

The Weaver's Journal

\$2.00

JANUARY 1977 VOLUME 1 NUMBER 3 ISSUE 3



Countryside II

Multiple-Harness Looms

- * Jack-type
- * Four or Eight Harnesses, Convertible
- * Three Sizes: 36, 42, and 48 Inches
- * Quick Action—Fast Harness Return
- * Wide, Accurate Shed * Balanced Beater
- * Easy to Thread * Open-Eye Heddles
- * Quick-Change Wire Tie-Ups
- * Easy Treading
- * Heavy Canvas Aprons
- * Passes thru 30-inch Doorway
- * Hard Maple
- * Danish Oil Finish

Our goal . . . in building the Countryside II is to provide serious weavers with a loom that will be easy to warp, easy to use, and that will help weavers get the best results from their efforts in the least time. And it should stand up for years.

The type of loom you select and the advantages it offers can be translated into enjoyment . . . time saving . . . easier operation . . . and if you weave as a business, in dollars of work produced. For these reasons, we hope you will consider the advantages which Countryside II offers you.

Sizes Available

Three weaving widths are presently available: 36, 42, and 48 inches. The loom is made with 4 and 8 harnesses; you can buy the loom with 4 harnesses and add four later; however, it is less costly to buy the loom with 8 harnesses at the outset.

Smooth-Action Jack-Type Design

The Countryside II is of jack-type design, the harnesses being raised by an all-aluminum lift system that assures their moving straight up and down, providing a clean, even shed. The lift system provides unusually easy treading and quick return. The harnesses are of high strength aluminum and travel in hardwood tracks. Harnesses cannot "hang up" or interfere with each other, thus assuring an accurate shed. There is no rusting and no paint to peel off.

Hardwood Construction; Oil Finish

The Countryside II is built of selected kiln dried northern hard maple . . . carefully sanded, and finished with durable, water resistant Danish oil, hand applied. Maple is extremely strong . . . dent and splinter resistant . . . and stable in its dimensions.

Quick Tie-Up System

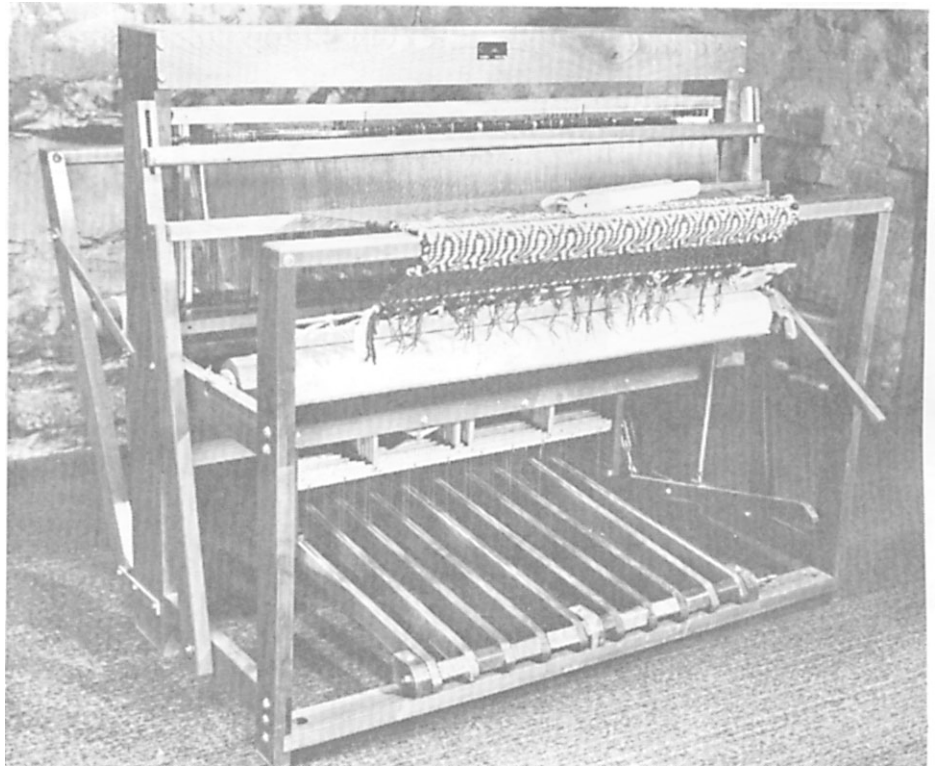
The hardwood treadles are attached to the aluminum lamms with steel wires which attach in a few seconds, need no adjusting, and cannot kink like chain, or wear thru like cord. There are no bolts in the tie-up system.

Wide Spaced Treadles

All Countryside II looms have ten treadles, spaced so two cannot be depressed at once by mistake.

Leg and Knee Room

For tall weavers, or weavers who like to stand while weaving, the high (35") front beam gives plenty of leg and knee room.



"No-stretch" Warping

The breast beam can be easily removed for warping if desired. The rear beam folds in, or down to the floor, to permit working within inches of the heddles. It is not necessary to lean over the beams to warp the Countryside II, making for faster warping in greater comfort.

Beams, Aprons, Ratchet, Brake

The rotary beams are of redwood, used for its dimensional stability. The warp beam has a friction brake which can be released slowly to prevent warp tangles that can occur with a ratchet-type brake. The cloth beam has a ratchet with an easy-to-reach handle to advance the warp. Front and back aprons are of heavy canvas, put on at the factory. Apron rods are 3/8-inch round aluminum rod.

Balanced Beater for Easy Operation

The beater is heavy enough for hard beating and is balanced for easy operation. The angle between the reed and the warp is close to 90° in all positions. There is an ample shuttle race. Extra weight can be added to the beater by fastening a metal bar under the shuttle race.

Wide, Clean, Accurate Shed

In the Countryside II, the warp threads lie flat and rise evenly, all the way across, giving a wide, clean shed (approx. 2¼ inches), adequate for large boat and rug shuttles. Harnesses in the DOWN position rest on a sloping base, which keeps the threads in the same plane. This prevents picking up threads by mistake with the tip of the shuttle.

Easy-to-Thread Heddles

Flat steel heddles with large eyes are supplied—20 per inch of weaving width. They are easy to thread, and easy on the warp. Wire heddles are optional.

Standard Equipment

The basic loom as ordered (4 or 8 harnesses); plain warp beam; 20 flat-steel heddles per inch of weaving width; two canvas aprons; 4 apron rods; lease sticks; sleighing hook; friction brake on warp beam; ratchet on cloth beam; 12-dent plain steel reed.

Dimensions

Height: 47 inches. Depth: Open—45 inches; closed—29 inches. Length: 10 inches more than weaving width. The loom will fit in van-type automobiles (including VW).

Optional Equipment at Extra Cost

Loom Tray. Fits on top of loom; 6 by 34 inches inside. Holds shuttles, bobbins, reed hook, crank, etc. Maple, with hard-board bottom.

Sectional Beam. Consists of 4 removable sections which attach to warp beam with screws. Wood dowel separators on 2-inch centers.

Delivery Time

Delivery time depends on the orders on the books and the looms in production. We will be happy to give you an estimated delivery (or shipping) date if you will tell us the size loom you need. In general, delivery time is good.

Terms of Sale

Fifty percent with order; balance when loom is ready for shipment.

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The Weaver's Journal

Quarterly Journal For Textile Craftsmen

Volume I, Number 3, Issue 3

January, 1977

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Editor and Publisher - Clotilde Barrett
Fashion Editor - Barbara Knollenberg
Associate Editors - Iris Richards and Maxine Wendler
Advertising Manager - Jeanne Richards
Circulation Manager - Willy Bottema
Photography - Earl Barrett

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The editorial committee takes no responsibility for the goods advertised in this journal.

COVER: Poncho and Dog Coat woven by Iris Richards - see page 33

Letter from the Editor

The Weaver's Journal plans to be international in scope. Many copies have already been sent to Europe and Australia. Our readers there use the metric system and soon the system will become universal. We feel that the handweaver should be prepared for the day that measurements in pounds and inches will become obsolete. Starting with this issue, we will make an attempt at including more and more information about the metric system and augment the specifics for weaving projects with data in the metric system which we will keep in parenthesis. The following chart may be helpful for reference:

1 centimeter (cm)	= .3937 inch (in.)	1 inch = 2.54 cm.
1 meter (m)	= 3.28 feet (ft.)	1 foot = 0.305 m.
1 meter	= 1.093 yard (yd.)	1 yard = 0.915 m.
1 gram (g)	= .0352 ounce (oz.)	1 oz. = 28.4 g.
1 kilogram (kg)	= 2.204 pounds (lb.)	1 lb. = .454 kg.

For instance, in the metric system, reeds come in lengths (weaving widths) such as 90 cm. (35.4 in.), 100 cm. (39.37 in.), 120 cm. (47.2 in.). The total length is usually 2 cm. more. The standard height of a metric reed is 12 cm. (4.7 in.). The height of the dents is 8.5 cm (3.35 in.). The sizes of the reeds are 30/10 (7.5 e.p.i.), 40/10 (10 e.p.i.), 50/10 (13 e.p.i.), 100/10 (25 e.p.i.), which means 30 dents per 10 cm., 40 dents per 10 cm., etc. The closest approximation in the dent per inch system would be 30/10 (7.5 e.p.i.). In the metric system, standard lengths for heddles are 22 cm. (8.7 in.), 28 cm. (11 in.), 33 cm. (13 in.).

As always, we appreciate comments from our readers. We want to make a special appeal to weavers who do tapestry on a home made loom. We would like to publish a survey article on the use of frame looms, their sizes, building cost, warping system, tensioning system, shedding mechanism and how the frame is supported. We are also concerned about giving the fiber craftsmen more information on dobby and Jacquard looms. How and where are they available, what is the size and price range, what are the assets and the disadvantages of such looms for the home or small studio craftsman? How much of an expert has one to be to be able to draft patterns for these looms and then transfer the draft to the shedding mechanism of the loom? We hope to hear from all weavers who have some knowledge about dobby and Jacquard looms. We appreciate any historical information you might have on them also.

Letter from the Fashion Editor

My own personal philosophy on clothing is that clothing is a daily personal expression of one's view on life. Clothing is an art form to me and I truly wish to inspire more handweavers to join a crusade for more quality, handmade, personal clothing to be worn today. This is meant to be quite a challenge to you and I hope you will accept it and march with me.

Being an avid clothing enthusiast, I wish to appeal to all creative clothing artists to show me their wares. Many weavers are creating clothing for their

personal use and for private sale; we wish to see what you are doing and especially what you have done as inspired by articles appearing in The Weaver's Journal. Your "show and tell" will enable us to more readily anticipate your educational needs and determine your creative interests. Hopefully, your response will give us a survey as to where modern clothing weavers are directing their energies, and where we can best support your efforts.

The applause from you the readers has been marvellous. Thank you for your questions and kind words, and keep writing for we love it.

Please include with your questions a self addressed, stamped envelope for reply.

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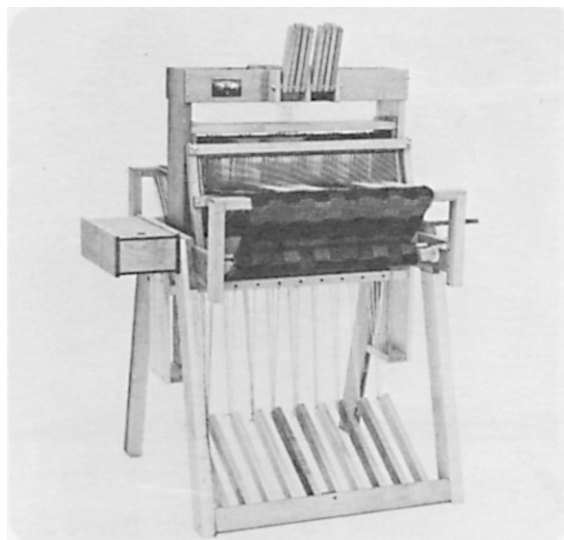
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FLOOR STAND FOR SCHACHT TABLE LOOMS

We have designed a floor stand and a floor loom conversion kit for our table looms.

The floor stand comes with a shuttle box and a shelf. It takes only a few minutes to attach it to any one of our 15", 20", or 25" table looms. We have taken great care to design this floor stand to beautifully suit the shape of our table looms.

The floor loom conversion kit includes lamms, treadles, and a harness adapter which may be easily added to the floor stand at any time. The addition of the floor loom conversion kit makes your table loom into a sturdy dependable floor loom.

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Placemats

by Paul DeRoy

Three sets of placemats and a table runner will be described. Each uses a different weave and a different finishing technique.

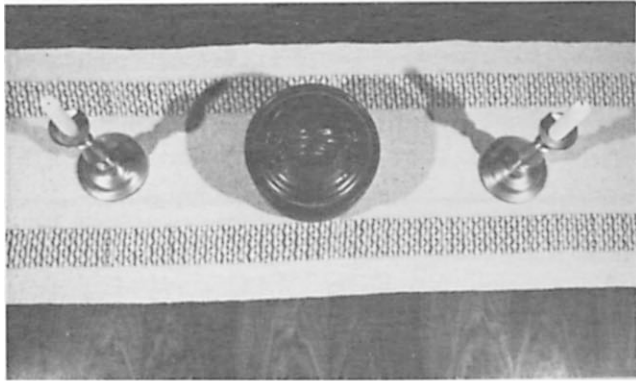


Plate 1
Table Runner
woven by Willy Bottema

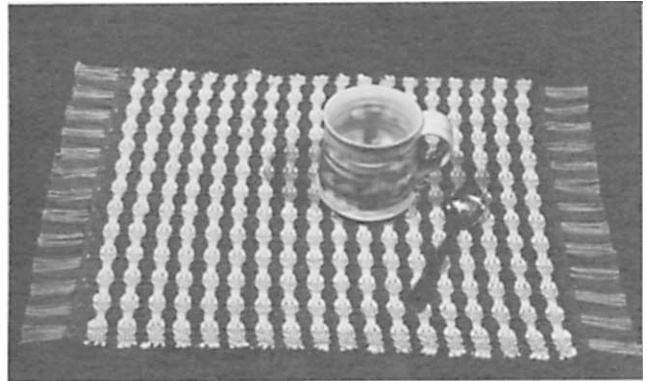


Plate 2
Placemat
woven by Jeanne Richards

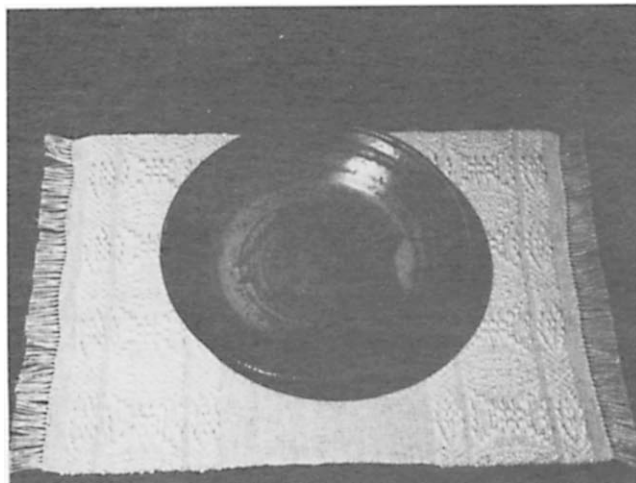


Plate 3
Placemat
woven by Clotilde Barrett



Plate 4
Placemat
woven by Maxine Wendler

WEAVING WORKSHOP

Clotilde Barrett, editor and publisher of "The Weaver's Journal", will travel and give workshops on the following weaving techniques:

Double Weave
Shadow Weave
Ethnic Weaving

Rug Weaving
Pattern Drafts and Fabric Analysis
Tapestry

Address all inquiries to: Clotilde Barrett
624 Peakview
Boulder, Colorado 80302

VARIATIONS OF HEMSTITCHING USED TO FINISH PLACEMATS (Use a blunt needle to do the sewing).

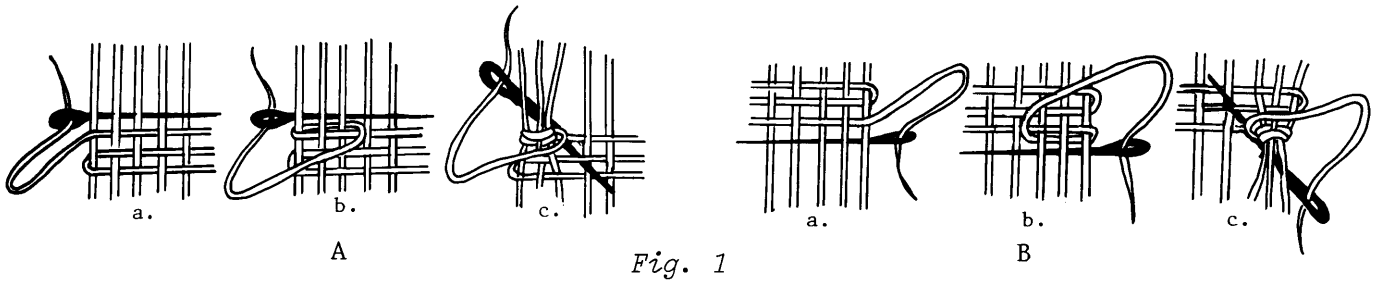


Fig. 1

Fig. 1 shows hemstitching: A shows the three steps of the stitch when the unwoven warp (fringe) is away from the worker. The sewing proceeds from left to right. B shows the same steps when the unwoven warp (fringe) lies toward the worker.

These three basic steps are:

- a. Under 3 warp ends and up to the top.
- b. Over and again under the same warp ends.
- c. Over and diagonally under the same warp ends and two weft picks which are the closest to the fringe.

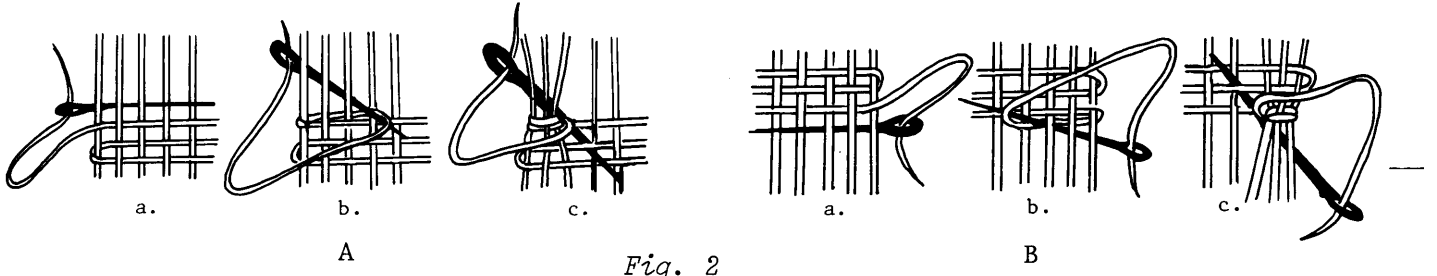


Fig. 2

Fig. 2 shows locked stitch hemstitching. Steps a and c are the same as for the Fig. 1 hemstitch. In step b, the loop is secured with a half hitch; the needle passes under 3 warp ends and under the sewing thread.

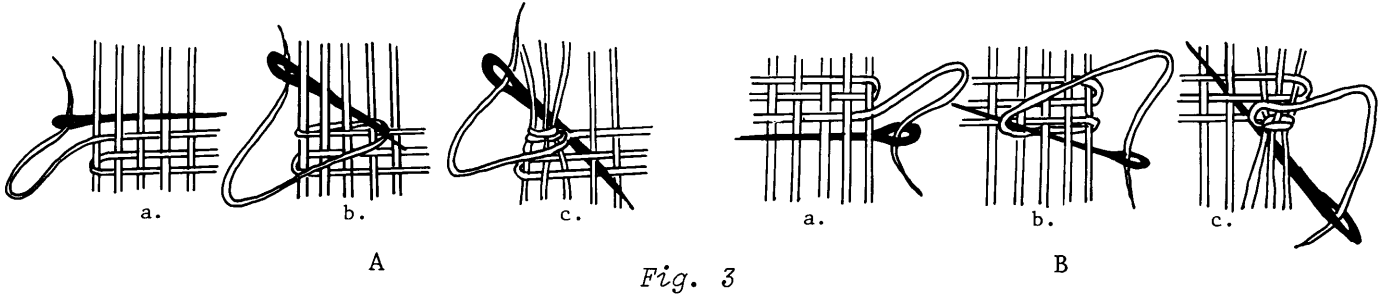


Fig. 3

Fig. 3 shows a hemstitching which holds the weft in better than the other variations. (The method applies equally to the locked stitch hemstitching). The basic steps are:

- a. Back up one warp end and go under 3 warp ends.
- b. Same as step b in other stitches.
- c. Sew diagonally under the 3 warps bundled together and under one more warp and two weft picks.

Notice that the two weft picks of the edge cannot be pulled out as in ordinary hemstitching because the warp is drawn together above the weft pick-up.

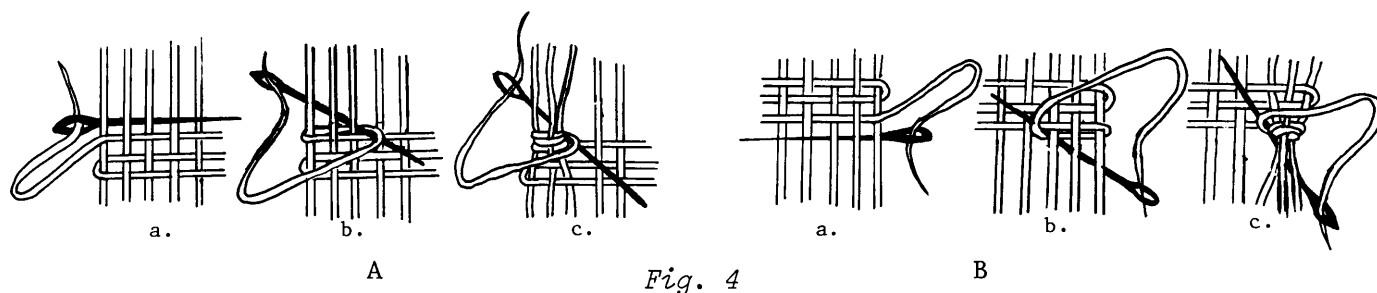


Fig. 4 shows a finish with double half hitching. Steps a and b are the same as for the locked stitch hemstitching. Step c repeats step b.

If a fringed mat is desired, weave strips of cardboard for a total of 1½" before starting the first mat and for a total of 3" between mats. If desired, start with two picks of a holding weft, using scrap yarn. These will be removed as the hemstitching is done. If the hemstitching is done on the loom, the weft is started on the right side, leaving a 6 foot length of weft hanging loose. Weave a few inches of the placemat. Thread the loose weft end into a blunt needle and finish the placemat as in the B section of the figures. End the mat by leaving a 6 foot loose weft on the left side. Thread a needle and finish according to the A diagrams of Figs. 1, 2, 3 or 4.

If the hemstitching is done off the loom, start and finish the mat by leaving a 2" length of weft loose. Use a separate thread for the stitching and sew the loose weft end in the same loop as the first 3 warp ends.

TABLE RUNNER WITH MOCK LENOS AND HEMSTITCHED HEM (Plate 1)

Four harnesses are required and there is no special problem with selvages. After washing, the finished size is: 70" x 17½".

WARP: Albolin cotton-linen from Gustaf Werner in two colors.
 Rust (250 gr.) Ecu (500 gr.)

Two runners were woven with this amount of yarn.

WEFT: Same as warp.

SETT: 12 e.p.i. The sett should be that of a medium balanced tabby.

WIDTH IN THE REED: 23". Total number of warp ends, 250.

LENGTH OF WARP: 6 yards.

THREADING, TREADLING AND TIE-UP:

There are several ways to weave four harness mock leno. Each results in a different cloth structure. Plates 5 show close-ups of the cloth for the five methods of threading, tie-up, and treadling described here. Be careful not to overbeat. Try to keep the weave balanced, that is, as many weft picks to the inch as there are warp ends to the inch.

JAPAN : CRAFT AND FOLK ART TOUR

Fourth Annual tour leaves October 13, 1977, for 21 days.

Information:

Mary Lou Maxson, 735 Gilpin Dr., Boulder, CO, 80303. (303) 499-0893
 Yoko Harrold, Jamestown Star Rt., Boulder, CO, 80302. (303) 442-7071

METHOD A

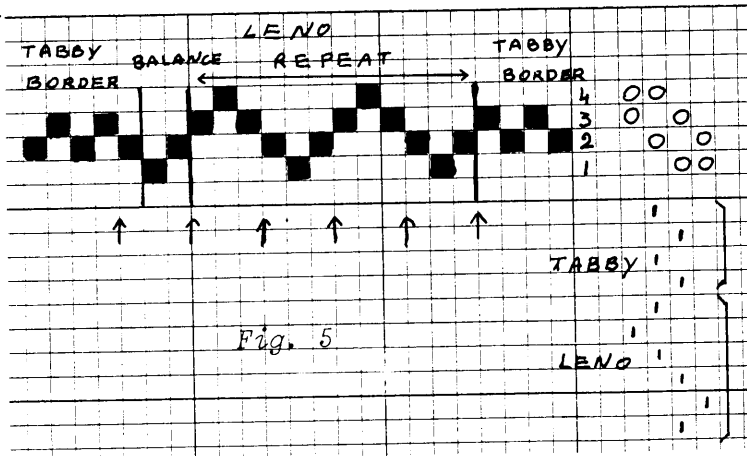


Fig. 5



Plate 5A

The vertical tabby stripes and the vertical leno stripes may be varied in the width by repeating the appropriate threading unit. If a more lacey leno is desired, dents may be skipped during the slewing. Arrows indicate the places where a dent may be skipped.

METHOD B

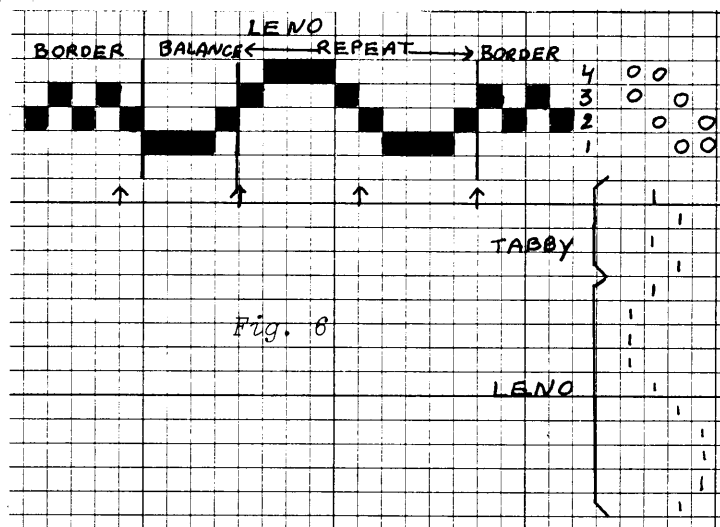


Fig. 6

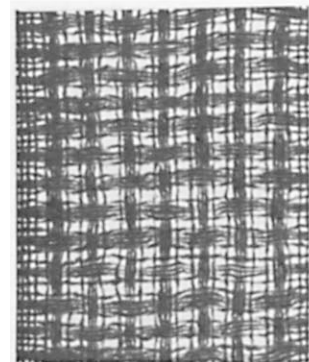


Plate 5B

The arrows indicate the places where a dent may be skipped.

METHOD C

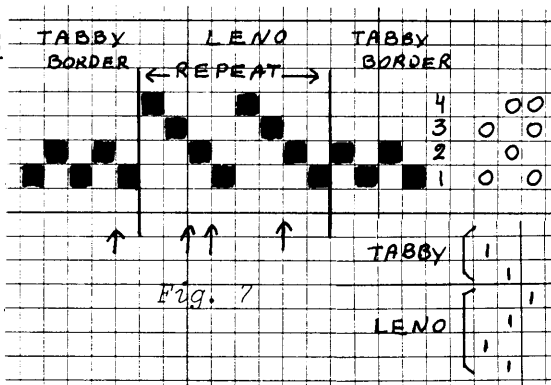


Fig. 7

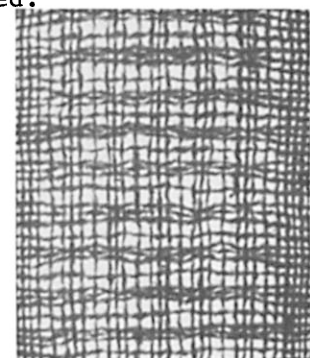


Plate 5C

The arrows indicate the places where a dent may be skipped.

METHOD D

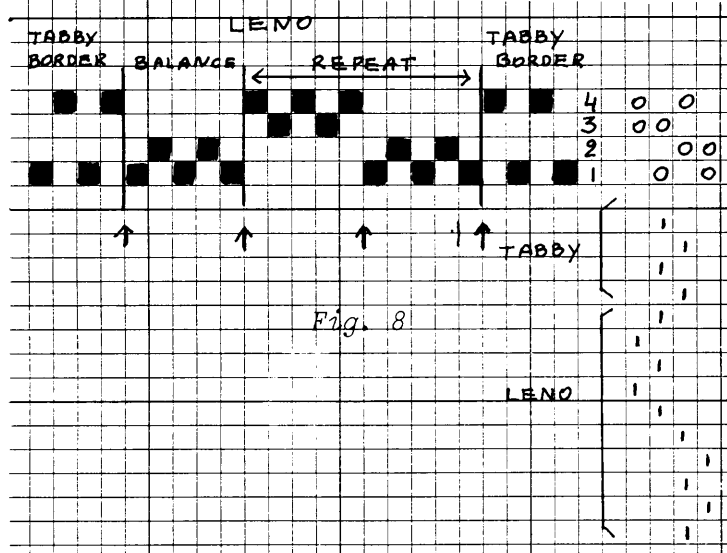


Plate 5D

The arrows indicate where a dent may be skipped during sleying.

METHOD E

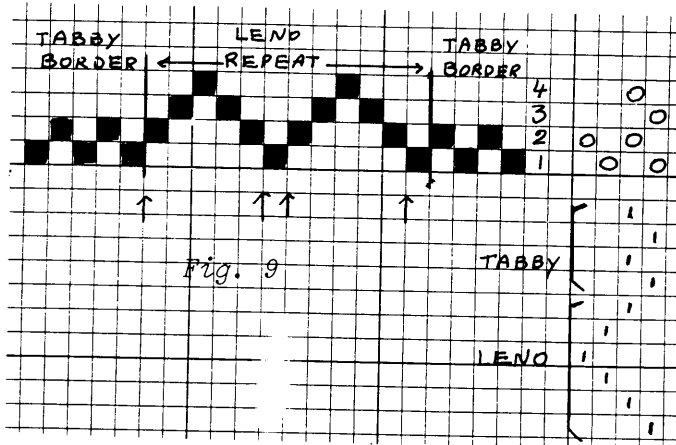


Plate 5E

The arrows indicate where a dent may be skipped during sleying.

SETT: For the runner we chose method D. In the leno stripes a rust warp was used for the ends on harnesses 1 and 4. The warp order was as follows: 36 ends for the tabby border, 35 ends for the leno band sleyed with skipped dents indicated by arrows. The middle tabby stripe has 108 ends. Repeat the leno band and the tabby border.

WEAVING: Start and finish each panel with 2½" of tabby, otherwise, weave leno.

FINISHING (Fig. 10): Baste 1" hems on both ends of the panel and hold them in place by hemstitching.

With needle and thread, do a locked stitch (hemstitching, Fig. 2A), catching 5 warps above the hem and two wefts of the folded hem, pull tight.

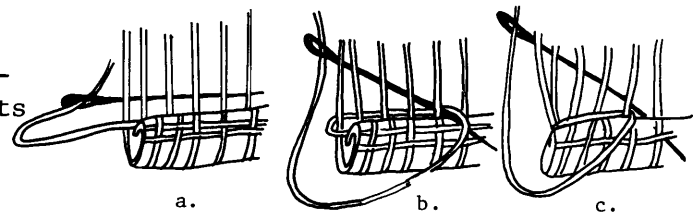


Fig. 10

PLACEMATS IN M's AND O's USING HEMSTITCHED FINISH illustrated in Fig. 3,
(Plate 2)

Four harnesses are required. For better selvages, sley the 4 warp ends of each selvedge double (2 per dent). After washing, the finished size of the 8 placemats is 12" x 14 3/4" plus fringe. Note: The placemats on the loom were 13 1/2" x 17" plus fringes. This pattern takes up a great deal. If larger mats are desired adjustment must be made accordingly.

WARP: Lily carpet warp in two colors.

gold (8 oz.) rust (1 lb.)

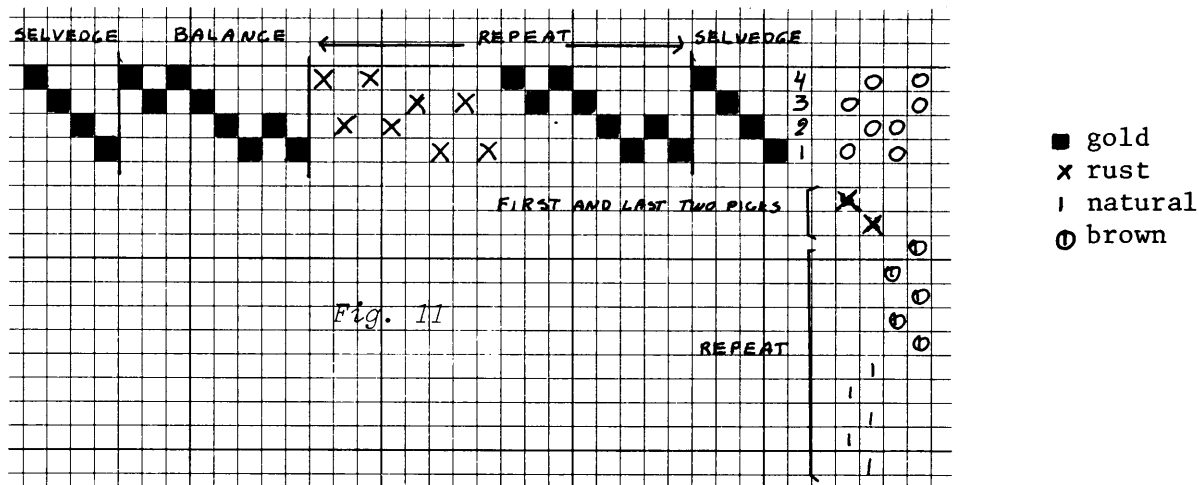
WEFT: Coats and Clark rug yarn in two colors, natural and brown.

SETT: 15 e.p.i. The sett should be that of a medium balanced tabby.

WIDTH IN THE REED: 13 1/2". Total number of warp ends, 208. (Includes 8 for selvages plus balance of pattern). 112 gold 96 rust

LENGTH OF WARP: 6 1/2 yards.

THREADING, TIE-UP AND TREADLING:



WEAVING: Weave two picks with the finer rust warp yarn, then change to rug yarn and begin the pattern with brown. End the mat in the same way.

FINISHING: The hemstitching method of Fig. 3 is used to finish these mats.

PLACEMATS WITH OVERSHOT USING HEMSTITCHED FINISH illus. in Fig. 1 (Plate 3)

Four harnesses are required. After washing, the finished size of the 6 placemats is 12 5/8" x 16 1/4" plus fringe.

WARP: Gustaf Werner cottolin, ecru - 250 gr.

WEFT: Tabby is same as warp.

Pattern is Lily 6 strand floss, twofold, yellow.

SETT: 16 e.p.i. The sett of a medium balanced tabby.

WIDTH IN THE REED: 14". Total number of warp ends, 224.

LENGTH OF WARP: 4 1/2 yards, length of each mat on the loom; 19".

THREADING AND TIE-UP:



Fig. 12

WEAVING: 12 picks of tabby.

In the overshot border, alternate a pick of pattern weft and a pick of tabby weft.

Treadingling sequence for pattern weft in the first overshot band : 3, 4, 1, 2, 3, 4, 3, 2, 1, 4, 3.

6 picks of tabby.

Overshot band using above sequence: 4, 3, 2, 2, 1, 1, 1, 4, 4, 4, 3, 3, 3, 4, 3, 3, 3, 4, 3, 3, 3, 4, 4, 4, 1, 1, 1, 2, 2, 3, 4.

6 picks of tabby.

Overshot, repeating the first overshot pattern band.

7" of tabby.

Repeat the overshot and tabby border.

FINISHING: The hemstitch method of Fig. 1 is used to finish these mats.

PLACEMATS IN 6 HARNESS TWILL WITH TABBY SELVEDGES AND A DOUBLE HALF HITCH FINISH, FRINGED (Plate 4)

Eight harnesses are required. Twills usually cause problems with selvedges, therefore 2 additional harnesses to make narrow tabby borders are used. After washing, the finished size of the 12 placemats is 12½" x 16½" plus fringe.

WARP: Cum cotton in 5 colors, 1 oz. each color.

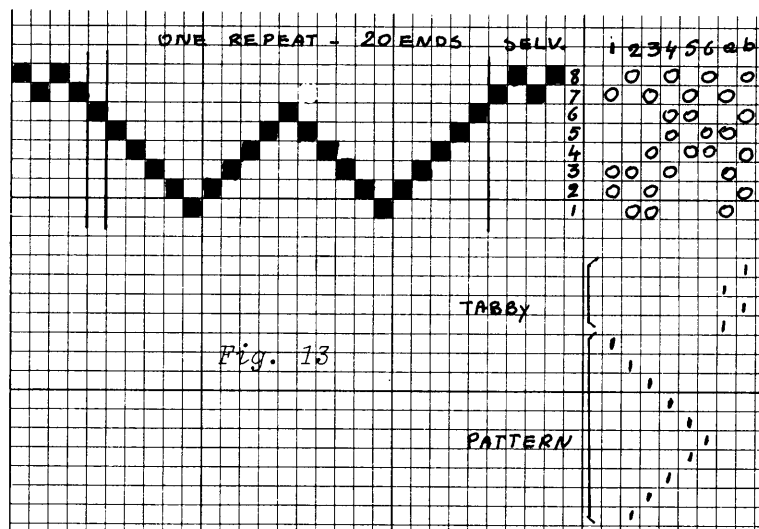
WEFT: 5/2 Lily pearl cotton, white, 1 lb.

LENGTH OF WARP: 8 yards

SETT: 20 e.p.i.

WIDTH IN THE REED: 14½". Total number of warp ends, 289.

THREADING, TIE-UP AND TREADINGLING:



WEAVING: Start the mats using as weft the same yarn as the warp used for tabby selvedges and weave 4 picks of plain weave. Change to the main weft (white), and weave for 18" in pattern. Finish with 4 picks of plain weave with the same yarn as selvedge threads.

FINISHING: The finishing technique shown in Fig. 4 is used to finish these mats.

What a Handweaver can learn from the Scottish Weaving Industry

by Clotilde Barrett

Scottish textiles have a unique appeal for fashion designers and interior decorators. Whether they are woven by hand on a home built loom or in mills using the latest weaving technology, the greatest care is given to the fiber itself and to the treatment of the fabric after it is woven. The flow chart of Fig. 1, based on the woolen cloth manufacture taught at the College of Textiles in Galashiels, will be used to elaborate on the steps that fiber craftsmen should follow to improve their production and the quality of their work. Many of the ideas in this article came to my mind while visiting Scotland and watching demonstrations in woolen mills and at the College of Textiles. The weaver should study each step carefully, and should then make a self-evaluation of how he has proceeded with his production in the past. Then he should read the hints inspired by the Scottish weaving industry and hopefully will gain new insights on his approach to handweaving.

The darker lines in the flow chart indicate steps which are not used in the Scottish woolen manufacture but which are added for the benefit of the handweaver.

DESIGN All important and too complex to elaborate on here. Keep nature in mind as a source of inspiration for shapes, color and texture. Play with yarns by winding them around pieces of cardboard. Try to imitate color and texture effects that appeal to you in nature.

SAMPLES A sample to show a potential customer should be at least one square yard. Smaller reference samples, about 6" square, are useful. Samples should go through the complete finishing cycle and handled as if they were the real thing.

KEEP RECORDS Include with your samples, swatches of yarn and their references to your yarn storage records. Indicate amounts of material used. Drafts should include threading, tie-up, treadling, sleying and cloth structure.

Describe the cloth finishing cycle and keep measurements of the width of the project in the reed, the length of the warp, the dimensions when the cloth comes off the loom and the dimensions of the finished cloth. Cost should include labor and other expenses incurred for the production of the cloth.

YARN SUPPLIES Keep an up-to-date file on your supplies with samples and price list. Keep records and receipts for all your purchases.

RAW MATERIALS Here the handweaver is at a disadvantage because he often has to take what he can get. Local wool and cotton growers associations, county fairs and extension services are often valuable sources of information. Learn about breeds and crossbreeds of sheep before buying a fleece from a farmer.

THE MAKING OF YARN: For sorting, picking, blending, oiling and carding refer also to the article "Scouring a Fleece", in "*The Weaver's Journal*", Vol. I, No. 2 p. 18.

BLENDING Strive for uniformity of the quality and color of the fibers used

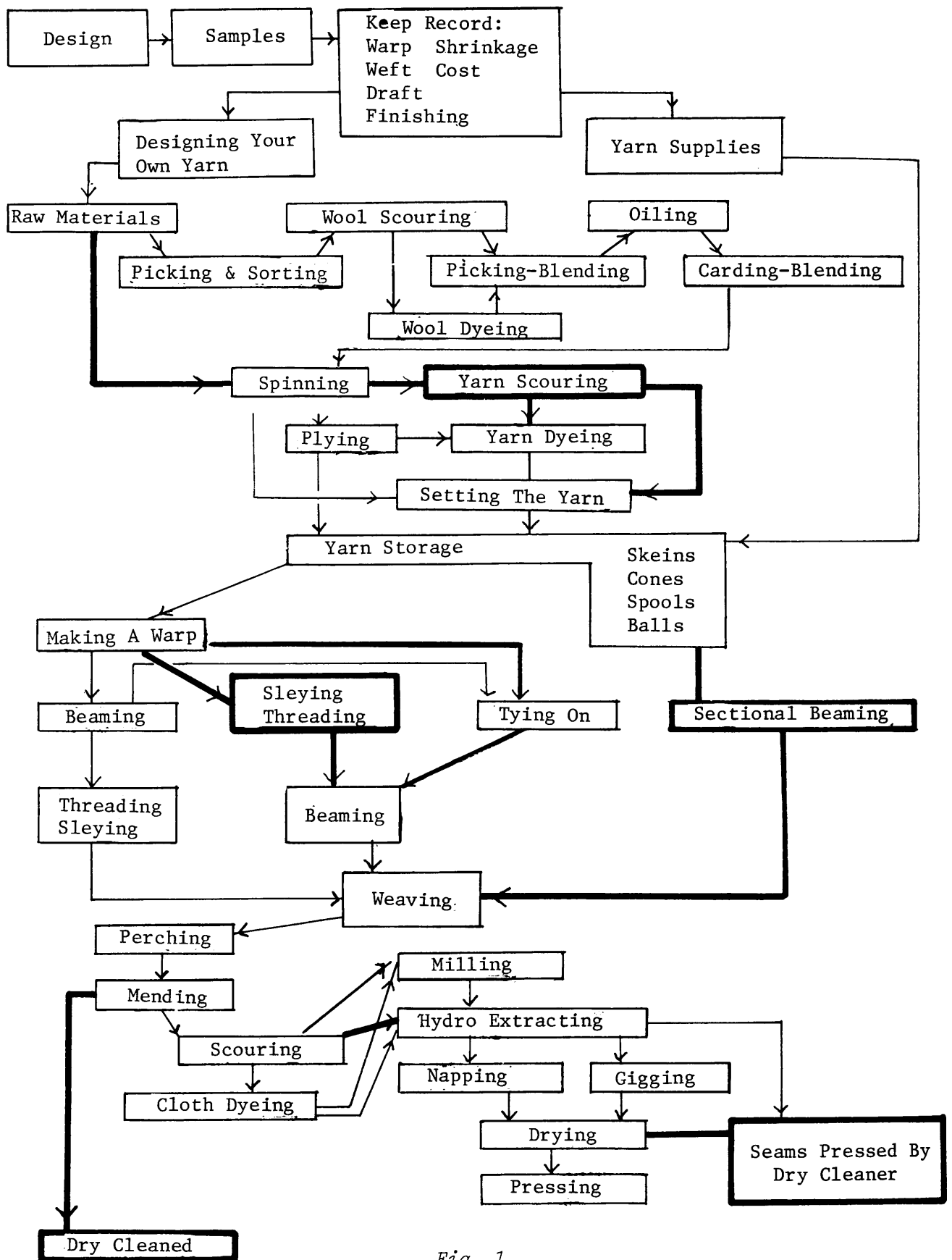


Fig. 1

throughout a particular project.

Uniformity is obtained through blending of fibers from different sacks of scoured wool. Weigh out amounts of scoured wool from each sack in proportions which will give the desired properties expected from your finished yarn. Keep these proportions constant throughout the preparation of all the yarn used for a project.

OILING Oiling the fiber is considered very important in the industry. It facilitates the spinning and the weaving. The wool dyeing is often preferred over the yarn dyeing because the oil will not have to be scoured out until the cloth is woven.

CARDING Use cards of different fineness. Coarse cards should be used to rip the fibers apart, shaking out any loose dirt that is left in the wool. Use fine cards to prepare final rolags.

YARN SCOURING Yarn scouring is done in the same way as wool scouring but the wool is now spun and skeined. Articles on wool and yarn dyeing, spinning and plying will be forthcoming in *"The Weaver's Journal"*.

SETTING OF YARN In Scotland the yarn is kept taut and then steamed. The handweaver can hang skeins on a rod, keeping them taut by weighting them down. (See Fig. 2). If the skeins are dry, they should be dampened well with a spray bottle and water.

YARN STORAGE If your yarn has to remain boxed, keep at least one skein of each type in the open. Many weavers like to display their yarns according to their colors, arranging them in the color wheel sequence. One may arrange them according to yarn suppliers or according to fiber content, yarn type or yarn put-up (cones, skeins, etc.).

YARN RECORD All yarns on display in your studio should be coded with a reference to a master file. The master file should contain the order number and date, the supplier, the quantity in stock, the price (including shipping cost), the fiber content, the number of yards per pound, the results of tests for color fastness, fading, shrinking, and whether the yarns are home spun and/or home dyed. The file should also include a reference system to the raw materials and the dye process.

MAKING A WARP Care has to be taken that the yarn comes off its put-up with even tension. This is difficult to achieve with balls. The yarn pulled from the inside of a ball is under more tension in the beginning than at the end. Yarns from a cone should come off vertically. A peg and a wire loop mounted on a piece of wood, as shown in Fig. 3, is one of many solutions used. Spools should be horizontal and on a spoolrack. The "Dear Heddle" column of *"The Weaver's Journal"* Vol.I No.1, p.8, gives a helpful hint to provide uniform tension.

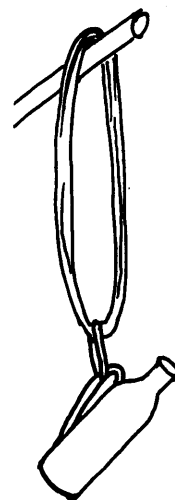


Fig. 2

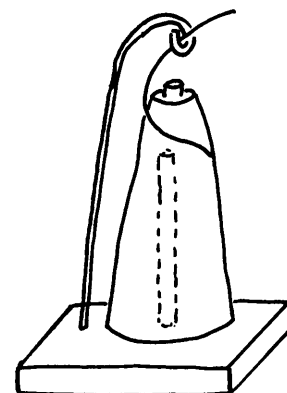


Fig. 3

In the Scottish weaving industry, the warp is made in sections. Each of the several yarns for one section unwinds from its own spool, goes through a tensioner and onto a large warping creel. This operation is repeated, one section at a time until the creel is filled. Then the whole warp is transferred from the creel onto a removable warp beam. The warp beam is consequently fitted into the loom.

DRESSING THE LOOM In Scotland I watched the harnesses being taken out of the castle for the threading of a new cloth. However, if the new cloth is the same as the previous cloth woven, the old warp thrums are cut from the woven cloth and from the warp beam. The pieces remain in the reed and through the heddles. Each warp end that comes from the new warp beam is tied to the corresponding thrum. The tying-on is done between the back beam and the harnesses. This method of tying-on can be used by the handweaver who favors sectional warping. However, a warp chain is best tied on between the front beam and the reed, using the cross to separate the ends. Note that this is the case if the old warp remains attached to the warp beam.

WEAVING The fly shuttle and dobby loom are used extensively in Scotland. In the industry, the woven cloth is always under tension not only lengthwise but also crosswise. For crosswise tension the handweaver uses a stretcher or temple which makes the beating-in of the weft easier and smoother. The use of a temple will result in an even drawing-in of the cloth, and a firm and straight selvedge.

In the Scottish weaving industry great use is made of doupe leno (a complete study of doupe leno will be published in one of the forthcoming issues of the journal).

PERCHING The cloth is off the loom and is now examined for mistakes in the weave, loose ends hanging out, knots and other defects.

MENDING All the defects are corrected and the loose ends are darned in.

CLOTH SCOURING The spinning oil and the dirt picked up during the weaving process are removed by washing the cloth in soap and soda. Use lukewarm water (90 F). For 6 gals. of water, use 1 tbsp. of washing soda and 5 tbsp. of Ivory liquid. Wash gently by hand.

MILLING Milling in the industry is done by subjecting cloth to a high temperature bath and to some beating. The handweaver can cautiously use a home washing machine to achieve this effect. If the cloth is washed in the washing machine, always fill the tub with water before entering the cloth. Use the delicate wash cycle. Machine washing will cause some felting and shrinking of wool. If the time and temperature are controlled skillfully, (keep records of the timing), an optimum amount of fulling will occur, which is the equivalent of industrial milling.

HYDRO EXTRACTING In Scotland I saw the cloth put alongside the vertical perforated walls of large circular drums. The excess water was removed through centrifugal force. The handweaver can use the spin-dry cycle of a washing machine. Fold the cloth lengthwise and line the inner walls of the tub with the cloth, going around and around. This method avoids setting wrinkles in the cloth.

NAPPING - GIGGING The College of Textiles in Galashiels had a machine for napping which consists of fine cards rubbing against the cloth. Later the nap was cut to an even length by blades similar to those of a rotary lawnmower. The advice for the handweaver is to spread the damp cloth on a table, bed or floor. Pin it in place and brush gently in the direction of the weft and/or the warp. Test for optimum results. Use a handbrush, fingernail brush, wire brush for suede shoes, bristle brush or fine dull card. For napping, always stroke in the same direction. For gigging, which means raising the nap with teasels, brush in all directions so that there is no special direction to the nap. Effective gigging will make loop mohair into brushed mohair because gigging does pull fibers loose from the yarn.

DRYING In the industry the cloth is hooked on a tenter and dried with heat. In a handweavers studio the cloth may be pinned to a flat surface and let stand to dry. A good alternative to the industrial "Tenter" is the old fashioned curtain stretcher. The cloth is stretched on it damp, the napping and/or gigging may be done on the stretcher, and then the cloth is left to dry.

PRESSING A mangle is the household device which duplicates the industrial process the best. Use a lot of steam or a press cloth. Dry cleaners charge very little for steam pressing and the results are outstanding.

Note: If no fulling, napping or gigging is desired, the cloth may be commercially dry cleaned. This process will remove all the spinning oil from the fibers in the cloth. The result is very satisfying for rugs, upholstery fabrics and others.

Information about Scottish Textile Craft is available from the following organizations:

Craft Center, Ocherson House, Connongate, Edinburgh, Scotland.
Sicos, Small Industries Council for all Rural areas in Scotland, 27 Walker St. Edinburgh, Scotland FH3 7142.
Highlands and Islands Development Board, 27 Bank St., Inverness, Scotland.

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The Vertical Loom

By taking a survey of all the looms used in the world, both in the past and at present, one can distinguish two major types.

1. Vertical looms.
2. Horizontal looms in which we group:
 - a. The pegged loom (the warp is pegged to the ground).
 - b. The backstrap loom.
 - c. The draw loom.
 - d. The treadle loom.

This series of articles will concern itself with vertical looms.

The essential components of a loom are:

1. A support for the warp which allows the warp to spread out in an even fashion.
2. A means of keeping the warp under tension.
3. A shedding mechanism; that is, a means of separating one set of warp ends from the other in one single motion.

Vertical looms may be classified according to the types of warp support.

1. The one-beam loom, also called half loom, in which each warp end has only one support (attached to only one beam).
2. The two beam loom, also called full loom, frame loom or tapestry loom. Here each warp end is supported by two beams.

Part I: The one beam loom and the warp weighted loom

This loom may very well be the oldest in existence. It was probably the outcome of matmaking, either plaited or twined. One of its main characteristics is that the work starts on top and the filling is pushed upward. Essentially the loom consists of a cross beam resting on two upright supports. The warp is hung from the crossbeam in several ways, some of which are depicted in Fig. 1.

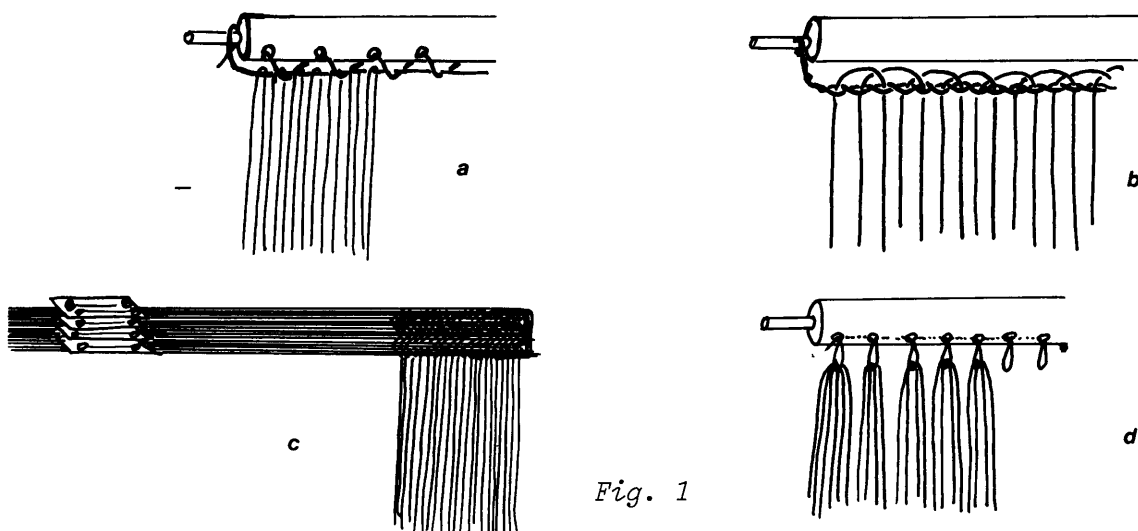


Fig. 1

In Fig. 1a, the warp ends are folded over a heading cord which is laced or sewed to the beam. In Fig. 1b, two heading cords have been twisted. The first warp end has been brought up before the first twist, *the next warp end has been brought up between twists 1 and 2, the preceding warp end is brought back down between twists 2 and 3, repeat from *. The twisted heading cords are finally laced onto the beam.

In Fig. 1c, a woven tape is used instead of a heading cord. The tape can be an inkle band or can be card woven. Long weft loops hanging from one side of the tape are cut to become the warp of a new project. The tape is sewn to the beam of the loom.

In Fig. 1d, a bunch of warp ends are folded and sewn directly onto the beam.

The one-bar loom is used mainly for plaiting and twining, see Fig. 2.

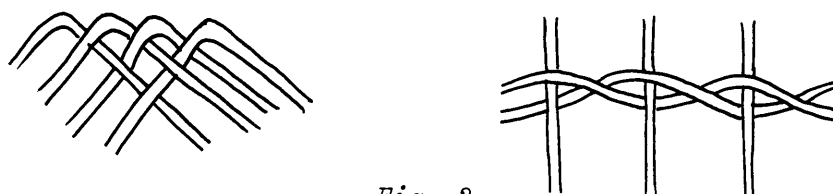


Fig. 2

These looms were often designed so that the finished cloth could be rolled onto the beam.

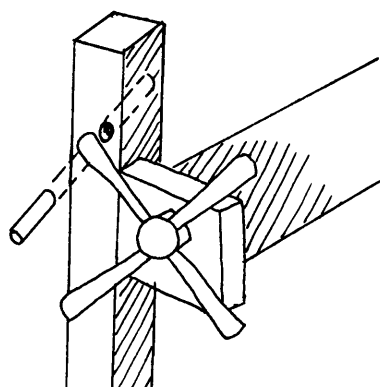


Fig. 3

Fig. 3 shows how a removable peg that fits in a hole of the upright holds back the spokes of the beam to prevent the cloth on the beam from unwinding.

We find many examples of the one-bar loom among the North American Indians. Many tribes used the loom to twine rabbit fur blankets; the warp ends are twisted strips of rabbit fur, the twining wefts are sinew. They also used the loom to make garments. Cedar bark warp is held together by twining with grass roots and other material.

The Chilkats of the American Northwest coast are famous for the capes and shirts which they twine with a goathair weft and a cedarbark and goathair warp. In this case, the warp is covered completely with the weft and intricate totem designs are created by building up color areas as in tapestry. Some tribes arrange the warp in two layers. After one row of twining is completed in the front layer of warp, the twining wefts are carried around the back to twine the back layer. The work is continued in a circular fashion. This technique is suitable for bags and for tubular garments. Instructions for building a loom suitable for tubular twining and for making a twined bag are given in another article in this journal.

Strictly speaking, the one beam set-up used for twining and plaiting is not a loom. The tensioning device and the shedding mechanism are missing. For the contemporary craftsman such a free hanging warp is suitable for macrame work, braiding, lacemaking (patterns used in bobbin lace) and of course, twining.

The wallhanging shown in Plate 1 has a horse-hair warp fixed to a beam using the method shown in Fig. 1b. The twining wefts are white wool and grey and black alpaca tops. Stuffed red freeform pillows were added after the twining was completed.

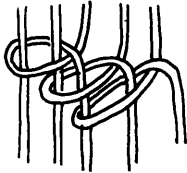


Fig. 4

Fig. 4 shows the macrame technique used in combination with the twining. Weavers often refer to the technique depicted in Fig. 4 as "Phillipine edge".

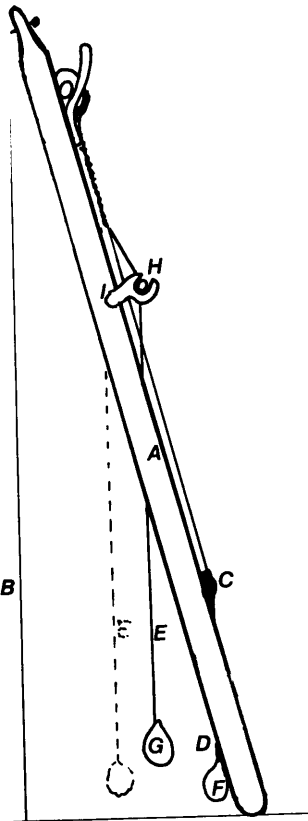


Fig. 5



Plate 1

The only way a warp hanging from a single beam can be tensioned is by gravity. Clay or stone weights are attached to bunches of warps and keep them taut. This leads us to the study of The Warp Weighted Loom, Fig. 5.

The earliest warp weighted looms are found in Scandinavia, among the Central European lake dwellers, and in Greece and Rome.

The uprights (A) are slanting and rest against a wall (B) or roof rafter. A shed stick (C) separates the odd (D) and the even (E) warps. This stick is tied to the uprights. The front warp ends are tied in bunches to a set of weights (F). The back warp ends are tied in small bunches to a set of weights (G). Gravity forms a natural shed for the weaver to insert a weft pick which is then beaten upward with a sword.

A counter shed has to be made in which all the back warps come forward. This could be made with heddles and a heddlebar (H). Without this device, the counter-

shed will have to be picked up by hand, one warp at a time. The heddle bar can be pulled forward to rest on a support (I). It is connected to each one of the back threads by a loop (the heddle). A forward pull brings all the back threads forward and a new shed is formed. The weaver stands up to work. For wide webs, two weavers work together side by side. At the start of the weaving, the worker may have to stand on a bench.

A warp weighted loom with treadles and set-up to weave double cloth was depicted by Johannes Brauniers in 1680 ¹.

The warp weighted loom was still in use in Scandinavia when Martha Hoffman published her book "The Warp Weighted Loom" ². She gives the following details: The loom dates back at least to the Neolithic Age, BC 4000 - 2000. The warp is linen by preference. The heading cord is wool, made of an assortment of the colors used in the weft. The main use, at least in later years, was to make bed covers. The weft was wool and covered the warp completely. Plain weave was most common although Krokbragd, a Swedish rug technique, based on a 3 harness point twill, was popular. 2/2 twills are not uncommon. If three or more sheds were required, one or two were picked up by hand.

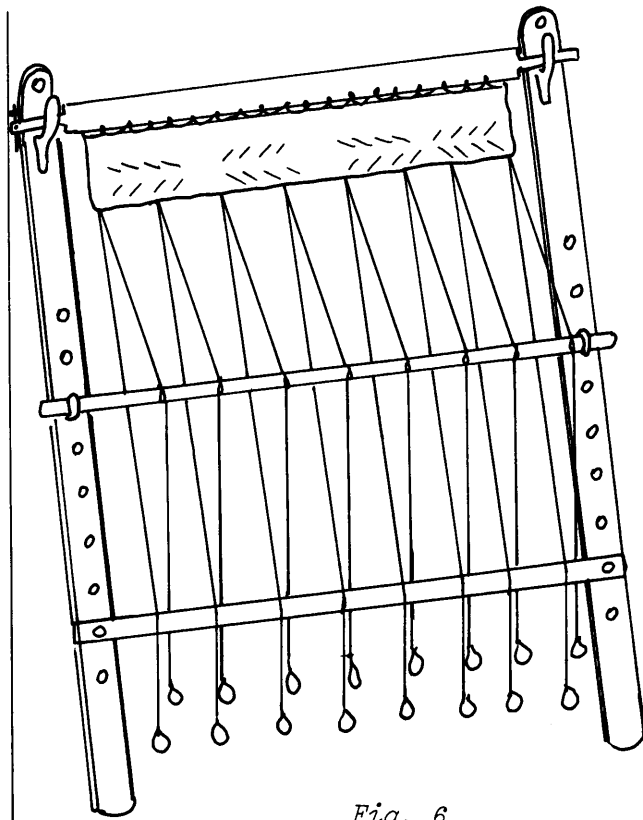


Fig. 6

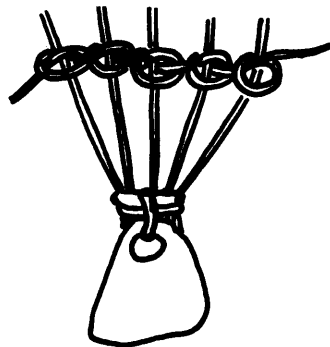


Fig. 7

The height of the uprights are about 7' (213 cm). The uprights have a hole on top for nailing them to the wall or rafters. There are crotches for the beam and there are about 12 holes in the uprights in which the supports for the heddle rod (these project about 10" or 25 cm) or, in which pegs to hold the shed rod can be placed (see Fig. 6). On the side a hole is drilled to insert the peg which prevents the wound beam from unwinding.

The crossbeam is about 7' (213 cm) wide and rests in the crotches of the upright and can be turned by means of spokes. The beam often has holes to sew the heading cord onto the loom. The shed rod is about 3" (7.5 cm) wide and often has a row of pegs (like a raddle) to keep the warp spaced. The pegs are about 4" (10cm) apart. About 30 loom weights are used, each weighing the same (between 1 lb. and 2 lbs. or 500 gr. and 1 kg.).

Chaining across the warp ends of each shed with an extra piece of yarn helps to keep the warp spaced and facilitate the shedding mechanism. (Fig. 7).

For the contemporary weaver this neolithic loom can be very meaningful. The loom is easy and inexpensive to build. When not in use it can be stowed away. The mechanism is easy to understand and adaptable to specific weaving problems. The artist craftsman will appreciate its versatility. For instance, the weights can temporarily be untied from the warps, thus freeing the warp for knotting and bobbin lace techniques. The heddles are easily removed and remade; this enables the weaver to make new sheds or to change the relative position of warp ends, thus deflecting the warp ends in the web.

REFERENCES: Long Roth, "Studies in Primitive Looms", pp 121-122, Bankfield Museum, Halifax, 1918.
Hoffman, Martha "The Warp Weighted Loom", Universiteits Forlaght, 1964.

CONSTRUCTION OF ONE BEAM LOOM

In these series of articles on looms, construction plans will be given to make working models of all the looms described. Directions will be published for two sizes a 4' x 2½' loom and a 6' x 4' loom. The looms are easy to build using only readily accessible tools and materials. Timid loom builders are urged to stick to the 4' x 2½' model while the more adventuresome builders should construct 6' x 4' models. The looms are easy to assemble and to disassemble. All major parts will be interchangeable and will be used over and over again in subsequent articles on ethnic loom construction. It is hoped that even the most "all thumbs" fiber craftsman will try his hand at building looms and gain insight and knowledge of the mechanics of weaving.

MATERIALS AND PLANS FOR THE CONSTRUCTION OF THE BASIC FRAME WHICH WILL BE THE MAIN ELEMENT OF ALL OUR ETHNIC LOOMS.

<u>Materials needed:</u>	Small Loom 4' x 2½' Model	Large Loom 6' x 4' Model
Lumber - 2 x 4	2 pieces 4' L 2 pieces 2" L 1 piece 2½' L	uprights legs lower brace upper brace crotches for beam
1 x 3	1 piece 2½' L 2 pieces 1' L	2 pieces 6' L 2 pieces 3' L 1 piece 4' L 1 piece 4' L 2 pieces 1' L
Bolts: Machine bolts ¼" x 4"	12	18
Machine bolts ¼" x 2½"	6	
Washers and nuts	18	18

Construction:

Fig. 8 depicts the 4' x 2½' frame construction. Adjust the construction and measurements to the 6' x 4' frame if desired (follow specs. in parenthesis). Note that the sizes given for lumber are those that you order at the lumber yard. Wood finishing and shrinkage changes these dimensions to some extent.

MAKING THE BASIC FRAME INTO A ONE BEAM LOOM (Plate 2)

Materials needed:

Pipe or conduit
 3/4" or 1" diam.
 1 1/2" wooden closet rod
 1/2" dowels

Small Loom

1 piece 3' L

Large Loom
 6' x 4' model

1 piece 5' L
 1 piece 5" L
 1 piece 7" L

For the small loom, insert conduit in holes of braces and lace heading cord onto the conduit for hanging the warp from the beam (Fig. 1).

For the large loom, drill 1/2" holes at 90 angles one above the other at one end of the closet rod and glue the 7" dowel pieces in the holes to form spokes, see Fig. 9. Drill 1/2" hole in upright for the 5" stop peg, see Fig. 3.

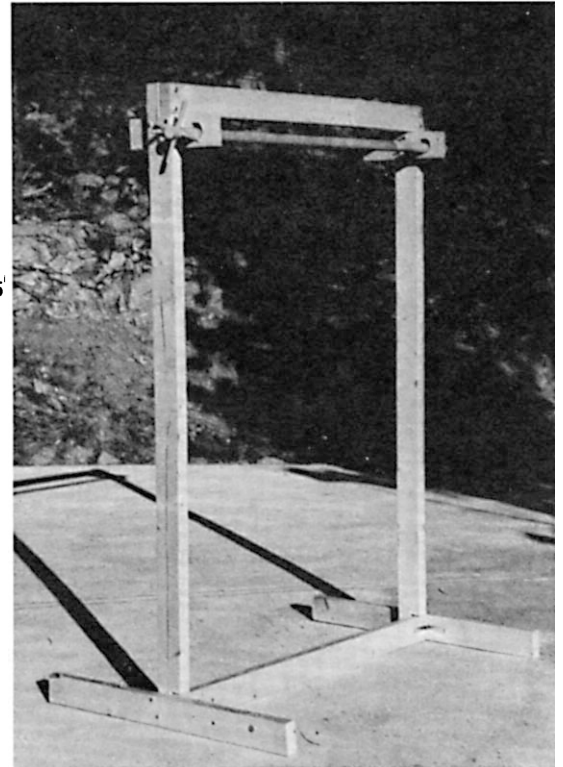
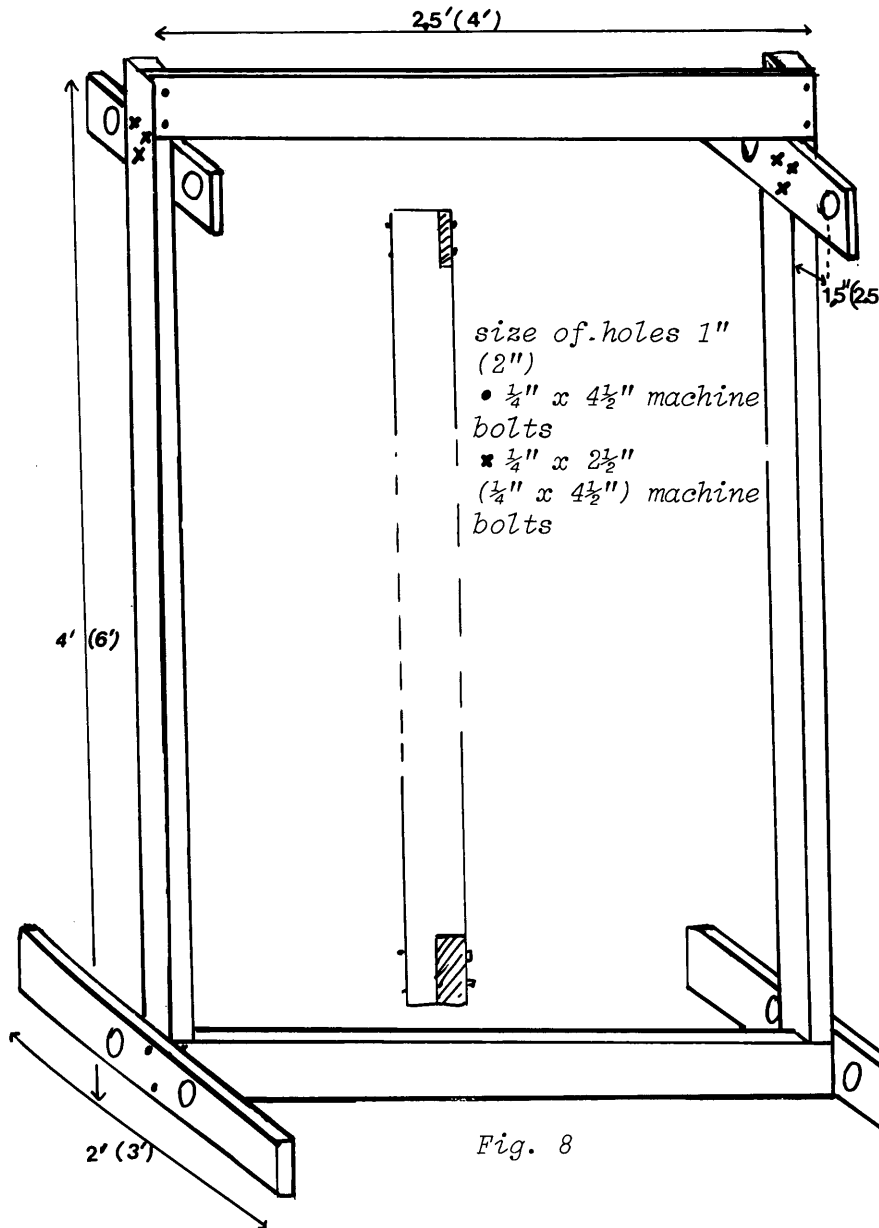
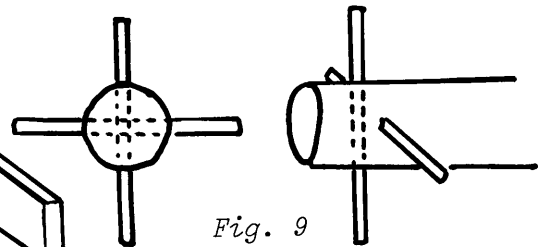


Plate 2
 Plate 2 shows the finished large one beam loom.



Binding Handwoven Garments with Leather

by Barbara Knollenberg

Leather, like handwoven fabric, is a special material to sew with. All the special handling techniques used with hand woven fabrics (*The Weaver's Journal* Vol. I, No. 1, p. 25) are applicable to leather sewing. Leather and natural fiber handwoven fabrics in combination are well suited to each other, especially in the way that both materials respond best to care by dry-cleaning methods, whether the leather is suede or smooth textured. The only differing sewing property that leather has is its lack of raveling or raw edge shredding, which means fewer finishing steps are necessary for a polished appearance.

Leather binding of handwoven garments is a great time and fabric saver. By binding the raw edges of the front, neck, sleeve and hem edges of a garment, one can eliminate the need for facing pieces and hem allowances, and therefore reduce the amount of woven yardage needed for a garment. Leather is applied with more ease as a binder than fabric, especially handwoven fabric bindings.

For best results when binding with leather, choose the leather according to its similarity in weight to the woven fabric. Not all leathers are suitable for use with or as garments. The more pliable the leather is, the better will be your sewing results. The leathers that I have found to be suitable and therefore recommend are:

1. Sheer Lambskin - a lightweight suede.
2. Capeskin or Cabretta - a mediumweight smooth sheepskin.
3. Deerskin - a medium to heavyweight suede.
4. Sheerling - a heavyweight sheepskin with curly wool on one side, suede on the other side.
5. Pigskin - mediumweight suede with a porous texture.
6. Cowhide - a heavyweight reversible suede.
7. Rabbit Fur - a lightweight leather with long hairs.

Having chosen the leather skin that is suitable in weight and pleases you aesthetically, you are ready to plan and cut strips from the skin to make the bindings. Cut 1½" to 2" strips from the skin with an X-acto knife, single edged razor blade, or sharp heavy-duty scissors, making sure that the strips are laid out with the grain. The straight grain of leather hide runs from tail to head or along the longest length (Fig. 1). You will want strips as long as possible, therefore cut them as illustrated in Fig. 1. To obtain the necessary amount of strip length a garment requires, simply measure around all the areas of the garment to be bound and use this measurement as the total binding length plus 6" to 12" more. The extra inches will be needed for overlapping strip ends and as necessary wastage. If possible, try not to piece together strips, such as on sleeve hems and other small areas. Large areas of garments such as front edges and hems will need strip piecing.

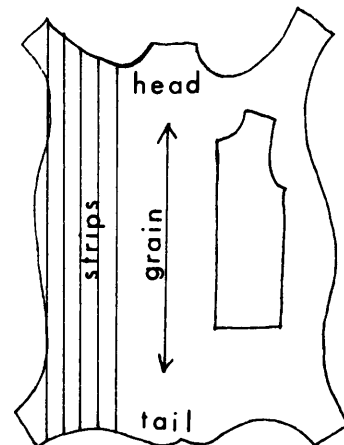


Fig. 1

To piece strips together cut the ends of the strips at a 45-degree angle and bevel the edges (Fig. 2). The beveling can be optional; however, it creates a flat bulkless seam which will apply to the garment with greater ease. Then lap the ends over each other right sides up with a $\frac{1}{4}$ " overlap, and glue in place with rubber cement (Fig. 3). Gently pound the glued overlap flat with a leather mallet.

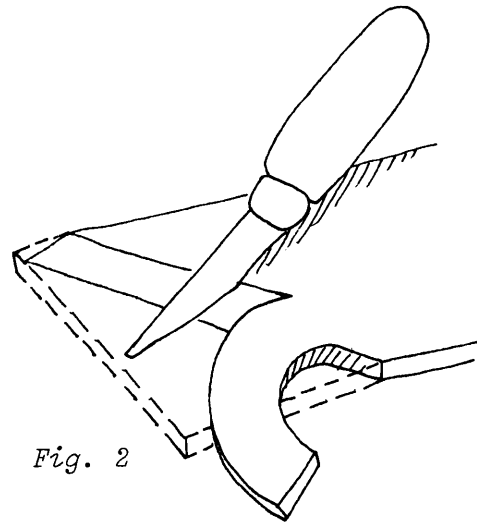


Fig. 2

To attach the leather bindings to the garment you will need a chisel-pointed machine needle (Fig. 4) of heavy-duty size. I have found Bernina's #90 and #100 leather needles to be the best needles. The stitch length necessary is 6 to 8 stitches per inch. Do not use pins on leather to secure the strips in place on a garment. A permanent hole is produced where pins and needles pierce leather and holes can show on the finished outside surface. Use plastic tape, masking tape or paper clips to secure the leather on the garments for sewing (Fig. 5). Therefore once you sew a seam in leather it is permanent and not easily alterable without loss of strength.

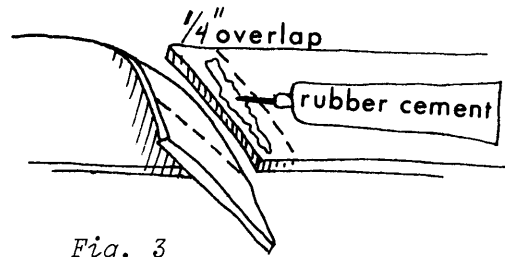


Fig. 3

Trim away all seam and hem allowances of the areas you are binding on the garment and secure the leather on the garment with right sides facing each other. Sew in place with a $\frac{1}{4}$ " seam with the leather as the top layer. Next, turn the binding over the seam; pound in place to "press" (flatten); turn the binding to the back side of the seam being sure the leather edge overlaps the sewing line by $\frac{1}{4}$ " or more; glue with rubber cement and pound again to flatten. The final step is to stitch-in-the-ditch (Fig. 6) from the right side of the garment. The ditch is the seam line that forms between the garment fabric and the leather binding.

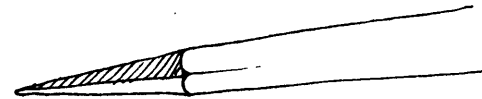


Fig. 4

Never pull leather taut when machine stitching the bindings on garments. Pulling the leather will cause the bound areas to curl when completed. To prevent this from occurring, attach the strips to the garment with tape or paper clips every 2" and ease the leather gently with your fingers as you stitch.

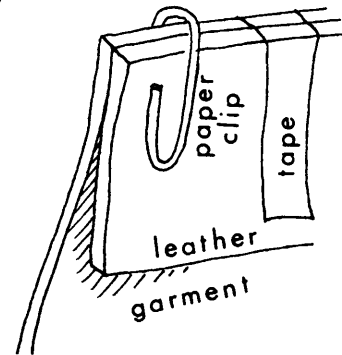


Fig. 5

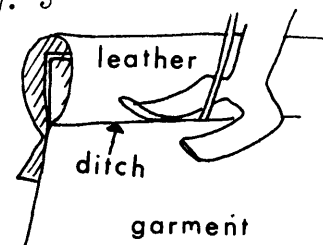


Fig. 6

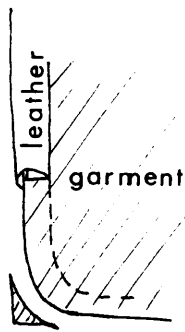


Fig. 7

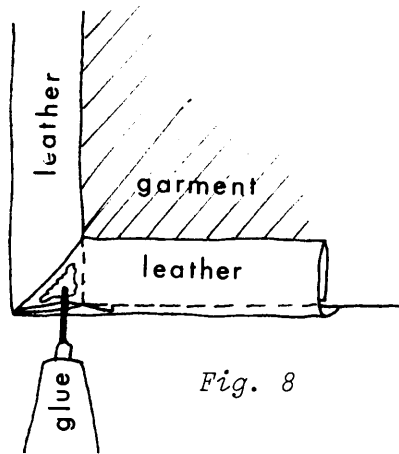


Fig. 8

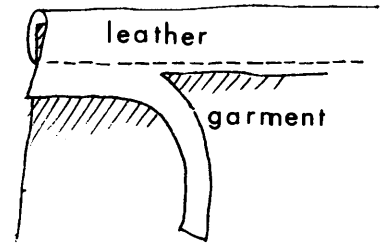


Fig. 9

Corners on garments are made by cutting curved edges on the garment and easing the binding around this curve allowing plenty of binding to prevent curled corners (Fig. 7). Another method is to complete the binding to the corner edge, cut off the binding flush with the edge, and begin another binding piece that has been cut diagonally (Fig. 8). Complete the binding with overlapped and glued ends.

The inside edges of the leather binding can be trimmed and made even by cutting with scissors close to the stitching (Fig. 9).

Happy leather sewing!

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Shadowweave, Part III - Marian Powell's Shadow Weave Conversion by Clotilde Barrett

Two noted weavers, the late Harriet Tidball and Marian Powell, have published articles on shadow weave. Each, however, uses a different system of drafting. This article intends to explain the difference between the two systems and the conversion rules which relate one to the other. This theory may only be of interest to advanced weavers who have some prior knowledge of shadow weave.

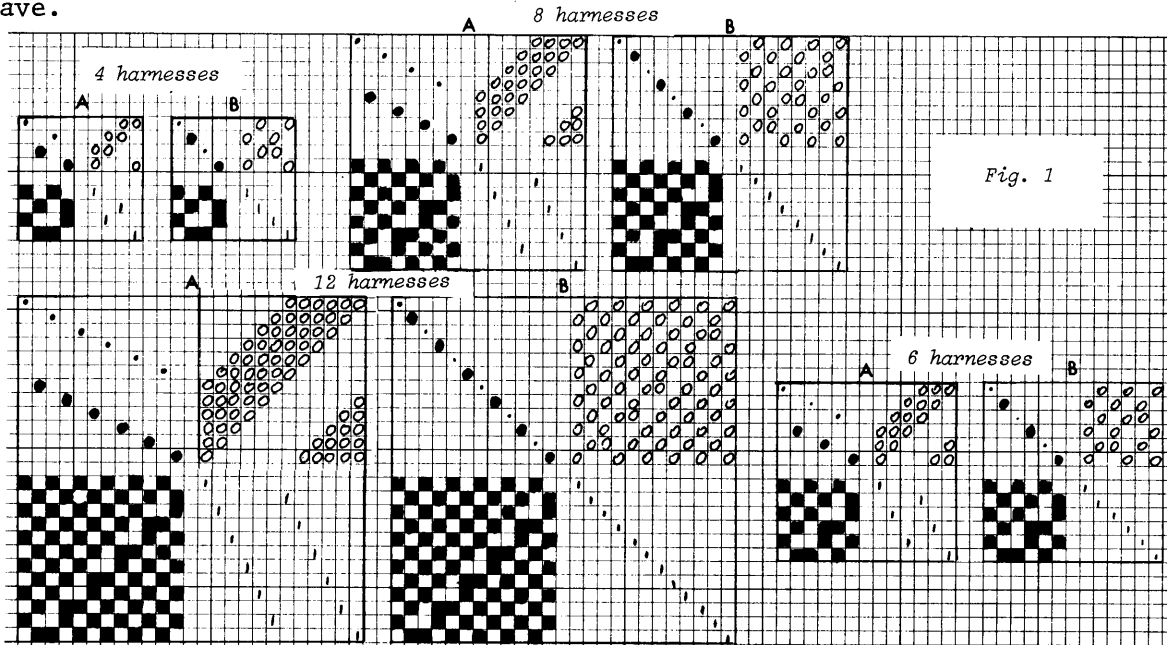


Fig. 1

The A drafts of Fig. 1 represent the threading, tie-up, treadling and cloth structure for 4, 6, 8 and 12 harness shadow weave using the system of drafting described in *"The Weaver's Journal"* Vol. I, No. 1, p. 13. The motif is a section of the straight draw. The section is chosen so that the dark warp ends, together with their light counterparts involve all the available harnesses once and only once.

For the B drafts, the cloth structure obtained in the A drafts has been graphed out first. Then, without looking further at the A drafts, the threading has been reconstructed by putting the first warp of the cloth structure (the one to the right) on harness 1, the second on harness 2, the third on harness 3, etc. The treadling has been reconstructed by using treadle 1 for the first weft pick (starting at the top), treadle 2 for the second pick, etc. Next, the tie-up has been figured out and this completes the B drafts of Fig. 1.

The A drafting system has been published by Harriet Tidball who uses the twill tie-up, and the B drafting system by Marian Powell, who refers to the tie-up of the B drafting system as "converted shadow weave tie-up".

By comparing the A and B drafts one can derive a set of conversion rules for the threading and the treadling for the weaver who prefers the converted shadow

weave tie-up rather than the twill tie-up. To convert from draft A to draft B, in the case of an 8 harness weave:

- the warp that was on H1 stays on H1,
- the warp that was on H5 is now on H2,
- the warp that was on H2 is now on H3,
- the warp that was on H6 is now on H4,
- the warp that was on H3 is now on H5,
- the warp that was on H7 is now on H6,
- the warp that was on H4 is now on H7,
- the warp that was on H8 stays on H8.

The treadling order is changed in an equivalent way.

This procedure may be reversed; starting from the B drafting system one may "reconvert" to the A system using the twill tie-up by changing the threading as follows (for an 8 harness weave):

- the warp that was on H1 stays on H1,
- the warp that was on H2 is now on H5,
- the warp that was on H3 is now on H2, etc.,

and by making the equivalent changes in the treadling.

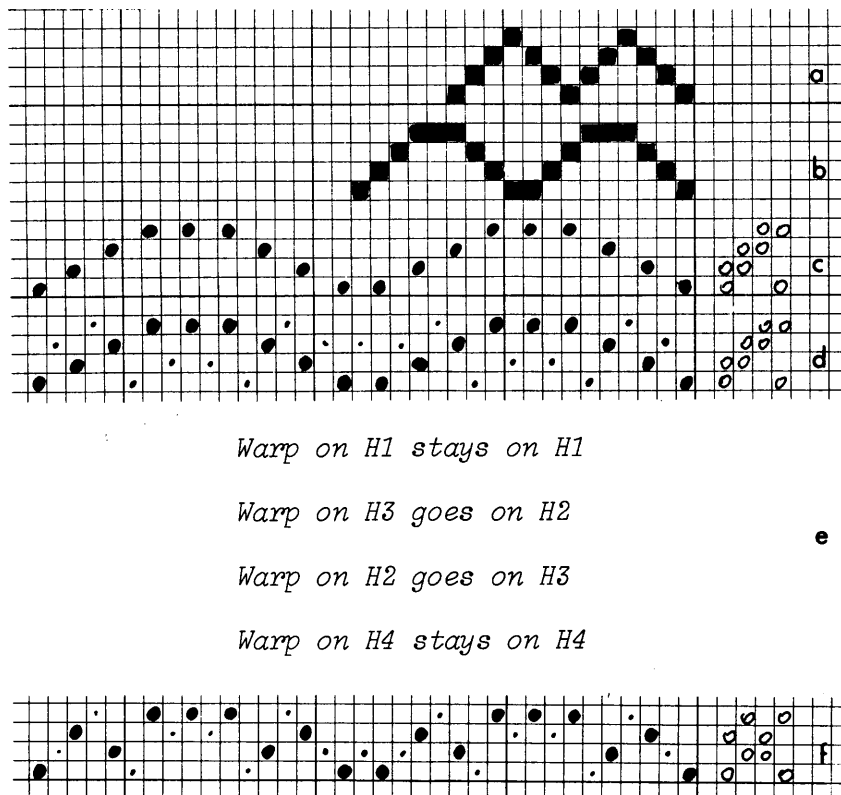


Fig. 2

Fig. 2 shows the following steps:

- a. Twill motif
- b. Extended twill motif
- c. Threading of the dark warps and the twill tie-up
- d. Light warp threading is superimposed on dark
- e. Conversion table
- f. Converted shadow weave draft using the converted tie-up.

One advantage of the converted shadow weave system is that this draft can be more easily condensed into a profile draft. For instance, in the case of a 4 harness loom there are 4 blocks possible, called A, B, C and D. The A block

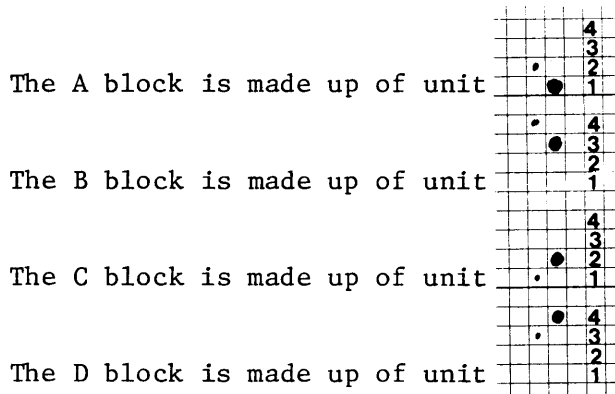


Fig. 3 is a profile draft of the shadow weave drafted in Fig. 2 (Some corrections have to be made at the turning points). Notice that the profile draft has the same configuration as the extended twill motif from which the shadow weave has been derived. This means that, by using the converted shadow weave tie-up, a shadow weave can be derived from an extended motif by interpreting that motif as being a profile draft in which the appropriate units are substituted to derive the threading.

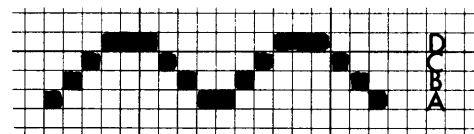


Fig. 3

REFERENCES: Harriet Tidball "The Weavers Book", The MacMillan Co., 1970, p. 156.
 Marian Powell, "1000 (+) Patterns in 4, 6 and 8 Harness Shadow Weaves", Robin and Russ Handweavers, 1976. (See book review)

A Twined Bag

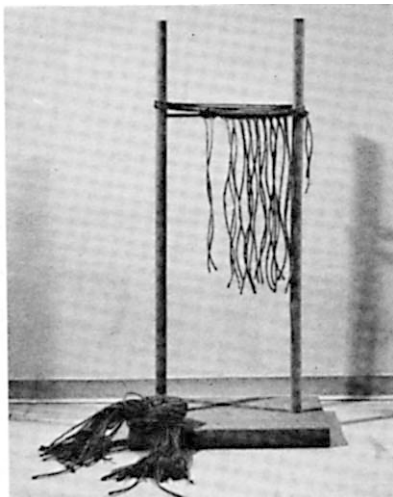


Plate 1



Plate 2

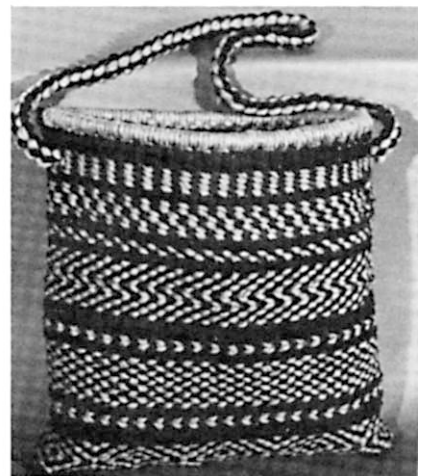


Plate 3

Twining is a textile construction whereby one starts out with a set of foundation cords called the warp. (See vertical strands in Fig. 1). Two weft strands A and B enclose the first warp; A in back, B in front. Then the two wefts are twisted half way around (clockwise in this example) and enclose the next cord, they are twisted again and enclose the following cord, etc.

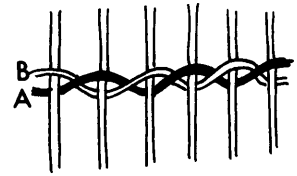


Fig. 1

The twining frame used for the bag illustrated in Plate 1 is inspired by a photograph published in "Ojibwa Crafts" by Carrie Lyford in which a bag is being twined on a simple device consisting of two sticks driven into the ground. Materials needed for the twining frame are:

One piece pine lumber 2" x 12" x 20".

Two dowels, 1" diameter 36" long.

One dowel, 1/4" diameter 13" long.

Drill one inch holes into the 2" x 12", about 1" deep and with the centers 13" apart.

Drill 1/4" holes in each of the thick dowels about 4" from the end.

Put the frame together with glue as in Fig. 2.

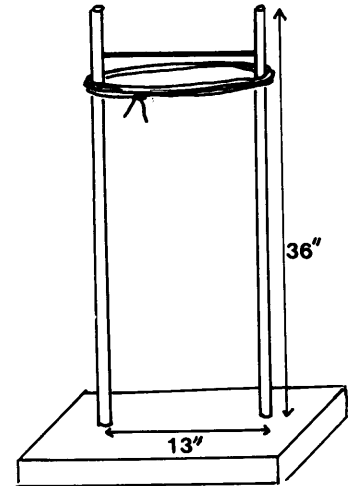


Fig. 2

Materials needed for the bag are:

50 yards 5-ply corona jute (for warp and mounting cord).

1 lb. 4-ply rug wool (used two-fold to increase the thickness), in two colors A and B for weft and braided handle.

Cut mounting cord 10' long, wrap this cord 4 x around the stakes and tie the ends together (Fig. 2). Cut 45 warp strands, each 36" long. Fold them in half and attach each one to the mounting cord with a "larkshead", followed by a right side half hitch and a left side half hitch (Fig. 3 and Plate 1). Make these knots very tight. Before covering the last 2" of mounting cord, where the knot is tied, untie the knot and overlap the ends. Mount all the following warp over all five strands of jute.

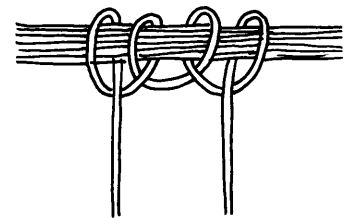


Fig. 3

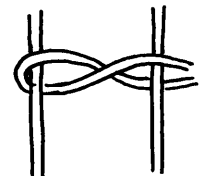


Fig. 4

To start twining, cut a twining strand of two-fold or heavy rug wool about 4 yards long. Fold it in half and enclose a warp in the fold (Fig. 4). With the right hand, twist the strands half a turn clockwise and enclose the next warp between the two wefts, twist again and enclose the next warp, etc. Notice that the weft in front of the first warp is in back of the next one. Continue twining around the frame. When you come back to the first warp you may start twining counter clockwise for the 2nd row. Notice that the "stitches" of the 2nd row slope in the opposite direction from the "stitches" of the first row (Fig. 5).

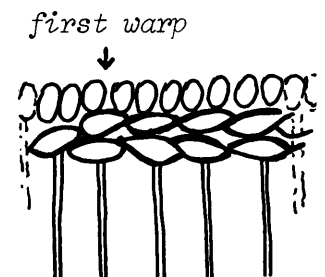


Fig. 5

Do a few more rows with two wefts of the same color, twine either clockwise or counter-clockwise for the entire row.

Whenever you run out of a weft yarn, splice a new piece onto it by overlapping the tail end of the old one and the first 2" of the new weft. Don't let the two strands of your two-fold weft run out at the same time. Always start a new color at the beginning of a row. Darn the ends of old and new twining weft alongside the closest warp. Interesting designs are achieved when the two wefts, A and B are of a different color. Make your first twined bag a sampler for the following simple 2-color designs.

Fig. 6a: Both rows are twined clockwise. In each of the rows color A always lies in front of the same warps.

Fig. 6b: Both rows are twined clockwise. Color A lies in front of the even warps in the first row and in front of the odd warps in the second row. To offset the color between the first and second row of pattern b, one has to make one full twist at the start of row 2 (Fig. 7). Color A lies in front of two consecutive warps. An alternative is to twine over a pair of warps at that point.

Fig. 6c: The first row is twisted clockwise. the second row, counterclockwise.

Fig. 6d: Same as in 6c but with an offset of color between the first and second row.

Fig. 6e: With two colors, twine clockwise around warps 1, 2, 3, 4 and 5, then twine counterclockwise around warps 6, 7, 8, 9 and 10, repeat this around the bag. The second, third and fourth rows are done in the same manner and with an offset of color along the warp. For rows 5, 6, 7 and 8, twine counterclockwise around warps 1, 2, 3, 4 and 5 and clockwise around warps 6, 7, 8, 9 and 10. Note that between row 4 and 5, there is no offset of color.

Twine for 12½".

To finish the bottom: turn the bag inside out and tie each warp of the front layer to the corresponding warp of the back layer with a square knot.

For the handle, make a braid of your choice. In the bag illustrated in Plate 3, a Greek braid (also called idiot's delight, double crocheted braid or single Higginbotham sennit) was used with 5 strands of color A and 5 strands of color B.

REFERENCES: Lyford, Carrie "Ojibwa Crafts", Haskell Press, Lawrence, Kansas, 1943.

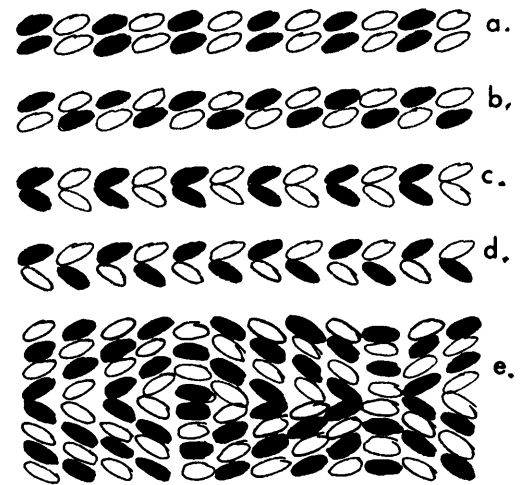


Fig. 6

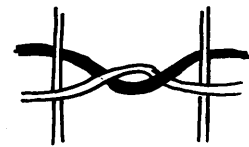


Fig. 7

Portraits in Double Weave

by Carol Strickler

Finnweave pickup on a 4-shaft doubleweave threading has been, for me, an excellent way of weaving portraits. I have used two different techniques to translate a picture into a two-tone graphed drawing.

In the case of the Beethoven hanging, the book illustration chosen for the original was a black-and-white reproduction of a "stormy" portrait, already characterized by sharp dark/light contrasts. The photocopy on a xerox machine (which does not reproduce photos well) further eliminated the gray tones. At this point, tracing the design outlines onto tissue paper allowed me to reduce the portrait entirely to black-and-white contrasts. This was then traced onto 8-to-the-inch graph paper, then enlarged onto 5-to-the-centimeter paper (a 3x3 block of 9 squares representing each square of the 8 per inch drawing to allow more detail). Plate 1, a, b, c, d.

"Portrait of Jim" demonstrates a different technique for achieving the graphed design. In that case, the original was a colored slide of Jim Turner, musical sawyer, giving a concert. So I was able to simply project the slide onto a piece of 8-to-the-inch graph paper taped to the wall and to trace the outlines of dark and light contrast, eliminating all halftones as I traced. This was then enlarged onto 5-to-the-centimeter paper (a 2x2 block of 4 squares representing each square of the 8-per-inch drawing to allow more detail). Plate 2.

In both of the weavings, the 5-to-the-centimeter design was used as the basis of the weaving, each square representing a pair of warp threads and a pair of weft threads (2 picks of pattern and 2 picks of background). The Beethoven hanging was woven of Lily Frost-Tone, Article 49, mercerized cotton warp in green and white at 30 e.p.i., with smaller weft threads (to square the design). Plate 3.

"Portrait of Jim" used bright blue and white 2-ply Finnish wool at 20 e.p.i., with white and a darker blue of the same yarn as wefts. Plate 4.

Editor's note: An alternative procedure for transferring a design to graph paper is available to the weaver who is equipped to do photographic processing.

The original subject is photographed on a standard black-and-white film such as Kodak Tri-X or Plus-X. The film is then developed in a strong-working developer such as Kodak D-11 or D-8, fixed, washed, and dried. The result is a negative with high contrast.

This negative is placed in an enlarger and projected onto a sheet of the graph paper and the image is adjusted to the correct size. A positive transparency is then made on Kodalith film, processed in Kodalith developer. This transparency will be purely black and white, without halftones. After drying, the film is registered with the graph paper and the pattern is blocked in. A tracing table is most useful for the final step.



a



b



c



d

Plate 1



Plate 2

Plate 3



Plate 4



Book Review by Clotilde Barrett

HANDWOVEN by Susan Guagliumi. (Guagliumi, 1976) North Haven, Connecticut, 30 pp., \$4.00. This book is really a workbook describing projects to be woven. The instructions are geared to the intermediate weaver who knows the structure of the basic weaves and double weave. Yet the type of woven article described in the book would appeal more to the beginning weaver with a small loom who is looking for a quick useful and successful project. For the beginning weaver, however, some of the statements made should have been better clarified. For instance, the book does not state that a tubular plain weave should be done on an odd number of warps. The book will be appreciated by someone who has just learned the technique of double weave and is looking for ideas to practice the new skill. It is also one of the few texts dealing with weaving angular shapes.

1000 (+) PATTERNS IN 4, 6 AND 8 HARNESS SHADOW WEAVES by Marian Powell. (Robin and Russ Handweavers, 1976) McMinnville, Oregon, 270 pp. The book consists of three sections. The first deals with theory and definitions. This reviewer has the impression that someone who is not thoroughly familiar with shadow weave will not be able to decipher the information given in these chapters. An unusual number of typographical errors makes the text even harder to comprehend.

The second section gives the drafts, i.e. threading, tie-up, treadling and a cloth diagram showing the color effects. One out of 50 uses the drafting system advocated by the late Mrs. Atwater. The other 49 use the drafting system using the "converted" shadow weave tie-up advocated by Marian Powell. The reason for using the Atwater system for draft #2 is not made clear. This section is not too useful as the same information is repeated through photographs and drafts of the third section.

The third and last section makes the book a worthwhile addition to any weaver's library. It contains about 400 excellent photographs of shadow woven cloth. Each photo is coded clearly, with references to the number of harnesses, to the threading, the twill motif from which the threading is derived and to the treadling.

One only wishes that somewhere in the book there would be a clear explanation about the way the threading was derived from the twill motif and a justification for the converted shadow weave tie-up used throughout the book.

List of Advertisers

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Dog Fashions by *Iris Richards*

Do you have a small dog that needs protection from the cold in the winter-time? A handwoven coat is just what he needs. Little dogs are so close to the ground they feel the cold much more than a larger dog and certainly need this comfort when outdoors.

You may choose to have your canine friend match your own coat, jacket or poncho as in the cover illustration.

Styled after your own garment, your dog's coat will become the height of sophistication because it can be as fancy or plain as you wish. I think we have all read that hoods are one of the leading styles this season; so it is with your dog. Dogs need protection for their ears in zero weather. You can even make the hood detachable if you wish.

Use yarns such as wool, alpaca, mohair, even some silk. Avoid doghair fiber as it may make the dog uneasy. You may use the same warp for the dog coat as for your poncho; just remember to weave the dog coat of lighter-weight weft than yours. Color plays a very important part in your canine's coat. Just as to you, some colors are more becoming to him. Try holding different colors against his fur and you will be surprised how much better some colors look on him. The pattern of the weave should not be too large. The dog coat should be as soft and pliable as possible. The coat should fit well and not come down over his legs or it will interfere with his walking.

Never line your dog coat with a slick lining such as satin as it makes the coat slide around on his body. Use a soft velveteen, corduroy, chamois or any napped material that will cling to his body. When making the dog coat you have to tailor it as you do your own, using a light weight interfacing. The collar should by all means be rolled to look proper. The finishing and trim is very important. A leather trim is very lovely, or one can trim with a braid made of the same yarns as used in the coat. Even a fur (preferably fake fur) collar or trim adds a posh look to your dog's coat.



Fasten the coat with as few shank buttons as possible and choose buttons with a slick finish, not covered with fabric.

Make a belt of the coat fabric and plan on fastening the belt with a buckle, allowing for adjustment in the event of weight loss or gain. If a chest protector is desired, the belt is made by extending the chest protector on each side (Fig. 1). Be sure the buckle is worn towards the top of the coat otherwise the buckle can cause much discomfort to the dog.

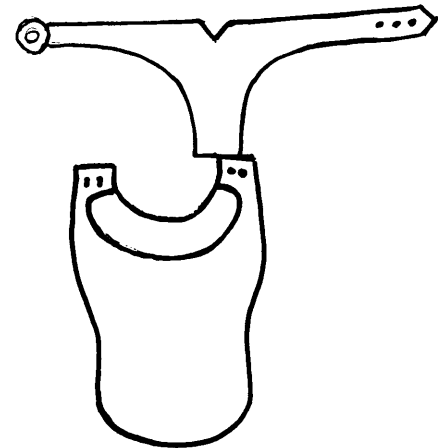


Fig. 1

Try putting a pocket in your dog's coat to use for your parking meter money; then you always have the change and never have to hunt. It will be there as your dog won't spend it.

Another idea for your dog is to make a crazy quilt coat for him using your handwoven scraps. Join the scraps of bright colors together with fancy stitches. Embroider a bone on it just for fun.

Another stunning style can be obtained by knitting, crocheting or using part leather along with handwoven fabric. This adds a completely different look.

Why not a western style coat for your pal with yoke and piping all around as in your western shirt? You may even choose to put a toy pistol with a leather holster on each side of the belt. Your dog can't play with them but it is a conversation piece!

Instructions for weaving the poncho and dog coat illustrated on the front cover:

Warp - Maypole "Willamette (white) and a lightly textured novelty wool in a contrasting color. The same warp is used for the poncho and dog coat.

Weft - For the dog coat, use Icelandic Homespun lopi (natural).
For the poncho, use a thicker lopi.

Threading, Tie-up, and Treading - see Fig. 2. The weave is a combination of Atwater-Bronson lace and broken twill.

Sett - See Fig. 2.

Width in the reed - 27 inches.

Thread the border, the pattern 4 times, then B 2 times, and end with the border.

O-Orange
B-Brown
Y-Yellow
S-Sienna

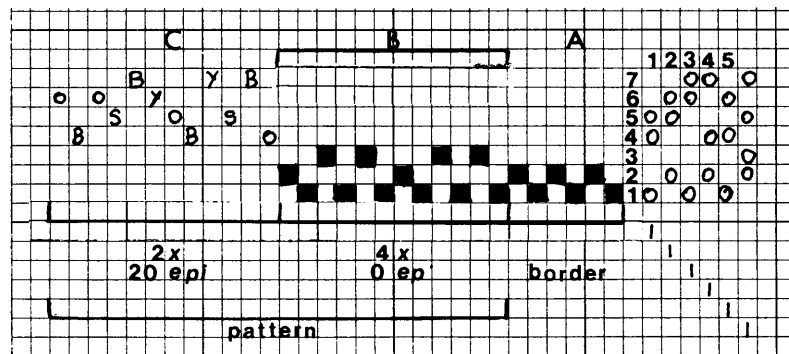


Fig. 2

Patterns for Dog Coat and Poncho:

Dog Coat - Use preshrunk fabric and follow pattern outlined in Fig. 1. Measure the coat from the withers, which is the point at the top of the shoulders where the neck joins the body, to the end of the spine and the beginning of the tail (see Fig. 3). Allow for seams. Measure around the dog to know how long to make the belt, allowing enough to attach the buckle.

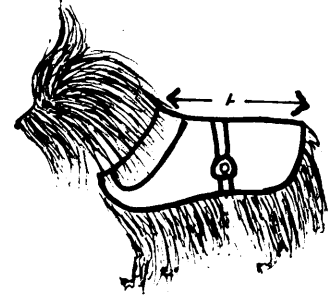


Fig. 3

Poncho - Use two strips 27" x 74", sew them together leaving an opening for the head. The poncho measured 52" x 74" off the loom, and 48" x 72" after dry cleaning.

Weaver's Market

"WARPING THE LOOM ALONE" by Teresa Folts and David Mathieson, \$4.95, third printing.

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New Products

TRI-WEAVING by Wilbur Gloor

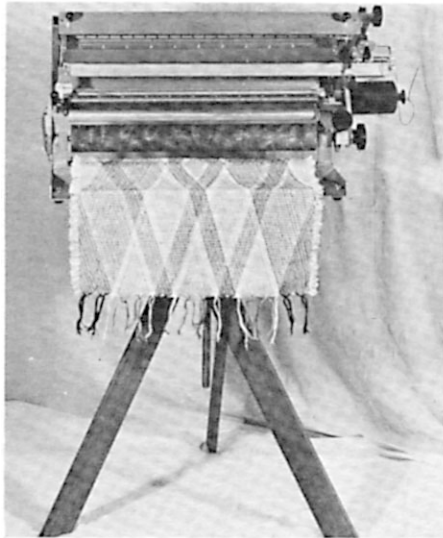


Plate 1

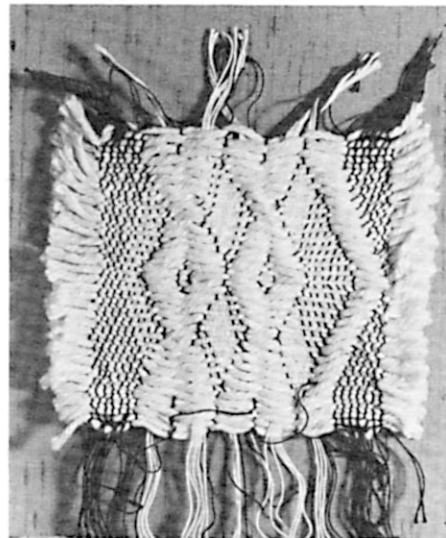


Plate 2

Tri-Weaving is the latest weaving development being offered to the public market. It is the intertwining of three threads at their crossing point, and produces a stable fabric having bias strength, ravel resistance, curve fitting, unique patterns and reversibility. There is little published information about three-thread fabrics, though more will certainly be available in years to come. Tri-Weaving provides an alternate method of weaving fabric to supplement our traditional two-thread system which dates from perhaps 5000 B.C. Historical records show early evidences of the triangular designs developed by Tri-Weaving. There is a similarity in appearance to some initial forms of plaiting which date from 2000 B.C. Certain designs of chair-caning use a bias cane, but these are not triangularly arranged. In the 1920's some work in this field was recorded relative to a fabric design, and also for hat formations. In the 1960's additional interest developed in applications to aerospace research, due to the improved physical features of three-thread formations in comparison to traditional two-thread fabrics. Commercial research and marketing of three-thread fabrics has been in process the past several years, primarily in the industrial fabric field. Now, in 1976, the first manual loom to Tri-Weave fabric of useable width and length has been introduced to the public market.

Patches of Tri-Weaving have been done by using simple toothed hexagonal frames; considerable patience and time are required to devise the formations. Such frames are marketed and are being used to wind yarn in three directional layers, followed by tying the intersections of the three thread layers, but this is not Tri-Weaving. An illustration, familiar to most, would be a Chinese Checkers board which readily illustrates by ball positions the three directional thread intertwine points in Tri-Weaving. While Tri-Weaving is more complex than traditional weaving, the new manual loom arrangement provides operational simplicity in weaving two- and/or three-thread fabrics. Before market introduction, over four years of investigative work and testing has been required to verify that good quality Tri-Weavings could be easily produced on the manual TRI-WEAVER. Plate 1 illustrates the TRI-WEAVER. It is quite different in appearance as compared to traditional looms. Plate 2 shows a sample of test Tri-Weaving illustrating discontinuous-warp and combination Tri-Weaving with oscillating-warp

Tri-Weaving at each end. A complete instruction manual is provided with the loom, allowing users to Tri-Weave fabrics of distinctive quality and to develop patterns of their choosing.

CLEMES KIT WHEEL



A compact castle wheel built of Baltic Birch and Maple. The wheel comes in kit form, unassembled and unfinished. All parts are pre-fitted and sanded with a medium grade sandpaper. Fine sandpaper is included for finish sanding. Detailed instructions are included. The wheel is 16" in diameter with ball bearings for smooth operation. The treadle is of the heel-toe design and provides excellent control of the wheel including starting and stopping without having to touch the wheel. The flyer has a 3/8" orifice with generous bobbins for those who like to spin yarns towards the heavier size or don't like to change bobbins all the time. The tension is a dual-belt drive system which works evenly and smoothly and is very easy for the beginner or the pro to adjust.

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