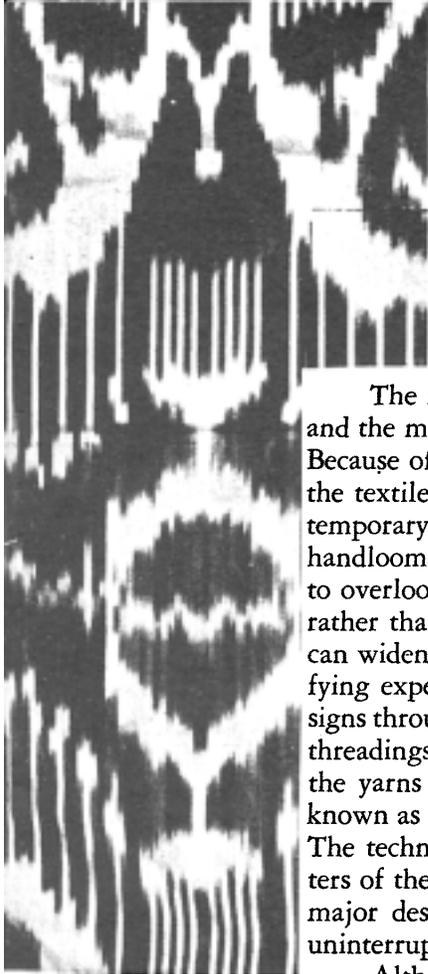


SHUTTLE CRAFT

January 1957

9
Position



*Warp-rep jaspé
from Turkestan.*

JASPE'

by Harriet Tidball

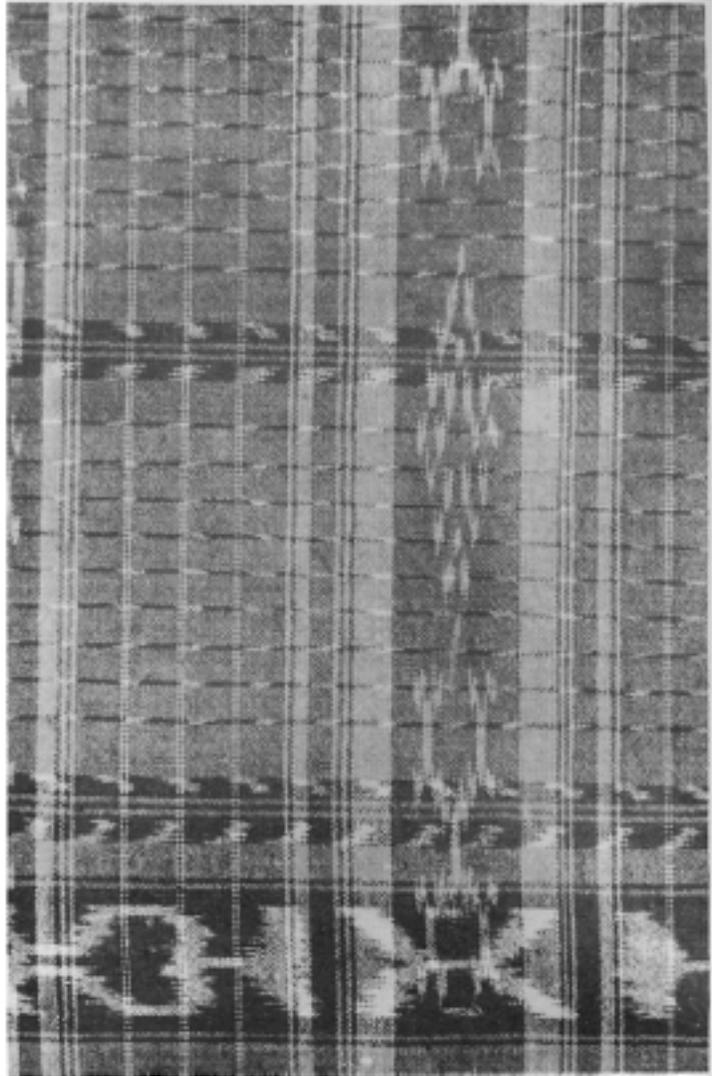
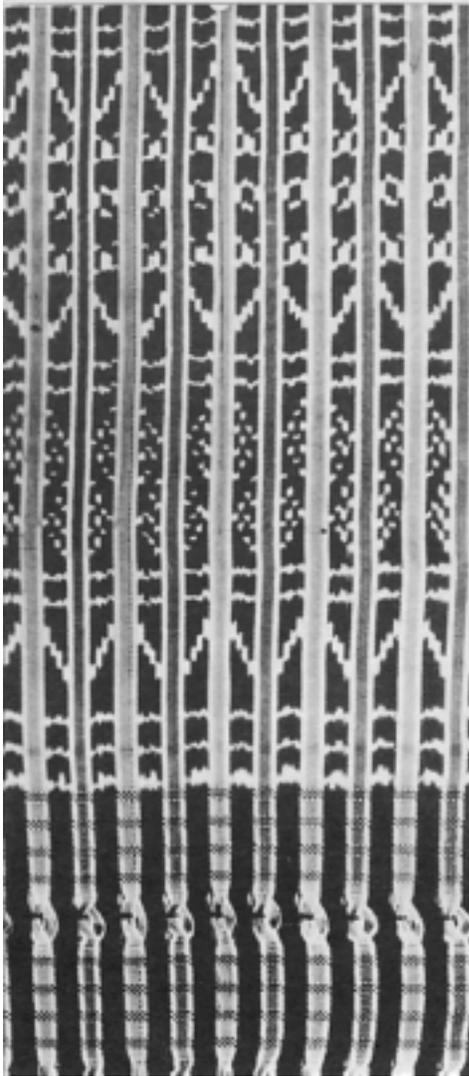
The roots of modern design lie deep in the ground of primitive art forms and the modern designer goes consciously to the primitive for fresh inspiration. Because of the universality of textiles throughout the span of recorded history, the textile techniques from the past are a particularly fertile field for the contemporary handweaver, though because of the relative complexity of modern handlooms as compared to the primitive loom, the handweaver has a tendency to overlook the techniques which depend for design on the weaver's ingenuity rather than on the capacity of the loom. Therefore one design medium which can widen the scope for the modern handweaver and prove a fruitful and satisfying experience, has been too often neglected: the technique of creating designs through patterns dyed into the yarns instead of through harness and heddle threadings. Such patterns are achieved through a method of resist dyeing of the yarns before they are woven, and fabrics in this technique are variously known as tied-and-dyed, chine', ikat or jaspé. (See derivation notes on page 11.) The technique seems to have been used throughout the textile-producing centers of the world from unrecorded times, and has continued to the present as a major design method in places where the history of handweaving has been uninterrupted from the primitive.

Although jaspé work is fairly common in India, Turkestan, Indonesia and some parts of Africa, the American weaver's source of interest in jaspé stems largely from the handwoven pieces produced in Guatemala and Mexico. The experience has recently been enriched by examples of beautiful jaspé work given in two portfolios: *A STUDY OF OKINAWAN TEXTILE FABRICS* by Toshio and Reiko Tanaka, published in Tokyo in 1952, and *FORTY HAND-WOVEN COTTON TEXTILES FROM JAPAN* by Shumi-No-Momen-Kenkyukai, prepared in Kyoto, Japan in 1956. The former portfolio consists of color plates of photographed textiles, whereas the latter consists of forty woven examples, each about six by seven inches, and in both the jaspé design technique dominates the collection.

Modern weavers have been unnecessarily discouraged in attempting jaspé designs, perhaps because most of the examples which come to us from primitive looms show design in the warp or in both warp and weft, and the method for dyeing patterns into warp threads seems too tedious for our awkward fingers. But there are also many examples of excellent weft jaspé, a technique quite practical for the modern weaver, to alleviate this superficial discouragement.

Typical of the complex warp jaspé is this pattern from Turkestan. A much simpler warp jaspé, which requires threads dyed in only four different patterns,

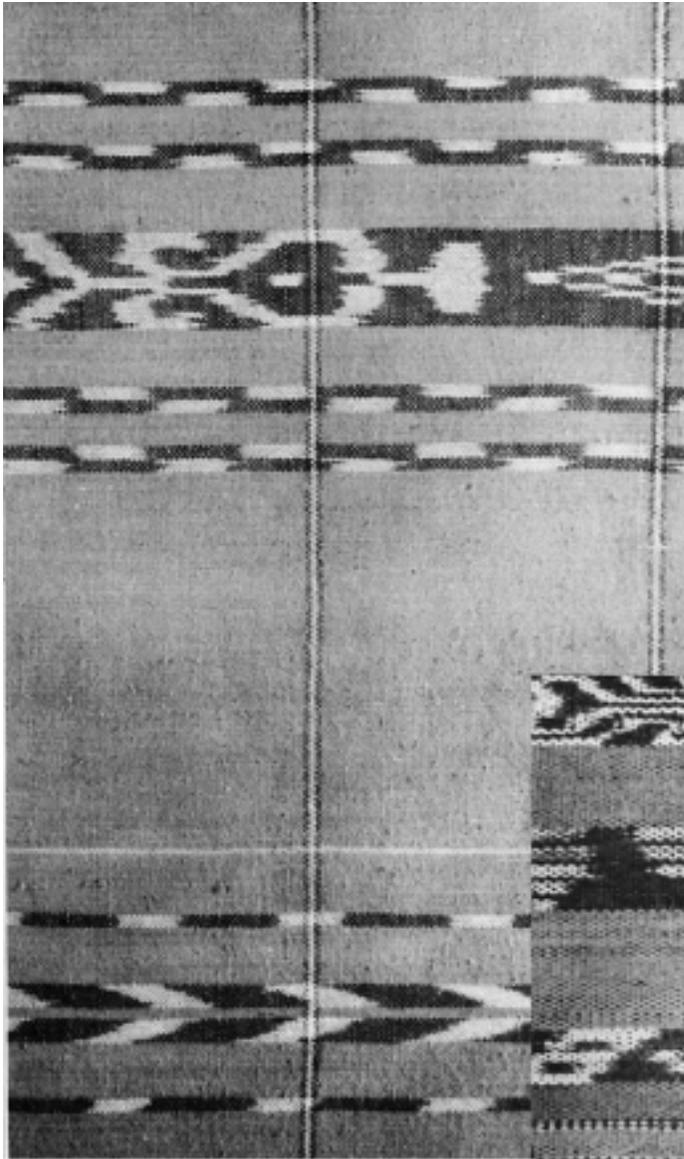
is the silk reboso from Mexico. A fine example of warp and weft jaspé is shown in the photograph of the modern Guatemalan skirt from near Quezaltenango; examination of this shows that most of the design is in the weft, with the majority of weft borders in simple structure, accented by some warp jaspé and plain warp stripes.



*Silk warp-rep jaspé reboso from Mexico. Black and white designs with color stripes.
Courtesy, Dorothea Hulse. (left)*

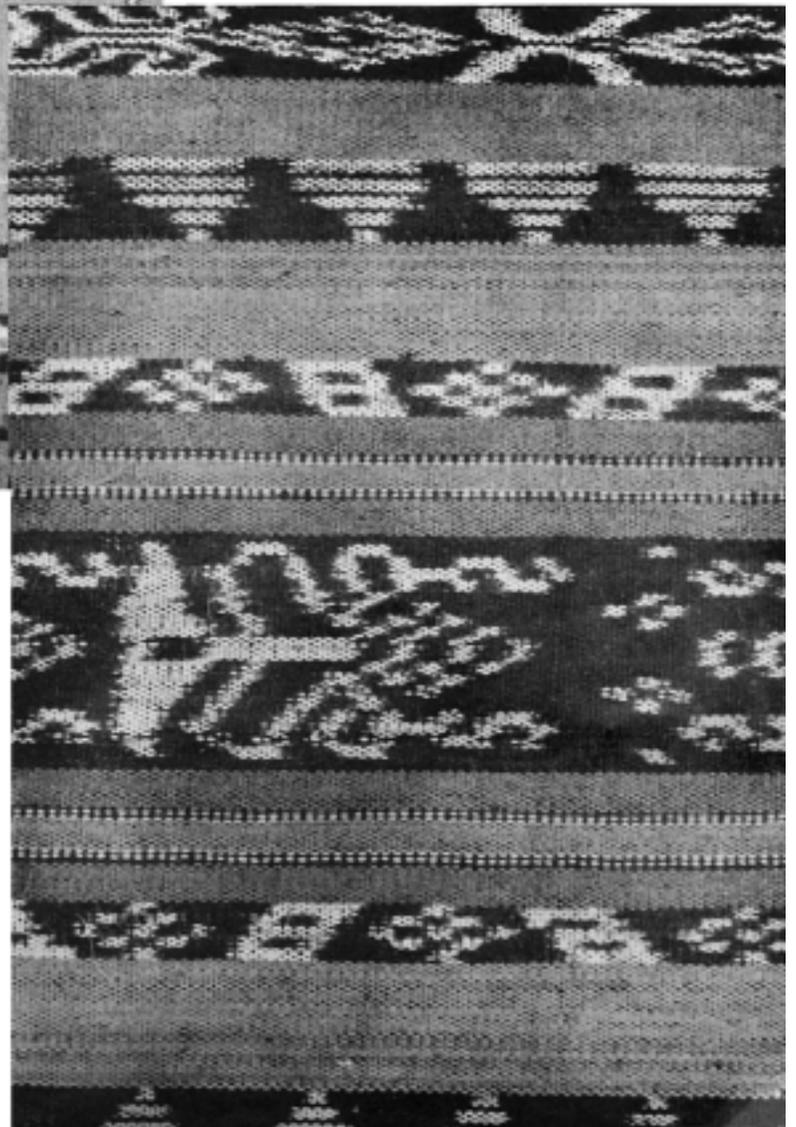
*A jaspé skirt yardage from near Quezaltenango, Guatemala. Cotton, green with black and
white. (right)*



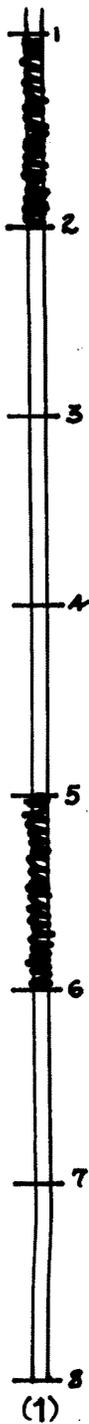


A jaspé skirt yardage from Santiago Atitlan, Guatemala. Cotton, red with black and white. (above)

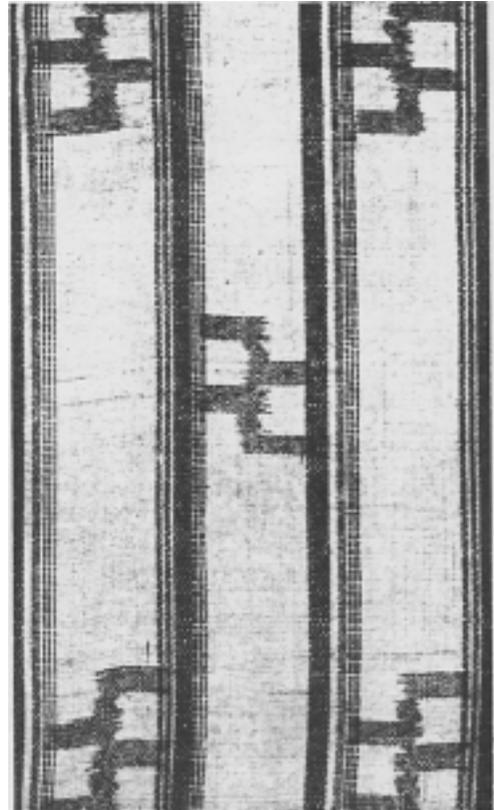
Shawl from Totonicapan, Guatemala. Gold and black botton jaspé and brilliant worsted stripes. Strong weft emphasis. (right)



Further Guatemalan textiles such as the skirt length from Santiago Atitlan and the gaily colored shawl from Totonicapan, show jaspé work in the weft only. The cover illustration shows a warp jaspé from the Kyoto Portfolio (Number 3), the designs composed of only one tie-dye pattern; whereas the illustration from the Okinawan Portfolio (next page) shows plain warp stripes with jaspé in the weft only, in a design which requires threads dyed in two patterns.



The Guatemalan weaver who wishes to produce simple weft jaspé is fortunate to be able to purchase skeins of the tie-dyed yarn in many of the village markets. The North American weaver is not so fortunate. Although commercially spot-dyed yarns in enchanting color combinations may be found on many yarn counters, these are not suited for producing jaspé designs because the span of any single color is too long to form a design when such yarns are woven. The North American handweaver must dye his own yarns. Fortunately, elaborate dyeing methods are not required, and the most interesting designs are accomplished with very simple patterns tied into the weft thread. Start with one tied arrangement and fairly heavy thread of a light color dyed to a dark color. For our own first experiments we used 10/2 cotton (Lily Article 314) in various light colors, and black Putnam dye.



*Weft Jaspé with Warp Stripes
Number 27, Okinawan Portfolio*

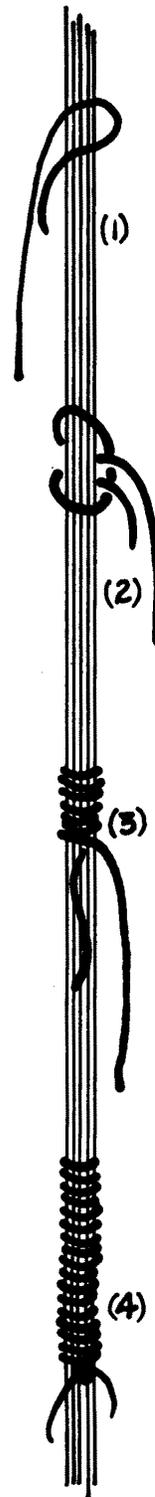
PREPARING THE TIE-DYE YARN. The first process is to wind the selected material into a taut skein. The skein length is not arbitrary, though the total number of inches of the skein's circumference should be divisible by four. Most of the skeins available in the Guatemalan markets are only twenty-four inches, though some are thirty-six. We wound ours two yards, using a horizontal warping reel. Many other winding arrangements would have served as well, provided the total distance around is carefully calculated and set: a squirrel-cage swift such as those made by Leclerc and by Gilmore which can be firmly clamped for any desired distance would be excellent, or three or four pegs of a warping board, or even heavy nails (dowels would be better) driven into a board. Perhaps the most practical winding frame would be the Gilmore-type Inkle loom, using the tensioner board for adjusting the skein length, releasing the tensioner when necessary during the tying process to move the skein to convenient positions. The skein for tying cannot be wound large, if the spots are to be spaced with the required accuracy. We found that about two hundred turns of the reel with the 10/2 cotton gave a workable skein. More turns could be made with fine material, and fewer with heavy material. When the desired number of rounds of thread have been wound, tie the begin-

ning and completing ends together and leave dangling, so that they may be found and the knot cut for the eventual bobbin winding.

Cut pieces of carpet warp about eighteen inches long for the ties. Snitch a length of carpet warp around the skein as shown in the diagram, leaving one end long and one end short. Pull the snitch very tight and let the short end hang down the skein. With the long end wrap very tightly and closely down the skein, incorporating the short end, for the desired length, making a double cover. When the desired length has been wrapped, tie the two ends together in a tight square knot. Snitch the next cord loosely below this and measure accurately from the top of the previous tie to the exact position where the top of the new tie should be; then tighten the cord at this point and wrap as before. Continue this around the entire skein. Perfect accuracy of measurement is necessary in order to make the distance between the first and last ties, when the circuit of the skein is completed, exactly the same as that between the other ties.

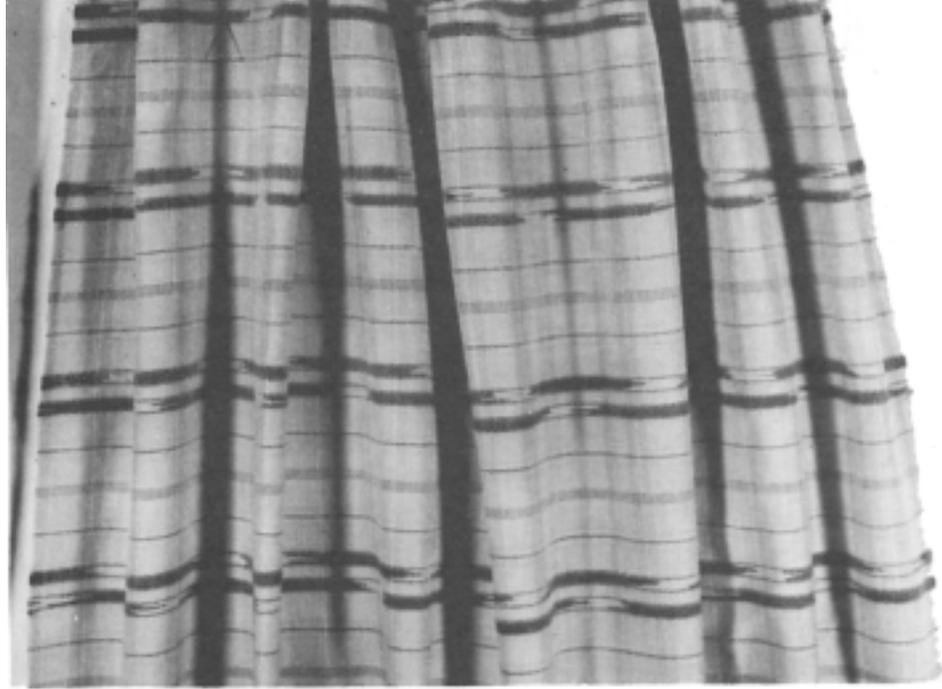
The next problem is determining the arrangement of ties. Four basic arrangements are diagrammed on the marginal sketches, all showing eight inches of skein in exact scale, with the inches indicated. The first one wraps an inch and leaves three inches unwrapped. The second wraps one inch and leaves one inch unwrapped. The third wraps one-half inch, skips one inch, wraps one-half inch, skips two inches. The fourth wraps two inches and leaves two inches unwrapped. Arrangements may be made on the basis of three-inch repeats if preferred. Any one of the given arrangements may be used alone for forming different design borders, or two patterned yarns may be used together to form more complicated patterns. As the weaver's experience increases, three and four different pattern yarns may be used together to form complex patterns, and the weaver who becomes truly intrigued with the technique will experiment with different tie spacings. Mrs. Atwater's article gives a clever method for creating the more elaborate borders, similar to the Guatemalan and the Turkestan ones illustrated.

When the ties are completed, the skein is removed from the reel or pegs and is ready for dyeing. Any good commercial dye is satisfactory for the weaver not particularly intrigued by home dyeing; while those weavers who find dyeing their own yarns one of the more fascinating facets of the craft will probably do extra special work here. We used drugstore package dyes, following the directions on the package, but increasing the proportion of dye per quantity of water and weight of yarn, and reducing the boiling time considerably, to give the dye bath less opportunity to penetrate the resist areas. Results were satisfactory and colors have proved fast. When the skein is completely dry, cut the knot at the bottom of each tie and unwrap. The Guatemalans and Mexicans slit the ties skillfully with a sharp knife and remove them at lightening speed, but our natural caution against the possibility of cutting one of the skein threads indicates the slower process of unwrapping. When loosened, the skein is ready to be wound onto bobbins for weaving. We found that there was shrinkage caused by the dyeing process, but this created no problem in the weaving.





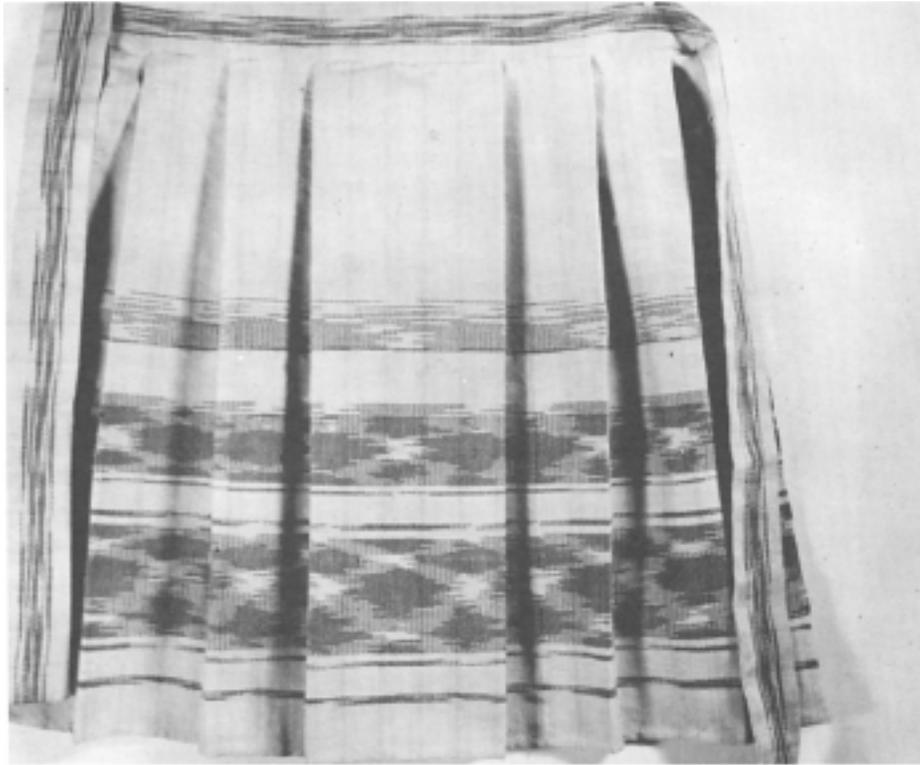
WEAVING BORDERS WITH TIE-DYE WEFT. The problem of forming design borders is simply that of arranging the spot areas in the shed so that the spots occur at the places desired. This may be done as suggested in Mrs. Atwater's article, by removing or adding warp ends at the edges so that the pattern spots coordinate exactly with the warp width. The stripes in Mrs. Shield's



Weft jaspé yardage, woven by Mrs. Geneve Shields, San Gabriel, California.

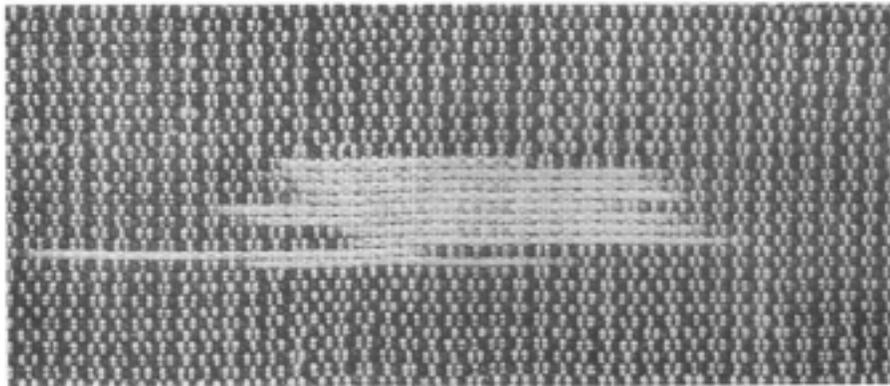
fabric show this coordination between warp width and spot arrangement: one shot of tie-dye weft was thrown and the spots arranged where desired; then the spots on the other three shots fell naturally into similar positions. Mrs. Edward's fabric shows an unexpected diamond pattern which emerged without any weft adjustment, on a warp in which the warp width and the spot arrangement were not in coordination. Pleasant, unplanned effects like the borders on this apron are one of the surprises in store for the jaspé weaver. The detail of this fabric shows a chain-like effect in the warp resulting from the sley of three per dent in a 15-dent reed. This texture is permanent when a fine, closely spaced warp is woven with a heavier, closely spaced weft. If such a warp is woven with identical weft, in perfectly balanced tabby as in Mrs. Shield's yardage, the warp groups adjust themselves when the fabric is washed, to a smooth, regular surface.

Both of the fabrics illustrated were woven in the Shuttle Craft studio on a warp of Joseph D. Acton 30/2 mercerized cotton, set at 45 ends per inch, three per dent in a 15-dent reed. The warp was mainly amber, but with a one-

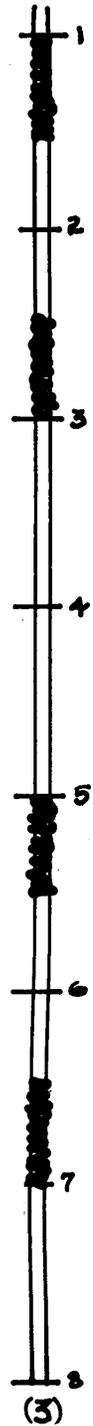


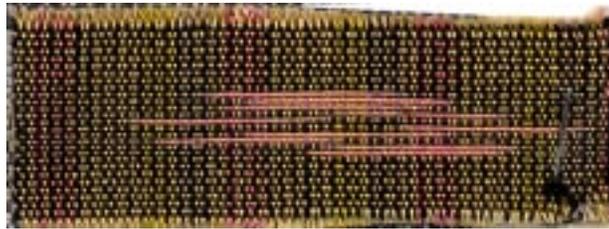
Apron with weft jaspe' borders, woven by Mrs. Elmeda Edwards, Portland, Oregon.

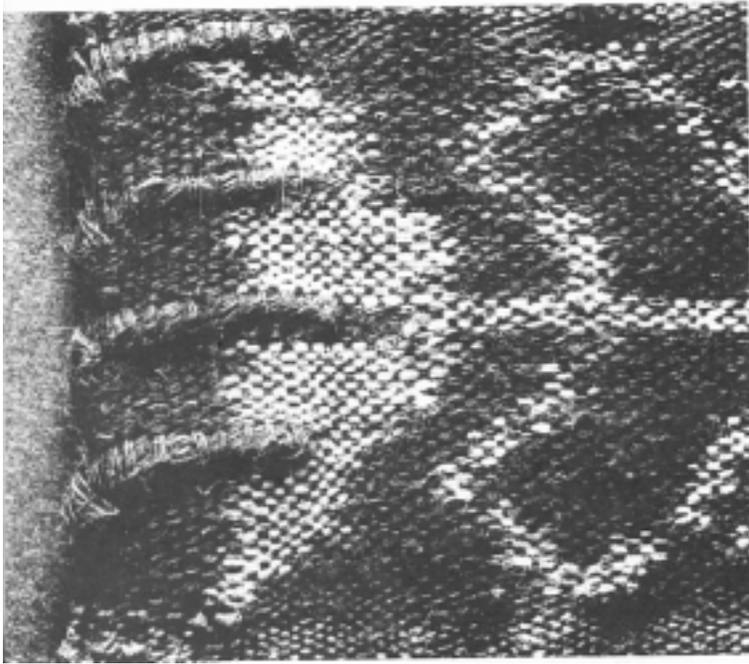
inch wide shadow stripe arrangement using rose and taupe. All of the weaving is on tabby sheds, so any threading which produces a tabby is suitable. Mrs. Shield's apron is woven in gold with stripes in black and turquoise (the turquoise color stripes do not show in the photograph) of 30/2 like the warp, with only the spot-dyed yarn in 10/2 (Lily, topaz dyed with black).



Enlarged detail of the Jaspe' spots showing warp groupings which occur from the 30/2 warp sleyed three per dent and woven with 10/2 cotton, without balance.

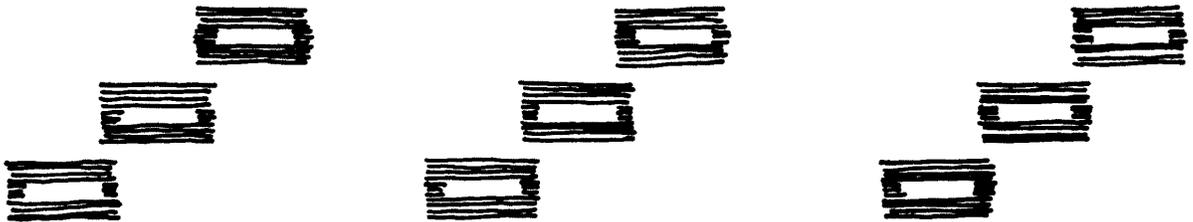






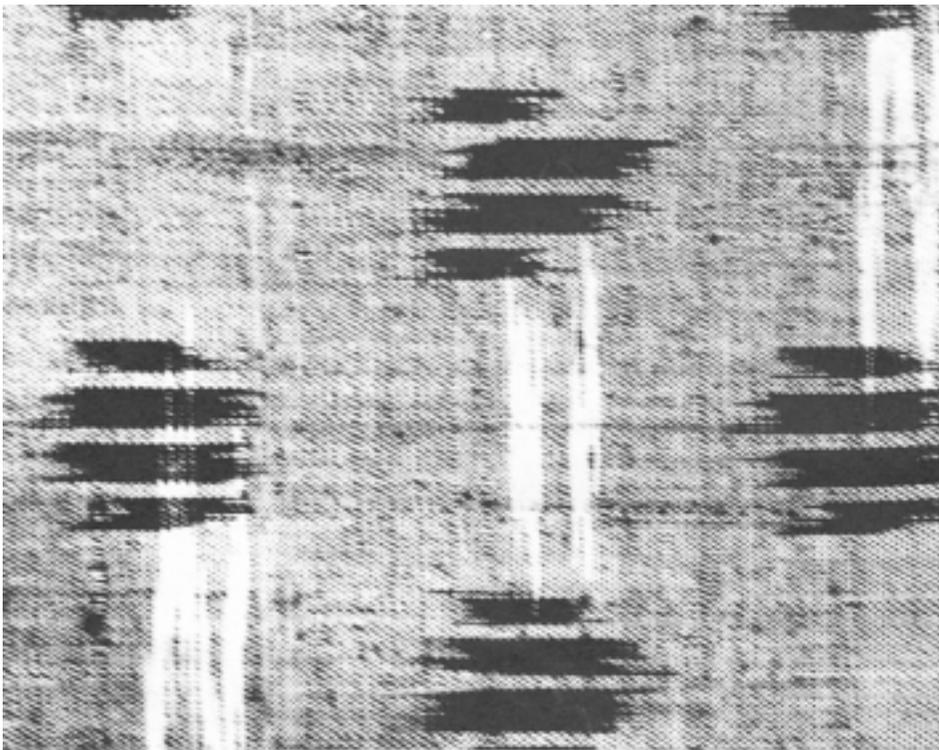
*Selvage detail from
the Totonicapán shawl,
showing treatment of weft loops.*

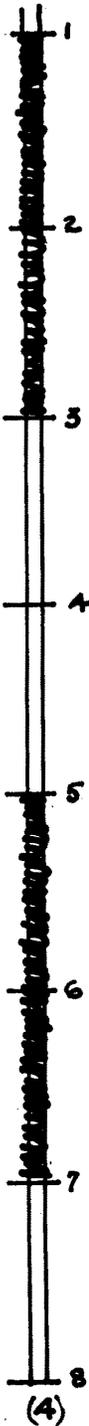
To form planned borders similar to those in the Japanese and Guatemalan fabrics, the North American handweaver must free himself of one of his most troublesome inhibitions—the selvage inhibition. He must shift his attention from the selvage to the design, and permit selvage irregularities to occur. Because each weft thread must be placed in the shed so that spots fall in exactly the correct positions, most of the wefts must be adjusted in the shed by leaving loops, at the selvage. All of the Japanese textiles show this problem handled very casually: there are simply dangling loops. The Guatemalans are more particular about the regularity of the edges, but in a manner which is at first shocking to the North American weaver. The Guatemalan weaves several shots, allowing the loops to dangle; then he gathers the loops together, gives them a twist between the fingers, and thrusts the whole group into an open shed. This leaves a corrugated selvage, as illustrated, which is strong and neat and not offensive, once the handweaver frees himself of the misplaced emphasis of feeling that a machined-like selvage is paramount to design. Except for certain textiles such as table mats and other articles in which the selvages are part of the planned effect, selvage irregularities, especially when they are consciously allowed as adjustments to design, are not a sign of poor craftsmanship. Selvage irregularities are important only if they indicate lack of basic skill.



DESIGNING WITH WEFT JASPE: Jasper textiles woven on primitive looms usually have warp jasper designs in warp-emphasis or warp-rep fabrics because, on these primitive contraptions, it is easier to manipulate warps than to make sheds. The fabrics now being woven in Japan and the jasper skirt lengths one sees from Guatemala, are woven on treadle looms. The samples in the Japanese Portfolio are seven inches wide with one selvage, so that fabrics were obviously fourteen inches wide. Therefore it may be an adjustment to weaving economy that these are all slightly warp-emphasis, with the major designing in the warp. The wide Guatemalan skirt lengths, on the other hand, are sometimes in balanced tabby, but are more apt to be in weft-emphasis, though this emphasis is usually achieved through using a heavier weft yarn instead of weaving with more weft shots than warp ends per inch. Thus, it is plain that there are no balance rules for weaving jasper. Weave with balanced tabby, with warp or weft emphasis plain weave, or even with warp or weft rep. The weaver may handle the ratio of warp and weft density so as to produce the type of fabric and the design effect desired.

Restraint is the guide when using weft jasper. Just a few shots of the tie-dye yarn, judiciously arranged, can carry a strong design impact; while over-use of the spot-dyed yarns produces a jumble which speaks, "I didn't know what I was doing." In the Japanese fabrics, there are a number of examples of the jasper used for all-over patterns instead of stripes, but complex designs and spacings are avoided. The illustration here shows a combination of warp and weft jasper; but the white designs are so shadowy that the effect could have been achieved by a few threads of white spaced in the navy warp to coordinate with the positions of the spot designs.





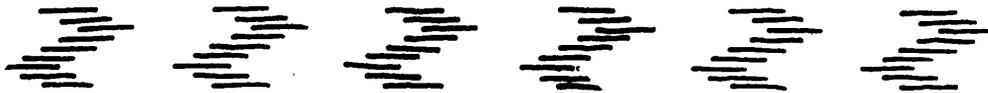
The cover photograph shows one of the most beautiful of the jaspé stripe fabrics, worked with only one tie-dye yarn pattern: one inch wrapped and one inch unwrapped, repeated throughout. (The photograph is enlarged to show detail.) Reversing warp and weft arrangements for the convenience of the handweaver, the directions are as follows. Warp of plain white at the warp setting which would make a firm twill rather than a close tabby. Plain weave throughout with twenty-five per cent more weft shots per inch than warp ends. (For instance, use 30/2 cotton set at 40 ends per inch and weave with 50 shots per inch, or 24/2 cotton at 32 with 40 shots per inch) though the Japanese fabric is finer with 80 warp per inch to 64 weft ends. Weft colors are medium tan for the background, the same dyed with dark brown for the jaspé, and plain dark brown for the alternate brown and tan stripes; the accent color here is brick red, achieved by alternating bright red with medium brown.

- Weave
- 1: 66 shots tan
 - 2: 8 shots red and medium brown alternated
 - 3: 4 shots tan
 - 4: 10 shots jaspé yarn
 - 5: 4 shots tan
 - 6: 4 shots red and brown alternated
 - 7: 4 shots tan
 - 8: 10 shots jaspé yarn, spots placed in opposite positions to 4
 - 9: repeat stripes 7, 6, 5, 4, 3, 2
 - 10: 48 shots tan
 - 11: 16 shots dark brown and tan alternated
 - 12: repeat stripes 5, 6, 7, 8, 7, 6, 5
 - 13: 16 shots dark brown and tan alternated
 - 14: 48 shots tan
 - 15: 8 shots red and brown alternated
 - 16: 4 shots tan
 - 17: 6 shots jaspé yarn
 - 18: 4 shots jaspé yarn spots placed on over lapping position
 - 19: 4 shots red and brown alternated
 - 20: repeat stripes 18, 17, 16
 - 21: 4 shots red and brown alternated
 - 22: repeat stripes 20, 19, 18, 17, 16, 15, figures oriented in opposite direction. Repeat this throughout.

The color effects of the Japanese fabrics are rich but reserved. Most of them show the strong value contrast of white with navy blue or dark brown, and sparkle added by restrained use of one or two warm colors. These sharp value contrasts are effective however because of the very fine yarns used. If the yarns are coarse enough to require a set of less than 40 ends per inch, it is wise to avoid the use of colors which give anything approaching a black-and-white contrast, or unpleasant salt-and-pepper effects will result. The Guatemalan fabrics, on the other hand, are often much coarser and employ the black and

white or dark blue and white jaspé yarns, in conjunction with plain color stripes in an assortment of very brilliant colors. These textiles are unpleasantly garish when new. They do not become beautiful until many washings and the brilliant sun have softened the poorly-dyed colors to dull, mellow tones.

PRACTICAL APPLICATIONS FOR THE JASPE' TECHNIQUE. Designs in the jaspé technique offer a rich field for handweavers, and impart a characteristic handwoven quality. Although cotton is the most common material for tie-dye yarns and yardage materials for clothing fabrics and accessories (skirts, blouses, aprons, men's shirts, childrens' clothes), the technique could be much more widely adapted. It should be quite appropriate in worsted yarns for stoles, afghans, baby blankets, full size blankets, and even for sport jackets. And in any yarn which can be dyed easily at home for bed spreads, draperies, upholstery and many other functions. Linen, because of its dyeing problems, would be an unlikely fiber.



LOOM LANGUAGE

tied-and-dyed—Designating a method of dyeing in which a design is obtained by bunching and tying portions of the fabric so that they will not absorb the dye.

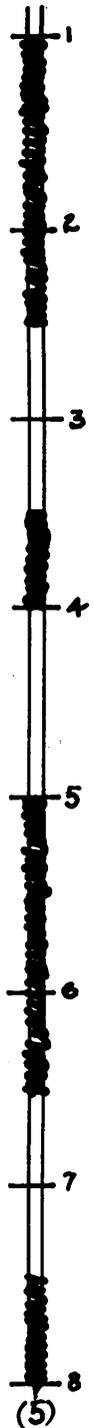
ikat—Pronounced ē kät. From the Javanese *iket* meaning turban. Any of the chine' silk fabrics of Sumatra, Java, Bali.

chine'—Pronounced shē nā. French, from *Chiné'*, China; past participle of *chiner*, to dye threads of a fabric in different colors so as to produce a figure. Figured after a supposed Chinese fashion which is, in fact, Indian or Indonesian;—applied to fabrics in which the threads, usually only the warp threads, are printed, dyed or painted before they are woven.

jaspé'—Pronounced zhās pā. French; past participle of *jasper*, to mottle. Clouded in streaks of contrasting colors: designating a color effect in ceramics, cloth, etc.

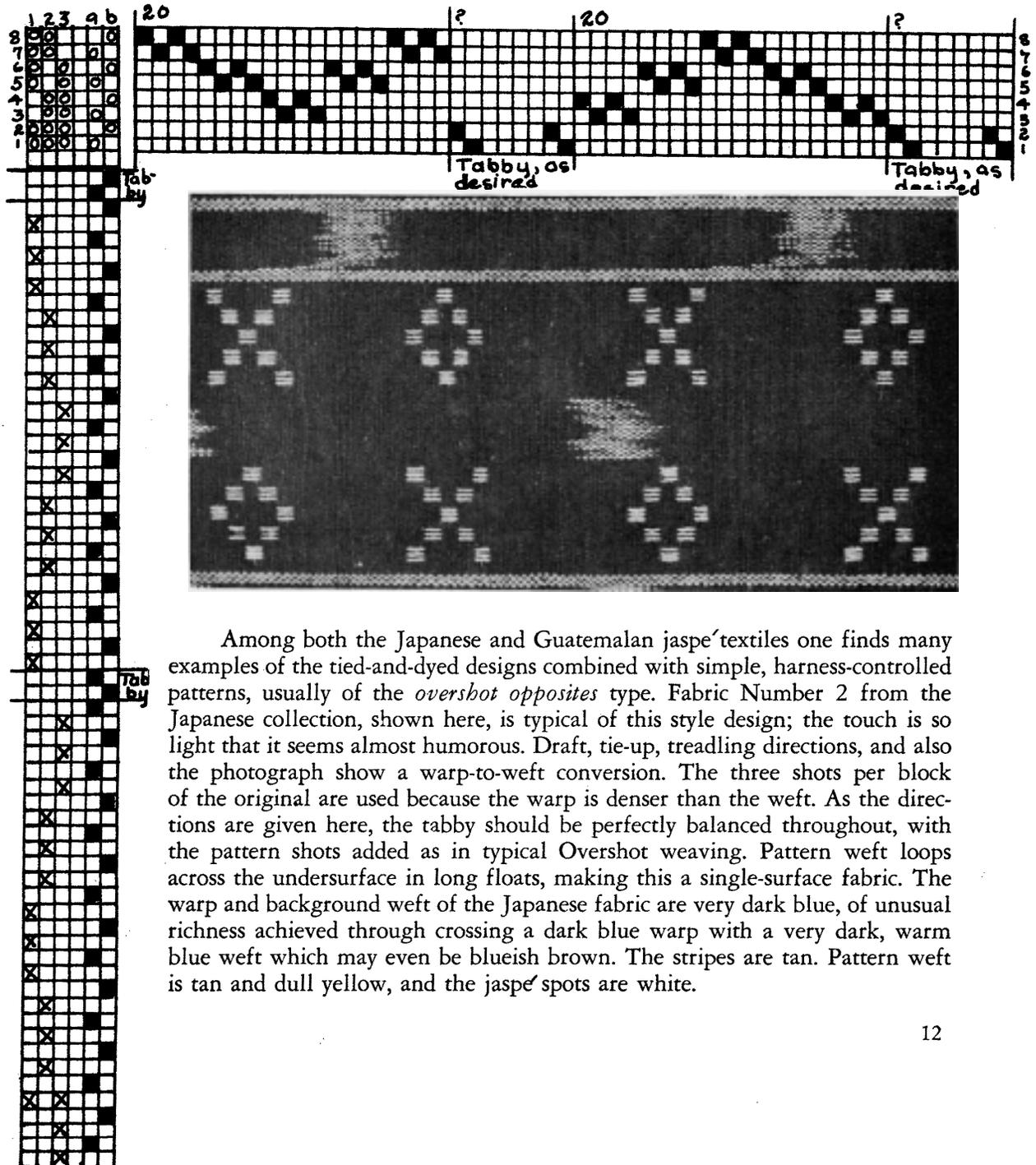
kasuri—The Japanese word for this technique.

From these definitions it would seem that JASPE' is the most suitable word for designating this technique. Tied-and-dyed, although descriptive, is awkward, and refers more specifically to the resist dyeing of cloth than of the woven thread. The romantic work IKAT has a specific meaning too narrow for these applications. CHINE' has, in textile connotations at least, come to mean the painting or dyeing of the tensioned warp only. (For the Chine' technique, see The Shuttle Craft BULLETIN for August 1953.)



The MULTIPLE-HARNESS WEAVER

JASPE' COMBINED WITH PATTERNS



Among both the Japanese and Guatemalan jaspe' textiles one finds many examples of the tied-and-dyed designs combined with simple, harness-controlled patterns, usually of the *overshot opposites* type. Fabric Number 2 from the Japanese collection, shown here, is typical of this style design; the touch is so light that it seems almost humorous. Draft, tie-up, treadling directions, and also the photograph show a warp-to-weft conversion. The three shots per block of the original are used because the warp is denser than the weft. As the directions are given here, the tabby should be perfectly balanced throughout, with the pattern shots added as in typical Overshot weaving. Pattern weft loops across the undersurface in long floats, making this a single-surface fabric. The warp and background weft of the Japanese fabric are very dark blue, of unusual richness achieved through crossing a dark blue warp with a very dark, warm blue weft which may even be blueish brown. The stripes are tan. Pattern weft is tan and dull yellow, and the jaspe' spots are white.

By MARY MEIGS ATWATER

JASPE'

(Reprinted from the Shuttle Craft Bulletin, March 1943)

For a long time I have been promising myself the adventure of experimenting with some of the warp-dyed and weft-dyed patterns seen in ancient Peruvian weaving and in weaving from Guatemala and other countries. Last month this intention came to a head, and here is the story. Guild members who may have a similar urge will perhaps be saved some disappointments and some lost motion. I discovered plenty of things *not* to do, and that is always useful.

For the jaspé effect the warp may be tied-dyed and woven with a plain weft, or the weft may be tie-dyed, and woven over a plain warp. For the Guatemalan methods of weaving, with short warps stretched full length in a "belt-loom," warp-dyeing is perhaps the more popular method, but for our weaving equipment the weft-dyeing method seems the more practical, so most of my experiments were carried out in this technique.

The material to be dyed must first be stretched on a frame. This may be a special frame for the purpose, like the one from Cambodia shown in an illustration in an interesting book I recently happened upon. I found, however, that my spool-rack made an entirely satisfactory substitute. I took out all but two of the wires, and set these at a distance apart equal to the width of my proposed warp.

The weft-material should be wound over the wires in a continuous thread to make a skein — simply 'round and 'round, without a cross or "lease." It is important to make each turn with exactly the same tension for if some of the threads are loose while others are tight the pattern will be distorted.

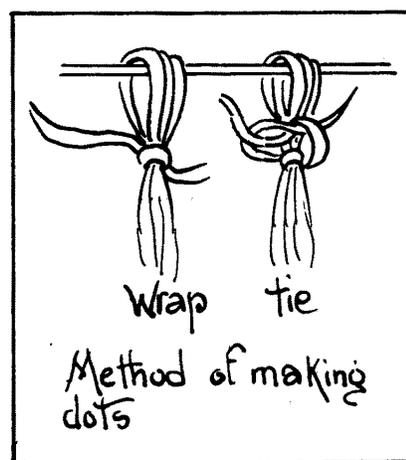
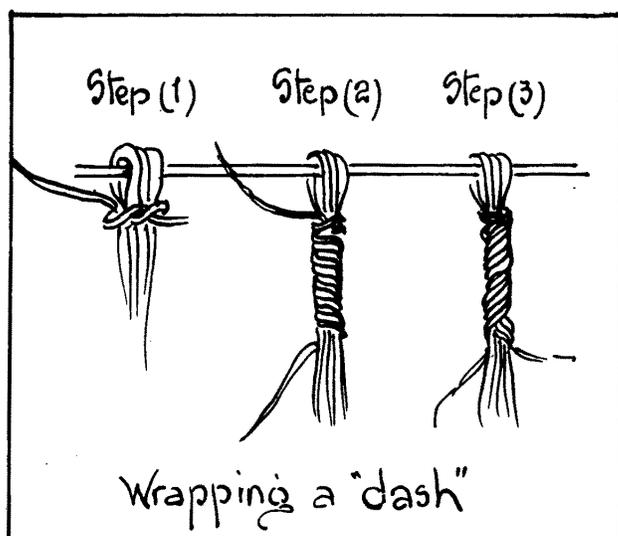
All the weft material may be wound over the bars in this manner before starting the tying, but I found it easier to wind each strand of four or six ends separately, attaching the free end of the weft material to the bar by a loop-knot while I made the ties.

For my experiments I used coarse materials, as it is easier to see what happens. I tried the thing first with rags, cut quite narrow, and sacrificed an old sheet to the good cause. I got a pattern, but when all was said and done the thing was still just a rag rug and seemed hardly worth the trouble.

I next used the light-weight rug-yarn supplied by Lily Mills (Article 814) and got much handsomer results. I tied this material in strands of six ends, but four ends would have been better. In fine material one might use strands of eight or more ends. I tried using lengths of rag for making the ties, but found this unsatisfactory as it is impossible to wrap and tie tight enough to keep out all the dye. I got much better results when I used lengths of rug-cotton for the purpose.

Patterns in this technique are made up of small dots and of wrapped "dashes" and the figures may be as elaborate as one chooses. The dots may be made as illustrated: wrap the tying material once or twice around the strand and tie tight as possible. It is the compression rather than the thickness of the wrapping that protects the material from the dye.

The method I used for wrapping the dashes is illustrated. For a dash about one inch and a half long I used a 14 inch length of wrapping material. I tied this at the center at one end of the proposed dash and then wound one end for the length required, winding the other end over the first in the opposite direction. At the end I tied the two ends together. This wrapping must be done with precision, and—I repeat—as tight as possible.



The illustration shows the frame and the simple pattern I used, tied on 17 strands. Of course the pattern might be repeated as desired.

When the wrapping and tying is completed a cord should be run through the loops at either end of the skein and tied as indicated on the sketch. It saves time to lay these cords along the bars before winding the weft-skein and winding over both the cord and the bar at the same time.

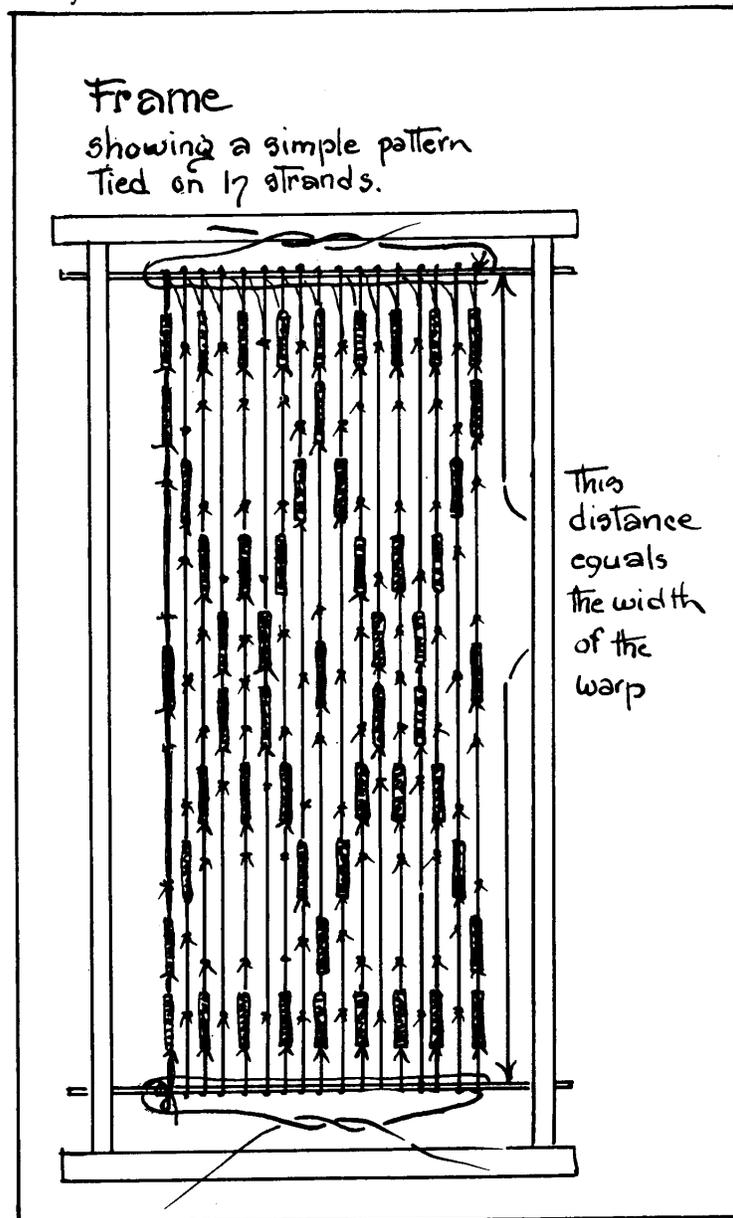
The skein may now be taken off the bars and dyed by any method one chooses. After the skein is dyed, thoroughly rinsed and dried, the wrappings may be removed. This must be done with care not to cut the material. When all the wrappings are off, the skein may be put on a swift or winder and wound off into a ball or directly on the shuttles.

If the weave is to be plain, the warp should be set far enough apart to allow beating up the weft to cover the warp. A rather better way is to thread the warp 1, 2, 3, 4 (twill) and weave a double tabby on 1-2 and 3-4.

In most of the Guatemalan pieces the jasje' is not used as an all-over

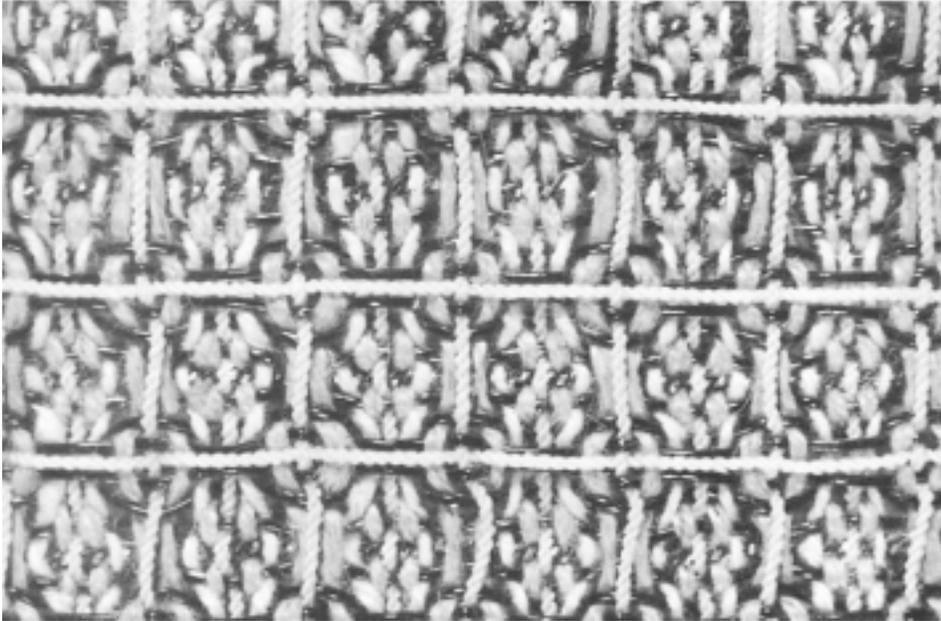
effect, but in stripes of various widths, set off by stripes in plain color—usually several brilliant colors. This makes the effect far more lively, and also saves time, as only part of the weft is tie-dyed. I have one sample in which each group of tie-dyed threads—in this case six—is separated from the next strand by ten shots in a lighter blue in plain color, the whole feature being set off from the next by bands of plain color in green, yellow, red and dark blue.

The jaspé effect is extremely bold and striking. If one wishes to tone it down a bit and give it a bit of mystery, the weft may be woven a trifle off-center, so that the dots and dashes do not register exactly over the other. The effect is to produce a smaller plain block with a shading on each side. I rather prefer this effect to the sharper and more definite effect of making the weft-shots register exactly.



WAFFLE LACE

by Elmer Wallace Hickman



Looking for something new? Here is a fabric that is unusual, fascinating, and quite practical for several purposes. It is an appealing fabric, which, when utilized in one of several projects, may be a prized possession or a lively source of income for many weavers. The textile was originally planned for handbags, but the finished material may be easily adapted, for modern usage, to the covering of lamp shades, single or divisional screens, under glass decoration for serving trays and table tops, etc. The fabric is a semi-open, medium heavy textured material and may be backed in any project by a colorful lining, the lining being one of cloth, parchment, wood, or any backing of choice. However, the lining, while unobtrusive, acts as an accent and gives vitality to the finished product.

This fabric, as one can readily see, is definitely a patterned one, and even though the draft is an ancient one the effect produced, with the assistance of some modern type yarns, is scintillating—not in a bewildering way but in a restful, pleasant pattern. The method of treadling causes the interlacement of warp and weft to produce a three-dimensional fabric, easily detected in this particular textile. The surface is in three levels. The top surface of white nylon twist is formed by long skips, in the warp and weft, on the four outer edges of the waffle design units; the second level of linen and plastic yarns slopes to the deepest level of the Beadette decoration.

The true *waffle weave* is done with five harnesses, but this four-harness variation, with its true tabby formation, may be the means of producing many varieties of fabrics, according to the yarns used and the closeness or openness of the reed sleying; such as, table linens, towelling, wool and cotton stoles, cushions, sportwear suitings, bed spreads, baby blankets, etc.

Since patterned fabrics are returning to the textile scene, this Waffle Weave draft could be the stimulus for rewarding experimentation. The variety of pattern is obviously limited, but the fabric texture in fine, medium, coarse, plain and novelty yarns is not. Color, in this weave, can be co-ordinated in proper order, as in a monochromatic color scheme, to give a greater illusion of depth, the order being to arrange a light color for the top surface yarn, with receding or darkening tones on the lower levels to the darkest tone at the very depth of the waffle squares. An example of this idea in the warp order would be: white, light yellow, yellow, brown. (See SHUTTLE CRAFT BULLETIN for August, 1955 for an enlightening discussion of this *Waffle Weave*.)

THREADING DRAFT: The draft is the 4-harness *WAFLE WEAVE*, 4-3-2-1-2-1-2-3. The treadle tie-up is outlined, with weft shots, under "Treadingling."

WARP: Contessa's 2-ply straw finish white Nylon blend. Butterworth's 10/2 natural color tow Linen. Contessa's natural Carpet Warp, or Butterworth's 8/4 natural Cotton. (Should colored Carpet Warp be used be sure it is color fast. See end of this article for yarn sources and addresses.) The warp is threaded one end in a heddle. The order of threading the heddles in the draft above is as follows: Har.4-Nylon yarn, Har.3-Linen yarn, Har.2-Carpet Warp, Har.1-Linen, Har.2-Carpet Warp, Har.3-Linen, and repeat. For selvages use 8 threads of Carpet Warp for each selvage, threaded 4, 3, 2, 1. All yarns are sleyed two ends through a dent of a No. 8 reed. When making the warp for beaming use one spool of Nylon, two spools of Linen yarn, and one spool of Carpet Warp. This will make 4 thread unit at the "Cross," and need only be repeated for the width of the warp chain. For sectional beaming it will be necessary for the weaver to decide how many times the unit of spools will have to be used for the width of each beam section on his particular loom.

WEFT: 2-ply white Nylon, same as warp. Blask Tensolite No. CKO-30. Black and silver Beadette, or suitable heavy metallic gimp.

TREADLING and TIE-UP:

Treadle 1.	Har. 4 alone.....	Nylon
Treadle 2.	Har. 3 alone.....	Tensolite
Treadle 3.	Har. 2&4	Tensolite
Treadle 4.	Har. 1&3&4	Tensolite
Treadle 5.	Har. 2&3&4	Beadette
Treadle 6.	Har. 1&3 (Tabby)	

For sinking shed looms tie treadles as follows: Har. 1&2&3 to Treadle 1, Har. 1&2&4 to Treadle 2. Har. 1&3 to Treadle 3. Har. 2 to Treadle 4, Har. 1 to Treadle 5, and Har. 2&4 to Treadle 6. Treadle 6 is used only for tabby headings. Use the first 5 treadles, in order given, for the pattern, reversing with

Treadle 4, then 3, then 2 for the upper part of the waffle design, using the same yarns indicated opposite these treadles in the yarn column above. Use Treadle 3 with Treadle 6 for tabby headings.

The yarns used in this fabric are inexpensive with the exception of Tensolite, but because of the open weave the amount of Tensolite used is not too great. Tensolite is made of fiber glass encased in a plastic tube. The Tensolite selected for this project was the black opaque, but the yarn may be had in several colors. For use in a more elegant fabric, such as eveningwear bags, the Crystal Clear Tensolite CK-30 may be advantageously employed. This clear Tensolite will give an opalescent effect. For a substitute of the Beadette weft yarn (used on Treadle 5) a heavy metallic gimp No. C-650 from Tinsel Trading Company may be used, since the Beadette yarn is not always readily available. The 10/2 natural tow linen which was used in the original sample was a neutral color, of course, but if colored linens are selected in the construction of the warp one may choose from about 18 colors from Butterworth. The 2-ply straw finish nylon comes in white only, but this neutral will combine quite satisfactorily with most of the colors offered in both the linen yarn and the Tensolite.

The warp and weft composition of the textile is nicely balanced with dominance and contrast which any well designed fabric should have. A finer textured fabric, using this same warp and weft construction may be made by these yarn substitutions: 20/2 linen for the 10/2 linen, 2-ply metallic LAMNETTE substituted for the white 2-ply straw finish nylon yarn, Lily's 10/3, Art 714 substituted for the 8/4 cotton or carpet warp, CC-277 Tensolite for the CKO-30 Tensolite, and 3-ply LAMNETE substituted for the BEADETTE. This composition would be threaded one warp end in a heddle, and sleyed two ends in a dent of a No. 12 reed, using, of course, the same pattern draft and same treadling.

SUGGESTIONS: The weaving of *Waffle Lace* is rapid because of the yarns used and the weave construction. The weft yarns should be pressed sufficiently into place, but never beaten, on closed sheds, so that the waffle unit will be squared. By a "closed shed" is meant this: begin by throwing a shot of weft in the first shed designated under treadling directions, then before moving the weft yarn back into place, change the treadling to the next shed (this closes the shed) then move the beater, and the weft yarn, into place. Continue this process throughout the weaving. Since the Tensolite is springy, it might be necessary, at times, to hold the yarn in place with the beater.

When the finished material is taken from the loom, it need be only steam pressed, remembering to use a very low heat, since both nylon and plastic yarns are used in the construction of the fabric. Selvages are difficult to weave on this fabric, but will be possibly cut off anyway. If you use your finished material for handbags, sketch off the bag pattern on the fabric with crayon or chalk; and before cutting the material, paint an adhesive or cement around your pattern outline so the fabric will not ravel. In SHUTTLE CRAFT BULLETIN, May 1954, a satisfactory cement is recommended—it is made by "squeezing a tube of Duco cement into 3 ounces of acetone. Have a druggist put the acetone into a 5 ounce bottle. Shake until dissolved." It might also be practical to use

MYSTIC TAPE, a gummed cloth tape, for sale at most hardware and stationery stores. Unless sewn by hand, it will be advisable to learn what machine needle to use on this material. When using the fabric for other projects mentioned above, the difficulties are less than in making handbags. You may know about the new curtain rod handbag frames by The McCordi Corporation, which, it is claimed, help give the finished product a professional look (See supply sources).

For projects such as screens, table tops, etc., it would be advisable to first cement all edges before cutting the material, and bind edges with the previously mentioned MYSTIC TAPE, preferably with the 1-inch width. This same gummed cloth tape should prove satisfactory for a binder and edge for lamp shade making. I am offering the above suggestions only, since many weavers may know of preferable methods for the several projects.

COLORS: When colored yarns are used, make the color of your Tensolite yarn your dominant color. The other yarns can follow suite in a monochromatic color scheme, or an analogous color scheme. If an analogous color scheme is used be sure the Tensolite yarn is of a dominant color, with other yarns, except the white nylon, in subdued contrasting colors. If the white nylon is not available use Contessa's Natural 4-ply Spun Silk, or a 3/3 Rayon Twist, white and colors, from Butterworth. When necessary, it is advisable to have this fabric dry cleaned.

SUGGESTED COLOR COMPOSITIONS

WARP:

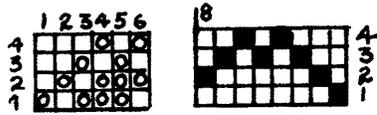
<i>Linen</i>	<i>Nylon</i>	<i>8/4 Cotton</i>
Lt. Yellow	White	Black
Orchid	White	Orchid
Chartreuse	White	Lt. Brown
Lt. Blue	White	Med. Blue
Orchid	White	Lt. Blue

WEFT:

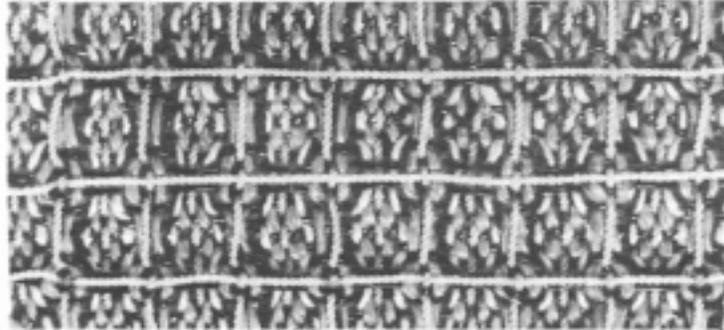
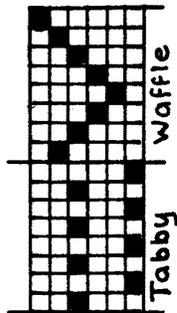
<i>Tensolite</i>	<i>Nylon</i>	<i>Beadette</i>
Rose	White	Silver
Yellow	White	Silver
Red	White	Gold
Blue	White	Aqua
Green	White	Silver

SOURCES OF SUPPLY: Nylon and Carpet Warp yarns from Contessa Yarns, Ridgefield, Conn. Tensolite from Cinderella Yarn & Novelty Company, Canaan, Conn. Linen Yarns, 10/2 and 20/2 from Charles Y. Butterworth, 2222 East Susquehanna Avenue, Phila. 25, Pa. Beadette from Yarn Arts Guild, Whitestone 57, L.I., New York, also from Wolkin Yarn Co., 192 McKibbin Street, Brooklyn, New York. Lamnettes (Laminettes) and heavy metallic gimps from Tinsel Trading Company, 7 East 36th Street, New York 18,

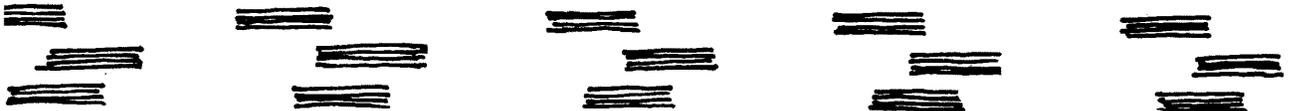
N.Y. Curtain rod bag frames and bag patterns from The McCordi Corporation, Dep't. E, 707 Fenimore Road, Mamaroneck, New York. Curtain rod bag frames also for sale from Lee Ward Mills, Elgin, Ill.



Waffle Lace, reproduced in actual size



The conventional Graphic Draft with tie-up and treadlings (converted) is shown here for those weavers who have been trained to use this draft form.



Meet the Author



Elmer Hickman's vital modern designing and lucid articles have been familiar to handweavers since the days of the *WEAVER* magazine. First as a hobby, more recently as a retirement activity, handweaving has been a "natural" with Mr Hickman. If one wonders at the bold color combinations, the contemporary spirit and dramatic effects he achieves, one may find their source in his professional background, as Mr Hickman is a stage designer. He studied widely in both art and dramatic schools in this country and in Europe and was the staging designer for many Broadway plays. In later years his professional activity was as professor of stage design and dramatics at Stephens College and Carnegie Institute of Technology. This work lead to an interest in textiles, first to the large, dramatic, mural tapestries, and later to the Swedish Art Weaves, which were the subject of his *WEAVER* articles. Contemporary weavers have profited from his current interest of developing *New Weaves From Old*, which he has presented in a group of *FOLIOS*, the *MODERN DRAPERY AND UP-HOLSTERY* being the latest.

The WEAVER'S BOOK SHELF

by Boris Ueren

OF WATER, WAVES, AND WEAVES

Your book columnist has been working like mad for the past month in constructing an annex to our book studio, to house some of the equipment of the Shuttle Craft Guild . . . steel files . . . addressograph machine, a Guatemalan huipil, and an electric typewriter, which I've coveted for many months . . . The most pleasant part of this book room is a new window, overlooking the blue Pacific Ocean . . . Correction: not "overlooking" for who could do that, but looking over . . .! This steady contemplation of waves, and rocks, and water, has kept me from some of my daily pleasant chores, such as preparing this first contribution for the new January SHUTTLE CRAFT. And tomorrow is deadline! I speculate . . . instead of working . . . on the lethargic effect that water has on the bodies and the minds of man, especially those identified with weaving publications . . . I've lived and worked on this very edge of the continent for 10 years. Mrs. Tidball has worked for several years on the shores of Clear Lake in California . . . Mary Black writing beside her Nova Scotia lagoon . . . And Russell Groff of "Warp & Weft" tells us about his view over the ocean from the Santa Barbara hills . . . already four editorial comorants! I recall with pleasure my visit to Mary Alice Smith, editor of "HANDWEAVER & CRAFTSMAN" a few years ago, but I do not remember if her typewriter commanded a view over the Hudson . . . or the East River . . . or the bay . . . I shall have to write to Mrs. Sandin of "Loom Music" and pin her down, geographically. And perhaps in this statistical age. I could develop some thesis between weaving editors and water.

For the past 6 weeks I've been at this window straining my eyes thru binoculars in search of the "M. S. California" which steamed out of the Swedish port of Goteborg loaded to the gunwhales with copies of Malin Selander's *WEAVING PATTERNS*, a new English translation of the popular *Vavmonster*. Days went by without seeing the funnels of this motor-ship, but I was rewarded with sights of fishing boats from the home port of Monterey, a few Navy Battleships, squadrons of flying geese—and for a magic moment, perhaps the faint sight of a vessel that is strangely and mysteriously identified with weavings; the famous OSEBURG SHIP . . . a graceful 9th century pleasure ship, which carried with it on its last trip thru the Oslojford, a Viking Queen, together with her bondswoman, her dogs, horse, household effects, and a considerable quantity of her valued textiles.

Now, part of the real story of this ship and the textiles is related in a

book brought to my attention by my weaving neighbor-friend of Carmel, Anne Blinks called: *PICTORIAL WEAVINGS FROM THE VIKING AGE* by Sofie Krafft. For 30 years the author was associated with the work of preparing the Oseburg finds for exhibition, and helping to restore the textiles which were excavated with the celebrated Viking ship, working as a draughtsman to copy every single piece, meticulously reproducing its pattern and colors. In this volume, translated from the Norwegian into English and French, she describes how the task of preparing this unique collection of early medieval weavings was tackled, inspiring the reader with the same sense of awe and mystery that the author herself felt when first confronted with these remarkable relics of Viking culture.

I sent a note to Mrs. Blinks, asking if she'd furnish the readers of *SHUTTLE CRAFT* with a book review, and in two days this gracious weaver dutifully handed me this review:

"PICTORIAL WEAVINGS FROM THE VIKING AGE. Sofie Krafft; Dreyers Forlag, Oslo, 1956. Text translated into French and English.

Mrs. Krafft's delightful picture book describes dramatically the careful examination of the cloth fragments found in the Viking burial ship of the 9th Century excavated at Oseburg, Norway. This elaborately carved ship contained the remains of a woman of rank, together with sufficient retinue and household goods to insure her comfort and position in the hereafter. Among these are a quantity of textiles which the author has sketched in great detail. She speaks repeatedly of "woven pieces" and "tapestries" but it is not clear from the limited text as to what were the techniques employed. The drawings would certainly suggest embroidery. In any case they give a graphic illustration of life and costume of the Viking Period. In addition there are 30 drawings on squared paper of the motifs used as background on various pieces. These are arranged in squares and blocks strongly suggestive of many arrangements used a thousand years later, as in Rosepath and in many of the "Dralls" and indeed in the Early American *overshot*. There are no threadings given but the modern weaver should have no great difficulty in translating these handsome geometric patterns and decorative figures into dramatic contemporary use. Finally there are two color plates of exact water color sketches of *silk* fragments which were found together with the linen cloths. These had been cut into strips and applied on to the basic material. No source is indicated for these obviously exotic materials. In fact, it is made quite clear that this excellent and stimulating book is a pictorial record, not the archaeological account of the textiles which is scheduled to appear as Volume IV of the technical Report on the Oseburg Find and the publication of which we await with great impatience." *Anne Blinks*

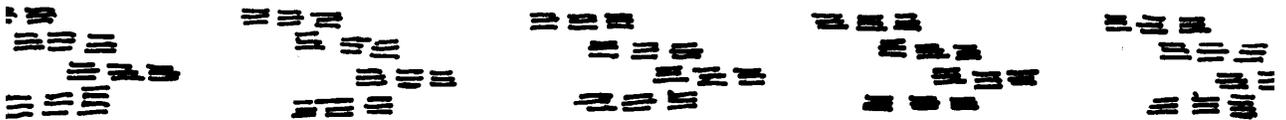
I am grateful to Anne Blinks for showing me this beautiful book and sharing it with you. I find it a valuable addition to that small shelf of books on the romantic anthropological aspect of weaving. The color plates that Mrs. Blinks mentions in her review are truly outstanding in their rendition, and the dramatic and lively text certainly whets my appetite for further publications

on these textile finds. Oh yes, there is a photograph of the author with a ribbon-weaver's loom similar to the one found in the Oseburg ship. It looks to my untrained eyes like a card loom.

In reproducing the Oseburg Textiles, Mrs. Krafft was above all prompted, we are told by Mr. Henning Alsvik, a well known Scandinavian Museum director, by the thought that these patterns could provide a source of inspiration for modern embroidery and weaving.

PICTORIAL WEAVINGS FROM THE VIKING AGE . . . Drawings and Patterns of Textiles from the Oseburg Finds by Sofie Krafft. Oslo, 1956. \$5.85

I see that my warp is nearing its end, and I'd like to tell you that the "M. S. California" did pass this part of the coast, but in the middle of the night when most ships do pass, and that the copies of Selander's *WEAVING PATTERNS* are now in my stock. Most of you are familiar with the original book review given this book by Mrs. Tidball when it was first published . . . and I will only quote one sentence from it: "ONE OF THE FINEST HANDWEAVING BOOKS I HAVE EVER SEEN." Hundreds of weavers have purchased and enjoyed this book in the original Swedish text. For those of you who have hesitated buying the book because the text was in Swedish, this is your opportunity of having the book in English text, so ably translated for American weavers by Karin Haakonsen and Alice Griswold. All the original beautiful color plates, and photographs and patterns are here, with the addition of Karin Haakonsen's valuable notes and tips to American weavers . . . The price is \$6.95.



LEARNED at the LOOM

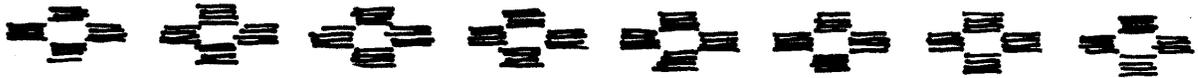
Contributed by Grace B Perk, Hollywood, California

I have made a New Year's Resolution which I *hope* I can keep: MAKE SAMPLES. I have been disappointed so many times with the results of my weaving, even though I was following written instructions or a woven sample. A change in yarn size or color, or warp set, which I had thought would not make any difference, made all the difference in the world! Hence my determination to make samples first! The time and yarn spent in making samples cannot compare with the time and yarn *wasted* because samples were not *made*.

FASHION REPORT: Handwoven

DINNER SKIRTS

Found on a shopping tour, in the \$200.00-and-up class (with a scoop-neck cashmere sweater thrown in) were super-glamorous handwoven dinner skirts. The fabrics for these were in the spirit of the very bulky tweeds so popular now, and were actually heavy in poundage, though lightly woven to drape softly. Warps were all of single color of size about No. 5 pearl cotton, or similar weight in 2-ply silk, or worsted the weight of Bernat Fabri or Lily Weaving Wool, set at 15 to 18 ends per inch. Threadings were 4-harness twill (1, 2, 3, 4, repeated) woven with a single tie-up to raise one harness at a time, usually in the 1, 2, 3, 4 order, but some designs added shots on tabby sheds and shots on the 1-2 and 3-4 sheds. The character of the fabrics lay in the weft. Some were woven of fairly heavy worsted, the weight of sweater yarn and even as heavy as 4-ply worsted knitting yarn. In these smooth-surface fabrics the designs were very wide blended-stripe repeats in beautifully harmonizing colors, making the most luxurious of the designs. The most daring fabrics were of narrow, miscellaneous stripes in startling color harmonies, employing such yarn mixtures as chenille, different weight worsteds, ribbons, braids, rug yarns, colored metallics and gold braids. In some cases very heavy yarns used on twill sheds were contrasted by occasional narrow stripes of fine worsted on tabby sheds. A simple but striking design was a black warp woven with a soft, bulky, irregular, homespun-type white yarn twisted with silver metallic. The skirts were made up in styles which varied as widely as the fabric designs: sheaths, dirndls, unpressed pleats, straight fronts with very full backs, gores—but all of them approaching ankle length. Some had weft used vertically, some horizontally, and some diagonally. Imagination and daring were the characteristics.



From WEAVER to WEAVER

My dear Handweaver:

For thirty-three years the Bulletin of the Shuttle Craft Guild has been a rather intimate publication, somewhat like a monthly letter from weaver to

weaver. This has been a natural approach, since handweaving is a very personal matter with most of us, and so we shall continue this style in a monthly "Editor's Letter" as a means for passing along oddiments, news and informal chatter.

In the article on Jaspé weaving I have mentioned two Japanese Portfolios which are available from the Craft and Hobby Book Service, Coast Route, Monterey, Calif. The *STUDIES IN OKINAWAN TEXTILES* by Tanaka is \$12.50, and well worth the price I have felt. The *FORTY HANDWOVEN COTTON TEXTILES FROM JAPAN* with actual woven samples was produced in very limited edition, exclusive for Craft and Hobby. There are only a few of these left. Price is \$22.00, plus postage for both items.

A very cordial invitation to any American handweaver visiting England has come from Mrs G W Shaw, Honorary General Secretary of the London and Home Counties Guild of Weavers, Spinners and Dyers, to attend monthly Guild meetings. These are held the second Saturday of each month (except August and September when they are on the third Saturday) at Mary Sumner House, 24 Tufton St, Westminster S W 1, at 3 p.m. Mrs Shaw suggests that any visiting weaver contact her first at 35 Portland Place, London W 1. She reports, "We are now a very healthy Guild and our members grow keener and keener as time goes on. At the moment, with the Home Counties, well over a thousand strong."

By the time the first issue of the enlarged Bulletin reaches you, the Shuttle Craft Guild will be well settled in its new abodes. Remember that all publications including the Home Study Courses, will be handled by Mr Boris Veren, Shuttle Craft Guild, Coast Route, Monterey, Calif. All subscriptions, renewals and orders should be sent to him. Only criticism of correspondence course lessons will be taken care of with me.

The Shuttle Craft Guild Editorial Office is at 165 O'Farrell Street, Suite 400, San Francisco. Here, I shall hold forth alone, and I shall be happy to welcome callers by appointment, afternoons. The location is a convenient one for anyone ivsiting San Francisco, as it is one block from Union Square, just across the street from the O'Farrell entrance to Macy's. It is going to be quite a change for me, with a view from my desk of a department store facade instead of lake and wooded hills, but a stimulating change I anticipate.

Please address questions, comments, criticisms and correspondence lessons to me. As always, I shall welcome "Letters To the Editor" with suggestions and comments. Our "Learned at the Loom" section will be a contributors column altogether, so when you write about your clever short-cuts and the new things you discover, please present the information as a short article which I can quote. It is the friendly contacts with weavers everywhere which keep us alive and up-to-the-minute in the field, so I shall be looking forward to letters from subscribers as much as ever.

Sincerely yours,



The LOOM-SIDE MARKET

The handweaver is in a special situation when faced with the problems of securing the equipment, supplies, materials, published information, instruction and services of his craft. Although there are an astonishing number of handweavers throughout the United States and Canada, the figure is small when compared to the size of the general buying public, and consequently the things which the handweaver needs are not readily available in stores, even in large city department stores. The weaver must find for himself his sources of supply, and most of these sources will be mail order.

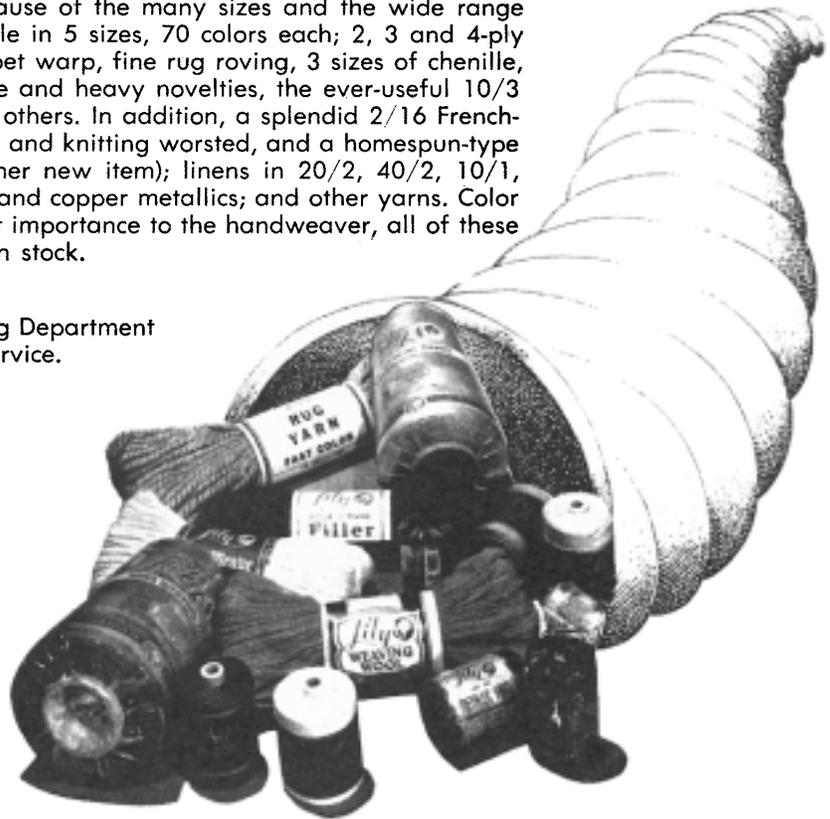
Recommended Sources

LILY MILLS is truly the handweaver's "Horn of Plenty" when it comes to yarns. The standard source for cottons because of the many sizes and the wide range of color in each size: mercerized perle in 5 sizes, 70 colors each; 2, 3 and 4-ply warps in many sizes and colors, carpet warp, fine rug roving, 3 sizes of chenille, 8/2 drapery cotton (a new item), fine and heavy novelties, the ever-useful 10/3 mercerized Soft-Twist, and numerous others. In addition, a splendid 2/16 French-spun worsted in 40 colors, sports yarn and knitting worsted, and a homespun-type woolen tweed yarn in 3 sizes (another new item); linens in 20/2, 40/2, 10/1, 14/1, 20/1, in 20 colors; gold, silver and copper metallics; and other yarns. Color fast guarantee in all yarns. Of utmost importance to the handweaver, all of these hundreds of items are permanently in stock.

LILY MILLS has a special Handweaving Department to give weavers the best possible service. Liberal discounts on quantity orders. Complete samples \$1.00, deductible from first \$10.00 order.



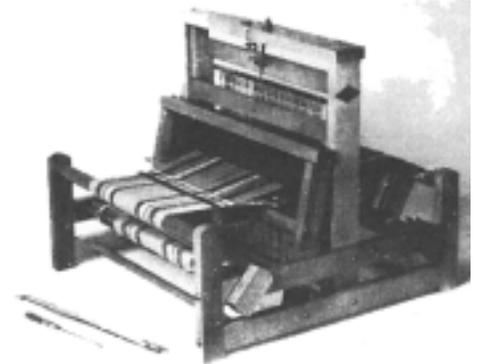
LILY MILLS COMPANY
Handweaving Department
SHELBY, NORTH CAROLINA





The popularity of the LECLERC 4-harness counterbalanced loom is well deserved. Because of the loom's solidness, strength, easy action, efficiency for threading as well as weaving, and simplicity, there are more Leclercs in use in Canada and the U.S. than any other make of loom. The loom is completely reliable. There are four weaving widths: 27", 36", 45", 60". LECLERC also furnishes auxiliary equipment of excellent design and quality, and several other loom models. Particularly useful is the little 14" wide, 2-harness table loom. This is so inexpensive that it serves the person wishing an introduction to weaving with little expenditure.

NILUS LECLERC INC
L'Isletville, Quebec
Canada



LECLERC LOOMS and all other LECLERC equipment are sold through many agents throughout the U.S. and Canada. For a complete catalogue and the name of your nearest dealer, write to: NILUS LECLERC INC.

This system means that the handweaver must, in most cases, purchase "sight unseen" and hope that his selections are wise—a hazardous position for the beginner in the field, and even for the experienced weaver who is expanding his purchases beyond the circle of previous experience, because there are good and bad, satisfactory and unsuitable items in all classes. There are two paths open: to be willing to "take a chance" and make selections from advertising and catalogues sent by manufacturers, or to seek help from someone more experienced in the field. The second course is generally preferred, but it too has

For thirty-five years handweavers have found **Bernat Handweaving Yarns** the best in their types. Two sizes of soft, lustrous, high-quality English-spun Worsted are now available. The famous FABRI and AFGHAN, in 44 glowing colors. FABRI is 2/18 worsted with 4800 yards per pound, known as the most versatile handweaving worsted there is. AFGHAN is the same yarn in 2/28 with 7600 yards per pound.

Bernat yarns are available
only through agents.

Bernat Yarns



See the CLASSIFIED DIRECTORY and RECOMMENDED SOURCES
for your favorite source.



The HERALD LOOM is a perfect answer for the weaver who demands loom efficiency, and also a loom style which will fit harmoniously into a contemporary livingroom. This is a well designed piece of furniture. The wood is neutral toned, beautifully finished. Although rigid in structure, the loom is compact. Wire tie-ups are easy to attach. Treadle action is light. Available with either sectional or plain beam. The 4 and 6-harness models are particularly recommended. Three widths are 24" (\$160.00), 40" (\$175.00), 48" (\$190.00). Prices quoted are 4-harness, plain beam. Matching bench; accessories. A particular advantage available in no other loom is the 2-yard horizontal warping reel which may be attached to the breast-beam position for one of the best "do it alone" warping methods there is. Write for brochure.

HERALD LOOMS, (Mr. Herald Micander), 2080 Edgewood Road, Redwood City, Calif.

its risks, since hardly any weaver or weaving teacher, regardless of length of experience, has had the opportunity to extensively use enough different equipment or purchase and use yarns from a sufficient number of sources to be able to make comprehensive and thorough judgments.

The Shuttle Craft Guild has, for thirty-three years, served as a research agency for handweavers and a testing service for manufacturers, experimenting with as many different makes and types of equipment as possible, and yarns of all kinds from countless sources. The testing has not been complete and never could be without a large staff devoted to this exclusively, but every year many

The Macmillan Company
60 FIFTH AVENUE, NEW YORK 11, N.Y.

A HANDWEAVER'S WORKBOOK, by Heather G. Thorpe. Beginners can now learn the skills for weaving on the 4-harness treadle or hand loom from the teacher, Heather Thorpe. This comprehensive guide has illustrations, diagrams, glossary and handsome weaves. \$4.50

THE SHUTTLE CRAFT BOOK OF AMERICAN HANDWEAVING, by Mary Meigs Atwater. This definite book on handweaving, revised in 1951, includes the important loom techniques: Overshot, Summer and Winter, Crackle, Bronson, Double, Leno, Rug Weaves, Pickups. \$7.50.

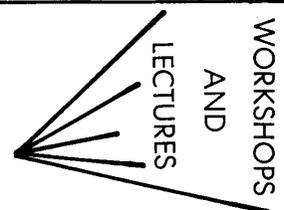
BYWAYS IN HANDWEAVING, by Mary Meigs Atwater. The unusual handweaving techniques from all over the world: Card Weaving, Inkle Weaving, Twinning, Braiding, Knotting and Plaiting and many primitive weaves. 8 full color plates, many drawings. \$8.50.

new items are tested, and at times the studio has been quite extensive with as many as twenty to thirty looms in almost as many makes, and a wide variety of auxiliary equipment. Through the years the Shuttle Craft Guild members, a large percentage of whom are teachers, designers and commercial weavers of many years experience, have been helpful in sending information about many items, and in supplying leads to new sources.

The Shuttle Craft Guild standards have always been the highest, and for major equipment items such as looms, six months or more of testing with a wide variety of warps and projects have been carried on before judgments are



Dorothea Hulse, noted for having woven THE ROBE and other textiles for motion pictures, and now rapidly gaining fame as a lecturer and a conductor of dynamic Workshops, will be available again in the spring and summer of 1957. Mrs Hulse is scheduling trips to the Middle West and East. Any Guilds wishing to avail themselves of this opportunity write to **Dorothea Hulse, 517 1/2 N Robertson Blvd, Los Angeles 48, Calif.**



THE CROSS-COUNTRY CRAFTSMAN

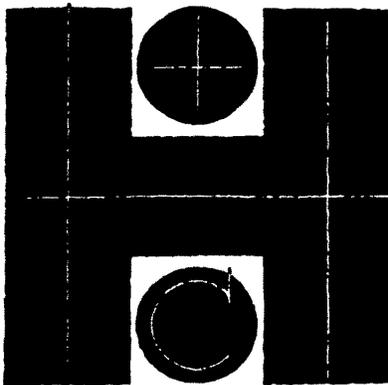
A monthly news bulletin for all artist-craftsmen. Friendly and informal, it brings news of fellowcraftsmen and events from all parts of the country, exhibit announcements and reviews. Illustrated with photographs. Single copies 25c. Subscription, \$2.50 a year. Address: PO Box 1237, Fayetteville, Arkansas.

Grant Hand Weaving Supply Company handles just about everything the weaver can want: looms including the HERALD and LECLERC, warping equipment of all kinds, a wide variety of domestic and imported shuttles, yarns in magnificent array. Yarns include Bernat Afghan in 16 colors, Bernat Fabri in 44 colors, the Golden Rule Yarns, Durene, loop wool, chenille, and cotton and rayon boucles and ratines in many types and sizes, and metallics, all of these in colors. In addition, Grant has several equipment items which they manufacture themselves, including the All-Purpose Electric Bobbin and Spool Winder, and the Swivel Spool Rack and inexpensive spools for warp winding. The Swivel Spool Rack with plated metal rods is the finest creel we have ever used. Reeds in any length of dentages 4-5-6-7-8-9-10-15-18-20 pr inch, heddles, yarn stand and twister, and many other useful things. All of these items, including looms, are in stock for immediate delivery and may be seen on the floor of the beautiful Grant store at:

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(Write for complete catalogue.)

LOOMS	YARNS		LOOMS	YARNS
WEAVING ACCESSORIES			WEAVING ACCESSORIES	

Handweaver & Craftsman



The basic magazine for the entire handweaving field; amateurs and professionals, textile designers, teachers, occupational therapists. Lavishly illustrated, it shows prize-winning exhibit textiles, and has articles of wide and varied interest, exhibit announcements, descriptions of summer weaving courses, local Guild news. The full advertising medium, so it is the source for all commercial addresses.

Quarterly, Single copy \$1.00.

1 year \$4.00, 2 years \$7.50, 3 years \$10.00, 5 years \$15.00.

Extra postage: Canadian 50c, Foreign \$1.00, a year.

Write for special group-subscription rates.

HANDWEAVER AND CRAFTSMAN, Mary Alice Smith, Editor
246 Fifth Avenue, New York 1, N. Y.

crystallized. Many factors are considered in judging looms: correctness of engineering, durability, ease of operation and general efficiency, suitability of woods, metals and hardware used, versatility, space economy, uniformity of manufacturer's output and availability of replacement parts, manufacturer's own guarantee, quantity of output, manufacturer's service and credit rating and his durability in the field, reliability of agents, accuracy of manufacturer's claims—all points of utmost importance to the buyer. Cost too has always been an important consideration, and is evaluated on the dollar-for-dollar value return basis rather than on list price. The manufacturer's own production efficiency and labor relations are important considerations in price.

These points enter to varying degrees into the testing evaluations of aux-

WEAVING PATTERNS

by Malin Selander

Translated from the Swedish *VAVMONSTER* by Karin Haakonsen and Alice Griswold. The publishers are happy to present to American weavers this translated edition of what is considered in Sweden one of the most beautiful weaving books ever published.

WEAVING PATTERNS contains descriptions of 180 modern, practical textiles in good quality and color combinations. The patterns are designed with an eye to the taste and home environment of our day, and at the same time they tie in with traditions of the art of weaving.

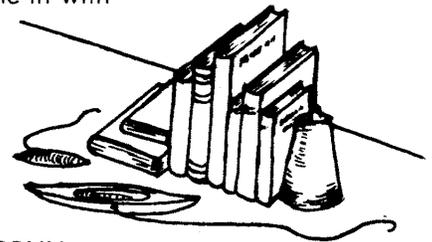
133 of the book's 180 patterns are shown in natural color on 16 FULL COLOR PLATES. There are also 100 or more detail pictures of finished material, and the 180 textiles with drafts, tie-ups, treadlings and full directions.

Price, \$6.95. Published by

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Exclusive U. S. distributor

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Year-Around Classes, Beginning and Advanced. Enter at any time. Looms available for special projects. Special lessons.

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AGENT FOR: Bernat Fabri and Afghan, looms, accessories, books and supplies.



INSTRUCTION

● **EXCLUSIVE LINES OF HANDWEAVING YARNS**

- Joseph D Acton stocks a number of specialty yarns of very high quality which are not elsewhere available. These include the 30/2 mercerized cotton which the Shuttle Craft Guild found so delightful as warp for the jaspe projects, in 24 colors.
- The beautiful Bretton Tweed yarns are in 18 brilliant colors. Swedish linens in 48 colors will be available soon. Send 35c for samples to the new ACTON STUDIO-SHOP, **2039 Rittenhouse Square, Philadelphia 3, Penna.** Agent for Macomber Looms.

BOBBIN and SPOOL WINDING and YARN MEASURING EQUIPMENT, which will "last a lifetime."

Manufacturer and sole distributor of the WE-GO WINDER and the WE-GO YARDAGE COUNTER which the Shuttle Craft Guild has found to be the most satisfactory equipment for these purposes. Also instruction, accessories and general supplies.

HAND WEAVERS WORK BASKET, Grace D Blum, Box 691, RR 1, West Chicago, Ill.



The New Model Gilmore Loom

The famous GILMORE LOOM is now available in a revolutionary new model. Retaining all of the outstanding characteristics of rigidity, superior craftsmanship and good balance, this is a **compact loom**. Its depth of 28½ inches makes it movable through any standard door, and gives it the efficient 11" weaving space. It is supplied with stainless-steel 15-dent reed and two of the excellent Gilmore shuttles, plain warp beam, 6 treadle. There are three widths at very attractive prices:

- 22"—400 heddles—\$95.00
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Mr. Gilmore was the originator of the popular "push-up harness" loom, which has all the mechanics under the harness and no top-castle, making it a handsome livingroom loom. The standard rigid and folding models known for many years, are still available. For brochure and complete information write to:

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330 South Commerce St
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INSTRUCTION in BASIC HANDICRAFTS: Hand Weaving, Metalcrafts, Pottery, Enameling on Copper and Silver.

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Continuous instruction from March 18 to June 22, 1957 affords the opportunity for coming during this period for long or short terms of personalized training in small groups.

Summer Sessions: June 24 to July 13; July 15 to August 3; August 5 to 24, 1957. Excellent equipment and teaching personnel. Modern living conditions in a beautiful mountain country-side. Write the Registrar for full information.

iliary equipment. Durability, versatility, efficiency and easy storage are important considerations for all equipment, as well as general good design and craftsmanship.

In selecting yarn sources, the quality of the yarns, color fastness, range of colors and types, are of basic importance. But equally important to the purchaser are the length of time required for filling orders, the matter of whether or not items are stocked continuously and may be duplicated years later or whether stocks are of a transient nature, the accuracy of the dealer in filling orders and billing. It has been found that the attitude of the customer is extremely important in determining the quality of the service. The service will be best for the weaver who gives all the necessary information when ordering, such as item or article number, type of yarn, color and color number, and accurate price extensions; who encloses payment with the order and gives exact shipping information; who does not expect the dealer to advise on suitable yarns for specific projects or to compute yarn requirements and who does not ask technical questions or expect instruction along with a yarn order. Important also to the purchaser is that quantity computations be made generously so that there will be no chance for a shortage, since colors can usually be duplicated

LOOM MUSIC by Mary Sandin and Ethel Henderson, has been one of the standard and most popular small, practical periodicals for handweavers for thirteen years. Presents well designed projects, mainly for four harnesses, with such thorough and clear directions that they are good for the beginning weaver and stimulating for the experienced weaver. Ten issues a year; subscription \$5.00. Address: MRS R B SANDIN, University of Alberta, EDMONTON, ALBERTA, CANADA



YARNS

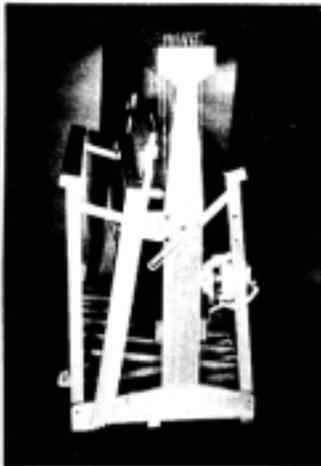
The weaver interested in purchasing **yarns from job-lots** will find Frank Kouble an excellent source. Mr Kouble purchase many types of yarns from mills with over-stocked inventories, bankrupted mills, liquidated mills. As these are bought below cost, great savings are passed on to the handweaver. In these constantly-changing stocks are unusual yarns, unavailable elsewhere. Write for samples stating special yarn interests, to: FRANK KOUBLE CO, PO Box 82, VALLEY FALLS-LONSDALE, RHODE ISLAND.



The Hand Weaving Yarn Company woolen yarn is one of the best for suitings. It comes in 20 attractive colors, solid and heather mixtures, as shown on the free color card. Very light weight fabrics may be woven in tabby with this yarn set at 20 ends per inch, average suitings in twill at 24 per inch, heavy fabrics in multiple-harness twills at closer settings. All virgin wool, 3600 yards per pound, this yarn is strong and when handled correctly will cause no trouble even to the beginner. Order from HANDWEAVING YARN CO, P O Box 7145, ELKINS PARK, PA.

in a later order but dye-lots seldom can, nor should dye-lot duplication be expected.

All of the items and sources included in these advertising pages have been tested by the Shuttle Craft Guild and found completely satisfactory. To help the prospective purchaser better evaluate any single item with relation to his own needs, most of the advertising notes have been written by the Shuttle Craft Guild rather than by the manufacturer or dealer. Questions about anything listed are invited, if further help is needed in making appropriate selections, and should be directed to the Shuttle Craft Guild Editorial Office, 165 O'Farrel St., Suite 401, San Francisco, California. Since an exhaustive treatment of the offerings of these firms cannot be made in the short paragraphs here, different subjects will be taken up each month, and we suggest that you read these paragraphs thoroughly and consistently to keep abreast of developments in the supply field.

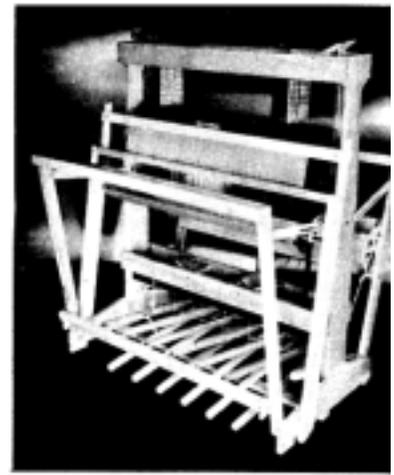


This famous loom has long been the classic among multiple-harness weavers. The add-a-harness feature makes it possible to convert a 4-harness into a multiple-harness model. Widths of 32", 40", 48", 56", have standard frames to hold 10 harnesses, but custom frames for 12 or 16 are available. One or two warp beams, sectional or plain, brake or ratchet controls, double back beam, warp yardage counter, extra treadles, are optional features which make this a true custom loom. Very strong frame which folds to 25" depth. Easily dismantled for threading. Light treadle action. Speedy wire tie-ups.

Also portable, folding treadle looms with 4, 6 or 8 harnesses, 16", 20", 24" wide. Accessories. "Ad-A-Harness"—registered trade mark.

For brochure and price list write to:

L W MACOMBER
16 Essex St
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Classified Directory of Handweaving Services

This section is planned to answer the constant flow of inquiries to the Shuttle Craft Guild from new weavers who wish to locate a near-by instructor or to know of local sources of supply, from Guilds who wish to secure speakers or a capable person to direct a workshop, from weavers who are traveling or are moving and wish to establish weaving contacts in new localities. We hope that this section will grow until it is a truly comprehensive DIRECTORY for all the small commercial and instruction services in the United States and Canada, and a clearing bureau for exhibits and for lecturers and workshop leaders. Classified rates are placed low to permit the individual and the small business to list. For securing a two or three-line listing, please write to the Shuttle Craft Guild Editorial Office, 165 O'Farrell Street, San Francisco 2, California.

YARNS

Marie Phelps, Strawberry Hill Studio, Sherman's Point Road, Camden, Main. 20/2 linen, snow white, \$3.65 a pound; 4 beautiful colors at \$4.75 a pound. Custom dyeing of 20/2 linen, minimum quantity 30 pounds, to any color. Prices post-paid.

The Craft Shop, 448 So Coast Blvd, Laguna Beach, Calif. Imported Norwegian and Swedish Homespun, 18 colors. Swedish linen bleached and natural 12, 16, 20. Knox Mercerized linen 30/2 in 35 colors. Bernat Fabri in 32 colors. Also accessories.

The Weavers Workshop, Miss Gynethe Mainwaring, Dodgeville, Wis. Bernat Fabri 80c per skein, Afghan 95c per skein, both in 44 colors. Knox mercerized linen 16/3, 20/2, 40/2, 50/2 and No. 2 Floss, in 43 colors. Orders post-paid. Immediate delivery.

Maypole Handcraft Yarns, 8300 S E McLoughlin Blvd, Portland, Oregon. Thirty-six colors, 100% English-spun worsted yarns in two sizes on 2-ounce tubes: Wilamette with 700 yards per tube and Clackamas with 1050 yards. Send 10c for samples.

GENERAL SERVICES

Countryside Handweavers, 5605 West 61st St, Mission, Kansas. SILICONING of Yardages a specialty. Also yarns, Looms, Accessories, Books. Mail orders accepted.

The Garrisons, 5 Cherry Tree Lane, Middletown, New Jersey. Instruction to beginners in warping and weaving. Agent for the HERALD LOOM and accessories, and Maypole yarns. Custom weaving. Visitors welcomed. Mail orders accepted.

EXHIBITS

Dr W G Bateman, 2501 S 116th St, Seattle 88, Wash. Study Exhibits for experienced weavers. All original designs, many original techniques, mainly multiple-harness weaves. This is my fourth year for these popular exhibits: Something new every year.

INSTRUCTION

Kate Van Cleve, The Garden Studio, 14 Marshal Street, Brookline 46, Mass. Master Craftsman and Medalist, Society of Arts & Crafts, Boston. Certificate Courses in Weaving.

PUBLICATIONS

Elmer W Hickman, R 2, Emlenton, Penna. MODERN DRAPERY AND UPHOLSTERY, A Folio containing twenty new and beautiful samples for decorating fabrics, with complete directions including yarn sources. 4-harness weaves. Order direct, \$6.50, postpaid.

Mary E Black, Box 14, Bedford, Nova Scotia, Canada. HANDWEAVERS REFERENCE, \$3.25, postpaid. This is an index of subject-matter in several classifications for the basic handweaving periodicals and books. A very useful supplement to make any weaving library useful.

Alena M Reimers, West Pines Hotel, Joliet, Illinois. WAYS TO WEAVE OVERSHOT. A loose leaf manual in three-ring binder, well illustrated including 16 woven samples, beautifully organized and printed. Good for study groups. Order direct, \$10.00 postpaid.

LECTURES and WORKSHOPS

Elsie H Gubser, 647 No Denver, Tulsa 6, Oklahoma. This well known lecturer and Workshop director is again available for engagements with groups. Write directly to Mrs Gubser.

Handweaving
Looms
Yarns

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FROM THE SHUTTLE CRAFT GUILD

- SHUTTLE CRAFT**, The Monthly Bulletin of the Shuttle Craft Guild, A Technical Journal for Handweavers. Mailed ten times a year; June-July and August-September issues combined.
 Annual subscription\$ 7.50
 (Add \$1.00 for foreign mailing)
- SHUTTLE CRAFT—Portfolio Edition**. Same as the above, but with actual woven samples added, and also a PORTFOLIO ANNUAL on a special design subject, with woven illustrations.
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Business and Subscription Office:

Boris Veren
The Shuttle Craft Guild
Coast Route
Monterey, California

- HANDWEAVER'S INSTRUCTION MANNUAL**, by Harriet D Tidball \$ 3.00
 Basic text book in the skills and techniques of 4-harness weaving
- THE INKLE WEAVE**, by Harriet Tidball.....\$ 2.00
 Complete instructions for Inkle Weaving and constructing Inkle Loom
- THE DOUBLE WEAVE**, by Harriet Douglas Tidball.....\$ 2.00
 4-Harness Double Weave, 12 techniques, 12 pages of designs
- THE WEAVER'S WORD FINDER**, by Harriet Tidball,
 A reference book.....\$ 2.50
 Over 1,000 words, terms, formulas used by handweavers, defined and explained.
- HOME STUDY COURSES, 10 Lessons in each part**.....each \$10.00
 Part I: Beginners; basic skills and 2-harness techniques; designing.
 Part II: For the 4-harness counter-balanced loom; techniques; drafting, etc.
 Part III: Unbalanced 4-harness weaving; techniques, drafting, designing.
 Part IV and Part V: Multiple harness weaving.
 (Not yet available.)
The HANDWEAVER'S INSTRUCTION MANUAL and FOUNDATIONS FOR HANDWEAVERS (\$7.50) are the supplementary instruction references needed for these courses.
- HOME STUDY COURSES, Bargain Package** (\$38.00 value).....\$30.00
 Includes MANNUAL, FOUNDATIONS, Parts I and II, one year subscription SHUTTLE CRAFT.



Criticism of Lessons for those who wish **Certificates**, per Course of 10 Lessons.....\$15.00
 Plus postage for return of lessons. Basic Certificate awarded on successful completion of Parts I, II, III; Master Weaver Certificate, Parts IV, V. Make arrangements for lesson criticism with Mrs Tidball, San Francisco.

SHUTTLE CRAFT BOOK OF AMERICAN HANDWEAVING, by Mary M Atwater, revised 1951.....\$ 7.50
BYWAYS IN HANDWEAVING, by Mary M Atwater, 1954.....\$ 8.50
CHESKIN COLOR WHEEL, for Color Harmony Study.....\$ 5.00
 Drafting Pens (Fountain Pens for India Ink, from Germany)—
 No. 1—Fine Line for ruling, notations and writing.....\$ 3.95
 No. 3—Heavy line for draft symbols and pattern developing \$ 3.95
 Textile Magnifying Glass, mounted on stand with one square inch field.....\$ 4.00
 In pigskin case. (Also known as Pick Glass, Linen Tester, Thread Counter)
BOOKS FOR THE WEAVER, A complete descriptive catalogue—free on request.

Postage Extra. California residents please add 4% sales tax for all items.
 Prices subject to change without notice. Payment should accompany orders.

Order from: SHUTTLE CRAFT GUILD, Coast Route, Monterey, California.

