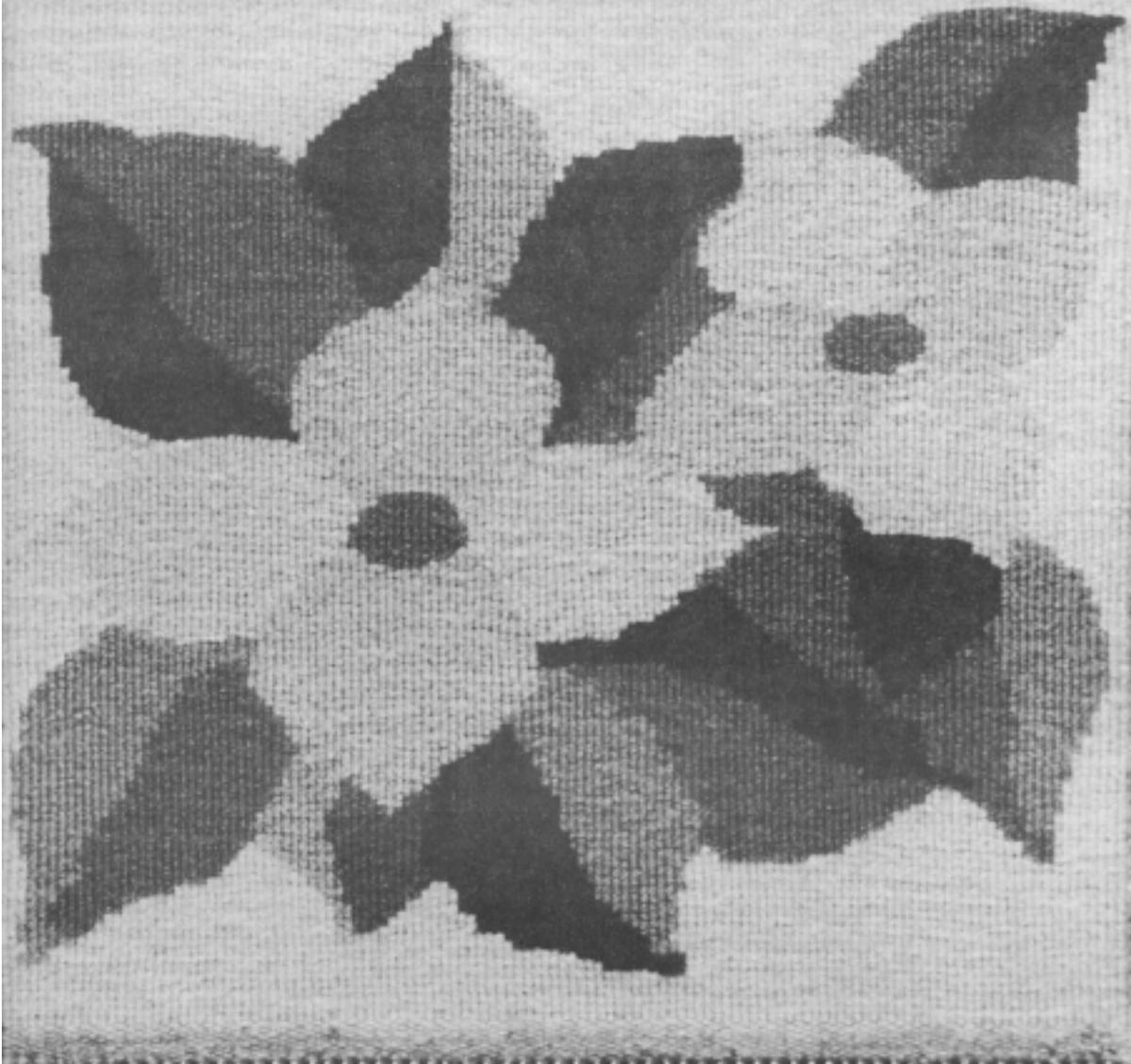


SHUTTLE CRAFT

February

PORTFOLIO

1958



SHUTTLE CRAFT

THE MONTHLY BULLETIN OF THE SHUTTLE CRAFT GUILD
VOLUME XXXV, Number 2 Bedford, Nova Scotia February, 1958

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Portfolio Samples: Summer and Winter Fabrics

Cover: "Swedish Knot"

Design by J. C.

Weaving by M. E. B.

The Shuttle Craft Guild was founded in 1922 by Mrs. Mary M. Atwater and operated by her until 1946. Mrs. Martin (Harriet) Tidball was owner-director from 1946 to 1957. It is now owned and operated by

Miss Mary E. Black and **Miss Joyce Chown**
Bedford, Nova Scotia, Canada

Associates

Harriet Tidball—Multiple-harness weaves—Kelseyville, California.

Boris Veren—Book reviews — Coast Route, Monterey, California.

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(The Portfolio edition is the same as the regular edition but includes woven samples of some of the textiles for which directions are given in the text.)

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From Weaver To Weaver

Dear Guild Members:

With the compilation of this, our sixth issue of SHUTTLE CRAFT has come a keen realization and understanding of why Mrs. Tidball could not publish it working alone.

The two of us, working almost constantly, have been unable, so far, to bring it back on its deadline delivery date of on, or about the first of each month.

We are worried about this situation and have given it much thought. We feel, and think you will agree with us, that it is better to incur your displeasure from a late arriving bulletin rather than from one which obviously had been thrown together in a hurry to meet a deadline. We took over SHUTTLE CRAFT without any backlog of written material, or samples, and everything we present must, therefore, begin with the draft and the threads.

We value your friendship, which is evidenced to us in many ways, and would so enjoy time to sit at our desks and answer your friendly notes and letters, but to do so at this time would further delay SHUTTLE CRAFT and this we cannot do, so please accept our wholehearted thanks for your interest in us and your congratulatory messages. These notes and letters have been carefully read and placed in a special folder and when we find a moment we will write you individually. Already many of the names on our mailing list are changing into personalities. We find some of our members have visited Nova Scotia and even one or two of you have told us that your own roots began here. We hope those who have visited Nova Scotia will come again, and those who have not will plan to come soon so that we can talk weaving over that ubiquitous Canadian cup of tea and become really acquainted.

All letters that come to us with suggestions or requests we place in a special file. Tonight I have taken out that file and here are a few excerpts from your letters: "Please let us have continuity in SHUTTLE CRAFT in all ways"—"Don't bother to let us know what you plan, just write up whatever comes to mind, I like the surprise element"—"Give us theory, then more theory, we all need it"—"Give us fewer technical articles. These are abstract and as much of my time is spent with abstract study, I turn to weaving as an escape from the abstract to what, for me, is concrete"—"What I really find useful are the articles which have definite directions and drafts and list of threads"—"Wish you would take one weave and develop it, in all its ramifications"—(This is what Mrs. Tidball has done with Summer and Winter and will do shortly with another weave.) Our first reaction to these requests was one of consternation.

Then as light slowly dawned we were overjoyed because, no matter what we present, we are going to please someone in each issue, and by the law of averages should be able to please everyone at least part of the time!

Seriously though, it is our aim to give you only articles which have some meat in them. Articles prepared to stimulate and interest our highly-skilled weavers; articles to encourage beginners who are lost in a maze of threads and technical terms; and, articles for those in between who are filled with questions. We want to encourage weavers to think about their weaving, even though many are interested only on a hobby level, and in so doing receive from it the greatest possible enjoyment.

Several members have asked about the little Shuttle Craft shuttle stickers. As yet we have not been able to have any printed, we must pay our initial bills first. And here is a thought, if you enjoy and profit from your Guild membership won't you recommend SHUTTLE CRAFT to a weaving friend? We can still take care of many more members and the more we have the better service we can give. For each new member you get, you receive a credit on your own SHUTTLE CRAFT subscription (\$1.00 credit if you get a regular subscriber and \$2.00 for you if you get a portfolio subscriber).

There have been a number of inquiries about the correspondence courses. We have commenced work on these, but feel we want to get SHUTTLE CRAFT on schedule before concentrating on the courses, but they will come soon.

It has been our experience that weavers are friendly people, always ready to share their weaving successes and problems with others and to exchange ideas. A wonderful way to do this is to belong to a Round Robin group.

Round Robins are especially valuable to weavers living in isolated communities where they must work alone, yet the Round Robin has much to offer the city dweller even though he has many contacts with weaving friends and access to courses, libraries and museums. Our environment governs our approach to our work to a much greater extent than we realize, and we each can learn from the experiences of the other.

If you would like to join a Round Robin group send us your name and address; your particular weaving interests and ability; whether you want to belong to a group living in adjacent or widely separated states or provinces or in overseas countries. Include any special activities you may wish to develop.

After we have received a sufficient number of letters we will form groups of weavers, whom we feel, from their letters, would be congenial. Each group will be limited to six weavers so that letters will be received at fairly frequent intervals. We will arrange names alphabetically or in accordance with geographical locations if it seems advisable, and send the first letter on its way together with details of how a Round Robin operates.

In looking over a copy of the October SHUTTLE CRAFT the other day we noted that the sample of the Black Watch tartan in the portfolio edition was not woven on the sett we gave in the text. Stewart lists two acceptable setts in his "The Setts of the Scottish Tartans" and we, without thinking chose the wrong one.

In answer to enquiries as to why the portfolio issues of SHUTTLE CRAFT are received by subscribers a few days later each month than the regular issue—this is the story. As soon as both editions come off the press, the regular edition is "stuffed" and mailed by the printer and the portfolio issues are sent to us here in Bedford. We fasten the weaving samples in the magazines—this has to be done by hand—and then stuff and mail the portfolio issues from the Bedford Post Office. Getting these copies from the printer to us takes a day, and affixing samples, stuffing, stamping and mailing takes a second day.

Ideas for future issues tumble into our minds almost without effort making it difficult to keep our minds on the present. Material for the Ecclesiastical issue in March is shaping up but with samples still to be woven. We hope you will enjoy this number as much as we have enjoyed preparing it.

Cordially,

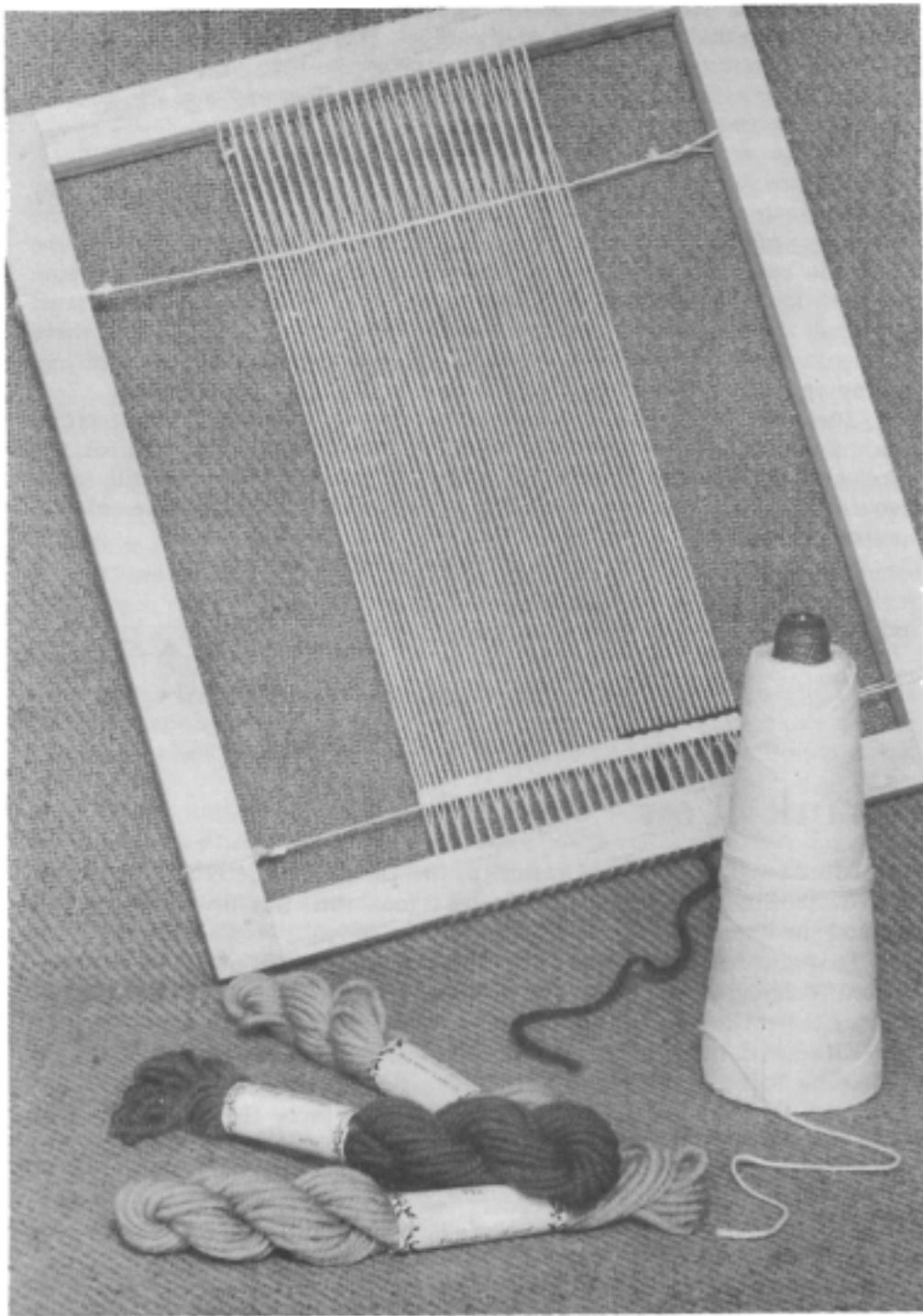
Mary E. Black.

Thank You

After reading the Chiné article in the December SHUTTLE CRAFT, one of our Shuttle Craft Guild members took time out to tell us of the method she uses in putting her design on the warp.

To quote from her letter—"I also have a comment-question on your 'Chiné Technique'. As far as I can tell you paint the warp with no support and try to get the color 'around all sides of each warp thread'. This sounds very difficult to me. I have done some painting on a warp stretched across a drawing board, with the design inked on paper between the board and the warp. I used a small, stiff stencil brush to force the paint into the warp and got satisfactory coverage without changing sheds or trying to paint around threads."

It pleases us to have our readers pass along the benefit of their experiences for us all to share. A Scottish friend of our says "in this way we all become more knowledgeable"—spoken, we may add, with a lovely burr!



TAPESTRY THROUGH THE AGES

by
Joyce Chown

It is interesting to note in studying the history of arts and crafts, that a type of tapestry has evolved in almost every country in the world. The American Navajo and Chimayo Indians both produced tapestry, the colors, design and techniques of which are distinctive to their respective tribes. The Canadian west coast Kwakiutl Indian also produced a tapestry technique which was peculiar to that tribe.

The ancient South American Incas evolved a type of tapestry—the design and color of which has never been bettered to this day.

In the Old World, tapestry weaving has been practised for centuries. We read of it in Greek mythology where we hear of a famous tapestry weaving contest between Arachne and the goddess Pallas in which Arachne wove so well that “Pallas was so overcome with vexation at the success of a work not inferior to her own, and incensed beyond control at her rival’s deliberate insult in selecting for subject the *Amours of the Gods*, that she belabored the hapless Arachne with a shuttle until she had rendered her insensible. The goddess then changed Arachne to a spider to weave evermore.”¹

We read of this gentle art too in a not so gentle Norse saga: “In the North of Caithness, Darad came up to a rock, having seen several figures approach and disappear in it. In this rock there was an opening through which he saw wild women weaving, and singing as they wove. And the weights of the loom he beheld were human heads—the heads of heroes: of entrails were the warps and woofs: swords were the shuttles: and for a comb they had arrows. Now as they sang their awful song, the words dinned in his ears and became understandable. They sang that they were Valkyrias and that the web they were weaving was the web of Darad. As the song ceased they tore in pieces the work they had done, and departed as they had come, some going North and some going south.”² And though this story is rather grim it does give us an account of tapestry weaving in early times.

Tapestry weaving was also practised by the ancient Copts in Egypt and we read what we believe to be mention of this art in the Bible.

It is interesting to note too, that whether the technique came from the Canadian Kwakiutls, the South American Inca or the Egyptian Copt, the technique was essentially the same, and the tapestry technique or techniques as practised by modern American and Canadian handweavers today varies little from the ancient techniques.

As with most of our handloom weaves, our tapestry techniques have come to us from the Scandinavian countries and Western Europe—more

specifically Norway, Sweden and Finland in the north and France in the south.

The history of tapestry in France goes back to the first centuries A.D. Exactly when or how this art form started in France is not known, but it is probable that it came from the East as did other art forms. The "Golden Age" of tapestry weaving in western Europe was in the Middle Ages (8th to 15th centuries A. D.) of history. Tapestry at that time, was made from the designs of manuscript illuminations—or influenced by the designs and painting of manuscript illuminators—and the simplicity of color, line and form of this type of art suited itself better to tapestry than many designs of later centuries.

Tapestry weaving continued to flourish all over Western Europe—The Netherlands, Flanders, France, Germany, Spain, Italy, England—up to and including the 17th century after which there was a gradual though steady decline in tapestry manufacturing. This art form never became extinct in Western Europe—though for decades the centres of its manufactory were forced to move from one country or region to another due to various economic and political difficulties.

In France, tapestry factories of varying sizes and merit were to be found from the earliest days of tapestry in Western Europe. The oldest of the medieval tapestries extant today—the Apocalypse of Angers—was woven in Paris in 1377. Arras tapestries—named for the French town of Arras where they were made—were famous in the 14th century and were sent to the aristocracy and courts of many nations in Europe and Asia. Later, in the 16th, 17th and 18th centuries the famous factories at *Beauvais* and *Aubusson* were begun, and at the wish of Henry IV the *Gobelin* factory was organized in Paris early in the 1600's.

"The locality chosen for the Gobelin workshops was the Faubourg St. Marcel. In the first half of the 15th century, Jean and Philibert Gobelin, dyers of scarlet, and merchants, lived and set up works there on the banks of the stream Bievre, whose waters were excellent for dyeing. Their business prospered, and their descendants became financiers, and noblemen. The name of the Gobelins clung to the mansion and neighborhood, gave a name to the national manufactory of tapestries and furniture of France, and in some measure is used today as a synonym for all tapestry of the kind that was woven there."³

In the first years of this new factory, all tapestries were done by the *basse-lisse* or low-loom method; the *haute-lisse* or high-loom weaving was left to the other tapestry manufactories that existed in Paris at the time. High-loom weaving was (and still is) considered better in every way than low-loom weaving—except in speed. But in the first 50 years—and the greatest years—in the history of the Gobelins, it was felt that the Gobelin weavers had reached such a high peak of perfection that it was difficult to tell the Gobelin low-loom weaving from the high-loom weaving of other workshops.

1, 2, 3 W. G. Thomson, *A History of Tapestry*, rev. ed. (London, Hodder and Stoughton Ltd., 1930).

Later, haute-lisse looms were brought to the Gobelins, and though we do not know if basse-lisse looms are still used at the Gobelin, it is the haute-lisse which we associate with the Gobelins today—and the basse-lisse with the Aubusson tapestry weaving.

In the next issues of SHUTTLE CRAFT we will tell you about weaving methods and techniques as done today at the Gobelins in Paris. These techniques were taught us by Mrs. Albertine Durand Kelz of Scarsdale, New York, a weaver of French tapestry and a student of the late Gaza Gilbert Foldes—who was, in turn, a student at the Gobelins.

“SWEDISH KNOT”

by Joyce Chown

“Swedish Knot” is one of those weaving terms which is misleading—misleading because it is *not* a technique used in Sweden but in France. So why this particular technique has been given this name, we do not know.

The Swedish Knot is one of the first techniques taught the apprentices at the Gobelins before they learn to weave the actual Gobelin tapestry. And although there is no similarity in the two techniques—one *knots* the weft around the warp and the other *interlaces* the weft through the warp—the Swedish Knot does teach the student many things that will be of use to him when he starts weaving Gobelin tapestry. It—the setting up of the loom and “weaving” the Swedish Knot—teaches the potential tapestry weaver how to put the warp on his loom and prepare it for weaving; it teaches the student how to trace and ink his design on the warp threads; it teaches him how to follow the lines of his design—which is not as easy as it might sound; and it teaches him how and when to “build up” areas of the design when he is weaving.

From the point of view of color and design, the Swedish Knot will help in understanding the possibilities and limitations imposed by both techniques. Both techniques produce weft face fabrics, that is, fabrics where the weft completely covers the warp. And since this is so, both techniques are problems in color and design. One is not concerned with texture or pattern:—texture, in the sense that you do not use a number of different weights and qualities of thread; and pattern, in the sense that there is no surface pattern produced by mechanical means as in overshot, crackle, summer and winter, etc.

Aside from the practical fact that an understanding of the Swedish Knot technique helps the weaver in planning and weaving Gobelin tapestry, it is also fun to do. You have no worries about understanding—or misunderstanding—complicated weave structures, systems, drafts or tie-ups. This is a completely finger-controlled technique (as opposed to harness-controlled weaves) and thus what you weave is entirely up to you.

It is a quiet and relaxing technique to do, and if done on a small practice frame, is a technique you can literally pick up any time. The knotting does not work up quickly, but then no finger-controlled or finger-manipulated weave does—and the slowness is compensated for by the results.

The Loom

Presumably the Swedish Knot is done on a high-loom in the Gobelin workshops but for our purposes we used a frame, which is easily obtainable, is big enough to do a sample of the technique and is easy to handle or transport from one place to another if necessary.

The frame used—actually artists' canvas stretchers obtainable in any art supply store—measured 16" x 23".

Warp and Weft

In French tapestry, cotton is used for the warp and wool for weft. Silk and metal threads can and have been used in French tapestry weaving but wool is the most used and probably the most satisfactory weft material.

For our warp, we used an unbleached 6-ply Triton cotton. This is merely a 6-ply cotton string—the same or similar to the string all grocers used to use to tie up parcels before the invention of adhesive papers and tapes. It is about the same twist and finish as Lily's cotton carpet warp—but almost twice as heavy.

For weft, we used Bernat's tapestry yarn.

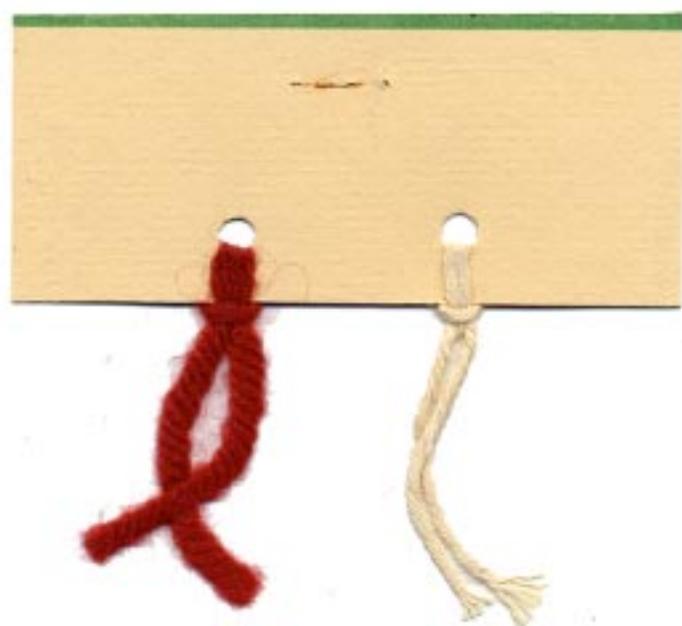
Other weights of warp and weft could be used, but we have not experimented extensively with other weights and therefore, give directions here for this combination of threads which we know produces a well-balanced fabric.

Design

The design used must be simple—and made up of solid blocks of color, with no shading. Do not attempt a line design, or even pattern areas outlined by a single line. The pattern areas must not be small or finicky, since this technique lends itself to a bolder type of design. Any shape may be woven—that is, horizontal lines, vertical lines, diagonal lines and curved lines may be used to make up the design areas.

We would suggest, that for the first piece of weaving, the design be made up of non-realistic shapes such as triangles, curves, and circles and the whole surrounded by a border. The border will give you all the practice you need for horizontal and vertical lines—and the other shapes will give all the practice you need for the curved and diagonal lines.

Plan the design to be 10" square—including the border. A word of caution here. If your design has no background area, be careful that your pattern shapes are not too large as to be uninteresting (large areas look larger when woven than on paper); and at the same time try to avoid too many small areas that may make the finished piece look cluttered or spotty. If your design does have a background area, be careful not to make it too large for again the background area tends to look larger when woven than it does on paper.



Color the cartoon with the colors you are going to use. When selecting your colors, be careful not to put a very dark color in or near the middle of the design—especially if the surrounding colors are light. We made this mistake once, and viewed from a distance, the finished piece looks as though it had a hole burned right through the middle of it.

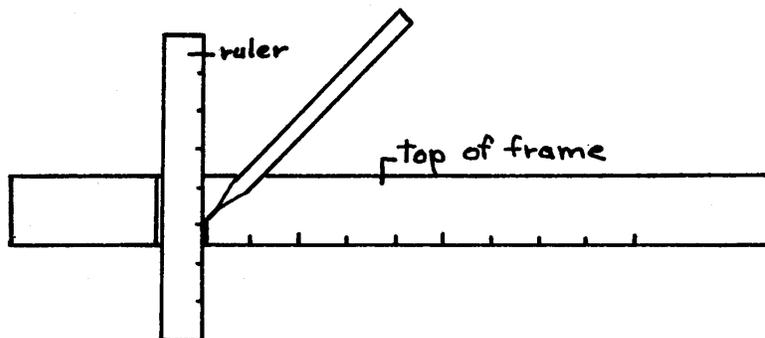
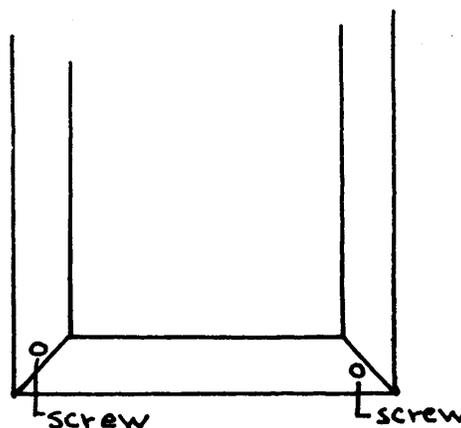
When your design is complete, outline each shape with a heavy pencil or black India ink. Fasten the paper securely to your drawing board or table and fasten a piece of tracing linen over the design. (Tracing paper may be used but the linen is sturdier). Trace the outline of the design onto the tracing linen with black India ink. (Our fine line Rapidograph pen is excellent for this purpose). Try to make this tracing as neat and accurate as possible. If the traced lines are smudged or are too thick or not accurate, one can and will run into unhappy difficulties in weaving.

Preparing the Practice Frame for Weaving

1. If you use canvas stretchers, simply fit the corners together and tap them into position with a wooden mallet. *Be sure the frame is square and that the wood is not warped.* Screw a $\frac{1}{2}$ " screw through each corner of the frame. This prevents any possibility of the corners moving or coming apart due to warp tension, or to dropping the frame.

If you make your own frame, follow the same precautions as above. $\frac{3}{4}$ " wide x $1\frac{3}{4}$ " thick wood is suitable for the frames. If the edges of the wood at the top and bottom of the frame (the short ends) seem sharp, sand them just enough so that there is no danger of them cutting the warp.

2. Stand the frame on the floor (with the short side up) and make a pencil mark 3" in from the left side of the frame and every inch up to within three inches of the right side of the frame. On each mark, rule a straight line across the width of the top of the frame.



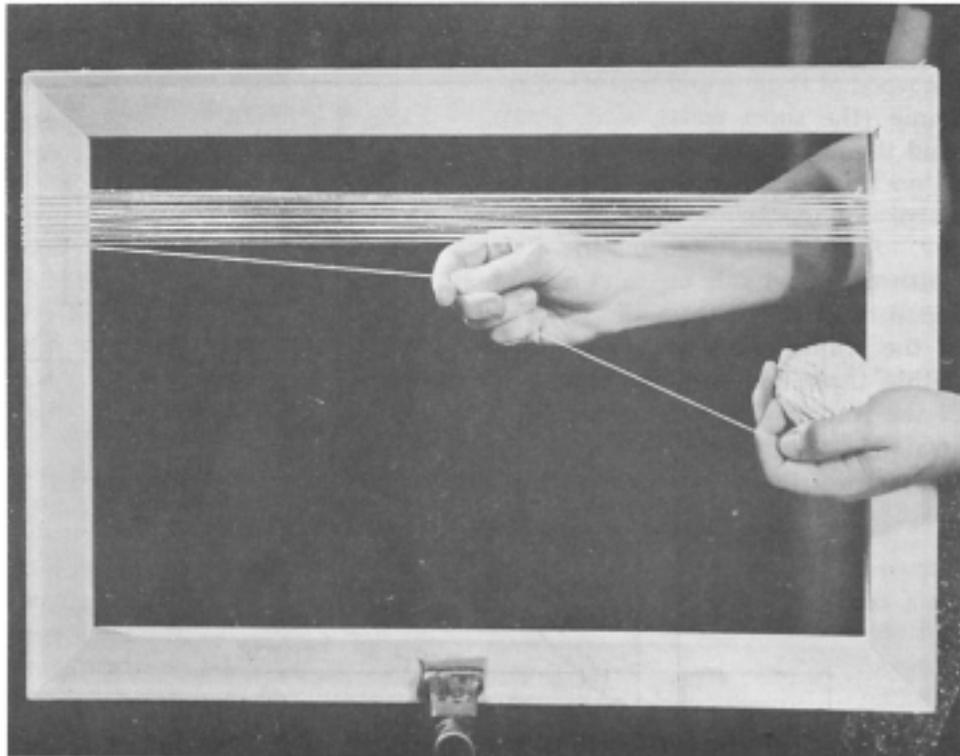
Turn the frame upside down and make similar markings on the bottom edge making sure you start marking from the *same* left side as you did at the top of the frame. This is done to make sure the warp will be straight—as will become more evident when you start warping.

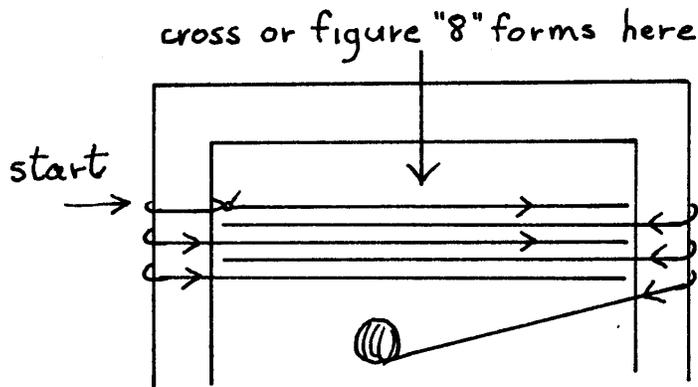
Fasten a vice securely to a table; pad the jaws with felt or similar material; turn the frame on its side and centre it in the vice. Be sure it is secure and cannot wobble—it saves a lot of concern.

3. Wind a *tight* ball of the warp cotton, turning the ball constantly while winding. You should wind off enough for all the warp needed for your project. This of course is difficult to gauge, but a ball $2\frac{1}{2}$ " to 3" in diameter, or one that will fit comfortably into your hand, will be ample.

4. You are now ready to wind your warp. Before you begin, be sure you won't be interrupted in the warping process, for once you begin you cannot stop until it is finished. If you stop, your warp tension is lost and you have to rewind your ball of cotton and start again. So it is well to have someone handy to answer the phone, the doorbell and what have you.

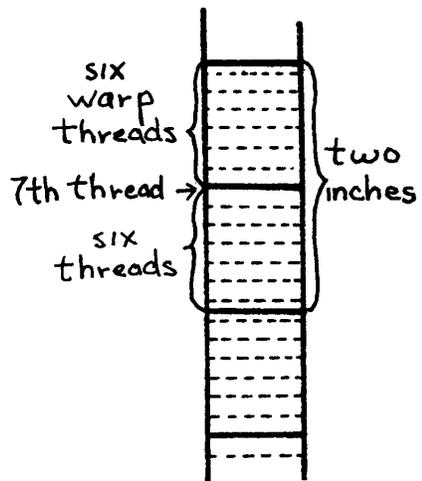
At the upper left side, tie the warp around the frame just below the first pencil mark. Make three or four knots so there is no danger of the knot coming undone.



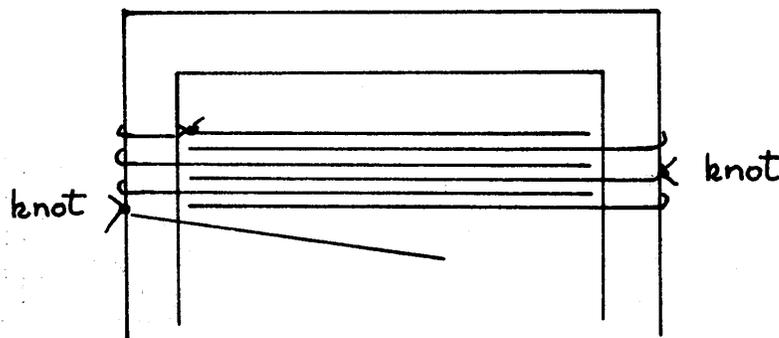


Hold the ball tightly and carry it to the back of the right frame—just below the first pencil mark on this side—to the front of the right frame; under the first warp thread, to the back of the left frame; and, to the front of the left frame.

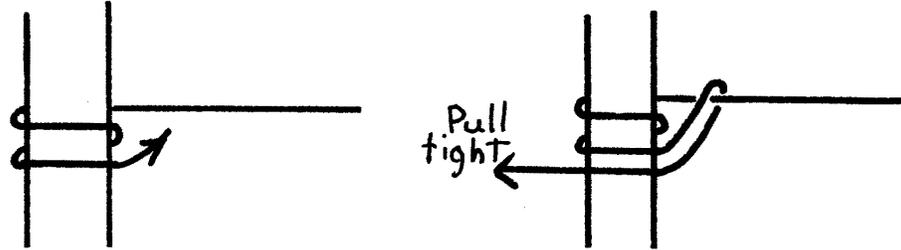
Using the 6-ply cotton warp and the tapestry yarn weft this warp is set 13 threads per inch, so there will be 13 threads between the two inch pencil marks at the top and bottom of the frame. That is, there will be six threads in the first inch with the 7th thread lying on top of the first inch mark, then six more threads in the second inch. The third inch will be the same as the first, the fourth the same as the second and so on. Every other inch mark will be covered by a warp thread.



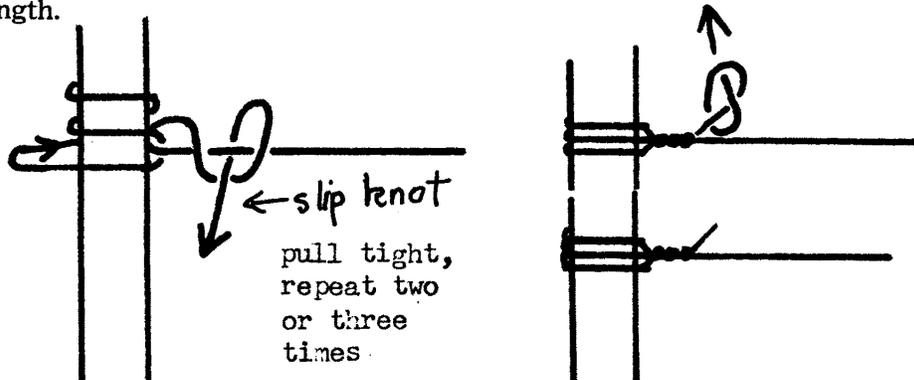
Continue winding the warp as described above taking care not to let the tension slacken, and checking periodically to make sure the right number of threads lie between the marks. If for some reason it is necessary to join a new warp thread to the old one, always make the knot at the top or bottom of the frame so it will not interfere with the weaving.



After the last warp thread is wound, cut it about 15 inches longer than the length of the warp. Carry the thread around the frame twice as shown:



make a slip knot, pull it tight and repeat two or three times. Then make one or two more knots for good measure. Clip the end to about a 1" length.



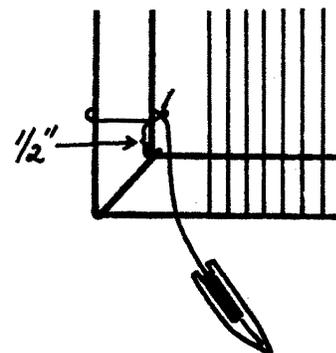
5. Remove the frame from the vice, and holding it between your knees, straighten and space the threads evenly between the pencil marks at the top and bottom of the frame.

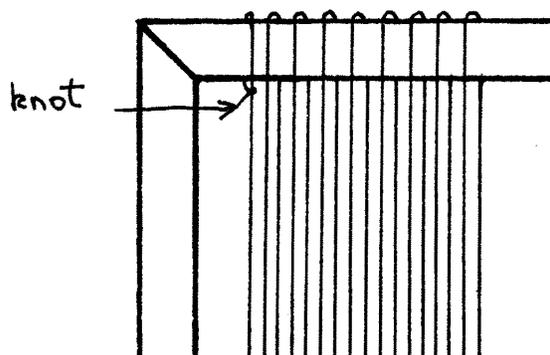
6. The next step is to make a plain weave, weft face cotton heading upon which the design is to be woven.

Wind a netting shuttle with warp cotton.

Sit with the frame in position for weaving, that is the bottom of the frame resting on your lap and the top part of the frame resting against the edge of a table. The table should be high enough—or the chair low enough—so that the frame will be within easy reach for weaving and resting against the table at about a 45° or sharper angle.

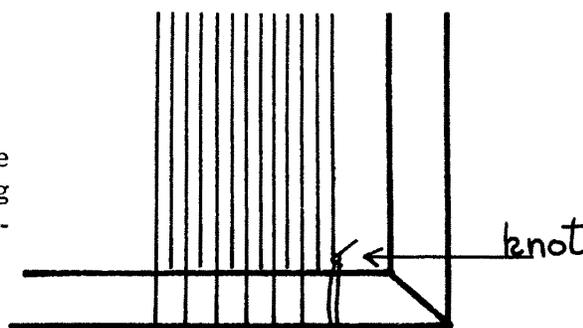
Tie the end from the netting shuttle around the lower left side of the frame about 1/2" from the inside of the bottom of the frame.



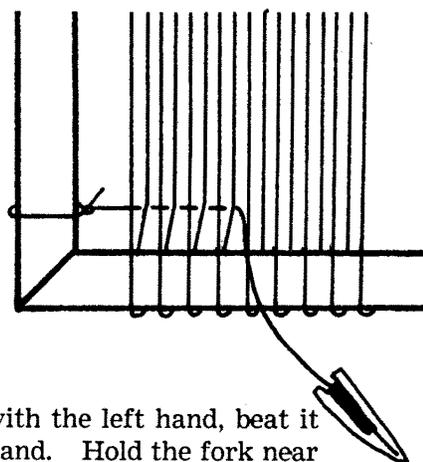


Look at the left selvage warp threads to see if they are in the right position, that is, there should be one up and one down or vice versa. If there are two up or two down, this may be corrected by moving the outside thread up or down at the top left of the frame—where the knot is.

The outside *right* thread may be adjusted in the same way by moving it up or down at the knot at the bottom right of the frame.



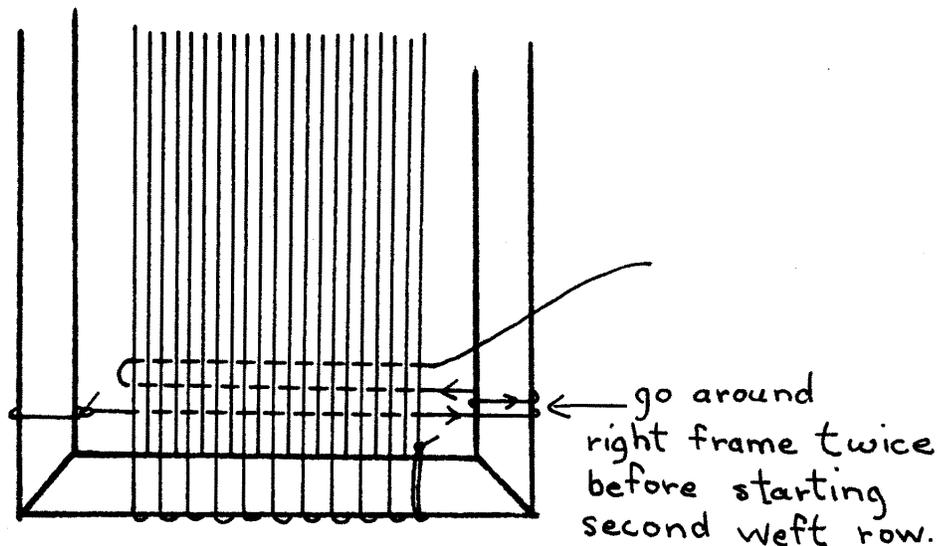
7. Insert the shuttle from the left through about 1 inch of threads bringing the figure "8" or cross to the bottom of the frame.



Drop the shuttle, and holding the weft taut with the left hand, beat it down into position with a fork—held in the right hand. Hold the fork near the end of the handle and use a "throwing" motion for beating. And as a precaution, it is wise to have all people and things out of your line of action until you become accustomed to the feel of this beating motion.

Pick up another inch of threads, insert the shuttle, beat, and repeat this procedure across the width of the warp to the right selvage. Keep the weft taut all across the warp. This is a little difficult to do in the first row, but each successive weft row is easier to do if the first weft row is kept taut for a firm foundation.

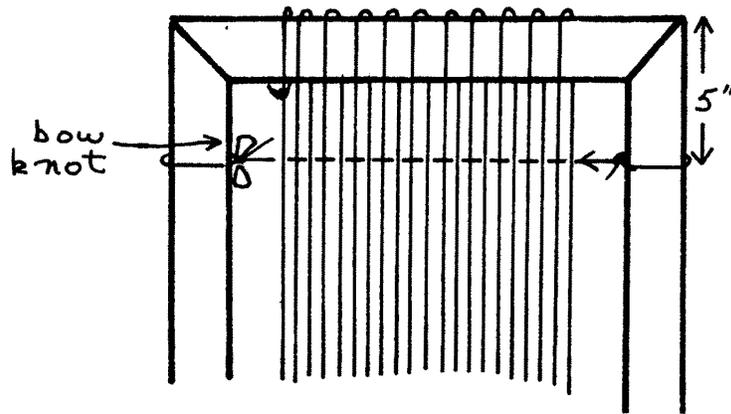
Take the shuttle out to the right frame and go around the frame twice and continue holding the weft *taut*.



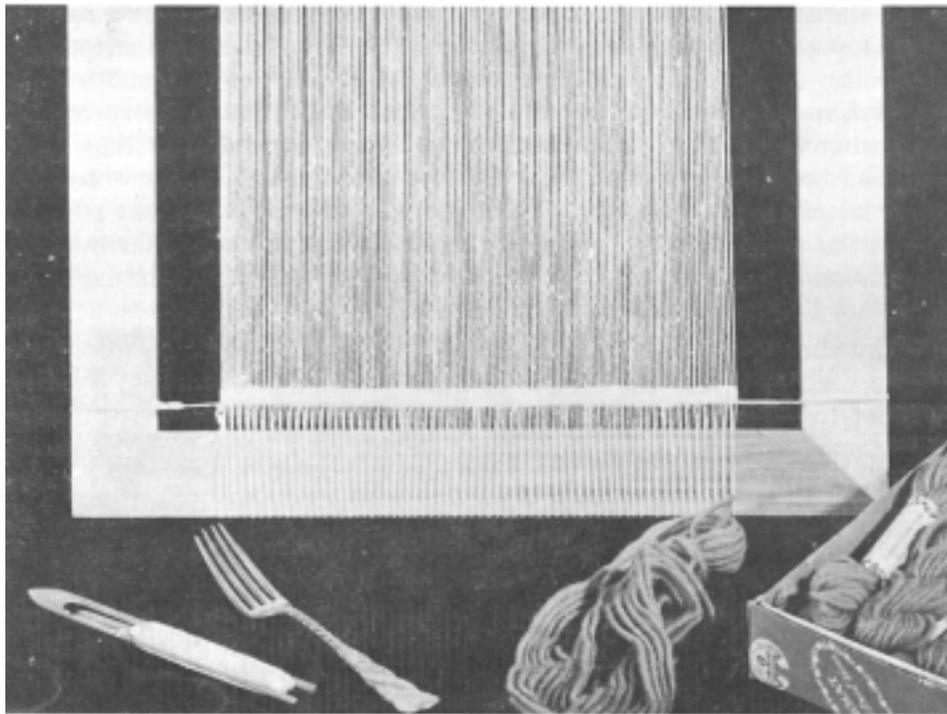
Now start the second weft row. Working from right to left pick up about an inch of warp on the opposite shed; insert the shuttle through these threads; drop the shuttle; hold the weft in the left hand; and beat it down with the fork. You will find, that after a little practice, you will not need to drop the shuttle each time, but will have no difficulty in holding onto it with the left hand at the same time as you are holding the weft thread to be beaten in. Continue across the warp to the left selvedge. It is not necessary to go around the left or right frames again. Repeat these two rows until you have built up a cotton heading about $5/16$ " wide—or about 12 or 14 rows. Cut the weft leaving an end about 1" long. The heading is now finished.

The weft should completely cover the warp in the heading to produce a firm base upon which the design is woven. When finished, the heading should be exactly 10 inches wide, and the selvages straight. You will find that in the second and successive weft rows it is not necessary to hold the cotton as tightly for beating as in the first row. If you hold it too taut, the selvages will pull in and the warp won't be covered. If you hold it too loosely, the warp will be covered, but the heading won't be firm and the edges will draw out. One more trap to avoid here: don't try to pick up more than 1" or at the most $1\frac{1}{2}$ " of warp at a time when making the heading, with the thought that it would be quicker. It isn't. It is more difficult to handle the weft, and tends to make it too tight.

8. Tie a piece of the cotton warp securely around the upper right frame about 5" from the top of the frame. Weave the long end across the warp to put the shed in "neutral". Pull this thread tight and tie it around the upper left frame securing it with a bow or other knot which may be easily untied.



The warp is now ready to have the design inked on it—and then to begin the weaving—or more accurately, the knotting. While it seems to have taken quite a while word-wise to get to this point, we felt it was necessary to give a considerable amount of detail at the beginning. We would like to get on to the actual technique—as you no doubt would too if you have persevered in reading this far—but it will have to wait for another month. The March issue of SHUTTLE CRAFT is to be an all Ecclesiastical issue, so we will continue with this subject of tapestries in April.



VARIABLES IN WEAVING

by

Mary E. Black

We are inclined to take much of our weaving for granted, but the more we weave the more conscious we become of the “variables”, many of which may be hidden and which affect our weaving.

First, perhaps we should define the word variable. There are several definitions given in Webster’s Dictionary but the one which seems to fit our need best reads as follows—“that which is variable; a thing which may vary, or is liable to vary”.

One illustration of a variable is the stripe which is set an inch wide in the reed, but when measured in the body of the web is usually at least one or two threads narrower than the inch at the reed.

Another illustration is in beating. The width the warp is set in the reed does influence the result as we discovered when weaving the sample of the luxury fabric for the January issue. The original sample was set triple sley in a 16 dent reed, 7 inches wide on a small loom. The material for the actual portfolio samples was set 42” wide resulting in a much more loosely woven web than the original sample which had a brocade-like stiffness.

A similar variable we saw recently was where a weaver put a narrow wool warp on her loom and experimented with metallic pattern stripes for borders on cocktail skirts. When she finished weaving her stripes and color schemes on the small sample, she then set a 45” wide warp on her loom using the identical materials, sleying, threading and treadling. But what had been brilliant metallic bands of color in the sample now became rather lacy or shadowy bands of color—simply because it was not possible to beat the weft in as compactly on the wide warp as on the narrow one. Both fabrics were pleasing, but the latter effect was disappointing since it was not the desired one for the occasion.

And similarly, you will recall in the December issue we mentioned it was impossible to beat the sample of the reproduction of the old coverlid as we wanted it, on the small loom at our disposal. Quite different effects are obtained using the same thread and sleying on a small hand loom and on a foot loom.

These variables will perhaps help explain why your weaving is disappointing at times when you have been careful to follow directions.

When winding two or even three threads together for the warp keep a finger, or fingers between the threads to keep them from twisting around each other. This saves much time when winding the warp onto the beam. If more than three threads are being wound at a time, use a paddle.

THE WEAVER'S BOOK SHELF



by
Boris Veren

The Monarch butterflies, who for some inexplicable reason to humans, but not to butterflies, migrate each year to the pines and cypresses of this Monterey Peninsula and this coast, have returned north, and in their place have come the whales. Certainly not to take their place on limb and leaf, but to continue their merry course south to San Diego. As I type this column this sunny Saturday morning, I can catch the tell tale geysers of spouted Pacific water, and many times, I can even see their huge backs as they frolic, literally, under my window. I have checked, this morning, on fourteen of them. It is comforting to an old conservative and conservationist, to know that whales are in and will remain in oceans. True they are mammals, and this habitation has at times seemed strange to me. But for years, that has been their home, and I'd like to see them each year in the same seas they now live in. Unless we get awfully avaricious for continental margarine, we can depend on seeing them here each year. At least I hope so, for we now hear of dogs leaving ground and kennels to whirl through space. I believe that mice, and rabbits may already have been evicted from hutch and cave and lair and taken into several types of high ethers in metal balls. Now, will whales be travelling through space soon? In some of my wildest of nightmares, I have pictured a Sputnik, fully and comfortably equipped with weaver, loom, and a shelf of weaving books, shuttling between moons and planets, but my imagination cannot—at least today—imagine a whale, furnished with aquarium and oxygen cylinders, spouting in space, and scaring Moby Dick in his watery grave. Now, this was not meant to be either a nature essay or another editorial on artificial satellites (I go for the real thing!), but a confession that migrating whales on a Saturday morning are distracting. My cat Boychik, who is draped around my shoulders says: "Stupid! How can anything the size of a whale be merely distracting? A mouse could be, even a grasshopper, but a whale . . . come!"

So, to work. Whales, as I said are going south today and will be passing Long Beach soon. I will follow their general course and will parallel their watery highway with this beautiful Coast Route, and I shall make some of their stops too, my final one being Long Beach, California, at the ocean and in the Municipal Auditorium of that city on March 22 and 23, 1958. I hope to have some new and old books to show SHUTTLE CRAFT readers who intend being at the first weavers conference of the Southern California Handweavers.

You can pick up at my booth, a new English translation of the Finnish text, being the weaving directions for the book PITSIA KANGAPUISSA, by Matilda Wahe. I called this book to the attention of my readers a few months ago, as the best book dealing exclusively with the lace weave techniques. Many purchased the book. Some didn't because the text in Finnish was too difficult to decipher. No problems now, for I have recently swapped some books for an excellent translation of this book. I intend cutting the stencils of the manuscript next week and will mimeograph it shortly. SHUTTLE CRAFT readers who purchased this from Craft & Hobby Book Service may have it free of charge. No stamps needed, no box tops to be sent. Just let me know. And those who may purchase the book (\$3.50) will receive the translation at no extra charge.

I'd like to swap some more books for a glossary of Norwegian and also Danish weaving terms. Any translators?

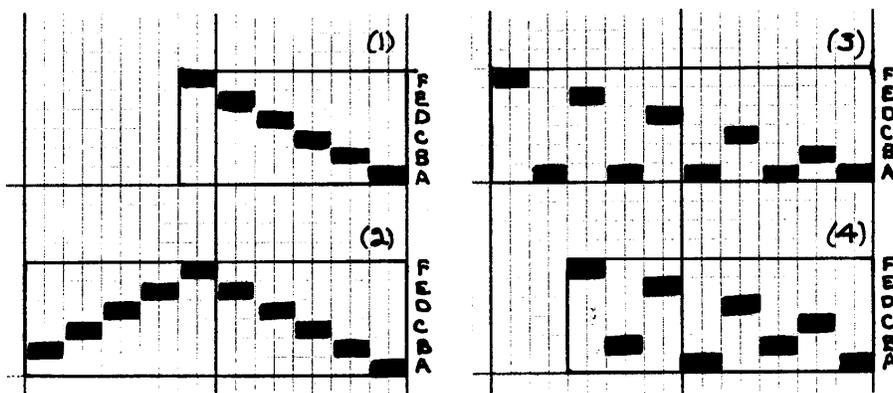
I have been mailing at random, some specimen full color plates from the sumptuous collection TEXTILES IN PRE-INCA which was reviewed last April 1957 by Marie Murelius in SHUTTLE CRAFT. The beautiful reds and greens of this particular tapestry weaving made a Christmas card, but the accompanying sales circular told of its beauty, its contents of 100 full color plates and its price of \$90.00 for the set collected in ten cardboard folders of \$120.00 as a two-volume bound set. Several weavers wrote in, telling me how beautiful the plate was, how much they would like to have it and then gave me the sad news that they didn't have or couldn't spend \$90.00 or \$120.00. I understand and can sympathize with this confession. I mean to do something about it. In fact, I have with a number of impecunious weavers. I will be willing to sell this set to SHUTTLE CRAFT readers on a long term time payment plan. I have no definite time limit or payments in mind, and I mean to be as flexible as are the needs of weavers. Broadly speaking I would send you a set on application with a down payment of \$20.00 and monthly payments of anywhere from \$5.00 and up a month. And what is more amazing, and irregular, no interest will be charged. The only interest is YOUR INTEREST in owning and enjoying this greatest of weaving collections. Here, for the price of four medium grade automobile tires (which themselves are expendable in a few thousand miles) you can have in your library a truly great treasure of the weaver's art, perhaps the greatest we have ever seen! Normally I am adverse to the use of too much or undeserved hyperbole, but I would hate to see this TEXTILES OF PRE-INCA go unbought because of a financial reason, which can be remedied by this plan. I also wish to assure you that the book is produced at far less than its production costs, as it primarily was published as a testimonial to this private collection of Peruvian weavings by its owner, Mr. Itoji Muto, president of the Kanegafuchi Spinning Company of Japan.

The Summer and Winter Sequence Weaves for Color Textures

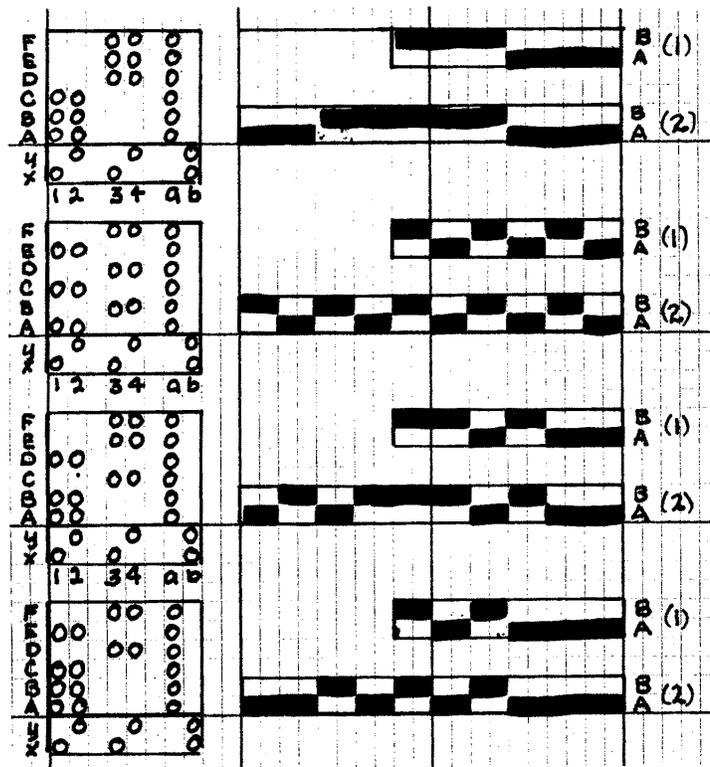
by
Harriet Tidball

The unconventional sequences or shed rotations for weaving Summer and Winter have been touched on in the SHUTTLE CRAFT articles for November 1957 and January 1958. These methods are so important in the interpretive use of Summer and Winter threadings, as opposed to the classical patterns and textures, that they deserve systematic study.

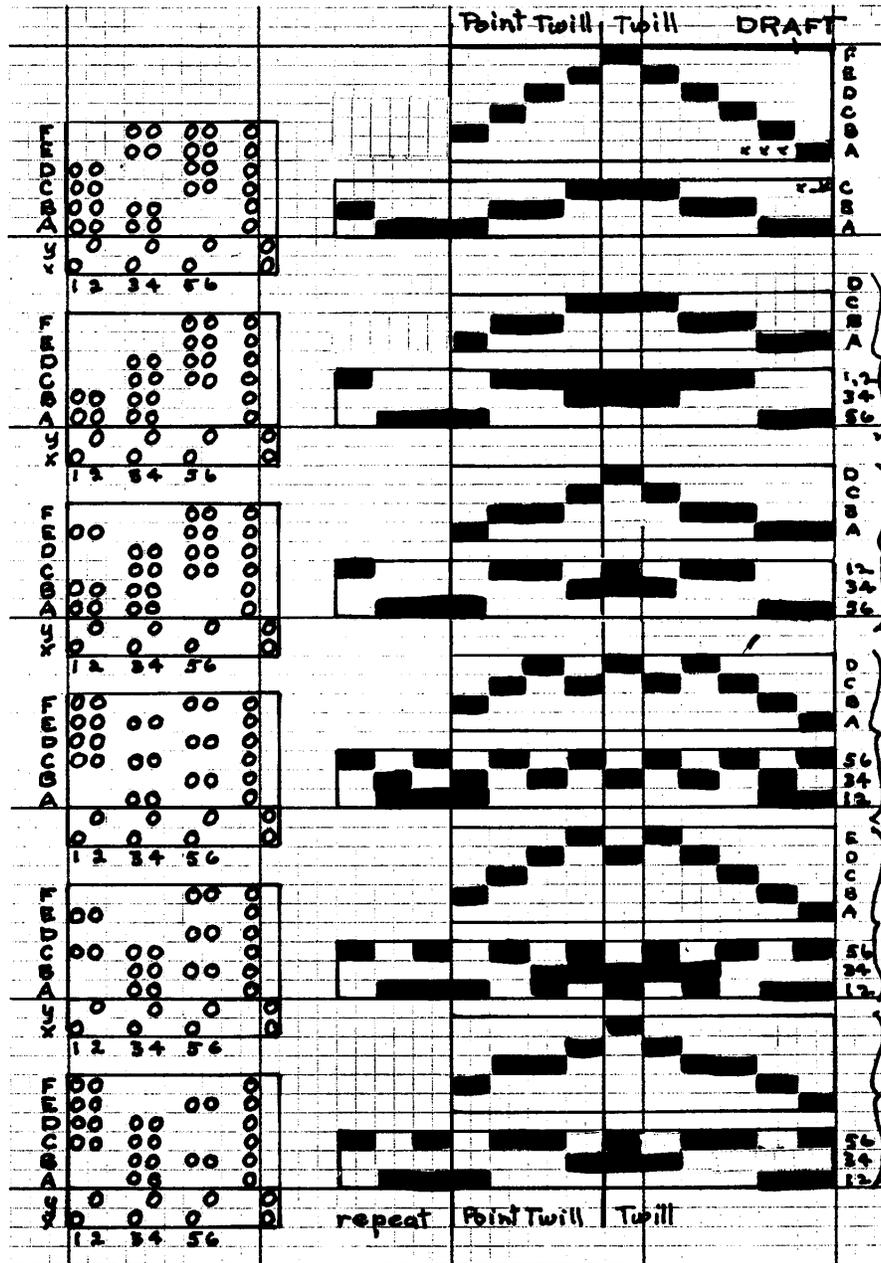
The Sequence techniques are weaving methods, rather than threading systems, and they may be applied to threadings of many different systems regardless of the particular pattern configuration or the number of harnesses employed. The Sequences have varying significance however, when used on different threading systems. As it happens, of all threading techniques the Summer and Winter System provides the most useful and versatile foundation for weaving a wide variety of sequence textures and designs. The reason for this is that the Summer and Winter foundation combines the shed advantages of a number of different systems. First, it has the firm, high quality character of the tabby or plain weave, and this character may be used wherever it is needed. Second, it has the shed variation characteristic of the Twill, short floats limited to three threads and the soft, draping quality which these impart. Third, it has the pattern-block potential of the pattern weaves, with the ability for combining pattern blocks in any desired manner through manipulation of the pattern-harness tie-ups. Fourth, the two evenly spaced tie-downs which occur in each four-thread unit give the weaver a control over texture which few threading systems offer. These characteristics not only lead to the development of an almost endless variety in surface textures and color combinations, but they also make the Summer and Winter threading suitable interlacement for any of the fibers which handweavers use: cotton, linen, wool, silk, man-made fibers, and natural grasses and woods and other oddities.



Simplicity of pattern is usually desirable for the Sequence weaves which stress beautiful textures and color harmonies rather than elaborate patterns. Therefore these weaves are particularly good for the four-harness weaver. However, the multiple-harness weaver finds it advantageous to make simple six, eight or ten-harness threadings of blocks arranged in Twill order (1), Point Twill order (2) or Interrupted Twill order (3) and (4), and to reduce these through the tie-up. The Profiles show the block arrangements with two units in each block for illustrative purposes, but the designer will alter the block sizes as desired. The four eight-harness tie-ups are examples of the way eight-harness threadings are reduced to two-block arrangements through the tie-up. Two Profiles are given for each tie-up, the first showing how this tie-up will alter draft (1), the second showing how it will alter draft (2). The advantage of the multiple-harness threading over the four-harness one is obvious—many different patterns may be composed on the same threading.



Three-shed arrangements are often more interesting than the two-shed ones, particularly if the sheds give interesting block overlaps. Six examples of three-shed tie-ups (each shed connected with each the x and y tie-down) from an eight-harness threading are shown.

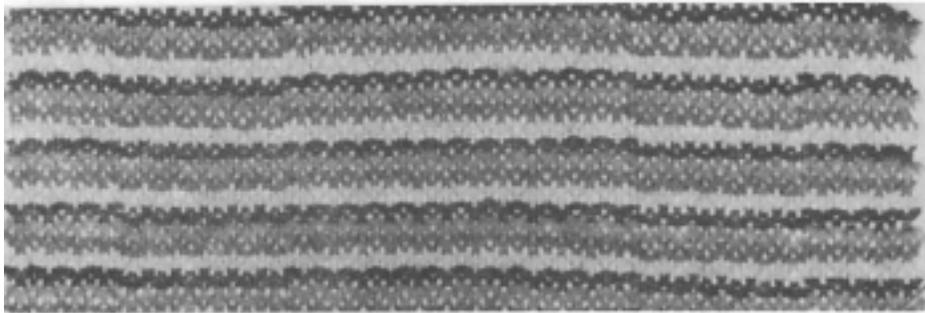


The threading Profile is given at the top, showing draft (1) if the repeat is started with the first vertical line, draft (2) if the repeat of the entire draft is made. The lower three-line Profile for each tie-up shows the exact arrangement from the three sheds of the tie-up. Above this is the threading Profile required if this pattern is threaded alone.

TWILL TEXTURES:

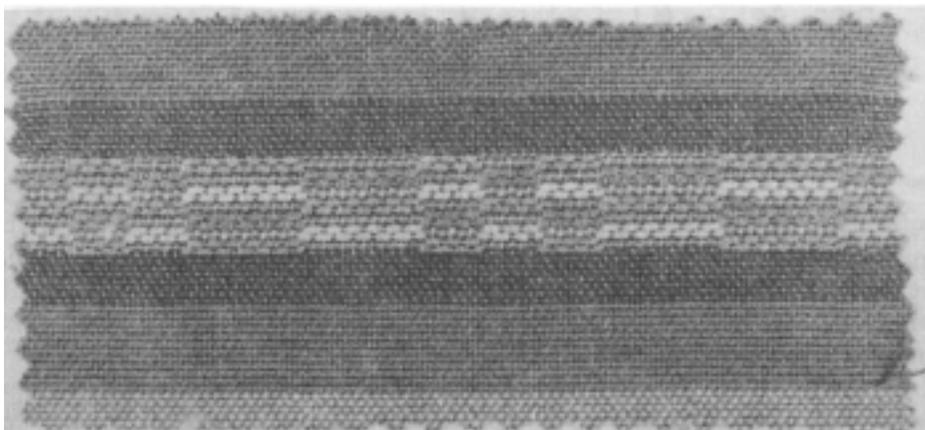
The Sequence treadlings are mainly based on applying the treadling method for some other weave to the Summer and Winter tie-up. Most significant of all the methods is the Twill sequence which is simply weaving the four (or six) Summer and Winter treadles in 1, 2, 3, 4, (or 1, 2, 3, 4, 5, 6) order, repeated throughout. This is a no-tabby weave. Although it makes a pleasant Broken Twill texture when woven with a single color weft yarn, the significance of this weave lies in the way a group of colors may be harmonized for all-over or border texture-patterns. The four photographs show color effects on a four-treadle repeat, sequence. The first photograph (on a white warp) is:

Treadle: 1, 2, 3, 4 — dark green,
1, 2, 3, 4 — burnt orange,
1, 2, 3, 4 — grey green,
1, 2, 3, 4 — pale water green,
repeat.



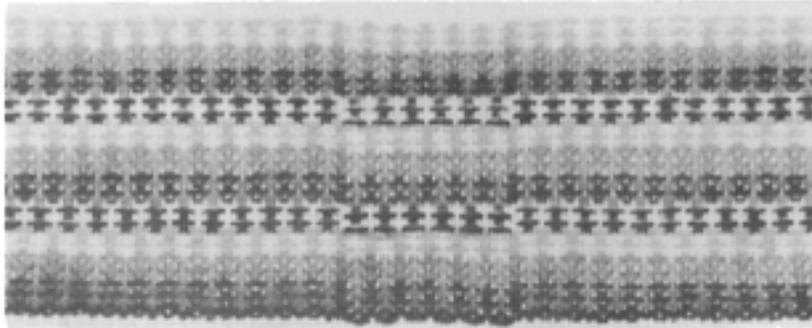
The second photograph (on a skipper blue warp) is:

Treadle: 1, 2 — burnt orange; 3, 4 — Kelly green;
1, 2 — pale green; 3, 4 — burnt orange ;
1, 2 — Kelly green; 3, 4 — pale green;
repeat.



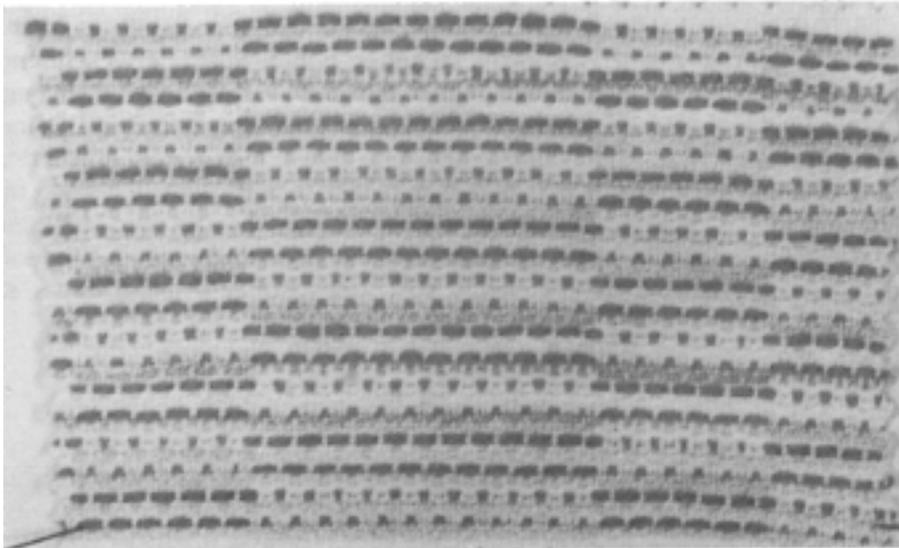
The third photograph (on a white warp) is:

Treadle: 1 — rose; 2 — white; 3 — rose; 4 — white, twice;
1, 2, 3, 4 — rose, twice;
1 — dk. rose, 2 — rose, 3 — dk. rose, 4 — rose, twice;
1 — white, 2 — dk. rose, 3 — white, 4 — dk. rose twice;
repeat.



The fourth photograph (on a white warp) is:

Treadle: 1, 2 — lt. blue, 3 — Wedgewood blue, 4 — white;
1 — white, 2, 3 — lt. blue, 4 — Wedgewood blue;
1, 2 — white, 3, 4 — medium blue;
1 — Wedgewood blue, 2, 3, 4 — white;
1 — lt. blue, 2 — Wedgewood blue, 3, 4 — white;
repeat.



POINT TWILL TEXTURES: These may be woven in several ways and are usually most effective as single-color textures, though colors may be introduced. The no-tabby texture is woven;

Treadle: 1, 2, 3, 4, 3, 2, repeat.

A corduroy-like texture or weft rib is woven:

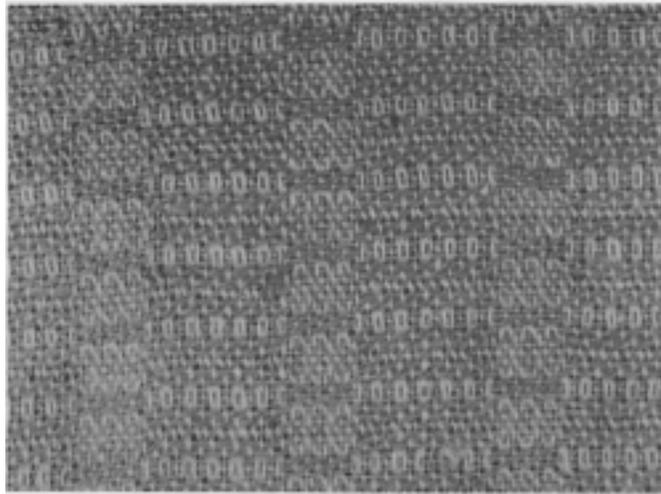
Treadle: 1, 2, 3, 4, 3, 2, 1;

a, b, a;

repeat.

The texture shown in the photograph, which is very pleasant in linen, is:

Treadle: 1, 2, 3, 4, 3, 2, 1, a, repeat.

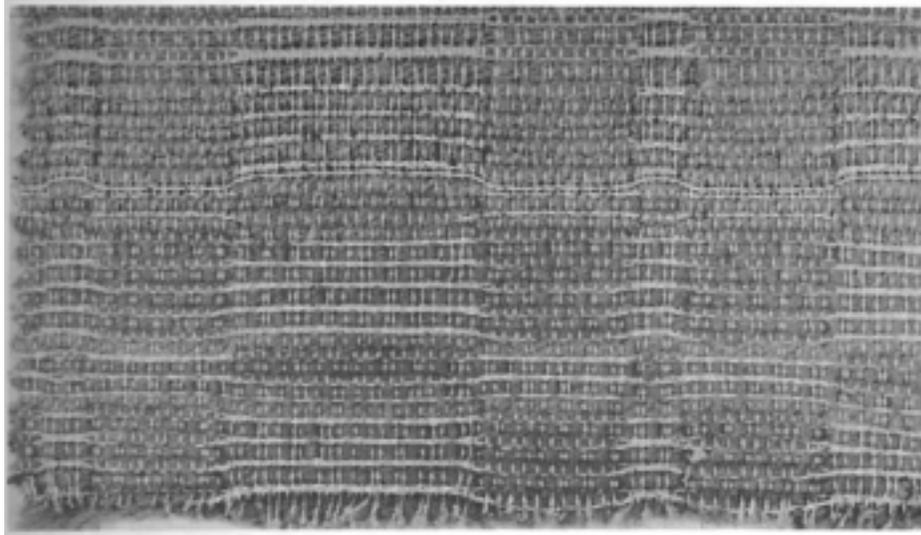


CURVED OUTLINE: Only an introduction to the possibilities of this Spot-weave Sequence is shown in the sampling photograph. This sequence gives an all plain-weave surface but builds up off-set blocks created through the use of extra heavy pattern weft which may be alternated with finer weft. The under side of the fabric has long floats making it impractical for any use which requires two good sides, but it is a remarkably good upholstery texture. The treadling sequence below gives the two-block arrangement as illustrated in the photograph, but the blocks may be extended as shown on the tie-ups, to create very beautiful multiple-harness effects.

			6	0 0 0 0	6		0 0	0	6		0 0 0	0
			5	0 0 0 0	5		0	0	5		0 0 0	0
4	0	0	4	0 0 0 0	4		0	0	4		0 0 0	0
3	0	0	3	0 0 0 0	3	0	0	0	3	0	0 0 0	0
2	0 0	0	2	0 0 0 0	2	0 0 0 0	0	2	0 0 0 0	0	0 0 0 0	0
1	0 0	0	1	0 0 0 0	1	0 0 0 0	0	1	0 0 0 0	0	0 0 0 0	0
	1 2	a b		1 2 3 4	a b		1 2 3 4	a b		1 2 3 4	a b	

Treadle Block A: b — fine, a — heavy, b — fine, 1 — heavy; repeat;

Treadle Block B: b — fine, a — heavy, b — fine, 2 — heavy; repeat.

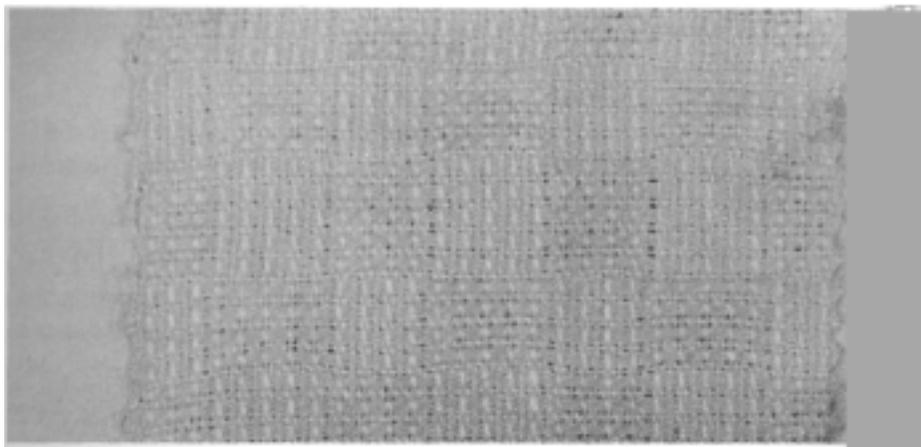


If a contrasting outline thread to show up in a strong curved line is desired, place it in the final pattern shed of each block. This sequence is given in the hopes that weavers will wish to experiment further with it.

SUMMER AND WINTER LACE TEXTURE: This so-called lace texture is excellent for table linens if woven with a single color linen weft, as in the photographed piece which also used a linen warp. On every sixth shot, the one which occurs on the a tabby shed, may be woven of the same color as the warp and the other five shots in the sequence of a different color. The x tie-down is used throughout, with the standard Summer and Winter tie-up, in the order:

Treadle Block A: b, 1, b, 1, b, a; repeat as desired;

Treadle Block B: b, 3, b, 3, b, a; repeat as desired.





OPPOSITE TEXTURE: Summer and Winter Opposites is useful when one wishes a weft-rep surface which completely covers the warp. Opposites is woven without tabby, but classical Summer and Winter drafted patterns may be produced in this technique rather than textures, if desired. Simple two-block Opposites is illustrated by the first photograph and is woven;

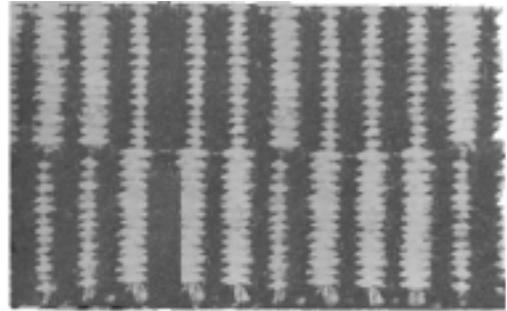
Treadle Block A:

1 — dark, 4 — light; repeated as desired;

Treadle Block B:

3 — dark, 2 — light; repeated as desired.

The more elaborate Opposites texture which gives a satin-like surface with unbroken color blocks is treadled as follows for the two-block designs:

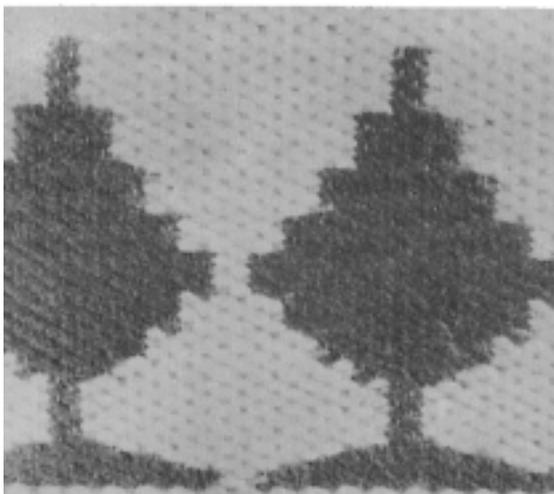


Treadle Block A: 1 — dark, 3 — light, 2 — dark, 4 — light; repeat;

Treadle Block B: 1 — light, 3 — dark, 2 — light, 4 — dark; repeat.

The illustration from a sampler woven by Mary M. Atwater shows a charming pattern in trees woven in this manner. The threading for this is the eight-harness Point Twill arrangement with two units on each pattern block. Too many treadles are required for the full tie-up, so this is easier done with the skeleton tie-up.

The sheds are as follows:



First Block: 1-4-5-6-7-8 — light, 1-3 — dark;
2-4-5-6-7-8 — light, 2-3 — dark.

Second Block: 1-5-6-7-8 — light, 1-3-4 — dark;
2-5-6-7-8 — light, 2-3-4 — dark.

Third Block: 1-6-7-8 — light, 1-3-4-5 — dark;
2-6-7-8 — light, 2-3-4-5 — dark.

Fourth Block: 1-7-8 — light, 1-3-4-5-6 — dark;
2-7-8 — light, 2-3-4-5-6 — dark.

Fifth Block: 1-8 — light, 1-3-4-5-6-7 — dark;
2-8 — light, 2-3-4-5-6-7 — dark.

Background: 1 — light, 1-3-4-5-6-7-8 — dark;
2 — light, 2-3-4-5-6-7-8 — dark.



HONEYCOMB TEXTURE: This may be woven on two blocks or as many blocks as one wishes. It is based on the weaving of a color spot by alternating the two treadles with x and y tie-down and following the alternation with two tabby shots, or sometimes more advantageously with three tabby shots. A standard Summer and Winter tie-up is used. Use the same color as the warp for the two tabby-shed shots.

Treadle: 1, 2, 1, 2, 1, 2, 1 — pattern color; b, a, b — warp color;
3, 4, 3, 4, 3, 4, 3 — pattern color; b, a, b, — warp color.

An interpretation of this was given in SHUTTLE CRAFT for January 1958, the Jewel-Tone skirt borders.

These Sequences are not a comprehensive coverage of the field of color-texture weaving on Summer and Winter, but they should give a foundation of suggestions to the weaver who is imaginative and wishes the pleasure of adventuring further in this fascinating byway.

Most of the Sequence Weaves allow full freedom in choice of materials and colors—anything may be used which will suit the function for which the fabric is intended. In most cases wefts considerably heavier than the warps are best, which makes the weaving progress with pleasant speed as compared to the more laborious weaving of classical Summer and Winter with tabby and fine pattern weft. Combinations of types and sizes of wefts and of colors are effective. Color blendings and progressions are very subtly accomplished through the Sequence weaves. Metallics are excellent, as wefts are held closely in the shed. And the weaver interested in the use of oddity fibers such as natural grasses and grain stalks will be pleased with the interesting effects obtainable with these weaves.

There is always the question of suitable application for any weave. In using the Sequences, it must be kept in mind that the fabrics (with the exception of Summer and Winter Lace) are opaque, fairly heavy, and unbalanced, with greater weight and stiffness in the weft than in the warp. This limits their use to situations in which this is appropriate; for instance, the weaves are more suitable for upholsteries than for curtains. In fact, in yardage interpretations these design into some of the very best and hand-somest of upholstery and sofa cushion textiles, as illustrated by Miss Fitzgerald's upholstery designs given in the November 1957 SHUTTLE CRAFT. The weaves are also suitable for upholsteries when used in stripes alternated with plain weave stripes (unusual stripes are very popular upholstery designs now). Photograph two is of such an upholstery. It is a skipper blue 24/2 cotton warp with plain weave stripes of light green, Kelly green and dark green, accented by the Sequence bands which are highlighted with burnt orange, all of the weft yarns being 10/3 mercerized cotton. The weaves are good for modern design bedspreads. On a fine worsted warp they can make charming Afghans and soft, warm blankets.

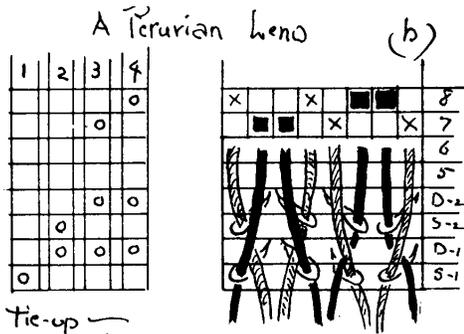
PERUVIAN LENO

by

Mary M. Atwater

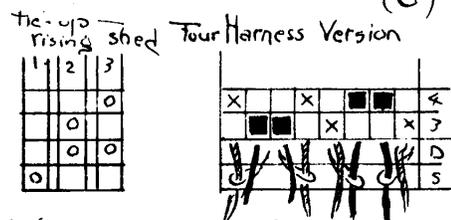
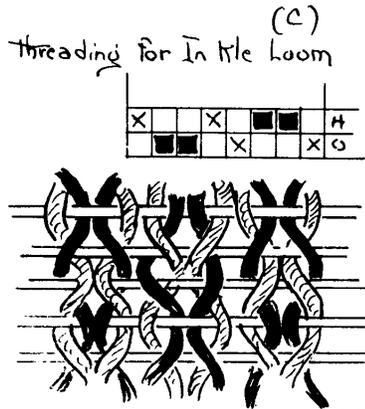
Another novelty is an odd 'leno', from a small bag illustrated in the d'Harcourt book on ancient Peruvian textiles. It makes an interesting fabric that at first glance does not resemble leno at all. It is nice for bags, and done in wool makes an excellent fabric for a sweater jacket. The effect is a small diamond figure in warp-face weaving.

"Guild members would be amused to learn of the hours of struggle I put in to arrive at the quite simple solution of this weave given on the diagram. As will be noted, six harnesses are required—two for the threading, with two sets of doups and two sets of standards. On an eight-harness loom, use harnesses 7 and 8 for the threading and the four front harnesses for the leno as indicated on the draft. This is a weave for coarse material. I tried it in Germantown yarn at a setting of 20 to the inch, and in Lily's "thrifty-knit" cotton at the same setting. I also tried it using the thrifty-knit material double, slewing four ends through each dent of a six-dent reed. The manner of taking the threads through the doups is indicated on the diagram, but to make it as clear as possible: For the first pair of warp-ends take the dark thread through the loop of doup No. 2,—on harness 4—and take the light thread over the doup. Now take the dark thread over doup No. 1,—on harness 2—and take the light thread over the dark thread and through the loop of doup No. 1. These two doups are set to the right of their standards as shown. The second pair of threads are taken through the doups



tie-up — rising shed
 Weave: 2, 1, 2, 3, 4, 3
 Repeat

Legend:
 X Light threads
 ■ Dark threads



Weave: 1, 2, 3, 2, Repeat

This produces an effect similar to the above, though not exactly like the Peruvian piece. Use the dark color for weft.

in the same way exactly, except that this set of doups goes through the eyes of the standards from left to right. The doups for the third pair are also from left to right, and for the fourth pair from right to left, like the first.

"The weave may be used for belts on the inkle loom, the two plain sheds being made in the ordinary way and the two cross-sheds picked up. This is not difficult and gives a handsome effect. The sketch, showing the sheds, should make it clear.

LOOM LANGUAGE

All handweavers are confused at times by the use of words which, to them, should have, but do not have, an identical or common meaning.

As you read and study SHUTTLE CRAFT articles, KEY TO WEAVING and other publications you will note some variations in the use of words and terms. Some of these variations may be due to local usage, some to background influence and some are just plain controversial.

Oddly enough it was our concern over word definitions and usage; classification of weaves; techniques, and other weaving problems, that first brought Mrs. Tidball, Miss Chown and myself together for serious study. Original plans conceived to work out a solution to this confusing situation did not mature, but now that we find ourselves working together (and I may say still somewhat surprised about it!) we hope through the pages of SHUTTLE CRAFT to clarify some of these difficulties and institute a weaving language common to all handweavers.

Fortunately Mrs. Tidball, Miss Chown and I find we can disagree happily over words, eventually however, arriving at a workable decision. We would like to invite you, our Shuttle Craft Guild members, to send in your problems regarding word usage and terminology, and perhaps through the coming months we can reach some conclusions satisfactory to us all.

For a start, let us take the word "tabby", one of the most commonly used words in our weaving vocabulary. Mrs. Tidball defines this word in her WEAVER'S WORD FINDER as follows—"tabby—the plain weave (alternate threads up and down in both warp and weft) in which warp and weft are identical and there are exactly as many weft shots per inch as there are warp ends"—she continues with a further definition for "tabby background—the tabby weave as it forms the ground or basic fabric for most of the two-shuttle pattern weaves and many of the brocade weaves. Any tabby background, when classically interpreted, should hold strictly to the tabby balance between warp and weft. This means that there are actually twice as many weft shots per inch as there are warp ends, as the pattern weft is an extra shot, following each tabby, which takes up no perceptible space."

On the other hand in KEY TO WEAVING the word tabby has largely been reserved to describe the fine thread inserted between pattern threads, and Mrs. Tidball's balanced 50/50 weave is referred to as plain weave.

The LOOM-SIDE MARKET

RECOMMENDED SOURCES

We would like to call the particular attention of our readers to the goods and services offered by our advertisers in this issue of SHUTTLE CRAFT. Here you will find some new sources of materials and equipment which we can heartily recommend to you.

You will miss some advertisers who have been with SHUTTLE CRAFT since it came out in its new form in January 1957. We hope they will return to us as the months go by because we appreciate that they have excellent merchandise that you as weavers will be looking for at the beginning of this new weaving season.

In working out the samples which we will be writing up for you in future issues of SHUTTLE CRAFT we will be using a great variety of threads from many sources and shall mention the names of the vendors insofar as we have them.

When you write to any of our advertisers please state that you saw their advertisement in SHUTTLE CRAFT. This is proof to them that their advertisement is of value.

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, Bedford, Nova Scotia, Canada.

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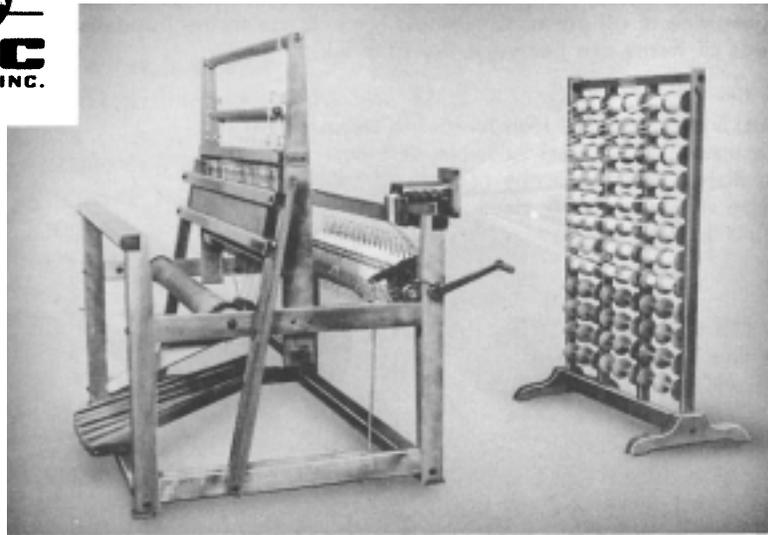


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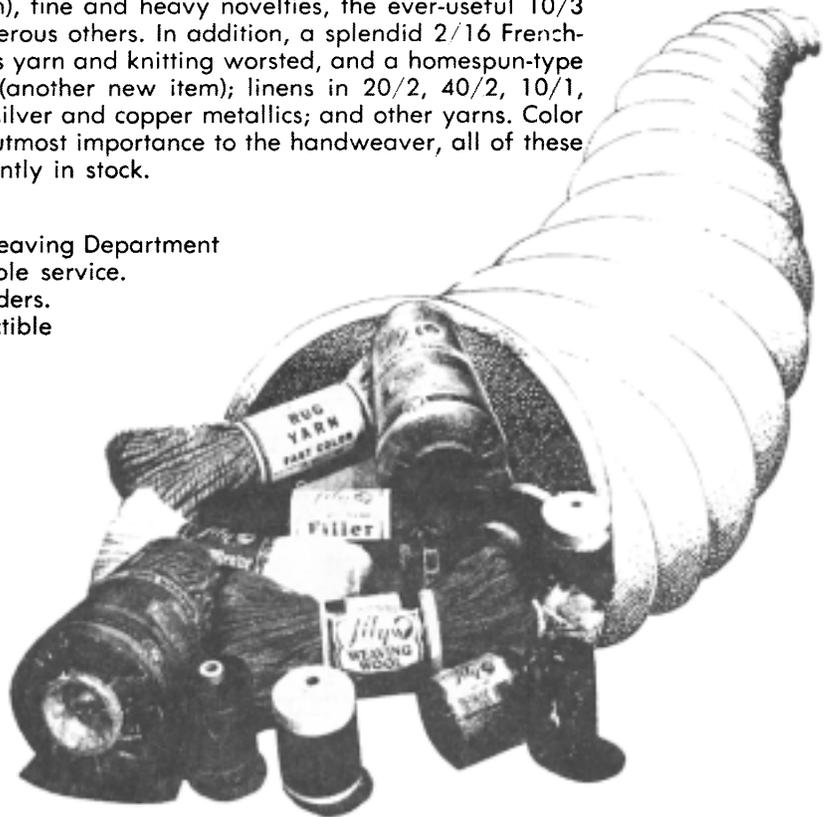
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PUBLICATIONS

HARPER & BROTHERS, 49 East 33rd Street, New York 16, N. Y.
HANDWEAVING FOR PLEASURE AND PROFIT, by Harriette J. Brown, 1952, 283 pages, clothbound. A guide to two harness weaving for beginners and advanced weavers. Excellent illustrations. \$4.50.

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