

THE WEAVER

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Paul Bernat, Editor

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THE FINISH OF EDGES

By MARY M. ATWATER

How to finish the edges of a woven piece is one of the minor problems of the textile craftsman, but it is often a troublesome detail. And important, too, for nothing detracts more from the final effect than a poor or unsuitable finish.

Most familiar forms of finish are the plain hem, the rolled hem cross-stitched in color, and the hem-stitched hem—all finishes made with the needle—and fringes tied in an ordinary overhand knot, as is the common practise for rugs. I shall say nothing about these forms of finish in the following notes, as they are too well known to most people to require comment.

To fringe or not to fringe the ends of ones runner, scarf, rug, girdle or what-not—this is the problem that many people find hard to decide. It is first and foremost a question of style. There are elaborately fringed years, and years in which all fringes are taboo. That simplifies matters. Unfortunately there are also other years when one may fringe or not as one chooses, and that's when the matter becomes a problem. In a general way it may be said that if the warp is much finer than the weft, and is spaced fairly far apart, the skimpy warp-fringe that results is anything but handsome and an unfringed finish is desirable. If one feels the necessity of a fringe on such a piece it is necessary to use an applied fringe, separately woven, or to tie in fringe material along the edges.

On the other hand, in the case of certain warp-face fabrics—the popular belt-weaves, for instance—the warp-fringes are rich and handsome and add a great deal to the effect.

Fringes, of course, are not a complete finish in themselves. That is to say one does not simply stop weaving and cut a length of unwoven warp. The edge of the weaving must be held in some fashion to prevent ravelling.

For the fringed ends of a fine linen piece, such as a table mat, the finish may be made in the loom. Weave across in the manner of the Spanish open-work weave. That is to say, open a tabby shed and take the shuttle from right to left under eight of the raised threads. Change the shed and weave back from left to right under four threads. Change the shed and weave forward under eight; change the shed and weave back under four. This has somewhat the effect of a hem-stitch done with the needle but does not hold the edge as firmly. However, if two or three rows of the Spanish stitch are woven, with care to make the turns at a different place on each row, this will hold well enough. It is a good

idea, however, to weave in several shots of tabby after the finish, and beat them up well. Leave these shots in place till after the piece has been washed, then take them out.

Coverlets in wool and cotton, in overshot or summer and winter weave, are not as a rule finished with fringes,—the pattern borders giving a satisfactorily finished appearance. If a fringe is desired this should be woven separately and applied, as the warp in such pieces makes a very skimpy fringe. The coverlet illustrated on page 214 of my Shuttle-Craft Book shows an applied fringe of this order.

Fringes are easy enough to weave by several different methods. Illustration No. 1 shows such a fringe as made on an "inkle" loom. In a similar manner the thing may be done in card-weaving or on any ordinary harness loom. Simply set up the warp for a narrow heading in warp-face effect. That is, set the warp-ends close enough to cover the weft completely. The heading may be plain, as in the illustration cited above, or may be in colors and in a simple pattern. Weave the heading with a small shuttle carrying material like the warp, and lay in the fringe material through each shed, or through every other shed. The fringe material should be coarse or in strands of several ends. It may be cut the desired length by winding over a book or other suitable gauge, and should be made twice the length of the desired fringes. Take a strand through the shed and on the following shed double it back. If a picot edge is desired, tie an overhand knot at the center of each strand of fringe material and permit these knots to protrude along the unfringed edge of the heading. The weaving with the shuttle holds the heading, and fringes made in this manner need not be knotted unless one wishes.

Another way to make a woven fringe—but only on a fairly wide harness loom—is to set up the little warp for the heading at one side of the loom, and at the other side of the loom set up four coarse threads to serve as guides. The distance between these threads and the heading should be spaced for the length of fringe desired. Weave with two shuttles—a small shuttle carrying material like the warp and a large shuttle carrying the coarse fringe-material. Weave back and forth across the heading with the small shuttle and take the large shuttle all across to engage the spacing threads. When the fringe has been woven these threads may be taken out and the ends of the fringe may then be cut or left in loops as preferred.

Still another method, on a loom of sufficient width, is to set up two headings, one on either side of the loom, with a space between them equal to twice the length of fringe desired. Weave with three shuttles—a small shuttle for each of the headings and a single large shuttle for the fringes. The small shuttles weave back and forth across the headings only, while the large shuttle weaves through both headings, all across the loom. In this manner two lengths of fringe may be woven at the same time, and are cut apart later through the center of the unwoven space between the headings.

These fringes should be woven very firmly, the headings beaten as close as possible.

The fringe material may be all in one color, or may be in bands of different colors, as shown on the illustration.

Whether such applied fringes are desirable or not is a matter of style and taste. To me they always have an artificial appearance, as they do not result directly from the weave, but this is no doubt nothing but a personal prejudice.

Extra fringes may be added to a woven piece by drawing strands of fringe-material through the selvages or the heading, using a crochet hook. Cut the fringe material twice as long as the desired length of fringe, fold the strand over and draw the loop through the fabric for an inch or so. Now take the two ends of the fringe through the loop and draw tight.

The material for the knotted fringes seen on many old white cotton counterpanes is usually put in in the above manner, though a separately woven fringe may also be used. Illustration No. 2 shows a typical simple fringe of this type knotted in staggered rows of the "Solomon Knot" described in a previous article. This form of knotting is, of course, macramé, and very elaborate effects can be produced if one wishes. For patterns and details consult any of the books on macramé, or the book on knotting and fancy rope-work cited in the previous article. A heavy, soft, unmercerized cotton—in white, of course—is used for these counterpane fringes. The fringes should not be set too close.

It will be noted that at one end of the fringe shown in the illustration the strands from two knots are lashed or "seized" together to bring the fringes down into points. This makes a neat finish. The manner of making the seizing is shown at (b) on the diagram herewith. A separate piece of material is used for the seizing. Lay this in a loop, up and down, with the ends to be seized together. With one of the free ends, make several turns around the group and the ends as shown on the sketch, making the turns upward toward the loop. Finally draw the free end through the loop and draw up the loop and the lashings by drawing the two free ends tight. These ends may then be clipped off.

Braided fringes make a handsome finish for many pieces.

The long fringes of the Indian braided belts and also of belts in card-weaving and inkle loom weaving, are usually braided for the full length in the four-strand Indian braid. All the warp-ends may be braided in this fashion, or groups of braids may be made at either edge and in the center, the rest of the warp being either twisted or left "as is." These belts are usually made the exact length to fit the waist of the wearer and are fastened by tieing the braids together, no buckle being required.

Mexican bags—especially those done in double weaving—are often finished with a braided top. The warp ends are made into little three-strand braids, and these braids are then plaited together, often in elaborate patterns. A simple finish of this order is shown on illustration No. 3. The border is finished by seizing the braids together in pairs in the manner described above. This may be clearly seen in the illustration.

A braided fringe of a different type is shown on Illustration No. 4. This is easy to make and has an interesting effect. Take nine or eleven strands of fringe and pick up a tabby shed across them; draw the two outside strands through this shed, one from either side. Pick up the reverse tabby shed on the remaining strands and again draw the two outside strands through. Continue in this manner till the braiding comes down to a point and knot the last three strands with an overhand knot or a Solomon knot to keep the braid from ravelling.

The tie commonly used for the fringes of rugs is a single overhand knot pushed close against the woven heading. This is an entirely practical tie, but is a bit lumpy and not very handsome. A much more attractive method of finishing the fringes of a rug is shown at (a) on the diagram. This is an excellent tie for any fringe except an extremely close-set one, as in the belt-weaves. It has the effect of a tidy little braid that holds the warp-ends securely and is not bunchy. Work from the right side of the fabric and begin at the left. Draw the first two strands toward the right and make a tie around them with the third strand as illustrated at (a 1). Now drop the first strand and carry along to the right the second strand and the third one—the one just used to make the tie. Make a tie around these two strands with the fourth strand. Continue in this fashion all across. Just how many ends to use in each strand depends on the setting of the warp and a little experiment may be required to determine just how many to use. The braid should be pulled tight to hold the ends, but must not draw in the selvages.

I found this braided finish on a piece from the Mountain Province of the Philippines. The finish was made across the ends of the piece on both sides of the fabric. For a rug it is usually sufficient to tie it only on the right side. The effect of this tie is shown on Illustration No. (5).

Three forms of finish used by Maori weavers are shown at (d) (c) and (e) on the diagram. The one at (d) is from a piece of "taniko" weaving. A two-strand twining is made, starting from the left, and the warp-ends are taken upward and secured by the twining as indicated on the sketch. The ends may later be clipped off or covered with a facing as is customary on the taniko head-bands. This finish makes a rolled edge, and holds satisfactorily if the warp is coarse and somewhat stiff. I have also used it successfully on blankets made with a warp of Germantown yarn. The similar edge shown at (c) is, however, more secure. It will be seen that the warp-ends are taken first from above downward through the twining and are then turned upward again through the twining before being clipped off.

Both these finishes should be made from the wrong side of the fabric.

The finish at (e) is the most practical of the three, and is easy enough to make after one gets the "hang" of it, though it may seem difficult at first. This should also be made from the wrong side of the fabric, and started at the left. The finished effect is a double rolled braid, and is very firm and good looking.

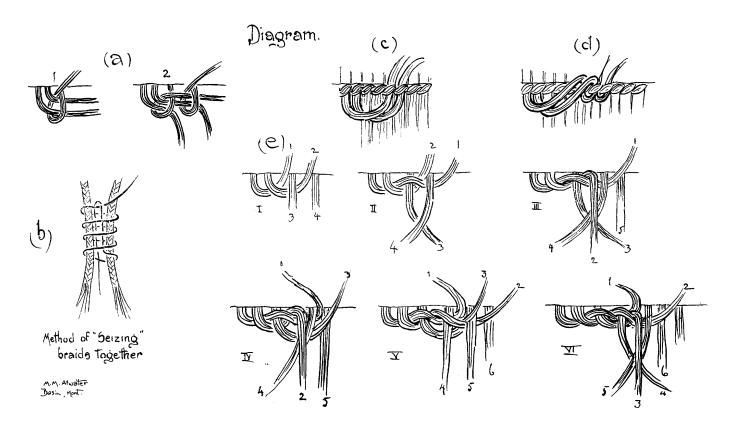
I have made the process as clear as I am able in the sketches. The start is simple: take the first strand to the

right under the second strand and up; then the second strand in the same way under the third and up as shown at (1). You now have two strands pointing upward and two pointing downward, which is the position at the beginning of each "tuck" of the braid. Now cross the two lower strands taking the one from the left under the one on the right. Bring down the left hand upper strand over this cross as illustrated. Turn back over it the strand that projects to the right and take the strand brought down from above under the turned back strand and under the next free strand to the right. This completes the tuck of the braid. You now have three strands pointing upward. Discard the one furthest on the left, which is not used again, and make the next tuck with the other two upward strands and the two downward strands.

I suggest practising this with very coarse material before attempting to finish a rug or other piece in this manner. It is a bit confusing at first. At least I found it so.

These three Maori finishes are shown in an interesting book, "The Evolution of Maori Clothing" by Te Rangi Hiroa (P. H. Buck), which contains many other fascinating things. I did not find the diagrams in the book entirely clear, so I have ventured to modify them a bit to make them easier to follow, I hope.

Of course a great deal more might be said on the subject of fringes and edge-finishes. At some other time, perhaps.



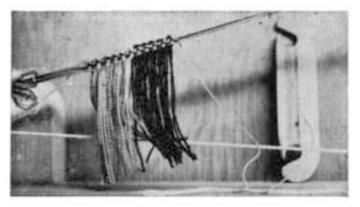


ILLUSTRATION 1

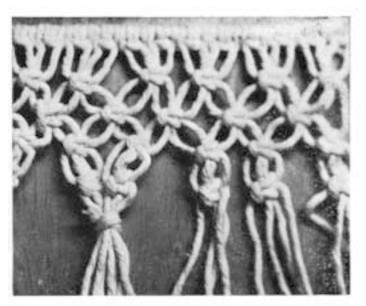


ILLUSTRATION 2

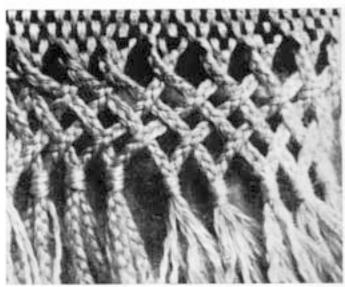


ILLUSTRATION 3

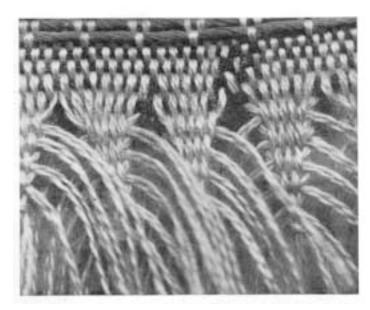


ILLUSTRATION 4

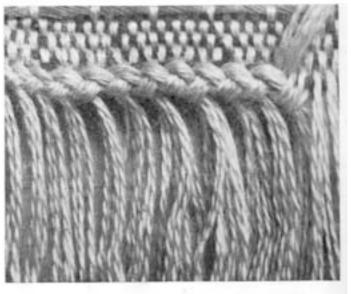
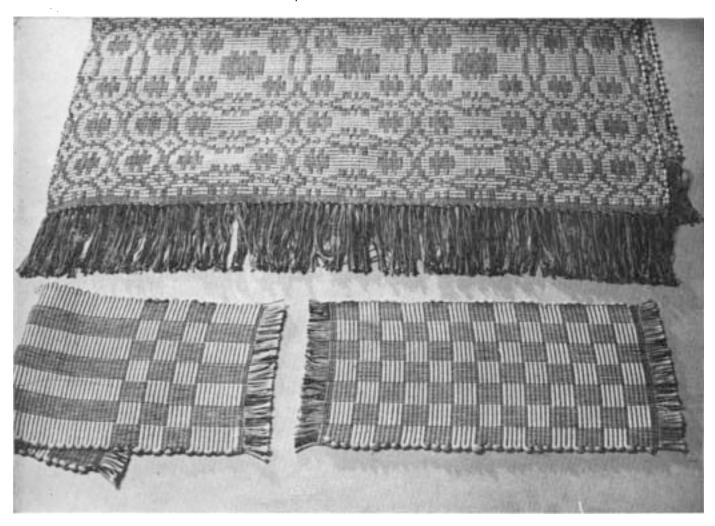


ILLUSTRATION 5

WARP-FACE TECHNIQUE

By ANNA R. COLE



A warp-face weave is, as the name implies, one in which the weft is covered, or faced, by the warp. In the rugs and mats which are described and illustrated here the warp is made of two colors which form a reversible pattern with one color showing on top where the other is on the reverse side.

A two harness warp-face or "Log Cabin" weave is a plain or tabby weave. The four harness patterns are not, strictly, a tabby weave, but they do approximate one very closely, since each of the four treadles draws down exactly half of the warp threads very nearly as in a tabby.

The pattern on either two or four harness threadings is formed wholly by the arrangement and distribution of the two warp colors as they cross a heavy weft thread which is alternated with a finer thread. This finer weft thread serves the same purpose as the tabby in an overshot, but is not confined to the usual two treadles.

I MATERIALS

For rugs use an 8/4 ply cotton carpet warp in white and one color or in two contrasting colors for the warp, and one of the two colors for tabby. Use Bernat's Rugro in white or in the lighter warp shade for the heavy weft thread.

For small mats, luncheon sets, etc., use two shades of Bernat's Perle Cotton No. 3 or No. 5 for warp and tabby, with the Rugro for weft. The same materials used for rugs can, of course, also be used for the smaller pieces.

II WARPING

In warping for a four harness warp-face pattern the colors must be alternated throughout the warp, a light thread, then a dark one.

For the two harness warp-face the colors alternate for the width of each pattern block where two of one color come together. The first block will begin with a light thread and end with a dark. The second block will begin with the dark, thus throwing two of them together. At the next pattern change two light threads will come together, and so on.

III THREADING

A two harness pattern is threaded for tabby weaving with the colors drawn in as warped, according to the draft. Two of the same color are threaded consecutively (on alternate heddles, of course) at each pattern-block change.

In threading a four harness draft the light thread must be followed each time by a dark one on alternate heddles as follows:

Light on heddle one, followed by dark on two Light on heddle two, followed by dark on one Light on heddle three, followed by dark on four Light on heddle four, followed by dark on three

Use a No. 10 or No. 12 reed, 2 per dent, making 20 or 24 threads to the inch. Fewer than 20 per inch will not give a clearcut pattern. A closer sleying may be used if desired. Bernat's No. 10 perle gives a satisfactory texture set at 2 per dent in a No. 15 reed.

IV WEAVING

For two harness weaving the rugro and carpet warp are alternated for the length of each pattern block. Between blocks two shots of carpet warp, or tabby, are thrown to reverse the colors, then the alternation is continued with the rugro falling on the treadle in block two which carried the tabby in block one.

In weaving four harness patterns the rugro and carpet warp are alternated throughout. The tabby follows the rugro, or pattern weft in the same order in which the dark thread follows the light in threading. Each shot of rugro on the first treadle is followed by a tabby on the second; rugro on second, followed by tabby on first; rugro on third, followed by tabby on fourth; rugro on fourth, followed by tabby on third.

A third color should never be introduced in warp-face weaving, with the exception of white rugro weft which may be used with any combination of warp colors.

The pattern is usually more distinct if rugro the shade of the light warp thread, and tabby like the dark are used for weft. Although either shade left over from the warp may be used for tabby, provided the same color is used throughout each individual mat or rug.

Since the patterns are reversible the same treadle tie-up may be used for Structo or other looms.

V FINISHING

For rugs leave five inches for fringe at each end (ten inches between rugs) and tie in groups of eight. Eight or ten tabby shots at the beginning and end of each article help to give it a more finished appearance. When tying fringe if the last two of these threads are raveled out as you go along they will hold the others in place while you work.

For mats leave 2 or $2\frac{1}{2}$ inches fringe between mats and whip by hand or stitch on a sewing machine about two threads from the edge, then ravel these two back to the stitching and clip. This is easier to do and neater in appearance than when the stitching is run along the last row or below it.

LOG CABIN TABLE MATS

158 Warp threads (79 each color) No. 10 Reed, 2 per dent

The draft refers to the light warp color only. Follow each light thread with a dark as explained in Section III.

Each block should be the same width when woven. 24 threads are used in the outside blocks and 22 in the others to allow for a little drawing in on the sides.

Treadlings are given for several different mats, showing some of the variety that can be obtained from this simple two harness pattern.

Treadling draft refers to Rugro weft only. Follow each shot of Rugro with tabby on the other treadle. Throw 2 tabby at the end of each block. For instance in Mat No. 1 five Rugro on Right treadle are alternated with tabby on left. After the five a tabby is thrown on left then on right treadle. This brings you back to the left treadle for the next five shots of Rugro as specified.

	x	X
	А	5
Mat No. 1 As drawn	5	5
in.	5	5
	5	5
Mat No. 2	12	12
		12
Mat No. 3		18
	18	
Mat No. 4	5	5
		5
	10	5
	5	5
	,	5
		10
Mat No. 5	5	5
	5	3
		5
	5	
		10
Mat No. 6	5	10
mat no. o	3	5
Illustrated	5	
	-	30
	5	5
	5	,
		10

LOG CABIN RUGS (Not illustrated) 540 Warp threads No. 10 Reed, 2 per dent

Threading draft refers to light thread only. Follow each light thread with a dark thread on the other heddle; with two of the same color together at the point of change. The Twentieth thread will be a dark one on the front heddle; the twenty-first a dark thread on the back row. The fortieth thread will be light, falling on the front, and the next thread will be another light one on the back.

Weaving draft shows length of pattern blocks in inches. Weave 5 inches with Rugro on left treadle and tabby on right, alternately. Follow the last tabby with an extra one on the left treadle then weave 1 inch with the Rugro on the right treadle, etc.

WHIG ROSE RUG () D C 3 2 3 3 3 2 5	Illustrate B 2 3 2	2	A	X	X X	x	X X
3 3 3	2	2		K		\mathbf{X}	
Draft refers to light th	hread.	ıes		2			1
only. Alternate with		Repeat 3 times	H		1		1
thread as explained in S		t 3	Border		1	1	
III. Detail below shows	Sel-	pea			1		1
vedge and A to B.		Re	for	2		4	
В	Selv.			2		т_	
LL DD LL	D.			_			7
D D L L D D	L	se		2		4	
LLDD DD L	L)	Repeat 5 times	H	2			
		t 5	for Center		1		1
Selvedge	2	pea	Ö			1	
A to C 2 times	112	Re	for		1		1
A to D 3 times	408			2			•
A to C 2 times	112					4	
A to B once	28	es es up	Ξ.	2			
Selvedge	2	tim orde gro	7		1		1
	((1	: 3 I Be	بر ا			1	
	664	Repeat for 2nd Omit la	5 5 5 60		1		1
No. 10 Reed, 2 per dent		Rep for Om	tug.	2			
			-			4	

Treadling draft refers to Rugro, only. Follow each Rugro shot with tabby as explained in Section IV.

Weave 8 tabby on the two treadles at left at the beginning and end of each rug.

Leave 5" fringe at each end, or 10" between rugs.

ADAPTATIONS

A wide variety of patterns can be designed or adapted for four harness warp-face weaving. Two harness patterns are necessarily limited to two pattern block figures, which can form only stripes and checks. However, the two harness threadings lend themselves, in the weaving, to more variations from the planned pattern. Any two harness warp-face threading can be woven into an almost limitless number of variations by changing the length of the woven-in blocks in varying proportions.

Any overshot draft with only two pattern changes, such as the Monk's Belt, can be easily adapted to a two harness warp-face.

For four harness adaptations it will be found that very few overshot patterns will adapt themselves to this medium very well. Many figures from crackle weaves, summer and winter, or double weaving can be easily transposed for this type of work.

Many of the complex summer and winter or double woven patterns which are otherwise impossible of duplication on four harnesses can be used this way.

SUGGESTIONS

For patterns which might be adapted to warp-face weaving refer to the following issues of THE WEAVER:

Vol. V No. 1, Jan.-Feb., 1940, P. 4.

Vol. VI No. 1, Jan.-Feb., 1941 P. 11.

This design can be easily redrafted for a two harness warp-face rug. However, the smallest blocks should be enlarged to utilize at least four threads, as fewer than this in any warp-face threading will not show up very

Vol. VI No. 2, Apr.-May, 1941, P. 22. Illustrations No. 6 & 8.

Vol. V No. 3, July-Aug., 1940, P. 14.

The Monk's belt adaptation in upper left makes a simple yet interesting two harness rug or mat.

HANDWOVEN CHRISTMAS GREETINGS

By VIRGINIA COLE

Instructor in Weaving at Perkins Institution Watertown, Mass.

I came upon this handwoven Christmas tree quite by accident. I should like to pass along the idea to any of you to use either in making your own Christmas cards, or as a class project for those of you who teach weaving to children either in school or in camp.

My blind students at Perkins have taken great delight in weaving these Christmas trees for their Christmas cards, with greetings in Braille for their blind friends, and greetings written in "square hand" or typewritten for their seeing friends.

The pattern is a very simple one-shuttle design of blocks of twill enclosed by stripes of basket weave. It may be executed on either floor or table loom, and the same threading may be used for a variety of other useful articles.

My loom was threaded for guest towels and luncheon sets. For warp I used seven spools of ready wound cotton, 20's/2, threaded two per dent in a 15 dent reed. The draft is given at A.

For hems in basket weave:

Treadle 4 and 1, two picks. (Pass the shuttle around the outside warp thread after the first pick.)

Treadle 2 and 3, two picks.

Alternate for as wide a hem as desired. Now weave twill:

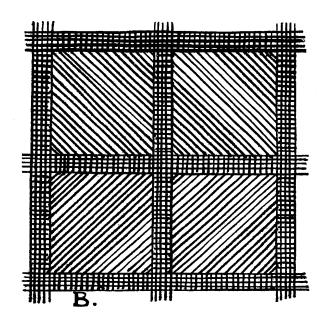
Treadle 4 and 1 once

1 and 2 once

2 and 3 once

3 and 4 once

Repeat until block is square or slightly longer than square. Basket weave stripe, same treadling as for hem, making stripe same width as lengthwise stripes. (Approximately 14 picks.)



Repeat twill block either as before, or twill line may be reversed by treadling 4 and 1 once.

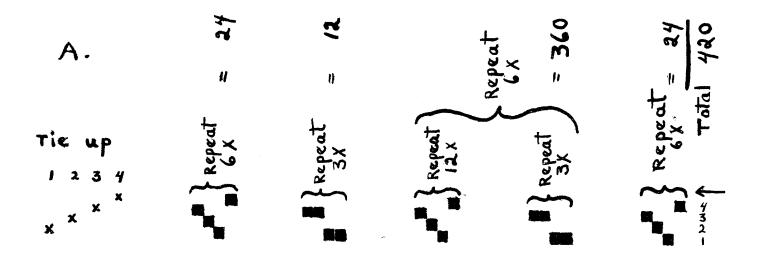
3 and 4 once

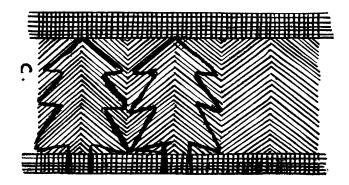
2 and 3 once

1 and 2 once

Repeat same number of times as before. See figure B.

The guest towels and luncheon sets were woven with a Linen Special or Linen weaver filling in natural, with colored basket weave hems or stripes.





Now for the Christmas tree. One ball of Bernat's Miralaine, green No. 3181, will make material enough for about 25 trees.

Treadle as follows; using the Miralaine:

A. 1 and 2 once

B. Reverse the twill line:

2 and 3 once

2 and 3 once

3 and 4 once

1 and 2 once

4 and 1 once

4 and 1 once

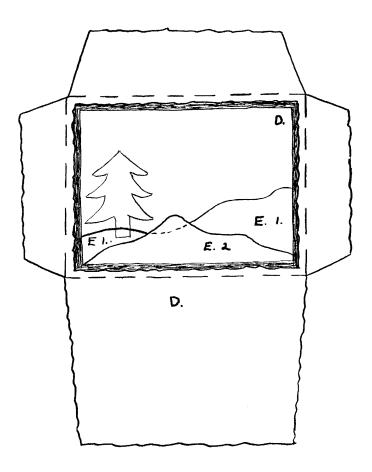
Repeat for about 24 picks.

3 and 4 once Repeat same number of picks

as before.

Continue reversing A and B in this manner until the Miralaine is all used. In looking at the cloth from the side, the trees are apparent. See diagram C. A pair of scissors makes the trees a reality. It is best, however, to cut the trees one at a time as they are needed, and glue them on to the cards immediately, using "Grippit" and covering the entire surface of the wrong side of the tree with it. This will prevent raveling.

For the envelope and card I used a slightly grayish charcoal paper which may be bought at a stationers or art store. To obtain the deckle edge, tear the paper against a straight edge instead of cutting. Patterns, actual size, are shown at D. Stiff white paper was used for the snowy hills, one being glued on top of the other. See E. 1 and E. 2.



The printing and edging are red water color, applied with a small paint brush. The card is glued to the inside of the envelope with "Grippit", and I used a Tuberculosis seal to close the flap.

The realistic appearance of the tree is due to the nubbly yarn and the reversed twill. The cards were very inexpensive, lots of fun to make, and I had many compliments on them.

TYPES OF OVERSHOT PATTERNS

By OSMA COUCH GALLINGER

To analyze the types of Overshot Patterns, visualizing each one as a repetition of a single motif or as a combination of several connected motifs, gives one a keen appreciation of the great beauty of the patterns that form our Colonial heritage. These patterns were figured out by our ancestors without the aid of books, and not only their association in the history of our country but their inspiring beauty of balance and proportion have endeared them to us for all time. As American weavers we are interested in perpetuating the best forms that have come through with the revival of our craft. Not the least important factor in the preservation of these is the Shuttlecraft Book of American Handweaving by Mary Meigs Atwater, giving as it does a practically complete coverage of all the pattern types fabricated in the early days of our country.

In surveying the various kinds of patterns in the Shuttle-craft Book, we find that we can make a skeleton outline of each pattern on check paper. By this we do not intend to actually picture the development of the draft, but to outline the geometrical forms that appear so clearly after developing the draft on check paper. Such an outline enables one to see at a glance the character of each separate motif, and also to see clearly the way the motifs are connected to form the complete pattern. It aids the weaver also in placing the pattern at once in its correct group or family.

There are, in the art of Colonial Pattern weaving, such typical figures as the Cross, Diamond, Star, Rose, Wheel, Table, etc. The way in which two or more of these separate motifs are combined, determines the nature of the final composite pattern. It is perfectly possible for the weaver, after he or she becomes familiar with the manner of drafting each figure, to make original combinations to the end of securing more varied pattern arrangements. Just as the musician takes such chords as the Tonic, Dominant and Sub-dominant, and connects them with their proper resolutions to form a tune, the weaver may also take such motifs as the Star and Cross and connect them to form a pattern as delightful to the eye as the improvised harmony is to the ear. The procedure is to familiarize oneself with the appearance on check paper of a woven Star, Rose, Cross, Diamond, Wheel, Table, etc., and to recognize at a glance the woven counterpart of each. After this, one may plan roses, stars or diamonds directly on the check paper as desired, and from this plan, work out the corresponding draft that will cause the same effect in cloth.

In this article we have attempted to make a survey of the patterns in Series I and II of the Shuttlecraft Book, giving a simple scaffold diagram of each type motif used, as well as diagrams of the geometrical forms produced by combining them. The titles of the series are as follows: Series I. Diamond and Cross Family, Shuttlecraft Book, P. 158; Series II. Star and Rose Patterns, P. 167; Series III. Wheel Patterns, P. 175; Series IV. Radiating Patterns, P. 188; Series

V. The Patch Patterns, P. 195; Series VI. Miscellaneous Patterns, P. 200. The many lovely patterns contained in these series are too clearly explained and beautifully diagrammed to need further explanation. Our purpose has been rather to assemble the bare forms that make up the patterns, without the addition of the half-tones, to enable the student to see at a glance the plan beneath each lovely Colonial pattern. By comparing the various forms assembled at close range, he or she should be able to place any example of Overshot weaving that comes to hand in its proper series. A good exercise for a Guild of Weavers would be to plan a meeting for the display of as many varied types of overshot patterns as possible, and to test the members, letting them guess in turn the class name of each piece, by referring to these diagrams or the pictures in the Shuttlecraft Book.

SERIES I. DIAMOND AND CROSS FAMILY. Group (a) Simple Figures. (Shuttlecraft Book, P. 158)

Figures No. 1 and 2. In the simple Diamond or Cross figures, one finds either just a single cross — the result of a threading of several adjacent blocks and their reverse — or an all-over pattern of diamonds formed by the repetition of several cross formations. The blocks are written adjacent in a typical draft in our Figure No. 1 (see adjoining circles), and when woven appear as steps in diagonal diamond forms, as shown in Figure No. 1, under Series I, small sketch at left. This simple type of pattern consists of two or more adjacent blocks and a reverse. One can analyze the pattern in No. 1, by following the blocks in circles: 1st block, 1 & 2; 2nd block, 2 & 3; 3rd block, 3 & 4, this acting as the reverse block or point of a diamond. This particular pattern, then, has three blocks with a reverse on the third. Note that when the draft is repeated, there is also a reverse point on the 1 & 2 block. Follow the detailed development of the draft in the enlarged sketch.

A simple repeating Diamond pattern may also be made up of two separate groups of blocks alternating with each other, as in Series I, Figure No. 2. Here we have a figure on only two adjacent blocks — 1 & 2, 2 & 3, 1 & 2 — alternating with a figure on two other adjacent blocks — 3 & 4, 4 & 1, 3 & 4. We can also have a small figure on opposites alternating with another figure on opposites — 1 & 2, 3 & 4, 1 & 2, alternating with 4 & 1, 2 & 3, 4 & 1. The effect of such alternation is shown in the small sketch marked No. 2, Effect of Diamond on Opposites.

SERIES I. Group (b) CROSS AND TABLE PATTERNS. (See Shuttlecraft Book, P. 158.)

Figures No. 3 and 4. In this type pattern, there is a simple Cross alternating with a Table. A Table is a square section of weaving formed by the repetition of two adjacent blocks or two blocks on opposites, and usually ending with the one first used. For instance, the 1 & 2 block may alternate with the 2 & 3 block, the table ending with the 1 & 2. One of the blocks may be much larger than the other — for in-

stance, the succession — 1, 2, 1, 2, 1, 2, 1, 2, — 3, 2, 3, 2, and repeat, makes a 1 & 2 block of 8 threads, and a 2 & 3 block of 4 threads. In combining a Table with a Cross, the Table may occur at either of the reverses or points of the Cross. In No. 3 a Table might have occurred at the center of cross, at point marked by arrow. The Table often starts with the threading that might otherwise have formed the point. Suppose our Cross starts with a 1 & 2 block, then a 2 & 3, a 3 & 4 and a reverse on 4 & 1. Instead of this simple reverse point made of one block, we may have a Table arranged as follows at the point; a 4 & 1 block, then a 1 & 2, all repeated 4 times, and ending with the 4 & 1 block. After the Table the pattern reverses, and we have a 3 & 4 block, then a 2 & 3 and a 1 & 2. Similarly a Table could have been developed at the 1 & 2 block which forms the other reverse of the Cross, and this Table might have been the 1 & 2 block alternating with the 4 & 1 block and finishing with a 1 & 2 block. Sometimes there is a Table at each reverse point, as in Figure No. 4, where a small Table is shown taking the place of the simple reverse block at the point. Instead of a Table too, one may have an enlarged single block at the point of reversing. Such patterns as Orange Peel and King's Delight come in this group.

SERIES I. Group (c) DIAMOND AND TABLE PATTERNS. (See Sh. Bk. P. 161)

Figure No. 5. In this type, a Diamond figure alternates with a Table. Additional crosses may be present, as in our illustration, Series I, Group (c) No. 5. There are a number of popular bedspread types in this group — Bonaparte's March, Rose of Sharon, Governor's Garden and Star of the Sea. In our sketch we have marked the Cross, Diamond and Table. Either the Diamond or the Table may be as large or as small as desired, and one may occur where the other has been placed, and visa versa. This is a very effective type pattern.

SERIES II. STAR AND ROSE PATTERNS. Group (a) Simple Figures. (See Sh. Bk. P. 167)

Figures No. 6 and 7. The Star and Rose patterns form a very charming group. Among the simple figures are such popular examples as Sweet Briar Beauty, Cleveland Web, Dog Tracks and Winding Vine. A Star is a figure which when woven is composed of a group of five blocks placed horizontally across the warp, and five in the same proportions showing vertically, formed by the weft. Several typical stars are shown in the sketch at the right of Series II, Group (a) Simple Figures. On the draft of a Star, the five successive blocks are formed by the alternation of two adjacent blocks, such as 1 & 2, 2 & 3, 1 & 2, 2 & 3 and 1 & 2. The star shown at A, for instance, would be written: (1, 2, 1, 2, 1, 2,) (3, 2, 3, 2, 3, 2) (1, 2, 1, 2) (3, 2, 3, 2, 3, 2) (1, 2, 1, 2, 1) with the usual overlapping of the blocks. The shape of a Star is more or less implied by its own name, for it has symmetrical parts balanced on all sides of a center, and is not like a Table, a rigid square with solid repeated parts. It has the charm of varied proportions, with usually two large blocks on either side of one small center block. Sometimes the center is broken up into three small blocks, as shown at C and D. Again the largest blocks may be at the four corners, with the parts between broken up into smaller blocks, as at B. There is always an unever number of blocks to provide for the center block, and a symmetrical arrangement on each side. A Star may have any uneven number of blocks — 5, 7, 9, etc. There must always be at least five, and rarely more than nine.

In Figure 6 we have a Star (and this may be any Star) alternating with a Cross. Starting at the center of the Cross, our draft would be written: the 1 & 2 block (4 thds.); 2 & 3 (4 thds.) 3 & 4 (4 thds.) 4 & 1 (4 thds.) followed by a Star with 1 & 2 (8 thds.); 2 & 3 (8 thds.); 1 & 2 (4 thds.); 2 & 3 (8 thds.); 1 & 2 (8 thds.); then continuing with the Cross — 4 & 1 (4 thds.); 3 & 4 (4 thds.); 2 & 3 (4 thds.) and repeat all.

The same pattern woven Rose fashion would appear as shown in Figure 7.

SERIES II. Group (b) STAR AND TABLE PATTERNS. (See Sh. Bk. P. 169).

Figure No. 8. In this type, a Table alternates with a group of Stars. Again instead of the Star at the center of the group of five, a Cross might have occurred. Here we find such patterns as Virginia Snow-Ball and Federal Knot. SERIES II. Group (c) ROSE AND TABLE PAT-

SERIES II. Group (c) ROSE AND TABLE PATTERNS. (See Sh. Bk. P. 172)

Figure No. 9. In this type, a Table alternates with a group of Roses. This pattern may be written like that shown at No. 8, but is woven with the blocks in reverse position to form a Rose — instead of a Star — group at the center. The Morning-Glory pattern is an example.

SERIES II. Group (d) STARS AND ROSES WITH A TABLE. (See Sh. Bk. P. 174)

Figure No. 10. In this type pattern a Table alternates with a section of Stars and Roses. Coming under this group are such lovely patterns as Queen's Delight.

SERIES II. Group (e) CLUSTER OF STARS WITH A DIAMOND. (See Sh. Bk. P. 174)

Figure No. 11. Our diagram shows the plan of the Four-Leaf Clover Pattern, found on P. 174 of the Shuttlecraft Book, and listed as No. 63. Only a quarter of the pattern plan is shown here. It consists of Tables surrounding a central section of four stars. Just one Table and one Star are shown. The four Stars are connected by a Cross at their center, shown at lower left corner of sketch. A Diamond formation occurs between Table and Star.

SERIES III. WHEEL PATTERNS. (See Shuttlecraft Book P. 175.)

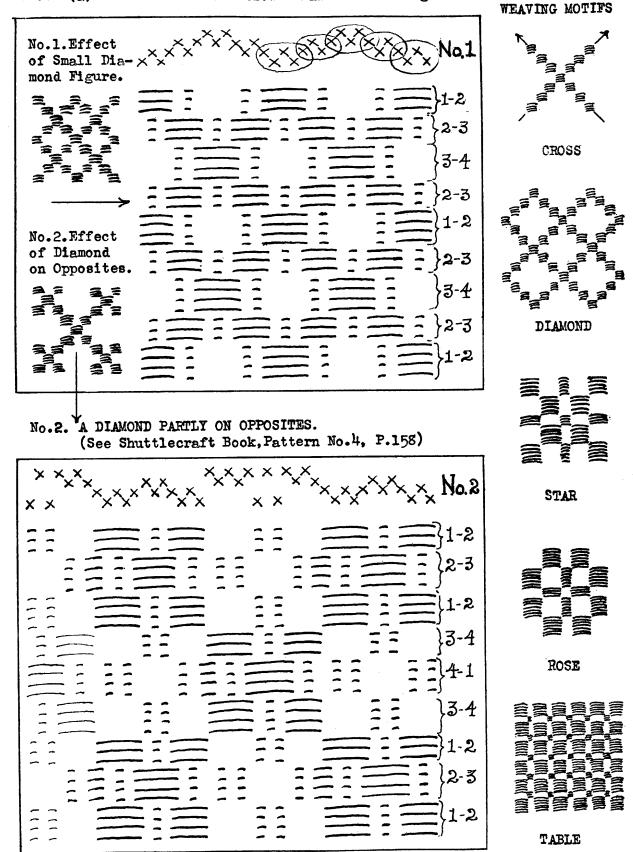
The sample pattern of this group shown here is from Group (b) Single Wheels with table, Pattern No. 82, "The Arrow", (See Sh. Bk. P. 179).

The Wheel Patterns are listed as follows:

- (a) Star and Wheel Patterns with a Cross or Diamond.
- (b) Single Wheels with Table.
- (c) Clusters of Star-and-Wheel Figures with a Table.
- (d) Wheel-and-Rose Patterns.
- (e) Wheel-Patterns with both Stars and Roses.

There are many lovely examples, as one realizes when one follows the pages of the book from one lovely wheel design to another. Examples are "The Whig Rose", "Wheel of Fortune", "Chariot Wheel" and "Sun, Moon and Stars". In this type, the succession of blocks produces a curving base line which approaches corner figures at left and right, as shown in the sketch of the Arrow pattern in this article, see

SERIES I. DIAMOND AND CROSS FAMILY. (Shuttle-cr. Bk. P. 158) GROUP (a) SIMPLE FIGURES. Below: Small Diamond Figure.



SERIES I. Group (b). CROSS AND TABLE PATTERNS. (Sh. Bk. P. 158)

No.4. Grosses Bet. Tables with

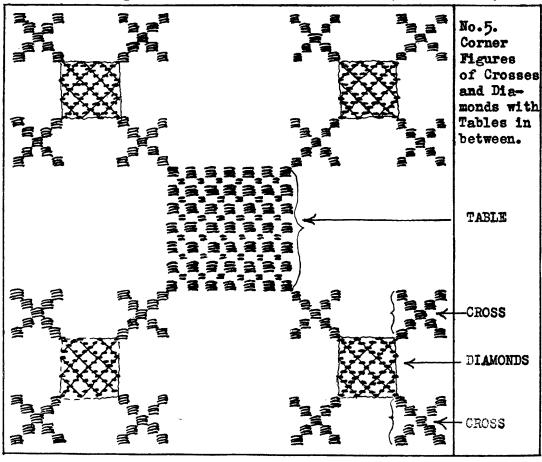
No. 3. Tables Joined by Crosses.

Table or Block at Reverse Point.

TABLE

Large
Block or Table at Point.

SERIES I. Group (c) DIAMOND AND TABLE PATTERNS. (Sh.Bk.P. 161)



arrows. The center of the figure may be a Star, Rose, Diamond or Table, and the four corners may be either Stars, Roses, or Diamonds.

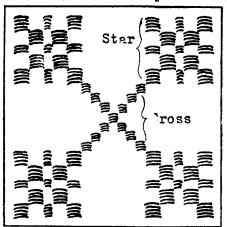
SERIES IV. THE RADIATING PATTERNS. (See Shuttlecraft Book, P. 188.)

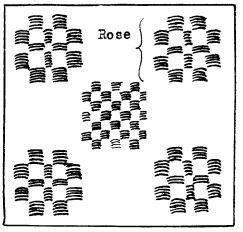
The sample pattern shown here is from Group (c), Pat-

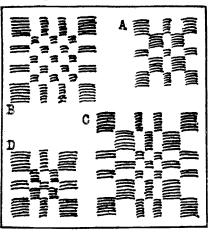
terns Based on the Blooming Leaf Figure, Pattern No. 113, "Blooming Leaf from Arkansas", (See Sh. Bk. P. 191). This pattern shows four radiating leaves with a block at their center, and the four leaf groups occur around a main central table, shown at arrow. This pattern is particularly

Continued on page 21

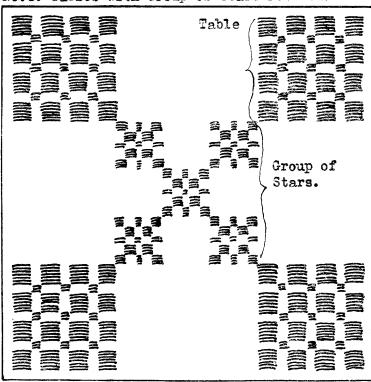
No.6. Stars Joined by Crosses. No.7. Same, Woven Rose-fashion. Group of Typical Stars.



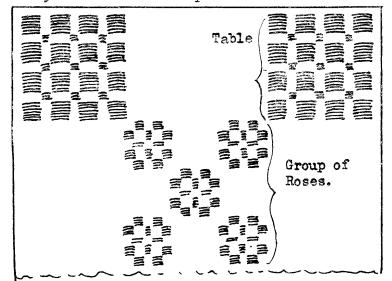




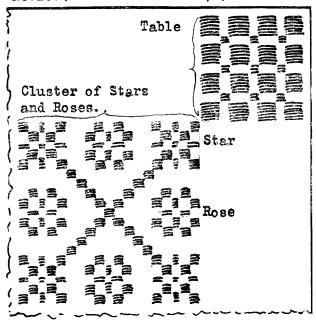
Group (b) STAR AND TABLE PATTERNS. (Sh. Bk. P. 169) Group (d) STARS AND ROSES WITH A TABLE. No.8. Tables with Group of Stars Between.



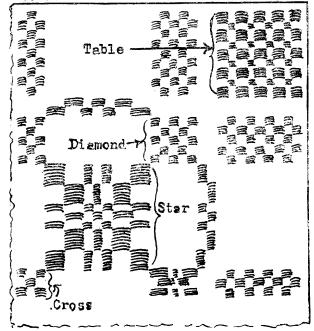
Group (c) ROSE AND TABLE PATTERNS. (Sh. Rk. P. 172) No. 9. Tables with Group of Roses Between.



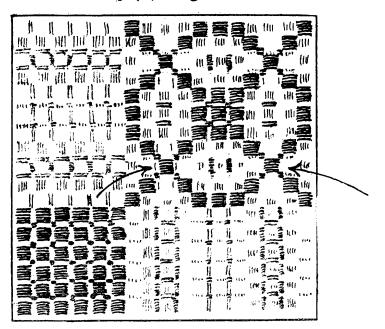
No.10. (See. Sh. Bk. P. 174)



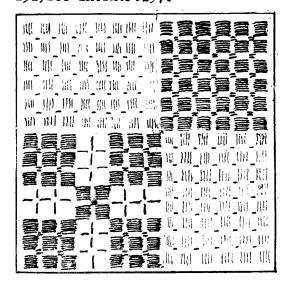
Group (e) CLUSTER OF STARS WITH A DIAMOND. (See Sh.Bk.P. 174) No.11.



SERIES III. WHEEL PATTERNS. Sample Pattern,
"The Arrow", Pat. No. 82, See Sh. Bk. P. 179.
from Group (b) Single Wheels with Table.

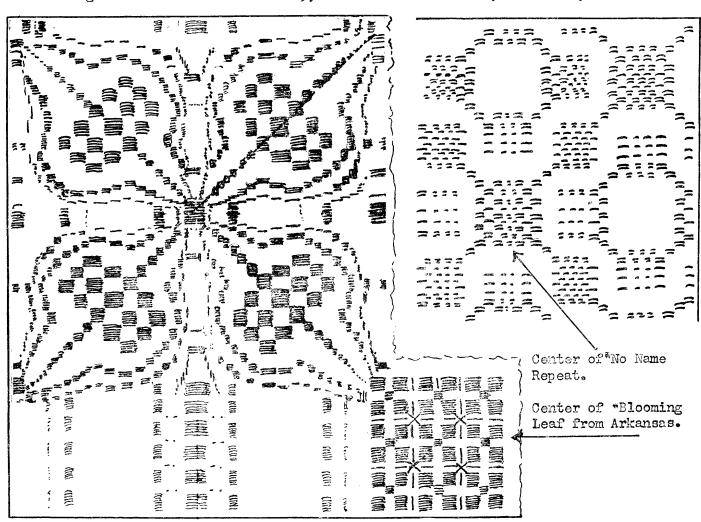


SERIES V.PATCH PATTERNS. Sample Pattern, "A Patch-Pattern from Kentucky," Pat.No. 131, See Sh.Bk.P.197.



*Blooming Leaf from Arkansas! No.113, P.191.

SERIES VI. MISCELLANEOUS. Sample Pattern, "No Name", Pat. No. 146, Sh. Bk. P. 200.



SIX HARNESS "Summer and Winter" WEAVE

By NELLIE SARGENT JOHNSON

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Those of you who have a six harness loom will enjoy using some of the variations suggested here for the weaving of a four block "summer and winter" pattern. The effects described are different in character from the regular method of weaving this texture. Even the pattern itself is lost in some of these combinations, and the colors are used in such a way as to give an entirely modern effect to the fabric.

At Figure No. 1 is shown an ancient fragment which I have in my own collection of early American weaving. It is a variation of the "Whig Rose" type of pattern so common in many of these colonial weaves, and is woven the so called "rose" fashion. It is my belief that the "summer and winter" texture was not used as often as the four harness or the double weave among our early weavers. At least examples

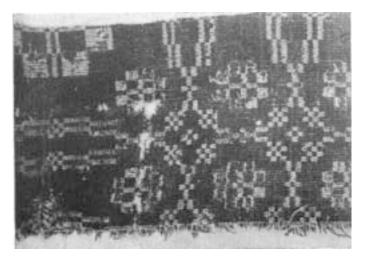


Figure No. 1 Photograph of an ancient fragment in the author's personal collection of early American weavings.

Figure No.2 Key Draft and Pattern Effect

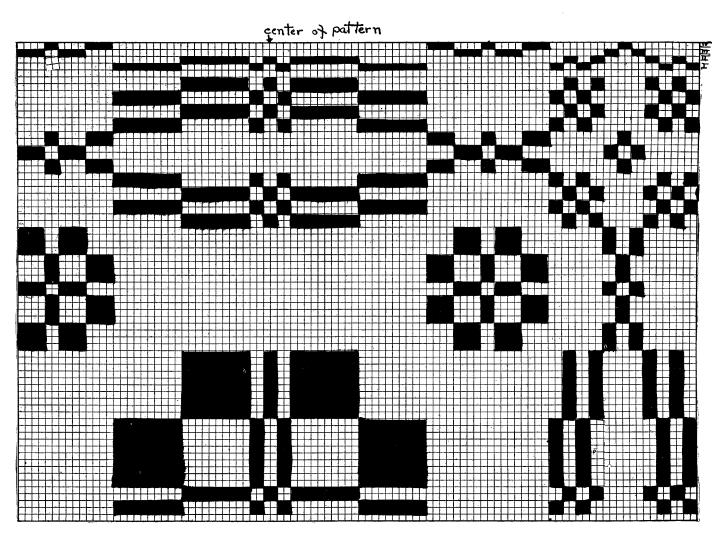


Figure No. 2 Key draft of pattern of Figure No. 1.

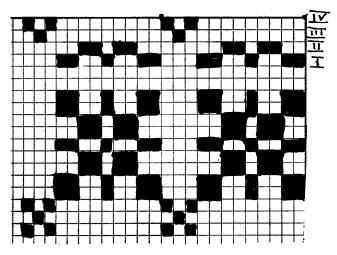


Figure No. 3 Key draft derived from Figure No. 1.

of it today are not found nearly as often as the other two types. And modern weavers do not seem to use it as much either. This old piece is woven of finely spun blue wool, and white cotton, set at about 24 threads to the inch. Warp and weft are about the same size.

The drawing at Figure No. 3 shows the four block key draft for this pattern and the draw down of the pattern effect. The figures I, II, III, and IV at the right of the draft indicate pattern blocks. This is not the threading draft, it is a draft of the units of the pattern blocks. Each unit of this key draft equals 4 warp threads, two of these are on one harness for the pattern block, while the other two warp threads of the unit are on harness 1 and 2. Thus for each unit of this key draft, thread pattern block 1 — 1, 3, 2, 3; for pattern block unit 2 thread 1, 4, 2, 4; for block 3 thread 1, 5, 2, 5; for block 4 thread 1, 6, 2, 6. Repeat each of these units as indicated by the number of units in each pattern block of the key draft. Any summer and winter threading is threaded in this way. The key draft of this pattern makes a very large figure. If desired all of the pattern blocks may be cut in half. This would make smaller figures, and would keep the original proportions the same.

At Figure No. 3 is a simple pattern derived from the large pattern key draft by just taking the small rose and making it half as many units, and then taking just the small center figure. This gives a key draft with only 12 units, and will require 48 warp threads for this one repeat. Two repeats are shown on the key draft, and they are woven "as drawn" which means as the pattern is threaded. This is also called "star" fashion in contrast to the "rose" fashion of the ancient piece described above. The actual threading draft for Figure No. 3 is given at Figure No. 4. And Figure No. 5 is a photograph of the actual weaving of the pattern as drawn down at Figure No. 3. This is woven "in pairs". The fabric was folded to show both sides in the illustration, and was woven in three colors; black, green, and pale yellow of Bernat's

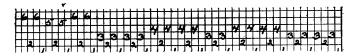


Figure No. 4 Threading Draft for Figure No. 3.

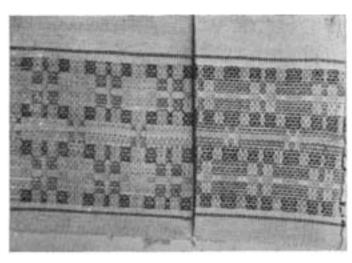


Figure No. 5 Woven "as drawn" and star fashion of Figure No. 3.

linen floss. Warp used was 40/2 linen natural set at 24 threads to the inch in the reed. The regular tie-up for this pattern is given at Figure No. 6 (A) and (B). The one at (A) would require ten treadles or two for each pattern block represented by the numerals I, II, III, and IV. Plain weave or tabby is 1 & 2 for A tabby and 3, 4, 5, and 6 for the B tabby. The tie-up at Figure No. 6 (B) requires only 6 treadles, but to use this one must use both feet. Use first treadle 1 alone with the required pattern treadle, and then treadle 2 alone with the required pattern treadle when weaving. Directions given below are for the levers of the Structo loom. From these it is easy to transpose the same tie-up to the treadles of the 6 harness Bernat loom if desired.

Directions for weaving of Figure No. 5. As some may not understand how to weave "in pairs" and the figures "as drawn", directions will be given in some detail for this. Use levers 1 & 2 for the plain weave shot to the left, and levers 3, 4, 5, and 6 for the opposite plain weave shot to the right. Of course when using a treadle loom, use the treadle to correspond in each case. With Bernat's heavy white linen floss, weave 35 shots of plain weave for the heading. Then 2 shots of black linen floss, 4 shots of white linen floss. For the first pattern block, or block 1, use black linen floss for the pattern shots and 40/2 natural linen for the plain weave shots which alternate after each pattern shot. With black weave 2456—once, 12 plain weave, 1456—once black; 3456 plain weave, 1456 black—once, 12 plain weave, 2456 black once, 3456 plain weave, 2456 black—once, 12 plain weave, 1456 black—once, 3456 plain weave, 1456 black—once, 12 plain weave, 2456 black—once, 3456 plain weave. Plain weave alternates between each pattern shot, and will be understood and not written for the rest of the directions. Be very careful and keep the alternation of this plain weave

For the second pattern block or *block 2*, weave as follows.—with green linen floss, 2356—once, 1356—2x,2356—2x,1356—2x,2356—once. Then *block 1* again weaving with yellow linen floss,—2456—once, 1456—2x,2456—once. Repeat *block 2* with green as given above, and repeat *block 1* with black as given at the beginning. Weave the next block or *block 4*, with green, 2346—once, 1346—2x,2346—once.

And block 3 with yellow, 2345—once, 1345—2x,2345—once. This is the center of the repeat, repeat back in the same order to the beginning. This is the basic pattern which can be used for bags, upholstery material or any purpose where an all over pattern is desired.

Now for some of the unusual variations of this pattern. The original effect of this pattern is entirely lost in the arrangement given below. Many interesting color possibilities may also be used. This particular piece at Figure No. 7, was woven for a bag, and it is photographed so as to show both sides of the fabric, either side of which could be used for the right side if desired. Four colors of heavy linen floss were used for this with a little black. Note that only one tie harness, namely harness 2 is used with the pattern harnesses throughout the weaving. Alternate plain weave is used after the pattern shots but is not written in. With white linen floss weave 25 shots of plain weave. Then one black, one dark green, one light green, one yellow green, and one vellow plain weave, 5 shots of white, one black, and 2 white. Now use 40/2 natural linen for plain weave with the floss in color for the pattern shots. Block 3-2346-4x D green, block 4-2345-4x L green, block 1-2456-4x yellow green, block 2-2356-4x yellow, block 4-2345-4x L green, block 3—2346—4x D green, block 4—2345—4x L green, block 2-2356-4x L green, block 1-2456-4x D green; center of border, repeat back to beginning in same order.

At Figure No. 8 is a piece of weaving which I have not seen anyone else do. As far as I know it is an *original* use for this weave and presented in the "Weaver" for the first time. It enlarges the scope of this already very excellent weave. Here we have overshots skips on the right side combined with plain weave. If alternate plain weave shots are used between pattern shots, the opposite side from the over-shot is entirely in plain weave. If only the 1 & 2 plain weave is used with the pattern shots, there are warp float skips on the back of the fabric. In planning summer and winter patterns to weave in this fashion, it is best not to have the pattern blocks too long or the over-shot skips will be too long for

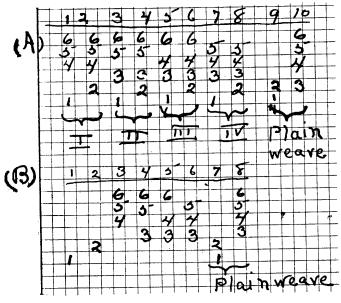


Figure No. 6 (A) Complete tie-up. (B) Combined tie-up.

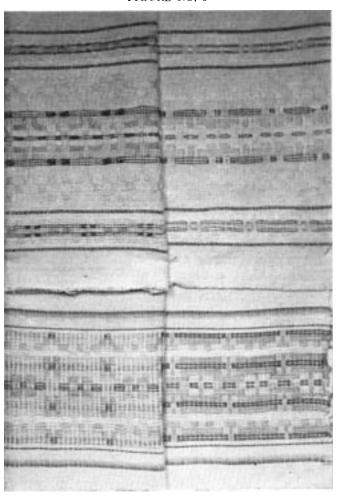


FIGURE NO. 7 Original variations of the weave.

practical use. Over-shot blocks may be woven by using levers 456, 356, 3 alone, 35, 45, 36, 46, 345, and 346, using 1 & 2 and 3, 4, 5 and 6 for the plain weave as usual. To weave Figure No. 8 proceed as follows — 35 shots white linen floss plain weave, 2 shots black, 3 shots white. Then 46-4X with yellow, and plain weave with 40/2 natural linen between the pattern shots. Now 345-2x black, 36-2x orange, 345-2x black, 46-4x yellow, for the first narrow border. Then 3 shots white linen floss in plain weave, 2 shots black, 5 shots white. For the center border, use 1 & 2 only for tabby between pattern shots, using 40/2 natural linen after each pattern shot. Continue for this border, 356-4x yellow, 456-4x, 35-4x, 346-4x; black 356-3x; orange 345-3x, 45-3x; yellow 36-3x; black 456-2x; center of wide border. Repeat back in same order to the beginning to finish.

Figure No. 9 is the same type of pattern as at Figure No. 8 but a different combination of color. For this use dark blue linen floss, medium blue, and green with white linen floss for the heavy plain weave, and 40/2 linen for the fine plain weave back of the pattern shots. Only one tabby namely 1 & 2 is used back of the pattern shots. This makes rather long skips of warp on the back where the pattern shots have been repeated a large number of times. This might be objectionable if the back of the fabric was to show. But it

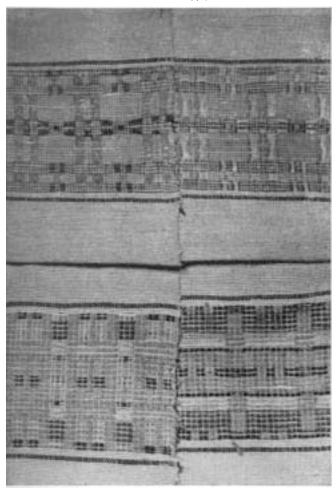


FIGURE NO. 10 Original variations of the weave.

would of course be all right for bags or for anything in fact where there was to be a lining. Weave this as follows: — Plain weave with heavy linen floss as desired, then 2 shots of dark blue, use 40/2 linen for the fine plain weave shots

after each pattern shot, — 345-4x green, 36, 3x blue 345-4x green, 356-10x blue, 456-2x green, 346-2x dark blue, center of the border, repeat back to the beginning in reverse order for the rest of the border.

Figure No. 10 shows another different method of weaving. Here again is an opportunity to use several colors, and to combine blocks of two colors on the same row of weaving. Use one shot of one color on one shed, then one shot on another shed, then fine plain weave tabby. It's very simple and easy to do and has many possibilities. Note that only one tie harness is used with the pattern block combinations, namely harness one in this case. To weave this piece proceed as follows; — Plain weave in white linen floss as desired, then 2 shots of dark blue, 3 shots of white. Then use alternate shots of 40/2 linen tabby between patternshots.

1356—blue once	repeat 3x	
1456—light green once §	repeat 3x	
134—dark green once	repeat 8x	
1456—medium blue once §	repeat ox	•
136—light green once		
1456—medium blue once }	repeat 2x	
134—yellow once		
156—medium blue once \	repeat 3x	
134—yellow once	тереат эх	•
156—medium blue once	repeat 2x	
1346 dark blue once	repeat 2x	
1356—light green once /	repeat 6x	
146—medium blue once \	repeat ox	
1356—dark blue once	reneat 4v	Center repeat back to
1456—light green once	repeat 1x	beginning in reverse
		order for rest of bor-
		der.

Another material which would weave up well in this way is Bernat's fabri yarn. It beats up especially well, and can be used double for the pattern shot and single for the fine plain weave between the pattern shots. This would be excellent for chair seats or upholstery fabric especially on a dark warp.

TYPES OF OVERSHOT PATTERNS (Continued from page 15)

good for pillow tops with four clusters of leaves about the central table.

The Radiating patterns are listed as follows:

- (a) The Sunrise Figure with Tables.
- (b) The Sunrise Figure in Various Combinations.
- (c) Patterns Based on the Blooming Leaf Figure.
- (d) The Bow-Knot Figure.

In these patterns there is always a central figure with radiating leaves or veins. Examples are "The Sunrise Coverlet", "Lee's Surrender", "Star of Bethlehem" and "Double Bow-Knot".

SERIES V. THE PATCH PATTERNS. (See Shuttle-craft Book, P. 195.)

The sample pattern shown here is from Group (c) Four-Block Patch Patterns, Pattern No. 131, "A Patch-Pattern from Kentucky", (See Sh. Bk. P. 197). One repeat only of the pattern is shown.

The Patch Patterns are listed as follows:

- (a) Two-Block Patch Patterns.
- (b) Three-Block Patch Patterns.
- (c) Four-Block Patch Patterns.

In these patterns the blocks of any one portion or group of blocks are written on opposites. The result is a span or expanse of rigid square forms resembling Stars or Tables connected at their points by other small blocks or small Tables. The entire plan of these patterns adheres strictly to square outlines and blocks on opposites. Examples are "Monk's Belt", "Doors and Windows", "Leopard Skin" and "Four o'Clock".

SERIES VI. MISCELLANEOUS—PATTERNS NOT READILY CLASSIFIABLE UNDER PRECEDING HEADS. (See Shuttlecraft Book, P. 200.)

The sample pattern shown here is from Group (c), Pattern No. 146, "No Name", (See Sh. Bk., P. 202).

These patterns are listed as follows:

- (a) The Sunflower Patterns.
- (b), (c), Miscellaneous.

In all of these patterns there is a peculiarity in the connection between figures, and the general pattern formation does not adhere to the regular plans of types given above. There are some interesting examples, such as "Ladies' Delight or Sunflower", "Job's Trouble" and "Indiana Frame Rose."

TWO NORWEGIAN BANDS IN PICKUP

By MRS. W. F. McNULTY

Many interesting designs may be worked out in this method and on any device that will make two sheds. An inkle loom is ideal for pickup. The writer uses a modified inkle, one that does not stand on the floor but rests on a table and ones lap. The bands are useful for belts or girdles and may well be the keynote of a carefully chosen costume. They may be used as trimming in an endless variety of ways. They make attractive tiebacks for curtains, be they elaborate or simple. They add a pleasing note for luggage racks. These same luggage racks make delightful tea tables. Ones ingenuity in the choice of color, design and material is the only limit.

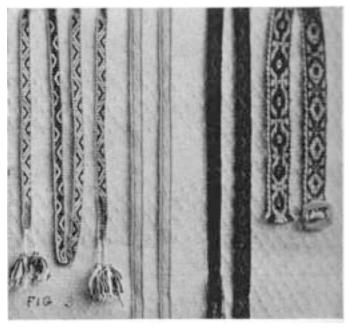
Herewith are presented two bands which will give, it is hoped, attractive results as well as pleasure in the doing. Bernats glorine, zephyr, homespun or germantown with their wide and lovely color range are excellent material. The work progresses rapidly. Truly it is far from slow.

The draft for the first and the design worked out on squared paper are given in figure one. This band shows the background in white mercerized with the design worked out in red wool with an accent of blue at the edges. The particular band of which this is a copy was bought by the writer in Trondheim, Norway, in the summer of '39. The ends of the original were finished by tassels and added a gay note to the costumes of the Norwegian girls seen on the street.

After threading the draft, note that one shed shows five red threads and the other shows four red threads. The design is brought out by raising certain threads by means of a pickup stick and depressing others with the fingers. It is convenient to observe the following order of precedure. A. Depress the desired threads. B. Pass the shuttle. C. Pickup up the desired threads with the pickup stick. D. Change the shed. The pickup stick is used before changing the shed because the threads to be picked up are then on top and easily found by the pickup stick. When the shed shows four red threads on top we will, for convenience, number them from left to right 1, 2, 3, 4. When the shed shows five red threads we will number them from left to right 1, 2, 3, 4, 5. Note that numbers 1 and 5 of this shed are neither picked up nor depressed. After a few shots of plain weaving, let us begin with the shed showing 5 pattern threads on top. Depress 2 and 4. This means threads 2 and 4 of the five threads on top. Pass the shuttle. No pickup here. Change the shed and four pattern sheds will now show on top. Depress 2 and 4. Pass the shuttle and pick up with the pickup stick number one of the four pattern threads now showing. Now change the shed. B and D will now be omitted from the instructions.

5 threads up, depress 3, pickup 2; 4 threads up, depress 3 and pick up 2; 5 threads up, depress 4, pickup 3; 4 threads up, depress 1 and 4, pickup 3; 5 threads up, depress 2, pickup 3; 4 threads up, depress 1 and 4, pickup 2; 5 threads up, depress 4, pickup 2; 4 threads up, depress 3, pickup 1; 5

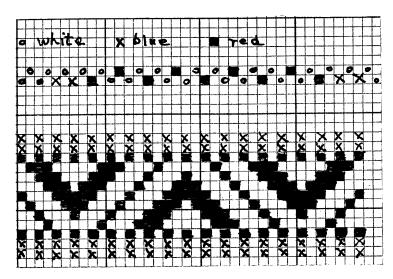
threads up, depress 3 and remove pickup stick; 4 threads up, depress 2 and 4, no pickup; 5 threads up, depress 2 and 4, no pickup; 4 threads up, depress 1 and 3, pickup 4; 5 threads up, depress 3, pickup 4; 4 threads up, depress 2, pickup 3; 5 threads up, depress 2, pickup 3; 4 threads up, depress 1 and 4, pickup 2; 5 threads up, depress 4, pickup 3; 4 threads up, depress 1 and 4, pickup 3; 5 threads up, depress 2, pickup 4; 4 threads up, depress 2, pickup 4; 5 threads up, depress 3, remove pickup stick; 4 threads up depress 1 and 4, no pickup. Repeat from the beginning.



After making the design a few times and noting how the design is made, discard the instructions for it is much easier to work without them.

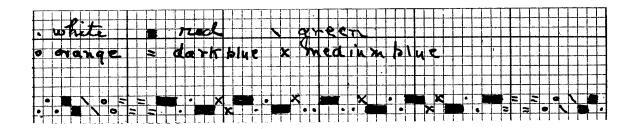
Band number 2 is a copy of one the writer bought in Bergen, Norway. The material is rather coarse yarn, about the weight of germantown, and in several colors as shown in the draft in figure 2. In this band the threads forming the design are brought over two, instead of over three weft threads as in the first band. A very pleasing mosaic is formed in this band, due to color arrangement of warp threads. Only the red thread is picked up or depressed. The red threads are numbered from left to right as in the instructions for the first band. The weft thread should be fairly heavy and may be in either one of the center colors, in this case blue or white, with a corresponding change in the center mosaic as well as in the effect on the edge.

Beginning as before with five pattern threads up, depress 1, 2, 4, 5 pass the shuttle and pickup up 1, 3 and 5, change the shed. With four threads up depress 1, 2, 3, 4, pass shuttle, pickup 2 and 3, and change shed. As before it will not be



necessary to include in the instructions the passing of the shuttle and the changing of the shed, but these must be used in their correct order nevertheless. Now 5 threads are up, depress 1, 2, 4, 5 and pickup 2 and 4; 4 threads up, depress 1 and 4, pickup 1 and 4; 5 threads up depress 1, 3, 5, pickup 1 and 5; 4 threads are up, depress 2 and 3 and remove pickup stick; five threads up, depress 2 and 4, pickup 3; 4 threads up, depress 1 and 4, no pickup; 5 threads up, depress 2 and 4, pickup 1 and 5; 4 threads up, depress 2 and 3, pickup 1 and 4; 5 threads up, depress 1, 3 and 5, pickup 2 and 4; 4 threads up, depress 1 and 4, pickup 2 and 3. Repeat.

Figure 3 shows the original band from Trondheim. The next two are copies in different colors and materials. The fourth is the original belt from Bergen. The instructions for this show a slight variation from the design in the original.

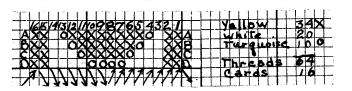


Book Marks and Hair Bands on Card Weaving

By ELOISE COBB

Bookmarks and Hair Bands can be made from the accompanying pattern of card weaving of Mrs. Atwater's.

I made the Bookmarks 5/8" wide and 7 or 8" long; leaving a space of 3" or so between each bookmark. Then when finished cut in between making 11/2" of fringe on each end of bookmark.



The Hair Bands I made 24 or 28" long but no fringe. A good combination was yellow, white and tourquoise, another red, white and blue.

If cards are turned all one way it makes an arrow head, if the normal 4 and 4 turns are used it makes a diamond. The threads used were the same as for card woven belts or a little finer. Other narrow patterns may also be used.



VARIATIONS OF "THE HUMANESQUE FIGURES"

By LELAH FRISBIE ADLER

I wonder if any member of the "weaving family" has had as much fun playing with Mrs. Atwater's "Humanesque Figures" (The Shuttle Craft Guild Bulletin, March, 1941) as I have had with this type of weaving.

I have used it for upholstering materials, peasant aprons, rugs, luncheon sets and wall hangings. It gives a tapestry effect and works up rapidly. The design possibilities are all most endless. I have used it for aprons with sailors in blue uniforms, soldiers with nipped in waists and Sam Brown belts, red cross nurses in white uniforms against deep blue background, garden flowers such as hollyhocks, corn flowers, for-get-me-nots, Dutch boy and girl with tulip borders, Peruvian cats and many others.

The tulip luncheon or breakfast set, diagram No. 1, works up rapidly and is as colorful as one could wish. For warp, I used 24/3 natural, set 24 threads per inch. For weft, a soft coarse cotton, natural cream color, of about the grist of 10/2. For the design, Bernat's Perle Cotton No. 10. Green-1017, Red-1046, Black-1031. Weave 2 inches plain tabby of cream colored cotton (weave extra for desired width of hem, I wove the runner 28"/14" in the loom, to finish 24"/12".) In the following treadling the numbers designate the treadle to be used, one shot on each.

Weave-

*1-2-3-4-black	1x
1-2-3-4-green	2x
1-green 2-cream 3-green 4-cream	6x
1-green 2-3-4-cream	2x
1-2-red 3-4-cream	6x
1-red 2-3-4-cream	2x
1-2-3-4-black	1x**

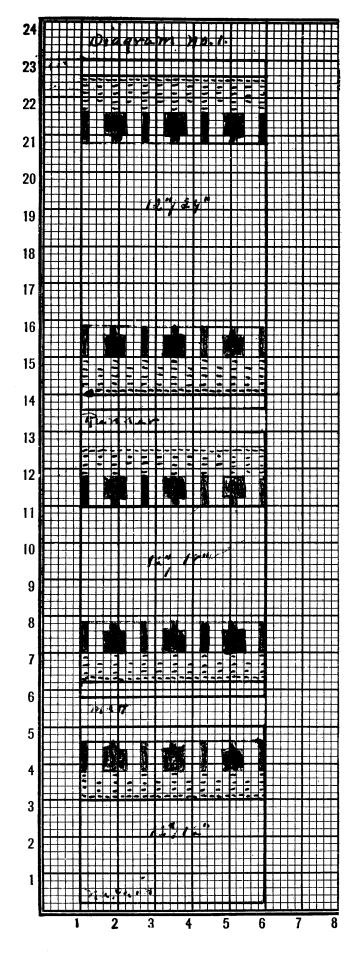
Weave the body in cream cotton, repeat from ** to * for opposite border. Weave mats with the same border, to finish 18" long. Napkins have one border so placed to cross the top when folded in thirds.

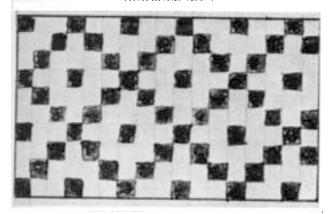
For upholstering material, diagram No. 2, I used 24/3 natural, doubled in the heddle, for warp; set 20 threads per inch. For weft, Bernat's Fabri, tan-137, blue-596.

Weave-

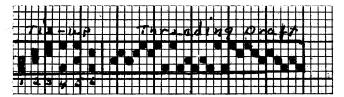
*1-blue 2-3-4 tan	4 _X
1-tan 2-blue 3-4-tan	4x
1-2-tan 3-blue 4-tan	4x
1-2-3-tan 4-blue	4x
1-blue 2-3-4 tan	4x
1-2-3-tan 4-blue	4x
1-2-tan 3-blue 4-tan	4x
1-tan 2-blue 3-4-tan	4x**

Repeat from * to *** for length of the piece. This produces a material with a tan background and a blue figure, warp does not show. A third color can be introduced with pleasing results.



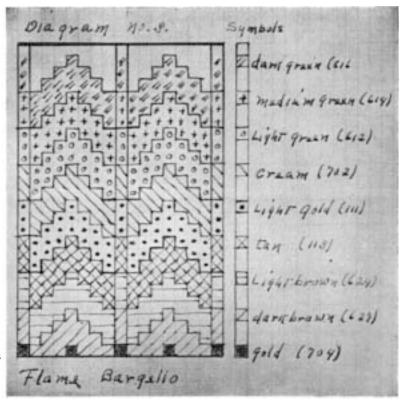


UPHOLSTERING MATERIAL



One of the nicest things worked out in this technique, is a simulation of Flame Bargello embroidery, diagram No. 3. Use a tapestry warp, set 15 threads per inch. Bernat's weaving special for weft; any color combination can be used. The following worked out very nicely, dark brown 627, light brown 624, golden tan 113, light gold 111, cream 702, light green 612, medium green 614, dark green 616. Use the darkest color at the bottom of the design and shade to light tones, as shown in the diagram. This is nice for bags, upholstering material or wall hangings. Weave—

1-gold 2-3-4-dark brown	2x
1-2-3-dark brown 4-light	
1-2-dark brown 3-4-light	
1-dark brown 2-3-4 light	



1-2-3-light brown 4-tan	2x
1-2-light brown 3-4-tan	
1-light brown 2-3-4-tan	2x
1-2-3-tan 4-light gold	2x
1-2-light tan 3-4-light gold	2x
1-tan 2-3-4-light gold	2x
1-2-3-light gold 4-cream	2x

Continue for the following colors, all ways introducing the new color on treadle 4. The work is rapid and if colors are carefully shaded, a very lovely fabric is produced.

QUESTIONS and ANSWERS

By MARY M. ATWATER, Basin, Montana

Question: "I have a quantity of Bernat's "fabri' yarn in a good blue shade and wish to make a fabric for a suit. I do not want herringbone or twill. How shall I weave it?"

Answer: If you do not wish herringbone or any variation of the twill weave, the best weave to use is plain tabby. A tabby fabric in fabri has a slight "crepiness" however, that may or may not be agreeable to you. This results when a hard-twisted yarn such as fabri is used for both warp and weft. To avoid this effect it is necessary to use a warp twisted in one direction and a weft with the opposite twist. The crepe effect, however, is not unpleasant,—unless you happen to object to it.

For a firm fabric with splendid wearing qualities, set the warp at 30 ends to the inch and weave 30 weft shots to the inch. Set the warp $33\frac{1}{2}$ " to 34" wide in the reed for a

"finished" width of 32",—which, tailors tell me, is the width that cuts to best advantage. Allow generously in length for shrinkage.

Wash the fabric in warm, mild, soap-suds when it comes from the loom. Wash it thoroughly with a kneading action. Rinse. Allow to dry somewhat and press lightly through a cloth while still damp. Don't let anybody tell you that steaming or dry cleaning will do as well. The washing is necessary to give the fabric finish and pleasant texture, and to take all the shrinkage out of it. Any all-wool fabric should be finished in this manner. If you have any doubts, weave a good sized sample, cut it in two and wash one of the pieces as above, leaving the other piece unwashed. Then compare the two samples. Seeing is believing, and this will surprise you.

NEW PATTERNS FROM OLD MANUSCRIPTS

By MARGUERITE P. DAVISON

Philadelphia holds a unique place in the history of American hand-weaving. The Swedish settlement on the Delaware, descendants of whom are numbered among her prominent citizens today, brought all the home-arts of a people accustomed to subsist by their own efforts. Also there were many Finns in the number. In their home country they knew forest life. From them Daniel Boone and other pioneers, Hanks and Lincoln families, going from near Reading to Kentucky and the middle west, took the art of making log cabins, now associated by us as an integral part of frontier life.

Without doubt the beginnings of our Colonial weavings came also from this source and from subsequent settlements in Massachusetts, South Carolina, Tennessee and western New York. It is more than coincidence that where centers of hand-weaving have been strongest, there also were Scandinavian settlers.

German settlers have left a more definite mark on our handicraft, for few if any weavings survive from the early Scandinavian weavers, though mention is made by various writers of the obvious work done by them. The Germans came in greater numbers. Their double-woven coverlets in block patterns, twill patterns both in wool and linen, and damask, as well as more simple weavings have been preserved in great quantities and were woven until civil war times. Some spinners of fine linen thread are still in existence and a movement is on foot to revive all of the crafts in Pennsylvania so nearly eclipsed by commercial workmen.

Ida M. Tarbell, in "In the Footsteps of the Lincolns," tells us that Abraham Lincoln's first ancestor to land in this country was an apprenticed weaver; also his brother. They did not weave here as the lot of clothing the families fell to the women. The struggle experienced by these heroines is one of constant wonder to modern generations. The Swedish and Finnish women doubtless passed on to them the technique of making the bright, colorful fabrics which were a relief from the woolen suitings made more for durability than for beauty. The German men were responsible for the double-woven and twill-woven coverlets and fine linens now to be found in Pennsylvania Dutch neighborhoods.

Early in the period of awakening interest in Colonial weavings, at the time when Mrs. Anna Ernberg was called to Berea College in Kentucky to perfect the work of "our contemporary ancestors", Eliza Calvert Hall gave us her "Book of Hand-Woven Coverlets," with all the romance she found in collecting her material. In the September-October, 1930, number of The Handicrafter she presents a problem concerning the origin of American coverlet weaving. Her idea while she was writing her book was that it was of English, Scotch and Irish descent, since the people among whom the art flourished in America were of these nationalities. She was surprised to find no over-shot work among the English weavers and no counterpart of the patterns in the British Isles. Her assumption was accepted without question

by other American writers. One element forgotten was that there were good neighbors of a different origin living near who have left their print on our life. Their log houses are the homes of our pioneer ancestors; their melon baskets are called "Cherokee Baskets" or "Mountain Baskets", according to the location in which they are found. Their handweaving patterns formed the basis of our Colonial patterns, many of them coming without change from their traditional designs.

In the Philadelphia museums are six manuscripts which record the patterns of old weavers. Nothing is known of the men who made them beyond the date; even that is uncertain on one of them, and the name of another is obscure. They do bear mute evidence of the careful work general among them and one has an account book with it that records the amounts paid for different kinds of work, for whom the weavings were made and whether or not the accounts were settled. Strange is the coincidence that all but one were named John or Johann. The oldest is the book of Johann Speck, dated 1723; the next has had part of the name scratched out, so all that we see is "Johann D-, 1766." Johann Michael Kirschbaum's manuscript, 1771, is in the library of The Franklin Institute. The rest are in the library of The Philadelphia Museum of Art at Fairmount. John Landes' book has been preserved to weavers through the efforts of Mrs. Mary Meigs Atwater. The date of its use is not known, but is presumed to be late eighteenth century. It is in a fragile condition and is no longer in circulation, though the photostats serve the purpose of perusal very well. William Hutchison, 1819, has his journal and cash book accompanying his pattern book and Johann Schleelein, 1820, handed his work on to Conrad Schleelein, 1844.

There is no record of the technique in which the patterns were developed. The Kirschbaum manuscript gives the skeleton draft at the bottom of each page. There are many duplicates among the designs; while the weavers were probably German and some of the manuscripts evidently came from Germany, we find counterparts in Swedish and Finnish books today. This is especially true of the many variations of our well-known "Whig Rose" design. The "Whig Rose" commonly developed in overshot coverlets, having a large rose in the center, four small roses, and enclosed in interlacing rings, with a corner of small diamonds, is found in Swedish books. In a modern German book a similar design is called "Schwedenborte mit spitzenartigen grund kleinere Musterung". The popular Monk's Belt and some kindred designs, Cat Track and Snail Trail, King's Flower, are given in almost all of these records.

The patterns recorded in the old manuscripts have little of interest for modern weavers. They are generally large and ornate. A few which have been adapted to smaller work have been selected, woven in several techniques, and the

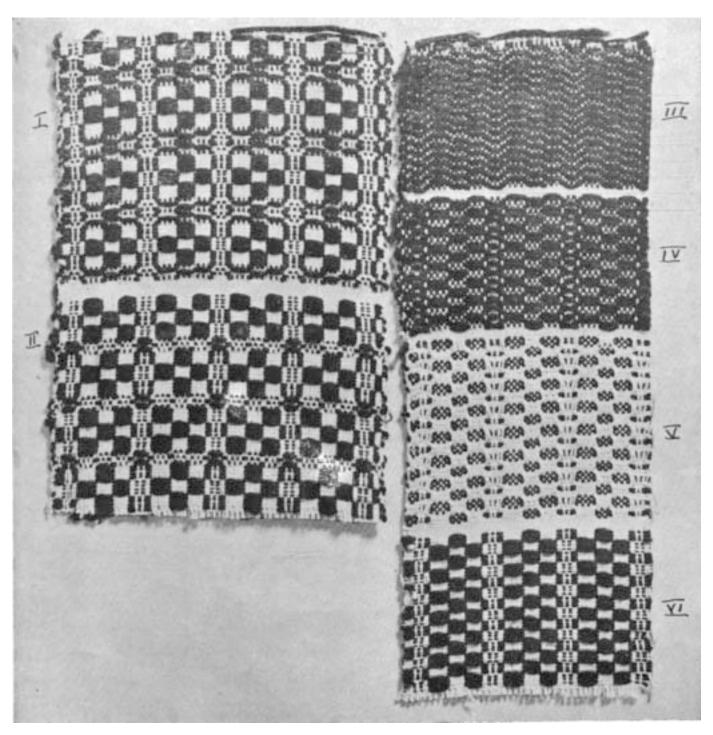
"BARLEY CORN" OR "BRONSON WEAVE" APPLIED TO JOHANN SCHLEGIELN'S NO 41

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PLATE II.

SCHLEELEIN'S NO. 123.

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results are given here. The large dot with twill joining, Johann D—'s No. 32 and Johann Schleelein's No. 198, is very effective in overshot work and is also-developed in Jamtlandsvav by Caroline Halvorsen in her latest edition, page 147.

The manner of weaving called "Bronson Weave" by Mrs. Atwater, is a well known German technique called "Barley Corn" by them. Linen woven in a diamond pattern with a twill border has recently been seen among Pennsylvania Dutch linens, using this method of producing it.

The samples here shown were woven on a Number 12, two-ply cotton warp with weft of the same size, in the case of the "Barley Corn" weaves, and a tabby of No. 12 two-ply cotton with three-ply sport yarn in the overshot designs. They were threaded thirty threads to the inch in a fifteen

dent reed. The design of Plate V develops beautifully in forty lea two-ply linen warp with weft of the same size or a single thirty lea linen. The small block is enlarged for corner and border. The variations of Plate III are adaptable to upholstery.

Where it would be cumbersome to indicate the use of a tabby thread, the use or absence is indicated and must be taken into account when following the treadling directions: for instance the numeral 1 or 3, etc., between the vertical lines means that the combination of harnesses indicated directly above it in the intersection of the horizontal and vertical lines is to be used that number of times with tabby between to gain the desired effect. In the case of the Barley Corn weaves, they are treadled as indicated, no tabby being used, as it is one shuttle work.

PLATE III

JOHANN SCHLEELEIN'S No. 110.

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