PRACTICAL WEAVING SUGGESTIONS

VOL. 4 - 56

THEME WITH VARIATIONS



Created by Ruth Jelks

Effective color and texture combinations as suggested by nature can be used to create original designs for hand woven fabric. The creating is exciting, the results are interesting and the fabric is functional if designed with an end use in mind.

This all began with a Lion's Paw shell (PEC-TEN nodosus) and a set of yarn samples! The shell, a beauty, is found along the coastal waters of Florida from Sanibel on the west and as far north as the Carolina coasts on the east. Fan shaped with scallops at the top this shell varies in size from two to five inches across, with colors ranging from oranges and reds to browns and purples. Large ribs or fingers seem to issue from a single point at the base of the shell, and each finger is set at intervals with a number of knobs or knuckles: thus the semblance of a paw.

Perhaps a little far fetched for conventionality, nevertheless this likeness of the shell to a paw apparently has given it the interesting colloquial name Lion's Paw shell.

The yarn samples? They came from Lily Mills and are a complete set of stimulating and exciting colors of various sizes and textures; (also included was a promise of more textured yarns in the near future).

It doesn't take close examination to see that varied textures predominate in the composition of the Lion's Paw shell. Not only are there ridges riding up and down the knuckled fingers and between the fingers, but each ridge is serrated, thereby resulting in what seems to be a two-dimensional textural quality. This textural quality was used as the theme on which to

weave four variations. Four warps, each depicting the serrated, ridged fingers of the Lion's Paw shell, were used to make the four variations on the theme:

Warp I. One color variation

Warp II. Gradation on the same color variation

Warp III. One color with complementary combinations variation

Warp IV. Neutral variation

On each variation were woven designs as were suggested to the weaver by either the scalloped edges or color and/or textural arrangement of the Lion's Paw shell. To obtain the desired textural effects, Lily yarns of varying sizes and textures were used. It was found that Lily Novelty 105, size I, worked beautifully in simulating the serrated ridges of the shell's fingers. Yes, textures to simulate the raised knuckled fingers of the Lion's Paw shell were built up in the warp by using Lily's heavy Novelty, Pearl 3 and Carpet Warp. To create an illusion of concavity between the knuckled fingers, Lily's finest size cotton warps were used in an irregular spatial relationship.

'Tis true the Lion's Paw shell possesses textures so bold that one immediately wishes to reach out and touch! When warm beautiful colorings are added to this tactile feeling, who wouldn't be inspired to create! One particular Lion's Paw was used by the weaver. Picked up on Sanibel Island and nearly perfect, the shell contains a wonderful range of colors: neutrals,

warm pinks, reds, browns, oranges, and purples. Around the colors from this particular shell were built the color combinations used in all the variations. Because of the wide range of colors in the Lily yarns, the shell's colors were easily duplicated in yarns of varying sizes and textures.

Basically, each of the four warps was devised for drapery material and the resulting fabrics from each variation range in weight qualities from light and translucent to heavy and opaque. However, there exist in the variations materials suitable for upholstery, couch or pillow covers and curtain or drapery materials for formal or informal surroundings. Fabrics from all the variations drape well and are inexpensive and easy to weave.

WARPING: All four warps were sectionally beamed, with the exception of the heavier yarns, which were either chained or left on their original tubes and dropped, weighted, over the warp beam in a way similar to Mrs. Atwater's methods. Because of the take-up in the heavier yarns, about 3 inches extra per yard was allowed.

THREADING: All four warps were threaded on the Bird's Eye draft of 1, 2, 3, 4, 1, 4, 3, 2, 1, 4, and repeat. Whenever a heddle eye proved too small, particularly for the textured yarns, string heddles were made.

SLEYING: Each warp was sleyed differently 38 inches wide through a 12 dent reed.

TIE-UP: Standard, with tabby on treadles 3 and 4.

Warp I. One color variation.

Warp plan:

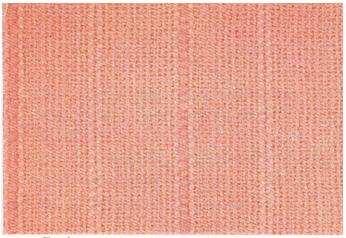
Article	size	color	number of ends
114	3	908 Salmon Rose	74
105	1	908 Salmon Rose	18
714	10/3	K41 Salmon Rose	190
214	20/3	41 Salmon Rose	352
			
		Tota	1 624

SLEYED: left to right

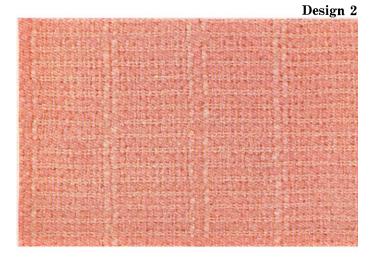
ends to dent		size yarn
2		20/3
2		20/3
2*		20/3
1		10/3
1		10/3
2*		20/3
2		20/3
1		10/3
1		10/3
1	Pearl	3
1	Pearl	3
1		10/3
1		10/3
2		20/3
2*		20/3
1		10/3
1		10/3
2*		20/3
2		20/3
1		10/3
1		10/3
1	Pearl	3
1	Novelty	1
1	Pearl	3

^{*} Ends are heddled as a single.

The above order was repeated every 2 inches across the warp except: for the left selvedge 2 ends of 20/3 were added so that the first two dents would have 3 ends each; for the right



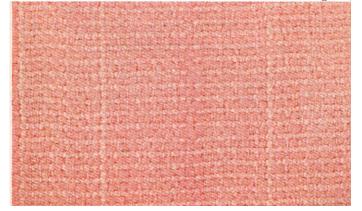
Design 1



Design 3



Design 4



selvedge, the last 3 ends (Pearl 3, Novelty 1, and Pearl 3 respectively) were dropped and 8 ends of 20/3 were added so that the last two dents would have 3 ends each.

For warp and weft in this variation pink was selected because it predominates in the shell, and, too, shades of pink seem to be at present a popular decorative color. The same color, Lily's Salmon Rose, was used but in different yarn sizes for both warp and weft in all the suggested designs of the variation. This perhaps sounds like a lot of pink, but the interplay of the different yarn weights and textures created an interesting breaking up of the one color into subtle shadings. Also, yarns in different twist and thickness, mercerized or unmercerized, even though dyed in the same dyestuff and under controlled conditions, have a tendency to vary slightly in color value. (Footnote: It might be added here that the color discrepancies as sometimes found in yarns are the plague of any dyer. There are so many factors governing the failure or success of the entire dye process, that it is a wonder more discrepancies do not occur. On a recent visit to Lily Mills this weaver noticed the care that was taken in trying to match a single weaver's off shade sample! Of course it is certainly wonderful to have a firm that will try to match a desired two ounce tube of yarn, but the best thing to do for all concerned, and especially for the resulting fabric, is to order a little extra yarn — the only insurance of no color discrepancy.) This slight variance in color of the yarns as caused by the weights and textures of the yarns was used as a focal point in weaving the following designs:

Design 1 was woven plain using approximately 874 yards of Article 105, size II, color 908

Salmon Rose, for one yard. Even though the fabric has a texture look and feel, it is light weight and translucent.

Design 2 was woven plain using one shot of Article 105, size 1, color 908 Salmon Rose, to two shots of Article 214, size 20/3, color 908 Salmon Rose. It takes approximately 265 yards of the former and 530 yards of the latter to weave one yard. This design produces horizontal serrated ridges.

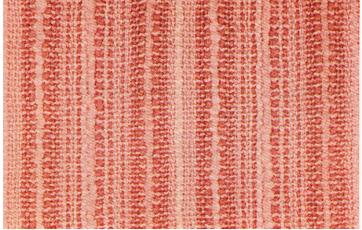
Design 3 took approximately 465 yards each of Article 105, size 1, and Article 114, size 3, both color 908 Salmon Rose, to weave up one yard. The treadling was 1, 2, 5, 6, 1, 2, 5, 6, 5, 2, 1, 6, 5, 2, and repeat. The weft was alternated so that Article 105 came on sheds made by 1 and 5 treadles and Article 114 on sheds made by 2 and 6. No tabby was used. The fabric from this design is heavy enough for unlined drapes or upholstery.

Design 4 used for weft for one yard approximately 304 yards each of Article 105, size 1, and Article 114, size 3, color 908 Salmon Rose for both. The two wefts were woven alternately in plain weaving and produced a fabric well balanced in structure as well as design.

Warp II. Gradation on the same color variation.

Warp plan:

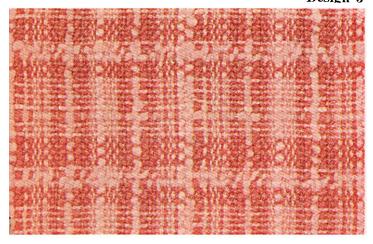
Article	size	color nu	mber of ends
214	20/3	41 Salmon Rose	316
114	3	908 Salmon Rose	38
714	10/3	49 Coral Pink	57
714	10/3	44 Rose Fraise	152
114	3	458 Dk Rose Pink	95



Design 1

_		Design 2
	Control of the	Amount Av
The Market		
		Same en vers
and the second	and the later	National Section

Design 3



Design 4



105	1	908 Salmon Rose	57
314	10/2	458 Dk Rose Pink	76
714	10/3	41 Salmon Rose	38
		Total	829

SLEYED: left to right

ends to der	nt	siz	ze yarn
$\begin{bmatrix} 2 \\ 2 \\ 1 \\ \hline \end{bmatrix}$	Pearl	20/3 S 3 S 20/3 S	almon Rose almon Rose almon Rose almon Rose oral Pink
2 1 1 1 2	Pearl Novelty Pearl	10/3 R 3 D 1 S 3 D	ose Fraise k Rose Pink almon Rose k. Rose Pink ose Fraise
$egin{array}{ c c c c c c c c c c c c c c c c c c c$		10/2 D 20/3 S 20/3 S	oral almon Rose ok Rose Pink almon Rose almon Rose k Rose Pink
1 1 1 1 1 1	Pearl Novelty Pearl	10/3 Sa 3 D 1 Sa 3 S 10/2 D	almon Rose k Rose Pink almon Rose almon Rose k Rose Pink almon Rose
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	Pearl Novelty	10/2 D 20/3 S 10/3 C 10/3 R 3 D 1 Sa	ose Fraise k Rose Pink almon Rose
$\begin{matrix} 1 \\ 2 \end{matrix}$	Pearl		k Rose Pink ose Fraise

^{*} Ends are heddled as a single.

 \square Means sleyed in one dent.

The above order was repeated every two inches across the warp. However, 4 ends of 20/3 were added to the left selvedge and 8 ends of 20/3 were added to the right selvedge. The outer two dents of each selvedge held 3 ends each.

Of course, a gradation of pink could have been achieved on Warp I by using different values of pink in the weft, but it would not have given the desired strong vertical lines of the Lion's Paw shell. Only a short range of gradation from a light peach to a dark rose was used; however, from Lily's color cards it is a simple matter to select a color with a much greater range of values and in varying yarn sizes. Color values as well as textural arrangements were used to get the desired results in the following designs:

Design 1 was woven plain with Article 105, size II, color 908 Salmon Rose. It takes approximately 684 yards of weft to weave one yard. The serrated ridges simulating the fingers seem to stand out in relief in this design, but the fabric is light and translucent.

Design 2
Weft for one yard:

Article	size	color	approximate yardage
114	5	85 Peach	304
105	1	908 Salmon Rose	152
714	10/3	44 Rose Fraise	152

By using 3 shuttles this design was woven plain in the order Peach, Salmon Rose, Peach, Rose Fraise. The 3 weights of weft depict the horizontal ridges that seem to crisscross a Lion's Paw shell, thus creating an interesting allover textural quality.

Design 3
Weft for one yard:

Article	size	color	approximate yards
114	5	85 Peach	27
105	1	908 Salmon Rose	54
714	10/3	44 Rose Fraise	189
714	10/3	41 Salmon Rose	243
1014		Y42 Tea Rose	27

Five shuttles were used for plain weaving in the following order:

5	shots	Salmon Rose 10/3
1	shot	Pearl
1	shot	Tea Rose
3	shots	Salmon Rose 10/3
4	shots	Rose Fraise
1	shot	Salmon Rose 10/3
2	shots	Novelty
3	shots	Rose Fraise

Rectangles in different sizes are formed by both color and texture in this design. The fabric is medium weight and could be used for cottage curtains.

Design 4

Weft for one yard: 608 yards of Article 714, 10/3 Salmon Rose.

Weave: Brooks Bouquet. The scalloped edges of the Lion's Paw shell are suggested by the Bouquets which are "tied" at planned intervals across the web. Use the above warping, however, minus the 105 Novelty warp, because the spaces incurred are used for tying the Bouquets. Using tabby treadling entirely, open the shed so that by reading from right to left the 2nd and 3rd Pearl 3 warps are up. Between these two there will be 4 up and 5 down warps. It will be noticed that this same warp grouping occurs at approximately 4 inch intervals across the warp. This grouping is tied into the first row of Bouquets thus:

From right to left push the shuttle through the shed and allow it to come out between the 3rd and 4th Pearl warps (the space left by empty dent). Pull weft all the way through. Keeping same shed, insert the shuttle back to the right between the 1st and 2nd Pearl warps, thus catching in a circle or Bouquet the 3rd and 2nd Pearl warps and the 4 up warp threads that are between the 3rd and 2nd Pearl warps. Carry the shuttle to the same thread grouping that is approximately 4 inches to the left, allowing the shuttle to come out in the place corresponding to the first Bouquet. Pull the weft all the way out and tighten the 1st Bouquet. Insert the shuttle between the two Pearl warps to the right, encircling the 4 up warp threads and 2 Pearl warps in the same manner as the 1st Bouquet . . . and so on across the warp. When all Bouquets have been formed on the row, beat, change the shed, beat again, and make 4 plain shots.

The 2nd row of Bouquets will be formed from left to right. Beginning on the left, pass the shuttle through the shed and allow it to come out between the 13th and 14th Pearl warps (space caused by empty dent). Pulling the weft all the way out, insert the shuttle to the left between the 11th and 12th Pearl warps. Thus the 12th and 13th Pearl warps will be encircled at the same time with 4 other up warps. Across the warp at approximately 4 inch intervals the groupings are easily detected because of their position on the up shed and the spaces setting off each grouping. When the row is finished, beat the Bouquets into place and weave 4 plain shots.

The 3rd row of Bouquets is a repetition of the 1st row followed by 4 plain shots. The 4th row of Bouquets will begin on the left by encircling

the 11th and 10th Pearl warps and the up warps between. Follow the row with 4 plain shots. The 5th row of Bouquets begins on the right and forms a new grouping by encircling the 5th and 4th Pearl warps and the warps between. Finish row and weave 4 plain shots.

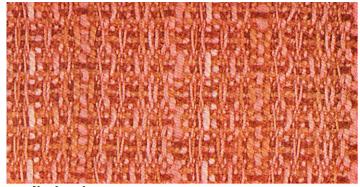
The 6th row of Bouquets is a repeat of the 4th row, the 7th of the 5th and the 8th row of the 2nd row. Weave the 9th row like the 1st, the 10th like the 2nd, the 11th like the 5th and the 12th like the 4th. Between each two rows of Bouquets weave 4 plain shots. Twelve rows of Bouquets complete a design.

When hung in front of light, the design of this fabric comes to focus in an interesting allover pattern of straight and curved lines as formed by the caught warp yarns. The Bouquets give a feeling of the shell's scalloped edges.

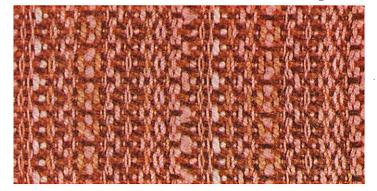
Warp III. One color with complementary combinations variation.

Warp plan:

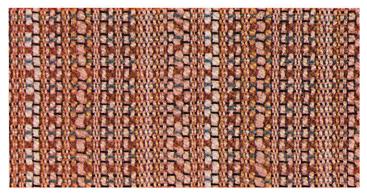
Article	size	color	number of ends
214	20/3	41 Salmon Rose	384
114	3	908 Salmon Rose	38
105	1	908 Salmon Rose	38
114	10	1458 Crab Apple	76
714	10/3	41 Salmon Rose	76
114	10	85 Peach	38
114	5	908 Salmon Rose	114
114	3	1458 Crab Apple	38
314	10/2	1458 Crab Apple	76
114	3	85 Peach	38
114	10	908 Salmon Rose	76
		m .	1 000



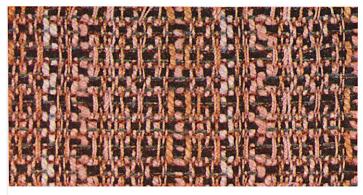
Design 1 Design 2



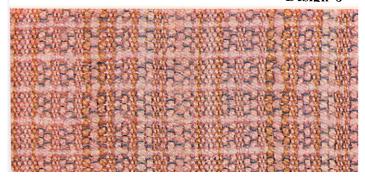
Design 3



Design 4



Design 5



SLEYED: left to right

ends to der	nt	;	size yarn
4		20/3	Salmon Rose
1	Pearl	3	Salmon Rose
1	Novelty	1	Salmon Rose
1	Pearl	3	Salmon Rose
$egin{array}{ c c c c c c c c c c c c c c c c c c c$		$\begin{array}{c} 20/3 \\ 20/3 \end{array}$	Salmon Rose Salmon Rose
$\begin{bmatrix} 2 \\ 1 \end{bmatrix}$	Pearl	$\begin{array}{c} 10 \\ 10/3 \end{array}$	Crab Apple Salmon Rose
$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	Pearl	$\begin{array}{c} 10/3 \\ 10 \end{array}$	Salmon Rose Peach
$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$	Pearl	$\begin{array}{c} 10/3 \\ 10 \end{array}$	Salmon Rose Crab Apple
1	Pearl	5	Salmon Rose
1	Pearl	5	Salmon Rose
4		20/3	Salmon Rose
1	Pearl	5	Salmon Rose
1	Pearl	5	Salmon Rose
4		20/3	Salmon Rose
1	Pearl	3	Crab Apple
1	Novelty	1	Salmon Rose
1	Pearl	3	Crab Apple
$oxed{egin{array}{ c c c c c c c c c c c c c c c c c c c$	Pearl	$\begin{array}{c} 10 \\ 10/2 \end{array}$	Salmon Rose Crab Apple
1	Pearl	5	Salmon Rose
1	Pearl	5	Salmon Rose
$egin{bmatrix} 2 \\ 2 \end{bmatrix}$	Pearl	$\begin{array}{c} 10 \\ 10/2 \end{array}$	Salmon Rose Crab Apple
1	Pearl	3	Peach
1	Pearl	3	Peach
4		20/3	Salmon Rose

^{*} Ends are heddled as a single.

The above sleying plan was repeated every 2 inches across the warp. Two 20/3 Salmon Rose were added to both selvedges making the outer 2 dents on each side hold 3 ends. Additional colors could have been used in this warp, as the shell also contains Heliotrope, Raspberry,

[□] Means sleyed in one dent.

Claret, Henna, Topaz, and Rust. However, no deeper color values were used so that the texture lines would be as strong as or stronger than color lines of the warp. Peach and Crab Apple were used to further warm the Salmon Rose and complement the textured fingers.

Colors used in the weft for this variation either originated from the shell or were suggested by the shell's environment; blues, jades, and/or greens for the ever-changing Gulf, sparkle for sunlight and soft textures in natural for the beach sands.

Design 1
Weft for one yard:

Article	size	color a	ipproximate yardage
114	3	1458 Crab Apple	266
114	3	1261 Dk Orange	266
114	10	1457 Burnt Orang	ge 304

Treadle: 1, 2, 3, 4, 5, 6, 5, 4, 3, 2, and repeat.

Weave: on treadles 1 and 5 a shot of Crab Apple.

on treadles 2 and 6 a shot of Dk Orange

on treadles 3 and 4 a shot of Burnt Orange.

This weave makes a medium heavy fabric. The combination of oranges brings life to the subdued warp.

Design 2

Weft for one yard:

Article	size	color a	pproximate
			yardage
114	3	1457 Burnt Orang	ge 342
114	3	617 Lacquer	342

Treadle: 1, 2, 5, 6, 5, 2, and repeat.

Weave: on treadles 1 and 5 a shot of Burnt Orange

on treadles 2 and 6 a shot of Lacquer.

The fabric from this weave is rather formal in lines, but the combination of Burnt Orange and Lacquer creates enough color vitality to add sparkle to the formality. The material could be used unlined in formal surroundings.

Design 3

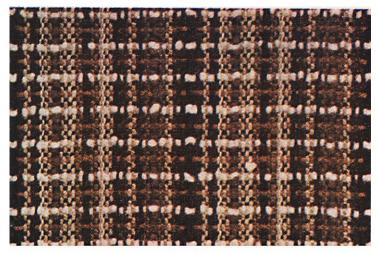
Weft for one yard:

Article	size	color appr	approximate	
		ya	rdage	
114	20/2	562 Bottle Green	342	
314	10/2	501 Jade	152	
114	3	1261 Dk Orange	152	

Weave plain in the order Bottle Green, Jade, Bottle Green, Dk Orange. This contrasting color combination of warp and weft produces an allover design that seems to move with life. It is effective and stimulating. The fabric is suitable for both drapery and upholstery.

Design 4
Weft for one yard:

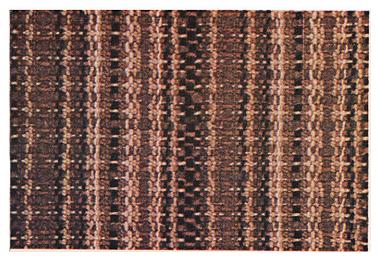
Article	size	color	approximate yardage
314	10/2	501 Jade	266
114	10	617 Lacquer	266
114	3	656 Chili Brov	vn 266



Design 1



Design 2



Design 3

Treadle: 1, 2, 3, 4, 5, 6, 5, 4, 3, 2, and repeat.

Weave: 1 shot Jade, 1 shot Lacquer, 1 shot Chili Brown, and repeat.

The combination of yarns, color and weave in this design produces a fabric with a seemingly two-dimensional quality, causing the material to look heavier than it really is.

Design 5
Weft for one yard:

Article	size	color	approximate yardage
214	20/3	36 Turquoise	456
305	guimpe	Silver	114
105	1	Natural	114

Weave plain with 2 shots Turquoise, 1 shot Silver, 2 shots Turquoise, 1 shot Natural. The silvery sparkle of the sunlight, the turquoise of the Gulf, and the natural color and texture of beach sand suggested this design. It makes a light, translucent fabric that would be interesting in a little girl's room.

Warp IV. Neutral variation.

Warp plan:

Article	size	color n	umber of ends
314	10/2	441 Black	120
314	10/2	1431 Taupe	76
414	carpet warp	836 Black	38
105	1	441 Black	19
714	10/3	124 Dk Brown	n 76
714	10/3	91 Leaf Beige	e 152
314	10/2	656 Chili Brow	vn 76
105	1	656 Chili Brow	n 38
314	20/2	1402 Linen Colo	r 76
314	24/2	1431 Taupe	38
714	10/3	120 Brown	76
114	3	441 Black	19
914	20/6	1080 Linen Cole	or 38
		Total	1 949

SLEYED: left to right

ends to den	t	si	ze yarn
2		10/2	Black
2		10/2	Taupe
1		carpe	t warp
1	Novelty	1	Black
1		carpe	t warp
2		10/3	Dk Brown
2		10/3	Leaf Beige
2		10/2	Chili Brown
1	Novelty	1	Chili Brown
2		10/2	Chili Brown
2		10/2	Black
2		10/3	Leaf Beige
2		10/3	Dk Brown
2		10/2	Black
2		10/2	Taupe
$egin{array}{ c c c c c c c c c c c c c c c c c c c$			Linen Color Taupe
2		10/3	Brown
1	Pearl	3	Black
2		10/3	Brown
2		20/6	Linen Color
2		10/3	Leaf Beige
1	Novelty	1	Chili Brown
2		10/3	Leaf Beige
2		20/2	Linen Color

□ Means sleyed in one dent.

The above plan was sleyed in 2 inch sections across the warp. However, 2 ends of 10/2 Black were added for the right selvedge and 4 ends of the same were added to the left selvedge. The outer 2 dents of both selvedges held 3 ends each.

Basically, this variation is just like the other three variations; i.e., it contains the serrated ridges and vertical textured feel of the Lion's Paw fingers, and it adheres to the shell's coloring; but the difference is in the usage of the shell's neutral coloring. This variation is really not a true neutral, for neutrals are supposedly tones that have no tinge of color — like white, black and grey. (Greys tinged with pink or blue are not neutrals in the true sense of the word.) The term "neutral" is used loosely and as a means of indicating that the materials woven from this warp could be used as a background for practically any color combination. Because the shell contains browns instead of greys, browns were substituted for greys, and off whites of the shell were used rather than neutral white. Of course, a true neutral material could be woven with interesting modern effect by merely substituting neutral white for the off whites and neutral grey for the browns.

Fabrics from the following designs are rugged, and because of this they suggest materials for a den, playroom, mountain retreat, or ranch house.

Design 1

Weft for one yard:

Article	size	color	approximate yardage
314	10/2	441 Black	465
414	carpet warp	1330 Rust	114
105	1	Natura	l 114

Weave up plain with 2 shots Black, 1 shot Rust, 2 shots Black, 1 shot Natural, and repeat.

Design 2 used approximately 950 yards of Article 714, size 10/3, color 91 Leaf Beige, for weft for one yard. Treadle 1, 2, 3, 4, 5, 6, 5, 4, 3, 2, and repeat.

Design 3

Weft for one yard:

Article	size		ximate dage
714	10/3	91 Leaf Beige	152
414	carpet warp	1330 Rust	304
105	1	656 Chili Brown	152
305	Guimpe	Copper	90

Weave was plain in the order Rust, Leaf Beige, Rust and Chili Brown. The copper guimpe was wound around the Chili Brown novelty on half of the bobbins that carried Chili Brown. This was done so that Chili Brown/Copper bobbins could be alternated with plain Chili Brown bobbins. To wind the two yarns, the novelty cone was set on the floor with the copper tube directly above. Then the bottom yarn was brought through the center of the top tube and it and the top yarn were wound together on a bobbin. The top yarn winds around the bottom yarn.

Yes, it all began with a shell and a set of Lily yarn samples, but it doesn't have to end with the foregoing suggested variations and designs. Find an interesting source — perhaps the bark of a favorite tree, a polished section of a choice stone, moss after rain, skin formation of a snake (it's beautiful!), shells, microscopic enlargement of wood tissues, or a butterfly's wing, to name a few — and with a full set of Lily samples select yarns that simulate the coloring and texture of a chosen design. Warp a loom in such a manner as to catch the feel of any desired vertical or angular lines that the original design contains. With color, texture, various yarn sizes, and imagination, weave a pattern or design simulating the characteristics of the original design. Of course, the resulting woven design won't be a facsimile of the original, for who can duplicate nature? However, fabric woven from a design thus created not only is interesting and original and functional, but also affords the ultimate in weaving satisfaction to the creator.



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