SHUTTLE CRAFT

November PORTFOLIO 1957

SHUTTLE CRAFT

THE MONTHLY BULLETIN OF THE SHUTTLE CRAFT GUILD

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The Shuttle Craft Guild was founded in 1922 by Mrs. Mary M. Atwand operated by her until 1946. Mrs. Martin (Harriet) Tidball was ow	

director from 1946 to 1957. It is now owned and operated by Miss Mary E. Black and Miss Joyce Chown

Bedford, Nova Scotia, Canada

Associates

Harriet Tidball-Multiple-harness weaves-Kelseyville, California. Boris Veren—Book reviews — Coast Route, Monterey, California.

Photography

All photographs except those for Mrs. Tidball's articles are by Russell Heffler-Bedford, Nova Scotia.

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From WEAUER to WEAUER

For us, this "new venture" actually started in August after dozens and dozens of pages of correspondence to and from California. For you, the change-over became a reality when you received your August-September SHUTTLE CRAFT and read about it in the lengthy "Weaver to Weaver" column in that issue. In our separate letters to you then, each of us asked that members write to us here in Nova Scotia.

Now you have written us and we are more than pleased at the warm response shown by members old and new. Our warmest thanks to you for your encouragement.

This issue of SHUTTLE CRAFT brigns you articles on the Plain weave (both warp face and 50-50), Swedish Lace in disguise and continues with Mrs. Tidball's Summer and Winter series.

This series by the way, will continue into the new year and will be followed by more articles by Mrs. Tidball for advanced weavers.

We haven't forgotten our promise to continue the tapestry articles. They're coming, but SHUTTLE CRAFT just hasn't had enough room in it these past three months.

We would like to call your attention to our page "For Christmas Giving". These are all articles which will make fine gifts for handweavers, such as:

Drafting pens, fine line and wide line. The famous Rapidograph pens which Mrs. Tidball has offered to weavers for the past few years. These are a fountain type pen, and a Godsend to those of you like ourselves, whose ordinary pen nib runs dry in the middle of ruling a line. Drafting paper. We use this cross-section paper for all our drafts and draw-downs in SHUTTLE CRAFT. We have had it printed in convenient size to fit the regular $8\frac{1}{2}$ " x 11" page note book. Either 8 squares per inch or 10 squares per inch.

Lettering pen nibs. These are the broad square nibs used for filling in drafts and draw-downs on squared paper quickly and neatly.

Record cards, either plain or printed. The printed cards have spaces for all the information pertaining to your sample warp used; weft used; reed; sley; width of sample; draft; treadling, etc. We find these indispensable for all the samples we do. We use the plain cards for extra samples and weaving directions.

Reference tables. These are reprints of the tables enclosed with this issue of SHUTTLE CRAFT.

Speaking of gifts, don't forget Mr. Veren's excellent collection of weaving books—and, we may say, excellent service too.

Our slowness in getting our mailing back on schedule has caused us "pains in the head"—possibly similar to those mentioned in this month's "Weaver's Book Shelf". But with copy for the December SHUTTLE CRAFT going off to the printer this week, we feel confident that the pains will have disappeared by Christmas.

Joyce Chown

LOOM LANGUAGE

The Interior Decorating trade has been in a dither recently about a word-if one can judge by numerous articles in popular, trade and professional periodicals. The word is DRAPERY, DRAPERIES. The problem is—how shall we properly term the textiles which hang at windows? It is quite generally conceded that the word "drapery" means a more or less elaborately festooned window hanging. The word "drape" or "drapes" has never been acceptable among the knowing, as this is a verb used in the manner, "He drapes the draperies at the window." The trouble arises from the fact that windows are no longer elaborately festooned. Textiles are usually hung at windows in simple, straight folds; window textiles are more commonly translucent or transparent than elaborately heavy; and a single textile rather than two or three layers is now the style. "Casement" or "casement cloth" is sometimes used to refer to these translucent window textiles, but this implies that they fit the exact size of the window, which is seldom the case since they usually hang, when open, against the wall at the window side and extend to half an inch from the floor and often to the ceiling. A dilemma, certainly.

The conclusion seems to be that we return to the old-fashioned but general term CURTAIN, more specifically WINDOW CURTAIN. Now everybody is happy. If we are going to weave these things (I have yarns ordered for three new "curtain" projects myself) I guess we want to call them by the correct, at the moment, name.

- Harrist Tidball

OLD DRUGGETS

By Mary E. Black

From Webster's dictionary we learn that a "drugget is a rug having a cotton warp and a wool filling."

What Mr. Webster failed to add, possibly because he did not know, was that a drugget is a warp, or rep, face weave; that is a web in which the warp completely covers the weft or filling.

Another thing Mr. Webster failed to take into consideration is the many variations which entered into the weaving of the drugget by our pioneers. These variations were due to the circumstances under which the druggets were woven; the materials which were available and the use to which they were put, whether for parlor, bedroom or for stair-carpeting.

It is an adventure in itself to visit the old farm homesteads along the north Atlantic seaboard in search of old druggets. There are few remaining now but those which are still in use, having survived the distaste of a "younger generation" who replaced them with linoleum and store bought rugs, are still fresh and bright attesting to the weavers' excellent workmanship and mastery of dyeing.

If a complete study and recording of old druggets could be made the findings would fill a large book.

Seven pieces have been chosen from a collection for this discussion. Each one of these has its own distinguishing characteristics yet all conform to the general principles of drugget weaving. Several of these pieces are known to have been woven over a hundred years ago, so are of special interest. The word drugget has come, through general use in some localities, to mean both a method of weaving and a finished article, as in the case of the Swedish matter and the tapestry.

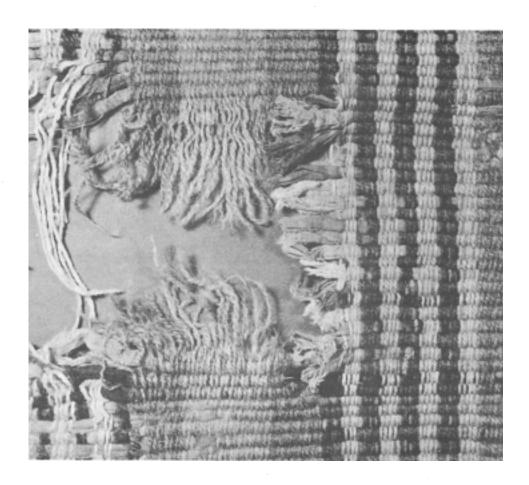
The color interest in a drugget lies in the vertical strips, and it is the arrangement of the colors and variations in the number of threads in each stripe which produces either an attractive or unattractive drugget.

The prime requisites for successful drugget weaving are: a sturdy loom with a good shed,—a rising shed LeClerc loom is excellent for this purpose; good warp, either a Lily 4/8 cotton carpet warp or Briggs and Little heavy 2-ply homespun yarn; a sturdy back and strong arms. A drugget must be beaten hard.

The warp must be very closely set, 4/8 carpet warp sleyed at 30 or more to the inch, 3-ply homespun at 28 or 30, and 2-ply at 36. To prevent rubbing or fraying of the wool and to facilitate easy action of the warp in the reed, double or preferably triple sley in a coarse reed. Drugget can be woven as successfully on a two-harness loom as on an eight or twelve as it is a plain weave; however, on two harnesses, the close proximity of the heddles not only wears the warp threads, but also makes for a rather heavy treadle action.

In spite of Mr. Webster's contention that a drugget has a cotton warp and a wool filling the samples being studied all have woollen warps with a variety of wefts. It is not for us to say who is correct; we however have evidence before us.

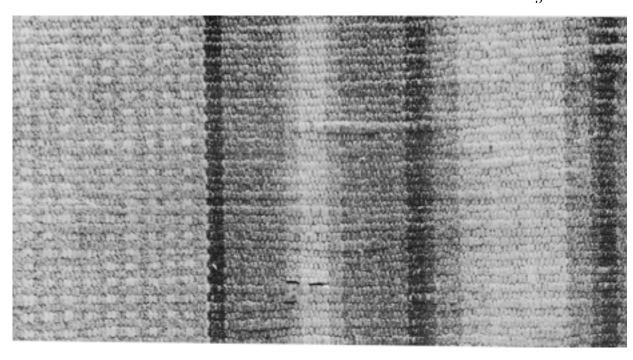
The first photograph, showing a badly worn place in the drugget is used here to show drugget construction. The warp is a mixture of 4/8 white carpet warp, which shows at the left of the picture and a two-ply homespun yarn, in a size comparable to the 4/8 cotton. The weft is of cotton carpet rags. The rags are quite irregular in size and roughly joined resulting in a lumpy web. The beating is irregular and the weft not completely covered. The warp colors, though badly faded now from use, are browns, tans and cinnamon brown wool alternating with the



white carpet warp stripes in the border. The centre of the drugget had wider stripes of mauve, (we hope this wasn't originally too bright a purple!) with pale grey, and greeny blue. These stripes do not repeat themselves in any regular order but are so laid out that the broader stripe—the one with the mauve—comes at the right hand side where it was joined to a second piece of drugget in such a way as to make this the centre of the carpet and the dominant stripe. This piece of drugget, incidently, was found hanging on a pasture fence. Where it came from and why it was there is something we shall never know.

The druggets in the collection are all approximately 30" wide. As many narrow pieces as were needed were sewn together to get the desired width.

Another coarsely woven piece (not illustrated) has a 2-ply homespun warp of many colors, and, a rag filling. In this case however the rags have been more carefully torn and sewn and the weaving done with more care. The colors are still bright and the stripes are the same on each side of the centre stripe. The yarns in the older pieces, with the possible exception of the scarlet, were undoubtedly dyed with vegetable dyes. In this piece there are madder red stripes, golden rod yellow and orange, and one stripe, the color of which could well have resulted from a combination of the dyes used for the above two; a pale green, then a natural grey mix stripe. While this sample has fewer colors than most druggets the colors are so arranged that it must have been very gay when new. When a natural grey yarn is mentioned it describes the mixture spun from wool, mixed in equal proportions from the black and white sheep. It is known as Oxford grey. Natural white which actually is cream color, refers to the wool as it is taken from the white sheep.



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The rags used for the filling were not only carefully cut and joined but had the edges turned in and pressed before weaving. These rags were dyed a dark brown. It is quite possible that the dye baths from the wools were all saved and mixed together and the rags dyed in this. It was a crime to waste anything in the early pioneer days, things were "too hard come by".

The history of this piece of drugget is not known but it is not thought to be as old as some of the other samples if judged by the wool used for the warp. It seems much too even and regular for handspun wool. Some small water driven spinning mills were known to have existed in the 19th century in this part of the country so it is thought that this wool may have come from one of them. It is the colors and their arrangement which attract and hold the attention in this sample. The yarn was apparently dyed by someone with a love for color and the knowledge of how to dye the colors they wanted. Throughout there is a subtle blending of color—a very dark brown, a medium and a light brown; an orange stripe flanked by a few threads of apricot; more dark and light brown threaded at random; a stripe of green starting with a very dark green on one edge ending at the other with a very light green, many shades of greens being threaded at random across the stripe yet so cleverly done that they suggest at a distance only three distinct shades. Next lies a gold stripe, flanked with very pale yellow then a return to the green stripes. same system of mingling the colors as used in the green stripe was also used for a second stripe of madder red, red and rose with a pale apricot centre stripe followed by a return to the reds. Thus there are three predominating stripes each approximately 3½" wide, one in blended browns and orange, a second in greens and yellows, and a third in the reds. This sounds rather awful but actually the colors are so well blended that they produce a charming result. In the centre of the drugget there is an 8" stripe bounded on each side by a very dark brown stripe of 8 threads. is possible this may originally have been black). The centre of this stripe is threaded 2 orange,* 4 grey, 1 yellow, 1 orange, 1 yellow, 1 orange. This is repeated from the* across the entire stripe ending with the 2 orange and 8 dark brown.

From family records it has been definitely established that the drugget shown on the cover is well over 100 years old. It differs from the others discussed in that both warp and weft are of wool, a coarse 2-ply for the warp and a fine 2-ply for the weft, both handspun and vegetable dyed. The weft is particularly interesting in that one ply is spun of natural black, and the other of neutral shades of tans, grey and light green. This combination of colors produces a subtle undertone showing through the warp which does not completely cover it. In studying these old druggets it is interesting to note the many ways in which stripes can be used.



When we stop to consider that the weavers of these druggets had little or no training in art or design the charming results they obtained are all the more amazing.

The yarns in this sample were dyed to achieve a variegated effect giving a somewhat similar result to that obtained in the last sample discussed. The wider stripes are of madder red, natural grey and scarlet probably dyed with cochineal. The next stripe is of tan; then grey; then a lovely blue-green alternating thread by thread with a very dark green. The next stripe of shaded light blue greens was probably dyed in the same dye bath as the dark blue-green. A narrow cream stripe lightening the whole area is followed by a second greyed blue-green, a dark green, a brown variegated, and a tan and cinnamon stripe. It is necessary to see the beautiful blending of these century old colors to fully apreciate them.

Probably the best of the drugget pieces studied is one of which unfortunately there is no photograph. The wool is a much heavier handspun wool than is found in any of the others. It is closer set with the result that the weft, a very tightly spun wool, does not show except in the few places where the drugget is worn. This combination results in a much heavier rug. The stripes in this piece are much wider than in the other and no attempt has been made to blend the colors within the stripes. The same colors appear in this piece as in the others, a wide cinnamon brown stripe predominating with stripes of varying widths of tan, orange, black, grey, green, light yellow-green with a pink orange flanking it on each side.

Among the druggets available for study was one set and woven as log cabin. The warp, as in the others, is of double ply homespun yarn, the weft alternating shots of wide carpet rags and a single strand of 4/8 carpet warp in grey. Three blocks, each a different color, are repeated in succession across the web. The first is of alternating threads of light green and tan; the second of madder with alternating threads of tan and brown between the madder threads. The third block is of light green with alternating threads of tan and brown between the green. The blocks are woven to square.

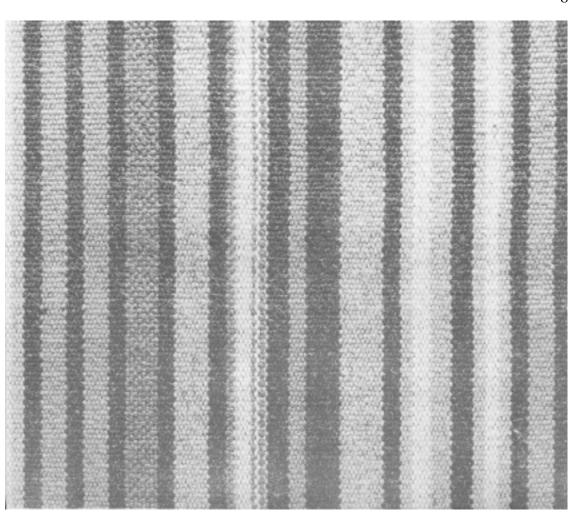
The last sample to be discussed is a modern drugget woven for stair carpeting. It is somewhat lighter in weight than the old druggets discussed yet is plenty heavy for the purpose intended. For warp a Briggs and Little heavy 2-ply homespun "wool in oil" was used. For filling, a fine 2-ply homespun yarn from the same source, in a dark grey. This sample was sleyed twenty to the inch, double in a 10 dent reed; for a firmer web it would be better to sley 24 or 28 threads to the inch, remembering to double or triple sley in a coarse reed. The colors used in this reproduction followed as closely as possible those in the old druggets, namely dark and light green, crimson (madder), scarlet, orange, and the natural greys and white. It has been noted in studying these old druggets that none of

them contain blue of any shade. One can only surmise that the blue from the indigo vat was too precious and expensive, otherwise it would have been used.

Imagine to yourself the maiden aunts who were held responsible for keeping the household supplied with linens; blankets; linsey-woolsey and drugget carefully tending the dye plants, which in many cases also supplied their medicinal needs. Or imagine these capable women hastening along the woodsy paths to gather barks; fungii; leaves; plants and flowers at just the right season to obtain the best results. Some of these were used immediately, others dried and stored for future use.

We can picture too, their pride when the new drugget came off the loom, the narrow strips carefully sewn together and the finished whole placed on the floor ready to be shown to visitors.

It is only occasionally that these old druggets can be found today, but with luck after months of carefully tracing down this rumor and that the seeker is rewarded. Invariably these still existing rugs have been given special care and attention over the years and viewing this handiwork of some long departed weaver we can only exclaim, "How lovely!"



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SUMMER AND WINTER SEQUENCE WEAVES

FOR CONTEMPORARY UPHOLSTERIES

From Fabrics Designed by Nathallie Fitzgerald

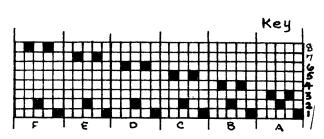
By Harriet Tidball

Techniques which are conveniently labeled the SEQUENCE WEAVES are an application of the classical treadling sequence of one threading system to an unrelated threading and tie-up system. Unexpected interlacement patterns of great beauty and an elusive, mystic quality often result from this method, and weavers experimenting for new textile designs find the sequence weaves thoroughly fascinating.

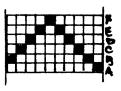
Of all weave systems, the Summer and Winter provides the most fruitful scope for sequences, its flexibility due to the close interlacements and to the opposing character and regularity of the x and y tie-downs threaded on harnesses 1 and 2. These weaves were receiving especial attention in the Shuttle Craft Guild Studio during 1950 and 1951 when Miss Nathallie Fitzgerald, now of Seattle, Washington, was associated with the Guild. Miss Fitzgerald has continued experiments with the sequence weaves and has developed from them a remarkable series of clothing and upholstery fabrics, some of which she is here sharing with Shuttle Craft Guild subscribers.

In her work Miss Fitzgerald has followed the system then in use in the Shuttle Craft Guild studio of beaming a very long warp of fine thread in an adaptable color and threading it to a Summer and Winter six-block Twill or Point Twill Profile, a single unit on each block, on an eight-harness loom. This system makes it possible to weave many yardage lengths on a single warp, in a wide range of designs which would require individual threadings if set up on fewer harnesses. The sequence weaves are generally most effective on only two or three blocks, requiring but four or five harnesses. But by threading six units on six different pattern harnesses, two and three-block patterns are formed by combining harnesses in the tie-up so several will form a single block. To make such tieups, the only thing one need remember is that any pair or group of harnesses which are combined to form a single block must always be raised together or left lowered together, and none of them can be operated alone, either up or down. When a six-harness Twill is used as the Profile for an eight-harness Summer and Winter threading there are six units available for combining in a single pattern repeat; when a Point Twill draft is used, there are ten units in a single pattern repeat.

In the thirteen textiles on three warps selected here from Miss Fitzgerald's remarkable work, two of the warps used the six-harness Point Twill draft as the Profile and one used the six-harness plain Twill. The diagram shows the two eight-harness threadings in Profile with the draft unit key, and two simple Profiles derived from each, with the eight-har-

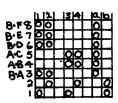


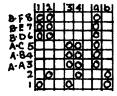






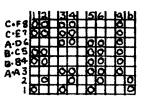


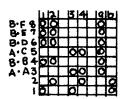






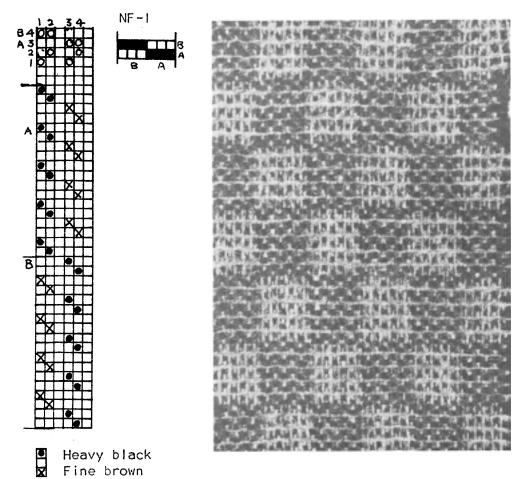




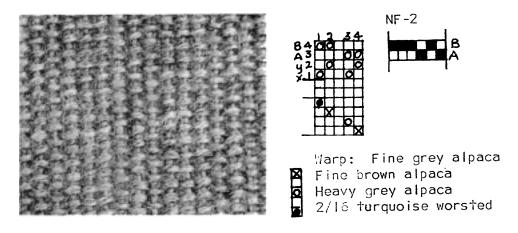




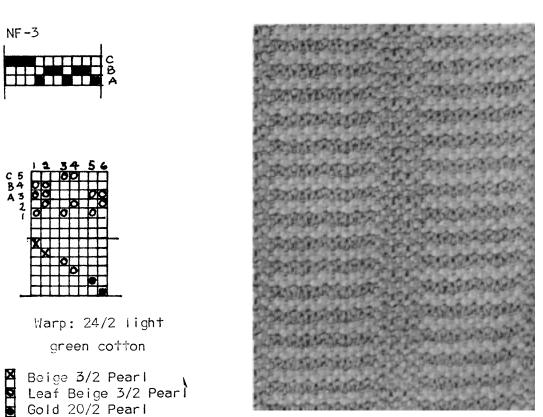
ness tie-ups for producing each pattern. A comparative study of the diagram will reveal to the interested weaver the system for making such combination tie-ups. Under the details for each of the thirteen textiles, the drafts and tie-ups are given as though the threadings had been made on the minimum number of harnesses, for the convenience of weavers with four and six harnesses only.

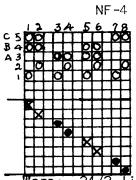


The first textile, NF-1 (N.F. for Nathallie Fitzgerald) is familiar to many weavers as it was widely photographed as purchase-prize award winner for the Northwest Craftsmen's Exhibition of 1956. The warp is a very fine natural grey alpaca set at thirty-six ends per inch. Weft is natural brown alpaca of the same size and heavy black alpaca. NF-2 is an upholstery woven on the same warp but using a natural grey heavy alpaca and turquoise 2/16 worsted as weft.



NF-3 through NF-8 are upholsteries woven on a warp of 24/2 cotton (Lily Article 314) light green, set at thirty-six ends per inch. Wefts are mainly 3/2 Pearl cotton and 20/2 Pearl cotton (Lily Article 114). NF-8 uses 2/18 worsted (Bernat Fabri) as weft.

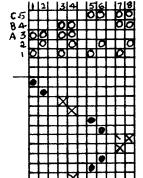




Warp: 24/2 light green cotton

Leaf Beige 3/2 Pearl
Gold 20/2 Pearl



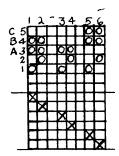




Warp: 24/2 Light-green cotton

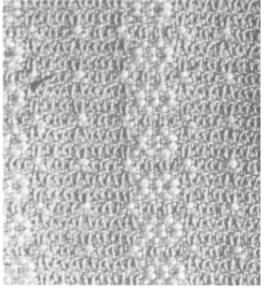
Light-blue 20/2 Pearl Light-blue 20/2
Gold 3/2 Pearl

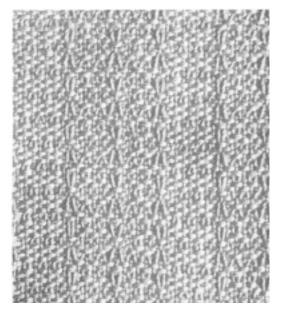
NF -6

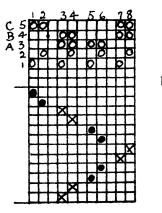


Warp: 24/2 Light-green cotton ☑ Gold 20/6 Pearl Floss

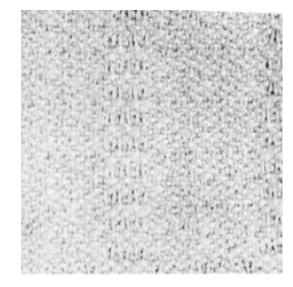








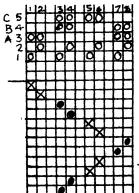
NF -7



Warp: Light-green 24/2 cotton

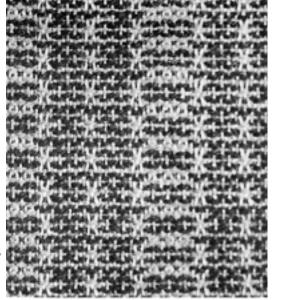
Grey 3/2 Pearl

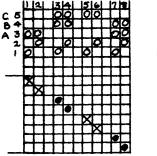
The Leaf Beige 3/2 Pearl



NF -8

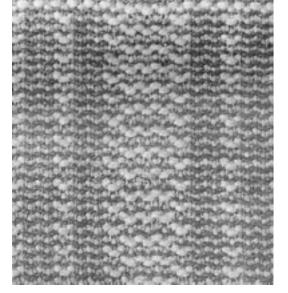
Warp: 24/2 Light green cotton Grey-green 2/18 worsted Dark-green 2/18 worsted





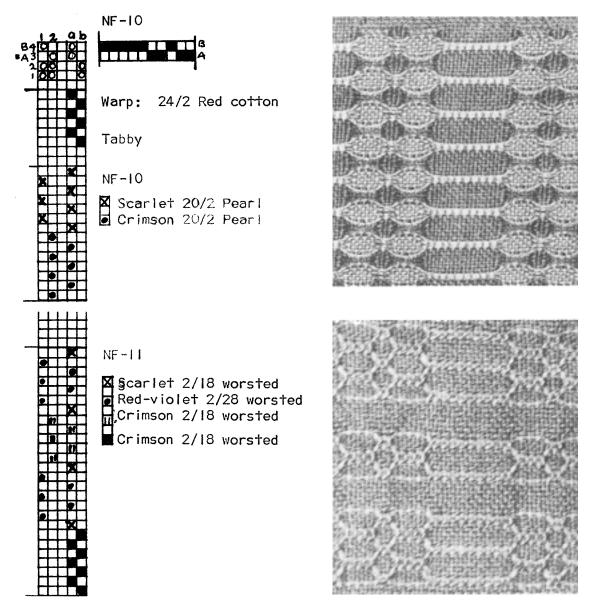
NF-9

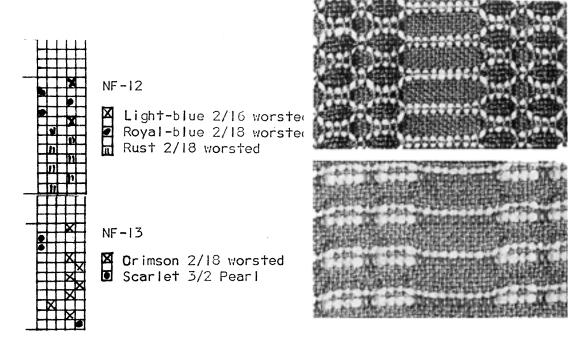
Warp: 24/2 red cotton Red-violet 2/28 wors Scarlet 2/9 worsted Red-violet 2/28 worsted



The last five textiles are on a warp of 24/2 red cotton set at thirty ends per inch. Wefts are mainly 2/18 worsted, 2/28 worsted and 3/2 Pearl.

It will be observed from the treadling directions that the sequences used in weaving the first nine textiles are twill or broken twill. The last four textiles, all honeycomb variations, are woven on the Spot Bronson sequence. Notice that for all of these the x and y tie-down harnesses are tied to operate together so that in actuality these four textiles could all be woven on a three-harness irregular Spot Bronson threading.

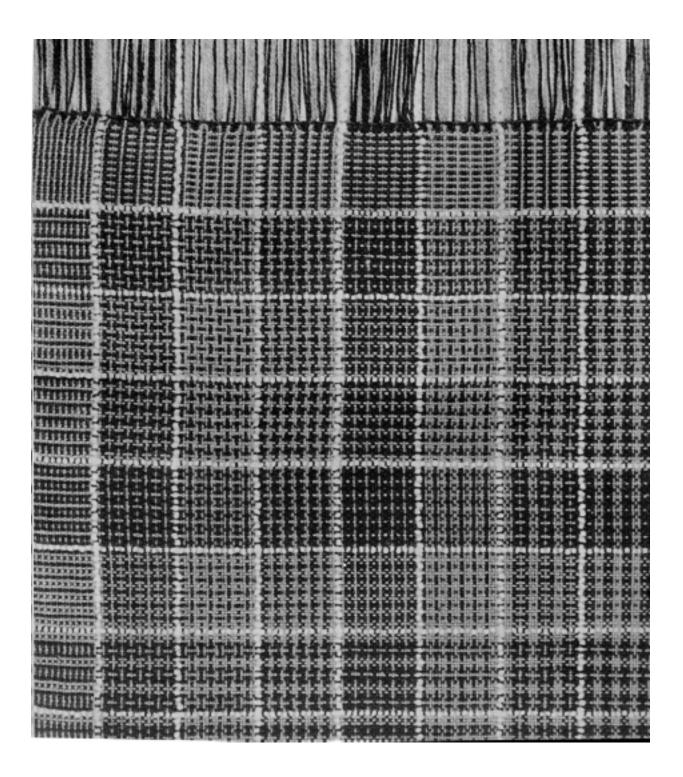




In their deceiving simplicity these upholsteries carry the authority which is almost a definition of sophisticated taste. Elusive stripes and vague all-over patterns, which alter visually when viewed from different angles, these fabrics achieve their quality from intricate interlacements and close color harmonies.

To check the current trend in upholstery fabrics, we made a recent visit to the contemporary furniture department of the coast's largest fine furniture store. Of hundreds of upholstered chairs and sofas shown there, not one had a rough or nubby fabric. No fancy spinnings were seen and the roughest textile was of Dupionni silk, and merely the natural roughness present in this spun silk and in moderately slubby linens. The new upholstery fabrics are smooth and pleasant to the touch. They will not trap dust and soil nor make clothes shiny through abrasion, nor will they become shabby quickly as the rough fabrics do. The yarns composing them are smooth and mainly the natural fibers with cotton leading, and also worsted, silk and linen. Shiny rayons were not in evidence, nor was there the tiniest bit of metallic in any. Textures were fine-grained rather than coarse, with subtle instead of brash contrasts, usually of one or two, occasionally three materials. In many the smooth yarns were used as Miss Fitzgerald has used them, to emphasize interlacement pat-The dominant design was stripes, either horizontal or vertical, but subdued through close color harmonies and often stripes were crossed by a differing stripe arrangement to give unbalanced plaids, but always vague or shadowy. Many of the colors were strong, but the harmonies were largely monochromatic or analogous with colors softly blended or texturally related as they are in Miss Fitzgerald's fabrics.

It is our hope that these new, ultra-contemporary upholstery designs by Miss Fitzgerald will be a useful guide to the weaver who is ready for the complete change-over of style in decorating fabrics.



Two-Color Plain Weave Gamp

Designed and woven by

Evelyn Longard, Halifax, Nova Scotia.

A TWO-COLOR PLAIN WEAVE GAMP

We had intended to pursue the subject of gamps every alternate month, but when we studied our two-color plain weave gamp, the resultant samples seemed to lend themselves best to coat, suit and dress materials—so we wrote this article to accompany our October Fashion Report on wool weaving. But alas—no room in October. So here it is now.

For this sampler, we chose two colors of 2/8 cotton—black and paddy green—set 24 threads per inch (sleyed double in a 12 dent reed). We wound 24 threads for each square of pattern and one heavy white rayon frill (sleyed 1 per dent), the latter so we could see each pattern more easily at a glance.

The threading was 4,3,2,1 and the treadling 1,3 and 2,4 alternately in a balanced weave. The weft color order changed with each pattern block.

Threading

Stripe (1) 1 black

1 green

alternated for 24 threads

1 white

Stripe (2) 1 green

2 black 1 white repeated for 24 threads

Stripe (3) 1 black

2 green 1 white

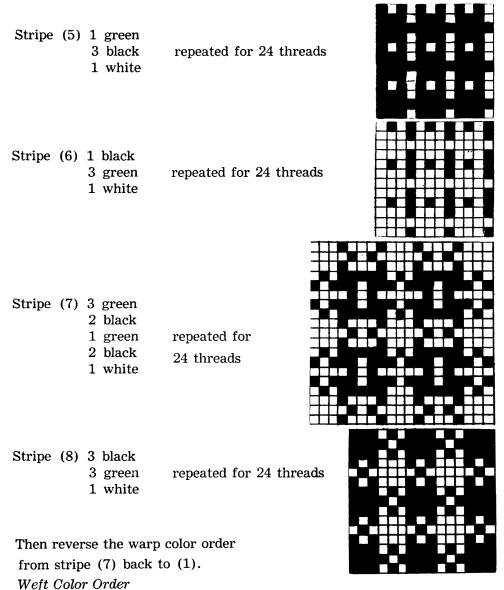
repeated for 24 threads

Stripe (4) 2 black

2 green

repeated for 24 threads

1 white



This will be the same as the warp color order, that is: stripe (1) weave 1 black and 1 green alternately for 24 threads, weave 1 thread white; (2) weave 1 green, 2 black and repeat for 24 threads, weave 1 thread white; (3) weave 1 black, 2 green and repeat for 24 threads, weave 1 thread white; and so on for the eight squares—and then reverse back from square 7 to 1 again.

Each square must be woven in a balanced or 50-50 weave and in the same color sequence as the warp was threaded.

8							
	7						
		6					
			5				
				4			
					3		
						2	
							/

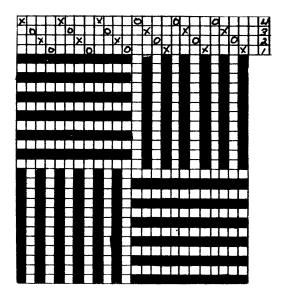
The squares numbered 1 to 8 in the diagram are the squares which show the result of this weaving sequence. All other squares show variations, some of which are pleasing and some of which are plain uninteresting.

There are of course other thread combinations which would lend themselves to a two-color plain weave gamp such as: 4 dark, 1 light; 4 dark, 2 light; 4 dark, 2 light, 2 dark, 2 light and so on. But as we found several good thread combinations in this relatively simple gamp, we will discuss these only.

Square 1 shows half of an old friend, that is, Log Cabin. It is a very handy little combination of threads for dozens of projects in linen, cotton or wool. In wool we would suggest using it for fine suiting using a 2/20 or 2/16 Botany set 28 threads per inch. The color sequence will have to be changed in each square as shown:

that is, if the first square is threaded a dark, a light, a dark, a light and so on, then the second square must be threaded a light, a dark, a light, a dark to the end of the square. The third square will be in the same color sequence as the first, and the fourth as the second. This will bring two light-colored threads between the first and second blocks and two dark-colored threads between the second and third blocks, and so on across the warp.

The weft is woven in the same way, that is: the first block is woven a dark and light alternately and the second block is woven a light and a dark alternately thus producing the little Log Cabin squares.



We would suggest threading 16 threads in each block across the width of the warp, and then weaving in the same order. This will produce approximately $\frac{1}{2}$ " squares.

Square 2. We have seen this combination using the same 2/20 Botany (Searle Weaving Service) set at 26 to 28 per inch as mentioned above. The light thread was a natural white and the dark threads were dark almost charcoal grey. It was woven for a man's lightweight jacket material, and excellent quality it was too. Try some other variations. For example, thread one white, one dark blue, one navy blue; or, one white, one dark heather green, one very dark green; or, one beige, one heather brown, one chocolate brown. Try weaving the green combination on the blue combination; or, the blue on the brown. Or try weaving any one of these color combinations in Briggs and Little's one-ply homespun (Tranquillity Studio) set at 18 threads per inch, and woven 18 threads per inch.

And for a car coat, try doubling the one-ply homespun, so that you would actually have 4 dark threads and 2 light instead of 2 dark and 1 light. Thread this double in the heddle and wind the weft double in the shuttle.

Square 3 is just the opposite in coloring to square 2 and the same suggestions hold for both squares. This color combination also lends itself to fine woolens. If you're not afraid of bright colors try two threads scarlet and one burgundy (it may sound awful, but the result is sparklingly bright); or, two threads bright blue and one of dark bright green. Both these color harmonies result in stained-glass brightness. Or for less bright colors try two threads light mauve, one thread purple; or, two threads glacier green and one thread dark green.

Use your favorite dress weight wools: 2/16, 2/32; Afghan or Fabri. Square 4 is excellent for sports jacket tweeds. Thread in 2 dark green, 2 natural white in one-ply homespun, set at 18 threads per inch. Weave the same colors in the weft. Or weave 2 white, 2 rose in the weft; or 2 white and 2 blue.

Square 5 and square 6 could be woven in similar weights and colors as squares 2 and 3. By the way, when cutting either of these two, notice that there is a very definite right and wrong side. What appears as a weft color stripe on one side of the fabric, is a warp color stripe on the reverse, and vice versa. In making up a garment, the results would be disastrous if the material was not cut out correctly.

Square 7 and square 8 are both somewhat bolder, since the color arrangements have produced larger checks. Weave these either in a fine worsted for a tailored dress or a heavy 1 or 2-ply homespun for the big and bulky coat. Make the colors muted or bright for whichever effect you desire.

So far we have spoken of the possibilities of only 8 out of the 64 squares and in only one material—wool. However, we think the gamp has again shown its worth. We'd like to pursue the subject further and we'd like to think that some members will find other uses in other yarns and threads for some of the other variations in this gamp. There are still 56 squares to go and several materials. The thought is staggering.

A CELLULAR BLANKET WEAVE

By Joyce Chown Mary E. Black

If you are one of those fortunate weavers who have crossed the Atlantic on either the Queen Mary or the Queen Elizabeth you will already know about these warm cellular weave blankets because you will have slept under one.

Only recently introduced to American and Canadian markets the weave of these cellular blankets follows the precept embraced in the cotton mesh undershirts worn by mountain climbers, Polar explorers and skiers

One explanation given for the secret of the extraordinary warmthgiving properties of the cellular weave, or knit, is that the holes collect air and act as insulators against outside cold, thus keeping in the natural body heat.

These blankets are much lighter in weight than a closely woven blanket, are easier to wash and require slightly less wool. For those who do not care for an electric blanket they are probably the answer to warm sleeping. While we have not seen one of these blankets closely enough to analyze the draft, we do know that it is a grouped thread weave. As we discussed the weave, it occurred to us that perhaps some of our less experienced weavers, tired of plain and twill weave, might like to progress to something new and different, to a weave which would challenge their latent abilities.

Accordingly, we have worked out the directions in detail. We suggest that first you set up a sample in order to clarify the sleying method in your mind and to get the feel of the beat which is most important.

For our sample we wound a warp of 100 threads, 1 yard long of Lily Mills weaving wool, article #110. This material is quite suitable for a baby blanket or afghan.

In the interest of lightness we used a 10 dent reed, sleyed as shown in the threading directions. As these are a bit complicated they are given in written rather than in the usual graphic form.

Threading and sleying directions

Right border:

thread heddles 1,4,1,4,1,4 — sley double

Centre of sample:

block A

thread heddles 1,2,2,1 — sley in one dent

thread heddle 4—sley in one dent

thread heddles 1,2,2,1 — sley in one dent

skip next dent

block B

```
thread heddles 4,3,3,4—sley in one dent thread heddle 1—sley in one dent thread heddles 4,3,3,4—sley in one dent
```

skip next dent

Repeat blocks A and B until all threads except six have been threaded. *Left border:*

thread heddles 1,4,1,4,1,4 — sley double

Tie-up

```
tie harnesses 1 and 2 to treadle 1
" " 1 and 3 " " 2
" 2 and 4 " " 3
" 3 and 4 " " 4
```

Treadling

This weave requires careful beating, and will present a challenge to the beginning weaver. However, with care and practise there is no reason why the result should not be satisfactory. The weft is pressed back into position and not beaten in the usual way. Edges are difficult at first, especially where the shuttle is turned around the edge thread on the 1,2 and 3,4 harness shots. If edges are very bad they may be bound with blanket binding.

A true tabby, or plain weave, is not possible with this threading because of the double threading on harnesses 2 and 3 where the threading reverses. This double thread shows up in both end and side borders. This is because it is a balanced weave.

Enter the shuttle from the left: treadle 3 and 2 alternately until the width of the end border matches the side border.

BLOCK A

treadle 3

treadle 1—twice. Press the first weft shot back in place, insert the shuttle between the 1st and 2nd warp threads on the right and pass it through to the left. Press weft back with the beater against the 1st weft thread lying in the same shed.

treadle 3

These four weft threads comprise one block and should lie closely together.

BLOCK B

- treadle 2—Press the weft back toward the fell leaving a space between it and the last thread of the A block.
- treadle 4—twice, inserting the weft in the same manner as for treadle 1 in the A block.
- treadle 2—Close the shed and press the B block threads closely together and back toward the A block threads until the open spaces between the threads form a square. See photograph.

Watch the border and if mistakes in treadling or beating are made they will show up here.

End sample with a border as at the start.

The sample, when removed from the loom and steam-pressed should be soft and pliant.

For Christmas giving plan and weave a baby blanket or afghan in this weave. A satisfactory size for a crib blanket is $36'' \times 54''$ and for an afghan approximately $43'' \times 60''$. To obtain a 43'' finished width set the afghan 45'' wide in the reed.

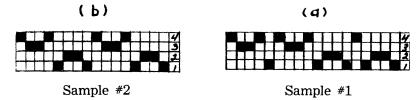
If you like to sew, weave material for a bed jacket. The amount of material needed can be figured from the bed-jacket pattern. Woven with side borders and a border at the start and finish, the jacket can be made up with plain borders down the fronts and at the bottom. Use Lily weaving wool, article #110 in white; white and pale pink; two shades of pale pink or two of pale blue. This material is not pleasing when woven of contrasting colors.

The sleying used works out to $22\frac{1}{2}$ threads per inch (4 in first dent, 1 in second dent and skip a dent in a 10 dent reed). For the bed jacket, figure the amount of yarn, length of warp and number of threads needed by the usual formula.

Sample #2

The Beriau, Marguerite Davison and some of the Scandinavian pattern books give drafts for grouped thread weaves. For the second sample a heavier yarn was used—a 4-ply fingering knitting wool with a fairly tight twist; or, Briggs and Little's finest 2-ply white homespun could be used for a sturdier bed blanket.

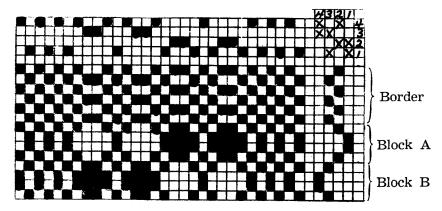
The draft for this sample is almost an identical twin to that used in sample #1.

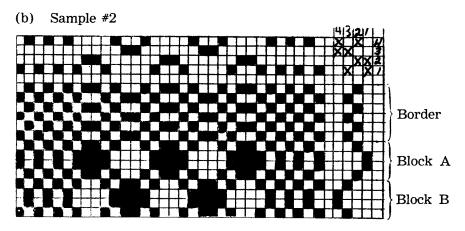


Both samples are made up of two blocks, A (1,2,2,1) and B (4,3,3,4) with sample #2 being threaded block A, block B throughout and sample #1 threaded block A twice (with one thread on harness 4 to separate the two A blocks) and block B twice (with one thread on harness 1 to separate the two B blocks) and repeated throughout.

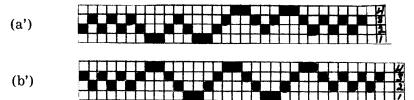
The selvages are threaded the same in both samples, i.e. 1,4,1,4,1,4 and the treadling is the same in both samples: border 24 and 13 alternately; block A 24,12,12,24; block B 13,34,34,13.

(a) Sample #1





It is interesting to note that these same drafts are often written as follows:



The results of the weaving will be exactly the same as for drafts (a) and (b). The difference is that drafts (a') and (b') are written on opposite harnesses to those in (a) and (b). And, there will also be a change in the treadling, which becomes: border 24 and 13 alternately; block A 24, 34, 34, 24; block B 13, 12, 13.

The 4-ply fingering yarn was sleyed single in a 15 dent reed or the Briggs and Little 2-ply sleyed single in a 12 dent reed. The threads were not grouped together in the dents, and yet a handsome "cellular" effect was produced, though the "cells" were not quite as pronounced as in sample #1. The beat, as in the first sample, must be light to achieve the open squares in the pattern area and a balanced or 50-50 weave in the border.

For the $43^{\prime\prime}$ x $60^{\prime\prime}$ afghan (set $45^{\prime\prime}$ in the reed), the following draft and treadling directions could be used:

Warp: 4-ply fingering knitting yarn. Weft: same or similar weight as the warp. Same color as the warp or different color of equal value.

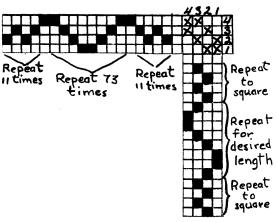
Reed: 15 Sley: single

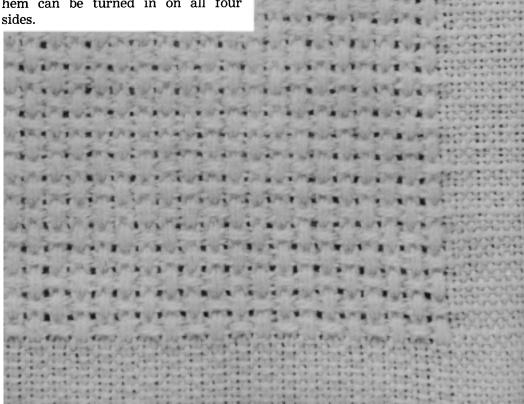
Width: 45"

No. of threads: $45 \times 15 = 675 - 1 = 674$ (one thread subtracted to fit draft) Threading order:

Right border 45 threads or 3" width Pattern 584 threads or 39" width Left Border 45 threads or 3" width Beat: Very lightly. Must be a 50-50 weave.

If desired, the right and left borders may be planned wider so that a hem can be turned in on all four sides





26



THE WEAVER'S BOOK SHELF



by Boris Veren

An exchange of letters from Boris Veren to Harriet Tidball: "Dear Harriet:

This is an S.O.S. I am leaving in one hour (this is 4 o'clock in the morning) for a two week vacation as non-paid assistant fire-watcher in the El Dorado National Forest. In cleaning up my cluttered desk, I find an urgent letter from Mary Black asking for next month's book review. I had forgotten that although I no longer was the Business Manager of SHUTTLE CRAFT I was still, by invitation, their book reviewer. cannot change or postpone my plans. Now, do help me. I have here on my desk part of your letter in which you say of the book you found on my shelves of new arrivals, "The Forbes book: STUDIES IN ANCIENT TECHNOLOGY is magnificent. I don't want to lay it down. Aside from the fact that the little stories it tells are fascinating, one gleans through reading them many of the reasons for things which we do, and a better understanding of the manipulation of threads both mechanically and These points, not through their actual delineation, but through the depth of perception about textile construction which the book gives. The only previous book on this subject I know is MAN IS A WEAVER by E. Baity, which is a frothy, dull, unauthoritative discourse by comparison'. Will you, Harriet, please have a review of this book ready for me on my return so that I can spend the first few days taking care of acculmulated correspondence? Thanks. Boris".

From Harriet Tidball to Boris Veren:

"Dear Boris:

Here are some comments on the 'Technology'.

STUDIES IN ANCIENT TECHNOLOGY, Vol. IV, by R. J. Forbes, Netherlands, 1956. *Studies in Ancient Technology* may sound a bit dull, but the title, though factual, is deceptive. The book proves that history and technology can be absorbingly interesting.

This is a non-romanticised history of the use of natural fibers (wool, linen, cotton, silk and the minor fibers) in textiles, and the early history of the textile arts including dyes and dyeing, spinning, basketry, cloth and tapestry weaving, fulling, and the tools used in the textile arts. The author modestly states, 'it is better to admit that we do not know the actual story of the origins of textiles and that like other cultural developments the technical advances in weaving may have proceeded at very different rates and even quite independently in different areas'. Therefore, he adheres to tangible and documented facts only giving a picture uncluttered by theories and guesses. His sources are the known remains

of textiles—those few which have been preserved from Paleolithic times through the period of the early Christian centuries—identified and authenticated imprints of early textiles, drawings and paintings from archeological sites, references to textiles and their production and textile trade in early inscriptions and manuscripts. Although the text is thoroughly documented and referenced, the author's tact has placed the references at the end of each section where they do not interfere with the flow of the narrative.

The entire book is good and interesting reading. But a person with a particular interest in any of the single subjects such as fibers, threads and yarns, dyeing, spinning, fulling and finishing, weaving, basketry and mats, will find these sections peculiarly satisfying.

There are things to be learned from this account of early textile arts aside from the historic facts presented. One learns the reason for 'S' and 'Z' twist yarns and the proportion of attention which should be placed on this technical detail. One sees the reasons for the use of the horizontal and the vertical loom which may help in the use of one's own equipment. One learns the wherefores of warp tension and weft tension differences and can draw parallels which will help use tensions creatively to produce desired effects. Thus, as with any good book, the thoughtful reader will find guides which are not actually laid out by the author, but which analysis extends through association and application of the basic facts presented. Harriet."

What a life saver! All I have to say in conclusion is that the book is in stock, and is priced at \$6.75. You will note that the book is published in the Netherlands. Fortunately for American and Canadian readers, the text is in the English language. There are 257 pages, 1 colored frontispiece, 36 illustrations. I am now in the midst of the book and I agree with Harriet. It certainly should interest all textile students and weavers who wish to know more of their craft's heritage. The bibliography will make any scholar deliciously mad! And for weaving guilds, here is material galore for several programs of historical lore that is not too well known.

I wish to thank all of you who have sent me orders for the Mary Black NEW KEY TO WEAVING. I had written in my original review of the book that it would probably be off the press by the time the August-September SHUTTLE CRAFT was ready. Such is not the case. My love for printers has not increased by these continued delays and postponements and today's mail brings the irritating news of another delay. But I will let Bruce Publishing Company's whipping boy Bill Connolly tell you about it by reproducing his letter to us dated October 16:

The Bruce Publishing Company Milwaukee 1, Wisconsin

October 16, 1957.

Mr. Boris Veren Shuttle Craft Coast Route Monterey, California Dear Mr. Veren:

When I was a youngster I used to have a great deal of admiration for Tom Thumb. Like all children I had quite a vivid imagination and I often wished that I could be another Tom Thumb, or even a leprechaun from the green island of Ireland. As I grew older this desire disappeared, maybe when I began to face reality my imagination took a back seat. Now that I have become a man I suddenly reverted back to my childhood desires, not only do I wish I could be another Tom Thumb but I wish I were an invisible man. Do you know why? Because of a book we publish, NEW KEY TO WEAVING.

Two years have passed since I first informed our book dealers that the book would be available soon. Soon is a very funny word, so I had to become more specific. For the last year I have been saying that the book will be available within six months, five months, four months, and so on, still no KEY TO WEAVING. You can imagine how much embarrassment this has caused. There is one happy thought, however, I have been told by the Production Department that the work has finally been completed and we can look forward to books within the next six to eight weeks. This is not a promise simply a report.

I don't think I have ever seen more correspondence in my life than I have concerning this particular title. Each back order we are holding has caused at least one pain in the head. Soon I hope to go home with an eased conscience and no more pains. Believe it or not I even had a reaction from your article in SHUTTLE CRAFT. A number of orders have arrived since you mailed this out, each one inquiring as to the exact printing date of NEW KEY TO WEAVING. This I promise: as soon as we get stock I'll rush copies out to you Special Delivery our expense, so please forgive me for all my past sins.

We appreciate your interest in NEW KEY TO WEAVING and will do our outmost to make your sales become a reality.

Cordially,
THE BRUCE PUBLISHING COMPANY
Bill Connolly
Order Department

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

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

To help the prospective purchaser better evaluate any single item with relation to his own needs, most of the advertising notes have been written by the Shuttle Craft Guild rather than by the manufacturer or dealer. Questions about anything listed are invited, if further help is needed in making appropriate selections, and should be directed to the Shuttle Craft Guild, Bedford, Nova Scotia, Canada.

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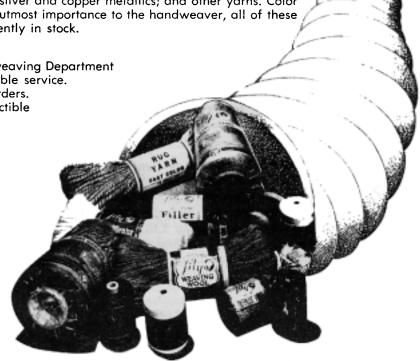
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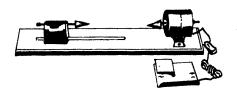
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FOR A



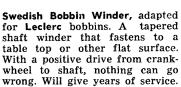
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HARPER & BROTHERS, 49 East 33rd Street, New York 16, N. Y. HANDWEAVING FOR PLEASURE AND PROFIT, by Harriette J. Brown, 1952, 283 pages, clothbound. A guide to two harness weaving for beginners and advanced weavers. Excellent illustrations. \$4.50.

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