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Paul Bernat, Editor

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THE TEXTILES of TIMBERLINE LODGE

by MARY ELIZABETH STARR

Photographs courtesy of Oregon W. P. A. Art Project

Worthy of pilgrimage by America's hand weavers are the beautiful hand woven textiles at Timberline Lodge on Mt. Hood near Portland, Oregon. They are an expression of the best in modern American design. But so is the entire lodge for that matter and to speak of the textiles only would be to tell only a part of the story.

Timberline Lodge was built by the W. P. A. in 1937. That in itself means little for what community cannot boast at least one W. P. A. structure? But in Timberline Lodge the insight of architecture and the skill of craftsmen seem to be welded into one with nature's grandeur. Mt. Hood, loftiest peak in Oregon, and one of the grandest in the Cascade range, seems to belong to the city of Portland. One seldom sees a picture of the city without Mt. Hood in the background. It is so easily reached from Portland that with our increasing interest in winter sports in general and skiing in particular a lodge on Mt. Hood seemed a very logical thing. The location, 6000 feet elevation on the southern slope of Mt. Hood is certainly a well-chosen one. One can stand on the front terrace of Timberline Lodge and gaze over the lesser Cascades stretching endlessly to the south with

Mt. Jefferson's symmetrical cone rising distinctly over a hundred miles away. But Timberline is not just another mountain inn.

Timberline Lodge was built without precedent. Its architecture is unique and has been christened "Cascadian". The ski lounge on the ground floor and the main lounge of the floor above it are six-sided, taking their shape from the mammoth hexagonal chimney which towers through the center of the rooms. Huge fireplaces grace the alternate sides of this pylon to provide ample fireside space for many guests. The shape of chimney and lounge are echoed in the shapes of tables, couches and lamp bases.

"Timberline Lodge is unusual not only because of its lavish use of indigenous materials but also because of the wide scope it has given to the creative and inventive talents of native artists and craftsmen." These words are from a federal bulletin which deals largely in dollars, man-hours, dimensions and board feet — probably to provide answers to those innumerable questions "how much?" and "how many?" which are said to be the only questions Americans ask. Even the section entitled "Art" gives statistics — the number of pieces of wrought iron used as andirons, lighting fixtures,



View of the main lounge showing the hexagonal chimney, one of its three fireplaces, and the skillful recalling of the architectural shape in the table tops and couches. The generous use of wrought iron can be seen in the furniture and building braces, andirons, lamps, light fixtures, ash trays and the gates to the dining room. Just faintly visible through the gates are handwoven curtains.

furniture braces and grill work — the 130 watercolors which hang in the guest rooms, depicting thirty-seven varieties of local flora — the 119 hooked rugs in thirty-six designs using forty-five color combinations. The handwoven textiles are described only by the following two sentences: "With warp of Oregon flax and weft of Oregon wool, 136 yards of curtain material were woven by hand for use in the dining room. Hand woven are also 322 yards of material made into fifty-two bed spreads, and 564 additional yards required to upholster the chairs, benches, couches and stools of the guest rooms and main lounges."

One's impression on seeing Timberline is that surely some master mind did the planning and some master hand guided the chisel, torch and shuttle to produce such perfect harmony and keep everything on the same magnificent scale. A harmony such as is seldom seen exists between the lodge, its furnishing and its setting. Only an artist could have the fine feeling for proportion that characterizes Timberline Lodge.

That artist is Mrs. Margery Hoffman Smith. Trained as an interior decorator and widely traveled, Mrs. Smith was an excellent choice for designer. As Assistant State Director of the Oregon Art Project she was responsible for the design and execution of all the furnishings. She has a knowledge of all the various crafts used in Timberline. She made her designs and at the same time taught women to hook rugs using cuttings from sewing rooms and cast-off

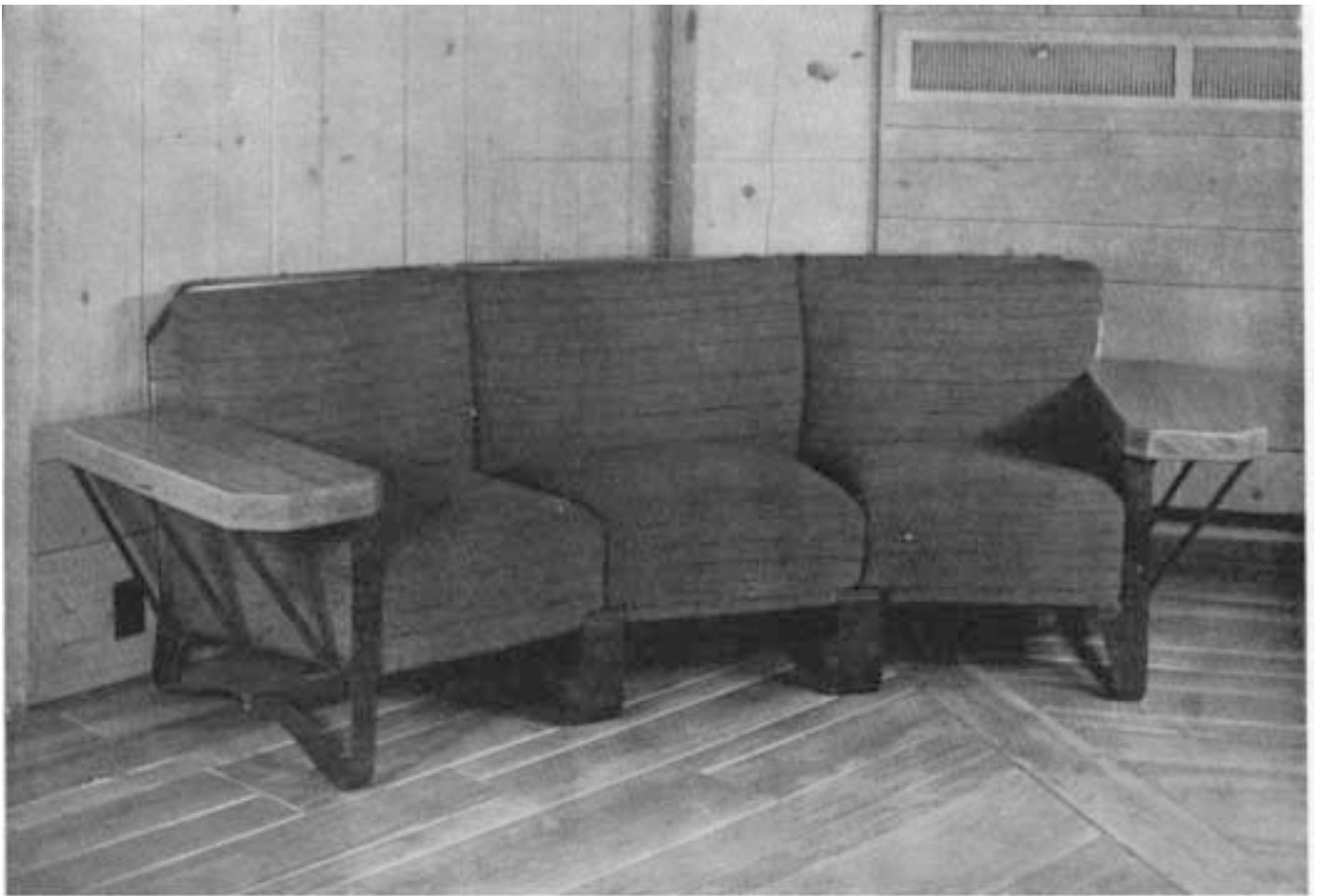
apparel and blankets from C.C.C. camps.

She delved into Indian lore and early history and made designs for the curtains of sail cloth which are used in the main lounge and guest rooms. She also used floral forms for these curtains—bachelor button, blue gentian, anemone, Solomon seal, trilium and others. In fact, many of the rooms are designated by name rather than by number. In the Trilium room, for instance, one would find the trilium applied in an all over pattern on the sail cloth curtains, an etching or water color of triliums over the fireplace, stylized trilium motives in the restrained carving on the furniture and in the hooked rugs on the floor.

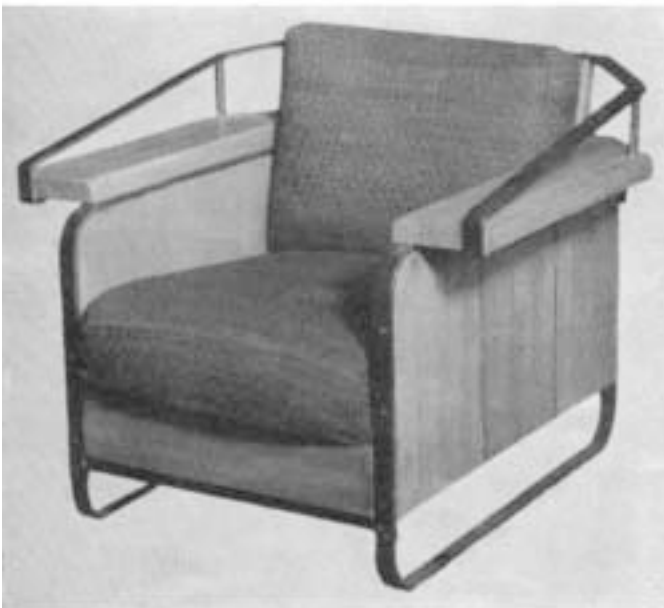
She started with her own four harness loom and taught women to weave. The main dining room has ten pairs of hand woven draperies, designed in horizontal stripes and in warm rich colorings.

The furniture in the ski lounge is made of wood, wrought iron and raw hide, but in the guest rooms and main lounge all of the upholstery material is handwoven. In keeping with the setting the materials are for the most part fairly coarse in texture and somewhat bold in design. Herringbone twills and the crackle weave with variations are the two technics most used. Nothing new or startling there, but used as only a person with a knowledge of design principles and rare good taste would use them.

There is nothing Scandinavian, Austrian or Swiss about this "Alpine hostelry". It is truly American.



Curved couch upholstered in chenille fabric woven as a twill on a crackle weave threading.



Arm chair upholstered in fabric woven as a twill on a crackle weave threading, using linen warp and wool weft. This fabric is used in many colors.



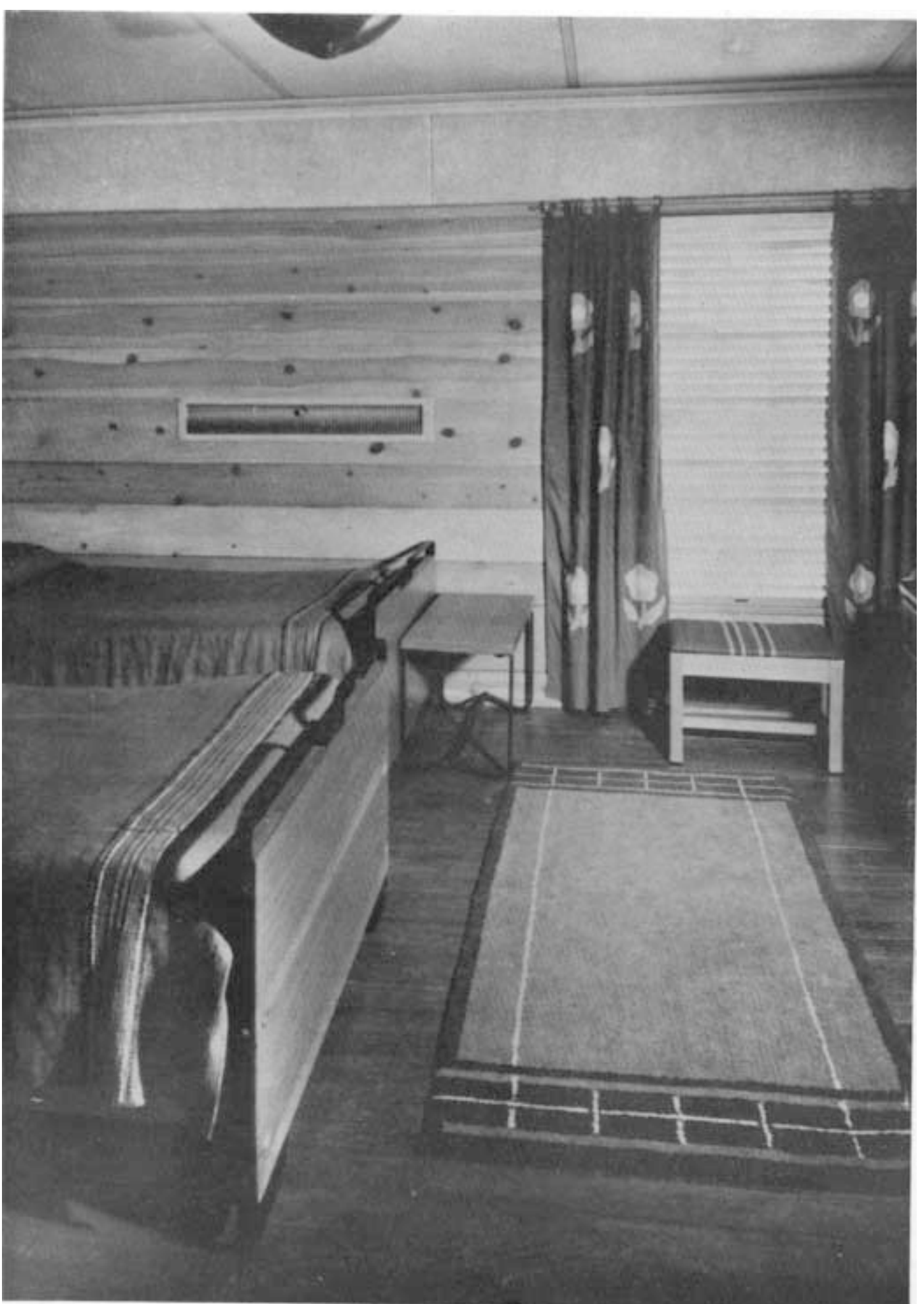
Portion of a de luxe bedroom showing harmonious use of many handicrafts. Hand made furniture with hand woven upholstery, appliqued curtains, flower print, hooked rugs, wrought iron in furniture and andirons in squirrel design. Only the telephone is machine made.



Chair upholstered with crackle weave fabric, linen warp, wool weft.



Bedroom chair upholstered with handwoven fabric in herringbone twill, using linen warp and wool weft. Curtains are of sail cloth with Indian design of triangles applied by hand. Lamp is wrought iron with raw hide shade.



Guest room showing handwoven bedspreads and bench cover, hooked rug, appliqued curtains and hand made furniture.

THE BRONSON WEAVE - FOUR WAYS

by MARY M. ATWATER

When I became interested in hand-weaving, a good many years ago, some of the old ways of weaving had become so deeply buried by time and disuse that they were to all practical purposes "lost art". It has been my great pleasure to dig up some of these fine old forms of beauty, to put them into useable shape again, and to see them generally accepted once more as part of the tradition and practise of our craft.

One of the most valuable of the old weaves set going again in this way is the so-called "Bronson" weave. The name is something of a misnomer, and I fear I am responsible. But it is probably too late to correct the error. The thing happened this way: when studying some ancient books on hand-weaving in a private library where I was permitted to work, I came upon the "Domestic Manufacturer's Assistant and Family Directory in the Arts of Weaving and Dyeing", printed in the year 1817. The authors: J. and R. Bronson. In this delightful and enlightening work I came upon several drafts for linen weaving written in a manner I had not seen elsewhere. No name was given this special weave in the book, and in order to have a handle for it I gave it the name of "Bronson weave".

As I discovered later, the weave is far older than the Bronsons, and in giving it their name I accorded them an honor not strictly due them. But after all no great harm has been done, I fancy.

The weave, as I learned later, is more correctly known as the "spot" weave, and appears to be of English origin. I found it under this name in an ancient English weaving book, where it was given not only for linens but also for the making of shawls. In Colonial America, however, it appears to have been used rather exclusively for linens. Many charming old bits can be found in the museums and in private collections here and there about the country, and I have seen tiny samples of exquisite fineness pasted to the pages of ancient note-books kept by weavers of the Colonial period.

The wide use of this weave for linens, in early America, may have been due to the fact that in the new country there were not many elaborate looms for the weaving of damask, and this weave permits pattern weaving in linen on a quite simple loom. Some patterns, in fact, may be woven on four harnesses, though in most of the ancient pieces at least five harnesses appear to have been used. When put on eight or ten harnesses the weave provides all the elaboration of pattern most weavers care for in fabrics of this type.

The form of threading we know as the Bronson weave has many uses in addition to its value for linens. These forms

are so distinct as to be actually separate weaves, and as a result there has been some confusion. It is in the hope of clearing up some of this confusion and of answering the many questions that have reached me on the subject, that this article has been prepared.

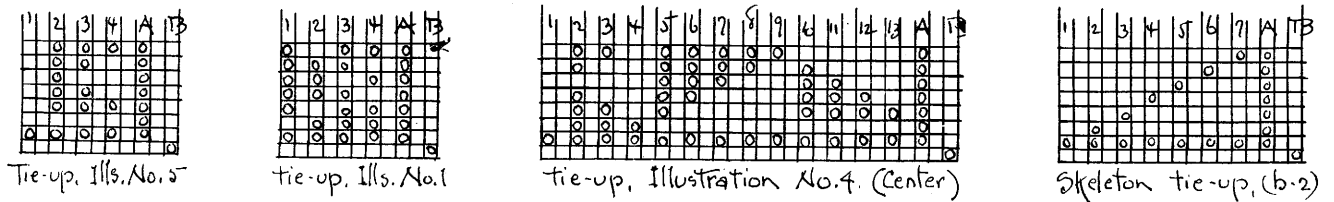
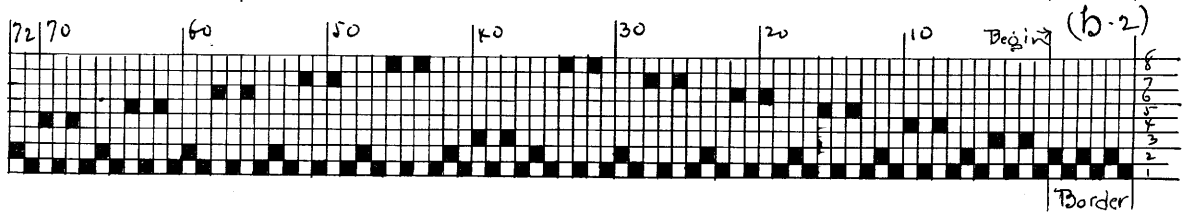
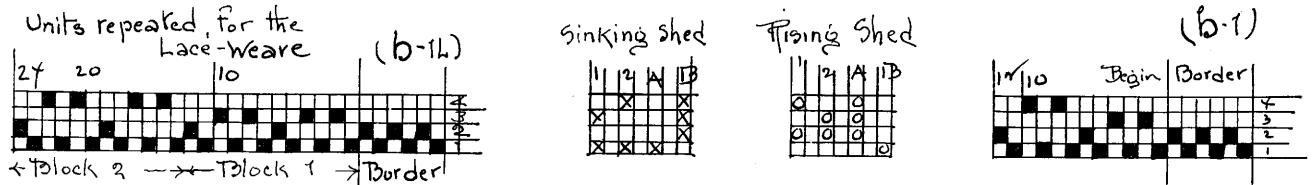
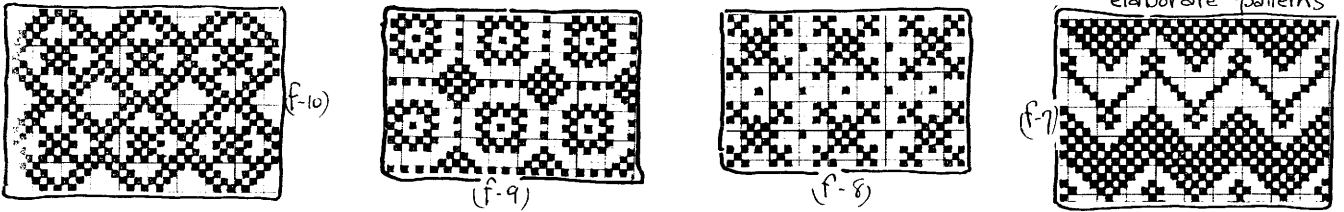
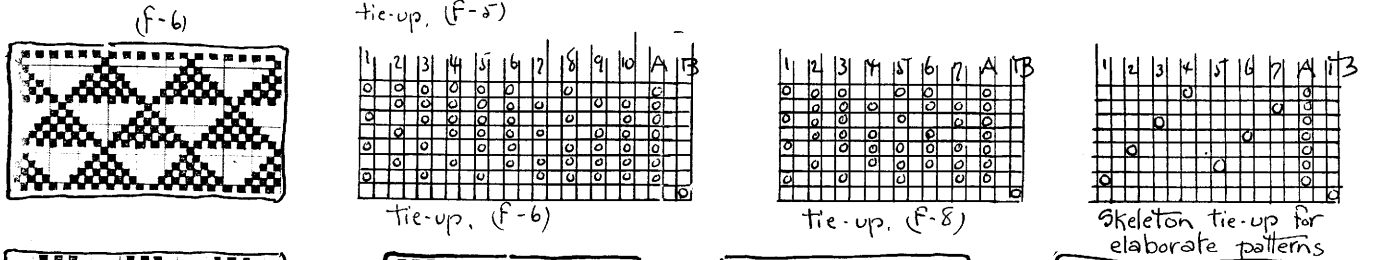
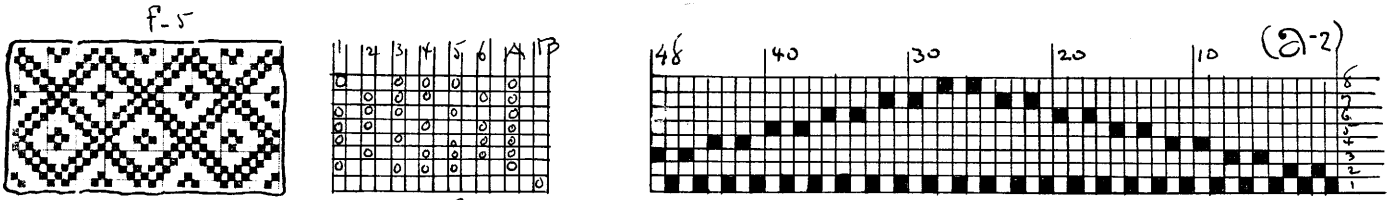
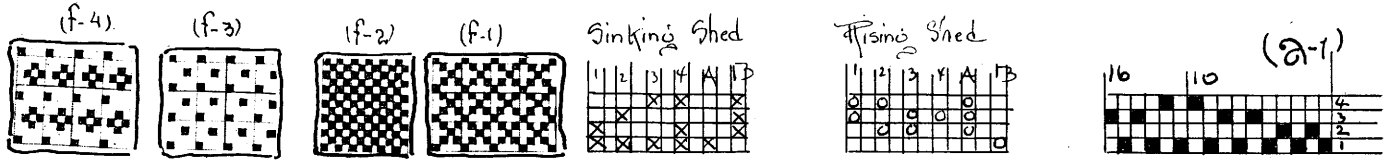
The peculiarity of a Bronson threading is that half the warp — every other thread — is threaded through one harness; usually the front harness though the back harness is sometimes used instead. The remaining harnesses, to any desired number, are used for the pattern. There are two distinct forms of this threading, shown at (a) and (b) on the diagram. It will be observed that in the (a) type of threading all the pattern blocks are of the same number of threads and that there are the same number of pattern blocks as the number of harnesses, less one. On four harnesses there are, for example, three pattern blocks, and on eight harnesses there are seven pattern blocks. These blocks may be written in any order desired to produce a particular figure. For the sake of clearness the drafts given on the diagram are all "point" or "diamond" patterns.

In the (b) form of draft a small three-thread block, always on the same harness, is inserted between all the other pattern blocks. This little block may be woven as a pattern block if desired but is usually treated simply as a "tie", somewhat in the manner of the ties in the summer and winter weave. Any one of the pattern harnesses may be used for this tie block. For example in drafts Nos. 256, 257, 258, 260 and 261, page 256 of my Shuttle-Craft Book, I wrote the tie blocks on harness 3. In draft 269, page 260, however, I wrote the tie blocks on harness 2, and as this gives the draft a better appearance on paper I now follow this system exclusively. It makes no difference, of course, in the weave — provided the treadling follows the draft as written.

A draft written in the (b) manner provides one less pattern block than an (a) draft, it will be observed, but there are a number of advantages, especially in the weaving of fairly elaborate patterns on eight or ten harnesses. It is not practical to weave adjoining pattern blocks at the same time if the draft is written in the (a) style, as long overshot skips would result. But if the draft is written in the (b) manner the tie thread on harness 2 makes it possible to weave all the pattern blocks together, for a stripe all across the fabric, and figures may be developed with much greater freedom.

Another interesting thing about drafts written in (b) fashion is that borders in plain tabby, and plain tabby sections

Bronson Weaves - Diagram



See Illustration No. 7

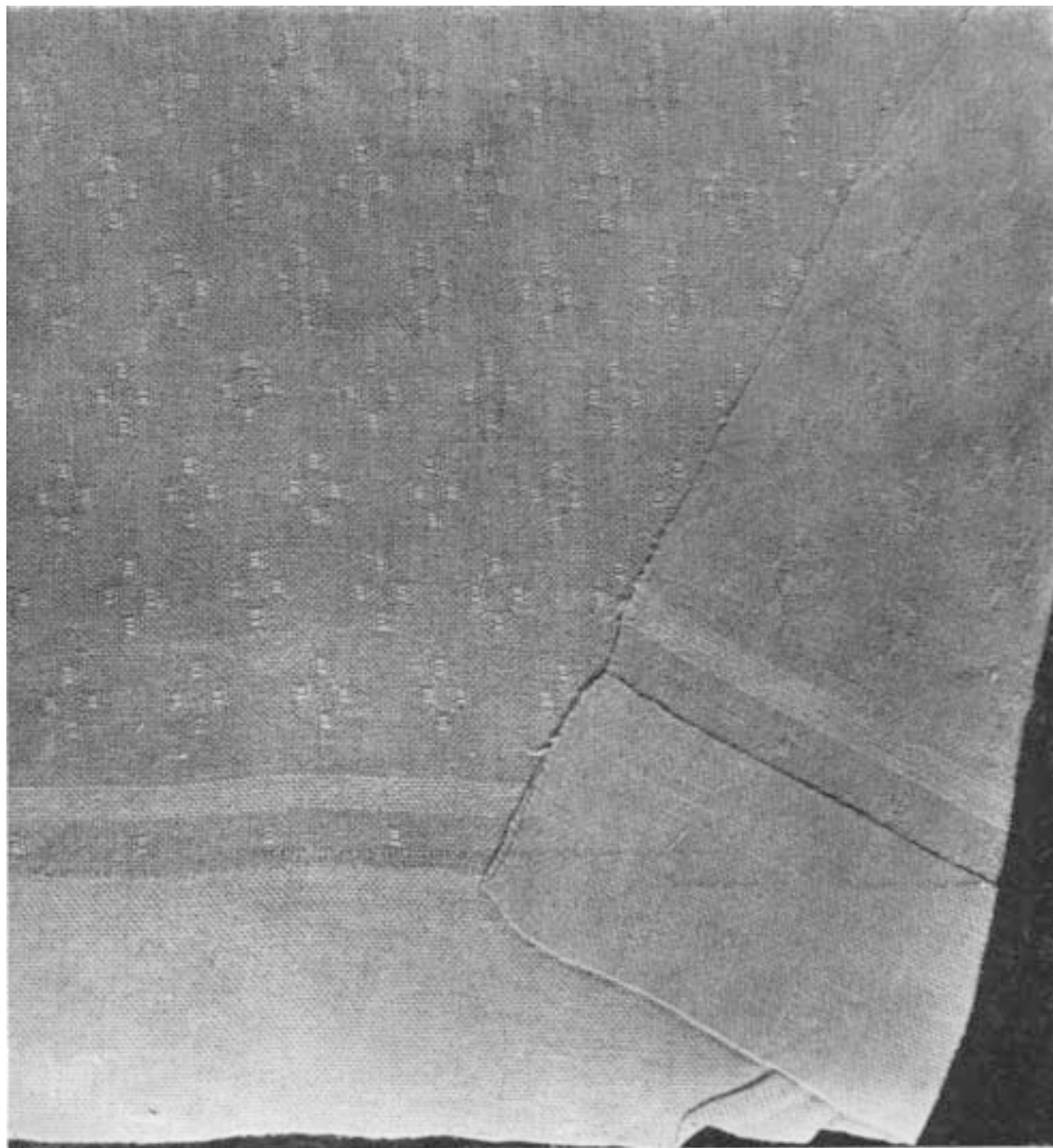


Illustration No. 1
Towelling in Bronson Weave

between pattern figures, may be introduced as desired — written 1, 2, 1, 2, and so on as indicated on the diagram.

Another feature of the (b) drafts is that they may be used for an openwork weave similar to the Swedish lace-weave. (The lace-weave cannot be produced on the (a) type of draft.) But in order to make the lace-effect it is necessary to repeat each pattern block at least twice, as shown on the diagram.

There are also two ways of using a Bronson weave threading for upholstery fabrics. One of these techniques we have been using for years, and patterns for the weave have been published in the Shuttle-Craft Guild "Recipe Book". It consists simply in the manner of treadling. The second technique for upholstery was worked out experimentally last summer, and found very interesting at our summer "institutes". It consists in threading each pattern block with ten

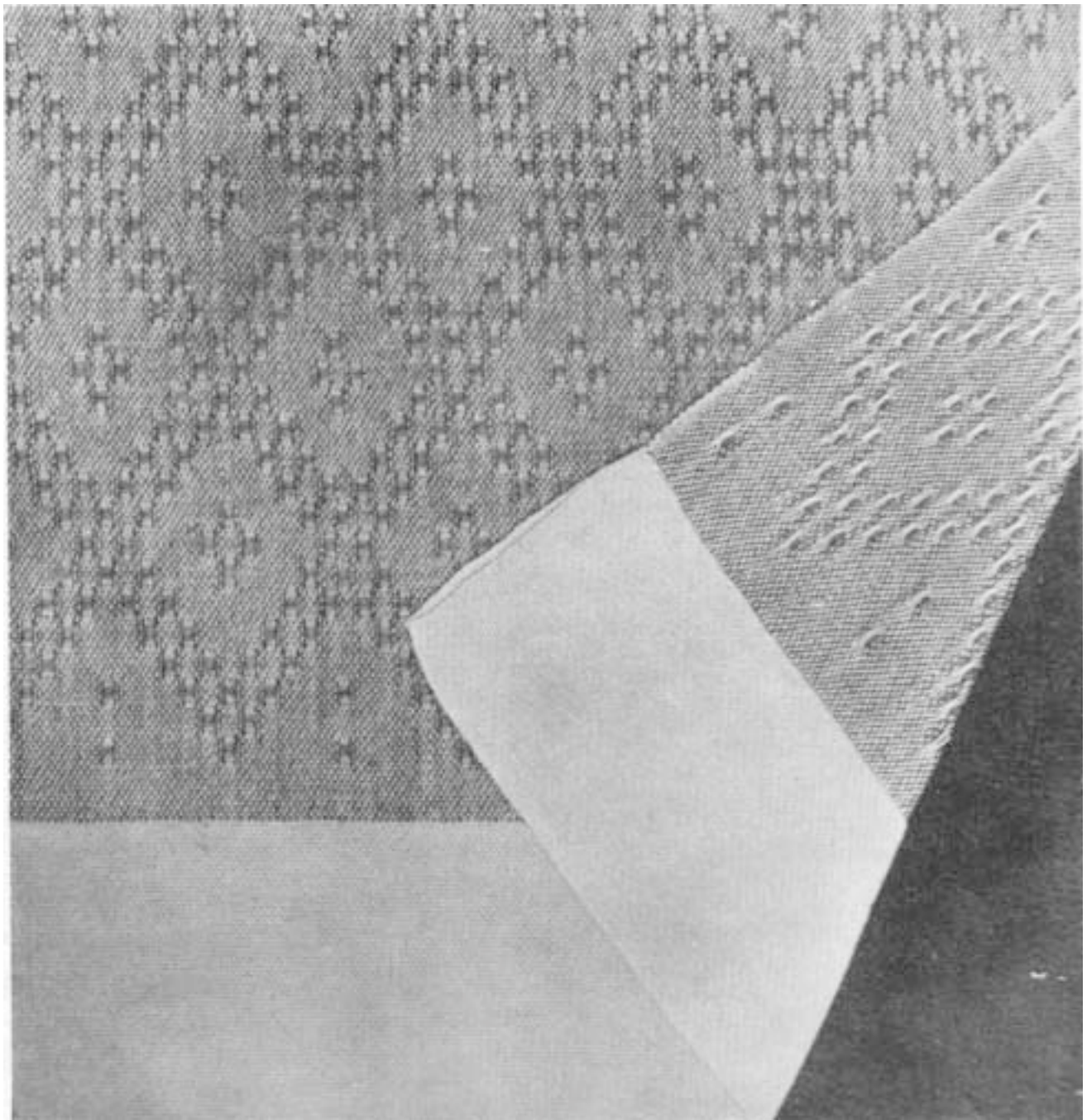


Illustration No. 2
Towelling in Bronson Weave

ends, instead of four, setting the warp very close, and treadling the pattern in warp-skips for the right side of the fabric. The (a) type of draft, without a tie block, should be used for this. A four-harness draft is given at (c) on the diagram. The woven effect is a figured "rep" — one of the most durable and satisfactory of fabrics for chair-covering and the like.

We have, then, four types of weaving possible in the

Bronson weave: (1), a weave for fine linens; (2) an open-work lace-weave suitable for linens, for window-drapery in fine or coarse linen; and for shawls and scarves, done in fine wool; (3) a weft-effect upholstery weave, suitable also for bags, pillow-tops, and the like; (4) a warp-face patterned rep for furniture covering.

To consider these different forms of the Bronson weave in detail: The linen weave is the ancient and traditional

form. It is a beautiful weave for towelling, table linens, and so on. Warp and weft should be the same thread, or threads the same in grist, and fine linens are best. This is not a good weave for coarse or rough linens. As a rule both warp and weft are used in white or natural, but attractive results may be obtained by weaving a colored linen weft over a white or natural warp. The pattern appears in weft-skips on one side of the fabric and in warp-skips on the reverse. Either side may be considered the "right" side. The warp should be set close as for a firm tabby fabric, and the beat should also be firm, with exactly the same number of weft-shots to the inch as there are warp-ends to the inch in the setting. Drafts of either the (a) or (b) type may be used.

Illustrations 1 and 2 show towels in the linen weave. The warp in both was Bernat's "special" singles linen warp set at 36 ends to the inch. The weft in No. 1 was a fine English "flourishing thread" in pale gold. The hem woven in tabby in material like the warp. No. 2 was woven in Bernat's linen "weaver" in blue. As this material is rather too coarse for the warp the figures are somewhat too long for their width, but the effect is pleasing. A corner of each piece has been turned back to show the pattern effect on the reverse side of the fabric. Both pieces were woven on the threading given at (b-2) on the diagram, though the pattern of No. 1 is a simple figure that might be threaded on five harnesses, and the pattern of No. 2 can also be woven on the (a-2) draft as illustrated on the diagram.

The method of treadling for this weave is the same for all patterns, and is as follows: For patterns in the (a) style, weave the B tabby between all pattern shots. The A tabby treadle is used only in making the plain-weave headings and hems, and tabby intervals between pattern blocks. To weave draft (a-1) for instance, in the figure illustrated at (f-1) weave: 1, B, 1, B, 2, B, 2, B, 3, B, 3, B, 2, B, 2, B, and repeat. A number of variations, even in this simplest of patterns, may be woven. For (f-2) treadle: 4, B, 4, B, 2, B, 2, B and repeat. For (f-3) treadle: 1, B, 1, B, A, B, A, B, 3, B, 3, B, A, B, A, B, and repeat. For (f-4) treadle: 1, B, 1, B, A, B, A, B, 3, B, 3, B, 2, B, 2, B, 3, B, 3, B, A, B, A, B, and repeat. Other variations will suggest themselves to the weaver.

Pattern (a-2) in the figure (f-5) as illustrated is woven in exactly the same manner, on the tie-up as given: 1, B, 1, B, 2, B, 2, B, and so on.

Patterns of the (b) type are treadled in a slightly different manner, as an A tabby shot is woven between each pair of pattern blocks. This way: 1, B, 1, B, A, B, 2, B, 2, B, A, B, and so on. This shot on the A tabby corresponds to the tie-thread threaded on harness 2. It should be noted that when weaving with a colored pattern weft and a tabby in white these "A" shots should be in the pattern thread. To put it differently: weave all B shots in white and all other shots in color.

The openwork lace effect can be produced on any (b)-type Bronson weave draft, provided each pattern unit is repeated at least twice, as shown on the diagram. Set the warp further apart than for the linen weave and beat lightly. The openwork effect does not appear very plainly while the fabric is on the loom but is brought out by washing and finishing. Illustration No. 3 shows the corner of a linen lunch-cloth with borders in lace-weave. This is a four-harness pattern from the Shuttle-Craft Guild Recipe Book. On four harnesses only two pattern blocks are possible, of course, but on eight or ten harnesses quite elaborate and interesting effects are possible. Just how to set the warp for the lace-weave depends to some extent on the purpose of the fabric. For a table piece like the one illustrated the setting should be fairly close as otherwise the tabby part of the fabric will be too "slimpsey", but for window drapery the setting may be a good deal more open. Though this weave is best in fine material, coarse linen — Bernat's linen floss — makes very handsome hangings when woven in this weave. For light scarves and baby-blankets of the shawl variety, Bernat's fine Afghan yarn set at 30 ends to the inch, or Bernat's "weaving special" yarn at 20 ends to the inch work out nicely.

The difference between the Swedish lace-weave and the lace-weave as produced on a Bronson threading is in that for the Swedish weave — done on four harnesses with only two pattern blocks — one block shows the weft-skip and the other the warp-skip effect. It is easy enough to make a tie-up to produce this effect on a Bronson threading if one wishes, but of course for a more elaborate pattern, in which several adjoining blocks may be woven together, it is impractical and would ruin the effect. The Bronson type of threading therefore has more possibilities in the lace-weave than a threading of the Swedish type.

The Bronson lace-weave has found wide use since I introduced it some years ago. As it differs from the Scandinavian practise, and also from the ancient methods of using the "spot" weave, I believe we may claim it as a modern American innovation — a new contribution to the art of weaving.

Caution: the lace-weave is not suitable for cottons, or for a cotton and linen combination, or for silks, or for any hard or slippery material. It is best in fine linens, or fine worsted yarns. And a piece in this weave must always be washed to bring out the lacy effect.

The Bronson weft effect for upholstery is an attractive and practical one. The fabric produced is firm and has excellent wearing qualities. A draft of the (b) type should be used, and a good cotton or a fairly fine linen may be used for warp and tabby with pattern weft in wool, silk, or a coarse cotton. The fabric is nice for large bags and for pillow-tops as well as for furniture covering. Illustration No. 4 shows a piece woven in this technique for a bag. The warp and tabby are Egyptian cotton 24/3 set at 30 ends to

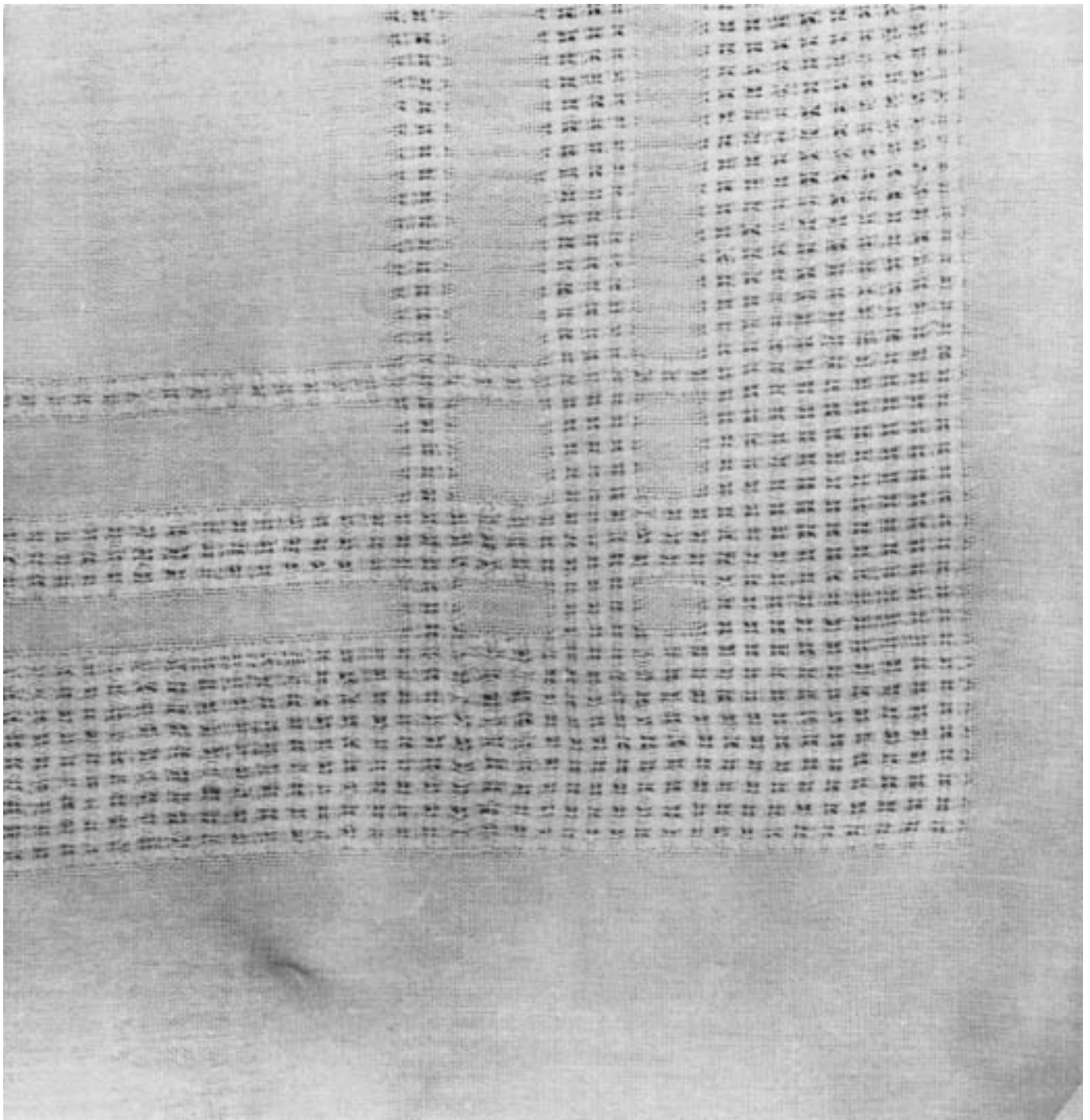


Illustration No. 3
Corner of linen lunch-cloth with borders in Bronson lace-weave

the inch, and the pattern weft happens to be a coarse hand-spun wool in two colors. The threading used was pattern (b-2) as given on the diagram, on the tie-up as shown.

In weaving, throw both tabby shots between pattern shots. This Way: 1, in pattern material; A, B, in tabby material; repeat as required; 2, pattern; A, B, tabby, repeat as required — and so through the pattern.

This method of weaving makes a better wearing fabric than the traditional form of treading, as the warp-skips on the reverse are eliminated. However the wrong side of the

fabric shows very little of the pattern effect and is uninteresting. For bags or chair-covering this does not matter, but the weave is not suitable for drapery where both sides are in evidence. Illustrations 5 and 6 show a small figure in this weave, from the right and wrong sides. A few lines of the lace-weave are also shown with the idea of illustrating the difference between the weft-skip effect and the warp-skip effect. As the warp was cotton, and set too close for the lace-weave, this is not altogether successful, but perhaps it conveys the idea.



Illustration No. 4
Piece of weaving for a bag in Bronson weft-effect in wool over cotton

As far as I know, the above manner of using the Bronson weave is also a modern innovation, first introduced by me some years ago. It has not been as widely used as the lace-weave, but it has very definite values — especially for the weavers who have looms equipped with more than four harnesses.

The Bronson “rep” weave was worked out experimentally last summer and proved interesting to those who attended our summer “institutes”. Rep is a closely woven, very firm ribbed fabric with excellent wearing qualities. It is one of the best and most enduring fabrics for upholstery. And this is an excellent way to make it.

Illustration No. 7 shows a sample in this weave made at one of the institutes. The material used for warp was Bernat’s Shetland set at 30 ends to the inch, and a four-harness threading like (c) on the diagram was used. As the warp was fairly coarse the blocks were threaded with six instead of with ten threads as shown. A finer warp, set closer, and threaded as given on the diagram, produces a somewhat better effect, but the coarse sample shows best in the photograph. The weft was ordinary cotton carpet warp, doubled. If a bolder rib is desired, three or four strands of carpet warp may be used for weft. This weft shows in skips on the wrong side of the fabric, but is entirely covered by the

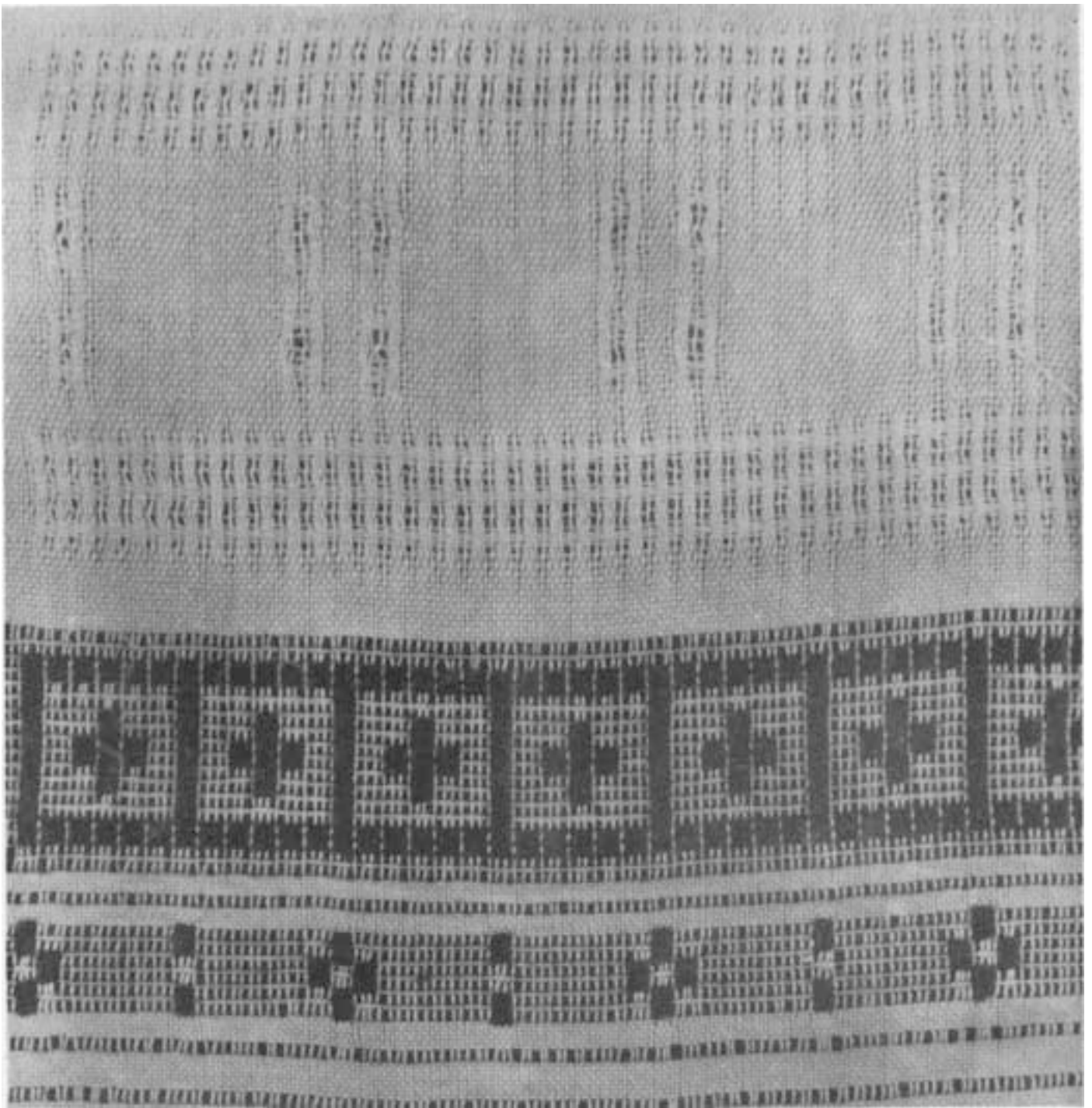


Illustration No. 5
 Bronson weft-effect in coarse cotton
 Also Bronson lace-weave. Right side

warp on the right side, as seen in the photograph. Any Bronson weave draft, with any number of harnesses, may be used for this weave, but I prefer drafts of the (a) type, and the blocks should be threaded with more than the four threads usual in the linen weave.

For this weave it is usually best to make the warp of a solid color. Introducing variations of color simply gives a striped effect to the fabric and does not add anything valuable to the texture pattern of the weave. As the weft does not show it makes little difference what color is used, though it is best to use a dark weft with a dark warp and a light weft with a light warp.

Treadling on the A and B treadles gives the plain ribbed effect. The little variations in pattern are produced by weaving a single shot on a pattern treadle instead of the B treadle as and when desired. For example, the small diamond figure at the bottom of the photograph is woven this way: A, 1, A, 2, A, 3, A, 2, and repeat. The figure of staggered dots next above is woven: A, 1, A, B, A, 3, A, B, and repeat. And so on. The beat should be as firm as possible, for the fabric should be hard and rather stiff.

To the eye of the non-weaver there would appear no similarity at all between a dainty fine linen in the traditional spot weave, a lace-weave shawl, a wool or silk bag fabric,

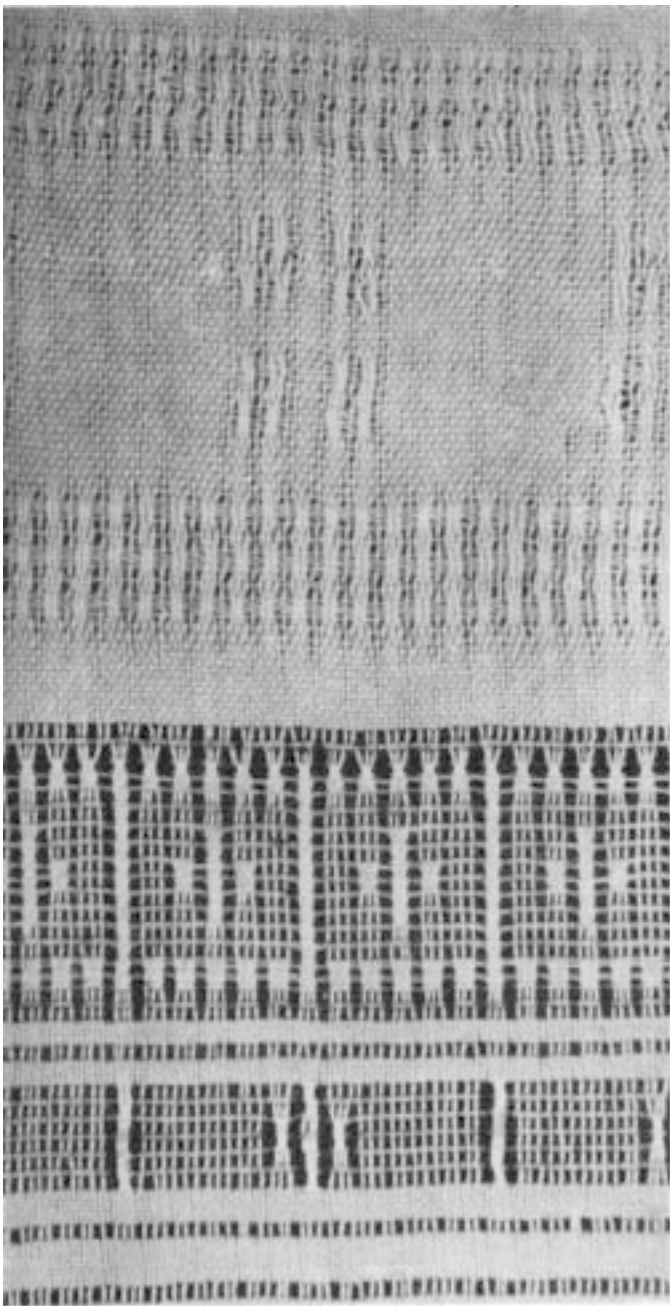


Illustration No. 6
Same piece as in Illustration No. 5
Wrong side of the fabric

and a heavy ribbed material for chair-covering. The weaves are in fact entirely different, and they are classified together simply by reason of the manner in which the fabrics are constructed and the drafts are written. In order to explain this as fully as possible it has been necessary to be rather technical. But after all weaving is a technical project, and we should be willing now and then to examine into the inner workings of our craft. Otherwise it might be better to play at something else.



Illustration No. 7
Sample of Bronson "rep" weave in wool, cotton weft

"D" is for DAMASK

by DORIS McMULLEN



Damask is perhaps the richest of all fabrics and strangely enough requires the least in time and effort. The threading is simply and easily done in units and the weaving speeded up with only one shuttle being used throughout. It is therefore difficult to understand why more weavers are not producing this outstanding fabric.

Margaret Bergman, who is an inspiration herself, designed the pieces shown in the illustration.

I hung the large dinner cloth over a rod suspended from the ceiling so that the camera could catch the design. It measures three and a half yards by eighty two inches. Although it is seamed in the center the work was so carefully done that the seam is not noticeable.

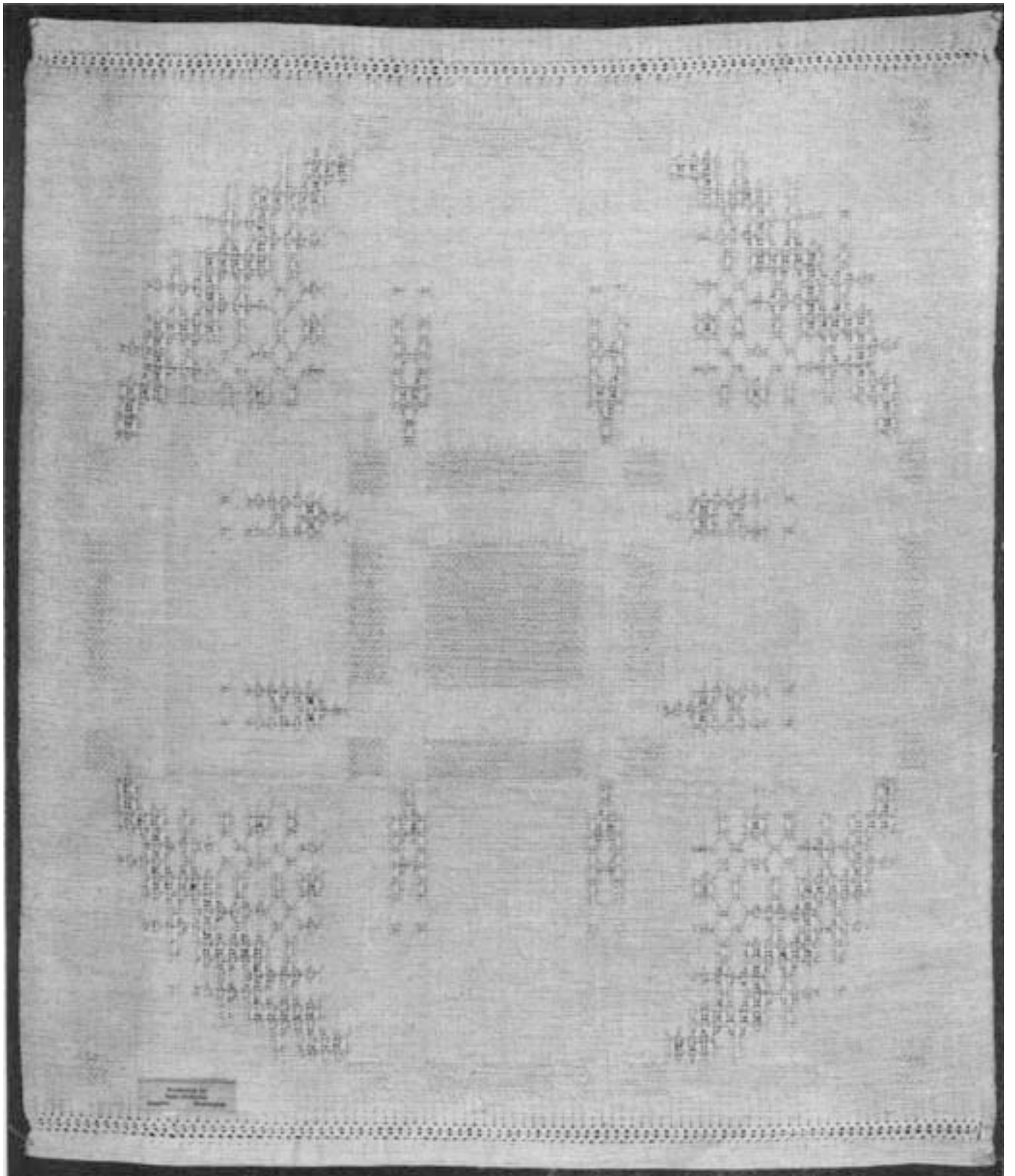
Bernat's 50/2 linen set 40 ends to the inch is the best choice for warp although 40/2 can be used nicely. Linen Special No. 20 makes an excellent weft. Mrs. Bergman used an original design and her tree border is a welcome change from the usual floral patterns. Many fine drafts are to be found in the Shuttlecraft book. Mrs. Atwater also gives the tie-up and method of threading. It is not necessary to go into detail on planning width of border, repeats, etc., as that is an individual problem.

Damask is also the answer to more formal place mats. Bernat's linen special in color woven over 40/2 or 50/2 makes an excellent combination. Yellow is especially good. If one wants to be very thrifty Linen Special No. 20 can be used as both warp and weft with good results. This warp should be treated more politely than the round but an experienced weaver will have no difficulty.

While we are discussing Damask it might be well to show how beautifully it can be combined with Lace weave. The mat shown in the illustration B is much more interesting with the black of Damask than it would be without it. The Lace pattern is threaded on the first right harnesses and the black of Damask requires an additional four. In Lace weave as in Bronson it is necessary to use the same material for weft as for warp. 50/2 set 40 so the inch should be threaded 8 ends to a unit instead of the usual 6. For example 1, 7, 1, 7, 1, 7, 1, 2 and of course the 2 additional shots added to the usual treadling, that is: B pattern three times then B and A.

Bernat's gold metallic thread was wound with the weft for the weaving of the mat at B. This makes a very elegant piece with a beautiful texture that would complement any dinner service.

After all our weaving in the modern trend Damask is very restful. I sincerely hope more weavers will become acquainted with this technique.



TEXTURE CHANGES and DESIGN VARIATIONS

by RUTH KETTERER HARRIS

Instructor Related Art University of Wisconsin

When one is fortunate enough to have at her demand an old weaver's sketchbook, there is no end to what one may do with these patterns. Illustration No. 1 shows a black and white tracing of a section of one of these patterns. The book is in Miss Helen L. Allen's library. The book is so old that it has no name or author and the designs are not named. The pattern as it appeared in the book is three repeats of this unit, both in the threading and weaving of the design. This hollow block type of design is very interesting to work with in various types of threading which will give you the same silhouette in your design but different textures.

all of the textures that are given here will result in a hollow block type of design.

Let us first write the threading in colonial overshoot, which is as follows:

COLONIAL OVERSHOT THREADING

From the threading we will draw down the pattern. If it is drawn down as threaded in, the result will be star fashion design. The original pattern is shown as two units that are not connected so that the weaving will be rose fashion for the colonial overshoot treadling.

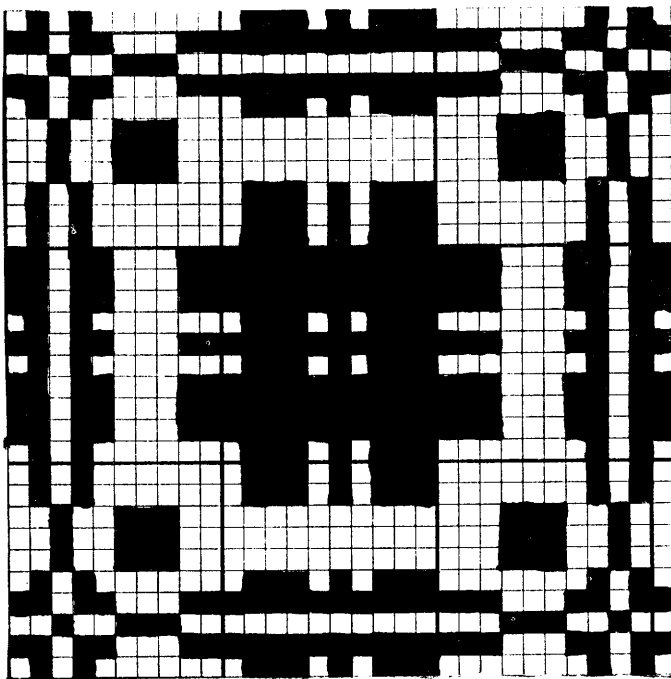


Illustration No. 1
Design from old weaver's sketchbook

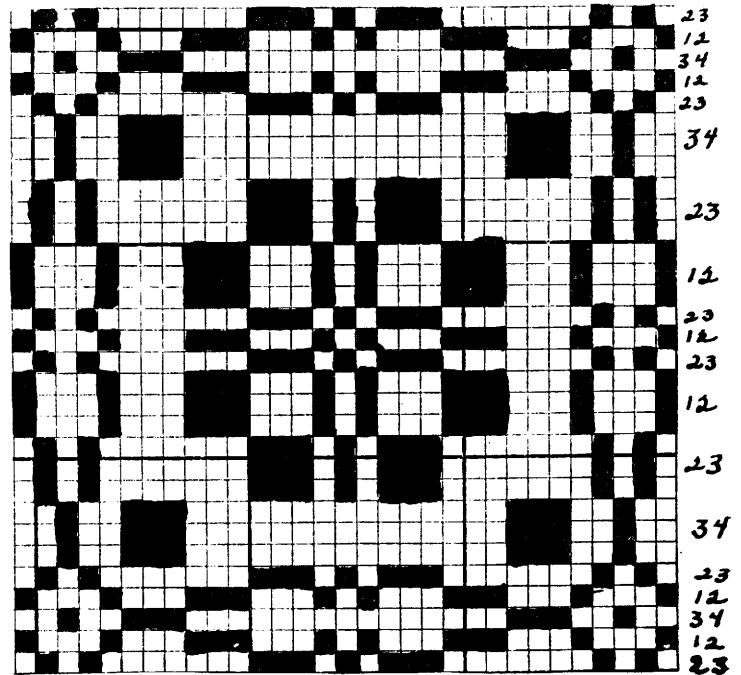


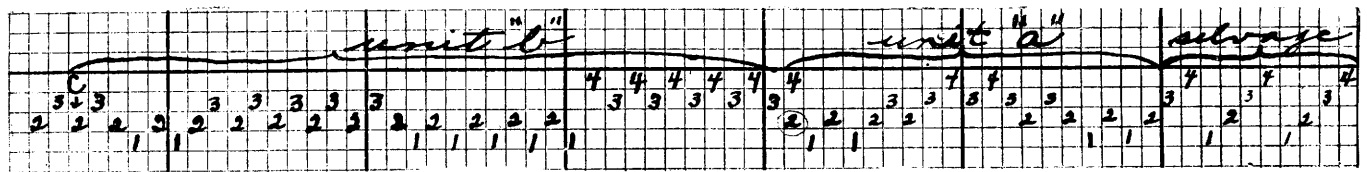
Illustration No. 3



Illustration No. 2
Profile of design

Illustration No. 2 gives the profile of this design, which shows it is a three block pattern. From the profile of a design it is possible to write the threadings for various textures. Not

This is given in Illustration No. 3. The threading is planned for a No. 10 perle cotton warp set twenty threads to the inch. This of course would only give a piece six and a half inches wide. The easiest thing to do would be to repeat this threading until one has the width material desired. For a more interesting piece one may vary the repeats in the profile.



Colonial overshoot threading



Illustration No. 4

Illustration No. 4 shows this variation in the profile. The threading for this would be to repeat unit "a" of the previous threading three times, and unit "b" repeated twice, then unit "a" repeated three times and the twill selvage of ten threads. This gives a total of two hundred and fifty-one threads. This will make a piece twelve and one-half inches wide, which is a very usable width for a table runner.

Comparing Illustration No. 3 with Illustration No. 1, the hollow block and continuous horizontal line characteristics of this design have been lost in the colonial overshoot threading and weaving. The reason they are lost is that it is impractical to get a continuous horizontal effect of this type as it would make the overshoot too long. It is possible to use a tie down thread from another harness if the overshoot is too long, but that introduces accidentals into the rest of the design, which again spoils the original effect.

Crackle weave is a suitable texture for this type of design. To translate our design into crackle weave the (a) block is threaded $\begin{matrix} 3 \\ 2 \\ 1 \end{matrix} 2$; the (b) block is threaded $\begin{matrix} 4 \\ 2 \\ 1 \end{matrix} 2$; the (c) block is threaded $\begin{matrix} 4 \\ 3 \\ 2 \end{matrix} 3$; while the (d) block would be $\begin{matrix} 4 \\ 3 \\ 1 \end{matrix} 4$; but it is not needed in this pattern. This is a three block design and the (a), (b), and (c) units are used. This is a suitable texture because the blocks can be made as large as desired due to the fact that the overshoots are never more than three

threads wide. To achieve this horizontal effect all one needs to do is to repeat one of the units of four threads for the width desired, as long as the number of threads is a multiple of four. Due to this short overshoot it makes it desirable material for upholstery, pillow covers, bags and many other articles where an overshoot of great length is not desired. Illustration No. 6 gives a variation on the original design. The threading for this in crackle texture is given below it, which has a total of five hundred and seventeen threads.

Unit (a) is repeated from thread three through thread fifty four, three times, and this gives one hundred and fifty six threads plus the two threads which start a twill for the selvage, making one hundred and fifty eight threads. The selvage may be made as much wider as you desire by adding any multiple of four threads in a twill threading. Unit (b) has in it sixty nine threads and unit (c) has in it sixty three threads. The center of unit (c) is the center of the design. This threaded with number ten perle cotton at twenty threads to the inch will give you a piece of material twenty five and one half inches wide, suitable for a table runner.

Another texture for this same design is shown in Illustration No. 7. This gives a dukagang effect with the design threaded into the loom and which results in one block being woven by using three treadles against one, depending on the type of loom. The threading is given for this texture below Illustration No. 7. It has been threaded with twenty threads to the inch and has one hundred and forty nine threads. The

Treadling (a) block in this texture is $\begin{matrix} 2 \\ 1 \end{matrix} 2 2$; the (b) block is $\begin{matrix} 4 \\ 1 \end{matrix} 4 4$; the (c) block is $\begin{matrix} 3 \\ 2 \end{matrix} 3 3$. In each case the block must consist of five

threads and then a tie down thread which may vary in the threading of the pattern. For further discussion of this texture, may I refer you to the "Weaver" for April, 1938, page twenty-seven. The overshoot in this texture is two threads wider than in the crackle weave. There is more of a three value contrast in this texture; due to the very dark of the overshoot, the lightest value of the tabby and warp or plain weave areas, and the middle value is a mixture of these two or what is known as accidentals. The vertical and horizontal effect of the design is more evident in this texture.

To plan an article for this texture one may make a knitting bag or pillow by using the original design but enlarging each block proportionately to the size desired. It may be woven as in the original, or as I have shown in Illustration No. 8. The threading for this is given below the Illustration.

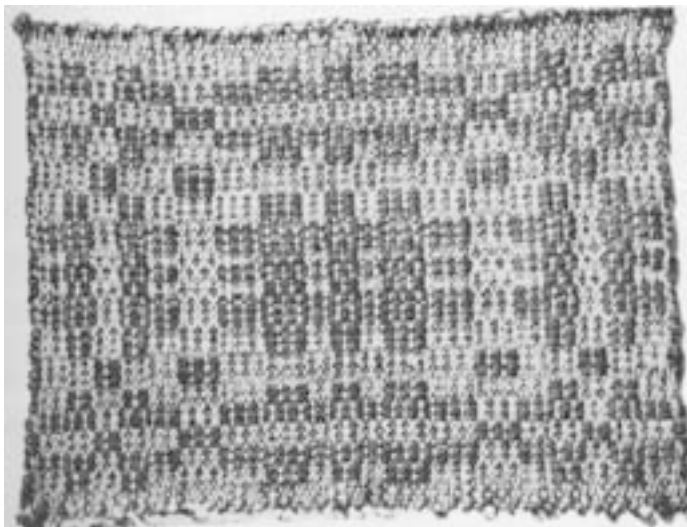
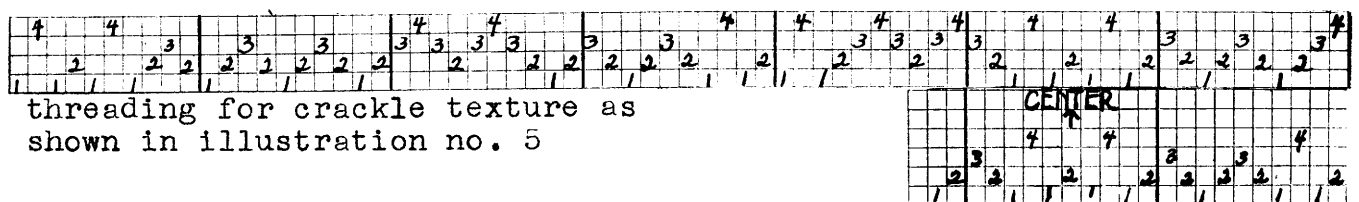


Illustration No. 5



threading for crackle texture as shown in illustration no. 5

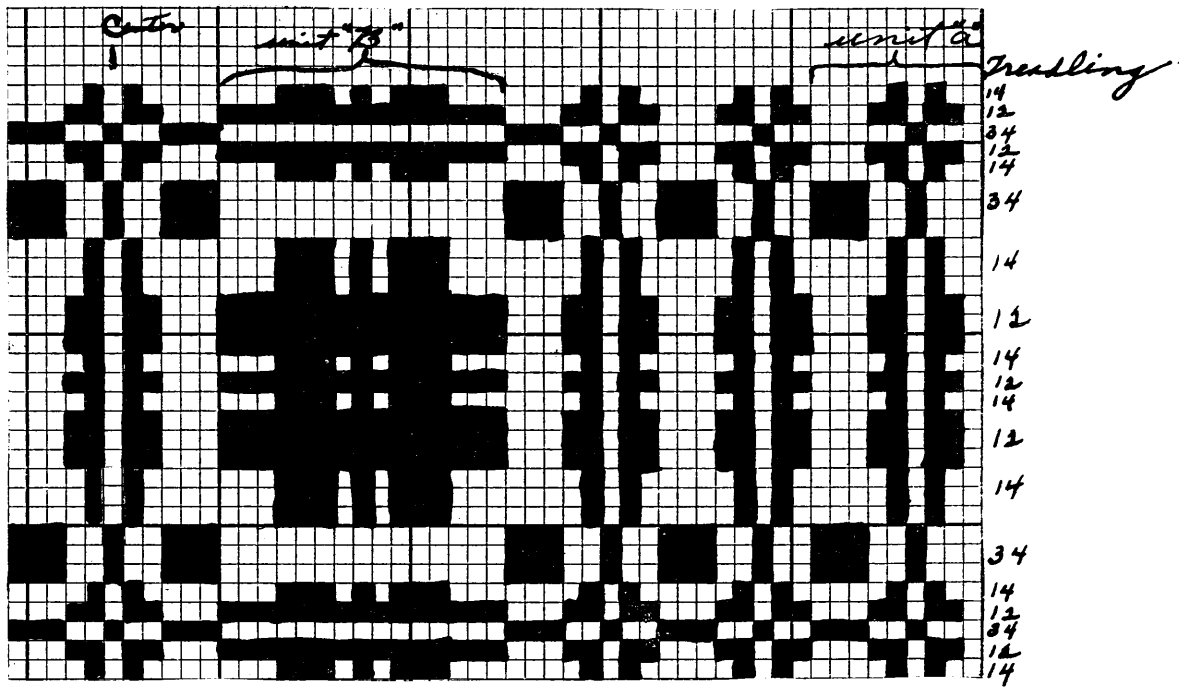
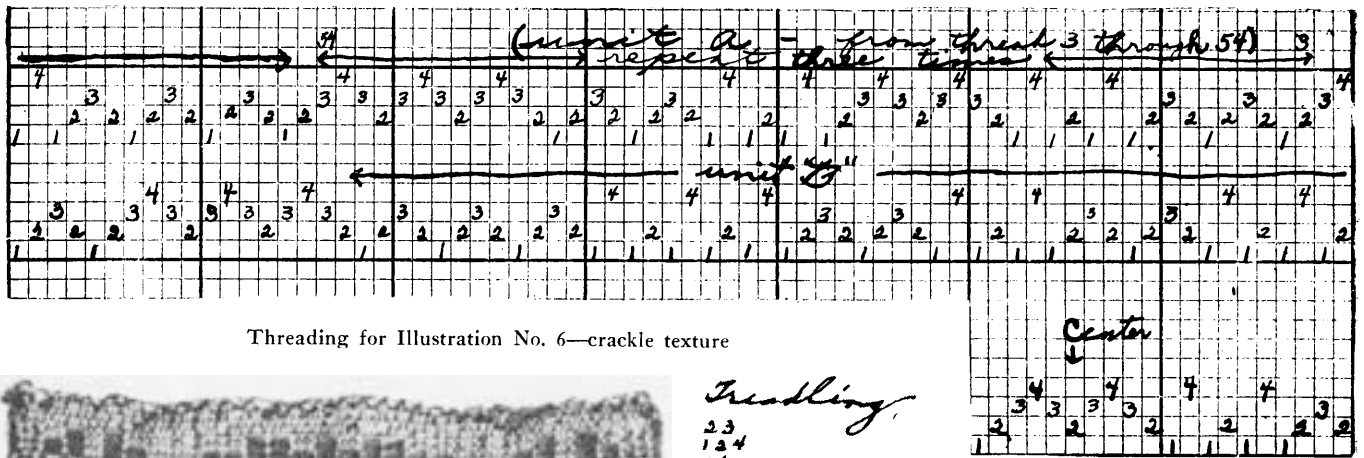


Illustration No. 6



Threading for Illustration No. 6—crackle texture

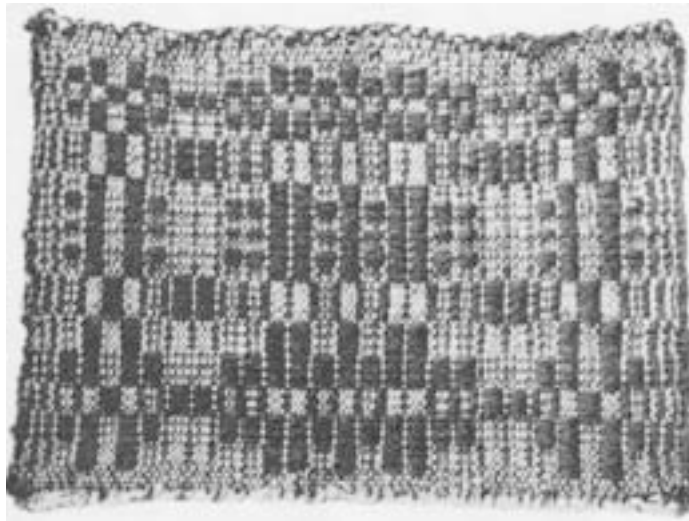
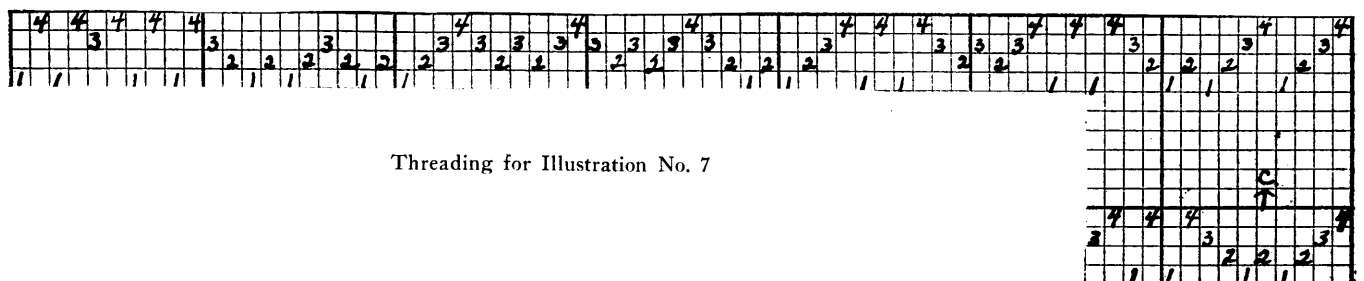


Illustration No. 7



Threading for Illustration No. 7



Illustration 9a.—Short draft summer and winter

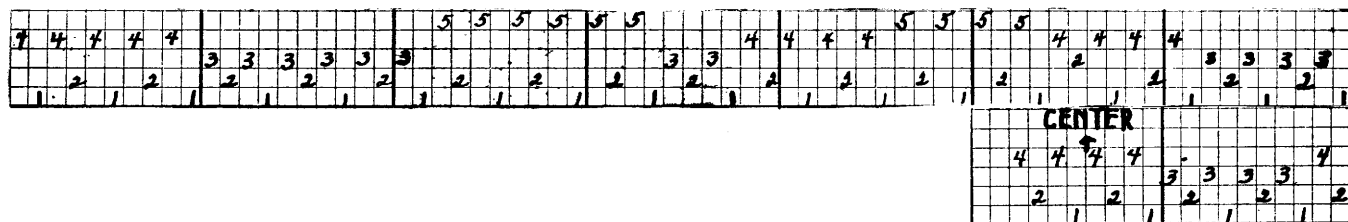


Illustration 9b.—Long draft summer and winter

alternated treadles one and two with the pattern treadles and of course alternated the tabby in between each pattern thread. The dark area or middle area in the photograph (Illustration No. 9) is a portion of the design woven bound fashion which works out very satisfactorily, but because my weft threads were of the same value, although a different hue from the warp thread, the design does not show up as it should. The last part of Illustration No. 9 shows a variation in the weaving of summer and winter by using treadle one continuously with my pattern combinations and the second treadle is used only in the tabby. This gives the design a long vertical effect.

It would be interesting to try this design in a weft rep or warp surface texture. For this a six harness loom would be needed and two different values of color used in the warp threads, which would be alternated throughout the threading. For further data on this texture may I refer you to Sigrid Palmgrens Vavbok, number one, pages forty-two to forty-nine.

There are other textures one may weave this original design in such as bronson, and others that will take a multiple harness loom. The threading for these may be easily worked out from the profile of the pattern.

BLENDDED DRAFTS AND WEAVES

Something new in Honeysuckle and other Patterns

by DONALD W. GREENWOOD

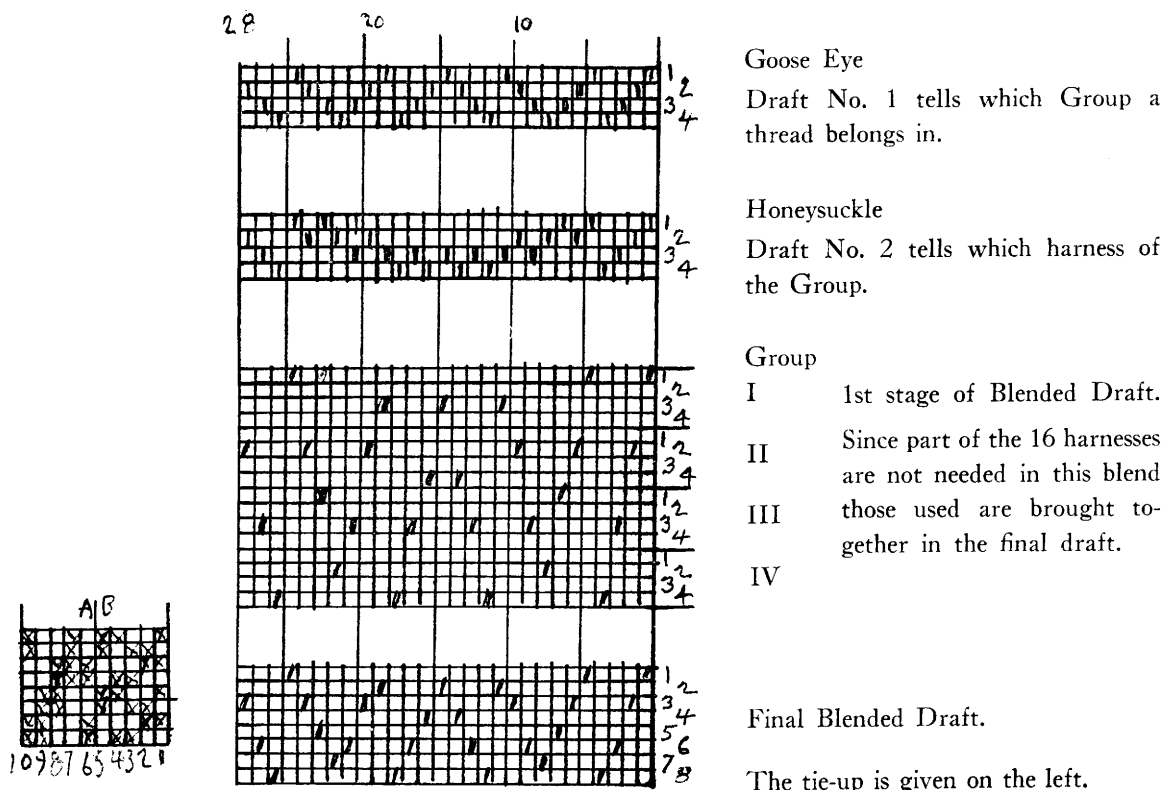
"There is nothing new under the Sun" is an old saying that is true more often than not. I am sure the idea of blending the fine qualities of two or more patterns has been considered often in the past years and has been tried with more or less success at times. I am equally sure that if the system of blending described in this article had ever been tried it now would have been well established and widely known. It is the system that makes the blending a practical thing.

This system of Blended Drafts, worked out on paper last year, was given its first real trial recently at Berea College. I presented the idea to two of Berea's experts, Miss Ledford and Miss Walker, who were very much interested and arranged to have a "blended draft" tried out on a loom in the classroom of Miss Walker.

The paper work of last year was largely done using the Honeysuckle and the Twill drafts chosen because of the radical differences between the two drafts. For the purposes of this trial Miss Walker selected Goose Eye as the companion draft of the Honeysuckle and placed two extra threads in the long overshot of the Honeysuckle so that the two drafts might have the same number of warp threads per repeat of the drafts. This is of obvious advantage both in threading and in weaving.

A totally independent structural modification of the loom was being made which necessitated an entire new tie-up and delayed the start of weaving. Long before I could have done any weaving Miss Walker began and made the first few inches of the sample cloth illustrating this article, thus she was the first to weave from this blended draft. If her thrill was equal to mine I know she will be a long time forgetting it. The first few bands of the cloth show that the two patterns can be used independently while the remainder of the cloth display a few of the possibilities of intimately blending the two patterns.

There is very little to say of the possibilities in weaving from the blended drafts that the sample cloth can not say better than words can. The two patterns can obviously be woven absolutely independently or intimately blended as the weaver may desire. It may be in order to say a few words to the two extremes, as far as fondness for honeysuckle is concerned, that may interest both groups. Honeysuckle is so remarkably versatile that some people "honeysuckle thru life" in perfect bliss. These people will find a vast new field for their honeysuckle to parade itself in thru being combined with less conspicuous backgrounds. Those weavers who abhor the whole ubiquitous honeysuckle family may find it is ideally suited to decorating other weaving patterns such,



for example, as the goose eye which is versatile in its own right. To all weavers the blending of patterns opens up unlimited possibilities for investigation and experimentation.

This blending system is based on one fundamental principle and that is this; draft number one determines which "set" of harnesses a certain warp thread will be placed in, draft number two determines which harness of that set shall "get" the thread.

The accompanying drafts shown in detail just how to blend any two four harness drafts, other drafts using more than four harnesses may be similarly blended but the blending process is especially fitted for the four harness drafts. The four harness Summer & Winter drafts will reduce to six required harnesses while the four harness Bronson drafts may require ten harnesses.

To aid in following the "1st" stage of the blending process several random threads are followed thru the blending.

Thread No. 1. Draft No. 1 indicates Group No. 1

Draft No. 2 indicates Harness 1 of group 1.

Thread No. 2. Draft No. 1 indicates Group No. 2

Draft No. 2 indicates harness 2 of group 2.

Thread No. 3. Draft No. 1 indicates Group No. 3

Draft No. 2 indicates harness 3 of group 3.

Thread No. 4. Draft No. 1 indicates Group No. 4

Draft No. 2 indicates harness 4 of group 4.

Thread No. 7. Draft No. 1 indicates Group No. 3

Draft No. 2 indicates harness 1 of group 3.

Thread No. 8. Draft No. 1 indicates Group No. 4

Draft No. 2 indicates harness 2 of group 4.

In the Tie-up the treadles 1,2,3,4 will weave from Draft No. 2 (Honeysuckle); treadles 5 & 6 will weave plain or tabby; treadles 7,8,9,10 will weave from Draft No. 1 (Goose Eye). The blended weave will, of course, use any of the ten treadles according to the desires of the weaver.

The foregoing directions for blending drafts is, I hope, quite complete but should there be any question about the blending procedure, or should anyone desire Blended Drafts or sample cloths such questions or requests may be sent to the writer, Donald W. Greenwood, Olcott Artcrafts, Whea-

ton, Ill. enclosing a self addressed stamped envelope. For questions other than to explain an apparent vagueness or a definite incompleteness in the article there will be a suitable charge.



Illustration B
Blend of Honeysuckle and Goose-Eye

MODERN DESIGNS for LAID-IN TECHNIQUE

by NELLIE SARGENT JOHNSON

Instructor of Weaving, Wayne University, Detroit, Mich.

In order to be sure that everyone knows exactly what is meant by "Laid-In" technique, it may be well first to define it. Laid-In technique is a form of brocade weaving. And a brocade is generally characterized by the fact that the pattern weft of the fabric is an extra thread not necessary to hold the body of the fabric together. Or in other words, if you pull out the pattern weft entirely, there would still be left the plain weave background. This pattern weft thread is always laid in the same shed as the plain weave, either with the fingers or with a small bobbin, for a small portion of the width of the fabric. A shot of plain weave background is always in the same shed as the pattern color weft. Thus a laid-in fabric differs from a real tapestry, in that the tapestry bobbin colors are carried *only* for the distance of each color as needed, and there is no plain weave shot all the way across the width of the textile. So the pattern colors of a

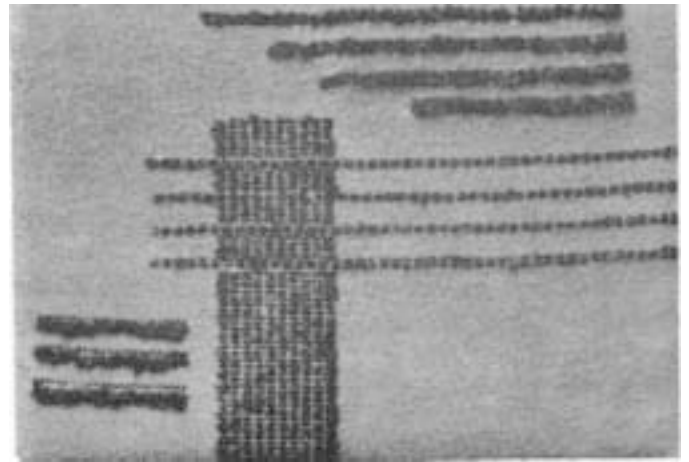


Figure No. 1 Yellow and Brown Purse woven by Helen Skowronski

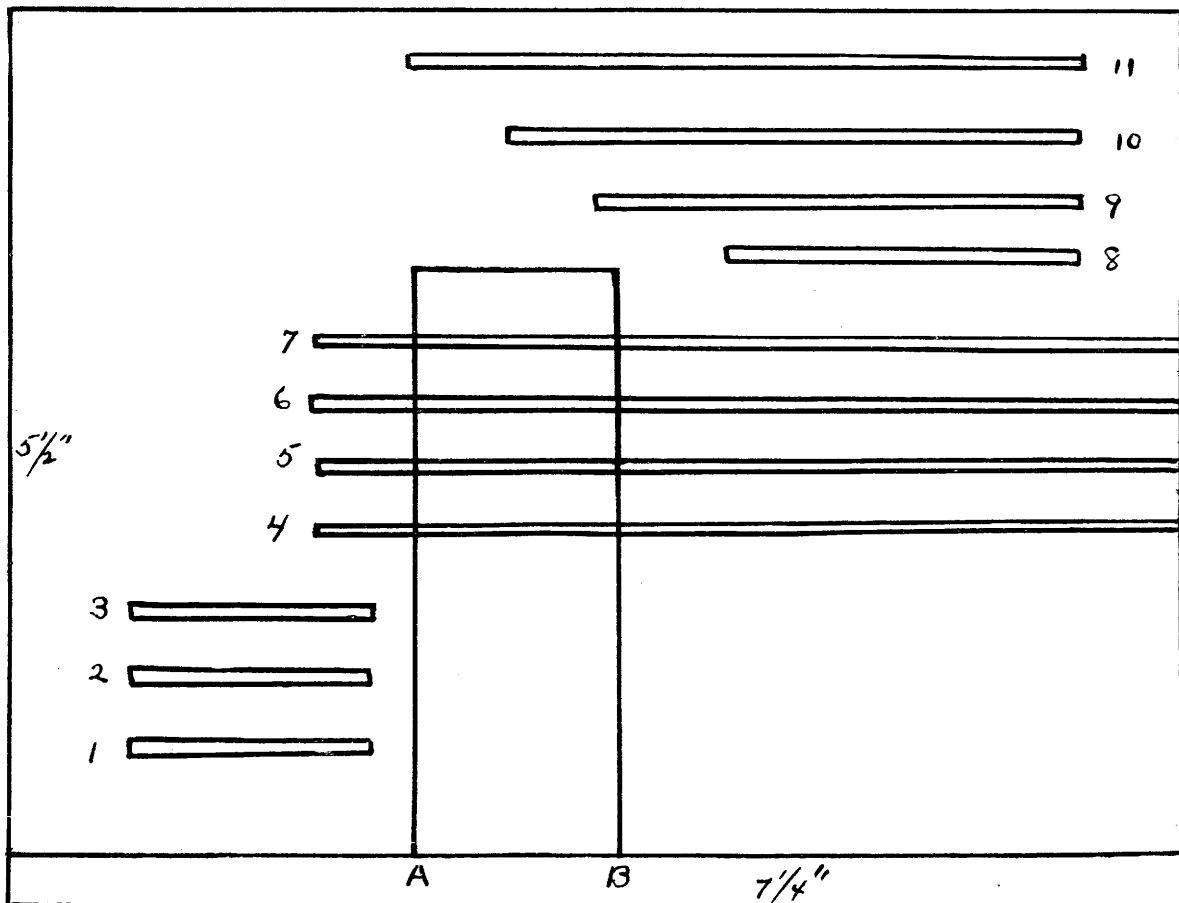


Figure No. 2 Drawing for the design of Purse at Figure No. 1

tapestry must be interlocked together in some manner in order to hold the fabric together. In a recent letter someone asked "what is finger-weaving"? Laid-in technique is often spoken of as finger-weaving. I have always thought this was a rather poor name as there are several other weaving techniques very different in character from the laid-in which are also done almost entirely with the fingers, and a real tapestry might be included in such a class as well as some of the lace weaves. So let us call this form of weaving where the colored pattern weft lies in the same pattern shed as the plain weave, *laid-in technique*.

Modern textiles are placing much emphasis on interesting texture, and skillful new uses for threads and yarns. Threads are really the tools of the weaver, and the use of different or even the common threads and yarns in unusual ways is an unlimited field for the hand weaver. And these simple modern designs as given here are easy to use and may be woven with many different kinds of threads and still be effective. At Figure No. 1 is shown a small envelope purse which was designed by one of my students Mrs. Helen Skowronski. The design for this is as given in the detail at Figure No. 2. This was woven on the 8" Structo loom which was threaded

to a twill threading 1,2,3 and 4 for the full width of the loom.

The warp used was No. 20 mercerized cotton natural set at 30 threads to the inch in the reed. The weft was Bernat's Bonde di Laire in a clear yellow, and the pattern design was woven with Bernat's dark brown raw silk. Of course there are many other possible threads which could also be used for this, and be just as effective as well.

To weave the purse, — weave 5" of plain weave with yellow, which includes 1/2" for a hem. Then begin the design for the flap as shown at AB on Figure No. 2 by using dark brown for the pattern and the yellow for the plain weave, using the laid-in technique. The detail of this design can be drawn off on a sheet of paper and pinned underneath the actual weaving if desired. The lines numbered 1,2,3,4,5,6,7, 8,9,10, and 11 are just two rows of the dark brown pattern weft. The flap with the design on it should measure about 5 1/2", then weave 6" for the back of the purse, and then 5 1/2" more for the inside of the purse with plain yellow. The flap folds back a little above the bottom of the purse, and the inside of the purse is as shown at Figure No. 3. Take in a deep enough seam on the sides of the purse so that it can be turned in and hemmed down where the material is single on the inside. The purse is made up in this way so it can easily be slipped out of the inside lining and washed if desired. A silk lining should be made to fit the inside of the purse, slip it in and sew it down in the sides to hold it

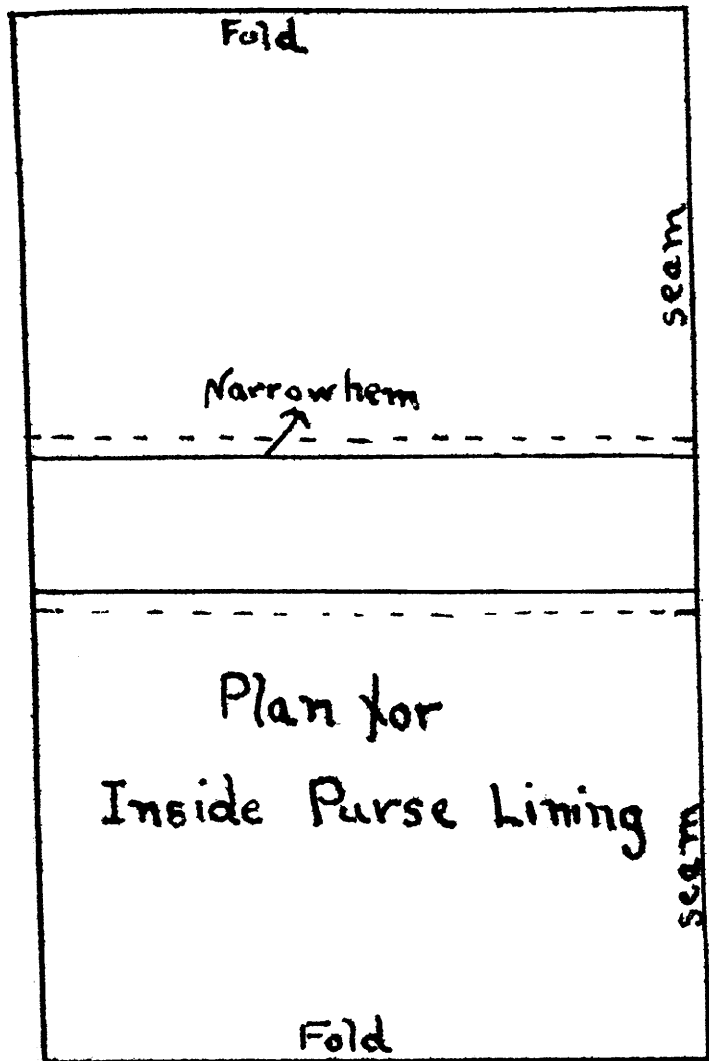


Figure No. 3 Detail of the purse as it is made up

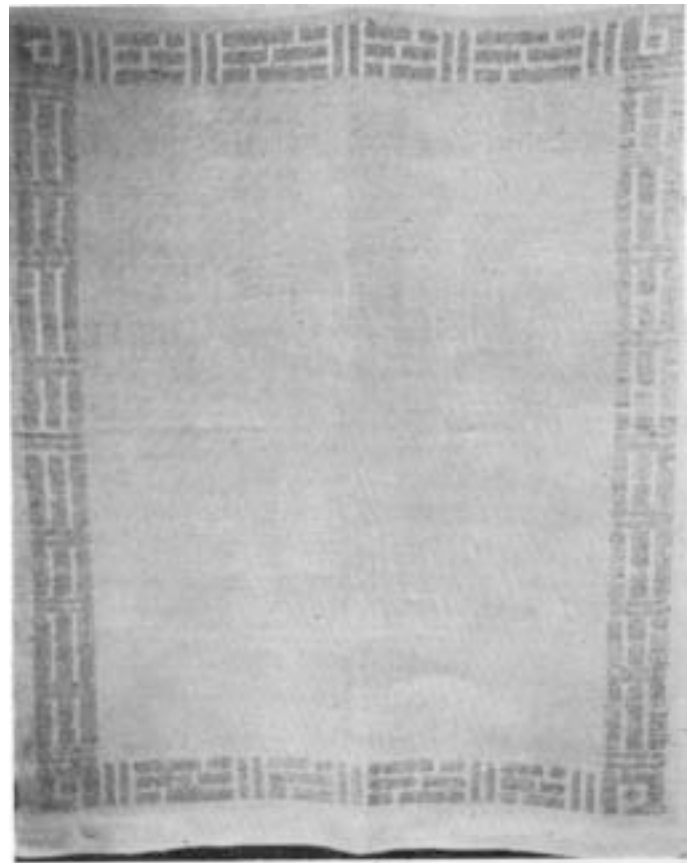


Figure No. 4 Linen runner with laid-in border woven by Eleanor Schwerack

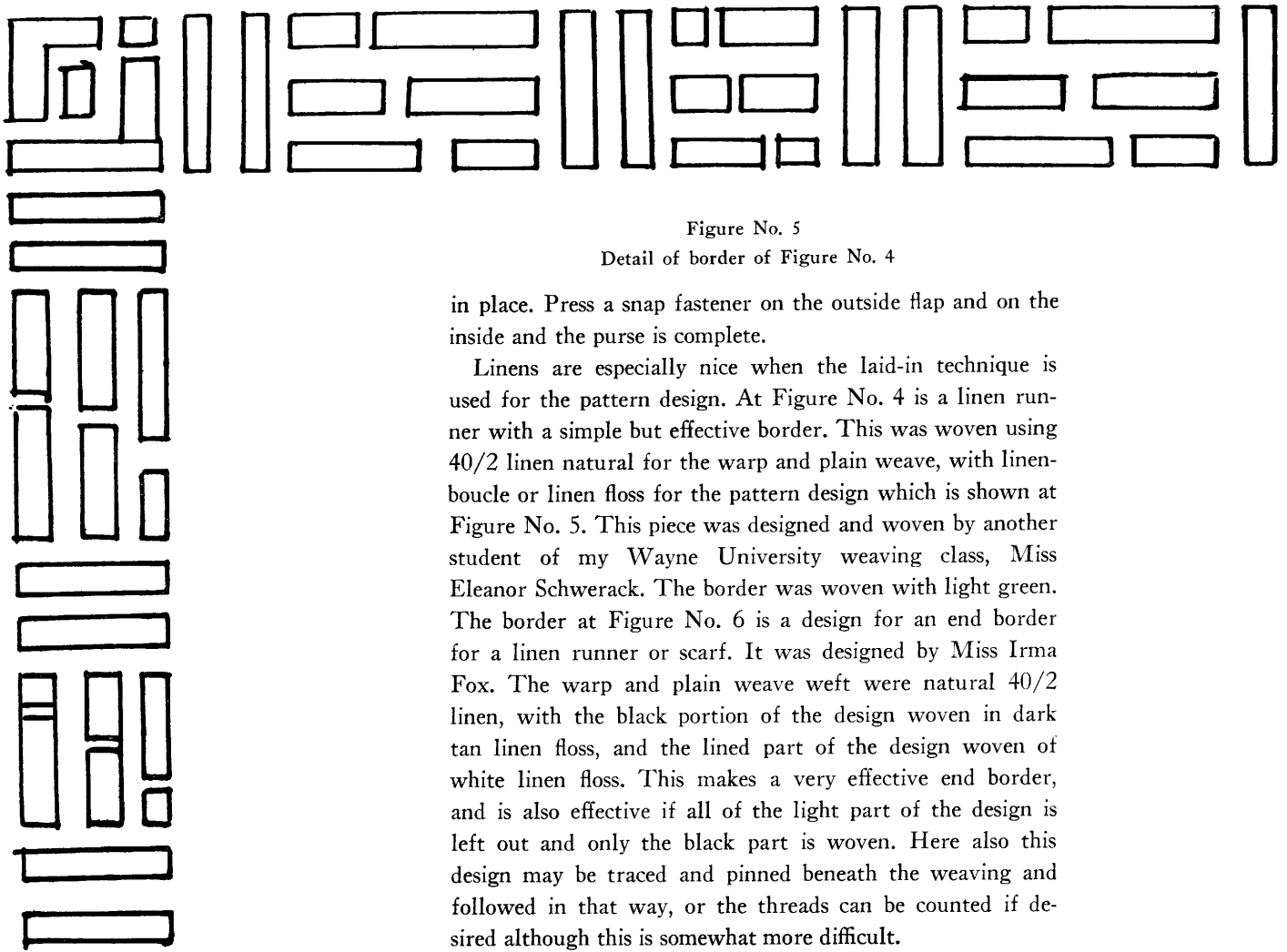


Figure No. 5
Detail of border of Figure No. 4

in place. Press a snap fastener on the outside flap and on the inside and the purse is complete.

Linens are especially nice when the laid-in technique is used for the pattern design. At Figure No. 4 is a linen runner with a simple but effective border. This was woven using 40/2 linen natural for the warp and plain weave, with linen-boucle or linen floss for the pattern design which is shown at Figure No. 5. This piece was designed and woven by another student of my Wayne University weaving class, Miss Eleanor Schwerack. The border was woven with light green. The border at Figure No. 6 is a design for an end border for a linen runner or scarf. It was designed by Miss Irma Fox. The warp and plain weave weft were natural 40/2 linen, with the black portion of the design woven in dark tan linen floss, and the lined part of the design woven of white linen floss. This makes a very effective end border, and is also effective if all of the light part of the design is left out and only the black part is woven. Here also this design may be traced and pinned beneath the weaving and followed in that way, or the threads can be counted if desired although this is somewhat more difficult.

These are only a few ways in which the simple laid-in technique may be used and I hope will prove of interest and use to the readers of *The Weaver*. If anyone desires to ask for further information concerning either the designs or the technique, I shall be glad to have them write me.

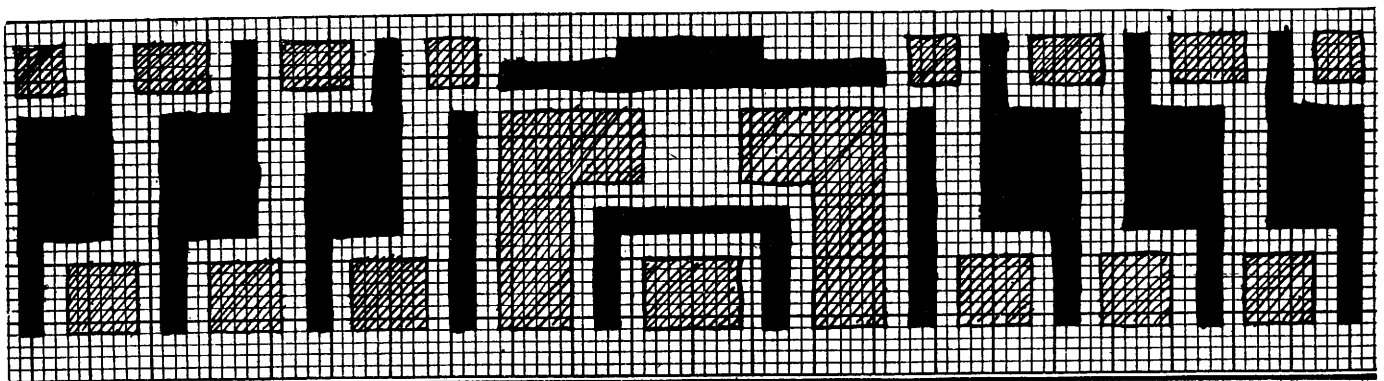


Figure No. 6

Detail of border for end of a runner or scarf designed by Irma Fox

QUESTIONS AND ANSWERS

by MARY M. ATWATER

(Questions for this department should be addressed to Mrs. Mary M. Atwater, Basin, Montana.)

Question: Why is it that in weaving a plain twill for a tweed fabric one thread on the edge fails to weave in? What is the remedy?

Answer: There is no way of getting a plain tabby selvage for a twilled fabric except by the use of an extra pair of harnesses, to carry the selvage threads. The single thread that fails to weave in on one edge of a four-harness twill can be easily overcome simply by taking out and discarding this thread. There will be no further trouble if the twill is woven all the same way. However, if the twill is reversed the loose thread will appear on the opposite selvage, and it is impractical to suppress a selvage thread on each reverse in the treadling. When no special selvage harnesses are available it is necessary on the reverses to take the shuttle around the offending thread. However, if the reverse is made in the "dornik" manner the loose selvage thread will not appear on the reverses. That is to say, if you have been treadling: 1-2, 2-3, 3-4, 1-4, and repeat and wish to reverse do not start back: 3-4, 2-3, 1-2, 1-4, but omit the 3-4 shot and reverse: 2-3, 1-2, 1-4, 3-4, and repeat.

Question: What, exactly, is a "tweed" fabric? Is it true that a tweed is always woven in twill?

Answer: The word "tweed" is often loosely used for any wool fabric with a rough texture, but this is often incorrect. Properly speaking, a "tweed" is a fabric composed of wool yarns for both warp and weft, woven in twill or one of the twill variations such as "Herringbone" or "Dornik." A twilled fabric composed of worsted yarns is not a tweed, and neither is a fabric composed of wool yarns

woven in plain weave. The latter fabric is correctly named "hop-sacking," but as there appears to be an odd prejudice against this name it is often called "homespun." "Homespun" of course, is the name of the wool yarn used and not of the fabric, but this misuse of the word causes little confusion and is allowable.

Question: How should a tweed fabric be finished when taken from the loom? Is it necessary to wash it, or will steaming and pressing suffice?

Answer: The fabric should always be very thoroughly washed in mild soap-suds, rinsed, and lightly pressed through a cloth, or run through a mangle, before it is completely dry. This washing is required to give the fabric the desired texture and should never be omitted. Very decidedly, steaming and pressing do not serve the purpose.

Question: How wide should a tweed suiting for a man's suit be set in the reed?

Answer: For this it is best to consult your tailor. Most tailors recommend a "finished" width of 32". For this set the warp 33" or 33½" wide in the reed, to allow for shrinkage. In weaving also allow generously for shrinkage. The rate of shrinkage varies somewhat with the yarn used and also with the setting in the reed and the weave. A fabric made on a warp set very open in the reed will shrink far more than a fabric with the warp set close, and a "fancy" six-harness or eight-harness twill with skips of more than two threads will shrink more than a close 2-2 twill.

THE PENLAND SCHOOL of HANDICRAFTS, Inc.

Announcement for 1941



Last summer, The Penland School of Handicrafts experienced the most successful session of its history. More people than ever before availed themselves of the opportunity to combine useful study with a wonderful vacation in the high hills of Carolina.

This summer, the main sessions will be held from June 23rd to August 23rd, although instruction in pottery will be offered this year from the fifteenth of June until the first of October. Once more, Rupert Peters of Kansas City will direct the summer school, and Edward F. Worst of Chicago will conduct special classes. Mrs. Axel Sommer of Washington, D. C., will give instruction in tapestry weaving, Mrs. Margaret Bergman of Poulsbo, Washington will teach special techniques, and Miss Grete Petersen of Denmark will offer instruction in a variety of Scandinavian weaves.

Eugene Deutsch of Chicago, who is nationally known in the field of ceramics, will give special pottery instruction, and classes in this field will be directed from June until October by Mrs. Peggy Jamieson of Cocoa, Florida who is an artist in her profession.

Art metal work will be in charge of two young men from the Industrial Arts department of the Kansas City Schools, who will offer instruction in metal-spinning and hand forming of metal and jewelry. Roby Buchanan will conduct field trips for collecting semi-precious minerals and teach the cutting and polishing of stones for jewelry.

Courses will be offered in basketry, chair seating, hand spinning of cotton, wool, and flax, vegetable dyeing, glove-making, block printing, and many other minor crafts. Lincoln Mathews, son of Edward Mathews of the Edward Mathews Guild, Weymouth, Massachusetts will give instruction in the making of shoes. Almost any crafts-minded person will find an interest at Penland. All inquiries should be mailed to Miss Lucy Morgan, Director, Penland School of Handicrafts, Penland, North Carolina.

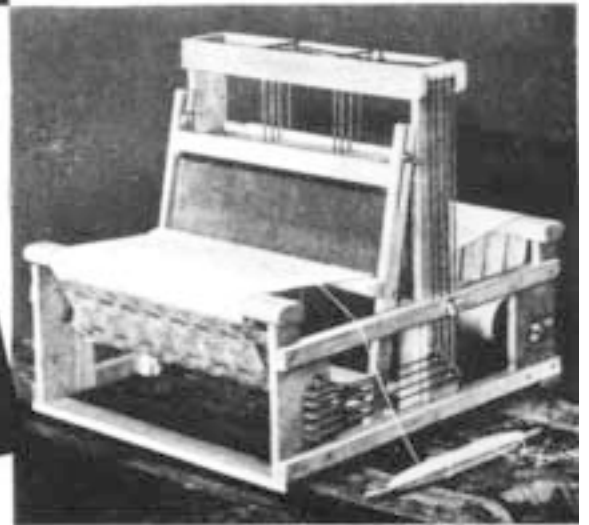
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