

THE SHUTTLE-CRAFT GUILD

BULLETIN

for

Basin, Montana

January, 1936

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The New Year is a time for large plans, and for initiating important projects. It therefore seems appropriate to devote the January Bulletin to the subject of coverlets. Every hand-weaver should make at least one coverlet as it is the traditional "magnum opus" of our craft.

The making of a coverlet is not really such a large project as new weavers seem to imagine. The whole thing, -- from warping to sewing up the center seam and hemming the ends-- does not take more than a week if one has six hours weaving time a day. Not so much time to put into something that will give pleasure and comfort for the next hundred years!

A coverlet should always, if possible, be planned for the room and the bed it is to grace. The conventional Colonial "four-harness over-shot" in dark blue wool on a white cotton foundation is always handsome, of course, but it is not appropriate to modernistic rooms and does not always harmonize with modern color-schemes. Nothing could be better for a stylized "early American" room or for a room of no definite style or period -- though for the latter type of room a lighter blue, a rose, tan or a combination of two colors will be found more agreeable than the navy blue our forefathers loved best. In a room definitely modernistic in style the Colonial type of coverlet makes an unhappy note, and for such a room the coverlet should be modernistic in design and color scheme.

But first to answer some questions about coverlets that have come to me: Can a coverlet be woven on the 20" Structo loom? The answer to this is "yes." It will, however, have to be woven in four strips instead of two and will take almost twice as long to make as a coverlet woven on a 40" loom. A special arrangement for a Structo coverlet will be found later in this Bulletin.

Should a coverlet always have a border? The answer to this is also "yes," as the border gives a finish and sets off the pattern like a frame around a picture. Some patterns, however, require only a narrow border, as plain a possible, while others require a wide and elaborate border.

What is the best way to thread a border? This question has many answers. Theoretically any pattern in the same weave can be used as a border with any other pattern, but some combinations would be very unpleasant and would not give the effect of contrast. If the pattern used for the main part of the coverlet is a large figure the border pattern should be a small, simple one. This is the most usual method of arranging borders and the pattern most used as a border threading is the "Diamond" or one of its many variations. If the large figure includes a small diamond, -- as most patterns for the Colonial overshot weave do -- this part of the main threading can be used as a repeat for the border. But the matter of how to use the diamond threadings for borders was discussed in detail in a recent Bulletin and the directions will not be repeated here. I wish this month to discuss the opposite arrangement -- the use of an elaborate border figure with a small pattern. This arrangement is much less common than the other, but is entirely in the tradition as there are a number of ancient coverlets still in existence that were made in this way. For narrow beds, such as a pair of twin beds, -- especially if they have a box spring and a deep overhang, -- this arrangement is better than the other.

Draft No. 108, page 190 of the Shuttle-Craft Book was written from an ancient coverlet of this order, seen in a collection in Boston. The first 420 threads of the draft are the border, and the last 44 threads are used as a repeat for the center of the piece. It was done on a fairly coarse warp set at about 20 ends to the inch, and was woven in golden tan and a dull green. All shots on treadles 1 and 4 in one shade and all shots on treadles 2 and 3 in the other color.

Draft No. 109 could be used in a similar manner as a border, with the center threaded to any small pattern. The "Diamond" or "Russian Diaper" threading might be used for the center, for instance, but it would be desirable to make each block of draft No. 1, page 138, two threads larger. This would make a repeat of 42 threads. The "Dog Tracks" draft, (No. 37, page 167) might also be used -- or the first 46 threads of Draft No. 15; or draft No. 30.

A coverlet in this pattern could be made very nicely on the Structo loom, as follows:

Selvage, 1,2,3,4, repeated 4 times	- - - - -	16 threads
One complete repeat of the draft		408 "
First 157 threads of the draft		157 "
Selvage, 4,3,2,1, repeated 4 times		16 "
		<u>597</u>

The three extra threads of a 600 end warp can be put into the selvage or simply suppressed.

Weave the complete figure as-drawn-in. This makes the corner. Weave the body of the strip using the treadeling for the small figure that will be used for the center of the coverlet -- Dog Tracks, for instance. Repeat the corner figure at the top of the stripe. Weave a second strip exactly like the first. These two strips will make the side borders.

Now re-thread the loom to the small figure selected for the center. Begin the threading with a complete figure but end in the center of a figure. Do not thread any selvages. Weave two strips on this threading using the same treadeling as for the side strips. That is, first treadle as for a complete figure of the border threading; then treadle the small figure and repeat the border treadeling at the top of the strip.

It is necessary, of course, to be very careful in weaving the strips to put in exactly the same number of figures and to make the figures exactly the same size so that the strips will match when sewed together. It is very harrowing to find one figure too many in one of the strips.

Another unusual way to arrange a border is to thread say three inches in plain twill -- 1,2,3,4 and repeat --; then one complete figure of the main pattern; then another three inches of twill; and finally the repeat for the center. This arrangement as suggested is, of course, for one of the larger figures. It is especially good as a border for the radiating patterns which require a rather solid border to hold them in. Take for instance, draft No. 102: Thread three inches of twill, 4,3,2,1, and repeat, and an additional thread on harness 4. Then thread the radiating figure, omitting the tables. That is begin at thread 47 of the draft and thread through to 192 inclusive. Then thread three inches of twill, 1,2,3,4 and repeat. The effect of this is a stripe of pattern between stripes in plain color, and makes an excellent frame.

I have had a number of requests for "miniature" coverlet drafts, and therefore include several of the best-known patterns written as small

as possible. These little patterns will not be very effective for coverlets, however, except in some special arrangement. Two or more repeats, balanced to make a complete figure, might be used, separated by two inches or so in twill. For use with the "Cat-Tracks" pattern the twill should all go the same way, but for the other patterns it would be better to make a return at the center of the twill stripe. That is, thread 1,2,3,4 and repeat, as far as the center, and the reverse: 3,2,1, 4,3,2,1, and so on. This would be something a little "different" while still in the Colonial tradition and might prove very attractive, especially with such figures as "Double Snow-Flake." I have not tried it myself and if some Guild member is inspired to experiment I shall be much interested to see a sample of the result.

Space is lacking to give the treadelings for all these small patterns but as all but (a) and (c) are ordinarily woven as-drawn-in and as all are familiar patterns the treadelings are hardly necessary. I really hope that by this time there is not a member of the Guild who does not know how to weave a pattern without treadeling directions. One caution, with these small patterns, do not omit the little two-thread 1-4 blocks. They do not show to the eye on the draft as prominently as the other sheds.

Treadeling (a)	Pattern (b)	Pattern (c)
Treadle 2, 3 times	treadle 1, once	treadle 2, twice
" 1, 3 "	" 2, "	" 1, "
" 2, 2 "	" 3, "	" 2, "
" 1, 3 "	" 4, "	" 1, "
" 2, 3 "	" 1, "	" 2, "
" 4, once	" 2, twice	" 3, 3 times
" 3, 2 times	" 1, once	" 4, 3 "
" 4, once	" 4, 3 times	" 3, 2 "
	" 3, 3 "	" 4, 3 "
	" 4, twice	" 3, 3 "
	" 3, 3 times	" 2, twice
	" 4, 3 "	" 1, "
	" 1, once	" 2, "
	" 2, twice	" 1, "
	" 1, once	" 2, "
	" 4, "	" 3, once
	" 3, "	" 4, "
	" 2, "	" 1, "
	" 1, "	" 2, twice
		" 1, once
		" 4, "
		" 3, "

(These treadelings have been written as for the standard tie-up. For use on the Structo loom, trans-pose as usual:
 "treadle 1," levers 3-4
 " 2, " 1-4
 " 3, " 1-2
 " 4, " 2-3
 Tabby, 1-3 and 2-4)

The pattern at (k) on the diagram is a new arrangement in crackle weave of a conventional Colonial pattern. The treadeling is written as for the standard six-treadle tie-up. It will be noticed that treadle 3 is not used in this pattern. A rather narrow border is suggested for this pattern -- five or six inches of border will set the pattern off nicely.

Weavers with modernistic leanings will find several suitable patterns in the Recipe Book, -- both for four-harness and eight-harness weaving. Several of the designs on the special "Step-Pattern" sheet are also suitable for coverlets. Of the six-block designs on this sheet I suggest No. 3, -- which one of our members calls "the flight of birds," --No. 13, No.32, No. 37, with its suggestion of flower-forms, and No.45 would all make handsome coverlets. No. 32 is very handsome when woven; I made a piece in this pattern using a dull plum-color for the darker blocks and a strong burnt orange for the lighter blocks, over a background in golden tan. It seems to me one of the most pleasing things I have done. A color-scheme of rose-taupe and tan on a cream background would give a lighter effect and would also be excellent. No. 45 is also particularly attractive when woven. I made a piece in this, using a

dark blue for the dark blocks and a variety of light colors -- yellow, two shades of green, light blue, rose, lavender and so on for the lighter blocks. The effect was like a bed of tulips. If a ten-harness loom is used a plain striped border can be used with any of the six-block figures. Pattern 79 would make a handsome coverlet also, but as this is an eight-block pattern it requires all ten harnesses; it would be impossible to use a striped border arrangement except on a twelve-harness loom. The best way to make a border on ten-harnesses would be a number of runs of two-unit blocks.

Coverlets in three strips can be made very nicely on the Structo ten-harness loom. If one of the patterns on the special sheet is used, thread half the warp to one repeat of the pattern and the other half as a border. Weave the two side-strips on this threading. As most of these patterns go all one way the second strip should, of course, be woven in reverse -- that is, from the top down. For the center strip take out the border and thread a second repeat of the pattern. The finished coverlet will be four repeats wide with a border.

It is perhaps unnecessary to say anything about the material to use for a coverlet. Modernistic coverlets can be of any material, of course. Silks and rayons preferred. I am particularly partial to a fabric woven in silk over a fine linen warp. Of course a coverlet woven in these materials is a "spread" rather than a blanket but as a rule coverlets are now used more for appearance than for warmth. I have a feeling that when a traditional old Colonial pattern is used the old colors and materials should be used too, but perhaps this is merely prejudice. Of course if intended for an "early American" room the old formulas should be adhered to as strictly as possible. By far the largest number of ancient coverlets were woven on a white or natural cotton or linen foundation, in homespun wool yarn, the favorite color being a deep indigo blue -- the shade we call "navy." Egyptian cotton has much the color-quality of the old cottons and a coverlet with warp and tabby of this material and pattern in hand-spun wool or commercial homespun reproduces the effect of the old weaving very closely indeed. Personally, I prefer a cotton to a linen foundation as linen adds a great deal to the weight of the piece -- and also to the cost. I believe Egyptian cotton will wear as long as fine linen in a coverlet, also. Curiously enough the shade of blue commonly known as "Colonial blue" is rather rare in the old pieces. A brownish madder rose is, however, often found, and also a strong red, which is less pleasing. Many old coverlets are in brown -- probably dyed with walnut -- and one often finds brown in combination with a golden tan. In some cases this appears to be a faded rose, and is almost the rose-taupe shade that is so "modern." It is a beautiful color. Yellows and greens are also sometimes seen in the old coverlets but are comparatively rare. I have never seen an ancient coverlet in that odious color, pink, -- or in purple or plum or lavender, or in orange, or in a clear yellow. Our ancestors did not have the dye-stuffs with which to make these colors. If one wishes to be "period" such shades should be avoided. In my opinion mercerized cotton or fine worsted yarns should not be used, either, as these are entirely modern. Of course the old patterns can be woven with a modern variation of some sort, and in that case any attractive material is suitable.

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I expect to have a special lot of excellent cotton warp, suitable for coverlets, but as the Bulletin goes to press it has not come in. If it arrives, samples will be found herewith. The price is \$1.00 a pound, or five pounds for \$4.50.

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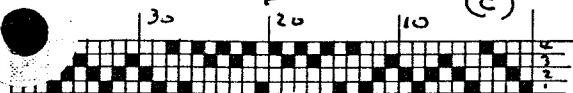
Through an error, Miss Shields' address was given in the last Bulletin as offering ancient hackled flax. The address should have been Miss Marion Renninger, 300 Fourth Street, Shillington, Pa.

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May Dr. Abrahm

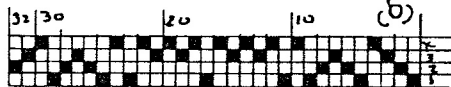
Whig Toss

(c)



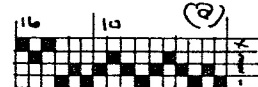
Single Chariot Wheel

(b)



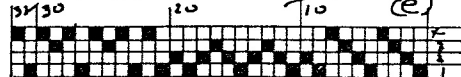
Sweetbriar

(a)



Cat Tracks, Winding Vine

(e)



Star of Bethlehem

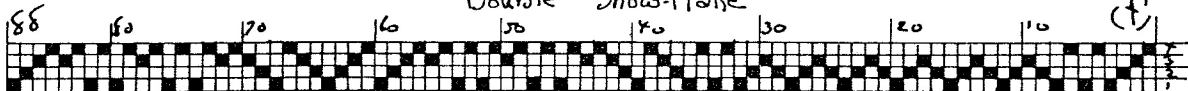
(d)



Pattern tabby

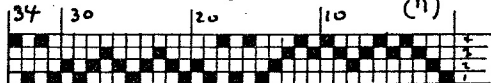
Double Snowflake

(f)



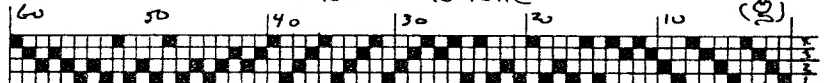
Worlds Wonder

(h)



Wheel of Fortune

(g)



Queen's Delight

(i)

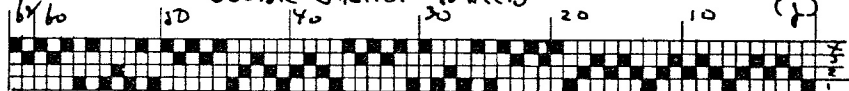


Drafts (a)-(j), Coverlet

Patterns in Miniature

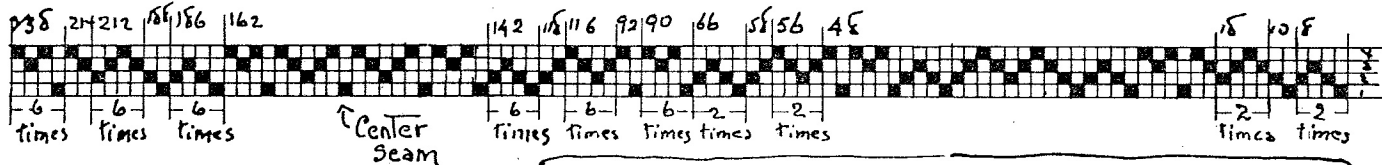
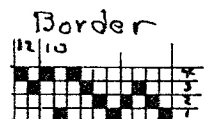
Double Chariot Wheels

(j)



A New Coverlet Pattern in Crackle-Weave Colonial Type

(k)



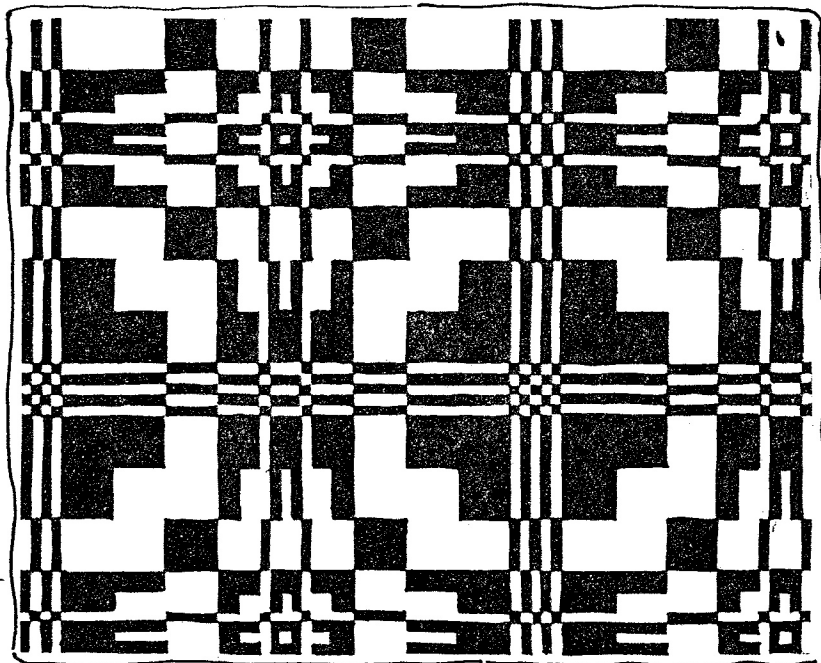
Treadle Border:

treadle 2, 5 times; 4, 5 times
Repeat

Treadle Pattern

Treadle 2, 9 times

- " 1, 9" (Continue)
- " 4, 5" treadle 4, 5 times
- " 2, 5" " 2, 5"
- " 1, 5" " 4, 5"
- " 2, 5" " 2, 5"
- " 4, 5" " 4, 5"
- " 1, 9" " 2, 25"
- " 2, 9" " 1, 25"
- " 4, 25" " 4, 25"
- " 1, 25" Repeat
- " 2, 25"



Sketch of Pattern (k)

THE SHUTTLE-CRAFT GUILD

BULLETIN

for

Basin, Montana

February 1936

Blankets

A number of inquiries about the making of blankets have been received recently, so the following notes should prove useful to at least some of our Guild members.

By "blankets" as distinguished from "coverlets" we usually mean an all-wool piece intended chiefly for warmth and comfort rather than for the adornment of a bed -- but of course there is no reason our blankets should not be colorful and attractive as well as soft and pleasant. Ordinary bed-blankets should be closely woven to withstand many washings and long wear, but baby-blankets, couch "throws" and so on may be as frivolous as we choose, and automobile blankets should be handsome as well as useful. Special drafts for these various types of blanket have been given from time to time in the Bulletin and many will also be found in the Recipe Book, but a general review of the subject and some new patterns seem to be in order.

Commercial blankets are usually woven in a plain twill and are heavily "fulled" to give fluffiness. Fulling mills are not generally available to hand-weavers in our day, but if we wish we can get a similar effect by weaving with a long-staple, loosely-twisted yarn and then raising the nap by brushing with a stiff wire brush. For my part, I am willing to leave the production of this type of blanket to the woolen mills. We can get softness and lightness by different methods, with handsomer results.

A great many different weaves can be used successfully for blankets. Baby-blankets and couch blankets may even be woven in the familiar "four-harness overshot" if a pattern composed of short skips is selected. However this is probably the poorest weave for the purpose and as there are so many better weaves it is not recommended. In a general way, any weave that produced a closely combined fabric is suitable -- for instance, all the linen weaves, the "summer and winter" weave, and our new-old and popular "crackle" weave.

Many of the old-time blankets that have come down to us were woven on the "Goose-Eye" threading, or some variation of this. A decorative effect was produced by using several colors in bold plaid effects. I have before me a delightful sample of one of these old blankets done in light tan, Colonial Blue and brown. The Goose-Eye threading is, of course, familiar to all, but for the sake of convenience it is given at (b) of the diagram. The material in the old piece is a fine hand-spun single-twist yarn set at 30 ends to the inch. Bernat's "Fabri" yarn at this setting could be used, or "Fabricspun" at 24 to the inch, or ordinary "Homespun" at 16 to the inch. The arrangement of colors in the old piece is as follows: 6 ends brown, 72 ends tan, 6 ends brown, 72 ends blue, and repeat. In weaving the same arrangement of colors is used. The pattern is treadled in the regular diamond figure, without a tabby.

A photograph of a similar fabric received from one of our Guild members shows a similar pattern and arrangement of squares and stripes, done in rose and blue, with the narrow separating stripes in white.

A light-weight blanket of this kind can serve as a blanket-sheet in cold winter weather and as a light covering for summer nights. Done in very fine, soft yarn, such as Bernat's "Afghan" yarn, warped and woven at 36 to

the inch it would make a delightful shawl-blanket for a new baby. Done in a heavy knitting yarn warped and woven 15 ends to the inch this weave would make an excellent automobile blanket, or a blanket for the couch.

For a small piece such as a couch blanket, a good arrangement of colors would be a broad border in the darkest shade used and the body of the piece in a lighter shade crossed at intervals by narrow bands in the darker color. Or a shaded arrangement of borders could be used with a plain colored center.

Nothing could well be simpler than a piece of this kind, but the possibilities are varied and interesting. I sometimes think that we give ourselves too much trouble with complicated weaves when we can do such lovely things with very simple weaves.

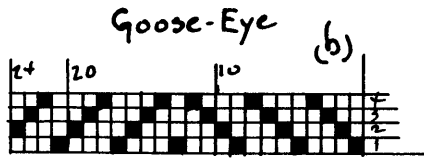
The plain twill weave is excellent for blankets and may be done in a number of different ways. Plaids woven in regular 2-2 twill may be mentioned. The 3-1 twill makes a heavier, softer fabric and when warp and weft are of different colors a blanket woven in this manner, on treadles 1,2,3,4 and repeat of the tie-up as given on the diagram at (a2) will produce a two-color blanket -- warp-color on one side and weft-color on the other. Or the eight treadles shown on this tie-up may be woven in succession, which produces a rippled effect.

The double three-harness twill was much by our fore-fathers for the making of blankets. Of all the blanket weaves this seems to me the most satisfactory because it makes a very closely combined fabric and also permits patterns of as much elaboration as one wills. However this weave requires a minimum of six harnesses -- for a two-block pattern. For a three-block pattern nine harnesses are required, and so on. The blanket illustrated on page 64 of the Shuttle-Craft Book is a twelve-harness pattern in this weave. The illustration on page 215 is also an all-wool blanket in this weave. The texture is clearly shown. This weave is to be preferred to the summer and winter weave for blankets because it is made without a tabby and with the same kind of yarn for both warp and weft. Any of the patterns on page 218 of the Shuttle-Craft Book can be carried out in this weave on six harnesses. The plan of the weave and the tie-up are given on the Bulletin diagram at (c). The threading at (c) represents the two units of the pattern. For a blanket it is best to use a unit of six threads as shown, though if a small figure is desired the unit may be of three threads only. All the patterns on page 219 of the Shuttle-Craft Book can be done in this weave on nine harnesses. The plan of the weave, showing three single units, is shown, (d) on the draft. To thread pattern 166, for instance, repeat the unit of the first block eight times (48 threads); the second unit three times (18 threads); third unit three times (18 threads); second unit, once (6 threads), and so on. There are 25 units in the pattern, so in this weave the repeat will require 150 warp-ends. Pattern 167 requires a special tie-up, given on the accompanying diagram at (d2), and pattern 173 also requires a special tie-up given at (d3). The other patterns on this page may all be woven on the (d1) tie-up.

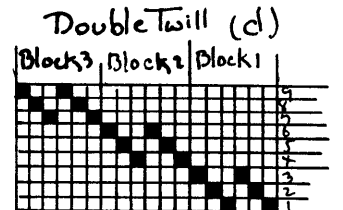
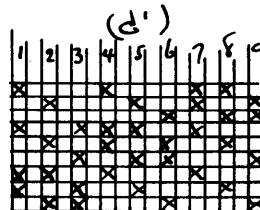
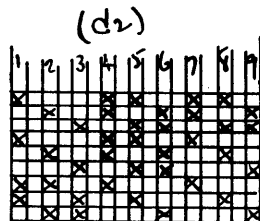
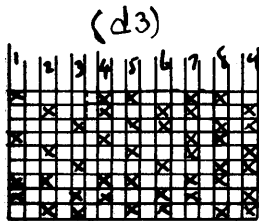
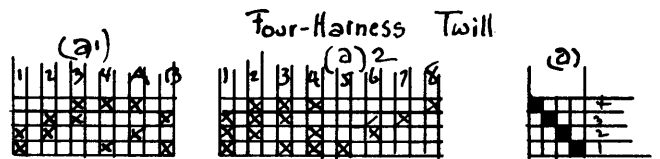
For this weave warp and weft should be the same yarn but different in color. If desired several colors can be used in both warp and weft. Old blankets in this weave were sometimes made in this manner. However a good deal of the effect of the pattern is lost when done in this way, and warp of one color with weft all in the same shade -- different from the warp -- seems to me to give the best effect.

A light-weight blanket made commercially in Canada is woven in what one sometimes hears called the "basket weave." It is a plain tabby done in strands of four, over four and under four. This, however, is not a true basket weave and though the effect is attractive the fabric is not closely enough combined to wear and wash well. The real basket weave, however, is excellent. A draft for this will be found in the Shuttle-Craft Book --

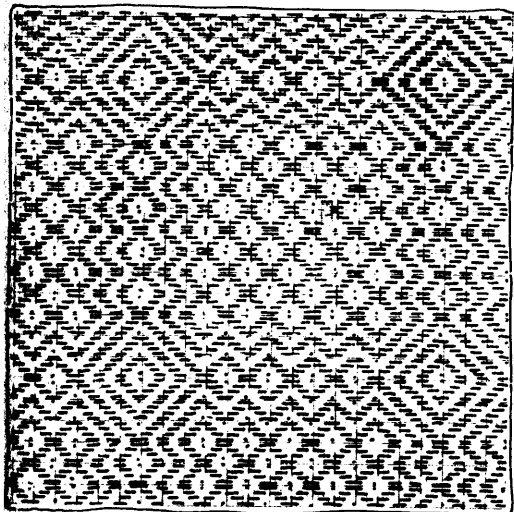
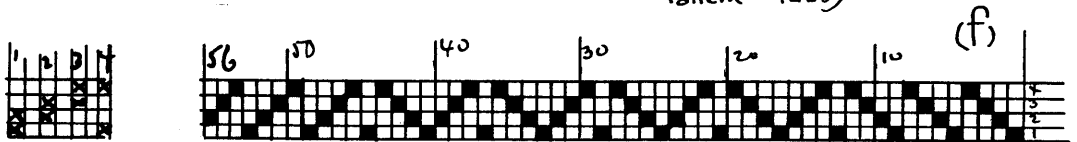
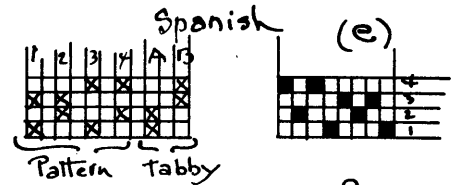
Bulletin, February, 1936



Weave without tabby



("X" indicates harness tied to sink)



Pattern (f)

Tredden (f) as follows:

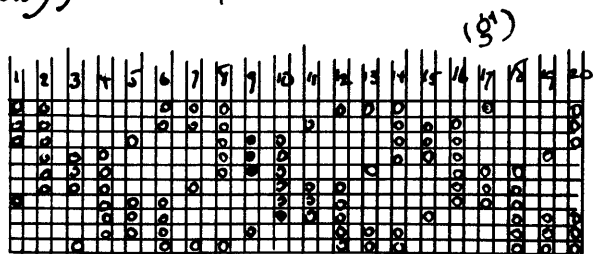
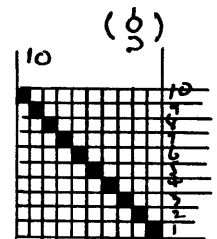
4, 3, 2, 1, — three times

1, 2, 3, 4, } Four times

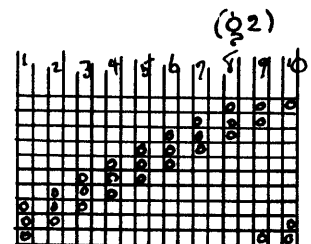
4, 3, 2, 1, } Four times

1, 2, 3, 4, — three times

(No tabby) Repeat



("O" indicates harness tied to rise).



A very soft and delightful blanket is one in double weave. For two-block patterns in this weave eight harnesses are required, of course. This weave, threaded for large squares in two alternating colors, could be enriched by weaving figures in the Finnweave technique in the center of some of the blocks. This is the blanket I should like to make for myself.

A blanket double the width of the loom can be woven on four harnesses in plain tabby weave; or in three-harness twill on six harnesses; or in any four-harness threading on eight harnesses. The manner of doing this has been described a number of times and this need not be repeated here.

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I have had several inquiries lately from business houses that wish to get in touch with hand-weavers who can supply "yardage" fabrics for sale. The growing interest in hand-woven fabrics has reached the point of showing business possibilities on a large scale. I have hoped for a long time that someone would organize the business side of the craft through an adequate selling service. Perhaps the time has come. Will all Guild members who can supply dress-fabrics on a regular output basis, -- and also those who might be interested in weaving these fabrics for sale -- kindly send in their names to me so that I may have a list for reference in the event that these projects develop.

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One of our members writes of having seen in a large New York store table sets consisting of a small center mat and eight place-mats, made of celophane in an open weave. These sets were selling at \$30.00, and were much admired. I still have some celophane and "straw-twist" in stock so that anyone inclined to try this can secure the material. The price is as before -- \$1.15 a pound or \$5.00 for a five-pound assortment.

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The sample enclosed is from a lot of light-weight chenille, dyed in a gay and variegated manner. The price of this is \$1.00 a pound, or \$4.50 for a five-pound assortment. This material will make attractive curtains and inexpensive knitting bags, -- also bath-mats and small rugs, and the baby bath-aprons that proved so very saleable some years ago. This is not a large lot, so please order at once if you wish some of this.

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Mr. MacKay has failed me on the gauze harnesses, to my very great chagrin. I have made arrangements with another manufacturer to supply the equipment and hope to have it in hand very shortly. I hope Guild members will pardon me for the premature announcement. I would not have made it without Mr. MacKay's promise that he would have the equipment ready by the first of December.

I have received from the Structo Company the model of a small winder for use in filling the Structo warp-spools. This is a very nice little tool and greatly facilitates re-warping the spools. I believe it is to be put on the market very shortly, at a price of \$5.00. Warping remains the most troublesome part of our project -- the least interesting and the "fussiest." Anything that simplifies the work is a real boon.

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Mary R. Austin

THE SHUTTLE-CRAFT GUILD

BULLETIN

for

Basin, Montana

March, 1936

(Copyright, 1936. Mary M. Atwater)

For some reason my mail at this time of year is always full of questions about drapery fabrics. Perhaps it is a first sign of spring, though the early robbin is still far away. As I write, I can look out of my window at mountains covered with many feet of snow, and a thermometer that blandly records fifty degrees below zero, which is anything but spring-like. But no doubt warm weather will come again in time, and the fun of turning the house out of doors and dressing it up all new and fresh for the summer.

The curtains we want to make for spring are light, gay curtains -- for the sun-room, the summer cottage, to dress the living room for the days of open windows and soft airs. In winter -- in a cold country at any rate -- there is comfort in heavy, thick draperies in rich, warm colors, to give our rooms the shut in and protected feeling that is so comforting against the outside whiteness and chill. In summer such draperies seem "stuffy" and we want something very different.

The designing of draperies to set off a particular room is always a nice little problem. If the room is designed in a definite decorative style and color scheme the thing is simplified, as one needs merely to go along with the general plan, but many of us live in rooms that contains many diverse elements and the problem is to bring these into harmony -- to draw the room together and make it an entity. This bit of magic can be accomplished with draperies more easily than with any other single item of furnishing, but just how to do it in a particular case is a matter for careful consideration. If the room lacks decorative detail -- if, for instance, it has walls in a dull monotone and heavy furniture in leather or a plain color, -- a bold use of both color and pattern will do wonders for it. If, on the contrary, it is full of small objects, with pattern in the wall-paper, the rugs and the upholstery, draperies done in plain color and in an interesting texture but little pattern will prove more agreeable. For the first type of room described I can think of nothing more likely to prove successful than the three-harness weave, done in many colors and much dash. The very thought of such draperies in a room of the second type is painful.

The three-harness weave has been described in the Bulletin and is also given in the Recipe Book, but the simple draft is shown at (a) on the accompanying diagram as a convenience. This weave depends entirely on color for its effectiveness. It should be done in quite coarse materials, and woven without any inhibitions whatever. Simply choose a back-ground color -- as cream, tan, or "natural" linen -- surround yourself with weft material of a dozen brilliant colors, not omitting black, and "go to it." It is useless to try to plan a piece of three-harness weaving on paper. The best effects are those improvised on the loom. Those who are unfamiliar with the weave are well advised to make a practise piece, that can be used later for a pillow-top or table runner, before embarking on a large project like a set of curtains, as anything may happen in this fascinating weave.

In setting up the loom for three-harness weaving leave all four harnesses in the loom though only using the three front harnesses for the threading. Leave enough empty heddles on the back harnesses to preserve the balance of the loom, and make the standard four-harness tie-up. The loom operates much better this way than when only three harnesses are hung over the rollers. If the loom is of the "jack" type, however, hang only the three harnesses required for the weave.

We have so many patterns for draperies that for this Bulletin I believe it would be well to concentrate on those of the "texture" type, -- especially as the trend appears to be toward interesting textures rather than patterny effects. One of our Guild members who is living in France recently sent me a fabric which she says is the fashion of the moment for draperies in that country. It is a firmly woven plain cotton material that owes its character to the use of a very unevenly spun and rather "wooly" cotton, in natural cream color. Curtains of this material -- enlivened perhaps by gay colored borders -- would make attractive curtains for a morning room, a sun-room or a bed-room. I have been unable to find cotton yarns of the right type for this, but the natural ramie, of which a sample is enclosed would give the effect.

Another interesting sample recently received is in a rather hard-twisted and wiry linen with little nubs at intervals, in natural and red. The threading, tie-up and treadeling are given at (b) of the diagram. The two colors appear in the warp as well as in the weft, producing a plaid effect as follows: 12 threads natural; 4 threads red; 4 threads natural; 4 threads red, and repeat. Of course other arrangements of stripes could be used as desired. The special tie-up and treadeling produce an extremely interesting texture, very subtle in effect, and the same on both sides of the fabric. This weave can be quite open, with the warp set far apart and the weft lightly beaten. It would be a good weave for light scarves done in fine worsted novel yarns, and would also be an excellent weave for a couch-blanket if done in Germantown or a similar yarn.

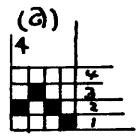
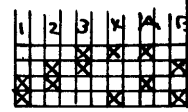
The threading at (c) produces a very interesting texture, but is not good on the wrong side, and should be used only for draperies so hung that only the right side is in evidence. The weave might also be used for upholstery and for smart tailored bags. Of course for hangings the weave should be somewhat more open than for other uses. The blocks may be of any size desired, or may be of different sizes as shown at (d). The weft should be all the same material, though a mixed or novelty yarn, or a strand of two or three fine yarns of different colors, would give a more interesting effect than a plain colored weft. Weave as follows: several shots in plain tabby, ending with tabby B; Treadle 1, once; treadle 2, once. Plain tabby for several shots, ending on B. Treadle 3, once; treadle 4, once. Tabby, ending on B. Treadle 3, once; treadle 2, once. Tabby, ending on B. Treadle 1, once; treadle 4, once. Repeat. Note the special tie-up- for this weave. The first four treadles bring down a single harnesses instead of two harnesses as in the standard tie-up. If the loom fails to open a good shed on these treadles make a set of "false ties" as explained several times in the Bulletin. On a loom of the jack type no false ties will be required.

The draft given in the Recipe Book, Series III, No. 1, is an excellent one for an open weave done in quite coarse material. It also gives an interesting effect for a closer setting of the warp, the missed dents being omitted -- that is, all dents sleyed. An interesting way to weave this is to use a series of five or seven shots, and repeat. For instance, cream, yellow, cream, red, purple, and repeat. Follow the regular scheme of treadeling throughout: A,B,2,B,A,1, and repeat. Using an odd number of shots in the color repeat brings the brightest shot on a different shed each time for four repeats, and this gives an attractively uneven effect.

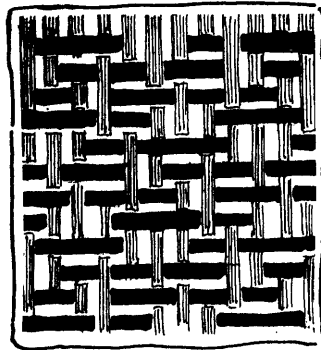
Plaids and checks are very fashionable at the moment and at (e) is given a new figure of the "Shepherd's Check" type, taken from an interesting sample in coarse linen in red and natural, recently sent in by one of our Guild members. The warp should be set four threads of one color and four threads of the second color, and the weaving should be done in the same order. This threading can be used for scarves, done in fine worsted, or would prove excellent for a sports coat done in hand-spun tweed yarn.

There are a number of threadings in the Recipe Book that will prove useful for draperies of the "texture" type. The following are suggested: Series III, No. 15; Series IV, No. 1; Series IV, No. 2; IV, 4; IV,5; IV,9; IV,11; IV,13; IV, 14; IV,15. For draperies, of course, the warp

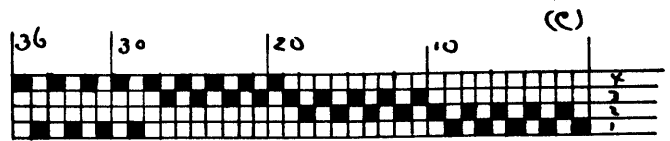
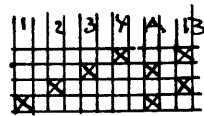
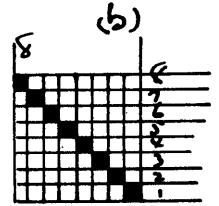
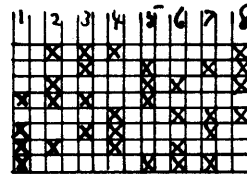
Three-Harness



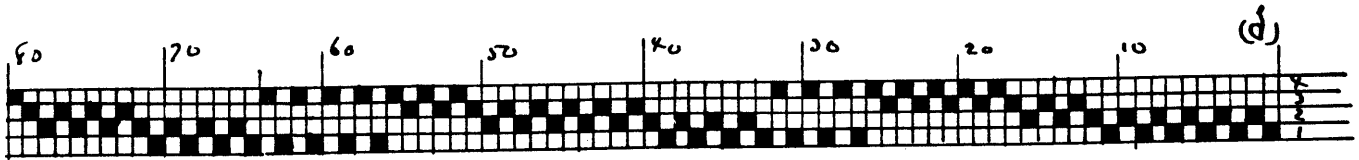
Weave (b) as follows:
 1. 2. 3. 4. 5. 6. 7. 8
 Repeat
 (One shot on each treadle)



(b)



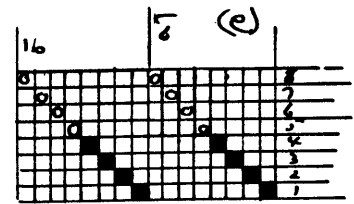
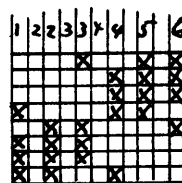
(c)



(d)

Weave (e) as follows:

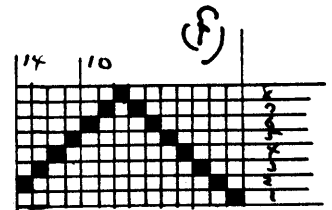
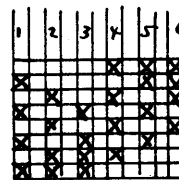
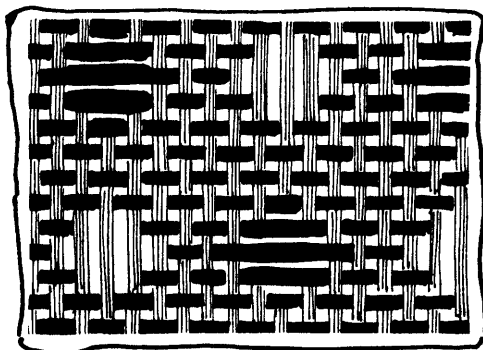
1. once 2. twice 3. once - natural
 4. " 5. " 6. " - red
 Repeat



(e)

■ "Natural"
 □ Red

(f)



(f)

Weave (f) as follows: 1. 2. 3. 2. 1. 4. 1. 4. 5. 6. 5. 4. 1. 4. Repeat.
 (One shot on each treadle.)

should be set further apart than for a suiting or an upholstery fabric, and for spring-time curtains cotton, linen or silk are better materials than wool or worsted yarns. In all these fabrics when made for curtains the beat should be light -- the same number of weft shots to the inch as there are warp-ends to the inch in the threading.

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I have succeeded in obtaining some very attractive materials for our spring curtains. Samples are enclosed. The natural ramie has already been referred to. The price is \$1.25 a pound, or five pounds for \$5.50. This is a small lot and those who send in their orders first will be the ones to be supplied. Of the heavy cottons I have a good supply. These are on large cones weighing from 1½ to 2 lbs. each. The price is 85¢ a pound or \$4.00 for five pounds. The novelty worsted yarns are \$1.25 a pound or \$5.50 for five pounds. These yarns will be excellent for scarves and light-weight dress fabrics as well as for curtains. I have some odds and ends of silks still in stock and will supply this material, while it lasts, at \$1.25 a pound -- in assorted colors.

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One of our members who weaves as a business has had very useful cost-sheets prepared. These, together with a set of samples, would make an extremely valuable record -- not only for those who weave for profit but also for all of us. These sheets are inexpensive and I believe would add a lot to our knowledge of our craft. I have obtained sample sheets which I enclose. Prices are as follows: lots of one hundred, \$1.50; lots of more than one hundred at the rate of \$1.00 per hundred. Lots of five hundred and over at 75¢ a hundred. These prices include postage. Orders should not be sent through the Guild but direct to Quinby Scheele, 146 Bedford Road, Pleasantville, New York.

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Several Guild members have inquired about the next travelling exhibit. The time of year for the last exhibit proved unfavorable, and for this year I should like to start the exhibit June the first. Perhaps this date will be more satisfactory. I should like to hear from members who plan to contribute to the exhibit this year, though of course pieces need not be sent in before the middle of May. For the information of new members I wish to explain that the exhibit can be sent only to those who contribute, and in places where there are local weaving Guilds or where several members live within easy distance of one another the collection will be sent to only one person, who will be requested to notify the other weavers of its arrival so that all may see it. This is made necessary because of the time element. The collection is sent "round robbin" fashion from one member to another along an itinerary planned to make the carriage charges as low as possible. Heretofore there has been no charge except these carriage charges, but I find that I have a good many expenses in connection with the exhibit and shall ask this year a fee of \$1.00 from each exhibitor. In the case of a group of exhibitors the carriage charges can be divided.

Our exhibit last year took far too long in making the round owing to the fact that two people kept the collection much longer than contemplated. The exhibit is supposed to be kept not longer than a week under ordinary conditions -- ten days at the outside. Even so the round requires several months. Several people last year sent in very small pieces, so that the main part of the collection was contributed by only four or five people. It seems to me unreasonable for anyone to expect to receive the collection for a contribution of, say, one small towel. Small articles are desirable, of course, but please do not send a single small piece, and I hope we shall have a number of large pieces also. The exhibit is an interesting and useful method of exchanging ideas and I should hate to abandon it. If pieces sent for the exhibit are accompanied by cost sheets the value will be greater.

May M. Atwater



BULLETIN

of the

Shuttle-Craft Guild

April, 1936

Basin, Montana

(Copyright, 1936. Mary M. Atwater)

At last I have some information about gauze or "leno" weaving. I have been experimenting with a patented steel heddle used for this weave on power looms, and find it can be used on our looms also, -- but only on the larger looms that are equipped with 12" heddles. This heddle is not made in a size to fit the Structo loom.

The patented heddle can be used on our ordinary standard harness frames, but would, I believe, work a little more easily on special bars that can be secured from the people who manufacture the heddle. The address is: Steel Heddle Manufacturing Co., 2100 West Allegheny Avenue, Philadelphia, Pennsylvania. These special heddles are, however, quite expensive. The price quoted me was \$60.00 per thousand or 15¢ each in small quantity. Though this equipment would be desirable for anyone who plans to weave leno on a commercial scale I believe for most of us hand-weavers, who wish merely to do this kind of weaving occasionally, the old methods are more practical. I have therefore been experimenting with several of the methods used in leno weaving by the old-time weavers; it is unnecessary to describe all the different methods as one appears to be simpler and better adapted to our equipment than the others, and therefore I shall describe this particular method in detail.

It involves no great expense and no great amount of extra work in setting up the loom, and no change whatever need be made in the loom itself.

The cross in the warp is produced by the use of a set of "doupes," or half-heddles, tied of string. Ordinary carpet-warp can be used though a stout linen is better as there is a certain strain on these heddles and unless they are made of strong material they will be apt to break after a short use. These half-heddles have no eye and are simply loops of such length that when hung over the heddle-bar of the harness they extend a little beyond the eye of the wire heddle. I made mine long enough to be hung on the heddle-bar with a clove hitch, as illustrated on the diagram. The hitch serves to keep them in position. However if a fine warp is used and a large number of doupes are required it would be better simply to hang them on the bar without the hitch, as this occupies some extra space on the bar.

The doupes should, of course, be tied the same length. It would be easy to make a template to tie them over by setting two dowels in a wooden block, correctly spaced apart. However, I found a book that served very well as a template and tied my doupes around this. The book, by the way, was that interesting travel book "Easter Island." Doupes tied around this book cross-wise -- not length-wise -- were just right for my large loom and would fit any loom equipped with 12" heddles.

Two harnesses are required to operate the doupes -- a harness called the "standard" equipped with ordinary wire heddles and a second harness to carry the doupes. The classic way to set up the loom for cross-weaving is to use two standards and two sets of doupes, but as a fifth harness is required to make the plain shed this is impractical for four-harness looms.

Besides, the cross can be produced perfectly well with a single standard and single set of doupes. There is a little more strain on one set of warp-threads, but unless a very delicate warp is used this causes no great inconvenience.

The process of setting up the cross-warp is as follows: First thread the warp as for plain tabby through the two back harnesses of the loom. (If a loom with more than four harnesses is used the threading can be a four-harness twill, or an eight-harness twill for that matter, or any fancy threading desired, so long as the two front harnesses are reserved for the cross.)

Put on the front harness -- the standard -- half as many heddles as there are threads in the warp, and have an equal number of tied doupes prepared. The doupes can be put on the harness before starting the threading, but I found it more convenient to hang them on the bar, one by one, as required.

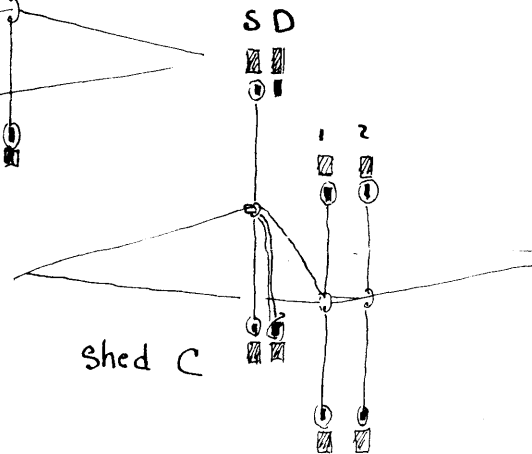
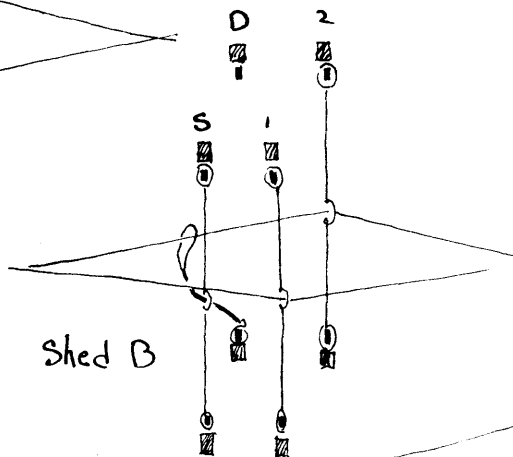
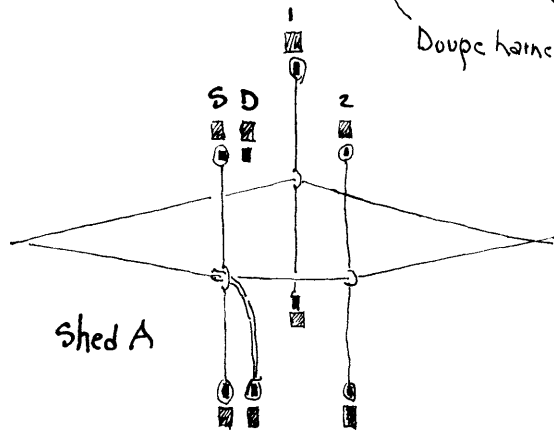
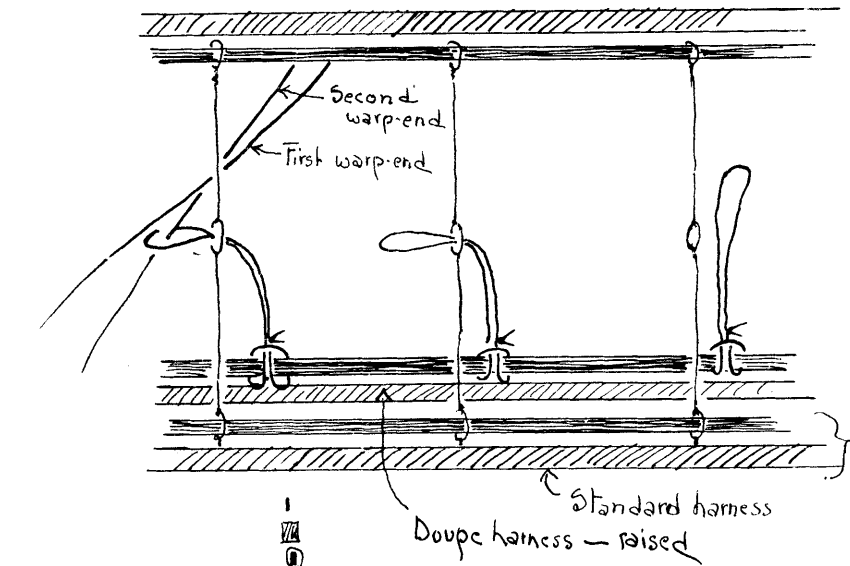
To thread the doupes, begin at the right side of the loom. Bring the first heddle of the standard to the right of the warp and hang a doupe on the bottom bar of the second harness, a little to the right of the heddle. Put the loop of the doupe through the eye of the heddle. Take up the first pair of threads in the threading; take the first thread over the loop and draw the second thread through the loop. Repeat this process for each pair of threads all across the warp. When the first and second harnesses hang in regular position the loop of the doupe should not extend further than just through the eye of the heddle on the standard, therefore to make the threading of the loops easier it is a good idea to raise the second harness during the threading process. This gives one a longer loop to work with. The method of threading the doupes is illustrated on the diagram. There is nothing complicated about this, but of course it must be done with exactness. Note that the first thread of each pair must pass over the loop of the doupe, and the second thread through the loop. Any error in the order will cause trouble.

In sleying draw the two threads of each pair through the same dent of the reed, no matter what the warp-setting. If sleyed singly through different dents the cross could not pass through the reed. A special reed is not required, however, except for some exceptionally heavy warp. In my experiments I used ordinary carpet-warp and got a very satisfactory mesh by setting the warp at ten ends to the inch and sleying as follows through a fifteen dent reed: two threads through the first dent; skip two dents. Repeat. A more open mesh of the same material set at eight to the inch and sleyed in the same fashion through a twelve-dent reed was also satisfactory. I believe a good rule for warp-setting would be two thirds the number of warp-ends customary for the particular warp in question. A setting for Egyptian cotton 24/3, on this basis, would be 20 ends to the inch; for perle cotton #10 would be 16 ends to the inch, and so on.

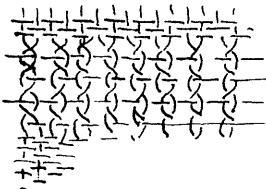
A fairly elastic warp should be used for this weave, when done with a single set of doupes. A linen warp would prove very troublesome unless kept dripping wet, but cotton, silk and wool work all right. There is more take-up on the second thread of each pair than on the first thread, and if a very long warp is to be woven it would be an advantage to use two warp-beams so that this difference could be equalized. However this is unnecessary as a rule. By cutting out each large piece woven and tying in again to the beam the slack can be taken up if necessary.

On the tie-up as given on the diagram the plain tabby is woven on treadles A and B. The plain leno or "marquissette" on treadles B and C alternately. In the case of an elaborate weave or pattern threaded through the

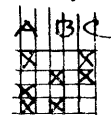
Method of mounting & threading the doupes



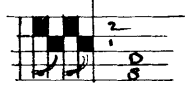
Weave - Structo
A - lever 3, alone
B - levers 2-4
C - levers 1-2.



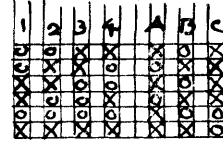
tie-up



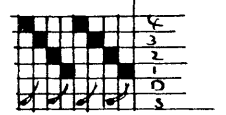
threading



tie-up



threading



☒ Sinking ties
☐ Rising ties

Treadle:

Plain tabby - A & B, alternately
Leno: B & C, alternately

Simple method of "Cross" or "Leno" weaving.

back harnesses of an eight-harness or ten-harness loom special treadles for these weaves should be tied as may be required, with an extra tie raising the doupe harness made on each of these treadles.

The cross-shed -- on treadle C -- puts a strain on the warp as can be readily understood by the diagram of this shed as shown on page three. If the loom used is an eight-harness loom and six harnesses only are to be used -- as in the six-harness draft shown on page three -- this strain can be reduced by using the four back harnesses and the two front ones, allowing extra space between the threading and the doupe harness. It is well not to attempt to open this shed for the full width of the reed, but be content with a ~~xx~~ somewhat shallow shed.

Shed A, which raises only one harness and sinks three, on the four-harness set-up, may give trouble on a counterbalanced loom. If so, do not make the sinking tie to the doupe harness but let this rise if it balances the loom better. It will make no difference in the shed.

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The enclosed samples are from a varied lot of cottons, just received. The coarse ones will be found excellent for drapery and the fine ones for drapery and also for summer dresses. These cottons are on fairly large cones, that weigh a pound or so each. There are many more kinds and colors than it is possible to include in the samples. The price of these cottons -- both the coarse and the fine -- is \$1.00 a pound or \$4.50 for five pounds in assorted colors. Five pounds in the same color or in selected colors must be charged for at the pound rate.

I am making some very attractive draperies in the leno weave using ordinary carpet-warp and a variety of the heavier cottons. I have a few good-sized samples of this fabric that I can supply -- as long as they last -- at \$1.00 each. I will include one free of charge with every order for ten pounds or more of the new cottons.

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Inclosed also is a sample of a small lot of spun rayon in a few good colors. The price of this material is \$1.15 a pound or five pounds for \$5.00. It is an excellent material for dress-fabrics and could be used for warp with the novelty yarns now in stock.

A new lot of the novelty yarns recently received is in a great variety of colors, but there is no large amount of a color. A sample showing a few of the shades is inclosed. I can supply this lot only in five pound lots of assorted colors at \$5.50. These will be lovely for scarves and for light dress-fabrics. In ordering please state whether you wish dark or light shades, blues, or greens or yellows, etc. If special shades are desired I shall include these if possible.

The cross-weave is excellent for scarves, sweater fabrics, dress-fabrics and so on, as well as for curtains.

Prices of yarns are rising sharply, due no doubt to the threat of new processing taxes. The lots now in stock will probably be the last we shall get at these rates, so it would be advisable to purchase such of them as you may need during the next six months. The stock at present is fairly large but will not last long. The lot of ramie offered last month is sold out.

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Will those who wish to take part in the travelling exhibit this year please plan to send in their pieces on or before the fifteenth of May.

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May M. Abrah





BULLETIN

of the
Shuttle-Craft Guild
for
May, 1936

Basin, Montana

(Copyright, 1936, Mary M. Atwater)

How are we going to weave our new dress-fabrics for spring and summer? That seems to be the burning question of the moment.

I think perhaps a good many of us will try the leno weave described in the April Bulletin. This weave will be found excellent for filmy lace-effects in fine yarns, -- for dresses, blouses, scarves, and the triangular neck-pieces so popular at the moment. It is, too, something few of us have done before, so it has the interest of a new adventure in weaving.

The advantage of the leno weave, of course, is that it permits the making of a more open fabric than even the plain tabby weave. The more open the weave, of course, the lighter and softer the fabric, but if a tabby fabric is made with a warp very widely spaced and a very lightly beaten weft the tendency is for the threads to draw apart in spots when the material is worn, and of course this ruins the effect. The twist in the leno weave holds the weft firmly.

I advise against the use of a "homespun" wool yarn as warp for this weave. Any good worsted yarn, however, will prove satisfactory -- for sweaters the heavier knitting yarns, for dresses, blouses and scarves, Saxony, Iceland, Bernat's "weaving special", "Fabri," "Fabricspun" and "Afghan " are suggested. Various novelty yarns, -- rayon mixtures, boucle and so on will also prove satisfactory. The very fine, soft yarns, such as Bernat's Afghan, must be lightly handled, of course, and will give less trouble if treated with warp-dressing. Such yarns as Fabri do not require dressing.

The soft knitting cottons and various novelty cottons can also be used for blouses and summer dresses in this weave.

Linen, because of its lack of elasticity, is difficult to manage in the leno weave, which puts a good deal of extra strain on the warp due to the twist. Linens, if treated to warp-dressing and kept very wet while weaving, can be used successfully in the leno weave on a large loom in which there is a good deal of space between the front and back harnesses -- an eight harness loom, for instance, with the two front harnesses for standard and doup harnesses and the two back harnesses for the weave. On a small four-harness loom the weave would prove extremely difficult if not impossible in linen.

All sorts of combinations of tabby, twill and leno can be used very effectively. A fabric in which stripes in tabby are woven between wide and narrow stripes in leno give a much more lively and interesting effect than plain leno throught. And of course a great number of colors can be used together in this weave. The liveliest and most amusing effects of this type can best be produced directly on the loom -- it is almost

impossible to plan them ahead. The way to do is to surround oneself with yarn in many colors and improvise, as a musician improvises at the organ.

Plaid fabrics, and large square checks are fashionable this season and give those who enjoy playing with color a great range of delightful possibilities. I have a charming fabric on my loom at the moment. It is in plain tabby weave, in some of the light novelty yarns of which samples were sent out last month. I am using four colors -- a very light yellow-green, a very light turquoise blue of about the same color-value, a brilliant blue-green and a strong blue. The two light colors I warped in six-inch bands, alternately, and through the yellow-green band I set three fine stripes in vivid blue-green and through the turquoise band some fine strips in strong blue. These fine stripes are set toward the side of each band and not directly through the center. I am weaving in the same four colors, following the color-arrangement of the warp. The result is a large plaid effect, very soft and subtle as the colors are so similar in value, given life and interest by the fine lines of vivid color. This is an unusual and very attractive effect. The same sort of thing could, of course, be done in other colors, -- for instance a pale grey and a light tan with lines in yellow and tangerine, or in taupe and rose-taupe with lines of brown. The squares of the large plaid can be shaded into one another if one wishes by alternating the two colors for an inch where the two shades come together.

A fabric made of two strongly contrasting colors, as vivid green and vivid blue, or brown and tangerine, is very attractive when done in fairly small checks of the two colors.

My warp-setting for the fine novelty yarn is 15 to the inch. This makes a light, soft fabric with a crapey texture that seems to me charming. The crinkly quality of the yarn gives it stability, though so open in mesh.

There are infinite possibilities in the plain tabby fabric, and-- as many weavers have discovered--it is more difficult to weave a good tabby fabric -- especially a lightly beaten one -- than to do simple pattern weaving. For many purposes tabby is the best possible weave and we need none of us consider ourselves too "advanced" to trouble ourselves with tabby weaving.

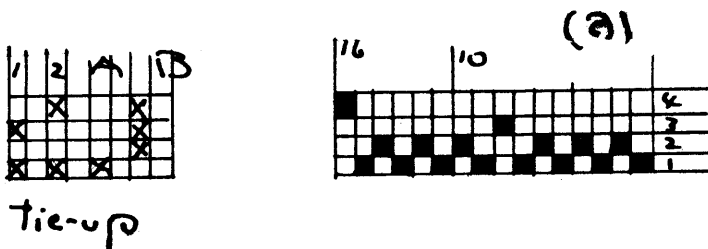
A firm, light-weight suit-fabric is best woven in tabby. However if the warp is set close and the weft very firmly beaten up a tabby fabric tends to become stiff and "hard" even when soft, high-grade yarns are used. The twill weave gives a softer fabric at the same warp-setting than the tabby weave. There are so many variations of the twill weave that a large book could be written on the subject. The simple four-harness 2-2 twill is familiar to everyone and the 3-1 twill, the three-harness "jeans" twill, broken twill, "herring-bone" which of course belongs to the twill family, and several others are quite generally known. Double twill and the many fancy twills that require more than four harnesses provide a tremendous number of fancy weaves. Some of these have been given from time to time in the Bulletin and a number will be found in the Recipe Book. A new fancy weave of this type will be at (b) on page three of this Bulletin

Twill, of course, is the classic weave for tweeds. In fact the name "tweed" and the word "twill" have the same derivation. The elaborate fancy weaves are not strictly correct for tweeds which are usually woven in either the ordinary 2-2 twill or in the five-harness "corkscrew" twill. The latter is particularly good. The yarn for tweeds should be a rough wool yarn -- not a worsted -- and nothing is quite as suitable as the Scotch "Harris" yarns. These have a wiry and sturdy texture that, for some reason, our native homespun yarns seem to lack. I have recently received attractive

samples of imported Scotch yarns from a firm doing business in the east. The prices, however, are \$3.75 and \$4.50 a pound. As we can still get similar yarns from Scotland for \$2.50 a pound it seems unreasonable to pay the higher rates -- especially as this firm does not keep the yarns in stock but imports them to order, as we do, and will not take orders for less than five pounds of a kind. I am therefore not recommending this source of supply. I understand the Bernat Company intends to offer a line of imported Scotch yarns but has not yet put them on the market. If they carry the yarns in stock, so that they can be had without the long wait for orders to come through from Scotland, this will be a great convenience, -- even though the price may be somewhat higher than the Guild price.

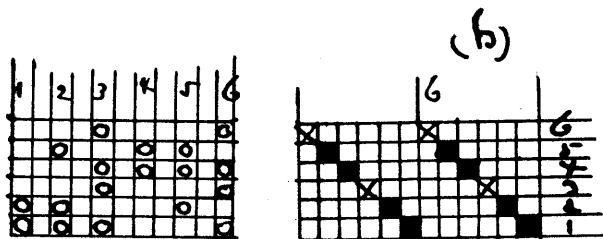
An interesting fashion note of the present season, featured in the better quality sports outfits, is the use of three shades of the same color effect in the same outfit. For instance a suit recently seen was in a green and tan mixture -- the blouse more tan than green, the jacket more green than tan, and the skirt a shade between the two. We could produce a similar effect by weaving a double strand of fine weft, let us say like this: warp, a light tan; the blouse woven in leno weave with tan and an occasional shot in green; skirt woven in tabby with a double weft, -- one thread green and one tan -- or woven in twill with alternate shots in green and tan; jacket woven in tabby with a double strand of green, or in twill, all shots green. A combination of this kind is harmonious but more lively than an outfit in which all the fabric is exactly the same.

Here are some suggestions for a few "fancy" weaves that may prove useful: Draft (a), below, can be used to weave small dots in a plain fabric. Warp in a plain color. For weft use a yarn like the warp for all shots on shed (B) and a coarser yarn, in a different color if desired, for the other shots. Weave as follows: B,A,B,A,B,A,B,1,B,1,B,A,B,A,B,A,B,2,B,2. Repeat as required.



Tie-up

Draft (b) is from an interesting sample sent in by Mrs. Mary D. Stronach, -- one of our Canadian members. Two kinds of yarn are combined in both warp and weft -- a fine, hard-twisted yarn in a gold shade and a coarser yarn with large nubs in a taupe and bown mixture. We have no yarns exactly like these, but a combination of a fine yarn like Fabri in connection with any soft, coarse, rough yarn would give an attractive effect. The warp in the sample is set at 21 ends to the inch, and the warp is threaded: two threads fine yellow, one end coarse yarn, and repeat, as indicated on the draft. Weave the treadles in succession and repeat, weaving treadles 1 and 4 in coarse yarn and the other treadles in fine. This weave produces a cross-barred effect in coarse yarn on a fine tabby ground. The "o" on the tie-up draft indicates a raised harness. The fabric is rather soft and thick and will be excellent for sports coats, though rather heavy for a suit for summer wear.



Tie-ups

■ Fine yarn
 ■ Coarse flake yarn

The fine cottons of which samples are enclosed will make attractive summer dresses and blouses. The material is in a wider variety of colors than as shown by the sample, but of some shades there is not a great quantity. I can supply these cottons only in five-pound assorted lots, at \$4.50. If, in ordering, Guild members will state a general preference -- whether dark or light colors, blue-shades, rose or green and so on -- I am sure I shall be able to supply an assortment of colors that will combine attractively. Also, please state whether you wish at least one pound of a color or whether you wish as many different colors as possible.

I can also still supply many charming combinations of color in the novelty worsted yarns, such as I am using for the dress-fabric in large squares described in this Bulletin. Fortunately I was able to secure quite large shipments of these materials. The spun rayon, however, is sold out, and I shall be unable to get more at the same price. All prices have risen during the last month, -- probably in anticipation of the new processing taxes

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One of our members supplies a "kink" that may be of help to others: he paints alternate harnesses on his ten-harness loom, and finds this a help in threading, as it lessens the chance of threading a heddle on the wrong harness.

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I happened to run out of tie-up cord the other day and in the emergency used a fine silk cord of which I happened to have a little that came with one of the special shipments. To my surprise I find that this cord stretches less and frays less than the linen cord. I shall be glad to supply this cord at \$1.50 a pound -- as long as it lasts. It looks rather frivolous on the loom, but it is extremely practical.

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The second issue of Bernat's new magazine THE WEAVER, recently issued, contains much interesting material. Guild members may be pleased to learn that all the articles are by members or former members of our Guild. The two articles on dress-fabrics are of interest in connection with the subject of this Bulletin. Miss Bolinger has had great success with her fabrics, which are unusual and practical. Mr. Heartz' article on Scotch tweeds is also excellent.

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Though it is not very practical to weave dress-fabrics on the Structo loom, our Structo weavers will find most of the fabric weaves useful for scarves, neckties and other small pieces. The manner of weaving pattern (a) on the Structo is as follows: For "treadle 1", levers 2-4; for "treadle 2", levers 2-3; for tabby A, levers 2-3-4; for tabby B, lever 1, alone. This little pattern, done in fine material, is a good one for neckties. It is, of course, an arrangement in "Bronson weave."

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A new magazine called KNITTING AND HOMECRAFT is being issued in Canada. A sample copy recently received contains some material of interest to hand-weavers. The subscription is \$1.00 a year and single copies are 10¢. The address is Unity Building, Montreal, Canada. The editor's name is Viola Cameron.

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May M. Abrah



BULLETIN

of the

Basin, Montana

Shuttle-Craft Guild June, 1936

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Our June Bulletin has in past years been called the "Summer Camp" number, and has been devoted to suggestions for some of the kinds of weaving that go well with vacations and life in the open.

Some of the small textile crafts, done without large or elaborate equipment, are particularly well adapted to camp life. Among these small crafts card-weaving seems to me the most fascinating. A piece of card-weaving is as easy to take along on a trip as a bit of knitting, and any tree or porch railing will provide all the frame required for one of the most ingenious little looms imaginable. The card-weaving process is practical only for the weaving of narrow fabrics, such as belts, hat-bands, wrist-watch ribbons, bag-handles, pack-straps, bridles, and so on, -- but for these things it is the best of all methods as it produces a firm, smooth fabric with great strength in the lengthwise direction. The weaving process is so rapid and amusing and the pattern effects so varied and interesting that this craft makes an ideal summer passtime. I shall give no directions or patterns for card-weaving in this Bulletin as these are contained in a pamphlet published some time ago. The pamphlet has been out of print, but I am having it reprinted as I have had many requests for it. The price of the pamphlet to Guild members is \$1.00 (\$1.50 to non-members.) The equipment required for this craft consists merely of a set of square cards with holes in the corners. I do not keep weaving cards in stock, but they can be obtained from the Emile Bernat and Sons Co., Jamaica Plain, Mass.. The price is \$1.00 a hundred or \$8.00 per thousand. The same set of cards can be used for a number of different pieces, of course, though in the end they wear out. One of our card-weaving members writes that she dips her cards in shellac and that this treatment makes them much more durable. Any material except very soft and fuzzy yarns can be woven on the cards. Silks and mercerized cottons are the easiest materials to use in this craft. Strand cottons are also excellent, and worsted yarns if hard-twisted, like "fabri" or "Saxony", are also excellent.

This craft is among the most ancient forms of weaving and seems to have been practised from antiquity down to our own times in parts of the world as far apart as ancient Egypt, China, Arabia, Iceland, the Balkans. Some of the ancient Peruvian weavings show the characteristic card-woven structure and could hardly have been made in any other manner. Curiously enough the textile principle on which card-weaving is done appears never have been translated to mechanical weaving. One wonders why.

Another small weaving craft of much interest is the form done on a "slot and hole" heddle. This equipment, oddly enough, is variously known as a "Swedish heddle," "Colonial garter-loom," and "Indian belt-loom." Photographs received from one of our members in the Philippines shows native Bontoc weavers using a similar loom on a warp tied between two trees. A Bulletin giving directions for ~~knux~~ some simple ways of weaving on this heddle was published last year. A few copies of this Bulletin are still available, which may be of interest to new members. The price is 25¢.

Braiding is a small textile craft that has many interesting and useful possibilities, and that requires no equipment at all except the fingers with which most of us are equipped by nature. There are many uses to which braiding can be put, and as an occupation for, say, a wait while a tire is

being patched, it has few equals. A Bulletin on braids and braiding was published some time ago; a few copies are still available, so no directions for braiding will be given this month.

The form of weaving on small equipment that appears to me to have the least to recommend it is the weaving done on a frame like an embroidery frame. The warp in these little looms is set so far apart that only a very heavy fabric can be produced, and as the frames are usually small there is no very useful purpose to which the product can be put. Perhaps the most interesting use for these loom-frames is the making of squares in tufted weaving. Coarse tapestry squares can also be made on them. A very small metal frame of this type was sent me some time ago as a sample. I have found it useful in working out samples of various weaves, using coarse yarns that show the fabric structure very clearly. A set of samples done in this fashion would be an extremely useful thing for a teacher of weaving, and perhaps some of the teachers among us might like to undertake the making of such a set of samples as a summer project. It could be a group-project in a summer camp. The affair is called the "Modeloom" and was sent me by the Hardware Specialties Manufacturing Co., Inc., Stratford, Connecticut. It seems absurd to call this little contraption a "loom" but one can weave on it, and of all the frame-type weaving equipment I have seen this seems to me by far the most practical.

Many ancient Peruvian pieces of weaving were made in separate squares of different color, sewed together, patchwork fashion, either in a plain checkerboard arrangement or in several colors to form a pattern. As a camp group project a large piece could be made in this way on the little modeloom, each camp contributing a square. An afghan made in this manner would be more interesting and a good deal more beautiful than one made of knitted or crocheted pieces put together, as is sometimes done.

The forms of weaving suggested above might be classed as "pocket weaving," for they could all be done with equipment and materials easily carried about in an ordinary hand-bag. For those who have room in the car for a Structo loom more elaborate weaving is possible. The twenty-inch Structo table loom is -- as far as it goes -- an entirely satisfactory four-harness loom, as many of us know from experience. Such a loom makes a delightful companion on a vacation trip or for a summer in camp. The fourteen inch Structo has the same excellent construction and is just as good a loom, though too narrow except for quite small pieces. I consider the twenty inch loom a good deal more practical because of the extra width. It does not take up much more space and many more things can be made on it to advantage than on the smaller loom. The tiny Structos -- eight inch and four inch widths -- do not seem to me practical at all. It is very difficult to weave on them and nothing very useful can be made on them. For narrow fabrics the card-weaving technique is infinitely better. As toys these little looms are more complicated and less amusing -- in my opinion -- than the little tin "modeloom" which costs much less and takes up much less room.

For an established camp or for use in a summer home larger looms can be used to advantage. The Structo 26" ten-harness loom is not too large to be carried back and forth in a small truck, and the new Bernat loom which will soon be on the market can be taken about quite easily, thanks to the folding frame on which it is built. A great deal of time and hard work has gone into perfecting this new little loom and I believe that many people will find it just the loom they have been wanting. It is well finished and attractive in appearance and will be offered at a very moderate price. It weaves 28" wide and has several special features, such as two warp-beams, that will greatly appeal to any weaver. It will be possible to supply this loom through the Guild and the Bernat Company will allow the Guild a small commission on sales, which will help our work along, so I hope Guild members who are interested in this loom will send in the orders through the Guild. The loom will be shipped from Boston, of course.

And while we are on the subject of equipment: The Structo Company has put on the market a useful little winding device for filling their warp-spools. The price is \$5.00. This winder will be found useful not only for the economy in preparing ones own warps but also as it permits warping any material desired and any desired number of threads to the inch. To use this winder it is desirable to have a spool-rack, as for sectional warping to a large loom. However it will be possible to use the winder without a spool-rack by making the warp-chain in strands of the number of threads for two inches in the reed. The spools can be wound from the chain, though this is a little more difficult than winding from the spool-rack.

Some of our members have summer-time shops in resort places, and I shall be glad to supply an exchange of names and addresses between those who wish woven things for sale on consignment and those who have articles for sale.

In the old day there were many itinerant weavers who went up and down the land with their equipment on a cart, visiting villages and farm-steads and stopping for a while where there was yarn to be woven. This has always appealed to me as a delightful way of life -- especially in the summer time. I believe a modern weaver might turn itinerant, with a car and a trailer-workshop, going from place to place through the vacation country. People, I believe, would be attracted and would enjoy seeing a scarf, a bag, a knee-blanket or set of linen towels woven "while you wait" under a roadside tree or beside a mountain stream. If I were not held down to one spot by a post-office box this is the way I should spend my summer. What could be more fun than to go a-gypsying and turn an honest penny along the way! As a good field I would suggest the western dude-ranches, with a "line" of hand-woven sports shirts, blankets, saddle-blankets, gay belts, and bits of weaving such as people like to buy as gifts or souvenirs. Perhaps the idea will appeal to one or another among our members. I shall be glad, of course, to help along such a project in any way I can.

But so far we have not considered what to weave in our summer liesure. It is a good time for the making of things that take a bit of extra time. ~~XXX~~ To those who have not tried these techniques I suggest the fascinating "Finnweave" and the Spanish open-work weave. These weaves take more time than plain weaving but are worth the extra time for the charm of their results. Some beautiful pieces in these two weaves are included in the travelling exhibit now under way. Mrs. Jenkins, one of our foremost "Finnweavers," has contributed a panel showing at the top the design of a weaver at the loom from the Recipe Book and also a lady at an embroidery frame, a spinner at her wheel and Bo-Peep herding her sheep. It is an interesting piece. Mrs. Howells, whose article on the Spanish technique is published in the current issue of the "Weaver" has sent some beautiful examples of her weaving.

The "leno" weave will prove interesting for summer weaving, too. I have not myself tried this weave on the Structo loom and have an idea that it may present some difficulties on account of the small size of the heddles. If any of our Structo weavers have made the experiment I shall be interested to hear how well they succeeded. I am making a number of experiments in this weave to find out just how far we can go with it with our equipment and shall have further notes on this weave for a future Bulletin. I am charmed with some celophane curtains I have made in this weave on an ordinary carpet-warp. One of these curtains is included in the travelling exhibit.

The special pattern for this month is taken from a beautiful old white cotton bed-spread, sent me by one of our Guild members. It is in the weave we know as "Bronson weave" and requires five harnesses. However, a modified version can be done on four harnesses, a draft for which is given on the diagram. The material in the old piece is a fine, soft cotton which appears to me to be hand-spun, so the probability is that this piece was made well over a hundred years ago. Warp and weft are the same material and the wrap-setting is about 52 ends to the inch. The pattern appears in weft floats on one side of the fabric and in warp-floats on the other. The pattern could of

course be carried out in coarser material or in silks, linens or worsted yarns. If done in very coarse material it might be well to modify the threading by taking two threads out of each of the ~~max~~ smaller blocks and four threads out of each of the larger blocks. For lack of space I am not giving this shortened version of the draft, but anyone will find it simple enough to write it on a bit of squared paper. The pattern may, of course, be woven "as drawn in." The treadeling given is for the special treadeling of the ancient piece. The figure is a modification of "Wheel of Fortune" or "Cup and Saucer."

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I should like to mention a book recently published that has in it many diversions and small handicrafts. It is intended as a book for invalids and would prove a boon to anyone during a time of convalescence, but it seems to me to have a wider scope. There are many things in the book that would add to the pleasure of a vacation and that would provide amusement and occupation during, say, a spell of bad weather in camp. The name of the book is "Feeling Better?" and the author is Cornelia R. Trowbridge. The publishers are Dodd, Mead and Company, Inc., 443 Fourth Avenue, New York, N.Y., and the published price is \$2.00.

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I cannot resist making advanced mention of a course in tapestry weaving soon to be offered by one of our Guild members who is an outstanding tapestry weaver. This will be published in a set of lessons with charts and illustrations, and with a correspondence service included. I have had many inquiries about tapestry weaving and am sure this service will appeal to many of our Guild members. If those who are interested will send me their names I will send them full information as soon as it is available. The course is on the press now, I believe, and will be ready very soon.

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I have received a nice lot of Egyptian cotton warp, of which a sample is enclosed. The price is \$1.00 a pound or \$4.50 for five pounds. I was fortunate enough to get a fairly large lot at this price, but if past experience is any guide it will not last long, so I suggest that those who wish some of it let me have their orders as promptly as possible. It will make a delightful warp for leno weaving as well as for all the many purposes for which we use this warp.

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Summer will soon be here again, and I hope I shall have the pleasure of seeing many members of the Guild here in Basin as I did last summer. Come to Montana for your vacation trip. I can recommend our fine highways, our beautiful scenery and our wonderful trout-fishing.

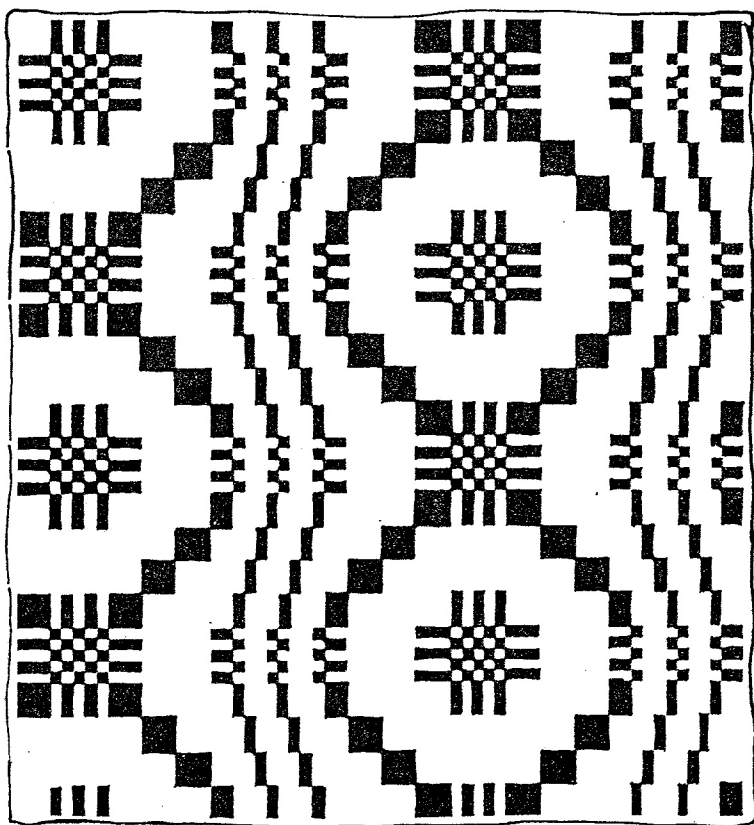
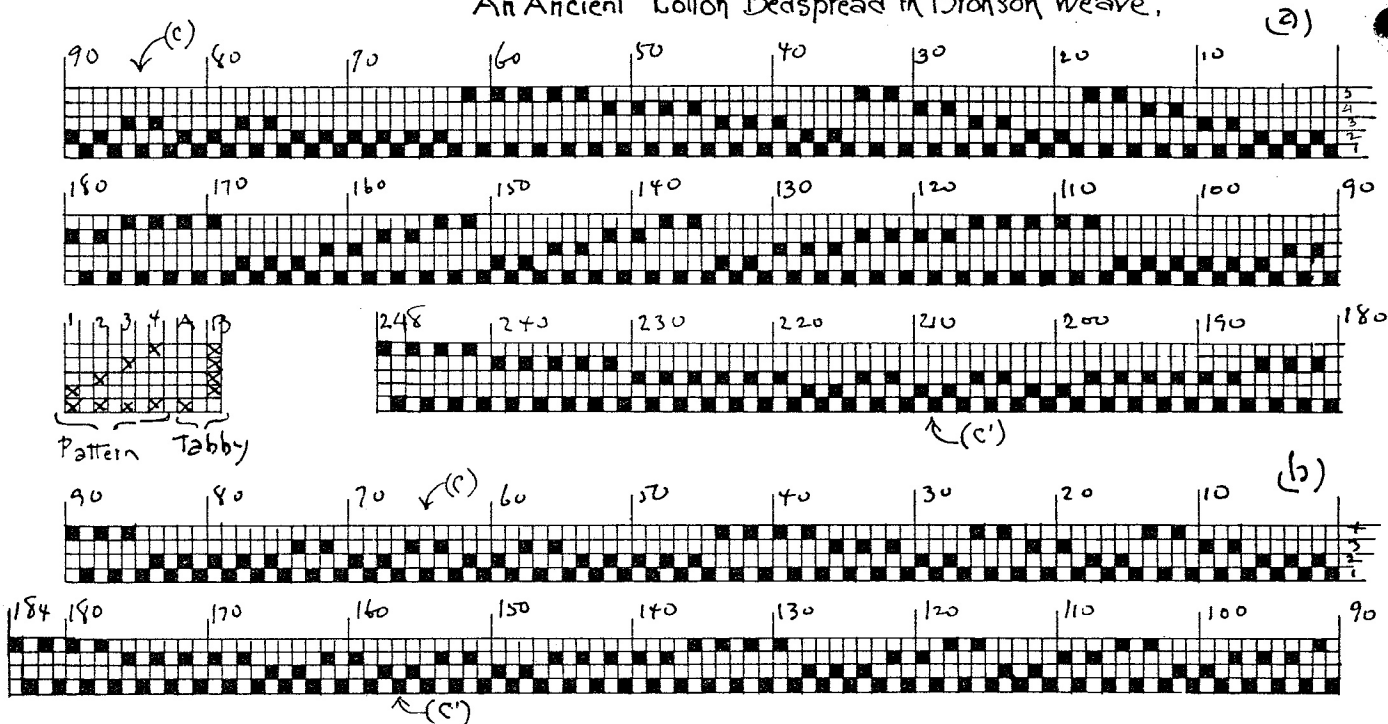
Basin is a very small place, but it not difficult to reach as it is on the main highway between Butte -- the largest city -- and Helena, the capitol -- of Montana. About forty miles from Helena and twenty-five miles from Butte. Hotel accomodations in Basin are somewhat primitive, but clean and not impossible for a short stay. The rates are very reasonable. There are countless charming places to camp.

The most interesting route by car from the east is by way of the Black Hills and through Yellowstone Park into Montana. The shortest route from the sout-west is by way of Salt Lake City, but the motorist will find better roads and more beautiful scenery by going up the coast to Portland or Seattle and then into Montana by Spokane and the Coeur d'Alaine.

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May M. Afoah

Bulletin, June 1936
An Ancient Cotton Bedspread in Bronson Weave.



For a bed-spread in two strips, make the seam at either (c) or (c').

Weave as follows: (Pattern (a))

- Treadles 1. B. 1. B. 1. B. 1. B. 1. B. 1. B. 1.
 " 2. B. 2. B. 2. } twice
 " 1. B. 1. B. 1. }
 " 2. B. 2. B. 2.
 " 1. B. 1. B. 1. B. 1. B. 1. B. 1. B. 1.
 " 4. B. 4. B. 4. B. 4. B. 4. B. 4.
 " 3. B. 3. B. 3. B. 3. B. 3. B. 3.
 " 2. B. 2. B. 2. B. 2. B. 2. B. 2.
 " 1. B. 1. B. 1. } twice
 " 2. B. 2. B. 2. }
 " 1. B. 1. B. 1.
 " 2. B. 2. B. 2. B. 2. B. 2. B. 2. B. 2.
 " 3. B. 3. B. 3. B. 3. B. 3. B. 3.
 " 4. B. 4. B. 4. B. 4. B. 4. B. 4.
 Repeat

Weave: (Pattern (b))

- Treadles 1. B. 1. B. 1. B. 1. B. 1. B. 1.
 " 2. B. 2. B. 2. } twice
 " 1. B. 1. B. 1. }
 " 2. B. 2. B. 2.
 " 1. B. 1. B. 1. B. 1. B. 1. B. 1.
 " 3. B. 3. B. 3. B. 3. B. 3. B. 3.
 " 2. B. 2. B. 2. B. 2. B. 2. B. 2.
 " 1. B. 1. B. 1. } twice
 " 2. B. 2. B. 2. }
 " 1. B. 1. B. 1.
 " 2. B. 2. B. 2. B. 2. B. 2. B. 2.
 " 3. B. 3. B. 3. B. 3. B. 3. B. 3.
 Repeat

Pattern (b) is woven on the same tie-up as (a) with treadle #4 omitted

When treadled as indicated a double thread occurs at each change of block. If this effect is not desired weave a Shot on treadle A, one on B, one on A again between blocks.

BULLETIN

of the Shuttle-Craft Guild July, 1936

Basin, Montana

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Questions about weaving in linen have been piling up, and it appears to be time to attempt to answer them. Many of these questions are perennials -- they crop up every year -- so if I repeat information given in previous Bulletins, old members of the Guild must excuse it.

Questions No. 1. What are the special difficulties in linen weaving, and how may they be overcome?

Linen requires different handling from other kinds of weaving material chiefly because of its lack of elasticity, which makes it hard to beam a linen warp, makes even a slight degree of narrowing in at the edges result in broken threads, makes certain weaves undesirable, and causes other troubles in weaving, such as sagging warp-threads and a too open fabric due to the difficulty of beating up the weft. Some types of linen warp tend to fuzz in the reed with disastrous results. Most of these difficulties can be overcome by the simple procedure of keeping the warp thoroughly damp. This gives elasticity and also prevents fuzzing and makes a closer beat possible. No other treatment is required for a warp of "round" linen or a fairly heavy linen floss. A "singles" linen warp, however, should always be treated with warp-dressing. There are commercial warp-dressings on the market but as these are not readily obtainable in small quantity most of us make our own warp-dressing by boiling flax-seed. The quantities are unimportant. The starch-like solution that results may be diluted to the consistency of thin starch and applied to the warp-material in the manner most convenient. If the warp-linen is in skeins these skeins may be soaked in the dressing before warping. If, however, the material is on spools this is impractical and the dressing must be applied to the strand of warp-threads during beaming, or can be applied later, from time to time as weaving progresses. This can be done simply by dabbing the dressing on the stretched part of the warp from time to time, with a cloth or sponge. A dressed warp can often be woven dry, but even when dressing has been used it is advisable to keep the warp damp. If a very close fabric is desired it is well to keep the weft damp also, but as a rule this is not necessary.

Much depends, of course, on the choice of a suitable warp-material. A weft linen should never be used for warp as even a liberal treatment with dressing will not make it weaveable. The linens supplied by most dealers are limited to 40/2 and 40/3 round, a coarse and a medium weight floss, and one or two counts in singles. The round linens are strong, hard-twisted threads and give no trouble at all if kept damp. They are often incorrectly set, however, and therefore do not produce a good fabric. For most purposes the best setting for 40/2 linen is 36 ends to the inch and for 40/3 linen, 24 ends to the inch. The 30 to the inch setting often used is unsuitable for either thread. The linen warp I prefer -- in fact of all warps it is my favorite -- is a #20 singles linen, set at 36 ends to the inch. This is ideal for towelling, table pieces and so on, also as a foundation for upholstery and other fabrics. The Emile Bernat Company supplies an excellent warp-linen of this type which is listed as "special" warp-linen. The same material may, of course, be used as weft, but a cheaper weft-linen of the same count is satisfactory for most things. This singles warp should always be treated with dressing and woven damp,

but if handled in this manner gives no trouble.

Question No. 2. Can linen be combined with other materials, and if so, how?

A "union" fabric composed of cotton warp and linen weft is quite common for towelling and other things. This combination makes a handsome fabric with excellent wearing qualities, but of course has an entirely different texture from all-linen and is not as beautiful. Egyptian cotton is not a good warp to use for the purpose as the creamy color of the Egyptian is somewhat unpleasant with either bleached white linen or the greyish color of "natural" linen. Linen was often used in the old day as a warp and tabby material for coverlets with pattern weft in wool. This combination is therefore "classic." Personally, I prefer Egyptian cotton to linen as a foundation for coverlets, not only because it is less costly but also because it makes a lighter coverlet and gives what seems to me a more pleasing effect. Linen makes the best possible warp for use with rayon "art silk", with celophane "straw-twist" and other stiff weft materials which as a rule combine very poorly with cotton. Linen makes the best foundation for upholstery fabrics in wool or silk, and a silk and linen combination is ideal for draperies of many kinds.

Question No. 3. What weaves are suitable for all-linen fabrics?

This is a very important question, and many of the failures in linen weaving result from a poor choice of weave. The most beautiful weave for linen is, of course, damask, which is the same weave as satin. Simple two-block patterns may be woven in "four-heddle" damask on eight harnesses and the same patterns in the richer "five-heddle" damask on ten harnesses, but this weave is impossible on four harness looms. The tie-up and treadling for damask have been given elsewhere -- in the Shuttle-Craft Book, for instance -- and need not be repeated here. The double twill weave is also very handsome in linen and in this weave three-block patterns may be woven on nine harnesses. This weave has also been explained elsewhere and the tie-up and directions are given in the Recipe Book. Any of the patterns on page 219 of the Shuttle-Craft Book -- and, of course, many other patterns composed of three blocks -- can be carried out in this weave. The next weave in importance is no doubt the "Bronson" weave, also known as "spot" weaving. The most interesting patterns in this weave require more than four harnesses, but some simple effects in this weave can be done on a four-harness loom. A number of these patterns are included in the Recipe Book and others will be found in the Shuttle-Craft Book. The most useful threading is probably a simple "point" threading on eight harnesses two versions of which are given on the accompanying diagram. On either of these threadings a great variety of delightful little figures may be woven, and for those who weave linens for profit these threadings are especially useful as one can produce great variety without changing the threading. This weave produces the same pattern on both sides of the fabric -- in weft on one side and in warp on the other, -- when woven as indicated, with all tabby shots on the same treadle. The same threading is useful also for upholstery, bags and other uses. When woven in materials other than linen, however, it is advisable to alternate tabby shots on the two tabby treadles. This makes a heavier, firmer fabric, but the pattern appears only on one side and the "wrong" side of the fabric is uninteresting. The disadvantage of the weave as used for linens is that the warp and weft do not interweave over the pattern blocks and the fabric is therefore weakened. I have seen ancient pieces in which all the pattern blocks have worn away and the pattern appears as a series of holes. However, unless we intend our linen pieces to last, in hard use, for more than a hundred years this weakness need not worry us. "Ms and Os" is a favorite four-harness weave

for linens and many charming patterns are available. There is, however, no plain tabby in this weave and for towels in plain weaving with pattern borders, or for towels with plain hems and the body in pattern weaving this weave is not desirable and ordinary "huck" serves the purpose better. The Ms and Os weave can be threaded on eight harnesses, as given on the diagram, and in this arrangement a plain tabby is, of course, possible. The weave makes a stronger fabric than Bronson weave but has not nearly as many pattern-possibilities.

Summer and winter weave and the somewhat similar crackle weave are handsome when carried out in heavy linen floss, but ineffective in fine linens. The worst possible weave for linen is the beloved "four-harness overshot" and in my opinion this should never be used for the purpose as there are so many better weaves. However, an overshot pattern composed of short skips ~~only~~ can be used for pattern borders in plain linen if one is wedded to this weave. Patterns with long skips are entirely unsuitable for the reason that linen threads do not cling together as silk and wool yarns do, and the effect is "stringy" and unpleasant when linen is woven in long floats.

Linen is difficult to use in either the Finnweave or the leno weave because these weaves put an extra strain on the warp and the lack of elasticity in linen makes it too difficult to open a proper shed in these weaves. Linen weft with a cotton warp can be used for these weaves with good results.

There are, of course, many other special weaves used for linen in addition to those listed. The Spanish open-work linens, for instance, are of particular interest. And in a general way any weave that is suitable for all-wool fabrics is also suitable for all-linen. The contrary also holds good. In most of the linen weaves warp and weft should be the same or similar in type and count. However slight variations are allowable, and in summer and winter weaving or the crackle weave the weft-linen used for the pattern shots should be a good deal coarser than the warp and tabby. The Scandinavian lace-weave is excellent in linen.

Question No. 4. How should linen pieces be finished?

All linen pieces require a very thorough washing to bring out the lustre and beauty of the fabric. Linen looks stiff and stringy on the loom as a rule and a beginner may feel disappointed with the appearance of a first piece of linen weaving before it is finished. Washing produces a really amazing difference in texture. Soak linen pieces in warm water for several hours, rub them out well in mild soap -- the more rubbing the better -- rinse well, wring out, and iron while still quite wet, passing the iron over and over the fabric till it is thoroughly dry. Linens improve in beauty after repeated washings, and this first strenuous treatment should never be omitted.

Whether or not to fringe the ends of linen pieces is a matter of taste. A linen fringe is handsome, but fringes have been somewhat out of favor for several years and as a rule it is safer to use plain hems, -- either hem-stitched, or rolled and stitched in color. Of course they should never be stitched on a sewing machine.

Question No. 5. How should one use color in linens?

For towelling, a very common method of introducing color is to weave borders in colored pattern weaving with hems and the body of the towel in plain tabby. This, of course, is entirely suitable if the pattern threading used is one adapted to the character of linen.

This type of towel is nice for the very tiny "guest-towels," and also for large towels made of coarse linen. For the ordinary size hand-towels, however, there are other arrangements that seem to me more interesting. A towel in fine linen, for instance, with the hems in plain weave in color and the body of the towel in Bronson weave in white in a pattern effect is very attractive. A towel in the same weave, with the hems in white tabby and the body of the piece in pattern weaving in color is also very effective. Recently there has been a vogue for towels done on a warp in bold stripes of color. These are novel and handsome. Plain weave can be used, or a herring-bone. The colors should be as brilliant as possible and a dashing effect of broad stripes rather than an effect of daintiness should be the aim. Plaid patterns are also sometimes woven in linen pieces. One must be careful, however, to avoid the effects used in cheap commercial towelings -- not because some of these are not handsome but simply because they are too familiar.

Question No. 6. Where can good linens be obtained?

The Emile Bernat and Sons Co., Jamaica Plain, Mass., supply some excellent linens, white, natural and colored. I like especially the "special" singles warp mentioned above, the coarse linen floss and the colored linen "weaver."

The S. Mazer Co., 24 Braintree Street, Allston, Mass., also supplies a variety of white, natural and colored linens.

Some very handsome linens may be had of the R.J.Ederer Co., Elizabeth and Unity Streets, Philadelphia, Pa.. Guild members may recall a special lot of coarse colored linens on balls offered some months ago. This was "Ederlin" linen, supplied by this firm.

The Linen Thread Company, with offices in several cities, supply the Barbour linens. The New York address is 200 Hudson. Other addresses of this company: 443 Mission, San Francisco, Cal., 154 West Austin Ave., Chicago, Illinois, 575 Atlantic Avenue, Boston, Mass., 78 Duttonhofer Building, Cincinnati, Ohio., Public Ledger Building, Philadelphia, Pa.

Another New York address is Hughes Fawcett, Inc., 115 Franklin Street.

- - - - -

The travelling exhibit is on its rounds and will probably be seen by many of our members before it returns to be distributed. It is not nearly as large a collection this year as in the past, but it contains a number of particularly interesting pieces. I have included some of my "leno" experiments in carpet warp and celophane straw-twist which will help to make this weave clear to members who have not tried it.

- - - - -

I am spending July and perhaps August at our northern ranch, and letters addressed to me at Essex, Montana, will reach me more promptly than mail sent to Basin -- though of course mail addressed to Basin will be forwarded. Our ranch is not at Essex but at a place called Paola, a few miles west of Essex on the highway between Glacier Park and Belton. Guild members driving through Montana will probably find it as convenient to visit me there as at Basin, and I hope to see many. This is a very beautiful spot, just south of Glacier National Park, and accessible over excellent highways from either the west or the east. While at Paola I shall be unable to supply weaving materials,

May M. Water



BULLETIN

of the
Shuttle-Craft Guild

Basin, Montana

August, 1936

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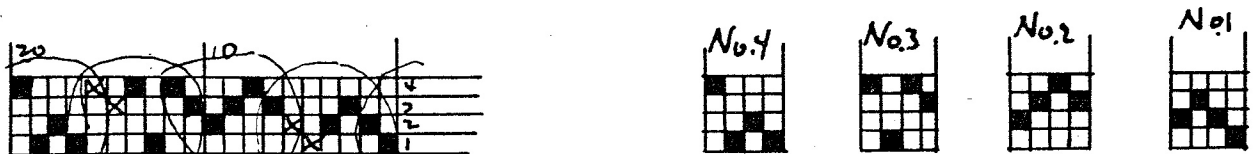
There have been a number of requests for the pamphlet on the "crackle weave," published some time ago, -- but this pamphlet is out of print and will not be reprinted at present. I am therefore devoting this issue of the Bulletin to a re-consideration of this useful four-harness weave.

What we know as "crackle weave" is an adaptation of an ancient Scandinavian weave known as "Jamtlandsvaev," and was introduced to American weavers through the Bulletin, some years ago. Since that time it has become very popular and many people who have never heard of our Guild are finding it useful.

There are two main reasons for the popularity of this special weave: It produces a closely combined fabric similar in structure to the Colonial "summer and winter weave" without long skips, which makes it a desirable weave for rugs, upholstery fabrics, linens, bags and scarves -- in short for all fabrics in which long floats of weft are impractical --; and secondly it permits weaving overlapping blocks, and also blocks as large as may be desired, thus making possible to four-harness weavers a great many effects that cannot be woven in the overshot weave and that are possible in summer and winter weave only on six or eight harnesses. This broadens the horizons considerably.

The drafts for this weave are somewhat difficult to write. At least I have found them so, and those of our members who have experimented with these drafts also report the same experience. The difficulty is that each pattern shed weaves across two blocks of the threading and this sometimes produces undesired effects.

If we analyze the weave we find that each block is written on two pattern sheds, in units of four threads which may be repeated as desired to make a block of any size. Block No. 1 is written: 1,2,3,2; block No. 2, 3,4,3,2; block No. 3, 3,4,1,4; and block No. 4, 1,2,1,4. This is shown on the diagram below. When, however, one comes to combining the blocks it is soon apparent that to preserve the correct movement of the weave and avoid any four-thread skips it is necessary to put in two extra threads between some of the blocks. These extra threads are shown by the "X" marks on the draft below, which is the simple twill arrangement of the four blocks. It will also be apparent from this simple draft that each block overlaps the next by two threads instead of by one thread as in overshot weaving, and that each block, when written as small as possible, covers seven warp-ends. This is indicated by the pen-lines encircling the blocks on the draft below. It will also be apparent that the 1-2 shed weaves across block No. 1 and also across block No. 4; that the 2-3 shed weaves across block No. 2 and block No. 1; the 3-4 shed, across blocks 2 and 3; and the 1-4 shed across blocks 3 and 4. These are the important points to keep in mind in writing drafts for this weave.



41 shed - - - 3 - 4
 12 shed weaver block 1 and 4
 23 - - - 2 " 1
 34 - - - 2 " 3

The possibility of making very large blocks if desired permits a freedom of design impossible in overshot weaving, as of course in overshot patterns the size of the block is limited to the practical length of a loose float of weft. It is this greater freedom that makes the weave practical for patterns of a modern and modernistic type. The weave in not, however, by any means limited to modernistic patterns and can be used with entire propriety for strictly Colonial patterns if desired. The structure of the fabric is so similar to summer and winter weave that even though our Colonial ancestors appear to have been ignorant of this weave it is suitable for strictly "period" Colonial pieces. There seems to have been some confusion on this point, therefore I mention it. Many of the crackle-weave threadings published in the Recipe Book and Bulletin have, to be sure, been definitely modernistic in character, but this does not mean the weave can be used only for patterns of this type. There is no other four-harness weave known to me -- except the double "Finnweave" which can be used for practically any type of pattern -- that makes modernistic effects possible, and if I may seem to have given more modernistic than classic patterns in crackle weave it is simply because there had been a demand for these newer effects and no other good way to make them on four harnesses.

The trend of taste is quite definitely away from the old overshot coverlet patterns. In the first years of the revival of hand-weaving in this country "four-harness overshot" was all we knew, and we used it for everything -- not always with satisfactory results. Our ancestors used this weave almost exclusively for coverlets, and this remains the most suitable use for the weave. It is a very poor weave for linens, as noted in the Bulletin last month, and is almost as bad for rugs. It should, in my opinion, never be used for chair-covering or for any fabric that is expected to stand up under friction. Some overshot patterns -- those with short skips only -- can be used successfully for bags and pillow-tops, and for curtains, but the best use for the overshot weave is still the coverlet. For this it is perhaps the best weave of all, provided the coverlet is to be used in a room not too modern in character. We are coming more and more to like the large, simple spaces that characterize modernistic design, and the subtle balance of modernistic patterns. The geometric symmetry of the Colonial rings, roses, stars and tables begins to look a bit stiff and fussy; we are beginning to like the odd color combinations and the bland color-schemes of the modern inspiration. This is no passing fad, -- it is the beginning of a new style in art, and I for one find it very thrilling to watch it develop and slowly reshape and re-color our surroundings and change all our accepted ideas of what is beautiful. But I have no wish to impose modernism willy-nilly on the Guild, and try always to supply patterns in both the old and the new styles.

But to return to the crackle-weave: Several drafts labeled "crackle weave" but which are not in this weave at all have been published in Bernat's "Handicrafter." I mention this because of questions that have come to me. If in doubt about a draft test it by the rules given on page No. 1 of this Bulletin. It is annoying that people are not more careful in their use of technical terms. Many of the words we use in ordinary speech have fuzzy meanings and can be used over a wide range; a technical word, however, means one specific thing and no other. If used loosely much confusion results. For instance, in a recent article in Bernat's "Weaver" a certain Scandinavian weave was described as "simple draw-loom weaving." A "draw-loom" is an entirely different form of equipment from that described and of course this weave was not a "draw-loom weaving," and should not have been so called. This in answer to a number of inquiries. If we do not keep our words for their exact meanings we shall never be able to tell others what we mean, or to be sure we understand what others tell us. It is difficult enough to convey exact meanings even when words are carefully used, and unnecessary confusion due to missuse of terms is extremely irritating.

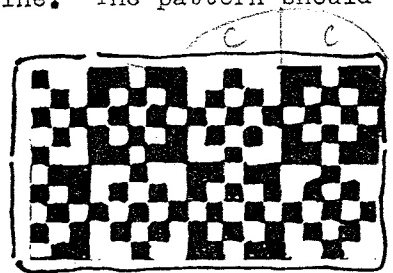
Though the crackle-weave is of Scandinavian origin it can be used for American patterns with entire propriety, as noted above. It also lends itself well to weaving in the Italian manner, without a tabby. This method of weaving

has been described in the Bulletin and is also shown on some of the patterns in the Recipe Book but perhaps it will be useful to repeat the directions here: When weaving the 1-2 shed for the pattern block weave, 1-2 (pattern yarn), 1-4 (background), 1-2 (pattern yarn), 2-3 (background). Repeat as required for the size of the black. The two back-ground shots may be in different colors if desired, the weaving being done with three shuttles. A fine tabby shot may be put in after every two shots or after every four shots, if a very firm fabric is desired. When woven without a tabby the fabric is soft and rather thick. It is a nice weave for blankets. When weaving the 2-3 block for pattern the alternating back-ground shots are, of course, on the 1-2 and the 3-4 sheds. When 3-4 is the pattern shot the background shots are on 2-3 and 1-4. When 1-4 is used for pattern the background shots are on 3-4 and 1-2/.

The drafts given on the diagram have been designed for various purposes. Draft (a) which is one of the "right and left" patterns, weaves the same figure on both sides of the fabric. It is therefore a good pattern for linens and curtains. The draft is written as small as possible but would be more effective for curtains if the "unit" of each block were repeated. The units are marked on the draft by an encircling fine pen-line. The pattern should be woven as follows:

treadle	4,	7	shots
"	3,	7	"
"	2,	7	"
"	3,	7	"
"	4,	7	"
"	2,	7	"
"	1,	7	"
"	4,	7	"
"	1,	7	"
"	2,	7	"

Repeat

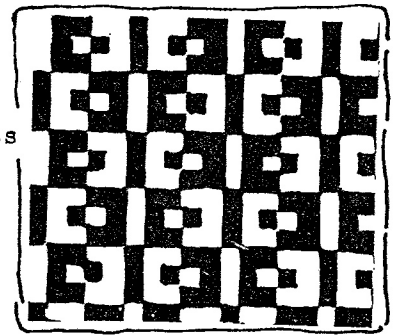


(b) 1

Draft (b), illustrated here, is a similar pattern in that it weaves the same figure on both sides of the fabric. It also can be made larger as indicated by repeating the units of each block two or three times. It can be woven in many different ways. Of the two effects sketched, No.1 is strictly conventional while No.2 is more modern in character. This will prove a good threading for linens, also for bags and small articles. Weave as follows:

No.1				No.2			
treadle	2,	7	shots	treadle	2,	7	shots
"	3,	7	"	"	1,	7	"
"	1,	7	"	"	2,	7	"
"	3,	7	"	"	4,	7	"
"	2,	7	"	"	3,	7	"
"	4,	7	"	"	4,	7	"
"	1,	7	"				
"	2,	7	"				
"	1,	7	"				
"	4,	7	"				

Repeat

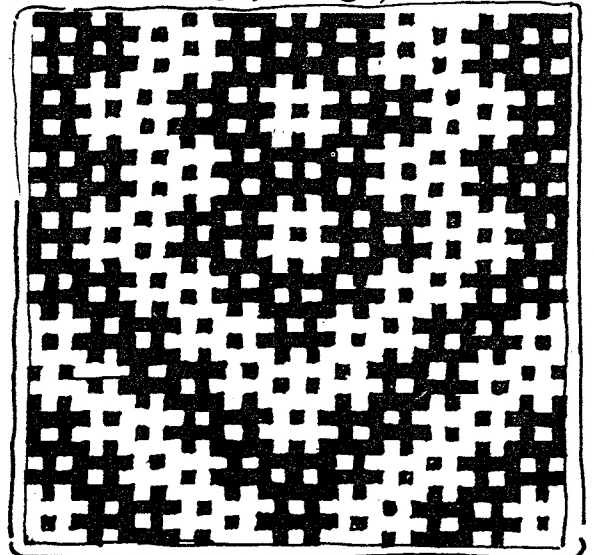


(b) 2

Pattern (c)

Draft (c) is designed for a rug -- unusual but restrained. The effect is particularly interesting if worked out in several shades of the same color or in a number of colors similar in tone. Warp ordinary carpet warp in an ecru or tan at 12 ends to the inch and use wool rug-yarn or cotton chenille for weft. The sketch, of course, shows only part of the rug.

The first 140 threads of this draft may be used as a repeat for linens and will give an interesting diagonal pattern, the same on both sides of the fabric. The 162 threads, 119-280, may



be used as a repeat for an all-over pattern, useful for upholstery. This will not be the same on both sides. The rug as sketched will not be the same on both sides, either, though the pattern on the "wrong" side will be interesting. The threading as given for the rug might also be used for a pillow-top: weave to (*) of the treadeling as given below and then follow the treadeling back to the beginning; Weave the rug as follows: (The number of weft-shots is based on the use of heavy rug-yarn -- for fine weaving at least twice as many shots will be required for each block)

End of rug:
 treadle 4, 5 shots
 " 3, 5 " 7
 " 4, 5 " "
 " 3, 5 " "
 " 2, 5 " "
 " 3, 5 " "
 " 2, 5 " "
 " 1, 5 " "
 " 2, 5 " "
 " 1, 5 " "
 " 4, 5 " "
 " 1, 5 " "
 (*) " 4, 5 " "
 " 3, 5 " "
 " 4, 5 " "
 " 3, 5 " "
 " 2, 5 " "
 " 3, 5 " "
 " 2, 5 "

Center of rug:
 treadle 1, 5 shots
 " 2, 5 "
 " 1, 5 "
 " 2, 5 "
 " 3, 5 "
 " 2, 5 "
 " 3, 5 "
 " 2, 5 "

Repeat center figure as required for length of rug. Repeat end in reverse order/.

This will make a rug 36" wide. Eight selvage threads, threaded: 1,2,3,4, 1,2,3,4, -- and 4,3,2,1,4,3,2,1 -- should be put in on the sides, and a heading in tabby woven across the ends.

Draft (d) is a classic Colonial pattern called "Double Snow-Ball" arranged for the crackle weave. It would make a good coverlet pattern and may also be used for pillow-tops, runners and the like. It would add life to the pattern if all the shots on treadle 2 were woven in a different color from the other two pattern shots, but as this pattern is strictly conventional it would be well to keep to the Colonial colors.

- - - - -

I have decided to remain at our camp in the wilds till the first of September, so till that time please address mail to Essex, Montana. I think visiting Guild members will find it as easy to come here as to Basin as we are on an excellent highway, just south of Glacier Park, which most visitors to Montana wish to see in any case. Our camp may be reached either from Glacier Park Station on the east or from Belton on the west. In coming from the east watch for the Essex turn-off but continue on the highway for about six miles more. After going through an underpass, where there is a filling station, the road makes a sharp turn and goes up a slight grade. About the middle of this grade you will see our pole-gate in the fence on your left -- hospitably marked "No Trespassing." In coming from the west, after passing Hidden Lake tourist camp watch for a bridge marked "Tunnel Creek." This creek is on our property and continuing about a quarter of a mile you will see our gate on your right. A short (rough) drive leads from the gate directly to our camp.

I cannot be reached here by telephone, but a telegram to Walton, Montana, will reach me promptly.

In coming from the east the shortest route is by Helena, Augusta, Browning and Glacier Park Station; from the west by Missoula, Polson, Kalispell and Belton. The latter route includes Flathead Lake and is the more interesting. There are hotels at Glacier Park and Belton, and a number of tourist camps along the highway between so that one need not fear lack of accommodations. Prices are moderate.

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No weaving materials will be available till my return to Basin

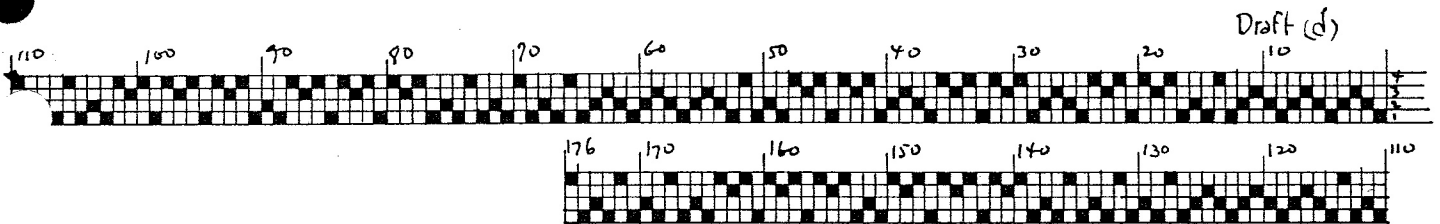
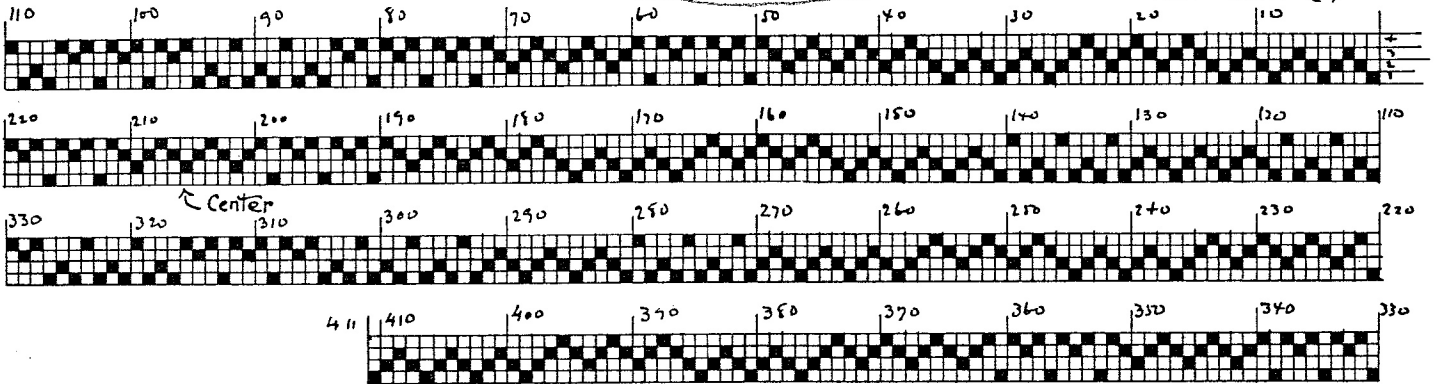
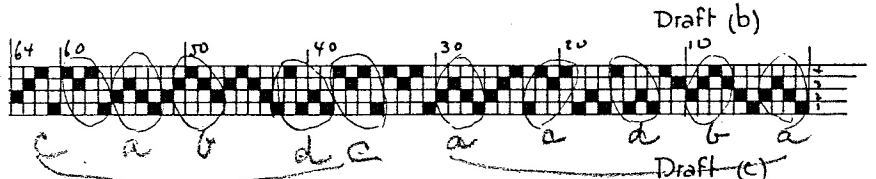
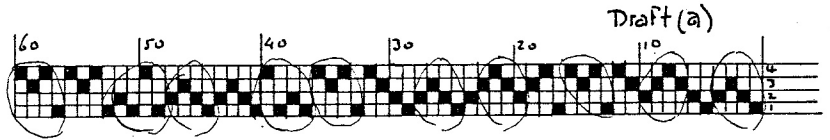
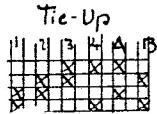
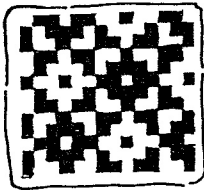
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Mary M. Afwater

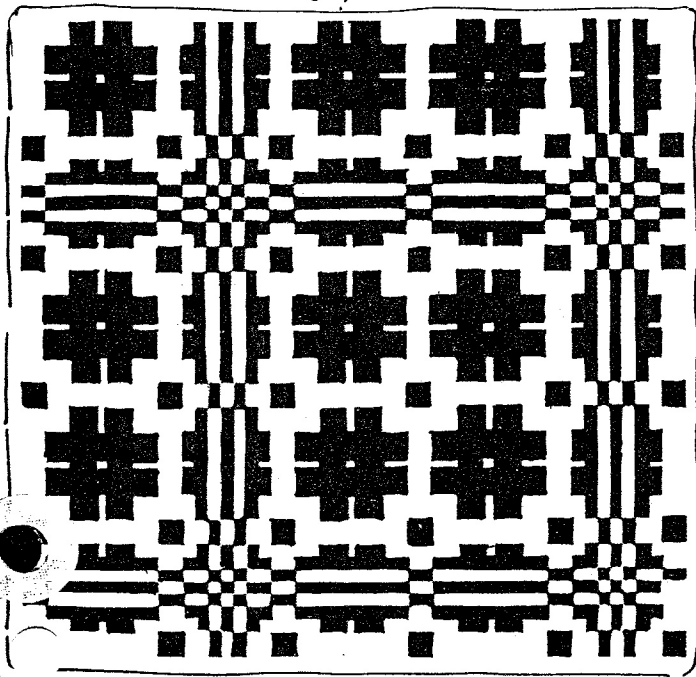
Shuttle - Craft Bulletin, August, 1936

Drafts of Patterns in Crackle Weave

Pattern (a)



Pattern (d)



Weave as follows: (treadle 1 not used)

Treadle	2,	11	shots
"	3,	5	"
"	4,	5	"
"	2,	3	"
"	4,	5	"
"	2,	3	"
"	4,	5	"
"	3,	5	"
"	2,	11	"
"	3,	11	"
"	4,	11	"
"	3,	3	"
"	4,	11	"
"	3,	11	"
"	2,	11	"
"	3,	11	"
"	4,	11	"
"	3,	3	"
"	4,	11	"
"	3,	11	"

For a pillow-top on the Structo Loom, thread as follows:

Edge: 2, 3, 4	3
Complete draft, 3 times	528
First 65 threads	65
Edge: 4, 3, 2, 1	4
	<hr/> 600

For treadling, transpose as usual for the Structo loom.

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Repeat



BULLETIN

of the Shuttle-Craft Guild

for
September, 1936

Basin, Montana

Bags! We never seem to weary of making them; they change in shape and style from time to time but they do not seem to go out of fashion and have probably never been more popular than at present. Every woman likes to carry an attractive bag -- bags make charming and personal gifts. They are useful as well as ornamental, keep our belongings together and add an accent to any costume. The question for us is how to make them, and also how not to make them.

Perhaps nothing we make is more difficult to design and carry out than a bag. The thing can't be done effectively by taking a well-woven bit of material and sewing it into a frame. The piece of material must be specially designed for the size and shape of the bag to be made, and the mounting should be in a style and material to suit the special bag. A bag does not stay in one spot and finds itself in a variety of surroundings; it must be a self-contained bit of art. To be successful it should in some way express the personality of the owner, -- be either young and gay, old and sad, "smart" and sophisticated, witty, sweet, gentle or sharp, venturesome or timid, spendthrift or economical. It is a problem in psychology as well as a problem in handicraft.

A few things, however, every bag should be: it should be perfect in finish and workmanship, for instance. A sloppily made bag is an abomination, no matter how handsome the pattern and colors. And right here is where most hand-woven bags -- except those made by an expert -- are apt to give trouble. It is extremely difficult to fit a bag into an elaborate mounting and few people without special training and long practise can accomplish it satisfactorily. I confess I cannot. The way to avoid this difficulty is to make the kind of bag that looks best in a simple mounting. Fortunately hand-made fabrics usually look best in a simple, hand-made wooden mounting, so we really lose nothing by following this practise. If, however, we wish to produce very rich and elaborate bags we should either have the mounting done for us by an expert in this work or else take the time and trouble to become expert ourselves, -- and unless we wish to make an exclusive business of bags the latter is hardly worth while.

Another thing every bag should be is interesting. It should have a touch of novelty, of unusualness. It is not enough to be honest and useful. A bag is always an "accent" in personal effect and needs to be keyed higher than larger and more important articles. It should, of course, be beautiful also -- if possible -- but downright ugliness is far better than stupidity in a bag. A bag should also be easy to carry and should be of a shape capable of holding the things one wishes to carry about in it. It is astonishing how often these practical considerations are overlooked.

I think bag-making requires a special talent, when all is said. Anybody can weave a good coverlet or a good tweed fabric, or a nice honest rug -- but a bag! There is a real problem.

I recently saw a bag made by an Iggarote weaver in the Philippines that seemed to me very charming -- all that a bag should be. The weaver will probably not object to having it described in detail in the Bulletin. We may not wish to make bags exactly like his, but some of his methods we can use to advantage.

First, the mounting. This was a simple wooden affair, plainly hand-made and somewhat irregular, but well designed as a hand-hold and supremely simple as an attachment for a bag. This is shown on the diagram at (a). It will be noted that instead of a row of small holes across the bottom this mounting has a slot. The piece of fabric for the bag was made twice the size of the bag -- the two ends in plain tabby and the middle part in pattern weaving. The tabby fabric serves as lining for the bag. In mounting, the two plain ends of the piece were each drawn through the slot of one of the handles, and the ends of the fabric were then seamed together to form the bottom of the bag. The sides of the bag were then seamed to within a few inches of the handles; the fabric was arranged in agreeable folds and lightly tacked together below the handle, and the mounting was complete. Nothing could be simpler, and even I could do this in a finished and slightly manner. Ideal, it seems to me. This bag also had inner pockets sewed to the lining part of the fabric, and of course if these are desired they should be made before the mounting is done. They are indicated on the plan of the fabric shown on the diagram at (b).

The warp in this piece is a very fine "natural" cotton, set at 42 double ends to the inch. The fingers of savage craftsmen are so much more deft than ours that they handle these fine threads, and some much finer, without difficulty, but I believe we would get better results with a somewhat coarser warp. I suggest ordinary 20/2 natural cotton set at 36 ends to the inch. Tabby, of course, in the same material as the warp.

The pattern weft is a soft unmercerized cotton in black, somewhat coarser than the warp. Colored material could, of course, be used, and several colors might be combined if one wished.

The weaving was probably done on a primitive two-shed loom with the addition of a set of shed-sticks. However we can produce the weave in a much more convenient manner on an eight-harness loom, threaded as shown on the diagram. The threading can, of course, be woven in many different ways and would be a very useful threading if a number of bags were to be made. All could be different in effect without changing the threading.

Of course to reproduce the effect on a four-harness loom would be impossible without the use of shed-sticks. However, there are many small four-harness weaves that could be used instead of this particular threading and would give much the same effect if woven in bands as indicated. To use a large pattern would, I think, be a mistake, -- for this particular bag. The "Diamond" threading, or "Bird-Eye", or "Goose-Eye", or "Turkey-Foot" or the small pattern at Draft No. 4, page 158 of my Shuttle-Craft Book, or the threading used for so much Spanish weaving: 1,3,2,3,1,4,2,4, and repeat, are the ones I would suggest. The effect of the bag depends less on the figure than on the arrangement of the bands of pattern weaving, and a large pattern would break up this effect.

The arrangement of the bands, as indicated on the diagram, is as follows: $16\frac{1}{4}$ " in plain tabby (for the lining and the top of the bag); two or three tabby shots in color, two or three tabby shots in white; the small diamond figure; two or three tabby shots in white; two or three tabby shots in color. This border measures 1" across. Then $1\frac{1}{4}$ " tabby in white; figure in triangles for $2\frac{1}{2}$ "; $1\frac{1}{4}$ " white tabby. Repeat the inch-wide border; $1\frac{1}{4}$ " tabby; $2\frac{1}{2}$ " in the triangle figure. This brings one to the center of the piece of weaving, -- the bottom of the bag as made up. Weave $2\frac{1}{2}$ " in the triangle figure, reversing the triangles; $1\frac{1}{4}$ " tabby; the inch-wide border; $1\frac{1}{4}$ " tabby; $2\frac{1}{2}$ " in triangles; $1\frac{1}{4}$ " tabby; the inch-wide border; $16\frac{1}{4}$ " plain tabby.

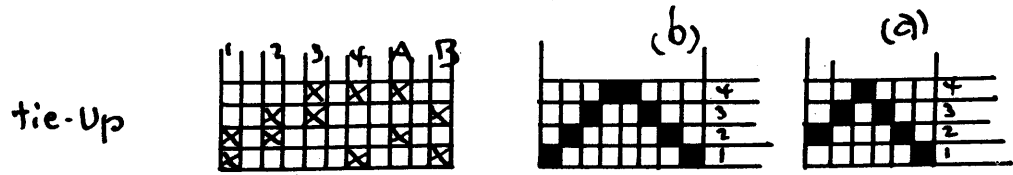
I do not know of any dealer who supplies handles similar to the one sketched, but I feel sure one or another of our members who make wooden bag-mountings would be willing to make them. The addresses of these members:

- Mrs. O.C.Houchin, Babcock-Selvidge Building, Billings, Montana
- Mrs. L.L.Robbins, Hastings, Iowa
- Miss Daisy Strong, 109 Adams Street, Greensboro, N.C.

The "leno" weave, as mentioned before, makes unusual and attractive bags. I made mine on carpet-warp set at 10 ends to the inch, with celophane "straw-twist" in a double strand as weft. Jute could be used instead of celophane if one preferred. Any stiff weft-material would be suitable. When made in this way the bags resemble a light openwork basket. Braided handles of the weft-material make a suitable finish.

I have been using part of the rug-threading given in the August Bulletin for a set of curtains, and find it a very satisfactory pattern for the purpose. It is unusual and interesting without being startling. The same threading would be excellent for bags and could be woven in many different ways and with many color-combinations. The part of the pattern I am using is the first 140 threads of draft (c). I think I shall call this threading "The Hesitation Twill." It has an interesting movement and I think most people would find it pleasing.

We are indebted to one of our members, Miss Elizabeth Biddle Frost, for an interesting suggestion that could be used with good results for a bag on the plan of the Iggarote bag but done in coarse material. In the sample pieces sent me she has used a coarse unmercerized cotton warp set at 18 ends to the inch, with tabby like the warp and pattern weft of coarse knitting yarn. The two threadings used are given below. For bags I should prefer draft (b) which gives an effect in the plain part of two threads together, two single threads, and two together again. This plain part when woven in regular tabby alternation gives a striped fabric. It may also be woven this way: tabby A, double, tabby B, tabby A; tabby B double; tabby A, tabby B, and repeat.



Drafts for "Biddle's Delight."

On one of the pieces Miss Frost has woven an interesting narrow border as follows: Treadle 4, treadle 3, treadle 2, treadle 1, one shot each in brilliant green wool, -- no tabby between pattern shots. Treadles 3,2,1,4, in orange wool, -- no tabby. Treadles 3,2,1,4, in blue, -- no tabby. Repeat in orange, and again in green.

The pattern when woven: treadle 3, twice; treadle 2, once; 1, twice; 2, once, and repeat makes an attractive little diamond figure. A tabby should be woven with this.

There are a number of other attractive variations that suggest themselves. The pattern will be useful for a variety of small pieces.

Miss Frost calls her little pattern "Biddle's Delight" after the fashion of the old-time weavers. She writes me that she is a high-school girl of fifteen and is greatly interested in her weaving.

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The Bernat loom is finally completed. I have received one of these looms from the Bernat Company and have been preparing a set of instructions and patterns to be supplied with it. The loom in its final form is a loom of the "jack" type, operated by an ingenious arrangement of couplets placed under the harnesses instead of in the top-castle as in most looms of the type. It is equipped with two warp-beams -- a steel beam to take the spools of prepared warp and a plain beam. It has six treadles and our standard four-harness tie-up, and weaves 30" wide. One of the novel and convenient features is a folding frame which makes it possible to move the loom about easily. It could also be put away in small space when not in use. The frame when open is rigid, and the loom is provided with a good beater and shuttle-race. I find it a very nice little loom to weave on as it is light in operation and opens a good shed. It is also an attractive little loom in appearance, which means a good deal when one has a studio or when one lives intimately with the loom. It is nicely finished, and a convenient box in the top-castle holds shuttles, bobbins, extra heddles and so on very conveniently. The price of the loom is \$40.00 f.o.b. the Bernat plant in Jamaica Plain Massachusetts.

Mr. Bernat will allow the Guild a commission on looms sold through my office, and of course these commissions will help our work along so I hope anyone wishing to purchase this new loom will do so through me.

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We have another new loom this month. Mrs. Osma Couch Gallinger who is a member of the Guild, has sent me her attractive folders to be sent out with this Bulletin. I am sure all our members will be interested to learn of her project and will enjoy visiting her studios when in her part of the country. I have not myself seen her looms or woven on them, but they are very attractive in design, I think, and would fit in well with modern furnishings.

It has always been the Guild policy to announce through the Bulletin any special equipment manufactured and supplied by Guild member. There is no charge for this. Of course unless I have actually used the equipment myself I cannot give a definite recommendation, however, and correspondence should be addressed to the member offering the equipment rather than to me.

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May M. Atwood

BULLETIN

of the

Basin, Montana

Shutte-Craft Guild for October, 1936

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As the "old members" of our Guild will recall, the October Bulletin is our birthday number and marks the beginning of a new year -- our thirteenth year. That we have been able to continue so long seems to me to show that what we are doing is of definite value to our group of craftsmen. It is a matter of much personal satisfaction to me -- who have served as the Guild's chief designer and spokesman for all this time. I want to thank our members for the many kind letters of appreciation and encouragement that I have received.

In making plans for the coming year of Guild activities I should greatly appreciate suggestions from our members. If you wish to see more of this and less of that in the Bulletin -- if you wish to see some special type of pattern or a discussion of some particular craft problem -- please write me about it. It is only through requests from members that I can know what material will be of most interest and use. Our space is limited and I am anxious to make it carry as much useful information as possible.

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The October Bulletin has for a number of years been devoted to the subject of weaving for Christmas. Christmas is one of the hand-weaver's great opportunities; no gifts are more appreciated by our friends than pieces of our handiwork, and those of us who weave as a business find the holiday sales a season of harvest. Many, of course, have already begun their Christmas weaving, and for all of us it is high time to make definite plans.

Christmas weaving is, of course, no different from weaving at other seasons except that the accent is on the smaller pieces and that gayety and charm are for the moment of more importance than stark utility. We do not wish to make useless things -- either for sale or to give our friends -- but the things we make at this season must be attractive or they fail of their chief function. Color, design and finish are the matters of chief importance.

In planning our Christmas weaving it is a good idea to begin with the selection of a warp and then to plan the various pieces that can be made on that particular warp. We do not want to make gifts in dozens, all alike, so in choosing a threading it is well to choose a pattern that permits many variations so that each piece will be individual.

To be more specific: On a good cotton warp, such as Egyptian 24/3 or perle cotton #20, we can weave bags, pillow-tops, table runners, fabric for mounting photograph albums and portfolios, desk pads, fancy boxes and glove-cases; we can make dresser scarves and little pin-cushions, sewing kits for the traveller or the lone bachelor, shoe-bags -- even towels. Towels and table sets, however, are handsomer if made with a linen warp, and a linen warp may also be used for many of the pieces listed above. For table runners woven in silks a linen warp is much better than a cotton warp, and in some ways handsomer than a silk warp. A fine wool warp is best for scarves and for the men's neckties that have become so popular. A medium weight wool warp is best for baby-blankets, couch-blankets, automobile knee-blankets and the like. There is a special charm about soft wool things for Christmas, and no one ever has too many gay scarves or too many light blankets. A silk warp may be used for scarves and neck-ties also -- and for blankets if one wishes. A silk warp is best for luxurious bags -- evening bags, particularly, and those done in metal threads. Whether to use a white warp, a "natural" or a colored warp must also be decided. A white warp is not always the best selection as it limits

one to the light color-effects. For many things a black warp is much handsomer. It is my experience, however, that a warp in a dull "old gold" or golden tan shade combines better with a greater variety of colors than any other. But whatever warp is selected plan the work with this particular warp constantly in mind.

As to pattern: It is the simpler patterns that give the largest number of variations. A large Colonial coverlet pattern in the overshot weave would, therefore, be a poor choice. Some of the small overshot patterns -- those, particularly, in which there is no long skip -- are excellent. For instance the little "Maltese Cross" pattern as used by Mr. Hickman in the very successful bags he described for us in a Bulletin of some months ago. I should like to suggest, though, that we avoid "Honeysuckle" if possible. This little pattern permits many charming variations, but it has been used so intensively for so many years that it has lost the charm of novelty, and something else would prove more interesting.

Novelty and surprise have a great attraction, and I think these qualities might well be accented in our Christmas weaving, if our work is to be in the spirit of the interesting times in which we live. We are living in a day of great changes that require high courage and a willingness to "take chances." Timidity and sedateness are definitely not in style. So I think our Christmas weaving this year should be bold and vigorous, with lots of color and no "fussiness" at all. Some of the crackle weave patterns designed in the modern style seem to me especially well adapted to weaving of this type. My favorite of these patterns is "Three Twills" which was first published in the Bulletin some time ago and which is also given in the Recipe Book. This is a bold, simple pattern and lends itself to an amazing number of effects. A smaller pattern with great possibilities is "Drifting Shadows" -- also given in the Recipe Book. Of course there are many others. Those who weave on eight and ten harnesses would find "Botanical Gardens", from the Recipe Book, and the "point" threading in Bronson weave excellent, and capable of practically unlimited variations. Most of our members have the Recipe Book, but those who do not wish the complete collection of patterns may procure single pages from the book at 25¢ or six patterns for \$1.00. Among the patterns in the Recipe Book is one giving directions for a man's neck-tie, and also others with directions for making a photograph album and one for a telephone book cover. There are special patterns for blankets, for luncheon sets, towels, bags, -- in fact for most of the weaving projects one may have in mind.

The patterns supplied with this Bulletin have been chosen as especially well adapted to Christmas weaving in this particular year. There is an amusing note in modern weaving in the use of patterns that in form follow the structural plan of some simple "fabric" weave. This month's patterns are of this type. The crackle-weave pattern on Diagram No. 1 is, as will be noted, a single run of the pattern given in the August Bulletin. It is a basic pattern -- and by that I mean that the plan of this pattern can be used in many different ways. In the August Bulletin it was used in a "point" arrangement; it could be used as a giant "Herringbone;" some of our familiar star-and-rose figures could be threaded in this manner. As shown here it follows the movement of the plain twill. It is a distinctly novel effect and can be woven in a great many different ways, a few of which are sketched on the diagram. By using a variety of colors, by varying the sizes of the blocks, by weaving in the Italian manner without a tabby, and by many other tricks of our craft this threading may be used to produce pieces as different as possible in effect, and all a bit out of the ordinary. The pattern is so distinctive that it seems to rate a name, so I am calling it the "Hesitation Twill."

It is easier for most people to weave from the illustration rather than from treadelings directions, but for the convenience of those who like their treadelings written down I am giving these for the five weavings as sketched on the diagram. These directions, of course, are based on our standard six-treadle tie-up as given, and Structo weavers and those weaving with four treadles must transpose as usual.

At (a) No.1 is sketched the "as-drawn-in" weaving of this
 draft: Treadle 1, 7 shots
 " 2, 7 "
 " 1, 7 "
 " 2, 7 "
 " 3, 7 "
 " 2, 7 "
 " 3, 7 "
 " 4, 7 "
 " 3, 7 "
 " 4, 7 "
 " 1, 7 "
 " 4, 7 "
 Repeat.

(a) No. 3, as follows:
 Treadle 3, 7 shots
 " 2, 7 "
 " 4, 7 "
 " 3, 7 "
 " 1, 7 "
 " 4, 7 "
 " 2, 7 "
 " 1, 7 "
 Repeat

(a) No.2, as follows:
 Treadle 1, 7 shots
 " 2, 7 "
 " 3, 7 "
 " 4, 7 "
 Repeat

(a) No.4, as follows:
 Treadle 3, 7 shots
 " 2, 7 "
 " 4, 7 "
 " 1, 7 "
 Repeat

(a) No.5, as follows:
 Treadle 1, 7 shots
 " 2, 7- "
 " 1, 7 "
 " 2, 7 "
 " 4, 7 "
 " 3, 7 "
 " 4, 7 "
 " 3, 7 "
 Repeat

Draft (b), Diagram No.I, is a variation of draft (a), in which some of the blocks are larger than others. The sketch shows the "as-drawn-in" weaving, done in the same order as the treadeling for (a) No.1, but with the first block woven with three shots only, the second with seven, the next two with three shots each, the fifth with seven shots, and so on. All the variations sketched for draft (a) can be woven on draft (b) in this same fashion. These variations simply suggest a few of the possibilities. Many others will readily suggest themselves. These may be worked out on paper or may be improvised at the loom. Sometimes the most interesting effects are these improvisations. It is grand fun to take a new pattern through its changes, as a musician embroiders a melody on the piano. And it is well worth doing as this delightful exercise results in a sampler from which to arrange more formal pieces of weaving. As I have said often before, nothing is of more value to a weaver than a good collection of samples, and one should make a practise of weaving a sampler -- to keep -- on every new pattern threaded into the loom.

Diagram No. II shows two eight-harness patterns based on simple fabric Structures. Draft (a), as will be recognized, is produced from the three-harness "jeans" twill; Drafts (b), (b'), (b'') and (c) are based on the familiar "Shepherd's Check." The patterns as sketched show weaving in two colors after the method that has been described several times in the Bulletin. At (a) No. 1 is shown the simple jeans interlacing, with the blocks representing the warp-threads woven in a dark color and the blocks representing the weft shots in a lighter shade. At (a) No. 2 is sketched the same interlacing with the colors differently arranged and spaces between the blocks representing the warp. At (a) No. 3 is shown an irregular interlacing. Draft (a) Variation produces stripes of different widths, repeated in a regular order, instead of all the same width as in draft (a). These patterns are very effective when woven and give the "fabric" effect so fashionable at present.

The "Shepherd's Check" patterns are all sketched as woven to produce the check figure, the variations being in the threading and in the arrangement of the cross-barred background. Of course these drafts could be woven in many different ways, and the drafts could be further varied, also. I am particularly taken with this pattern and expect to use it for my own Christmas weaving. It is novel and amusing and thoroughly in the spirit of the times.

These "fabric" patterns will be excellent for bags and also for scarves. The "Shepherd's Check" pattern might be threaded on six harnesses with the dark stripes as dark warp-threads and the cross-bars in dark tabby. For a scarf this would be better than to weave them in the pattern weave. The patterns will also be novel and amusing for linens.

It seems unnecessary to give the treadelings for the patterns on diagram No. II as they can be woven much more easily from the drawings than from written directions. The various sheds involved are clearly shown.

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I have received a number of letters asking for Mrs. Gallinger's leaflet which, owing to a delay in receipt of the material, were not sent out with the Bulletin as scheduled. The leaflets were mailed on my return to Basin, and have no doubt been received. If, however, anyone has failed to receive this attractive and interesting announcement and will let me know I shall be glad to send a duplicate.

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A quantity of attractive weaving materials remain in stock, but the quantities are so small in some colors that I am unable to send out samples. I wish to clear my stock-room and also to offer Guild members a special bargain for Christmas weaving, so I will supply "grab-bag" lots made up from these stocks at \$5.00 for ten pounds -- for as long as the material lasts. Some of the yarns are suitable for scarves while others will make attractive bags and other pieces. Many of these yarns sell for as much as \$3.50 a pound retail, so this is a real bargain offer.

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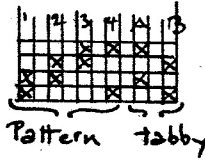
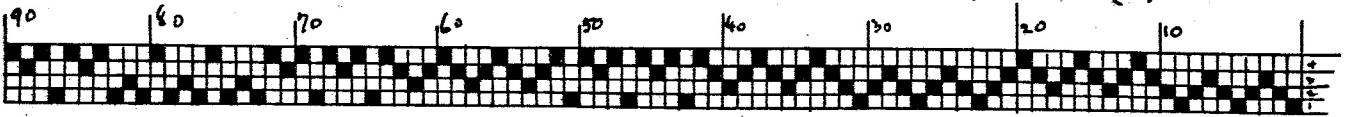
The problem of getting materials for our work at reasonable prices is becoming more and more acute. I am at present in correspondence with a number of manufacturers and hope soon to have something of interest to pass on to the Guild. Some time ago I gave the address of the S. Mazer Co., 24 Braintree Street, Allston, Mass., as a source of supply. This firm, I am informed by Mr. S. Mazer, proposes to supply materials for hand-weaving only -- materials in skeins and on tubes, and not in the little balls that are desirable for knitting but so troublesome to weavers. I have used some of the Mazer yarns and have found them excellent. The line is not as varied as that carried by some other dealers, but Mr. Mazer assures me he will supply any material for which there is a demand. The prices are somewhat lower than for yarns as put up for knitting.

I shall, from time to time, have further addresses for the Guild and am in hopes of being able to make arrangements with various yarn dealers to allow the Guild a special discount, but at the moment of going to press these arrangements have not yet been completed.

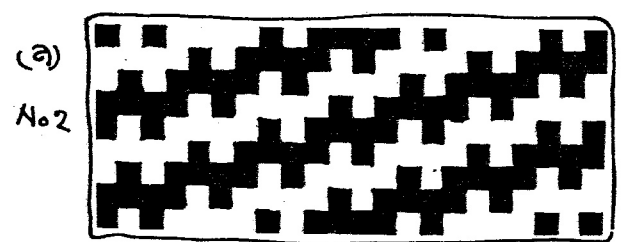
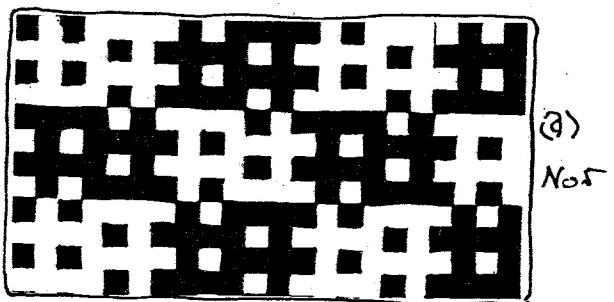
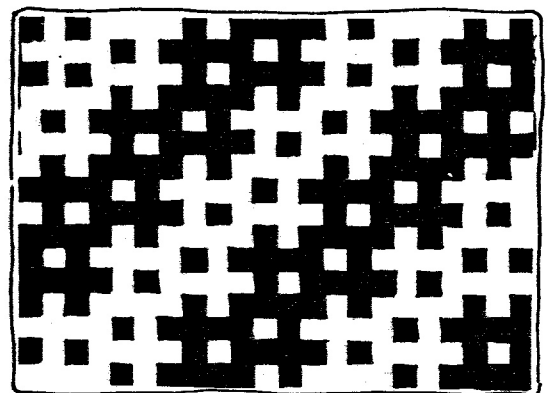
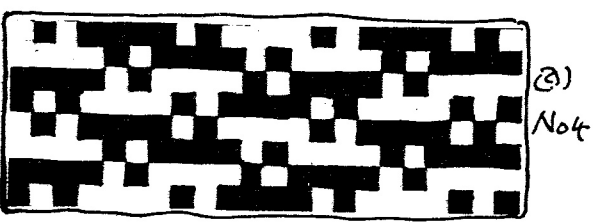
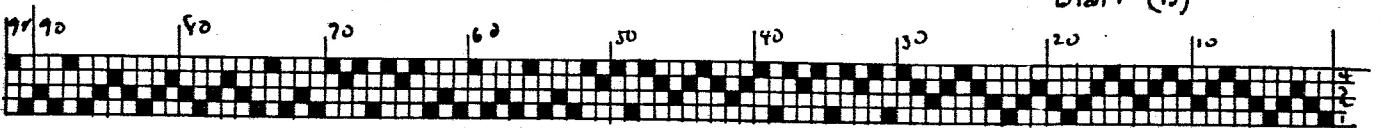
For the benefit of new members: we still supply imported "Harris Tweed" yarns from Scotland, and can supply samples on request. At the present rate of exchange the price is \$2.50 a pound -- which includes the enormous duty. On orders for thirty pounds or over we can make a price of \$2.25 a pound. These yarns are ideal for coats and suit-fabrics. We do not keep the Scotch yarn in stock but import it to order only, and it takes about a month for orders to come through. The yarn is used both for warp and weft in tweed fabrics and in calculating quantities allow three quarters of a pound to the square yard for a medium weight tweed and from one pound to a pound and a half per yard for a heavy coat-fabric. The price of this yarn is no higher than for inferior commercial "homespun" and many of our Guild members are using it for coverlets and blankets as well as for tweeds.

May M. C. Allen

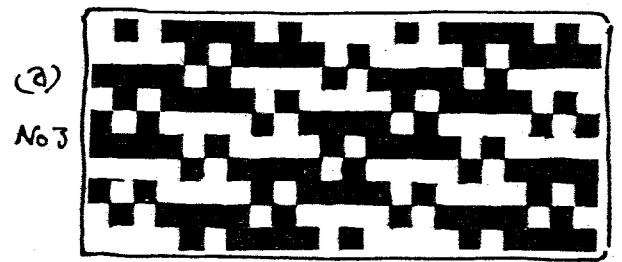
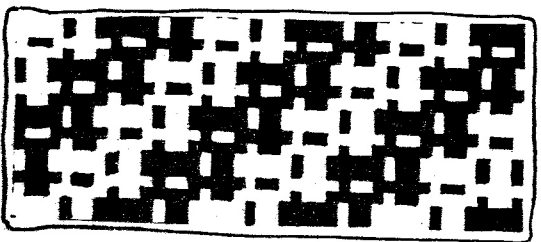
The Hesitation Twill, Draft (a)



Draft (b)



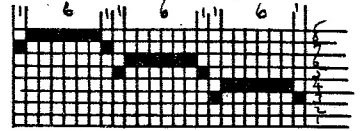
Pattern (b)



Shuttle-Craft Bulletin, October, 1936. Diagram II

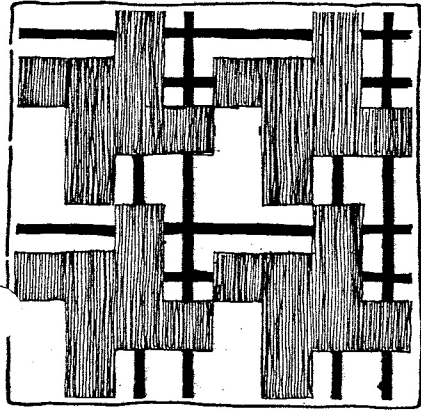
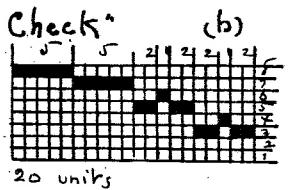
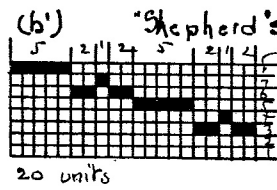
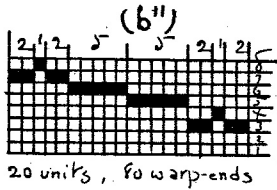
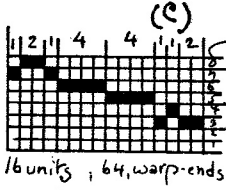
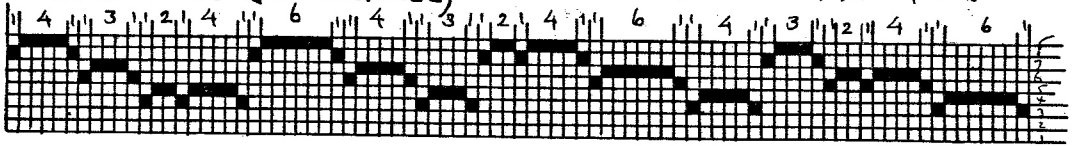
(Drafts are for Summer and Winter weaves on eight harnesses.)

"Jeans Twill" (a)

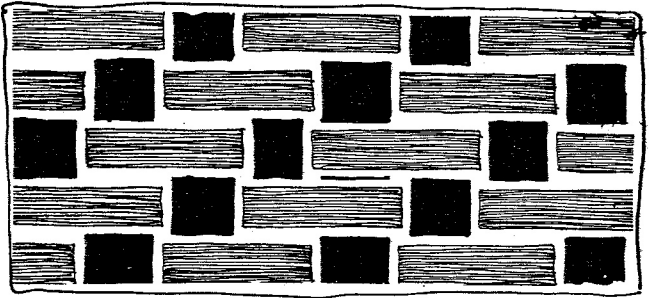


(a) Variation (not illustrated)

84 units
336 warp-ends

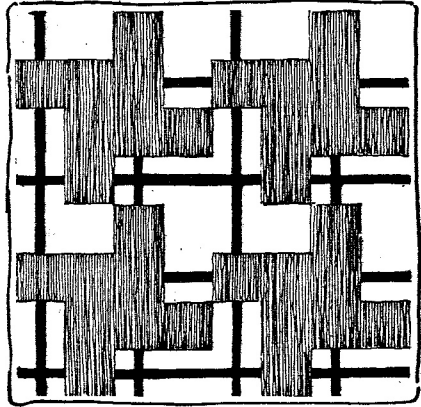


Draft (b)

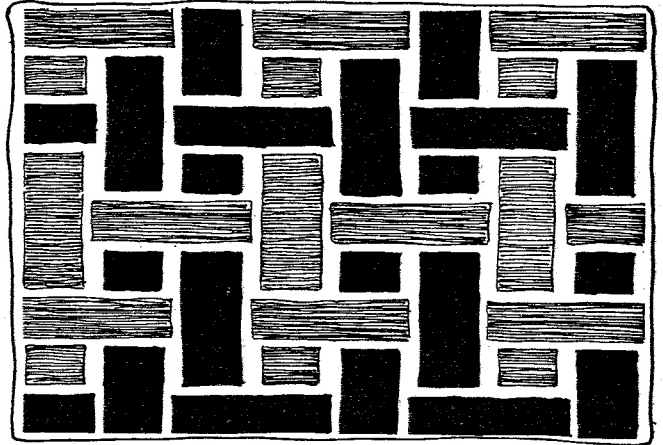


Draft (a)

Woven in "Jeans" style

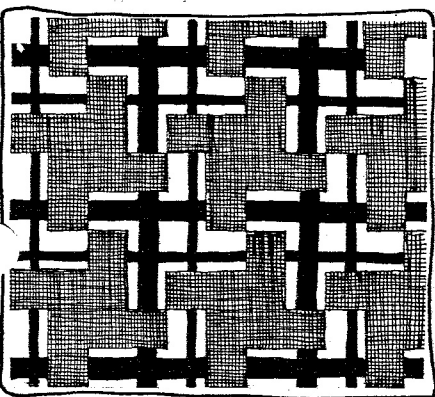


(b')

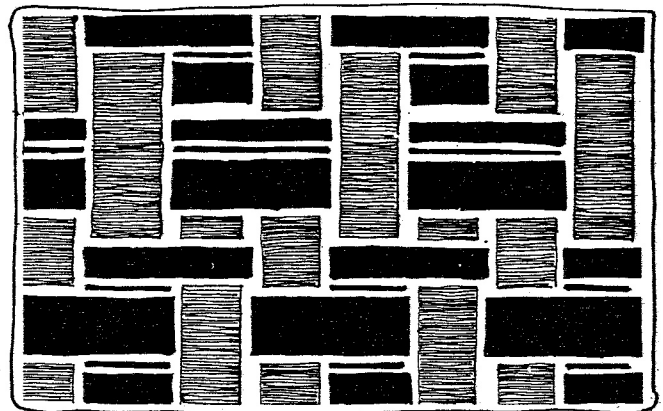


(a)

Variation



Draft (c)



(c)

Variation

BULLETIN

of the

Shuttle-Craft Guild for

November, 1936

Basin, Montana

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The weaving of afghans appears to be very much on the mind of our members at the moment. By "afghan" most of us mean a soft, light-weight blanket to be used on a couch or a chaise longue, or to lay over a sleeping child -- a useful and agreeable article, that may be as gay as one chooses. What could be nicer as a Christmas gift? I have an idea many friends of our Guild members will find a hand-woven afghan under the Christmas tree this year.

The most popular form of Afghan is the kind made of a fairly coarse worsted yarn, lightly woven, done in one or another of the "fabric" weaves and owing its charm to color and texture rather than to an elaborate figure. A piece of this type may be woven very rapidly, which is an advantage in these busy days before the great holiday. A skilled weaver can easily weave a yard an hour of this fabric, and even a beginner should be able to do a yard in an hour and a half. Of course the work of setting up the loom for a single blanket would take much more time than the weaving, so it would be a good idea to plan afghans for, say, six of ones friends and put on a warp for all six.

A coarse, soft, worsted yarn is the material to use for this type of blanket -- the same material for both warp and weft. Germantown yarn is a good choice, the warp set ten ends to the inch. A knitting worsted may be used instead of Germantown, if preferred. This yarn is somewhat harder twisted than Germantown, and is not as soft. On the other hand it has better wearing qualities and would be better than Germantown for a couch blanket. As usually woven these blankets weigh about half a pound to the square yard, so a blanket set 42" wide and woven a yard and three quarters long would take about two pounds to two pounds and a quarter of yarn. If one uses Germantown yarn at department store prices this would make a fairly costly gift; however if one uses the knitting worsted at the special rate offered in last month's Bulletin the cost will be very much less and will come well within our budget allowance for our more important gifts. And it will also be possible to weave these small blankets for sale at a price that will return a good profit and will not be so high as to be prohibitive.

As the warp used in these pieces is a soft material it is advisable not to put too much tension on the warp while weaving, to slack off the tension when the loom is left even for an hour or two, and to weave off the warp as rapidly as possible. A soft worsted warp left stretched on the loom for any great length of time -- say several weeks -- will lose much of its elasticity and softness, so do not warp for more blankets than are to be made immediately.

The weave selected may be a very simple one, and we have many suitable weaves any of which would make a charming blanket. The effect depends chiefly on the choice of colors. Dark, rich colors are best for a couch-blanket for a man's study, or for a living room done in dark colors, but for a morning room or a bed-room the lighter shades are better. A great many colors can be combined in the same piece, arranged either in a plaid design or used to accent the movement of the weave. If the colors used are all bright and brilliant shades they can be combined with the greatest freedom, and the piece will make a gay accent, not discordant with any but very set color schemes. Of course a blanket done in yellow and orange shades would be painful in a pink or mauve boudoir and if we have friends addicted to some special color of this difficult type we shall have to arrange a special color-effect to suit. We might do this, on a long

warp by making the body of the piece in white and tying in a border color in the special shade desired.

An overshot pattern is not desirable for the making of an Afghan, but crackle-weave patterns will give good results, especially if woven after the Italian method, without a tabby. Summer and Winter weave patterns may also be used if desired. For afghans in this style warp and tabby may be of a finer yarn than that used for the pattern weft.

The Recipe Book contains a number of patterns suitable for the making of Afghans. The following are suggested: Series II, No. 4 and No. 10 -- in crackle weave -- and No. 11 in summer and winter weave. Series III, No. 1, -- a four-harness "texture" threading; Numbers 3, 9, 10, 14, -- crackle weave--; No. 15, a "fancy" six-harness threading; No. 22, -- summer and winter --; No. 23, -- a "Finnweave" design--; No. 25 -- eight-harness. Series IV, No. 3 (b); No. 4 (c); No. 5, -- eight-harness "fabric" threadings; Numbers 6, 7, 8, -- tartan "setts" --; No. 11; No. 12 (b) and No. 13, -- six-harness --; No. 14, -- eight-harness --; No. 15 -- six-harness. All these are patterns of the "fabric" type and if done in coarse worsted yarns would be excellent for Afghans. Series V, No. 2, -- a pattern of the "Herringbone" type--; No. 4, crackle-weave; No. 5, an eight-harness summer and winter weave pattern; Numbers 10, 19, and 22, crackle weave; No. 23, six-harness "basket" weave. Series VI, No. 1 (a), a four-harness fabric pattern and (b) an eight-harness pattern of similar type; No. 3, a four-harness "Bronson" threading; No. 7, a four-harness blanket weave; No. 11, crackle; No. 12, two eight-harness blanket patterns; No. 16, "waffle" weave; Series VII, No. 7, a "Herringbone" arrangement.

There are also many patterns in the Shuttle-Craft Book that are suitable for afghans. The four-harness summer and winter weave group of patterns: Numbers 150 - 163; the small figures in summer and winter weave for more than four harnesses -- particularly Numbers 246 and 247 --; the Bronson weave patterns, No. 251 - 263; the "fabric" threadings: 286, 287, 295, 296, 297.

A number of blanket patterns were given in the Bulletin for February of this year. New members who do not happen to have this number may obtain it if they wish. The price of back-numbers is 35¢ each.

The patterns on the accompanying diagram are all intended for use with Germantown or knitting yarns. The plain tabby border shown with pattern (b) may be made as wide as desired. Spaces in tabby may be inserted between the squares woven in a figure, if desired. For instance add ten threads threaded 1, 4, 1, 4 etc, at the point marked by the arrows. The entire repeat should then include the first ten threads of the draft and the complete repeat will cover 68 war-ends. The tabby bands might be warped and woven in a color different from that used for the pattern figures, and a number of colors may be introduced. Weave the tabby bands on treadles 3 and 4. These do not make a real tabby, as there are double threads at intervals. The effect, however, is interesting. A border for this pattern might be made of repeating threads 21-28 as required. As a border for pattern (c), repeat the first eight threads of the draft as desired.

The patterns shown on the diagram are all of the "fabric" type and can be easily and quickly woven. They have been selected as likely to prove useful for Christmas weaving. If, however, one wishes to make a more elaborate piece the "Finnweave" offers delightful possibilities for afghans and small blankets. Warp and weft, of course, should be of worsted yarn. Fabri yarn set at 40 ends to the inch -- half of one color and half of another -- would make an agreeable fabric, not too heavy for a small blanket. Shetland yarn set at 24 to the inch might be used if one wished a heavier blanket. In the classic form of the Finnweave warp and weft are exactly the same and the weft is woven with the same number of shots to the inch as there are warp-ends to the inch in the setting. However it is allowable to vary this by using a fine warp set fairly far apart, woven in a coarser yarn. For instance one might warp in Fabri at 32 ends to the inch and weave with Shetland.

A number of patterns have been given in the Bulletin -- in addition to the one in the Recipe Book listed above -- that would be delightful for a piece of this kind. The ones in the Bulletins for April, May, August and September, 1935, seem to me especially good for the purpose. My own choice would be the delightful Peruvian animals in the August number. Two repeats of the figure in width and three repeats in length would make a fascinating piece.

Structo weavers can, if they like, make afghans, but of course these must be made in strips and sewed together. For a width of 40" it would be best to weave a middle strip the full width of the 20" loom, and then divide the warp in the center and weave two side-strips at the same time, using two shuttles. Pattern (a) on the diagram will make attractive scarves if carried out in fine yarn. In reading the treadelings, as given on the diagram, transpose as follows for the Structo loom:

Pattern (a) -- "treadle 1", use levers, 3-4; "treadle 2", use levers 1-4; "treadle 3", use levers 1-2; "treadle 4", use levers 2-3.

Pattern (b) -- "treadle 1," levers 3-4; "treadle 2," levers 1-2; "treadle 3", levers 1-3; "treadle 4," levers 2-4.

Pattern (c) -- on the eight-harness Structo -- "treadle 1," levers 4-5-7-8 ; "treadle 2," levers 1-5-6-8; "treadle 3," levers 1-2-6-7; "treadle 4," levers 2-3-7-8; "treadle 5", levers 1-3-4-8; "treadle 6", levers 1-2-4-5; "treadle 7" levers 2-3-5-6; "treadle 8," levers 3-4-6-7.

I enclose a leaflet with an illustration of the new Bernat loom which may prove of interest to Guild members. This little loom may solve the problem for weavers who wish something larger than a table loom and who are restricted in space. I found it a very nice little loom to weave on. It is, in my opinion, too light for heavy rug-weaving but for anything else it is adequate within its width limit.

Several Guild members have asked questions about the card-woven rugs shown in the last number of THE WEAVER. Whether or not these pieces were woven in strips and sewed together is not entirely plain from the illustrations. However as the "returns" do not match in the various patterns I am inclined to think they were made in this manner. I made some experiments once with weaving wide pieces by the card technique, putting the warp on the warp-beam of a large loom and taking out the heddle frames and the batten, using the loom simply as a frame to support the warp and the cards. This was entirely practical though the cards had to be turned in sections and the work did not go very rapidly. If heavy rug-yarns were used the weaving would, of course, be less slow. For such heavy yarns it would, I think, be advisable to use "cards" of wood or composition, at least twice as large as the ordinary weaving card. It is interesting to note that the patterns used in these pieces are patterns from our Shuttle-Craft pamphlet. Mr. Bernat writes that the article was contributed by an English weaver. In this connection it is interesting to note that all but two of the contributors to the last number of THE WEAVER are either active members of the Guild or were at one time Guild members. Mrs. Ropes, whose article on linens will be found of much interest, has had great success with her towels and other linen pieces. Miss Carr had a rare gift for color and her pieces have much charm.

The travelling exhibit for this year has been concluded and the pieces returned to contributors. Next year we shall probably organize another of these "round robbin" exhibits, and I hope Guild members will keep it in mind and have many unusual and interesting pieces to send in.

May B. Akers

BULLETIN

of the

Basin, Montana

Shuttle-Craft Guild

for

December, 1936

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The December Bulletin has, of custom, been devoted to practical matters of equipment and method. This seems like a suitable time to discuss warping.

Perhaps some day some public benefactor will devise an entirely satisfactory, quick and easy way of warping. It must be admitted that no such way exists at present, though some methods of warping are far more troublesome than others. Warping is the least interesting part of the textile process, but successful weaving depends on correct warping and it is useless to try to weave at all on a poor warp. Provided, however, that the warp is wound smoothly and evenly on the beam it makes no difference in the woven fabric what warping method was used, and the best method is the quickest and least toilsome one.

Before going further I want to repeat what seems to me the first rule of weaving: Never try to weave on a poor warp. If through mischance you have a poor warp on the beam, correct it. Wind the warp off onto the cloth-beam and beam it back to the warp-beam. This is not very difficult to do. The only other course is to discard the warp completely.

At present we have three methods of supplying a loom with warp. We can avoid warping altogether by using one of the prepared warps now available. We can warp by the sectional method. We can use the warping board or drum and make a "chain" as our forefathers did, and beam through a raddle. None of these methods is ideal.

Prepared warps save a great deal of time, and as these warps are made by machinery they are wound with great precision. For those whose weaving time is limited they are a great convenience. And though they cost more than warps prepared by the weaver they are not expensive if one counts ones time as of any value.

Prepared warps are supplied on spools, each of which carries the number of threads, or warp-ends, required for two inches in the reed. Most of them are put up in twenty-yard lengths which is the most convenient length for most hand-weavers. Warp in this form was originally used only on the small Structo looms, but many small treadle looms are now equipped with the special steel beam required to take the spools, and large looms may also be equipped with a steel beam if desired. The draw-backs to warp in this form are that only a few kinds of warp are available on spools, and that the same setting is used for all.

The Lowell Textile School -- and possibly other institutions, though I do not happen to know of any -- can be induced to supply prepared warps of a different kind: one may send them the warp-beam of the loom and they will wind it with any kind and length and setting of warp desired. This is the best way to get a prepared warp if one wishes a warp of say thirty-five to fifty yards, but is not practical for short warps because of the expense.

Mr. Stewart MacKay, North Chelmsford, Mass., used to make up shorter warps for small looms at moderate cost, but his service has become so slow and so uncertain that one must be prepared to wait a great while, which is not always convenient.

Some questions concerning the correct way to use the prepared warp-spools have come to me, and they may as well be answered here: In setting

spools on the beam be careful to set them so that they will all unroll in the same direction--"counter-clock" fashion -- and so that the pasters all come on the same line. Never use a partly used warp-spool in the same set with full spools.

The most laborious method of warping is the warping board and chain method. It takes many hours to measure a long, wide warp on the warping board, and it takes many additional hours -- and the co-operation of several people -- to beam the warp when made. Moreover some of the best warp-materials we use are almost impossible to handle by this method. It is entirely possible to put a good warp on the loom by this method, but in my opinion it is a waste of time. Many weavers disagree and cling to the ancient method -- perhaps through sentiment -- and of course, if they enjoy the exercise and have the time to put in, there is no reason they should not warp this way. For myself, if this were the only way to warp a loom I should never have become a weaver. And anyone who weaves for profit can hardly afford to use this method as it raises the time-cost of the woven fabric so much. There are exceptions, of course: for a short, narrow warp, especially if it is to be a "fancy" warp of several colors, the warping board may be the quickest and easiest method of warping. And in occupational therapy shops in mental hospitals the warping board provides rythmical occupation for patients who cannot be otherwise employed. Here it is a question of using up as much useless time as possible and labor saving devices are a detriment rather than a help.

For most of us, however, the sectional method of warping seems to me by far the most economical and practical. By this method it is possible to beam a long warp the full width of the loom single handed and in two hours. If a proper warp-beam of large circumference is used, and care is taken to keep the tension even, the warp will go on just as smoothly by this method as by the chain method, and the great saving in time and effort is obvious. Most modern treadle looms are now provided with sectional beams, and it is not difficult to equip an old loom with this modern improvement. The standard warp-beam is not a solid roller, but is made of four timbers set in an iron casting at either end. The sections are divided by dowels set along the upper face of the timbers at regular intervals. The usual practise is to divide the beam into two-inch sections. The beam itself has a circumference of one yard. Standard sectional beams for large looms may be purchased of the Reed Loom Company, Springfield, Ohio. Or one may buy the castings from this firm and have the beam made up at a local wood-working shop. It is impractical to section the ordinary solid roller used as a warp-beam on most old looms. The circumference is too small to permit putting on the warp smoothly, and it is also difficult to guage the length of the warp. If the beam is a yard in circumference one needs simply to count the revolutions of the beam to get the correct yardage.

For sectional warping it is necessary to have a spool-rack or creel and the warp must be on a number of spools corresponding to the number of warp-ends in two inches of the reed. The loom company whose address is given above supplies a creel of sixty spool capacity and also supplies large wooden warp-spools with heads. The best warp-spools are those of polished wood with fibre heads, such as are used in silk mills, but these are quite expensive. Paper tubes may be used as warp-spools also, and these cost very little. They must, however, be wound carefully as they have no heads and the thread tends to run off and become tangled if the tubes are wound too full or too near the ends. Paper warp-tubes may be obtained of the Emile Bernat and Sons Co., Jamaica Plain, Mass., at low cost. This firm, by the way, also supplies boat-shaped throw-shuttles and metal shuttle-bobbins, a small hand-winder, and an inexpensive "swift." This swift does not appear to me entirely practical. Better equipment is the upright swift with two large spools that may be adjusted to take any size skein from the smallest to the long linen skeins that are sometimes so troublesome to handle.

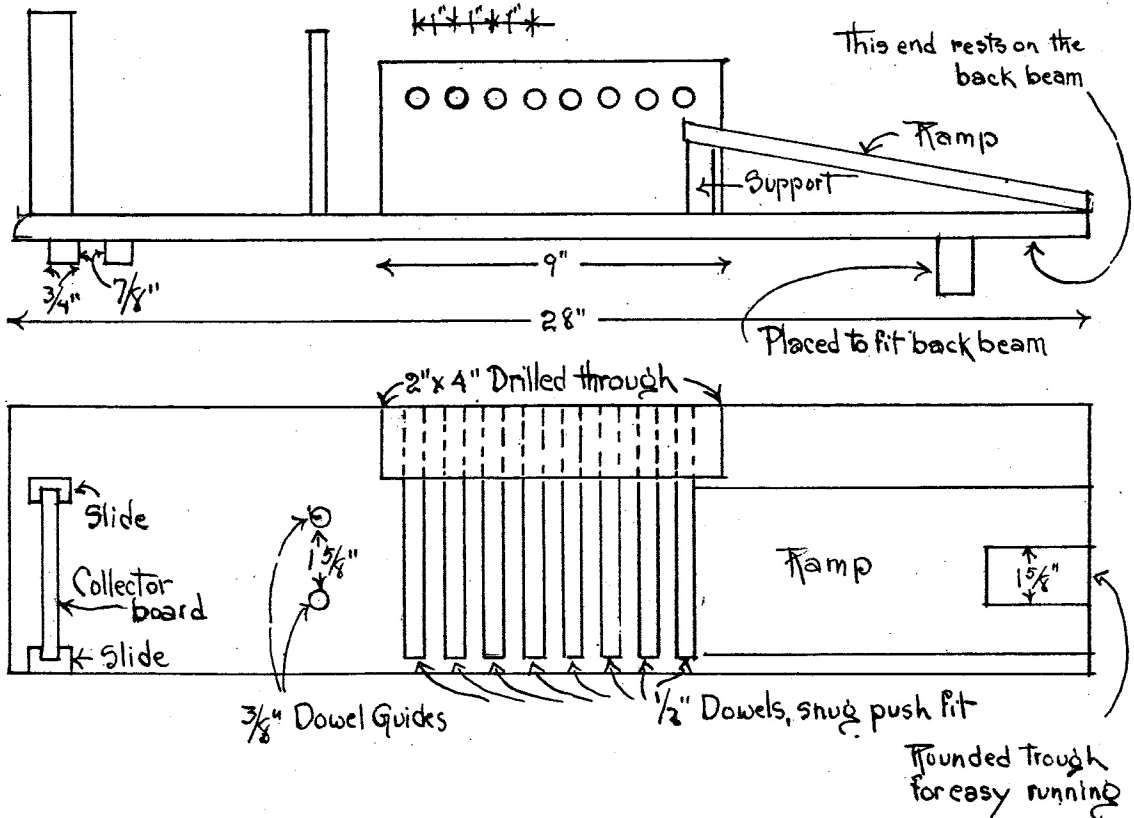
Some of the commonest warp-materials may be had on small spools for sectional warping, but other materials come in skeins only and it is necessary to spool the warp oneself for sectional warping. A winding device of some sort and a swift to hold the skeins are required for this. The best winder is one operated by electricity, but these are quite expensive. One way to get an electric winder at low cost is to purchase a second hand sewing machine

motor and have a local machine shop fit it with a tapered shank that will take shuttle-bobbins, spools and paper tubes. The hand-winder is slower, of course, but entirely practical.

Small looms cannot well be equipped with warp-beams a yard in circumference, but the new steel beam with a set of empty warp-spools can be used as a sectional beam for small looms. It is, to be sure, difficult to fill these spools evenly by winding directly from the creel as to a large beam, but the Structo Company now supplies an excellent little device for filling these spools. The price is \$5.00.

One more piece of equipment is used in sectional warping: a guide through which the threads from the creel are taken, in order to prevent tangling. The ordinary guide consists of a flat piece of metal punched with holes. This is set upright in a groove in the top of the back-beam. I find, however, that the raddle supplied with the Structo winding device makes a more satisfactory guide. This can be clamped to the back-beam above the section to be warped.

The only real difficulty in sectional warping is the tension. If the warp is held tighter while beaming one section than while beaming the next there will be a tight streak the length of the warp and this of course will ruin the warp. One of our Guild members, Mr. A.B. Gardner, has devised a simple and effective device for providing an even tension, and has kindly contributed working drawings from which anyone can make this piece of equipment or have it made at low cost. I reproduce Mr. Gardner's drawings below:



Mr. Gardner's notes are as follows: "Starting at the left, I made my warp tensioner with upright slides to take what I call the collector board, made of maple punched with 80 holes." (This corresponds to the ordinary guide, and might to advantage be a narrow piece of reed. M.M.A.) Next come two upright dowels, $\frac{3}{8}$ " which form guides to bring the warp to a width of $1\frac{5}{8}$ " which is the width of the section on the beam between the dowels. Next comes a piece of 2 X 4 set on edge and with eight $\frac{1}{2}$ " holes drilled through at 1"

intervals, and 1" from the top on centers. These are for the dowels, which are not fastened in, since if it is found there is too much tension one or more should be removed. Then comes a ramp of $\frac{1}{2}$ " maple which makes it easy to collect the warp-ends as they are threaded round the rods. At the end is a trough of $1 \frac{5}{8}$ " wide, rounded off to make the warp slide easily over the end without going over a sharp corner.

"Underneath at the left are two cleats to fit each side of the top piece of a light horse that supports that end. At the right is one cleat of such size and so placed that when this end is resting on the back beam the warp will slide nicely over and down.

"My practise is to thread all the warp from the spool rack through the collecting board. Then, commencing at the far side, take the threads one by one over and under the dowels. I pass the threads from the upper part of the collecting board under the first dowel and over the next and so on; those from the lower part of the board I pass over the first dowel and under the next. They should alternate.

"I did not sandpaper the dowels since friction is what is required to produce the tension. All parts of the tensioner are put together with screws except the slides for the collecting board which I mortised and glued."

With these clear and detailed directions I am sure no one will have any difficulty in making this tensioner, and it will eliminate the chief difficulty in making a sectional warp. I am sure Guild members will be grateful to Mr. Gardner for his generosity in sharing his excellent bit of practise with our membership.

No more "grab-bag" materials for a while! A fire a few nights ago destroyed my garage and stock-room.

The samples enclosed are an imported silk material which is supplied by one of our members, Miss Mabel D. Hall, Watsonville, California. Miss Hall writes that she will soon have a new shipment containing additional colors. The price of the material is \$6.00 a pound, or 35¢ a skein. Orders should be sent direct to Miss Hall, and not through this office. I have not yet tried this material on the loom, but I am convinced it will be delightful for bags, scarves, neckties and the like. It should also make delightful belts and hat-bands in card-weaving.

It occurs to me that some of our members may have weaving friends for whom a subscription to the Bulletin, or a copy of the Recipe Book might make a useful and interesting Christmas gift. I shall be glad to make a special rate of \$4.00 on gift subscriptions to the Bulletin, and \$7.50 for the Recipe Book. I also have a few copies left of the John Landes publication of some years ago. The Guild price of this was \$6.00 -- for Christmas I will make a special rate of \$5.00. The stock is limited, however, and I shall not be able to fill many orders for this

A card-weaving outfit would also make an attractive gift for a weaving friend. I shall be able to supply sets consisting of a pamphlet of patterns and instructions, a set of 100 cards, and a piece of work set up and started for \$3.50, including postage.

Card-weaving is a fascinating little craft. I am at the moment preparing an article on some card-weaving "stunts" for Bernat's "Weaver." The card-weavers in our membership may find it interesting.

With this Bulletin go my best wishes for a Merry Christmas and a happy and successful New Year to all our members.

Mary M. Atwater