



Basin, Montana

## Shuttle-Craft Guild

## April, 1937

Easter, to be sure, has come and gone, but the subject of dress-fabrics is always of interest -- perhaps never more interesting to hand-weavers than this year, with the return to fashion of certain types of fabric that we can make so beautifully on our hand-looms.

Plaids of all kinds, from the little "shepherd's check" to large figures a foot or more across, are even more in evidence than last year, and the striped and bordered fabrics, such as we wove with so much pleasure a number of years ago, are this year the newest thing.

But before discussing these new fabrics, a few words about tweeds. There seems to be some confusion of idea as to what is and what is not a "tweed." The word "tweed" is derived from the word "twill" and properly speaking a tweed is a fabric made of rough hand-spun or "homespun" wool yarns woven in a twill. Therefore a tabby fabric made with a worsted warp and a homespun weft, for instance, should not be called a tweed.

The famous "Harris tweeds" of Scotland are the aristocrats of the tweed family and their history goes a long way back through the ages. Here are the "recipes" taken from a few imported samples of Harris. The material in all is the same -- a sturdy handspun wool yarn with a peculiar wiery texture due, no doubt, to the wool of some special breed of sheep.

Sample No. 1. Threading, plain twill: 1,2,3,4 and repeat. Warp, 2 threads white, two threads "colonial" blue. Weft, a mixed yarn, -- reddish brown and white. Treadled as for plain 2-2 twill: 1-2, 2-3, 3-4, 1-4, repeat.

Sample No. 2. Warp: the same mixed brown and white yarn as the weft in No. 1. Weft: 2 shots reddish brown; 2 shots a dull, light blue. Threaded and woven the same as sample No. 1 but more closely beaten.

Sample No. 3. Warp: mixed tan and natural white, with two threads of a very dark Oxford grey set at intervals of one inch. Weft, mixed grey and natural white, with four threads of a taupe shade woven at intervals of two inches. Threaded and woven as for plain twill, rather loosely beaten and somewhat "fulled."

Sample No. 4. Warp, light grey; weft, a mixed grey and reddish brown. Threading, Herringone. Woven in regular twill order. This sample is considerably fulled so that the herringbone weave is hardly apparant.

Sample No. 5. (This is a sporty plaid effect, excellent for a sports coat.) Warp: 4 threads white; 4 threads golden tan or light brown; 4 white; 4 brown; then 2 white; 2 dark blue, repeated for 24 ends. Then the whole pattern repeated. Weft, same colors as the warp, woven: 4 white; 4 brown; 4 white; 4 brown; then 2 white; 1 brown; 1 blue, repeated for 24 shots.

Other samples are woven in yarns of the same color but slightly different twist for warp and weft. Variations in texture are made by setting the warp close, or somewhat far apart, and by beating lightly or firmly. But all are in plain twill or one of its simplest variations. The use of mixed yarns, and the use of different shades of color for warp and weft give life to the plainest of these fabrics.

The Scotch tartan plaids are perennials, -- always handsome and always smart. These plaid patterns are excellent for scarves, skirts, whole dresses, and particularly desirable for light flannel outing shirts for those who take to the woods on hunting and fishing trips. The true tartans are woven in twill, but for our uses we often prefer the plain tabby weave which gives a lighter weight fabric than twill. Bernat's "Fabri" yarn warped and woven at 24 ends to the inch makes a very satisfactory fabric. If woven in twill a setting of 30 to the inch in this yarn is better.

The ancient tartan patterns are loved for their romantic history as well as for their beauty, and those among us who through Scotch descent are entitled to the use of the family pattern of course prefer the name-plaid to any other, but those who are not bound by tradition consider rather the color-effect. The "Royal Stewart" pattern, often called the "Queen Victoria plaid", is a prime favorite because of its gayety and charm. This pattern and a number of others are to be found in the Recipe Book. There are four pages of these patterns each with from four to six "setts." I can supply seperate pages of the Recipe Book if desired, at 25¢, or six pages for \$1.00, as a convenience to those who have not the complete publication.

It is not the traditional tartans, however, that are most prominent among the new fabrics. Many of the new "fancy" plaids are very striking, and the only limit is the taste and fancy of the designer. Many of these plaids are composed of rather narrow stripes of color, set far apart to make a pattern of large squares. They appear not only in wool fabrics but in the filmiest of materials for evening wear. Those who plan to weave cotton fabrics for summer will not go far wrong in making plaids and checks a specialty.

A good way to design these patterns is to use colored crayons on cross-section paper, drawing the figures of the size they will be when woven. It is very difficult for even an experienced designer to guess at an effect of several colors combined in this manner, and the only safe way is to see it before putting it on the loom.

An interesting manner to make these fabrics is to thread the main part in a fine warp and introduce a plaid pattern in single coars threads of the same color as the ground or in a different color.

Much grey is to be used in the coming season. All shades of grey from the warm color that is almost rose-taupe to the cold bluish shades will be fashionable. "Queen's grey" which is a mingling of black and white, can be made by warping in white and weaving in black, or the other way 'round. This, enlivened by lines of black and white is excellent

In the limited space of the Bulletin I can do no more than suggest the unlimited possibilities of the plaids and checks.

The new striped fabrics seem to me, however, more interesting than even the plaids and checks. Many of us no doubt recall the "peasant" skirts, imported from Europe, that were such a feature of summer fashions some years ago. These fabrics were "linsey", woven in wool over a rather coarse cotton warp, and were done in tabby weave in bold stripes of colow in great variety. The fabric was woven the width of a skirt-length and the skirts were made up with the selvages at the top and bottom of the garment. Exactly this same thing may go well this season, but "linsey" has a peculiar stiffness that many people do not care for. For this year I believe it would be better to make either all-wool, or all-cotton, or linen fabrics.

Some of the newest dresses are of stripes running lengthwise, with bands of round-and-round stripes at the bottom of the skirt to carry out the new "swing" idea. Here would be an attractive way to weave such a dress: Make the warp of fine unmercerized cotton in stripes of color as desired, setting the warp far enough apart to produce a lightweight fabric when woven in the tabby weave. Thread to the 1,2,3,4 twill. For the stripes at the bottom of the skirt weave in twill, in the colors of the stripes or in a contrasting color, beating fairly close. Between the stripes of twill weave tabby, lightly beaten. And for the main part of the fabric weave lightly beaten tabby in the background color. The heavier stripes at the bottom will give just the effect desired in the new skirts.

Some of the new striped fabrics are in broad bands of pattern, as elaborate as one chooses, separated by narrow sections in light-weight tabby, and are made up with the stripes running 'round and 'round. The pattern threading to use for this sort of thing is a matter of taste. However an overshot pattern with long skips would, in my bpinion, be a poor choice, and I would not advise one of the more pronounced Colonial coverlet patterns. The effect is of the "peasant" type and "Monk's Belt", "Bird-Eye", "Sugarloaf," "Ms and Os", a pattern in "Bronson weave" or in "crackle weave" would give better results.

The "leno" weave will also prove very useful for these striped fabrics, -- done in bands of leno and plain weave, or (if one has a loom of six or eight harnesses) a combination of leno and pattern weaving.

A novelty of the season is a sweater fabric made of rows of narrow fringe. To produce this effect set a foundation warp, say of Fabri yarn, in the ordinary way. Make a second warp, at least four times as long as the foundation warp, of the fringe material, which should be a soft, fluffy yarn. Put this on a second warp-beam. Thread alternate ends of foundation and fringe, or -- if the fringeyarn is coarser than the foundation yarn -- thread two or even three foundation threads to each fringe-thread. The threading can be put on two harnesses, though it is more satisfactory to put it on four, threading to the plain twill. Weave plain tabby for about an inch; repease the beam carrying the fringe yarn, raise the fringe threads and insert a lease stick an inch and a half wide, Set this on edge. (If the fringe is to be cut it would be more convenient to use a bar with a slot and a pile-knife as for Swedish tufted weaving.) Weave another inch of tabby, and so continue. Another way to get this effect is to weave the inch of tabby, put in a lease stick two and a half or three inches wide, laying it flat; weave a few more shots of tabby; take out the lease stick; release the fringe-warp, and with the batten drive the tabbies together. This, however, is hard on the warp and does not work well unless a strong and slippery warp is used. Wool fronge could be woven this way over a silk warp. Bands of loops woven in this manner might make an unusual border and trimming for a fabric in plain weave.

Fabrics in "basket weave" and "waffle-weave" are good this season, also. As drafts for thase weaves have been given, and are in the Recipe Book also, it seems unnecessary to repeat them here.

It must be remembered that texture and color are the important matters in planning a dress fabric. For texture the materials must be carefully selected for the desired purpose and the warp-setting chosen to suit not only the material but the weave. As a rule it is best to make warp and weft of the same yarn, or yarns similar in kind and grist. Soft and fuzzy yarns can be used successfully as warp if the warp is treated with dressing. And this, too, which has been said often before but seems to bear repeating: an all-wool fabric and an all-linen fabric must be washed in order to give them a finish. This washing is less important for cotton fabrics though it is best to wash them, too. In allowing for shrinkage, remember that a loosely woven fabric shrinks much more than a closely woven fabric, and make a generous allowance. No rule, unfortunately, can be given as different yarns shrink differently. A loosely twisted yarn, of course, shrinks far more than a hard-twisted yarn.

At the time of writing not enough names have come in for the travelling exhibit to make the project sufficiently interesting. I am therefore not suggesting definite dates or arrangements for this exhibit. Perhaps it will be best to put it off till the end of summer. We will organize the exhibit when -- and if -- the Guild members want it.

There seems to be a bit of confusion over the orders for Bernat yarns. Guild members who can buy the Bernat yarns at the wholesale rates should order direct from Bernat. There is no discount allowed. Our service is for those members who have been unable to buy direct. The 20% discount applies only to the retail prices and brings the cost of the materials down to about the wholesale rate. These retail orders to which the discount applies should be sent to this office and not to the Bernat Company, but the material will be shipped from Jamaica Plain.

Several Guild members who are already making surmer plans have asked me whether I shall be in Basin this summer or on the Glacier Park Ranch. I expect to spend part of the summer on the ranch, but have agreed to conduct a weaving "institute" at Palmer Lake, near Denver, Colorado, g beginning about August 15. I hope to see many Guild members at this meeting in Colorado, which promises to be interesting. The project is under the auspices of Mrs. Anne Fisher, El Cunejo Blanco, Palmer Lake, Colorado, to whom inquiries as to terms and arrangements should be addressed.

And speaking of summer plans: my son, Montgomery Atwater, and his wife, have decided to open the Glacier Park Ranch as a small dude-ranch. It is an ideal spot and will give visitors to that part of the country all the advantages of a visit to Glacier Park under less "touristy" surroundings and at less cost. There will be trips through the park, horses to ride, trout-fishing, hikes, pack-trips into the mountains, and so on. The place is easily accessible as it is on the Great Northern railway and also on the main highway. For further information address Mr. M.M.Atwater, Drifting Snow Ranch, Essex, Montana.

May M. afwaler



## of the Shuttle-Craft Guild for August, 1937.

Basin, Montana

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A number of requests for additional "miniature" overshot patterns have come in recently; and several Guild members have asked for directions by which to write these little drafts for themselves. I believe the interest in drafts of this type is part of the unmistakable trend away from the ancient overshot coverlet effect. We are beginning to realize that the overshot weave in its classic form, with its long, loose floats of weft, is poorly adapted to some of the uses to which we have been putting it, and still we are unwilling to give it up altogether for one or another of the other weaves.

It is perfectly true that long skips of weft weaken the fabric and make it impractical for hard wear of any kind. Overshot is an excellent weave for coverlets, and satisfactory for hangings, but for rugs and upholstery it is undesirable. The old-time weavers would not have dreampt of using an overshot pattern for some of the purposes to which modern hand-weavers have put it, but when hand-weaving was revived in this country some thirty years ago the overshot weave was the only weave anybody knew anything about. It was used for everything. There are still many hand-weavers who know no other weave.

It is true that overshot patterns in which there are no long skips can be used successfully for many things that should not be woven in the patterns that include very large blocks, and the "miniature" drafts, in which there are no long skips, are practical enough for bags, runners, and so on. I am not sure but that some other weave is to be preferred, but that is a matter of taste.

By "miniature" I take it we mean a pattern written as small as possible. A pattern, theoretically, remains the same whether large or small, if the proportions are preserved. In practise, however, it is usually impossible to preserve the proportions exactly when writing a pattern down to its lowest terms. This is due to the structure of the weave, which requires an odd thread in the "return" blocks. In a large pattern the extra thread makes little difference in the effect, but when written very small this extra thread changes the proportions a good deal, so that the pattern becomes "chunkier" and less graceful than in its original form. It is easy enough to write the pattern down to miniature size, provided it is a suitable pattern, but whether or not the reduced form will be attractive is a question for the eye. It is well to try out these drafts on paper before threading them on the loom.

An easy method of making a small draft is shown at (a) and (a') on the diagram. For the illustration I have taken draft 97 from the Shuttle-Craft Book. The blocks in this pattern are all of either four or eight threads except the return blocks which are of five and seven threads. As the smallest possible pattern block is one of two threads we can reduce this pattern to its lowest terms by taking two threads out of each of the four-thread and five-thread blocks, and four threads out of each of the eight-thread and seven-thread blocks. I have drawn a pen-line around each of the groups of threads to be

omitted. Re-writing the draft now, leaving out the ringed threads, gives us the "miniature" draft at (a').

It will be obvious that a pattern, -- like "Honeysuckle" for inatance, that contains two-thread blocks to begin with, cannot be written any smaller and is already in its lowest terms. To make it any smaller it would be necessary to leave out part of the blocks, and that would make a different pattern. Patterns composed of blocks of many sizes from small to very large do not lend themselves well to reduction. In these miniature drafts a skip of more than five threads is hardly allowable. The reason is this: as many of the blocks will be two-thread blocks, woven with a single shot of weft, a skip of more than five threads in a single weft-thread looks skinny and skimpy and does not carry the pattern. Another group of patterns that cannot be written successfully in miniature form are those either in whole or in part "on opposites. In these patterns there are "accidentals" of two threads, and when the smallest pattern blocks are also of two threads the accidentals become so prominent that they confuse the pattern and its character is gone. We are therefore rather closely limited to patterns in which all blocks are of the same size, and those in which the blocks are of two sizes only -- the larger blocks twice the size of the smaller ones.

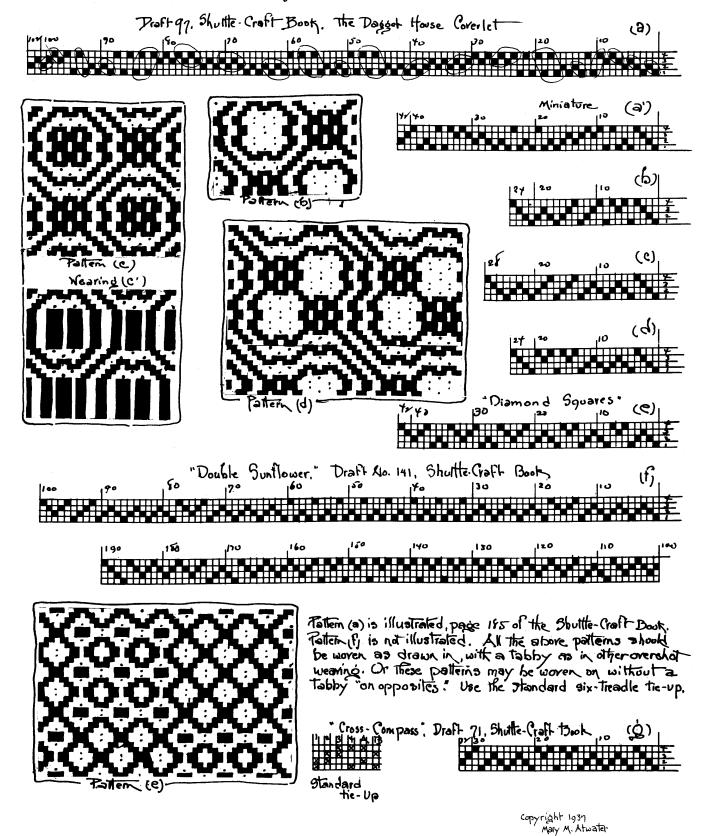
A group of ten "miniature " drafts was printed in the Bulletin for January, 1936. Copies of this Bulletin are still available, and new members who wish these patterns can obtain them by sending for this number. The price is 35¢. These include the patterns that lend themselves best to reduction -- "Whig Rose," "Chariot Wheel," "Star of Bethlehem" and so on.

Of the patterns on this month's diagram: (e) is the figure known as "Diamond Squares," reduced from the draft No. 7 of the Shuttle-Craft Book. The illustration of the effect of the reduced draft when compared with the illustration in the book will show the "chunky" appearance of the figure explained above. It must be borne in mind that the actual size of the figure is much smaller in the reduced form. As the draft covers only 42 threads the two alternating squares will be less than an inch and a half in combined width if threaded on a warp set at 30 to the inch.

In my opinion, the small drafts are most successful when written with two-thread and three-thread blocks only. Patterns written in this manner give a fine, close weave of excellent wearing qualities. Naturally it is impossible to write all patterns in this form without changing them a good deal, however, one may preserve the "movement" and spirit of a pattern and make what is an "arrangement" rather than a direct reduction. In draft (b) of the diagram I have made such an adaptation of the star and circle motif. It seems to me better than the litteral reduction. In the same way draft (c) is an arrangement based on "Solomon's Delight." The two methods of weaving illustrated show the two ways in which this pattern is ordinarily treadled. Draft (d) is an arrangement based on "Winding Vine." An interesting variation of this pattern is to repeat the draft from the end back to the beginning, and then from the beginning again. In other words, take the draft as half the pattern with centers on the first and last threads of the draft. This makes the figure called "Dog-Wood Blossom." Draft (f) is the reduced version of a very large pattern, "Double Sunflower" or "Double China." In the original version -- draft No. 141 in the Shuttle-Craft Book -- all the blocks are of four or five threads and the whole pattern takes 422 warp-ends. This reduced version will be found an interesting one, though it should perhaps not be classed as a miniature.

There are many ways in which these threadings may be used. They are practical for upholstery as well as for small articles, and they may be woven in many variations. The classic method for overshot weaving can be depended upon to give good results, but it is important to make a careful choice of yarns. In weaving a large pattern in the overshot weave a good deal of latitude in the grist of the pattern weft is allowable. If the weft is coarse one uses fewer

Tage three



shots to square each block than when weaving with a finer weft. But for these patterns of small blocks it is necessary to use a pattern weft that will exactly square the pattern when one shot is woven over each of the two-thread blocks and two shots over the three-thread blocks. If the weft is too coarse the pattern will be distorted lengthwise. If the weft is a trifle too fine the pattern will be flattened, and the weaving of two shots over the smallest blocks and three or four shots over the three-thread blocks will probably distort it the other way. No rule can be given, for the manner in which the fabric is beaten up is also a factor, and each weaver has his own individual beat. There is no way to determine the best weight of weft-yarn except to experiment on the loom. A tabby should be used with these patterns unless the system of weaving "on opposites" is used.

An interesting way to use these weaves is not for fine fabrics but for coarse work in heavy yarns. Make warp and pattern weft of coarse material, the same or similar in weight, and use a fine tabby. Or set the warp far apart and weave on opposites, beating the fabric close so that the warp is completely covered.

It is probably unnecessary to say anything about the treadeling of the patterns as given on the diagram. They may be treadled in many ways, of course, but the ordinary way is to weave them "as drawn in." Pattern (c), for instance, should be treadled as follows: (on the standard tie-up as given on the diagram) Treadles 1,2,3,4,1, one shot each; treadle 2, twice; treadle 1, twice; treadle 2, twice; treadle 1, twice; treadles 2,3,4, one shot each; treadle 1, twice; treadle 2, twice; treadle 1, twice; treadles 2,3,4, one shot each. This produces the figure as shown on the upper illustration. The other weaving illustrated is treadled as follows: Treadles 1,2,3,4, one shot each; treadle 1,8 times; treadles 4,3,2,1,4,3, one shot each; treadle 2,8 times; treadles 3,4, one shot each; repeat. The only confusion apt to occur when following the threading draft for the treadeling is on the repeat: do not overlook the 1-4 block between the last thread of the draft and the first thread of the repeat.

Structo weavers should transpose the treadeling as given, of course, in the usual way: For "treadle 1," use levers 3-4; for "treadle 2," levers 1-4; for "treadle 3," levers 1-2; and for "treadle 4," levers 2-3.

"Miniature" drafts for patterns in Summer and Winter weave need hardly be given. There are no long skips in this weave, and most of the patterns include blocks of one unit so they cannot be written smaller without changing them, -- though of course small patterns of a few blocks can be designed in this weave. The smallest possible pattern is one of two one-unit blocks, threaded: 1,3,2,3,1,4,2,4. This extremely simple threading, on a coarse warp and woven on opposites, is the foundation of much gorgeous Spanish weaving, as has been described in the Bulletin. When used in this manner it can hardly be called "summer and winter" weaving, as it has an entirely different effect though in structure the weave is the same. The simple "point" or diamond threading given in the July Bulletin could be made half as large by threading one unit for each block instead of two units as shown on the draft. The effect, however, would be less interesting.

As announced in the Bulletin, the weaving Institute at Palmer Lake, Colorado, will be held from the sixteenth of August to the sixth of September. During that time I shall be away from my office and though letters addressed to Basin will be forwarded I shall receive mail more promptly if it is addressed to me in care of Mrs. Anne Fisher, El Conejo Blanco, Palmer Lake, Colorado. A number of Guild members have wratten to me to say that they plan to attend the institute, and I am looking forward to meeting many people whom I have known for years by letter. The September Bulletin will be somewhat late in the mails in all probability, as I shall not be able to mail it till my return from Palmer Lake.

May M. atvata



## BUDDESTOWN of the Shuttle-Craft Guild

Basin, Montana

October, 1937

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The weavers' "Institute" held recently at Palmer Lake, Colorado, under the auspices of Mrs. Anne Fisher and El Conejo Blanco training school, brought together many members of the Guild. It was an enthusiastic meeting, and we greatly enjoyed meeting each other and working out together some new ideas that will, I believe, prove interesting to the entire membership. In this Bulletin I shall try to pass on some of the Institute findings.

First I want to speak of the "round table" discussions held in the evenings, at which many of the problems of our craft were brought up for the consideration of the members. Many of these discussions turned on the economic questions that constantly crop up. At one meeting we discussed the always trouble—some matter of selling prices for hand-woven articles. There are no standard rates in force, and people who wish to sell part of their work are often at a loss as to the price to set. Those who weave as a business are in better position to set these prices than those who weave chiefly for pleasure but like to sell enough of their weaving to cover the expenses for yarn and equipment. If this latter group, however, sells things at too low a rate it works a hardship on those who make a business of weaving and depend on their profit for a livelihood. With the idea of putting a little order into this matter of prices I shall send out a questionnaire with next month's Bulletin and will ask all Guild members to fill it out and return it to me. We are getting tired of footless questionnaires, I know. The mails have been full of them. But this will have a very definite and practical purpose, and by "getting together" on our prices I believe we can do a good deal to stabalize the craft and make weaving more profitable to everyone.

Another discussion was concerned with the teaching of hand-weavig. Just what should be included in a general course of instruction? Was a teacher, one of our members asked, in duty bound to teach a pupil all special weaves and "tricks of the trade?", The question was made specific as to the "leno" weave, in which everyone at the meeting was particularly interested. This weave has very definite commercial value. Scarves made in this weave are extremely attractive and will make, we agreed, a very saleable product, -- a product that should return an excellent profit, as the scarves can be made very rapidly and take wery little material. This particular weave, in the form we have found practical on our regular types of loom, is something I worked out for the Guild and presented through the Bulletin a year ago. My stand in the matter is that as the Guild through its subscriptions pays for the experimental work I do, the results belieng to our members to be used as they choose. This particular trick in weaving is by no means general practise and it appears to me that the most conscientious teacher need not feel duty bound to pass it on to everyone who comes in for a general course. Those who wish instruction in this, or other special weaves, should be expected to take a special lesson or set of lessons and pay a special price for this specific thing. A rate of \$15.00 for instruction in the leno weave was suggested and tentatively approved. I shall be interested to hear from Guild members their opinion on this point.

We discussed also the problem of the improper labeling of machinemade fabrics as "hand-woven." There appears to be a tendency to label such spurious fabrics by a new trade-name: "Hand-loomed," instead of "hand-woven." If this meaning of "hand-loomed," as of a fabric made by machinery in imitation of a hand-woven fabric, is generally accepted and understood by the buying public, there can be little objection. But at the present time the term is misleading.

Hand-weavers cannot, of course, compete in price with machine-weavers, and the present methods of certain manufacturers appear unfair and to be a detriment to our craft. We agree on this, but the question of what to do about the situation is another matter. Here, again, I should like the opinions of Guild members.

In this connection we discussed the selling methods of the WPA hand-weaving projects, who sell their woven pieces for the replacement cost of the raw material. This highly uneconomic procedure was sharply criticised, but no one had a suggestion as to how to combat it. The solution will probably have to wait till WPA either passes out of existance or is reformed. A person, for instance, may now go to a WPA weaving shop and buy a hand-woven blanket of hand-spun wool, paying for it an equal weight in raw wool or the money equivalent. The government meanwhile pays the spinners and weavers a salary and also pays the instructor a salary, and provides equipment and quarters. This sounds very benevolent, but is it? These spinners and weavers they are training will someday be "on their own." When the government no longer pays them wages and no longer supplies equipment, the cost of these things will have to be added to the selling price of the blankets they make. This will certainly much more than double the present prices at which these things are selling and I fancy it will prove extremely difficult to persuade purchasers that the new price is reasonable. Fortunately the output from WPA weaving projects is not large, and much of it is absorbed by people on "relief," to whom it is issued without cost. It is a troublesome matter, affecting of course chiefly those who weave as a business, and is not a major problem of our craft. The competition of the "hand-loomed" fabrics is far more serious.

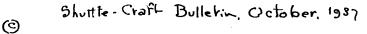
Another interesting feature of the Institute was the collection of looms of many different types, assembled by Mrs. Fisher. Several manufacturers sent examples of their newest models to be tested at the meeting, and there were little and big looms, from an ancient Colonial affair as big as a wood-shed down to tiny table looms only a few inches wide. Everyone was particularly interested in Mr. Gilmore's eight-harness looms and in a new large treadle loom soon to be put on the market by a leading manufacturer. The 45° size, equipped with four harnesses, will sell for \$75.00, I am told. The loom will also be supplied in six-harness and eight-harness form, I believe.

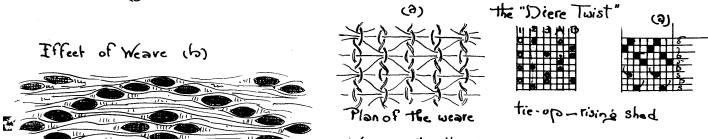
On these looms we did a variety of weaving -- leno, Finnweave, Swedish knotted pile-weaving, Spanish open-work, warp-face weaves, three-harness weaving in several styles, several Scandinavian weaves, lace-weave or "mock-leno," double-width cloth and seamless bags, the Indian saddle-blanket weave explained in the September Bulletin, and many other things. We also did a lot of card-weaving and made belts on a little English "Inkle" loom. I received one of these little looms from England not long before leaving for the Institute and took the thing with me. Everyone was delighted by it and a local cabinet-maker was kept busy turning out replicas. I got my loom from Dryad, Ltd., Saint Nicholas Street, Leicester, England. The cost, including postage and duty, is about five dollars. One of our Guild members may be able to supply a similar little loom for about the same price. We worked out many patterns and four distinct techniques for the inkle loom. One of our members, when she left for home, took her "inkle" along in her hand, to weave on on the train.

We all greatly enjoyed seeing Mrs. Fisher's wonderful collection of textiles, and the beautiful hand-spun silk and angora yarns produced at El Conejo Blanco.

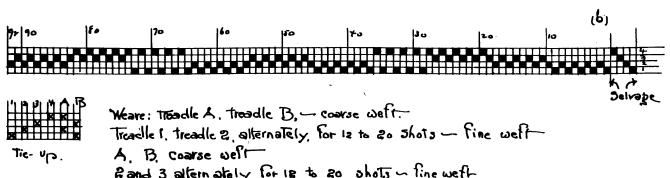
All in all, the meeting was voted a great success, and the hope was expressed that a similar Institute might be held next summer.

For a number of years it has been the customs to devote the October issue of the Bulletin to the kinds of weaving we like to do in preparation for Christmas and the holiday season. I propose to give notes on some of the special things worked out at Palmer Lake, as some of these will make excellent gifts for





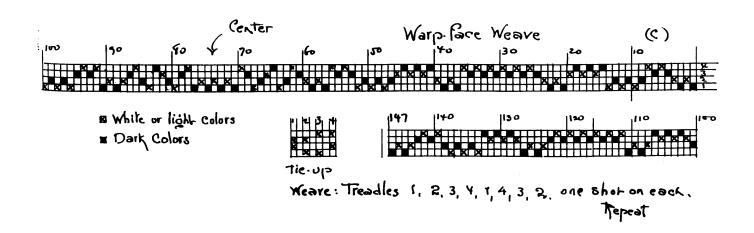
Weave(0): Treadles 1, 2, 1, 3, Repeat



Treadle 1. treadle 2. alternately. For 12 to 20 shots — fine west A. B. coarse west and 3 alternately for 12 to 20 shots, — fine west 3 and alternately for 12 to 20 shots, — fine west A. B. coarse was for 12 to 20 shots, — fine wast A. B. coarse 1 and 1 alternately for 12 to 20 shots — fine wast A. B. coarse 1 and 2 alternately for 12 to 20 shots — fine west A. B. coarse 2. 3. alternately for 12 to 20 shots, — fine west A. B. coarse 2. 3. alternately for 12 to 20 shots, — fine this is the center of the sigure; sepeat the treadeling in severse

back to the beginning.

On the Structo loom: For "1" use levers 2-3-4. For "2", levers 1-3-4. For "3", levers 1-2-4. For "3", levers 1-2-4.



Christmas I shall describe such of them as space permits.

Scarves in leno weave, such as we made at Palmer Lake, will I think be particularly attractive. We set up two looms in this weave, one with a warp of white spun silk and the other with a warp of Fabri yarn. The silk warp was set at 15 to the inch and sleyed: two threads through a dent and skip a dent. The Fabri warp was set at 12 to the inch and sleyed in the same manner through a 12-dent reed. On these warps we used a variety of weft materials -- floss silks, "novelty" yarns of many different kinds, combinations of material. The results were charming. One of the looms was set up with the six-harness threading given in the Bulletin that explained this weave. On this set-up small "motifs" in a tapestry effect were woven into the leno mesh, initials, and so on. On the four-harness set-up the same technique could not be used, but initials were put in with a heavy needle instead of a shuttle, with excellent results. Length and width for a scarf are matters of taste. Ours were set 14" or 15" wide and were woven about a yard and a quarter long. Some, made with Angora yarn on the Fabri warp, were particularly soft and lovely and I believe anyone getting such a scarf as a Christmas gift would be delighted.

One of the looms used for the leno weave was a Bernat treadle loom. We had a bit of trouble with the adjustment as the harnesses were not heavy enough to keep the doup-harness down. An extra treadle hung from this harnesses and weighted with a bit of iron gave the extra weight required and the loom then worked beautifully.

A new leno arrangement is given at (a) on the diagram. The zig-zag effect produced in the weft gives an interesting texture. This weave, however, is not suitable for the inset motifs and initials. If such decorations are planned the plain leno is better.

Bags, of course, are always a prominent feature of the holiday season. A weave that would make attractive bags for the evening, and be a bit out of the ordinary, might be made on the threading at (b) of the diagram. The weave is a Scandinavian weave, used for bed-spreads and bureau scarves, and is ordinarily woven in cotton. For an evening bag I suggest a warp of spun silk set at 30 ends to the inch, pattern weft of the same material, either white or in colors, and tabby weft of a very heavy silk floss or a coarse Worded silk. The effect of this weave depends on an unusual balance of materials; it has a lacy appearance though it is a solid and firm fabric. As shown on the diagram, four treadles are tied each to sink a single harness. Sinking a single harness while raising three is simple enough on a loom of the "jack" type, of course, but is sometimes troublesome on a counterbalanced loom. If the sheds do not open correctly it may be necessary to put in a "false tie" as explained more than once in the Bulletin. The top of the bag should be woven in tabby, with alternate shots of coarse and fine weft. A little below the top a narrow band of pattern weaving might be introduced. Tabby again, then, for a few inches, and pattern weaving for the bottom of the bag to the depth required. Then tabby again, narrow band of pattern work, and two inces or so of tabby back to the top of the bag. The draft is for a simple diamond figure. A somewhat more elaborate pattern, arranged as a bureau scarf, will be found in the Recipe Book. This is a simple weave, but as it appears to be little known among American weavers it has the interest of novelty.

Another thing we worked out at Palmer Lake will, I believe, prove a novely and can be used for small bags, flat purses and so on. This is a simple warpface effect on four harnesses, which is given at (c) on the diagram. To make this weave effective a great many colors can be combined. The draft shows merely dark and light threads. The light may be all white and the dark threads in five or six brilliant colors, or the dark threads shown in the draft may be black and the light threads may be in many different shades. It makes little difference just how the colors are arranged, though the central figure should be made the point of chief interest. The draft as written, threaded in #3 perle cotton gives a width of a little less than three inches. For a wider piece use the first 88 threads of the draft as a repeat, and repeat as desired.

In weaving a warp-face fabric of this type it is best to dispense with the reed. If the warp is sleyed through a reed closely enough to produce the effect, it will be found very difficult to open the sheds. When done without a reed the width is regulated by drawing the weft as close as may be required. A flat stick shuttle is best to use, and the weft can be pressed back with this after each change of shed. As the weft is not required to be very close this is not difficult to do. The weft should be drawn so tight that it is completely covered by the warp. A fairly coarse weft thread should be used.

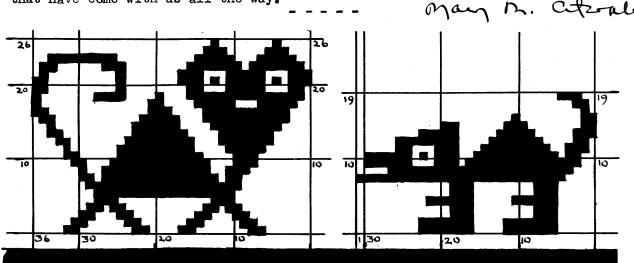
The Finnweave offers many delightful possibilities for Christmas weaving. We wove a whole managerie of strange birds and beasts, also conventional patterns of many kinds, at Palmer Lake. We had two looms set up for the weave -- a large treadle loom and a small hand-lift loom. It was easier to find the sheds on the large loom, but it was not very difficult to accomplish the work on the small loom. Everyone was surprised to find how easy the technique is, -- after one gets the idea of it firmly fixed in mind. The thing that appears to cause most of the difficulty in the beginning is putting in the round stick. This must be inserted under the cross, as shown on the diagram in the leaflet. When inserted through either of the upper triangles of course the thing will not work as desired The other point that seems confusing at first is that one picks up the pattern to weave the background, and picks up the background to weave the pattern. After weaving the first few blocks the thing becomes clear.

The dog and cat, at the bottom of the page, are two Peruvian animals drafted at Palmer Lake. Either figure might be used double, face to face, or singly, on a child's bib, for instance, or in the corners of a cribblanket.

A Finnweave runner made at the Institute was a particularly handsome piece. On one end it showed a figure given in a bulletin some time ago. It represents a highly stylized version of a house beside the road. On the opposite end of the runner, instead of repeating the design, we used a figure in the same spirit, representing a road and a tall cactus. The body of the runner was done in an arrangement of lengthwise stripes. The whole effect was unusual and extremely handsome.

One of the things we did at Palmer Lake that proved of particular interest was the three-harness weave. We set this up in wool and wove some very handsome knee-blankets. We also set it up in two different forms in fine warp on two table looms. The three-harness weave is one of the most exciting things in hand-weaving. It has been explained in a previous Bulletin, but as this has been out of print for a long time, and as some of the things we did with the weave were different from anything set out in that Bulletin, I shall make the November issue on this subject. The knee-blankets are quickly and easily woven and will prove excellent as Christmas gifts.

With this issue of the Bulletin the Guild enters on its fourteenth year. It gives me great pleasure to find on the membership list so many names that have come with us all the way.





bear me out.



Shuttle-Craft Guild

November, 1937

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The three-harness weave has always seemed to me to be one of the most interesting and exciting weaves we have. The reaction of weavers at the Institute in Colorado last summer when this weave was put on the looms seems to

The charm of the three harness weave is in color, chiefly -- and to a lesser degree in texture. Several different textures can be produced. However without color -- and lots of it -- the weave is not particularly interesting. Moreover the effect should be bold, and coarse materials rather than fine yarns are advisable. It is difficult to write treadeling directions for the weave as the most interesting effects are the improvisations one makes directly on the loom. My system is to choose a pleasant background color -- tan or a warm taupe by preference, as almost any bright colors may be used with these shades -- and then to surround myself with skeins of yarn in every bright shade available, not forgetting to provide plenty of black. Then the fun begins. And it is fun!

The weave is used chiefly for portieres, upholstery, large knitting bags, couch blankets, and pillow-tops. At Palmer Lake we set up a large loom in the weave and made "knee-blankets" that proved highly attractive. These little blankets will make extremely acceptable Christmas presents, I believe; I shall therefore describe in detail how they were made. For warp we used a hard-twisted wool warp Mrs. Fisher had in stock. It is perfect for the purpose. This yarn is called "Chimayo warp" and is supplied by the Charles Ilfield Company, Santa Fe, New Mexico. The price is \$1.60 a pound. Only a few colors are available in the warp-yarn, but a variety of colors may be had in a somewhat coarser "filler" Chimayo yarn, from the same firm, at \$1.70 a pound. I have purchased some of these yarns and shall be glad to send samples to anyone who is intereste and will write enclosing a stamp for reply.

At Palmer Lake we made the blanket warp in dull blue, and set it at fifteen ends to the inch. I expect to make some of the blankets in the near future and plan to use natural white warp set at 12 ends to the inch, which will, I believe, give a somewhat gayer effect. The blue warp is best if one wishes to make automobile blankets. Though, as a matter of fact, unless one alternates tabby stripes with pattern stripes in weaving the blanket, the warp will show very little.

For the blankets we used the small threading given at (a) of the diagram. The effect of this is less bold than when threading (b) is used, but the fabric is more closely woven, and for a blanket no long skips of weft are advisable.

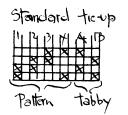
When setting up for the three-harness weave on a four-harness loom, do not take the fourth harness out of the loom. Take the heddles off it and leave the harness frame in place. Of course the fourth harness may be taken out if one chooses, but it is far more difficult to make a tie-up to balance three harnesses without the fourth, and nothing whatever is gained by taking out the harness. The regular standard tie-up may also remain undisturbed.

Suppose, now, that you have set up your loom as described above and are now sitting before it, prepared to start on the thrilling adventure of the three-harness knee-blanket: First weave two inches or so in plain tabby, using

Basin, Montana

the A and B treadles as usual. Use yarn like the warp for weft, or weave in the background color, which I shall call color (1).

I hope you also have five or six brilliant colors at hand, including plenty of black. For the first band of pattern weaving select a bright shade -neither black nor the lightest color in





your collection -- say red. I shall call
this color (2). Weave as follows:
Treadle 2, color(1); treadle 4, color (2). Weave these two shots alternately for
six shots. Use no tably.

Treadle 1, color (2); treadle 3, color (1). Alternate for six shots.

Treadle 1, color (2); treadle 3, color (2); treadle 2 color (2); treadle 4, color (2)

Treadle 2, color (2); treadle 4, color (3)-- the next shade in your list. Alternate

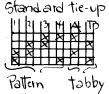
for six shots.

Treadle 1, color (3); treadle 3, color (2). Alternate for six shots. Color (2) is now eliminated, as color (1( was eliminated after the second group of shots. Weave treadle 1,3,2, and 4 in color (3) as was done with color (2) in the third group of shots above, and continue by weaving color (3) on treadle 2 and introduce color (4) on treadle 4. This system may be followed throughout, the colors following each other in regular order, -- which makes zig-zag rows of color -- or at any point one may "return," by reversing the treadeling back to the beginning.

This is simple enough. The amazement is that so many variations can be introduced into so easy a technique. It is useless to attempt writing them out for to do so would take the space of a book, and besides as mentioned above the most amusing effects are those improvided at the loom.

The standard method of treadeling, given above, may be followed for weaving on threading (b), which has a longer skip and produces a bolder effect

than threading (a). Threading (a) is advised for blankets and also for bags, but for portieres and for large couch pillows threading (b) will be found the more effective. The difference in form is sketched below, but as the thing depends so greatly on color it is hopeless to give a good idea of it in black and white.





For upholstery an entirely different manner of treadeling is used. For this technique use only three treadles: treadles 3, 4 and A of the standard tie-up. Fach of these treadles raises two of the pattern harnesses and sinks one. Weave these three treadles in the same order throughout the entire piece, producing the pattern by changing the alternation of the colors. For instance weave as follows: treadle 3, Color (1); treadle 4, color (3); Treadle 3, color (1); treadle 4, (color (2); treadle A, color (1). Repeat 3 times 3, " (1) " 4, " (2) " A, " (2) " "

times. 4, A, 3, 11 11 4, 11 Ħ 11 (1) 11 (3( A (2) Ħ 11 11 11 " :: \*\* 4, 3, (2) (3) (2) Ħ Ħ 11 11 11 11 11 11 4, (2)(3)Α (3) 3, 11 u 11 17 11 11 (4)(3) (2)Α

This finishes color (2), and it should be easy to continue, having reached this point. To weave a plain color use the treadles in the same order, but all in the same color. The figure may be varied in many ways, of course. The system of weaving given above is the basic form for the weave. Threading (b) may be woven in exactly the same manner. This technique produces a very firm, smooth surface without skips. The under side of the fabric is loose and not particularly handsome, but for upholstery this does not matter. The weft should be closely beaten up and the warp spaced far enough apart so that it will be entirely covered by the weft. For upholstery and ordinary carpet warp set at 12 ends to the inch and woven in knitting yarn or homespun serves very well. A coarse linen warp may also be used if one prefers.

Structo weavers will find this weave entirely practical on their equipment. As the fourt harness is not required for balance it may be removed, or permitted to remain in the loom, as is most convenient. The levers to use to produce the sheds are as follows:

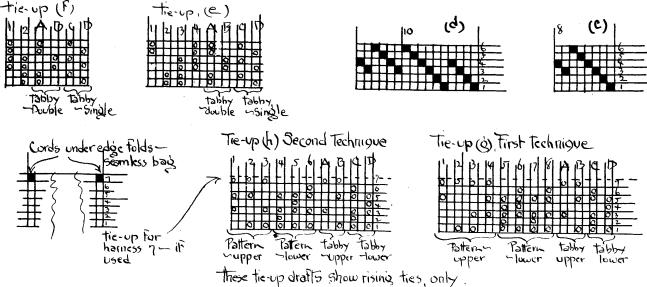
For "treadle 1" use lever 3, alone. For "treadle 2" use lever 1, alone; for "treadle 3" use levers 1-2; for "treadle 4" use levers 2-3; for "tabby A" use levers 1-3; for "tabby B" use lever 2, alone.

Threading (c) and threading (d) below, can be woven in many different ways. Tie-up 1 can be treadled as for the weave on three harnesses, and will give the same effect as the first technique described, except that that the warp will be double instead of single. Tie-up 2 can be used to produce the second technique described. The only advantage of the six-harness threading over the three-harness threading for these effects is that a close tabby can be woven with the heavy border stripes. On the three-harness threading the warp is set too far apart for a good tabby. This permits the use of the weave for borders in the ends of table runners and for similar purposes.

However, the most interesting use for the six-harness threading is befor the weaving of seamless bags or double-width fabric. Tie-ups 3 and 4, below, are for this use of the weave, -- one for the first technique and the other for the second technique.

The chief difficulty in weaving double width or a seamless bag is to keep the edges from drawing in, with a resulting dense streak through the center of the piece in the case of a double-width blanket, for instance. Here is a "kink" of my own devising that may or may not appeal: Use a fairly heavy cord on each edge threading it through a seventh harness. This harness is then tied so that all weft so shots of the upper fabric will go over it and all shots for the under fabric will go under it. In other words it will lie free inside the fold. As it does not interweave it can be withdrawn readily when the piece is taken from the loom. But as it has no take-up it is necessary to tighten it now and then at the back of the loom. I have shown this bit of strategy on the diagram. It may, of course, be omitted if found too troublesome. However I find it a help. If a double-width piece has a streak up the center it might just as well have been woven in two strips and seamed.

Another suggestion for the use of the three-harness weave, which is not shown on the diagram, is to use it in connection with leno. Thread the three back harnesses -- or the six back harnesses if preferred, -- to the three-harness weave and use two front harnesses for the cross. This would be an interesting way to weave drapery fabrics, and would be very unusual and striking. The weaving would then be done in alternating stripes of plain leno and heavy pattern weaving.



When threading for a seamless bag, using draft (c), omit the first thread of the draft at the beginning of the threading and add this thread at the end, after the last repeat. On draft (d) omit the first three threads and add them at the end. This brings the figure correctly at the folds.

To weave a seamless bag on tie-up (h) proceed as follows:
Weave a tabby heading, A,C,B.D. and repeat. Patterns: Treadle 1, color (1);
treadle 4, color (1); treadle 2, color (1); treadle 5, color (1); treadle 3,
(color (2); treadle (6), color (2). This completes the first round of shots,
as given on Page Two of this Bulletin for the second technique. The treadles
should be used in the same order throughout the weaving. Treadle 1 corresponds
to treadle 3 on the standard four-harness tie-up and weaves across the upper
fabric. Treadle 4 weaves the same shot across the under fabric. Treadle 2 of
tie-up (h) corresponds with tabby A in the standard tie-up, and weaves across
the upper fabric. Treadle 5 weaves the same shot across the lower fabric. In
making tie-up (h) treadles 2 and 5 may be omitted and the corresponding tabby
treadles used instead. This is a little confusing, however, and it is rather
better to make the complete tie-up as shown. In the same way: treadle 3 weaves
the upper and treadle 6 the lower fabric.

To weave double width simply use the treadles in a little different order. Suppose you wish the fold to be along the left-hand edge: treadle the tabby, beginning at the right, A,C.D,B, and repeat. Use the pattern treadles in the following order, beginning at the right hand side of the warp: 1,4,5,2,3,6, 2,1,2,5,6,3, and repeat.

Space is lacking to give the treadeling for tie-up (g), but this should be simple enough. Treadles 1,2,3,4, weave the upper fabric and correspond exactly with the treadles as given in the treadeling for the first technique. Treadles 5,6,7,8, weave the corresponding shots for the lower fabric. A little experimenting on the loom will make the matter clear.

The enclosed Questionnaire speaks for itself. I hope all members of the Guild will fill out the blanks and return the sheet to me. As mentioned in the October Bulletin, this is an attempt to carry the round-table discussion on selling prices -- held at the Palmer Lake Institute -- to all our membership. If we can establish standard prices for certain basic products it will be very useful to all who weave articles for sale, -- whether they make a business of weaving or simply sell part of their work, weaving chiefly for pleasure and to make things for their own use. We want our selling prices to be high chough to return a reasonable profit to the weaver, but not so high that the things will not sell. Some of us, I believe, are inclined to price things much too high, while others sell their work far too cheap. If we can adopt some convention in the matter it should help the entire craft. At least that is my hope, and I ask the co-operation of our membership.

