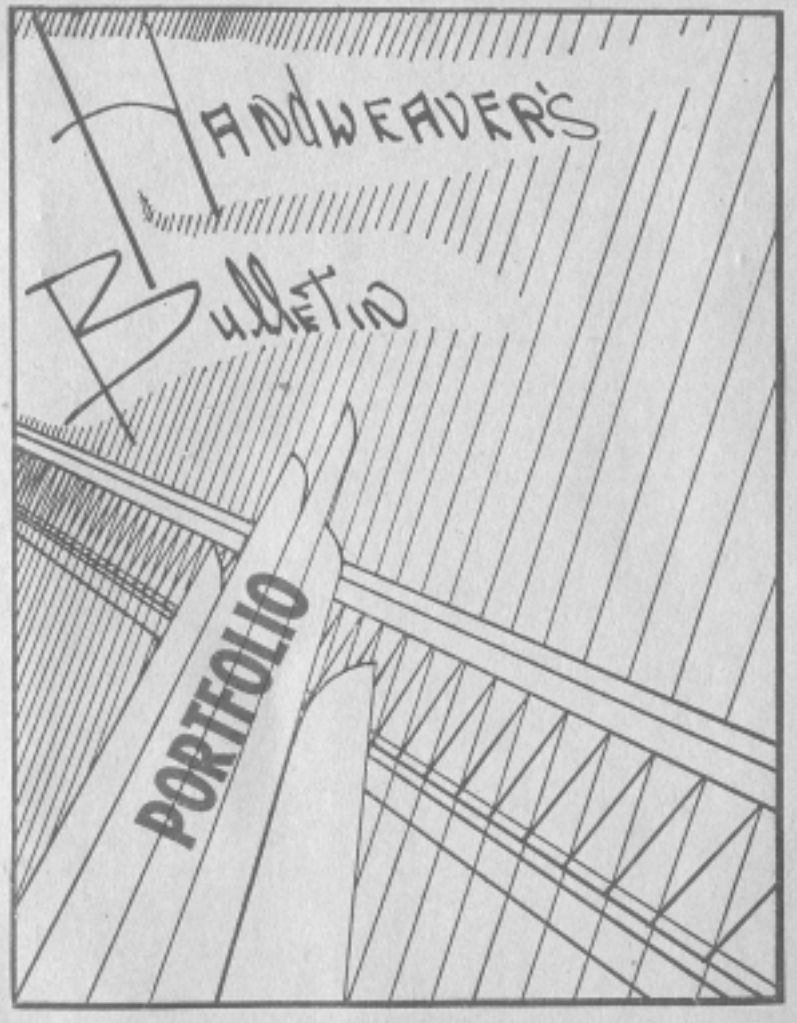
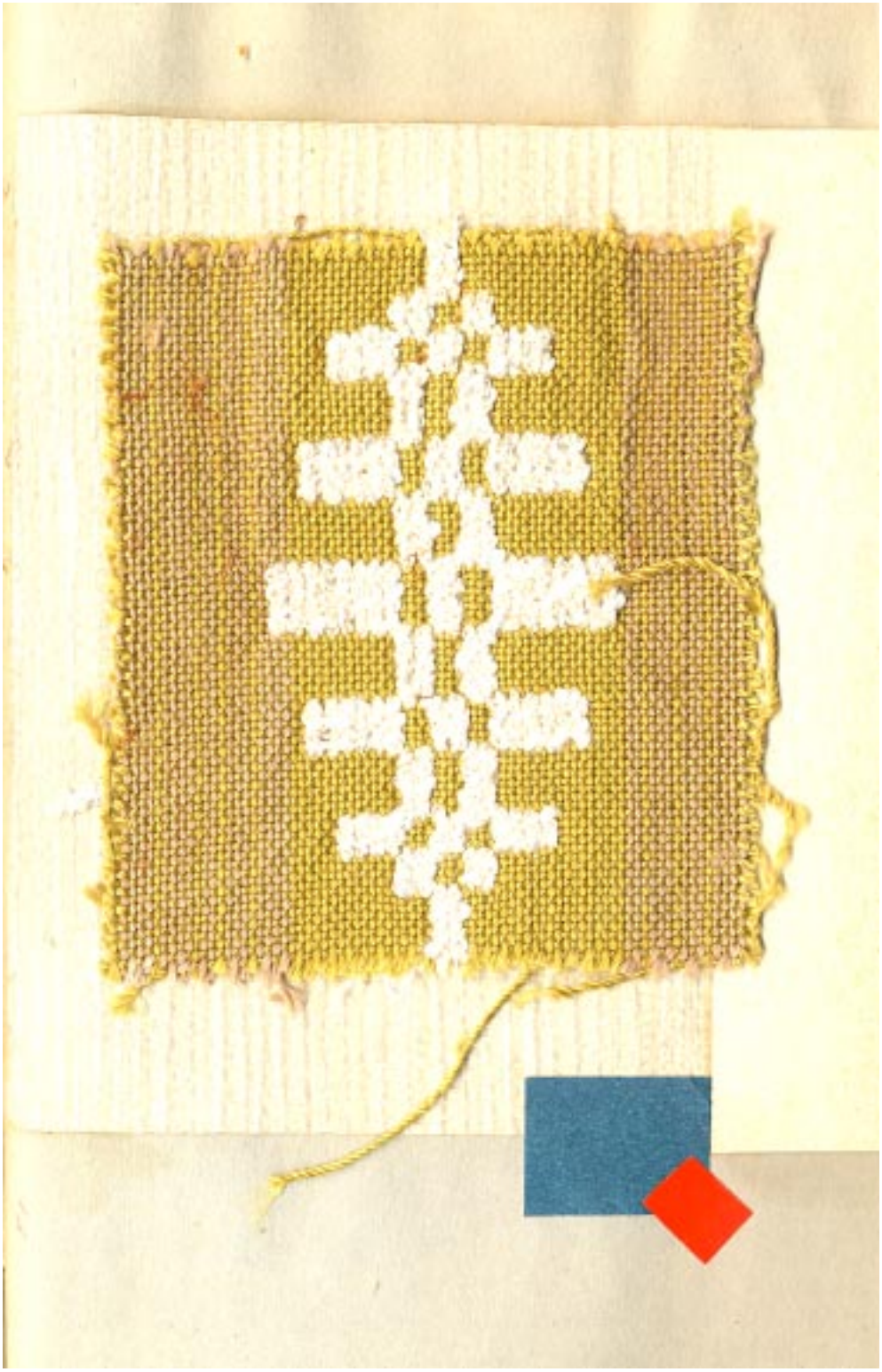
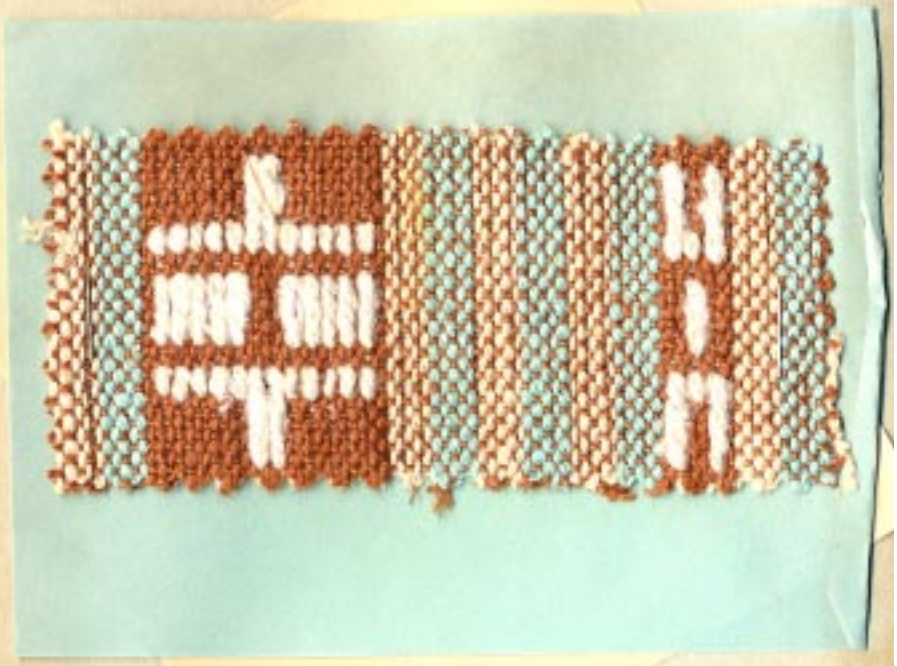


Shuttle Craft Guild Virginia City, Montana
Volume XXIX Number 4 April 1952





Design
With
Color

Martin Tidball

Shuttle Craft Guild Virginia City, Montana
Volume XXIX Number 4 April 1952

The Shuttle Craft Guild
HANDWEAVER'S BULLETIN
Harriet Tidball, Editor

FORMAL DRAPERIES in WARP PATTERN

Drapery fabrics in all kinds of patterns -- geometric, floral, striped -- are evident in every decorating shop, and there is an increasing popularity of elaborately patterned hand-blocked fabrics. Why, with this popularity of patterned textiles, should patterns in handwoven textiles have become unpopular even to the point where they are in some cases held in contempt? The answer can be only that the handweaver has not kept abreast of the times with his patterns and pattern techniques, and they have been so poorly adapted to present-day trends that they have earned their current unpopularity. This unfortunate situation has led to a monotony among decorating textiles which utilize only the textures of threads and colors as their design elements, avoiding the textures of weaves and the basic element of pattern. As a consequence the creative field has become so limited that there are signs of a tendency to turn from the too obvious designs of handwoven draperies to the more interesting power-woven ones.

What can the handweaver do to correct this distressing tendency? The weaver can select patterns which are in keeping with present day trends rather than reproducing the patterns of past generations. He can select techniques which will weave these patterns in textures suitable to present day needs. He can originate or follow contemporary designs rather than those which were contemporary one or more centuries ago. This means studying trends in design by observation, learning new weaving techniques, as well as utilizing the new types of thread.

One pattern technique which is too little used, though ultimately suited to weaving draperies with a contemporary spirit, is the warp-pattern weave. This weave was given for a limited application in the BULLETIN for October 1950, and also in the BULLETIN for Sept 1949 by Mrs Atwater, both of which

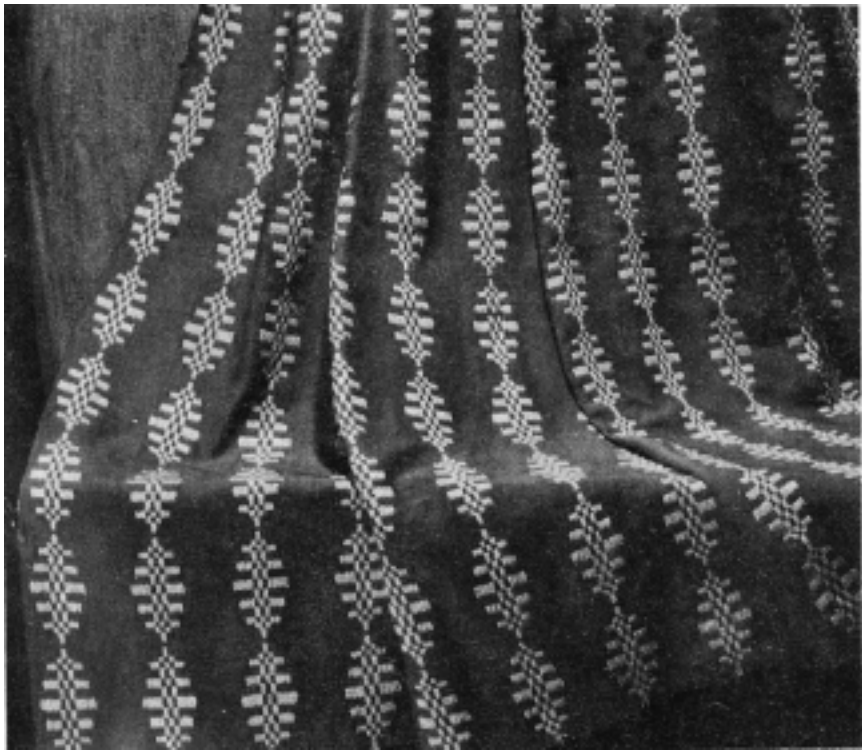
are still available. Mrs Atwater gives a pick-up interpretation which is suitable for great elaboration of design, but only treadled patterns are given here, as suitable to the present emphasis on simplicity of design.

The Warp-pattern weave may be compared to any of the common two-shuttle weaves with the difference that both pattern and background threads are in the warp, and the weft is a simple tabby. The Warp-pattern is more flexible in interpretation and can be used for patterns with more dramatic effects. While it is true that any of the two-shuttle pattern weaves, Overshot, Summer and Winter, Crackle, may be reproduced exactly in Warp-pattern, these techniques are seldom used except as a trick. The Warp-pattern technique described here is a means for weaving strong, vertical pattern stripes in a fairly coarse fabric suitable to draperies. The technical advantage of this type of fabric is that the greater weight and strength of the material are in the warp, so the fabric drapes well; and from the design point of view, vertical or warp-wise stripes and figures are more commonly useful in draperies than are horizontal stripes. The pattern floats or overshots may be much longer and bolder when made in warp for a fabric which is to hang lengthwise, as the element of sag which is so important in weft-wise floats is minimized. The fabrics here described are single-surface materials as the designs have a definite wrong side and the pattern floats on the wrong side are often too long to be attractive, but the material is not one which requires lining in most cases.

The Warp-pattern weave requires two warp materials: a smooth thread for the base warp, set to give a good tabby for the entire warp width, and a heavy pattern thread which is superficial to the fabric and is arranged in stripes as desired. The base warp is threaded on harnesses 1 and 2 to weave tabby; the pattern warp is threaded on the harnesses above 2 (3 and 4 for a 4-harness weave, 3, 4, 5, 6, 7, 8 for an 8-harness weave) which are called pattern harnesses. The weave used here requires 2 base warp ends for each pattern warp end, and the threading arrangement is base warp on harness 1, base warp on harness 2, pattern warp on the

proper pattern harness. A Profile draft may be used for threading, in which case each block on the profile indicates three warp threads, two of them base warp threaded on harnesses 1 and 2 (undrafted) and one pattern warp threaded on the indicated harness. The pattern warp must be spaced in the beaming according to the arrangement called for in the design, and it must be sleyed as superficial warps added to a perfectly regular arrangement.

WARP-PATTERN Drapery I



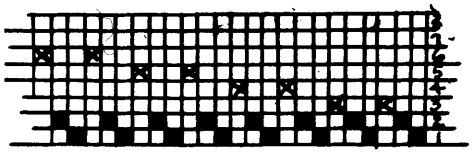
The drapery illustrated above was woven on 8 harnesses. The base warp of Lily 10/3 cotton (Art 714) was set at 20 ends per inch and beamed sectionally. 40 2-ounce tubes of Ming gold were set up on the creel and alternate sections were beamed. Then 30 of the tubes of gold were replaced with 30 tubes of leaf beige, in miscellaneous order, and the

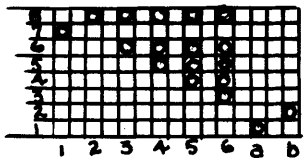
remaining sections including those at both sides were beamed. If the drapery width requires several strips, the mixed warp should be placed at only one side. The design called for a 2-inch wide pattern stripe alternated with two inches of tabby, the pattern to be placed on the gold stripe, with the mixed color stripe between patterns. If more widely spaced pattern stripes are desired, two or three bouts of mixed colors should be wound between each bout of plain gold. Of course the warp may be entirely of a solid color. In this case the gold stripe was used to make the pattern stand out more strongly, and the mixed colors to give a depth. The weft was gold 10/3 throughout.

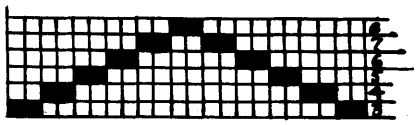
The pattern warp selected was a heavy, rough novelty rayon-cotton. A wide range of heavy yarns would be suitable, though the pattern warp should be soft and loosely twisted. Perle cotton #3 is excellent, and the Lily Soft-twist (Art 414) is suitable if a dull effect is desired. Any novelty or strand material may be used, or even 4-ply knitting worsted. The pattern warp was wound on a warping board, an individual 22-end chain made for each stripe, though the entire pattern warp may be made in one chain. This was sleyed 1 per dent in a 10-dent reed for 22 ends, then 10 dents skipped, with each stripe placed to center on a stripe of gold base warp. The chains were then beamed on a second (solid) warp beam, from front to back. Threading was from back to front. If the two warps are beamed together, the sectional method is not practical. The compound warp method explained in the March Bulletin may be used by sleying the base warp first and then sleying the pattern warp on top of it, and beaming the two simultaneously. The warp beam must be well padded during beaming.

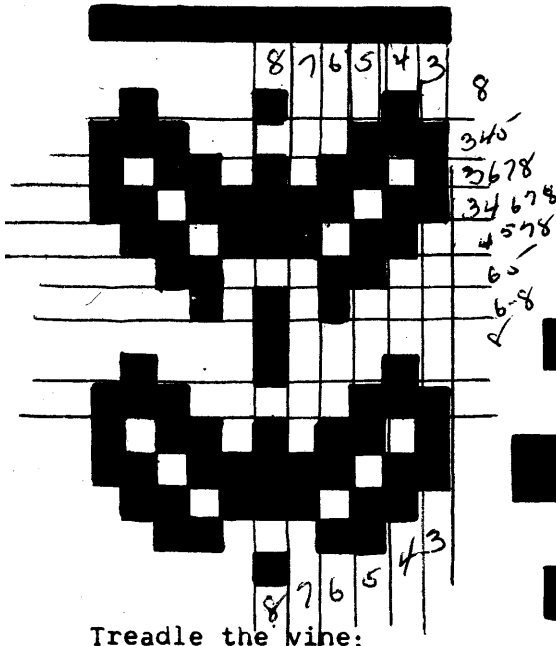
The pattern stripe for the illustrated drapery is given at the right. At the top is a partial thread-by-thread draft, the black squares indicating base warp and the "x" indications meaning pattern warp. In sleying the pattern stripes, two ends of base warp and one of pattern are drawn through the same dent. The unpatterned stripes are sleyed 2 per dent. Below this is the tie-up for the treadles (rising shed). Below is the complete profile draft with one black square indicating the pattern thread.

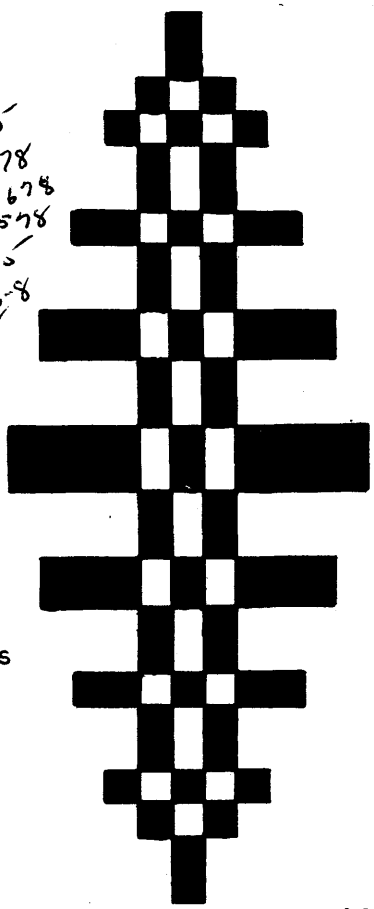
Treadle:
Tabby a, b alone,
Treadle 2, 8 shots
1, 4
3, 4
1, 8
4, 4
1, 8
5, 6
1, 8
6, 8
reverse.











Treadle the vine:
Raise harnesses 8, 4 shots
8-6, 4
6-5, 4
8-7-5-4, 4
8-7-6-4-3, 4
8-6-5-3, 4
5-4-3, 4
8-~~4~~, 4
repeat.

Continued on page 10.

PROJECT NAME DATE KEY

DESIGNING Objective: _____

Technique: _____, Weave _____

Warp ends per inch: _____, Reed: _____, Sley: _____

Designing reference: _____

Draft reference: _____

Finishing process: _____

MATERIALS	Type	Size & Yds	Color	Source	Price

YARN CALCULATIONS (Warp length is: number of units planned, times required warp per unit, plus allowances.)

Finished length per unit _____

Plus hem or fringe allowance _____

Plus shrinkage allowance _____

Equal required warp length per unit: _____

Times number of units _____, equals: _____

Plus loom allowance: _____

Plus experimental allowance: _____

Plus estimated warp take-up: _____

~~Finished~~ warp width: _____
Plus take-up in width _____
Plus shrinkage in width _____
Equal total warp width: _____

Warp width: _____, times _____, number of warp ends per inch: _____,
times warp length: _____, equal warp yardage requirement: _____,
Warp yardage divided by _____ yards per pound, equals warp poundage
requirement: _____. Add 15% for safety margin: _____
Poundage requirement, times price, equals Total Warp Cost: _____

Weft requirements (according to materials and weave)

Total Weft Cost: _____

LABOR TIME

Planning and Designing	_____
Warping	_____
Loom Dressing	_____
Experimenting	_____
Weaving	_____
Washing and Ironing	_____
Sewing	_____

Total Labor Time: _____
Times hourly wage rate: _____
Equals Cost of Labor: _____

WHOLESALE PRICE (Per project)

Total labor cost	_____
Total cost of materials	_____
Overhead allowance	_____
Marketing allowance	_____
Equal total price:	_____

RETAIL PRICE

Wholesale project price divided by number of units:	_____
Merchandizing margin:	_____
Total unit price:	_____

Handweaver's Calculation Sheet, Shuttle Craft Guild, VirginiaCity,Mont

WEAVER'S RECORDS

Arithmetic, calculations, figures and records are things which many weavers would like to do away with altogether, though as a basic part of planning any weaving project, they are here to stay. The desired warp width is part of the designing problem but the proper warp length must be calculated. The number of threads in the warp, the number of yards of thread which this will require, the weft thread yardage, the cost of the warp and weft, are all points which the weaver must calculate before even ordering materials for a project. Further calculations must be made if the weaving is to be done with economy, and the keeping of exact calculation records is helpful in planning future projects. A standard form of some kind will always simplify the making of calculations and the keeping of records.

On pages 6 and 7 is the calculation sheet which the Shuttle Craft Guild uses for keeping studio records on a project from the moment it is decided upon until it is completed. This sheet is offered as a suggestion to weavers of the points which it is important to keep. It may be used as an exact model for making one's personal record calculation sheets or as a guide toward making a similar sheet suitable to individual needs. This particular sheet is printed on standard 8 by 10½ notebook paper, punched for three rings. Should Guild members wish to purchase some of these, we have some extra ones on hand and can have more printed. The price would be 35 sheets for $1.00.

An explanation of the features included on this sheet seems wise. In the first line the KEY may be used for the warp number, project number or for a symbol which some commercial weavers use to identify specific articles, or as a reference number for filing. Although this is not a designing sheet for noting draft, weaving directions and other designing data, the top section gives spaces for noting references on these points so that they will not be forgotten. The next space is record and reference for ordering materials in case one wishes to duplicate all or part of the order at a future time or to have a note of changing prices. The YARN CALCULATION section provides a form for figur-

ing the exact amounts of warp and weft which a project will require. Even for the weaver who always warps generously with two or three extra yards, a full estimate including the number of articles planned, hem and shrinkage allowances, and loom waste (this last can be estimated only from the weaver's personal habits) is valuable if disappointments are to be avoided. If all factors are calculated and estimated, the weaver will have his exact required warp length and width at the right hand side of the page. Using these figures, plus the number of yards per pound of the material or materials as recorded above, the weaver may follow the formula given under YARN CALCULATIONS to determine exactly how much yarn will be required. The "Add 15% for safety margin" is a point which many beginning weavers learn by sad experience. Seldom will one pound of yarn or thread contain as many yards as the noted yardage for its size. Several factors enter into this reduction of yardage. The yardage is set by the basic strand measurement, but most weaving yarns have two or more strands twisted together and the take-up of the yarn in the twisting is not considered. The reduction of yardage will therefore be greater in a tightly twisted yarn than in a loosely twisted one. The measurement is often made under a more severe tension than the handweaver uses, so there is some yardage loss due to elasticity. And also, the weight of a pound of material will often include the weight of the tube or cone on which it is wound. Exact calculations of these losses is impossible, so the safest plan is to make the generous 15% allowance. Since yarn is put up on cones, tubes or skeins of specified weights, seldom will the required yardage be an exact multiple of the put-up yardage, so a little excess is inevitable. The weaver must remember that if the planned warp has several types or several colors or thread, this inevitable excess is multiplied, so the most economical warp is of one color and one type of thread. Weft requirements vary so widely that a blank space is left for calculating this.

The lower section of the sheet is perhaps the most important part for the commercial weaver or for anyone who sells any of his loom products. If each line under LABOR TIME and WHOLESALE PRICE is filled in accurately, the weaver will have the basis

a reasonable selling price for any article. (See the BULLETIN for September 1950 for further help in this matter.) The weaver who has been selling a few articles occasionally may prepare for a shock when it comes to filling in the Total Labor Time, or if the weaver estimates the monetary value of his time, the shock may come on the last line. One factor which the handweaver is apt to overlook is that the selling or marketing, whether done by oneself or by an agent, has a very real value, and this is indicated by the difference between total wholesale and retail prices. Also, the weaver cannot afford to compete with himself by selling both wholesale and retail at the same price. His own marketing time and effort has as much value as does that of an agent. Although this last section does not have as great significance to the person who weaves for his own pleasure and self expression, it is well to calculate all of these points at least occasionally in order to know something of the value of articles made for personal use and for gifts.

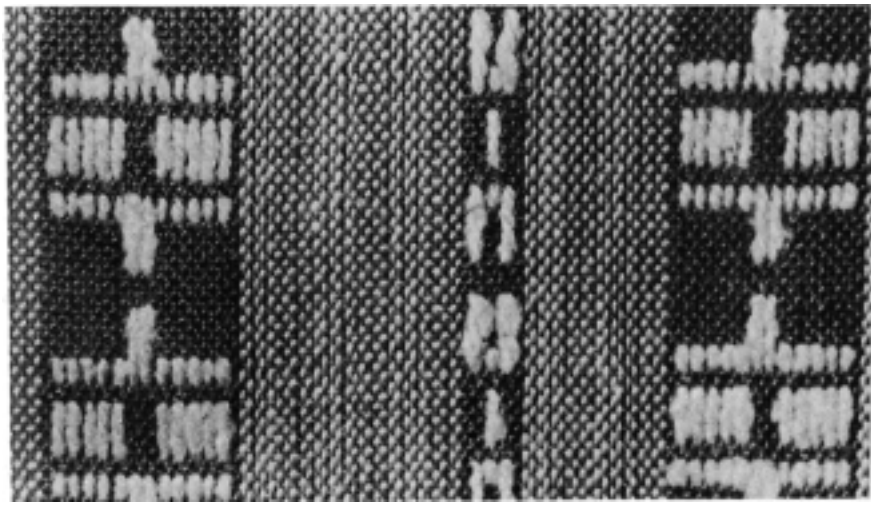
Continued from page 5

The most convenient treadling system uses two feet simultaneously. The base weave is tabby, and tabbys are tied to a and b, these treadles operated with the right foot. When tabby alone is woven, the pattern warp float without any interweaving on the under side. To weave pattern, a harness or harnesses to which pattern is threaded must be raised. If all of the pattern harnesses are raised a line of pattern will lie on the top surface. To weave this pattern bar, tabbys a and b are woven with the right foot while the treadle or treadles raising all of the pattern harnesses are depressed with the left foot. A single pattern block is woven by raising one pattern harness with the left foot and treadling a, b with the right foot for two shots.

At the top left of page 5 are the treadling directions for weaving the geometric pattern at the right, with the full tie-up. Treadle 2, 5 shots, means to treadle 5 shots on a and b alternated with treadle 2 depressed throughout. For variety, the treadling given for the vine pattern indicates the

harnesses which are raised rather than the treadles which are depressed. These combinations could be tied to treadles: treadle 1 to harness 8, treadle 2 to 8-6, treadle 3 to 6-5, treadle 4 to 8-7-5-4, etc. A wide range of patterns may be devised on this simple threading. The Stars given in the Oct 1950 Bulletin are charming in draperies.

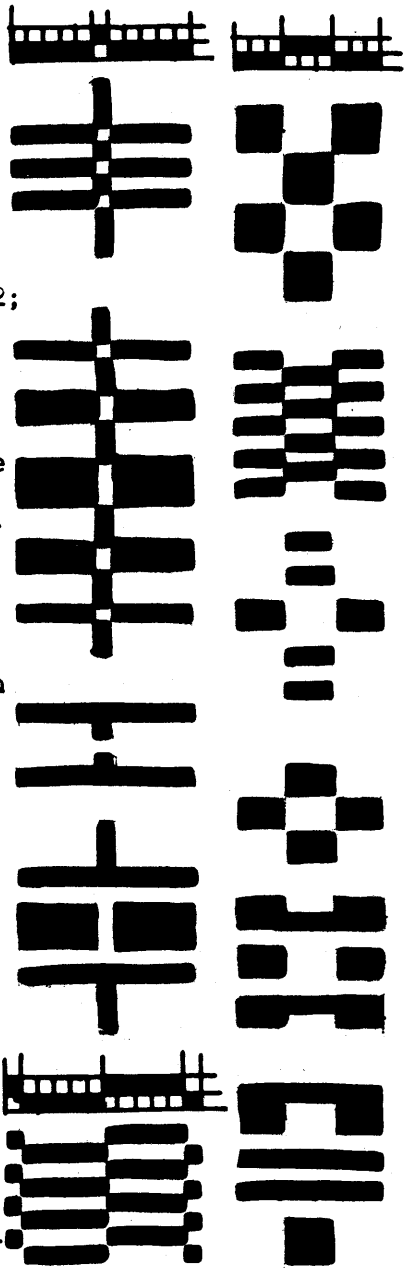
WARP-PATTERN Drapery II



The drapery fabric above is on 4 harnesses. Only 2-block patterns may be woven on this set-up but it often happens that the greater the simplicity the more effective the design. Since the pattern is not complex, a greater interest in the base warp is suggested. The base warp for the illustrated fabric was of 14/2 linen set at 20 ends per inch but woven at 17 to 18 shots per inch to give greater strength to the warp stripes and better drape to the fabric. The color arrangement for the base warp was: 8 ends cattail brown; 5 ocean aqua, 5 veiled peach repeated 3 times; 26 brown; 5 aqua, 5 peach repeated twice (for sider set stripes this could be repeated 5 or 7 times); this arrangement repeated throughout. The pattern warp was the heavy, natural color, silk noil sold by the Weaver's Workshop. Three ends of this were threaded with the narrow brown stripe on harnesses 4, 3, 4; 12 ends were threaded on the wide brown stripe to, harness 3, 5 ends; harness 4, 2

ends; harness 3, 5 ends. The weft used throughout was cattail brown 14/2 (7/1 would give a softer drape) to emphasize the brown pattern stripes. The treadling was: with harness 4 raised, weave 6 shots raising 1, 2, alternately; with harnesses 3 and 4 raised, weave 1 and 2; weave 1 and 2 alone; with harness 3 raised weave 6 shots on 1 and 2; weave 1 and 2 alone; with harness 3 and 4 raised weave 1, 2; with harness 4 raised weave 6 shots on 1, 2; weave 1, 2 alone; repeat throughout.

Almost endless threading and treadling arrangements may be made on a 2-block pattern, worked either directly on the loom or drawn first on squared paper. A few arrangements are shown at the right. Try making some of your own.



PORTFOLIO CONTENTS
Samples of both of the fabrics described here.

STYLES SUBJECT
Beach stoles.

Next month the subject of handwoven drapery will be temporarily abandoned so that we may give you a very special project. There are also many announcements on equipment and special features which could not be included here.

Harriet D Tidball

SOURCES OF SUPPLIES FOR WEAVERS

All of the products recommended here have been thoroughly tested in the Shuttle Craft Guild Studio and found satisfactory and to meet with all advertised claims. The firms have been found to be reliable in all respects. In most cases, payment is required with the order, and shipping charges are added. Please mention the Shuttle Craft Guild when writing to these distributors.

LOOMS

The Macomber Ad-A-Harness. Manufactured and distributed by L. W. Macomber, 166 Essex St., Saugus, Mass. An exceptionally efficient, strong, well made jack-type loom which folds conveniently. All looms made to hold 10 harnesses but may be purchased with 4 or more, also 12 and 16. Solid and sectional warp beams available and beam brake if desired. Widths: 32", 40", 48", 56". Also Tensioner and spool rack.

The Gilmore. Manufactured and distributed by E. E. Gilmore, 330 S. Commerce St., Stockton 34, Calif. An exceptionally strong, well made, Jack-type loom—the original pushup harness loom. 4 to 8 harnesses, folding or rigid, sectional warp beams. Widths: 22 to 56 inches. Also excellent shuttles, tensioners, and Inkle Looms.

The Leclerc. Manufactured by Nilus Leclerc Inc., L'Islet Station, Quebec, Canada. Distributed direct and through agents. The "tops" in 4-harness counter-balanced looms. Widths: 27", 36", 45", 54", 90". Also fine auxiliary equipment and Tapestry Looms.

The Structo. Manufactured by Structo Mfg. Co., Freeport, Ill. Distributed directly and through agents. A hand-operated 4 or 8 harness table loom of sturdy construction, equipped with solid warp beam and steel beam to hold Structo Ready-Warped Spools. Widths: 8", 20", 26". Stands available.

GENERAL WEAVING SERVICES

Searle Grain Farm Home Weaving Service. 318 Grain Exchange, Winnipeg, Manitoba, Canada. A general service specializing in looms and materials, particularly imported materials: Irish, French and Canadian linens; Canadian rayons, U.S. and Canadian novelties, Egyptian cottons, Scotch, English and Australian wools.

Hughes Fawcett, Inc., 115 Franklin St., New York 13, N.Y. A general service to handweavers, selling looms of many types, a wide selection of all kinds of materials, equipment of all types, and standard weaving books. Also certain specialties.

MATERIALS

Lily Mills Co. Handweaving Dept., Shelby, N.C. An exceptionally wide selection of cottons in many colors, fast dyes. Also weaving wools, linens, metallics and some novelties. Belt shuttles.

Contessa Yarns. 3-5 Bailey St., Ridgefield, Conn. Excellent source for a wide variety of specialty and novelty yarns at low prices. Samples of special offerings sent monthly. Also regular stock of fast-color carpet warp and linens. Searching service for that unusual yarn.

Royal Society, Inc., 230 Fifth Ave., New York 1, N.Y. Highest quality standard tweed yarn in wide color range and heather mixtures, novelty flecked tweeds, and 2/18 worsted in 22 colors.

Tinsel Trading Co., 7 W. 36th St., New York 18, N.Y. Metallic yarns, and metallic combinations in all types and colors, including the ever-useful supported metallics.

The Weavers' Workshop, Dodgeville, Wis. Those unusual, hard-to-get yarns such as spun silk and silk noils, Bernat Afghan, imported Irish linens, novelty wools, silks and linens, Bobbin Lace materials.

PUBLICATIONS

Craft and Hobby Book Service. Box 1931, Carmel, Calif. Almost all weaving books, foreign and domestic, in stock. Will order any others. Special searching service for out-of-print books. Also Art and Design books and books on other crafts.

Handweaver And Craftsman, 246 Fifth Ave., New York 1, N.Y. The all-inclusive periodical for all handweavers. Published quarterly. (Send them your news items too.) Mary Alice Smith, Editor.