



# HANDWEAVING NEWS

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Including:

- Look Up. Think Up. Lift Up.

· A Short Biography of Nellie Sargent Johnson

-A History of The Sears Hearthside Loom

Nancy M. McKenna

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# Look Up, Think Up, Lift Up:

A short biography of Nellie Sargent Johnson  
(c) 1998 Nancy M McKenna

*"We will remember Mrs. Johnson as a gracious lady who helped to fill the world with beauty and human achievement*

*She inspired others to create beautiful things and to find within themselves the ability to weave something noble into the fabric of the world about them.*

*She was indeed a teacher; a master weaver of textiles and of human lives."*

-condensed from the Memorial Service conducted by the Rev. Tracy M Pullman.

Nellie Sargent was born in Massachusetts on September 21st 1887. In 1909 she received a Bachelor of Arts degree in Social Work and Home Economics from Simmons College in Boston. During her lifetime she would also do coursework at the University of Michigan, the University of Wisconsin, Ralph Parson's Studio (Gloucester, MA) and the Arts and Crafts Society in Detroit, MI.

Her early jobs were in the field of nutrition and diet. She worked in many places on the East Coast in this field, starting as the Assistant Superintendent of the New England Kitchen in Boston, and progressing through the positions of Dietician at Eastern Maine General Hospital, the New York Polyclinic Hospital, the Assistant dietician at Lakeland Hospital in Cleveland, among many more such positions.

The job that changed her life was one she was offered in 1920 at the Women's Hospital Annex in Dearborn, MI. She accepted it and was to spend the rest of her life in Detroit. In 1922, at the age of 34, Nellie married Charles S. Johnson, a Certified Public Accountant. Within a handful of years, their



first son, Thomas, was born. Tragically, in 1928, this young child died, and her second son, Albert, is born. Named after Nellie's father and perhaps taking after his mother, by 1951 he is on staff at the U.S. Naval Hospital in Philadelphia.

In the meantime, in 1927, Nellie had started offering private weaving instruction in her home. By 1929 Nellie was writing articles for

Handcrafter and Weaver, Knitting and Home Crafts Magazine, and had become the Weaving Editor for Design Magazine.

Already well known as a weaver, in 1933 she started producing the newsletter Handweaving News. She wrote and mailed two to four page newsletters, twelve months a year for the rest of her life; some 220 issues in all. The subscribers were located throughout the United States. These issues run the gamut from ancient Peruvian weavings to early manuscripts like those by J. & R. Bronson to the most modern of weaves from Scandinavia. Although she appreciated the old wovens, she often remarked that these are for learning from, and that modern weavers should use the techniques to create their own patterns not slavishly copy the old. *"Let us try to design for use today, rather than "copy" what past periods have given to civilization. We are not living in Colonial America, or in the stage coach days, but in the present age of invention and speed... We can't be sure be inspired by all that has gone before us, but let us try to evolve textiles that belong to our own time, rather than past ages."* When she offered an old pattern in her newsletter, she often described how to use modern yarns to update the look or give the resulting textile a life within the modern home, such as using a coverlet pattern to make towels

using boucle yarns. Every January issue discussed some aspect of designing handwovens. She also reviewed and sold hard to find books ordered from Sweden, as well as good buys she was able to find from mills. She alerted weavers to weaving related goings on in various cities, and shared her student's work as well as work sent in by subscribers.

In 1934 she demonstrated weaving at the Naval Armory Exhibition of Women's Work. Noticing a sample of Rumanian weaving in another stall, a very fine, silk scarf which is used as a head dress by the Rumanian women, Nellie returned to the floor loom she had warped and ready to go, and reproduced the piece: a woven lace based on gauze weave. In Nellie's words:

"I shall never forget the real excitement of the woman who owned the scarf when she saw my woven piece on the loom. She said, *"None of the women of my Country know how to do this now here in America, you are the only one in United States that can do it."* And I am sure that was true at that time. Her scarf was over 100 years old, and woven by her great grandmother."

In 1936 Nellie sought and received the position of special instructor of weaving and home economics at Wayne State University. She was a very good teacher. Quick yet methodical, she was patient in explaining techniques as most of her student had little or no previous weaving experience. *"A witty, gray-haired woman with an infectious interest in weaving."* Is how one former student remembers her, *"She was a very kind and patient person and an artist in her weaving and her handling of her students."*

The summer of 1939 finds Nellie in Lima Peru, where she discovers ancient and modern Peruvian weavings. During the month she is there, she collects over 300 samples of this weaving, 200 of which are ancient, many over 1000 years old, and about 100 of which are examples of modern weaving. She also collects a very rare small loom that was found in a burial and a spinning basket with its full complement of equipment: spindles, cotton on ancient distaff and

a tool made of a piece of bone which was used to beat down weft threads. Peruvian weaving became her passion, and for the rest of her life she returned again and again to these samples, working out how to weave them. One of her weaving students commented, *"It just makes our modern weaving look like nothing at all, doesn't it."* Some methods were shared through the newsletters and the articles she wrote for other magazines, others were kept in reserve for a book she was writing under contract with Prentice Hall Publishers in New York. Unfortunately, this book was never published.

Nellie spent the summer of 1940 teaching at the Penland School of Handcrafts in North Carolina. By this time, Wayne State was paying her \$1000 per year (7 months total, 2 sessions each of beginning and advanced weaving and one session of Home Economics at 10 weeks/semester and approximately 13 hours per week of instruction time.) This year also sees her at the World Fair, her work is shown at the National Exhibit of Contemporary Crafts held at the Philadelphia Art Alliance in Philadelphia, and she discusses handweaving as a business for the first time in her Handweaving News. Looking at the larger picture, she started working on a loom that is easy to use, portable, yet offered enough flexibility to be used in her classes. She developed a 12 inch rigid heddle loom. By 1942, Sears Roebuck and Co in Chicago had purchased the right to produce this loom, sell her manual for it, and her instruction book for advanced weaving as well, through their catalog. It made its appearance in the Spring 1943 General Merchandise Catalog at 27 inches weaving width; advertised as *"designed by Nellie Sargent Johnson (nationally known authority on home weaving) to meet the needs of both experts and beginners. Ready Warped.. Just start right in and weave. Experts or beginners can weave lovely fabrics. Can be stored in little space, does expert work"*. This loom was popular enough that by 1947 Sears was marketing a six shaft 36"/38" weaving width floor loom designed by Nellie as well.

In Nellie's words, *"November 15, 16, 17, 1946: We held our first sale at the Old World Market of*

*the International Institute ... Our sales were good, but not as large as we had hoped... Weaving was contributed this year by our active membership groups here in Detroit and was very well received with much interest. We were able to show both the small table model Hearthside Loom and the new large folding 6 harness floor loom through the courtesy of Sears & Roebuck Co. They also loaned us one of their show cases and the services of their display experts to help arrange our exhibit."*

Early in 1947, Nellie traveled to Chicago to demonstrate the use of the looms at a special event at the Sears Roebuck & Co. State Street store. There she had the opportunity to meet and discuss looms, threads, etc with many of her Handweaving News readers.

In the meantime, Nellie did not neglect her teaching assignments. In 1943, textiles woven in Nellie's class were chosen in a nationwide competition and were shown at the Museum of Modern Art in New York.

Through Handweaving News she taught many techniques that were new to the average weaver. She also produced special technique pamphlets detailing the weaving, and offered special traveling exhibits for each of these special courses as well. In addition to those that went with the courses, she produced traveling exhibits on Rare and Ancient Peruvian Textiles, Modern Peruvian Textiles, Articles woven on Portable Hearthside Looms, and offered to make up a custom exhibit on whatever techniques one wanted to learn. One only had to write to her for details.

On the afternoon of May 2nd, she was scheduled to teach two classes at Wayne University. She finished her first class at 5:00 p.m. and walked across the campus on some errands. On the way back, her foot apparently caught in the sidewalk. She fell and severely fractured her left hip. She was taken to Grace Hospital, where her hip was nailed. She appeared to recover quickly and was soon up and around in a wheel chair.

Suddenly, on the morning of May 19th, 1951, her conditioned worsened. She died at 11:20 a.m. from a pulmonary embolism (blood clot). Services were held at the Church of Our Father at Cass and Forest in Detroit, and she was buried in Grand Lawn Cemetery.

"It just makes our modern weaving look like nothing at all, doesn't it."

## **The Sears Hearthside Loom**

The name "Hearthside" among Sears products dates back to Sears, Roebuck & Co.'s Golden Jubilee in 1936, where the name can be found in the Fall/Winter general catalog on items such as quilting frames, hooked rug frames and patterns, linens for making scarves, etc.

As of 1940, a waffle weave rug loom was available for \$2.75 each which could make a throw rug 18" x 27" in size, using six balls of two ply yarn which ran 60 yards to the half pound ball.. This was a simple frame loom such as the potholder looms which are still available. This was the only loom available until the 1941 Spring general catalog, which saw the addition of the Adjustable "Hearthside" rug frame . At the same time, the catalog advertised "Join the Maysville Guild: Costs nothing! Entitles you to certificate, membership button, labels, subscription to the "Shuttle", magazine. Write away today!

The 1943 Spring general catalog saw the introduction of the "New Portable Hearthside Loom": a 27" wide rigid heddle loom which came prewarped with Maysville carpet warp.. It was "designed by Nellie Sargent Johnson (nationally known authority on home weaving) to meet the needs of both experts

and beginners” (1943 Spring general catalog, p. 515). This edition of the catalog also offers for sale Nellie Sargent Johnson’s instruction book for advanced weaving .

The loom we most often think of when someone mentions a Sears Hearthside loom is the type I have: a six shaft floor loom, foldable, with sectional warp beam. This loom was premiered to the public with the 1946 Fall General Sears, Roebuck & Co. It also included lease sticks, rug shuttle, reed hook and thread guide for sectional warping (raddle), 38” reed (12 dpi) for 36” weaving width (although I have gone the whole 38” without problems). Size open: 48” wide, 42” high, 45” front to back. 22” front to back when closed. Boat shuttles were available, and from the picture, are torpedo shaped, rather than the crescent like shape made by LeClerc at the time, and had a metal bobbin. This loom was sold mostly unchanged until the 1950 Fall General catalog. For the first time, it is sold as the “Hearthside Convertible Loom”; Basically, the same loom is sold with only four shafts in the same castle. The purchaser then has the option of adding the extra two shafts for an additional \$18.00 (basic 4s loom costs \$129.00 cash) The included reed has been enlarged to 39” as well. In the same catalog, the “Simplified Hearthside Loom” premiered; a two shaft loom, with a 39” wide reed for weaving up to 38” in width.

By the 1951 Fall general catalog, the 6 shaft Hearthside loom is no longer available. In its stead, there is a 4 shaft loom. The two shaft loom is still available. The 1953 Fall general catalog is the last year floor loom are offered, and both the 2 shaft and 4 shaft Hearthside are listed along with a LeClerc 45” loom.

Who Manufactured the Sears Hearthside Loom?

In an effort to put a myth to rest, I enquired as to who manufactured the Hearthside loom for Sears. The archives department does not keep records of the subcontractors who manufacture products under the Sears name, so was unable to find an answer there.

As more than one person mentioned that they thought LeClerc may have manufactured the loom, I e-mailed À Francois Brassard, current owner of LeClerc Looms who answered: “Sorry but I can not answer that question. I bought the Nilus Leclerc Company 3 years ago and I do not records from that time.”

The main clue may be the statement in the catalogs: “Shipped from Kankakee, Illinois. Order from nearest Sears mail order house.” Per the Kankakee County Historical Society records, the looms were manufactured by the Pope Machine Company. Henry Pope founded three companies: The Bear Brand company (hosiery manufacturer) was formed in 1893. The Paramount Knitting Company was formed in 1914. By March 1922 Pope opened the Pope Machine Company which manufactured the machines used in the creation of textile goods. They made machines under the names of several chain stores and drop shipped these machines from their facilities in Kankakee.

A version of this article about the Sears Hearthside Loom was printed in The Weavers Friend.

WEAVING IS FUN . . . WHOLESOME AND PROFITABLE

# Sears brings you the best in LOOMS, YARNS, ACCESSORIES

HEARTHSIDE LOOMS . . . MAYSVILLE YARNS . . . FREE GUILD MEMBERSHIP

*For Handicraft Classes . . . For Occupational Therapy . . . For Income*

**SEARS, ROEBUCK AND CO.**

Dear Weaver

Weaving is a handicraft that can give you many happy hours as a hobby, besides bringing you a tidy income whether you weave in your spare time for pin-money or do it full time as a living. Join the thousands that are enjoying this fascinating hobby. It's a fine craft that deserves the best in looms, yarns and accessories—you'll find them all on the following pages.

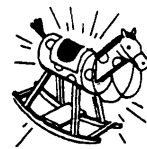
Hearthside looms have many improved construction features found only in Sears looms; they make weaving faster, easier, more comfortable. Hearthside looms are priced low for such high quality. Buy any of the Hearthside looms on pages 2 and 3 and you can start right in to turn out priceless one-of-a-kind hand woven articles for your own use or for sale. Accessories and yarns to speed your work, vary your pattern, are on page 3. Maysville famous yarns priced in economy lots for weavers are on page 4.

You can join the Maysville Guild absolutely free simply by writing to Sears Personal Service Department. See page 4 for all the advantages you get by becoming a member. Sears also offers you—at no cost to you—the expert services of Mrs. Nellie Sargent Johnson, nationally known weaving consultant. If you have any questions about weaving, just write to Mrs. Johnson in care of Sears Personal Service Department.

Sincerely yours,

Sears, Roebuck and Co.

P.S. Weaving is recommended by educators for vocational schools, special ungraded divisions and handicraft classes. Because it's so relaxing, it's ideal occupational therapy for convalescents, the handicapped, and the aged. Hearthside looms are built to take a lot of constant use over a long period of time so they're especially well suited for hospitals, schools or nursing homes.



A hobby for fun and relaxation



Weave draperies, rugs, scarfs, breads, etc.



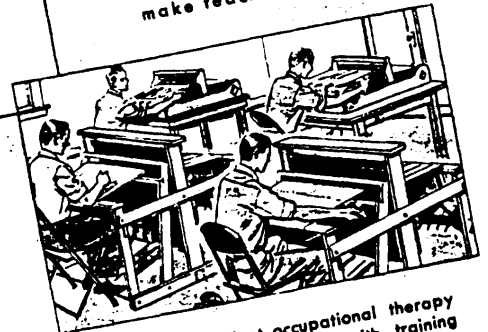
Hand woven items bring high prices, big profits



You can weave at home even if you live in a small apartment when you use Hearthside looms; see portable and folding models on page 2. Beautify your home with "unusual" accessories you can weave in your spare time.



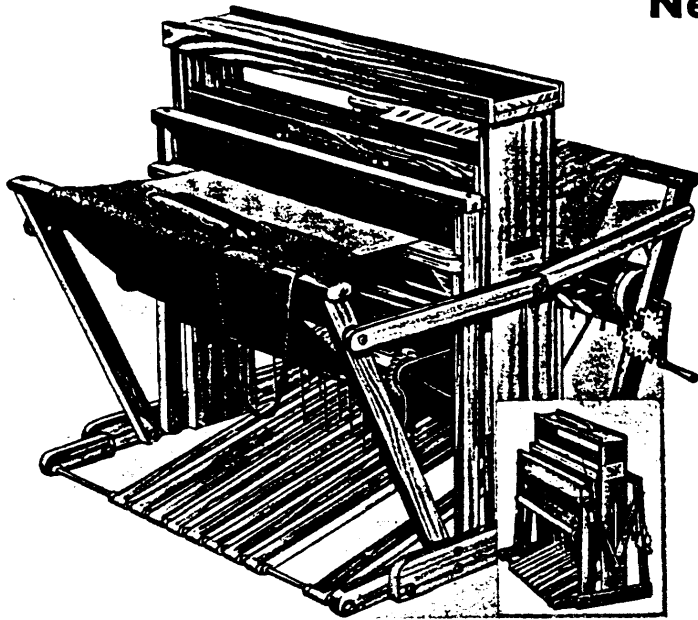
Learn-by-doing handicraft classes develop creative abilities, offer vocational training. Weaving is also widely used in "special" divisions. Exclusive Hearthside features make teaching loom operation easy.



Weaving is excellent occupational therapy . . . combines rehabilitation with training for earning a living. Hearthside looms are built to take long hard use.

**SEARS, ROEBUCK AND CO.**

# New Hearthside Convertible Loom



Four removable harnesses . . . converts easily to six harnesses

Just slip in two additional harnesses . . . sold separately

Improved precision operation . . . even shed every time



Harnesses slip in or out quickly, easily, smoothly . . . just lift off the top shelf



Hand woven fabrics look "original" in your home . . . bring high prices when sold

With four harnesses **\$129<sup>00</sup>** Only **\$13.00 Down**  
Cash

- Jack-type folding floor model loom with four harnesses and six pedals
- Improved harness and lamm construction guarantees even shed every time
- Harnesses raised by accurate mechanical action from below . . . no pulleys
- Plain or sectional warp beam has convenient automatic counting device
- Pedal action warp beam release; no cord or wire to tangle with yarn
- Easy action metal ratchet gears with handles on warp and cloth beams

## Extra Harnesses for Convertible Loom

- Any time you like you can make it into a six-harness loom
- Everything you need is included in this converting outfit

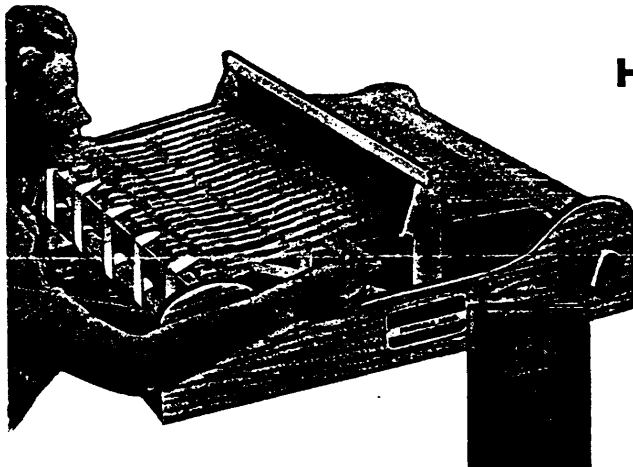
It's a new idea in looms. Everything you need to make a six-harness, eight-pedal loom out of the Hearthside four-harness loom described at the right. It costs you little and it's easy to change over because the loom is especially designed to make this change quickly. Has the same improved harness and lamm construction as the loom for easy operation, precision action. (Order extra heddles from opposite page.)

Converting outfit consists of two harness frames with heddle bars, lamms and wire connectors and two pedals. Easy to install with the simple directions which are included. Shipped from Manteno, Illinois; pay transportation charges from shipping point. Order from your nearest Sears Mail Order house. May be included in your Easy Terms order. Shpg. wt. 10 lbs.  
25 CM 4381F—Converting outfit \$18.00

For both beginners and experts. Designed to turn out fine work with speed and a minimum of effort . . . comfortable working height for ordinary kitchen chair. Made to take constant use . . . so important for schools, hospitals, homes.

Weaves up to 38-in. finished width; holds 50 yds. warp. Any of the 600 steel heddles can be removed without taking harnesses out of loom. Selective hook-up allows any heddle combination. Use 2 to 4 of the strong, light harnesses, or buy the extra harnesses at left and weave with 6. Top shelf comes off so you can put them in easily. Uses wool, cotton, rayon, nylon, Maysville yarns (see back page).

Made of kiln dried wood waxed and rubbed to a smooth natural finish. Metal parts cadmium plated. Warp beam has four reversible slats each divided into 2-in. sections by dowels; turn dowels out for sectional beam, in for plain. Comes with two flat leash sticks, rug shuttle, reed hook thread guide and 39-in. 12 dent reed (12 threads to inch). Instructions included. Other reeds on opposite page. Size open 48 in. wide, 41 in. high, 45 in. front to back (folds to 28 in.). Shipped freight or express from Manteno, Ill. Pay transportation charges from shipping point. Order from nearest Sears mail order house.  
25 CM 4380F—Shpg. wt. 250 lbs. \$129.00



## Hearthside Portable Table Model Loom

Low priced . . . lightweight . . . fast and easy to work

**\$14<sup>50</sup>**

Ready warped . . . just start right in and weave  
Experts or beginners can weave lovely fabrics  
Can be stored in little space, does expert work

A loom you can keep even in a tiny apartment, a loom you can carry from room to room. Especially designed for simple operation and compactness. The metal heddle serves as a harness and also as a beater. Small enough to fit into a small space in a closet when not in use. Use on kitchen, dining or bridge table. Carry it into the living room and weave as you listen to the radio; weave as you sit on the porch.  
Loom is 32 in. wide, 34 in. long, 10 in. high. Two leash sticks smoothly shel-

lacked and lacquered. Warp and cloth beams with apron and ratchets. Weaves up to 25-in. width; 29½-in. shuttle included. Shipped freight or express.  
25 CM 4323—Shpg. wt. 18 lbs. Each \$14.50  
Weaving Instructions by Nellie Sargent Johnson written especially for Table Model Loom. Loom operation, patterns, yarn requirements for weaving.  
25 C 4320—Postpaid (Shipping weight 3 ounces) . . . . . Each 39c  
Extra Shuttle for above loom  
25 C 4321—Shpg. wt. 6 oz. . . . . Each 59c

### Enjoy this fascinating handicraft Use Sears Easy Terms on orders of \$20 or more

You can start right now, even if you don't have all ready cash or if you don't want to disturb your savings. Just pick out what you want and list it on the enclosed order blank. Add up the cash prices of all the items and be sure the total amounts to \$20 or more. Then have the head of the household fill in the back of the order blank and sign it. Enclose a check or money order for the necessary down payment and mail the order to Sears.

Only 10% down payment required on merchandise in this catalog. That means a \$5.00 down payment on a \$50.00 order, a \$7.50 down payment on a \$75 order. Refer to the table at the right for how much to pay each month. Note: the monthly payment for a new account is only \$5 for an unpaid balance up to \$55.

If unpaid balance amounts to	We shall add for Easy Payments	Amount Payable monthly is	If unpaid balance amounts to	We shall add for Easy Payments	Amount Payable monthly is
\$20.00 to \$22.00	\$2.00	\$5.00	\$65.01 to \$70.00	\$7.00	\$7.00
22.01 to 24.00	2.25		70.01 to 75.00	7.50	
24.01 to 26.00	2.50		75.01 to 80.00	8.00	8.00
26.01 to 28.00	2.75		80.01 to 85.00	8.50	
28.01 to 30.00	3.00		85.01 to 90.00	9.00	9.00
30.01 to 33.00	3.25		90.01 to 95.00	9.50	
33.01 to 36.00	3.50		95.01 to 100.00	10.00	10.00
36.01 to 40.00	4.00		100.01 to 110.00	10.50	
40.01 to 45.00	4.50		110.01 to 120.00	11.50	10.50
45.01 to 50.00	5.00		120.01 to 130.00	12.50	
50.01 to 55.00	5.50	130.01 to 140.00	13.50	10.50	
55.01 to 60.00	6.00				
60.01 to 65.00	6.50	6.00			

Write for Terms over \$140.00



# New Simplified Hearthside Rug Loom

Two-harness loom with removable heddles  
 Designed for speedy, easy operation  
 Priced low for profitable rug making

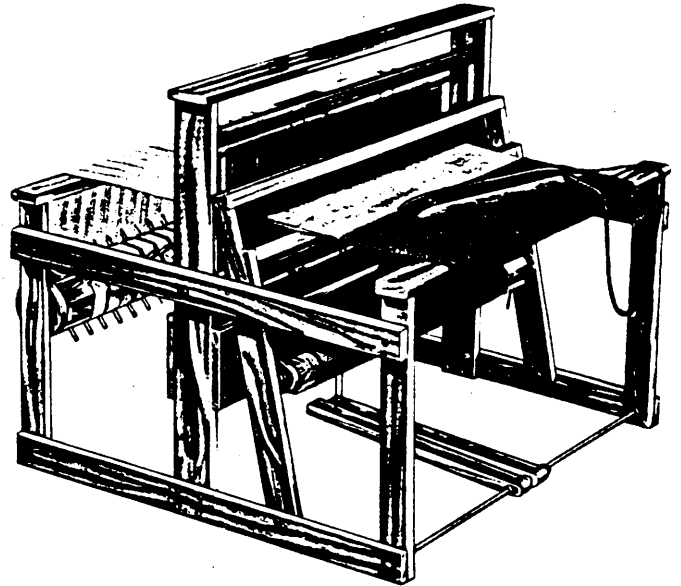
**\$49<sup>00</sup>** Cash Only \$5 Down

It's easy to turn a hobby into a profitable business with this loom  
 Sears Easy Terms help you get started right now . . . pay out of profit

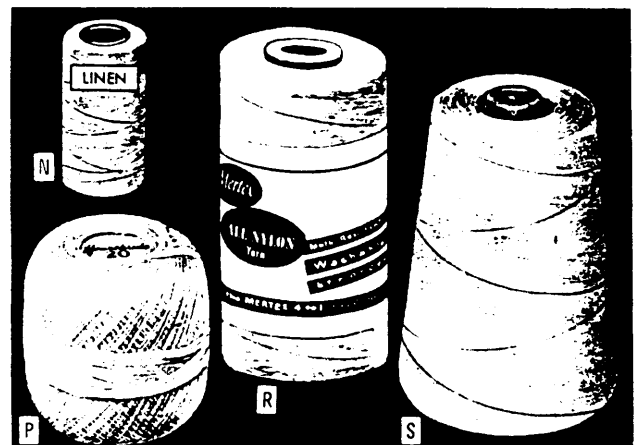
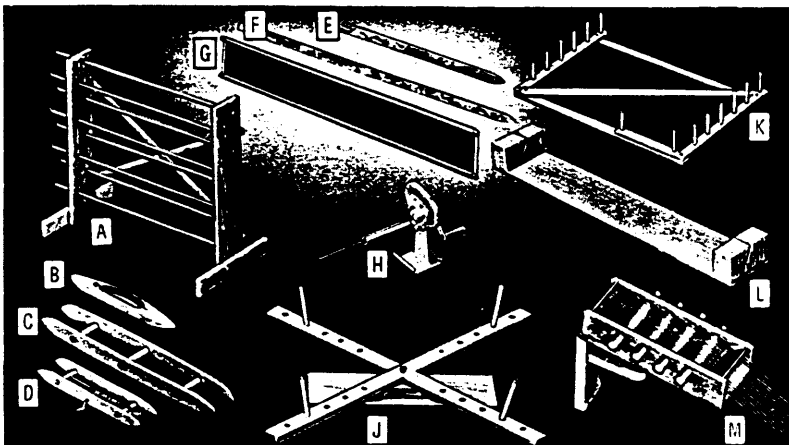
Designed and priced especially for you who weave rugs to sell. Simplified two-harness construction. All weaving parts of seasoned hardwood to take constant use. Individual heddles can be removed without removing harness . . . take out or put in as many as you like without taking loom apart. Holds 75 yards warp so you don't need to warp so frequently. Warp beam has four reversible slats each divided into sections by dowels. Turn dowels out for sectional beam, in for plain. Weaves up to 38 in. wide. Comfortable height for kitchen chair.

Loom is 41 in. high, 46½ in. wide, 41½ in. front to back. Comes complete with 39-inch, 12-dent reed, 400 steel heddles, two leash sticks and one rug shuttle. For other reeds and shuttles, see below.

Shipped partly assembled to save you shipping charges. Easy to finish assembling; instructions included. Shipped by freight or express from Manteno, Illinois; pay transportation charges from shipping point. Send order to your Sears mail order store. Shpg. wt. 150 lbs.  
 25 CM 4440F . . . . . Complete \$49.00



## Accessories and Yarns . . . for Hearthside and other looms



### Weavers' Accessories to speed your work, add beauty and variety to your pattern

- A** Spool Rack. 8 dowel rods hold 48 spools of carpet warp. Sturdy wood, carefully made. Easy to assemble. Size when assembled 24½ in. high, 27 in. wide.  
25 C 04341—Shpg. wt. 11 lbs. . . . Each \$3.79
- B** 12-inch Boat Shuttle for finer threads. Wood with metal bobbin holder.  
25 C 4342—Shpg. wt. 6 oz. . . . . Each 98c
- C** Large Rug Shuttle 21½ inches long. Made of wood.  
25 C 4344—Shpg. wt. 8 oz. . . . . Each 98c
- D** 10-inch Throw Shuttle for fine weaving. Made of wood with wire spindle to hold bobbin of thread.  
25 C 4016—Shpg. wt. 6 oz. . . . . Each 79c
- E** 14-inch Flat Plastic Shuttle. For netting or pick-up weaves on all types of Hearthside or other looms. Dark color . . . easy to see. Ends won't break.  
25 C 4011—Shpg. wt. 2 oz. . . . . Each 79c
- F** 27-inch Flat Pick-up Stick. For special warp threads; just turn sideways to make shed for shuttle. Dark plastic.  
25 C 4011—Shpg. wt. 3 oz. . . . . Each 69c
- G** Steel Reeds for extra fine work. Fit all Hearthside floor looms. 39 in. long.  
15-dent Reed. (15 threads to inch)  
25 C 04018—Shpg. wt. 4 lbs. . . . Each \$5.39  
12-dent Reed. (12 threads to inch)  
25 C 04021—Shpg. wt. 4 lbs. . . . Each \$5.39
- H** Bobbin Winder. Uses paper bobbins or empty carpet warp spools. Made of metal. Instructions included.  
25 C 4015—Shpg. wt. 1 lb. 8 oz. Each \$4.89
- J** Skein Reel. Winds shuttles direct from skein. Takes skeins up to 90 in. Natural wood. Comes apart for storing.  
25 C 4017—Shpg. wt. 4 lbs. . . . Each \$3.98
- K** Warping Frame. Saves time, avoids tangles when rewarping. Makes an 11 yard warp. Natural wood. Instructions included.  
25 C 04014—Shpg. wt. 5 lbs. . . . Each \$4.79
- L** Heddle Holder for Hearthside portable table model loom. Makes warping easier. Made of natural wood.  
25 C 4013—Shpg. wt. 9 oz. . . . . Each 49c
- M** Tension Box. For sectional warping (up to 30 ends) on Hearthside or other floor model looms. Four over and under tension bars. Clamps to slab stock bar. Wood reinforced with metal. Size 9¼ in. high, 9¼ in. long. Instructions included.  
25 C 4020—Shpg. wt. 2 lbs. . . . Each \$5.95

Steel Heddles (not illustrated). 10 in. long; ¾-in. eye. Sold only in lots of 100. Shpg. wt. 1 lb. 6 oz.  
25 C 4022 . . . . . 100 for \$1.00

### Linen, nylon, cotton Yarns for texture beauty, durability

- N** Linen Weaving Yarn. Fine quality 100% domestic linen for warp or weft. Hard spun yarn in single or double ply. For colorful patterns, strong fabric. Washable colors natural (unbleached), white (bleached), chartreuse (yellow-green), yellow, aqua blue, light blue, dark blue, light green, dark green, light pink, old rose, red, light brown, dark brown.  
20's-1 ply  
For weft. 4-ounce tube (1500 yards).  
25 C 4949—State color. Shpg. wt. 5 oz.  
Natural . . . . . Ea. 84c  
White . . . . . Ea. 95c  
Colors . . . . . Ea. \$1.19
- 12's-2 ply  
For warp. 4 ounce tube (450 yards)  
25 C 4951—State color Shpg. wt. 5 oz.  
Natural . . . . . Ea. 89c  
White . . . . . Ea. 95c  
Colors . . . . . Ea. \$1.09
- 20's-2 ply  
For warp. 4-ounce tube (750 yards)  
25 C 4950—State color. Shpg. wt. 5 oz.  
Natural . . . . . Ea. \$1.15  
White . . . . . Ea. \$1.19  
Colors . . . . . Ea. 1.29
- P** Hearthside 3-ply Cotton in Balls. Hard twist mercerized yarn makes a strong warp; also excellent for a filler on very fine work. Neutral colors in a choice of five sizes. Colors white, cream or ecru.  
Sizes . . . . . 10 . . . . . 20 . . . . . 30 . . . . . 40 . . . . . 50  
Yards . . . . . 250 . . . . . 300 . . . . . 400 . . . . . 500 . . . . . 600  
Lively colors bring out lovely patterns. Comes in size 30 only (300 yd. ball). Colors pink, light rose, tearose, bright red, dark orchid, orange, yellow, light green, baby blue, light blue, delft (medium blue). Shpg. wt. 3 balls 8 oz., 12 balls 2 lbs. 4 oz.  
25 C 4981—Please state both size and color. 3 balls 69c 12 balls \$2.50
- R** Nylon Warp Yarn. Full bodied single ply 100% nylon yarn for warp or weft. Nylon dries quickly, won't shrink, is naturally mothproof . . . just wears and wears. Fine for rugs, draperies and place mats because it's so wear resistant. Color natural (cream white) only.  
25 C 4952—½-lb. tubes (1000 yards). Shpg. wt. 10 oz. . . . . Each \$1.39
- S** Hearthside 3-ply Cotton in Cones. Mercerized yarn for warp or filler. Wears well and washes beautifully . . . just what you want in place mats, table scarfs, etc. Color natural (cream white) only.  
25 C 4972—1-lb. cone (2400 yards). Shpg. wt. 1 lb. . . . . . Each \$1.95

For color richness, texture beauty, long wear . . .  
for fun or for profit, weave with famous-for-quality

## Maysville Rug Yarns

**49<sup>c</sup>** Each in  
lots of 10  
(Natural)

### Carpet Warp

**A** We sell hundreds of thousands of tubes to satisfied weavers every year. Only because Maysville Yarn is extra strong, rich looking and of uniform quality at lowest possible prices. Smooth, 4-ply cotton in ½-pound (800-yard) tubes. Comes in natural (cream) and twenty-two colors.

Colonial (light) blue	Wine (deep red)
Royal (deep) blue	Lavender
Colonial (lt.) green	Slate gray
Aqua (med.) green	Burnt orange
Myrtle (dk.) green	Rust
Lemon yellow	Reddish brown
Gold	Dark brown
Peach	Black
Dusty (dull) rose	Bleached white
Old (deep) rose	Ecru (pale tan)
Red	Tan

State quantity	25 C 4862 Natural	25 C 4861 State color	Shpg. wt.
Each . . . . .	Tube 51c	Tube 56c	10 oz.
lots of 5 . . . . .	Tube 50c	Tube 55c	3 lbs.
lots of 10 . . . . .	Tube 49c	Tube 54c	6 lbs.
lots of 20 . . . . .	Tube 48c	Tube 53c	12 lbs.
lots of 50 . . . . .	Tube 47c	Tube 52c	30 lbs.

**53<sup>c</sup>** Each in  
lots of 3

### Washfast Warp

**B** Same fine quality, rich looking carpet warp as at left, but with the added washfast feature. Use Maysville washfast carpet warp to color accent your weaving. It works up into the most attractive rugs, place mats, knitting bags and accessories that sell on sight at prices that bring you high profits. Smooth, 4-ply cotton yarn is extra strong . . . has 9-pound breaking strength by laboratory test. 600-yard tubes. Washfast colors:

Colonial (lt.) blue	Lavender
Aqua (med.) blue	Lemon yellow
Royal (deep) blue	Gold
Colonial (lt.) green	Peach
Aqua (medium) green	Ecru (pale tan)
Dark green	Tan
Dusty (dull) rose	Dark brown
Rose pink	Black
Cardinal red	Bleached white
	Natural

State quantity	25 C 4863 State color	Shpg. wt.
Each . . . . .	Tube 55c	7 oz.
lots of 3 . . . . .	Tube 53c	1 lb. 4 oz.

**53<sup>c</sup>** Each in  
lots of 10

### Rug Filler

**C** Soft-spun yarn measures ¼ inch in diameter . . . about as thick as a lead pencil. Its extra thickness speeds your weaving, gives your rugs a professional finish that sells them quickly at a good profit. Fluffy 3-ply cotton yarn in ½-lb. skeins (average 225 ft.) Buy in larger quantities, save money. Colors:

Colonial (lt.) blue	Dusty (dull) rose
Royal (deep) blue	Old (deep) rose.
Colonial (lt.) green	Red
Aqua (med.) green	Wine (deep red)
Myrtle (dk.) green	Lavender
Lemon yellow	Slate gray
Gold	Burnt Orange
Peach	Rust
Ecru (pale tan)	Reddish brown
White	Dark brown
	Black

State quantity	25 C 4860 State color	Shpg. wt.
Each . . . . .	Skein 55c	10 oz.
lots of 5 . . . . .	Skein 54c	3 lbs.
lots of 10 . . . . .	Skein 53c	6 lbs.
lots of 20 . . . . .	Skein 52c	12 lbs.
lots of 50 . . . . .	Skein 51c	30 lbs.

**26<sup>c</sup>** Each in  
lots of 12

### Rug Yarn

**D** Maysville popular Kentucky "soft spun" . . . ¼ inch thick (about half the size of a lead pencil). Makes soft, easy-to-handle rugs and accessories. Uniformly dyed colors. Your friends will cherish hand woven gifts . . . your customers will pay well for articles woven of Maysville Home-craft because they wear so well. It's easy to work with, too. Fluffy 4-ply 50% rayon, 50% cotton yarn. 80-yard skeins in following colors.

Peach	Lemon yellow
Ecru (pale tan)	Gold
Tan	Red
Dusty (dull) rose	Reddish brown
Old (deep) rose	Wine (deep red)
Colonial (lt.) blue	Lavender
Royal (deep) blue	Slate gray
Colonial (lt.) green	Dark brown
Aqua (med.) green	Black
Myrtle (dk.) green	Ivory

State quantity	25 C 4878 State color	Shpg. wt.
Each . . . . .	Skein 28c	4 oz.
lots of 3 . . . . .	Skein 27c	12 oz.
lots of 12 . . . . .	Skein 26c	3 lbs.

## Waffle Weave Rug Frame \$3<sup>59</sup>

Weave a rug a day on this frame that tilts to any angle. Sturdy frame holds rug steady in any position making it easy to tie yarn—is easily taken apart for storage. 28½x49-inch frame is made of natural color wood.

One waffleweave rug 27½x48 inches takes only 5 skeins Maysville Rug Filler and ½ tube of Maysville Carpet

Warp listed above. Easy-to-follow instructions and one plastic rug shuttle included with each frame. Mailable. 25 C 04373—Shpg. wt. 15 lbs. . . \$3.59

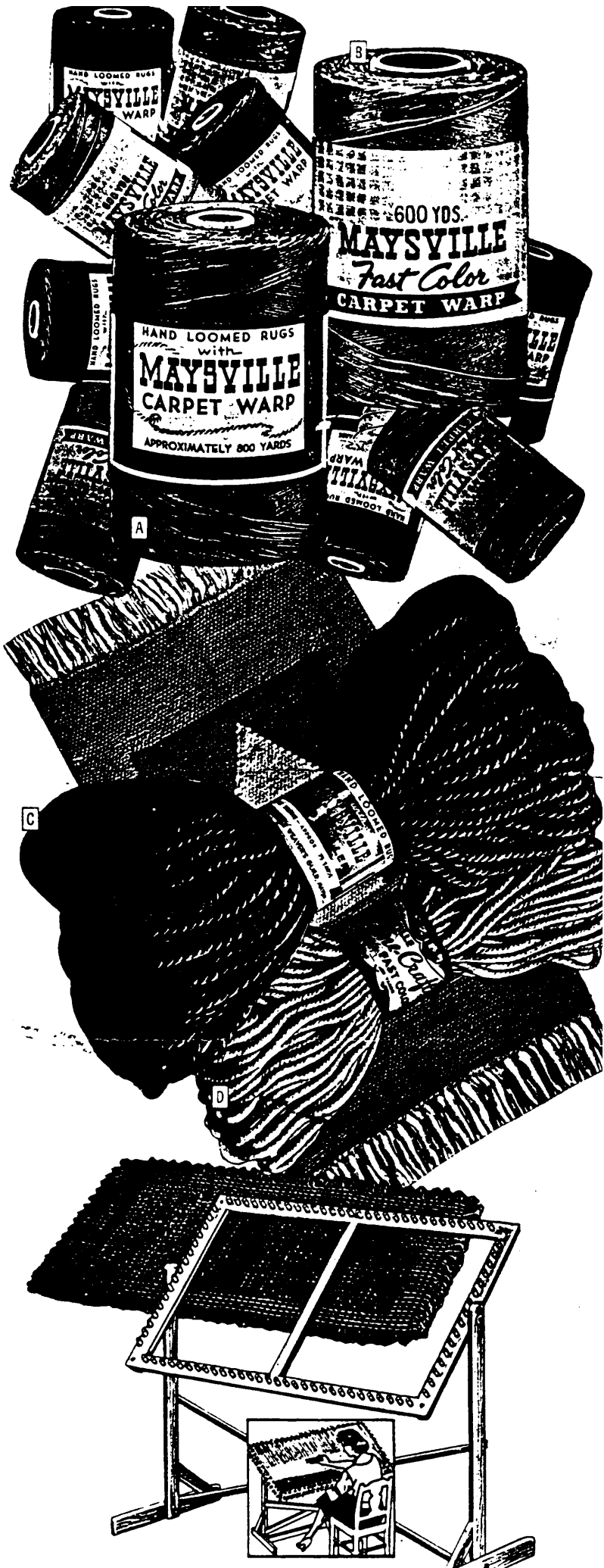
Extra Plastic Shuttles for use with above frame so two people can tie at same time. 25 C 4371—Shpg. wt. 3 oz. . . 2 for 19c

### Join the Maysville Guild

It costs you nothing . . . It helps you make more sales at higher profits, makes your work easier, more enjoyable

Free membership entitles you to a Guild Certificate you can hang in your studio, labels for all your weaving and a membership button. You also get absolutely free a Weavers' Manual and every issue of the "Shuttle" magazine with new ideas, interesting patterns and helpful weaving short cuts. Write to Sears Personal Service Department and join now . . . it's free.

SEARS, ROEBUCK AND CO.



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Look Up, Think Up, Lift Up by Nancy M. McKenna © 1998  
The Sears Hearthside Loom by Nancy M. McKenna © 1998

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June 1951 Backstitching on the Loom (Brooks Bouquet)

## Monographs:

Johnson, Nellie Sargent, Lesson on How to Weave a Double fabric in Pattern on a Four Harness Loom © 1934 self published, paper, Detroit, MI (4 pages)

Johnson, Nellie Sargent, Simple Draw Loom Weaving on a Four Harness Loom © 1935 self published, paper, Detroit, MI (4 pages)

Johnson, Nellie Sargent, Open Work Lace Weaves from the Greek Island of Cos ©. 1935 self published, paper, Detroit, MI (3 pages)

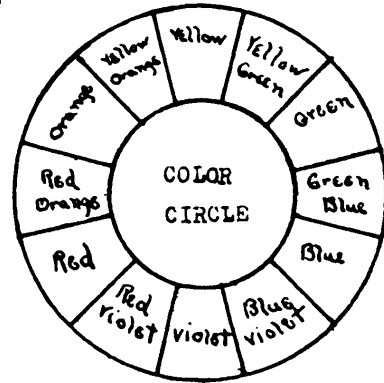
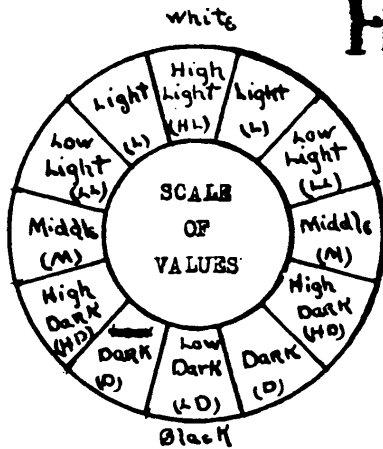
Johnson, Nellie Sargent, "Bratten" Open Lace Weave ©. 1937, self published, Detroit, MI (4 pages)

# Handweaving News

JUNE 1933

12489 Mendota Ave.  
Detroit, Mich.

NOTES ON COLOR



Color is a very inexhaustible subject in its many phases and in nature. In these brief notes, I shall only attempt to give you a few suggestions and color problems which will point out the way for the study of color in your weaving.

Definitions. Color is the effect of light on matter. As the rays of the spectrum fall upon a surface, certain ones are reflected and thereby passed on to the human eye, and others are absorbed. The hue of a color is the chromatic quality which is indicated by its name, - as red, red violet, violet etc. In order to change the hue of a color, we mix it with another color. By value we mean the quantity of light and dark in a color, and refer to its relation to white and black. In order to change the value of a color, we must make it darker or lighter without changing its hue, by the addition of white to make it of lighter value, and the addition of black to make it of darker value. The scale of values, as given above, represents the different values from white to black with the corresponding names of these values. Middle value (M) is the value half way between white and black; Dark (D) is an intermediate value between black and middle value; Light (L) is an intermediate value between middle value and white; and between these intermediates the values, - Low Dark (LD), High Dark (HD), Low Light (LL), and High Light (HL). Many others are possible, but these values of gray may be used as a measure of comparison. A value scale of each hue may be made in the same way as the gray scale, with all the gradations from white to black. By intensity of color, we mean the amount of its brightness. Each color has a saturation point where it reaches its fullest possible brightness or intensity. Intensity stands in opposition to neutrality in which no color may be distinguished. The more color we have, the greater the intensity, the less color we have the greater the neutrality.

The scale of hues of the color spectrum are given in the color circle above in order to show their relationship and position with regard to each other. They represent a fairly even gradation of hue, and their position on the color circle also shows the value at which they reach their fullest intensity. As for instance red orange is at its greatest intensity at middle value. The colors opposite each other on the color circle are complementary to each other, as for instance violet is the complement of yellow, orange is the complement of blue, green is the complement of red etc. If you mix equal parts of complementary color, the result is a neutral gray. Yellow is placed at the top of the circle as it is the lightest in value, violet is placed at the bottom of the circle as it is the darkest in value. The other colors range in value according to their respective positions on the circle.

For further study, I wish to refer you to the following excellent books which discuss color very completely, -  
 "Enjoyment and Use of Color" by Walter Sargent, published by Scribners N.Y. 1929.  
 "Study of Color" by Michael Jacobs, published by Doubleday N.Y. 1927.  
 "A Theory of Pure Design" and "The Painter's Palette" by Denman W. Ross. These two last books are out of print, but may be obtained from most good libraries.

But far more important than all the reading one can do, is the actual experience of using color. Any single color combined with white, which makes up so much of the handweaving one sees, presents no color problem at all, and is easy to do. And to my mind, one reason why so much handweaving lacks any individuality or interest.

A large field of opportunity is open to the handweaver who will take the time to study and experiment with colors, to design and create individual fabrics. Many people have an inborn feeling for color, and see it and use it easily in a creative way, are real artists. But everyone loves color, and through study can learn to play with it and use it, in the same way they learn to play a musical instrument. Perhaps they will use it with somewhat less skill than the artist, but they can use it effectively and well, if they understand certain of its principles and laws, and gain great joy through its use as well.

Now for some interesting ways to get color practise. One very simple thing to do, is to get a package of as many different colors of Kindergarten papers as possible. These are put up by the Milton Bradley Co. of Springfield, Mass in an excellent assortment of colors. Make a color circle putting in the colors in their proper places. Then make abstract designs with different colors cut in large and small shapes, and arrange on a colored background paper. It is so easy to select your colors, to cut them to any size you desire, and arrange them into a design, that this method is a very easy one to use to work out designs for "Laid-in" technique to weave. Select a group of these colored papers, and try making some free abstract forms, you will be surprised with the results. Colored crayons also offer a good medium, and can be purchased in sets of 60 or more colors, but of course the palette is more set than with paints. Inexpensive water colors, such as the Devco Tempera colors may be purchased in 2 oz jars at 50¢ each, and offer an excellent medium for anyone who really wants to play creatively with color, and are much less expensive than the regular water colors. To overcome a fear of color, which many people have, try taking very large sheets, the larger the better, and cover these with large spots of different colors. Be just as free as possible. Do not try for any definite shape or form. Take any color that your fancy dictates, and use a very large brush. In this way you get a feeling of color, and become sensitive to color relationships. Next take several objects, and try to get their colors. Do not try for the form of the object itself just its color. Make a collection of nature's colors found in plants butterflies, moths, flowers, trees etc. For instance, take a blue batchelder button, and carefully match up all of its colors, either with the colored paper or with paints. You will get lovely shades of blue green in the stem, and shades of blue and blue violet in the flower. Recently I have taken a parrot tulip, its colors ran through a gorgeous array of red and yellow and green. A study of the proportions of the different colors is also of much interest in these natural objects. See the proportion of bright color to the dull or neutral. Observe how the different colors effect each other when used together. Note the combination of several colors in most of these natural objects, to give the effect of one color.

This winter, one of the outstanding Art Exhibits which I saw here in the city, was one at a show of "Art in the Automobile", in which a collection of natural objects were shown in connection with a group of samples of upholstery materials. A lovely piece of rose beige was developed from a bit of coral, a beautiful neutral silver blue green sample from the colors of a butterfly's wing; a soft green sample with a tiny line of red in it from a gorgeous green bird with a brilliant red breast, Surely here is food for thought for those of us who weave. If the automobile manufacturer is doing that for our cars in which we ride, we can at least begin to do it very seriously for the things we can make on our own looms.

Now I wish to suggest some definite color problems, which I hope you will try in any of the mediums suggested above, or with yarns on your loom. These may give you some exciting surprises or dismal disappointing failures, according to your own ability in choosing the correct values and proper proportions, but which ever it is, they will give you much information.

#### 1. Equalization of Color.

For this problem, use a light color, a dark color, a dull color, and a bright color, with either gray or black. Use these in such proportion that when you half close your eyes, no one color stands out more than another. Note the smaller proportion of bright color which you can use, with relation to the others.

#### 2. Colors in a Sequence.

Colors below the line signify the background color. In weaving, use the color below the line for the warp. Or if you have a white warp on the loom, use it for the tabby thread. Or use the yellow for both warp and tabby. Do not forget that a gold or tan warp is a value of yellow. Use the colors above the line for the pattern weft.

(A) OY Y YG (B) O OY YG G (C) O Y G (D) R RO O OY

M. Johnson  
12759 Mack  
Detroit, Mich.

## 2. Colors in a sequence (continued)

(3) RO O OY YG G GB (F) YG G GB B (G) YG G GB B BV V

## 3. Color in the Triads.

To get the triads, start with yellow, count 5 and get red, count 5 and get blue. This is the most common triad of colors, and the one from which all the other colors are derived. Other triads are orange, green, and violet. Then Blue green, red violet, and orange yellow. Another Yellow green, blue violet, and red orange, etc. Take any of these triads and use one value of one color for the background color, with the other three colors for the pattern weft.

## 4. Contrasting Compliments.

To get contrasting compliments, take the adjacent colors to the color with which you start. Start with yellow, its contrasting compliments are RV and BV. Start with red, its contrasting compliments are YG and BG. Blue has for its contrasting compliments RO and OY, etc. Try using some of these combinations, with the warp or tabby in a value of one of the colors, and use the other three colors for the pattern weft. You will find from this, that the addition of a common tone to all the colors of any combination relates the hues more closely, and this is a simple method to harmonize the hues of a group.

5. Try weaving a free hand design in "laid-in" technique using great freedom in the design, and just as many colors as you wish, the more the better, for the laid in thread. For the tabby back of the colored threads use fine black thread. Make as much variation in the sizes of the spots of color as possible to add interest.

6. Try using very bright colors for tabby back of any pattern you may have on your loom. Use only one pattern color. Note the sparkle and life of your weaving when the bright color is used for the tabby.

7. Take a group of inharmonious colors. Study them to see,-

(1.) How the hues may be more pleasantly related

(A) By slightly veiling all the colors by weaving them with a warp of some one tone, or tabby of one tone to influence them all. Or by weaving in touches of one tone here and there among the colors. If the contrast of the colors in the group is too great, the overlay color may make the whole too much of one color and so monotonous.

(B) Analyse the colors to see if they are compliments or near compliments.

If so, modify all the hues by making them more neutral so they do not compete with the compliments. Or make them adjacent to one or the other of the two compliments.

(2) Are the colors in a sequence.

(A) If so, subordinate all the hues to the central one, and make all more neutral.

(3) Study the combination and see if they are in the general range of one of the triads. If so, make this relationship more definite to bring them into harmony.

## 8. Analysis of color in nature for use in weaving.

Select a flower and make notes of all the colors you can find in this, either with yarns or with water colors. Work out a color scheme for weaving from this.

No threading is given this month, but I hope that everyone who receives this letter will try just as many of these suggestions as they can. They are well worth the time and effort you put into them. And much may be learned, no matter whether you are an experienced weaver or not. Use some of these color combinations with any pattern you have on the loom. A color sampler will be very suggestive, and as color is the main object, the kind of yarn used should be that which suits the color best.

Have you enjoyed this color "spree" ? Has it opened up a new field for you ? I hope so. Are you afraid of color ? Start on some of these problems with confidence and joy. Create to your heart's content. Use color and get the wealth of vibration and happiness it can bring you. And if at first, you are not satisfied with the results, do not be discouraged. If your colors are not right, there is a reason why they are not pleasing. And you can find it, and in that finding gain much. I have a good many effective color combinations which I could pass on to you, and many of these are in my traveling Exhibits. But I do feel that every weaver should experience color for themselves. Also you will find as you work, that different pattern drafts give different color effects, even if exactly the same colors are used in one pattern as in another.

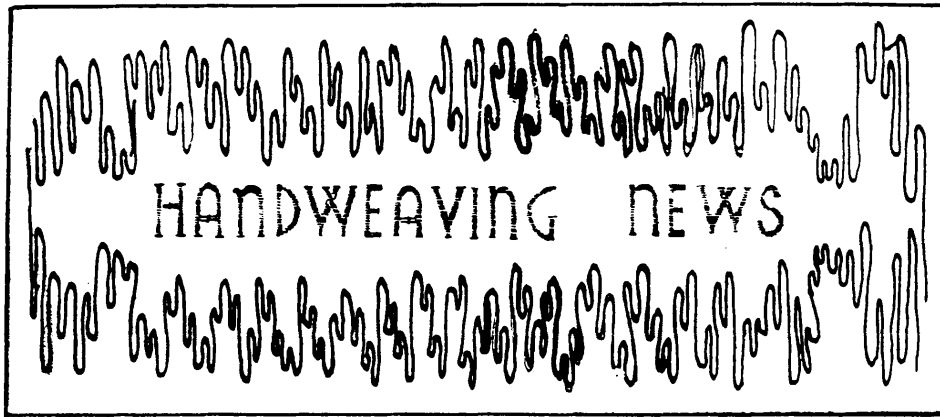
June 1933.

Most sincerely yours,

Thelie Sargent Johnson

12759 Mendota,  
Detroit, Mich.





### Simple "Laid-In" Weaving.

One of the simplest of the free weaving techniques is the simple "laid-in" method of decorating a fabric while it is on the loom. It allows for much freedom of design, and is not nearly as slow as some of the other methods. It can be woven on any loom, even on a cardboard one, which gives the plain weave, and with any type of yarn or thread desired. The only thing to remember is that the effect is better when the colored pattern thread of the design being "laid-in" is heavier than the plain weave or "ground" of the fabric. Also the weaving should be more closely beaten with the batten in the parts where the design is being put in, if it is not an all-over pattern, because the coarser pattern thread will have a tendency to make a more open texture in the weaving where the pattern is, than in the plain weaving.

### "Hit and Miss" Laid-In.

This method is an interesting way to use up all kinds of odd threads and colors in a fabric, and is worked without any definite design previously drawn out. You weave in your colors just as you feel like putting them in, keeping in mind of course some idea of balance. At (A) in Figure No. 1 on Page 2, is a graphic description of this simple technique. Weave a heading of plain weave for the number of inches desired, then start your colored threads as at 1 and 2 of Figure No. 1. One important point to remember, especially if you are using several colors, is to be sure and keep all of your colored threads going in the same direction as your thread of the plain weave. Throw a shot of plain weave tabby from left to right, then in the same shed, lay in, say a rose color at 1 from left to right. Leave a space of the warp, and lay in a green thread at 2, also from left to right. These two threads can be left on top of the weaving, or put below the warp threads if desired. Then throw a shot of the fine plain weave tabby from the right side of the warp all across the width to the left. In this same shed, lock the rose thread around a warp thread, and carry it also from right to left for any distance desired. Then lock the green thread around a warp thread and carry it from right to left for any distance you wish, or to within a few threads of the rose color. The ends of the colors with which you began, may be cut off after the weaving has progressed a short distance, and they are well beaten into the fabric. To finish a color, lock the thread around a warp thread and carry it back in the same shed, beat up well, and cut off after the plain weave tabby is well beaten up.

Rugs in heavy materials, luncheon sets of linen, towels, and curtains can all be easily and quickly woven after this method. For a towel, set 40/2 linen warp at either 24 or 30 threads to the inch, and lay in with six strand D.M.C. cotton or better still with heavy linen floss, using plain weave tabby like the warp. A colored hem with a narrow laid-in border is effective. An unusual table runner, can be made with gold silk warp set 24 threads to the inch, with tan fabri wool for the plain weave tabby, and heavy Germantown or tapestry wools for the pattern in blues, greens, blue-greens, and a touch of orange. Try this weave and see how effective it is.

## "LAID-IN TECHNIQUE.

Figure No.1

- (C) Weaving diagonals on open warp. A plain weave tabby thread can be added if desired. The diagonals may drop one, two, three or more threads as desired.
- (B) Weaving on an open warp, with no plain tabby weave between the pattern colors.
- (A) Weaving "Hit and Miss" method or designing the pattern on the loom as the fabric is woven. The fine line indicates the plain tabby weave. The threads of the color may be carried back and forth as desired.

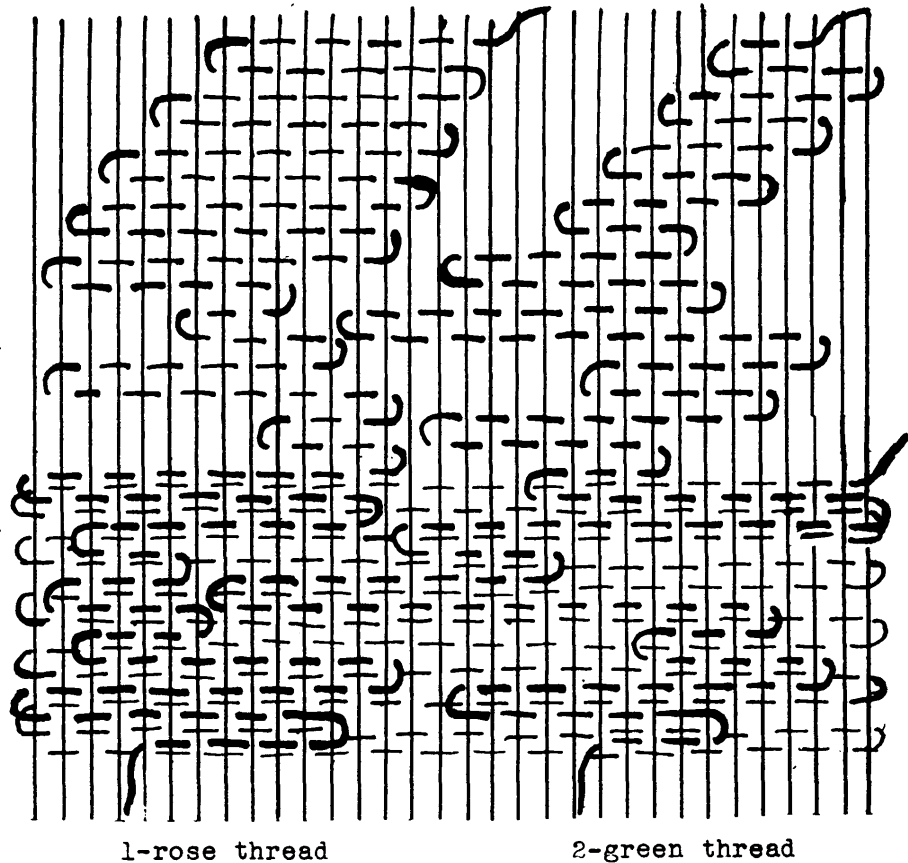
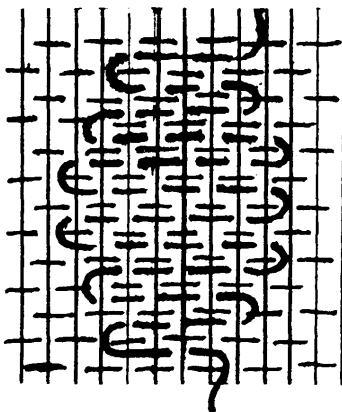
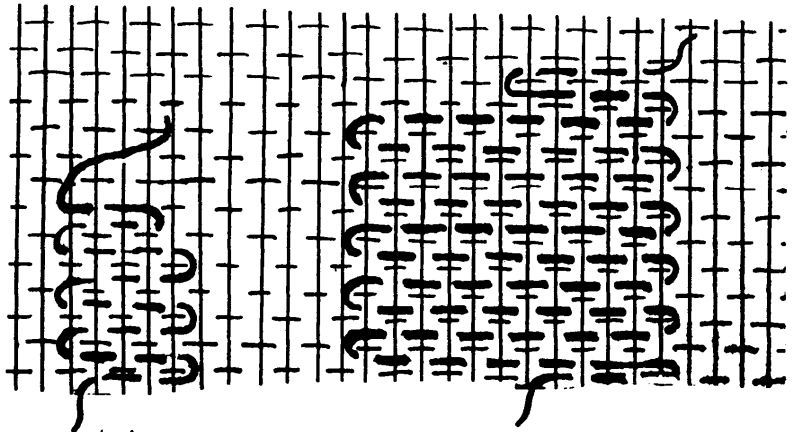


Figure No.2.



- (D) Weaving a circle. Circles are rather difficult, but are possible. The finer the fabric is set in the reed the better the appearance of the circle.

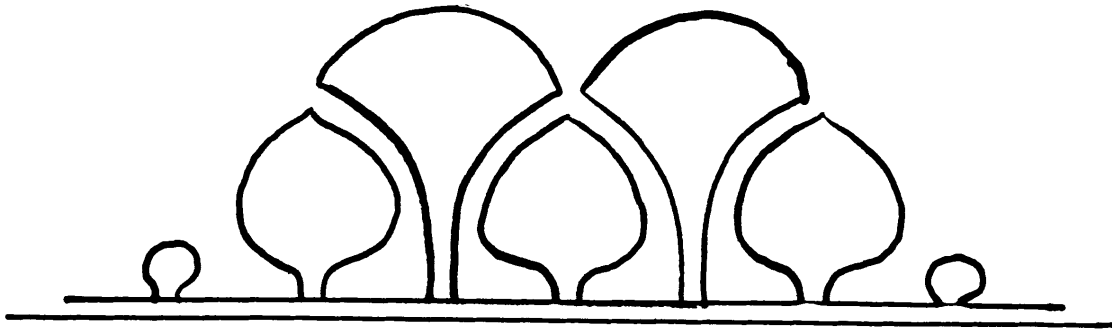


- (E) Weaving squares. Simple geometric forms of squares and lines are very easy to weave in this technique. Designs made after the lines and squares described in the January 1936 News will be found effective. The border at the bottom of Page 3 can be used for a towel. Weave a colored hem of plain tabby weave in green linen, several rows of white tabby, then green tabby for border, with squares in shades of yellow.

© NST

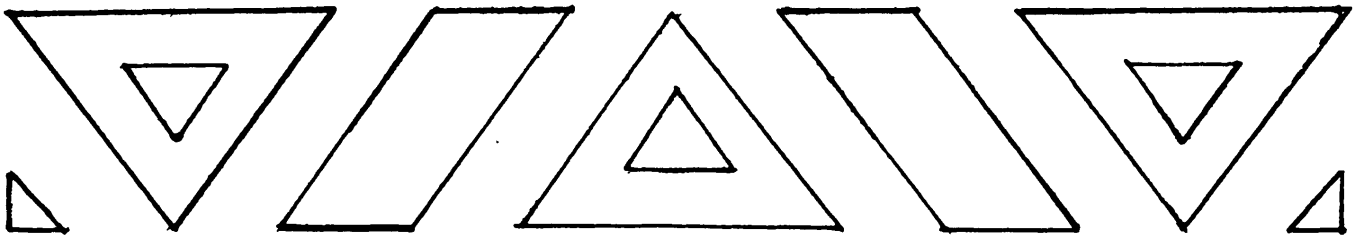
## Simple Designs for "Laid-in" Technique.

Figure No.3



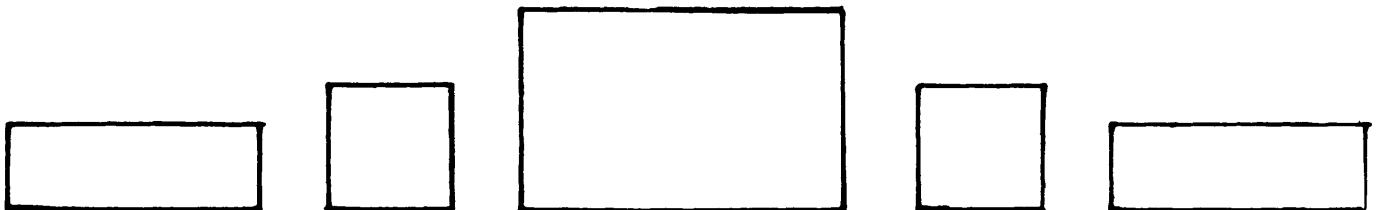
This little design of trees could be used for a border for a towel. It is slightly smaller on this sheet than the original, and may be enlarged or traced from this if desired. It should be woven of fine material, linen or cotton, set at 30 threads to the inch. It will give good practise in weaving an approach to the circle and more realistic designs. The method of weaving is the same except that it is better to have the right side of the weaving on top, so bring your pattern threads down beneath the warp each time, so that they can be easily brought up between the warp threads when you increase or decrease the design. Pin the paper pattern under your warp threads, and be sure you have enough width of paper on your sheet so you can pin it easily to the tabby weave heading. Weave the lines with a single laid-in color, then start seven different threads of color for the bottom of the trees. Increase and decrease according to the pattern. Let the top of the paper pattern hang down, and do not have it too stiff so it will interfere with your beating. Bring it up underneath your weaving with your fingers after each shot of the plain tabby weave.

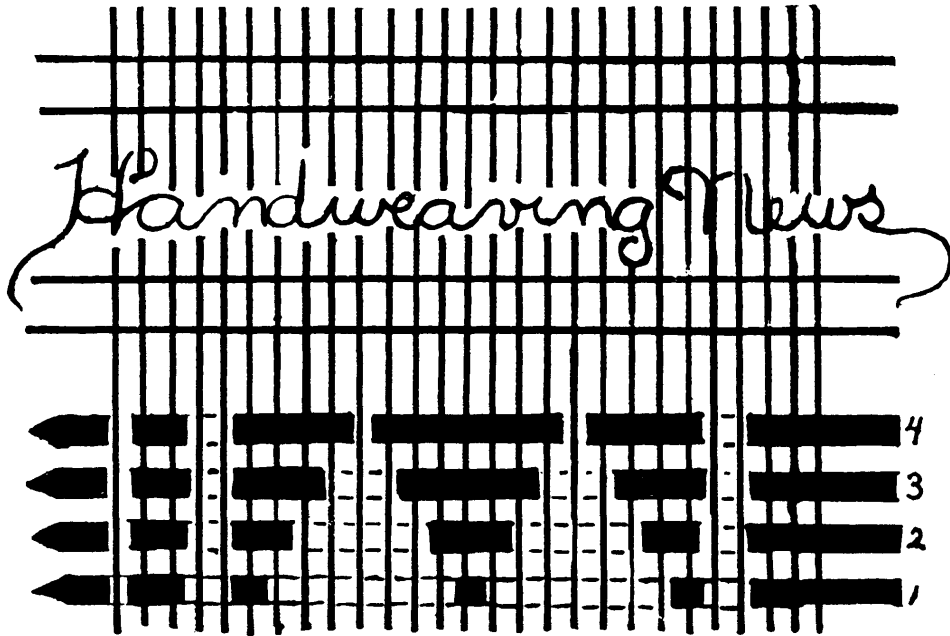
Figure No.4



This simple design of diagonals will give practise in weaving diagonals, and is just a suggestion. There are many very simple but effective designs which can be woven in this way.

Figure No.5.





SLIP STICK WEAVING.

Weaving by means of shed sticks which slip by each other, is an interesting form of pattern weaving that offers a most fascinating field for experiment to the weaver who enjoys working out her own patterns. And it requires only the simplest kind of a loom, the only requirement being a loom with long heddle eyes, so that the shed sticks which are placed at the back of the loom can raise the different groups of threads to form the pattern shed without any interference. The eyes of the heddles should be at least an inch long. Warp your loom and set it up in the usual way. If you have only a two harness loom, thread first one harness and then the other, and sley through the reed. Then you are ready to insert the pattern sticks.

On page 3, three different pattern drafts are given. The S on the draft means to skip over, and the X means pick up on the pattern stick. Let us take draft No. 2, and describe the method in detail. This draft has a repeat of 23 threads, and the center of the draft is on the 13th thread. Plan to repeat this threading draft on the width of your warp so that this thread will come in the center of your warp, in order that the pattern will balance on each side of the center. With a flat pick up stick, I use black ones which are most convenient to use or white threads, start at the beginning of the draft, and proceed as follows for one repeat, - Skip over 2 threads, pick up 2, skip 1, pick up 7, skip 1, pick up 7, skip 1, pick up 2, - repeat this all across the width of the warp. This is stick No. 1, push it toward the front of the loom. Then take pick up stick No. 2, and reading on the second line of the draft, pick up the second row as follows, - skip 2, pick up 2, skip 2, pick up 5, skip 3, pick up 5, skip 2, pick up 2, continue this repeat all across the warp. Then take stick No. 3, - skip 2, pick up 2, skip 3, pick up 3, skip 5, pick up 3, skip 3, pick up 2, - repeat this third row all across the warp. With the fourth pick up stick, - skip 2, pick up 2, skip 4, pick up 1, skip 7, pick up 1, skip 4, pick up 2, - and so on all across the width of the warp. Now you will find that any one of these pick up sticks will slip by each other, if they do not, you have made a mistake in picking up your threads, and should check carefully and correct this. Turn each stick, one at a time, on its edge, and insert another stick in the shed thus made, back of the heddles. It is very important to see that you get this back stick in the right shed, and it is advisable to mark each one in some way so that you can tell them apart as you weave. A tag on each one, with 1, 2, 3, and 4, is a good way to do. If you have a portable loom, it is best to tie these sticks to the edge of the loom so they cannot slip out, and cause you to lose the shed.

You are now ready for the actual weaving. Do several rows of the plain weave for a hem if desired. On Page 3 at the right is a drawing showing some of the simple borders possible with this kind of weaving. Starting at the top, reading down, 1-3x means to turn stick one on its edge, and in this shed in front of the reed throw one shot of pattern weft, beat up, turn the stick down, and throw a shot of the plain weft or binder, then turn stick one on its edge again, and throw another shot of the pattern weft, then turn stick one down and throw a shot of the alternate plain weave, repeat the same thing once more to make 3 times. Each row of pattern weft is followed by a shot of the plain weave, just as in any regular over-shot weaving. Following down the order of the figures from top to bottom, you will see spaces between the borders, these are just a few shots of plain weave, and may be omitted if desired. Many different possibilities lie in this very simple weaving, and the weaver desirous of creating unusual fabrics has a splendid opportunity in this interesting form of weaving.

The sticks may be used in any order which pleases the weaver, and of course with the addition of color, many different effects can be achieved. Try shading from dark to light, either on the same pattern shed stick, or on successive ones. Also try weaving with two or more shades of a color on the same shuttle. Then you can also, pick up just parts of the pattern shed, and not carry the pattern weft all the way across the loom. This is a very effective thing to do, especially for bags, and a great deal of variety can be obtained in this way too.

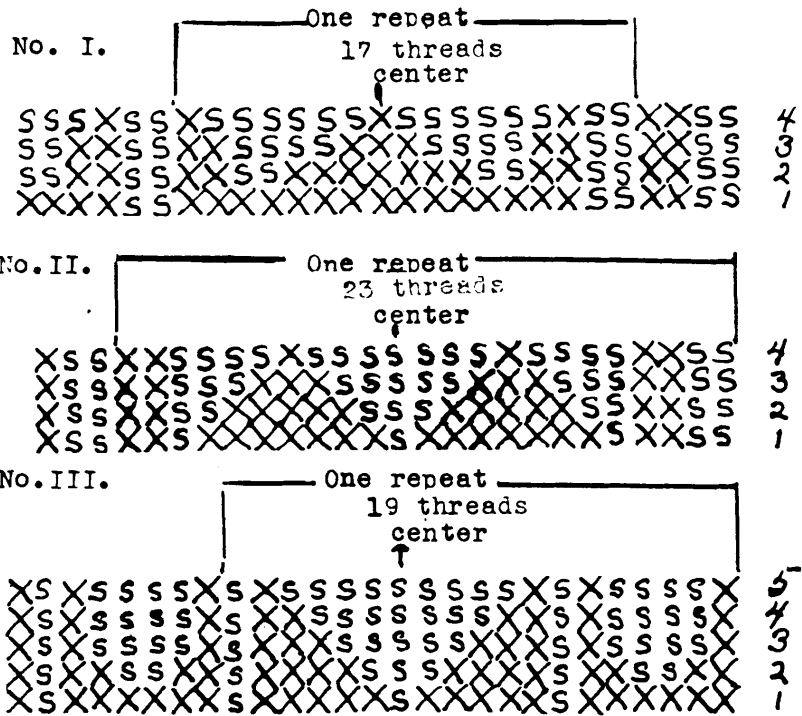
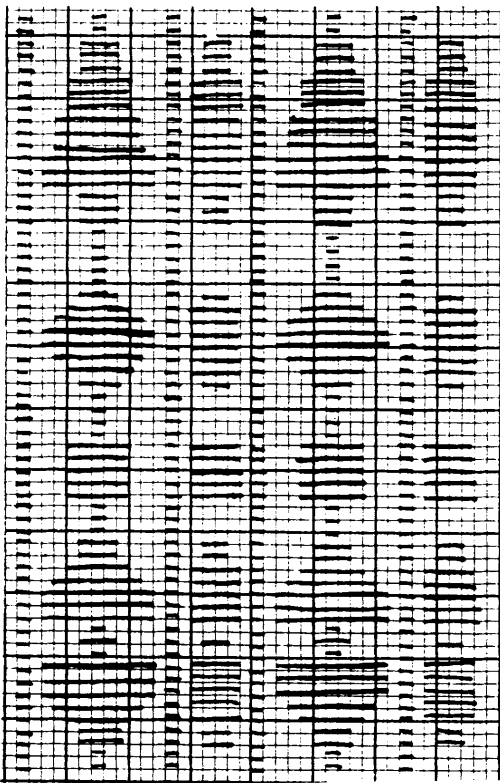
If you use draft No. 1 on page 3, plan to use fairly fine material, and set it at about 24 or 30 threads to the inch. If you look at the draft you will see that the pattern picks up on stick one, fifteen threads, which makes a very long skip if the warp is not set fine in the reed. This draft was used for a very effective luncheon set recently. Warp was unbleached linen set at 24 threads to the inch, and weft was white linen the same size as the warp. The border exactly as shown in the drawing of draft No. 1 was used on each side.

At draft No. 3 on page 3, you will see that 5 shed sticks are used. The addition of more shed sticks adds to the variety of the pattern sheds and of course does also increase the pattern possibilities. This pattern can be woven in a great many different ways, only a few of which are shown in the drawing of pattern draft No. 3, at the top left of page 3. With the use of more than four shed sticks, it is also possible to work out patterns with very large repeats of different sized skips. In planning out new patterns, the only thing you have to remember is that once a thread is skipped over, it must be skipped for the rest of the pattern above it. Or in other words, if a thread is an S on the first pick up stick, it must be an S on all of the pick up sticks which follow it, namely also on 2, 3, 4 etc. If this is not done, the sticks will not slip by each other so that the pattern sheds can be made easily. Another thing which is also a limitation of this kind of weaving, is that care must be taken not to have the skips or the pick ups of too great a number of threads, or the weft threads will pass over too many warp threads, and make too long an over shot either on the right or the wrong side. This is all right if the wrong side of the fabric will not be very much in evidence as in a bag or pillow top, or patterns with long skips can be used where the warp is set fine in the reed. If these things are kept in mind, it is very easy to devise other pattern drafts. And for those who have only a two harness loom to work with, this method will offer an unusual variety of interesting weaving, and a method of doing pattern weaving on a two harness loom. The graphic representation of these pattern drafts is one of my own devising, and they make it much easier not only to draw out the pattern on cross section paper, but also to use to pick up the pattern on the pick up sticks.

If you wish to use these patterns on a loom with short heddle eyes, the pattern can be picked up on the pick up sticks as described above, but instead of using shed sticks back of the harnesses, it would be better to tie in heddle rods, and secure them on a small frame at the front of the loom just back of the reed. The method of tying in a heddle rod was given in the July News letter under the directions for the setting up of a picture frame loom. A diagram of the method of attaching the frame to the front of the loom is described in the leaflet, "Simple Draw Loom Weaving on a Four Harness Loom", and will not be repeated here. This may be had for \$1.50, if desired.

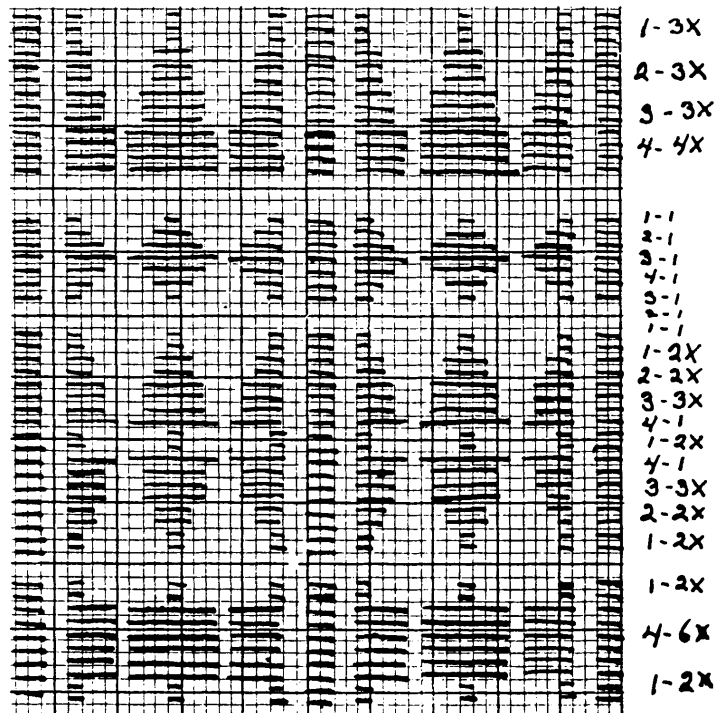
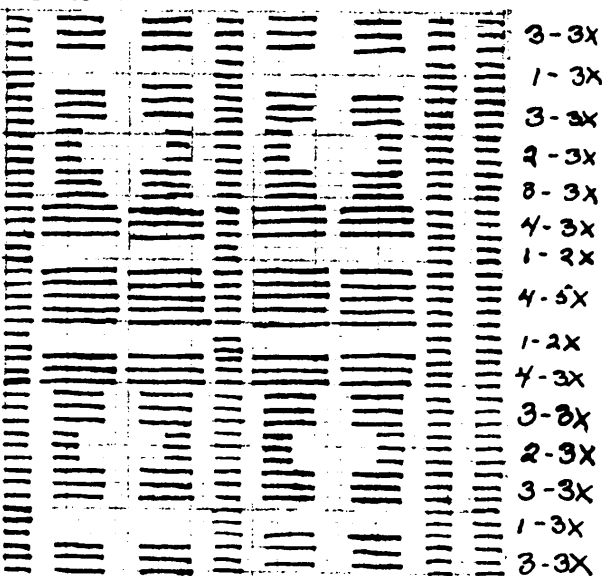
Pattern drafts for Slip Stick Weaving.

Drawing showing the woven effect of Draft No.3

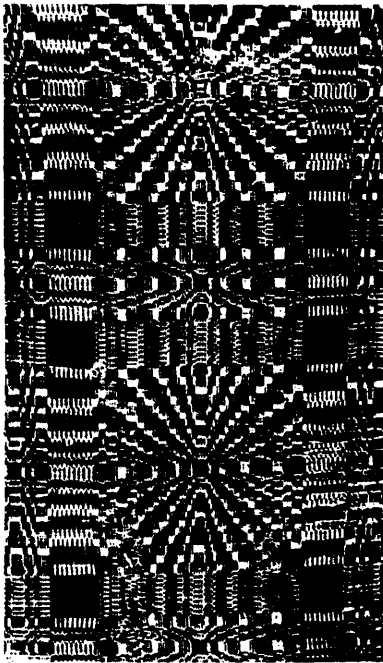


Drawing showing the woven effect of some of the combinations by using four shed sticks on draft No.2. Many more are possible. The breaks in the drawing indicate the places where just the plain tabby weaving is used to separate the borders.

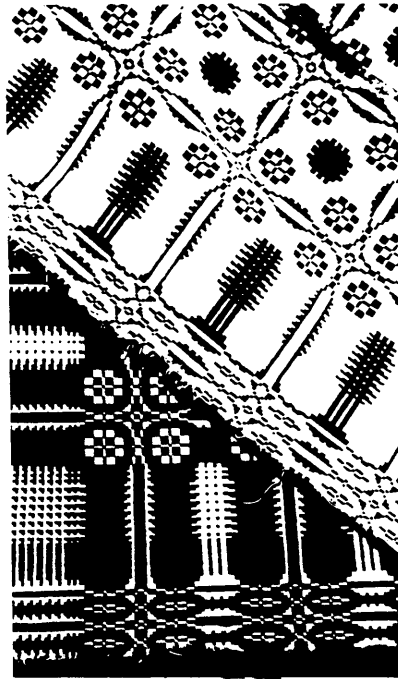
Drawing showing woven effect of draft No.1. The threads on stick No.1 of this draft pick up 15, and so this skip is a very long one, so it is best to set this in fine thread at about 30 to the inch.



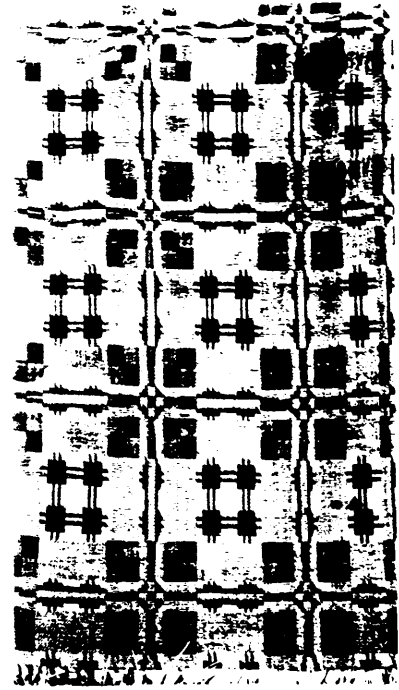
# HANDWEAVING NEWS



No. 1.



No. 2.



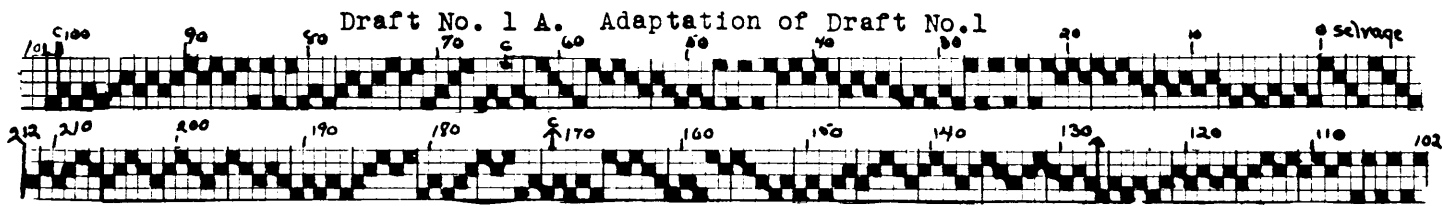
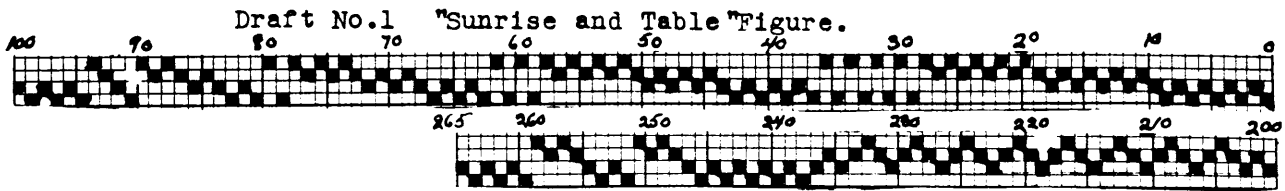
No. 3

## Three Old Colonial Coverlets.

This month, in answer to several requests I have had from subscribers, I am sending you three old Colonial coverlets, the photographs of which are shown above. No. 1 is a four harness draft of a blue and white one which I bought in Barnard, Vt. several years ago. It was woven about 1725-30 as near as I could get its history. It is one of the Sunrise type of pattern, sometimes called Jefferson's fancy, or Sunrise on the Walls of Troy etc. Names differ in different parts of the country, but the pattern is really a simple table with the radiating sunrise. The draft for this is given on Page 3, and also a draft of a similar pattern which I wove on a mercerized cotton warp No. 5, with orange Germantown yarn for tabby, and the same yarn in brown and tan for the pattern. This was quite different from the old one, and even very modern in its texture and general effect. The warp was set at 15 threads to the inch in this coverlet which was much coarser than the old one the pattern was adapted from.

No. 2 is a double woven coverlet, single snowball and roses with a pine-tree border. This coverlet and also No. 3 belonged to Miss Fullerton, one of the students in my weaving class at Wayne University this summer. Miss Fullerton says that these belonged to her ancestors who came from Pennsylvania, and were probably woven by her great grandmother Craig. The drafts for these in "summer and winter" weave are given on Page 3. I like to call No. 3, the Craig coverlet, on that account. It was also a double woven one, but rather exceptional in that it was woven all of very fine wool, one warp was all of dark blue, and the other warp was of soft light blue for the pattern blocks 3, 4, and 5, and red orange for pattern blocks 1 and 2. These were both pieced coverlets. No. 3 had a narrow border which does not show in the photo above, but is included in the draft on Page 3.

No. 4 on page 3 is the draft of another pine-tree border and single snow ball coverlet which came to me recently, and is owned by Mrs. Savage, another one of my weaving students. This gives the pine-tree border on the left hand side, and was double woven in dark blue wool for one warp and white cotton for the other.



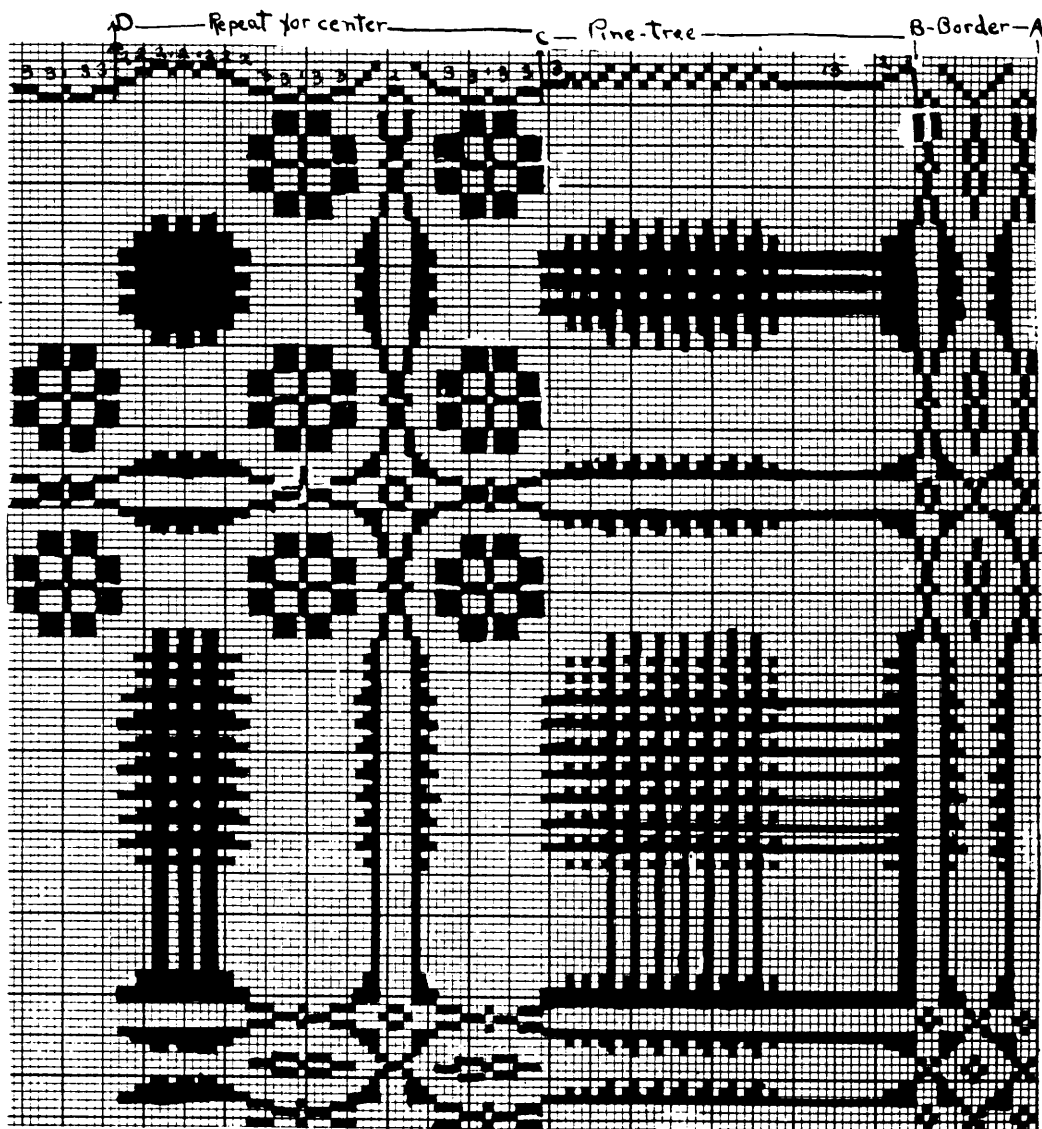
Use the regular four harness tie-up for both of the above drafts. Weave the pattern blocks in the order in which they are threaded into the loom. In No.1, the complete "Sunrise" is from 0 to 100, then 99 back to 0. The table figure begins with thread 200 to 265, then 264 back to 200. These may be repeated as desired. Center the coverlet at thread 100, the center of the "Sunrise", or at thread 265, which is the center of the table figure. In No.1 A, all of the "Sunrise" and table figure are complete as given. Center a coverlet on either thread 65, or on thread 170. A plain twill or simple diamond border may be added if desired.

Draft No.2 Pine-tree Border, Roses and single Snowball.

Order of Treading the Pattern Blocks.

Start at the lower right hand corner of the drawing. Weave the blocks as follows, -

- |         |                  |                 |                  |
|---------|------------------|-----------------|------------------|
| 2-1     | } Edge<br>Border | 5-1             | } Star<br>Center |
| 1-1     |                  | 45-1            |                  |
| 2-1     |                  | 845-1           |                  |
| 345-1   |                  | 2-1             |                  |
| 45-1    |                  | 1-2X            |                  |
| 5-1     |                  | 2-1             |                  |
| 1-1     |                  | 345-1           |                  |
| 2-1     |                  | 45-1            |                  |
| 1-1     |                  | 5-1             |                  |
| 5-1     |                  | 1-3X            |                  |
| 45-1    |                  | 2-3X            |                  |
| 345-1   |                  | 1-1             |                  |
| 2-1     |                  | 2-3X            |                  |
| 1-1     |                  | 3-3X            |                  |
| 2-1     | 5-2X             | } Snow-<br>Ball |                  |
| 3-45-2X | 45-2X            |                 |                  |
| 45-2X   | 345-2X           |                 |                  |
| 5-13X   | 45-1             |                 |                  |
| 45-1    | 5-1              | } Pine-<br>Tree |                  |
| 5-1     | 345-2X           |                 |                  |
| 345-1   | 45-1             |                 |                  |
| 45-1    | 845-2X           |                 |                  |
| 5-1     | } 7X             | 45-2X           | } Rose           |
| 45-1    |                  | 5-2X            |                  |
| 5-1     |                  | 1-3X            |                  |
| 45-1    |                  | 2-3X            |                  |
| 45-1    | } Rose           | 1-1             | } VII.           |
| 5-3X    |                  | 2-3X            |                  |
| 1-3X    |                  | 2-3X            |                  |
| 2-3X    |                  | 1-3X            |                  |
| 1-1     | } III.           |                 |                  |
| 2-3X    |                  |                 |                  |
| 3-3X    |                  |                 |                  |





Explanation of Draft No.2.

From A to B is the edge border, from B to C is the Pine-tree, and C to D is the repeat for the center. To weave this in the "Summer and Winter" technique requires seven harnesses, five for the pattern blocks, and harness 1 and 2 for the alternate threads. The actual threading of each pattern block is shown at (A) below. Each pattern block unit is composed of four threads of warp, and each unit is repeated as shown on the drawing of Draft No.2. The full tie-up draft requires 12 treadles, but if you weave with both feet, you can use only ten treadles, by tying treadle one to harness 1, and 2 to harness 2, then weave these alternately with the pattern block harnesses. The figures in the Drafts 3 and 4 indicate the number of times each unit of the actual Threading draft is repeated. To draw down the patterns of drafts 3 & 4, draw out the larger draft as in Draft No.2, and follow the order of drawing down the pattern blocks in the order of the treadling as given. If you have a Structo ten harness loom, it is very easy to bring down the proper harnesses for weaving the different pattern blocks.

Tie-up Draft

1	2	3	4	5	6	7	8	9	10	A	B
					7	7	7	7	7		7
					6	6	6	6			6
					5	5					5
		4	4								4
	3	3									3
	2	2	2	2	2	2	2	2	2		2
1	1	1	1	1	1	1	1	1	1		1

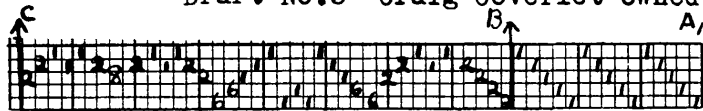
I. II. III. IV. V. Plain Weave  
 Pattern Blocks {  
 {  
 {  
 {  
 {

The directions for the weaving given on Page 2 refer to the order of the weaving of the pattern blocks, not the treadles used. The roman numbers at the bottom of the tie-up draft refer to the pattern blocks. If this is not clear, write me.

Actual Threading of the Units of the pattern blocks.

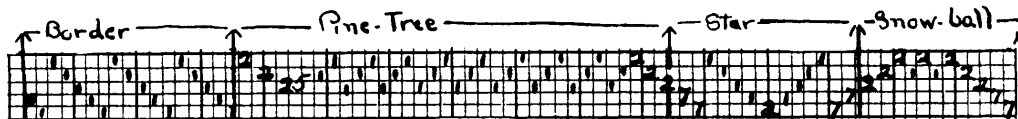
BLOCK V	BLOCK IV	BLOCK III.	BLOCK II.	BLOCK I.	
7	7				
	6	6			
		5	5		
			4	4	
				3	3
2	2	2	2	2	
1	1	1	1	1	

Draft No.3 Craig Coverlet owned by Miss Fullerton.



This is a much more unusual coverlet than the one at Draft No.2. From A to B is the simple border, and from B to C one repeat of the pattern. This is the shortened up draft, it should be drawn out one square for each unit if you wish to expand the draft to get the woven effect. Weave the pattern blocks as follows, - Block 2-1,1-1,5-1,45-1,345-1;- repeat this 3 times. Then block 2-2x,1-2x,5-2x,45-2x,345-2x,45-1,345-1,45-2x,5-2x, this complete's the simple border. For the main pattern repeat,weave the blocks as follows, - Block 1-7x,2-7x,5-1,45-1,345-1,1-1,2-1,1-1,345-1,45-1,5-1,2-7x,1-7x,5-2x,45-2x,345-1,45-1,345-1,45-2x,5- 8x,45-2x,345-1,45-1,345-1,45-2x,5-2x.

Draft No.4. Mrs. Savage's Coverlet  
 Single Snow-ball with Pine -tree Border on left side



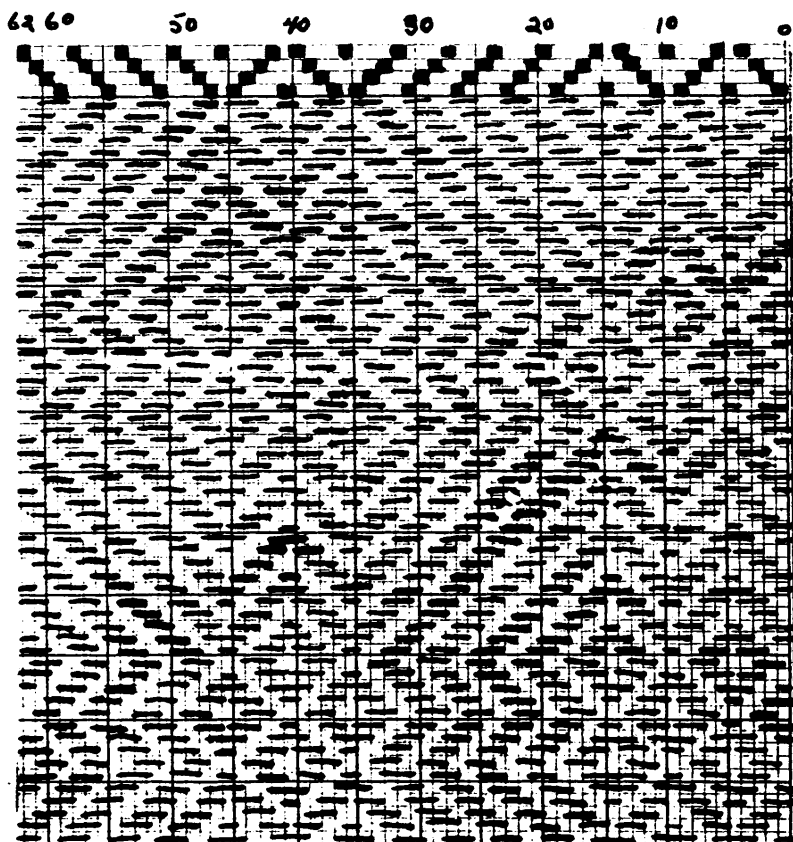
This draft may be woven on the same tie-up draft as No.2 & 3, and it is also a five block pattern which can be woven on seven harnesses in the "Summer and Winter" weave. The Pine-tree border is similar to the one at No.2 on Page 2, but written to come on the left side of the coverlet. If you wish to have your border on the right side of your loom, just reverse this draft. The simple edge border is almost the same in the threading as for No.2, but the effect is quite different as the order of the blocks as they are woven are changed. To weave, proceed as follows, - Block 2-1,1-1,5-1,45-1,345-1, repeat this 3x for the simple edge border at the left. Then for the Pine-tree, Block 2-1,1-1,345-2x,45-2x,5-25x; \*45-1,345-1,5-1; \* repeat from \* to\* 8x; For the Star 45-1,345-2x,45-2x,5-2x,1-14x,2-14x,345-1,45-1,5-1,1-1,2-2x, center of start figure, repeat back to beginning of star figure in same order. Then the snow-ball figure, block 5-2x,45-2x,345-2x,45-1,345-2x,45-1,345-2x,45-2x,5-2x. I hope that this explanation has been enough so those of you who wish can use these drafts all right. If there are any questions about them, be sure and write to me.

# Handweaving News

## A Variety of Threading Drafts for the Four Harness Loom.

As it has been some little time since I have included in the News any four harness drafts, I am sending you some this month which I hope you will find useful for Christmas gifts etc. The pattern draft given below was drafted from the photograph of the linen on Page 76 of the book entitled, "Early American Textiles" by Frances Little, by Mrs. Evelyn Lauer one of our subscribers. The book states that this was of the wedding linen of Sidney Howland (of Mayflower descent), woven in the early 19th century. Mrs. Lauer has used this for towels, and has kindly drawn out the pattern and given the arrangement and treadling as she used it on her No.600 loom.

Thread the No.600 loom as follows;-



1,2,3,4, repeat 3x, then 9 pattern repeats as given at the right, then to end thread the first 30 threads of the draft. This takes up 600 threads, or 10 spools of 40/2 linen. Weft used was No.14 half bleach.

Only one shuttle was used and no plain tabby shots were used, Just one shot on each pattern shed in the order as given below, for levers of Strueto table loom.

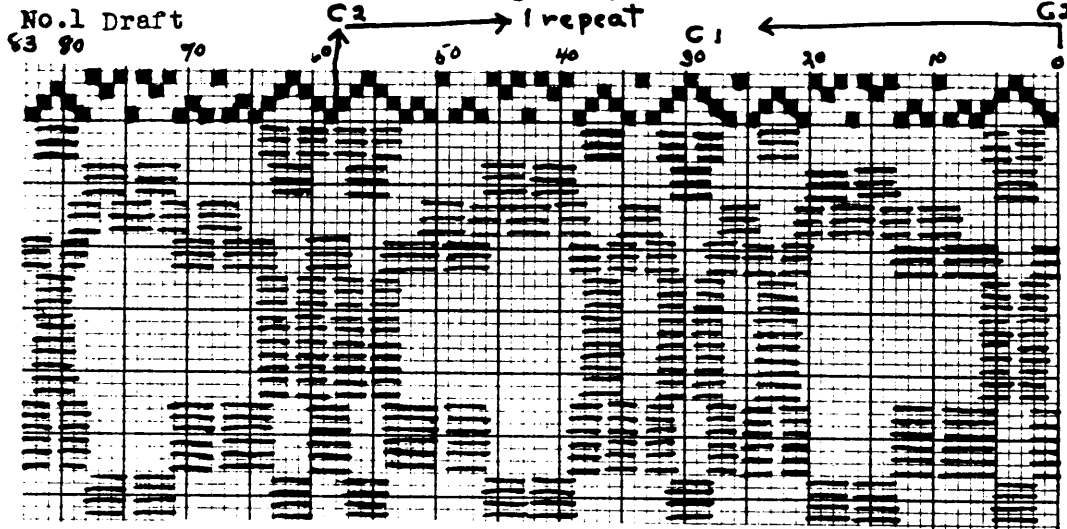
Treadling;-

3-4,1-4,1-2, 2-3, repeat 4x. Then 3-4,1-4,3-4,2-3,1-2,1-4,1-2,2-3, 3-4,1-4,3-4. Now 2-3,1-2,1-4,3-4, repeated 4x. Then 2-3,1-2,1-4,1-2, 2-3,3-4,1-4,3-4,2-3,1-2,1-4,1-2, 2-3. Repeat from the beginning until of the desired length.

This would also make an attractive luncheon set woven of 40/2 linen like the warp. Bags would be nice woven on the same warp of rayon or fine silk chenille, or of fabri yarn.

(Note that the pattern is twill combined with "Rose-path" as described in the June News.)

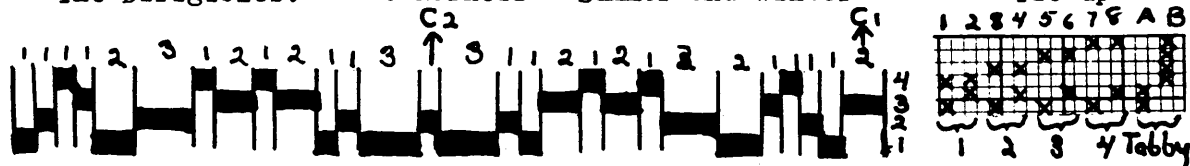
Two Patterns designed by Mrs. Florence Bratten.



This rather unusual pattern draft is capable of many different variations. It can be used for bags, for borders for towels, or for an all over pattern for upholstery material with good results. Only one half of a wide border is shown at the left. One repeat is 58 threads and note that the draft can be centered in two places, one at thread 30, and the other at thread 1 where the draft begins

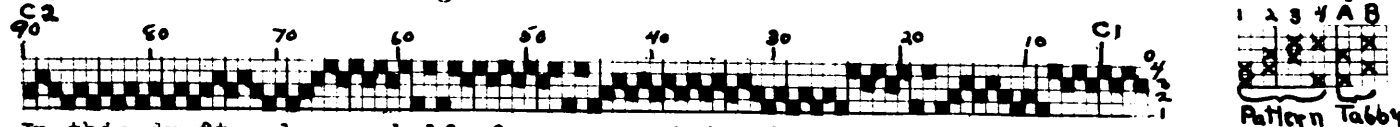
To thread into the No.600 loom with a warp of 600 threads, thread from thread 11 back to thread 2, then 10 full repeats of the pattern from 1 through thread 58, then to end thread from 1 to 11. The treadling for the pattern as shown is as follows;- 1-4-3x; 12-3x; 23-3x; 34-3x; 14-10x; 34-6x; 12-4x; center, repeat back to beginning in same order.

No.2 Draft "The Dirigibles." 6 harness "Summer and Winter"



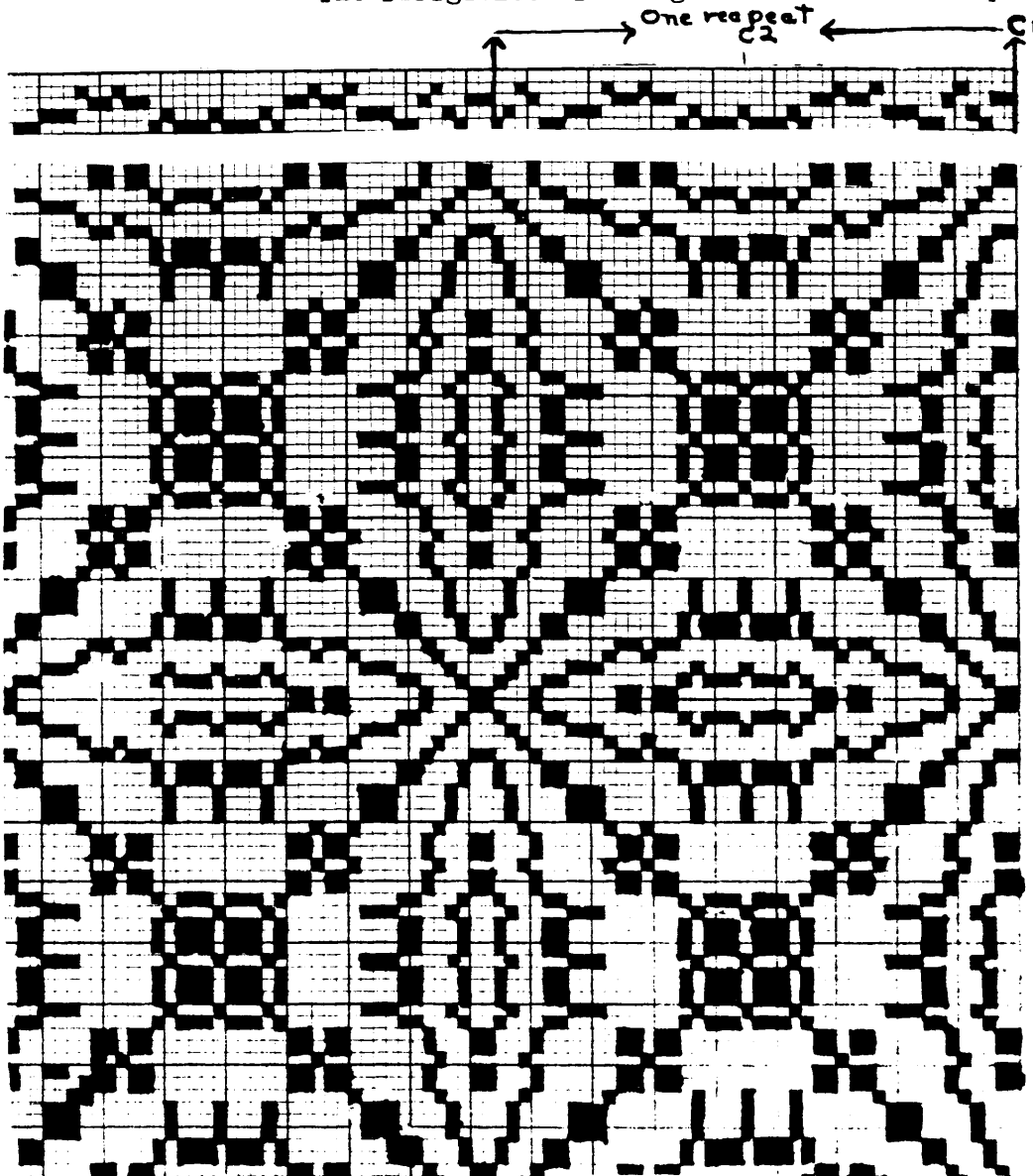
This draft is drawn out on Page 3 so you can get the effect of the pattern design. The draft given above is the short pattern draft for a six harness loom to be woven in the "summer and winter" weave. Only one repeat of the pattern is given, and the C's indicate the places where the pattern centers. In planning for a coverlet, its center should come on one of these pattern blocks. Each unit of the above draft represents 4 threads, - begin to thread, 1,5,2,5,1,5,2,5, for the first two block unit, for the next one block unit 1,3,2,3, then the next 1 block unit 1,4,2,4, etc. This can be used for the key draft for the over-shot pattern draft given below.

No.3 Draft "The Dirigibles" 4 harness Over-shot draft



In this draft only one-half of one repeat is given. For full repeat, thread from 1 to 90, then 89 back to 1. Note that the pattern can center on either thread 4 or thread 90 as C 1 or C2. This helps in planning to put this draft on your loom. These center blocks are also marked with C's on the draw down of the pattern on the next page. The 4 harness draft follows the same order of pattern blocks as the 6 harness draft above. To write this 4 harness draft, 4 threads were used for each unit of the pattern blocks on the key draft, but an extra thread has to be added occasionally to keep the correct tabby alternation. The key draft starts on the 3rd pattern block, and is a 2 unit block, so write 3,4, 3,4,3,4,3,4. The next unit is on the 1st pattern block, so write 1,2,1,2; the next unit is the 2nd pattern block, so write 3,2,3,2, etc. The weaving of the pattern follows the same order as the blocks are written, but omit in the weaving the occasional 2 thread blocks which occur, as this pattern is written partly "on opposites." To put this pattern on a warp of 600 threads, begin to thread at thread 32, thread back through thread 1, then thread 2 to 90, 89 back to 1. Then repeat from thread 2 to 90 and 89 back to 1 twice more, then thread from 2 through thread 32. If you thread the first and last thread double in the heddle eye, it will take up your full 600 threads. This is an interesting pattern to use and many variations are possible in the weaving of it. If you wish to make the blocks smaller, you can shorten up all of the pattern blocks by two threads, and get the same woven effect.

## "The Dirigibles" Drawing to show effect of pattern



Order of weaving the  
Pattern Blocks.

3-2x  
1-1  
2-1  
4-1  
3-1  
1-2x  
2-3x  
4-1  
3-2x  
4-1  
3-2x  
1-1  
2-1  
1-3x  
2-1  
1-3x  
2-1  
1-1  
3-2x  
4-1  
3-2x  
4-1  
2-3x  
1-2x  
3-1  
4-1  
2-1  
1-1

This drawing shows the effect of the pattern when woven, but does not show the exact texture. The order of weaving the pattern blocks is given at the right of the drawing. But for the tie-ups for both the "Summer and Winter" draft and the over-shot, refer to the drafts on page 2. Those of you who are familiar with weaving 6 harness drafts will have no difficulty following this.

Other suggestions for these drafts.

Draft No.2. Try using this for towels made of silk boucl'eyarn, on either a 20/2 cotton or a No.20 mercerized cotton warp. They give the effect in texture of a bath towel and can be carried out in white with pattern in white, and colored linen or mercerized cotton for the tabby between the pattern shots. The mercerized cotton warp is especially nice. Or they can be carried out in colors, peach, blue, green, or rose for the plain body part of the towel, with borders in white with colored tabby. Linen towels on 40/2 warp with No.20 natural linen, No.14 grey linen, or No.14 bleached linen in a rough weave will make an excellent gift. For these you could use either Draft No.1 or No.2. These are very practical drafts and there are many ways in which they may be successfully used.



### Designing Handwoven Textiles.

All handwoven fabrics, no matter how simple, should be planned or in other words designed. Let us try to design for use today, rather than "copy" what past periods have given to civilization. We are not living in Colonial America, or in stage coach days, but in the present age of invention and speed. Radio, telephone, automobiles, etc. are at present all around us, and symbolic of the age in which we are living. We would not think of riding in a car built in 1920, and yet we are perfectly satisfied to wear clothes and use textiles in our homes which were designed for use in homes fifty to a hundred years ago. We can be sure be inspired by all that has gone before us, but let us try to evolve textiles that belong to our own time, rather than past ages. The study of Colonial coverlets, for instance, gives us appreciation and knowledge of the time and effort which our grandmothers needed to produce the treasured heirloom which has come into our possession. And if our knowledge of weaving and the loom has been carried far enough, we can take and use many of these old Colonial pattern drafts to evolve new fabrics with new threads very different from those of the old coverlet. In the same way, we can use and learn to appreciate many of the lovely old foreign textiles, such as tapestries, etc. which have found their way to our shores. Their techniques can be adapted to new designs and new uses far different from that intended in the original fabric.

The materials of which the article is to be woven must also have some consideration as the design is being planned. What kinds of yarn or thread are to be used? Are they appropriate for the design which has been planned? What are their possibilities and what their limitations? If color is to be used in weaving the design, is it possible to obtain the colors used in the design in yarns on the market. Bernat's color card of tapestry wools is a great help when it comes to the planning of a design to be carried out in colors. And if an article is to be made of linen, for instance, the color of the linen threads which are obtainable must be considered as the design is made. Or you can start the other way around, take a definite kind and color of threads, and build your whole design of what you intend to weave around them. I myself never get even a small swatch of sample threads in lovely colors but what my mind immediately begins to think of all the lovely things which they could be used to make, and of course the design builds itself up with the threads. Even different kinds of threads have many possibilities for different textures, even though there is only a slight variation in the color of the threads to be used.

Another requisite of good textile design is that it should be suited to the technique with which it is to be carried out. Right here I like to make two large divisions of loom techniques; - one what I call "Free woven Pattern Design" and the other "Loom Controlled Pattern Design". The "Free woven Design" is entirely controlled by the skill, hands and mind of the weaver, while the "Loom controlled Design" is controlled to a very large extent by the pure mechanical arrangement of the pattern draft in the way the threads of warp have been threaded into the harnesses of the loom, as well as the manner in which the treadles are used.

In general, when attempting to make a design for weaving, I have found it a good plan to first draw out, preferably in actual size, the outline of the article to be woven. This gives you some definite idea of the space you have to fill, and you are at once brought up to the problem of the right length in relation to the width. After the width has been decided, one of the first questions that students generally ask is, "how long shall it be." Many people have an instinctive feeling for good proportions, while others need guidance even in this simple problem. And for those of you who wish a definite help on planning width in proportion to length, I refer you to "Handweaving News" for January 1934, where you will find an adequate simple explanation based on the use of dynamic symmetry with all of the complex mathematics left out. With this simple method, one can easily determine the correct length in proportion to the width.

The next step is to fill the working area with masses of some sort using a variety of sizes as well as different kinds of shapes and lines which carry out and conform to the structural size and form of the object being designed. One of the easiest methods I have found is to use colored paper and scissors. The method of "Designing with the square as a Unit" was described in the Handweaving News for 1936. In this way squares and lines composed of the unit square can be cut out in actual sizes and moved around and placed as suits one's fancy until a pleasing arrangement has been found. Other shapes can also be used as well if desired. Where can the student look for ideas and inspiration for designs that are simple. One of the best sources are the Indian baskets and rugs. Current copies of Design magazine for October, November and December 1937 offer a wealth of material which could easily be adapted for numberless things. Two of the best books on Indian material are, "Navajo Weaving" by Charles A. Amsden, and "Indian Blankets and their Makers", by George Wharton James. "Some of the Latest Models of Finnish Rugs" can be had from Albert Bonnier, 4th Ave. New York. This has in it many fine illustrations of rugs in color, and is an excellent source for ideas. Those of you who have the libraries of the larger cities and Art Institutes will find there much valuable material for original designs which are not only very practical but can be easily woven. If you desire to sketch your design freely first instead of designing with the cut paper or cut squares, of course that is quite all right. But for those who have had little training and experience I have found the cut paper method simpler and generally easier. If you draw your design or sketch it, you can trace it on to the cross section paper, and then follow the traced lines as nearly as possible, filling in the squares as best you can to correspond to the outlines.

Now let us consider some of the requisites of textile design, for these help us and place limitations which make the problem simpler. At the present time we hear much about "functional" design. So let us ask what is the function or use of the textile for which we are planning a design, is it utilitarian or merely decorative? Its use generally determines its form, or in other words its size and shape. For instance, just recently a student brought to me a design which she had planned for a rug. The shapes were small and scattered around the outside edge, and when I pointed out to her that they would look lost on the floor, she changed the whole arrangement because as she said she really had not thought of the design as a rug. So the use of the textile can determine its form. Designing even a simple plaid for a rug involves the consideration that the plaid is for a rug and not for a dress or a luncheon set.

The structure of a handwoven textile controls to a great extent its use and form. Warp threads run lengthwise, and weft threads cross these warp threads at right angles. Consequently the designer must know that circles and curved shapes are more difficult to execute than straight lines. The finer the threads and the closer they are together the easier it is to approach a circle. Try making a design on large cross section paper, and then draw the same design on a very small size cross section paper, and this point will be very clear, if the lines curve or approach a circle. The beginner should always keep in mind the structural size and shape of the textile he is designing, and that simple geometric shapes and slight variations of these make the most successful designs. Horizontal lines, vertical lines, and diagonal lines are generally easier to weave, and these lines can easily be made to follow the structural shape of the rug, bag or luncheon set which is being planned.

"Free woven Pattern Design" can be woven on any loom which allows for the raising of one set, one half the warp threads, and the lowering of the other set or the opposite warp threads. Of course the loom controlled pattern design would generally imply more than a two harness loom. Also a loom controlled pattern can usually be carried out much faster and easier than on a hand loom. A good example of this is the way that old Colonial coverlets are being woven on either fly-shuttle or power looms, some of them even to the seam down the center, and sold in the department stores for as little as \$4.95 for a full sized coverlet. A recent exhibit in one of the large stores in our city featured a collection of real old Colonial coverlets in both the Jacquard and four harness types, together with new ones woven to exactly "copy" the old designs. To my mind the hand loom should be used to create textiles which the power loom cannot as yet duplicate, and use for the weaving, threads and yarns which are new and unusual and not yet adapted to large commercial use. And there are still many of the "free woven techniques" that the power looms have not as yet been able to duplicate.

Now let us consider what variety we can obtain on a loom where we have just the plain weave, or in other words, just a two harness loom. First we can use different kinds of threads in various combinations to gain interesting textures. One rule to remember is that if you wish to combine a wool and cotton warp, two warp beams should be used, as the stretch of the wool warp will be greater than that of cotton, linen, or silk. The next variation of plain weave, comes from arrangements of stripes of different colors, or weftwise stripes. These stripes should be of different widths, as well as of different colors to be of the most interest and not monotonous. Lengthwise stripes, or stripes of color in the warp, with a neutral color for all of the weft, or plaids are formed in plain weave when these lengthwise stripes are crossed with an equal number of weft shots of the same color. Scotch tartans are a good example of how plaids can be formed. And the best book I know of, giving many colored illustrations of the different plaids, with some of the history of the clans, is "The Scottish Clans and their Tartans" by W. and A.K. Johnston. Of course any of the above variations could be done on either a hand or a power loom, or even on a very simple primitive loom with only the use of heddle sticks.

I will now attempt to give a brief outline of some of the "free woven" techniques, with a few references concerning them which may be useful to many of you.

1. "Laid-in" technique, - Three types of design. Hit and Miss, laid-in, to my mind best designed right on the loom as you weave. Can be excellent or very ugly according to the colors and kinds of threads employed in the weaving. Squares, diamonds, and realistic designs can be carried out in several colors. Detailed description of this technique was given in the April 1936 News that is simple and easy to follow. The leaflet "Lace Weave from the Island of Cos" gives an entirely different method of using this technique also.  
 "The Book of Weaving" by Anna Nott Shook is another book that deals with the laid-in type of weaving. Also "Adaptations of Tapestry Weaves", by Cecilia Cleveland Williard. "American and European Handweaving", by Helen L. Allen. Designs for this type of weaving can be carried out either in actual size and pinned under the warp threads, or they can be drawn on cross section paper and the warp threads counted as the weaving progresses.
2. "Pick-up" or Brocade weaving, - Some of the Swedish books call this type of weaving "Flushing" (Dukagang, or over three warp threads and under one) or generally called embroidery weave in this country. Diagonal flushing, or in Swedish (Krabbasnar). Each line of cross section paper squares are different in this technique. Half Krabbasnar has three weft shots with plain weave tabby between all exactly the same. Simple designs and directions for the working of this "pickup" technique with the shuttle on a flat warp were given in the News for August 1937, for the heddle belt loom, and designs given in the News for Nov. 1936 could also be used. Designs can be drawn out on cross section paper but the skips should not be too long, unless the weaving is very fine, or unless the back does not show.  
 "Swedish Textiles" by Emilie von Walterstorff, has excellent illustrations of these techniques. Also "Vavboken" by Montell-Glantzberg.

3. Tapestry Techniques,- True tapestry is a bobbin type of fabric, and as yet not been able to be copied by a machine exactly as it is woven by the hand of the weaver. The design can be geometric, pictorial, or floral and is planned so that the warp will hang horizontally as in the Gobelins. Tapestries of this type are being woven at the Tapestry Looms, 238 East 47th St. New York City. Where two colors meet each other in a vertical line, a slit in the fabric will appear. There are four methods of handling these slits,-

- 1) Interlocking wefts around the same warp thread as the colors meet.
- 2) " " " " each other
- 3) Planning the design so the verticals are short and leaving them open
- 4) Leaving the verticals as they occur in the weaving and sewing them up after the removal of the fabric from the loom.

References,- Tapestry Techniques by Emily Goodwin; Indian Blankets and Their Makers by George W. James. Navajo Weaving by Charles Amsden. Two excellent articles in the current number of the "Weaver" by Elmer Hickman and Ellis P. Cole. The Swedish books mentioned above and Miss Allen's book also contain valuable material. A very rare form of the tapestry technique where the slits form the pattern is found in some of the Turkish and Greek weavings. This Miss Allen calls, "Demondesh". I found it in some silk fabrics from the Island of Cos, and have described it in detail and given designs for the weaving of it in my leaflet, "Lace Weave from the Island of Cos." I know of no other references for this particular type of weaving. So called "Spanish stitch" while not strictly a tapestry technique could be classed under this heading. It was introduced into this country by Mrs. Gertrude Howells of State College, New Mexico. She also published a small book on the weave with designs that are common in Spain. Handweaving News for March 1937 gives a detailed description of the weave, and some variations worked out by some of my own students.

4. Pile and Knotted Techniques,- These include the different types of knots and the tufting technique. Method of tufting was described in Handweaving News for November and in July 1936. Almost any type of design may be woven in these techniques. An excellent description of the Ghiordes and Sehna knots is contained in Handloom Weaving by P. Orman. "Some of the Latest Models of Finnish Rugs" contains excellent illustrations of rugs woven in the Ghiordes knot technique, "Popular Weaving and Embroidery in Spain" by Mildred Stapley has excellent illustrations of tufting as well as some of "Spanish stitch" or as she calls it "red de telar."

This brief outline of different types of techniques should show the possibilities for designing according to the type of technique to be used, the article to be woven, as well as the kinds of yarn to be used. And if the references are studied should offer an interesting field for the weaver of original fabrics.

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I wish to take this opportunity to thank those of you who have sent in their subscriptions for Handweaving News for 1938. Please let me know if I can be of service to you in any way concerning your weaving problems. And if there is any particular thing you wish included in the News, do write and tell me. I am also always glad to give advice as to what materials to use for special types of weaving, and often have on hand interesting threads for unusual fabrics. Also I will be glad to answer problems concerning looms etc. If you are planning on buying another loom, I should appreciate your placing your order through me, as all of these things help to keep the News letter going.

I am at present planning to send out a traveling Exhibit of weaving very soon. Several have already subscribed \$5.00 for this. Is there anyone else who would wish to be included? If so, may I hear from you right away. This exhibit will include examples of the Bratten Lace Weave, Lace Weave from the Island of Cos, several bags, etc. and if you have any special type of fabric you wish to see, when you send in your subscription let me know, and I will be glad to include it.

With all best wishes for the New Year of 1938, I am

Sincerely yours,

*Helli Lugent Johnson*

12489 Mendota Ave. Detroit.

January 1938



Announcements for February 1938.

If any of you wish to have photographs of some of these cardboard loom articles, I can furnish them for 10¢ each. These would be especially valuable for those of you who are teaching and wish to use them for illustrative material. Please order by number according to the list given below,-

1. Large envelope purse set-up with heavy rug wool, and round bag on ring handle.
2. Plaid heavy wool envelope purse, and wool strap bag with wood balls.
3. Cardboard loom slipper, with cardboard showing how to set it up.
4. Tufted bag of heavy cotton chenille on large wood ring.
5. Two small bags of colored raffia.
6. Large plaid knitting bag on wood rod handles.
7. Oval knitting bag with tufting on large oval riggs.
8. Finished baby jacket, and its set-up.
9. Finished doll jacket and cap, and its cardboard set-up.
10. A group of 6 all wool germantown zipper purses woven by 10th grade girls.
11. Two scarves, a round zipper purse, and a hat, woven by 10th grade girls.
12. Plaid bag mounted on 6" wood frame with handle.
13. Diagonal wool scarf, and its set-up showing how to use the pins, and an all wool tie.

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I have had a request from a subscriber for a "dignified weave for a luncheon set, not a towel effect." This is to go with a spode dinner set with pastel colors in its pattern. Too many handwoven luncheon sets of the 4 harness variety are just that, a towel effect. And for a nice dinner set entirely out of harmony. She has also just subscribed for the "Bratten Lace Weave" leaflet, and my suggestion is that she set up her loom with 40/2 linen warp, and using the same linen for weft, weave a luncheon set in this weave. It would be right for many kinds of china, and a really interesting, unusual, and very durable sort of fabric. One of my Wayne University students is at present weaving a set, we designed especially for the New dining room in the Home Economics department. The design for this luncheon set is available at \$1.50 if there is anyone who wishes to have it. Also photographs of this will be available shortly at 10¢ each. Everyone that has seen and woven this particular type of weaving is very much pleased with it. And it offers the creative weaver an unlimited field as far as design is concerned.

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Just recently I have had a number of questions concerning draft writing. I am teaching the writing of four harness over-shot patterns in an entirely different manner of approach from that found in the standard weaving books, and have found that the results are far easier to grasp by the average student. And further it can easily be taught without even the use of a four harness loom. Handweaving News for June 1936, and for June 1937 contained a simple method of approach to four harness loom pattern drafting, and also a new method which was devised by Mrs. Florence Bratten for what she chooses to call three and one, four and one, five and one, and six and one, patterns. This type of pattern is a delight to the person who loves to create his own drafts, and will produce many different types of threadings. I often think how much happier I would have been if I had known how to draft in this way when I first began to weave. May I ask those of you who have questions concerning this form of drafting to write to me, or possibly some of you have devised drafts you would like to share with someone else. If so, wouldn't you like to send them to me. Or I should be delighted to see some of the woven results of these threading drafts. I have a wonderful assortment of weavings as well as threading drafts which Mrs. Bratten has sent to me, would you like to have some of these in a future News?

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Again I should like to remind you that I am preparing a new traveling Exhibit for which several of you have already subscribed. Are there others who would like to have this? The charge is \$5.00 for the Exhibit for a period of two weeks study, and if there is any particular kind of material you would like included, please let me know. Several have asked if I would include new yarns and threads which I have found of interest, and this I am planning to do, as well as an assortment of bag frames that are inexpensive and suitable for handwoven bags. Write me soon if you wish the Exhibit.

Very sincerely yours,

*Hellie Layton Johnson*

February 1938.

12489 Mendota Ave. Detroit, Mich.

I hope those of you who have not already tried the broom-stick loom technique will do so, as it offers many interesting and unusual possibilities. In my own classes here in Detroit, the first thing we tried in this kind of weaving was the rugs. The collars, belts, bags, accessories, etc. were worked out by some of my students, and were an entirely new and original variation of the technique. No one else had ever done just this same sort of thing. Large beads can be strung on the warp threads, and be pushed up as desired to form a pattern, being held in place by the weft thread which follows. Initials and other design forms can be used with the beads, both for bags or for belts. We used the large colored kindergarten beads effectively. There really is no end of variety to the kinds of belts which can be woven in this very simple easy method. Those of you who are recent subscribers to the News may obtain copies of May 1936 and 1937, both of which contain further details of this form of weaving. Cost of these leaflets is 45¢ each.

The broom-stick loom technique also offers a fine opportunity for the designing of rugs and wall hangings, and either the regular technique, or the knot technique can be used, or a combination of both for rugs. Knotting short lengths of wool, cotton or wool rags, short lengths of silk stockings, etc. on the warp threads is also an original adaptation of the broom-stick loom. There is on the market at the present time a small metal device for holding two heavy warp threads, on which the knots can easily be made. This sells for \$1.00, but the long lengths of the knot stitch have to be sewed into a rug to complete the operation. While on the stick the knot followed by the regular technique finish the whole thing at one time, and is much simpler, it seems to me.

Just a word concerning the kinds of yarns and threads most suitable for this technique may be helpful to many of you. Almost any kind of material may be used according to the kind of texture desired in the finished article. I have found some excellent threads for this particular form of weaving at the E.T. Knapp Co., The Bourse, Philadelphia, Penna. They carry an excellent weight of heavy cotton roving which is the best material to use for a rug warp. The natural is 45¢ a lb, and colors about 60¢ a lb. They also have a good color line of heavy cotton rug chenille at \$1.35 a lb. This makes a good weft material, do not use it for a warp as it is not strong enough. You can also obtain candlewick cotton from this same firm. The natural is 60¢ a box of 12 skeins, and the colors can be had for \$1.09 a box of 12 skeins. This material is excellent for use as a warp for a fairly fine wall hanging with Germantown yarn double for the weft, or the candlewick cotton for the weft. It also can be effectively used as both the warp and weft for sport belts. Also large knitting bags can be made of this same cotton on the cardboard loom. One of my students made and sold twelve of these bags this past winter, working out attractive plaids with different colors of the candlewick cotton. Send to this firm and get some samples of these threads.

I should be very glad to answer any questions you may have concerning this broom-stick loom technique. I should also like to hear from those of you who have tried out some of the suggestions I haven't out concerning it. Please do write me. My students here are helping me to send many new ideas to you, haven't you anything you would like to pass on to someone else. If so, write me about it, or better still, send me some of your weaving if you can spare it.

Last month I had a most interesting trip to St. Louis where I had the opportunity of speaking to the Weaver's Guild of St. Louis. They are doing and have done much creative weaving, and my visit was most enjoyable in every way. While there I also had the chance to see some weaving carried on as a W.P.A. project. This was quite a contrast with the work of the Weaver's Guild, of course, as their aim was quite a different one from that of the Guild. But it was of much interest to me to see what can be done with weaving in a project of that sort. Many thanks to the Weaver's Guild of St. Louis for their kind hospitality during my visit with them.

Most sincerely yours,

*Helie Fayent Johnson*

Announcements for Handweaving News.

Handweaving News is a monthly instruction leaflet on weaving which has been sent to weavers all over the country since February of 1933. Subscription is \$3.00 a year for 12 issues, of the current year. Back issues are available as listed below, and are 45¢ each, or 12 copies for \$5.00. Any one full year of 12 issues, no substitution on this, can be had for \$3.50 as long as the present supply is available.

All the remaining copies for the years 1933, '34, '35, and '36, have been compiled into one volume. This can be had for \$5.00. I have not very many copies of these left now, and if anyone wishes to have them, better send for them soon.

1937  
 Jan.-Designing 4 harness pattern.  
 Feb.-Cardboard loom, bag& slipper.  
 Mar.-Spanish Weave variations.  
 Apr.-Weaving on Two Harnesses.  
 May.-Broomstick Loom, rug, bag, belt.  
 Jun.-Original 4 harness drafts.  
 Jul.-Picture Frame loom, Tapestry.  
 Aug.-Heddle Belt Loom, Brocadeing.  
 Sep.-How To Make a Warp.  
 Oct.-Tablet or Card Weaving.  
 Nov.-More 4 harness loom Drafts.  
 Dec.- Tufted Italian Weaving.

1940  
 Jan. Ostwald Color Theory  
 Feb. Designing "Crackle" Weave  
 Mar. A form of Peruvian Tapestry  
 April. Flossa Rug Knot  
 May. Ancient Dye Recipes  
 June. 4 harness 2 block patterns  
 July. 8 harness 2 block patterns  
 Aug. Three Colonial Over-shot drafts  
 Sept. How to Sign Handweaving  
 Oct. Notes from 1940 World's Fair.  
 Nov. Ancient Trees for Crackle Weave  
 Dec. Handweaving as a Business

1938  
 Jan.-Further Notes on Design.  
 Feb.-Cardboard Loom set-up with Pins.  
 Mar.-New variation Spanish Weave.  
 Apr.-Laid-In Technique Designs.  
 May.- Rug Knot on Broom-stick Loom.  
 Jun.-Designing 3 Block Pattern Drafts.  
 Jul.-More Notes on 3 block Patterns.  
 Aug.-M's and O's, and 2 block Drafts.  
 Sep.-How To Do Greek Soumak Knot.  
 Oct.-Further Notes on Soumak Weave.  
 Nov.-Variations of Brocade Weaving.  
 Dec.-Warp Pattern Belts.

1941.  
 Jan- Mexican Brocadeing  
 Feb- Three Block Key Drafts  
 Mar- "Summer and Winter"  
 April- "More Crackle Weave"  
 May- Simple 2 harness Weaves  
 Jun- Twill, Herringbone, etc.  
 July- Broomstick Technique  
 Aug- Choice of a Loom  
 Sept- How to set up the Heddle  
 Oct- 8 harness "Summer & Winter"  
 Nov- "Laid-In" technique  
 Dec- Texture experiments

1939.  
 Jan.- Importance of Texture  
 Feb.- A Swedish 2 block pattern  
 March-Danish Open Weave  
 Apr.- Brocade Pattern Borders  
 May.- Guatemalan Textiles  
 June- Designing 2 block Patterns  
 July- Designing 3 block Patterns  
 Aug.- Modern "Laid-In" Designs  
 Sept- A Weaver's Trip to Peru  
 Oct.- Peruvian Tapestry on Gauze  
 Nov.- Peruvian Lace Weaving  
 Dec.- Different Ways to Weave  
 4 harness Over-shot.

1942  
 Jan- Designing Name Drafts  
 Feb- Cardboard Looms  
 Mar- Modern "Summer & Winter"  
 April- Two Harness Weaving  
 May- "M's and O's" Drafting  
 June-Designing 4 block Drafts  
 July-Other 4 block Drafts  
 August- A Variety of Rugs  
 Sept- An ancient Gauze Weave  
 Oct-An ancient Warp Weave  
 Nov- The "Hearthside" Loom  
 Dec-"Bronson" Weaves.

Special Leaflets on Handweaving \$ 1.00 each

The leaflets listed below are full of practical help and information for the weaver who weaves articles to sell that are unusual and different

1. WHAT TO WEAVE ON A 20 yard WARP, threaded to the same pattern. Directions for weaving of bags, towels, runners, luncheon sets etc. for the 4 harness loom.
2. FOUR HARNESS "SUMMER & WINTER" WEAVE. Drafts and directions for weaving bags, towels, a rug, baby blanket of wool, luncheon sets etc. for 4 harness loom.
3. "EMBROIDERY" WEAVING. Several different methods of weaving this technique are given, and a page of suitable patterns. 3 pages.
4. SIMPLE INEXPENSIVE ARTICLES TO WEAVE. This leaflet was planned especially for the use of the 8"-4 harness Structo loom. It gives instructions for small articles suitable to make for sale on this loom, such as bags, book marks, holders, sachets, small towels, bibs, etc. 6 pages.

1943  
 Jan. Designing Code Drafts.  
 Feb. Weaving on the Hearth-  
 Mar. {side Loom, Booklet  
 Apr. Crackle Weave Drafts.  
 May. Eight Harness Twills.  
 Jun. Six harness "S and W"  
 July. Laid-In for Hearthside.  
 Aug. 4 harness "Over-shot."  
 Sep. Peruvian Double Brocade.  
 Oct. Peruvian Kelm Tapestry.  
 Nov. New Broomstick Technique.  
 Dec. More Bronson Weaves.

1944  
 Jan. More on Code Drafts  
 Feb. Hearthside Loom  
 Mar. Greek Soumak Weave  
 Apr. Brocaded cap & Jacket  
 May. Crackle Weave Pattern  
 Jun. Picture Frame Loom  
 July 2 block Over-shot  
 Aug. Handwoven Hats  
 Sept 8 harness Weaving  
 Oct. Ideas for Christmas  
 Nov. More on "Laid-In"  
 Dec. A new Bronson Weave

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All of the material listed on this page should be of interest to a weaver. Every issue contains instructive information. Many new unusual techniques have first been given in Handweaving News. If you are a new subscriber, send for some of the back issues, or for the full year. These will not be available after present supply is out. Let me know if I can help you further on your weaving problems.

12489 Mendota Ave. Detroit 4, Mich.

*Nellie Sargent Johnson*

Announcements for Handweaving News.

Several people have asked me lately concerning inexpensive equipment for weaving in adult classes where it is not possible to purchase floor or table looms. One of the best answers I know of to this problem is the simple heddle. This can be tied into a picture frame or not as desired, and does make a simple practical loom on which anyone may learn to weave. Many of the people in my own adult classes have made not only excellent samplers on which they have learned a large variety of weaving techniques, but also have woven scarves, bags, and luncheon sets in great variety, with no other equipment than this simple heddle.

Descriptions of the method of setting it up were given in the News for Aug. 1936, Aug 1937, and in Dec. 1938 some ways of using it for warp pattern belts was given which are simple enough for children to do, and yet also of interest to adults as well.

Prices of these heddles.

10" size	-----	\$1.75
12" "	-----	2.75
20" "	-----	3.75

Black shuttles and pick-up sticks for free weaving techniques are very helpful. Prices are given below.

9" and 14" size shuttles 65¢.  
20" size shuttle or pick-up stick --85¢

Copies of Handweaving News, back numbers still available, 45¢ each.

SPECIAL LOT OF BAG FRAMES FOR HANDWOVEN BAGS.

Reduced to

7"-#101	special gate-top, amber, black or white	\$1.00
7"-#200	" square, amber, black or white	1.25

These are very exceptional frames at this price, and if you are planning any handwoven bags, it would be well to order at once as the supply on hand is small. Kindly enclose check or money order with your order with small allowance for postage. No exchanges or refunds on these, kindly indicate a second choice.

Special Odd Lot of Yarns and Weaving Materials.

It is often possible for me to buy yarns and threads in odd lots at greatly reduced prices, and if at any time you wish a particular thread, or an assortment of a number of different kinds, write me. At present I have some unusual bargains in threads that are an excellent buy especially for some of these texture experiments.

Candlewick cotton, 22 yd skeins, orange, violet, blue and some black,	75¢/lb.
Natural silk noil yarn about the size of Germantown, dyes beautifully	1.00 "
Black or white silk boucle', an excellent material.	1.50 "
Natural heavy linen <u>welt</u> about 15/3, has appearance of handspun when woven,	
put up on 1 lb cones only	1.50 "
No.20 mercerized cotton, several shades of red, some light green	1.00 "
Metal thread, copper or silver on wood spools, about 1/2 lb	.60 spool
Cellophane thread red, gold, blue-green or violet combined with silver	.25 "

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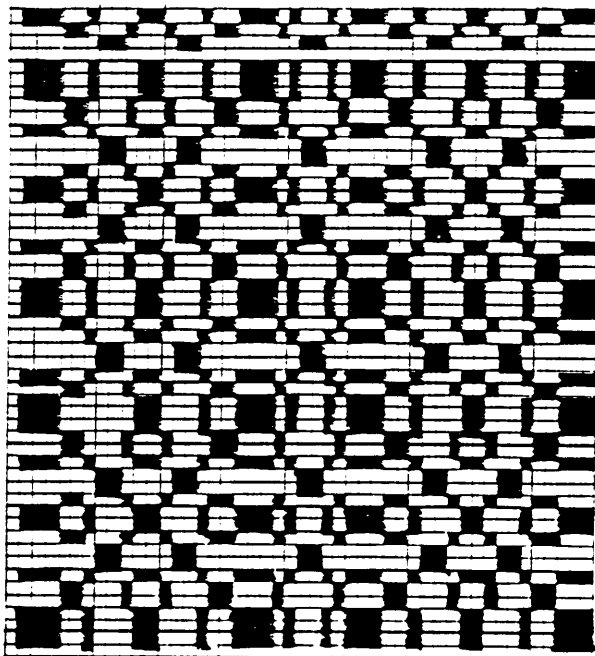


### Designing Three Block Patterns.

Designing ones own patterns for the loom is always interesting. Many weavers seem to be afraid to even attempt to do it, but it is not difficult, if you will take the time to really study it seriously, and can spend the effort that it takes to do the drawing. The News for June 1936 contained a method for designing using the simple twill, herring-bone, and rose-path threadings as basic threading drafts, and showed how to build up a variety of pattern drafts with these. The June number for 1937 carried this same idea a little further. While the January 1937, and also the June 1937 gave Mrs. Bratten's method of planning out designs starting with an abstract number of blocks of any size you desire to make them, and then drawing down the blocks below to see what the pattern would be. Those of you who are new subscribers for the News may obtain these back numbers if you wish to have them.

Draft No.1 drawn out below is an original one of Mrs. Florence Bratten's. Using this as an illustration, I will attempt to explain to you how very easy it is to plan and draw out your own patterns and drafts for anything you may wish to weave. Equip yourself with a good drawing board, and for the first work a good pencil. Later if you wish you can use a lettering pen, but it is much easier to erase mistakes in the drawing if it is worked out first with a pencil. A pad of cross section paper can be purchased at most of the ten cent stores for 5¢ for 24 sheets. First we will plan the drawing, later we will plan our threading draft from this. Note carefully the draft at the top of the drawing. On your cross section paper, mark off three squares for the size of your first pattern block. Each block of cross section paper represents one unit of your pattern, this is not your threading draft. The next block on the line below contains two units, the next one on the same line as the first, is only one unit. The 4th block is also a two unit block, but on the line two spaces below the one just drawn. As this is to be a three block pattern only three lines across the top of the paper are to be used for these unit blocks. These units may be any size you choose to make them, but if you are planning an over-shot pattern for the 4 harness loom, do not make these units too large. In order to have your pattern balance, you must have one block as a center, and have the blocks the same size on each side of this center. This is important.

Draft No.1



Draft No. 2. Figure 2.

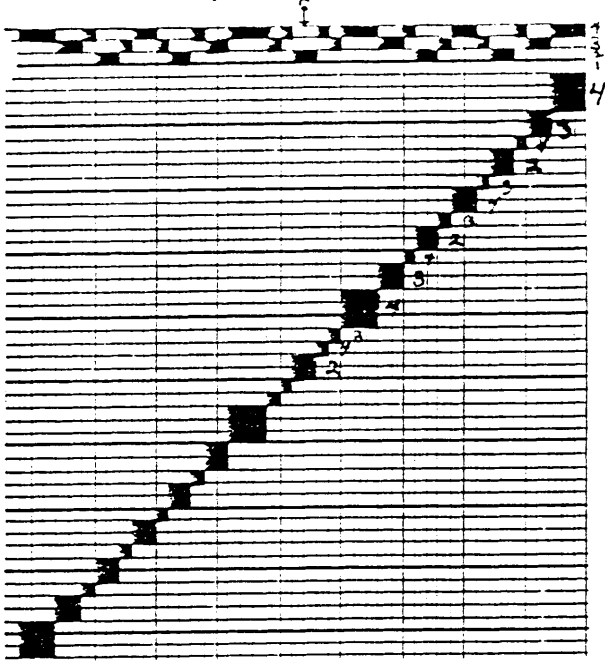


Figure 3.

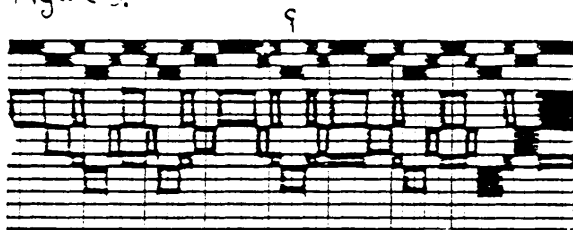
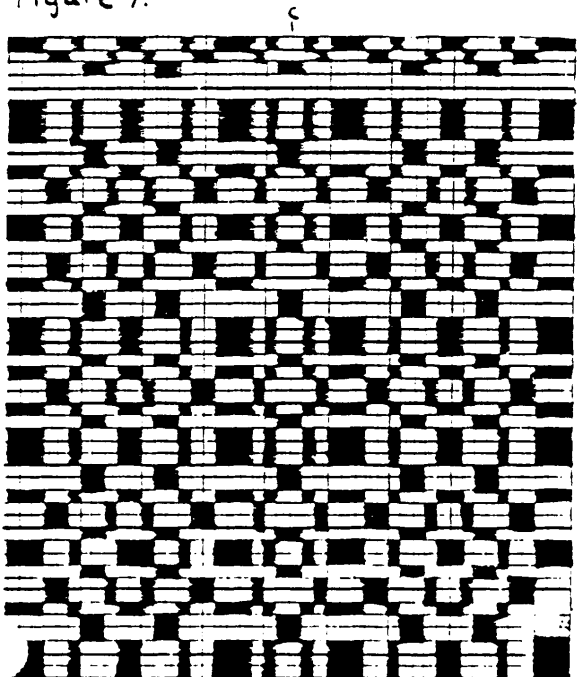


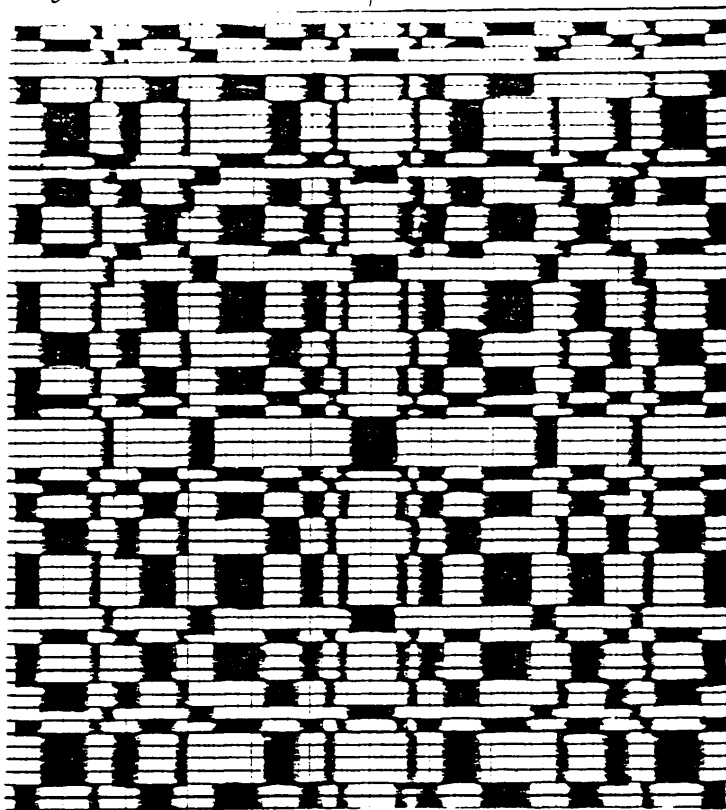
Figure 4.



The center block on this drawing is marked with a 3. It is also much easier to balance your pattern draft for threading into the loom if you know where the center of your draft is. Draw out the full repeat on each side of your center. This is your 'key draft,' from which you can plan out many different threadings. On a four harness loom, you may have only four pattern blocks, we have drawn only on three lines, representing only a three block pattern. We will call the top row of the draft, block 4, the one below block 3, and the one just above the drawing block 2. Block 1 is not shown. The drawing on Page 1, follows the same order as the blocks were drawn on the key draft. When the pattern is woven in this same order, it is called weaving "as drawn in", or in other words the pattern is woven as it was drafted, and the order of the woven blocks is the same as on the draft. This will be further explained later. To draw down your pattern blocks, start with the 3 unit block on the top line or pattern block 4. You can draw these blocks right down on the diagonal as they occur in the key draft, as shown at Figure No.2 on this page. Or draw your first block 3 units square, and at every point on your paper where there is a unit on the top line, draw down the corresponding units of block 4. The dark blocks of Figure No.3, show the diagonal blocks which govern how deep each of the other blocks are drawn down, all across the width of the paper. Note that the order in which the blocks are drawn is block 4, which is drawn down 3 units square, then block 3, which is 2 units square, then block 4 again, but this time only one unit square, then block 2 which is two units square, block 3, one unit square, block 4 which is 2 units square and so on to the center which is block 2, also 2 units square. When these are all drawn out across the paper, you have as a result the drawing on Page 1.

There are many variations which can be woven on this threading. One of these which was woven and drawn out by Mrs. Bratten is shown at Figure No.4. Compare the drawing on Page 1 with this, and you will see that just using the order of the drawing down of the different pattern blocks in another way, produces quite a different pattern from the one shown at Page 1. The numbers at the side of the pattern 4-3x, for instance mean block 4 drawn down 3x, 3-2x means block 2 drawn down twice; 4-1 means block 4 drawn down once; 3-2x means block 3 drawn down 2 times; and so on. Try different ways of drawing down the blocks, and work out other borders. The same pattern blocks can be drawn down more or less times as you prefer. For instance if you wish you can draw down a 3 unit block 5x, or even 10x, if you wish. On the next page, you will see what will happen when you write the unit blocks in different sizes from the unit blocks on Page 1, but keep the same order for the pattern blocks. This is another phase of pattern planning and the resulting pattern quite different from the original one as you will see.

Figure 5



Figures No.5 and 6 on this page show what happens when you change the sizes of the unit pattern blocks, but keep their order just the same, as on the original at Figure No.1 on Page 1. Compare carefully No.1 with No.5. Note that the order of the blocks on this draft is as follows;-  
 Block 4, Block 3, Block 4,Block2,  
 " 3. " 4. " 3, " 2,  
 " 4, " 3, " 4, " 3,  
 " 4, " 2; center.

The order of the unit blocks is the same on both drafts, but the sizes of the unit pattern blocks are entirely different.

Figure No.5 and No.6 on this page give quite a different pattern effect when they are drawn down on their diagonals, but the order in which the unit blocks were originally drawn is the same, but the sizes of the blocks are different. For comparison these are written out below. Read down.

Figure 6

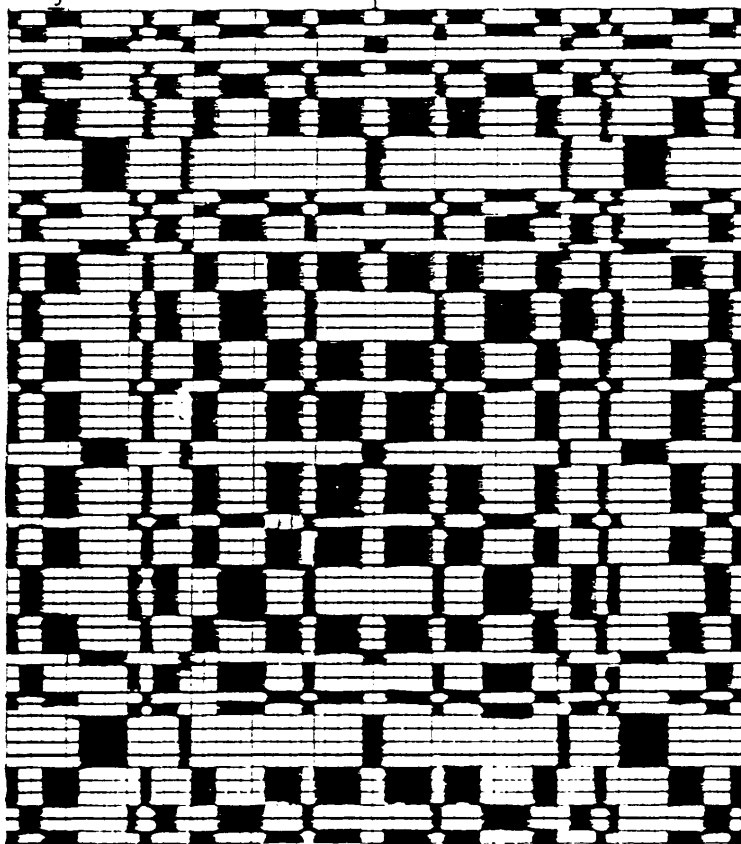


Figure No.5                      Figure No.6.

Pattern block	No. of Units		
4-	2.	4-	1
3-	4	3-	2
4-	1	4-	3
2-	1	2-	4
3-	2	3-	1
4-	3	4-	1
3-	1	3-	2
2-	2	2-	1
4-	4	4-	2
3-	3	3-	4
4-	2	4-	3
3-	1	3-	1
4-	1	4-	4
2-	4	2-	2
	center.		

These drafts have only been written out to show one repeat. If you will write out two repeats, you will see that there is also a second center for the pattern on the first and the last unit pattern block.

Try drawing down Figure 5 and 6, in the same order as No.4 on Page 2, and see what the effect of the same pattern is when drawn out that way.

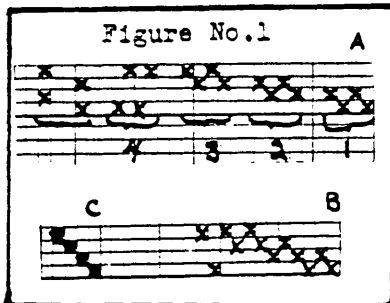
Also try planning out borders in the same way with these unit drafts.



### Designing Over-Shot Threading Drafts.

Last month the method of designing three block patterns from unit blocks was given. If you have studied this carefully step by step, you have learned how to design many different kinds of patterns, and have acquired a real knowledge of some of the fundamental principles. To plan threading drafts for these pattern designs is the next step, and that will be discussed this month.

Explanation of Pattern Blocks of a four harness loom. It is possible to write four different pattern blocks on a four harness loom draft. By a draft is meant the plan which is used to thread each warp thread through the eye of one of the heddles on the loom. Each square of cross section paper indicates a warp thread, and each horizontal line of blocks one of the harnesses of the loom. Thus numbering from the bottom line, we have harness 1, 2, 3, and 4 at the top. The four pattern blocks are formed with combinations of these harnesses of the loom. They are pattern block No.1 or harness 1 & 2, pattern block No.2 or harness 2 & 3, Pattern block No.3 or harness 3 & 4, and pattern block No.4 or harness 4 & 1. On this system the plain weave harnesses are 1&3 and 2&4.



On paper these pattern block combinations are indicated as shown at Figure No.1. Four threads have been written on each pattern block, and if you will note carefully the draft, you will see that the last thread of the preceding block is the same as the first thread of the next block, or to say it in another way, each pattern block overlaps the next pattern block with one thread in an over-shot draft. Also note carefully that if this last thread were to be left in the actual threading draft, two warp threads would be together on the same harness, and this would be incorrect, so omit one of these threads and write as at (B) of Figure No.1. Another important point is

that the plain weave or tabby will not be correct if at any point of the threading draft, you skip from harness 1 to 3, or from 2 to 4, as this will also bring two threads together when you weave plain weave of such a draft. So every other thread of this system should be either a 1 or a 3, or a 2 or a 4. At (C) is shown four one unit pattern blocks. (B) shows the actual threading draft for these unit blocks using four threads for each pattern block unit of (C). Another point is that actual loom threading drafts generally read from the right to the left, instead of from left to right as one would read. This is probably due to the fact that the loom is generally threaded starting at the right and working toward the left hand side of the loom, hence it may be easier to read the draft when it is written from right to the left.



Also note that the threading draft at (B) of Figure No.1 does not repeat the last thread of the 4&1 block, because if it did when this pattern draft was repeated two threads would come together on harness 1.

At Figure No.2 on page 3 is the unit or "key draft" which formed the basis for the drawings in the June Handweaving News. Using this as a plan, we will draw the actual threading drafts in a number of different ways. This pattern uses only three of the pattern blocks. Four block patterns can be devised in exactly the same way, except that you use all four of the blocks.

Take four threads for each unit of the key draft, and three pattern blocks, namely 4&1, 4&3, and 3&2. For these drafts we will not use any block on the 1&2 pattern block, as we have no unit blocks on the key draft using this. The draft at Figure No.3 is an example of how this threading is worked out. The first unit on the key draft is a 3 unit pattern block on 4&1, so using 4 threads for each of the 3 units on the key draft at Figure No.2, we have 12 threads on the 4&1 pattern block. The next pattern block on the key draft is a two unit block on the 4&3 pattern block, so we write 8 threads for this, remembering that the pattern blocks overlap each other by one thread each time. The next block on the key draft is a one unit block written on the 4th pattern block, so is written 4,1,4,1. The next pattern block on the key draft is a 2 unit block written on the second pattern block, so write 8 threads on 2&3 pattern block. Right here note that you cannot skip from 1 to 3 and write this block beginning 3,2,3,2,3,2,3,2, or you would have an incorrect tabby alternation where the 1 and 3 came together.

Another important fact to note is that where a pattern block repeats back, as in the center of the threading, or at the blocks as checked on the key draft, the actual threading draft at that point must be written with an odd number of threads in the block to make the plain weave alternation correct. It is also easier to plan and mark where the centers of the key draft pattern come. This pattern key draft can center on either the very first pattern block of the key draft or at C as marked. It is well to mark your actual threading draft in the same way. Many times it is much easier to arrange your threading in the loom to suit the number of warp threads, if you know where the centers of your pattern draft threading are placed. At Figure No.2 the key draft repeat really stops at S, unless you wish to make a combination of the first and last pattern block to make it a 6 unit block, as the pattern repeats back on this block as well as the one marked C. The actual threading draft at Figure No.3 stops at S of the key draft, and also Figure No.4.

Some of the pattern blocks in the actual threading draft at Figure No.3 are rather long. If the warp threads are to be set rather far apart in the reed, it may be necessary to shorten up the pattern somewhat. When patterns are planned, it is always well to have in mind the number of threads to be used to the inch, so the over-shot pattern skips will not be too long. If the warp is set, say 15 threads to the inch, a 12 thread skip would be about  $3/4$ " in length. While if the warp is set at 30 threads to the inch that same skip will only be about  $1/3$ ". One way of making the threading smaller and still keep the pattern blocks relatively the same size is simply make each pattern block smaller by two threads. This has been done at threading draft Figure No.4. Another method of breaking up long over-shot skips is to write a single thread in the center of the pattern block as at Figure No.5. This shows two ways to break up the long skip on the 4&1 pattern block as on Figure No.3. In the case of the 4&1 pattern block this single thread may be written either on harness 2 or on harness 3. Which one to use depends on whether you want the resulting three thread skip to come on either 1&2 or 3&4 during the actual weaving of the fabric. As this is a three block pattern, and pattern block 1&2 would not be woven, this has been written to make the break on harness 1&2. In a four block pattern, these small skips would have an effect on the pattern, and should all be drawn out when the pattern draft is expanded.

Figure No.5

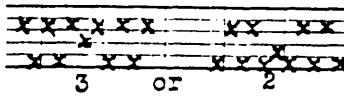


Figure No.2 "Key Draft"

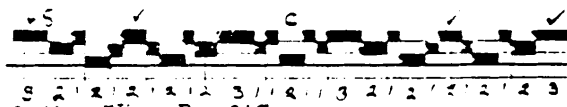


Figure No.3 Four threads for each unit of the "Key Draft".

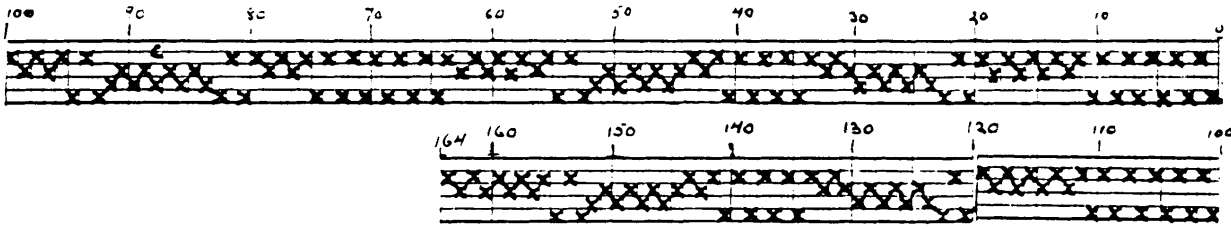


Figure No.4 Reducing each pattern block of No.3 by taking out 2 threads.

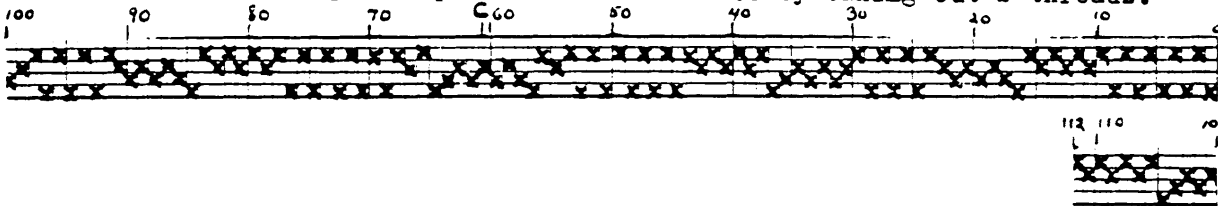


Figure No.6 Breaking up the long skips on the 4&1 pattern block.

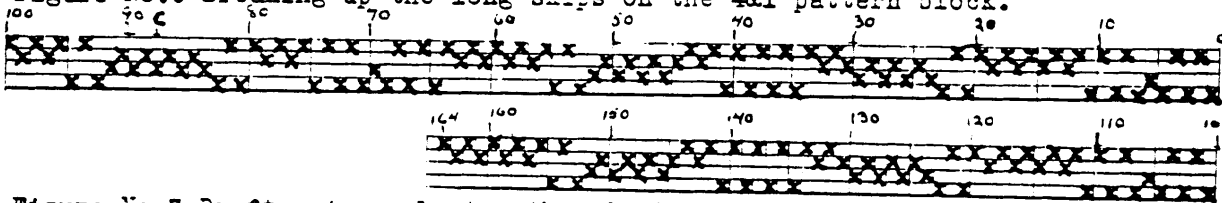


Figure No.7 Draft using only two threads for each unit of the Key Draft.

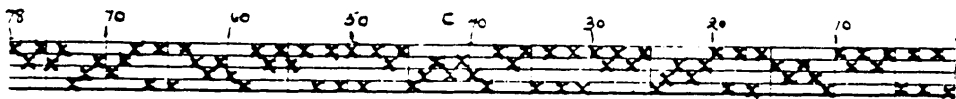


Figure No.8 Draft for Figure No.5 of June News. Long 4 unit Skips broken up.

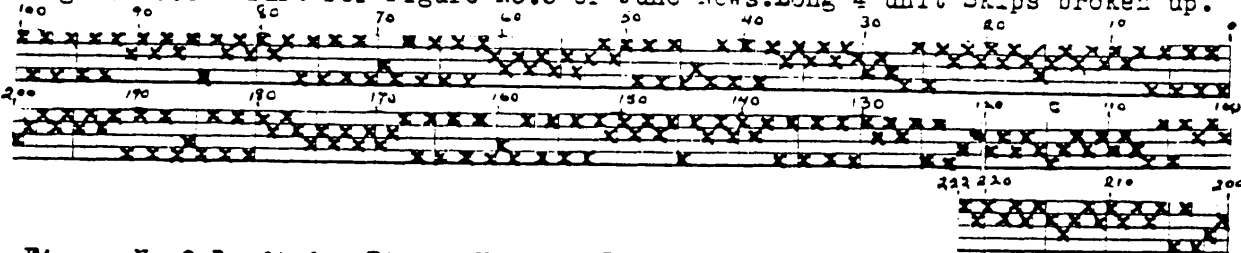
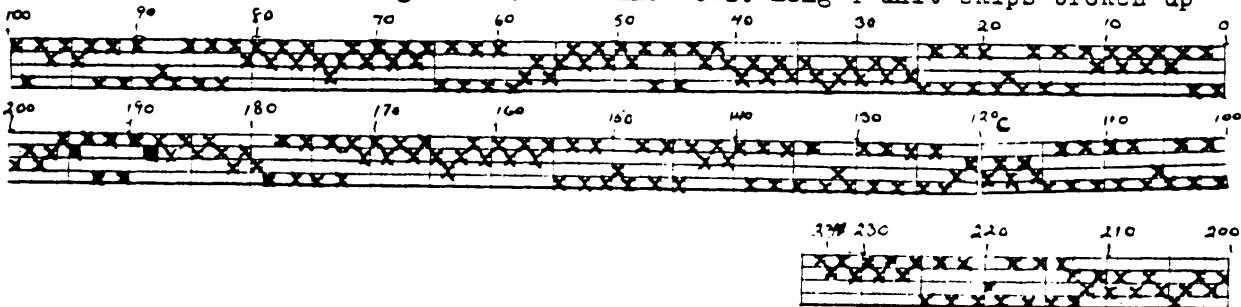


Figure No.9 Draft for Figure No.6 of June News. Long 4 unit skips broken up



Draft No.6 shows how these long pattern blocks are broken up by writing in one thread on the second harness. Compare this with the draft at Figure No.3. Draft No.7 is another way of writing a shorter draft on the same unit scheme as the key draft. But in this instance, the pattern blocks are only two threads for each unit. Note carefully how the draft has had to be slightly changed as the blocks are shortened up.

Weaving "as drawn" or in other words as the pattern is drafted. This means that each pattern block is woven square according to the number of threads or according to the number of units it contains, and in exactly the same order as it occurs in the actual threading or in the unit draft. Draft No.1 on page 1 of the June News is woven "as drawn", and this is explained in detail on Page 2. The actual threading draft order is followed down in the same way. If you thoroughly understand how the pattern blocks are formed from the unit draft, weaving as drawn, should present no difficulty. If you have any questions concerning this, let me know.

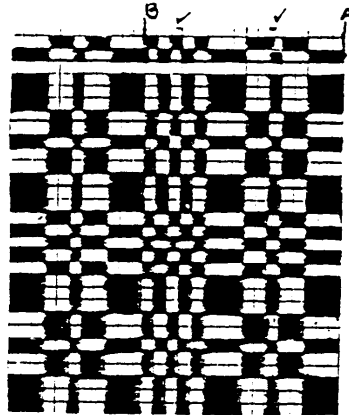
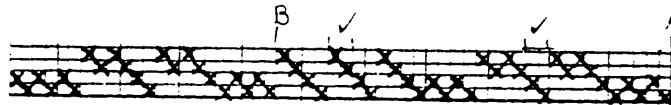
Tie-up of the loom. If you know that there are four pattern blocks in a pattern, and that these are made up of harness 1&2, 2&3, 3&4, and 4&1, the tying up of a loom and weaving of the pattern should present no trouble. For you always tie up your loom to weave the pattern blocks on which your pattern design is written. On a treadle loom the harnesses are pulled down by the treadles, on a jack loom or the Structo loom, bringing down the levers or treadles raises the harnesses, so in this case you use the "opposites", if you wish your pattern design to be on the top side of the weaving as you work. Or in other words, if you wish to weave the 1&2 pattern block, bring down levers 3&4. Do this and see that 1&2 harnesses are down, and in the same way use levers 1&4 for block 2&3; 1&2 levers for block 3&4; and 2&3 levers for pattern block 4&1.

Explanation of weaving "on Opposites". It is possible to weave any four harness loom pattern on opposites without a tabby or plain weave between the shots of weft. This is especially effective, the warp is set relatively far apart in the loom and several colors used. In this case, the warp is entirely covered. The opposites are harnesses 1&2 and 3&4; and 2&3 and 4&1. Use only one shot of weft on 1&2 with dark color, then one shot on 3&4 with light color. Alternate this until the pattern block you are weaving is square, then take the next pattern block in order. This would either be a 2&3 block or a 4&1, weave these alternately to square this block, and so on using the color with the best effect. Weaving "partly on opposites". Where a threading draft skips from the 1&2 block right to the 3&4, and then 1&4, to 2&3, and so on, or as this particular design does on the draft where it goes directly from the 4&1 block to the 2&3 block, and then continues with 3&4, 4&1 and so on, the draft is said to be written partly "On opposites". The little two thread blocks which occur when this is done are called "accidentals". These simple little threads often come in the wrong places and mar the whole appearance of the pattern if care is not used. It is well to draft out on paper the complete threading draft of any draft where these occur so as to see exactly what the woven effect will be.

Arranging the pattern draft in the loom to suit the number of threads of warp to be used. Many questions are asked concerning this. If you know where the center of the actual threading draft occurs, note this. Suppose your draft contains 34 threads and your warp is 240 threads. Divide your number of warp threads by the number of threads in the draft. This equals 7, so the draft would go into 240, 7 times plus 22 threads over. So if you take off eleven threads at the beginning, and thread the pattern seven times, then take off 11 threads on the last part of your threading, you should come out correctly, if you have taken into account the center of the pattern draft.

Drafts No. 8 and 9 are the threading drafts for Pattern No.5 and 6 of the June News. The long skips in these have been broken up with the single threads. It is possible to plan large threadings to take up the whole width of the loom, with just one center. Will those of you who are interested to have me go further with this draft writing, kindly write me, and tell me what you would like.

# HANDWEAVING NEWS



DESIGNING FOUR  
HARNESSTHREADING DRAFTS

FOR  
TWO BLOCK PATTERNS.

Figure No.2.

As there has been considerable interest in the designing of patterns, different threading drafts for a two block pattern design will be discussed this month. Logically perhaps this should have been taken up before the planning of the three block patterns as given in the June and July News.

At Figure No.1 is shown a simple "Key Draft" for a two block pattern. This is composed of 3 units for each pattern block. Note that one square of the cross section paper indicates one unit of the pattern. These unit pattern blocks can be written any number of squares one desires to write them, according to the pattern design. The smallest unit that can be written is of course, a one unit block. And the only limit as to the number of units in each pattern block would be governed somewhat by the type of threading draft to be used on the loom. For instance if a Colonial over-shot threading draft is being planned, it must be remembered that unless the loom is set up with a large number of threads to the inch, a block which has more than about 14 threads makes a very long over-shot skip. While if the "Summer and Winter" threading is used, the unit pattern blocks can be as large as one desires to make them, since the pattern weft only makes a three thread skip in any case.

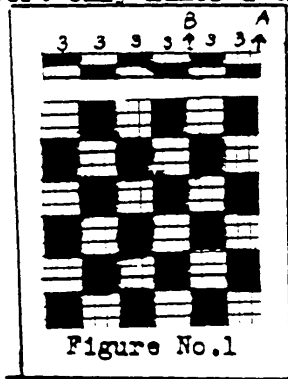


Figure No.1

Figure No.2 at the top of this page is the familiar plan for the "Monk's Belt" pattern. Note carefully that the pattern blocks take this order as to the number of units they contain. The first one on the right has 3 units, the second pattern block has 2 units, the third pattern block has one unit, and so on. The important thing to remember is that these units pattern blocks may be written any size desired. At Figure No.3 is shown a "key draft" with quite a number of different sized pattern blocks. The first block has five units, and so is drawn down five units square, the second pattern block has four units, so is drawn down 4 units square, while the third pattern block on the same line as the first is a one unit block. This should make it very plain how to design a "key draft" for a two block pattern.

### Planning Threading Drafts for the Key Drafts.

1. Colonial Over-shot Patterns. It is very easy to design Colonial over-shot pattern drafts from these key drafts. It is possible to write four pattern blocks on a four harness loom, but we will only use two of these, namely the 1&2 pattern block, and the 3&4 pattern block. We will use two threads on the 1&2 pattern block for each unit of the key draft on the first line, and two threads on the 3&4 pattern block for each unit of the key draft on the second line. Now refer to Figure No.1, and see that there are 3 units on the first pattern block, and three on the second, so the actual pattern draft which may be written will be 1,2,1,2,1,2, for the first pattern block, and 3,4,3,4,3,4, for the second pattern block. Written out graphically as at Figure No.4, three repeats are given, as in

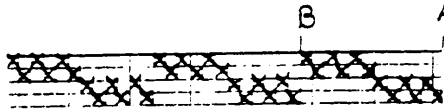


Figure No.4

this manner, it is very easy to understand how the loom is tied up, as it is tied up to weave two pattern blocks 1&2 and 3&4, with the plain weave on 1&3 and 2&4. Over-shot drafts woven in this way give a very sharp clear cut pattern, as there are no one thread skips to bring in a third value of color. And also note there is no overlapping of the pattern blocks as in a regular four block pattern design. Note we are only using two pattern blocks instead of four. This type of design where the pattern blocks are equal, or the same number of threads, is often used for a border, or as a part of a regular four harness pattern draft. When used in this way, it is referred to as a "table". Of course these tables can be written using the number of threads for each pattern block as desired. But if this sort of a table is written, it is woven "on opposites", and it is best to draw down all of the pattern threading, especially if it is written with a regular four block pattern, since the small two thread blocks, or "accidentals" may occur in the wrong places and spoil the effect of the four block pattern. Of course when all of the pattern is woven on two pattern blocks, no "accidentals" occur.

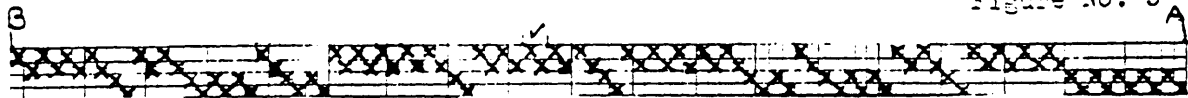


Figure No. 5

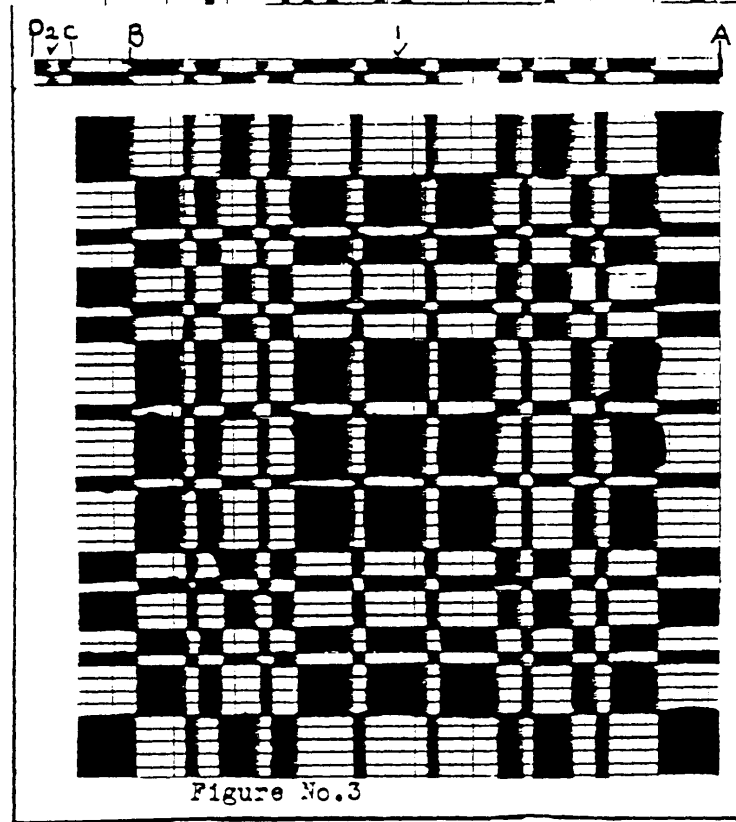


Figure No.3

From A to B on all of the Key drafts indicates one repeat. But in planning these drafts, one must also note carefully the center where the draft should be made to reverse back in the opposite way with the same number of units in each pattern block, so it will balance on each side of the center. A pattern may have several places where it might be centered, or it could be written large, and have only one center for the entire threading draft. For instance at the key draft of Figure No.3, one repeat of the pattern would be from A to B, with the center as checked at 1. Or the first pattern block could be repeated as from B to C, and this be the complete plan for the loom threading, or another center could be made as at 2, and one repeat be from A to D. One repeat of the actual threading draft for the loom is given at Figure No.5. But this is only one repeat of the key draft at Figure No.3, from A to B.

## 2. M's and O's Pattern drafts.

It is possible to use these same key drafts for the so called M's and O's threading drafts. At Figure No.6 is shown the M's and O's threading draft reduced to its lowest terms. Note this carefully,- For pattern block No.1, there are four threads for each unit of the key draft, or 1,2,3,4. As each unit of the key draft is repeated 3x, for the actual threading draft to correspond, repeat 1,2,3,4,- 3x as in Figure No.6. When this pattern block is woven, weave one shot of weft on 1&2, the next on 3&4. And continue to alternate these until the block is square. The small dots are put in to show the plain weave, as it comes out when each block is woven. In this weave, it is not possible to get a true plain weave, but the 2&3 and 1&4 pattern sheds can be used as the plain weave sheds would be if desired, although these patterns are generally woven as an all over pattern. The second pattern block is also composed of four threads and these are 1,3,2,4. This is repeated 3x as each unit of the key draft at Figure No.1 which we are using is repeated 3x.

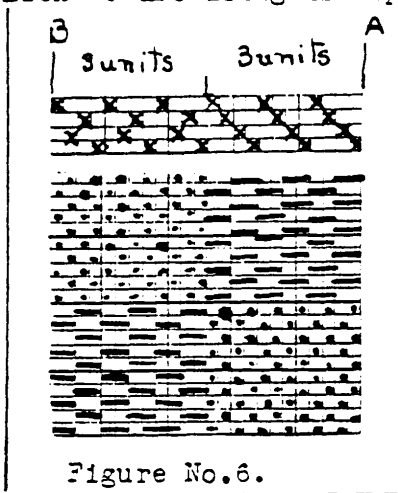


Figure No.6.

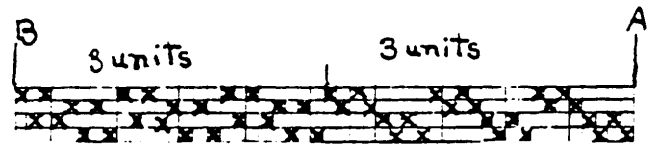


Figure No.7.

At Figure No.7 is a threading draft for the M's and O's pattern as it is usually drafted. Here we have eight threads for each unit of the key draft instead of four as in Figure No.6. It is woven just the same as Figure No.6, but of course the weft thread will have longer skips than in Figure No.6.

At Figure No.8 is the threading for the regular M's and O's following the key draft plan of Figure 2 of the Monk's Belt at the top of Page 1. The numbers under the brackets indicate the corresponding units of the key draft.

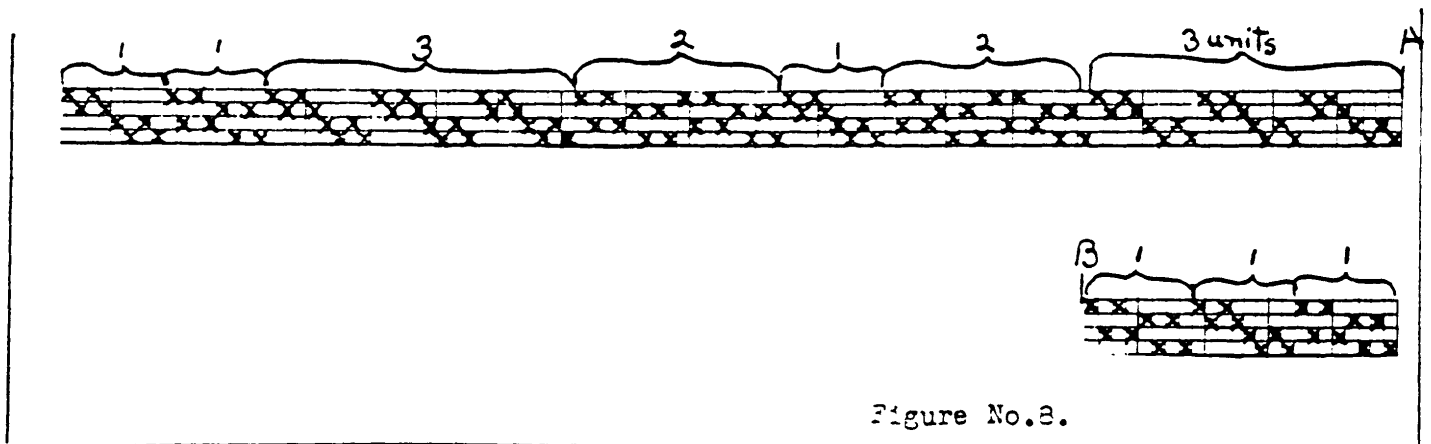


Figure No.8.

The M's and O's pattern drafts were much used for linen threading in the Colonial weaving, and many interesting old pieces are found. I never really understood just why the pattern was called M's and O's, until I saw an old linen table cover at the Museum in Chicago. This had just one unit of 1,2,1,2,3,4,3,4, for the one pattern block, and the 1,3,1,3,2,4,2,4, for the other pattern block. It was woven one shot of weft on 1&2, one on 3&4; repeated until the unit was square, then the other unit was woven one shot on 1&3, and one on 2&4 alternately until that block was square. And the effect showed up very clearly as little M's and O's. This is not so easy to see when other arrangements are made. Palmgren's Book, Vol. II. shows a rug woven on this same plan. It would be possible to design rather handsome ones, and the skips would be short and entirely suited to rug technique. Since I began writing about pattern designing in June, I have had a number of interesting letters. If you like this sort of thing, may I not hear from you also. Write me your questions. And do try out some of these ideas, and let me know what results you have.

# HANDWEAVING NEWS

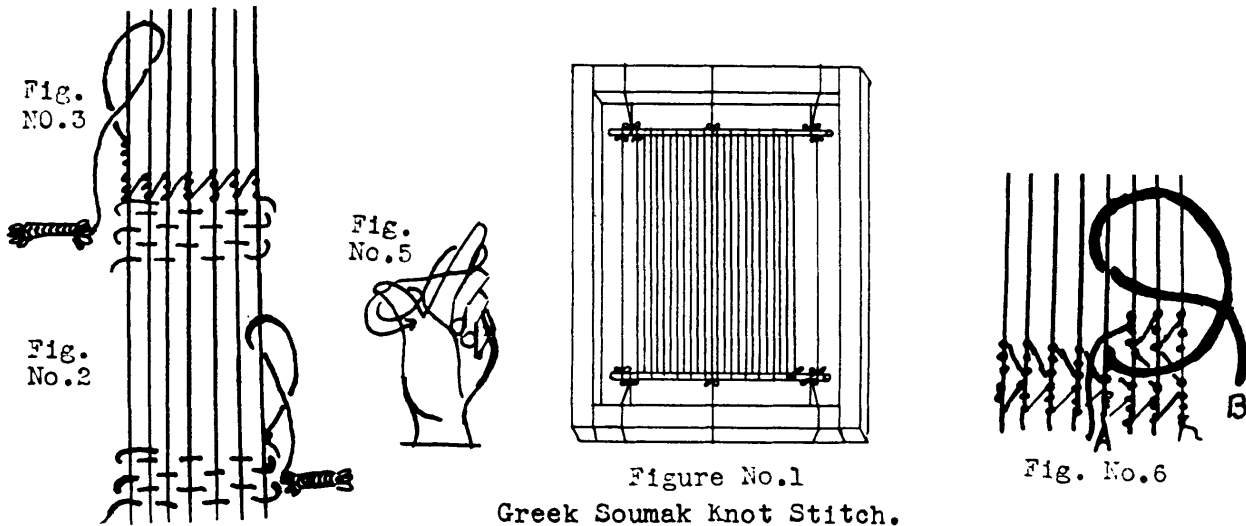


Figure No.1  
Greek Soumak Knot Stitch.

Lately a number of requests have come in for directions for making unusual fabrics that are different. And as we have been having loom controlled pattern for the past three months, I thought perhaps it might be of interest to discuss a free weaving technique this month.

The Greek Soumak Knot stitch was introduced to American weavers by Mr. Gilbert Foldes. And it is to Miss Emily Goodwin, 91 Cambridge Place, Brooklyn, N.Y. that credit must go for the first written description of the detail of this interesting weave, in her excellent book, "Tapestry Weaving, A Correspondence Course." I know that a few of the News subscribers have Miss Goodwin's course, and I hope others will find it of interest to write to her concerning it. And it is with Miss Goodwin's kind permission that I am sending this out to you this month.

Whether this particular form of the Soumak stitch is a variation of Mr. Foldes, I do not know. I have never seen any textile among either ancient or primitive fabrics which at all resembles it, nor has Miss Goodwin. There is also some little difference in the spelling. Luther Hooper in "Weaving on Small Appliances" Book I, spells it "Soumak" as I have here. While Miss Goodwin says that Mr. Foldes preferred to spell it "Summak".

**Design Requirements.** It is most important in this type of weaving to have an excellent design. This is a very permanent weave and a very handsome one. It can be used for rugs, upholstery, bags, or for wall hangings, and the design must be something one will wish to have around for a long time. Hence considerable time and thought should be spent on the design used. It may be planned out as a line design, and then transposed to cross section paper to be followed exactly in the weaving. It is best to have rather large masses with as little fine detail as is possible. This speeds up the time of working to considerable extent. Horizontal lines and diagonal lines weave very easily. No single vertical lines should be used, and it is best to keep any vertical line rather short, as the knots on this vertical line have to be staggered in order to lock together the two colors correctly as they come together. Cross section paper can be used with the same number of squares to the inch as the warp is set, and then the design will be full size. The colors, or approximate ones, may also be blocked in on the cross section paper design. And one square of the cross section paper design represents one complete knot of the weaving. The design on Page 3 was worked out for an experimental piece and as a small wall hanging. This was woven in tapestry wools, shades of brown, tan, orange, yellow, and greens, with a dark brown border all around the outside edges. It was set up on a simple frame 24" x 30" as shown at Figure No.1 at the top of this page.

Frame for Soumak Stitch. Small pieces up to about 18"x27" can be made on a simple wood frame as shown at Figure No.1 on Page 1. This can be a hooked rug frame, a picture frame well braced at the corners, or a frame such as artists use for stretching canvas. For larger pieces a regular loom should be used rather than attempt to work on too large a frame.

Materials. Warp should be a good quality of cotton cable cord such as heavy Butcher's twine No.12, No.10 medium, or No.8 for finer work. Weft should be good quality Germantown or tapestry wool of fast colors. For this set the warp threads at 10 threads to the inch. Rug yarn can be used if the warp is set from 6 to 8 threads to the inch.

Warping the Frame. At Figure No.4 is shown a simple method of making a continuous warp for this frame loom. Two removable pegs No.1 and No.2 are set in holes in a piece of board 2" wide by 30" long. The holes are set so the pegs can be put in at several different distances, depending on how long a warp is desired. Tie the warp end to peg No.1. Bring it around peg No.2 as shown and then back to No.1 again, making a cross or leash at L and X. Allow

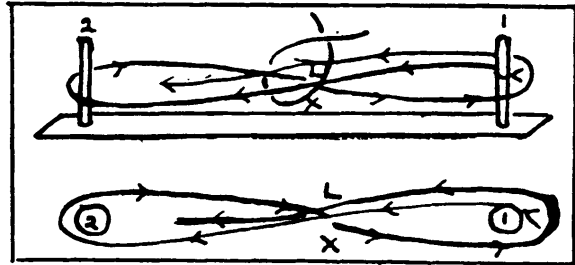


Figure No.4.

one warp thread for each square of the cross section paper design. So if the design is 80 squares wide, you need 80 warp threads. Put these warp threads on the pegs as carefully and as even as possible, and make no mistake either in the count or at the crossing LX. A single cord can be looped around the warp at LX to count every ten threads as they cross at LX. Now take two  $\frac{1}{2}$ " dowel rods 20" long, mark these rods off carefully in  $\frac{1}{4}$ ",  $\frac{1}{2}$ " and 1 inch marks all across their width. As soon as the correct number of warp threads are on the pegs, pull out pegs No.1 and No.2 and slip the warp threads over to the dowel rods. Secure the ends of the warp to the dowel rods as the pegs are taken out, and keep the tension of the warp even as the change is made. Now the warp is all made and on the dowel rods. Tie these into the frame as shown at Figure No.1 Page 1, with stout cords which can easily be adjusted either to loosen or tighten the warp threads. Space the warp threads so there are 8 warp threads to the inch, the marks on the dowel rods help do this. Tighten up the warp threads enough so they will make a strumming sound as the fingers are run over them. Cords at the top and bottom of the frame should be very stout, and securely tied.

To Weave a heading or Foundation for the Knot Stitch. Take a piece of heavy warp or twine, twice the width of the frame. Loop it around the left hand side of the frame near the bottom on a level with the bottom dowel rod and tie to the frame. Pass a flat leash stick through the opening between the warp threads above the cross of the warp near the upper dowel rod. Push this stick down toward the bottom dowel rod, and pass the double cord through the shed made by turning the leash stick on edge. Push the double cord down close to the bottom dowel rod with a fork or comb, spacing the warp threads evenly as this is done. Tie the ends of the double cord to the right hand side of the frame about level with the bottom dowel rod. Take another double length of cord, tie it to the left hand side of the frame at the top, and pass it over and under every warp thread, push up against the dowel rod at the top spacing the warp as this is done. Tie to the right hand side of the frame as below. Rest the frame against a chair or support of some sort. Do not let the warp or dowel rods touch the support. It is best to keep the same angle all during the work, so there will be no change in the appearance of the knot due to different tension or pull on the weft. Wind a small bobbin of either warp or yarn and weave a plain weave heading, passing the weft over and under each warp thread. Push each row down very firmly against the dowel rod. Weave this heading about a half inch wide. If the piece is to be hemmed, it is better to weave this heading of yarn the same color as the first row of knots. When the weaving is removed, stitch close to the first row of this heading on the sewing machine to fasten the edge securely. The method of winding a yarn bobbin is shown at Figure No. 5. Hold the yarn down with the middle finger, and wind around the thumb and first finger, then slip the end through and wind to form a tight firm bobbin.



Wind several yarn bobbins of each color of yarn to be used for the design in this manner. Be sure they are firm and tight, they need not be larger than about  $\frac{1}{2}$ " thick by about 2" long.

Greek Soumak Stitch consists of from 2 to 5 knots on the same warp thread. And the right side of the work is toward the weaver.

#### Detail of Working Greek Soumak Knot.

1. With a single knot, tie the end of the wool from the yarn bobbin to the first warp thread on the right hand side. Pull end through to the back between the first and second warp thread. Always begin a new thread or color in this way.

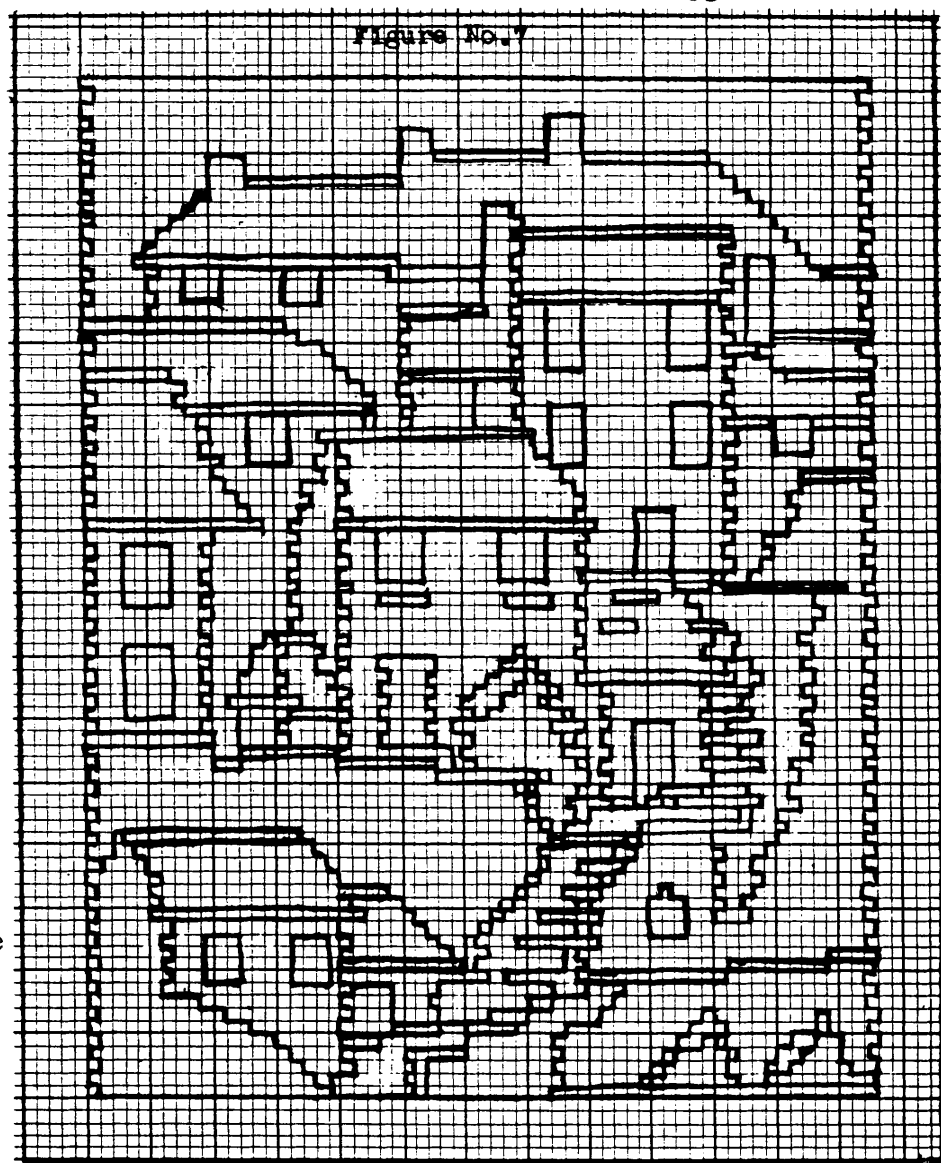
2. Hold the yarn bobbin between the thumb and first finger of the right hand, put it over and then under the first warp thread, as at Figure No. 2 on Page 1. To aid this, place left hand palm upwards, back of the warp threads holding 6 or 8 warp threads on the fingers. With the first finger of the left hand, hold out the warp thread on which the knot is to be made. Count the tie as one knot, and pass the weft twice around the first warp thread to make three knots on the first warp thread. Let the first warp thread slip off the first finger of the left hand, and make three more knots on the second warp thread.

Continue all across the width. Keep the weft as short as possible, not more than 6" from knot to bobbin is best. Do not warp the weft around the little finger of the right hand, keep weft vertical between knot and the yarn bobbin.

3. When last warp thread is reached on the left edge, make 3 knots on this. Then turn and come back to right as shown at Fig. No. 3 on Page 1. Throw the weft in the opposite direction from the first row, and make three more knots on the last warp thread to begin the next row.

4. Inter-locking. At Figure No. 6 on Page 1 is shown the method of inter-locking when short verticals occur. Finish the ending color with the last knot on the 3rd warp thread. Let this end pass over the 4th warp thread to the left. Tie in the new color on the 4th warp thread, make the knot as usual, then pull the ending color thread to the right. On the return row, pick up the end A, and make knots as usual.

Design for Small Wall Hanging in Greek Soumak Stitch.  
(Note how long vertical lines are staggered.)



# HANDWEAVING NEWS

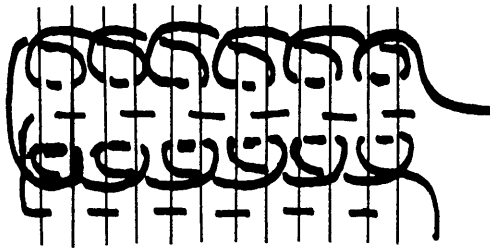


Figure No.1

## Further Notes on Soumak Weave.

This month I will give a few more notes concerning the Soumak stitch as it was not quite complete last month, and also some other variations of the method of working, which gives another type of texture to the fabric when finished.

**Greek Soumak Stitch.** When it is necessary to stop a color for just 3 or 4 knots, as in the case of the places on the design where there are doors or windows indicated in September News, the color of the larger area can be carried across the back of the 3 or 4 spaces, and continued instead of tying in another spool. It can be interlocked with the color of the 3 or 4 spaces at the point where it comes up between the warp threads to continue, if the slit is too long without the interlocking. On this piece some of these short verticals were not interlocked, as this was for a wall hanging, while for a rug or for upholstery, inter-locking would have to be made. The color should not be carried across the back if the skip is more than about 6 knots. When a color is no longer needed, the yarn can be broken off after the third knot and pulled through to the back. This end can be tied to another finishing end, or can be run down into the threads on the back with a needle and then cut off close.

When the design has been finished, weave a plain weave heading for the top, the same as at the beginning. For a rug the ends of the warp could be knotted after it has been cut from the frame. For a bag or for upholstery, or a wall hanging, a close row of machine stitching at both ends will hold the weaving securely, if one does not wish to have a fringe. For a wall hanging, the material should have a backing cloth of some sort. Pongee or a fair quality of sateen is an excellent backing cloth. This can be stitched to the fabric at the top, but should be hemmed by hand on both sides and across the bottom of the piece. Some people do not fasten the backing cloth down at the bottom at all. But if it is not fastened, a cozy nest for moths to grow is under the backing, and this should be avoided. Cut the backing plenty large, and do not let it pull as it is put on. If a rod is to be inserted at the top to hang the piece up with, it is easy to make an extra casing on the backing cloth at the top through which the rod can be slipped. The piece should be carefully stretched, dampened and pressed on the wrong side before it is lined.

Another form of the Soumak stitch is described by Luther Hooper in Book I. "Weaving on Small Appliances". The front of this stitch resembles the so called simple outline stitch of embroidery. A row of plain weave is put in, then a row of the Soumak, then a row of plain weave, then a row of Soumak. If the direction of making the knot is kept the same as described for the Greek Soumak, that is make the stitch from right to left as shown at Figure No. 1, all across the width, then a row of the plain weave, and then back from left to right with the Soumak making the row as shown at figure No. 1, the result will be like chain stitch, and be raised on the top side. While the back resembles the plain tapestry. But each knot is made to go over two warp threads, and under two each time as shown above at Figure No. 1. The chain effect is more distinct if two rows of the Soumak is put in, and then the plain weave.

October 1938.

Nellie Sargent Johnson.

Suggestions for Materials to Use for the Soumak stitch with plain weave between. The yarns used for the plain weave between each row of knots can be much finer than that used for the knot. The knots are made over two warp threads, and so the warp also can be some finer than that used for the Greek Soumak if desired. Separated figures in pattern design can easily be designed, and could be used on a linen warp. For such a plan, linen like the warp could be used for the plain weave between each row of the knots, and the knot stitch row be made with heavy linen floss. Or fine stranded yarn could also be used, such as crewel wools, or Bernat's Turkey wool, or six strand cotton embroidery floss. This is an excellent rug or tapestry technique. For a rug coarse Butcher's twine or Barbour's linen shoe thread could be used, or even carpet warp as the warp is used double. But for a rug, it is easier to use a regular loom than try to use a picture frame loom, since the plain weave between each row of knots is easier to do on a regular loom, and the beating up is also easier too. For a rug, heavy rug wool should be used for the knot stitch, and either finer wool or yarn like the warp for the plain weave rows.

#### Detail of Working the Soumak Stitch.

Weave a plain weave heading as wide as desired. Wind several yarn bobbins for the colors to be used for the design. In this case the design is to be an isolated figure. Plan the design on cross section paper, and let each square represent two warp threads, and 2 rows of weft, that is one row to the right and one back to the left, and also a row of the plain weave. If desired a row of the plain weave can be put in between every row of the pattern. Then each cross section paper square would represent a row of plain, a row of pattern color from right to left, a row of plain, and then another row of pattern color back from left to right. The pattern color would be taken over two warp threads, and the plain over every other warp thread. The pattern yarn can be threaded into a large needle, but it seems to me unless the distance is very small for the pattern color that to wind yarn bobbins is better, and easier to handle. The plain tabby weft can be wound on a regular loom shuttle. Either side of the material can be used for the right side, and ends of the pattern color should be fastened into the plain weave shed carefully so they do not show and cut close. When two pattern colors come together, they can be locked as in the Greek Soumak knot if desired, but this is not absolutely necessary as the plain weave row will close any slits which might occur from not interlocking the colors. The effect of this weaving is to give a somewhat raised figure on a background of plain weave. It can be a matter of choice as to whether a chain stitch effect is desired, or not. If the plain effect is desired, always throw the pattern thread color, the same way instead of reversing it when the pattern thread is taken back from left to the right. This stitch is, it seems to me, practically embroidering on the loom. Note that only one knot occurs on each two warp threads. Keep the warp threads spaced as evenly as possible during the working of the pattern wefts, and do not split the stitches between these two warp threads, if the underside of the material is to be used for the right side, always make the stitch over the same two warp threads. This technique can easily be used on the little heddle belt looms for small pillow-tops or wall hangings, but rugs and large pieces are easier to make on a large loom.

#### Another variation of Soumak.

This form of the Soumak has been called Scandinavian Soumak, and is also described in Miss Emily Goodwin's "Correspondence Course" mentioned in the September News. This differs from the technique just described in the following ways. First there is no plain weave between each row of the knot stitch, second it is made on a single warp thread, and third the design is carefully inked on to the warp threads, and the under side or the tapestry effect side of the weaving is the right side.

The picture frame loom can be used for small pieces, and a continuous warp made as described in the September News. For large pieces a regular loom should be used.

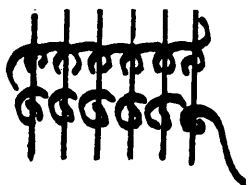


Figure No.2

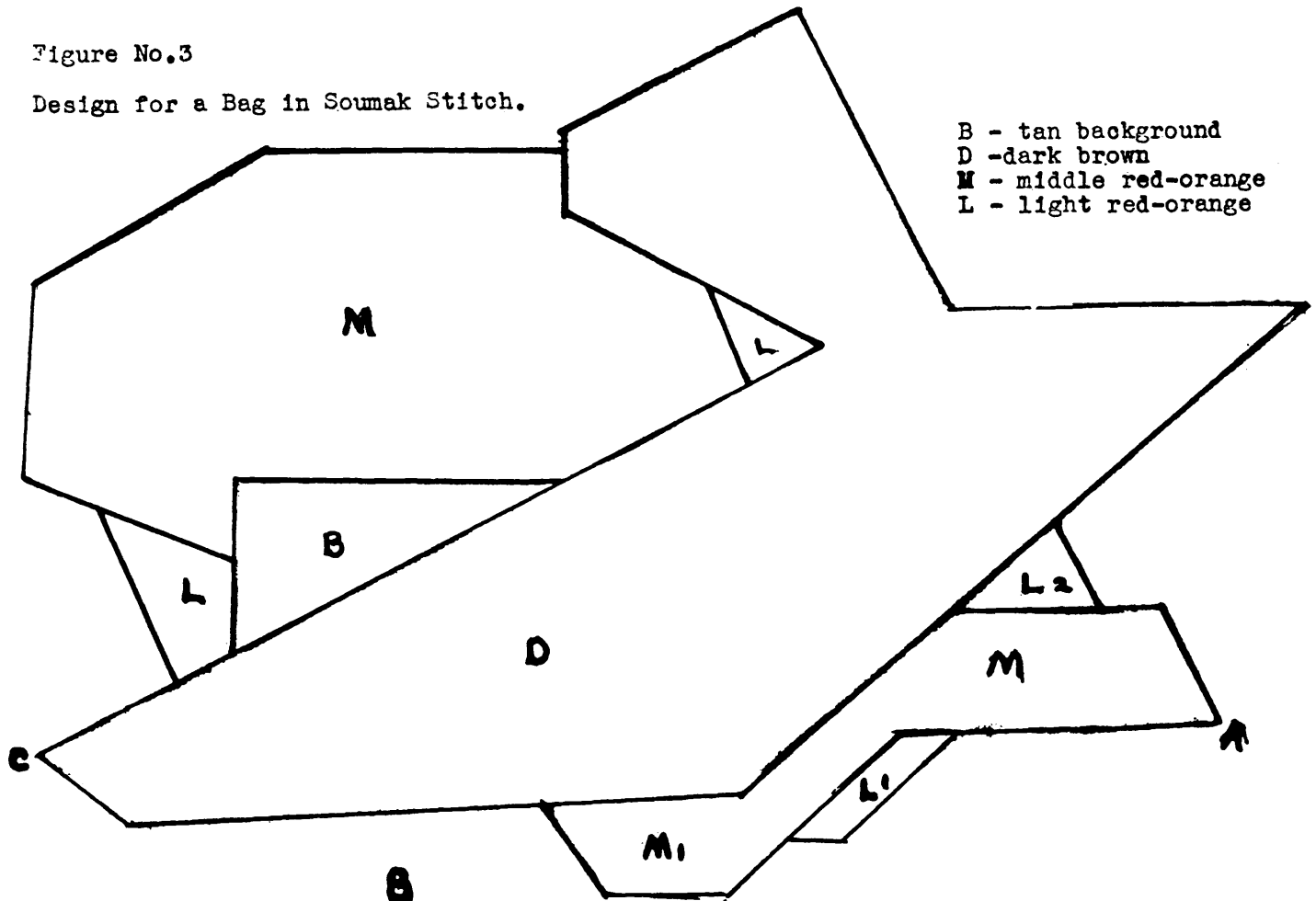
Warp- Use coarse twine or tire cord set about 8 threads to the inch. Mark the dowel rods at the top and bottom as explained for the set-up of the Greek Soumak knot, and for this technique make the warp as wide as the width of the design to be used. Weave a plain heading at the bottom to have a firm foundation to beat against. The knot should be beaten down into position with a fork or coarse comb.

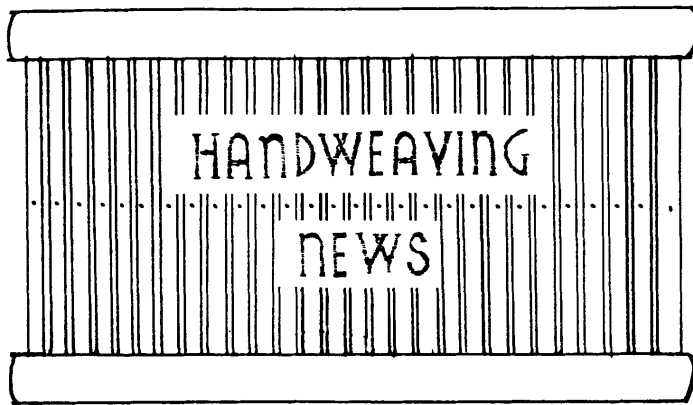
## Design Requirements for this Technique.

The design should be made in the actual size it is to be woven, on architects linen or tough drawing paper. Color this with the values of the yarns to be used, and pin to the design the shades of weft to be used. Tapestry or crewel wool of fast colors should be used for the weft for bags, upholstery, pillow-tops or wall hangings. A good quality of rug wool for rugs is best. Pin the design carefully and evenly back of the warp threads to the plain weave heading. The first design should have rather large masses with little fine detail as the one given at Figure No.3 below for a bag. With pen and waterproof ink carefully put a dot on each warp thread to follow exactly the design outline. Then ink each of these warp threads all the way around. This is a slow process, but must be done carefully to keep the exact contour of the design. Let the ink become dry before starting to work. Figure No.3 given below is an excellent design for a bag that is easy to do for the first piece in this technique. Colors are tan for background B, D for dark brown, M for middle red-orange, L for light red-orange. Other colors can be substituted for these if desired. Tie the weft to the first warp thread with a single knot and bring the end to the back in the same way the Greek Soumak stitch was started. This is the first stitch or knot. Make the next stitch or knot on the second warp thread as at Figure No.2 on Page 2. Under or foundation masses must be worked first, so with the tan work all of the background as far as A and C on the design. Then color M can be worked as far as the first mass of L at the bottom of the design, then work L and finish the rest of M. Now all of D can be worked as far as the beginning of L2, and so on. Not more than four stitches or knots which would be four rows, should be on the same vertical warp thread. When this has to occur work the adjoining mass up to this point, and interlock the two weft colors in the same manner that the interlocking occurs in the Greek Soumak knot. Long verticals should be staggered, and in this case the rows of adjoining color need to be worked along together. Otherwise work as much of one mass of color as possible before using another color unless it is necessary to change the color for the design. Always cover the dot with the under color. Keep warp spaced evenly, and do not let edges pull in.

Figure No.3

Design for a Bag in Soumak Stitch.





Warp Pattern Belts on the Heddle Loom.

There are a number of different ways in which interesting belts can be made on the simple heddle belt loom, with the pattern all in the warp. In this kind of weaving the weft does not show at all, and is generally much coarser than the warp. And the warp is set much closer together than for regular weaving. If the warp is all of one color no pattern is possible, so at least two colors must be used for the warp.

Equipment;- A small heddle made with holes and slots. I can furnish these heddles in three sizes, 10" for \$1.75, 12" for 2.75, and 20" for \$3.75. The description of other forms of weaving which can be made with these heddles was given in both the August 1936 and 1937 numbers of Handweaving News. Four flat leash sticks 1"x1/8"x 14" in length, a flat shuttle preferably a black one similar to a netting shuttle, and a needle and fine thread with which to thread the heddle are all the tools that are necessary for this loom. If anyone desires a black shuttle, I have these in 14" size and 20" size, at 65¢ and 85¢ respectively. These black shuttles are a great help for almost any kind of pick-up weaving, and to my mind a rather necessary piece of equipment no matter what kind of weaving one is doing. In this type of weaving the shuttle carries the weft and also serves as a beater to push the weft into place, as the heddle just raises and lowers the thread to form the sheds, and is never used to push the weft into place as it is in the regular form of plain weaving. It is possible to tie this heddle with its warp, one end to the belt or chair in which the weaver works and the other end to any stationary object as a door knob or table leg. But many people prefer to tie the whole apparatus into a frame of some sort. A frame such as hooked rugs are made one is useful, or one such as is used for the picture frame loom may be used. If any one desires a frame, I can furnish one 24"x 30" for \$1.00, plus the postage.

Materials;- For the first project in this form of weaving, it is best to use carpet warp in at least two colors. Or the knitting cottons which are to be found in most ten cent stores now, can be used if desired. But almost any kind of material may be used after a little practise in handling the loom has been acquired. Mercerized cotton #5 or #8, or even No.20 mercerized used double, fine silks used double, as well as worsted yarns such as "Fabri" or Saxony and Iceland, while coarse linens combined with art silks may all be used effectively. The only kind of material which it is well to avoid is soft yarn which would tend to be rough or fuzzy, or material which has nubs or lumps in it such as some of the rayons and novelty yarns.

### Threading the Heddle.

1. Simple belts. Thread the heddle one thread in a hole and one in a slit all across the width. Use a number of colors in the warp. These different colors arranged in the warp make the pattern. A number of arrangements are given below. The weft is entirely covered, and is best of the same color as the edge warp threads. It can be used singly, but the weaving progresses faster if the weft thread is of two threads or even four. Thread the heddle and tie it into a frame, and then weave pulling in the weft thread tightly as it goes across so it pulls the warp threads close together and makes a narrow braid. The width of the weaving should be less than half the width of the warp threads in the heddle. Keep this width even. The weaving process is as follows, - Raise the heddle, and pass the shuttle through the shed. Depress the heddle, push first weft in place with the shuttle, and then pull the weft through this shed. Repeat for required length desired. Do not beat the weft into place with the heddle, it is used only to raise and lower the warp threads. A heavy netting shuttle is an excellent tool to use for carrying the weft thread and to push it into place. I have these at 65¢ each in either a 9" or 14" size. This shuttle is useful for many other types of weaving as well.

Patterns for belts, -

No.1 Use double threads in both slots and holes. Thread as follows, - 5 brown, 2 orange, 5 green, 2 orange, 2 blue, 2 orange, 1 brown center, reverse back to beginning. Total of 38 warp threads required.

No.2. Thread singly one thread in a slot and one in a hole, - 5 black, 2 rose, 2 blue, 1 orchid, 2 blue, 2 rose, 7 black, 1 purple, 2 orchid, 1 rose, 2 orchid, 1 purple, 1 L green, 1 D green, 1 L green, 1 D green, 1 L green, 1 purple, 1 rose, center, repeat back to beginning in same order. Total of 69 threads required.

No.3 Thread singly one thread in a slot and one in a hole, - 3 yellow, 3 brown, 1 yellow, 5 brown, 1 yellow, 1 brown, 1 yellow, then alternate 1 blue and 1 yellow 8 times, then 2 blue, 2 red, 1 blue, 1 red, 1 blue, 1 red, center, repeat back in same order. Total of 67 warp threads required.

No.4. Thread singly one thread in a slot and one in a hole, - 5 D brown, 1 L green, 1 tan, 1 brown, 1 tan, 7 brown, 1 tan, 1 L green, 1 orange, 1 tan, 1 brown, 2 tan, 1 brown, 1 tan, 1 L green, 1 orange, 2 L green, 7 red orange, 4 L green, 3 orange, 1 red orange, center, repeat back to beginning. Total of 87 warp threads required. This is a very handsome wide belt. Pull in to about 3½" width.

The above method is a very simple way in which colorful weaving may be obtained, and it is as fascinating to adults as well as to children. Many other threadings can be invented, and much pleasure gained in putting together different color arrangements.

2. There are many different ways in which warp pattern can be made with the use of the heddle. And it gives me much pleasure to show you another method of weaving warp pattern which I have worked out for myself. The description may sound a bit complicated, but in order to make it clear I have gone into much detail. This is exceedingly interesting, as the designs can easily be planned out on cross section paper as at Diagram No.1 (A) and (B) on the next page. We will plan to use pattern (A) for the first attempt.

Cross section paper pattern design (A) is 19 units wide. Warp 1 red thread and 2 blue warp threads for each unit of the pattern design, so make a warp of 19 red threads and 38 blue threads. Thread as follows; - The first blue thread through a hole, red through a slit, blue through a hole, blue through a slit, skip a hole, red thread through the next slit, skip the next hole, blue through next slit. Repeat this all across width of the warp. Thus one repeat will use 6 warp threads, or two red and four blue threads. As soon as the loom heddle is threaded, tie the warp threads to a stick in front of the heddle, and tie the stick either to a frame or to the weaver's belt, and the other ends of the warp to the frame or a stationary object and the heddle is ready to weave. It is easier to use a frame for the heddle, but if this is not available, it can be tied up without, to the weaver's belt and a solid object.

Wind a shuttle with blue weft, and weave about an inch or so just raising the heddle and then depressing it. Pull the weft thread tightly so the warp threads are close together, and the width of the weaving only about 2" or so wide. Use the shuttle to push the weft thread into place, do not use the heddle except to raise and lower the warp threads.

The red threads are the pattern threads. With the warp flat, use a black pick-up stick to pick up the red warp threads as follows, - Begin at A on Diagram No.1 (A) which shows the design we will follow. Go over the first 3 threads, pick up the next 3, over 3, pick up 1, over 3, pick up 3, and over 3. Leave this pick up stick as it is, this is the upper pick up stick. Study the design carefully and note that the pick up stick goes over the spaces, blue threads, of the design, and picks up on the top of the stick the X's, or red threads. Pick up only the red threads, and do not let any blue threads get caught in on either the top or the bottom pick-up stick. Always pick up the threads on a flat warp, do not raise or lower the heddle.

Now put in the bottom pick-up stick which holds down the red threads opposite the ones on the row just picked up with the first pick-up stick. Proceed as follows, - Underneath the flat warp threads, pick up on a second pick-up stick, the first 3 warp threads, under the next 3, pick-up 3, under one, pick-up 3, under 3, pick-up 3. In other words, hold down with the second pick-up stick, the opposite warp threads from the ones picked up on the upper pick-up stick. Now turn the first or the upper pick-up stick on edge, raise the heddle, and insert the blue weft thread through the shed as shown at Diagram No.2 from right to left. Push the weft thread right up close to the previous row with the weft shuttle. If this cannot be done, some of the blue warp threads have been caught in under the lower pick-up stick. Next turn the lower or bottom pick-up stick on edge, depress the heddle and insert the weft shuttle from left to right in the shed as shown at Diagram No.3. Push the weft close as before. Note that the upper pick-up stick is always above all of the blue warp threads, and the lower pick-up stick is always below all of the blue warp threads. Remove both pick up sticks, raise heddle and throw a shot of blue weft, then pick up the next row of the pattern, with both pick up sticks as before, but the second row of X's on the pattern design, as follows; - The upper pick-up stick picks up the first thread, then over 3, pick-up 1, over 3, pick-up 3, over 3, pick-up 1, over 3, pick-up 1; and the lower stick picks up the opposite red threads. Then throw two shots of weft, pull out the pick up sticks and depress the heddle and weave a plain row. It is not necessary to put in a plain row of weaving between each of the picked up rows unless you wish to do so. Continue in the same way as far as desired. This weave has many possibilities, and many different pattern designs can be woven on the same piece if the same number of units in width are kept. Pattern (B) is also effective when woven. Please write me if you have any questions concerning this type of weaving.

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MERRY CHRISTMAS AND A VERY HAPPY NEW YEAR

TO YOU ALL,

*Hellie Sargent Johnson*

December 1938.

DIAGRAMS FOR WARP PATTERN ON THE HEDDLE BELT LOOM.

Diagram No.1 Cross section paper pattern for 19 warp threads.

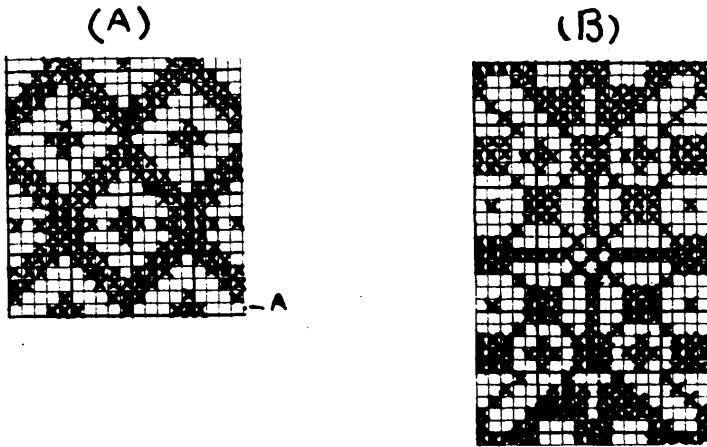


Diagram No.2 Raise heddle and pass weft through

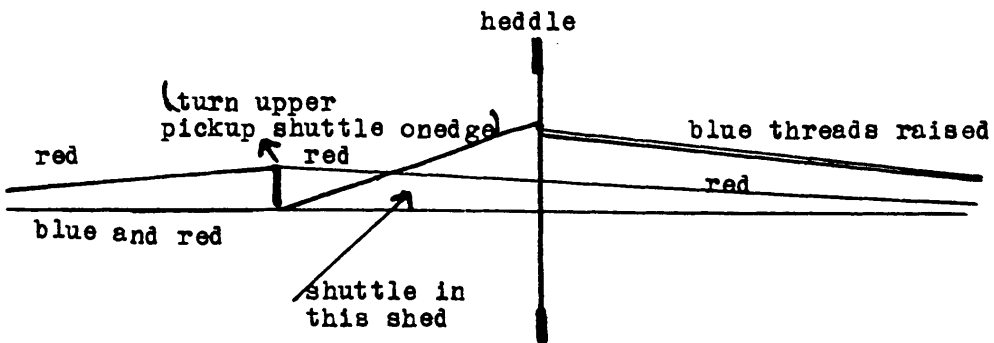
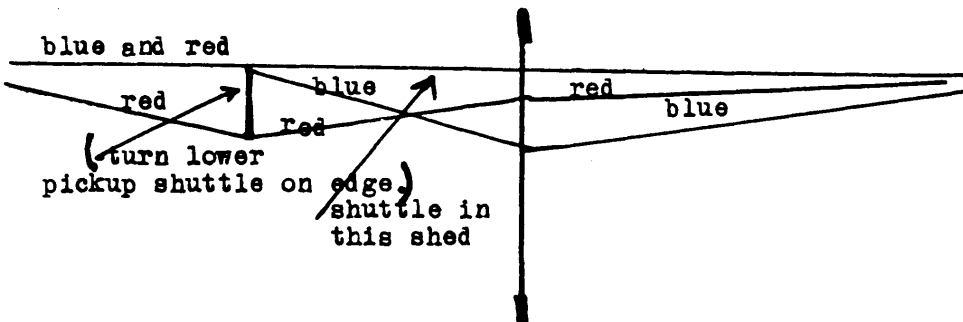
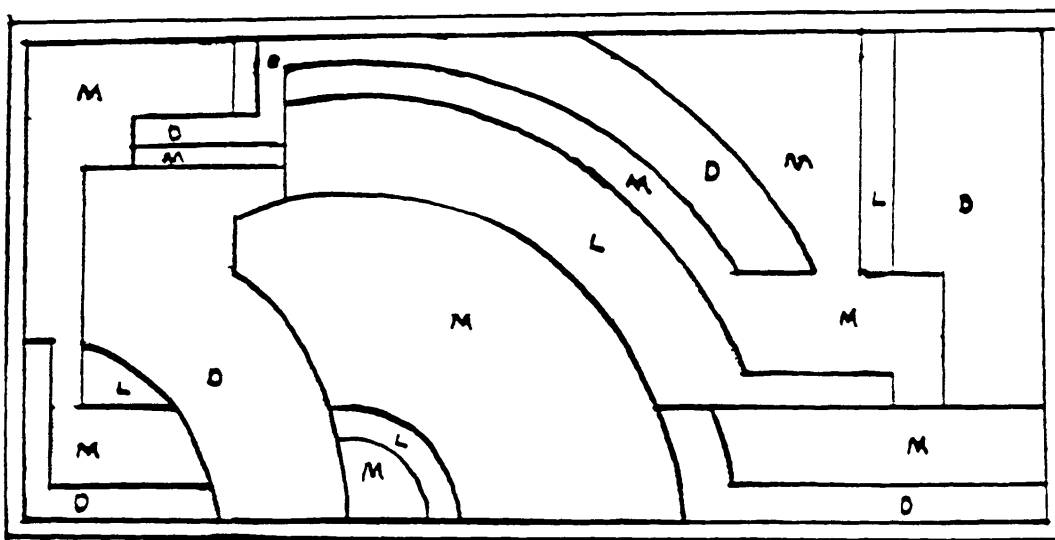


Diagram No.3 Heddle depressed.





# Handweaving News

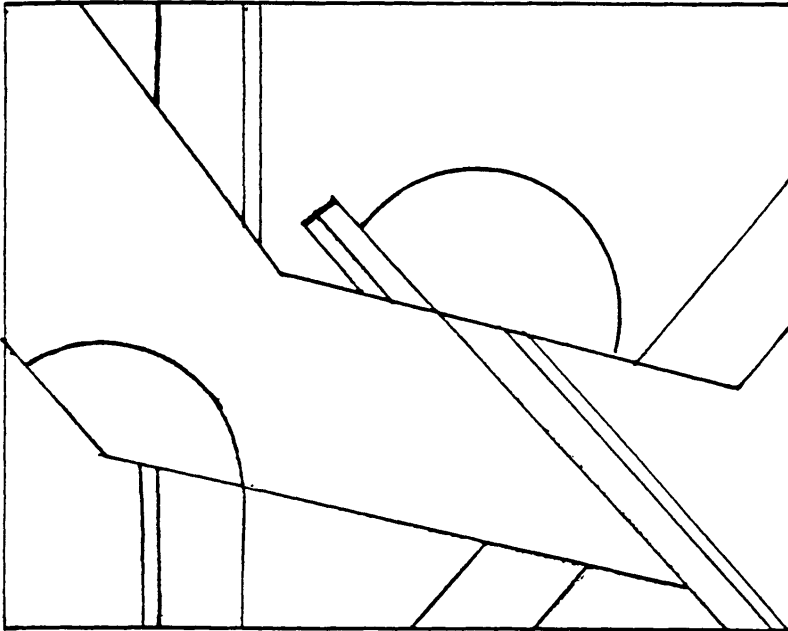


## Importance of Texture in Handweaving Design.

Ever since January of 1934, the January issue of the News has discussed in some form the matter of designing for Handweaving. As there are many of you who are new subscribers, perhaps it might be well to review as briefly as possible the content of these issues. In January 1934 a "Method of Designing Stripes, Borders, and Plaids" was given, and is I think one of the fundamental things every weaver should know. This is a simple procedure which anyone can carry out, and answers the question most often asked, especially by beginners, "of how long shall I make this piece of weaving", meaning of course the proportion of width to length. It is based on the principles of dynamic symmetry with all of the complicated mathematics left out. The January 1935 News contains an important outline of "A Basis of Criticism for Works of Applied Design." And this outline is explained, and an attempt is made to explain just how such a criticism can be used in handweaving. It gives a sound foundation for forming a judgment, more than just saying that "this is a poor piece of weaving," with relation to its design and structure as a whole. In January 1936 a simple method of Designing with the Square as a Unit was given, as well as a list of a few important books on design which have been helpful on this subject. Simple well designed squares can be carried out by beginners with much success, and inspire confidence. Also it has always seemed to me that this type of designing for handweaving most naturally fits the use of the weaving materials, and the fact that wefts cross the warps at right angles. January 1937 contains an explanation of free and loom controlled pattern design, and a method of using cut paper for designing free pattern design, as well as an entirely new form of making loom controlled patterns designed by Mrs. Florence Bratten. And in January 1938 further notes on designing with particular reference to free weaving techniques etc.

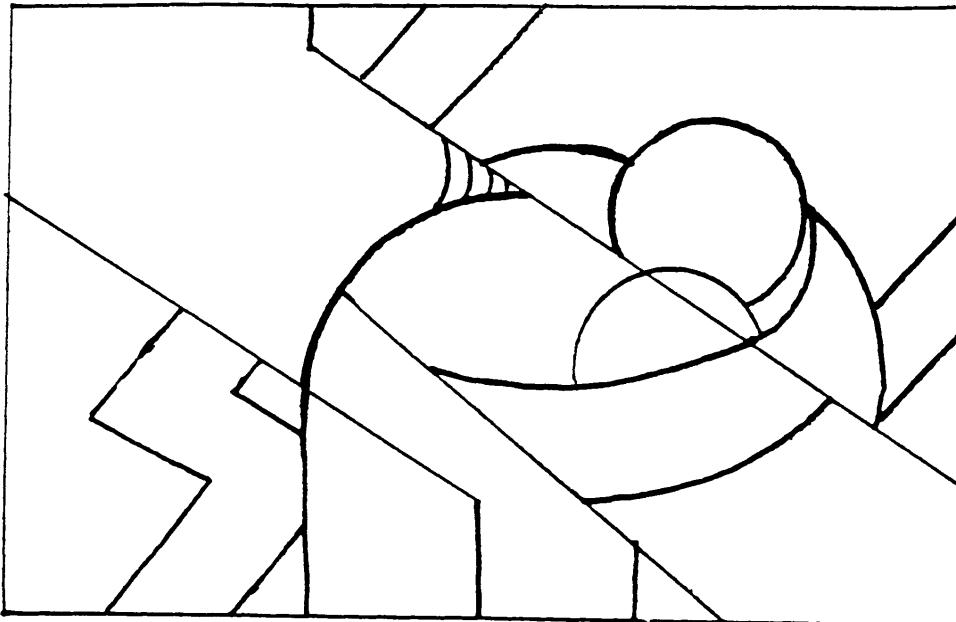
Threads are the essential structure of all woven textiles. With these on our looms we build up fabrics of different textures according to the kind of thread we use, how it is set in the loom, and what weaving technique is employed. The quality of this fabric may be thick or thin, soft and pliable or hard and board-like, dull or shiny, rough or smooth. Textures are an important part of modern textiles and offer a wide field for individual experimenting and designing of new ways of using threads on our looms. It has occurred to me many times that most weavers have not been interested enough to work with the possibilities in different kinds of threads. If they have found one type which they like particularly, they stick to that type.

There are a good many ways in which the designs on this page may be used to develop interesting unusual textures. A very logical procedure in texture experiments is to begin by making a piece of simple stripes of different kinds of yarns, twine, and threads etc. Have the stripes of different widths and of different yarns combined coarse against fine, rough against smooth etc. For instance make a heavy stripe with heavy rug chenille or rug wool, a narrow stripe of fine mercerized cotton or silk, some raphia, cellophane, carpet warp, metal thread of some sort, candlewick cotton, art silk, lian thread, silk boucle, finely cut corn husks, finely cut silk stocking material, etc. There is no better way to acquaint students with different kinds of threads and yarns than this, and it is simple and easy to do, and better suited for the person who is just beginning to weave than to take too complicated a design for the first attempt.



The next step is to take one very simple design or motif, and develop it in several different techniques, one after the other on the order of a sampler.

For instance, take such a simple motif as a square or rectangle and combine it with a triangle or a slight curve. Then weave this first in laid-in technique using three different kinds of threads or yarns. Then weave the same design in embroidery weave in some form. There are endless ways of making a most interesting sampler in this fashion, and much may be learned from such an experiment in making of weaving textures.



Some people like best to work with very coarse threads and make coarse textures, while others prefer fine threads set close in the reed. Different weaving techniques also impose certain limitations on both the kind of thread used, as well as the design it is possible to use.

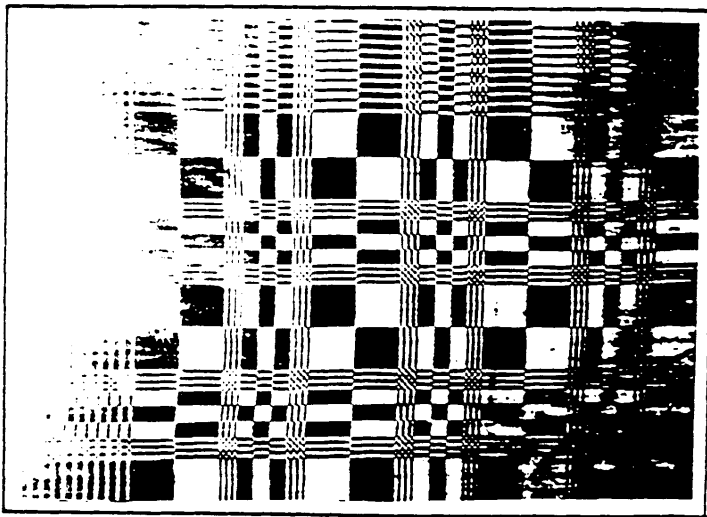
Several abstract designs are given this month designed by beginning students. These may be used for a number of different things, but the main object in presenting them here is the hope that they may be used for texture experiments with different kinds of threads. The design at the top of Page 1 could be used for a knotted rug using the Ghiordes knot in several colors of heavy rug wool. The letters L, M, and D, indicate light, middle, and dark for colors. Trace off these designs, better still make some of your own, and enlarge them. There are two convenient ways of doing this. One is to trace the design on to cross section paper with carbon paper and then follow the outline as near as is possible on the squared paper. This can then be planned according to the number of warp threads to be used. Or the design may be divided up into small squares, and an equal number of squares be drawn on a large size sheet of paper the actual size the design is to be woven, and then lines drawn in the squares on the large sheet just as they are on the small original design. In this way it is possible to secure the same proportions in the enlarged design as in the small one.

Suggested experiments in textures. Choose a design, preferably a simple abstract one. Decide what technique is to be employed and what threads are to be used both for warp and weft. For our first experiment, we will use the design on Page 1 enlarged to about 18" or 20". Set carpet warp or knitting cotton about eight or ten threads to the inch in the loom. We will use the laid-in technique entirely. Now comes the choice of threads. To eliminate the color problem entirely, it is easy to have all of our threads white, natural, or just off the white and play up the texture just by using different kinds of threads next to each other, for the different areas of the design. For instance in this design one can use, heavy cotton rug chenille, rug wool, Rayon art silk, linen, silk noils yarn, and fine and coarse mercerized cottons. Occasionally it probably will be necessary to put in a few extra shots where a fine thread meets a heavy one in the design in order to fill the space required, but this may be adapted as the weaving progresses.

A second experiment which would be entirely different in effect, would be to create different textures by using the same kind of thread throughout, but employ a number of different weaving techniques to carry out the design areas. For instance, use laid-in technique, tufting, embroidery weave, Spanish weave and possibly others in such a way as to have different techniques accent the space divisions of the design. Some of the design lines might have to be changed slightly as the weaving progressed according to the type of technique employed. There are a great many possibilities in this sort of weaving and a field in which practically nothing is being done by handweavers. And yet it seems to me, it is one of the most logical phases of handweaving because it depends entirely on the use of threads and techniques for its texture effect. This problem can be a very challenging one even for the most advanced weaver, particularly if the color scheme is also introduced.

Some of you may not care for the abstract designs presented here. And if you do not, better still make up your own designs, but keep them simple. Right here would seem to be a good place to emphasize the importance of keeping woven design on the abstract rather than the realistic or naturalistic side. Imitating painting techniques with threads is considered by the best authorities very poor functional design in weaving. We have cameras to photograph exactly the house we live in, we do not need to preserve it in threads. Weaving is formed by the crossing of threads at right angles to each other, and is a limitation of technique which should always be considered if our handweaving is to be truly good functional design. Texture is an inherent part of woven fabric and a natural result of the use of materials and weaving techniques. Let us as handweavers pay more attention to texture, to the materials with which we work, and create with them to see what they will do for us on our looms. We can be much freer with them on our hand looms than the power looms can possibly be. And we can create fabrics which are interesting and unusual solely for their textures.

# Handweaving News



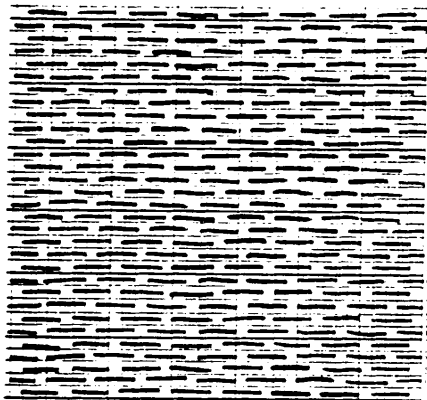
A Two Block Pattern derived from an Old Swedish Table Cloth.

At Figure No.1 above is a photograph of an old Swedish table cloth in red and white loaned to me by Mrs. Hedquist, one of my students. It was woven on an 8 harness twill threading two block pattern. On account of lack of space the original pattern is not given. The key draft on Figure No.2, page 2 is slightly smaller than the original blocks, and was used for the actual threading draft on Page 3, Figure No.8.

The August 1938 number of the News described the method of writing 2 block pattern threading drafts from two block key drafts, explained how to draw them down, and the way to write two block over-shot patterns, and the M's and O's threading drafts. Here we have devised a "3 and 1" threading draft which will give the "Summer and Winter" texture, on the regular four harness tie-up. For each unit of the key draft at Figure No.2, use 4 threads for the actual threading draft. One unit for one block is 3,2,1,2; and the other unit for the second pattern block is 3,4,1,4. These four threads can be written any number of times to correspond to the number of units of the key draft. This type of threading was one which I worked out from an old Roumanian coverlet, and reduced down. It was also explained in the News for September 1936. It is of much interest for several reasons. First it is possible to weave the "Summer and Winter" textures on these threadings without changing the regular four harness loom tie-up, and then it is also possible to use it for the Embroidery weave by using either Treadle 1 alone, or 3 alone. On the Structo loom, use levers 1 alone and 3 alone, alternating for the Russian embroidery weave which was described in the Nov. 1938 News.

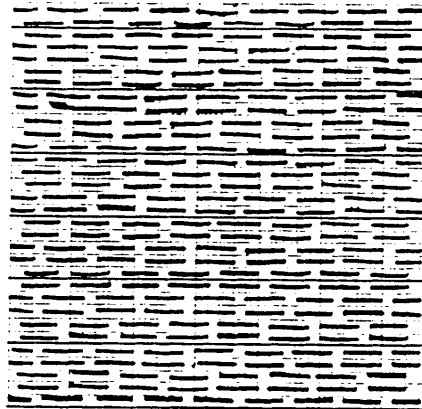
Figure No.5 gives the regular form for writing the four thread units of the "Summer and Winter" weave, with the tie-up as shown. Figure No.3, or weaving "one & one" can be woven on the threading draft at Figure No.8, by using Treadle 1, then Treadle 3, one shot on each to square the pattern block with plain weave tabby after each shot of pattern; and Treadle 3 once, then Treadle 4 once woven to square the block for the second pattern block. Or by weaving 2 shots on alternating treadles, with plain weave between each shot the effect is as at Figure No.4. This is called "weaving" in pairs. At Figure No.7, the pattern is woven on just one treadle enough times to square each pattern block as shown. This is a good pattern threading for linens as there are only three thread skips. Figure No.9 is an interesting plan for a glass curtain. Regular laid-in squares can be used instead of picking up part of the pattern as shown at Figure No.10. Note that this is picked up on the threading from thread 177 through 221, one block has been omitted in the center of Figure No.10. And the single square is picked up on the warp threads from 336 to the center 359, and reversed back as far as thread 335 again.

Figure No. 3. Draw down of actual threading, 3 end 1 units as given at Fig. No. 3. (Text is partially obscured by a thick black bar)



(Weaving "one and one").

Figure No. 4



(Weaving "in Pairs").

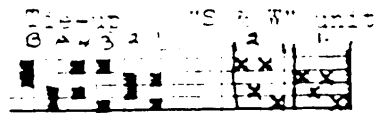


Figure No. 5.

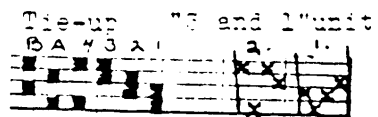


Figure No. 6

Figure No. 7 Draw down of actual threading, 3 end 1 units as given at Fig. No. 5

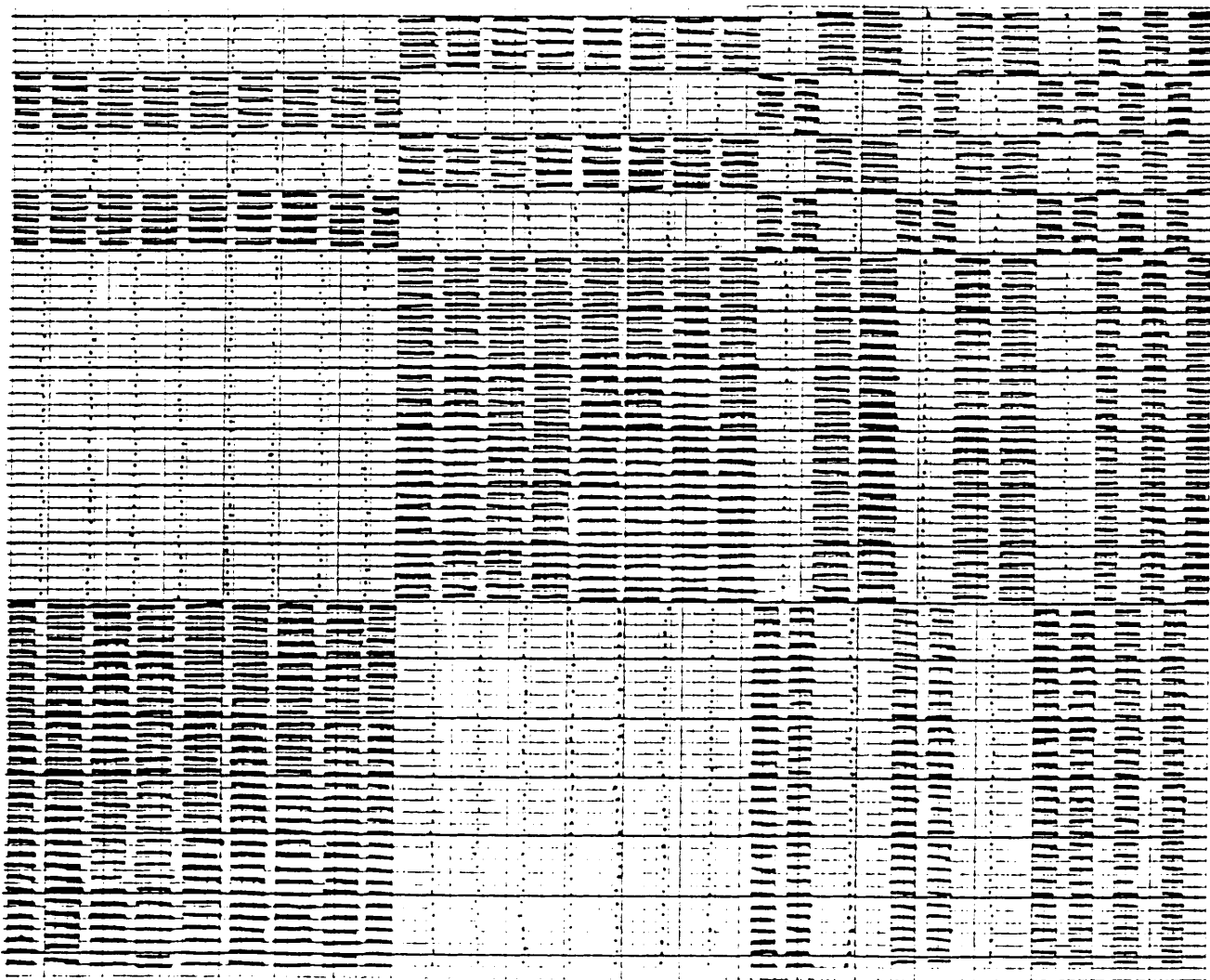


Figure No. 8 Actual creasing, "B and L", for Key Draft at Figure No. 9 One-half of complete bar with given.

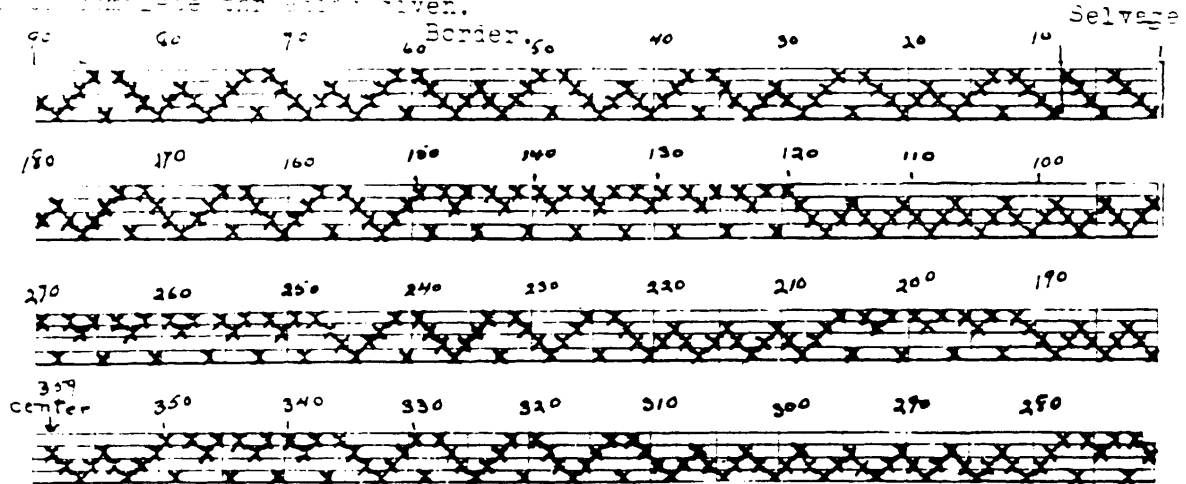
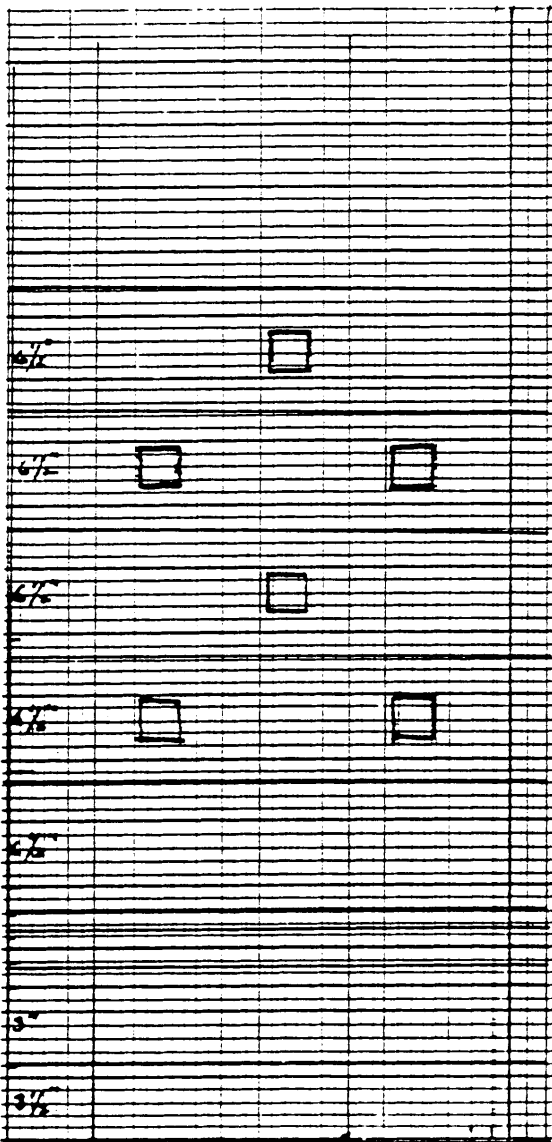


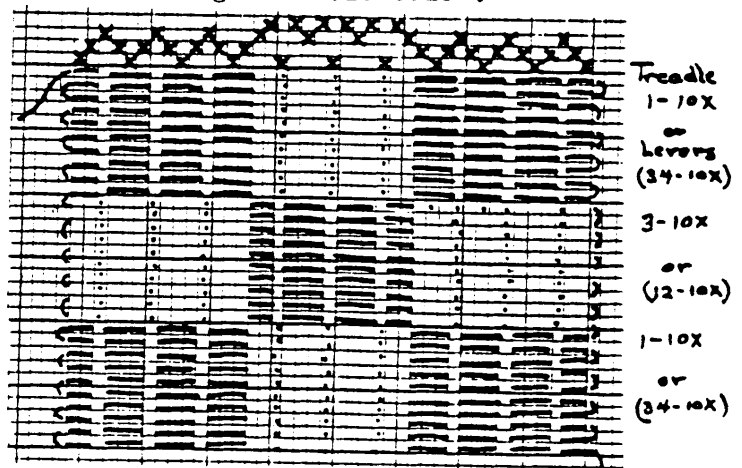
Figure No. 9 Plan for Glass Curtains.



Thread the selvage, putting 2 threads thro the first heddle. Then from thread 1 to 358, then 358 reverse back to thread 1. Thread a selvage on other edge putting two threads through the last two heddles making a total of 720 warp threads used. Sley 2 threads in a dent of a 15 dent reed.

Plan for glass Curtains.

Warp No. 20 mercerized cotton set 30 to the inch. Weft No. 10 mercerized cotton. Black line on sketch indicate one warp thread of No. 3 mer cotton, threaded through the same heddle as the regular warp, and wound on a paper bobbin, and hung with a dress weight attached loose at the back of the loom. Weave 3 1/2" of plain weave with fine weft, then 3" plain weave with heavy No. 3 cotton, an inch of fine plain weave, then one shot of heavy. Put in five shots of the No. 3, as indicated, then 6 1/2" of fine plain weave, then 1 shot of No. 3. Then about 2 1/8" fine plain, and we are ready to pick up the small squares as shown below in detail. Weave the pattern shots with No. 3, and carry the weft only as far as is indicated on Figure No. 10 below.



# HANDWEAVING NEWS

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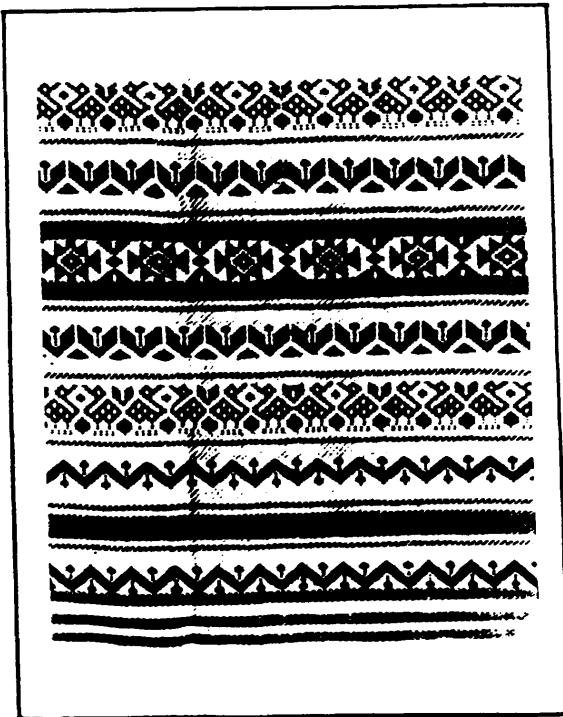
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Guatemalan Collection of Textiles.

This month I am going to attempt to describe for you an interesting collection of Guatemalan textiles which were recently loaned to me by Miss Rosenfeldt and Miss Wyatt, both teachers in our Detroit schools. They went to Guatemala last summer, and returned with textiles rather different from what the average tourist picks up and brings home from such a trip.

The Guatemalan women wear skirts of cotton cloth woven about 36" wide. Many of these are characterized by having the warp and weft tied and dyed. The warp for the cloth is tied off in small sections by twisting cord around the different groups of warp threads as it is stretched, and these ties will make a definite pattern. First they tie off all the parts of the warp which are to remain white, then the warp is taken off the warping equipment and dyed yellow, then all the places where they wish the yellow to remain are tied off with string again, and the whole warp again dyed blue, or any other color desired. Different localities have their own color combinations of blue, red and green, and often some black in the pattern. These different colors are combined and woven to make gorgeous stripes and plaids. The one before me now is a beautiful arrangement of red, yellow, green, and dark blue, and although woven only of cotton at a short distance gives the effect of a rich velvet.



The photograph at the left is of a head cloth. These occur in many different designs and types. The stripes of brocading in this one are carried out in red, yellow and some orange, and are brocaded or just stripes of plain color. At Figure No. 1 on Page 2 are the small bird figures at the top of the photo, drawn out in detail so they could be followed and woven. These borders could any of them be easily woven on the heddle loom and would be useful for bags, runners and scarves. Sometimes if the skip between the warp threads is a long one, these figures are woven with separate weft threads, many times these are a different color for each of the figures. And sometimes right in the middle of a figure the color is often changed. Just one half of this piece is shown in the photograph. The small border at Figure No. 4 on Page 2 is a very simple one, but quite effective as it is used for the very center of this piece. It could be used as a small border in combination of any of these others quite effectively.

Detail of Weaving on Guatamalan Textiles.

Figure No.1

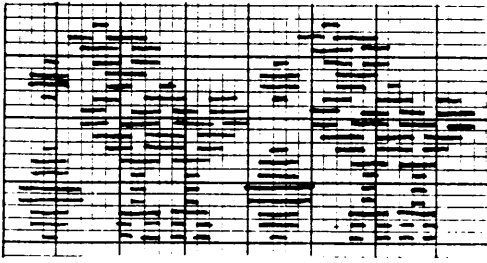


Figure No.7

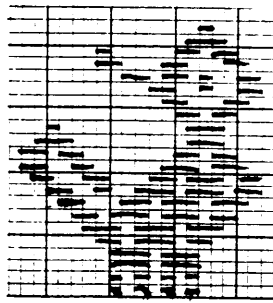


Figure No.8

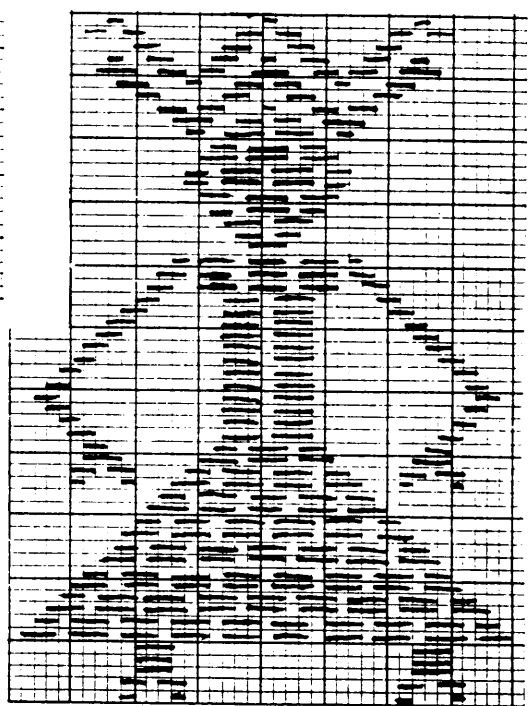


Figure No.2

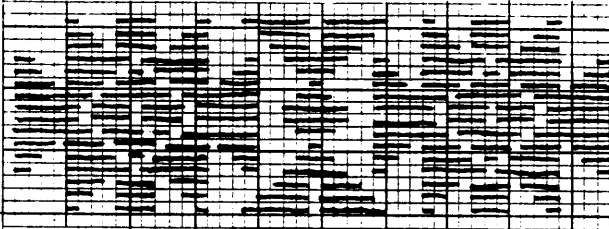


Figure No.3

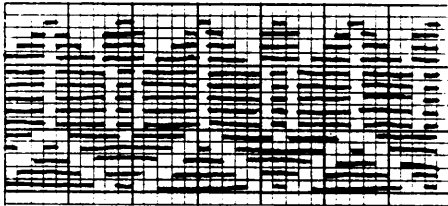


Figure No.9

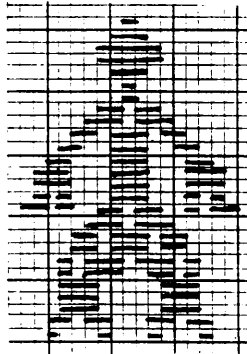


Figure No.5

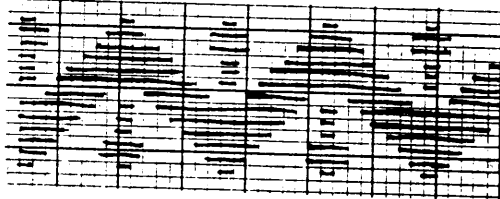


Figure No.4



Figure No.10

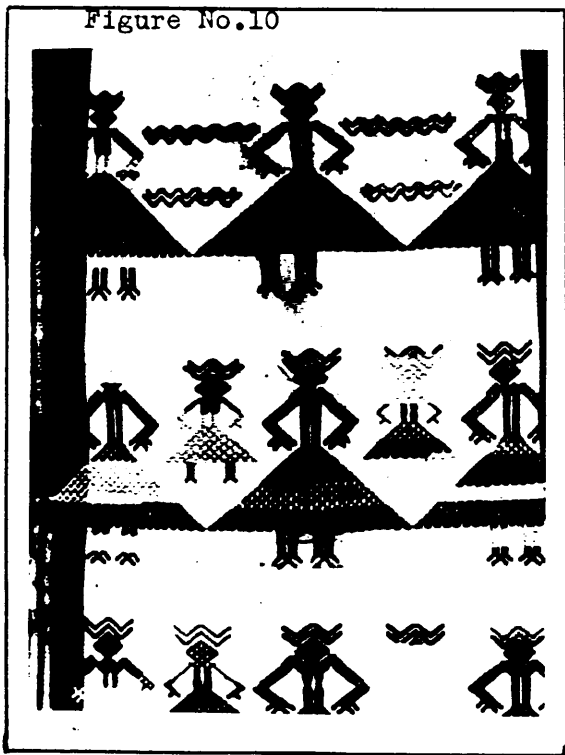
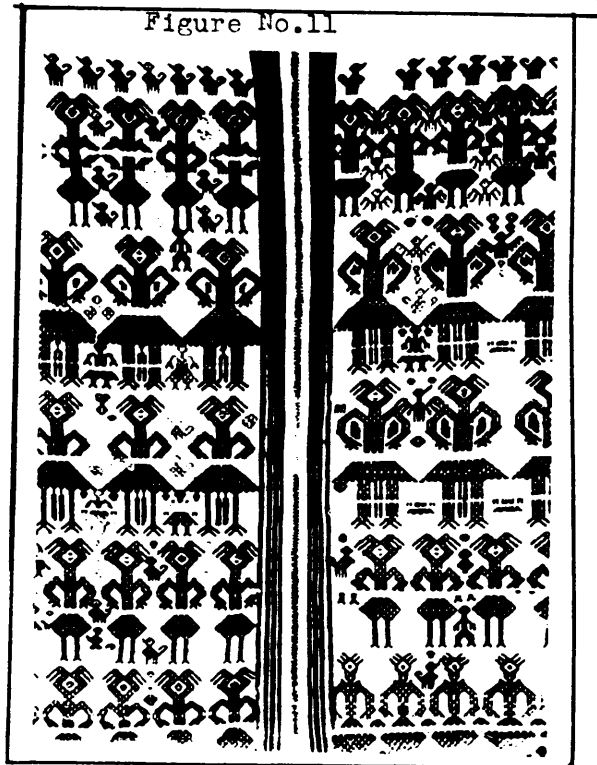
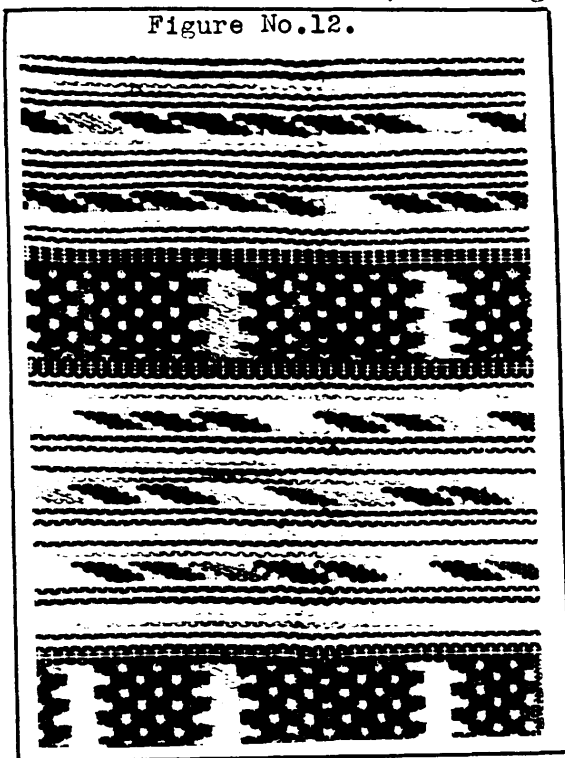


Figure No.11





At Figures No.10 and 11, on Page 2 are shown two pieces which are used for blouses. The detail of one of the little women's figures on No.10 is shown at Figure No.8. Note how the different colors have been changed in the weaving of the figures, and also notice the little wavy effect at the top of Figure No.10. This might mean clouds. Also note that the feet are **not always** made in the middle of the figures, nor are they always woven in the same way. The colors of these figures was mostly red and yellow, with some orange, and occasionally blue, but mostly red on a white background. The detail of the little boy at Figure No.9 and the bird at No.7 are taken from the textile shown at Figure No.11. Note here the very great variety of different kinds of figures and how they are arranged. Both Figure No.10 and 11 were woven of two pieces about 20" in width, sewed together in the middle as shown in Figure No.11.



At Figure No.12 is a photo of another texture which is of much interest and although the technique is the same as described in November 1938 News, the manner of using it is quite different. The colors used in this piece were red, yellow, and blue, on a white background. Note the little white squares of background showing through the color. The detail at Figure No.13 shows how this technique is worked. It is a little tricky, but not difficult to do. The tiny dots represent the places where the pattern threads begin and end. On the fabric itself, there are no slanting lines as the beating up close takes this out. But to make the process clear these had to be put in that way. The vertical lines of the cross section paper represent one warp thread, and the weft goes over three and under one warp thread for the pattern, and the next row is over and under the opposite three and one. At Figure No.14 are some modern variations of this technique woven on the heddle loom.

Figure No.13.

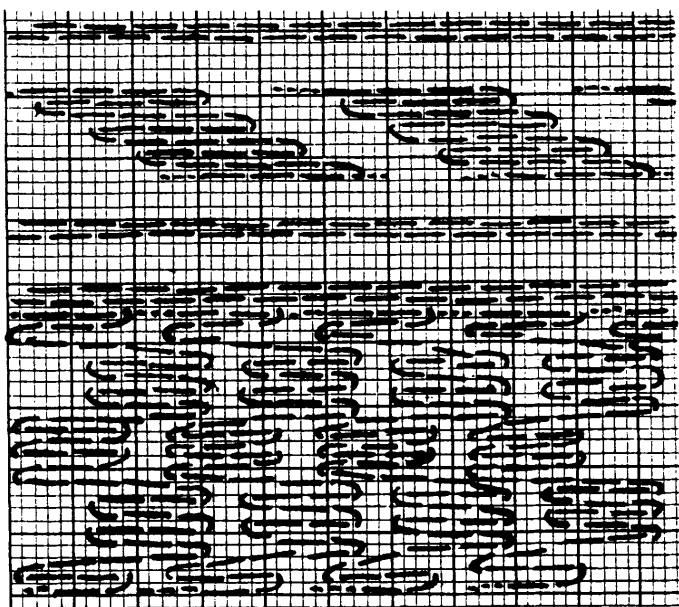
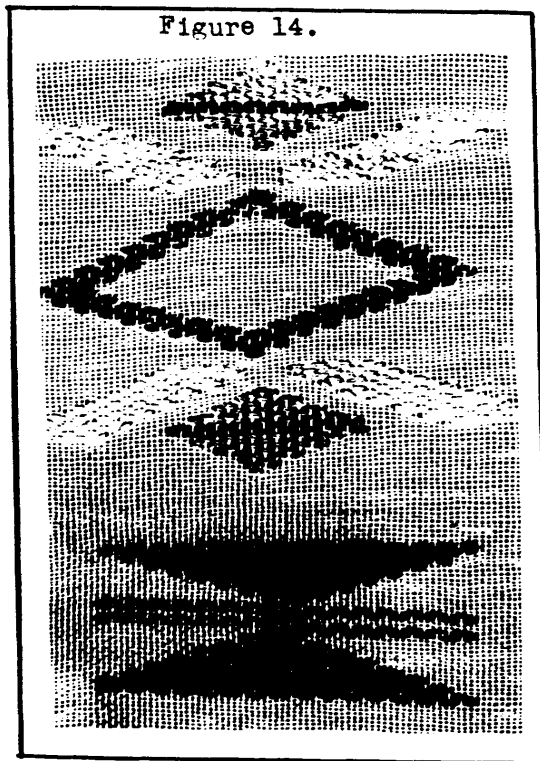


Figure 14.



# HANDWEAVING NEWS

Figure No.1 Key Draft No.1

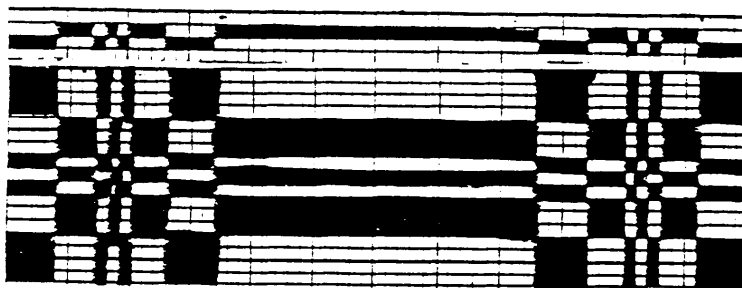
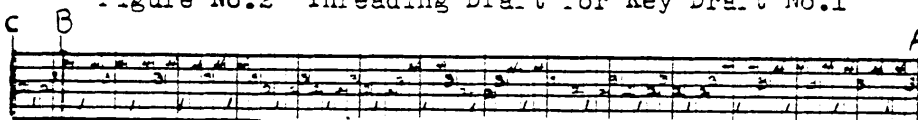


Figure No.2 Threading Draft for Key Draft No.1



Designing Two Block Patterns.

In August of 1938, the matter of designing two block patterns was discussed and this month in answer to several requests for four harness drafts, we will carry this same thing a bit further. Those of you who were subscribers in 1938, will have the August number to refer to, and if there are any of you who have not, this issue of the News is still available if you wish to have it.

At the top of this page is the key draft No.1 which is partly drawn down below. The wide center block can be as wide as desired to fit the number of warp threads being used. This is a particularly attractive draft for a luncheon set, and is best woven of 40/2 linen warp set 30 threads to the inch, with tabby of linen the same as the warp and blue linen special for the pattern shots. Each unit of the key draft represents four warp threads, and there are two pattern blocks. For one pattern block, thread each unit 3,4,1,4; and for the other pattern block, thread each unit 3,2,1,2. Repeat these units as indicated by the key draft. The threading for this draft gives the same effect as the "Summer and Winter" weaving usually used, and was worked out from an old Roumanian coverlet and first given to News subscribers in September of 1936. One advantage which this form of threading draft has over the usual Summer and Winter draft, is that the plain weave or tabby is the same as in the regular Colonial Over-shot weaving, namely 1&3 and 2&4, and the regular tie-up of the loom is also the same for the pattern shots.

To thread Draft No.1 for a warp of 420 threads; - proceed as follows, - Thread from A to B on the draft - or 68 threads for the border. Then from B to C, or 4 threads for the center repeated 71 times for a total of 284 threads; then thread from A to B or 68 more threads for the border on the opposite edge. To weave the regular "summer and winter" weave, "one and one" style, - bring down levers 1&2, throw a shot of blue pattern weft, then 1&3 plain weave, then 2&3 levers for a shot of blue, then 2&4 plain weave shot. Repeat this over and over until the pattern block is woven square. Then for the other pattern block, use levers 3&4 for a shot of blue pattern weft, then a shot of plain weave, then use levers 1&4 for another shot of blue, then an alternate shot of plain weave, repeat this until the pattern block is square.

The following variation of this pattern treadling was worked out by Miss Louise MacArthur one of my students, as is also the above pattern draft. This variation gives a very interesting and new texture which I am sure many of you will find interesting to use. Weave a plain tabby heading as desired for a hem. Then use lever 3&4 and throw a shot of blue weft, then use 1&3 for plain weave, repeat this 4x using only 1&3 tabby between the pattern shots. Then after 4 shots of the blue weft, use 2&4 tabby. Repeat enough times to square the block. For the second pattern block, use one blue pattern shot on levers 1&2, and tabby with 1&3 between. Repeat 4x then one shot of tabby 2&4, weave this until pattern block is squared.

Figure No. 3 Colonial Over-shot Threading Draft for Key Draft No. 2

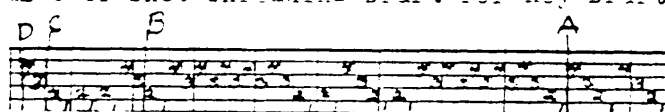


Figure No. 4 "Summer and Winter" Threading Draft for Key Draft No. 2

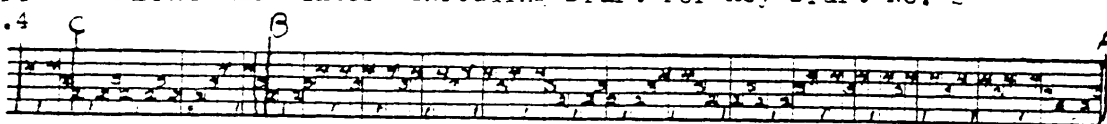
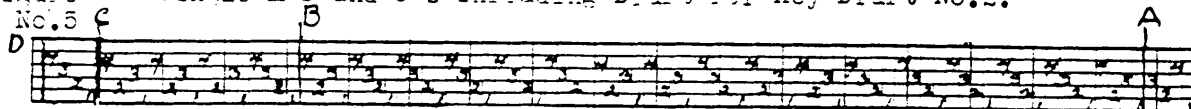


Figure No. 5 Single M's and O's Threading Draft for Key Draft No. 2.



Figures No. 3, 4, and 5 are all different arrangements of the Key Draft At No. 6 Warp can be either No. 20 mercerized cotton, with cotton weft in color, or 40/2 linen warp with linen weft. The M's and O's pattern as well as the "Summer and Winter" are excellent with white linen warp and pattern in dark natural linen. These threadings are very lovely for linens, and it is a pleasure to me to present these to other weavers thro the medium of the News, for I know they will be most useful and they are different.

Figure No. 4 is the same type of threading as Figure No. 2 Page 1. For a warp of 420 threads, thread first heddle double, edge 3, 4, 1, 4; from A to B once 68 threads; then B to C 16 threads repeated 17x for a total of 272 threads, C to D once; then A to B again, ending with last edge threads 4, 1, 4, 3. Thread last thread double in heddle for total of 420 threads. All of these patterns are woven on the regular tie-up for four harness Colonial over-shot.

Key Draft No. 2 Designed By Beatrice Carothers.  
Figure No. 6

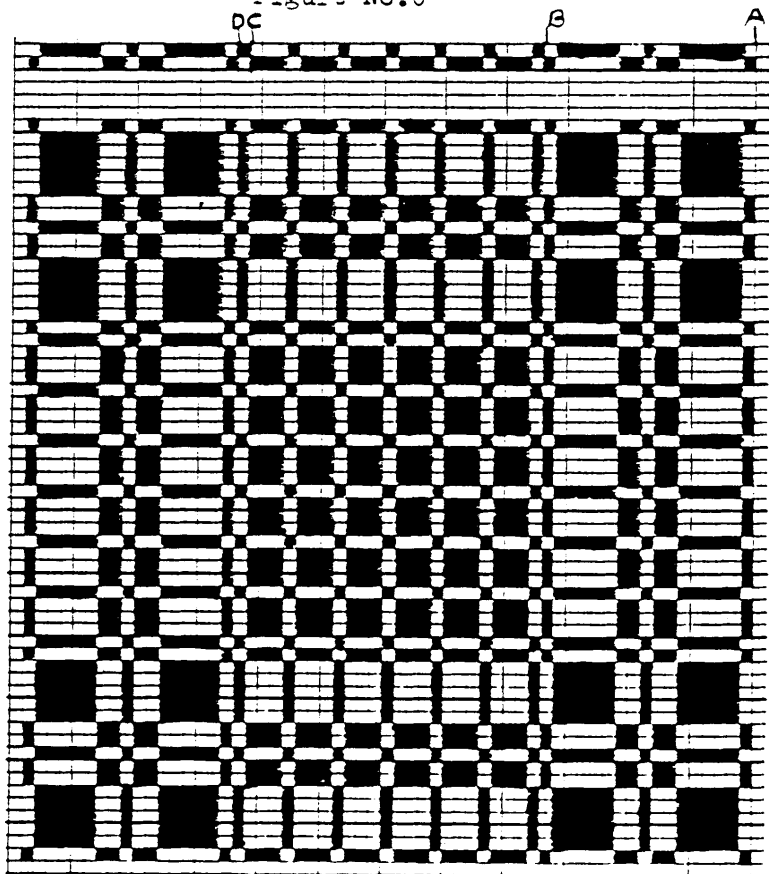


Figure No. 5 is what we have named Single M's and O's. We discovered it from reducing the regular old Colonial M's and O's threading to its lowest terms. It was introduced to News subscribers in August 1938, and as far as I know is an original use. This makes a most interesting texture especially for linens, and is a one shuttle weave with very short skips. There is no true plain weave on this threading draft. The nearest you can get to it, is to use 1&4, and 2&3 sheds. We have also found that it is best to thread the edge threads of the draft 1, 4, 2, 3, for a better edge. It is possible to make up your own key draft and plan out your threading draft from that. For one block of the pattern use as a unit 1, 3, 2, 4, and for the other block 1, 2, 3, 4. Repeat these as many times as there are units in each pattern block. If you are in doubt about this, refer to News for August 1938, for further explanation. For a warp of 420 threads, thread edge as given 1, 4, 2, 3, then from A to B or 68 threads, then B to C 17x repeated or 272 threads, then C to D or 4 threads, A to B 68 threads, ending with 3, 2, 4, 1. Thread first and last heddle double.

Figure No.7 Colonial Over-shot Threading for Key Draft No.3

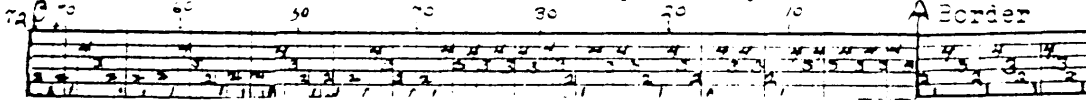
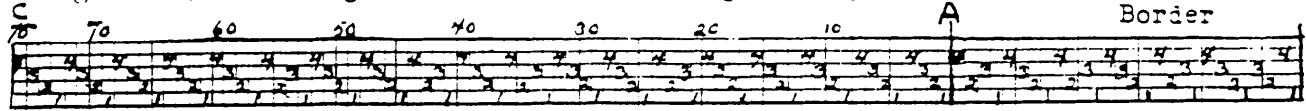


Figure No.8 Single M's and O's Threading for Key Draft No.3



For warp 420 threads.-  
 Border 7 inch x 4 = 28  
 A L B 144 x 2 = 288  
 A L C once = 70  
 End Border = 28  
 Total 420

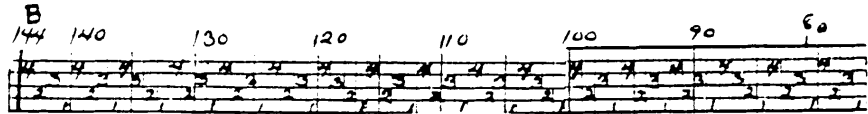
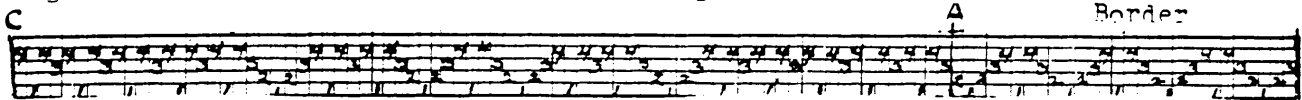
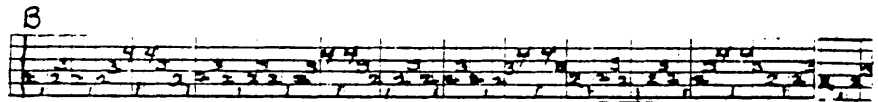


Figure No.9 "Summer and Winter" Threading Draft for Key Draft No.3

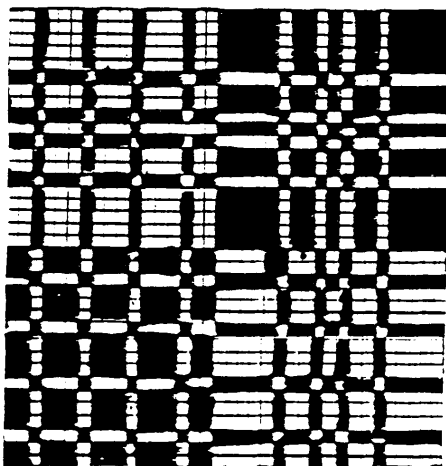
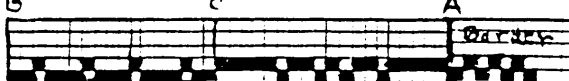


This draft may be arranged for 420 threads as in Figure No.8 as number of threads is the same.



At Figure No.10 is another two block key draft designed by Mrs. Lillian Cowley, one of my students. These designs are all simple and worked out by beginning students. Many more possibilities lie in this simple method of designing two block patterns, and their threading drafts. If you are one of those people who wish to do your own original threadings, I hope you will try out this method and see if you can do it. If you care to send me in threading drafts which you have written from your own two block pattern you have devised, I shall be glad to look them over and correct them for you or advise you about them. This offer only holds for regular subscribers to Handweaving News. In order to do this, you should also have a copy of the News for August of 1938, if you do not have a copy already. If you have any questions concerning this method of planning pattern drafts or anything is not quite clear in these directions, I will gladly answer your questions if you will include a 3¢ stamp with your request.

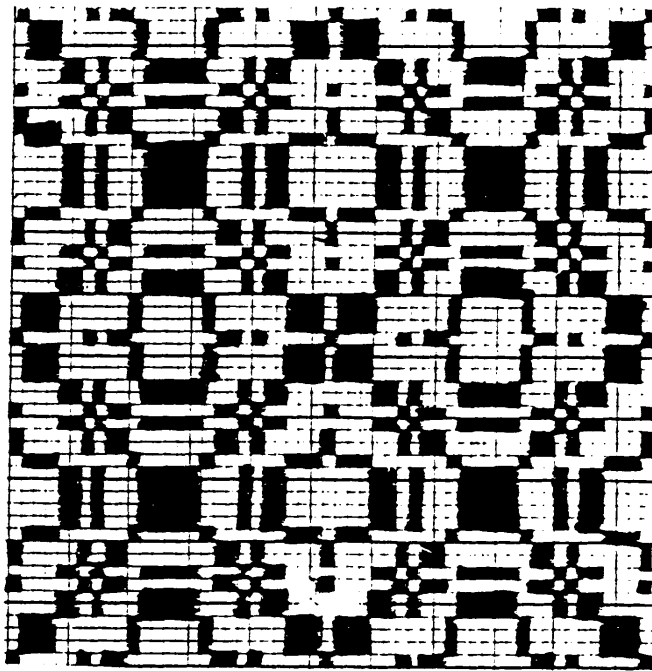
Figure No.10 Key Draft No.3  
 Designed by Lillian Cowley



Explanation of Weaving of the Single M's and O's pattern drafts.

To weave the single M's and O's patterns, use lever 1&2 for one shed of one pattern block, throw a shot of weft, then use 3&4 for the other shed and throw one shot of weft in this shed. There is no tabby weave between pattern shots. Repeat this alternately until the pattern block is square. To weave the second pattern block, use lever 1&3, throw one shot of weft, then use lever 2&4, throw a shot of weft. Repeat this until the second block is square. The number of times to repeat the alternation is difficult to estimate as it depends on the weight of thread used for the weft. But if you weave each pattern block square, your pattern should come out like the pattern blocks on your key draft. You will also find it easier to follow your key draft in your weaving, than to try and write up the treadling directions for each threading draft you use.

# HANDWEAVING NEWS



Three Block Patterns.

The three block pattern above was designed by Miss Erma Cox, one of the students in my class at Wayne University this last semester. It is a small dainty pattern and useful for many things. The drawing above shows two full repeats of the key draft at Figure No.1 below. The actual threading draft for the loom is given at Figure No.2. Set No.20 mercerized cotton or 20/2 cotton warp, at 30 threads to the inch. For a warp of 240 threads, repeat the threading given at Figure No.2, 5 times. Weave the pattern with No.10 or yarn of similar size in mercerized cotton. Gold and silver thread with white silk for tabby make excellent evening bags, and may be woven easily on a warp of this width.

For a warp of 420 threads  
 Begin to thread at thread 30.  
 From 30 to 48 - 18 threads  
 Then 0 to 48 - 8x- 384 "  
 Then 0 to 18 once 18 "  
 Total 420

For a Warp of 600 threads.  
 Begin to thread at thread 36.  
 From 36 to 48 - 12 threads  
 Then 0 to 48 - repeat 12x- 576 "  
 Then 0 to 12 once 12 "  
 Total 600 "

Key Draft Figure No.1

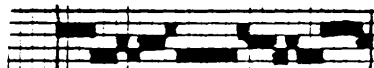
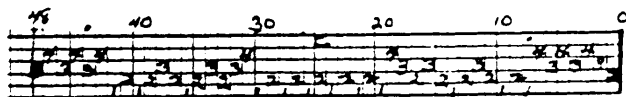


Figure No.2 Threading



To weave pattern proceed as follows,-  
 Figure refer to levers of Structo loom,  
 but treadles can be used by using the  
 opposites.  
 14-once, 12- 5x, 34-3x, 14-2x, 34-2x, 14-3x,  
 12-2x, 34-10x, center, repeat back in same  
 order. This weaves the pattern as drawn  
 in. Note that the 23 block is not woven  
 so that you have only 3 pattern blocks.  
 It could be woven of course if desired.

The pattern shown in this draft and actual threading were designed by Ruth Lindeman and named "Lincoln's Incarceration." It is a weaving pupil of Miss Leanne Kelly, a fine weaver in Lincoln, Nebraska, U.S.A. This pattern is composed of two units, a small unit and a large unit, which may be woven in a number of ways. The small unit from A to B of the large unit draft, and the large unit from C to B. The whole draft from A to B may be used as a pattern if desired.

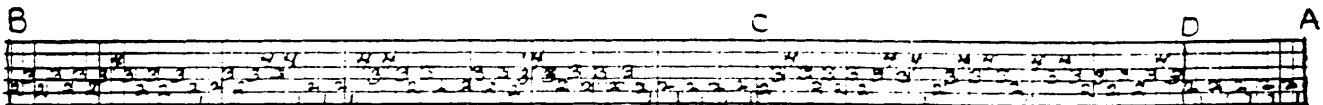
For a Runner set warp at 16 to the inch, and arrange as follows,-

Thread edge 1,2,3,4,- repeat 8x	-	14 threads	
Then from C to B once		60 "	
From A to C, repeat 8x 44 threads-		352 "	
From C to B once		60 "	
A to D once, and 1,2,3,4,1,2,3,4		28 "	
Thread first and last heald double		2 "	
Warp total		456 "	

For a two set warp 16 threads to inch and arrange as follows,-

Thread edge 1,2,3,4,		4 threads
Then from C to B		60 "
From A to C, repeat 8x 44		308 "
Then C to B once		60 "
and A to D, and edge 1,2,3,4,		14 "
Thread first and last double		2 "
Total		448

Figure No.3 Actual threading draft "Lincoln's Incarceration."



Weave as drawn in on regular 4 harness tie-up.

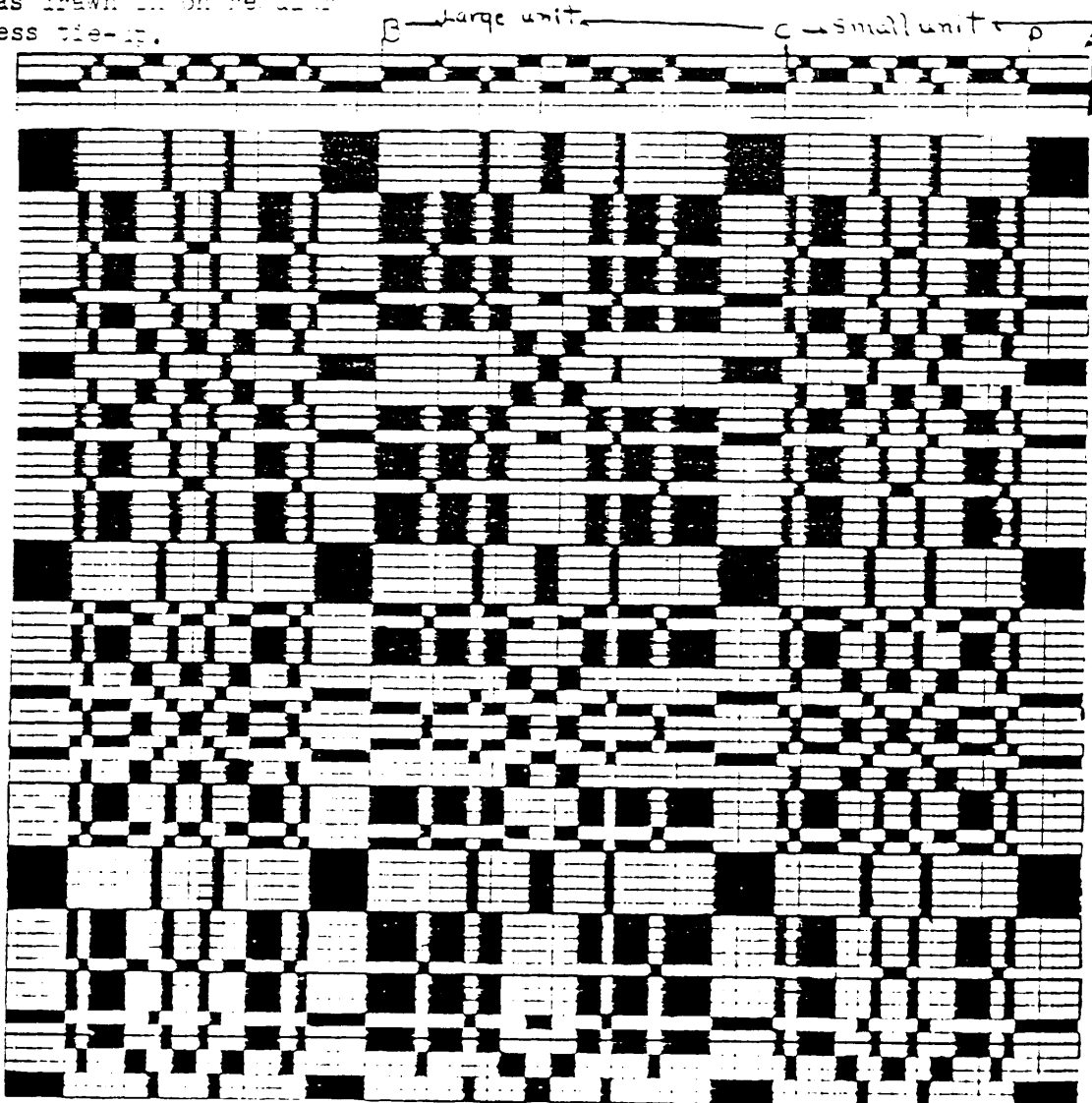
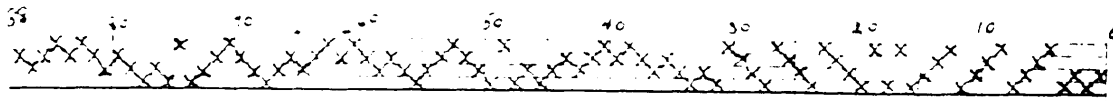
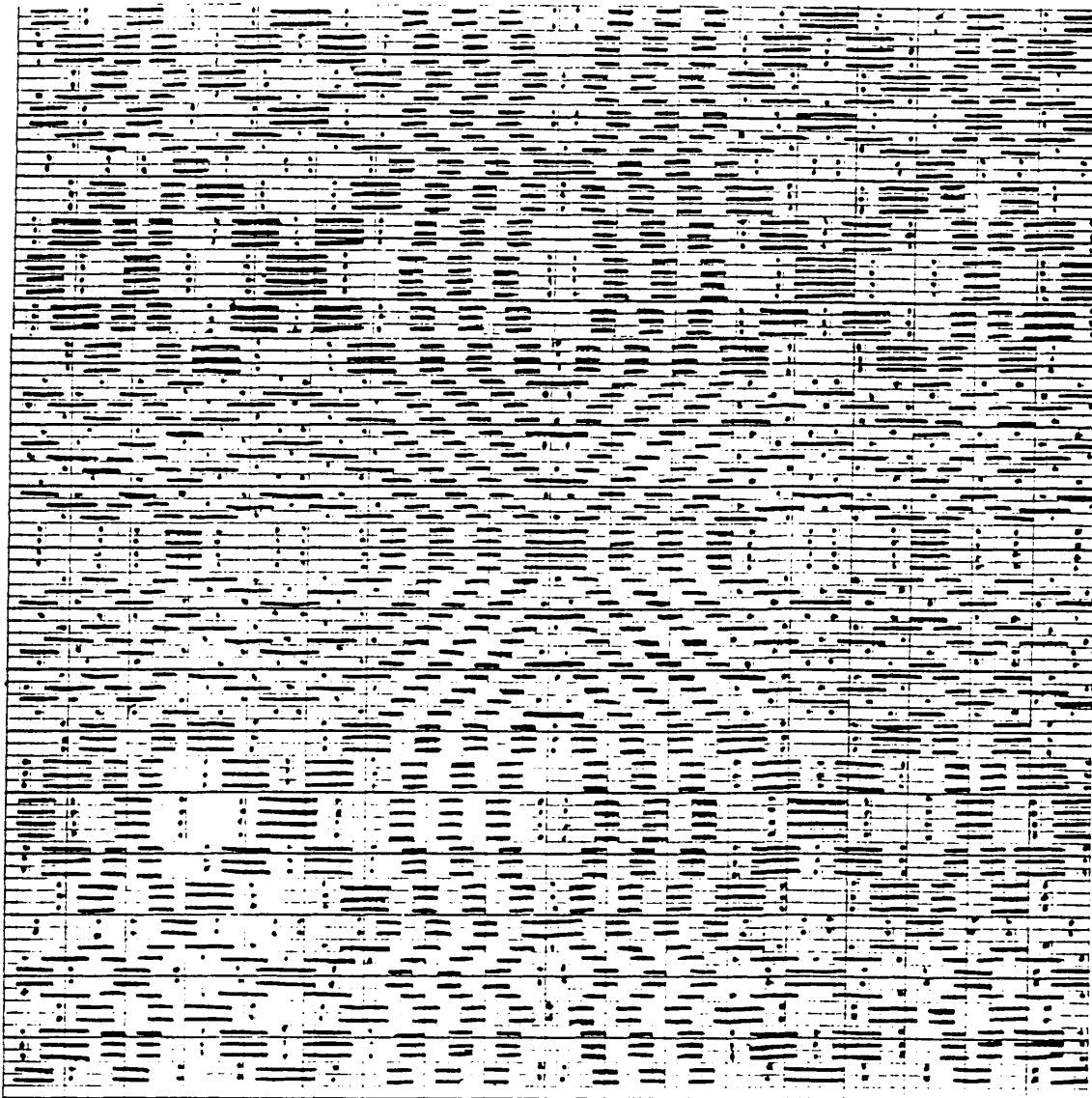


Figure No.4 "The Spider's Web" designed by Lillian Cowley.



This is another threading draft with a repeat of 88 threads. It is based on the method of designing suggested in the News for June 1936, writing threading drafts using twill, herringbone, and rose-path. Figure No.5 below shows this draft woven as drawn in. It has many other interesting borders, and one shown at Figure No.6 on Page 4 for a luncheon set. To arrange this threading draft for a warp of 420 threads, thread as follows, - Begin with thread 76 to 88 equals 15 threads, then from 1 to 88 repeated 4x, then 1 to 50 once. Thread the first two heddles double and the last one double so as to take up the 3 extra threads. Warp can be 20/2 cotton, mercerized cotton No.20, or 40/2 linen set 30 threads to the inch in the reed. Weft can be fine cotton or linen as desired. The finished width of the material set in this way is about 13 1/2", which is right for small towels or a luncheon set. To weave this as drawn in, with levers on Struete loom, proceed as follows, - 2&3-2x, 3&4-3x, 1&4-3x, 1&2-4x, 1&4-3x, 3&4-3x, \*2&3-once, 1&2-once, 1&4 once, 3&4-once\*\*, repeat from \* to \*\* 3x, then 2&3-4x, center of the repeat, reverse back to the beginning in the same order for the full repeat of the pattern. For a treadle loom, weave so the opposite harnesses are pulled down.

Figure No.5. "The Spider's Web" woven as drawn in.



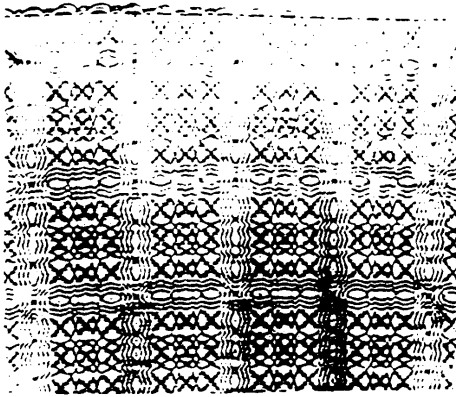


Figure No. 7

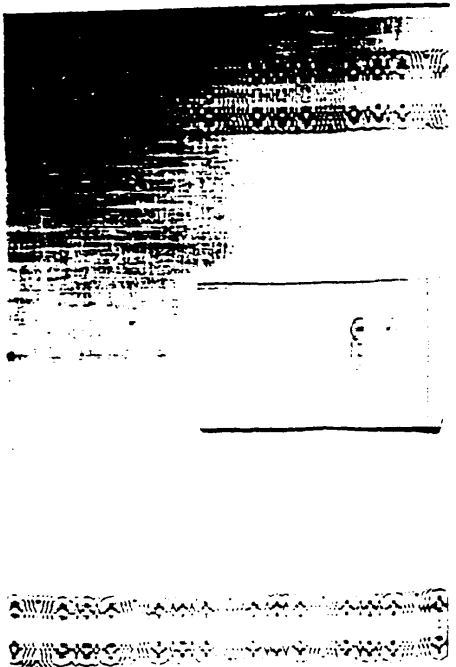


Figure No. 6

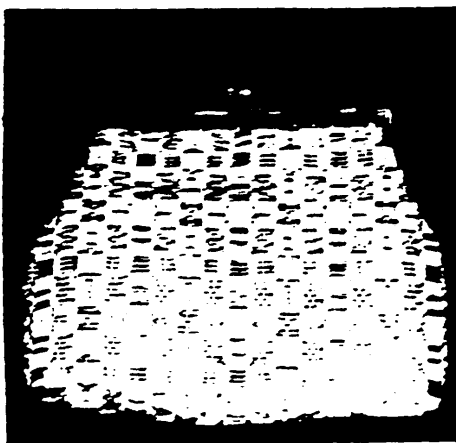


Figure No. 8

Figure No. 7 at the left shows how the pattern looks when it is woven as drawn in, or as it is threaded into the loom. This piece was woven with two colors of mercerized cotton No. 20, dark green for the pattern weft shots and light green for the tabby or plain weave between. This is an attractive threading with small over-shot skips.

At Figure No. 6 is shown a border woven for a luncheon set place mat with the napkin. This was woven on 40/2 linen with the same material for the plain weave between the borders on each end and for the center, with weaving special for the pattern shots in dark henna, blue, peach, and light green.

Weave the border as follows, - With henna for pattern 23-1, 12-1, 14-1, 34-1; 23-3x, 12-5x, 14-3x, 34-3x; with dark blue 12-5x; with peach 23-3x, 12-5x; with green 34-3x, center, repeat back to the beginning in the same order. Weave the center of the place mat in plain weave. This combination of colors was planned to go with a set of handmade pottery dishes, and is most effective. There are many other very interesting borders which can be woven on this draft as it has so many different variations in the sizes of its pattern blocks.

The napkin shown in the center of the place mat at Figure No. 6 has a small motif of the pattern picked up. The weaving of this is carried with the colors only as far as the motif is to be, instead of carrying the pattern weft all the way across the loom. Of course the plain weave goes all the way across the width as usual. There are two threads of color laid in with the warp threads on each edge. One of these is henna and the other dark blue about an 8th of an inch apart. These threads should be threaded through the same heddle as the regular warp, and can be weighted and wound on a small piece of paper and allowed to hang down at the back of the loom. Then during the weaving the same colors are put in with the weft so the color border will go all the way around the napkin.

Figure No. 8 is a small bag woven of silk and fine gold thread, by Miss Erma Cox who designed the pattern threading at Figure No. 1 on Page 1. This little pattern also has a number of interesting ways of being woven, and I hope this photo will be clear enough to show what the bag is like. It was mounted on a gold frame 5" wide.

I shall be interested to hear from any of you who try out these threading drafts. They have a good many unusual possibilities. Also I still have some of the real silk on hand which was sent you as samples last month. If you wish any of this, it would be well to write at once. Price is \$3.00 a lb.

I want also especially to thank those of you who have been telling others about the News and sending in more subscriptions. I appreciate this very much indeed.



# HANDWEAVING NEWS

Figure No.1 Key Draft

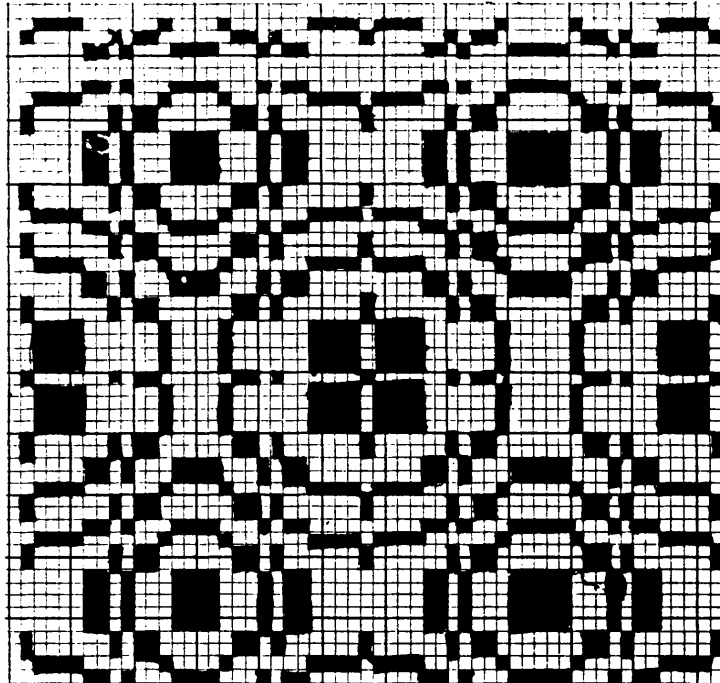
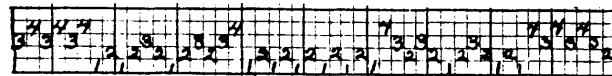


Figure No.2 Threading draft



Different Methods of Weaving Over-shot

## Threading Drafts.

There are a number of entirely different ways of weaving over-shot threading drafts which can often be used to much advantage. First, the most general method is that of weaving "as drawn in". This means that the pattern blocks are woven in the same order as they are threaded into the loom, and enough weft shots used to square the pattern blocks, with tabby or plain weave between each pattern shot. The key draft at Figure No.1, and the threading draft at Figure No.2 are the same as in the News for July 1939. It is much easier to follow the pattern threading draft when weaving, than to be dependent on a set of treading directions. Note that on the threading draft at Figure No.2, the first pattern block is a one unit block 2&3, the next is a 3 unit pattern block of 6 threads 3,4,3,4,3,4; the third pattern block is a 2 unit block 1,2,1,2; the 4th pattern block is a one unit block 3,2; the 5th a one unit block 1,2; the 6th pattern block is a 2 unit block 2,3,2,3; the 7th is a one unit block 3,4; and the 8th pattern block which is the center of the design is a 6 unit block 1,2,1,2,1,2,1,2,1,2. As there is no fourth pattern block indicated on the key draft the 1 and 4 block is not woven when it occurs on the threading draft, although it could be woven if desired. A general rule for weaving as drawn in, is to weave one less time than there are threads in the pattern block. For instance if the pattern block has four threads in it, put in 3 pattern shots with plain weave between, or weave to square the block. If you are weaving with coarse weft, only 2 weft shots may be necessary, while if you are using fine weft 6 or even 8 shots may be necessary to square the block. So the rule for weaving "as drawn" in is, to weave to square each pattern block, and in the same order in which they occur in the threading draft. Of course the loom tie-up is the same as the pattern blocks are written, 1&2, 2&3, 3&4, and 1&4, for a four block pattern; and 1&3 and 2&4 for the tabby or plain weave. Remember on the Structo loom, this order would be, 3&4, 1&4, 1&2, and 2&3 for the same pattern blocks, as the Structo harnesses rise instead of sink, when the levers are brought down.

2. One excellent thing for beginners to do when starting a new pattern is to weave each pattern shed over and over with plain weave between as follows, - 1&2 for 2 inches, 2&3 for 2", 3&4 for 2" and 1&4 for 2". This gives a series of different pattern stripes and the student also familiarizes herself with the different pattern sheds too. Then these stripes may be combined with the pattern also if desired. Another striped effect can be gained by using two adjacent pattern blocks alternately. If the pattern centers on 1&2 pattern block, and its adjacent pattern block is 3&4, weave 1&2 once, then 3&4 once. Repeat this as desired. Plain weave can be used between, or one color for 3&4 shots, and another color for the 1&2 shots. For a zigzag effect, use two adjacent pattern blocks which do not center, as for instance on the pattern on Page 1, use 1&2, and 2&3 alternate.

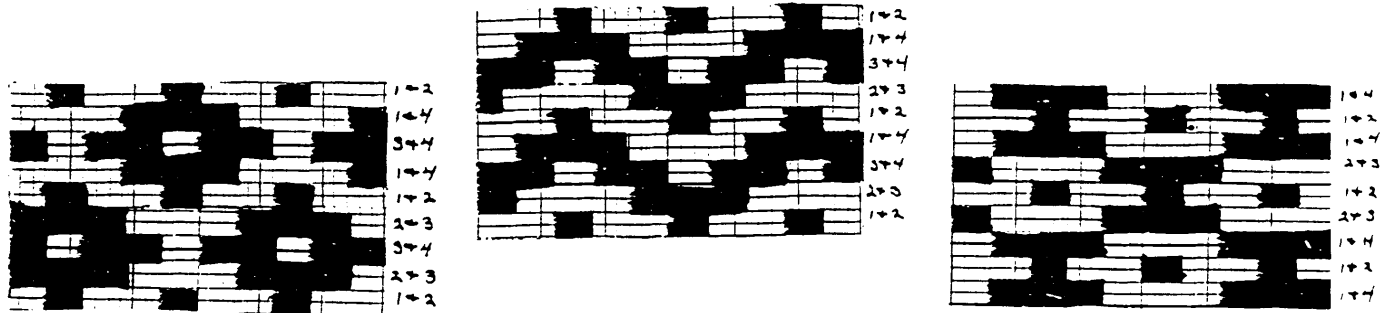
3. Weaving "Rose" fashion. It is rather difficult to formulate a general rule for this to fit every pattern. But any pattern which has a star figure can be woven rose fashion. The effect depends on the reversal of the order of weaving each pair of pattern blocks of which the pattern is composed. One way to do it, is to find the centers of the star figures and the pattern blocks on each side of these centers. Starting with the center pattern block, weave this once or twice, then take its adjacent block and weave it once or twice, then the next block to this. When you reach the same pattern block which you began, square this block, and reverse back again. Then start with the center of the second star figure and do the same thing. This is shown drawn out at the top of Page 1. You can also start with the adjacent block on each side of the centers of the pattern, and alternate this with the center blocks obtaining an entirely different effect.

4. Weaving "On opposites". A simple explanation of this is that harness 1&2 has as its opposite harness 3&4; and harness 2&3 has as its opposite harness 1&4. It is possible to weave with tabby or plain weave between each pattern shot, or if you desire to cover the warp entirely with weft color, no plain weave shots are needed, but two weft colors should be used. In fact very gorgeous color effects may be gained by weaving "on opposites" without any tabby between weft shots. It is important to note that, where the pattern changes to the next block it is best to omit the opposite, and begin the next pattern block with the same color. For instance weave as follows, - 12-once blue, 34-once tan, 12-once blue, 34-once tan, weave to square the block then end with 12-once blue; then 23-once blue, 14-once tan, repeat to square the block and end with 23-once blue; 34-once blue, 12-once tan, repeat to square the pattern block and end with 34-once blue; then 14-once blue, 23-once tan, weave to square the block ending with 14-once. Then you are ready to start with the next pattern block again. Many excellent color effects can be woven "on opposites", and it deserves to be used more often than it is.

5. Any pattern designed on the twill basis, as most of the Colonial over-shots are, can be woven without any tabby plain weave between pattern shots on the twill. This gives a thick heavy fabric which covers the warp. It is woven one pattern shot on each shed, as 12-once blue, 23-once green, 34-once tan, 14-once yellow, repeated over and over again, or if desired only enough to square the smallest block. Repeated over and over this will give the effect of long vertical lines of color, very effective for many things.

6. "Honey-comb" weave. This type of weaving is seen in many of the Swedish books, but any over-shot pattern can be woven in this manner. It looks best when the pattern blocks are rather large, with few small pattern blocks which confuse the effect somewhat. The Scandinavian books call this method "Halkrus" or "Spetsvav". The honeycomb weave effect is obtained by first using two shots of heavy weft in plain tabby weave. Then use each harness singly, as Harness 1 then harness 2 alternating them, using fine pattern weft for the 12 pattern block and no plain weave shots between these. Weave to square the pattern block, then weave two shots of plain weave tabby with the heavy weft again. On a warp set at 30 threads to the inch, mercerized cotton No. 3 or 5 is a good thread to use for the plain weave heavy shots, and fine mercerized cotton No. 20, can be used for the fine shots. For the 2&3 pattern block, alternate harness 2 and 3 with the fine thread, then two shots of heavy weft. For the 3&4 pattern block, alternate harness 3 and harness 4 using one shot on each for the number of times desired. Then harness 1 and 4 alternately for pattern block 1&4, using one shot on each pattern shed. On the Struoto loom, use three levers, as for instance leave lever one up, bringing down the levers 2, 3, and 4. Leave harness 2 up, and bring down 1, 3, and 4. For harness 3 up, bring down levers 1, 2, 4. And for harness 4, bring down levers 1, 2, 3. This fabric has long skips of fine weft on the back. Many old all white Colonial coverlets were woven on this type of treadling.

# Handweaving News



Designing "Crackle" Weave Patterns.

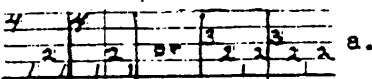
The so called "Crackle" weave is derived from a Scandinavian form of weaving called "Jamtlandsvav". The best references for this weave are to be found in "Vavbok" by Sigrid Palmgrens Vol II, published in 1926. And also in "Jamtlands-Och Herjedalsvavar" by Alexander Berger in 1928. It is the purpose of this News to analyze these drafts, and show their essential units, in such a way as to make it easy for one to design their own threadings in this technique.

Characteristics of the Weave. This is a four harness loom weave, usually having four pattern blocks. These pattern blocks are woven on harnesses 1&2, 2&3, 3&4, 1&4; with the plain weave or tabby on harness 1&3 and 2&4, so the loom tie-up is the same as for Colonial over-shot patterns. But there the similarity ends, for the designs for this weaving technique can be much more flexible than the Colonial over-shot, and much better adapted to modern weaving effect. In the first place there are no long over-shot skips, all the pattern blocks are of only three threads. In writing the drafts, care must be taken that no four thread blocks occur. The pattern blocks can be written as long as desired, by repeating the units over and over. The pattern blocks also overlap each other so that many unusual effects can be gained in this way.

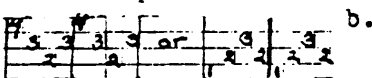
Units of the Weave. At Figure No.1 on Page 2 is the draft as given in Vol. II Page 38 of Palmgrens "Vavbok", except that it is reversed and written out in figures. Generally the Scandinavian drafts call the back harness, harness 1 on the loom and not harness 4 as we in America do. Figure No.2 is exactly the same draft, but reversed, as given in Berger's book on Page 18, and is also written in the Swedish notation for comparison. Now let us study the draft at Figure No.1. on Page 2.

## Three and One Units of Crackle Weave.

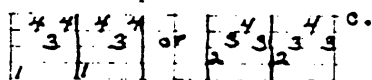
For 1&2 pattern block



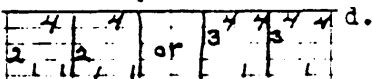
For 2&3 pattern block



For 3&4 pattern block



For 1&4 pattern block



1. Note that each pattern block unit consists of 4 threads, 2 of these threads are on the same harness, while the third and fourth thread are each on another harness. Thus as at (a) as written on the left, you can write the 1&2 pattern block as shown, 2, 1, 2, with the 4th thread on 3; or 1, 2, 1, and the 4th thread on harness 4. Which to use depends on which pattern block you wish to overlap on your 1 and 2 block.
2. In the same way the 2&3 pattern block can be written 2, 3, 2, and the 4th thread on harness 1; or it can be written 3, 2, 3, with the 4th thread in harness 4, as shown at (b) on the left.
3. At (C) is the 3&4 pattern block written 3, 4, 3, with the 4th thread on harness 2, or 4, 3, 4, with the 4th thread on harness 1, as shown at (C).
4. For the fourth or 1&4 pattern block, we can write it 4, 1, 4, with the 4th thread on harness 3; or 1, 4, 1, with the 4th thread on harness 2. Also note that when these units are repeated, they will weave either the 1&2 pattern block, or the 3&4 pattern block. Study and draw out each group a, b, a, and d to see how this works out.

Figure No.3



Figure No.2

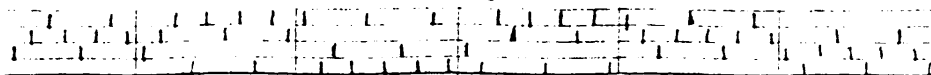
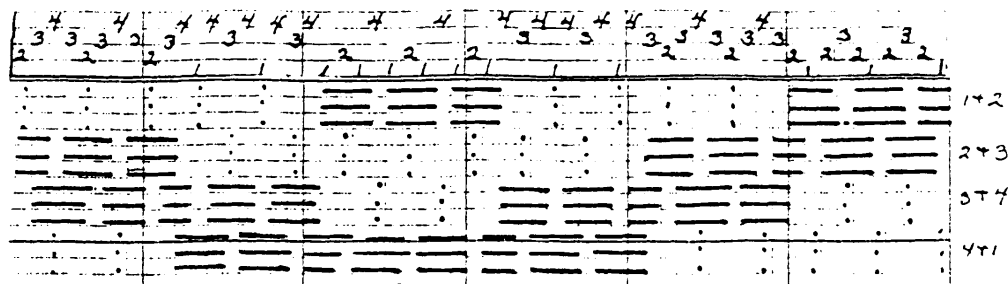


Figure No.1



At Figure No.1, we have one repeat of the pattern draft as given in Palmgren's "Vav-bok" Vol.II. Page 38. Just below the threading draft each pattern block is drawn down 3 times, exactly as it would look if woven. These pattern blocks can be drawn down so they form large squares if desired. And the same order can be followed as to weave as "drawn in" on the diagonal. Drawing down this much of a pattern is really a check on the threading draft, and will show exactly what happens when each pattern block is woven, and if the threading draft is correct. Examine this draw down, and note that occasionally there are 2 thread blocks instead of three thread blocks. These threads must be added to keep the tabby alternation correct, as at no time, should one jump either from 1 to 3, or from 2 to 4 when writing the draft. And there must be no 4 thread blocks either.

Figure No.3 is practically the key draft for the threading draft at No.1 and No.2. On this key draft the 2 thread pattern blocks are counted the same as a 3 thread block. This drawing expresses the pattern as a solid effect, and each square on the cross section paper represents one unit, which is a pattern block of 4 threads, or an overshoot skip of over 3 threads and under 1 thread in the actual weaving, as shown at the draw down of Figure No.1. The exception is of course the 2 thread blocks, which may be counted the same as a 3 thread block, or simply omitted in the drawing to show the pattern effect if desired. Study this carefully. The drawings at the top of Page 1 are pattern effects that can be obtained by weaving the threading drafts at Figure No. 1 and No.2. They indicate three different ways in which this threading may be woven. The numbers at the right of each drawing express the pattern block needed to weave to gain the effect. Note that these drawings indicate simply pattern effects, not actual weaving.

Twills.

These patterns are very effective if based on the simple twill, herringbone, and rose-path order. These are the basic drafts to which we have referred in the writing of the over-shot drafts. Figures No.4,5, and 6 all show the draw down of the actual effect of the weaving of the pattern blocks in the order 1&2, 2&3, 3&4, 4&1, and repeat.

Figure No.4  
One repeat



Figure No.5

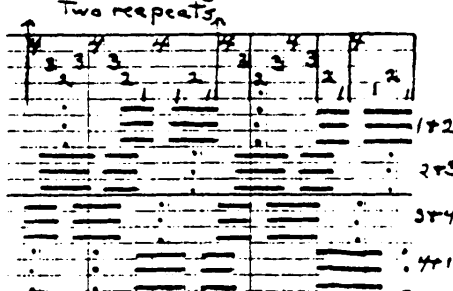


Figure No.6

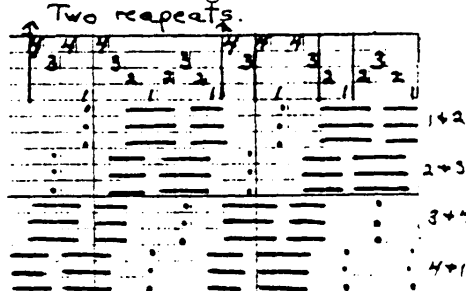
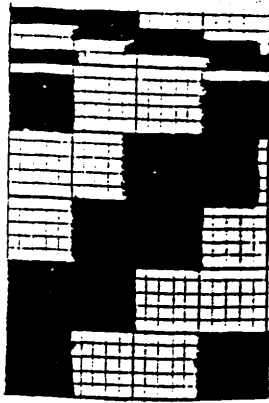
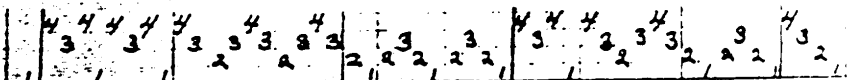


Figure No.4 is the same order as the Swedish drafts are written. The pattern units are 1,2,3,2; then 1,2, a 2 thread block; the next unit 3,4,3,2; then 3,4, a 2 thread unit, then the third unit block 1,4,3,4. This is one repeat. Note how the 2&3 pattern block and the 3&4 pattern block overlap. Two repeats of both Figure No.5 & No.6 are written. Note carefully the difference in the way the pattern blocks weave. In all three of these drafts the order of the weaving is the same namely, - 1&2, 2&3, 3&4, and 4&1. Also notice that the 2 thread units are the same in each draft.



a. Key Draft



b. Draw down effect of pattern

Figure No.8

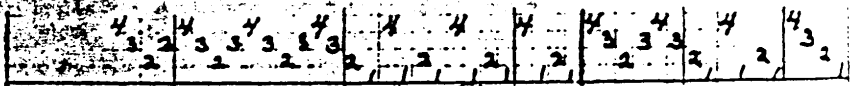


Figure No.9

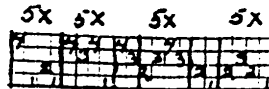
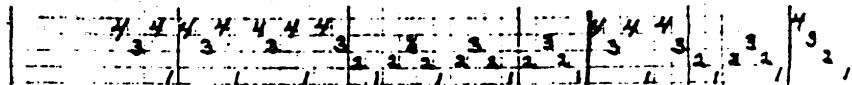


Figure No.10.

c. Threading

draft, each unit repeated 5 times.

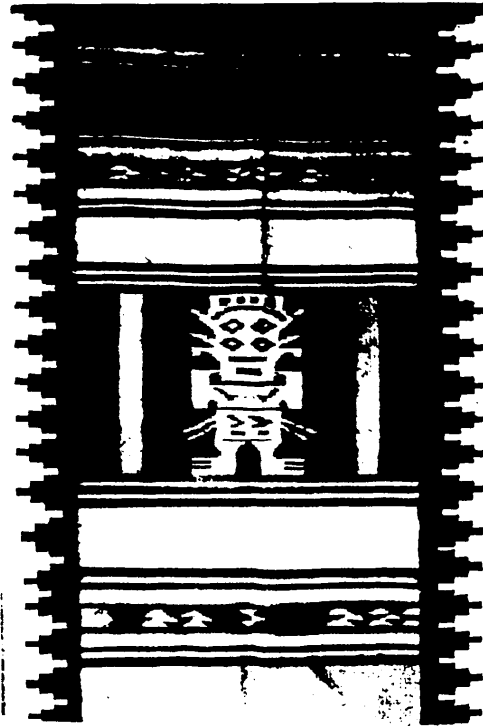
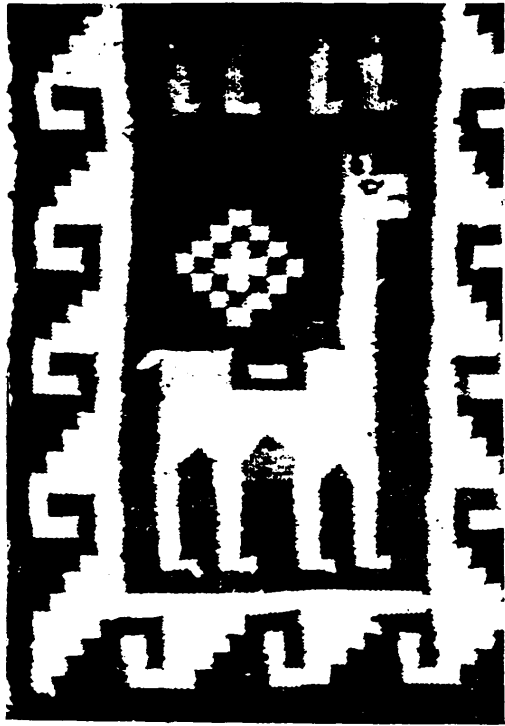
At Figure No.10, we have another pattern block added to Figure No.7. This block is 1,2,1,4. This makes the 1&2 and 4&1 pattern blocks overlap. Instead of writing long threading drafts, especially when the units are repeated, write them as at C, No.1

Repetition of the Twill, as a basic threading draft idea. Compare Figure No.7 above with Figure No.4 on Page 2. First we have the regular simple twill, then one repeat of Figure No.4, continue and note that the rest of the draft is written exactly like Figure No.4, except that each unit pattern block is repeated 2x/ In any threading draft you may wish to write, these unit pattern blocks may be repeated as many times as desired. Figure No.8 above is based on the same order as No. 5. It is one repeat of the simple twill, one repeat of Figure No.5, then each unit pattern block is repeated 3x in the same order as Figure No.5. Figure No.9 is one repeat of simple twill, one repeat of Figure No.6, and then each unit pattern block of Figure No.6 is repeated 3x. Study this and draw down 2 repeats of each of these pattern threading drafts at Figure No.7,8, and 9, to see the difference. Many interesting pattern drafts can be built up by changing the number of the repeats of these pattern unit blocks, but keeping the same order as the twill, namely 12,23,34, and 41. Now let us return to study Figure No.2 again. Note that if you wish the 1&4 unit to overlap the 1&2 unit, the 1,2,1,4 unit pattern block must be added to Figure No.4, then when the 1,2,3, 2 unit is repeated each pattern block will overlap the other. Here is another point, this 1,2,1,4 block can be used as the center, as it is in Figure No.2, and the pattern threaded back reversed to the beginning. This resembles the basic rose-path idea. Many pattern threading can be devised by just keeping to the order of these basic drafts if the sizes of the number of repeats of the unit pattern blocks is changed. They can be written just as twills, or a center can be made as in Figure No.2, and the pattern repeated back to the beginning.

Explanation of the Tie-up. This is a question I am often asked. The answer is to weave each unit pattern block, the loom harnesses must be tied up to the treadles to weave the unit pattern blocks as they are written in the threading draft. Hence for "crackle" weave patterns, the tie-up is the same as for over-shot patterns, - namely harness 1&2, tied to treadle 1; harness 2&3 tied to treadle 2; harness 3&4 tied to treadle 3; and harness 4&1 tied to treadle 4. If the loom only has four treadles, one must weave with two feet, with one harness tied to each treadle. Plain or the tabby weave is 1&3; and 2&4. With the Structo loom, the harnesses rise when the levers are pulled down, so in order to have the pattern come on top of the weaving, the order has to be reversed; that is to weave 1&2 unit bring down levers 3&4; for 2&3 unit, bring down levers 1&4; 3&4 unit bring down 1&2; and for 1&4 unit bring down levers 2&3.

Key Drafts for "Crackle" Weave Patterns. It is rather difficult to express exactly the pattern threading with a key draft on account of the two thread blocks and the overlapping of the blocks. But these pattern drafts can have very large pattern blocks and have many design possibilities, and it takes much time to write up the effect to the full size of the draft. One square of cross section paper can be used to express one 3 thread unit pattern block; or if the draft is very large one square can express 2 three thread unit pattern blocks, or even 3 three thread unit pattern blocks. The 2 thread pattern blocks can be disregarded or counted in, as desired, for they will make but little difference as far as the pattern effect on paper is concerned.

# Handweaving News



Peruvian Tapestry Weaving Similar to  
Norwegian "Aklæe".

The two illustrations above are both modern Peruvian weavings. The one on the left is a rug, and is photographed on the smooth side. The other side is rough as it was teased up in long soft fibres. It was woven of natural color llama wool in the "Aklæe" technique, two llamas in the center, and the border all around the outside edge. The piece on the right, also a modern weaving, though a copy of the sun god appears in the center, is in the same technique. It is woven on a fine handspun sheep's wool warp and very fine firm sheep's wool weft. The background is white, with many colors in the pattern. The black border goes all around it. I only found three of these in the native market at Huancayo, and probably these are the work of only one weaver.

## Method of Weaving the "Aklæe" technique.

1. The Design. For this technique is based on the square as a unit. One square of cross section paper can represent 2, 4, or 8 warp threads. Generally 4 warp threads are used for each square, unless a picture design is used, then 2 threads is more satisfactory. The design on Page 3, Figure No. 9 is quite suitable for a first attempt. It consists of 25 units of 4 threads each, which would call for a warp of 100 threads.

2. Materials. Carpet warp set at 8 threads to the inch may be used for the first piece if desired. But for a rug, use much heavier warp, or carpet warp could be used threaded 2 or even 4 threads in a heddle, and sleyed the same. Two harness looms can be used, or on a four harness loom, thread to twill 1, 2, 3, and 4. Weft should be of fine yarn, the best is Bernat's Crewel wool. Fine handspun yarn with the color mixed on the cards is also excellent. Germantown, shetland, or knitting worsted could be used.

3. How to Wind a Yarn Bobbin. No color is carried across the full width of the loom on a shuttle. So it is necessary to wind yarn bobbins for each separate color unit of the design. Hold down the end of a skein of yarn with the third and fourth fingers of the left hand. Wind in the shape of a figure 8 around the thumb and first finger of the left hand, using only three or four yards of yarn. When within about a half yard from the end, slip the figure 8 loops off the left hand, holding firmly between the thumb and first finger, and with the right hand, wind the 18" length closely around the loops to hold them together. Slip the end of the yarn under the last wind around the loops and pull it up so it will not slip out. Wind several bobbins of each color in this way, as at Figure No.1. The end which pulls out from the center is the one used to weave with. Do not make bobbins too large, as they are harder to handle, three or four yards is enough.



Figure No.1.

4. Two sheds- 1) Pattern shed, 2) Interlocking shed.

1) Pattern Shed. The shed on the loom that is raised so that the first warp thread on the right is down is the pattern shed, start with this shed and always add new bobbins in this shed. Always have all of the bobbin wefts go from the right hand side of the loom to the left in this shed. Figure No.2 shows solid black line for warp thread that

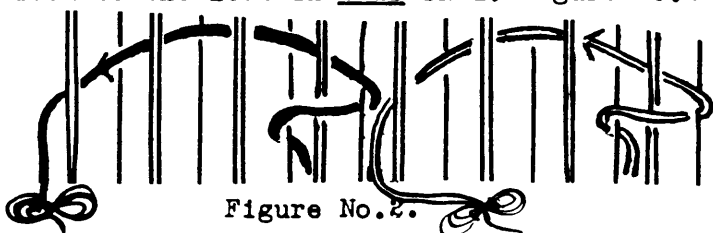
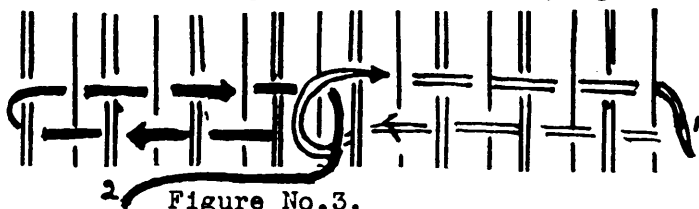


Figure No.2.

is down, double line for thread that is up, and two units of a light color, and two units of a dark color started. Note how each color is locked at the start. Do not carry weft of one color all way across the loom. Divide up the width and start new bobbins every two to 3 inches apart. Put weft in to form a good arc, as shown. Make this arc very

large for a long design unit, then beat it down into place, giving a slight pull on each weft bobbin to keep a straight vertical edge between each pattern unit. Never lock wefts on this pattern shed. A coarse comb or a fork can be used to beat the weft into place, if desired. It is best to change the shed, which will now be the interlocking shed and give two hard beats. This helps to beat the weft closely together.

2) Interlocking Shed. In this shed the first thread on the right is always raised when the shed is open, the weft always goes from left toward the right.



2 Figure No.3.

Starting at the left in this shed, take bobbin No.2 back toward the right up to the point on the previous row where bobbin No.1 ended. Cross the left No.2 over the right No.1, let No.2 hang, pick up No.1 bobbin, and bring it further to the right through the necessary num-

ber of pattern design units. Continue across the full width of the loom in exactly this same way. Always make arcs with the weft bobbins, and pull just enough so there will be no excess loop at the point where the interlocking takes place. This completes a row which covers the warp threads, so one shot of weft in the Pattern shed and one shot of weft in the Interlocking shed is needed. Weave enough rows to square the unit pattern block of the design. Clip off the ends where the adding of or finishing off, of a bobbin takes place. There should be but little difference between the back and front of the fabric. It is best to always finish off all of the color units in one row before leaving the loom, then no mistakes are made.

5. Finishing off a weft color and adding a new weft color. Should always be done on the pattern shed. When a weft bobbin color ends, let it lie in the last interlocking

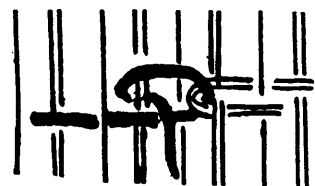


Figure No.4.

shed with an end at least 2 or 3 inches long. Let it interlock with the bobbin to the right as usual. Then change to the pattern shed, bring it back over two warp threads and tie a slip knot as shown on Figure No.4, pull this up tight. This method of tying off a thread is best as it leaves no slit in the weaving, and has been interlocked so that the warp is also completely covered. After several rows of weaving have been completed, these ends can be cut close.

Figure No.5 Showing how two weft colors come together on pattern shed.

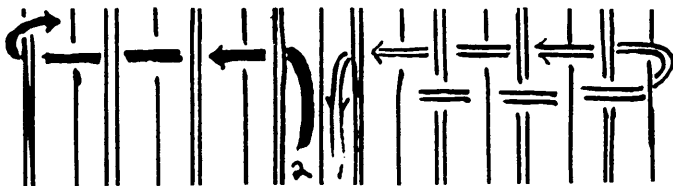


Figure No.6 Change of Design - Method of Advancing both weft colors to the Right.

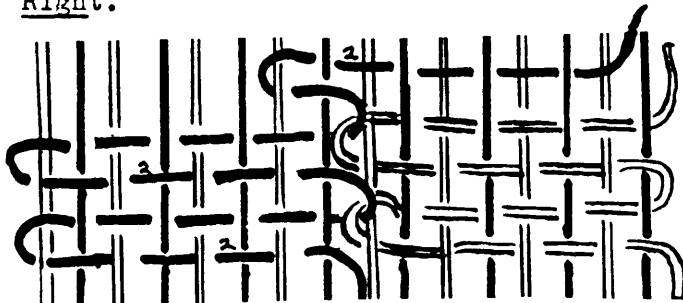


Figure No.7 Change of Design- One color Advancing to right and then left.



Figure No.8 Change of Design- Advancing to Left with both weft colors.

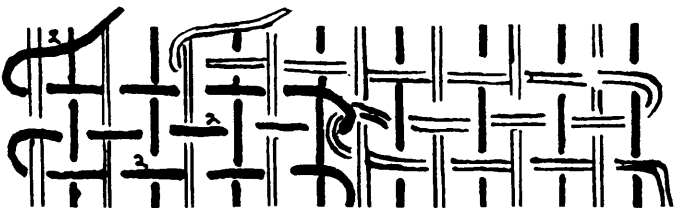
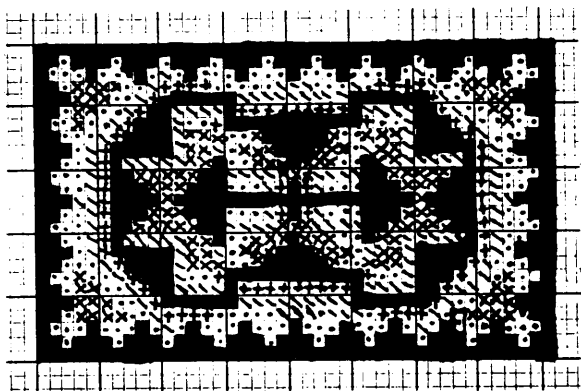


Figure No.9 A simple design using 5 colors, - blue, rose, tan, green, yellow.



of years ago. An excellent description, with further details of this technique, is also given in an article in the "Weaver", Vol II, No.2 for April 1937, by Elmer W. Hickman, "Scandinavian Art Weaving."

Refer again to Figure No.2 which shows the first row in the pattern shed, with the method of fastening the beginning of the pattern weft color. No.3 shows the first row of interlocking weft. Figure No.5 shows how the pattern weft colors should look when they meet on the second row, and succeeding rows, of the pattern shed. Note there is always one warp thread down between the two raised warp threads, when two weft colors meet on the pattern shed.

6. Change of Design. Two colors advance to the right. Finish interlocking shed, bring color No.1 as far to the right on the interlocking shed as it goes. Then take end of weft color No.2, leaving the interlocking shed still open, and go over one warp thread to the left of the interlocking of color No.1 and No.2, then go under the 2nd warp thread to the left which is down. Now carry color No.2 to the right in the same shed as color No.1, but only up to the point where the new unit of color No.2 begins. Always advance to the right with color No.1 first after interlocking, then with color No.2.

7. One color advancing to right and then left. If color No.2 ends at A on the interlocking shed, let the end hang after interlocking with color No.1. Finish putting in Color No.1 to the right. Change to pattern shed, tie off color No. 2 at A with a slip knot as at Figure No.7, and continue to advance color No.1 as far to the left as desired.

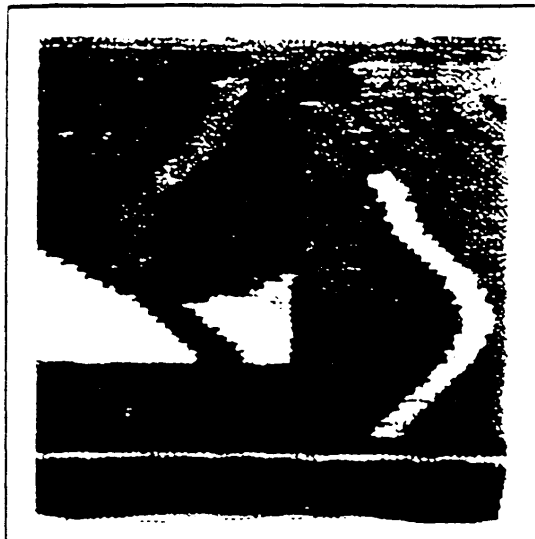
8. Advancing to the Left with both colors If color No.2 also advances to the left, instead of ending at A, and color No.1 also advances to the left, finish interlocking row all way across as usual. Then change to pattern shed. Bring color No.2 to the left as far as its color unit goes, then bring color No.1 to the left in the same shed, right over color No.2, as far as its color unit goes. If these methods are carefully followed, change of design will not be difficult.

9. A simple design is shown at Figure No.9 To follow this, transfer this to large cross section paper, and put in the colors with paints or crayons, or better still make your own designs. Note also the modern Peruvian designs on Page 1.

These directions were written up at the special request of several Handweaving News subscribers. I have attempted to give them in as clear concise way as possible, as I learned the technique a number



# Handweaving News



"Flossa" Rug Knot.

The Swedish "Flossa" rug knot is a pile technique. It is generally used for rugs of modern design, but may also be adapted for bags, wall hangings, and often is used for fringes. The rug knot can be used solid all over, or may be used only for portions of the design with a plain weave background. This form is often called half "Flossa". The photograph shown above is an example of the woven fabric sent in by one of my correspondents.

Design,- Should be a modern one for this sort of technique. Do not attempt to do a copy of an oriental rug, or roses and flowers etc. even though it is possible. Use a design with simple geometric lines. Any design which can be drawn out on cross section paper can be used. It is best to plan out the design before setting up the loom. If the loom is already threaded, the design must be planned to suit the width of the warp, by increasing or decreasing it in proportion to the number of warp threads. Each knot requires two warp threads. And four or six warp threads should be left unknotted on each edge of the warp. The warp should be sleyed about 10 or 12 threads to the inch.

Materials,- The warp for these rugs needs to be very strong and firm. Carpet warp can be used, but should be threaded double through the heddles, and through the reed. No. 3 mercerized cotton or other strong cotton about the same size is better, a 16/4 grey linen also makes an excellent warp. A heavy rug wool of fast color should be used for the knot. The plain weave background may be of material like the warp. In the piece shown above the background is of tapestry wool. On a long pile rug candlewick cotton could also be used if desired. An attractive rug at a recent exhibit which I saw, was made of a hemp yarn for the knot making a pile about 2" long, with red candlewick cotton for the plain weave background.

Special equipment,- Two pieces of special equipment are needed for these rugs. One is a double steel bar which is used as a gauge for the height of the knot, and the other is a special knife with which to cut the pile. The steel bar can be 3/8" to 2" in width. A good average width is 1/2" to 5/8" wide, and the length should be according to the width of the warp of your loom. A sketch of the bar is shown at Figure No. 2 on Page 2. The cutting knife is made so that it will not cut the warp threads as it is being used.

## Method of Weaving a "Flossa" Rug.

After loom is warped and threaded, weave a plain tabby heading about  $\frac{1}{2}$ " to  $\frac{3}{4}$ " in width. This can be of materials like the warp or of tapestry wool. Beat very firm and close. Wind a number of heavy rug yarn bobbins to be used for the knots. As soon as the plain weave heading is of the desired width, add six or eight shots of plain weave on the right, just over and under the first four warp threads. Then on the left hand side of the loom, start a small bobbin of the same material and also weave over and under the first four warp threads from 5 to 7 times. The number of times to do this depends on the weight of the weft. The edges are built up in this way so that they will fill up the same amount of space as is taken up by the row of rug knots. Figure No. 5 shows how each edge is built up and then how the right hand shuttle is again carried all across for the four rows of plain weave between each row of knots. The bobbin on the left can be carried along for just four threads, and turned, or it can be finished off and started each time as desired, but both edges must be built up in this way, and it is better to build them up before making the row of knots.

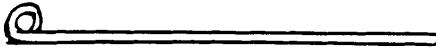


Figure No. 2

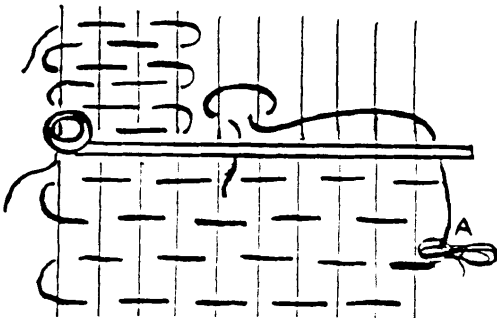


Figure No. 3

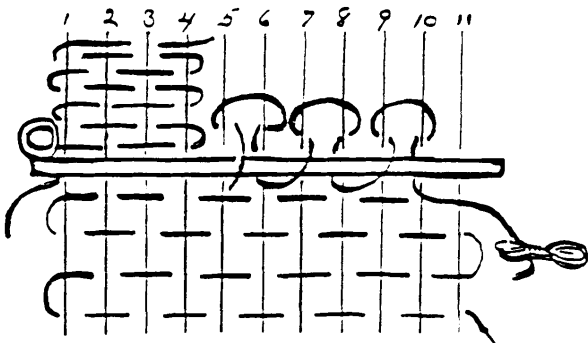


Figure No. 4

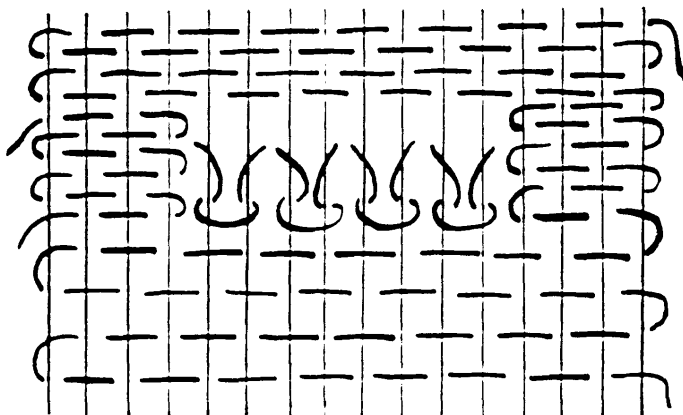


Figure No. 5

Directions for Making the "Flossa" Knot.

The first knot is made on the left hand edge of the warp, on the 5th and 6th warp thread in from the edge, with the warp flat. The first and last knot are set in from the edge to prevent the rug from curling and make it wear better. This distance can be increased if desired. Slip the rug yarn bobbin under the 5th warp thread from right to left, then over the 5th and 6th warp thread and under the 6th from right to left, for the first knot as shown at Figure No. 3. Now place the metal gauge bar on top of the plain weave heading with the slit side up and the ring on the left. Hold in place with the hand while a few knots are made. Take the rug yarn bobbin end A under the bar and pull the knot together. Then take it over the bar and under the 7th warp thread from right to left with the yarn loop toward the reed, again under the 8th warp thread from right to left for the second knot. Carry the yarn bobbin around and under the end of the gauge bar. Pull the knot down close. Bring the yarn up over the bar and make the rest of the knots in the same way for the width of the warp until the right edge is reached.

Do not pull the yarn loops too tight over the gauge bar. After completing a row of knots, weave at least 4 rows of plain weave all across the width as at Figure No. 5. Then take a sharp pile knife, run it across the top of the gauge bar to cut the loops. The knots are more even if the top of the gauge bar is turned slightly toward the weaver. Now build up the right and left edges respectively with plain weave on the first four and last four edge warps, and then the next row of knots may be woven.

Follow the design carefully. One knot and four rows of plain weave equal one square of cross section paper design. Beat very hard and close, it is impossible to beat too hard. Be sure the edges are also well beaten down too.

Finishing the Rug.

After the rug is completed, weave another plain weave heading on the other end as at the beginning. The warp ends of the rug can then be knotted together, or they may be braided in three strand braids. Another method of finishing is to run each separate warp thread back into the plain weave heading with a needle, as shown at Figure No. 6. This finish makes all of the warps completely out of sight. These ends should be run back far enough to fasten them well, and then the ends are cut off close.

The rug design below at Figure No. 7 was designed by Elizabeth Bates, a design student at Wayne University. It requires 75 knots for the width, plus 10 extra warps for the edges, or a total of 160 warp threads. This can be increased in size proportionately if desired.

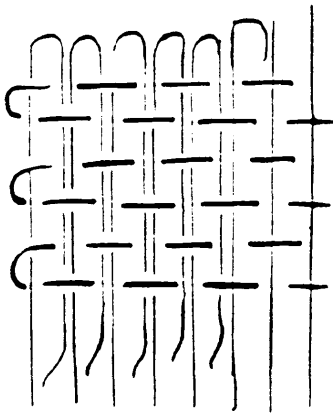


Figure No. 7

Heavy rug yarns for this were purchased from A.D. Jenness, 20 Roxbury Road, New Britain, Conn at \$2.85 lb. in the following colors, - light grey # 118, dark grey #117, cream 133, light brown # 127, dark brown #123 were the colors used. This same firm can also furnish pile knives and guage bars if desired. Prices on request.

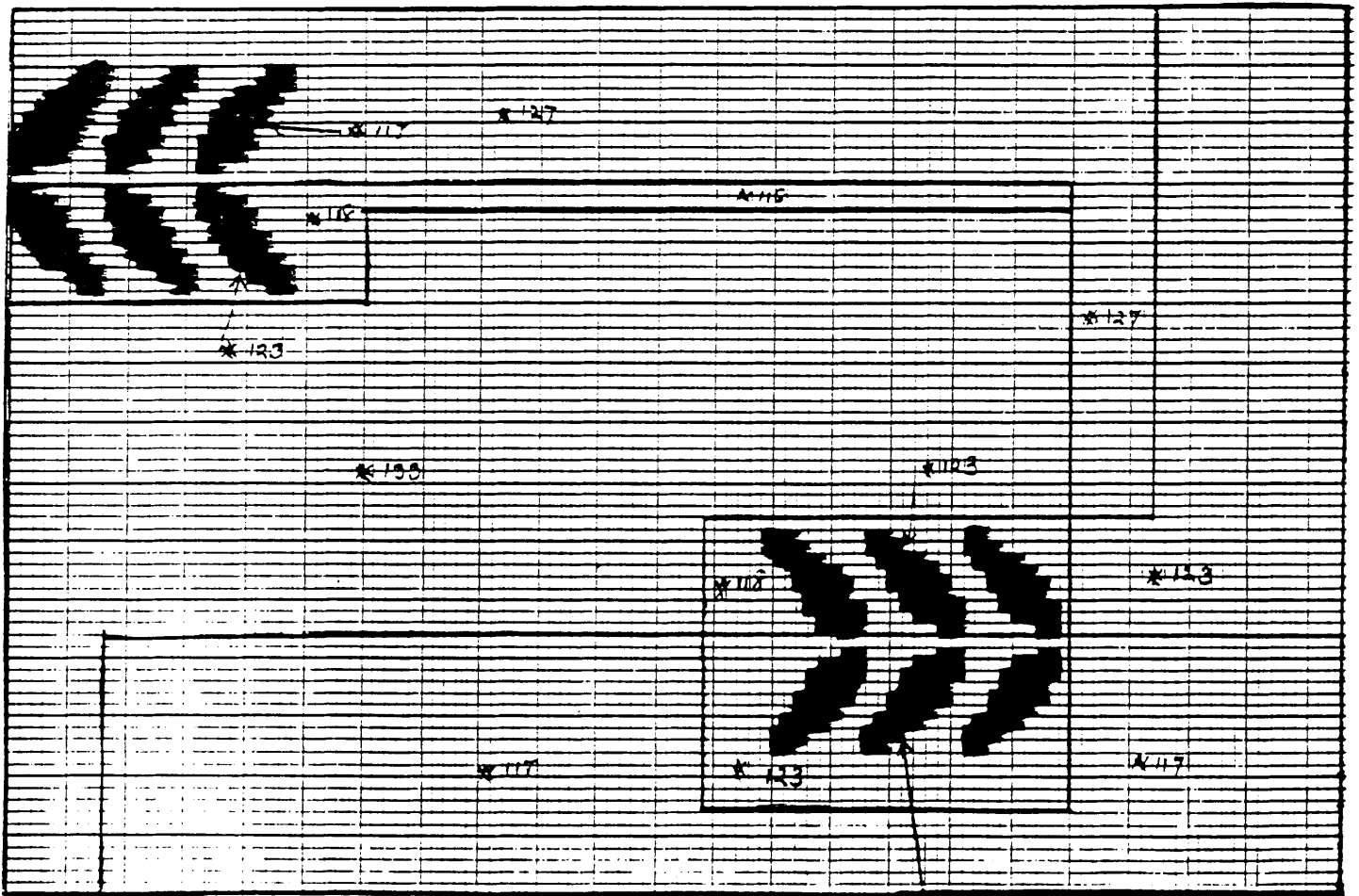
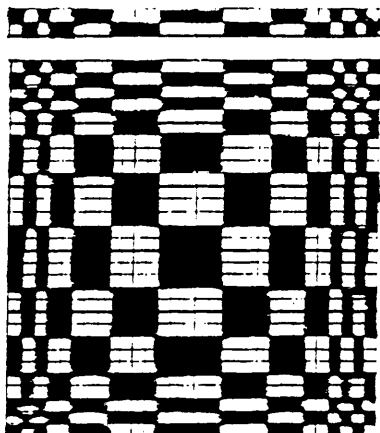


Figure No. 8

# Handweaving News



A variety of Threading Drafts from a two block Pattern.

It is not at all difficult to design your own two block patterns and from these a large number of different kinds of threading drafts may be devised. The simple pattern above was designed by Miss Rhea Kruke, one of my Wayne students. With this as a basis, I will explain how it is possible to plan out four harness drafts, and also 8 and 10 harness ones.

Key Draft or Basic Design. The key draft or the basic design is just above the pattern design. It consists of drawing out on cross section paper different sizes of units. The most interesting patterns are obtained when these blocks are of varying numbers of units, and contrasting, as for instance large and small. These key drafts can be written as large or as small as is desired, they can be planned so just one repeat will fill the loom. The centers of the design should always be kept in mind however, as well as the joining of one repeat on to the next. This pattern key draft is one quarter of the width of the No. 240 Structo loom, and used 240 warp threads. It can center on the center unit of the large block, and also on the first unit of the key draft. After the key draft has been written, the next step is to draw out the pattern from the key draft so as to see what the blocks of the key draft will form. Start with the first unit block, and draw it down once all across the paper, then take the second block which is also one unit, and draw it down. The 5th block is a two unit one so draw it down twice where ever it occurs on the key draft. The 6th is a 3 unit block so draw it down 3 squares, square and so on through the complete key draft. This is the same as "weaving as drawn in", and should form a diagonal.

Threading Drafts . Colonial Over-shot. Four Harness, often called "On opposites" This type of draft is very simple and easy to write. Take 1 thread on harness 1, and one thread on harness 2, for every unit of the first pattern block; and one thread on harness 3 and one on harness 4 for every unit on the second pattern block. This means use 2 threads for block 1, and 2 for block 2, for each unit. This draft is given at Figure No. 3 on Page 3. So for the first one unit pattern block write 1,2; for the second one unit pattern block write 3,4; for the 3rd one unit pattern block write 1,2; for the fourth pattern block write 3,4; while for the 5th which is a two unit pattern block write 1,2,1,2; and for the next which is a three unit block write 3,4,3,4,3,4; for the 7th pattern unit block of the key draft which is a 4 unit block write 1,2,1,2,1,2,1,2. And for the 8th or center block write 3,4,3,4,3,4,3,4,3,4. It is possible to increase the size of the threading draft by using 4 threads for each unit of the key draft as 1,2,1,2, for one unit of the first pattern block, and 3,4,3,4, for one unit of the second.

M'S and O'S Threading Drafts. There are two types of drafts which can be written for the M'S and O'S type of pattern. One, which is commonly found, I call Double M's and O's, and the other I have called Single M's and O's because it is simply a reduced threading draft of the double. The unit for the double M's and O's consists of 8 threads, namely 1,2,1,2, 3,4,3,4, for the threads of one pattern block of the key draft, and 1,3,1,3, 2,4,2,4, for the threads of the other pattern block of the key draft. The unit for single M's and O's is 1,2,3,4, or 4 threads for each unit of the key draft for one of the pattern blocks, and 1,3,2,4, or four threads for the second pattern block of the key draft. With this in mind, a threading draft for either may easily be written. Study the ones given at Figure No.4, and see how this is done. (A) is the 8 thread unit block, and (B) is the 4 thread unit block. I had never seen the 4 unit block used until it had been tried out in my classes as an experiment. It is most satisfactory for linen and is a one shuttle weave with no plain weave possible. To weave, put one shot on 1 and 2, one on 3 and 4 for one of the pattern blocks, of course weaving to square it down; and then for the second pattern block one shot on 1 and 3, and one on 2 and 4, alternating until the block is square. Either draft is woven the same way.

Summer and Winter Weave. The regular way of writing the threading for summer and winter weave is 1,3,2,3, for one pattern block of the key draft, and 1,4,2,4, for the other pattern block of the key draft. This is 4 threads for each unit of the key draft, and is as shown at Figure No.5 (A) on Page 3. Plain weave in this case is 1 and 2; and 3 and 4. I have recently found that it is convenient to write these Summer and Winter drafts in another way; though the woven effect is exactly the same. But it seems to me much more logical, as the standard tie-up on the loom does not need to be changed at all, as is the case when the regular method of writing is used as at (A) of Figure No.5. For one unit of the key draft, write 3,2,1,2; and for the other unit write 3,4,1,4; as shown at (B) of Figure No.5. The tie-up would be just the same as for Colonial over-shot, namely 1&2, 2&3, 3&4, 4&1, with tabby plain weave 1&3, and 2&4. There are three different textures which can be woven on this threading also, namely; - singly or "one and one", in "pairs", or by repeating 1&2 to square one pattern block over and over, and 3&4 repeated as many times as is necessary to square the other block of the pattern. This type of threading can also be called a "3 and 1" threading draft.

"Five and One" Weave. For this the effect is still another texture. Write 3,2,1,2,1,2, for one unit of the key draft; and 3,4,3,4,3,2 for the other pattern block unit of the key draft. This is written out at Figure No.6 on Page 3. To weave this just use 1&2, repeated over and over with plain weave between each shot until each pattern block is square; and 3&4 repeated the same way for the other pattern block. Of course the plain weave is the same, 1&3, and 2&4.

Matta or Mattor Weave. These weaves are used in Scandinavia for rugs, and that is what Matta means. But there is no reason why these weaves could not be used for other things as well as rugs if desired. This is really a warp pattern, and two colors of warp need to be used. The warp should as a general rule be set twice as fine as is generally necessary, as the weft is completely covered. For a rug, the warp should be set at least 24 threads to the inch and better 30 threads to the inch, with a heavy weft of either rags or heavy cotton roving. If carpet warp is used for these rugs, be sure that it is of fast color. This can be obtained now, it is slightly more expensive, but for this sort of rug is the only thing which should be used. For table runners or pillows, mercerized cotton in colors can be used for warp, with a weft of heavier yarn of some sort. No.20 cotton should be set about 60 threads to the inch, or four through one dent of a 15 dent reed.

A regular twill threading is used for this. Say you have two colors, one white and one blue. For one pattern block, thread harness 1 and 3 with white, and 2 and 4 with dark warp thread; repeat this as many times for one unit according to the size of unit you wish to use. As the pattern threads are set close this unit should not be any less than 8 threads. Thus for one unit of the key draft you would have harness 1, white; 2 blue, 3 white, and 4 blue, 1 white, 2 blue, 3 white, and 4 blue; for one pattern block. For the other pattern block the colors are simply reversed. Thus for the second pattern block, thread harness 1 blue, 2 white, 3 blue and 4 white, 1 blue, 2 white, 3 blue, and 4 white. To weave this just 1&3, and 2&4 plain tabby treadles are used.

Two block Pattern in Lengthwise Stripes. This is another type of weaving seldom seen in this country but would offer many possibilities for interesting texture weaves of different materials especially for curtains and drapes. Here again the pattern thread is a different kind or color from the plain weave, and indicated by circles on the draft on Page 3. One pattern block unit of the key draft is written 1,3,2,3, and the other 1,4,2,4, with color on harnesses 3 and 4.

Various Drafts written from the Two Block Key Draft On Page 1.

Figure No.3 (A) Colonial Over-shot One Complete repeat.  
 (2 threads to each unit of Tie-up the key draft.)

Figure No.3 (B) Colonial Over-shot Threading Draft. One half of one repeat.  
 (4 threads to each unit of key draft.)

Figure No.4(A). M's and O's Threading Draft. Regular way of Writing.

(8 threads for each unit of key draft) (One half of one repeat)

Figure No.4 (B) M'S and O'S Threading Draft. Reduced way of writing.  
 (2 threads for each unit of key draft.) Half of one repeat.

Figure No.5. (A) "Summer and Winter" Threading Draft. Regular way of writing.  
 (One half of one Tie up repeat.)

Figure No.5 (B) "Summer and Winter Threading Draft. Original way of writing.  
 (One half of one Tie up repeat.)

Figure No.6 "Five and One" Threading Draft. (One half of One repeat.) An Original arrangement. Tie-up is 1&2 for one pattern block and 3&4 for the other, with plain weave 1&3 and 2&4. Weave to square each block. 5 threads and 1, for each unit of key draft.

Figure No.7 "Matta" Weave, Threading Draft. Two colors of Warp used. (One half of one Repeat). Tie-up is 1&3, and 2&4, only. Alternate one shot of heavy weft and one shot of fine weft, repeated to square each pattern block. Fine weft can be of material like the warp, and to change the pattern from one block to the other just omit the last shot of fine weft when the pattern block is square.

(8 threads for each unit of the pattern, 4 blue and 4 white.)

Figure No.8 Two block Pattern in Lengthwise Stripes.

Plain weave can be written 1,2,1,2, for a plain edge border, and at any other place where it is desired between the lengthwise stripes. Tie up here is 1&3, 2&3, and 1&4, 2&4. Experimenting with this weave will yield some unusual textures.

# Handweaving News

Figure No.1

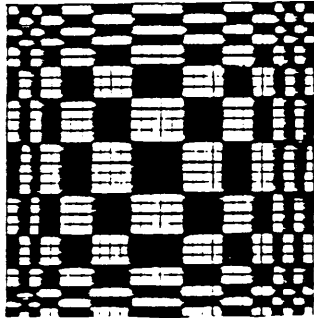
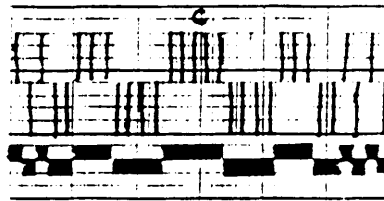


Figure No.2  
Short Threading Draft.



(One half of one repeat) Actual Threading Draft.



Some Variations on 8 harness Two Block Patterns.

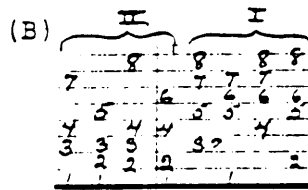
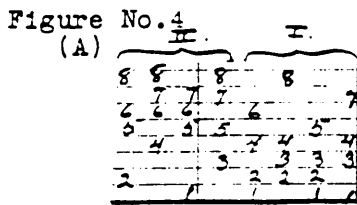
The two block pattern key draft as given above at Figure No.1 is the same as that given in the June News. This month it will be shown how by simply changing the tie-up of the loom, many different interesting and unusual texture effects may be gained from the same threading draft on an 8 harness loom. This field of draft writing is a very large one, and it is my belief that many people have been unaware of the possibilities which are to be found from the use of some of these simple devices. Most people would rather copy a draft out of a book, than take the trouble to design one of their own. Again and again, I have stressed the fact that if our present day weaving is ever going to amount to anything, or stand for anything in the future, weavers must know how to draft their own patterns, and do it. The students in my own classes never use any draft but their own, even for their first piece of weaving on the loom. Sometimes perhaps the finished results of the first weaving are not a masterpiece, but at least the student has gained a foundation from which to advance, and has had to do some thinking for herself too.

Start by drawing down on cross section paper, the key draft as shown at Fig. No.2. This can be any number of squares, but it is of more interest if this key draft has different sizes of pattern blocks. Allow four warp threads for each cross section paper square. In this way it is possible to design a pattern to just fit the number of warp threads to be used. Also plan to center the key draft, and if it is to be used as a repeat, as the one given above, do not add the last block which is the same as the first one at the beginning of the key draft. Generally it is better to write out and draw down two repeats of a key draft so as to be sure, the effect is what is wanted when it is repeated.

Just above the key draft plan is a short way of writing an 8 harness draft, here each four warp threads on harness 1, 2, 3, and 4 is represented by a straight line, for one pattern block of the key draft. And four warp threads 5, 6, 7, and 8, by another straight line, for the second pattern block of our key draft. This is the method of writing these threading drafts found in many of the Scandinavian weaving books, and an easy one to write as well as use. At Figure No.3 is the long way of writing the same thing. Note that the center block of one repeat is marked with a C in each case, and just above the threading draft numbers to represent the number of units repeated for each pattern block of the key draft.

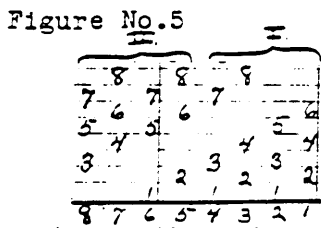
Now that the threading draft is written, what can we do with it? In all of my experimental work to try out drafts of this sort, I find it not only very convenient but much less work to use the little No. 240 Structo loom fitted up for 8 harnesses. This is easily done, and I would be glad to order the extra equipment for anyone wishing to do this. Also I believe that the 8 or 10 harness loom is simpler to use when it comes to the tie-up of these more complicated patterns, than a treadle loom, and have found the regular large 10 harness Structo loom most satisfactory, except for heavy rug work.

Significance of the Tie-up. This is important, as the entire difference of these patterns is due to the harnesses brought down and the order in which they are used. At Figure No. 4 is the tie-up for Double-faced Satin Weave written in two ways. Both of these tie-ups give exactly the same woven effect, except that in one case the pattern is on one side and in the other it is on the opposite side of the weaving. If the tie-ups are studied, it will be seen that just the opposite harnesses are used in each tie-up. The Roman numerals above the tie-up indicate the pattern block of the key draft, and the numerals at the bottom of the tie-up indicate the order in which each block is woven. Repeat this order enough times to square each pattern block of the key draft. The number of times it is necessary to repeat this will depend on the kind of thread being used for weft in each case.



Only one tie-up will be given for each of the succeeding patterns but it is very easy from this to write out its opposite and use it if desired. This is the regular satin weave, and excellent for linens. Remember that this tie-up and the ones which follow can be used for any threading you may wish to design yourself.

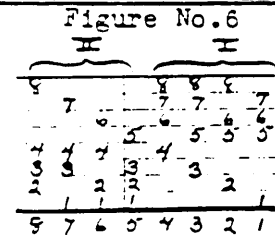
Tie-up No. 2 at Figure No. 5 will give a weft face twill on one side of the cloth, and a warp face twill on the other combined with a plain weave effect between these.



Weave one shot of weft on each pattern unit and weave to square the block, in the order as shown by the numerals at the bottom of the tie-up draft.

each treadle, and weave to square each pattern block, that is repeat 1, 2, 3, and 4 for one pattern block enough times to square it, and then 5, 6, 7, and 8 repeated enough times with one shot on each shed until that pattern block is also square.

At Figure No. 6 is the tie-up for a double faced twill.



This is also different in its woven effect from either of those given above. Weave one shot on

Figure No. 7 is still another form of twill. This particular tie-up gives a woven effect that has almost what one might call a third dimensional quality, if one could speak of a woven design in such terms. As the squares of the pattern blocks seem to be straight on one side, and twilled on the other side of the square which gives them almost a form of perspective after they are woven. Perhaps this is not technically speaking a right description of woven fabric, but it explains it anyway.

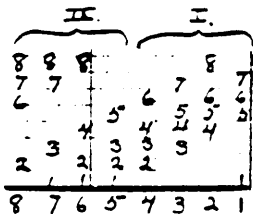
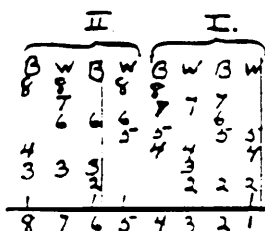


Figure No. 8 is the tie-up for Double Weaving on 8 harnesses, on an all white warp. Most directions for double weaving on 8 harnesses make no mention of the fact that an all white warp may be used, and show the threading draft for a dark and a light warp as well. But two colors of weft are necessary, instead of one color as all of the previous figures have been woven above. At the top of this tie-up, B and W have been used to indicate the two weft colors, and any two colors can be used for these.



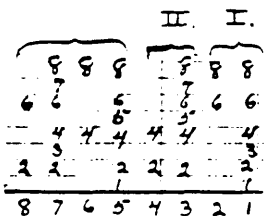


Double Weave (continued). On the samples used to try out this form of weaving, the warp was No. 20 mercerized cotton set at 30 threads to the inch, or a 15 dent reed sleyed two threads to a dent. This same set was used for all of the pieces here described. Now if weft thread about the same size as the warp thread is used, the warp will be practically covered by the weft. It can be covered if the weft is well beaten down, so that a solid color will result in the squares of the pattern blocks. In this particular case, a fine tan linen, and a fine rough blue cotton thread were used for the two weft colors. This gives the pattern in blue on one side of the fabric and in tan on the other side. In order that this will be perfectly clear the exact order of weaving of this pattern will be given. Group I. represents pattern block No. 1, and consists of one shot on treadle 1 with tan weft, one shot on treadle 2 with blue weft, one shot on treadle 3 with tan weft, and one shot of blue on treadle 4, repeat this twice which square the one unit block in this case for Group I. Then the next is Group II. which represents pattern block No. 2, and consists of one shot of tan on treadle 5, one shot of blue on treadle 6, one shot of tan on treadle 7, and one shot of blue on treadle 8, repeat this also twice, which squared the one unit block for pattern block No. 2 of the key draft. So for each group, weave 4 pattern sheds. So the condensed weaving directions will read, Group I repeated 2x, Group II, repeated 2x, Group I repeated 2x, Group II repeated 2x, Group I repeated 3x, Group II repeated 4x, Group I repeated 5x, Group II repeated 7x, which is the center of the pattern, reverse the order back to the beginning, and so on. Beat well on the shed where the pattern changes from one group to the next, and take care to properly lock the colors on the edges of the weaving. It is possible to weave pattern borders and plain weave. For plain weave with tan on lower shed, use harnesses 124568, and for the opposite 234678; while the blue in the upper shed is harnesses 2&6; and the other 4&8. Here again it is necessary to watch the alternation of the colors so the edge will be even. This has many possibilities.

Double Width Material, Colonial Over-shot Pattern, Two Block on opposites.

Haven't you often wished to weave wider than 8" on the No. 240 Structo loom in an over-shot pattern? Here is the method of weaving 15" material on this loom, this can be used on any loom with 8 harnesses. With warp set at 30 to the inch as this is, use heavy weft thread, 16/4 natural linen for the plain weave, and tapestry or Germantown yarn for the over-shot pattern. For a fine weft, set the warp 4 in one dent or 60 to the inch. Numerals at the bottom of the tie-up indicate treadles.

Tie-up Figure No. 9



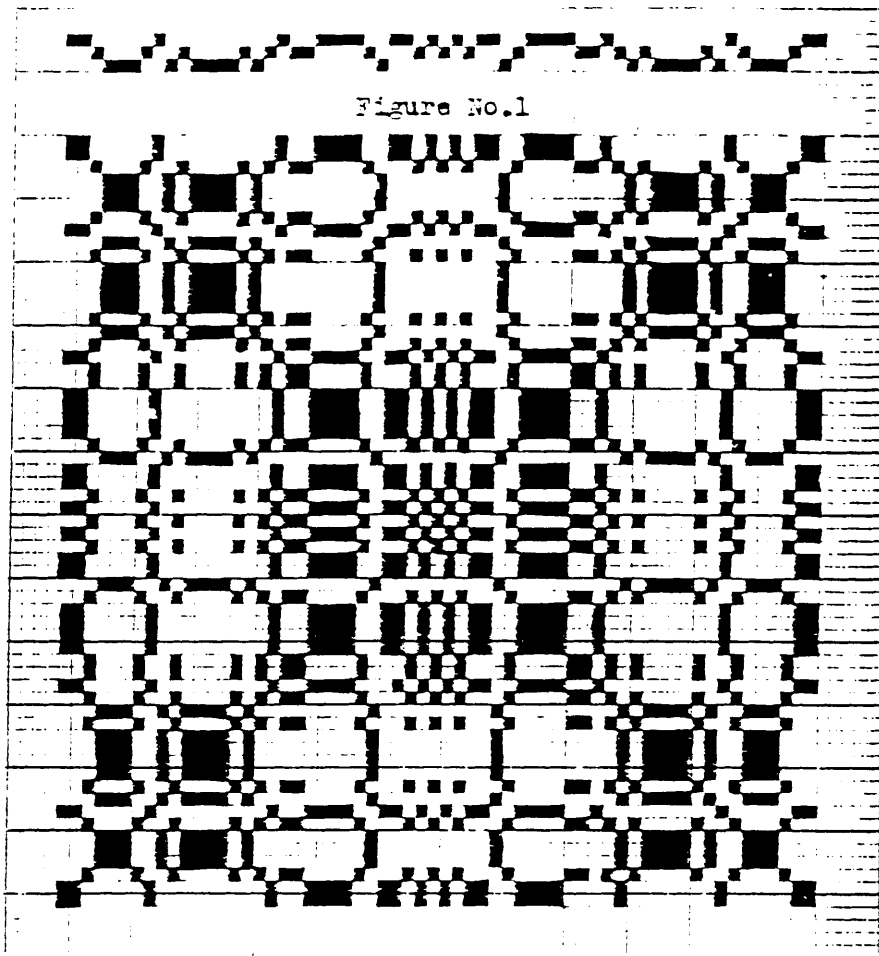
Correct order to Weave pattern block No. 1. Start the plain weave at the right of the loom, use treadle 8 or bring down levers 2&6, pass plain weft through to left. Beat, change shed to treadle 5 or levers 124568, and pass same weft on top shed back from left to right. Start pattern over-shot weft at right in lower shed on treadle 1, beat, change shed to treadle 2 and carry same weft from left to right edge again. With plain weave weft treadle 7 then treadle 5; then again pattern weft treadle 2, then treadle 1.

Repeated in this order an even number of times brings it though the second treadle 1, For an odd number of pattern shots brings it to treadle 7 with wefts on top on the right edge. Then proceed from treadle 7, treadle 6, and then to treadle 4 and treadle 3, where the weft pattern thread changes to the second pattern block. If the correct order is not kept, the fold which is on the left edge will not come out right, so this order is important. The order for weaving the second pattern block is treadle 8, 5, 3, 4, 7, 6, 4, 3. repeated as desired. Note that treadle 1 and 2 gives the over-shot for one pattern block and treadle 3 and 4 the over-shot for the other pattern block. While treadle 8, 5, 7 and 6 give the plain weave sheds, this order will also weave plain weave between a series of borders if desired.

Tubing with Colonial Over-shot pattern on opposites. The same tie-up as above for double width material is used for tubing. This would be a fast way of weaving pillow tops. The order for pattern block No. 1 beginning at the right hand side of the loom is treadle 1, 2, 5, 6, 1, 2, 7 and 8. For pattern block No. 2 the order is treadle 3, 4, 5, 6, 3, 4, 7, 8. Each pattern block may be repeated as desired.

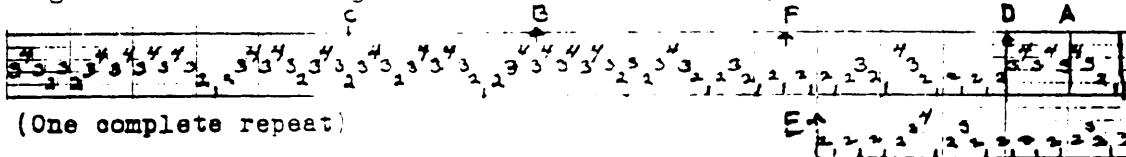
Samples of all of these weaves are available and will be loaned for a period of two weeks for \$2.00. Just ask for "Two Block 8 harness Weaves." I am sure this will appeal to some of our more advanced weavers, but it is not too difficult for anyone to try.

# HANDWEAVING NEWS



Three Colonial Over-shot Patterns.

Figure No. 2 Threading Draft for Pattern and Key Draft above.



The colonial over-shot patterns given here were all designed by Helen Hill, one of the weaving students in my Wayne University class this past spring.

Arrangement for 420 threads of warp

Thread selvage 1, 2, 3, 4.	4 threads
Then from B to D	- 38 threads
A to E, 3 times 110	- 330 "
A to B	- 43 "
End selvage 4, 3, 2, 1,	<u>4</u> "
	419

Thread 1st or last heddle double to take up 420 threads.

Arrangement for 600 warp threads.

Thread selvage 1, 2, 3, 4,	4 threads
Then F to D	- 18 "
A to E, 5 times 110	- 550 "
A to F	- 23 "
End selvage 4, 3, 2, 1, 2,	<u>5</u> "
	Total 600

In this threading draft 2 threads are planned for each unit of the key draft.

This is a three block pattern and the 4 & 1 pattern block is not woven. Weave in the same order as threaded, and enough shots to square each pattern block with a shot of plain weave between each pattern shot.

Wild Rose Pattern.

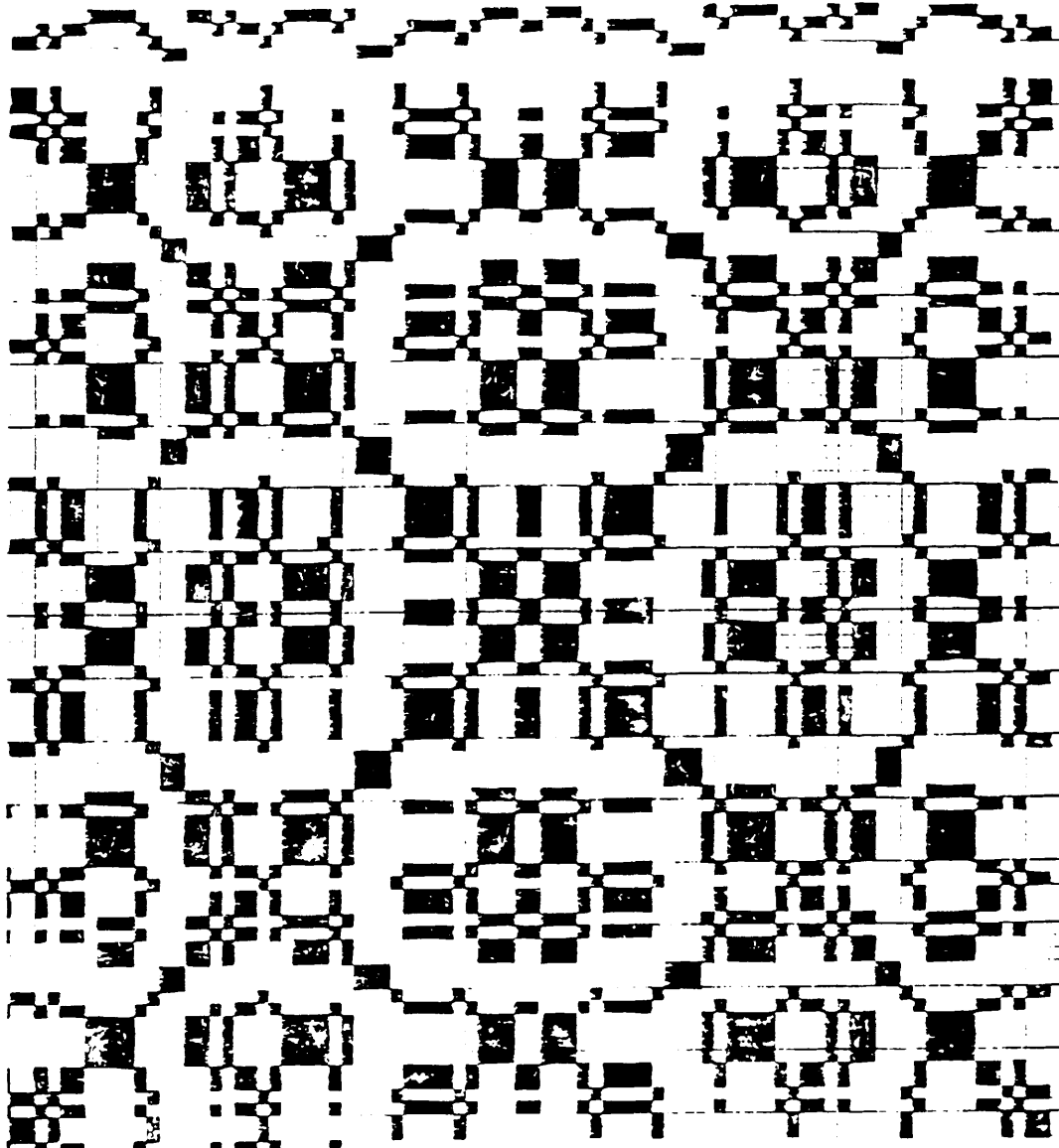
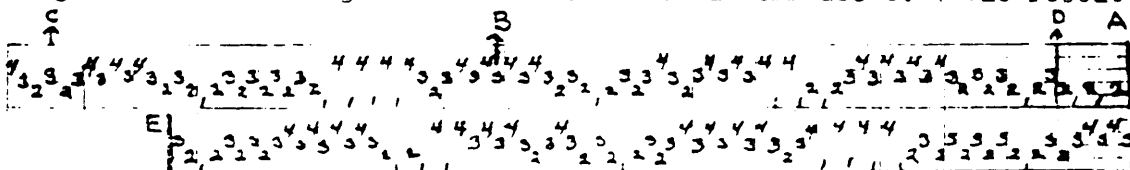


Figure No.3 Threading Draft for Wild Rose Pattern above. ( One repeat )



This is a large threading draft and a very attractive one. It also has an interesting variation in the sizes of the pattern blocks.

Arrangement for a Warp of 600 threads.

Thread selvage 1,2,3,4	4	threads
Begin at B to D	45	"
A to E, 3 times	166	threads
A to B	498	"
A to B	50	"
End selvage 4,3,2,	3	"
	<u>600</u>	"

The tieup for all of these patterns is the regular 4 harness tie-up. Harness 1& 2 tied to treadle 1, 2&3 tied to treadle 2, 3&4 tied to treadle 3, 4&1 tied to treadle 4, and the plain weave tabby A tied to 1&3 harnesses, and B tabby tied to 2&4 harnesses.

## Butterfly Fantasy

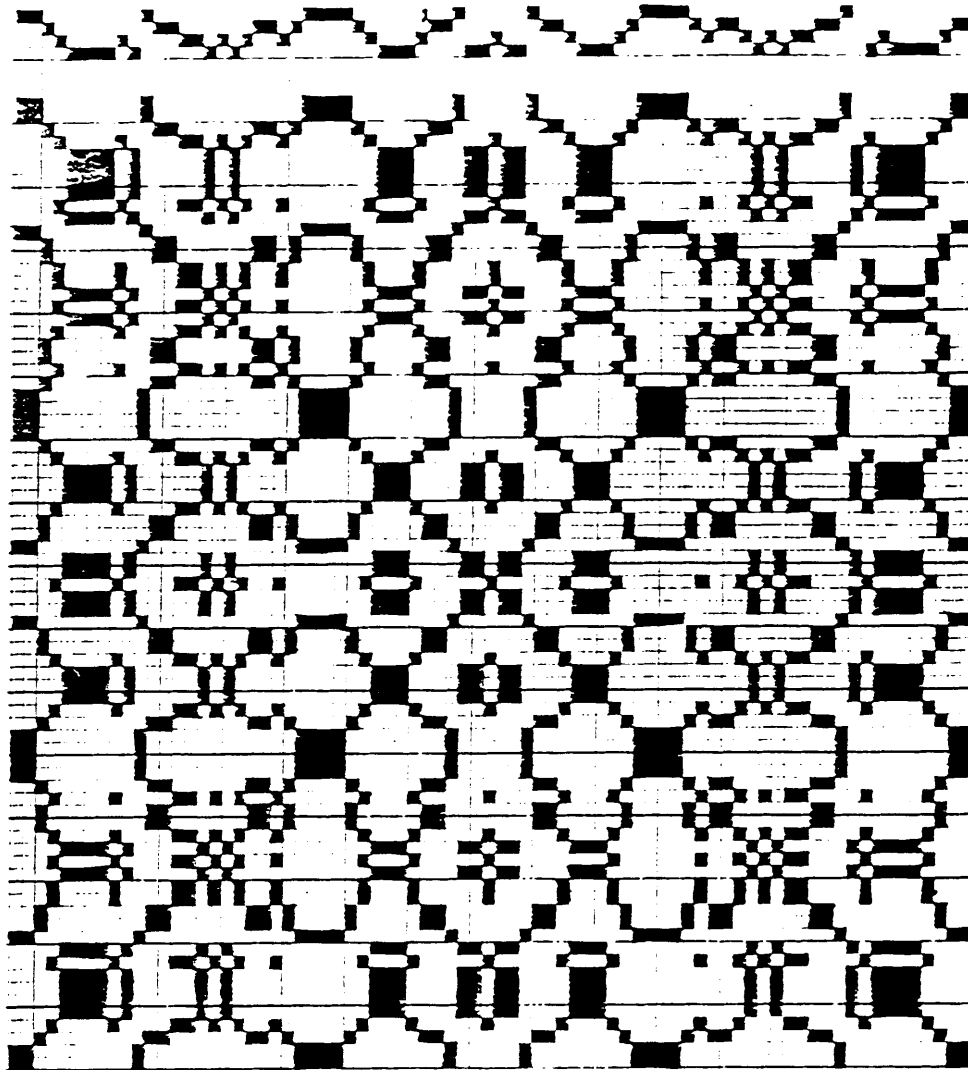
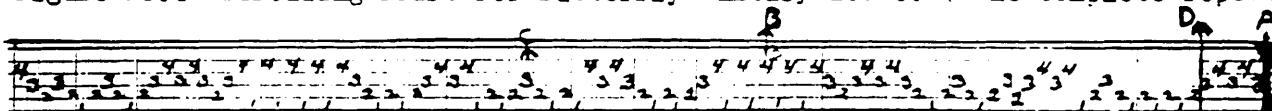
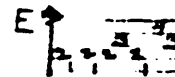


Figure No.4 Threading Draft for Butterfly Fantasy above. ( One complete repeat)

Arrangement for 420 warp threads

Thread selvage 4, 1, 2, 3.		4 threads	
B to D	-	35	"
A to E, 3 times 112	-	336	"
A to B	-	40	"
End selvage 3, 2, 1, 4, 3	-	5	"
		<u>420</u>	"



On the Structo loom, the pattern will come up on the under side of the weaving, if the levers are brought down in the same order as the pattern is written. For instance, to weave the first pattern block which is written in the threading draft 3, 4, 3, 4, use levers 1&2, or just the opposite from the harnesses of the threading draft. Follow the order of weaving either from the key draft or the threading draft. This applies to all of these patterns, and is much easier to do than to try to follow out an elaborate long treadling list.

HANDWEAVING

NEWS

### How to Sign Handweaving.

There are several methods of weaving initials in order to sign ones weaving. This signature can be ones name and date, and even may include "woven by", or it can be just initials and two numerals for the year. Many of the old time weavers signed their weaving with name and date, and even also the name of the person for whom the material was woven.

Designing of Signatures. Modern signatures should be carefully planned and designed. Plan out just whatever you wish to have on cross section paper first. This may be just simple initials, or name and date, but to my mind it should be small, subdued and inconspicuous. Initials can be worked out into a simple monogram, or even better an interesting sign or mark may be worked out to make the signature an original one. After the design has been made it should be reversed by tracing heavier on the right side of the drawing and then turning the paper over and marking the same lines on the back of the paper. The design shown at Figure No.2 on the next page was made in this way, and is the reverse of the initials N,S,J.

Combination of plain weave and brocading. To do this, if the design is to be on the hem of an article, weave a plain tabby heading for the hem as wide as desired. Weaving the design at Figure No.2 in the manner to be described will make the wrong side of the initials on the top side of the weaving, hence the reason for the reversing of these initials. This technique is really a combination of laid-in and brocading. To start raise the shed, start one color at A, and another at B for the N. If only one color is to be used for the whole monogram bring it through to the top of the warp threads that are raised for the shed and then down again at B where the N begins. This will make a skip on top of the weaving. But if two colors are used it is not necessary to do this. The skips on the N is not illustrated in the drawing, but would occur as at points O and M where the thread would skip over several warp threads. On the S the N skips would come right over the warp as at D and C. This should be clear from the drawing if you know that the long skip joining the two sides of a letter are not drawn in as it would be confusing to do so. It is somewhat easier to weave initials in a row in this fashion than to weave a monogram. And any of the initials at Figure No.1 can be used effectively. After each row of the laid in, weave a row of plain weave all across the width of the loom. The initials should be either another color of weft or a heavier weft than the plain weave, in order to show up well.

This monogram as it is drawn out measures about 11/8" square when woven on warp set at 30 threads to the inch, No.20 mercerized cotton and the same for the weft. Larger initials and monograms could be planned for the center of towels on a linen 40/2 warp and woven with linen floss. In planning the initials for such a project, be sure and consider how close and what kind of warp and weft are to be used, or they may not be in good proportion when finished.

Figure No.1

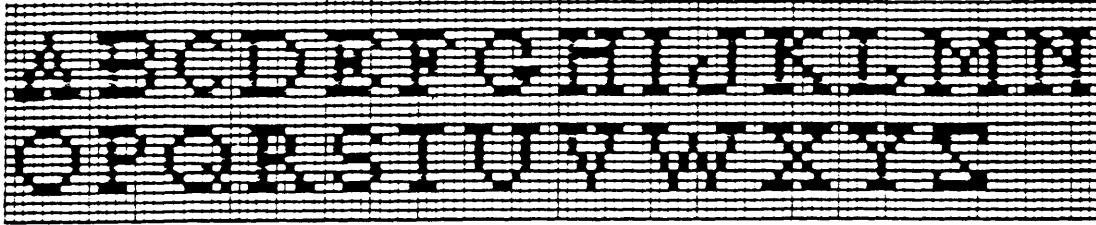
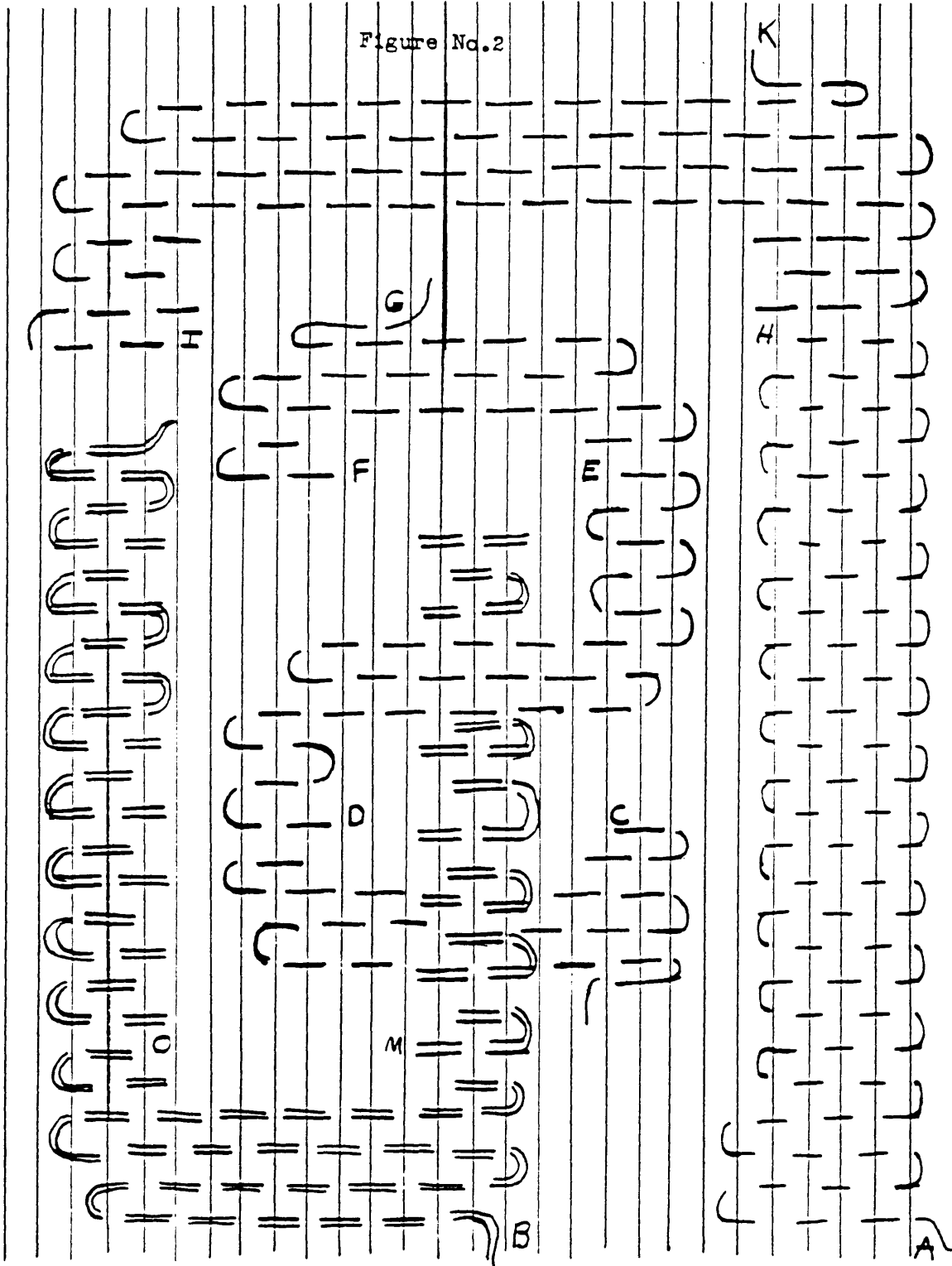


Figure No.2



Simple Brocading. This is another form of making a signature. At Figure No.5 at the bottom of this page is shown how to plan out an initial for simple brocading. The horizontal lines are weft going over the lengthwise warp threads as shown. For instance on the N at the top the weft would go over three warp threads, then under three, and over two. Then put in a shot of plain weave, after the initial weft has been pushed down under the warp threads. Bring it up again for the second row of pattern for the initial, and go over two, under three, and then over three warp threads, then push the weft down under the warp threads, and put in another row

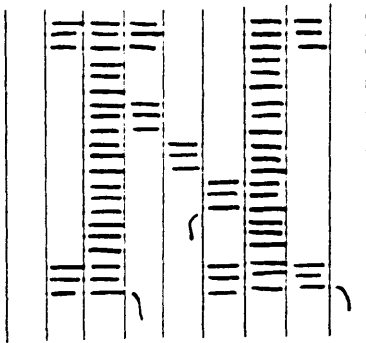


Figure No.3

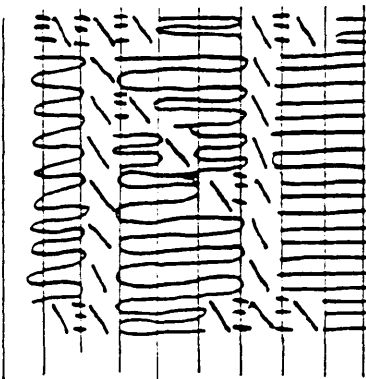


Figure No.4

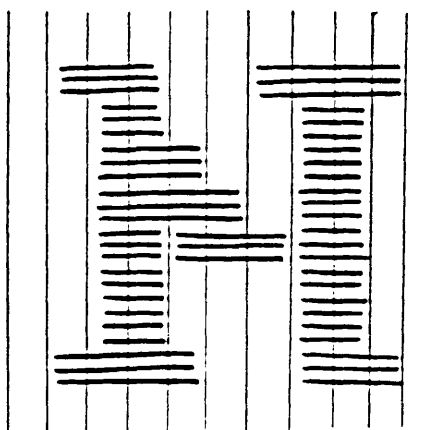


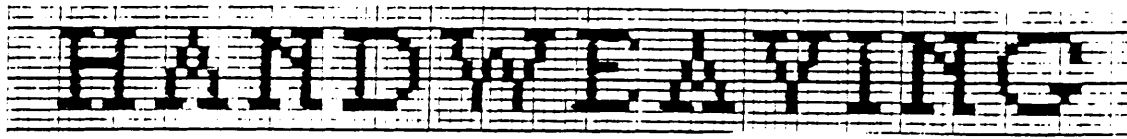
Figure No.5

of plain weave. This is the method for the working of the whole initial. Of course this brings the right side of the initial on top of the weaving. If it is desired to have it on the under side, of course the pattern must be reversed. A row of initials can be woven very easily in this way. The initial weft must be either a different color from the plain weave, or else a somewhat coarser thread, so the initial will show up well.

Embroider Weave or Dukagang. At Figure No.3 is shown the plan for initials in embroidery weave or dukagang. The horizontal lines at Figure No.3, indicate over 3 warp threads and then under 1 warp thread in each case. And three shots of pattern weft are used for one square of cross section paper pattern. Some people prefer to work this sort of weave with the right side on the top of the weaving, while others prefer to work it with the wrong side on top. At Figure No.3 the N is to be woven with the right side on top. For instance the top of the N is woven as follows, - with weft for the initial go over three warp threads, under 1, over 3, under 9, over 3, under 1, over 3, under 1, over 3 and then down under the warp threads. This is picked up on a flat warp, or can be put in on a shed which raises 1 warp thread and leaves 3 between on the shed. Then a shot of plain weave is put in. Bring up the initial weft thread, and go over 3 warp threads, under 1, over 3, under 1, over 3, under 9, over 3, under 1, over 3, and then down below the warp threads. Then an alternate shot of plain weave. Continue as shown on the pattern at Figure No.3. The small lines shown at Figure No.3 indicate points where new weft threads are started, and in this case the wefts were begun at the bottom of the N instead of at the top as just described.

Spanish Weave. Another effective way to weave initials monograms etc. is the spanish weave. This is an especially nice way to mark towels and possibly napkins for a luncheon set. At Figure No.4 the N is carried out in the slanting stitch of the Spanish weave. To make this effective be sure and pull the small plain weave groups of the spanish weave very tightly so the slanting stitch will show up well. For a fine piece set at 30 threads to the inch, 4 warp threads for each block of the plain weave should be used. Directions for this are as follows; on the edge up to the point where the first slanting stitch is to come, weave one shot of plain weave, change shed, weave a shot of plain back to the edge pulling the weft slightly, then change shed, and weave back to the point where the first slanting stitch comes going ahead two more warp threads in the same shed. Then change the shed and go back two warp threads,

change the shed and go ahead four warp threads and so on according to the plan of the pattern, as shown at Figure No.4.

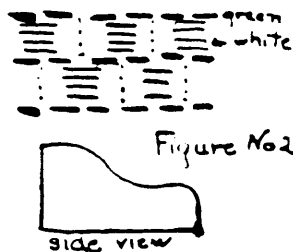
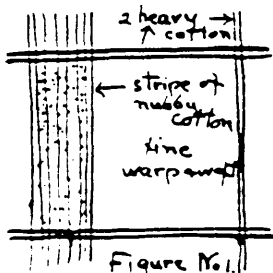


Some Notes on the 1940 New York World's Fair,  
Connecticut Craftsman Society, and  
National Conference of Handicrafts at Penland, N.C.

The purpose of this issue of the News is to bring to you some information about some of the interesting places which I visited this summer while on my vacation and to point out to you a few of the important high lights as I see them.

First let us stop for a short time at the New York World's Fair, and see what they had to offer of interest to the weaver. A short distance from the entrance to the grounds was the building of the W.P.A. Federal Arts Project. In the entrance hall of this building were two fairly large pieces of tapestry, both of which merit our attention. Both of these were woven by Maja Albee of the California Art project, and were designed by the artist Hilaire Hiller. One of these tapestries was called "The Surrender of Cornwallis," and was woven of bright blues, reds, white, with some gray as well as yellow. It had a considerable feeling of design and pattern to me, and was quite modern in its whole effect. The other piece called "The Forrest" used much of the yellow green, and many shades of brown, yellow etc. with some blue greens etc. One effect in this tapestry was of especial interest to me as I had not seen it used in a tapestry before, and that was the use of two contrasting shades of color in the same design area. For instance, using a shot of light color and then a shot of dark on the next shed, alternating these to produce an effect, quite different from that of the regular tapestry technique of hatching which was also used of course. In another room just back of the entrance hall were some other weavings carried out by different W.P.A. Art projects. Here was another tapestry entitled "The Bull". This piece was woven by Adeline Emerson of the Southern California Art project, and also designed by Hilaire Hiller. This was entirely of shades of gray, with black and white, and also distinctly modern in its effect. One point which I wish to bring to the attention of weavers is that all of these tapestries were designed by an artist, which is as it should be it seems to me.

Also in this same room were some very well displayed curtain and upholstery materials from other projects. All of these seemed to me to emphasize texture which of course is important in all modern fabrics. I was especially interested in one piece of curtain material designed by Adeline Titsworth, supervisor of a Virginia Art project. This combined a rich nubby cotton, a fine mercerized cotton, and a very heavy mercerized cotton arranged in a square plaid effect somewhat as shown at Figure No.1. Another piece of upholstery material which was effective was woven on rose-path threading as shown at Figure No.2. It was displayed on a simple chair as sketched. It was all of cotton materials, the alternate pattern shots of white with beige tabby between, and the light green shots as shown, very simple but good looking I thought.





The Finnish and Swedish Buildings. Both of these buildings were somewhat of a disappointment to me, of course owing to present conditions in Europe. Two pieces in the Finnish building attracted my attention, one a glass curtain and the other a blue drapery designed by Eva Antila. The glass curtain was woven of fine natural mercerized cotton in plain weave using the same material as the warp. Leave a deep hem, and then

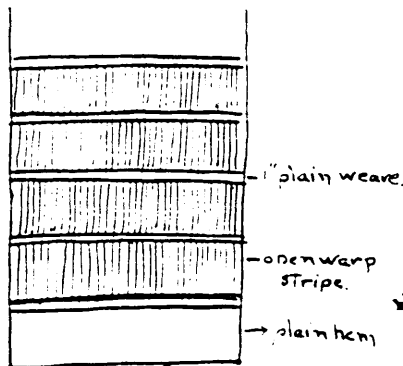


Figure No. 3.

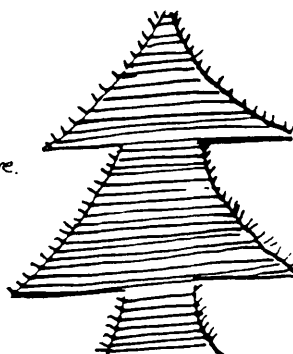


Figure No. 4.

about an inch above this of plain weave. Leave the warp unwoven for about 4" then weave another inch of plain, and so on to the top of the curtain. The effect is as shown at Figure No. 3. The heavy blue drapery was woven on a fine wool of french blue in color, set I should judge about 30 threads to the inch, the plain weft was of dark blue wool. The design of trees was an interesting form of laid in, and of different colors of what appeared to be a heavy rayon. Yellows, browns, and blue greens predominated. What made the laid-in design especially different was the fact that the ends of each color, extended on top of the fabric for about  $\frac{1}{2}$ " on each side of the design and gave a rough

texture effect which raised the outline of the design.

We will now travel up to Connecticut to the "Well Spring" at Andover where the Society of Connecticut Craftsman had a most interesting sale of crafts, including weaving. A previous sale and showing had also been held at the Bartel House at Norfolk, and I was told the results were excellent as far as sales were concerned. Many News subscribers are members of the society, and I want to take this opportunity to congratulate them on their excellent display, and to say that I was sorry that I could not have arranged to have personally met those of you whose names I knew on some of your work. Definite plans are being made for a permanent shop in New York city to serve existing craft societies in that section of the country. Membership in this organization is \$1.50 annually for those actually engaged in craft work as producers. There is one paragraph which I should like to quote from the January bulletin of this society, especially as it seems to emphasize some of the questions that may be of interest to many of us, - quote, "The Jury would like to emphasize how much the Society as a whole wishes to encourage original work. There are many craftsman here and elsewhere making splendid copies of fine old pieces and these will always have a place. But we have at our command today so many new materials and methods of construction, as well as new ways of living, that we have every reason to develop new designs. One of the subjects on which the jury would welcome discussion is whether originality of design should be a requirement for the master-craftmanship award. Some other questions are: Should all work sent in be accepted for exhibition, the only requirement being that everything submitted be hand-made? Will the reputation of the society suffer if some less professional work is present at exhibitions even though it does not bear the approved seal? Is it fair to the expert craftsman to have less professional work at lower prices shown? On the other hand is it fair to deprive the inexperienced craftsman of the opportunity to show and sell his wares? The level of less good work can be raised in many cases. Should not the Society therefore embark upon a program of gradually raising standards?" And of quote. In this same connection at the Conference at Penland which I attended later and which will be briefly described, this same question of sub-standard things was given considerable attention. The conclusions seemed to be that as far as possible people should be encouraged to do the things they are best able to do, and to do them well. That these things should fit their purpose and be simple and easy to do well. In this way, even they, ~~so~~ will pass on whatever they can to make their handcraft lasting.

As the question of markets and outlets for our work is of much interest to many of you, I thought this whole subject might well be discussed. Also may I hear from any who are taking steps as an organization in order to sell handcrafts. Much has been done in this direction in the East and South, and I should like to hear from those in some of our north and mid-western States, as to anything which is being done in these sections toward the marketing of handicrafts or of weaving.

Country Gentleman Loom and Weaving Leaflets. Several requests have come to me recently for plans for the building of a loom. Country Gentleman magazine had an excellent loom designed for them by Mr. Forrest Crooks, which appeared first in an article in that magazine in January 1938, I think. This leaflet can be had for a 3¢ stamp, as well as several other weaving leaflets, all of which are excellent and full of information. Write for a list of these leaflets. Those of you who are teaching and using simple equipment will find my article on Cardboard Loom Weaving which appeared in the July 1940 issue, and another article on Woven Wool Caps which I believe is to appear in the October issue of interest. The wool caps were woven on the 12" simple heddle loom, and a cap and bag on the broomstick loom. A subscription to Country Gentleman is only \$1.00 for 5 years, and in this way one would not miss any of the weaving material which they are publishing. Address Curtis Publishing Co. Woman's Editor of Country Gentleman, Mrs. Caroline B. King, Independence square Philadelphia, Penna.

Requests for Designs for Weaving of Trees. I am always glad when subscribers write and ask me for material which they would like to use, for in that way I can give what my readers wish to have. Tree designs seem to appear to be of much interest to several. While in Philadelphia this summer, I had access to some of the old weaving books in the Pennsylvania Museum, and brought home with me a number of these designs. I am writing out some threading drafts for these in both "Crackle" weave and "Summer and Winter" and these will appear soon in the News.

National Conference of Handicrafts was held at the Penland School of Handicrafts at Penland, N.C. from August 28 - September 4th. It seems to me that this was a most significant meeting in every way. The conference was in charge of Mr. Allen Eaton, of the Russell Sage Foundation, and Miss Lucy Morgan of Penland, N.C. We were welcomed by Mrs. Bonnie Ford who spoke to us of the spirit of Penland, and before we left, I assure you we were all made to feel that fine friendly spirit which pervades Penland and makes one feel a part of it, although it is rather difficult to describe. The roll call showed representatives from 22 states, and included many well known leaders, teachers, home demonstration agents, farm security people, W.P.A. administrators and supervisors, N.Y.A. supervisors, as well as a large group of individual craft workers. The main objective of the Conference was to see what we can do together which we cannot do alone. Many excellent talks were given by outstanding leaders which I will not attempt to enumerate here, as this will be sent out in a special report later by the Conference. Some of the ideas which seemed to me important was the need for trained teachers in the handicraft field, to teach people how to increase the family income through an educational program and the use of native materials that are easily available. There was considerable discussion of markets and outlets for craft work, as well as what to do with sub-standard work. I am also going to quote from my notes two other statements which I think are very significant, although I do not have down exactly who made them, and that is, "That one of the greatest needs of today is for people to have the chance to express themselves through craft work, and parallel with this the matter of design assistance." Also, "Our whole hope for the crafts is the improvement of standards and the making of something better."  
Craft workers in Pennsylvania. Will be interested in knowing that there is to be formed a craft association in that state. If interested in this, write to Mrs. Naaman Keyser, Plymouth Meeting, Pa. Also that a weaver's guild has been formed in Pittsburg and they are planning an exhibit in Pittsburg in October, for information about this write to Miss Lois I. Clifford, 5437 Ellsworth Ave. Pittsburg, Pa.

Bergman Looms. If anyone is thinking of buying an 8 or a 12 harness loom, I suggest that they write to Mrs. Bergman, Paulsbo, Washington. She has some excellent folding floor looms. I was privileged to work on one of these while at Penland, and can recommend them very highly. I would appreciate it very much if you write Mrs. Bergman, if you would mention that you saw the announcement of her looms in this News letter.

Combination of two 4 harness loom patterns for one 8 harness loom threading. This interesting scheme has been worked out by Mr. Donald Greenwood of Wheaton, Ill. and makes it possible to do some most unusual designing for an 8 harness loom. Mr. Greenwood very kindly passed on this information to me while I was at Penland, and after I have had the opportunity to write some original drafts and experiment with them, I shall pass them along to you in Handweaving News. This opens up an entirely new field for experiment for the venturesome weaver.

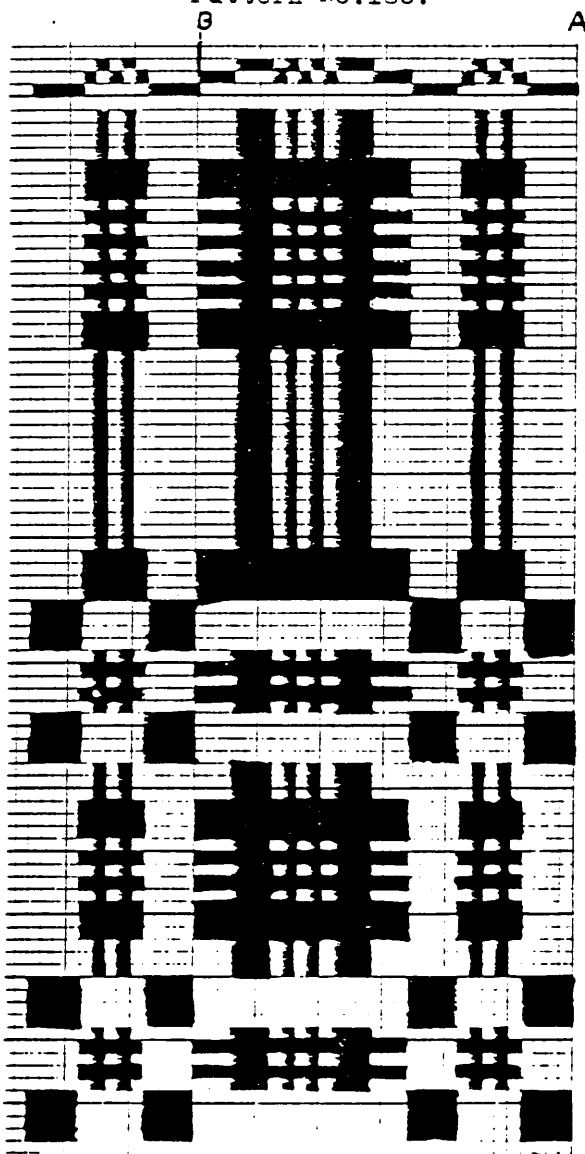
# WINDMILLING

## NEWS

"Crackle" Weave "Trees" adapted from an Ancient Pattern Book.  
 Threading Draft for Pattern No.183.



Key Draft and Draw down of  
 Pattern No.183.

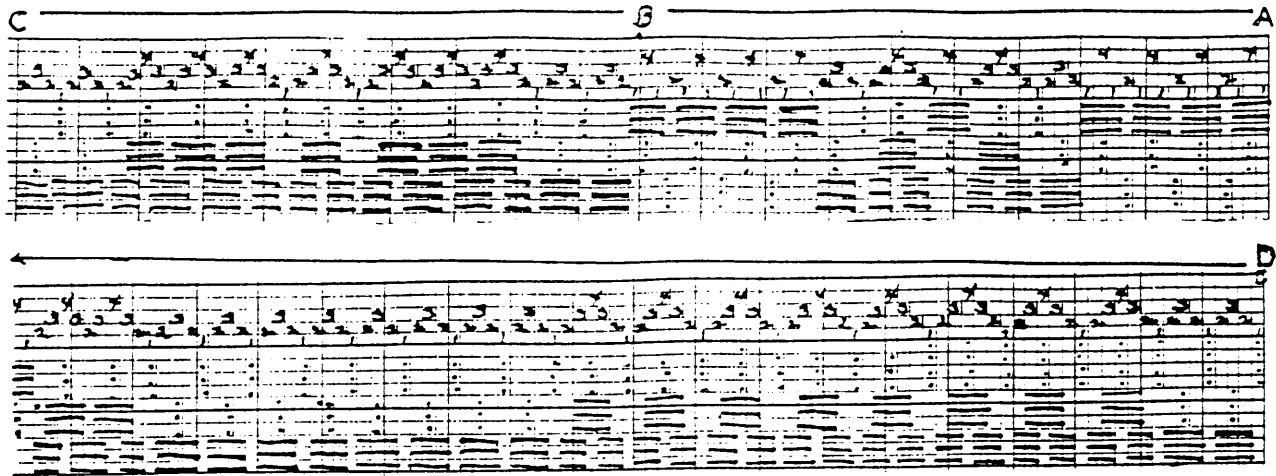


These pattern drafts in "crackle"weave are adapted from an ancient pattern book in the Pennsylvania Museum. It was purchased in Germany and although there are a number of names on the cover page, which are more or less intelligible, one can make out the name of Joham Schleelein under the date of 1820 - 1844. The book is full of many drawings but no threading drafts of any kind.

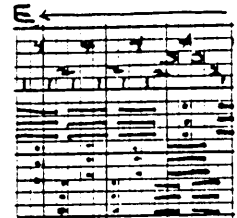
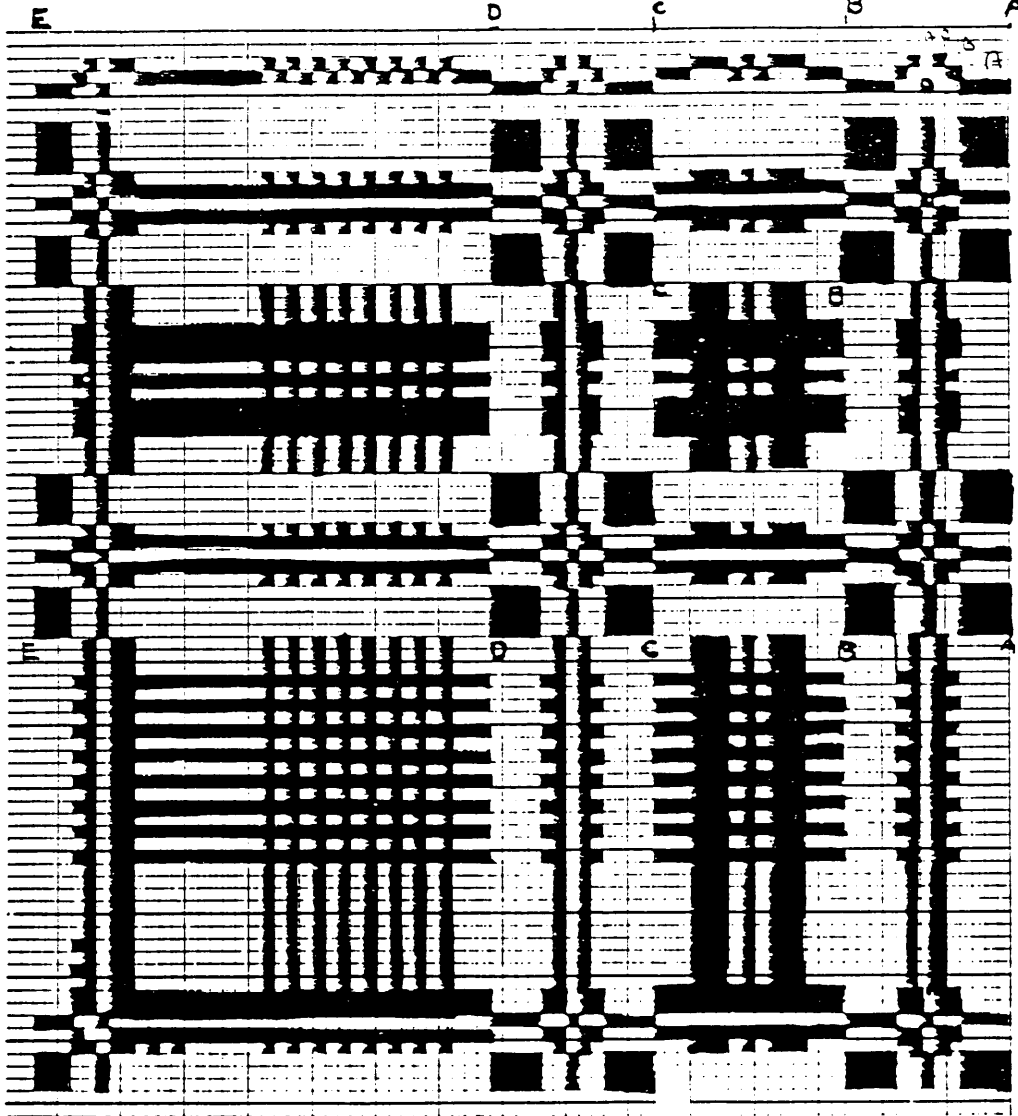
The lower part of the pattern as shown on the key draft and draw down at the left was shown as an all over repeat, while the pine tree effect above it was an adaptation of my own made from this. Note that all of the key drafts which have been chosen for this News are for three block patterns. Also note the similarity of pattern No.183 given on this page and that of pattern No. 186 given on the next page. Study both of the key drafts to see where this difference comes.

The threading draft at the top of this page is one repeat of the pattern as given. Just below the threading draft is a check draw down draft to show how each pattern block will look when it is woven. Only three pattern blocks are woven, namely 3&4, 2&3, and 1&4. The 1-2 pattern block is not used for this, although of course it could be woven for another pattern if desired, but we are concerned here with the weaving of the effect as drawn down from the key draft at the left. Study this check draw down and you will see that the 2&3 pattern block overlaps that of the 3&4 pattern block, and also note how the 1&2 pattern block is written to separate the 3&4 pattern blocks. While the 1&4 pattern blocks are written so they are entirely alone when woven, The single dots on the check draw down are one thread skips.

Actual Threading Draft, "Crackle" weave, for No.136 pattern adapted for a Pine Tree Border.



Key draft of Ancient Pattern No.196.



From A to B of the threading draft is the same as AB, and CD on the key draft. The pine tree border DE, is for the left hand side border. For a right side, begin to thread from E to D. On the key draft the repeat from A to C is the original pattern from the old book, no tree design was given there. Only three of the pattern blocks are woven, 1&2 is not woven, though it may be woven for another pattern if desired. The check draft below the actual threading draft shows what will happen when 1&4, 3&4, and 2&3 pattern blocks are woven, only 3 shots of each. Of course plain weave goes between these each time, and in actual weaving, these sheds should be repeated to follow the key draft design.