

THESE center pages will serve as a check point on several details in the mechanics of weaving.

Bobbins are really a pertinent topic. Good bobbins will save time and add pleasure to your weaving, and they are as easy to wind as poor bobbins. Wind your paper tightly around the spindle and start your thread into the bobbin at the top edge, illustration 106. If you should start your thread with the paper, an end would likely remain free to twist around the shuttle wire and inconvenience your weaving.

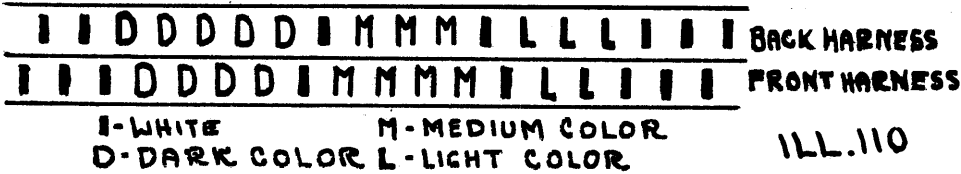
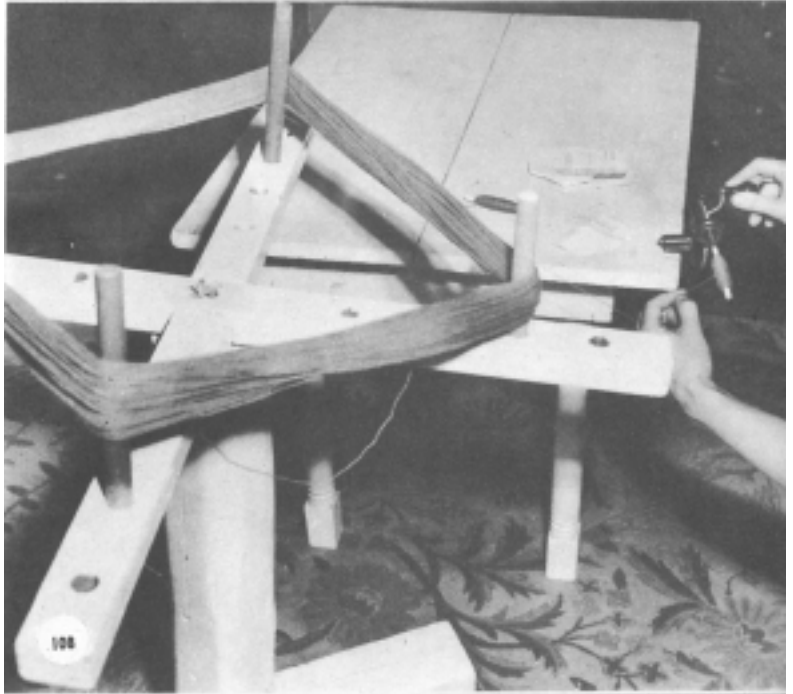
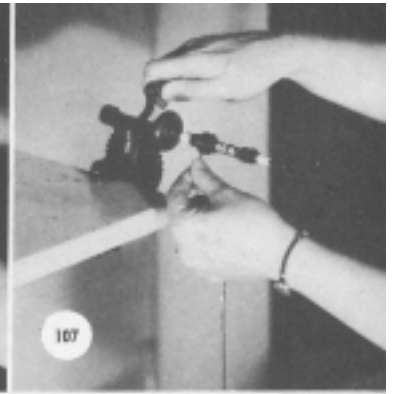
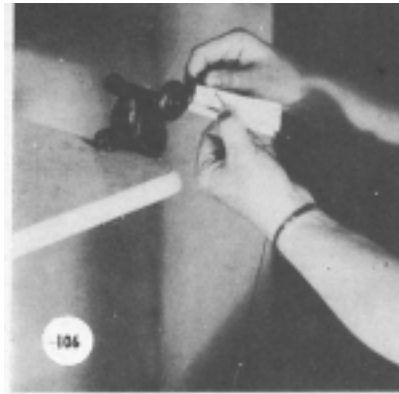
Build up the ends of the bobbin first, winding from one end to the other—illustration 107. Always work towards the center so the thread will not catch when the bobbin is unwinding in the shuttle.

A full bobbin is a convenience as it does not need be changed frequently. But a bobbin too full is an accursed thing. It will not only slow your weaving and test your temper, but usually has to be rewound.

From bitter experience, I can attest to the above statement, and will offer some advice on rewinding a poorly wound bobbin. Run a long knitting needle through the bobbin paper so it may unwind without additional twisting.

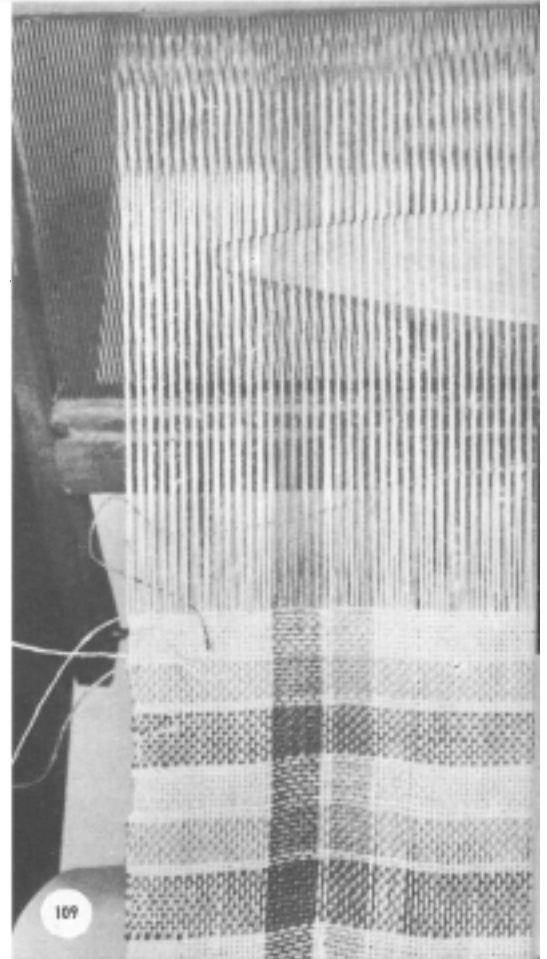
Most threads can be used better on bobbins in boat shuttles. Occasionally a very heavy thread need be used on one of the flat stick shuttles

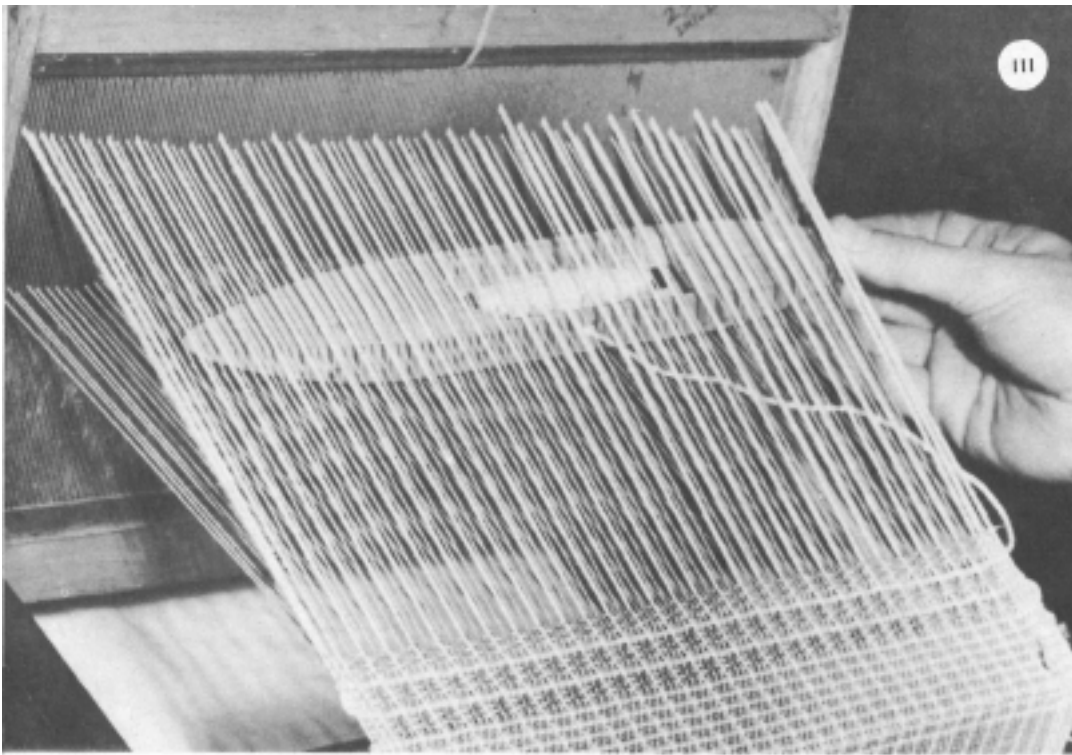
At all the Kenwood Hill loomhouses, we use home-made "winding blades" to hold the skeins of wool. These may be purchased, or made from scrap lumber as ours were. Needed are 3 lengths of 4x4x30; 2 lengths of 2x2x40; 4 dowel pegs cut from one rod, illustration 108.



The starting of a new thread is simply a matter of using good judgment. If the thread is fairly fine, it may be lapped a half inch over the old thread—either in the warp or at the edge of the warp. A very heavy thread, as candle-wicking, should be cut to two lengths and each length lapped. The frequent introduction of a new thread in stripes may suggest that you end one thread at one edge, and start the new thread at the other edge.

Another angle of mechanics which becomes important as you warp different colors, is estimating yardages. As long as you are using a plain warp, just the assurance you have sufficient yardage is enough. But as soon as you warp colored borders such as shown in illustrations 109, 110, you will need check the amounts of each color needed. A number of the following pages will have warps which can be estimated and checked against the yardages.

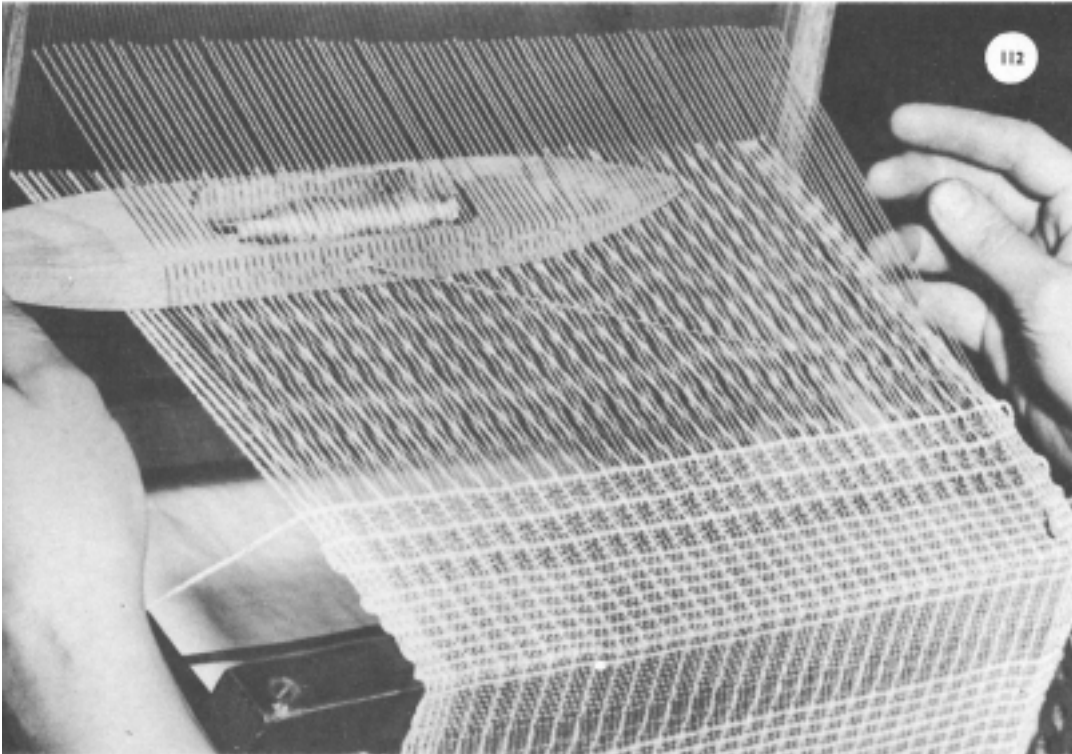




As mentioned at the beginning of PICKUP, the use of every sixth thread to bind the design in place is really the key to BASIC LACE. I believe the use of the warp shown in ill. 111-113 will serve a multiple purpose—either for the individual learning to weave by himself, or for a community group, or for a class studying some aspect of textiles and design.

By using the 6th thread of a different size and/or color, the design may be woven more easily by the beginner since each unit of six threads is clearly set off with the different 6th thread binding the other five in place. A full size runner or place mat may be woven in one or two class periods.

Design may be made by the weaver. On this warp, there are 29 units plus the selvages. So the design may be drawn on squared paper with each space representing the 5 between threads and each line being the 6th thread. The simplest border—the one of excellent style—will be a 3 unit border around the mat as drawn in ill. 115.



Draft for the design shows the back harness with the 6th thread—every third one on the back harness—showing up in white in ill. 111.

The front harness is shown in ill. 112, and is always woven as a tabby. Thus the weaving—

- front harness up—tabby
- back harness up—design PICKUP
- front harness up—tabby
- back harness up—design PICKUP
- front harness up—tabby
- back harness up—tabby in heavy white.

By the 6th thread being very heavy, you can use a finer thread for the other five threads and thus gain experience in handling a warp of different size threads. Try 3/2 mercerized cotton or equivalent size as a silk noil for the 6th thread. This will have 1,260 yards to the pound. For the finer thread try 16/4 mercerized cotton or 30/3 or 40/3 linen. The 16/4 mercerized will have 3,360 yards.

In making warp estimates for two colors, you will apply a few general rules:

Allow wastage for tying on at both ends—24 inches.
 Total length of pieces, allow for hems, add 10% for shrinkage.....xx inches
 Add enough for a test piece and for an extra piece in case of error.....yy inches

Total warpzz

Thus if you plan six place mats you would have.....24 inches
 6x(17, plus 5—hem, plus 2—shrinkage) or 6x24.....144
 Two extra pieces or 2x24.....48

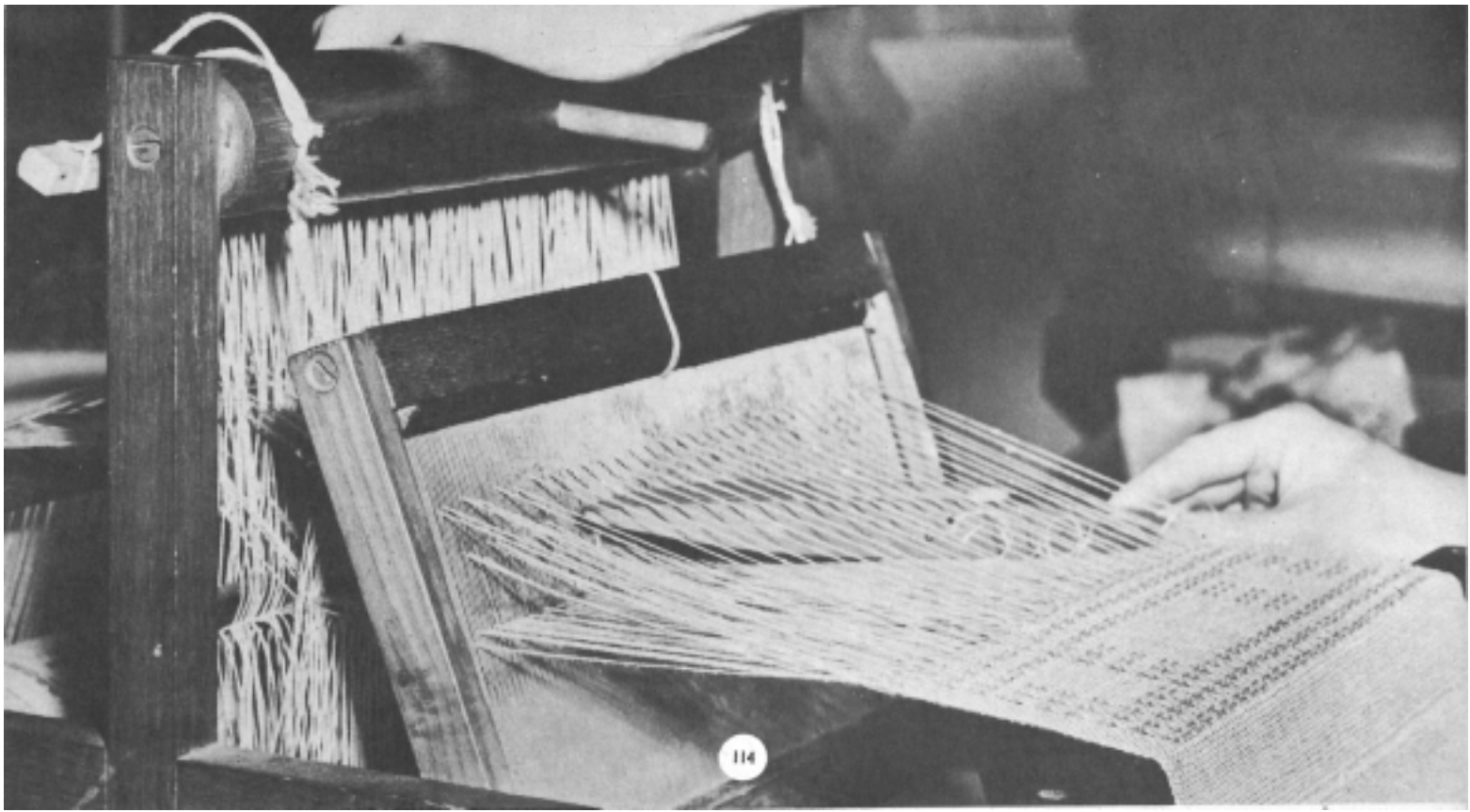
Total warp216

Total warp needed is 216 inches or 6 yards. Of these 151 threads are of one size and 36 is of the heavy size.
 6x151 equals 906 for warp; add same for weft; total is 1812 yards or 5 two-ounce tubes of 16/4 mer. cotton.
 6x36 equals 216 for warp; add same for weft; total is 432 yards or 3 two-ounce tubes of 3/2 mer. cotton.

SELVAGE UNIT SELVAGE			
000	011	0000	BACK HARNESS
111	111	111	FRONT HARNESS
REPEAT			HEAVY-LIGHT WEIGHT
RIGHT SELVAGE	7-	4	3
29 REPEATS X 6-	174-	29	145
LEFT SELVAGE	6-	3	3
TOTAL THREADS	187	36	151

THREAD 6TH THREAD-INDICATED BY 0- ON A THIRD HARNESS AS SHOWN IN ILL. 100.

ILL. 113



ALTHOUGH the warp given in illustration 111 is easiest for beginners and offers enticing combinations of colors and types of threads, you will have greater freedom of design by using a plain warp. If you are a new weaver, thread your loom by draft 113 but use just one color and 20/2 linen. However, if you have acquired some skill, you may like trying a 229 thread warp (38 design repeats with a selvage thread) of 20/2 linen set 15 threads to the inch. This is excellent for curtains and linens. A 15/2 to 12/3 wool warp may be used for baby blankets and afghans.

For finer linens set 20 threads to the inch, use 307 threads (51 design repeats with a selvage thread) or a place mat size of 271 threads (45 design repeats). 20/2, 40/3 or 50/3 linens are suitable sizes.

You can use this warp in designing for multiple harness. The designs given below are typical of the ones found in four or more harness weaving. Illustration 87 was based on an eight-harness weave.

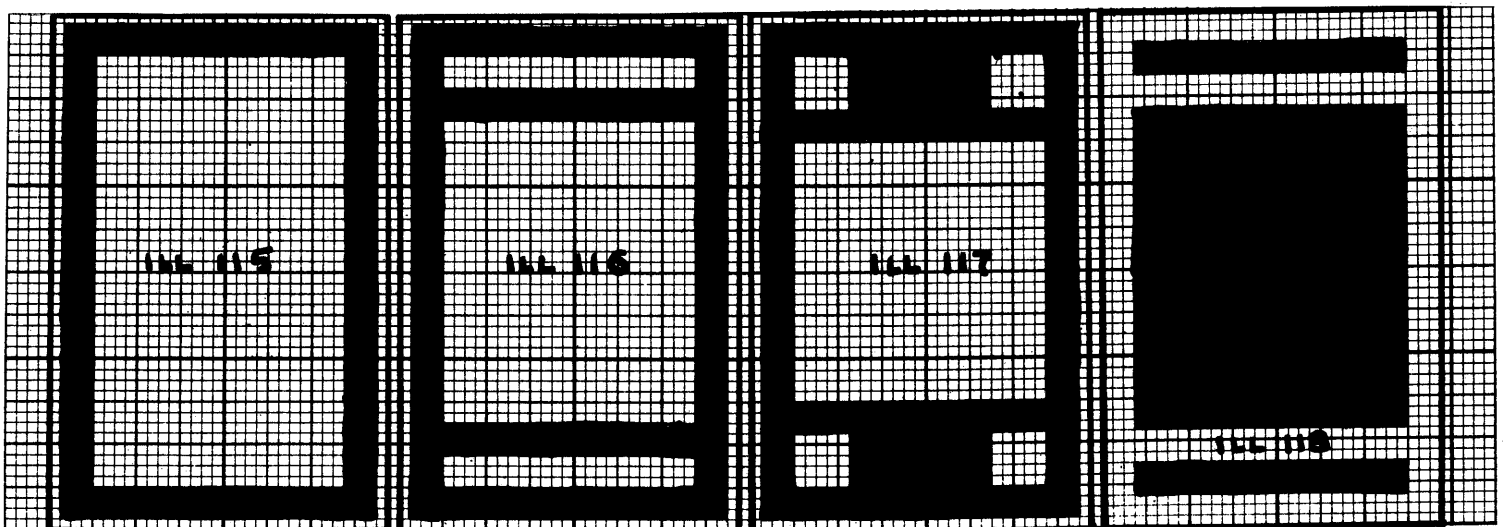
Another tangent to follow is the use of a heavy design thread with a plain weave background for afghans, blankets, cushions and draperies. Weave a regular tabby thread in warp size thread on tabby harness.

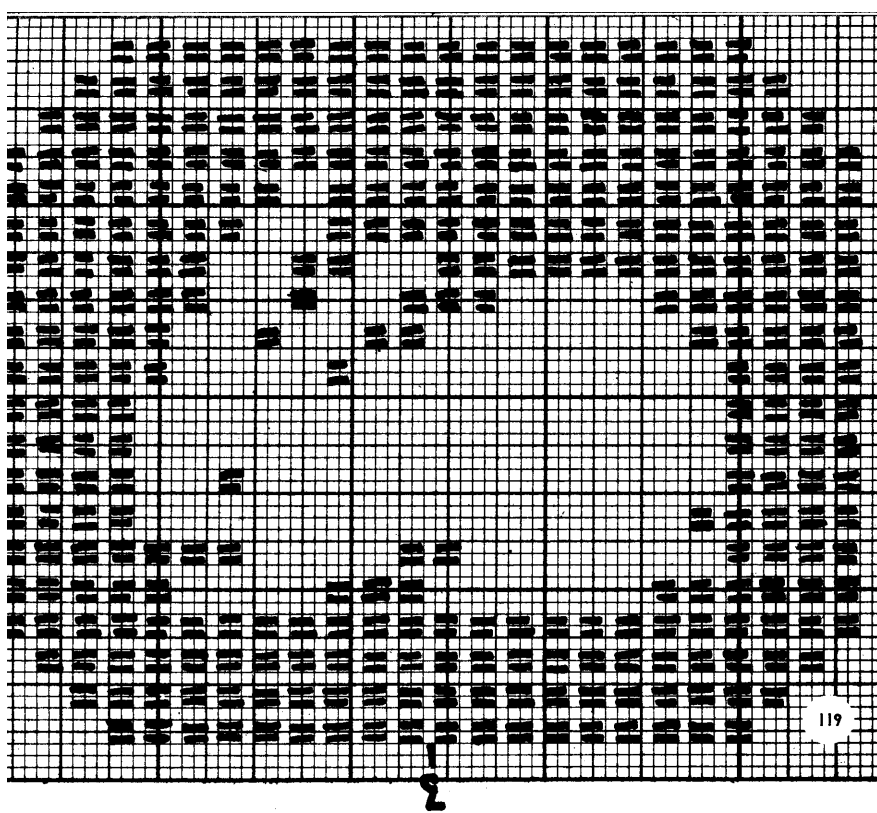
Weave a regular tabby on the design harness.

Weave a very heavy thread on the design harness.

Designs for this type weave may also be drawn or cartooned on squared paper.

Still another tangent is the use of the plain weave for the design while the lace is used for background. This type basic lace has a wide appeal in both linens and wools. See page 36 for the use of a lace background for the plain weave design.





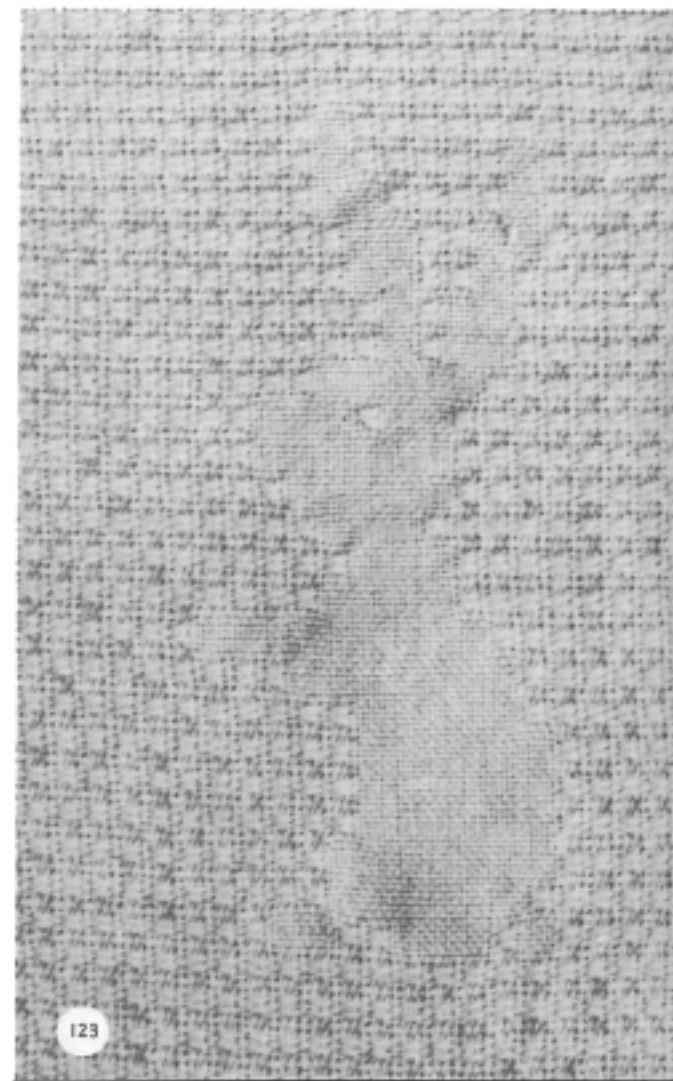
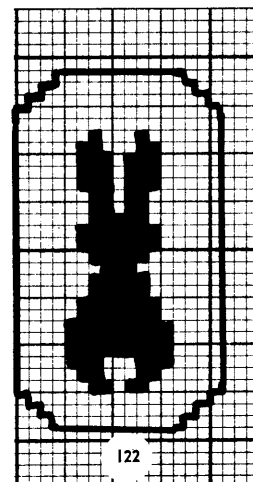
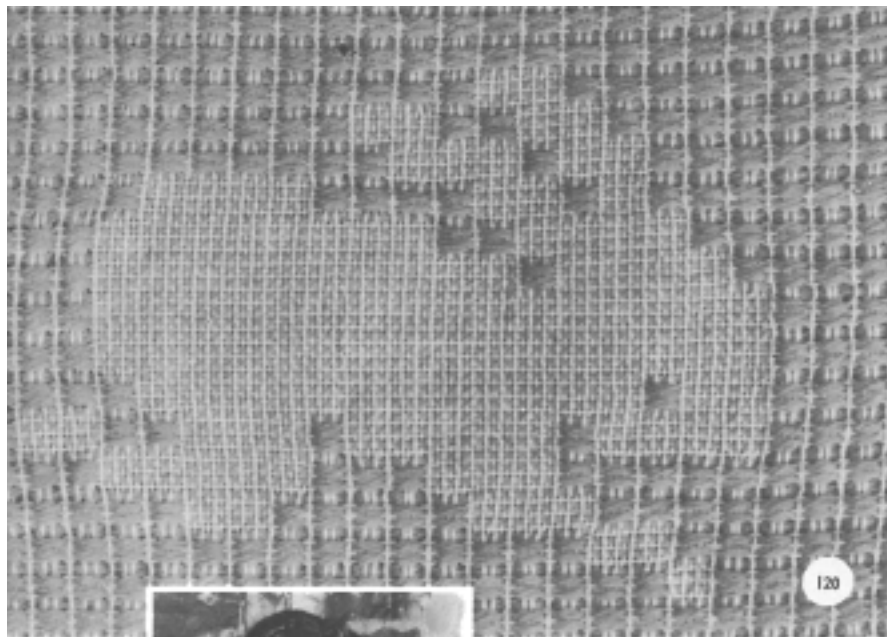
*P*ERSONALLY, I am very fond of PICK-UP or BASIC LACE used as the background weave for a plain weave design. Textiles produced from this weave are practical and charming. We are getting particular pleasure from the rabbits who live between the Little Loomhouse and Wisteria Cabin and who fondly believe they are fully concealed when sitting under the wild yam vine.

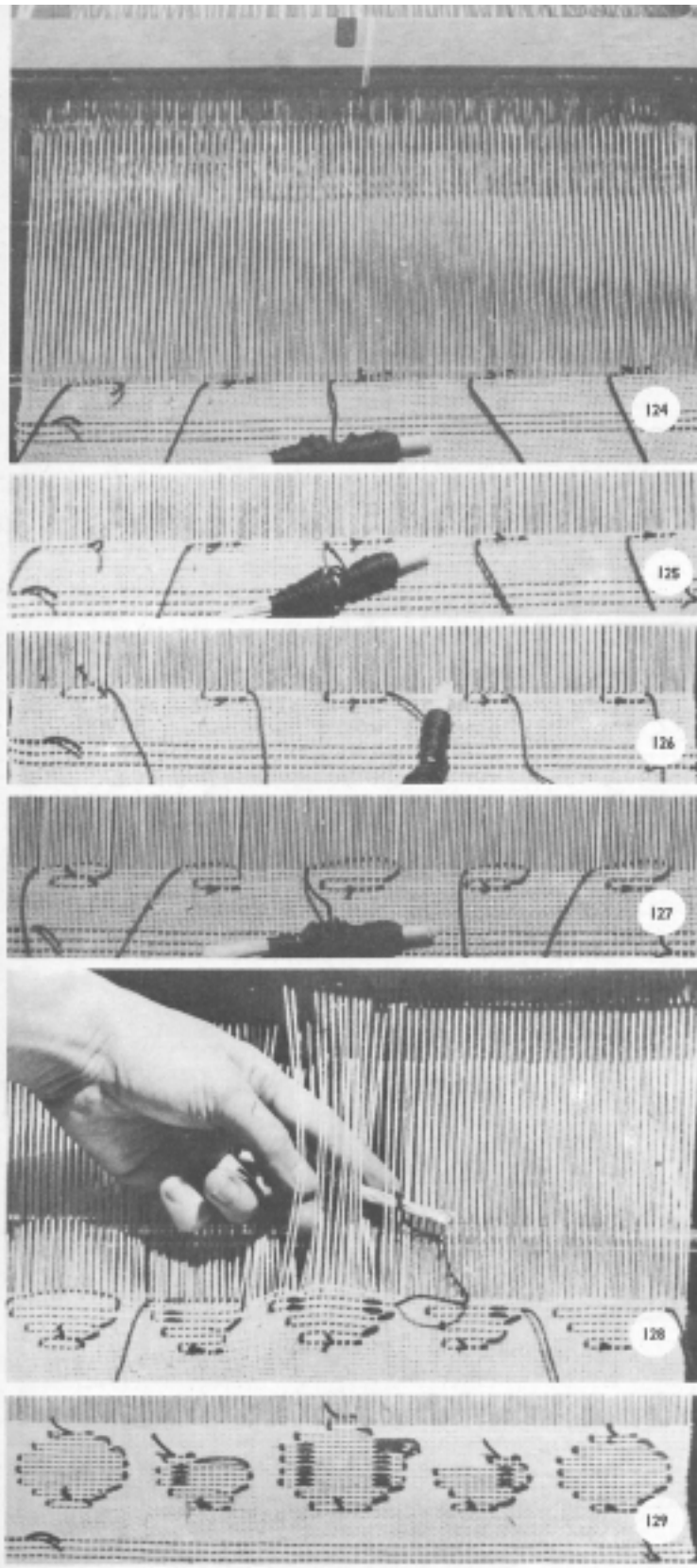
One rabbit design is cartooned ready for weaving in illustration 119. When woven on a cotton warp for a baby coverlet, the texture and design come out as shown in illustration 120. The full size coverlet is shown in illustration 121.

The texture of the weave when warp and weft are the same wool is shown in illustration 123. Blankets, coverlets, and afghans are practical textiles for this weave.

Curtains are delightful in this weave. Favorite animal designs may be woven against the lace background.

For convenience in handling the design, use the compact form as shown in illustration 122. Each block represents 6 threads or a basic lace unit. In this compact form, the weave may easily be transposed to other technics such as the ONEHARNESS tapestry technic given next.





ONEHARNESS tapestry technic is fun and fast. Basically it is a plain weave with a design laid-in on one shed or harness. Hence, comes the name ONEHARNESS. The other harness is always plain tabby.

ONEHARNESS has similarities to PICKUP. As designs are drawn on squared paper, many may be used interchangeably. However, there are differences in the handling of the designs.

In ONEHARNESS, weave a tabby thread on the design shed first. Then lay-in the design thread, which should be two to four times as large as the tabby thread, under such threads as are indicated on the cartoon. If you think it would be fun to start with a dishcloth, use the design in illustration 130, or make your own design on squared paper. You will use as many blocks as you have up threads on the design shed.

After you have woven your tabby thread going from right to left, on the design shed, lay-in the heavy threads as indicated on the first row of the cartoon. These threads should be locked in place by looping around the end thread of the design blocks. Note, ONEHARNESS is woven on the wrong side as are most tapestry technics. Illustration 124.

Return from left to right with tabby on tabby shed—illustration 125.

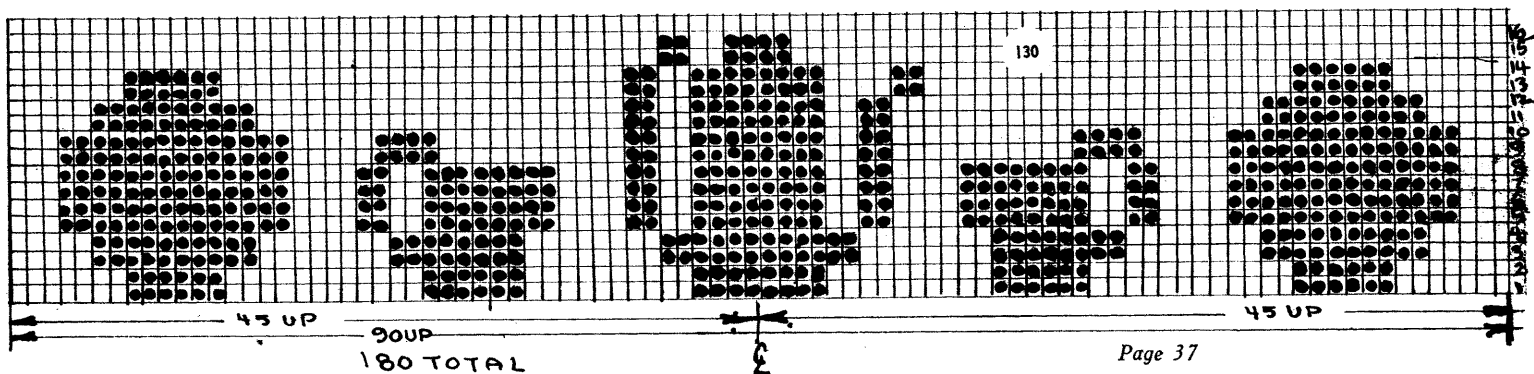
Weave a second tabby thread from right to left, on design shed, and lay-in a second row of design threads as indicated—illustration 126.

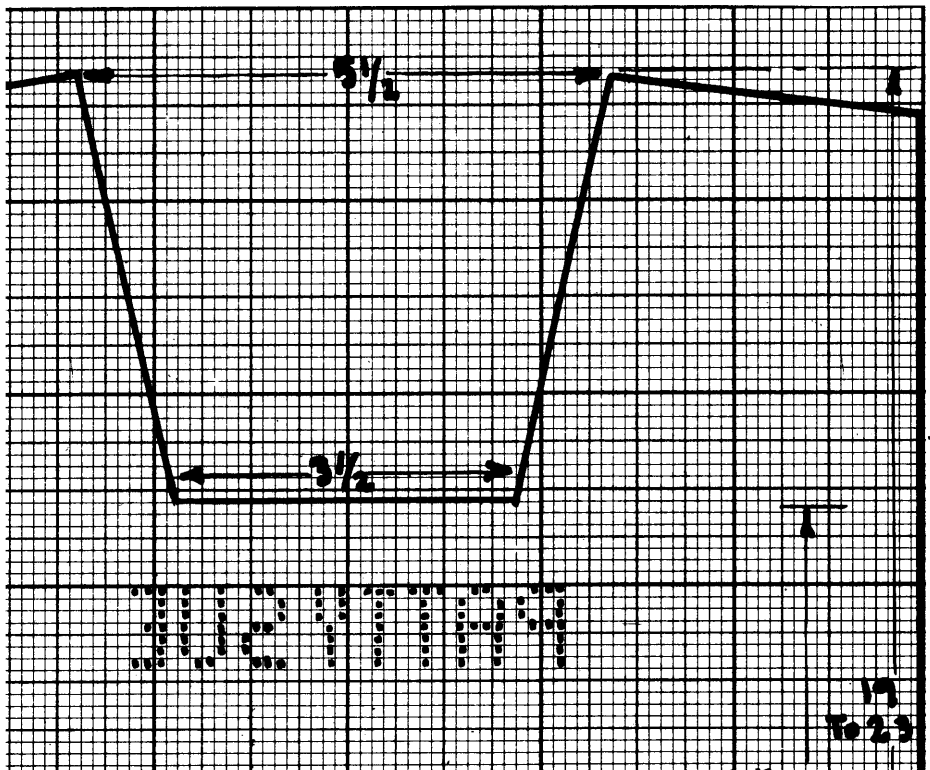
Return the tabby from left to right. Weave a tabby thread from right to left on the design shed, and lay-in the third row of design threads—illustration 127.

Continue according to cartoon 130. Threads on small bobbins are brought under the threads as shown—illustration 128.

After you have finished the design as shown in illustration 129, weave 12 to 15 inches for your dish cloth.

You will enjoy ONEHARNESS as you can make your own designs with success or easily transpose other designs. You will find it practical for aprons, ascots, curtains, cushions, drapery, pinafores and children's clothing, tablelinens, vestees, and upholstery.





If you ask a child what he wants in the way of handwoven textiles, he will always pick an animal figure or an airplane or a train. His own dog, rabbits, chickens—all have wide appeal.

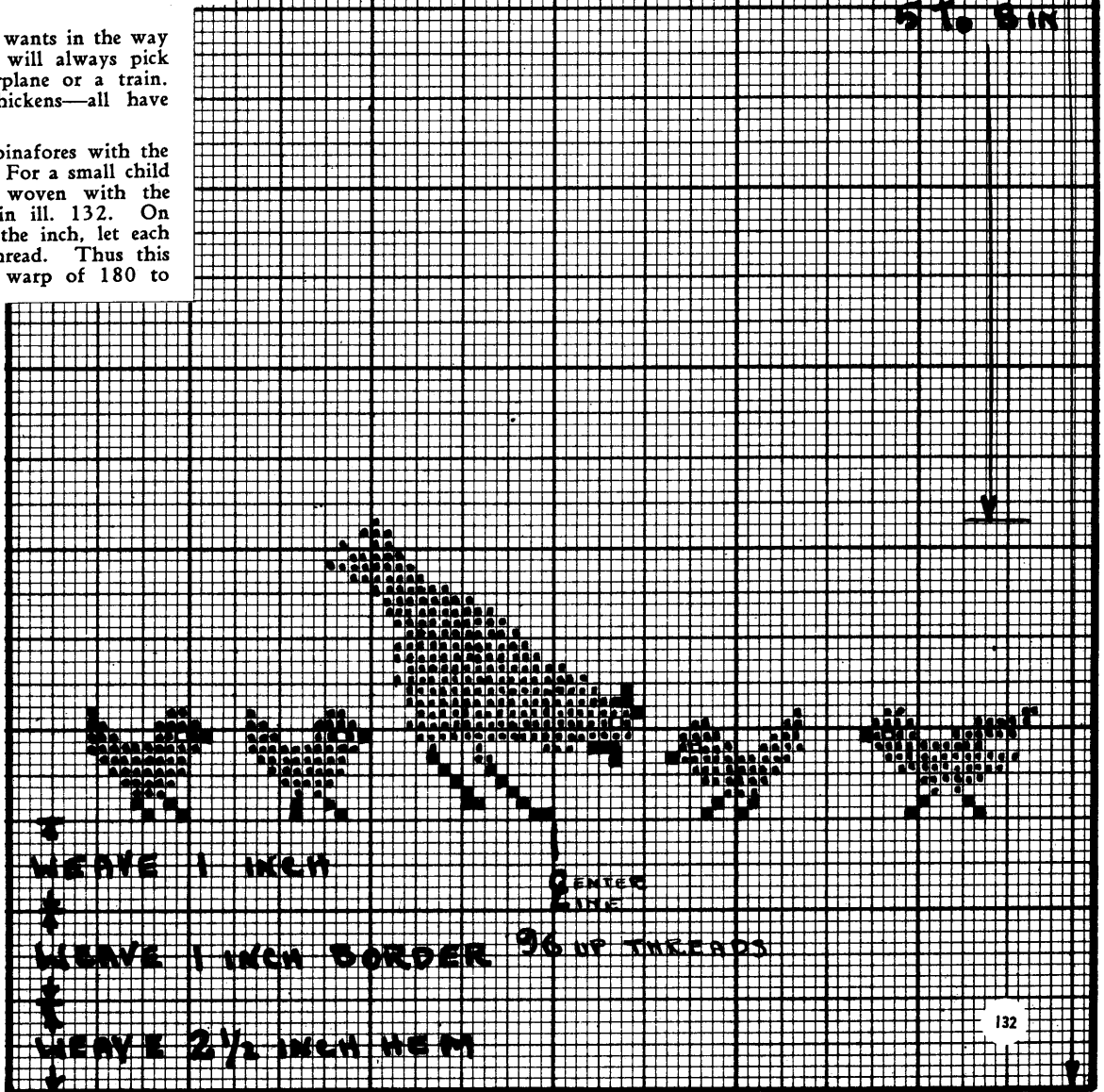
Little girls just adore the pinafores with the ONE-HARNESS designs. For a small child a bib or apron may be woven with the chicken design as shown in ill. 132. On a warp set 15 threads to the inch, let each square represent one up thread. Thus this design may be used on a warp of 180 to 230 threads.

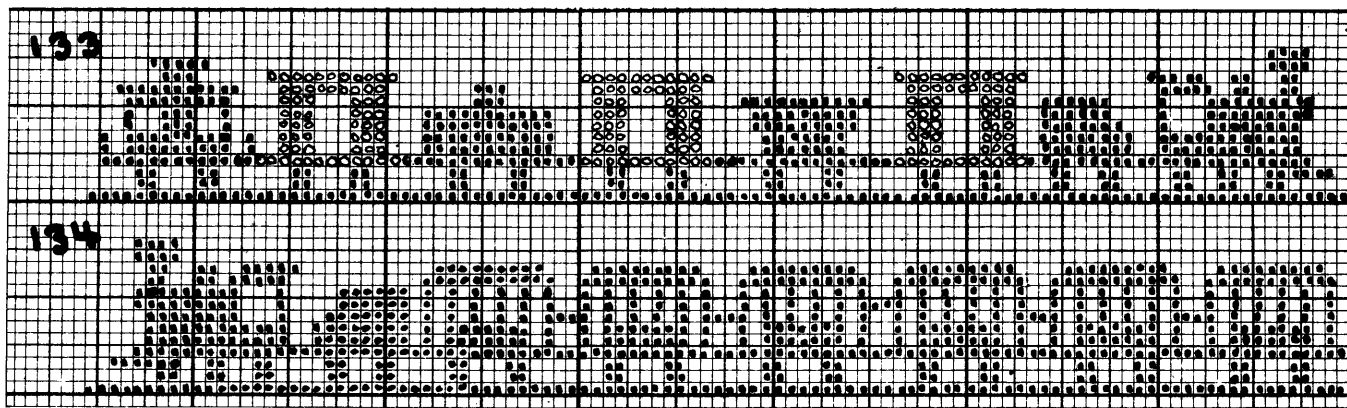
For a bib, you will cut the length to fit your bib pattern.

If you are using a finer warp set 30 threads to the inch, you may want to let each square or graph paper represent two up threads each way—two warp threads and two weft threads — as shown in the apron in ill. 131. Or for a very fine design the actual size of the drawing, let each square be one up thread on a fine count warp.

For a pinafore, turn the chicken design and weave in the lower part of the skirt. You will need to locate the center front of the skirt accurately and would be wise to allow an extra inch or so to the skirt length, in weaving.

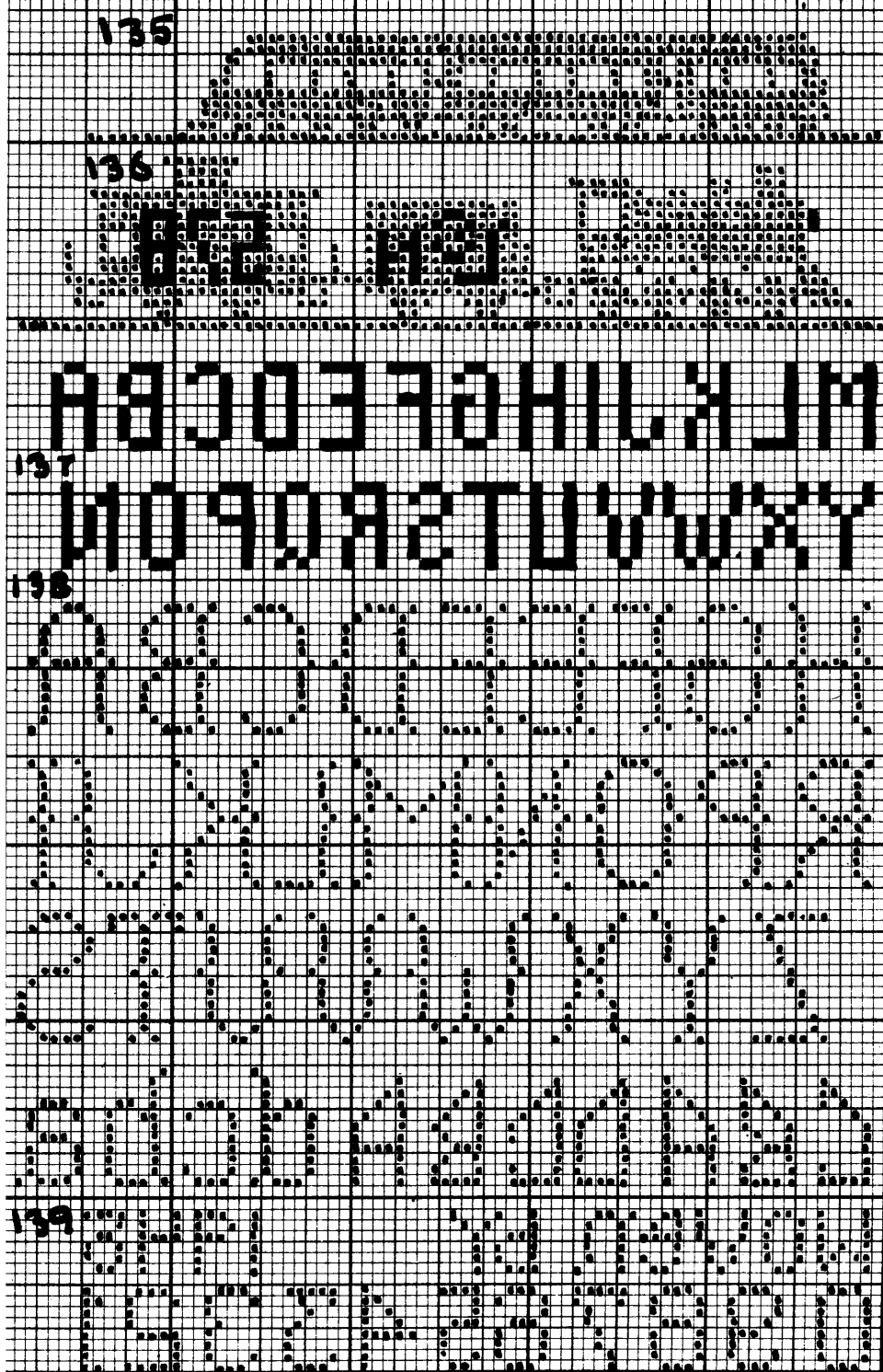
A row of chickens or other figures along the lower edge of a place mat of extra large size together with a napkin having amusing figures in each corner, will serve to entertain the very young as well as to start them on their early etiquette.

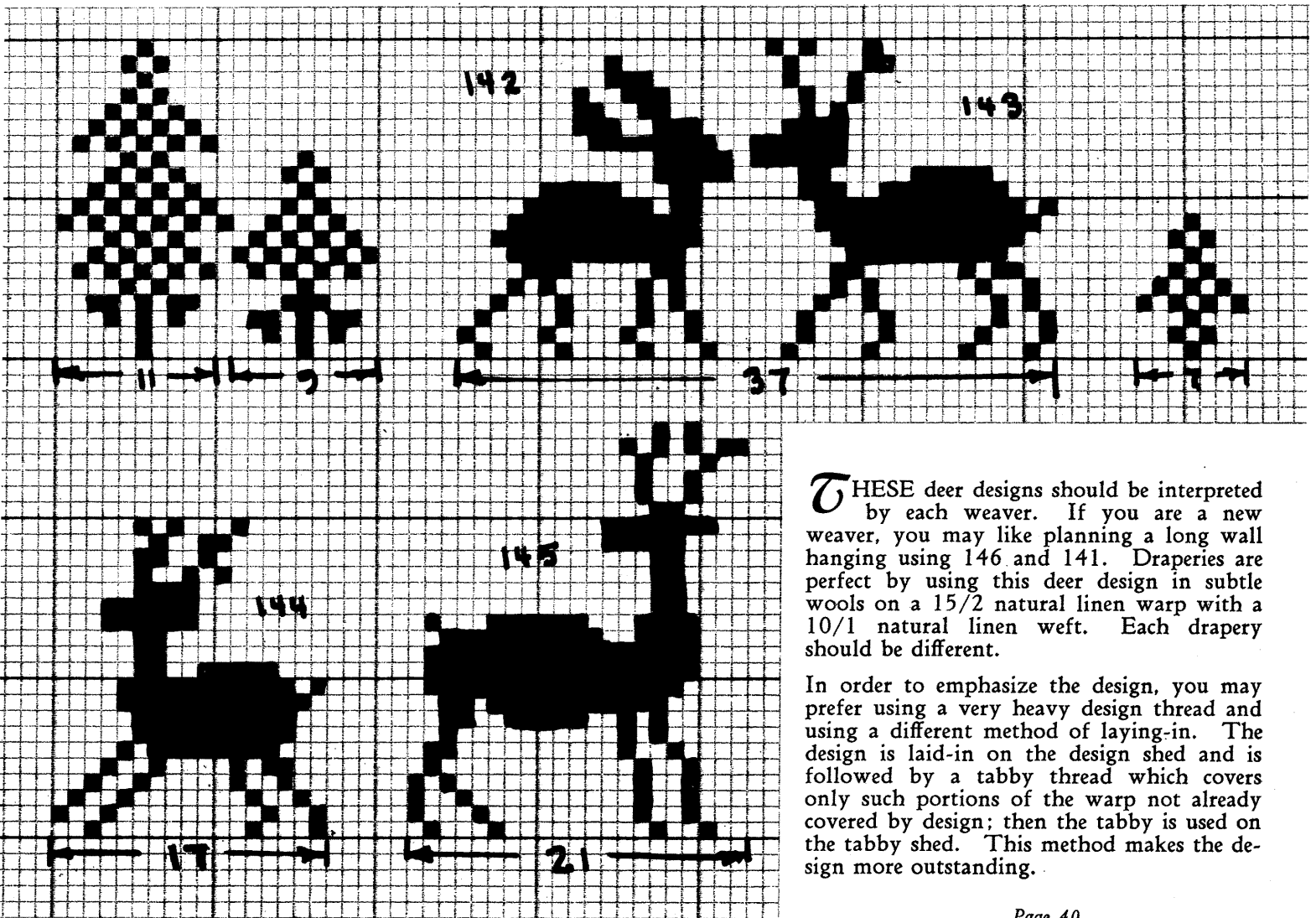
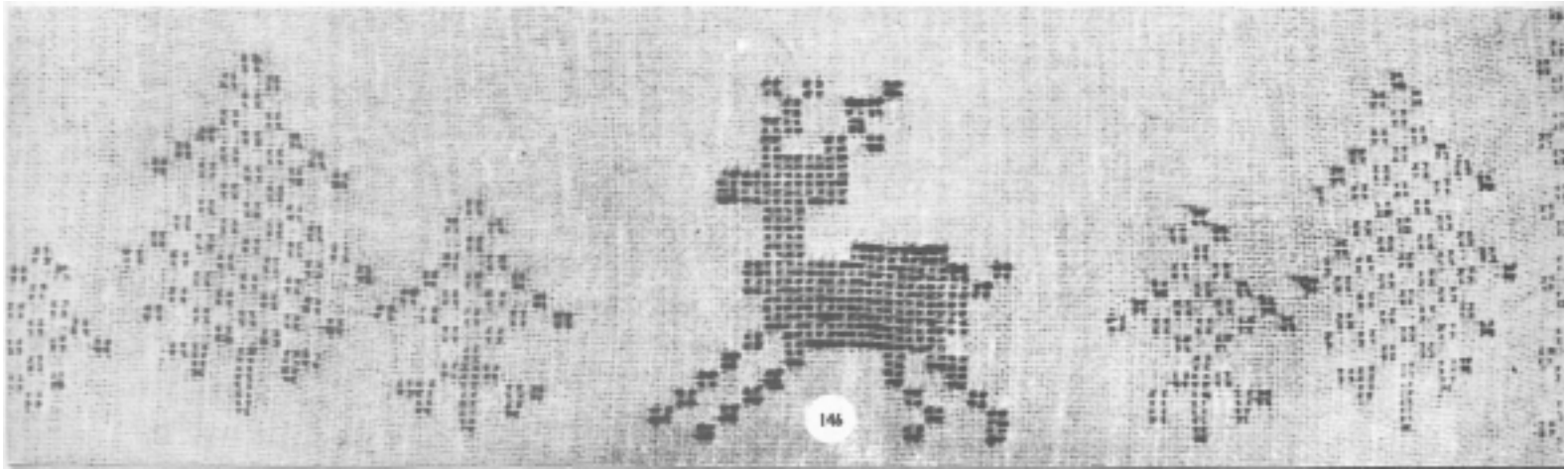




TRAIN designs have been exceptionally popular with children and adults alike. Although shown only in the pinafore—illustration 140, these designs have many uses—such as curtains for a boy's room. Any train may be drafted on squared paper. These designs may be transposed to several technics such as PICKUP, DOUKAGANG, EMBROIDERY, TWILL, etc.

Only a few of the lettering angles are given in illustrations 137-139. This technic is an excellent one for you to develop your own style of lettering.





THESE deer designs should be interpreted by each weaver. If you are a new weaver, you may like planning a long wall hanging using 146 and 141. Draperies are perfect by using this deer design in subtle wools on a $15/2$ natural linen warp with a $10/1$ natural linen weft. Each drapery should be different.

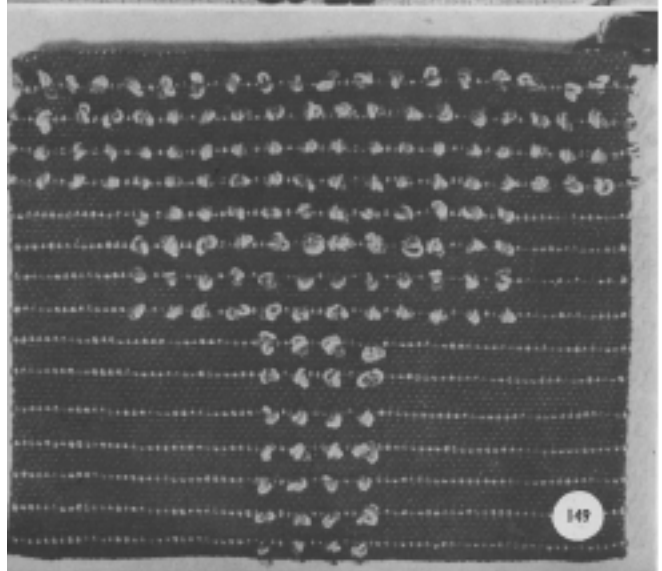
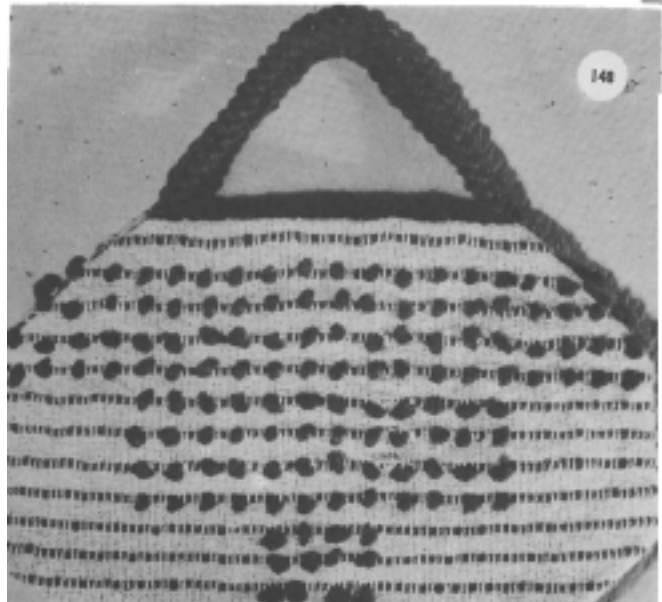
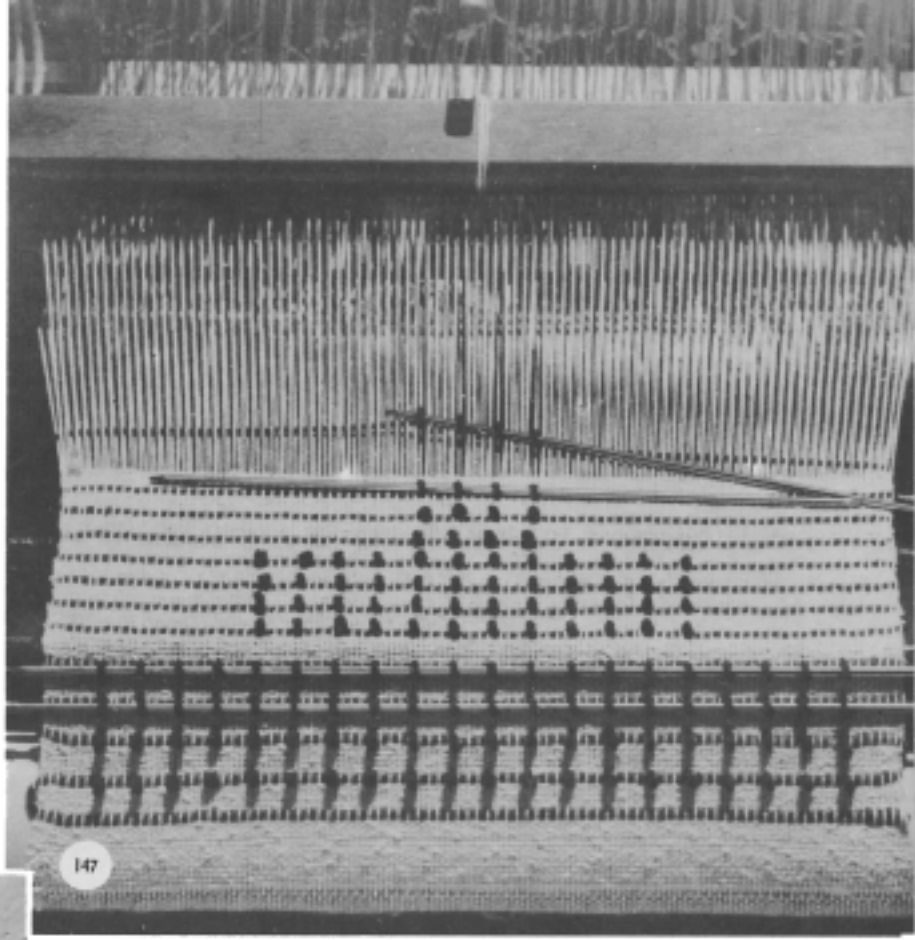
In order to emphasize the design, you may prefer using a very heavy design thread and using a different method of laying-in. The design is laid-in on the design shed and is followed by a tabby thread which covers only such portions of the warp not already covered by design; then the tabby is used on the tabby shed. This method makes the design more outstanding.

THIS knot weave is one you will especially like. It may be used as a beginning piece in the simple bag form. The knots are made by running a very heavy thread, or several strands of thread wound together, through the warp after the regular tabby has been woven, and by then picking up the heavy thread between every fourth up thread and looping it loosely over a knitting needle.

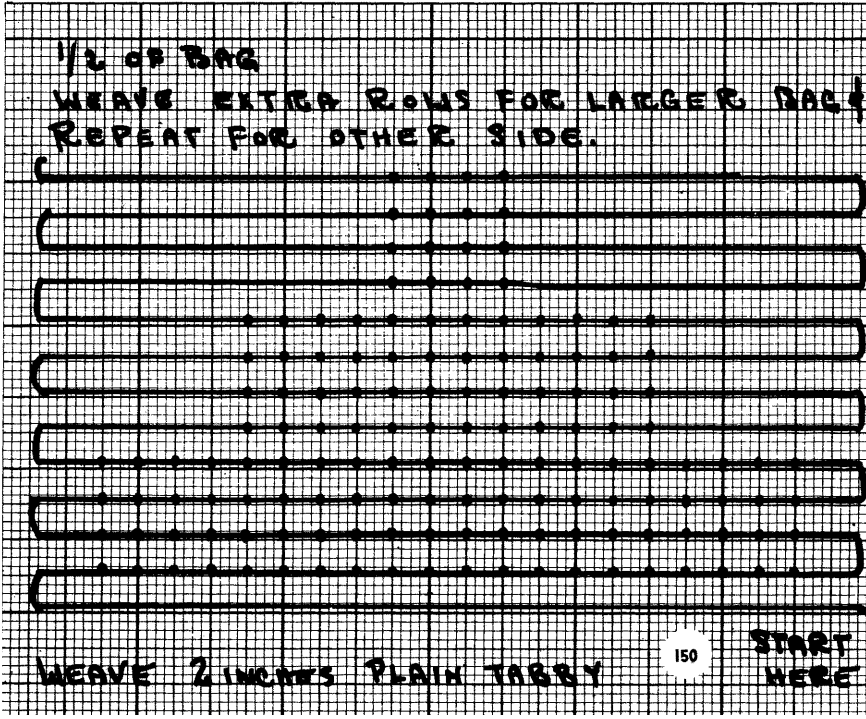
For your first piece, make the loop between every fourth up thread, starting seven threads from the edge. Repeat the row of knots every eighth weft thread so as to have all knots woven on the same shed.

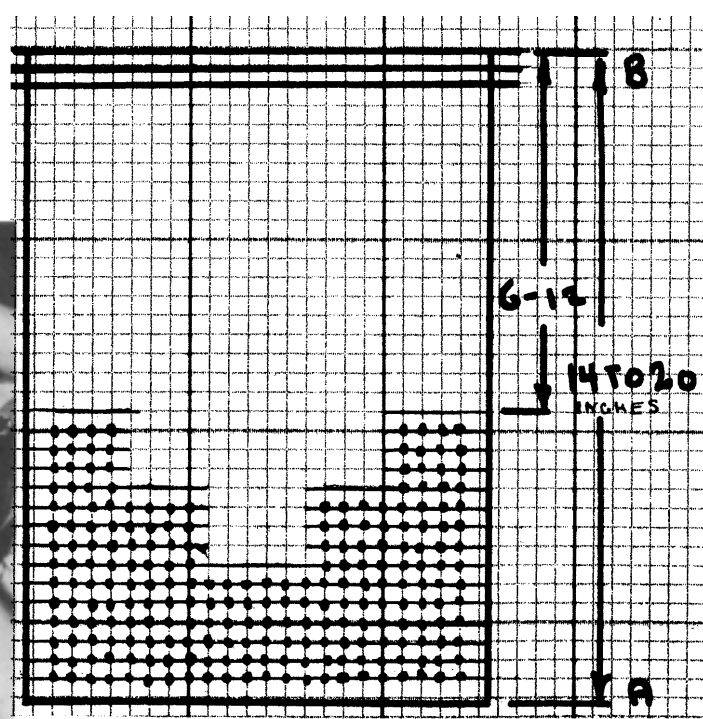
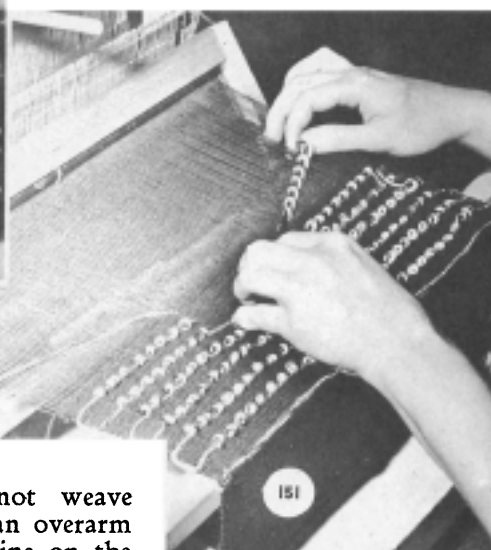
The bag on the loom in illustration 147 is woven with candlewicking and a nubby cotton thread, and is finished with a cord handle as shown in illustration 148.

The same design is used for the zipper bag shown in illustration 149. For this bag the warp is 3/2 mercerized black cotton with the knots made of three strands of the 3/2 thread.



You can use the system of recording design for knot weaves as shown in 150. The knot is drawn between every fourth space, or thread on the up shed. If you work out elaborate patterns, you will develop a more compact form of recording knot weave designs.





ILL. 153

THE same type knot weave may be used for an overarm bag. For the blue ratine on the loom in illustration 151, the drawing 153 is followed from A to B and then from B to A with the seam being at the bottom of the bag.

Weave three strands of heavy thread at B so the bag may be easily drawn together to slip over your arm.

You may prefer having the bag open at the top. In this case, weave from B to A, thence A to B. Weave the strands at each end for drawing in. The finished bag will be similar to the black linen in illustration 152.

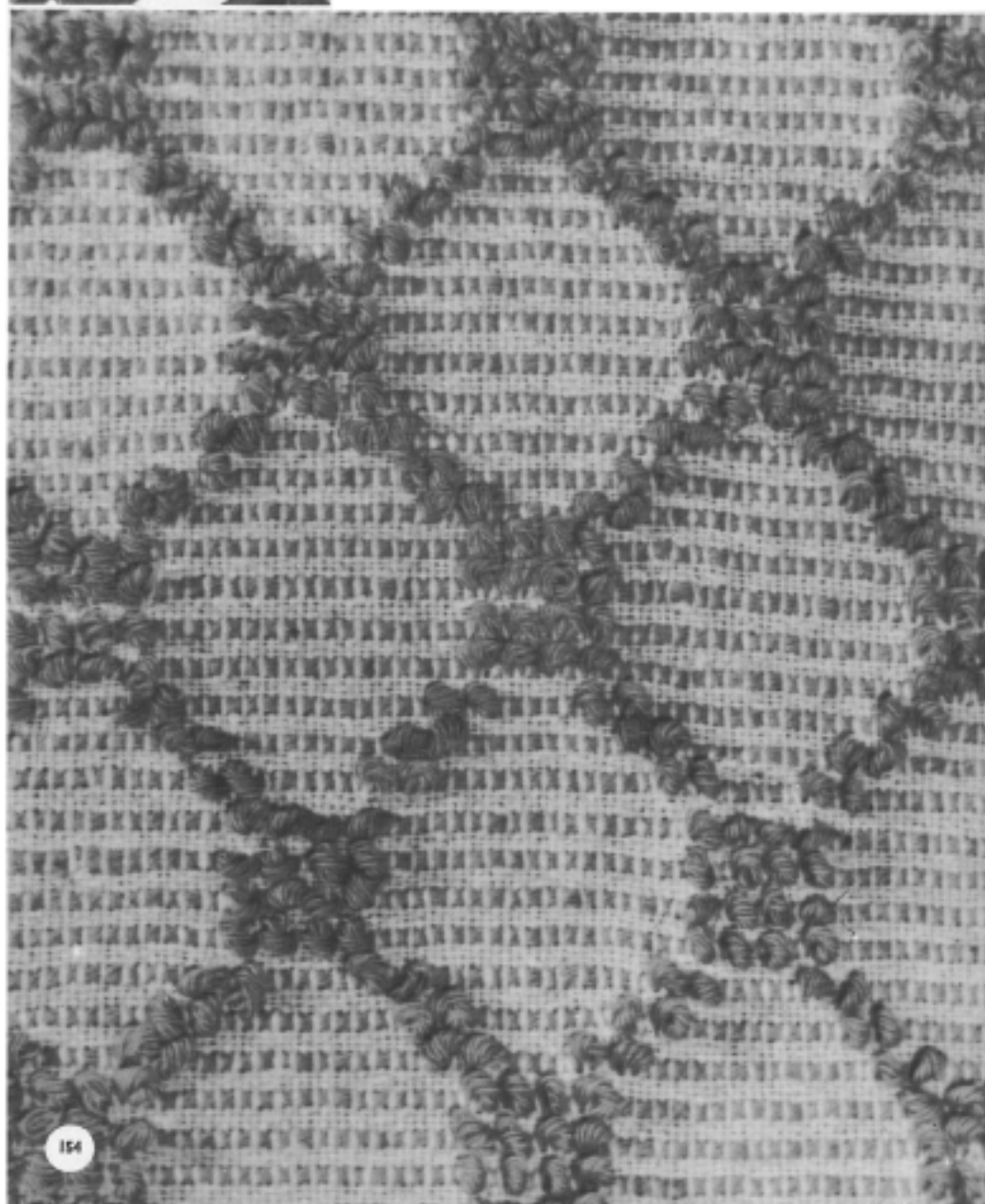
The textures possible in the knots are intriguing. Several textures in white are used with a silver thread on the black linen.

Among the finest weaving in our early American background were some of the knot weave counterpanes. You may want to try one later.

For a baby coverlet on a warp set 15 threads to the inch, pastel candlewicking is used in a simple design as shown in the detail illustration 154.

You will note the knots are closer together—a knot between every second up thread, and a row of knots repeated on every fourth thread.

You can work out your design on squared paper or by count. For practice try a doll coverlet, bag, or stool upholstery.



154



ANOTHER form of knot weave is the use of loops. A roomy summer bag may be made by taking loops over a half inch stick instead of the smaller knitting needles.

The warp can be almost any material but a boucle-like yarn makes a good weft, for you can get good texture with your loops.

As sketched in 157, you will weave 19 inches before starting the first row of loops. Repeat for six rows of loops, taking care to space the loops irregularly and sloping towards the center. Loops are made between every fourth up thread just as the knots are.

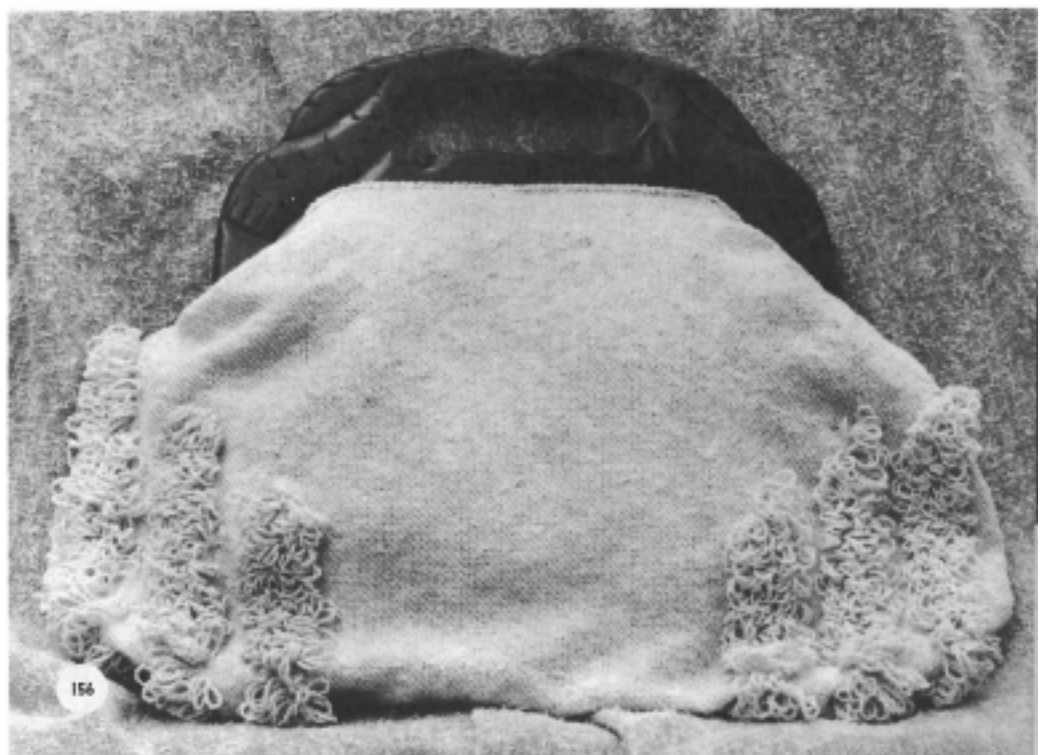
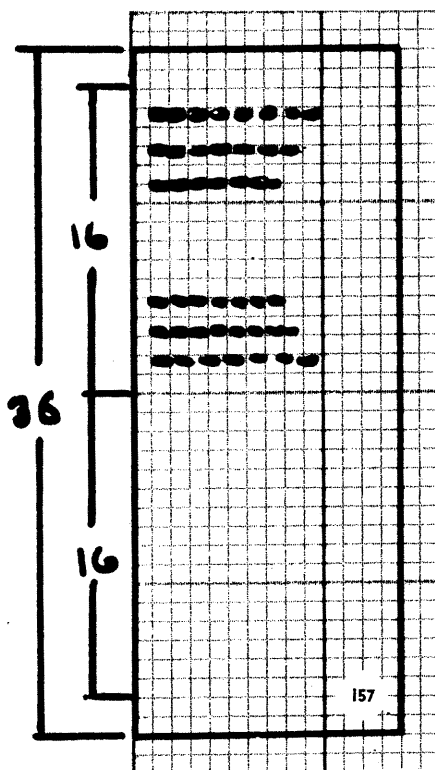
Weave an inch and repeat for the second set of 6 rows of loops.

Weave an inch and repeat for the third set of six rows of loops.

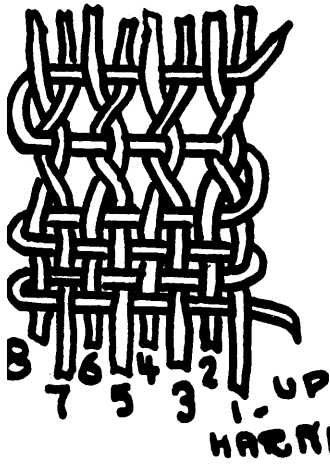
Weave six inches plain tabby, and start the reverse of the design.

As you wind the loops onto the loom, take care to run tissue paper with the loops to even the tension.

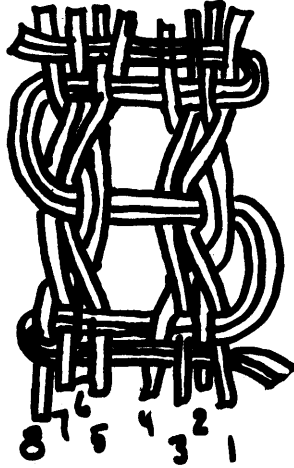
You will like the loops on drapery material such as that which is the background for the bag shown in 156.



ILL. 158



ILL. 159



LENO LACE is one of the most fascinating weaves and one which lends itself to innumerable interpretations. The leno lace is basically a twisted pair of threads—usually this takes the form of a half-twist. For your work in leno, plan always to start from the right with the first thread on the up shed. You will make the half-twist by taking the shuttle under the first thread to pick up the second thread; bring the second thread to the right of the first; and drop the first over the point of the shuttle as shown in illustration 158.

Since you can work much faster using two pairs of threads, you may want to weave a towel for your first piece of leno, using the double pair of threads as shown in illustrations 159, 160 for a hemstitching effect. Weave three inches for the hem, with 20/2 linen as will be used for the body of the towel. End on the shed having the first thread down.

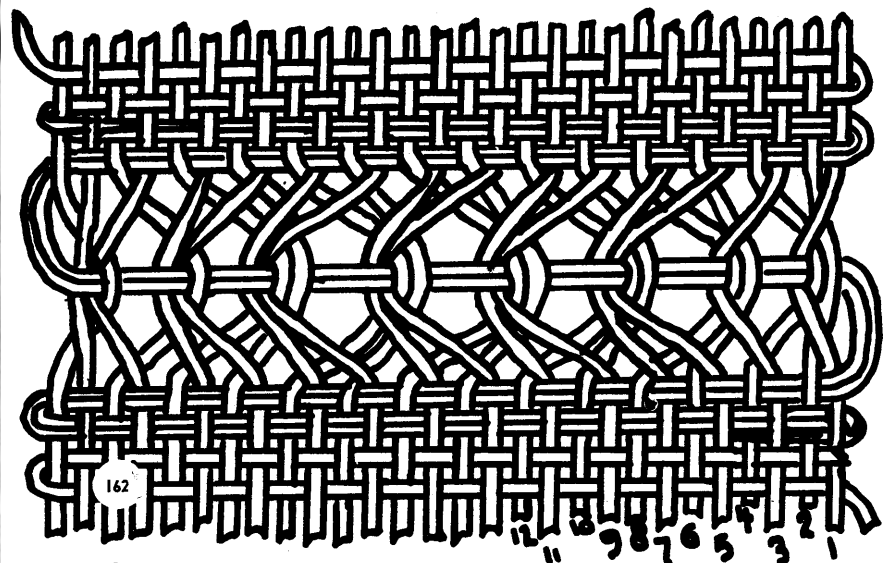
As your leno twist receives more strain than the body of the towel, you may want to use a doubled strand of the same thread as the warp or a doubled strand of 20/2 linen. Starting from the right with the first thread up, weave two tabby threads as shown in illustration 159. For the leno, pick up the down threads 2 and 4, bring under and to the right of 1 and 3, drop 1 and 3 over the point of the shuttle to give the half-twist. Continue thus across the warp.

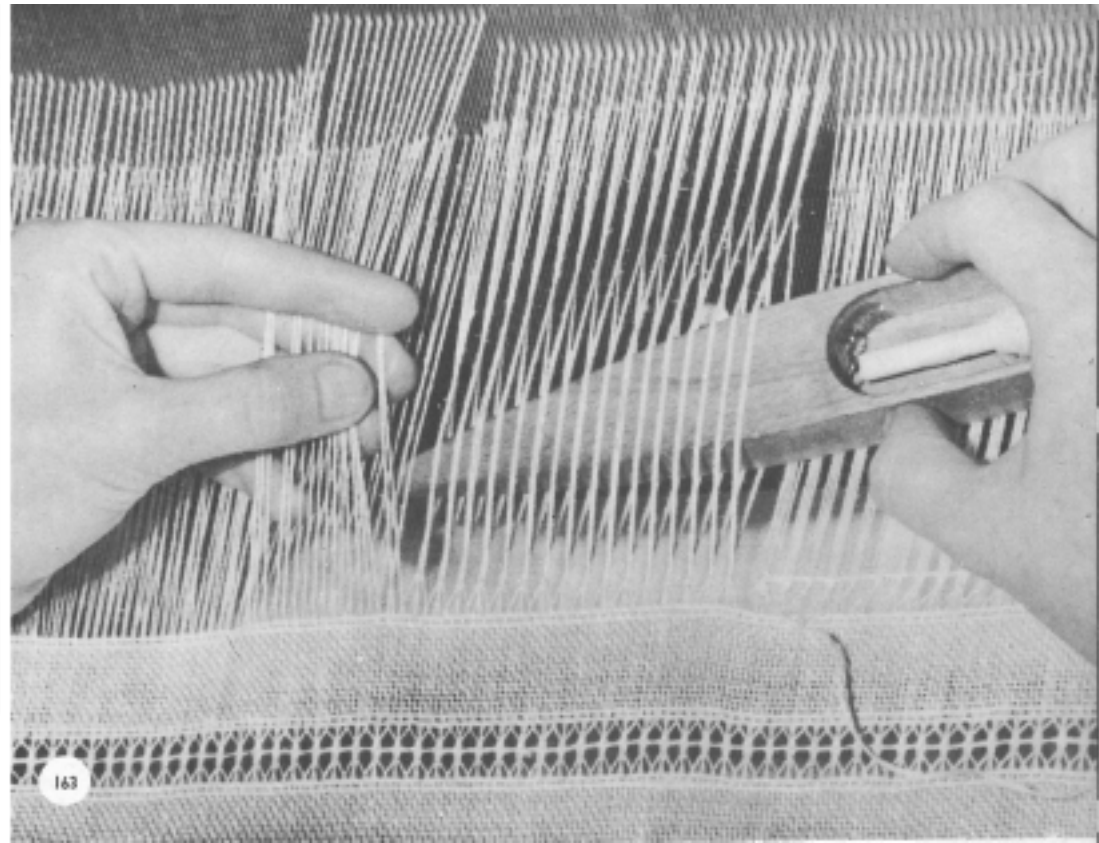
The return thread in this form of leno is a plain tabby made on the other shed. Beat the leno down very firmly; ascertain that you have changed to the shed having the first thread on the right side, down, then weave two tabby threads with the double thread. Continue with the towel of plain tabby. If you want leno practice, you can weave a towel of excellent style with a leno band every four inches. When you are ready for your border at the other end of the towel, you may like to try another leno variant. Weave the leno having two pairs twisted as previously done (illustrations 159, 160); weave seven tabby threads; this will throw the correct shed ready for the leno—that having the first thread on the up shed, right side up.

Weave two tabby threads of the doubled thread.

For this row of leno, you will not twist even pairs of threads as 2 and 4 being twisted with 1 and 3. Rather you will twist the lower threads of the second pair with the upper threads of the first pair. Two beginning twists need be made—pickup two lower threads 2 and 4 and drop 1 over the point of your shuttle; pickup 6 and 8 and drop 3 over the point of your shuttle; now you have the uneven pairing so you will continue across the warp, picking up 10 and 12, dropping 5 and 7, etc. At the other edge, you will find that you pickup just one and drop two to even out the last two twists—illustrations 161, 162.

Weave two tabby threads, taking care to see that you are on the correct shed; weave seven tabby; and weave a second border of plain double pairs; finish with three inches for hem.





PROBABLY the most delightful of the leno lace borders is this variant.

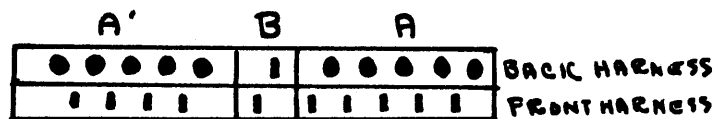
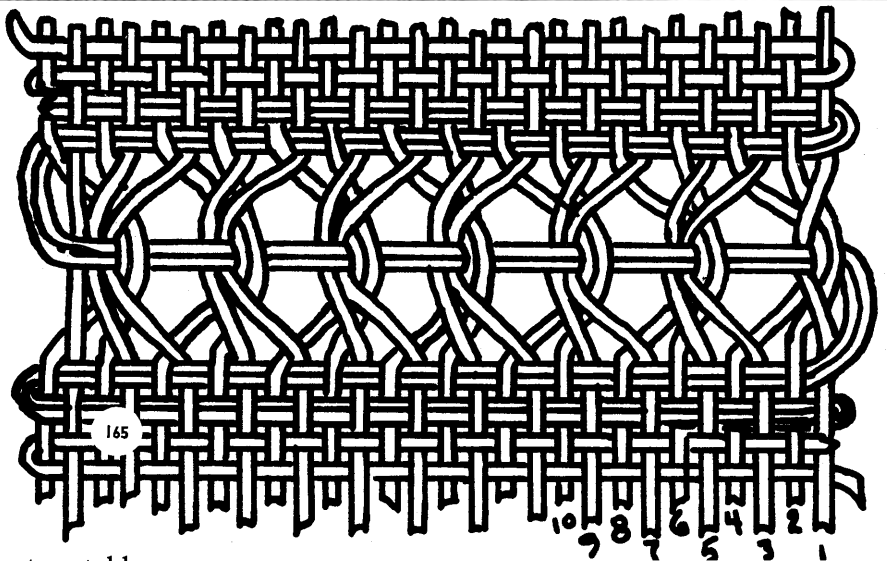
Basically, an upper thread from the right, a pair of threads, and a lower thread from the left are used as two pairs for the half-twist. If you analyze illustration 165, you will find it helpful in checking your lace for accuracy as you weave. As in illustration 162, the uneven pairing must be started at the edge. For the first twist only, pick up the two lower threads—2 and 4, and drop the first upper thread. Then pick up two and drop two across in the uneven pairing of picking up 6 and 8 and dropping 3 and 5; picking up 10 and 12 and dropping 7 and 9, etc.

Using your first cotton warp, or preferably using a linen warp of 20/2 linen set either 15 or 20 threads to the inch for a 12½ inch width or more, use this leno weave for place mats. Weave 3 inches of colored linen. With the doubled warp thread weave two tabby threads starting on the shed having the first thread up on the right. Weave a row of leno, and finish with the two tabby threads of the doubled weight. Weave three inches of colored linen.

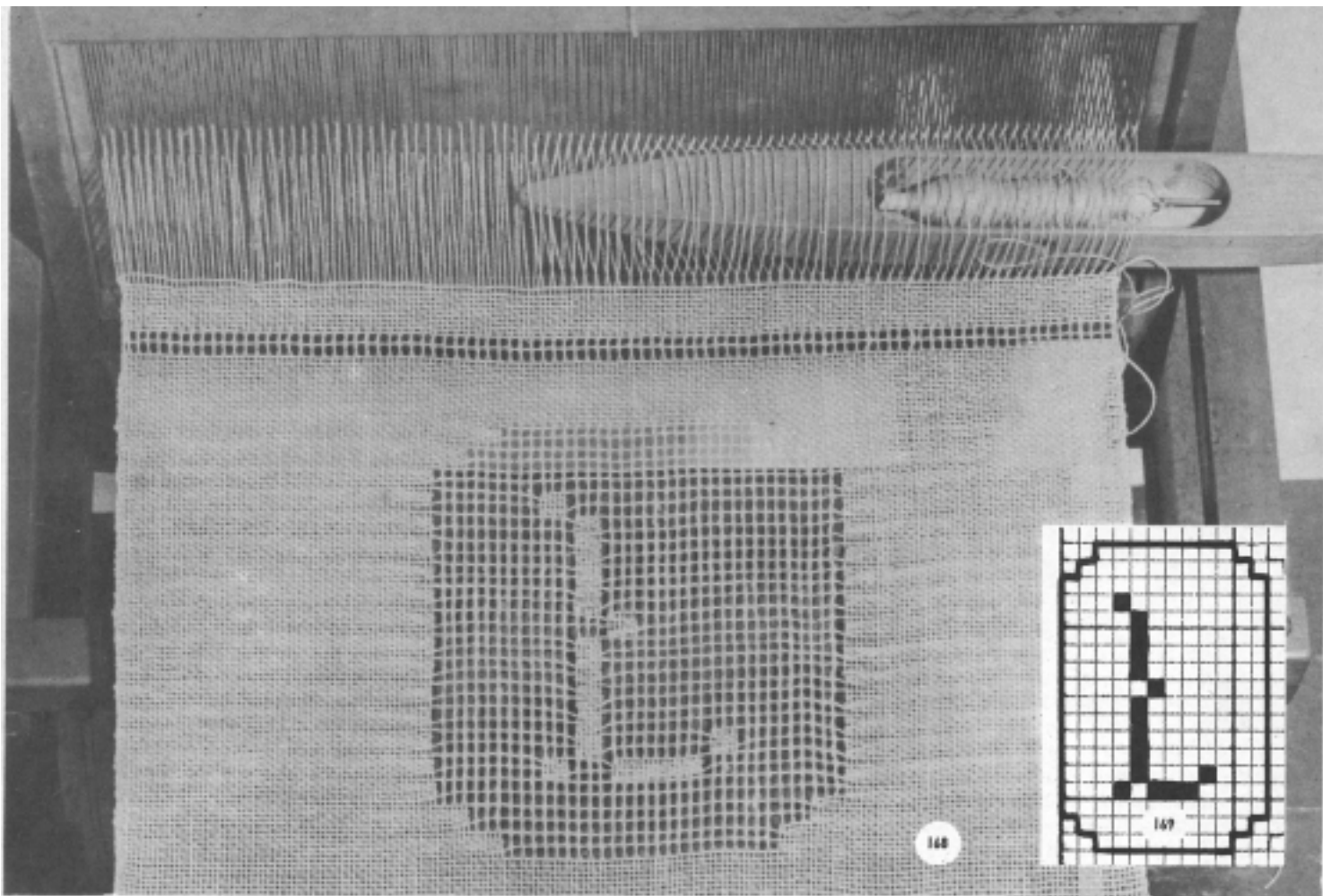
Repeat the leno lace with the 3 inches of colored linen for 5 or 6 rows. Personally I like the longer place mat size.

Current experimental work in leno lace has gone from the *Little Loomhouse* to seventeen foreign countries this year. One phase uses leno lace for blind weavers. They find it is better to use a heavier thread as the "guinea-pig" testing this leno variant is doing in illustration 164.

Two other tangents to follow are the combining of leno variants and the use of different colors or thread sizes in the warp. Illustration 166 shows a row of plain leno from illustration 158 combined with this leno, and followed by a second row of plain leno. One of the prize winning laces in the 1946 COUNTRY FAIR exhibition was a simple little piece using alternate rows of illustrations 158 and 166. Care need be used in adding the heavy silk to the warp. The in-between plain warp should always be threaded to an uneven number of pairs of threads.



START THREADING AT RIGHT
 FOR PLACE MATS - A, 17B, A, - 45B - A, 17B, A' - 197
 FOR NAPKINS - A, 17B, A, - 61B - A, 17B, A' - 229



YOU will particularly enjoy using leno lace as the background for a plain weave design. Your design may be drawn on squared paper. Any design which lends itself to a lace background may be used.

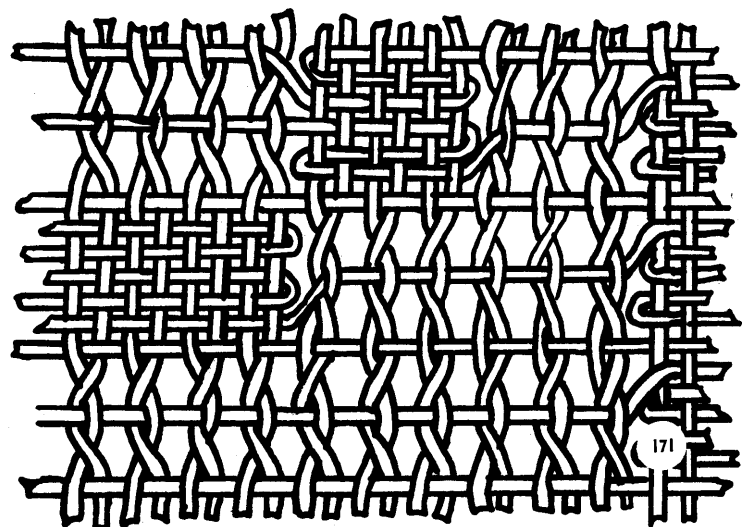
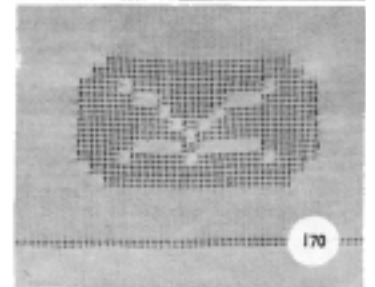
For your first piece with a leno lace background, use a 10/4 mercerized warp set 15 threads per inch. If this warp is not available, use 20/2 linen, also set 15 threads to the inch.

Regard each block of plain weave design as six threads; or, since all leno is in pairs of threads, as three pairs of threads.

Then the weft for each leno row—across and back, is also six threads for the plain weave part. Thus, you need pad in four extra threads for all plain weave portions.

To do this, weave the given number of leno threads; weave the given number of plain weave threads—change shed and weave the given number of plain weave threads, taking care to see that you have kept to the correct number of pairs—change shed and weave the third plain weave thread; continue with leno. On the return leno thread, weave through leno portion; weave the given number of plain weave threads—change shed and weave the given number of plain weave threads, change shed and weave the plain weave threads; weave through the leno portion. Thus two extra threads have been added each way to each leno thread as shown in illustration 171.

For your first piece you may like using an initial. Make your cartoon for the initial by placing it in a medallion as illustration 169. When woven on a warp 15 threads to the inch, it will appear as the one in illustration 168. This makes a good antimacassar. Likewise the initial may be woven on the side for place mats—in either fine or heavy warps, as illustration 170. For a warp 30 threads to the inch in 20/2 cotton, you will follow the same 3 pairs for each block. Later, you may want to use 2 pairs per block for a warp of 20/2 linen set 20 threads to the inch. You will need use good judgment to maintain the correct proportions.





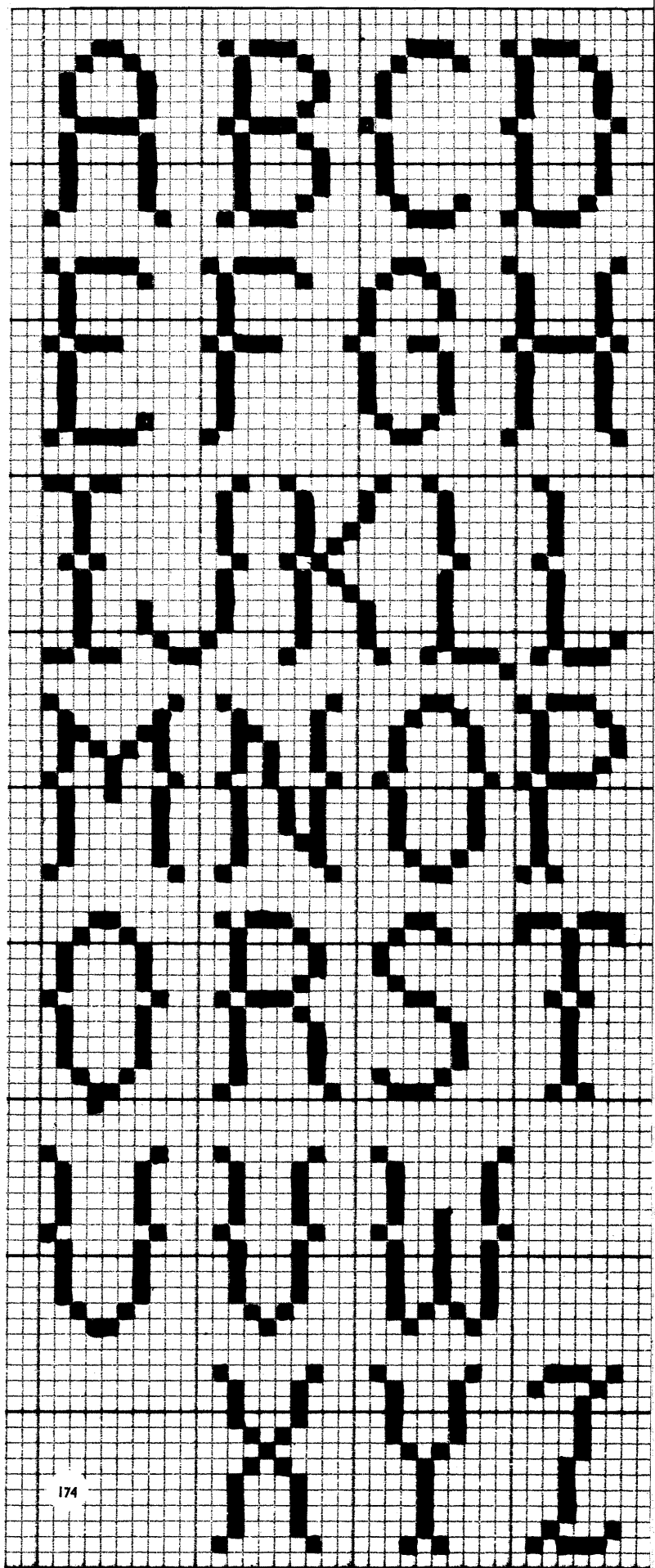
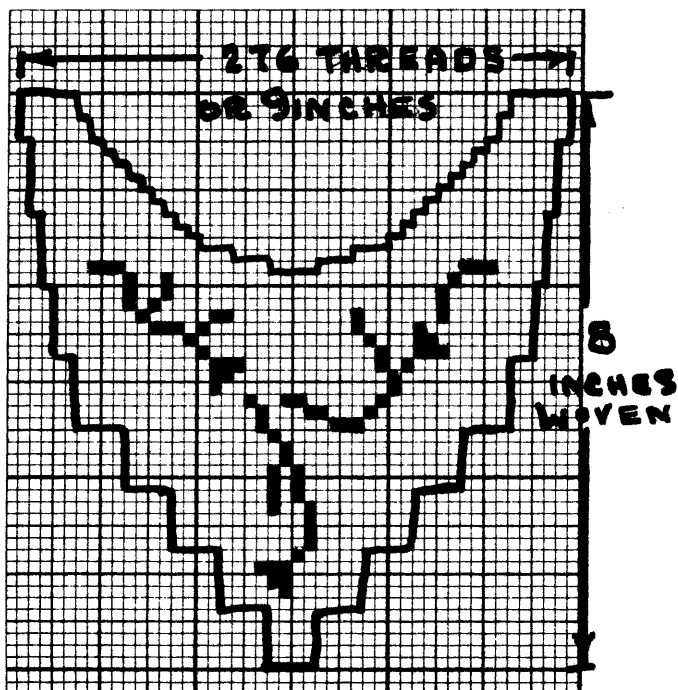
MEMBERS of the *Little Loomhouse Group* have made a widespread application of the leno lace technic into many textiles—all with which lace is well suited. So you may enjoy playing around with some different ideas in leno lace.

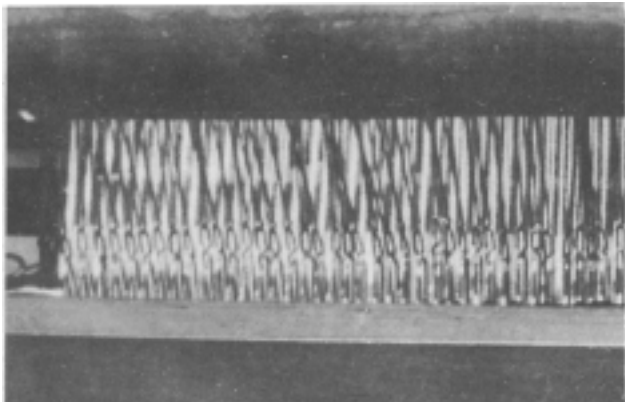
One of the favorites among both men and women is the use of leno lace in fine clothing materials. In the coarser warps, it has excellent style when combined with oneharness for peasant type clothing.

In the finer leno laces, especially those using leno lace as the background, blouses or blouse fronts are charming. The design given in illustration 173 is for 30 threads to the inch and may be woven in 20/2 or 30/3 cotton, or in 40/2 or 60/3 linen. The blouse in 172 is in 40/2 linen although we find new weavers handle 60/3 linen easier.

Later when you use your own designs, layout the blouse pattern carefully and estimate fully the amount of shrinkage and the number of threads per inch to your woven material. Then check this against your cartoon.

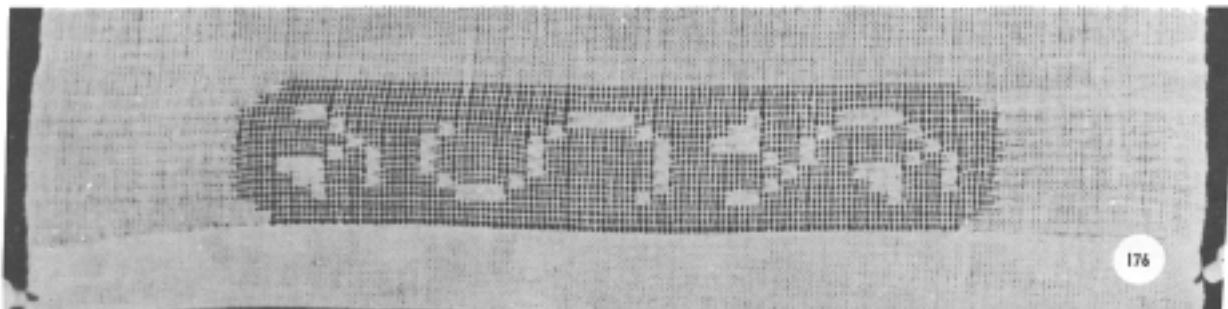
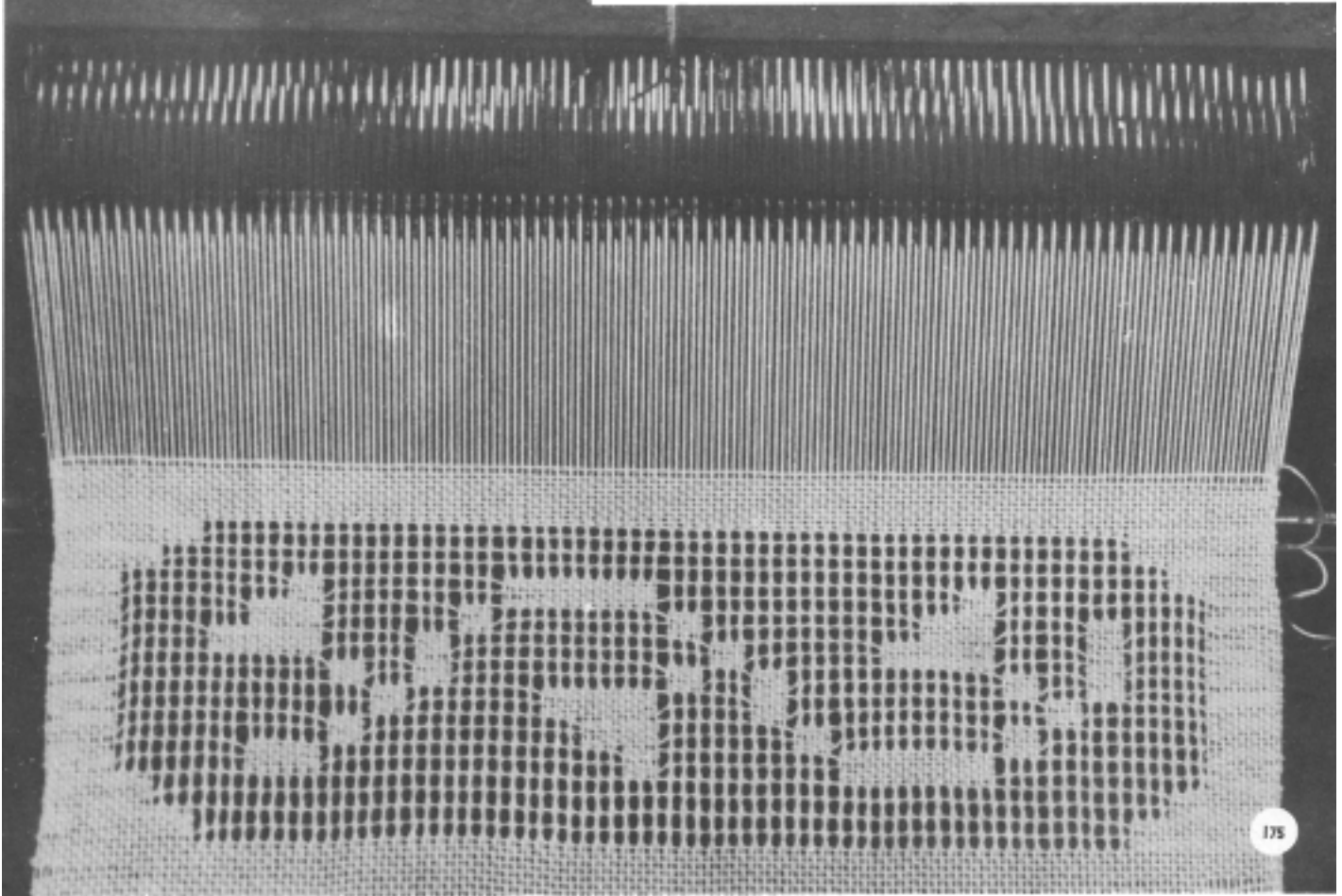
ILL. 173





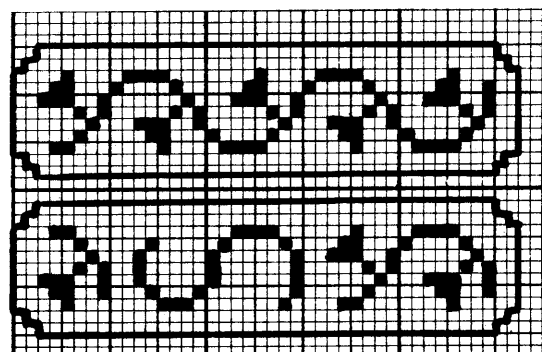
ON the same 10/4 mercerized cotton warp as you used for your first lettering in leno lace, try this leno lace border. The cartoon for this border is not given as you will get zest out of making your own cartoon from the cloth on the loom.

This same type border may be combined with bright designs in oneharness tapestry for peasant aprons and clothing material on the same 10/4 mercerized cotton warp. This is also good for curtain material.



For very fine leno place mats and napkins, use the finer warps suggested on page 47, and weave the inset given in illustrations 176, 177. The material for 176 is cream linen of 60/3 size, set 30 threads to the inch for 400 threads or 13 inches. The napkins should be wider and set to 450 threads.

ILL. 177



THE Isle of Capri technic is one form of laidin tapestry. Although this technic has very definite limitations, it has proven a technic of import to students of non-objective design. Some of their advanced work is exceptional. On these two pages in the Isle of Capri technic, several tangents in designing are given rather than designs to copy.

Basically the Isle of Capri technic is made by having pairs of design threads follow pairs of tabby thread with the first thread of each being on the same harness. The design threads are usually in motion—moving to the left or right.

The first tabby thread will be woven—in illustration 178, the first tabby thread goes from right to left on the shed having the back harness up, harness roller forward, first thread up on the right side.

The second tabby is woven on the other harness—in illustration 179, the tabby returns when the front harness is up.

The first design thread is woven on the same harness as the first tabby thread—in illustration 180, the back harness is up. Design threads are laidin on separate bobbins wherever design is needed.

The second design thread is woven on the same harness as the second tabby thread—in illustration 181, the front harness is up.

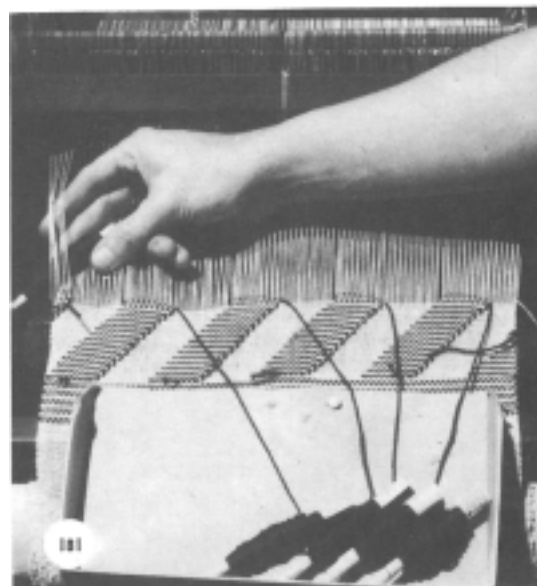
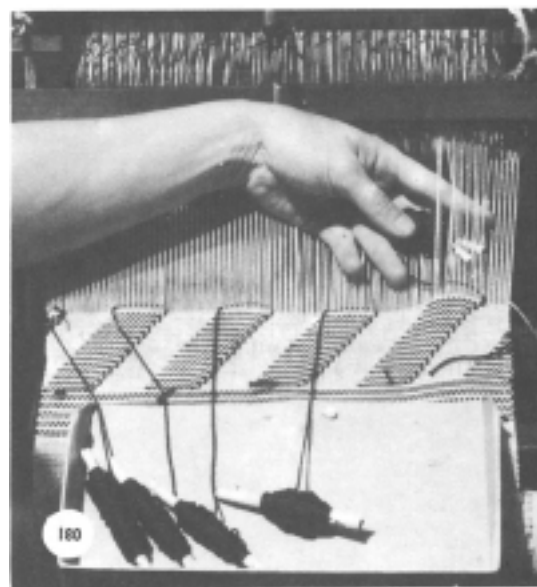
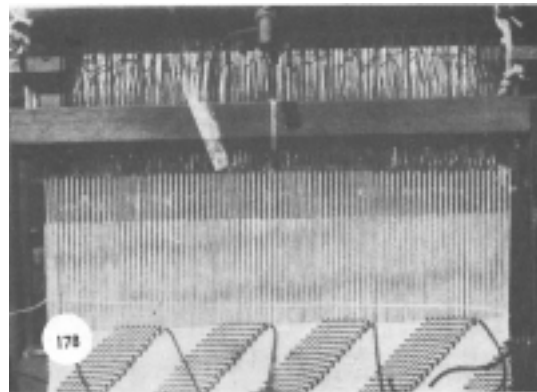
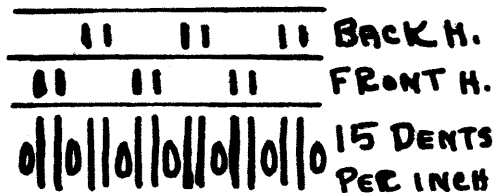
Five design bobbins are used for the simple diagonal shown in illustrations 178-181. Note the handy little pasteboard box pinned to the warp for convenience in handling bobbins.

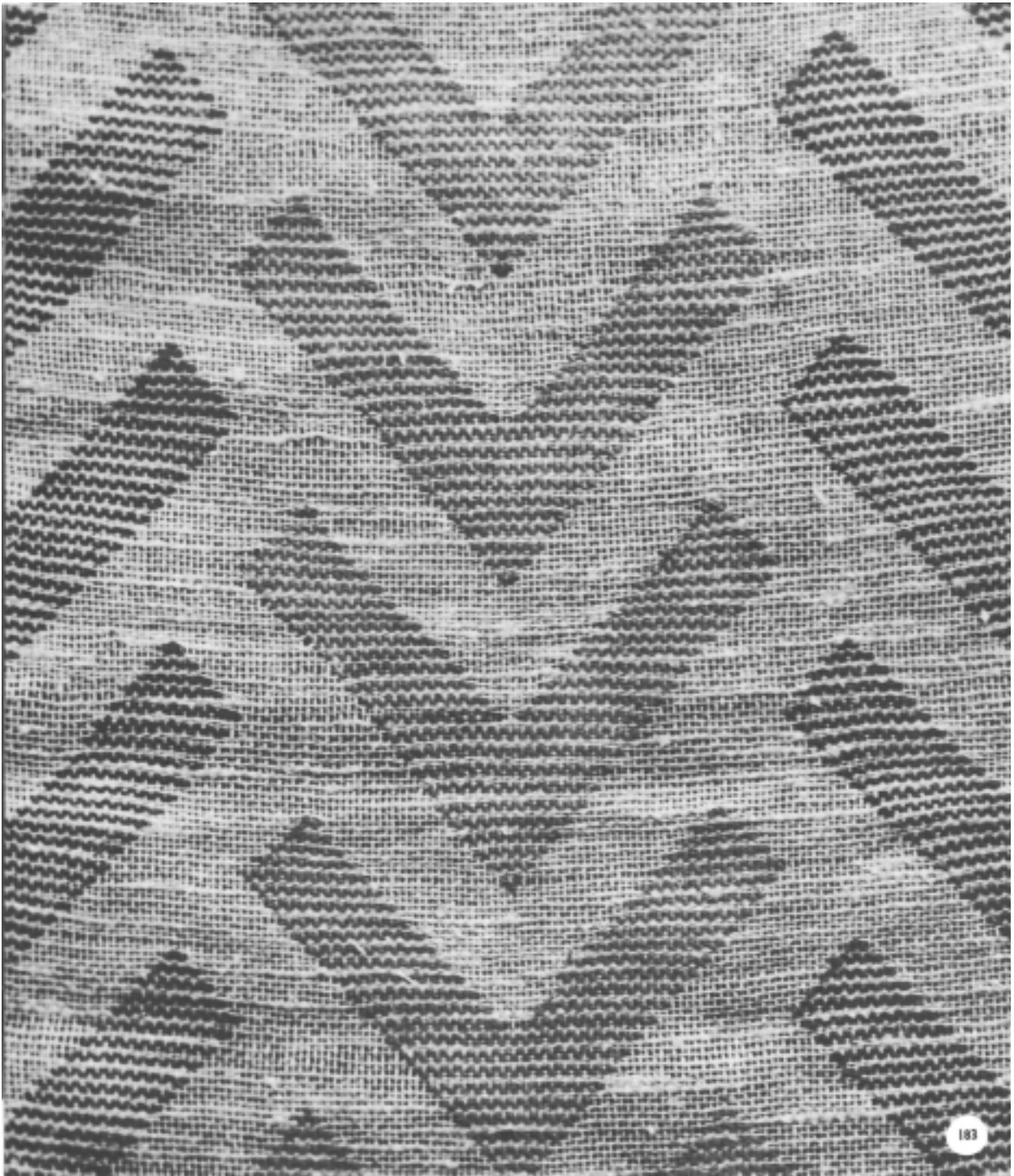
You may want to use this diagonal to try the technic. On a warp having 180 threads, you will have 90 up each time. Use five design groups of 10 threads each with 10 threads between each group. In the illustrations, we used 3/2 mercerized wine colored cotton on a cotton warp to make the design show clearly.

You will want to use a design thread about twice as heavy as your warp. Your tabby will be about the same weight as the warp. A 10/4, 12/4 cotton or mercerized cotton or a 20/2 or 18/2 linen, or other equivalent size warp may be used. You will enjoy having a good textured thread for your background.

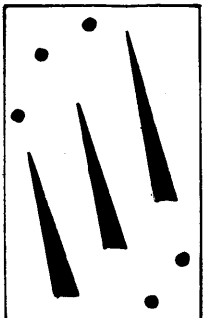
You may like a basket weave warp. 10/2 mercerized cotton threaded two strands together, with 15 of the double strands to the inch is excellent and does not give beginners any trouble. You can thread two strands through each dent in the reed and through each heddle.

ILL. 182

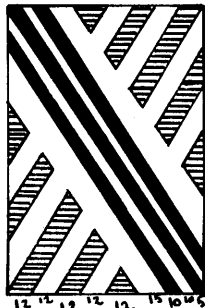




183



ILL.184



ILL.185

YOUR method of cartooning for the Isle of Capri will probably be your own development. A thread-by-thread method is unhandy and is often off-balance owing to the threads tending to elongate the design.

You may like sketching the design roughly and then estimating the thread count as you go—noting each count so duplication may be made—as shown in the drapery material cartoon in illustration 184. For this, you depend on the “feel” to keep you on a well balanced design.

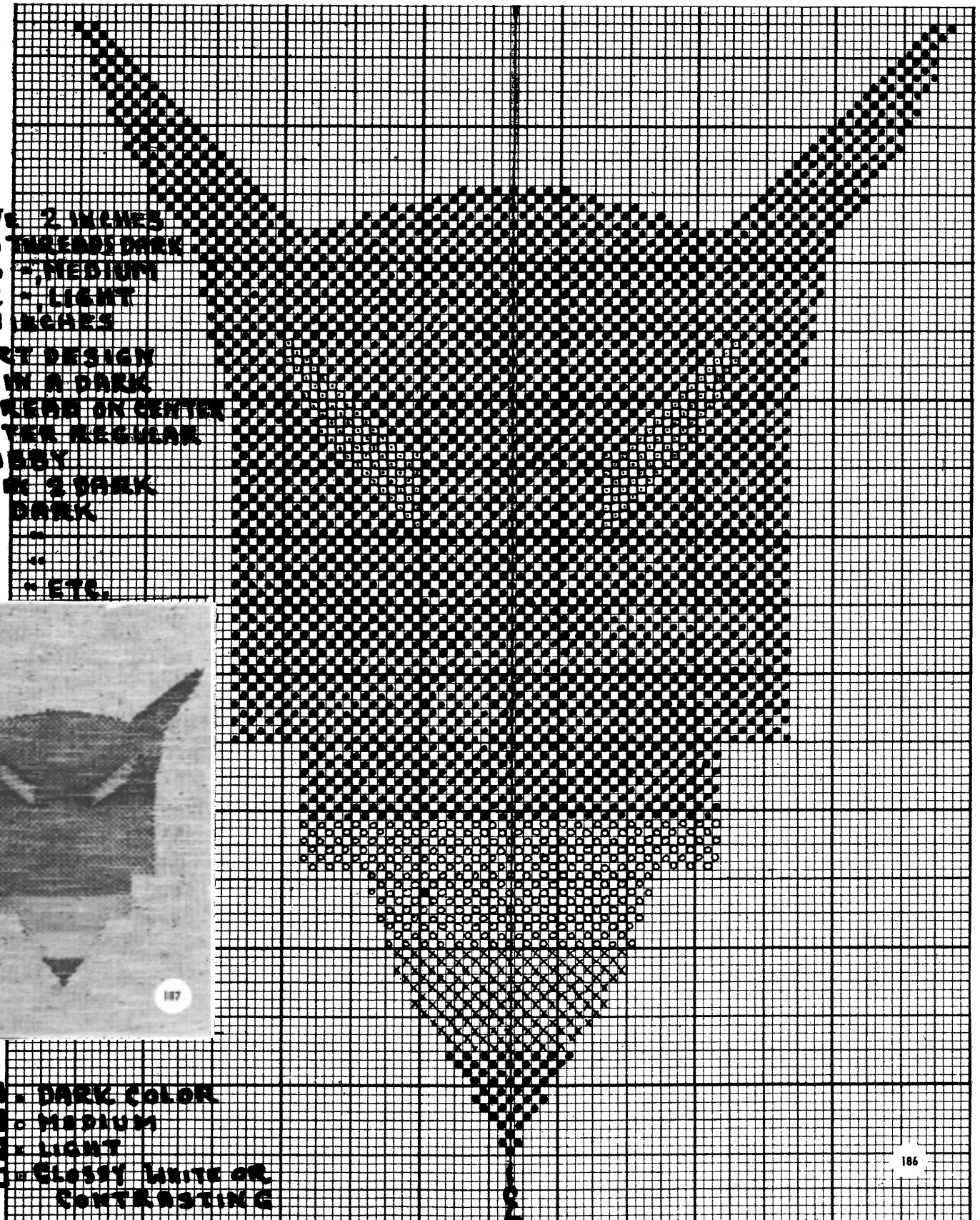
Or you may want your sketch to be more accurate, as to half scale with the number of threads written in before starting—illustration 185.

Laidin tapestry is the technic most frequently used in contemporary tapestry weaving. It is also commonly called inlay and embroidery technic. Laidin tapestry is, as the name suggests, a design actually laid in the warp threads after the regular weft or tabby thread has been woven. It has a myriad uses so, altho you will want to start with initials or a simple block design, you will soon find yourself making cartoons to suit your own purposes.

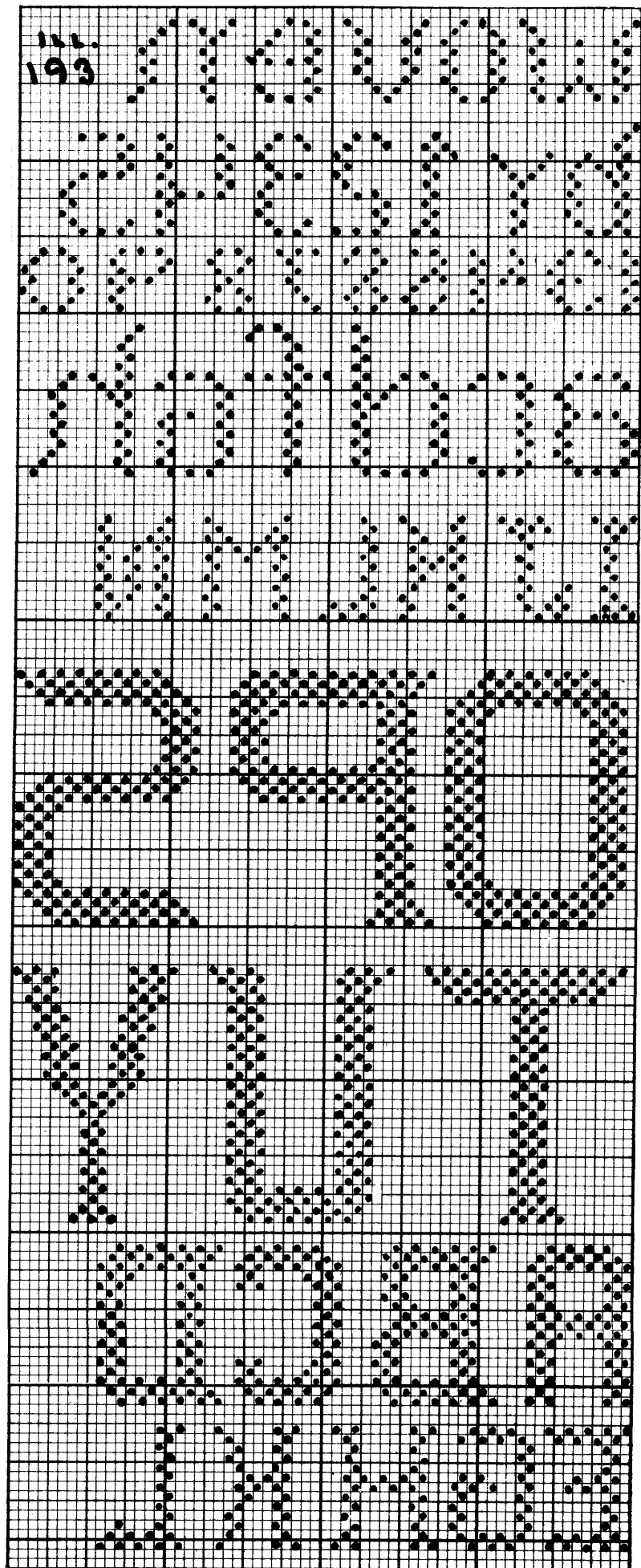
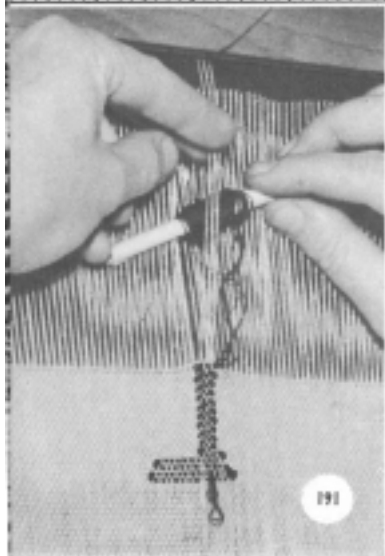
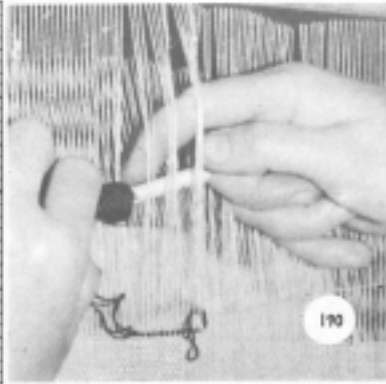
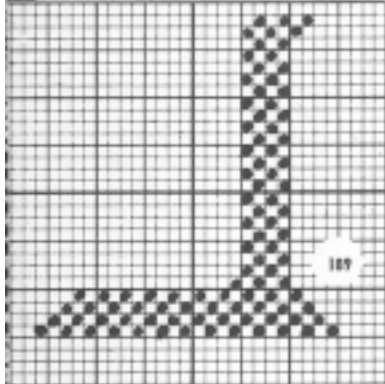
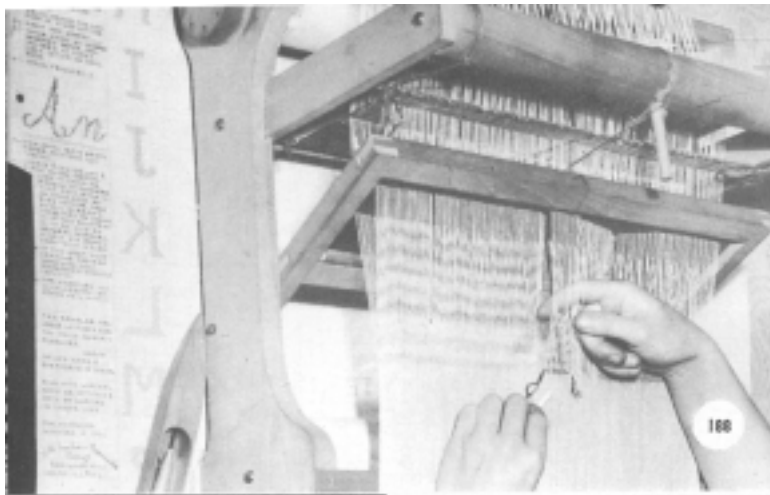
At first, make thread-by-thread cartoons. Later you will find it more fun working from free hand sketches—especially if you find the figures as ill. 4 amusing. If you like the fox—which the GI's say is a good GI wolf as anyone can plainly see, use cartoon 186 for a tapestry which will show up when woven as ill. 187. The weft should be about the same weight as the warp. The design threads should be slightly heavier. If they are too heavy, you will need adjust your cartoon by deleting a couple of rows when needed; if they are too light, you will need add a couple of extra design rows when needed to square the design to the proper proportions. You can have fun making your own cartoon by using a study in blocks, masks, or other designs having simple lines.

WEAVE 2 INCHES
 " 20 THREADS DARK
 " 16 - MEDIUM
 " 12 - LIGHT
 " 3 BEARS

START DESIGN
 LAY IN A DARK
 THREAD ON CENTER
 AFTER REGULAR
 TAPPY
 LAY IN 2 DARK
 " 19 DARK
 " 17
 " 15
 " 13
 " 11
 " 9
 " 7
 " 5
 " 3
 " 1
 " ETC.



■ - DARK COLOR
 ◦ - MEDIUM
 □ - LIGHT
 □ - Glossy White or
 CONTRASTING

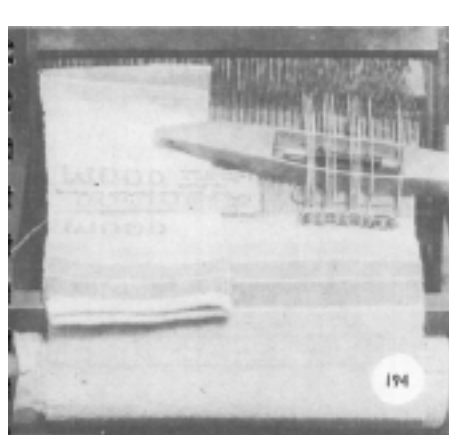


For your first lettering, use fairly large letters. The L used in ill. 188-192 is 27 high and 25 wide, and used 4 threads for the letter width—2 on each harness. This letter, 15 threads to the inch, is nearly two inches; 30 threads to the inch, is slightly over one inch—the bulkiness of the laid-in threads elongate the letter.

Using the initial in ill. 189, the L is started by laying in the 13 center threads on the same shed as the last tabby. After the thread is laid in, the end is looped back around the last three threads, ill. 188.

The harness is changed and the next tabby woven. Then on the same shed, weave the second row of 12 laid-in threads as shown in ill. 190. The initial is continued by a tabby thread being woven and a laid-in thread being woven before the shed is changed—11 threads, 10 threads, 3 threads, 2 threads, 2 threads, etc.

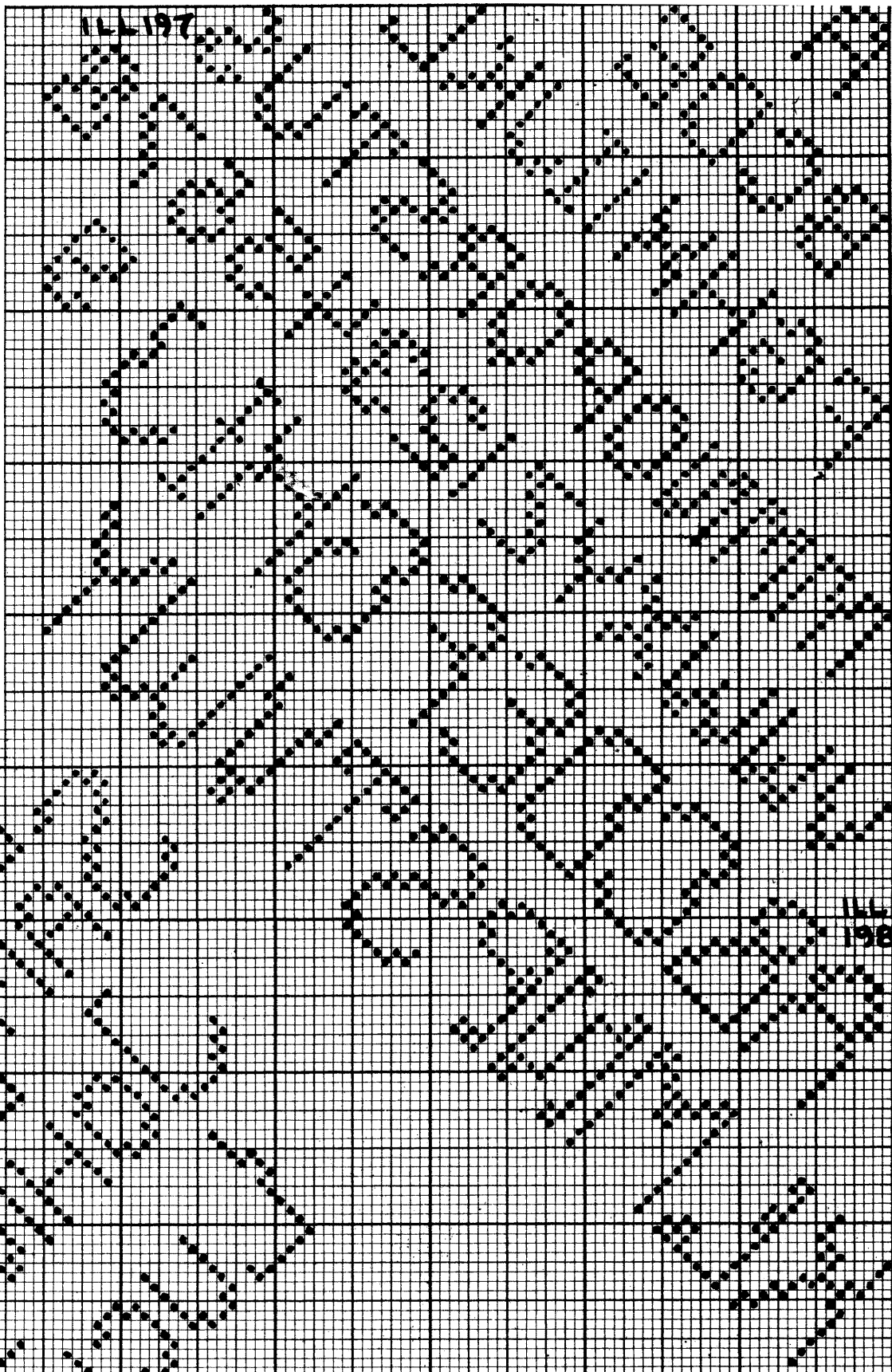
The initial is finished with design threads being woven after the tabby—ill. 191, and the final three threads being woven and locked in place—ill. 192.



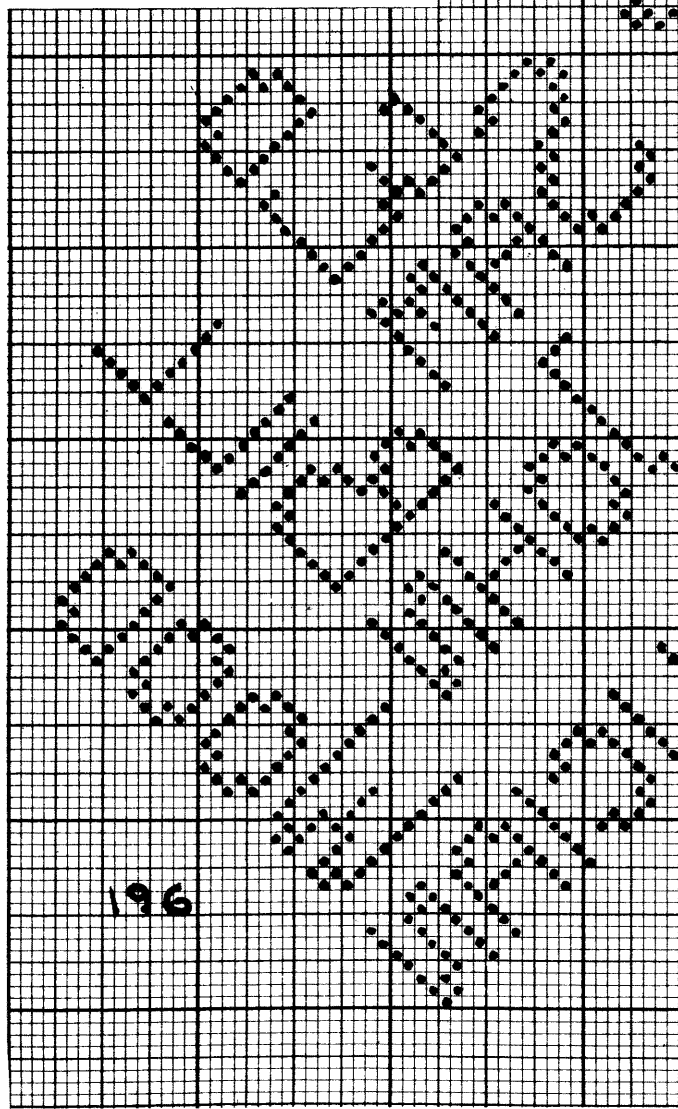
194



195



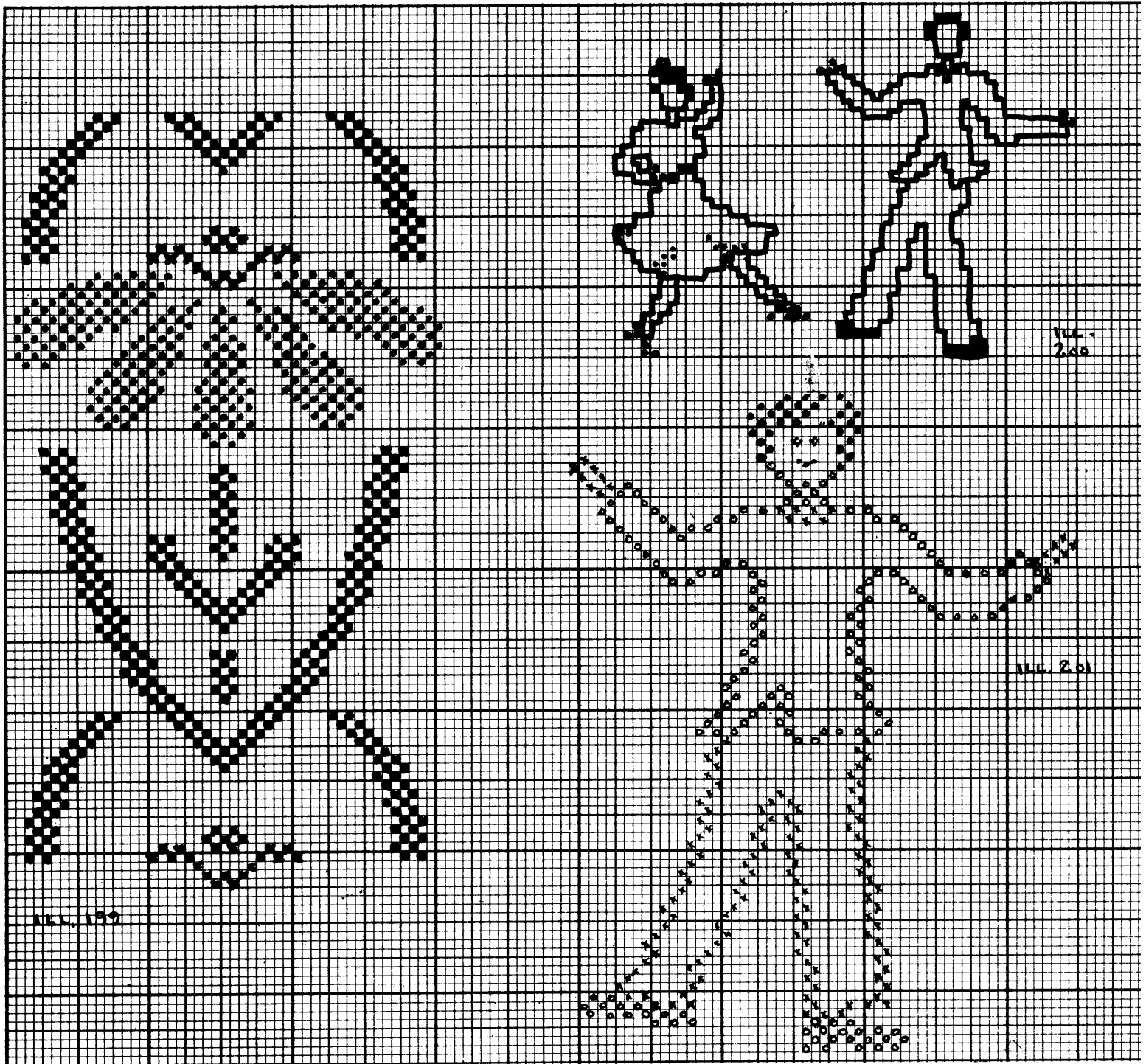
ILL 197



196

ILL 198

For signing a textile, you will lay in small letters with a shuttle as illustration 194. The slanting letters are also woven with a shuttle and appear as the ROSE on the lipprint washcloth in illustration 195. Using the small letters in 197 and the large ones in 198, make your cartoon for ascots, blouses, etc., as shown in illustration 196. We have made the large letters in several styles to show some of the tangents possible for this type lettering.



YOUR designs for laidin tapestries may be your own, or may come from other sources. If you are not too creative, you can practice by transposing designs. From pattern books on various types of needlework, you will find a rich store of formal designs. So you may work out your own design as illustration 199, or use a similar design transposed from a pattern book.

Any block or design on squared paper may be transposed from crossstitch or oneharness to laidin such as illustration 200 being transposed in illustration 201.

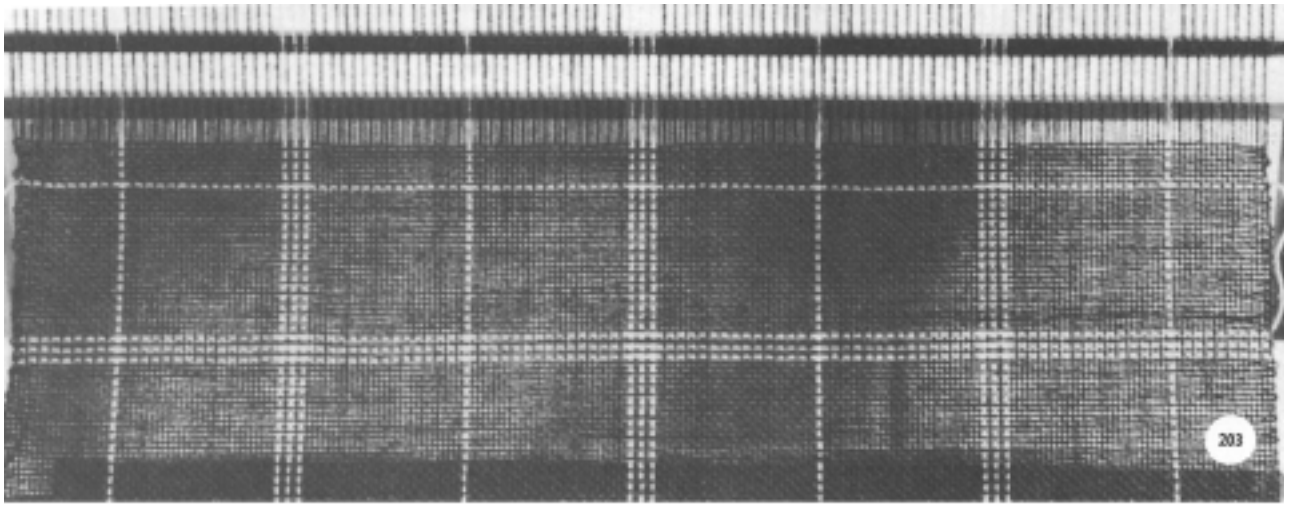
You will have more fun working out your own designs. At the *Little Loomhouse*, we get keen amusement in doing "portraits" of each other, in depicting our squaredance partners, and in doing droll figures. Because the Kenwood Hill cabins are always pictured in the woods, so often a reporter with a flare for a tall tale, writes a story of our hill-billy weaving. And even though we are on a hill which is surrounded by the city of Louisville, we have fun in keeping the tale from shrinking by weaving the "family"—*Granpappy*, *Wudge*, and *Coz Zeb* appear in this edition of WEAVING IS FUN.



STRUCTURAL designing for two harness is one of the most intriguing fields of handweaving. The number of delightful combinations of colors and textures are unbelievable. You would have been amused at the *Little Loomhouse Executive Board*—which confidentially we call the “dirty work” committee in memory of all the long hours of work which never show in the finished program. When we decided to add structural designing to the July, 1946 edition of *WEAVING IS FUN*, we went thru the files for the essential variants of two harness structural designs—eliminating the ones too similar and the ones too complicated. Then when we put the drafts and finished textiles on the walls of the *Little Loomhouse* loft, to make the final decisions, we found that we had exactly enough to make a full size manual on structural designs.

However, for these pages, we have limited the drafts to successive steps which will give you the most opportunity to create your own variants. With each draft is a functional textile which may be woven on a small loom. Even tho this manual is designed for a small loom with a 15½ inch weaving width, I have kept in mind the fact that many weavers, schools, and class groups can use this material on their large floor looms.

The ties, scarfs, afghans, ascots, children’s clothes, hats, place mats and napkins, may be woven on the small loom as easily as on a larger one. Clothing for adults, blankets, upholstery, draperies, etc., may be more easily woven on the larger looms. However, the upholstery and draperies in *Tophouse* have been woven on the small looms, and I am among the *Little Loomhouse* members who are wearing jumpers and blouses woven on the small loom used in this manual.



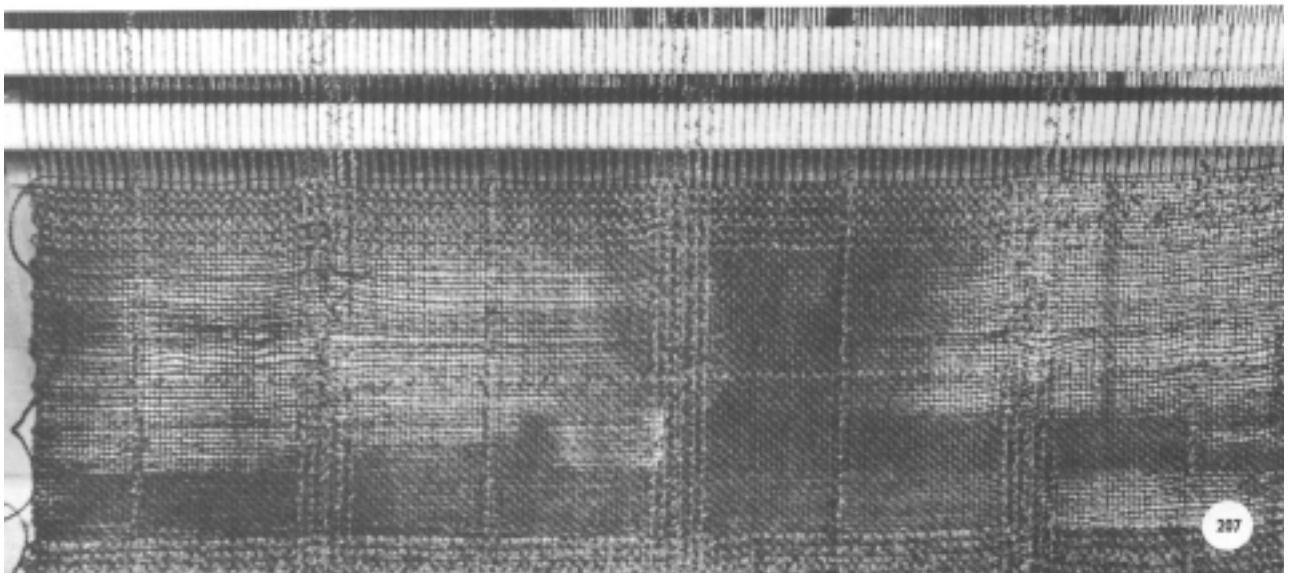
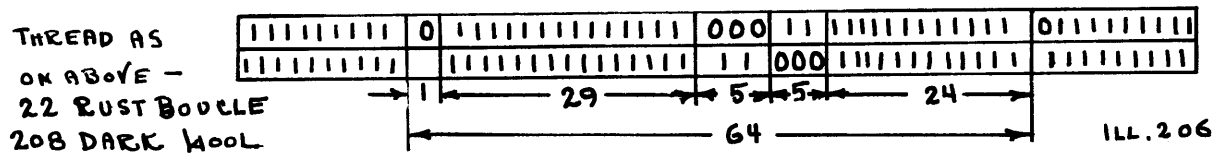
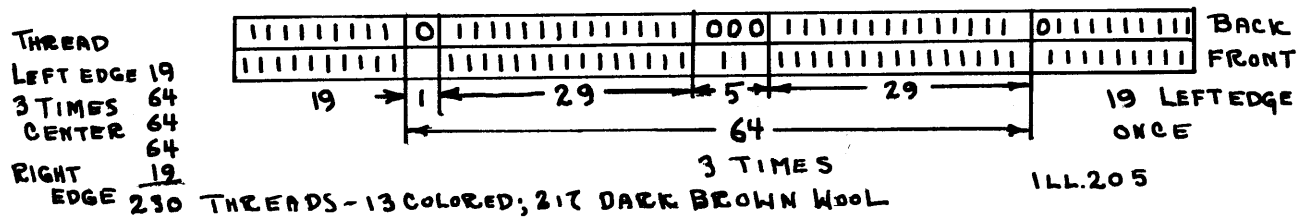
STRUCTURAL design for two harness is the arrangement of color and texture in warp and weft to produce a design. The first change is the use of a second color. This may be used in solid blocks as checks, such as illustrations 109, 110, and in irregular checks as plaids, such as the famous Scot clan tartans.

If you introduce into the warp, an alternating color by using the colored threads on the same harness, you will have a design as shown in illustration 203. Compare the photograph with the draft in illustration 205.

If you introduce a second group of alternating colored threads on the other harness, you will get the effect of a block design. This is shown on draft and tie warp in illustrations 206, 207.

The full use of the alternate colors are based on two methods of alternating the colors as shown on page 57.

Ties are excellent to weave in class. Check with the tie pattern you plan to use and make an ample shrinkage allowance. Our tie pattern requires 24 inches of woven material on a 15 inch width warp; the measurements are made on a loose warp.



ALTERNATE colors become a block design when colors are alternated from one harness to the other. The first method alternates a dark and light color in even pairs. The color which is second on the first block becomes first on the second block. Thus the textile shown in illustration 208, is drafted according to illustration 209.

This particular type variant of alternate colors is effective in upholstery materials set from 15 to 30 threads to the inch. The design may be conspicuous by using colors and threads of striking contrast as the shiny yellow rayon used with a dull deep brown cotton, illustration 208.

Often for upholstery, a more subtle coloring is desirable. The blending of a brown and gold in rough textured wools as used in illustration 210 shows a slightly different variant. A few other variants are:

blocks may be any size from about 3 pairs of threads to three or four inch blocks;

blocks may be of even or uneven sizes; illustration 214 shows a tie warp using graduated sizes;

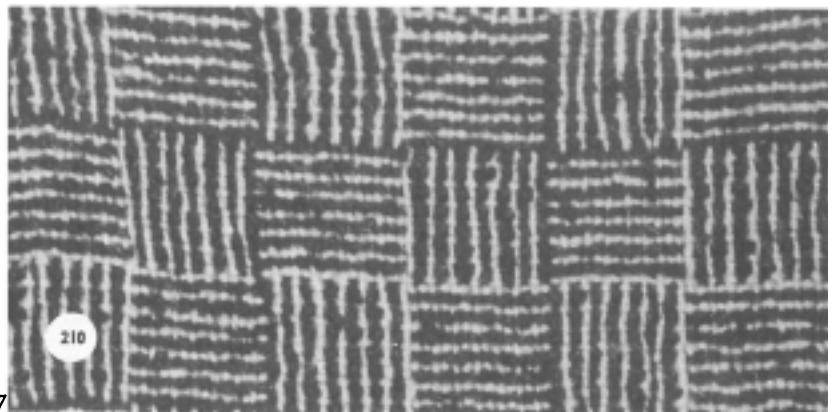
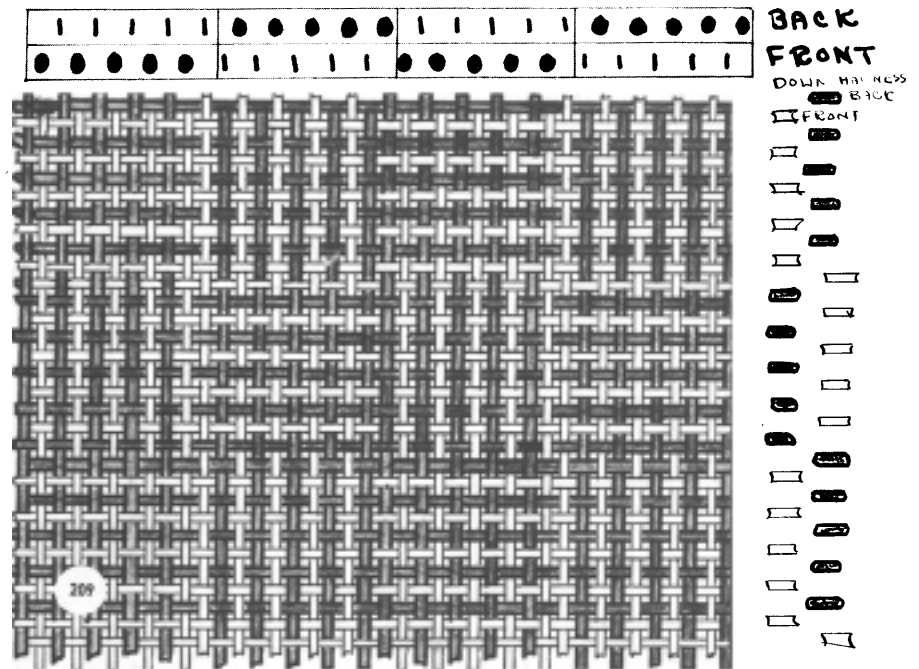
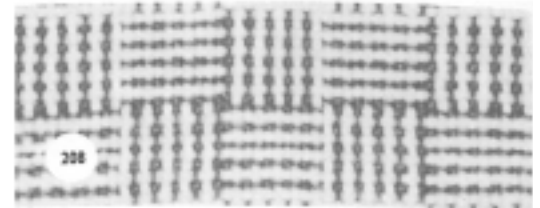
blocks may be woven on the diagonal—following the warp thread by thread as shown in illustration 209; or

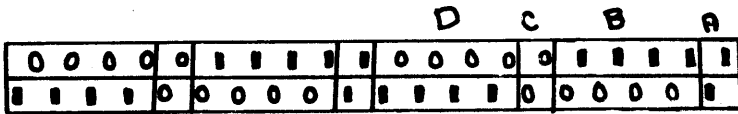
blocks may be woven with entirely different colors and treading to produce unusual texture effects.

In planning an upholstery warp, consider the stress placed on the threads used. For one block design having a two-inch size block, the stress was placed on aqua linen whereas the design emphasis was placed on a soft gray chenille, which would not carry as much strain as would the linen. Most threads having a similar amount of give may be used together.

In making your warp estimates,
 allow 24 inches for wastage;
 allow full measurement;
 allow a test piece;
 allow an extra piece in case of error;
 and then add at least 10% for shrinkage.

Ordinarily, you will need about equal amounts of warp and weft. For upholstery, suitings, drapery, etc., where it is important to have ample material, you will never regret having purchased surplus yardages.





ILL. 211

		1st Color	2nd Color
Warp	A	2	2
11 Times	ABCD	220	110
	A	2	2
		<hr/>	<hr/>
		224	114
			110

Threads set 15 per inch

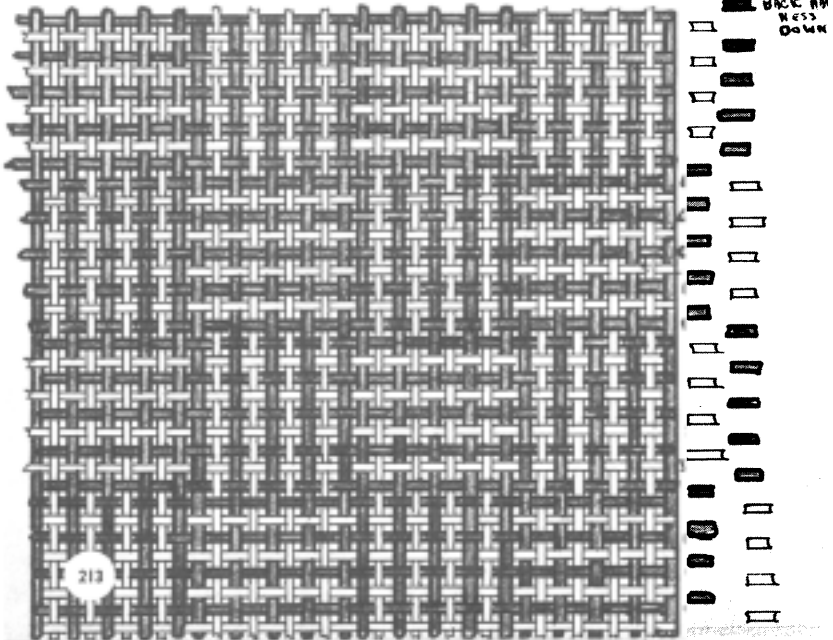
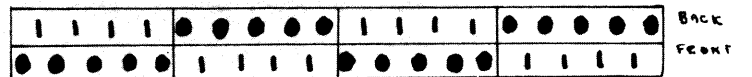
THE second method of using alternate colors starts and ends with the same color. Thus, this will produce an uneven number of threads to each block. Whichever color you wish to use for the predominating color is used as the starting color. Customarily the darker color is the predominating color and makes the design more pronounced.

The draft and cartoon for the second method is given in illustration 213. The same rules which apply to the use of the first method are also used with the second method.

Often in suiting and clothing materials, you will want less emphasis on the block design. Towards lessening the emphasis on the design, you may like adding more plain color. The variants which you may adapt to your own weaving is limited only by your imagination. Two variants—one for each method of using alternate colors—are given in the child's skirt and the man's tie warp.

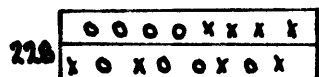
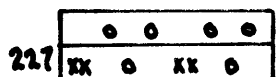
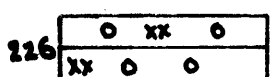
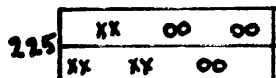
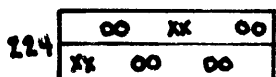
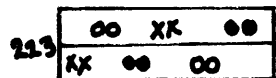
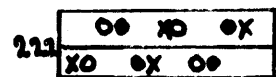
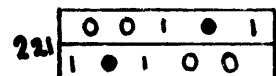
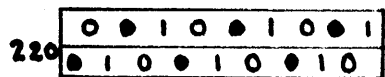
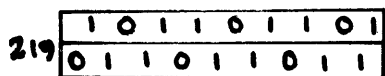
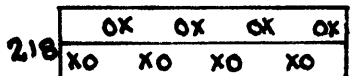
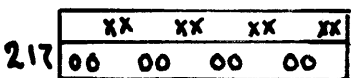
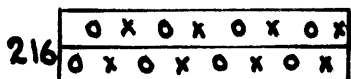
If you will analyze the skirt in illustration 212, you will see that each design block is separated by extra plain threads. Written, the draft will be that used in illustration 211. The colors used for the skirt were colonial blue and deep red. For each skirt, one skein each 15/2 wool in blue and red were used. The warp was set 15 threads to the inch. Some weavers prefer this weight wool set 20 threads to the inch for suiting material.

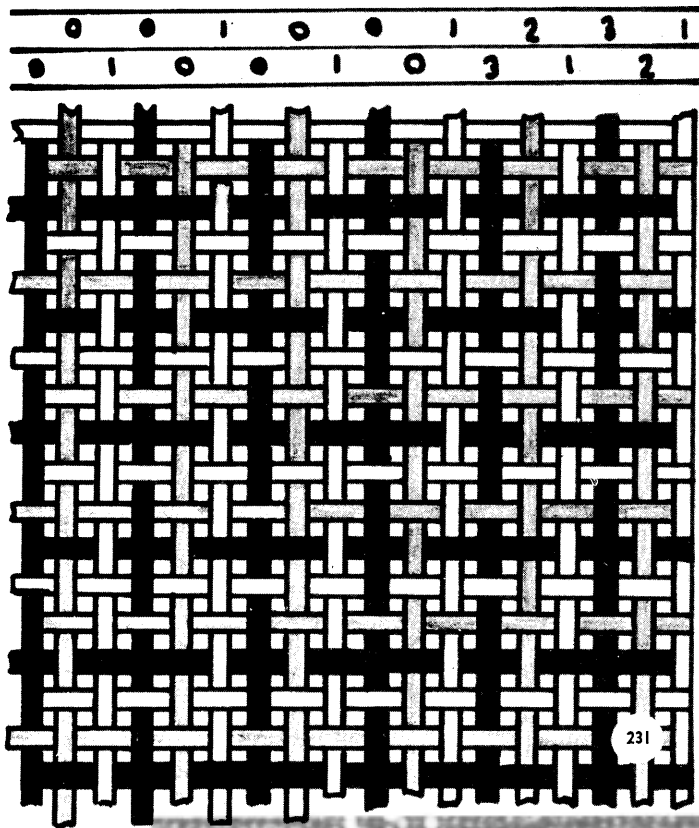
Skirts for two to six year olds require from 66 to 84 inches. Older children and adults need have the material cut in lengths and require from 7 feet to 4 yards of 15 inch width material. Actually for adults, a floor loom is preferable for weaving clothing material, but I am enjoying jumpers and blouses woven on our little loom.



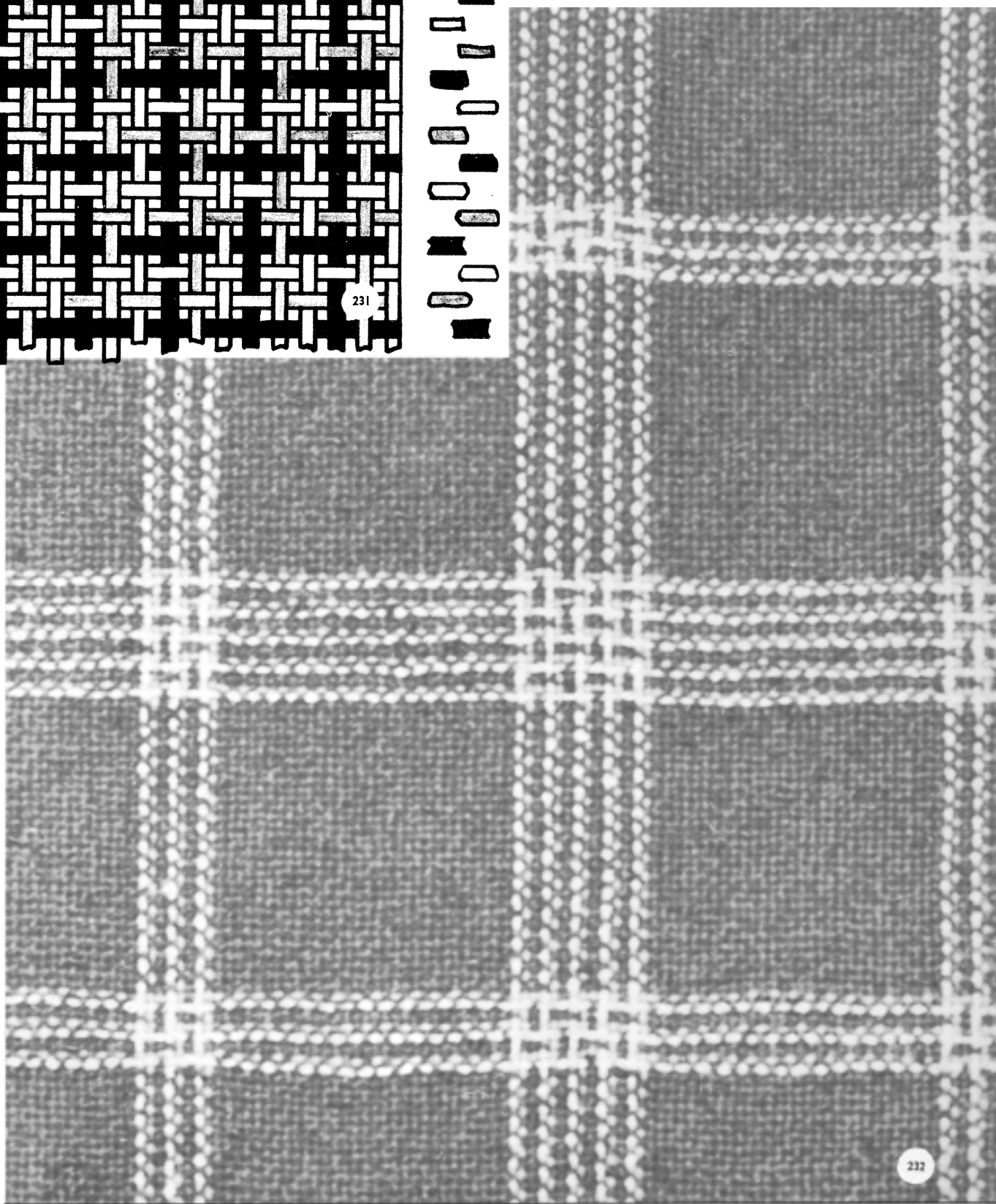
YOUR use of two colors may vary. You may enjoy making your own variant of illustration 216. Or if you like grouped threadings or basket weave, you may want to design a warp based on illustration 218. Basket weaves lend themselves for use on baby blankets, blankets and afghans, so several variants are given. Three threads may be used together, instead of two, to produce a more pronounced basket weave.

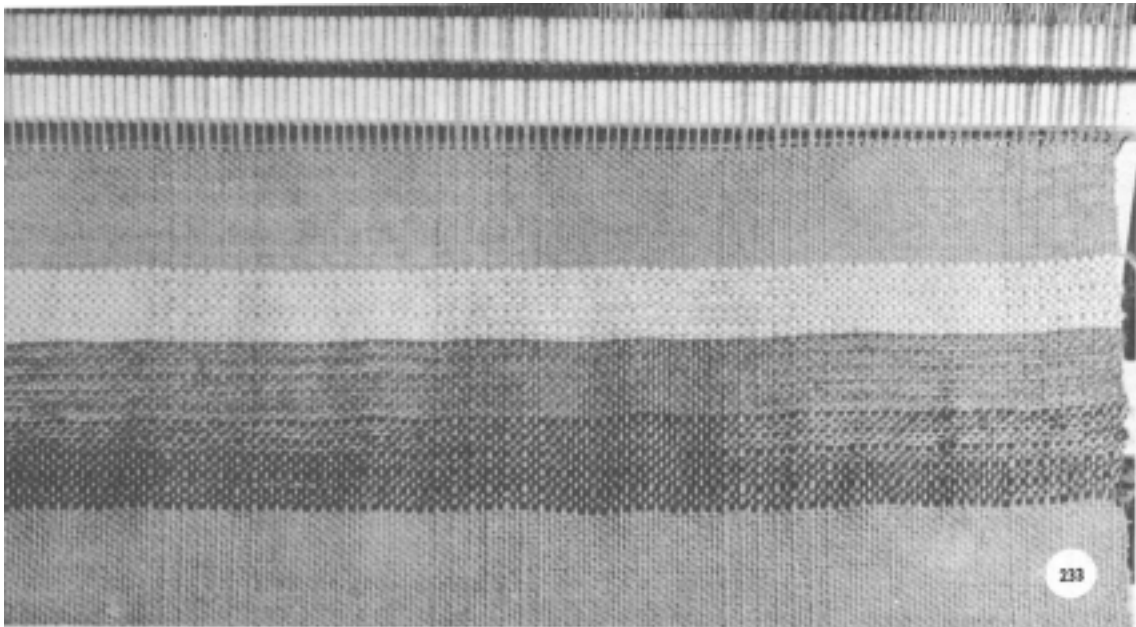
Another logical sequence to follow is the use of three colors in rotation. Going back to illustrations 73 through 84, you can see some of the variants of two or three colors possible for warps as well as wefts. The black linen pinafore shows the use of three colors with 20/2 black linen being used with a heavy silk in yellow and green.





THE use of three colors in rotation is one of the most fascinating tangents to structural design for two harness. The drawing is three times the size you will actually use for weaving, but you will have fun trying your colorings with water color pencils on an oversize sketch. The tie material in the lower photograph is a navy blue ratine warp with gray and light blue being the other two colors.



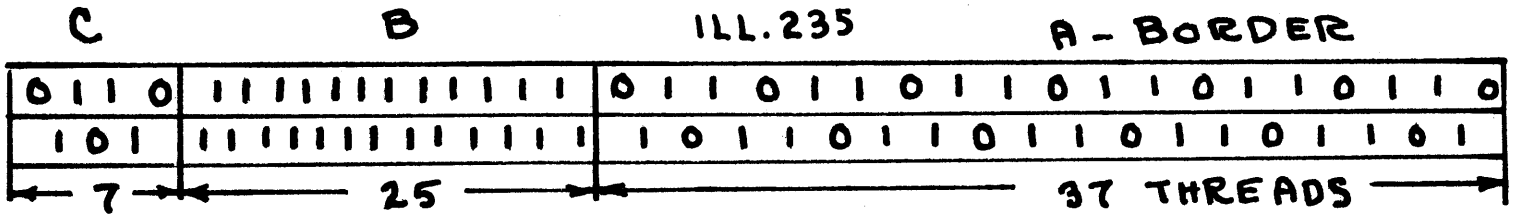


A SUBTLE warp has the use of a doubled thread on every third heddle. This tie warp is excellent for new weavers—illustration 233.

The same use of a doubled thread on the third heddle gives an excellent background for tapestry weaves.

Note pages 3, 15, and 55 show the use of 10/1 slub linen warp and weft with silly figures in laidin tapestry. The 10/1 slub linen warp is for skilled weavers, but the same idea may be used with 20/2 linen, for the new weaver.

One of the favorite designs for place mats is the use of a heavy silk or linen thread with 20/2 linen. The place mat in illustration 234 has 20/2 red linen used with Chinese wild silk. The weaver is using a 10/5 heavy white linen with a 20/2 blue linen for napkins in the same design. This place mat is excellent for beginners and for handicapped persons. It may be easily woven by the weaver having but one hand to use or by a blind weaver. The draft for both the place mats and napkins is given in illustration 235.



		20/2 linen	heavy
For place mats, warp	Border A	37	24
	B	25	13
For a napkin warp,	C	7	4
use an additional re-	B	25	3
peat of B, C for 32	C	7	4
additional threads or	B	25	3
a total of 277, set 15	C	7	4
threads to the inch	B	25	3
for 15-inch width.	A	37	13
		195	160
			35



FUNCTIONAL use of handwoven textiles is important. For Father's Day is this father and daughter set. Mr. Kendrick is the engineer on the 1946 model Lou Tate loom and designed the slender boat shuttles seen in the photographs.

The tie and skirt material has two-inch squares of goblin blue alternating with navy and red threaded with a double strand of red on every third heddle as:

1	RR	N	N	RR	N	N	RR	N	N	RR
1	1	N	RR	N	N	RR	N	N	RR	N

ONCE
14 TIMES

ONCE
26 THREADS
19 DENTS

48 DENT TO PATTERN REPEAT ILL 242

This type material may be woven in several ways. The tie and skirt in illustration 237 is woven as threaded—or woven on the diagonal. Illustration 238 also shows the same weaving.

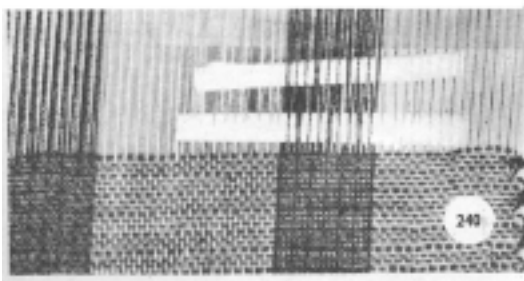
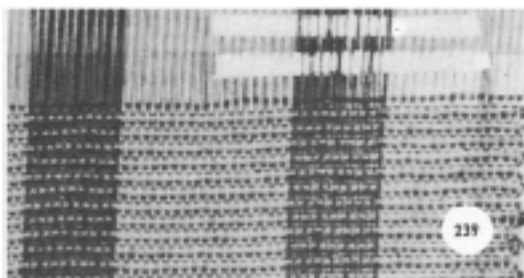
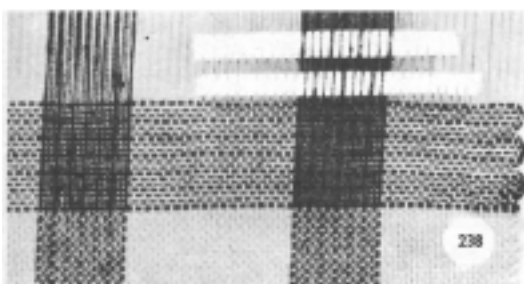
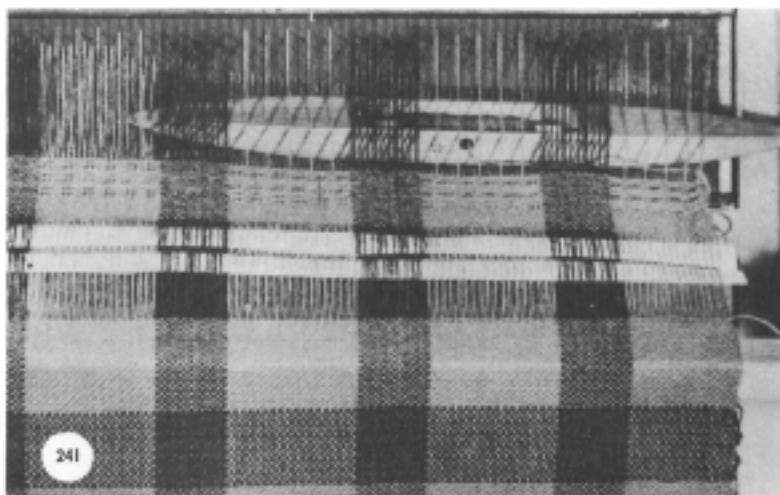


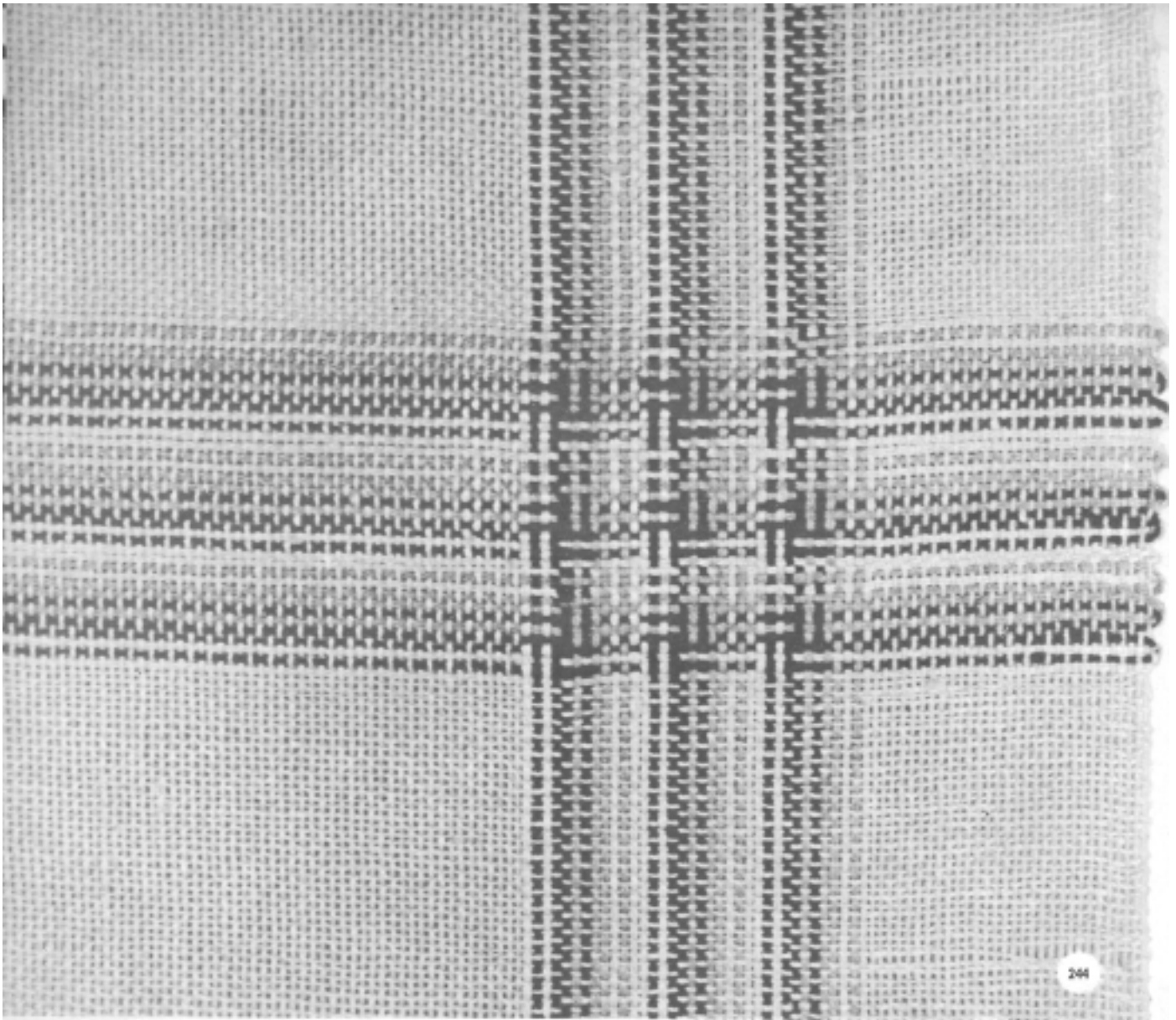
Illustration 239 shows an interesting material being woven by using the three colors in the warp in rotation.

Illustration 240 shows just the navy and red being used in rotation to produce a darker material.

A more pronounced texture may be obtained by weaving every 4th or 8th thread of a very heavy texture.

For afghans or blankets, you may want to use a lace weave. Thread every 6th thread—or every 3rd thread on the back harness through the special heddles as shown on page 29. Note, we used the structural design in red and navy as a plain weave and used only the goblin blue in lace.





4	99	93	22	22	44	44	33	33	22	22	11	11	33	33	22	22	11	11	1
4	44	44	33	33	22	22	44	44	33	33	22	22	11	11	33	33	22	22	1

66
 TIMES 1-YELLOW 30
 132 12
 DENTS 2-LPURPLE-24
 3-BLACK-24
 4-GREEN-12
 CENTER 32
234 THREADS

72 DOUBLED THREADS
 36 DENTS
 198 DENTS 15 TO INCH FOR
 13 INCH WIDTH.

15TIMES
 30DENTS
 ILL243

This shows a new weaver's application of structural design for two harness in a modern place mat having the borders across the top and two ends.

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I
N
D
E
X

BROADWAY

THE GREAT
SILVER

TOPHOUSE

MYSTIC
CABIN

6 MILES

UP
PARK

LITTLE LOOMHOUSE

KENWOOD
HILL

