

M

O

D

W

E

A

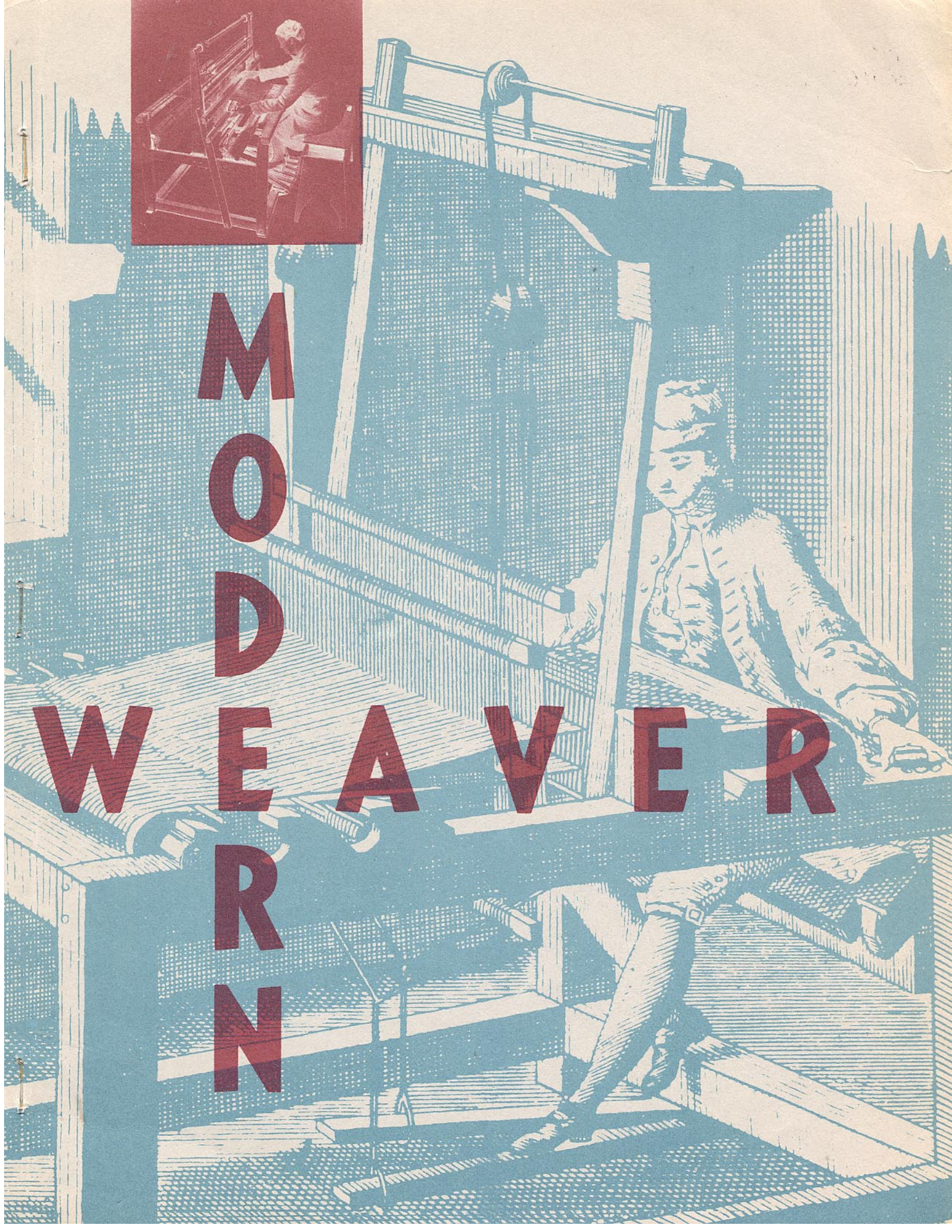
V

E

R

R

N



Did you try



It is splendid !

We are now in the full weaving season. But at this time of the year the air inside is very dry because of heating. Dry air makes the yarn, particularly wool, very brittle, which results in broken warp ends, during weaving.

If you want to have less trouble with your warp, use CLERCO. This dressing is not expensive and will save you a lot of time wasted on tying broken ends.

CLERCO is a special compound made for treating wool, when the threads break or stick together.

CLERCO does not stain the fabrics, and it is easily removed by washing in water, even without soap. It is completely invisible on wool.

CLERCO can be used also for linen, cotton, and rayon.

You can buy CLERCO at your nearest Leclerc Agent.

We still have linen and worsted bouclé yarn as advertised in the first issue of the "MODERN WEAVER". Hurry up. We have only a very limited quantity.

NILUS LECLERC Inc.

L'ISLETVILLE QUE.

MODERN WEAVER

Bulletin for Handweavers - Published by Handweavers

Publisher
"Modern Weaver"
Milus Leclerc Inc.,
L'Isletville, P.Q.

Technical Editor
S.A. Zielinski,
Z - Handicrafts,
Fulford, P.Q.

Managing Editor
Robert Leclerc.

Six issues per year

Subscription \$3.00 a year plus exchange.

Vol. 1 No. 2.

October 1954.

SELVEDGES

There are few points on which weavers are so touchy as on this particular one. And very justly so. Because fairly good selvedge maintained for yards of weaving is the best proof that the weaver has achieved a certain skill not only in throwing the shuttle, but also in warping, beaming, setting the loom, winding the quills or bobbins, beating, adjusting the tension of warp, and incidentally - in the speed of weaving as well.

It may be argued that an even beating is much more important than good selvedges, but it is a fact that the two usually go together. Uneven beating will nearly always result in wavy edges, and notches in the edges always leave marks in the beating.

A good edge is not the same as a straight one. The straightness is only one factor. There is another even more important - the count of cloth should be the same near the edge as in the middle of the fabric. If we set the warp, let's say at 30 ends per inch, and the take-up in weaving is 10%, we should have 33 ends per inch all across the fabric, but not 31 in the center and 40 at the selvedge. It is rather obvious why. If the weft is of a different colour than the warp, the cloth will have a different shade in the "bosom" than at the edges, and the texture will be different also. Not only that, but the edges will start "climbing" on the warp, and the line of weft will be curved on both ends instead of being straight. Unfortunately such phenomenon often results from the weaver's efforts to have straight edges at any cost, for instance by increasing the tension of the warp beyond reasonable limits, and without any regard to other factors.

What are these other factors?

Bad edges can be often discovered even before the weaver started his work on the loom. If the warp is planned too economically, with too few ends per inch, there is a chance that the edges are already doomed. A too open warp means plenty of take-up on the weft, which pulls

in the edges. If we do not compensate for this pulling, the warp ends will lie much closer at the edges than elsewhere. If we do compensate i.e. leave enough weft in each shed to overcome the pulling action, we must weave much slower, and the edges will be uneven. Consequently when planning the warp let us not be too stingy about the number of warp ends. A little more time spent on threading will pay dividends once the weaving started.

During warping and beaming care should be taken to have an even tension of the warp all across its width. If anything, it can be just a little tighter at the edges. When tying-in (tying the warp to the front apron) make the first and last "bight" (strand of warp) smaller and tighter. This - because there is always less take-up on the warp close to the edges, and unless we are careful the edges may become too soft.

The next step is winding of bobbins and quills. If they are much shorter than the spindle of the shuttle ($\frac{2}{3}$ of its length) they will work all right with any kind of winding, but they will hold comparatively little weft, and the re-winding will have to be done more often. But if we decide on full size bobbins, we must wind them so

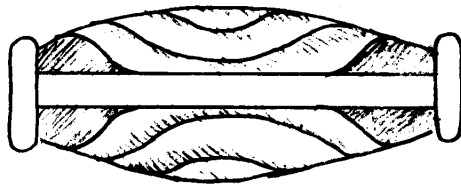


Fig.1

that there is always free space in the center (fig.1). Without this depression the weft being unwound would rub on the weft still on the bobbin. The winding starts on one side where the weft forms a cone, then it moves rapidly to the other end to make a similar cone. Afterwards the space between the two cones must

be filled gradually so that until the very last stage of winding there is a depression in the center.

The bobbin itself should be smooth and slightly thinner in the center than at the ends. When the bobbin is nearly empty the weft usually starts catching. The cones of weft at the ends should be then slid toward the center, which would be impossible if the bobbin were not smooth and slightly tapered.

When the weft catches it produces notches in the edges. When it unwinds too freely, it makes loops. Loops are just as bad as notches. Not only that they are unsightly, but if allowed to form for any length of time they will produce a flabby and uneven edge. With proper weft loops are seldom a problem, but with natural single linen or with metallics they may become one. Then some sort of brake must be used. A piece of soft yarn may be wound on the spindle, or a piece of fur glued inside the shuttle so that the weft or the bobbin will rub against it.

The tension of the warp should be as low as possible, i.e. just sufficient to get a clear shed. If we use a higher tension, the warp-ends at the edges will be pulled together too much, although the edge will be straight. In any case the tension must be always the same. Since the tension increases during weaving, the best method is to move the warp forward very often - every 2 inches or so.

The sequence of movements in throwing the shuttle, beating, and changing the shed is of smaller importance, on the condition however that this sequence is always the same. Probably the best way is to beat

once in the very moment of changing the shed. If there are small loops at the edges - beat a little earlier. If the edges are pulled in - a little later.

The coordination between the movement of the shuttle, and the beating is very important too. If we change and beat when the shuttle is still moving away from the shed the edges will be pulled in more than if we do it after the shuttle stops. The reason of this is very simple: when the shuttle stops the tension on the weft is immediately released.

In any case the weaving should be as fast as possible, because the speed warrants a certain rhythm in all movements, and identical movements must result in identical, even selvages. Getting good selvages by pulling at them with fingers, or by braking the weft with the thumb, is a hopeless task - it means slow weaving, lack of rhythm, and poor work.

We can make the following experiment to find out how good our edges really are. Make a wide warp of white rayon or other slippery yarn, and weave plain tabby with black, equally slippery weft, trying to get a 50:50 fabric. This will show not only the smallest notch or loop at the edge, but the evenness (or otherwise) of the count of cloth near the edges, and the regularity of beating as well. Care should be taken to select the proper sett of warp.

There is however one shortcoming of which many weavers accuse themselves unjustly. This is having one edge different from the other. Granted that one hand may be stronger than the other, but in most cases it is not the weaver who is guilty. The yarn used for weft has either the left-hand or the right-hand twist. Whichever is used there is always one edge where the weft has more tendency to form loops, because the very action of changing the direction of the shuttle either adds or subtracts from the twist of the yarn. It is a slight effect but it may be quite noticeable. It is not easy to get rid of it. We could examine the weft very carefully and try to wind it 1-st from a tube standing on one end, 2-nd - on the other end, and 3-rd - from a tube on a bobbin rack. In the last case the twist is unchanged when in the former it is either increased or diminished.

Perhaps the best advice for most good weavers is to go on with their weaving. When one reaches the stage where one can weave without paying the slightest attention to the edges, one will notice with surprise that there are no more problems.

S W I V E L .

The weave we are going to describe here has been used in the British Isles until the end of the 18-th century. Then it disappeared from hand weaving, although it remained in industrial weaving. In the 18-th century it was called "Spot Weave", but later on the same term has been used to designate other weaving techniques.

Swivel can be woven on any number of frames, starting with 3. Two frames are necessary to weave the ground, which in our case is always tabby. The remaining frames weave the pattern - and one frame is needed

for each block (element) of pattern. Thus 4 frames give us a possibility of weaving 2 block patterns. Fig.1 shows several examples of such patterns.

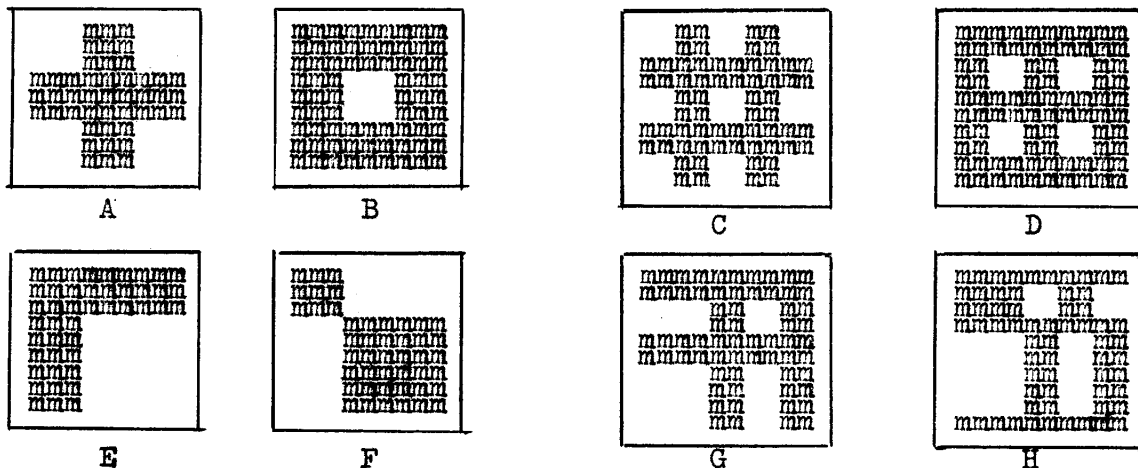


Fig.1

All these patterns can be woven on a 4 frame loom. With a larger number of frames we could weave patterns much more involved. As we already mentioned we need 2 frames for the ground. This ground either separates

elements of pattern as in fig.2 or forms a border around the pattern as in fig.1. But if we can weave without ground (as in fig.3), then we can have three blocks of pattern. We may point out here that with two blocks and ground we have 7 different patterns from one threading, and with 3 blocks - not less than sixty.

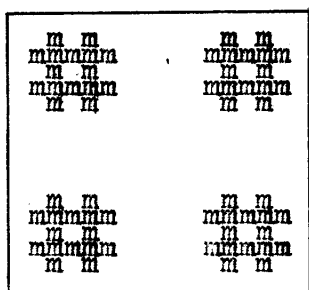


Fig.2

In fig.1 patterns A and B are made on the same threading. The same applies to the patterns C - D, E - F, and G - H.

In all cases the pattern is woven in tabby exactly as the ground. So obviously two different wefts must be used. The ground weft usually slightly finer and of a neutral colour, and the pattern weft of a bright or dark colour.

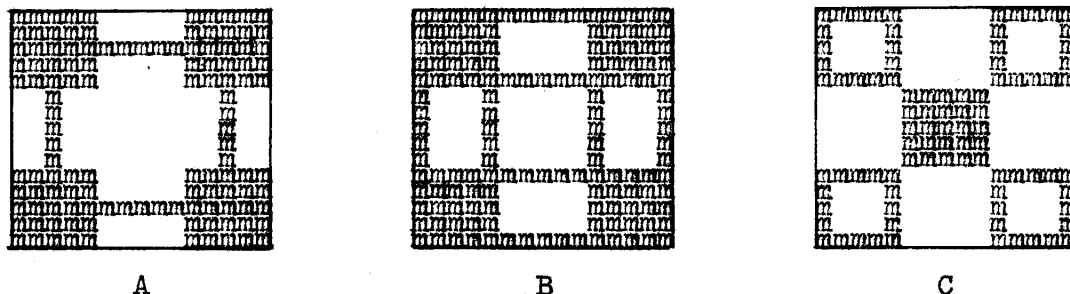
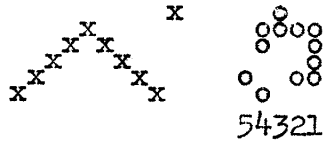


Fig.3

On the back of the fabric we shall have floats, sometimes very long. These floats do not count, and they are often cut off. We shall come back to this question later on.

On fig.4 we have a draft for the pattern C in fig.1. The draft is only an example and it would produce but a small sample. For practi-

treadles, and the complete draft will be:



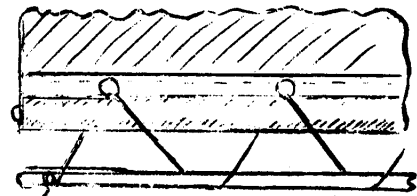
treadling: 54321234

In more elaborate weaves every block of pattern may correspond not to a single thread as in the above example, but to one unit (v) of the weave, and the resulting draft will be a shor-draft (v) only.

4. To describe the finishing operations the weaver must have more practice than theoretical knowledge. In extreme cases the finishing may destroy completely the weave, as for instance felting. Even in fulling the shrinkage may be so pronounced that the original thread count remains doubtful. However, since certain standards are usually observed in setting the warp, this original count may be deduced from the count of yarn used. Other processes such as napping, printing, embossing and so on are easy to notice and to describe.

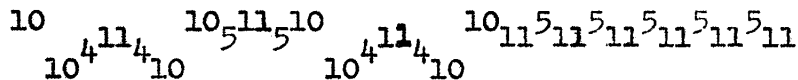
ANGORA - (fr. Angora in Asia Minor) Yarn or fabric made of wool of angora rabbits, or angora goats. Also yarn containing some angora wool, and its imitations.

APRON - A piece of strong fabric nailed to the cloth beam or to the warp beam. Its width should be the same as the length of the reed, and it should be long enough to reach close to the harness. The free end of the apron is hemmed and a steel rod inserted in the hem. Another steel rod is laced to the first one with cord. This second rod permits the weaver to attach the warp to the apron. It is desirable that the fabric of which the apron is made be as little elastic as possible. Strong linen cloth is the best material.



ARMURE - (fr. Lat. armatura or Fr. armure = weave) 1. Any of the basic weaves. 2. The set-up and threading of the loom for one of these weaves. 3. Cotton, or silk fabric with small pattern. 4. Small spot patterns on corded fabrics. 5. Woolen cloth woven in twill.

ARROW - Colonial pattern (v) of the Wheel-and-Table group. Short draft:



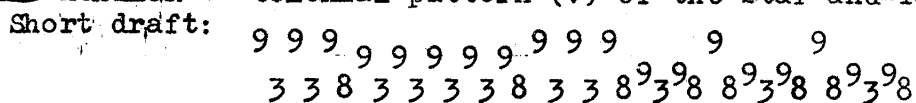
ART LINEN - Rather open tabby fabric used as ground for hand embroidery.

ASTRAKHAN - (fr. Russian) 1. Sheep skins with curly fur. 2. Imitation of astrakhan woven like velvet, but the pile made of angora goat wool.

AUBUSSON - Tapestry and rugs made in Aubusson (France) and their imitations.

AXMINSTER - Carpets with rich pile made originally in Axminster, G.B.

BACHELOR - Colonial pattern (v) of the Star-and-Table group.



appearance of the original weave. The draft is exactly the same as for Huckaback Lace (v) but two kinds of yarn are used both for warp and weft. In the threading draft "x" is very fine yarn of a neutral colour, and "■" heavy and soft yarn of a different colour. In treading the fine yarn is used on treadles 2 and 3, and the heavy one on treadles 1 and 4.

```

x x x      o o
■ ■      o o
  ■ ■      o o
x x x      4321

```

treading: 3131324242.

BASKET WEAVE (stitched) - Variation of plain basket in which the square blocks are stitched in the center.

BAST - (fr. AS boest) The inner bark of a tree. Vegetable fibers from stalks of plants.

BATISTE - (fr. old Fr. Baptiste) Very light cotton or woolen fabric made of best quality yarns, woven in tabby.

BATTEN - (fr. Fr. bâton) The frame which holds the reed. It is either hung from a rocking shaft placed across the capes (upper horizontal side beams of a loom frame), or propped on two bolts in the lower cross-beams of the loom. In either case it must be placed so as to move freely between the harness and the breast-piece. The batten has four parts: two Swords on which it swings, or rocks, the lower transversal piece fixed permanently to the swords - the Race Block, and the upper removable piece - Cape, or Handtree. The race block has a groove in its upper surface, and the handtree a similar groove in its lower surface. The reed fits into these grooves. For weaving with a hand shuttle the race block may have an extension projecting forwards, called Shuttle Race, which supports the shuttle. A flying shuttle always requires a shuttle-race, although this is set at a different angle than the one used for hand-shuttle weaving.

The should be adjustable as its height, distance from the harness and its weight. As this last adjustment may prove difficult, several battens are sometimes used with one loom.

Synonyms: beater, lathe, lay, ley, slay.

BAYADERE - (fr. Port. bailadeira) A barré fabric in striking colours originally made in India.

BEAD LAMS - In cross weaving, doups (half heddles) with beads tied on ends, used always when the heddles are mounted before the reed, as for instance in all Net Weaves (v). The perforated beads serve to reduce the friction between the warp (whip) and the moving heddles. The bead has a groove on its circumference to hold the doup.

BEAD LENO - A method of producing crossed warp ends, as in leno, gauze etc., which has beads, or short plastic tubes threaded on pairs of warp ends between the batten and the harness. The tension of each of the warp ends in the bead can be changed so that the bead together with the ends moves to the right or to the left and twists around a third warp end not threaded through the bead.

BEAM - Part of a loom. Any of the large rollers on which either the warp or the cloth is wound. See Warp Beam, Cloth Beam. Sometimes the Idler (v) is called Knee Beam.

BEAMING - Winding the warp on the warp beam. Several methods are used.

1. The warp in chain is placed on a bench in front of the loom, the batten and harness removed, the warp passed through a raddle or a spare reed attached to the slabstock, and tied to the warp beam apron.

If the warp has only one cross (lease) the lease rods remain in the warp during beaming. If there is one cross on each end of the warp the rods are removed for beaming and inserted again in the second cross for threading. When a reed is used instead of a raddle, the cross must be transferred from the front of the reed to the back before the reed can be removed. A helper is needed during beaming to hold the warp.

2. The warp is placed as before with the lease rods close to the reed, then the ends are cut, slayed and threaded (from the front to the back) before beaming. No raddle is used. The lease rods may be permanently removed after threading, or inserted into the warp in their usual position after beaming.

3. The warp is placed behind the loom, with lease rods in the usual place between the slabstock and the harness, then threaded and slayed. It is then tied to the front apron, and beamed on the cloth beam. When the end of warp is reached it is tied to the warp beam, and re-beamed.

4. The warp is placed (chained) in the back of the loom, and then wound through a raddle on the cloth beam. The lease rods are set between the breast-piece and the reed. Then the warp is slayed and threaded, tied to the warp beam and rewound.

5. The warp is made on a warping mill (horizontal model). The mill is placed in front of the loom. The warp passes through the raddle, and is laced (not tied) to the warp beam apron. The lacing permits to get an even tension all across the warp. The brake on the warping mill is set on, and then the warp is beamed only through the raddle without lease rods. When the beaming is finished the lease rods are inserted in the second cross.

6. In sectional warping the warp is not prepared beforehand, but goes straight from the bobbin rack through a tension box and a small raddle on the sectional warp beam. Each section must be beamed separately. Lease rods are optional, although desirable.

Whichever method is used the beaming should be done so that an even tension of warp is preserved all through. From this point of view the methods 2, 3, 4 are the best, and the most difficult is the sectional warping. As far as the speed of beaming is concerned the fastest is the 5th method, then the 1-st. Methods 5 and 6 do not require any help in beaming.

Synonym: Turning-on.

BEAMING DRUM - A rather obsolete piece of equipment, used in connection with a warping mill in industrial hand-weaving. It is a large wooden cylinder constructed like a barrel, and mounted horizontally. The warp taken from the warping mill is wound on the drum, and then rewound on the warp beam, which for this purpose must be removed from the loom and set on a special stand opposite the drum. Both the drum and the stand are permanently fixed to the floor.

BEARER - The same as Slabstock.

BEAT - One movement of the batten forward and back.

BEATER - 1. The same as Batten. 2. A heavy wooden fork used in Tapestry for beating down the weft.

BEATING - Action of pressing the weft (particularly its last pick) toward the cloth. This is done on a horizontal loom with a swinging

cal purposes it must be either enlarged or repeated several times.

		x x x x		x x x x		0	0	0
	x x x x		x x x x			0	0	0
x x x x				x x x x		0		
x x x x	x x x x	x x x x	x x x x	x x x x	x x x x	0		
ground	1-st bl	2-nd bl				5	4	3 2 1

Fig.4

Treading: (f - ground weft, m - pattern weft, x = times)

5f 4f - 4x; 2m 5f 4f - 4x; 1m 5f 4f - 4x; 2m 5f 4f - 4x; 1m 5f 4f - 4x; 2m 5f 4f - 4x; 5f 4f - 4x. The number indicates the treadle; the letter - the weft.

To weave the pattern D in fig.1 we change only the treading: 5f 4f - 4x; 1m 5f 4f - 4x; 3m 5f 4f - 4x; 1m 5f 4f - 4x; 3m 5f 4f - 4x; 1m 5f 4f - 4x; 5f 4f - 4x;

For the warp we can use 16/2 cotton set 32 ends per inch. The colour should be neutral (white, beige, grey). The ground weft is the same as warp. The pattern weft: 8/2 or 10/2 rayon, or 16/2 wool. When we throw the shuttle with pattern weft we should not beat before changing the shed i.e. before stepping on treadle 5. Otherwise the pattern weft may get twisted with the ground weft.

When the weaving is finished we must decide what to do about the floats on the back of the fabric. If only one side of the woven piece is going to be used (upholstery, cushion covers, fabrics with lining) the floats may remain, but even so it is better to cut them about 1/2" from the fabric. If both sides are needed, then we cut first the floats as above, then wash and iron the article, and cut once more with very sharp scissors quite close to the surface.

Fig.5 shows the draft for the pattern H in fig.1.

		x x x x		x x x x		0	0	0
	x x x x	x x x x		x x x x		0	0	0
x x x x				x x x x		0		
x x x x	x x x x	x x x x	x x x x	x x x x	x x x x	0		
						5	4	3 2 1

Fig.5

The treading: 5f 4f - 4x; 1m 5f 4f - 2x; 3m 5f 4f - 4x; 1m 5f 4f - 2x; 2m 5f 4f - 10x; 1m 5f 4f - 2x; 5f, 4f - 4x.

If we wish to enlarge the draft to get a more practical size of the woven article, we can simply multiply each part of the threading draft by the same number. For instance to weave a napkin about 12 x 12 inches in single linen No.14, we can multiply the draft in fig.5 by 6. We then get the draft in fig.6.

		x x x x		x x x x		0	0	0
	x x x x		x x x x			0	0	0
x x x x				x x x x		0		
x x x x	x x x x	x x x x	x x x x	x x x x	x x x x	0		
6x	12x	6x	6x	6x	6x	5	4	3 2 1

Fig.6

This way we shall have exactly the same pattern as in fig.1 H, but larger. Instead of this we may repeat the draft on fig.5 - six

times, both in threading and in treadling. This will give us 36 small patterns. Of course this can be done as well with the draft on fig.4.

So far we have used only one colour in the pattern. But it is quite easy to use several. For instance, pattern C in fig.1 can be woven as in fig.7, where "m" is black, and "o" - red.

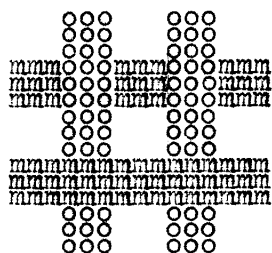


Fig.7

The threading and tie-up will be the same as in fig.4, but the treadling will be as follows:

5f 4f - 4x; 2o 5f 4f - 4x; 2o 3m 5f 4f - 4x;
 2o 5f 4f - 4x; 1m 5f 4f - 4x; 2o 5f 4f - 4x;
 5f 4f - 4x.

When we use two shuttles with pattern weft one after another, it is not necessary to beat after the first shuttle.

The number of picks of weft given in the treadlings is only approximate. It would be the proper one if the ground were woven exactly as 50:50 tabby. But in practice the presence of the second weft distorts the fabric, making it longer in the direction of warp. If we do not want to have our patterns spread in the vertical direction we must decrease the number of picks in the treadling. It is impossible to say in advance what should be the proper treadling because there are too many factors involved. When we start weaving we first try to square (by measuring) the first block of the pattern. Then we count the number of picks used and compare it with the treadling directions. Then we shall know how many picks to subtract from each part of the treadling.

It is obvious that the tie-ups which we use here are all not balanced, i.e. the number of frames tied to each treadle is not always the same. In case of a counterbalanced loom this means poor sheds, exactly as in case of Bronson, or double cloth. To correct this we must use a shed regulator, such as described in the last issue.

With the tie-ups as in fig.4, 5 and 6 we are weaving the fabric the right side up, so that the floats remain underneath. The weaving in this way is easier because the pattern is not partly covered by the floats. On the other hand it may happen that some sheds will give very little support to the shuttle, because very few warp ends are sunk. For instance treadle 2 in fig.4 sinks only 8 ends out of 56. If this is inconvenient we can reverse the tie-up as in fig.8. The treadling remains exactly the same as before. With a jack-type loom the tie-ups must be reversed: the one in fig.4 gives the floats on top, and the one in fig.8 - underneath.

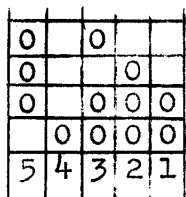


Fig.8

Swivel weave has many possibilities and can be woven in a number of ways. We shall return to this weave in one of the coming issues.

FROM THE EDITOR

We must apologize here to our Readers for the mistakes in the last issue. The pages 14 to 18 were printed from wrong stencils and this was not noticed until too late. We shall try to avoid such misunderstandings in the future.

DRAFTING - 1

A weaving draft is a distorted picture of the reality. It must be distorted since the reality has three dimensions, and the drawing only two. But it tries to show the weaver as clearly as possible what is actually happening on the loom during the weaving. It shows how the loom has been threaded, how the treadles are tied to the frames, in what order they must be used, and finally what kind of cloth is being woven. Additional verbal explanations speak about the yarns used, the number of ends (threads) in warp, the way the warp is sleyed (passed through the reed), and so on.

The drafting itself is concerned only with threading, tie-up, treadling, and with the result of these three factors i.e. with the weave itself.

A complete draft is a simplified view of the loom seen from above with the weaver (invisible) at the bottom of the picture. It has four parts:

1. The threading draft.

It shows the heddle-frames (or harness-frames, or frames, or leaves, or shafts, or healds, or /incorrectly/ "harnesses"). All of them together should be called a harness. Each frame is represented by the space between two horizontal lines (these lines are often omitted later on). The heddles are shown as crosses or black squares.

The frames are numbered from the bottom up, so that the frame nearest to the weaver is always No.1. The heddles are seldom numbered; if so it is customary to number them from the right to the left.

X	X	XX	X	X	XX	4
X		X	X		X	3
X	X	X		X	X	2
X	XX	X	X	XX	X	1

Fig.1

Thus on the draft in fig.1 the first heddle is on frame 4, the 2-nd on 3, 3-rd on 4, 4th on 1, 5th on 2 and so on. We shall thread the loom in the same order: the first warp end in a heddle on frame 4, the second on frame 3, 3rd on 4, 4th on 1 etc. As far as the threading alone is concerned the draft is not necessary - we could give simply Threading Directions, thus: 4341234121432143412341214321. But a draft shows much better the arrangement of heddles than the directions.

This is not the only way of representing the threading of a loom. Different countries in different times used other symbols than the ones shown above, but the idea is always the same.

2. The Tie-Up Draft.

The tie-up means the way in which different treadles are tied to the frames. We place this draft either to the left or to the right of the threading draft, but exactly in line with it. In the tie-up draft (fig.2) we have both horizontal and vertical lines. One space between horizontal lines means one frame, as before, One space between vertical lines means one treadle. The frames are numbered here in the same way as in the threading draft; the treadles in most cases from the

0				0	0	4
	0			0	0	3
		0	0			2
		0	0			1
6	5	4	3	2	1	

Fig.2

right. Thus if we have 4 frames and 6 treadles it gives us 24 squares in the draft. Any kind of a mark in one of the squares means that the frame which is in line with the square is tied to the treadle immediately below the square. Circles, black squares, or crosses can be used, Thus the draft on fig.2 reads: treadle No.1 is tied to frames 1 and 4; tr.2 - to 3 and 4; tr.3 - to 2 and 3; tr.4 - to 1 and 2, tr.5 - to 1 and 3; tr.6 - to 2 and 4.

There are looms in which two symbols or even three must be used to show not only to which frame a treadle is tied, but how it is tied.

3. The Treading Draft.

This shows us in what order the treadles are used. It has only vertical lines and the spaces between them correspond to the treadles in the tie-up draft. Any kind of marks can be used. The treadingling draft is always placed directly under the tie-up draft.

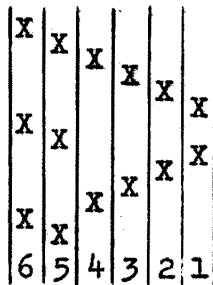


Fig.3

It is read from the top down. Thus the draft in fig.3 means that the first shot of weft is made when the treadle No.6 is depressed. The second on treadle 5. The third on treadle 4 and so on. Here again instead of a draft we could give Treadingling Directions, which in our case would be: 65432165123465. This is done very often when the weaving draft is given not complete, i.e. without its last part. Then the treadingling directions take much less space than the treadingling draft, and can serve as well. Sometimes numbers are used on the treadingling draft, instead of

plain marks, but this practice is not justified.

4. The Draw-Down. (or Block-Out, or Development)

This is a simplified picture of the woven fabric. Simplified, because it is all made on the assumption that the warp is white, the weft black, and that they both take exactly as much space, regardless

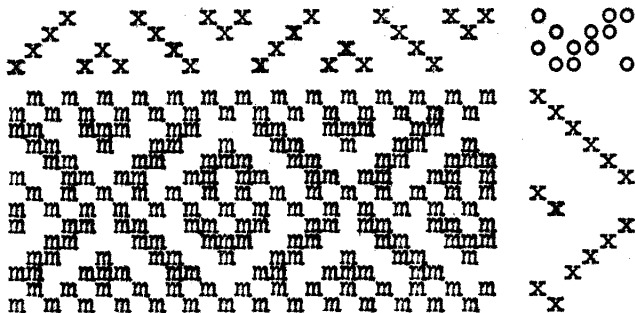


Fig.4

of their actual size (count, grist) and colour. Thus a black square means that in this particular point the weft is on top, and a white square - that here the warp covers the weft.

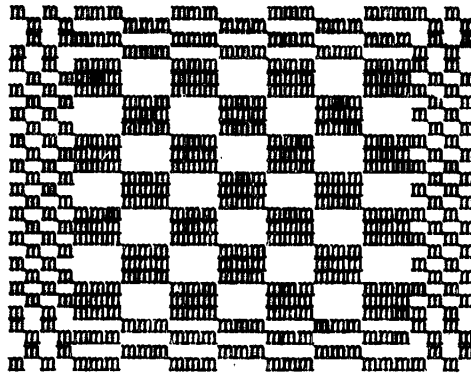
Now if we assemble all four parts we shall have a complete weaving draft. To use less space we shall eliminate the lines (fig.4).

We won't need the numbers

either, once we remember in which direction they go. We can see now that all the four elements of the draft are exactly in line: what is frame No.1 in the threading draft - is the same in the tie-up. What is treadle No.6 in the tie-up - is the same in the treadingling draft. And finally that the draw-down is in line with both the treadingling and the threading. A weaving draft in which the four parts are not aligned is practically useless.

WEAVE 3-3 BASKET.

Draft No: 4	C 1 time	Threading B 29 times	A 1 time	Tie up 6 5 4 3 2 1	
	x x		x x	0 0 0 0	
	x x		x x	0 0 0 0	
		v v v x x x n n n		0 0 0 0	
		x x x n n n v v v x x x		0 0 0 0	
					1 time
					60 times
					1 time



REED NO: 12

ENDS PER DENT: See note below

WIDTH: 30"

NUMBER OF ENDS: 533

WARP: wool

COUNT: 8/2

COLOR: x brown
n white
v beige

WEFT: wool

COUNT: 8/2

COLOR: x brown
n white
v beige

PICKS PER INCH: 20

FABRIC: shawl

Note:

Weft: follow same order as warp.

Sleying: First dent, 3 ends. Then alternately 2 and 1 end in the dent, so that the central end in each group of three will be always single in a dent.

Use one shuttle for each color. Beat lightly the 2-nd and 3-rd shot of weft in the same shed of basket. Always close the shed before beating.

Finishing: Wash and iron.

QUESTIONS AND ANSWERS

This is a free service offered to our subscribers. We answer only questions of general interest, and which do not require long replies. Write to: Modern Weaver, c/o Nilus Leclerc Inc., L'Isletville, Qué.

Question No. 6

The snap locks at the end of the ties in my tie-up, catches around the screw-eyes in the treadles.

Ans: Attach the cord to the treadle with a slip knot, and to the lamm with the snap locked.

Question No. 7

When I have two frames tied to one treadle (particularly 1 and 4) the lower part of the shed is split.

Ans: This is because you have both ties of the same length. Shorten the tie between the treadle and the frame No. 4.

Question No. 8.

We had very bad weather this summer. The loom has been stored in the basement and the reed got rusted. How to clean it?

Ans: If there is very little rust, you can simply clean the reed by wiping the blades with a piece of cotton dipped in gasolene. If the metal is already corroded, use fine wire brush, or steel wool. Rub the flat sides of the blades not only the front and back.

Question No. 9.

I have a table-loom (Leclerc) and the levers do not work very well. When the frame No. 4 is raised, and I press the lever No. 2, nothing happens. The No. 4 remains raised and No. 2 does not want to stay up. This loom is already working for about eight years, and it always gave satisfaction so far. Is something worn out? What part should be changed?

Ans: Probably the catch on No. 2 is worn out. This catch and all levers should be changed. If these parts are not too badly damaged, you can try to file the catch on No. 2 and adjust it so that all frames are released in the same position. The catches should be greased from time to time, to prevent the wear.

New Weaving Book called "World Weaving" is in preparation. The editor would like to have some swatches about 10" x 10" to be photographed in color and returned to all people who are interested to have their weaving appear in the book, contact the Editor, Mrs. Joseph Greer, 1640 Interlaken Pl. Seattle 2, Washington.

" EXHIBITION "

THE THIRD YEARLY EXHIBITION OF CANADIAN WEAVING.

organised by: LONDON DISTRICT WEAVERS, open from February 4th, to March 6th 1955, in the Public Library, Queen Ave., London, Ontario.

Open to all Canadian Weavers for articles woven in 1954.

There are no entry fees, but the contestants pay the shipping charges.

The entries must be in London, Ontario, on or before January 19th. They should be addressed to:

London District Weavers,
c/o London Public Library and Art Museum,
Queen's Ave.,
London, Ontario.

Prizes:

7	\$ 25.00
1	20.00
7	15.00
5	10.00

The prizes are for the best pieces of weaving in different categories: tapestry, rugs, upholstery, yardage, table linen and so on.

The entries will be judged on the basis of their originality, color, design, and workmanship.

The entry forms will be sent upon request by the secretary of the Exhibition:

Mrs. John Jeffery,
43 Grand Ave.,
London, Ontario.

CALCULATING TABLE FOR REEDS

To be used to find quantity of threads needed for warping, according to the width of the cloth. This calculation is made with 2 threads per inch; if you want single thread, divide by two.

No. of reeds
by dents to
the inch:

WIDTH

Nos. of reeds
by dents to
the inch:

	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	38"	40"	42"	44"	46"	48"
8	160	192	224	256	288	320	352	384	416	448	480	512	544	576	608	640	672	720	8	
9	180	216	252	288	324	360	396	432	468	504	540	576	612	648	684	720	756	810	9	
10	200	240	280	320	360	400	440	480	520	560	600	640	680	720	760	800	840	900	10	
11	220	264	308	352	396	440	484	528	572	616	660	704	748	792	836	880	904	950	11	
12	240	288	336	384	432	480	528	576	624	672	720	768	816	864	912	960	1008	1080	12	
13	260	312	364	416	468	520	572	624	676	728	780	832	884	936	988	1040	1092	1170	13	
14	280	336	392	448	504	560	616	672	728	784	840	896	952	1008	1064	1120	1176	1260	14	
15	300	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1350	15	
16	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1440	16	
17	340	408	476	544	612	680	748	816	884	952	1020	1088	1156	1224	1292	1360	1428	1530	17	
18	360	432	504	576	648	720	792	864	936	1008	1080	1152	1224	1296	1368	1440	1512	1620	18	
19	380	456	532	608	684	760	836	912	988	1064	1140	1216	1292	1368	1444	1520	1596	1710	19	
20	400	480	560	640	720	800	880	960	1040	1120	1200	1280	1360	1440	1520	1600	1680	1800	20	

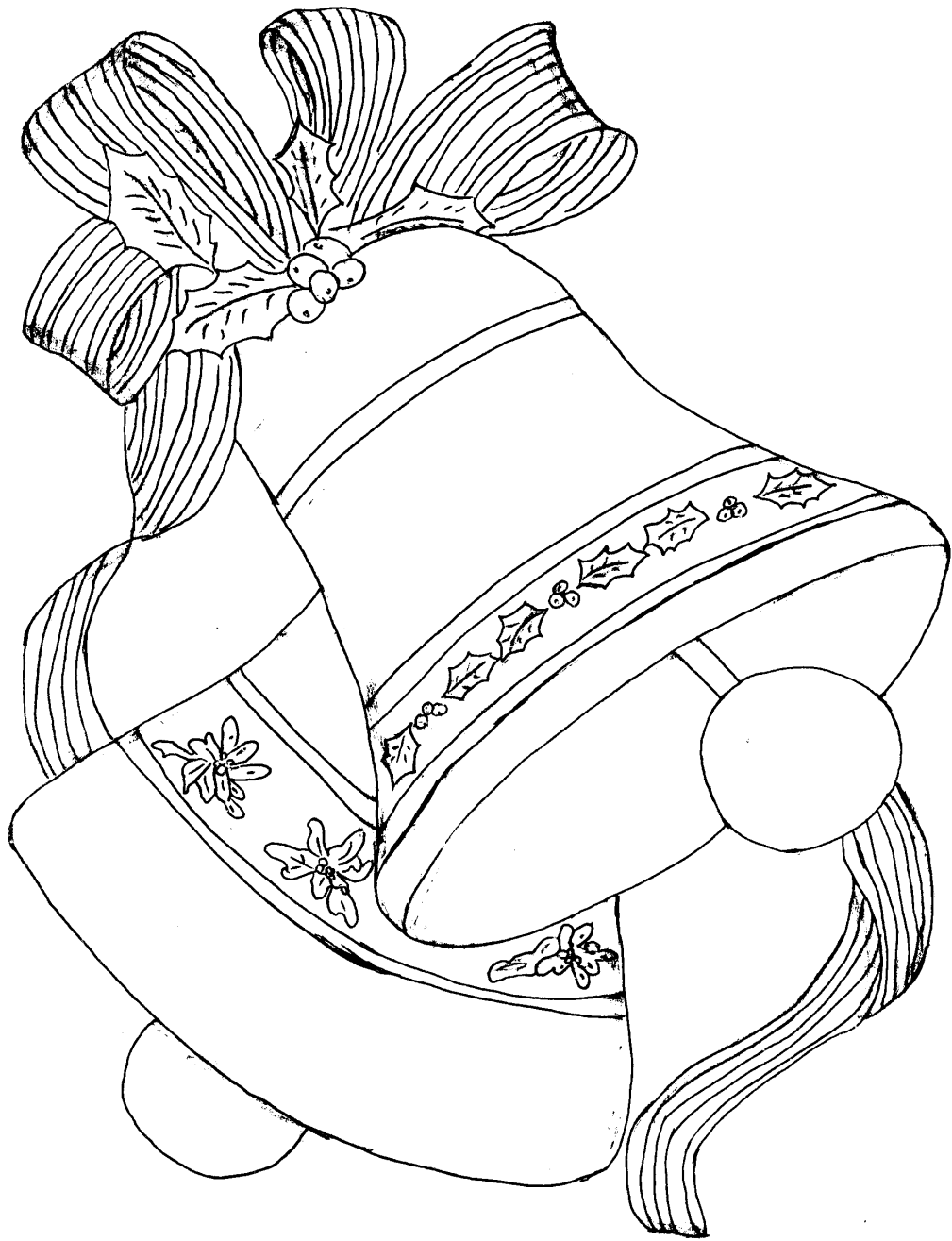
DON'T FORGET THE SHRINKING

COUNT OF THE THREADS THE MOST COMMONLY USED IN WEAVING

The calculation of the No. 1 gives you the rule to find the quantity of yards for all other sizes. You have only to multiply the No. by the quantity of yards of No. 1 and divide by the quantity of plies; example: for cotton No. 10/3, $840 \times 10 = 8400 \div 3 = 2800$ yards.

COTTON - RAYON		WOOL		FLAX - HEMP - JUTE RAMIE	
Size	Yards	Size	Yards	Size	Yards
1	840	1	560	1	300
10	8400	10	5600	10	3000
10/2	4200	10/2	2800	10/2	1500
8/2	3360	6/1	3360	15/2	2250
16/2	6720	9/1	5040	18/2	2700
20/2	8400	12/2	3360	20/2	3000
10/3	2800	15/2	4200	40/2	6000
20/3	5600	16/2	4480	40/3	4000
24/3	6720	32/2	8960	60/3	6000
30/3	8400	12/3	2240	12	3600
50/3	14000	10/4	1400	14	4200
4/4	840			16	4800
8/4	1680			18	5400
12/4	2520			20	6000
16/4	3280			30	9000
16/6	2240				
20/6	2800				
4/12	280				

NOTE: If you use a French book, reverse the calculation numbers; example: 16/2 cotton will be given as 2/16 in French and 32/2 wool will be given as 2/32.



Happy Year

INDIVIDUAL WEAVING LESSONS

at

Z-HANDICRAFTS
Fulford, Quebec, Canada.

A unique way of learning weaving

You can spend your vacations in the country near a summer resort and study weaving at the same time. You can bring your family (except children). You can buy a loom (duty free), and you can take it with you or have it sent later on.

Teaching adapted to the requirements of every weaver.

LESSONS: 2 hrs. of theory, 6 hrs of weaving a day, 5½ days a week.

Beginners: plain weaving, basket, twills, overshot, free weaves, draft reading, developping, squaring.

Advanced: crackle, summer-and-winter, bound weaves; spot weaves: lace bronson, double, turned, paper spots; huckaback and its variations lace, waffle, turned huck; M's-and-O's, honeycomb, corded fabrics; theory of overshot, short drafts, transcribing.

Seniors: Turned twills: dimity, dornick, damask; satins, fancy twills, swivel weave, clasped wefts; double weaves: double cloth, patterns in d.w., quilt weaves, pile weaves: weft pile, (corduroy, chenille, tufted weave), warp pile (velvet), patterns in chenille rugs; cross weaves: gauze, leno, pickets, free weaves, pattern harness; draw loom; analysis of fabrics, composition of patterns.

TERMS: Room and board (2 persons to a room, 3 meals a day), instruction and weaving, \$35.00, per week per person. No extra charges for yarn, unless the weaver wishes to keep the articles woven during the training.

LOCATION: Eastern Townships, Quebec. Picturesque tourist district of wide renown. Hilly country, pleasant surroundings, good roads. The studio and living quarters are located in a large farm house, 1 mile from the station of Fulford (CPR line: Montreal, Sherbrooke) 65 miles from Montreal, 35 from Newport, Vt., 2½ from Brome Lake (boats to rent, fishing), ¾ of a mile from the village, ¼ of a mile from the river.

RESERVATIONS: Only a very limited number of weavers may be accomodated. Make your reservations (from Sunday to Sunday) early. Write or phone.

Z-HANDICRAFTS, FULFORD, QUE. CANADA.

Tel: Waterloo 192-j-1.