

The background of the cover is a collage of various weaving charts and patterns. These include grid-based diagrams with different symbols and colors, some with handwritten notes in Finnish. One note at the top left reads "33 5K-8 6T-8". Another at the top center says "laimi- ja kudel-voitaitta pomsia yhdistetys." There are also some technical notes like "Turned from A to B", "Thread from B to C", etc. The charts are arranged in a layered, overlapping fashion, creating a rich, textured background for the title.

MASTER WEAVER

**BI-MONTHLY BULLETIN
FOR HANDWEAVERS**



**Z-HANDICRAFTS
FULFORD, QUE., CANADA**

MASTER WEAVER

BI - MONTHLY BULLETIN FOR HANDWEAVERS

Z - HANDICRAFTS - FULFORD - P. Q. - CANADA

September - October, 1965

Vol. XXVIII No. 83

TEXTILE SCULPTURE

Please forgive the levity in our treatment of this subject. If you bear with us, you will realize that the levity is only superficial.

We take an old picture frame, rather large one, or if none is available we make one by nailing together four pieces of lattice, or any wood about ½" by 1½". It must be strong but it does not need to be exactly rectangular. Any shape will do.

Then we wind around the longer side of the frame anything at all which could be used as a warp: copper wire, oat binder, string, silk ribbon - one of them or better all of them in the same project. Let's not worry about the "sett of warp". Again anything will do from two to ten ends per inch.

At this stage we can spray the whole thing, frame and warp, with fast drying lacquer. One can get aerosol bombs with a wide selection of colours in any auto-parts shop.

Then we go for a walk and collect all sorts of things: can openers, weeds (preferably dry), pine cones, old Christmas tree ornaments, broken China, dead leaves, small pieces of drift wood, and sea shells. No, we cannot include very perishable objects, neither very round ones, unless we are equipped to drill holes in them.

All those are "accents". The real weaving must be done with some sort of yarn, the way tapestry is woven. The "yarn" again can be anything if it is fairly narrow and long enough. It can be the yarn proper, but anything which looks like yarn will answer.

We open sheds with a picking stick, but we do not need to worry about getting real tabby or twill or anything. We just pick them at random. Parallel to the "ground" woven in more or less real

yarn we insert the accents: here a piece of twisted aluminum foil, there an acorn with the twig attached. Anything.

When we have finished that is filled the available space with colour and texture (particularly texture!), we have created a "Textile Sculpture". We may still improve it by spraying with clear varnish. At least it will make it waterproof.

All this has little to do with weaving, but since the phenomenon exists, and is being sometimes called "creative weaving" we must face it.

Granted that the freedom of expression is everybody's right. Granted that crafts are a field which offers many techniques of self-expression for both: artists and non-artists. Still...

Real freedom is a result of self-discipline. Nobody can be or feel free unless he mastered techniques of expressing himself. Speech is one and the most important example. To speak or to write one has to submit to thousands of often irrational rules. If he does not, he is classified sometimes as a surrealist, but more often as an idiot.

In arts and crafts which are means of non-intellectual, call it "emotional" expression, the technique is as important as in speech, mathematics, or electronics. If one refuses to learn the technique, and yet insists on playing with the medium, he is an interesting psychiatric case, if he is interesting at all.

We are only too familiar with pottery which looks like a product of an earthquake. We have metal sculpture done by welding junk. And we have also the textile sculpture.

But the uninhibited sculpture in stoneware or metal has at least the merit of being permanent. Good or bad it will last. The textile sculpture won't, unless we are very careful how we do it.

Here of course the question arises: why should it last? We have other forms of art which do not: fire-works, sand painting, conversation (it used to be an art), flower arrangement, love-making in certain civilisations, and even fighting.

Works of art do not need to last provided that they made an impression on a large audience at the time of creation, or because they have a deep meaning for the creators alone. They may also have a therapeutic value, as in depth psychology.

Now precisely what is the object of Textile Sculpture?

If it is Jungian, then it should be kept a secret between the patient and the doctor; it is of little value for anybody else. If it is of universal significance, it should have a large audience. But how can we get such an audience except by making the work more or less permanent? And in most cases it is not permanent.

The only alternative remains: the work is of deep emotional significance to the maker, but not on the unconscious level as in psycho-therapy. This is the only legitimate case. The creator just has to make this particularly risky experiment. He makes it for himself alone, and destroys it, if it does not solve his problem.

But then what is the difference between this type of textile sculpture and the normal experimenting in colour and texture which every weaver is or should be doing all the time? None, except that the author of the uninhibited sculpture is not a weaver, that he lacks the knowledge, the training, the discipline of weaving.

How much better it would be if the textile sculpture were made by qualified craftsmen! Unfortunately the "qualified craftsmen" are often frozen in tradition to the point that they do not dare to express themselves, and vice versa the "creative weavers" are only too willing, but they do not know how.

The impact of textile sculpture is good for the established authorities in handweaving because it upsets them emotionally; it makes them feel. On the other hand the impact of textile technology is good for the uninhibited "artists", because it makes them think. And both sides need badly these compensations for their shortcomings.

Supposing then that a real weaver is sick and tired of tradition, old and new, and wants to go on a binge. How should he go about it?

First of all he should make sure that he really wants it, and that at least vaguely he knows what he is after. There is nothing worse than "sophisticated" creativeness, sheer brain work performed without any emotional need, except pride.

The first time one attempts textile sculpture, the project should be made in two stages. We start with a sketch which may be just as described on the first page of this article, or perhaps made only on paper. It all depends on the personality of the author.

The sketch should be left alone for a while and then examined critically; changed, corrected, or destroyed. If it passed inspection with or without correction, the problem is to make the real thing, by eliminating technically weak points, and replacing wrong materials. This may take some time and study because the final version should look exactly like the original, yet it must be reasonably permanent. It should not decay, should not desintegrate when handled, and should resist legitimate cleaning.

Perishable materials must be either replaced or chemically treated. For instance no matter how tempting is boiled macaroni, it simply won't do as yarn. It could be "fixed" (see articles about "Unusual Yarns"), or replaced with plastic tubing. If the structure of the project is such that it involves large open areas, we must use proper techniques to make them strong (leno, net weaves). If some of the materials are too brittle, they can be made less so by chemical treatment before weaving (glycerine for dried plants). If we know in advance that there are colours which will fade, we can either fix them, or bleach and dye to the original shade.

The above examples are only to show some of the problems. There may be much more to it, and only a very experienced craftsman can attempt textile sculpture with any hope of success.

Incidentally most projects of this kind cannot be washed or dry-cleaned, but they must be at the very least dusted occasionally, and this is why we recommend spraying of the finished article with clear lacquer, or varnish, although this may darken the colours. A good compromise is to spray heavily the back with lacquer, and the front with a fixative (used in painting) which does not affect the colour. Unfortunately it may produce a frosty effect if there is any nap or pile. This can be gently removed with a soft brush before the fixative dries.

High quality textile sculpture may be much more than just a "conversation piece" hung above the open fire-place. When properly designed and executed it can be used for screens and partitions.

There is a special case of textile sculpture where only real textiles and real ceramics are used. We shall discuss this subject in the nearest future.

S H O R T C U T SD O U B L E B E A T I N G

We have said it over and over again that under normal circumstances we beat only once at the very moment of changing the shed, that is when the first shed is just closed, and the next not yet opened.

We also learned that the beating may come a little earlier, if we want to pull in the edges, or a little later if we want to spread them out.

But what about beating twice?

If it is a routine it is a bad one. Sheer waste of time. If it is a necessity it proves that the beater is too light for the job, and that it should be replaced or weighted.

Sometimes beginners find out that their beating or rather the spacing of the weft is more uniform when they beat twice. This may be true because the sum of two uneven beats will average better than single beats. All it proves is that the weaver did not learn how to keep a steady rhythm of weaving.

There are however cases when double beating is legitimate. We have such a case when the warp is rather sticky, for instance soft wool very closely set. Unless the beat comes after the shed is changed (this as we know has a tendency to spread the edges), the shed will not be quite clear. The warp ends will stick together particularly at the edges where they are closer than anywhere else. If we throw the shuttle at this moment, the weft will make loops around the stuck ends. Thus the edges will be soft and uneven. Here a second light beat will help, but it has nothing to do with packing the weft. It simply clears the shed.

We find another similar situation whenever some of the warp ends are tight, when the rest is loose. This may be due to very poorly made warp, but it is a rule with such weaves as Doup Leno, Warp Pile Weaves, and with all weaves except Embroidery woven with a Pattern Harness, or a Draw Loom. In all these cases it may happen that the shed is not clear after the first beat, and a second one will help.

LENO IN DOUBLE WEAVE

ON FOUR SHAFTS

Fabrics made entirely in Cross Weaves, particularly Gauze, or Leno, have always a tendency to pull in the edges. In case of Net-Weaves this pulling-in may reach such proportions that the fabric practically collapses when taken off the loom. The usual remedy is a very stiff and heavy weft; in case of certain Net Weaves the weft, or at least occasional shots must be made of rigid weft (wire, bamboo, wood strips).

It would help a lot if we could stitch the Leno fabric to a backing or ground made of a solid, stiff tabby which would prevent the pulling-in of the top layer. This can be done by adding three or four shafts: two for the tabby ground and one or two for stitching. But more spectacular results can be achieved with only four shafts, and the Cross Comb (MW 38/10), or even plain picking stick.

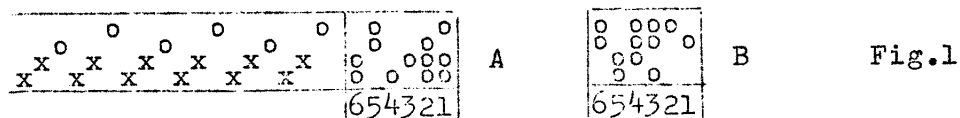
We shall have two layers of completely different fabrics: the top layer with a soft warp, and such weft as may be necessary for cross weaving; and the back layer of stiff warp and equally stiff weft.

It looks at first that we shall have to have two warps on two warp beams. This is true if we want a complete freedom of designing the top layer, because the take-up in the ground is always the same, when the top may have any take-up at all depending on how often we cross the warp ends, and in how large groups.

On the other hand a lot of projects can be made on a single warp, as long as we are not too extravagant in designing. Let us start then with a simple project where the crossing will be done at regular intervals, just often enough to compensate for the take-up in the tabby ground.

We shall use mercerized cotton 8/2 for the top layer and 25/2 linen for the backing; single linen #12 or 14 will do as well. In the threading linen is marked "x", and cotton "o". The sett of linen warp should be 28 to 30 per inch, and the sett of cotton just one half of the linen, that is 14 or 15. For a project 14" wide we shall need 588 or 630 ends in all.

Tie-up "A" is for sinking shed, and "B" for rising shed. In most cases this distinction is not important, but here it is vital.



at least a yard or so longer than required for the project. It may be also necessary to cut off a sample of the woven fabric at the start to see what it looks like when taken off the loom.

The draft in fig.1 is not the only one we can use. The backing may be much finer or much coarser than the face, and the drafts must be adjusted accordingly. Examples are shown in fig.2.

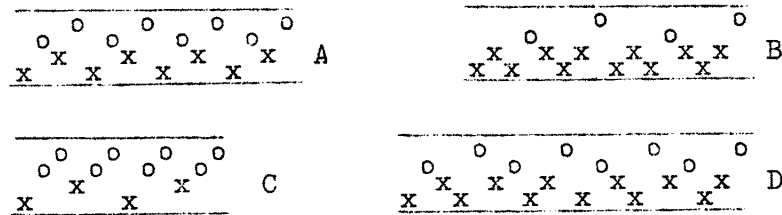


Fig.2

The ratio between the sett of the face and of the back was 1:2 in fig.1. It is 1:1 in fig.2A; 1:3 in fig.2B; 2:1 in fig.2C, and 2:3 in fig.2D. If both layers are woven in tabby or partly in tabby, then the ratios of the count of warp yarn should be: 1:4; 1:1; 1:9; 4:1, and 4:9 (or 1:2) respectively. Very often however the top layer is woven only in cross weave, and then it does not matter very much what its sett is. However the bottom layer must have the right sett for firm tabby. The tie-up is always the same for all drafts.

There is a very tempting possibility of stitching the two layers when the cross shed is open. We start with the shed #6, pick up the cross shed with or without a cross comb; then open the shed #3, or #4, and with a second picking stick stitch the upper layer of the ground to the lower layer of the top. Remove the first picking stick, turn the second one on edge, and throw the shuttle. Then keep on weaving the ground for a while, and stitch both layers as before with treadle #5. This is an idea worth trying.

On a six-shaft loom we could have doup leno stitched to a tabby ground. Plain gauze or leno can be woven on 3 shafts if no standards are used. Two more shafts for the tabby ground and one more for the stitching. Six in all. Of course the general effect will be rather different because of a much finer texture, but the weaving will be much faster, since no picking up is involved. We shall come back to this subject.

CATALOGNE

OR PLAIN RAG RUGS.

Rag rugs, exactly as quilted bedspreads originated in times when woven fabrics were so precious that they had to be used to the last shred. Both techniques were entirely justified a century or two ago. They survived until now only in extremely poor countries, or through sheer habit if not inertia.

Rag rugs are economically obsolete, esthetically questionable, and technically of a very poor quality. But they are still being woven in huge quantities in certain countries.

The economics are wrong, because a normal household does not provide enough left-overs in fabrics to produce a significant yardage of rag rugs. Thus the fabrics must be bought and cut in strips sometimes with an expensive cutter, when for the same price real yarn could be used, and not only look better but also weave easier.

The texture is not satisfactory, because of the fraying edges of the strips, which show here and there as an unwanted and accidental pile or nap.

But the worst about rag rugs is that they are not practical, at least not when used as floor rugs, or runners - and they are hardly good enough for anything else.

We could improve the appearance (but not the wearing quality) by replacing cut strips with ribbons. But then the cost would be absolutely prohibitive. Heavy rug filler would be much cheaper. Actually the whole technique should be abandoned long ago. Its proper place is in a museum.

Still, if for sentimental reasons some weavers persist in producing this type of fabrics, they should at least improve the technique to make the rugs more durable.

What is wrong with the technique is this: the very heavy and strong weft, which surely could stand a lot of wear is "protected" by a very fine and weak warp which is exposed. It should be just the other way around. A typical rag rug is essentially a warp-face fabric, even if the weft because of its weight shows more than the warp. Quite often 16/2 cotton is used for warp, and set quite close, so that the

whole take-up is on the warp, when the weft stays fairly straight. The result is that, when used as a floor rug, the fabric desintegrates in no time, because a 16/2 cotton, or for that matter any yarn of this weight cannot resist the friction produced by shoe soles, particularly of hard rubber. Perhaps it was different when people still used mocassins, or took off their shoes before coming into the house.

If we have to have rag rugs they should be woven on the same principle as tapestry, or bound-woven fabrics. That is the warp should be strong and heavy and very open: carpet warp of the highest quality, or very heavy linen (8/3, 1½, etc.) set not closer than 8 ends per inch.

The weft should have a twist. It will prevent to a certain extent the accidental nap, or at least it will make it more uniform. The twist can be done by hand: attach a length of the cut strip to a door handle, stretch it and twist. This should not be overdone, or the weft will become kinky and difficult to handle.

In weaving we use either flat shuttles, or large rug shuttles with the weft placed loosely inside in shape of figure eight.

Plenty of weft must be left in each shed, and the beating should be hard but there is no necessity to cover the warp completely with weft, as in real bound weaving or tapestry.

We have now a fabric with a strong warp protected by a still heavier and stronger weft. Such a rug will last much longer than the standard "catalogne" for practically no extra work or expense. It will also look better. Patterns other than stripes in weft can be woven in Locked Wefts.

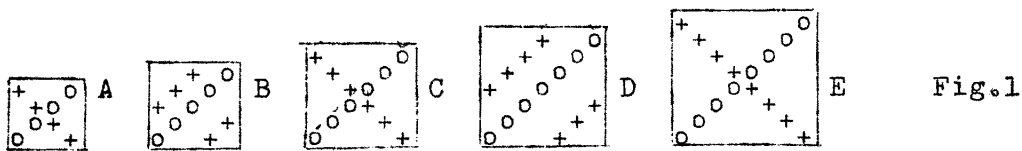
Only... once we go that far, why not make another step, and replace the cut strips with real yarn? Heavy cotton rug fillers are not expensive. They are continuous and can be wound on bobbins. The weaving will be easier, the choice of colours more dependable, and the general effect much better.

Much as we admire the old techniques, particularly of the 17-th and 18-th century, we have still to find a weaver of this period who would even mention rag-rugs as a legitimate weaving technique.

D R A W • L O O M 14

Now we come back to where we started (MW 73/6): Damasks and Dornicks on a Draw-Loom. We must finish somewhere. One could probably fill a whole library with all possible applications of our loom. There are double and multiple weaves, there are tissue weaves, and so on. Just a glance on Murphy's or Luther Hooper's books will tell the whole story, but not a book in the world will give all the answers.

With 4 shafts in the ground harness we can weave 1:3 dornicks (turned biased twills), or 1:3 damasks (turned broken twills). But we cannot weave real damask based on satin with only 4 shafts. For that matter we cannot weave a properly "cut" damask even if we had 5 shafts in the ground harness. This is because we cannot make a proper tie-up for damask with an odd number of shafts. Thus the lowest number of ground shafts for real damask is 8 (no satin on 6 shafts). In fig.1 we have different tie-ups for 4, 5, 6, 7, and 8 shafts.



In "A" we have our tie-up for 1:3 twill which we are going to use; it will produce damask based on satinet (not satin) or dornick. Tie-up "B" will give real damask but the blocks of pattern will have their outlines slightly blurred; the dornick will be still worse, because of the diagonals in 1:4 and 4:1 twills going in the same direction. Tie-up "C" will give perfect dornick, but no real damask. Tie-up "D" is in the same category as "B". Finally tie-up "E" gives both: real damask based on 1:7 satin, and perfect dornick.

Should one of our readers be tempted to build a draw-loom with more than 4 shafts in the ground harness, he should not stop at 5 or 6, but go all the way to 8. If he is not convinced, please make draw-downs with all the above tie-ups and see what happens. Should anybody solve the problem of designing a perfect tie-up for five ground shafts, we offer him a perpetual subscription to the "Master Weaver" plus all back issues.

There are no problems in weaving either damask or dornick on four ground shafts. The draw-downs in fig.2 show both.

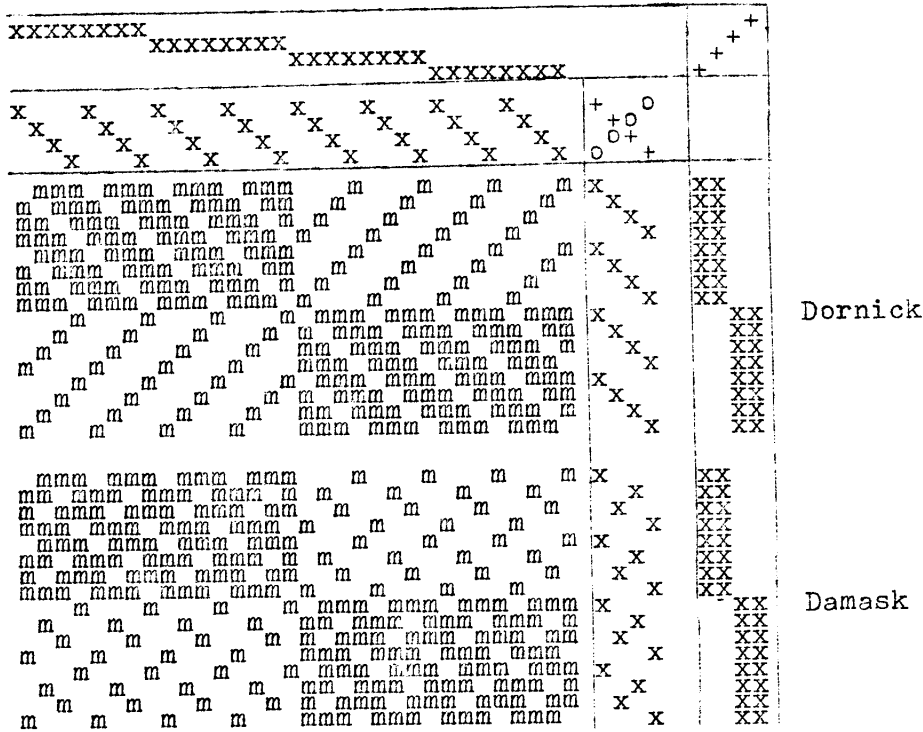


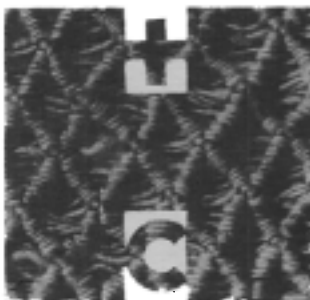
Fig.2

As long as we keep the above treadlings, we can change the pattern at will, provided that the change comes always at the end of one repeat of treadling, that is 4321 for dornick, or 4231 for damask.

Any serious weaver who went with us so far realizes that a standard loom converted into a draw-loom is not the final answer to his problems. It may do for study, experiments, demonstrations, or teaching, but not for real production. The real draw-loom must be much deeper, and therefore stronger; in other words it must be built. With our present knowledge there is nothing difficult about designing a draw-loom, but one must have space, plenty of it, and compromises simply won't do. The distance between the ground and the pattern harness should be increased to 24" in case one works with linen. This incidentally means longer pattern heddles, and a higher loom-frame. There are no blue-prints for building such a loom. We must rely on our own common sense.

The Magazine with something
 in every issue for all Hand-
 weavers, beginning or advanced.
 Published 4 times a year
 New ideas in each issue for
 you, Home Weaver, Professional,
 Teacher, Textile Designer, Occu-
 pational Therapist, Recreation
 Director, Librarian -- whatever
 your interest in the craft.

Handweaver & Craftsman



Contains articles covering

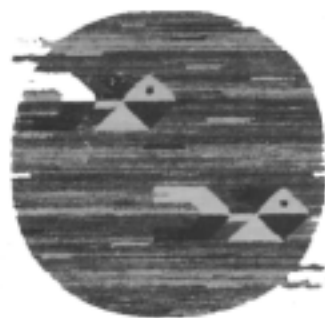
- Design and Techniques
- Drafts and Directions
- Yarns and Fibers
- Tools and Equipment
- Suggestions for Beginners
- Successful Teaching Methods
- Occupational Therapy Projects
- Effective Marketing Procedures
- Activities of Weavers' Guilds
- Exhibitions and Competitions
- Courses in Weaving

Handweaver & Craftsman



Handweaver & Craftsman

Handweaver & Craftsman



Build a Valuable Reference Library
 with previous issues.

Send for Brochure listing articles
 in available previous issues on --

- Weaves and Techniques
- Types of Looms
- Loom Preparation
- Design
- Therapy
- Recreation

Any 4 previous issues \$3.50

Handweaver & Craftsman



Subscription Rates

1 year \$5.00 2 years \$9.00

3 years \$12.00

Single copies \$1.35

Special Group Rates

Pan-American and Foreign Rates

\$1.00 a year extra

Please send checks or

Money Orders to

Handweaver & Craftsman

246 FIFTH AVENUE, NEW YORK 1