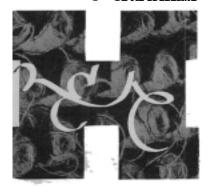
# MASTER WEAVER

BI-MONTHLY BULLETIN FOR HANDWEAVERS

Z-HANDICRAFTS FULFORD, QUE., CANADA

# Handweaver & Craftsman



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### MASTER WEAVER

BI-MONTHLY BULLETIN FOR HANDWEAVERS

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

January, February,

No. 43 1959

### SUBJECTIVE COLOURS.

We wrote quite a lot about colour, and we do not intend to go into still more complicated theories. What we have to say now is not very serious, but it may be practical.

The question is: do the colours exist "as a thing in itself"? Or in other words: can one colour, not compared with another one, or used on a background of another colour, be good or bad?

Let us imagine that we are in a dark room, bare of furniture, and which has grey walls, grey floor, and grey ceiling. Now we light it with electric bulbs of all imaginable colours, but always one bulb at a time. Can we say or feel that this particular colour is right, and another wrong? According to the scientific theories the answer is NO. One colour is neither good or bad, right or wrong. And yet...

Most of us are affected by single colours. We feel warm in orange light, upset by red, cold in blue, relaxed in green, active in white or pale yellow, uneasy in purple. This may not be true for everybody, but the exceptions are rare.

Such associations are not too difficult to explain. We must remember that our psychology does not change as fast as our wind, and that in many circumstances we react in the same way as a primitive man. Thus: orange suggests fire; red - sunset before a cold or windy night, and also blood; blue - a cold wintry day with snow on the ground; green - the security of a deep forest; white or yellow - the normal daylight when one has to be active; and purple or violet light hardly exists in nature, and therefore makes us wonder what is coming.

But the psychology of colour must take into account more factors than those which played such an important part in the life of  $\varepsilon$  primitive man.

For instance Yellow should be the most glorious of all colour since it suggests the sunlight. And so it is up to a point. Gold - which is nothing else but shiny yellow - symbolises wealth, power, glory, spiritual values. And this is not because gold happens to be an expensive metal, but just the other way around: gold was chosen as a precious metal because it is yellow! Otherwise gold was and still is the most useless metal one can imagine. Its only value is that it retains its yellow brilliance, and is not tarnished by the weather and other chemical actions. For any practical purposes gold must be mixed with stronger metals. On the other hand platinum which is infinitely superior to gold in every respect does not symbolise anything in particular, because of its neutral colour.

But otherwise yellow is not a lucky colour. It is associated with sickness (yellow flags on quaratine ships), cowardice, and even treason.

Red is an upsetting colour all right, even in the physiological meaning (it is supposed to raise the blood pressure). But it also symbolises sex, fight, danger (traffic lights), martyrdom (probably because of blood), revolt (red banners), and what not.

Blue besides cold suggests loneliness, peace, tranquility, and this is obvious. But why should it also symbolise hope? When one is freezing he may feel lonely and peaceful, but surely not hopeful.

Green represents rest which fits our theory, and also freedom (green light) which is still not too far fetched, but it is also associated with hope, youth, lack of experience, and stupidity.

Purple and Violet, being so to speak out of this world, were very justly appropriated by the authorities: kings and caesars. But both are essentially negative. They mean resignation, melancholy, celibacy, sterility: not exactly what we would expect from an emperor.

White should be the colour of action, but it is not. It rather means perfection, purity, truth, honesty. And also death (in Asia) probably on the assumption that perfection is reached only after death, and betrothal probably because of the assumed purity.

Black is not a colour but lack of colour (a black object does not transmit or reflect any light). Thus the Negroes are the only race which is not "coloured". Logically it should symbolise

night and rest. And it does that in a rather unexpected manner: rest - yes, but only the ultimate rest (in our civilisation); and night too, but only the mysterious things which happen at night: therefore evil. Also misery, epidemics, despair, ignorance.

\*\*\*\*\*

One should not laugh at these associations. They are as old as the human race, and if they are not logical, it is just too bad for the logic. This is how they affect us emotionally, and our emotions cannot be reasoned away.

Thus we should not make baby blankets in pink, because pink is only diffuted red, and who wants babies to get upset about sex, fight, or danger? Neither should they be "baby blue", because blue is cold, and who wants babies to freeze? The right colours for small children are: white, warm yellow, orange, warm green, and brown. They suggest security, warmth, relaxation.

The problem of colours for dresses, and for the interior decoration is extremely involved because the selection made may on one hand harmonise with the personality, or on the other hand it may be used to conceal this personality. For instance a warm-hearted individual may dress in brown, orange, and yellow with accents of red when at home, but at the office would rather like to look more aloof and dignified, and therefore affect blue, purple, white, and even plack.

It is obvious then that we cannot jump to conclusions as to the character of a person judging only from his selection of colours. They may indicate the real personality or just the opposite, or even a mixture of both.

This is perhaps the reason why colours with a low chroma are so common in our civilisation: they are non-commital, and therefore save us from too much sincerity and from too much hypocrisy.

In any case when making a new weaving project it is not enough to satisfy the requirements of a colour theory. We must plan the colour scheme thinking about the psychological "value" of each colour used, particularly about the dominants and the accents. Unless of course our creativity is absolutely spontanious: then we do not need to "think" at all!

\*

### SHORICUIS.

### W A R P I N G & W A R P I N G E Q U I P M E N T

For the time being we have finished with looms. Put not for good. We simply had to stop somewhere. Later on we shall return to this subject as the opportunity and the need arises. We shall describe in detail the construction and operation of Shed-Regulators, Pattern Harnesses, additional Warp Beams, and other optional parts of a loom.

Now we shall turn to the warping equipment. We must simply disregard many interesting methods of warping of historical value, even those which are time-honoured and "universal" as long as they are not practical. In one way or another they do not fulfil the conditions: either they are too bulky, or too slow, or good only for extremely long warps, or only for bed-ridden patients. If we had time and space we should like very much to write a satire about the vertical warping reel, which combines all possible drawbacks of all warping methods, yet until quite recently has been used extensively by weavers who should know better. But we shall refrain.

There are five methods of warping which are justifiable in our modern conditions:

- 1. Warping in a straight line, or Hindu method.
- 2. Warping frame.
- 3. Horizontal warping reel.
- 4. Horizontal warping mill.
- 5. Sectional warping.

The first does not require any equipment to speak of. The second is so cheap and easy to make, that every weaver should have one. Warping reel is only for those who cannot afford a warping mill; it is in all respects inferior to the latter. Sectional warping is used for very long warps. Every weaver should have the equipment for two or three of them, but never for more than that. For instance: a frame, and a warping reel; a frame, and a warping mill; a frame, and a sectional beam; or finally: a frame, a warping mill, and a sectional beam.

#### L. Hindu warping.

This method is used only when the warp is made of such a heavy yarn, that normal equipment could not handle it. For instance: hemp, sisal, and jute No.1, i.e. 300 yds/lb, or rug filler used as warp. Place mats, door mats, rugs, runners.



Fig.1

The only piece of equipment is a block of wood about 2 by 2 by 12 inches, with two pegs 1" in diameter and 10" long inserted in this block 8 or 9 inches apart (fig.1). This is clamped to a heavy table, bench, door step or bannisters - anything at all. The whole operation is best performed outdoors. At a distance equal to the length of the warp from the block a stick is driven in the ground.

We make the warp by crossing it between the pegs in the block and then walking to the stick in the ground, around it, and back to the block. It takes a bit of walking particularly with long warps.

When the warp is finished it is left lying on the ground, and beamed through a door or a window. It could be done inside but only in a very spacious house or apartment.

#### 2. Warping frame.

A warping frame properly constructed and properly used gives a comparatively short but nearly perfect warp, because all warp ends are of the same length and tension, and parallel to each other, that is neither crossed or piled one on top of another.

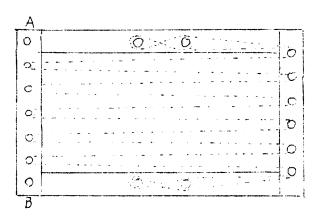


Fig.2

A good frame should be as large as possible, yet not so large that the weaver has to walk when warping, and to bend down or to stretch up to reach the upper or the lower pegs. Fig.2 shows a perfect warping frame. It is 45% long (between pegs) and 36% high with 13 pegs on the uprights, and 4 more for the two crosses. The longest

warp is about 17 yards. The pegs are 8 inches long just in case, but their whole length will be used only exceptionally. The frame is made of hardwood 2" x 3", and the pegs also of hardwood are 1 inch in diameter. The distance between the pegs is 6" - enough for the hand to pass between the pegs without touching them, which is important. The frame and the pegs should be very smooth, finished in linseed oil, shellac, or varnish, but only rubbed with the finishing solution, not painted.

Such a warping frame is an invaluable piece of our equipment. Warps of any length up to 17 yds can be made in a reasonable time. A short, sample warp can be made in no time at all. The quality of the warp will be much higher than of one made on a warping reel, mill, or on a sectional beam. The frame should be fixed to the wall (not just hung) with long screws, and the best place is in front of the loom; the exact position is not important.

Warping frame can be used for very heavy warps as well as for very fine ones, provided that the finish is very smooth.

In warping one must remember that no tension should be used. The yarn coming from one or two tubes, cones, or bobbins (or more if a paddle is used) should run without any friction between the thumb, and the index. Leather glove can be used to protect both the skin and the yarn, particularly for fast warping with fine yarns. A new "portee" of the yarn must go directly on the pegs, and not on top of the already made warp. The warp should be pushed very hard towards the frame from time to time. It looks as if the latter operation would disarrange the warp by "piling it up", but this is not so. It would be a mistake to spread the warp evenly along the pegs.

We have just mentioned the "paddle". It can be used with any warp and it speeds up the warping considerably. But to warp from 8 or more tubes we must have the yarn bought in rather large quantities. Winding the yarn first on smaller bobbins, and then warping with a paddle is pointless, because what we gain in time during warping is lost during winding. Thus this method is suitable for large projects or for commercial weaving only. The operation of a paddle is tricky (pegs A and B in the warping frame help then) and difficult to describe. We shall therefore come back to this subject later on.

When the warp is finished it should not be chained, unless

it is not going to be used right away, but then it is better lo leave it on the frame. Chaining tangles the warp, and is not necessary.

Spreading and beaming will be described separately.

#### 3. Horizontal Warping Reel.

This is in principle exactly the same as the common vertical reel, with the only difference that it turns around a horizontal axis instead of a vertical one. For that matter many types of vertical reels can be converted to orizontal by simply tipping them over.

Others require an additional support for what was the top of the reel.

The advantages of a horizontal reel compared with a vertical one are few but they are extremely important:

- 1. No tension is required during warping (in vertical type there must be quite a bit of tension to keep the warp from sliding down). This means that we can safely use such yarns as fine linen, very fine silk etc.
- 2. There is no danger of the reel getting twisted by the tension of warp, and thus spoiling its uniformity.
- 3. After the warping is finished there is no need to chain the warp because it has no tendency to slide off the reel when one end is released. The warp can be beamed directly from the reel.
- 4. Any horizontal warping reel can be supplied with a brake, which makes it possible to beam without a helper, directly from the reel, and at a much higher speed.

Warping on a horizontal reel is much faster than on a frame, and the warps may be much longer - up to 30 yds. Theoretically they could be of any length, but the longer the warp, the larger the reel, and there must be a Limit somewhere.

It is advisable but not absolutely necessary to have a row of pegs or nails in each side of the reel. Four-inch nails with cut off heads can be used, First we must drill holes about the same diameter as the nail and about ½" apart. This means at least 200 holes or more. The nails must fit the holes tight, but not too tight. When we start a new warp all nails are pulled out. Then we take a single yarn and wind it around the reel in the same manner as the warp to follow. This yarn is called a Guide. Then we fit the nails: one in each hole immediately to the right of the Guide all along the warp. Depending on the type of reel we shall need about 1 nail per two or three feet

of the length of warp.

When warping, we follow the Guide; the warp comes to the left of each nail. The next "portee" comes to the left of the first one, and so on until all space between nails is used up. Then we push the warp done so far to the right against the nails. We push very hard, exactly as in case of a warping frame. Then we start again in the same way. A new portee should be always wound directly on the reel, and not on top of already made warp.

If the warp is short, we can make only one cross at one end of the warp. If it is a long one, two crosses will be better. We shall come back to this point when speaking about beaming.

Here as in the case of warping frame we can use a paddle.

Unless the ends of nails were rounded up and polished with emery cloth, it is safer to remove all nails before beaming.

This method gives a better warp because all warp ends are of the same length. It cannot be used with a vertical reel.

In the next instalment we shall describe the warping mill, and the sectional warping.

A A B B

# SMAEL PATTERNS

\*\*\*\*\*\*

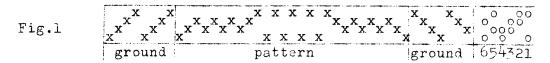
Large and complicated patterns are not fashionable any more.

And even if they were, there is quite an extensive literature on this subject with Atwater's "Shuttlecraft" always at the head of the list.

But what happens when we want small and simple patterns widely spaced on some sort of a background (not necessarily tabby)? We have Bronson and Swivel, and that is about all. And yet several traditional weaves can be easily adapted to our purpose.

We shall start with Overshot. It has four blocks of pattern, and we can easily sadrifice one or two of them for the ground. In the following draft the ground is threaded as plain twill, and the pattern on blocks: 23, and 14. These blocks should have long floats: as long as possible to get better contrast between the ground

and the pattern. In weaving treadle 4 or 2 can be used for the ground (just one of them or both alternately), and treadles 3 and 1 give the



pattern. The binder on 5 and 6 as usual. The pattern may be of the "X's-&-0's" type as in fig.2.

The ground between the figures can be woven in a number of ways, not only as suggested above. For instance the whole piece may be woven-asdrawn-in: 432143214333333332111 1111233333333412341234. Or the ground as broken twill: 4231. Finally we can weave the ground and the pattern on the same two blocks, as in overshot on opposites: 33113311333333333111

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Fig.2

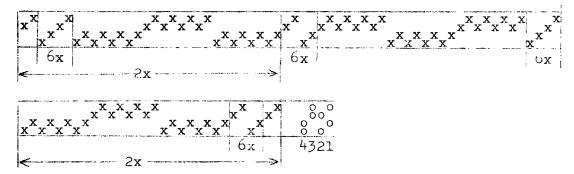
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To decide which treadling we shall use, we must make several samples at the beginning of a new warp.

#### PRACTICAL PROJECT No.1

Place mats in cotton. Pattern as in fig.2.

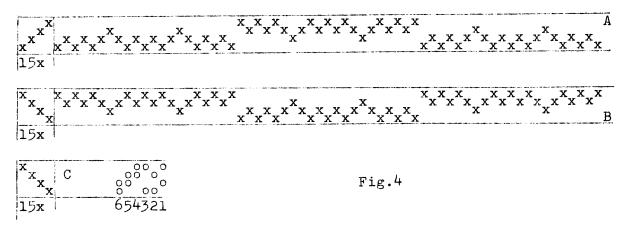
#### read from the left:



warp: 10/2 cotton; 20 ends per inch; reed no.10; 2 ends per dent; number of ends: 272.

weft: the same as warp for both pattern and binder, but of a slightly different colour.

The patterns in the above example are quite small, hardly more than one inch. If we want the same kind of a simple pattern but larger, we can repeat the same block several times, which is the same principle as of the Table in colonial Overshot. The floats then can be even not so long. The draft in fig.4 is an example of this technique: (read from the left)

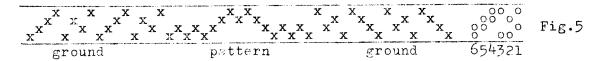


For a small project thread A then B, then A again and finish with C. This gives 429 warp ends. For a larger project: A, B, A, B, A, C - 675 warp ends. With 20/2 cotton or 60/2 linen set at about 30 ends per inch we shall have a warp 14" wide in the first case, and 22" - in the second. The treadling should be as-drawn-in.

The draft in fig.4 can be treated as a 4-block one, and then the treadling will follow all blocks: 6543-15 times; 6-5x: 5-2x; 6-6x; 5-2x; 6-5x; 3- once; 4-5x; 5-2x; 4-6x; 5-2x etc. Or we can forget the 23 and 14 blocks, and then the treadling will be 6644-15 times; 6-21 times; 4-21 times; 6-21 times, etc.

In all these projects the warp should be neutral (white, grey, beige, ivory, dark brown, black). The binder may be of the same colour as the pattern weft, but it may be also of the same count (and then only one shuttle is used) or not. Very striking colours are not indicated. Damask effects are desirable, that is: warp, pattern weft, and binder all of about the same colour, with the pattern weft rather soft and shiny (silk, rayon, soft linen).

Not long ago we have described a new technique of drafting and weaving overshot patterns, and we call it Six-Block Overshot (MW 42/8). This technique may be also used for small patterns and it gives a very interesting texture of the ground. Normal six-block overshot has no tabby and it must be woven on opposite sheds, but in our case we shall use only two blocks for the pattern and the remaining 4 treadles can be used for binder, which incidentally means also that the fabric woven may be much finer. Fig.5 shows the draft:



#### PRACTICAL PROJECT No.2. Linen place mats.



Thread from A to B - 5 times; from A to D - 8 times; from C to D - 5 times.

Warp: No.16 linen (or 30/2) natural; 32 ends per inch; reed No.16; 2 ends per dent. No. of ends: 383.

Pattern weft: No.25 linen (or 50/2), two colours twisted together (chartreuse and gold, red and wine; navy blue and royal blue; green and blue, etc).

binder: No.25 linen (or 50/2) natural, or half-bleached.

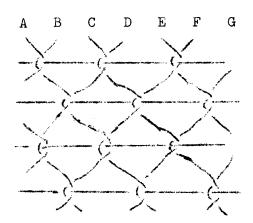
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### NET WEAVES WHID HIT

We cannot take up to much space with Net Weaving because of its limited interest. Therefore we shall describe in detail one weave in each issue, with suggestions as to the proper technique.

"Whip" means this part of the warp, or these warp ends which are doing the crossing, and which are threaded through the bead lamms in the classical set up. "Whip Net" is a Net Weave in which all warp ends cross each other at the same rate, without any Gauze or tabby in the ground. Therefore the weave can be done with only one warp beam, which is as well.

The simplest way of doing it without special equipment is to set up the loom for a very open Gauze (MW 30/4-8). For instance 8/2 mercerized cotton at 16 ends per inch; reed No.8. We make the first



crossing as for plain gauze.
Thus the end A will cross with
B; C with D; E with F. Then we
pick up the second row of
crosses so that B crosses with
C; D with E, etc. The direction of crossing should be the
same as in gauze. Thus if in
gauze A goes first over B,
then in Net B should go first
over C, etc.

But since it is pick-up, we should try one row with the opposite twist and see how we like it. This method is slow,

but it should be experimented with, before anything else is attempted. We should try at this stage first rigid weft, and then different soft wefts.

A faster method requires an additional harness. corresponding to the traditional "bead lamms". This is made of a flat or round stick as long as the warp is wide, with doups similar to the gauze doups, but made of a stronger thread, hanging from it. The first doup (from the left) will go from above between warp ends A and B and around C, in front of the batten. The second doup between C and D and around E, etc.

To open the Net shed we simply raise the Net-stick with the left hand, as high as it will go, and with the right hand we insert the picking stick (MW 38/12) in the small shed. Now we drop the Net-stick, turn the picking stick on edge, and throw the shuttle. The beating may be done with the picking stick still in the shed (flat), or without it. The Net-stick is lying then on top of the batten.

The same weave is very easy with a Net Comb (MW 38/10, MW 40 page 11, sample 6), but then instead of single warp ends, we have groups of warp ends, unless the comb has a very fine sett, and the sett of warp is exactly twice the sett of comb.

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