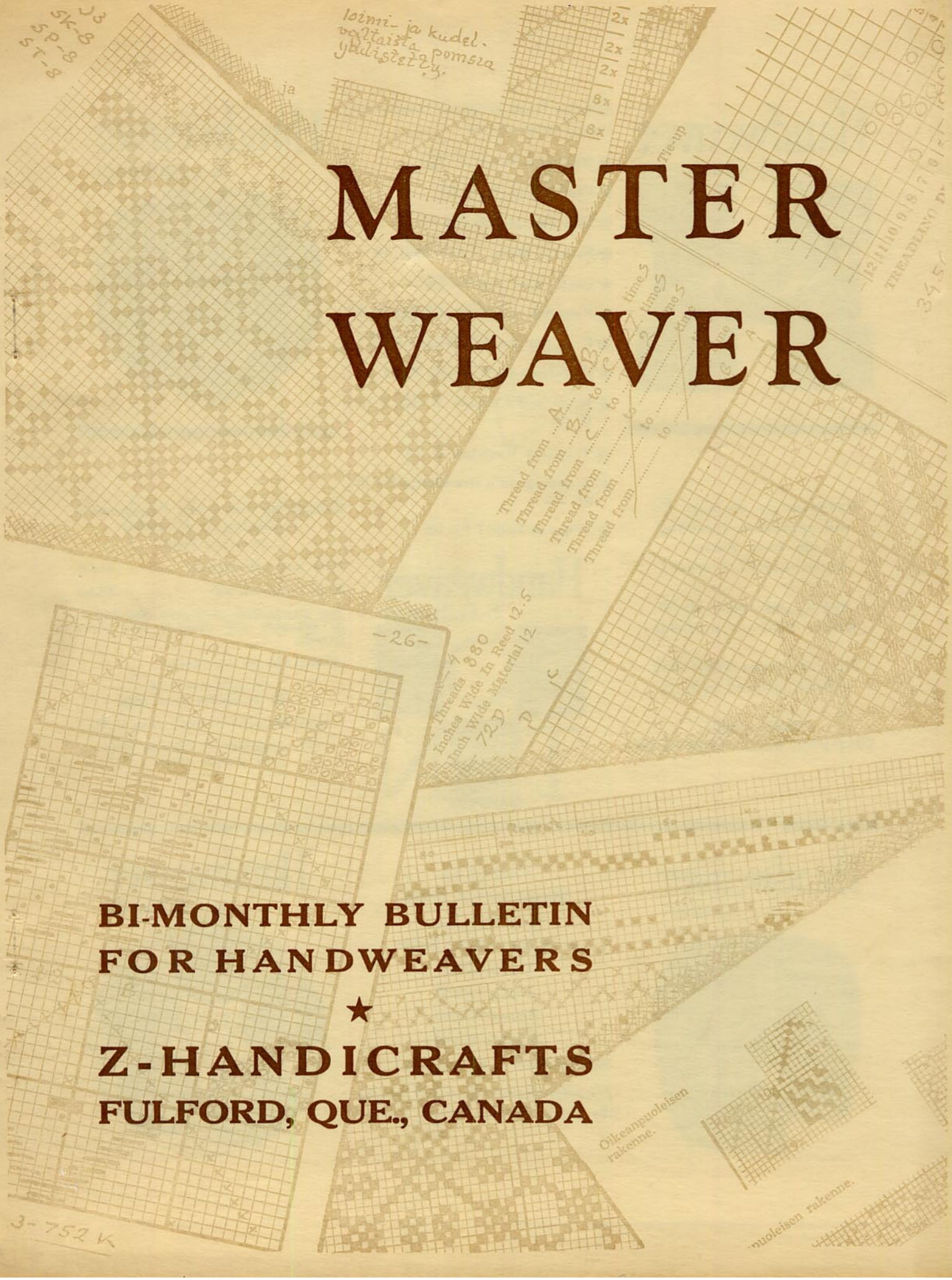

MASTER WEAVER

BI-MONTHLY BULLETIN
FOR HANDWEAVERS

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Z-HANDICRAFTS
FULFORD, QUE., CANADA

MASTER WEAVER

BI-MONTHLY BULLETIN FOR HANDWEAVERS

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

September, 1958 No. 41

CONCLUSIONS.

It so happens that we may write thousand upon thousand of words, and there is a complete silence - we can only hope that somebody reads our articles, but we cannot be sure. Then something strikes the right chord and there is an avalanche of response.

This is what happened with our articles about Exhibitions and about the Shortcuts. They were both in the same issue, and both provoked a very heated comment.

What they have both in common is the realisation that there is something fundamentally wrong with our contemporary handweaving. On one hand we have completely wrong weaving techniques - on the other a completely wrong appreciation of the results.

On one hand we are forced to weave on very bad looms (unless we design and build our own), and very bad yarns, vulgar and flashy - on the other juries and judges completely innocent of any knowledge of handweaving.

We all know that there is hardly a loom on the market which could be used for normal weaving without at least some corrections and alterations. We all know that there is hardly a source of yarn which could supply both the "S" and the "Z" twist for plain woolen fabrics - to give only two examples. Such conditions would be unbelievable in the 18-th century, but this is what we have to face now.

And then when we try to send our weaving to an exhibition, we find out that the jury has not the faintest notion what they are judging for the simple reason that there are too few (if any) weavers in a jury which is supposed to deliver a judgement upon textiles. And, although this may sound like a blasphemy, one sometimes wishes that the juries for handweaving were made of professional industrial power weavers.

At leaat they know what they are talking about, when our "artists" and "designers" could not tell a colonial coverlet from a Scandinavian damask.

But enough of this general discussion. We have already exhaustec the subject in previous articles. We shall now come down to facts.

Some years ago we were invited to give a prize for handweaving by one of the largest Guilds in U.S.A. We decided on 5 years' subscription to the "Master Weaver" for any piece of weaving with more than 64 ends per inch in the warp, provided that the design will be accepted by the Guild. In due time we had our winner. The piece was a fine multi-block damask technically perfect, and if we can judge from a picture - of a very good, and quiet design. So far so good.

But... the same piece had been sent to an Exhibition, not even a particularly important one, and - it was rejected. Not that it did not get a prize, but it was rejected altogether. This is remarkable, because after all the exhibit was first passed and then recomended for a prize by a rather important Guild of handweavers, only to be condemned in second rate crafts show. It seems that what the jury did not like was that the borders of the project did not match the central theme (there was gradation used in the borders and no such gradation in the pattern). Probably if the borders matched the pattern the jury would say that the composition lacked contrast, or drama, or that it was not dynamic. You can always have it both ways. The first prize in textiles on the same exhibition went to a rug, which looks (again judging from the photograph) like a first sampler of a child of 10 who has never seen a loom before. It could be perfect in colour, but the colour set aside, even the values are pure hit-and-miss (mostly miss), and they do not follow any idea modern or traditional.

Does not this case illustrate what we have said before?

From our own experience we know that it is risky to send to a show pieces which are outstanding technically. Some years ago we have submitted several pieces woven on a draw-loom in an also second-rate exhibition in Canada. Perhaps they were not so good, but they were the only ones of this type ever made in this country. You can guess what happen. They were accepted, then tightly rolled and put away so that nobody could see them.

Why is it so? Possibly the inexperienced jury thinks that there is something fishy about a piece of weaving which has fine texture, straight edges, and an unfamiliar pattern. It looks so different from their idea of a handwoven piece. How do they know it was handwoven? Perhaps it was done by black magic. So it is safer to reject.

Sometimes the verdicts of juries are funny, but often they are not even funny. We have at hand an opinion of another jury in another part of North America. Here one of the jurors (a name nationally known) says in the "juror's comment": "To attain a modicum of success the craftsman must also be an artist". In other words the juror tries to condemn 99% of American craftsmen: you must be an artist, or else. Either the juror does not know what the words: "artist", and "craftsman" mean, or he is trying to destroy the whole American world

of crafts, the whole movement which keeps people sane in this difficult "modern" world. And of course this is not a conscious, un-american, and un-democratic attitude. It is "only" ignorance. No wonder that some 3,000 years ago Hindu philosophy condemned ignorance as the only real sin, from which all other sins derive!

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Now a few quotations from the letters received:

"This letter is to say THANK YOU for your editorial. You have stated very well what many of us had in mind for a long time. It needed to be said. Those of us who have dared to make statements along this line have been condemned and ridiculed. If I could afford it I would have you send a copy of that article to every Museum in the country. They are primarily the cause of much bad weaving..." (Towson, Md.).

"I have just completed the reading of every word of it. I am thrilled with what you have written in regard to Exhibitions. It is one of the finest things on this subject that I have ever read. I think that the Presidents of every Guild should, in preparing for an exhibit, read all of this article to his or her Guild members, and then say: "MEMBERS OF THIS GUILD, THIS IS IT". This is the way this Guild is going to conduct this exhibit. If you wish to enter any of your work on these standards we shall be more than happy to have you do so." I like the last sentence: "IT IS OUR TASK TO KEEP THE FIELD OF EXHIBITIONS CLEAN, AND WE CAN DO IT WITH A LITTLE EFFORT". (Des Moines, Iowa)

"Your May issue of the Master Weaver has arrived and I read it with great interest. Thank goodness you have the courage to throw off all the barnacles some weavers have afflicted themselves with mentally. I think this business needs someone like you with the courage enough to look at these things objectively and not be hidebound by old fashioned traditions. Thank you for your refreshing and sensible approach to our weaving problems." (Kohler, Wisc.).

"Please extend congratulations to Mr.Z. (we are often called Zee people, and we like it) for writing EXHIBITIONS in the last Master Weaver. It is good and I wish every weaver would read it."

(New Canaan, Conn.)

"In my opinion this issue contains some of the most valuable information to all weavers, and especially to those of us who have not been weaving for too many years. ... I think the article on EXHIBITIONS was extremely important. ...your article contains the truth, and certainly I, for one, sincerely trust it will have an effect on this whole field." (Salt Lake City, Utah)

We are also very glad to announce that there are many more Exhibitions which observe the rules:

"For the first time this year the jury at the show of the Pittsburgh Weavers' Guild furnished such information (explanation of the jury's decision). I have been wanting something of this kind for a number of years." (Greenville, Pa.)

Re: Smithonian show: "We do all of thethings you suggest including covering all of the names during judging... We have not given certificates before... but decided to this year. We are also adding the explanation idea. We have developed a rather simple score card, and arranged for an impartial, strange secretary to be present to

take dictation of any comment." This is done by the St.Paul Fiber, Clay and Metal National biennial..."(Arlington, Va.)

We shall close now the discussion. There is no point in repeating the same arguments over and over again. Particularly that so far not a single voice has been raised in opposition. We can only hope that more weavers will start "kicking" against unfair dealings.

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S H O R T C U T S - 3

LOOMS - MULTISHAFT

We are not going to discuss at a great length the multi-shaft looms because: 1-st - the weavers who buy them are or should be experienced enough to use their own judgement; 2-nd - the subject is too long and involved for an article; 3-rd - because we are anxious to get down to more practical matters than theoretical discussions of the merits and demerits of various looms.

This is what we can say about multishaft looms:

1. We should not invest in a loom with more than 4 shafts unless we have to, i.e. unless we decided upon weaving certain articles which positively cannot be woven on 4 shafts. Even the best loom of this type is always a disappointment to anybody who is already used to 4 shafts.

In particular we should never be persuaded to buy for instance an 8-shaft loom instead of a 4-shaft one: "because it costs only a little more, and it still can be used as a 4-shaft one". This is one of the many fallacies of our trade.

2. A multi-shaft loom can be specialised, and then fairly efficient, or built for general purposes, and then much less efficient than a 4-shaft one.

3. Specialised looms such as 8-shaft counterbalanced are good only for a certain type of weaving, and cannot be used for anything else Thus they have a place in industrial handweaving, but are seldom of any use to a hobbyist, unless of course he can afford to buy several looms.

(4.) General purpose multi-shaft looms can be divided into 2 groups: single tie-up (jack-type), and double tie-up (countermarche, Swedish, etc).

(5.) Single tie-up (jack type) are easy to set up and adjust, but hard to operate. They have one very important advantage: any number of treadles can be used at the same time. They are best for experimenting, demonstrations, teaching, designing.

(6.) Double tie-up looms take much longer to set up and adjust, because the tie-up has twice as many ties as in a jack-type. Also in nearly all models the ties must be adjusted rather carefully. Only one treadle can be pressed at a time. But they are much lighter in operation, and therefore they should be used for "production" i.e. weaving of long projects (not necessarily for sale).

Here is another fallacy: that a double tie-up loom can be used as a single tie-up. No! No more than the other way around, although in both cases we can rig up some sort of a makeshift arrangement which will perform in a way. If we find by any chance a double-tie-up loom which actually works as a single tie-up as well, let us beware; it simply means that the loom is very poorly balanced and that it is going to be rather inefficient as a double-tie-up.

(7.) Draw-looms, Jacquards, two-harness looms, etc., are entirely beyond the scope of this article. We already have had, and we are going to have more articles about this class.

When buying a loom with more than 4 shafts, we must try it, i.e. weave on it for at least half an hour, to find out how it "feels", or rather how do we feel after such a trial. But we cannot expect here to get the same speed as on a 4-shaft loom, particularly with single tie-up.

And of course nearly all we have said about the 4-shaft applies here: that the loom should be strong, and large, and heavy.

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SETTING-UP THE LOOM.

Now comes the second stage: getting from the loom the best possible performance. We must set it in the proper conditions, get acquainted with it, find all small faults of construction (even the best loom is full of them), and correct whatever can be corrected.

When selecting a permanent place for the loom we must consider: accessibility, lighting, and heating.

The loom should remain always in the same place. It should be easily accessible from all sides. There should be enough room in the back to put a bench behind it (to sit down when spreading the warp), and as much space as possible in front - never too much. On at least one side (on the side of the warp-beam crank) about 24" for beaming.

What we are going to say now will provoke strong reaction in some quarters: the loom should be bolted, or otherwise anchored to the floor. The reason is that heavy beating will move the loom forward at a rate of several inches an hour. Rubber pads won't help unless they are cemented to the floor. A loom which moves continually on a hardwood floor or linoleum will ruin its surface in no time. Cemented rubber pads, even if they stay put, will spoil at least several square inches of the floor - when two ¼" holes are hardly visible, and can be plugged or filled with plastic wood later on. Thus if you really like your floors make the wise choice of the smaller evil. Two neat holes should be drilled in the loom frame (usually the front cross-piece which lies flat on the floor), and two smaller holes in the floor. The screws can be 3" or 3½" with round heads. Put ¼" washers under the screw heads. Also for better protection of the floor use felt pads under all wooden parts of the loom which touch the floor. Now drive the screws home very tight - a loose screw will break sooner or later.

In old houses, before doing this, make sure that the floor is level. If not - insert wood strips under the frame until the breast-piece and the batten checked with a carpenter's level do not slope one way or the other.

On cement floors we must use special drills to make holes, and also special expanding bolts. Then perhaps it is better to have rubber pads cemented to the floor. Use the black, sticky kind.

The Light. The daylight should come from one side, not from the front or back. The best source of artificial light is an adjustable lamp attached to the loom frame or on a separate standard. A frosted or milky bulb of 60 to 100W with a shade. Adjust it so that only the part of the loom between the breast piece and the harness is illuminated. Avoid strong light, also diffused or fluorescent light when weaving, but the latter can be used for warping and beaming. For threading - one adjus-

table light in front and another in the back of the loom. Direct light from naked bulbs or tubes should never reach the eyes of the weaver.

Heating. No radiator, hot-air register, etc. should be anywhere near the loom. Work in as low temperature as you can comfortably stand. Keep your weaving studio in always the same temperature - avoid all extremes. Incidentally there is no need any more when weaving fine linen for very high humidity (as often advised in old books), but the air should not be too dry.

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The loom is all set. We make a short but fairly wide warp of any kind; preferably an "easy" one of 10/2 cotton for any weave with balanced tie-up and with tabby sheds. Beam, and thread in any way at all. We shall describe these operations later on.

Now we sit down, open a shed, and try to throw the shuttle (do not throw it actually). When we are sitting, the elbows at rest should be at the same level as the warp, i.e. the same level as the breast-piece. If they are higher we measure the distance from the elbow to the warp level and cut off the same length from the sides or the legs of the bench. On the other hand - the feet should reach the treadles comfortably. Should it so happen that the elbows are in the right position but the treadles seem to be too far down - we must shorten the ties between the treadles and the lams.

It is not so easy when the bench is too low. We can use a thick cushion or another higher bench, or slip some sort of coasters under the bench, or nail extensions to the sides of the bench. But in no case let us get resigned to the fate: "Oh, well - it will work somehow". No! This is a completely wrong attitude.

Here is another fallacy: "rocking benches". The body of the weaver in action does not rock: with normal speed of weaving it would not have time to. It is only when the weaver sits too far from the loom, or when he weaves fabrics too wide for his constitution, that he has to move his body to reach the batten or the edge of the fabric. Rocking may be a good reducing exercize, but it is hardly ever necessary.

Even if the bench is not too low, always use a piece of felt, or rug on top of it. Not only that it reduces the wear on the seat of whatever you are wearing, but it is also hygienic. A flat cusion will do as well but better avoid foam rubber.

The level of the bench may be right, but not its distance from the loom. In most cases the bench is too far. Bring it as close as possible. The knees should not touch the cloth beam, but the batten should be reached without bending forward. If these two conditions are contradictory, there is something wrong with the loom itself, and this is probably the first "bug" we have discovered. Usually the cloth beam is lodged in two round holes drilled in the frame of the loom. If this is the case have another pair of holes drilled farther, and usually higher in the frame. An inch or so in both directions makes all the difference.

Now we open a shed. Does it open easily? Is it clear? No ends of warp hanging down or rising up? If the shed is hard to open, the reason may be that the warp is too tight (release the tension) or that the foot is too far back on the treadle (by "back" we mean here toward the weaver's back). It should be quite close to the tie-up. Again it may be that the bench is not close enough to the loom. If the shed opens as it should but is not clear, there is nothing to worry about. We shall discuss this point later. For the time being let us do our best by shortening the ties of the shafts which remain too high when they are supposed to be all the way down.

We make a few shots of weft to get a good "heading", and then start beating as hard as we can, observing all the time what happens. If the loom frame sort of creaks and moves with the batten, the bolts in the loom frame are loose. A wrench should be supplied with the loom and we must go over all the bolts and tighten them. This by the way should be done periodically, twice a year or so.

If the loom has a friction brake (the best and the only to be used on the warp beam) it may slip during our experiment with hard beating. Sometimes ill advised persons put a drop of oil in there. If you suspect that this is the case, wash it with gasolene, cleaning fluid or even lighter fluid. If this does not help, get hold of some resin (in any hardware store), or if anybody in the family plays violin borrow the thing they rub the bow with, pulverise some of it and apply generously to the brake.

If even this does not help, and you are sure that the brake slips - call the agent who sold the loom and explain.

Now let us pay attention to the batten (beater). When pushed back it should touch at the same time both stops in the loom frame, and

this without any pressure. If it does not, we have discovered another "bug", quite common and in most cases being due to the wood not properly seasoned. The easiest way to correct this is to make two small wedges of hardwood, about 1" by 1" and not more than 1/16 of an inch thick. They are inserted between the swords (uprights of the batten) and the race-board (the lower horizontal piece). First release the bolts, then insert the wedges from the side which is too far from the frame, then tighten the bolts again. Try until the batten is absolutely straight. Cut off th projecting part of the wedges with a sharp knife or a razor blade.

It is impossible to enumerate the less common faults which we are likely to find in a new loom. We can only quote a few examples:

(1.) The varnish on the breast piece, the slabstock (thread carrie the lease-rods, and the batten sticks to the yarn or/and the fingers. Remove the varnish with sandpaper. First with medium, then with fine. Rub the wood with boiled linseed oil; wait till it dries; sandpaper with the finest grade again; rub with hard floor-wax and polish - still bette simonize (follow directions).

(2.) The treadles are not smooth enough i.e. the foot does not slide easily along the treadle when weaving. Make sure that you are not wearing rubber soles; try heavy woolen socks, or light moccasins. If this does not help use the same treatment as in No.1, i.e. remove the varnish oil, and then wax.

(3.) The batten rubs on the loom frame (always on one side only). Loosen the bolts between the swords and the race board; straighten the batten; tighten the bolts again.

(4.) The fingers when grasping the batten touch the first shaft. This is extremely annoying, and makes normal weaving impossible. Fault o construction. There should be enough space between the batten and the harness (shafts) for the hand to go around the cape (upper part of the batten) without touching the heddles, or the shaft itself. Replace the rubber stops (if any) with much thicker pieces of wood glued to the uprights of the loom frame.

These were only examples of what happens when we buy a loom at its best. What we may expect from a loom at its worst defies description.

The advice given so far may seem to an unexperienced weaver rather trite and unimportant, but the accumulation of such small faults and mistakes makes normal weaving absolutely impossible.

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PATTERNS ON 1:2 TWILL

ON FOUR SHAFTS

This is a sequence to the former article about Dimity. But this time our patterns are going to be of the same class as Summer-&-Winter, or Crackle, i.e. large blocks with short floats.

The 1:2 twill seems to be a still better pattern weave than Crackle because it has shorter floats. Here the pattern weft goes over 2 and under 1, or over 1 and under two, as against 1:3 for Crackle, and 2:2 for diamond twill. But... it has no tabby binder. It has a binder of a sort, but it is not as firm as tabby. All in all this weave will be about as firm as Crackle or S-&-W, but with shorter pattern floats. Thus at least in theory it should be a better weave for upholstery, where the average strength of the fabric does not count, because the weakest part are always the floats.

This is theory. How would it work in practice it is hard to tell for the simple reason that so far we could not discover any reference to this technique in any weaving literature. We do not know even how to call it. This is then an open field for those who like research.

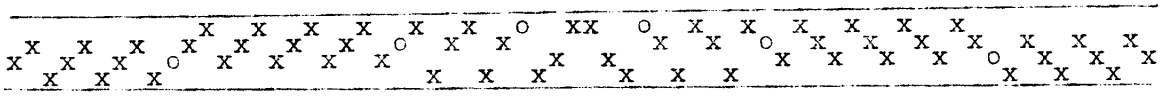
We have here as in crackle 4 units of threading, and also we have incidentals between units, or rather between blocks of pattern. But the units are different when the diagonal in a pattern goes up, from units when the diagonal goes down. In all we shall have the following 8 units:

going up:	Unit 1: 124,	incidental	between	unit	1	and	2:	1;
	" 2: 231,	-	-	-	2	-	3:	2;
	" 3: 342,	-	-	-	3	-	4:	3;
	" 413,	-	-	-	4	-	1:	4;
going down:	Unit 4: 314,	incidental	between	unit	4	and	3:	3;
	" 3: 243,	-	-	-	3	-	2:	2;
	" 2: 132,	-	-	-	2	-	1:	1;
	" 1: 421,	-	-	-	1	-	4:	4;

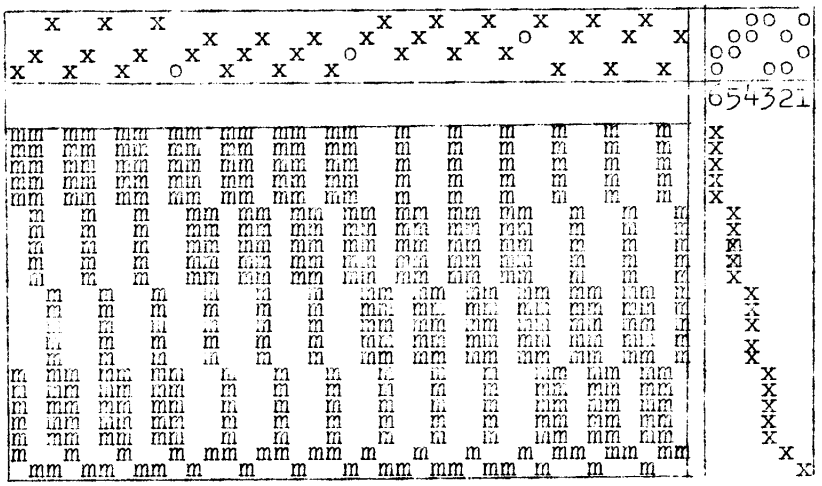
Whenever we reverse the pattern there are no incidentals, simply the repetition of the reversed unit. This sounds complicated and so it is. In practice it looks as follows. Supposing that we have a profile

mmm mmmm mm mm mm mmmm mmm   or   222 3333 44 11 44 3333 222

then the first part of the profile is "going up" and the second is "going down". Thus in the first part we substitute the units from the firs part of the table, and in the second part - the units from the second part of the same table. At the turning point the first unit (1) will be 124, and the second: 421. The whole draft will be:



Let us take now a complete draft and examine the draw-down. Since we have no tabby we must use as binder whatever we get on treadle 13 and 24 (two last lines of the draw-down).



The pattern part of the draft looks very much like traditional crackle. The blocks of pattern overlap each other by one half of their length. The only difference is that the floats are shorter. But the binder on treadles 1 and 2 is obviously not tabby. Fortunately the floa in the binder do not coincide with any floats of the pattern, which is as well or the binder would be useless.

Granted then that this weave is from certain points of view better than crackle or S-&-W, what can we do with it? As an ordinary pattern weave it can be used for upholstery - we know already that much But it has also interesting possibilities as a bound weave, and also as a texture weave. We shall describe now all these practical applications:

1. Pattern weave with overlapping blocks. The same patterns as for traditional crackle, or modern overshot can be used. Warp set at about the same rate as for crackle - a little more opened if anything. Treadling: 1-st block - 6261; 2-nd - 5251; 3-rd - 4241; 4-th - 3231.

Pattern weft on treadles: 6,5,4,3; binder on 2 and 1.

2. Pattern with half-tones like overshot. Any 4-block pattern can be used. Warp set as in 1. Treadling: 1-st block - 6251; 2-nd - 5241; 3-rd - 4231; 4-th - 3261.

3. Pattern as in 2. Treadling: woven-as-drawn-in. For instance in case of draft on page 11: 613613613526526 etc. This fabric is rather unusual, because the blocks of pattern are woven in 2:1 twill, but the ground has long floats in warp. Since these floats appear only on one side of the fabric they can be disregarded in case of upholstery, or they can be cut down with an occasional shot of very fine binder on treadles 1 or 2.

4. Bound weave. Here the warp must be set very far apart, and the only treadling possible is 3456 or 3546. This should produce extremely firm flat rugs, not unlike rugs made in bound crackle but much stronger. Two, three, or four colours may be used. If we call these colours: A,B,C,D the treadling for the 1-st block will be: 3A 5C 4B 6D; 2-nd - 3B 5D 4C 6A; 3-rd - 3C 5A 4D 6B; 4-th - 3D 5B 4A 6C.

5. Texture. Here any accidental treadling could be used if properly planned. But to avoid long floats in warp we can start with such treadlings as: 62514231; 62416231; 14265456; etc. Also <u>any</u> threading draft will do, as long as it is based on the units of threading and the incidentals in the table on page 10. In each case a complete draw-down should be made.

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Regardless of how interesting this weave is, it should be approached with caution, and before trying a large project it would be advisable to experiment on a small warp.

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WE APOLOGISE FOR THIS ISSUE BEING MAILED RATHER LATE, BUT THE EXPERIMENTS WE WERE MAKING WITH "PATTERNS IN 1:2 TWILL" TOOK LONGER THAN WE EXPECTED. THE COMING (NOVEMBER) ISSUE WILL BE ON TIME, AND IT WILL CONTAIN A RATHER SENSATIONAL ARTICLE ABOUT SIX-BLOCK MODERNISED OVERSHOT WOVEN ON ONLY FOUR SHAFTS.

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For more information see page 8.

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