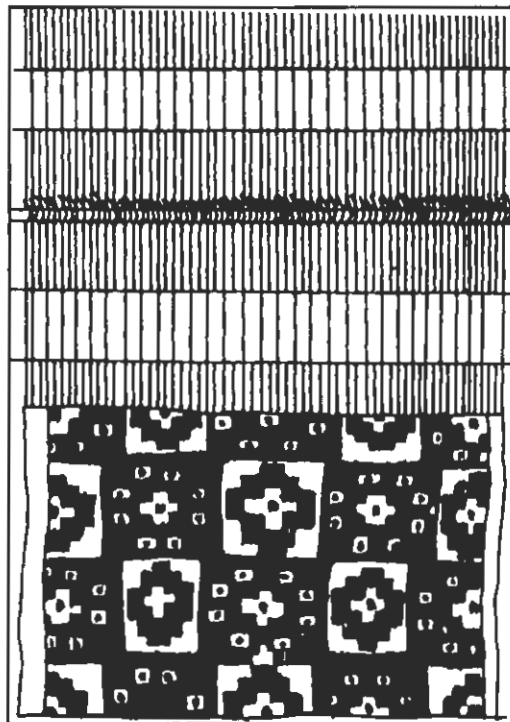


the

curious

Weaver

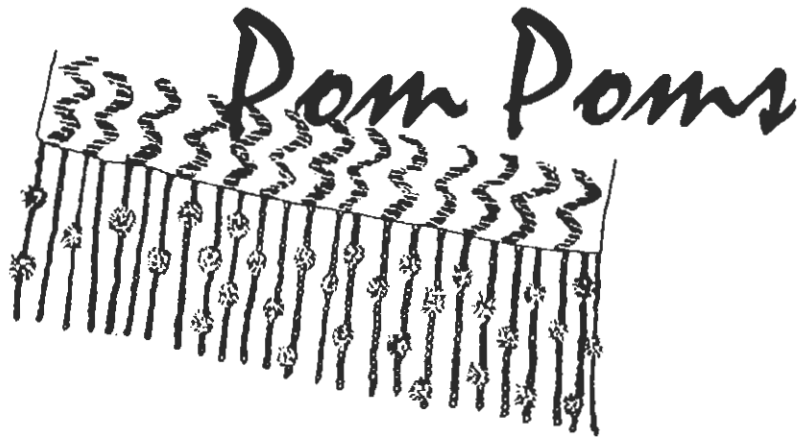
Issue 2, MAY 1995



BACKSTRAP LOOM WEAVING ■ FURRED AND ZEBRA CORDS

MAKE YOUR OWN WEAVING TOOLS ■ SEQUIN SASH

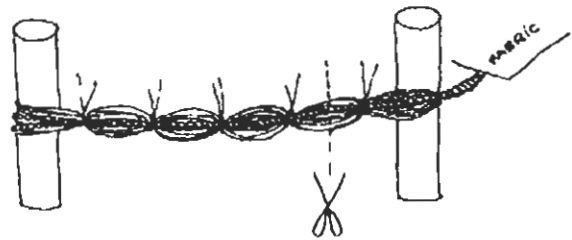
LAVENDER SACHETS ■ DOUBLE WEAVE POCKET WEAVE



On the fringe

Pom poms are the most persecuted embellishment in the textile arts. Easy-to-make, they can appear in their hundreds *EVERYWHERE!*, when in vogue. Is it time for their re-emergence? They could be a delightful addition to an otherwise ordinary warp fringe. Imagine them in silk or mohair. The following method shows how pom poms can be made directly onto a fringe.

Allow an extra long length of warp fringe at each end of the woven cloth. Hand twist the fringe. Secure one twisted strand of the fringe to a warping board and begin winding a soft thread around the warping board pegs. Make sure the twisted strand is evenly and well covered. Tightly tie the threads at 1.5cm intervals or as desired. Dampen all the threads with a water spray and cut through the soft thread in between each tie. *Don't cut the warp fringe.* Repeat this for all the strands in the fringe. When finished dip the pom poms and fringe into boiling water. Dry with a hairdryer and trim the pom poms to a velvet-like, fluffy appearance.



WEAVER

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Inquires: Phone Karen (065) 537 004

HANDS ACROSS THE NATION

Scarf Exchange '95

Scarf Exchange '95 aims to present spinners and weavers with a challenge, and engender friendship and interchange between craftspeople.

We invite interested craftspeople to submit 100gms of unspun fibre before 16 June 1995. This fibre will be sent to another entrant to create a scarf and you will receive a different package of fibre. The finished scarves are to be returned to the Newcastle Spinners & Weavers Guild, to be exhibited during the 'Mattara Spring Festival'. The word 'Mattara' meaning 'hand of friendship' in an Australian Aboriginal language. After the exhibition, scarves will be returned to the original supplier of the fibre with information about the person who crafted it. *Interested?*

For information write to

The Newcastle Spinners & Weavers Scarf Exchange,
 P O Box 28,
 ADAMSTOWN 2289 N S W
 Australia
 Phone: (049) 57 5023 or (049) 52 6374

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important as breathing,
if I'm away from fibre
too long, I feel lost and
unhappy"**

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The curious
weaver

Issue 2, May 1995

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Please make cheques payable to Karen Madigan

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W elcome,

To this second issue of THE CURIOUS WEAVER. I hope you have enjoyed these first two complimentary issues because I think Australia and New Zealand should have its own publication especially for weavers. To receive the next issue in November you will have to subscribe. A suscriber coupon is enclosed with this issue. Please consider a subscription, as this will help us to develop a weavers network in our region of the world.

Thank you to all who have contacted me with encouragement and interest in this idea. Weavers from every state in Australia, New Zealand and beyond, weaving with cotton, wool or silk, weaving at 6epi or 100epi, living in the city, the beach or the bush....we're everywhere!

As you can see, this issue is bigger than the last, every page packed with information and projects. We're living in black and white at the moment but all the information and projects are as exciting as colour. With subscriptions we will develop fulher.

Within this publication, beginners to advanced weavers will be catered for....any 'curious weaver'! Two, four, eight shaft and more articles will be published. Spinning, dyeing and braiding will follow naturally, and other textile constructions of interest. Next issue will carry a minor theme of 'Fantasy Dyeing'. If you have any ideas or successful experiments to share, please contact me. Other articles will include 'Bedouin Sasha' weave.

I would also like to introduce a READERS QUESTIONS ANSWERED page next issue. Do you have any unanswered questions or problems? I know I do, especially in relation to upgrading and making my loom do the seemingly impossible weave. Even after years of experience in weaving, a little hint or diagram can make an idea or design seem easier and possible!

Karen Madigan

A NOTE ABOUT PROJECTS IN THIS PUBLICATION
METRIC AND IMPERIAL MEASUREMENTS: Metric measurements are used throughout and where possible imperial conversions are included in brackets. EPC (Ends per centimetre) and EPI (Ends per inch) for the warp are both included. PPC (Picks per centimetre) and PPI (Picks per inch) for the weft are also included. Metric and imperial read measurements are given where possible, but sometimes conversion may not be as accurate as required. Projects will specify what type of reed was used. Both measurements are provided because Australians use weaving literature, reeds and equipment from both traditions.
DRAFTS: Threading drafts read from right to left and treadling drafts read from top to bottom. Threading repeats are indicated by brackets. Sometimes, smaller pattern repeats are shown within larger bracketed repeats. All tie-ups are for rising shed or jack looms. Each square in the tie-up with a circle in it, indicates that the shaft referred to rises when the corresponding treadle is pressed. To convert the tie-up for a sinking shed or counterbalanced loom, tie the treadles to match the blank squares on the tie-up. To convert for a countermarch loom tie the lower lamms to correspond to the squares with circles in them and the upper lamms to the blank squares. For a table loom follow each square on the tie-up with a circle in it to select the shafts to rise.
WARP LENGTH: The given warp length for each project includes the finished length of the project and an allowance for take up, shrinkage and a 70cm loom waste. Take up is the amount of warp used in the waven interfacing and shrinkage is the warp length lost in the finishing process. A 70cm floor loom waste is allowed for, but your loom may differ from this. A table loom, for example, requires less loom waste.

Living outside the city, I have been forced to 'make do' with a lot of my weaving equipment. This has resulted in strange looking tools and even stranger looks from my weaving friends. Other weavers in isolation from supply outlets may also be interested in making this equipment

REED HOOKS

I needed a reed hook to thread a 20 EPI reed and those I had were too thick to use. The answer was a well-worn hacksaw blade. Ground off the remaining few teeth and shape each end as shown in diagram 1. Use a small grinding wheel attached to an electric drill for the basic shape and then use a small 'warding' hand file to obtain a small undercut (diagram 1). When finished, snap the blade in half to obtain two hooks. Diagram 2 and 3 illustrate the shape of my other two hooks. Both were cut with a fret saw or a jigsaw from scrap Laminex and were sanded smooth with sandpaper.

THREADING HOOKS

Faced with the problem of misplacing my only threading hook, I made several new ones with a packet of four 2.5 mm knitting needles (plastic or metal types can be used). The ends were heated and one end was bent to a small tight hook and the other into a ring. See Diagram 4. The metal needles were heated in a gas-jet of my stove until red hot, then bent to shape with a small pair of pliers. The plastic needles were softened by placing the ends into boiling water until soft, then bending to shape.

INLAY SHUTTLES

Not being very good at making butterflies, which don't result in tangles, I made some flat inlay shuttles. They can be any size but I made them 12.5cms long with 3/4 inch holes. See Diagram 5. They were cut with a fret saw from scrap Laminex. A hole was drilled 2.5cm from each end of the shuttles. A saw cut was made from each end of the holes. They were then sanded smooth.

BOBBINS FOR BOAT SHUTTLES

In order to increase the amount of thread on each bobbin and decrease the amount of time I waste away from the loom, I devised the following. They require 4mm poly pipe available from most hardware and garden shops. The rigid type is best and is sold as "risers". Cut approximately 2.5cms shorter than the bobbin cavity. Obtain some plastic or metal washers (mine are 7/8") that will fit over the shaft and not intrude above or below the cavity space. Drill open the hole in the washer with a 9/32" drill. Place two on each piece of pipe and roughen the ends with a knife. Apply glue and wind with scrap wool and allow to dry. If the bobbins slip on the winding spindle build it up to suit, with tape. Diagram 6.

Earl Ingleby is an artist and handweaver living in rural Victoria. One of his many skills is creating, adapting and modifying tools and looms. He is currently working with sculpture weaving.

MAKE YOUR OWN WEAVING TOOLS

by Earl Ingleby

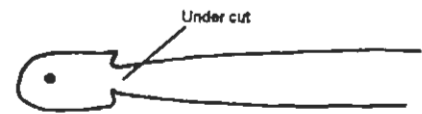


Diagram 1: Reed Hook



Diagram 2: Reed Hook

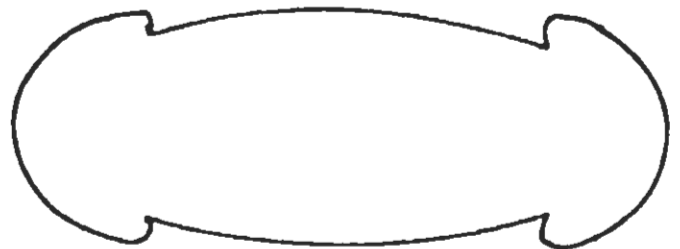


Diagram 3: Reed Hook



Diagram 4: Threading hook



Diagram 5: Inlay shuttle



Diagram 6: Bobbin for boat shuttle

© Earl Ingleby

BACKSTRAP LOOM

Weaving

Weaving on a backstrap loom is an ancient technique. This simple loom consisting of little more than several sticks produces intricate fabrics to the skill of the weaver rather than the complexity of the loom.

Its history of use is vast. Peru, Bolivia, Mexico, Scandinavia, Indonesia, Japan, China, Korea, India, Thailand, Laos and Vietnam, all have a history and present day use of the backstrap or body tensioned loom.

The weaver is personally involved in the weaving process as the front of the loom is attached around the weaver's back or hip with a backstrap.

The other end is either attached to a stationary object or tensioned with the feet. This allows the weaver to have perfect control over the nuances of warp tension.

The sticks of the loom are important because somehow some sticks are much better in shape and form than others. In Guatemala, it is easier to buy backstrap loom woven fabric than the precious sticks that the weavers treasure as their working and comfortable tools.

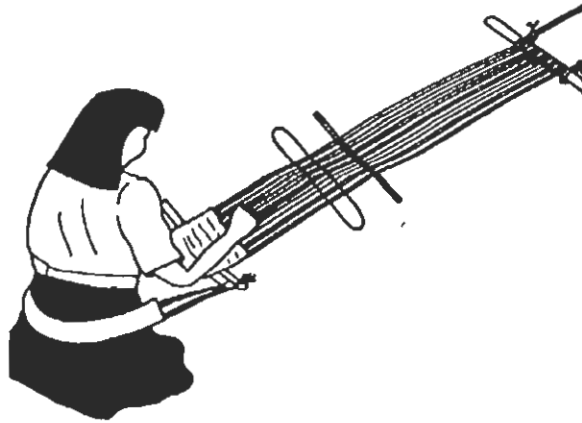
The backstrap itself can be made of many different materials. In South America it is more common to see a soft braided backstrap. In Asia a piece of wood is carved to fit around the back of the weaver. Any type of cloth, handwoven band or piece of leather can be substituted.

I have found backstrap weaving a very personal and exciting technique, as I seem to be more involved than when weaving on a shaft loom. It can be used almost anywhere and is simply rolled up when not in use.

Many fabrics made on the loom are warp faced, but balanced weaves can be woven if a stretcher or rigid heddle is used.

TECHNIQUE DESCRIPTION

To begin, a continuous warp is wound, then attached to the front and back loom rods. Additional sticks are attached with string heddles or put through the warp to obtain the *shed* openings for the weft yarn. One end of the loom is attached to the weaver, by a strap around the back or hip, and the other to a stationary object. See diagram 1.



the
challenge
of
simplicity

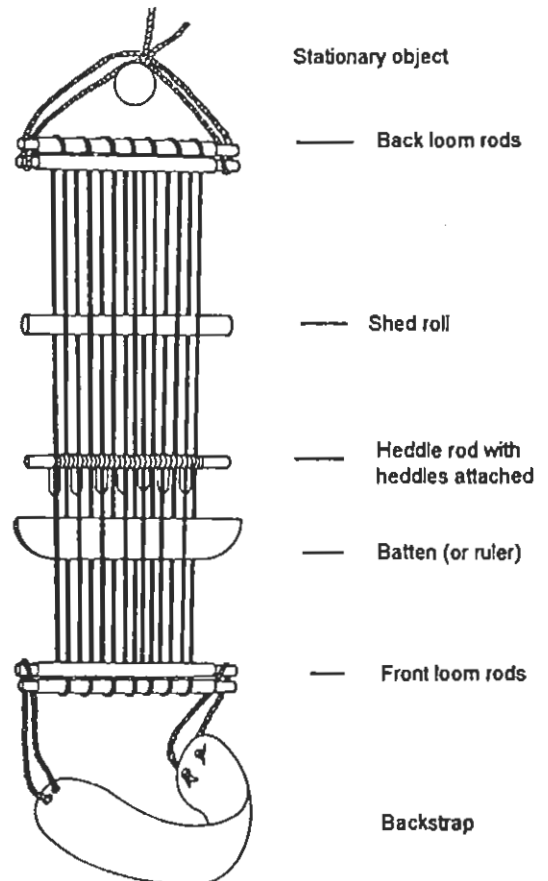


Diagram 1: A backstrap loom

MAKING THE LOOM

Backstrap looms can be purchased, however, making one is very satisfying and VERY easy. The following loom will produce fabrics up to 23cms (9") wide.

You will need:

- Five lengths of 13mm (½") dowel, each measuring 300mm (12")
- To make the loom rods: Notch both ends of four of these sticks as follows: Use a saw to score a 3mm (1/8") line, 25mm (1") from each end of the sticks. Use a chisel to taper the ends of the sticks to the scored line as shown. (Diagram 2). Sand the entire surface of the sticks with fine sandpaper.
- One 300mm (12") length of 25mm (1") dowel or bamboo for the shed roll. Bamboo is ideal because it is lighter.
- One 300mm (12") ruler for a temporary batten. A better one can be made from a piece of hardwood about 9mm (3/8") thick and 50mm (2") wide. The ends are cut at an angle so that one edge is shorter than the other. The short edge is planed and sanded down to sharp edge. (Diagram 3).
- Strong cotton string
- 4 metres of rope
- A piece of fabric (1.5m x 200mm) for a temporary backstrap.
- Tape measure, scissors.
- A stick shuttle



Diagram 2

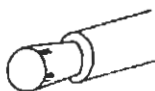


Diagram 3: Batten and cross section

THE WARP LENGTH

Before commencing a project, decide on the length of the warp. This is equal to the finished length of the project plus take up and shrinkage and an extra amount for the fringing. There is virtually no loom waste on this loom. One project per warp is usually woven.

WINDING THE WARP

Wind a continuous warp in a figure eight fashion on a warping board or around stakes in the ground. This process will form a *cross* to keep the threads in order. Begin and finish warping by tying the yarn to itself and leaving a loop for the loom rod to fit through. Change colours by tying the new colour to the old at either of the end pegs. See [diagram 4](#).

Before removing the warp from the warping board or stakes, tie two separate *lease strings* around each side of the cross, and a temporary string through the loops at both ends of the warp. See [diagram 5](#).

Carefully lift the loops from the pegs of the warping board and insert a loom rod through both of them. Lay the warp out flat on a table. Arrange the warp ends in order along one loom rod. Spread them out in groups to the full width of the planned weaving. It is important that the middle of the warp is in the centre of the loom rod.

Use the *cross* to check that each thread is in the correct order. At this point, remove the temporary string through

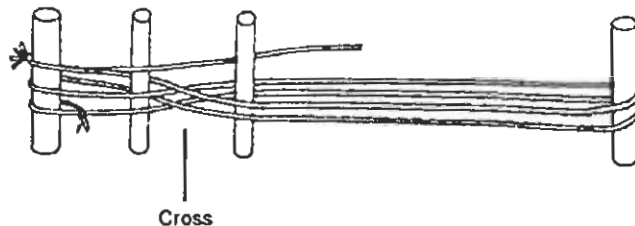


Diagram 4: Winding the warp in a figure eight fashion. New colours are tied in as shown.

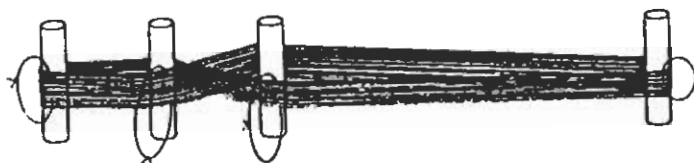


Diagram 5: Tie *lease strings* around each side of the cross. Also tie a temporary string through the loops at each end.

the loop. Leave the two *lease strings* for the *cross* in place. Place another loom rod on top of the spread warp and secure with elastic bands at each end. This completes the back loom rods. Attach these rods to rope and tie it to a secure stationary object. At the other loom rod (the front) spread the warp in exactly the same way as before. See [Diagram 6](#).

The front loom rods can then be attached to the backstrap ready for the weaver to place around the back or hip. It is important to be comfortable when weaving and you may need to experiment with sitting positions. Sitting on a cushion or bean bag or even a chair is permitted!

INSERTING THE SHED ROLL

With the loom attached to the weaver, lift the *lease string* for the *cross* closest to the top of the loom. Insert the shed roll through this opening. This will lift alternate warp threads. Slide the lease string up to the top of the loom, out of the way. To prevent the shed roll from slipping out of the shed, tie a length of string to each end. [Diagram 7](#).

MAKING AND ATTACHING THE HEDDLES

Heddles are string loops placed around the warp threads to assist the weaver in producing the other required shed. Lift the front lease string to create the second shed opening. Insert a flat ruler or batten through this opening. This batten, when turned on its side edge will produce a clear passageway through the warp.

There are many different ways to make heddles. The simplest way is to take a ball of cotton string and lead the end of it through the shed where the batten is placed. Tie the end to the heddle stick and begin pulling the string up between the warp threads and over the stick. See [Diagram 8](#).

Place your thumb over each new loop as you make it and try to make them all the same length. All of the threads laying on top of the ruler require a heddle thread around them. [Diagram 9](#) shows another method of heddle making which takes longer but is more secure on the stick. The loom is now ready to weave on.

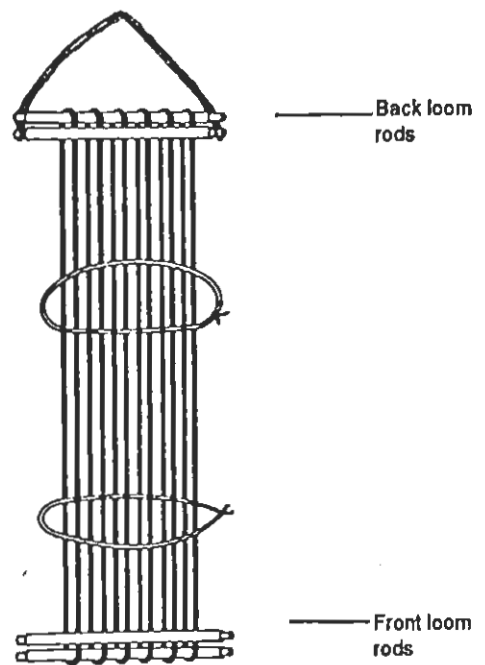


Diagram 6: Simplified, expanded view of loom set up.

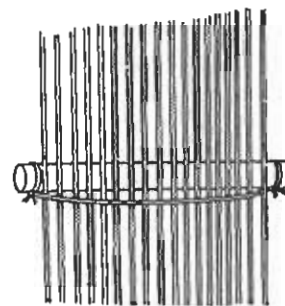
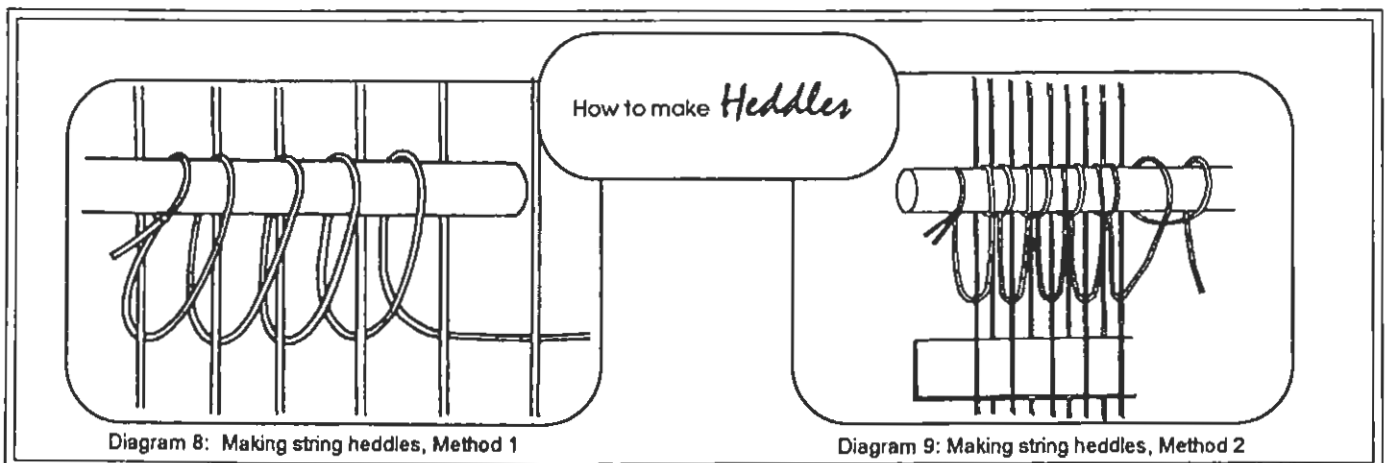


Diagram 7: The shed roll with string attached, to prevent it slipping out.



HOW TO WEAVE ON THE BACKSTRAP LOOM

Depending on the type of yarn you are weaving with it is a good idea to spray the warp with a spray starch before you begin. This prevents excess pilling around the string heddles which can make shed changing impossible. Begin weaving with a few rows of thick waste yarn, before beginning the actual fabric. Use a stick shuttle for the weft.

WEAVING

Two sheds are required to produce a plain weave. [Diagram 10](#) illustrates how they are achieved.

THE FIRST SHED is made by bringing the shed roll down close behind the heddle stick. See [diagram 11](#). This will open a shed or passageway, which can be enlarged by inserting the batten through it and turning it on its side edge. The first row can then be woven.

THE ALTERNATE SHED

Remove the batten and push the shed roll up out of the way. To make the alternate shed, lift the heddle stick and coax the warp threads by gently flicking the warp in front of the heddles. At the same time place the batten behind the heddle stick on top of the warp and put a down ward pressure on the warp, behind the heddles. See [diagram 12](#).

When the shed is completely clear and open, insert the batten through it, in front of the heddles. Turn it on its side and weave the second row. Raising the heddle stick requires patience and practice. It doesn't raise instantly, as it does on a shaft loom.

These two rows repeated will form a plain weave cloth. More pattern heddle rods and pick up techniques can be used to create more elaborate fabrics. As the fabric is woven, it can be wound on by rolling the fabric onto the front loom rods. The following project for a runner is a good beginners project to learn the basic operation of the loom. From there a project with finer cotton such as 16/2 at 37 Ends Per Centimetre (EPC) or 92 Ends Per Inch (EPI) can be attempted.

PROJECT

Warp Faced Table Runner

Wind a warp of 280 ends, 1.5 metres long in 5/2 perle cotton. This warp can be striped in any arrangement. This will produce a runner 20cms (8") wide at 14 EPC or 35 EPI. Set up the backstrap as described above and weave a waste yarn to allow a 30cm (12") fringe at the beginning. Weave the fabric until it measures 90cms (36") Cut the fabric from the loom allowing a fringe of 30cms (12") at the end. Finish the fringing as desired.

References: *Backstrap Weaving* by Barbara Teber & Marilyn Anderson, Watson-Guptil Publications 1975. *The Weaving, Spinning and Dyeing Book* by Rachel Brown, Alfred A Knopf, New York 1980. *Weaving on a Backstrap Loom* by Judy Ziek de Rodriguez and Nona M Ziek, Hawthorn Books, New York 1978.

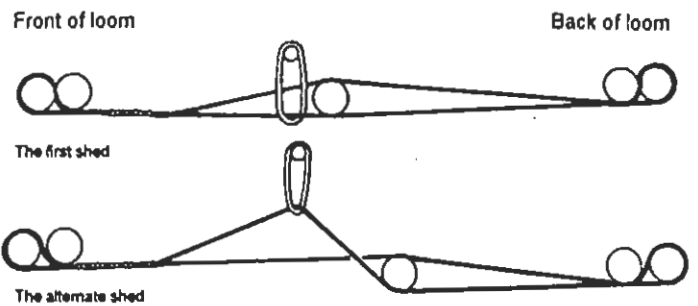


Diagram 10: The two sheds required to produce a plain weave fabric.

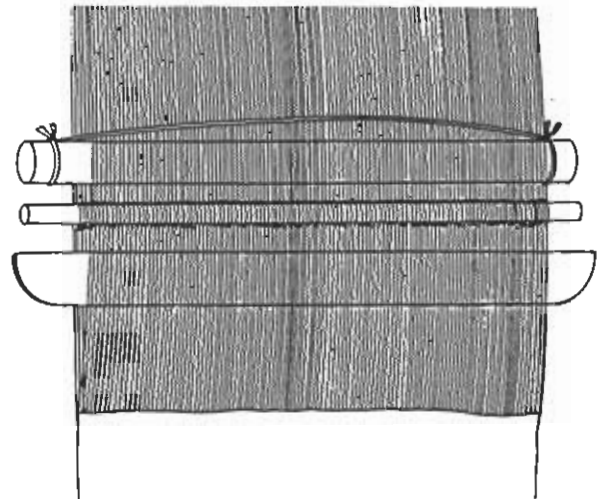


Diagram 11: The first shed is made by bringing the shed roll down close behind the heddle stick.

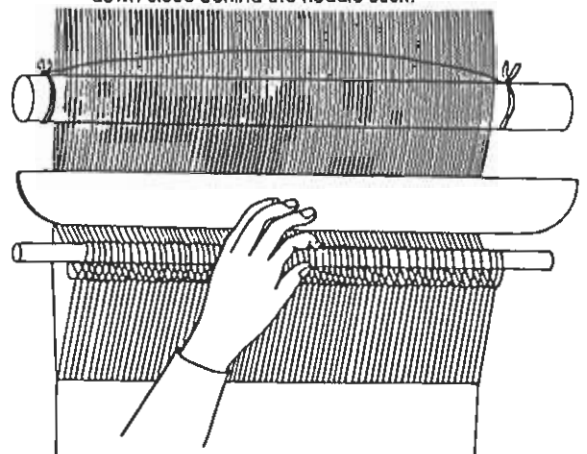


Diagram 12: Opening the alternate shed



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FURRED AND ZEBRA CORDS OF THE ANDES

The ancients of the Andes in South America, derived an amazing variety of very intricate textile techniques. Apart from woven techniques, braiding and other interlaced cords were extensively used. Many different types of complex braiding structures were developed in making slings. Slings had many practical uses in hunting, warfare, herding, ceremonial and decorative adornment. These patterned slings are made by male herders in the remote highlands of the Andes. Because of the cultural division of labour, it is rare for a woman to know how to make them. The two cords presented here are techniques other than braiding used in making the slings. They are very easy to create and combine strength with beauty. Contemporary weavers and artists will find potential for exploration and experimentation in these techniques. A delicate or heavy duty cord can be made, depending on the materials used. The thickness of the central cords determine the diameter of the finished round cord. They can range from fine crochet cotton, seine cotton, linen rug yarn or heavy weight jute. The central cords fit snugly together and I found it necessary to use a spacer to make the knotting easier. These can be made from cardboard or wood. The original Andean spacers were made from gourds. Thread the central cords through the holes to help separate and differentiate between each cord as you work. The technique is basically a wrapping process which can be done in a spiral fashion in either a clockwise or anti-clockwise direction.

ZEBRA SPIRAL WRAPPED CORDS

This simple cord is made by knotting around five central cords. The technique allows easy colour changes and it is sometimes referred to as the *Zebra Cord* as black and white colour changes are reminiscent of a Zebra's coat. The carrier yarn can be smooth, textured or silky. For easier manipulation it can be wound around a shuttle.

TO MAKE

- Cut the five central cords, to the desired finished cord length.
- Wind the carrier yarn around a shuttle. For convenience, knot all the central cords together, ready to begin.
- Take the carrier yarn around the first cord as shown. Continue going around each cord in its turn in a circular, spiral manner. See diagram 1.

FURRED CORDS

This cord is identical to the Zebra cord, but it has a cut pile added to each knot. The carrier yarn is not seen as the pile yarn completely covers it. The furred cord has a delightful, tactile appearance similar to a chenille yarn. Three central cords have been used here but more could be added if required. Almost any yarn or fibre or combination of yarns can be used for the pile. This includes wool, silk, cotton and rayon. Raffia or mohair or combinations could be experimental alternatives. Combine several strands of yarn to make a rich, full pile. Cut the strands into short lengths, ready to insert into the cord.

TO MAKE

- Cut three central cords, to the desired finished cord length. Wind the carrier yarn around a shuttle.
- Knot the ends of the central cords together, ready to begin. Cut the pile yarn into short lengths.
- Take the carrier yarn around the first central cord and insert the pile length as shown. See diagram 2. Repeat this by taking the carrier yarn around the next central cord. Continue encircling each of the cords in turn, inserting the cut pile as you go. □

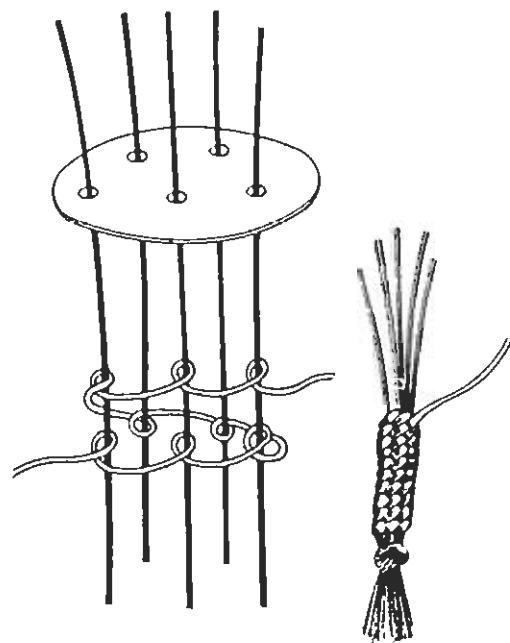


Diagram 1: Zebra spiral wrapped cord.
Anti-clockwise wrapping illustrated.

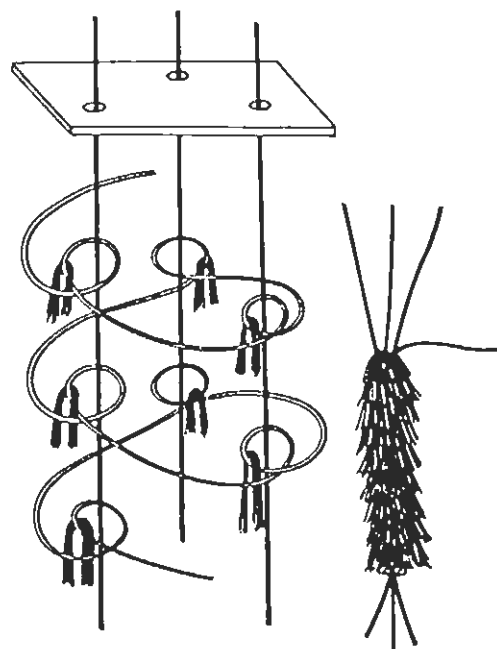


Diagram 2: Furred cord
Clockwise wrapping illustrated

Learning to twist plant fibres into yarn or cord was among the first achievements by humans. People everywhere, throughout history have collected the fibrous material from their local native plants to make the essential requirements of life. Baskets, fishing nets, mats and clothing. Commercial fibres such as cotton and flax are well known to spinners in Australia and New Zealand, but our native fibres have attracted little attention and have been largely overlooked.

The Bush Garden

In a garden situation, native plants will often grow with little attention because they are suited to our region of the world. Some species will grow in tropical climates and others in temperate ones. They can be harvested when needed, at the right time and season. There will be no need to take more than you need because you will have continual access to the plants.

Plants of Australia

A wide range of plants are used by indigenous Australians to make string for string bags and ceremonial costumes.

Depending on the type of material used, different methods are used to separate or extract the

fibrous material. The sappy inner bark or bast of trees and shrubs is accessed by separating the fibre and peeling it away from the outer bark. Often the fibre needs to be soaked in water until it is soft enough to be scraped away from the remaining tissue, similar to flax preparation. Although, some inner barks can be peeled away from the outer bark immediately. The prepared fibre is then spun into string by rolling it on the thigh. Australian Aboriginal spinners can produce a 2 ply yarn in the one process! See page 11.

Many varieties of plants can be used for spinning such as the young unopened shoots of the *Livistona* palm (Cabbage Palm). This spins into a hard, strong string. Eucalyptus bark string from Arnhem Land is spun in this manner and produces a softer, pliable string.

The table at the right indicates several varieties of plants and their uses.



A BUSH GARDEN FOR SPINNERS AND WEAVERS

NATIVE NEW ZEALAND AND AUSTRALIAN FIBRE PLANTS		
Common Name	Botanical Name	Uses
Cotton Tree	<i>Hibiscus liliaceus</i>	Fibre for spinning
Cabbage Palm	<i>Livistona</i> sp.	Fibre for spinning
Reed	<i>Phragmites communis</i>	Spinning, weaving
Bulrush	<i>Typha angustifolia</i>	Spinning, weaving, basketry
Lawyer Vines	<i>Calamus</i>	Basketry
Spiny Headed Mat Rush	<i>Lomandra longifolia</i>	Weaving, Welt twining
Screw Palm	<i>Pandanus spiralis</i>	Weaving, Welt twining, coiled basketry
N Z Flax	<i>Phormium tenax</i>	Weaving fine cloth, Spinning, basketry.
N Z Cabbage Tree	<i>Cordyline australis</i>	Weaving, basketry
Kiekie	<i>Freycinotia baueriana</i>	Weaving cloth, twined basketry


Plants of New Zealand

The Maoris used the fibre from New Zealand flax (*Phormium Tenax*) to weave baskets, bags and fine fabrics for cloaks. When the Europeans entered New Zealand, they compared the fibre of *Phormium Tenax* to the linen flax *Linum usitatissimum*, although there is no botanical relationship. This plant will grow readily from simple division. It thrives in wet soils but will tolerate most garden situations. The fibres are extracted by crushing and scraping the leaves, then washing them and setting them out to dry. After the fibre has been thigh spun and hanked, the resulting yarn is further softened and cleaned by pounding it with a patu muka (stone beater). When these processes have been repeated several times the yarn becomes soft and white. This high quality yarn was then used for weaving dress cloaks.

As yet, botanists have only identified *Phormium Tenax* and *Phormium cookianum* as varieties of flax but the Maori have identified at least 60 different varieties, each with varying qualities of fibre, suitable for different uses.

Other Plants

Many other native plants can be used for weaving and basketmaking. They can also be dyed. *Cordyline indivisa* has a very strong fibre and was traditionally used to make a warrior's cape (kahu toi). *Cordyline australis* can be used for basket making and is simply gathered, boiled and woven before it dries out. Kiekie, *Freycinetia baueriana*, requires little preparation and both the roots and leaves can be used.



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The customs and traditions of the indigenous people of our countries always ensured that weaving materials were gathered at the right time and in the correct way to ensure renewed growth and care for the earth. They had a spiritual approach to their craft and understood that spinning and weaving is more than learning a manual skill. Today, spinners and weavers uphold this tradition, and a bush garden is another delight, in the adventure of our crafts. □

References: *Australia's Living Heritage* by Jennifer Isaacs. UreSmithPress, Sydney, 1984. *Maori Weaving* by Erenora Puketapu-Hetet. Pitman Publishing, Auckland 1989. *Fibrecrafts* by A.L. West. Commonwealth of Australia, 1989. *Te Aho Tapu - The Sacred Thread* by Mick Pendergrast. Reed Methuen Publishers, Auckland, 1987.

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Thigh spinning is believed to be the oldest form of spinning in human existence. Many indigenous Papuans and Australians use the technique to make a two ply string. The process requires only deft hands, a bare thigh and fibrous material. Vegetable fibres collected from the bush are firmly spun into a tightly plyed string. This string is used to make traditional looped constructions such as bilums, dilly bags, headbands and ceremonial costumes. New Zealand Maori weavers use prepared NZ flax to thigh spin warp thread for a cloak weave called whatu.

Many of these applications of thigh spinning were more prevalent in pre-European times, but they do continue today in ceremonial and artistic applications. Thigh spinning in the New Territories of Hong Kong, continued until 1910. It was used to spin hemp for clothing and mosquito nets. Contemporary uses for spinners and weavers today include re-spinning commercial yarn to a tighter twist, making decorative cords or feature threads for weaving, embroidery and other yarncrafts. The advantage of thigh spinning is that it requires no initial outlay and it promotes a deeper understanding of our craft, its link to human history and the fragile environment that we use to grow and collect many of our needs. The Maori's call this "papatuanuka" and in English it is "mother earth".

PRE - HISTORIC

THIGH SPINNING

TO SPIN

Although no constructed equipment is used for this technique, the actions of an experienced spinner are highly synchronised and rapid. Handspinners will easily identify the thigh spinning procedure as a process similar to wheel and spindle spinning.

Dampen the fibres before you begin with a spray of water. Start with two separate lengths of fibre of equal consistency.

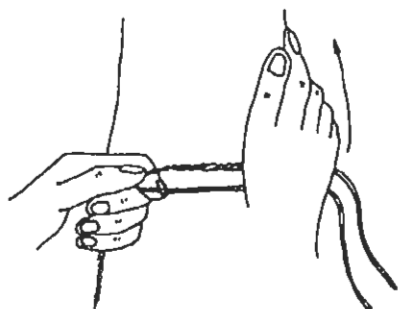


DIAGRAM 1: Hold the two lengths firmly together in the left hand and begin rolling the two separate lengths downwards, on the thigh, towards the knee. Use a strong rolling action with the right hand.

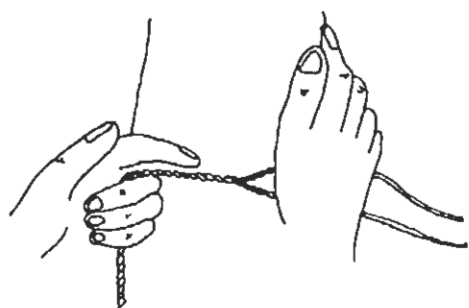


DIAGRAM 2: When you judge that enough twist has built up, release the *left* hand and the two groups of twisted fibre will entwine to form a plyed string.

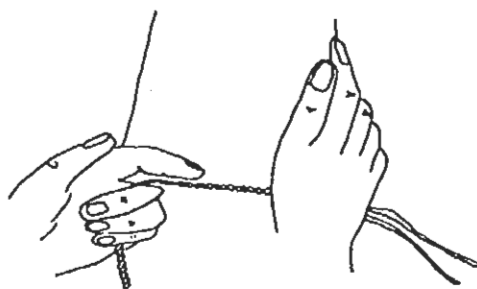


DIAGRAM 3: Maintain pressure with the *right* hand so the twist does not run into the unspun fibres.

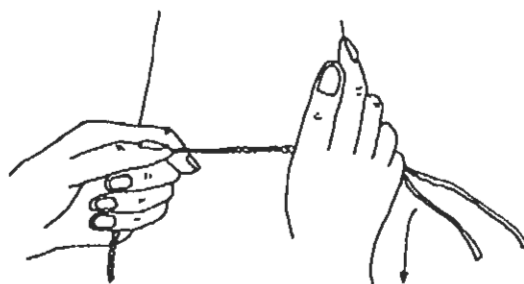


DIAGRAM 4: Set the twist by a firm upward stroke, towards you with the *right* hand.

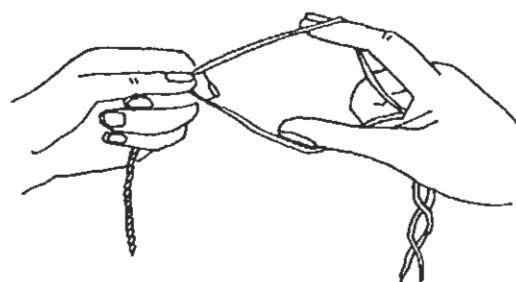


DIAGRAM 5: Hold the plyed string firmly with the left hand and separate the free ends ready to start the spinning process again. Add fresh fibrous material as required.

REFERENCE: *Make Your Own Bilum* by Sylvia Baker, Boolarong Publications, Brisbane, 1985.

DOUBLE WEAVE POCKET WEAVE

This fascinating weave is a variation of a double weave structure.

The threading allows small lace pockets to be placed within a single layer of plain weave fabric. Sequins or other flat objects are inserted into each of the pockets. Sequins make good insertions because of the tension problems that can arise with lumpy or uneven objects.

A minimum of six shafts are required to weave a workable fabric. Four shafts are required for one pocket block and two shafts for the plain weave ground fabric. Ten shafts or more can increase the potential of the weave by adding more pocket blocks. The pockets, and sequins, could then form a design according to the block patterning or profile draft.

Diagram 1 illustrates the threading and tie-up for a 6 shaft version. When the pocket is treadled, a pocket will occur at each position in the fabric where a pocket block was threaded. The pockets are separated by plain weave in the threading. Plain weave can also separate each row of pockets.



The eight shaft version in diagram 2 provides two different pocket blocks - block A and B. When pockets are treadled for block A, all the ends threaded in block B will weave in plain weave. The same occurs when block B is treadled - block A weaves in plain weave. Plain weave can also be treadled to weave an area of plain weave without pockets.

Both drafts (diagrams 1 and 2) illustrate a two thread interlacing in the pockets. This just refers to the look and design of the open lace area in the pocket. Diagram 3 is very similar to diagram 2 in its potential, but has a three thread interlacing in the pocket. This gives a slightly different look to the pocket and tends to cover the centre of the insertion more.

These fabrics look stunning when woven up. The sequins catch the light when the fabric is worn or placed where it can move. An eight shaft (can be adapted to six shafts) project for a sash is provided on the following page. *Enjoy!*

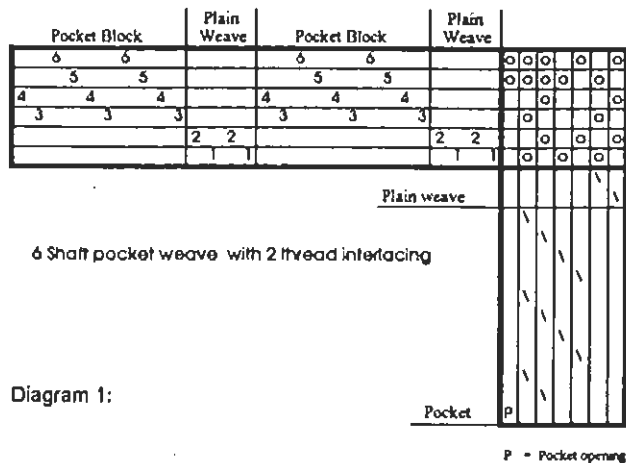


Diagram 1:

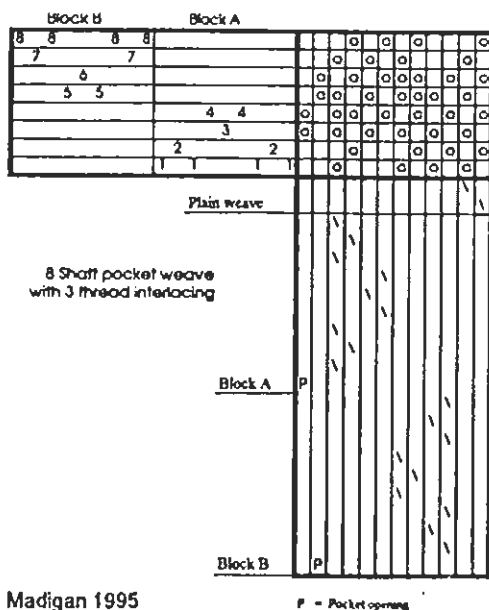


Diagram 3:

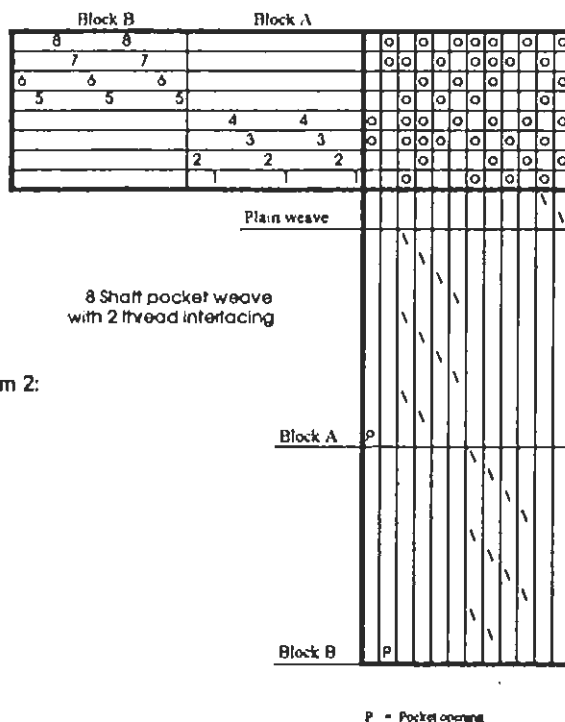


Diagram 2:

This sash is based on a variation of pocket double weave. Each row of pockets containing the sequin inserts are spaced far enough apart to allow an iron to press the fabric. The sequins should be avoided, as the heat distorts them. To enhance the sash a supplementary warp was added but it could be omitted by disregarding shafts 7 & 8 in the threading and tie up. A supplementary warp requires a second warp beam or a separately weighted warp as the take up is different to that of the ground cloth. A skeleton tie up is shown here, so two pedals will need to be pressed at the same time

WEAVE DESCRIPTION: Double weave pocket.

FINISHED DIMENSIONS: 172cms x 15.5cms, including fringe.

WARP REQUIREMENTS: 900 metres (approx. 55g) 20/2 mercerized cotton for the ground weave. 100% rayon for the supplementary warp, 8 strands were combined to make one warp thread. (Available from Taxtors Trading, Melbourne)

WEFT REQUIREMENTS: 40/3 sewing cotton.

REED USED: 15 D.P.I. (60/10)

SLEY: 2,2 The supplementary warp is sleyed in with (on top of) the ground warp.

E.P.C: 13 **E.P.I:** 30

OTHER: 1 packet #4 sequins (10mm diameter-flat) from Maria George Pty Ltd.Melbourne.

WIDTH IN REED: 17.7cm (7")

TOTAL WARP ENDS: 236 (212 ground warp plus 24 supplementary warp)

WARP LENGTH: 2.8 metres (includes 70cm loom waste)

P.P.C: 13 **P.P.I:** 30

TAKE UP & SHRINKAGE: 12% in width, approximately 24% in length, including fringe take up.

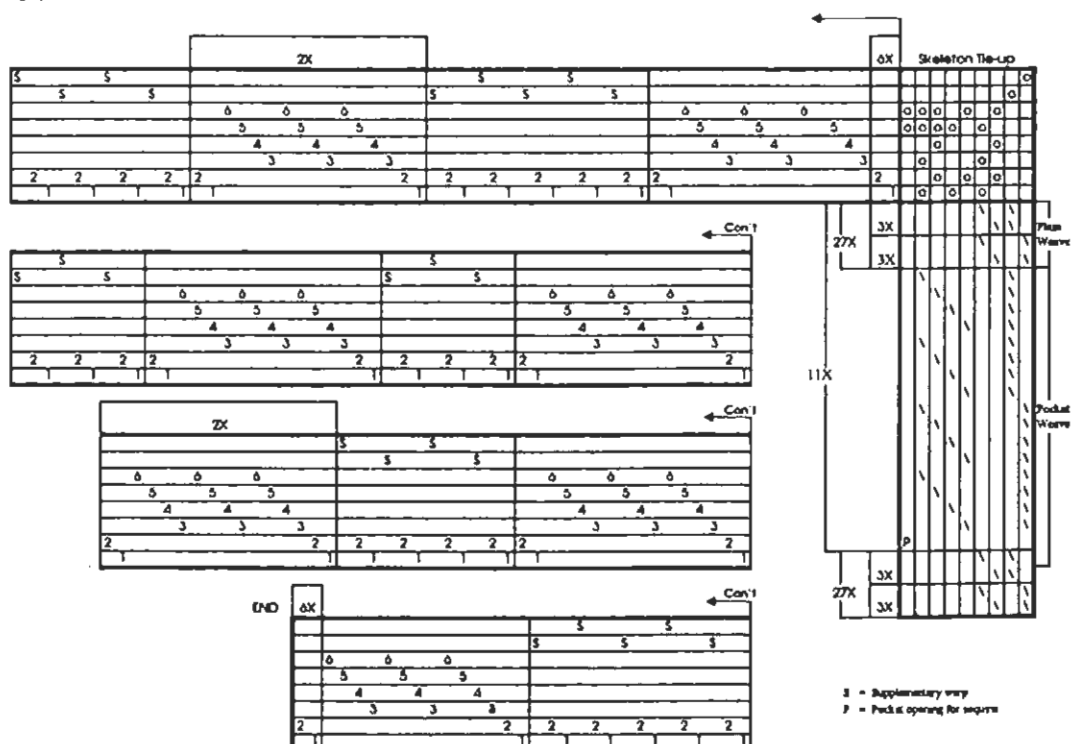
TO WEAVE: Weave as directed by draft. Plain weave sections should measure 12.5cms each.



Sequin Sash

by Karen Madigan

TO FINISH: Cut the sash from the loom leaving a 15cm (6") fringe on both ends. Finish with a hand twisted fringe. Gently wash in warm water. Spin dry. Weight the ends of the sash and leave until completely dry. Press between sequin rows with a steam iron. ■



Lavender Sachets



FOR FOUR SHAFTS

These sachets are the perfect project for a narrow table loom. If you haven't woven with fine threads before this is a gentle, undaunting introduction. The following instructions are for three sachets woven on the same warp. Two different treading variations are given, shown on the draft as pattern 1 and 2. Weave one sachet in each pattern and choose your favourite for the third. I found these patterns were most effective when two colours of a similar value were used in the weft, however many combinations of colours or tones could be tried.

WEAVE DESCRIPTION: Modified Huck

FINISHED DIMENSIONS: Each sachet is 13.5 x 8 cms (5" x 3")

WARP REQUIREMENTS: 20/2 mercerised cotton in mauve.

WEFT REQUIREMENTS: 20/2 mercerised cotton in pink and mauve.

REED USED: 50/10 (13 DPI)

SLEY: 2,2,3

E.P.C: 12 **E.P.I:** 30

WIDTH IN REED: 19 cms (7 1/2")

TOTAL WARP ENDS: 228

WARP LENGTH: 1.2 metres (47") includes 70 cms loom waste.

P.P.C: 14.5 **P.P.I:** 36

TAKE UP AND SHRINKAGE: 6% in width, 2% in length.

TO WEAVE: Weave as directed on the draft. Repeat the chosen pattern treading until the first sachet fabric measures 16 cms (6 1/2"). Change pattern treading and/or weft colours, for each sachet. When complete, cut the fabric from the loom and secure warp edges with a row of machine stitching.

TO FINISH: Wash the fabric in warm water and steam press when still damp.

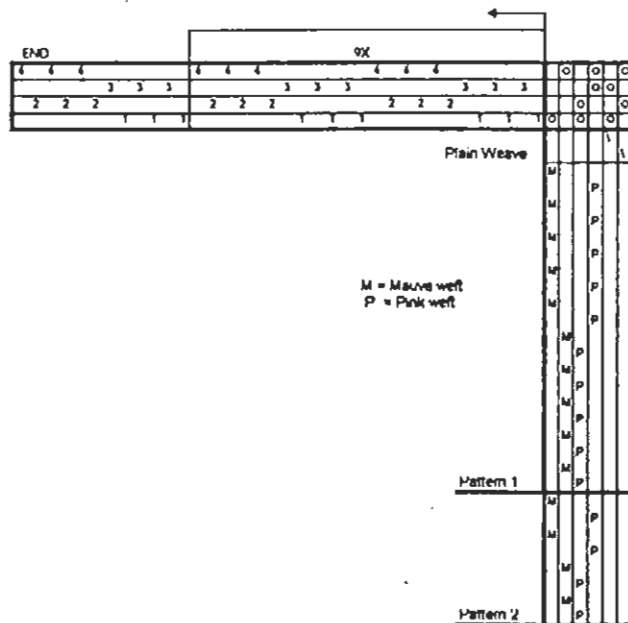
ASSEMBLY METHOD: When completely dry, cut the fabric into three sachets. Each of the pieces should measure 15.5 cms in length x 18 cms in width. Machine zigzag or overlock both raw edges on each of the sachet fabrics. Fold each sachet in half with right sides and selvages together. Machine stitch down the sides and bottom edge to produce the sachet bag. Turn the bag to the right side. Turn over a hem of 1.3 cms, at the top open edge and hand hem neatly. Use the mauve 20/2 cotton to

hand stitch a blanket stitch around the top edge, with each stitch 3 mm apart.

CROCHET EDGING: Use a 1.00 mm crochet hook to crochet an attractive lace edging. Begin by a slip stitch into the fabric at the side seam to secure. *Chn 3, sl st into the blanket stitch*. Continue repeating this until one round is complete. Secure yarn and end off.

Fill the sachet with dried lavender and make a hand twisted cord in 20/2 cotton for tying the sachet shut.

SUPPLIER: 20/2 mercerised cotton 'Britt' is available from Taxtors Trading Co., 15 Brighton Street, RICHMOND 3121 VIC.



Aho Whenu Yabba

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'Aho Whenu Yabba' means 'Weft Warp Talking' in English. Aho and whenu are Maori words and yabba or yabbering are from an Australian Aboriginal language which means 'the spoken word'. The word yabbering is also used as an expression in Australian English.

EIGHT PLUS!

I was fortunate to be able to attend one of Madelyn van der Hoogt's (Editor of Weaver's Magazine (USA) and author of *The Complete Book of Drafting for Handweavers*) workshops during her teaching tour of Australia in 1994.

I was amused to hear her say that American weavers think that no one in Australia weaves on more than four shafts! In fact many of us do, including the 17 who are currently members of EIGHT PLUS!, a group started in 1994 to provide mutual support for weavers.

EIGHT PLUS! works like this....Twice a year members receive a study package of material which focuses on a particular weave structure or theme, and a set of recording sheets. By a specified date, members send to the convenor 10 samples of the project they have woven on the set theme. The convenor then posts to all members who have contributed samples, a set of nine samples each, with the tenth posted to the NSW Spinners and Handweavers Guild library in Sydney for all to see.

The first project had 10 members contributing superb samples of double weave, all different and worthy of intensive study. The next project, *Bronson Lace*, will be followed by *'Something for Christmas'* to conclude in October 1995.

Weavers who have eight shafts or more, who are serious about their weaving (but not necessarily expert) are invited to join this keen weavers group.

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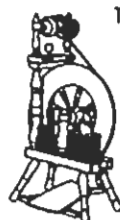
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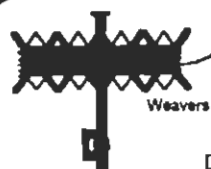
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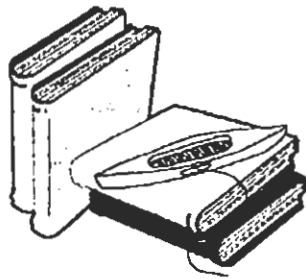
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REVIEW

LATVIAN WEAVING TECHNIQUES

by Anita Apinis-Herman

Published by Kangaroo Press, Kenthurst 1993

Historically this is a unique book for Australian weavers. Not only does the author and weaver clearly explain weaving techniques and patterning from Latvia, it is also a book from the heart. A journey of a family and a passion for the life of the shuttle. One that portrays an important aspect of Australian culture and how it meets the immense diversity of our country.

The author begins with a biography of her mother, Anna Apinis, who migrated to Australia in 1950 from Liepja, Latvia. As a skilled weaver and teacher she taught her craft to other migrants at the Parkes Holding Centre before settling in Sydney. Her daughter, Anita also a weaver, has compiled this book with a thorough knowledge and thoughtful approach to her skills. I was very moved by the biography, with its Australian content and links to Latvia. A delightful addition are the short poems or Latvian folk songs (daina) about weaving throughout the book. The author clearly explains the basics of weaving, its construction and the equipment needed. She also explains basic pattern drafting and how to prepare the tie-up on a countermarch loom. The basic weaves are covered moving on to more complex structures. Drawloom structure is approached and there are drafts for up to 17 shaft patterns.

Anita has also included chapters on embroidery, finishes and fringes and tablet weaving. Many of the traditional costumes are rich in patterning and could inspire creative adaptations and ideas for weavers. For example, a muted and simple log cabin weave is combined with stripes (all 4 shaft) in vivid colours to produce the Kuldga national dress. The author has not forgotten a map of Latvia

to refer to and the book has many black and white photos and drawdowns with 16 full colour pages. Latvian Weaving Techniques is not just another weaving book but an historical treasure for all Australian Weavers.

NATURAL PLANT DYES

by Judith V. Hallett

Published by Kangaroo Press, Kenthurst 1992

Written in a friendly tone, the author guides the reader through every aspect of natural plant dyeing. Plant collection, preparation, mordanting and dyeing wool are all covered. She is careful to include information on ratios of dye material to weight of wool and their potential effect on the resulting colours. Mordanting recipes and safety requirements are set out simply and clearly. Colour plates illustrate the range of colours possible with natural dyes. Judith also recommends natural dyeing for children and has provided ideas for a workshop. This would be particularly good for school studies on the environment or science. Many of the plants listed are Australian native plants and Eucalypts, which are easy to find or grow for dyeing. At the back of the book are three helpful reference lists. They are the colour list, plants for colours list and the botanical to common names list. Having the plants and colours sorted in this way is a terrific reference. This book is written for anyone who is interested in natural plant dyes, it is set out simply and in a non-threatening way for a beginner, but provides interesting information for more experienced dyers. Highly recommended.

TWISTS AND TREADLES Edited by Beryl Farr. Published and available from the Handweavers and Spinners Guild of Victoria Inc. 7 Blackwood Street, North

Melbourne. \$AUS14.00 post paid in Australia and \$AUS17.00 post paid overseas.

This delightful compilation of guild newsletter articles from the Victorian Spinners and Weavers is another important contribution to the journey and history of Australian Handweavers in their efforts to teach and encourage our passion of the loom. Published as part of the celebration of the 40th Anniversary of the Handweavers and Spinners Guild of Victoria, it is an interesting mix of hints, philosophies, pattern ideas and articles. For clarity it is divided into chapters of related articles such as Weaving, Spinning, Fibres, Colours and Dyes, Knitting & Crochet and Farrago. I especially like the variety of styles in writing and attitudes which reflects the diversity of the human character and a passage of time and thought. This passage of time however is continually linked and identifiable with our interest in the craft today. Articles are written by names such as Marcella Hempell 1982, Ann Greenwood 1987, Mrs. Tinsley 1961 and Mrs Plummer 1962....all contributing to knowledge and ideas. Congratulations to the Victorian Guild on the publication of this excellent collection.

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Silk fibre is spun by a caterpillar as a semi-liquid, continuous filament that hardens on contact with air. The smooth surface of the silk fibre reflects light, and this reflected light is seen as lustre. The silk is then processed and sold in many forms. I recommend using silk tops to obtain the best lustre and strength in your 'paper'. A top is a rope like preparation of silk fibres that have not been spun into yarn yet but have been carded and combed so as to perfectly align all the fibres of a specified length. Make sure when purchasing the tops that the staple length is at least 7.5-10 cms (3-4") - the longer the better for the paper's strength.

There are two major types of silk fibre depending on which species of caterpillar spins the silk. The Bombyx Mori extrudes a pure white silk that is very fine and highly lustrous and is sometimes commonly known as Mulberry silk. The Chinese Tussah silk worm spins a lovely honey coloured fibre which is slightly coarser and less lustrous, but also less expensive. Either will do fine.

YOU WILL NEED:

25 gms of silk tops will make a sheet of 'paper' of medium thickness 40cms by 76cms (16" x 30").

Approximately one square metre of tulle netting.

A piece of fairly heavy plastic to work on.

METHOD:

First lay down the piece of tulle netting twice as big as your project so as to sandwich the sheet of silk 'paper'. Next, lay out the silk fibre on top of the tulle. Begin by pulling off a manageable length from the silk top (about 15-30 cms) and strip it lengthwise as many times as needed. Then use the palm of your hand to hold down the end of the silk top on the tulle and pull out a length of fibre approximately 1.2 to 4 cms wide by 7.5 to 10 cms long. The length of fibre laid down at any one time is directly related to the length of the individual fibres in the top. Continue laying down fibre in this manner, ensuring that the fibres are slightly overlapping each time. I usually begin in the upper right hand corner of the sheet and work downwards towards myself. Then on the next row move back up away from myself. On the subsequent rows it is imperative to place your palm on top of the previous row so that each new row overlaps approximately 4 to 6.5 cms on top of the previous one. You should not be able to see the tulle underneath the silk. Continue laying down the silk until it reaches your desired dimension. The thickness of the silk 'paper' depends on the amount of silk you place in any one spot.

WETTING OUT THE SILK:

After your silk is laid down, cover it with the rest of the tulle. Next, wet out the silk so that it will easily accept the adhesive agents. Paint the silk with a solution of soapy water or a wetting agent. Turn the silk over and repeat on the other side.

APPLYING THE ADHESIVE:

There are several adhesive agents that can be used to "glue" the fibres together, such as Jo Sonja's Textile Medium and Atelier Acrylic Gloss Medium. To apply, follow manufacturers directions, and paint very evenly and thoroughly onto both sides of the silk paper. Leave the silk 'paper' to dry preferably on a mesh screen. When *thoroughly* dry, simply peel the silk 'paper' away from the tulle. You can then iron the paper on a silk setting to flatten it. It is then ready to use. Try this with mohair or wool tops...the effects are tremendous!

by **NANCY
BALLESTEROS**

Nancy is the designer and owner of Treetops Colour Harmonies. She sells reproducible Merino, Tussah silk and kid mohair tops in 12 harmonious variegated colour combinations. For further information please contact:

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