



SEPTEMBER/OCTOBER 1994

# Handwoven

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# Handwoven

SEPTEMBER/OCTOBER 1994, VOLUME XV, NUMBER 4

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ON THE COVER: Rich, deep colors and a luxuriously soft texture combine in Terry Newhouse's ROYAL BLUE CHENILLE JACKET to make a striking garment. Look for details and instructions in "First Pick," page 70.





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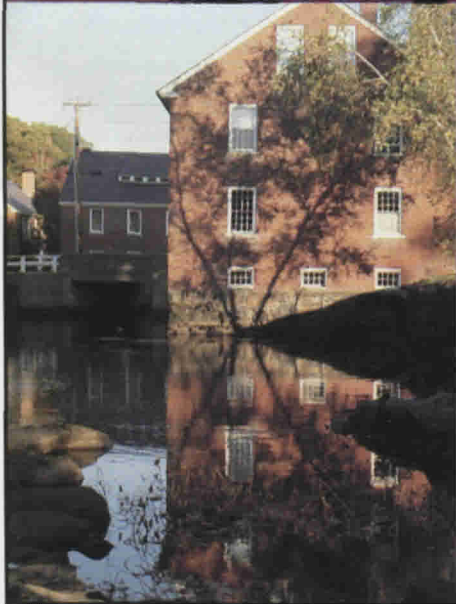
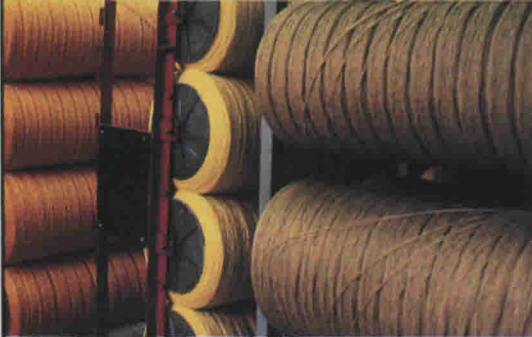
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# FROM THE EDITOR

This year marks the 15th anniversary of *Handwoven*. To celebrate this milestone, we are giving the magazine a face-lift. We've aimed for a fresh look with a new cover, new type styles, and clean page layouts. This much is cosmetic, but we've also rethought our priorities and presentation of material to reflect what you're telling us you want to see.

Joining *Books, Etc.* and *Tricks of the Trade* will be *Weavers' Circle*, in which weavers will describe their accomplishments undertaking collaborative projects; *Story Cloth*, in which weavers will tell of their triumphs, big or small; and *Yarn Basket*, a forum for discussion of various topics—by you. Sharon Alderman's *Swatch Collection* will come to an end, but she will continue to expand your weaving horizons regularly. Our other columnists will continue to contribute to the magazine, but not on a fixed schedule.

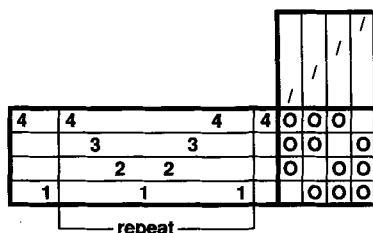
You'll notice changes in the instructions. The treadling now reads up from the tie-up in the same direction that picks create cloth. As before, the draft reads from right to left, starting at the tie-up, but now the color order matches that of the draft: the right sides of both warp color order and threading draft match the right side of your weaving as you sit at the loom. We think that these changes will be seen as logical in matching the way cloth is woven.

We're aiming to make our projects exciting enough for experienced weavers, yet approachable for the novice. We want to include pieces to weave for your family, for gifts, and for the sheer joy of creating and learning something new. As always, we want to keep in touch with you, what you're weaving, what you're thinking. We'd love to hear from you.

*Jean*

JEAN SCORGIE, editor

P.S. One change you won't notice is that, for the first time, we used electronic production for the cover and the article "Tales from the Loom: Story Characters on Four Shafts." In working out the details of this new process, we overlooked an error in the draft on page 65. The draft should read:



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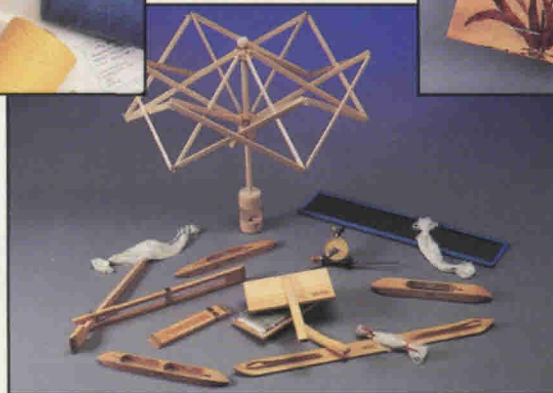
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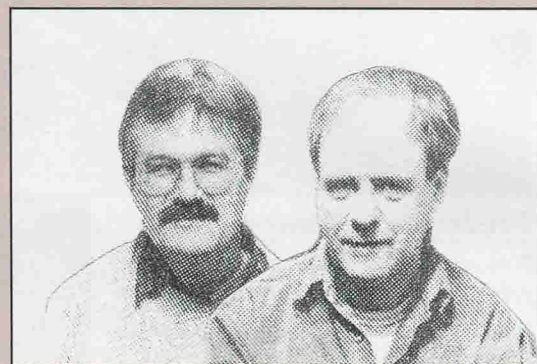
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clemens

jan

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# LETTERS TO THE EDITOR

## NEW LOOM

During the past three years, my husband and I have designed a new loom which we would like others to know about. The E-Loom is the first loom which combines the size of a conventional handweaver's floor loom with the versatility of individually selected heddles and the speed of fully automated electronic control. The loom looks like a conventional multishaft floor loom. The castle houses an array of 768 individually controlled heddles, arranged to provide 16 ends per inch over a weaving width of 48 inches. In addition, the castle accommodates up to four conventional shafts. As with other computercontrolled looms, it is convenient to design a pattern beforehand on a computer, store it in memory, and then rapidly transfer it to the E-Loom for weaving. To do this, we use a conventional PC with parallel digital interface. To open a shed, the weaver simply presses a foot switch and the loom automatically selects appropriate heddles by individual solenoids, latches the selected heddles by electromechanical means, and raises the latched heddles (and any conventional shafts, if needed) by an electric motor. Pressing a second foot switch closes the shed to reverse the previous steps and transmits the heddle selection data from the computer for the next shot. The power drawn by the loom averages less than 200 watts over a typical weaving period. In its present form, the E-Loom is a prototype for a whole new class of looms, but at the moment, we have no plans for commercial production. Any interested weavers who find themselves in our vicinity are invited to try out the E-Loom. Please write or call beforehand to arrange for a convenient date.

Christel and Rudi Engelbrecht,  
1920 NW Douglas Place,  
Corvallis, OR 97330  
(503) 754-7958 or (503) 737-3117

## CLARIFYING BEIDERWAND

Many thanks for your work on my article, "Pick-up Beiderwand," in the May/June 1994 issue. It turned out fine,

but I so wished that I had not been out of the country and thus unable to read my article before it went to press. By smoothing out some rocky sentences in my text, the paragraph on the Structure of Beiderwand on page 57 changed some of its content. I would like to take out the references to "plain-weave layers" and instead have it read

Beiderwand is classified as a lampas weave, a group of structures which combine two complete weaves in one fabric. One weave functions as the foundation weave while the other is supplementary. Both weaves are connected by the binding action of the supplementary warp, a feature which all lampas weaves have in common. In beiderwand, two plain weaves are combined. Unlike most other lampas constructions, in beiderwand, the supplementary weave forms the background and the foundation weave creates the design. The design areas consist of two separate layers in plain weave. Typical for beiderwand are the vertical stripes on the reverse of the fabric. They are caused by the supplementary warp ends moving above and below groups of the foundation.

Most weavers would not be aware of this clarification, I am sure, and ten years ago, I might have gotten away with it entirely, but that might not be so anymore. Over the years that I have been studying beiderwand and lampas weaves, it has truly been an arduous task to find any usable information before handweavers began to incorporate these terms and structures.

Heidi Waber, Vancouver, Washington

## CHILDREN'S BOOKS

Your March/April 1994 issue had many excellent hints for teaching youngsters the joys and wonders of weaving and spinning. "Spinning a Story, Weaving a Tale" by Kristie Sherrodd gives a detailed listing of books suitable for children. I have in my library

a delightful book I would like to share with the author and your readers. *How a Shirt Grew in the Field* by Marguerita Rudolph is beautifully illustrated by Y. Surmach Mills. It was published by McGraw-Hill, New York, in 1967. The story tells the details of growing flax and processing linen for making clothes. This story can be read to children as young as first grade and is informative for all ages.

Nathalia Sugden, Palgrave,  
Ontario, Canada

## WEAVERS OF THE GOLDEN WEST

Recently, I received a small, two-shaft table loom made of wood with string heddles. The side of the loom is stamped Weavers of the Golden West, 86 (blurred), Los (blurred). Reportedly, the loom came from the Frank R. Howard Ranch near Willits, Mendocino County, California. I would like to know more about the Weavers of the Golden West. Does anybody know if this is a loom manufacturer or, perhaps, a guild?

Louise Yale, PO Box 552,  
Redwood Valley, CA 95470

## WEAVERS IN ARGENTINA

Meeting other weavers gives me the opportunity to have "instant friends" because we have a common thread. For almost a year, I've lived in Buenos Aires, Argentina, and have found only two other weavers. Through several moves in the past 18 years, I've always managed to find other weavers through guilds or by asking at weaving shops, but this time, I am at a loss. I've checked with several sources, but we have not found anyone with an Argentine address. They may be like me and have a U.S. mailing address. If you are a weaver living in Argentina or you know of one, please write. I moved here from Houston, Texas, and left a huge weaving community. I miss the constant stimulus and sharing my love of weaving with others.

Kathy Barth, 1572 West Gray #251,  
Houston, TX 77019, or  
Avenida Alvear 1491, Capital Federal,  
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### GIFT EXCHANGE

I wonder how many weavers you inspired by your September/October 1993 issue of *HANDWOVEN*. I read Marty Hartford's letter to the editor two issues later, describing how she took Alison Irwin's snowmen ornaments a step further by felting the balls. I thought I was ingenious to do the same thing, but I added tiny hats felted using a three-dimensional method. At our Dyed in the Wool Weavers & Spinners Guild Christmas party, Chris Schmidt gave as her exchange gift a ball ornament she made from the same issue. This year, we're planning another ornament exchange, and we're looking forward to more ideas.

*Julia Kubat, Poplarville, Mississippi*

### NETWORK FOR PICK-UP WEAVERS

I am preparing a slide presentation of work done in double-weave and Finnweave pick-up techniques for a program to inspire weavers. I am also

planning to form a network of new or experienced pick-up weavers to share hints, ideas, and successful projects. Send me your name and address if you would like information about the network. If you'd like to have slides of your work shown and credited during the talks, include slides and a description of the work.

*Jan Doyle, 46 Fire Lane #1, Jerry Brown Farm Road, Wakefield, RI 02879*

### SAY WHAT?

Recently, I read an account of Plymouth Colony from 1620 to 1691. It mentioned that some of the men worked as "say-weavers." I've never heard of this term before. Does anyone know what it means?

*Dorothy Jane Bailey, Wesley, Arkansas*

### WARP ON HOLD

Even though I'm only a hobby weaver, I like to think I get as much as I possibly can from the limited time I spend weaving. I did something before Christmas that gave me a great deal of

pleasure in the "how clever" department.

I had just finished a run of placemats and liked the pattern so well that I wanted to tie on another warp for more. The only problem was that I needed to weave something quickly for our guild Christmas gift exchange, and my other loom had a project on it. Since the placemat warp was threaded on only three of the eight shafts, I decided to remove the placemat reed with the warp intact, tie it to the castle, insert another reed, and thread my scarf warp on the remaining shafts. Other than having to untie the placemats from the back beam, this worked beautifully. Now I'm tying on a second scarf warp for another quick project, and I'll still be able to return to the placemats.

*Anne Warner, Lakemont, Georgia*

*Your editors are eager to hear what's on your mind: about the magazine, about the state of weaving as a craft, and about how weaving fits into your life. Write "Letters," HANDWOVEN, Interweave Press, 201 East Fourth Street, Loveland, CO 80537.*

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## BOOKS, ETC.

### TEXTILES: 5,000 YEARS. AN INTERNATIONAL HISTORY AND ILLUSTRATED SURVEY

edited by Jennifer Harris

Harry N. Abrams, Inc., 100 Fifth Ave., New York, NY 10011, 1993. Hardbound, 320 pages, 425 illustrations, including 327 in full color, \$75 plus \$4 shipping. ISBN 0-8109-3875-8.

After a brief general introduction, a short survey of textile techniques covers weaving, tapestry, rugs, embroidery, lace, dyeing and printing, knitting, netting, knotting and crochet, and felt and bark cloth—all in 51 pages. This is more an appreciation of techniques to prepare the reader for information which follows about specific textiles than a technical how-to. The balance of the text whizzes you around the world, proceeding historically through the ancient world, the Near and Middle East, India and Pakistan, the Far East, Western Europe, Central and Eastern Europe, the Americas, and Africa. Each geographic section comprises richly illustrated essays by different authors. For instance, "The Americas" has three essays: "Colonial North America," "Native North America," and "Latin America." Many of the book's 22 contributing authors are curators of relevant textile collections.

Each essay is relatively short but intense. The style is never heavy; the pace is too fast for weighty erudition, and—praise to the editor—you can read along from essay to essay without any sense of a bumpy ride. I felt a challenge to read and study more. An extensive bibliography allows just that, though many of the references are not in English, and some, catalogs for example, may be hard to find.

Admirable and challenging as the text is, the book would be worth owning just for the illustrations, which will surely inspire project and design ideas for contemporary weavers. The illustrations are rich and intriguing enough that strangers in planes and trains asked me what I was reading. One of those, a

weaver (and a HANDWOVEN reader), observed, "It's like having your own little museum," a comment so apt, I promised to quote her. The illustrations, like the text, seemed chosen to communicate as much as possible, as efficiently as possible. There are a few full-page photos; many more large and small ones are sprinkled throughout the text.

The perspective is British, sometimes amusingly so—the section on "colonial" North America covers the period from the 1700s to the 1990s—but the distance offered me some fresh insights. The discussion of the growth of textile mills in New England and the ensuing labor problems made me see the present political and social circumstances of a familiar area with new eyes. Because textiles are explored in so-

cial, political, historic, and geographic context, the book is packed with avenues for exploration.

This is a big, expensive book. I read every word. Along the way, I decided I had to photocopy parts—the glossary for sure, then bits here and there. I finally decided I had to own it as a kind of curriculum organizer for future textile studies.

Donna Muller



### LATVIAN WEAVING TECHNIQUES by Anita Apinis-Herman

Kangaroo Press, 3 Whitehall Road, Kenthurst, New South Wales 2156, Australia, 1993. Hardbound, 136 pages, many color and black-and-white illustrations, \$43.95 postpaid. ISBN 0-86417-426-8.

If your eye delights in rhythmic Old World patterns and you long to explore ways to create such richness with simple tools, this new book will lead you along an exciting path.

It is a basic weaving text with examples focused on the fine handweaving of the author's Latvian-born mother, Anna Apinis. Although "the aim of the book is to present as many Latvian designs as possible using between four and

eight shafts," a few of the drafts are for twelve shafts, and a short chapter addresses the drawloom.

With only this book, a beginning weaver could gain a fairly comprehensive mastery of the craft of weaving while learning to reproduce a selection of traditional Latvian household fabrics and garments, though the basic information about loom function, yarn counts, and structure seems tedious in a book with a specialized story to tell. There are detailed descriptions for finishes and embellishments using embroidery needle, tablet weaving, and off-loom fringe braiding with four hands. Throughout, Latvian weaving terms are given to keep us reminded of the point of view and add value for Latvians and historians.

Though many of the techniques are universal to weaving, some of the applications and combinations are complex and unusual. Chapter 4, "Combination Weaves or *Sakopotie Sejumi*," explains that combining the tie-ups of two different weave structures, one over the other, will result in vertical bands of the two structures in the cloth; combining the two tie-ups side by side will weave the two structures in horizontal bands. A valuable concept, clearly presented!

The distinctive *Nica* wrap uses this principle to weave a 2/2 twill wool shawl with basket weave on three sides—on four shafts. The basket-weave areas guide the placement of colored wool embroidery in rich traditional patterns. Three drafts are especially recommended for weaving embroidery canvas. Wouldn't it be fun if some new synergies developed with weavers and embroiderers combining their expertise?

The directions for weaving a *Kuldiga* skirt combine Log Cabin with four-shaft weft-faced satin to give "another good example of clever use of color and sim-





## MORE BOOKS, ETC. . .

plicity of design . . . using only four shafts." In the instructions for a *Kuldiga* wrap, the first description in English, Apinis-Herman interweaves a tablet-woven decorative fringed border with the warp fringe of the loom-woven shawl inserted as weft in the tablet-woven band. This and other ingenious manipulations could plant seeds for contemporary innovations in handweaving.

Every page has charts, diagrams, drafts, or clear photographs, many in color, to instruct and inspire. The type is clear with, usually, enough white space for comfort. The high-quality paper is stitched together to make a durable book that lies open.

The English glossary of weaving terms is supplemented by corresponding Latvian terms and definitions. The bibliography includes both English and Latvian publications, with some surprising omissions, including *Ievads Latviesu Tautas Tērpu Vesture*, edited by Ginters Dzervitis, a 1936 introduction to Lat-

vian national costume history.

There is little evidence of an Australian accent, but the discussion of overshot block theory may be difficult to follow because of our American custom of assigning shaft 1 to the bottom line of a draft. In the section on embroidered motifs there is a baffling use of the term "fold." "The diagonal squares [on the chart] marked with a black dot • designate that part of the design where each red thread is folded under two white warps." This seems to mean only that the needle runs under the threads of cloth. As a weaving term, "fold" apparently means that the shuttle goes under the warp threads in question.

The details of clothing embellishment and how Latvian national dress combines handweaving and embroidery alone make this new book worth the price. For the historian of weaving wanting to know the dimensions of skirts and wraps from various regions of Latvia, the method of weaving, the yarns, setts,

drafts, colors, and finishing methods, they're here.

Jane Evans's book *A Joy Forever: Latvian Weaving* remains my choice for scholarship, and there are other, clearer sources for many of the techniques and weave theories presented here, but this new book from down under is a unique and stimulating source for weavers, garment makers, and embroiderers.

M. Kati Meek

## VIDEO

*Handwoven and Quilted Garments* with Sandra Betzina Webster. Power Sewing, 185 Fifth Avenue, San Francisco, CA 94118, 1993. 105 minutes, \$24.95.

*Handwoven and Quilted Garments* is well worth watching. Sandra Betzina Webster, a pro at sewing, teaching, and camera presentation, has been working in the field for some time. You may be familiar with her name through her contributions to *Threads* magazine or her



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books *Power Sewing*, *More Power Sewing*, and *Fear of Sewing*. This video, the twelfth and most recent of her series, focuses on sewing techniques appropriate for handwoven and quilted garments.

Opening with a mini-style show of handwoven garments, the video illustrates well how handwoven fabric can be used to advantage, alone or in combination with other fabrics such as leather or suede. Unfortunately, the garments are not easily seen against a cluttered background or background of similar value. This is a short, curious lapse in an otherwise very professional presentation so "keep tuned"—it gets better.

Also shown but not modeled are a group of pieced garments (a few of them also quilted) of exceptionally good design.

Most of the tape is devoted to fast-paced demonstrations of sewing techniques which will—it is hoped—assist you in producing similarly great garments. Sandra's relaxed manner and dexterous hands should be reassuring to

a handweaver about to make the first cut into handwoven fabric. The camera work is excellent. You are close in beside the machine needle or the scissors seeing exactly what is going on.

The sequence follows the order of garment construction, starting with some pattern alteration and ending with hints about hem weighting and trim application. Such basic topics as interfacing, seam finishing, pressing, pockets, closures, and linings are covered. The emphasis is on quick, simple, but effective solutions to the common problems. Techniques are illustrated with the fabric used in the earlier style show garments.

None of the sewing is done on pieced, quilted fabrics, which may be of concern to those craftpersons.

No single video will ever take the place of a good sewing class, text, and teacher. Consider it excellent supplementary instruction. There is a lot here for beginners who might well profit from multiple viewing. A more experienced

sewer may also be interested to compare methods and thus validate her own approaches while learning a few new twists. This is a video that many guild librarians will want to add to their collections and one that I hope the students in my handwoven garment classes will have an opportunity to see.

Louise Bradley



## BOOK MENTIONS

**Hug Your Sewing Machine** by Robbie Fanning. Open Chain Publishing, Inc., PO Box 2634-100, Menlo Park, CA 94026, 1992. Spiralbound, \$7.95 postpaid (\$8.50 in CA).

**Hand Wool Combing and Spinning: A Guide to Worsted from the Spinning Wheel** by Peter Teal. Reprinted by Robin and Russ, Handweavers. McMinnville, OR 97128. Hardbound, \$18.95.

**Jackets, Coats and Suits from Threads** compiled by the editors of Threads. The Taunton Press, 63 South Main St., PO Box 5506, Newtown, CT 06470-5506, 1993. Paperbound, 96 pages, 83 color photographs, 62 illustrations, \$14.95.

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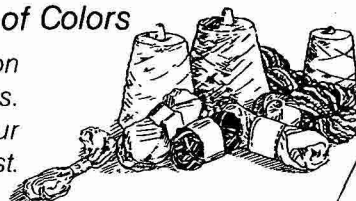
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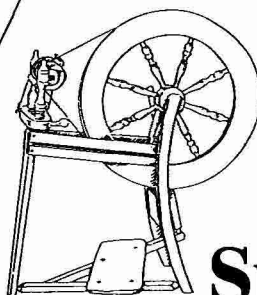


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**JANUARY 12** ✱ SIX INCHES OF NEW SNOW! THIS MORNING I skied around Brainard Lake in my newly finished vest. More snow this afternoon so I set up the Baby Wolf by the hearth and started a table runner for our next guild sale. What a cozy evening.

**APRIL 9** ✱ The first really warm day so far. It's wonderful to have a break from our business. Lars went off to explore the forest. I was finally able to get back to my long warp for towels. Rolled the loom out on the deck—such a delight to weave outside.

**JULY 15** ✱ A glorious morning. If Scotland had been like this I might never have left! Dave and Colette came up for breakfast.



Muesli and strawberries. I spread out the placemats and serviettes I wove last weekend. Four people—a real crowd in our wee cabin! I'm glad I could fold up the loom and tuck it away.



**OCTOBER 25** ✱ Leaving for Lars' conference in Russia. On our return we'll stop in Sweden. Already excited about visiting the weavers there and gathering ideas to test on my Baby Wolf. Maybe it's time I upgraded to that 8 harness loom.

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## NEWS AND EVENTS

### FIBER CELEBRATION '94

*Northern Colorado Weaver's Guild  
Exhibition Held in Fort Collins,  
Colorado, May, 1994*

Since its inception nineteen years ago, the Northern Colorado Weaver's Guild Show has grown from a local event to a regionally recognized textile exhibition. The 1994 show, held at the OneWest Art Center in Fort Collins, Colorado, attracted 90 artists from eight states. Juror Virginia West, known for her clothing designs for handwoven fabrics, evaluated the entries in four categories: functional items, two- and three-dimensional pieces, and wearables. The event was well sponsored, and a variety of awards were presented.

HANDWOVEN's Weaving for the Home Award of Excellence went to Laurie Kastner-Wells of Eaton, Colorado, who entered a length of fabric intended for a window covering for her weaving room. Inspired by the concept of cumulative cloth, the result obtained when fiber artists combine many techniques to produce intricate, evocative surfaces, she created *Back to the Fuchsia*, an impression of her mountain view at sunset.

### BAUHAUS WORKSHOPS: 1919-1933

*American Craft Museum, New York*

The 75th anniversary of the Bauhaus, an innovative school of design established in Weimar, Germany in 1919, is celebrated in the exhibit "Bauhaus Workshops: 1919-1933." The show will be on view through October 9, 1994, at the American Craft Museum.

The Bauhaus was organized into a series of workshops, five of which—ceramics, furniture, glass, metal, and weaving—are represented at the exhibition. The show illustrates the changing focus of the workshops from the initial craft and expressionist emphasis of the school's formative years in Weimar (1919-1925) to laboratories producing prototypes for industry in Dessau (1925-1932) and Berlin (1933). Novel upholstery materials developed by gifted weavers such as Gunta Stolzl will be of



*Back to the Fuchsia* by Laurie Kastner-Wells combines a painted 20/2 cotton warp and vat-dyed weft in an eight-shaft huck pattern.

particular interest to weavers.

Two public programs will be given in conjunction with the exhibition. Curator Ursula Ilse-Neuman will conduct an introductory slide lecture on the five workshops on September 22 at 6 pm. Sigrid W. Weltge, Associate Professor, Philadelphia College of Textile Science, will present a slide lecture, "The Women of the Bauhaus," on September 29 at 6 p.m. For reservations, call Olga Lydia Valle at (212) 956-3535.

### PACIFIC TEXTILE ARTS RELOCATES

Pacific Textile Arts, formerly known as Pacific Basin Center of Textile Arts, has reorganized and has moved from Berkeley to Mendocino, California. The nonprofit organization provides ongoing textile arts classes and an open studio, educational exhibits, a textile library, and lecturers.

Look for new exhibits of historical and contemporary textiles and costume in their new location. For more information, write to Pacific Textile Arts, PO Box 74, Mendocino, CA 95460.

### WEAVE A REAL PEACE ENTERS ITS THIRD YEAR

In March, members of Weave A Real Peace (WARP) held their second Annual Retreat and Meeting at Stonehaven Ranch in San Marcos, Texas. Founded in 1991, WARP's mission is "to facilitate self-empowerment and betterment of women and communities-in-need through textile arts." Because the members of the association have diverse interests, their projects and the ways in which they express their commitment to the group's shared goals are varied. Many are presently working in and with weaving communities throughout the world, for example, Ghana, Guatemala, Hawaii, and Tunisia. They provide guidance and opportunities for economic development and international marketing, promote cross-cultural education, and work to establish WARP as a clearinghouse for information, resources, and technical assistance within the textile community. The organization has also developed a Sister Guild Program that matches textile groups abroad with guilds in the United States.

Individuals or groups are welcome to join. For information, contact Linda Temple, 1230 NE 70th, Oklahoma City, OK 73111.

### RARE AND HISTORIC COVERLETS DISPLAY IN KANSAS

The Elizabeth M. Watkins Community Museum, 1047 Massachusetts Street, Lawrence, Kansas, has mounted an exhibit, "Rare and Historic Coverlets," which will run through October 30, 1994. Most of the 30 coverlets are overshot or double weave, but several are jacquard coverlets woven by Henry Adolph, who was active in Douglas County, Kansas, from about 1865 to 1880. Related activities include lectures and slide shows on the history of coverlets, a children's spinning and weaving workshop, and a "Discovery Day" when coverlets may be brought into the museum for identification by experts. For a calendar of events or additional information, call (913) 841-4109.

## PIÑA SHIFU WORKSHOP IN THE PHILIPPINES

*Shifu* is a Japanese term for paper cloth which is usually woven using a warp of cotton or silk and a weft of specially prepared paper thread. Piña shifu is woven with a warp of piña bast threads and wefts of Hawaiian piña paper thread cut in 2-mm strips. The piña fibers come from pineapple.

In Aklan Province, Philippines, a privately funded project has been initiated to establish shifu making as a cottage industry. Because the province is famous for piña cloth weaving and there are many weavers who can weave shifu when paper threads are available, it seems an ideal location to preserve this traditional craft. In January 1993, Asao Shimura and other members of the group Kami Philippines began to train the local people to make piña paper from coarse, brownish bast fibers, then to make the paper thread to be woven with a finer, whiteish piña fiber. They hope to establish a demand for the materials for piña shifu by conducting

workshops on the technique.

The second Piña Workshop, to be held January 18-25, 1995, in the Philippines, will cover making piña paper, paper thread, and shifu, as well as natural dyeing. Special guests include Sadako Sakurai, a shifu weaver from Japan, and Carol Muyung, an Ifugao ikat weaver. For additional information, contact Asao Shimura, 3-8-6 Hanahata, Adachi-ku, Tokyo 121, Japan; after September 30, write to Asao Shimura, Kami Philippines, Tina, Makato, Aklan 5611, Philippines.

## MUSEUM OF AMERICAN TEXTILE HISTORY ON THE MOVE

On October 2, 1994, the Museum of American Textile History will close its North Andover, Massachusetts, facility to the public to enable the staff to relocate the collections to a restored historic building in nearby Lowell. The new location's spacious accommodations at 491 Dutton Street will make the collections more accessible and will permit expanded public programs and exhibits.

During the move, the Textile Conservation Center will continue to provide conservation services by appointment. Contact the museum at (508) 686-0191 for the opening date of the new building.

## THE SOURCEBOOK OF CRAFT ARTISTS

The Guild, publisher of artist sourcebooks, is preparing the second annual edition of *The Sourcebook of Craft Artists: Buyer's Guide*, to be distributed free of charge to 2,000 galleries, design showrooms, home furnishings stores, and museum shops in North America and overseas. Listings include contact information, product descriptions, and business terms of craft artists who wholesale their work. The book is a companion to *The Sourcebook of Craft Artists: Gallery and Retail Edition*. The two volumes are distributed together each June.

Listings are free and without obligation. Interested artists may call (800) 969-1556 with questions or to request a listing form.



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# IN MEMORIAM

## Lillian Elliott, 1930-1994

Lillian Elliott passed away on April 2 in Berkeley, California. An artist, designer, and teacher, Elliott turned her attention to fibers and weaving in the 1960s. For the next 30 years, she explored a range of textile techniques and materials including appliqué, netting, card weaving, embroidery, and printed textiles, as well as woven cloth; most recently she concentrated on sculptural baskets and tapestries. Elliott received many awards and distinctions for her innovative work, and her art has been collected and exhibited by many museums.

## Joanne Segal Brandford, 1933-1994

Joanne Segal Brandford of Ithaca, New York, died of heart failure on April 5 in California. Her specialization in netting was enriched by her meticulous research on the technique in other cultures and other times; as an artist she drew on her knowledge of net structure and explored its expressive limits.

## Anna Bowers, 1942-1994

Anna Bowers died on April 27 in Surrey, England, after a short illness. The founder of Fibrecrafts in England, she was a liaison between weavers and spinners on both sides of the Atlantic. Her family plans to continue the business which meant so much to her.

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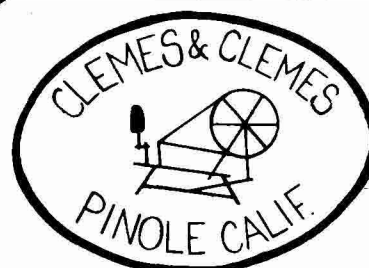


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# YARN BASKET

Yarn Basket is a forum for sharing what works and what makes weaving easier and more enjoyable. In each issue, we will present a problem and invite ideas, views, and philosophy to be published in a later issue.

This issue, the subject is how to weave even selvages, a problem that demands our attention with each cloth we weave. Whether we choose to weave with fine yarns, heavy yarns, cotton, linen, or wool, plain weave or multishaft structures, each fiber, yarn, and weave structure calls for a variation on how we achieve even selvages. Here are some thoughts we've collected.

## SOME THOUGHTS ON SELVEDGES

I enjoy weaving with cotton, especially fine cotton set at 24 to 36 ends per inch. To obtain even sturdy selvages in these fabrics, I do three things: I reinforce the edge threads, encourage a rhythm in my weaving, and allow for and permit draw-in.

The selvage has to bear more stress than the rest of the fabric. Some of this stress comes from the reed abrading it during weaving. When I first began to work with fine threads, I repaired a lot of broken selvage ends, and in self-defense I began to double the edge threads to reinforce the selvage and make the threads less likely to break.

Early in my weaving career, someone suggested that the way to good selvages was to weave ten yards of plain weave and develop a rhythm. I didn't do it, but over time I've woven considerably more, and I recommend the same to students. I have developed a rocking motion, swaying from side to side with each throw and catch of the shuttle. I am careful to throw the shuttle with the hand on the same side of my body as the foot I am treading with—right hand on shuttle, right foot on treadle. This puts me in a rhythmic, rocking motion. A firm, even tension on the warp also helps.

Developing a rhythm means that you weave faster because you're not slowing down to manipulate each edge.

But if you weave faster, your fabric is more likely to draw in. When I realized that draw-in was a part of faster weaving, I made a place for it in my planning. I weave 10"-wide samples and measure the draw-in. Sometimes I am flabbergasted at the amount the fabric has pulled in, but I am willing to thread a few more inches to make my weaving smooth and even.

Great selvages have become a trademark for me, and I am very proud of them. They add to a fabric that I can be proud to say I have woven.

—Barbara Eychaner  
Charleston, West Virginia

## EASY PULL

Some of my weaving friends have abandoned their regular boat shuttles in favor of end-feed shuttles, which are commonly used in the industry. They have told me that their selvages are now effortlessly perfect because the yarn feeds from the shuttle with much less tension. In an end-feed shuttle, the wooden pirn holding the yarn is stationary, allowing the yarn to unwind from the end of the shuttle past the tip of the pirn. In contrast, my regular boat shuttles have a wooden or plastic bobbin or a paper quill which rotates on the rod. When the shuttle is thrown, the rapidly turning bobbin produces quite a bit of friction as the yarn is pulled from it. Not wanting to invest in new shuttles just yet, I experimented to find a way to have less tension on my weft yarn with the shuttles I had. In a previous quest for free-running weft, I worked on winding a good bobbin, modifying my shuttles to have a long, smooth slit rather than a round hole for the yarn to exit, and using the correct length of bobbin for each shuttle to avoid straining the yarn as it exited. Now I turned my attention to

how I handled the shuttle. I found that by moving my arm outward to release a length of yarn from the shuttle just before I throw the shuttle, there is little tension on the yarn until the final few inches of width, just enough to seat the weft at the selvage. On narrow fabrics, I hardly move my arm sideways at all, increasing the movement for wider fabrics. I think my selvages have improved; at least it's a rationale for making do with the shuttles I have.

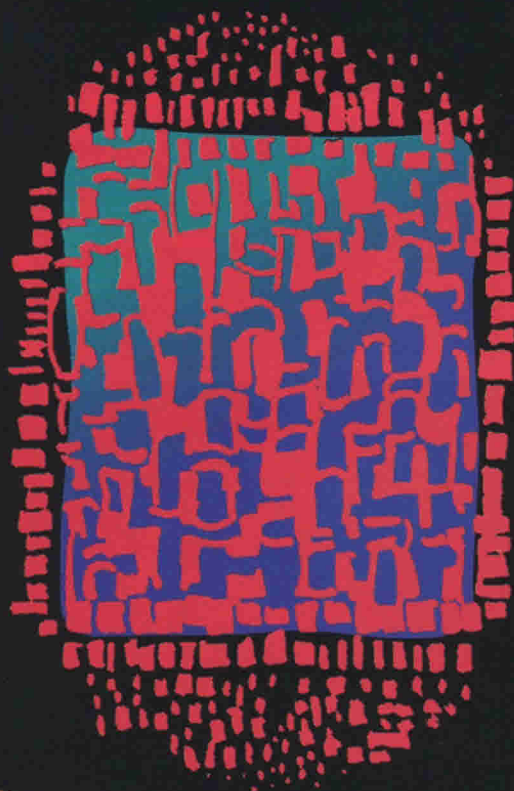
—Jennifer Verbright  
Masonville, Pennsylvania

## INVISIBLE AID

I don't usually have a problem with even edges, but when I made Bronson lace table mats, my selvages were just hideous. No matter how careful I was, they still looked awful. I decided that I needed to make the edges more rigid. I rewound the warp with fishing line doubled in heddle and reed for the edge, two ends on each side, and tied on the fishing line tightly. It worked beautifully. The fishing line was easy to pull out afterwards, and you would never know it had been there.

—Catherine Christie  
Meadows, South Australia

*Yarn Basket is a forum for sharing and comparing ideas for handling frequently encountered situations in weaving. The next topic for discussion is reeds. Though ideally we might like a reed for each sett that we use, what is the minimum number of reeds you find necessary? How much finagling do you do to get the sett you want with the reeds you have? How many ends per dent is optimum? When do you run into problems with reed marks? In general, what problems with reeds have you found solutions for? Send your thoughts to "Yarn Basket," Interweave Press, 201 East Fourth Street, Loveland, CO 80537.*



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# STORY CLOTH

We bring our thoughts, dreams, and hopes to our looms and as we weave, our histories imbue our fabrics with meaning. We may consciously convey it through pictures or shared symbols, or the significance may be private, hidden in color, pattern, and structure. Often the process is unintentional, and we are unaware of meaning until we reflect on the context in which we have made or used our handwovens, discovering only then that each piece, functional or work of art, is a story cloth.



**The Magna Vista Weavers are mentally handicapped children who participate in a special weaving program in Spencer, Virginia. Robert has been especially successful: he can work independently and his selvages are perfect.**

## VERY SPECIAL RUGS

Weaving a rug brings a sense of accomplishment to most weavers, but the children in the Magna Vista Weavers glow with pride when they complete one. I've been privileged to help these mentally handicapped young people learn to weave in the high school in Spencer, Virginia, where the other students express support and interest by coming to the studio to let the children

demonstrate what they have learned.

Businesses and individuals have been generous in their donations. Knitting mills have supplied us with enough material to last several years, and a local company donated many spools of nylon yarn for warp. Community members have given us large amounts of yardage to use for rag rugs.

Because many of the children must be assisted as they weave, simply completing a rug is cause for delight. We

have been fortunate to have publicity that helps us sell the rugs, too. The local cable station gave us air time to show our rugs and talk about the weavers; this July we were invited to hang our rugs in the Piedmont Arts Association's Young Artists Gallery. Although the money each weaver makes on his or her rugs is nominal, it allows the children to celebrate their achievements and look forward to creating something new.

*Bonnie Hutchens, Spencer, Virginia*

## WILL'S WEAVING

When he was about 11 years old, my son, Will, was stimulated to weave by my dye experiments. In my quest for madder red, I dyed a lot of orange wool; one day Will and his friends found a pile of it in the middle of the floor and their imaginations soared. Their first idea was to make a three-dimensional pumpkin. Next, they thought a tapestry of a pumpkin would be great; better yet, a tapestry of the headless horseman holding a pumpkin. Finally, they settled on a runner with a warp of commercial cotton and stripes of their own handspun orange and gold wool weft. Simple was good: a gallery saw it at a craft show and purchased it.

Inspired by success, Will continued to experiment with weaving. In the early spring, he gathered and bundled stems of dried fescue to make a grass runner. On the same warp, he made wool handbags, exploring color combinations with the addition of handspun yarn.

In the years that I've shared my weaving interest with my son, I've learned several things about working with kids. Color really excites them, whether they design and spin their own yarns or combine commercial yarns when they weave. Don't underestimate a kid's ability to understand weave structure and to pay close attention to it; Will actually makes fewer mistakes in over-shot than I do. Last, and very important, children's interest comes and goes. Sometimes Will has put aside his weaving for a month or two, but because I have another loom, I don't feel impatient. He can come back to finish his project when he has time.

*Shannon Stoney, Cookeville, Tennessee*

## KROKBRAGD PASSION

When your December 1993 issue arrived with the lovely krokbragd rug on the cover, I was in the midst of mailing Christmas cards decorated with a similar motif. I was reminded of my introduction to the technique.

When a good friend asked me some years ago if I knew how to do krokbragd, I immediately reacted that I was not interested in it—it takes too much wool and has too many picks, it is too slow to weave, and it is one-sided. She persuad-



Shannon Stoney's natural dye experiments prompted her son, Will, to experiment with color and materials. The wool bag includes some handspun wool weft in grays and blues, and the grass runner is woven with bundles of dried fescue.



Rose Schwyzer's krokbragd wall hanging awaits transformation into a baby's pram cover.

ed me to make some samples, however, and soon I was enthralled with the beautiful things I could make: cards with tree and star motifs, rugs, wall hangings. My considerations evaporated as I learned to work with the weave's characteristics. The small piece pictured here is biding its time as a wall hanging until a certain baby arrives! Then it will become a cozy and decorative pram cover, lined with a gray, curly sheepskin to keep the baby warm while framing the colorful stripes.

*Rose Schwyzer, Brissago, Switzerland*

*If you have a handwoven work and a tale to share with your fellow weavers, write to "Story Cloth," Interweave Press, 201 East Fourth Street, Loveland, CO 80537. Please include a sharp closeup color photograph or slide of your woven work.*



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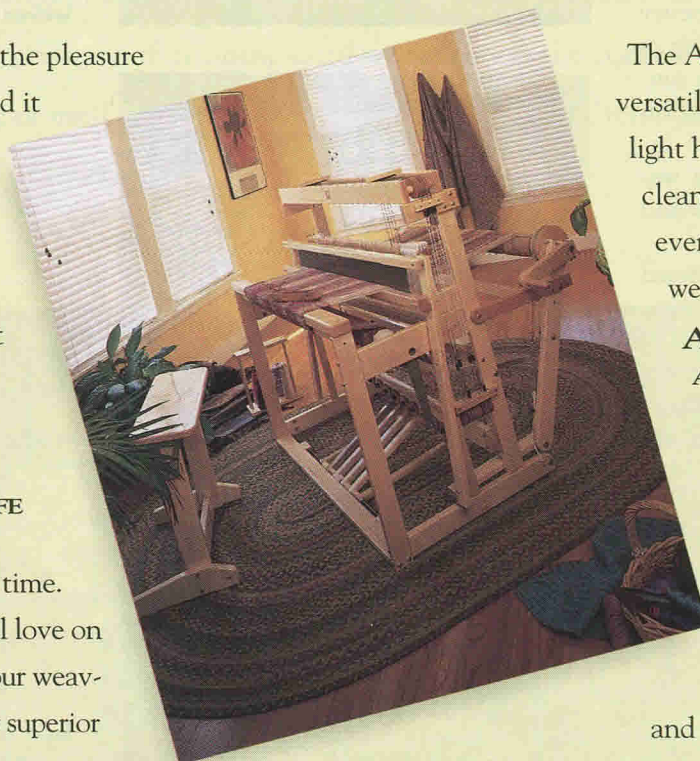
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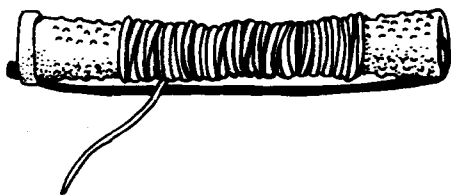
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# TRICKS OF THE TRADE

## MINI-BOBBINS FOR LOOSE WARP ENDS

As a new weaver, I decided to make a large set of dinner napkins, enough to last my family for dinner through an entire week. Bravely, I put on a 13-yard warp of 8/2 cotton and proceeded to break about ten ends while warping the loom. Looking for some kind of mini-bobbins to hold replacement ends, I found perm rollers with fine teeth that grip the yarn and have elastic closures.

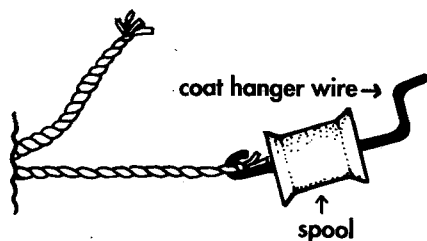


Amazingly, the hollow cores fit on the shaft of my bobbin winder. I wound my perm rollers, threaded and sleyed the yarn, and dangled the rollers off the back of my loom. They worked beautifully. Now I use them whenever I replace broken threads or need a floating selvedge, adding weights to them, if necessary. My napkins turned out great—all 23 of them.

*Chris Szalay, Damariscotta, Maine*

## YARN TWISTER FOR FRINGE

By the time I had twisted several linen warp fringes on a rug, my fingers were getting raw. My husband, Howard, invented a simple, inexpensive finger-saver for me. To use this fringe twister, tie an overhand knot at the very end of



each of two groups of warp ends (not too tightly because you may wish to take the knots out). Slip the hook on the yarn twister between the yarns of one group

near the knot. Then, holding the spool gently with one hand, turn the handle with the other hand so that the yarns twist. I usually turn clockwise to increase the twist of the yarns. Keep turning until the yarns are twisted so tightly that they begin to twist back on themselves. Use a clothespin or other clip to keep the strands from untwisting while you twist the other set of knotted warp ends the same amount in the same direction. (I use two yarn twisters, leaving one in the first group of twisted warps braced against the table while I twist the second group.) Then hold both groups in your fingers or fasten them to the yarn twister and twist them in the opposite direction. You can then knot the ends together, but make all the knots the same length from the finished weaving to make a neat edge.

*Pete Soeken, Claflin, Kansas*

## HANDY HOLDERS

When the leather straps supporting the shafts on my loom wore out and broke, I replaced them with strong cotton cords, but the shafts always hung unevenly because the cords kept slipping. I



found that inexpensive plastic "cord-locks" purchased from a camping supply store hold the cords perfectly so that the shafts stay even. They are also handy for other small holding jobs around the studio.

*Carol Timkovich, Tuscaloosa, Alabama*

## READING FABRIC

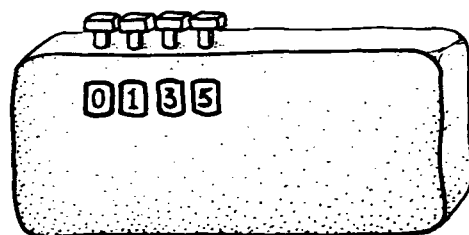
Learning to analyze weave structure by reading the ends and picks of a fabric swatch is invaluable, but I had given up reading commercial fabrics until I found a wonderful magnifier. No larger than an Instamatic camera, Micronata's 30X illuminated microscope and 8X magnifier

makes the weave of a man's handkerchief look like burlap. Available at Radio Shack, it takes one AA battery and costs less than \$10. When you copy the weave structure, take into account that the image is upside down and reversed due to the series of mirrors reflecting the image inside the microscope.

*Betty Burian Kirk, Sauk Village, Illinois*

## KEEPING TRACK

I have found that a simple knitter's counter makes winding bouts on my



warping board faster. The counter has buttons on top that push a gear and display the count. I mounted it with double-sided tape to an unused peg near the cross, and each time I wind, I hit the button. After each full pass around the pegs, I know that I have twice as many warp threads in the bout as the counter shows. Even if my mind wanders, I don't have to stop and count.

*Deanna Johnson, San Diego, California*

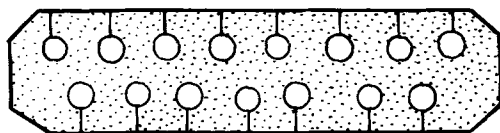
## DON'T GET UP

To avoid having to jump up at inconvenient intervals to retrieve a dropped shuttle, bobbin, or other fallen object, keep a grabber handy. About 24" long, a grabber looks like an olive picker with a flexible shaft. You can use it to reach under and between treadles and into other hard-to-get-to spots. It's a godsend for creaking joints! I found mine at Brookstone Tools.

*Margaret Sheppard, Houston, Texas*

## KEEP THEM STRAIGHT

To keep my weighted warp threads from tangling, I use a strip of heavy plastic cut from a jug. After cutting a flat

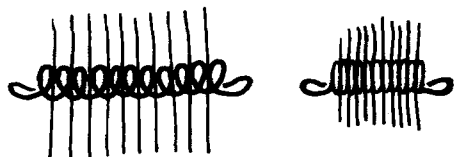


piece of plastic, I punch two rows of holes, and cut a slit from each hole to the outside edge. I slide each weighted warp yarn through a slit into a hole and pull the strip down to rest just above the weights on the yarns.

*George Henn, Beaverlodge, Alberta, Canada*

### SPRING AID

Expansion springs about 2" to 3" long are a great help when I'm sectionally beaming 60-end bouts of fine cotton, silk, or linen. To prevent a bout from becoming disarranged, I slip an expanded spring under it. While holding the bout



tightly, I bring the stretched spring up through it on a slight slant, thereby spreading the warp a little. Releasing the spring holds the bout gently and safely until the spring is expanded again.

*Margaret Sheppard, Houston, Texas*

### CONE PEG

Winding a bobbin from a spool or lightweight cone is difficult without a cone peg to keep the cone from falling over. Since a cone peg isn't always at hand, I use the metal rod in a shuttle for the same purpose. I set the shuttle on the floor, pull the rod up as close to vertical as possible, and slip the spool or cone onto it. Resting my toe on the shuttle to stabilize it, I wind away.

*Pamela Raikos, Dayton, Ohio*

### BOBBIN ORGANIZER

I am forever searching for an empty bobbin, only to find ones filled with the yarn I just used to fill my last empty bobbin. To become better organized, I purchased several "kitchen hangers" from my local building supply store. These

hangers each have seven pegs designed for hanging kitchen utensils, and are a perfect size to fit inside both traditional and end-delivery bobbins. I have hung four of these on the wall near my bobbin winder. Now I can determine which yarns I need to wind bobbins, and the number of empty bobbins with a glance.

*Leslie Sieburth, Pasadena, California*

### PLAN AHEAD

On my days off I wind several warps for future projects and demonstrations. To keep the warps straight, I attach a price tag at the cross tie. I label the tag with the project, number of warp ends, length, and any other information I might need. If I can't get to the project right away, there is no confusion about what a particular warp is for.

*Margaret Ruden, Paducah, Kentucky*

If you've discovered a nifty idea, hint, or trick to make your weaving easier, we'd love to pass it along. For using your idea, we'll send you a handy little weaving tool. Send to "Tricks of the Trade," Interweave Press, 201 East Fourth Street, Loveland, CO 80537.

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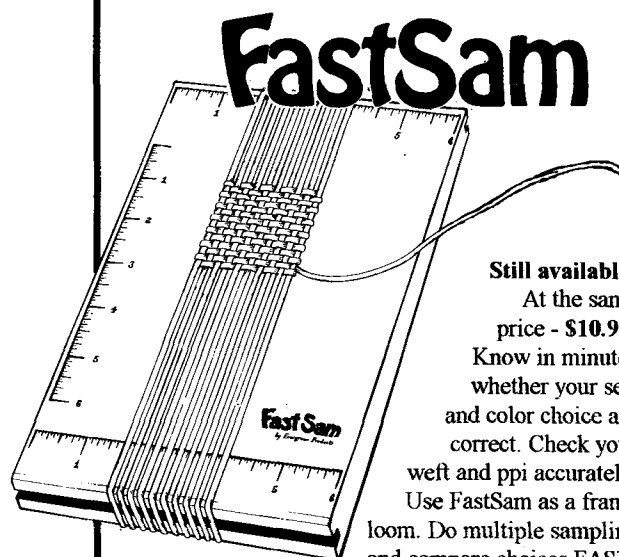
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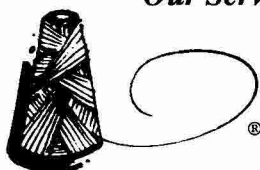
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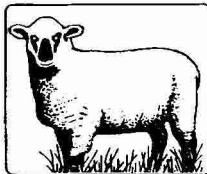
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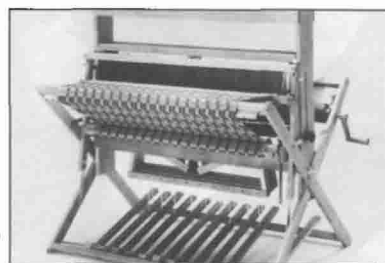
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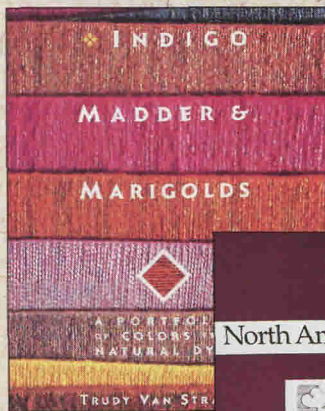
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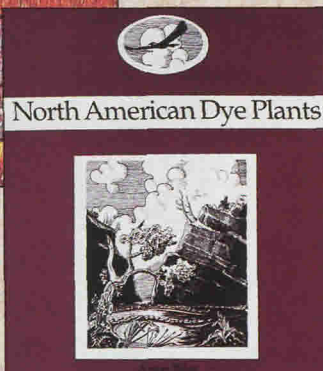
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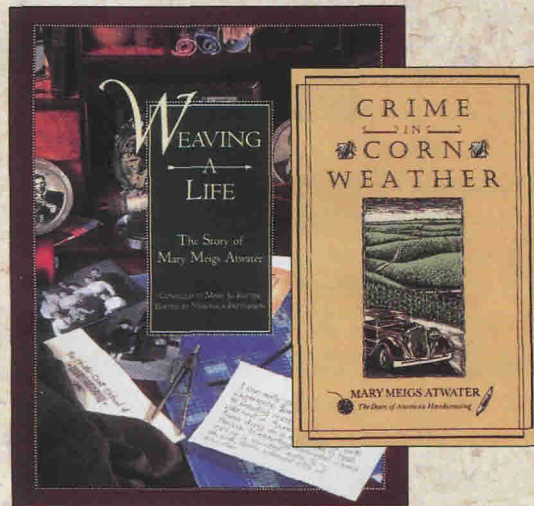
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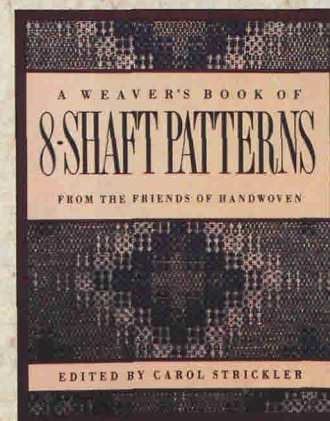
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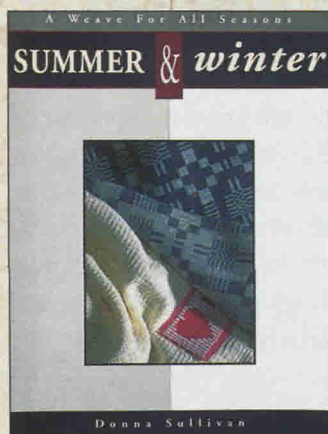
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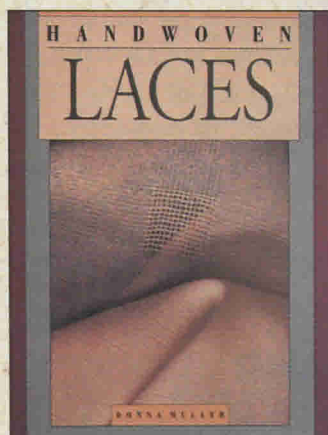


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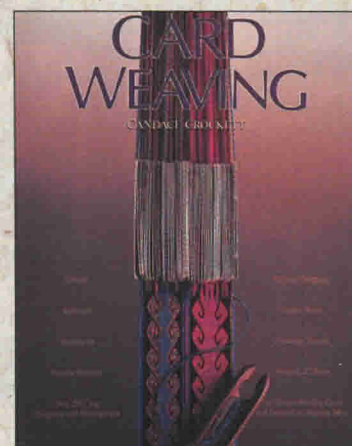
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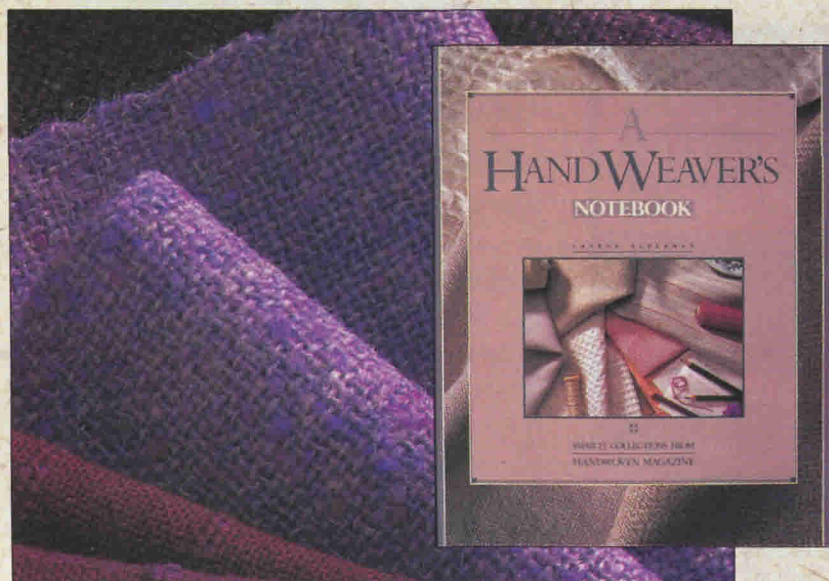
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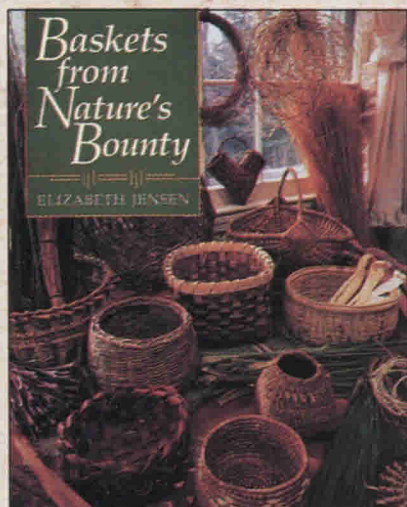
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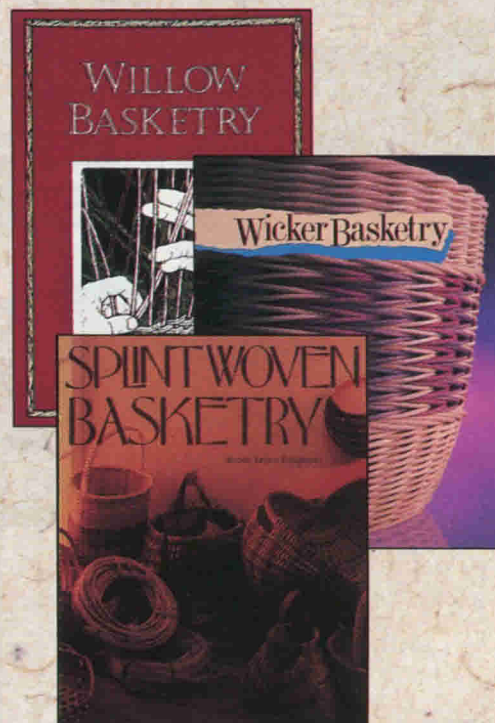
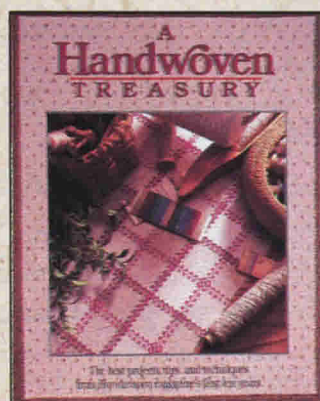
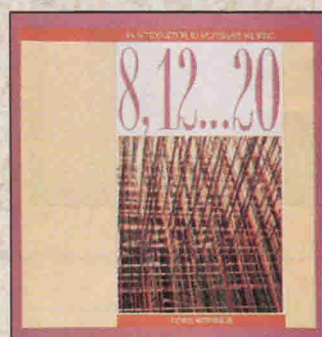
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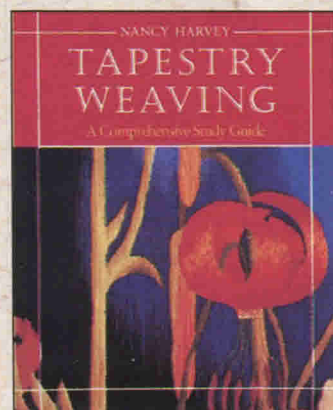
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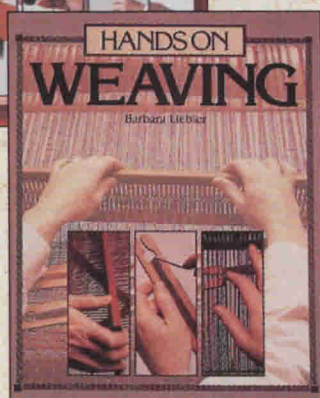
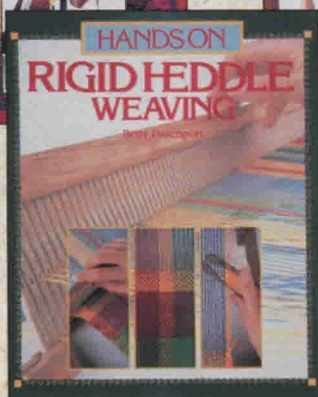
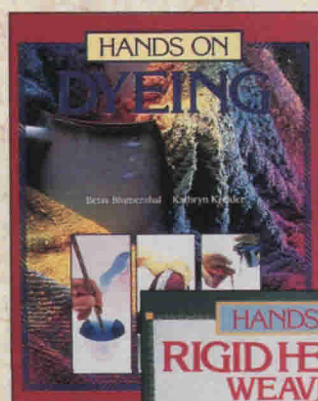
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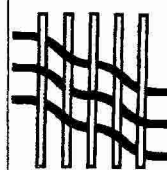
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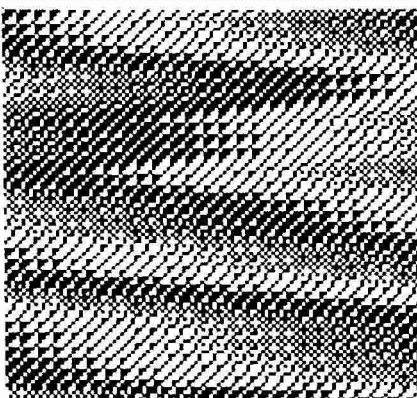
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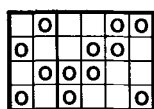


# ESSENTIALS

WE OFTEN HEAR TERMS ABOUT WEAVING USED IN CONVERSATION WITHOUT KNOWING EXACTLY WHAT THEY MEAN. "ESSENTIALS" ATTEMPTS TO DEFINE, DESCRIBE, EXPLAIN, AND ILLUSTRATE SOME OF THE TERMS AND PROCESSES ENCOUNTERED IN ARTICLES AND PROJECTS. WE HOPE IT WILL FAMILIARIZE YOU WITH WEAVING TERMINOLOGY AND GIVE YOU INFORMATIVE DETAILS TO ROUND OUT YOUR KNOWLEDGE.

## STANDARD 2/2 TIE-UP

Shafts are lifted in several combinations to produce different weave structures. On a four-shaft loom, shafts can be lifted one at a time, two at a time, or three at a time. Most fabrics are woven with two-shaft combinations with occasional use of one- or three-shaft lifts. There are six two-shaft combinations, the 2/2 twills (1-2, 2-3, 3-4, 4-1) and tabby or plain weave (1-3, 2-4). Most four-shaft floor looms come with six treadles to accommodate these two-shaft combinations, which are known as the standard 2/2 tie-up. Of course, it doesn't matter how the shafts are lifted—by levers on a table loom, by using two feet on separate treadles, or with a pick-up stick. It's just a shortcut way of saying that you will be using these six combinations.



In a standard 2/2 tie-up, the plain-weave treadles are together on one side of the twill treadles.

## PASS

Pass is one of a group of words that relate to the weft of a fabric. Just as the word *end* refers to a single strand of the warp, the words *pick* and *shot* refer to the strand of weft placed in one shed. The word *pass* is often used to refer to more than one pick. It is useful in situations in which you must keep track of the order of the sheds. For instance, in tapestry, when you are working with several colors, it is helpful to know when they are in the same shed. Completing a pass in each color guarantees that the next shed is the same as the one on which you started. Thus, in tapestry, a pass is two picks—one repeat of plain weave, the open shed and the heddle shed.

In bound weave, a pass is one treadling repeat. Each shot in the repeat covers some of the warp ends. When all of the shots in the repeat have been woven, all ends are covered, and the sequence starts over. The color repeat may change independently of the treadling repeat.

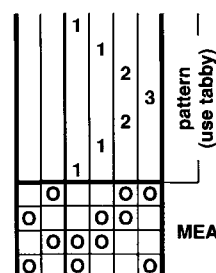
The word *row* is used both as pick and as repeat. It can mean one shot of weft, or it can mean one

repeat when it refers to a row on a graphed design and all the picks required to weave the row.

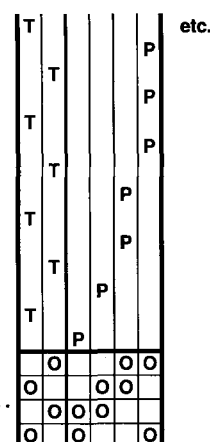
## WOVEN IN THE OVERSHOT MANNER

Overshot is traditionally treadled with pattern shots and tabby shots. The two tabby picks (1-3, 2-4) alternate to produce a background cloth of plain weave. In addition, the tabby alternates pick by pick with the pattern shots, one tabby shot for each pattern shot. A fabric woven this way is said to be woven in the overshot manner. In the treadling drafts, the treadling sequence often shows only the pattern shots, many of which are repeated several times. The entire pattern treadling is bracketed with the words *use tabby* to indicate that alternating tabby shots are to be interspersed with the pattern shots. Using the standard 2/2 tie-up with the plain-weave treadles on the left, the left foot treadles tabby and the right foot treadles the pattern. To keep track of which tabby you're on, start the tabby shuttle from the left when you use the left tabby treadle.

T = tabby weft  
P = pattern weft



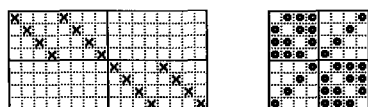
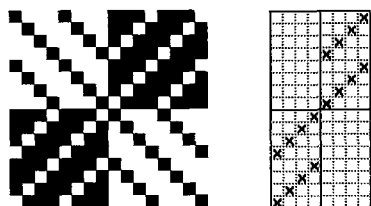
MEANS ...



"Use tabby" means to alternate a row of plain weave with a row of pattern.

## BLOCKS

In weaving, a block is an area of the fabric in which the threading makes a weave structure which contrasts with the weave structure on either side of it. A two-block fabric alternates two threadings designed to juxtapose weave structures with each other in a checkerboard fashion.



**Blocks of warp- and weft-faced twill clearly show a juxtaposition of weave structures.**

The weave structures often show contrasting pattern and background textures. In a two-shuttle block weave, the pattern weft forms longer floats on the face in one block, called the pattern block, and on the back in the other block, called the background or ground block. Three- and four-block fabrics offer even more possibilities for varying weave structures. They may alternate two weave structures, or they may include halftone blocks intermediate between pattern and ground.

Some examples of block weaves include summer & winter, Bronson lace, spot weave, and crackle. Each of these weave structures has distinct threading units which can be repeated to make a block wider.

## PROFILE NOTATION

A profile is a shorthand notation for drafts made up of repeated units, such as block weaves. An uppercase letter (the notation starts with A) stands for one repeat or unit of a block. A profile draft shows the number of units in each block as they alternate, for example, AAAB-BCBBAAA. Using profiles in place of thread-by-thread drafts is a convenient way to produce a drawdown showing the position of blocks in the fabric. When you're satisfied with the design, it's easy to substi-

tute each block's threading key or unit threading to set up the loom. Likewise, to weave the fabric, each block of the treadling profile is replaced with its corresponding treadling key. Profile notation greatly reduces the length of a threading or treadling, making your work not only easier, but less prone to errors.

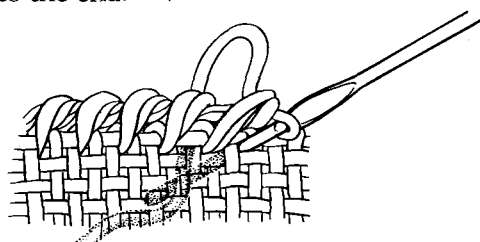
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**A profile draft uses a letter to stand for one repeat or unit of a block.**

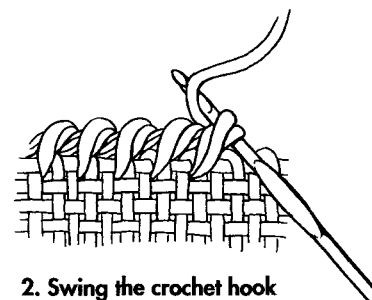
## SHRIMP CROCHET

Also known as backward crochet, shrimp crochet is a decorative edge finish consisting of a series of knots or bumps instead of the ubiquitous chain produced by the other crochet stitches. Shrimp crochet is worked like a row of single crochet but in the opposite direction, from left to right instead of from right to left. It's easy, but your hands may need coaxing from your head to keep from reverting to the regular method.

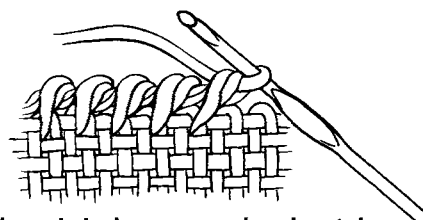
To work, start at the left edge of the piece. Insert the crochet hook through the edge, yarn over, and pull through a loop. Yarn over again and pull through a loop to complete the stitch. For the next stitch, swing the hook downward and to the right of the previous stitch. Insert the crochet hook, yarn over and pull through a loop. Yarn over again (this time above the stitches) and pull through a loop to complete the second stitch. Repeat to the end. ♦



**1. Pierce the edge of the cloth with the crochet hook. Yarn over in back of the cloth and pull a generous loop through to the front.**



**2. Swing the crochet hook clockwise; yarn over above the edge.**



**3. Pull through the loop to complete the stitch. Make the next stitch to the right of the previous one.**

# DESIGNING WITH CRACKLE

BY SUZANNE DE ATLEY

THE DEFINING ELEMENTS OF THE WEAVE STRUCTURE—POINT-TWILL THREADING UNITS, INCIDENTAL THREADS BETWEEN BLOCKS, AND A TIE-UP THAT WEAVES PAIRS OF BLOCKS—DICTATE THAT CRACKLE

blocks can't be combined arbitrarily. Instead, the blocks join in twill progression with special provisions for skipping blocks. Although this limits the patterns that may be developed in crackle, it is still possible to create richly varied cloth.

## WHAT IS CRACKLE?

Crackle weave is typically a three-thread construction comprising warp, pattern weft, and tabby weft. It forms a weave with contrasting pattern and background; the structure is the same on both sides, but reversed.

Four-shaft crackle has four threading units, each of which is a small point twill. Block A is 1,2,3,2; block B is 2,3,4,3; block C is 3,4,1,4; block D is 4,1,2,1. When the units are threaded in twill progression, the tabby alternation is preserved by threading an extra end, or incidental, between the blocks. The incidental is threaded on the same shaft as the first end of the unit. For example, the incidental for block A is on shaft 1.

Pattern treadling creates 1/3 weft floats on a background of 3/1 warp floats, and when a number of pattern shots are repeated, the block takes on a columnar or corded aspect with the weft floats aligned above one another. Alternating pattern shots with tabby creates structurally sound pattern blocks.

Because the first two ends in a block's threading unit are on the same shafts as the last three ends of one other block, the 2/2 tie-up dictates that two blocks will be combined when one is treadled. When blocks are threaded in sequence (ABCD), each treadled block will overlap the adjacent block by two threads.

## THREADING VARIATIONS

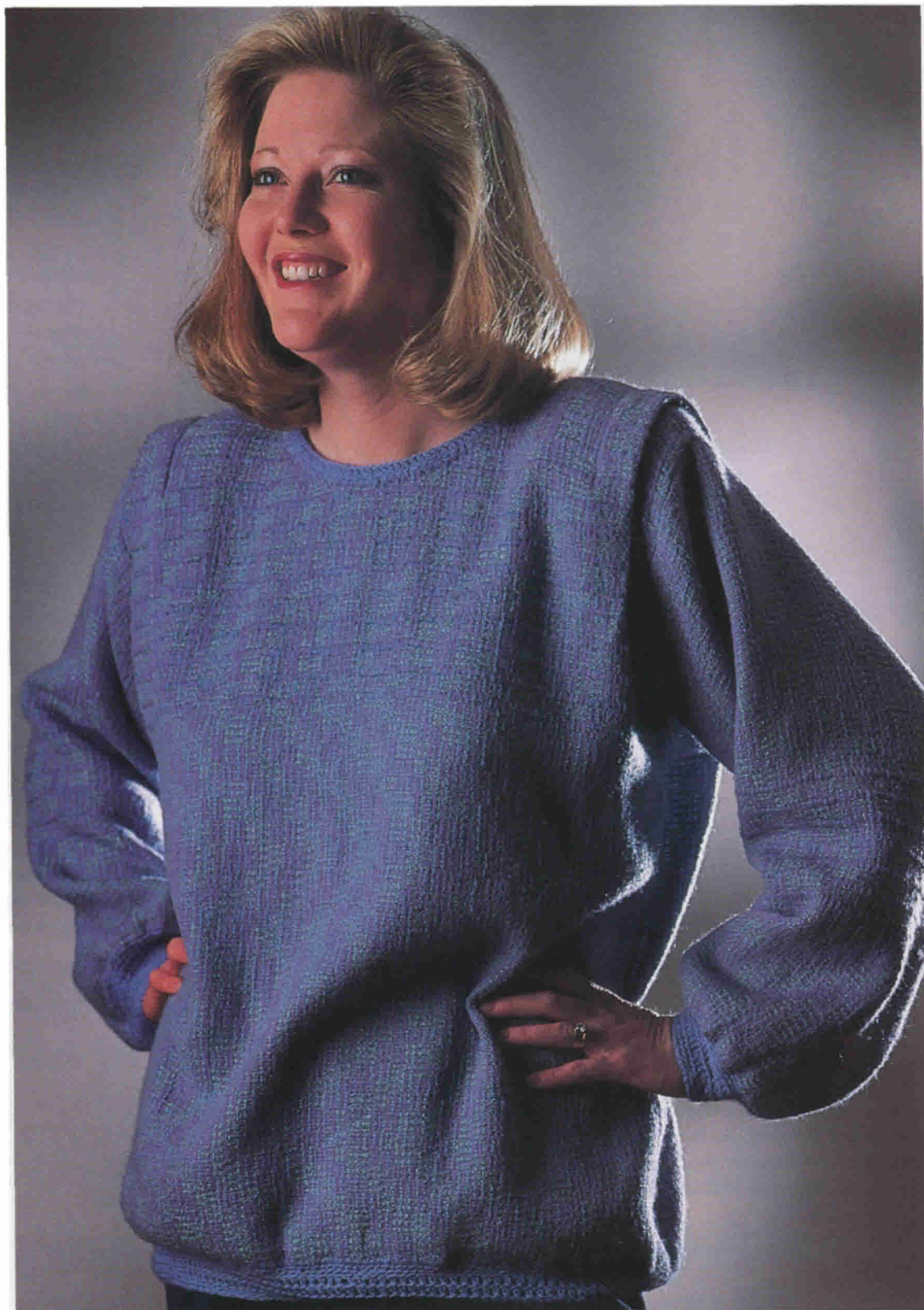
You can thread single crackle units in succession, but you can also enlarge the scale of a design and experiment with pattern by developing pattern blocks. You can make a block any size you wish by increasing the number of repeats of the unit. M. Lynette Holmes used this approach effectively in her *Periwinkle Crackle Sweater*, pictured on page 37. Her pattern has a straight ABCD block progression across the warp, but she achieves a dynamic quality in the design by making one block in each repeat twice as large as the others and by changing which block is largest.

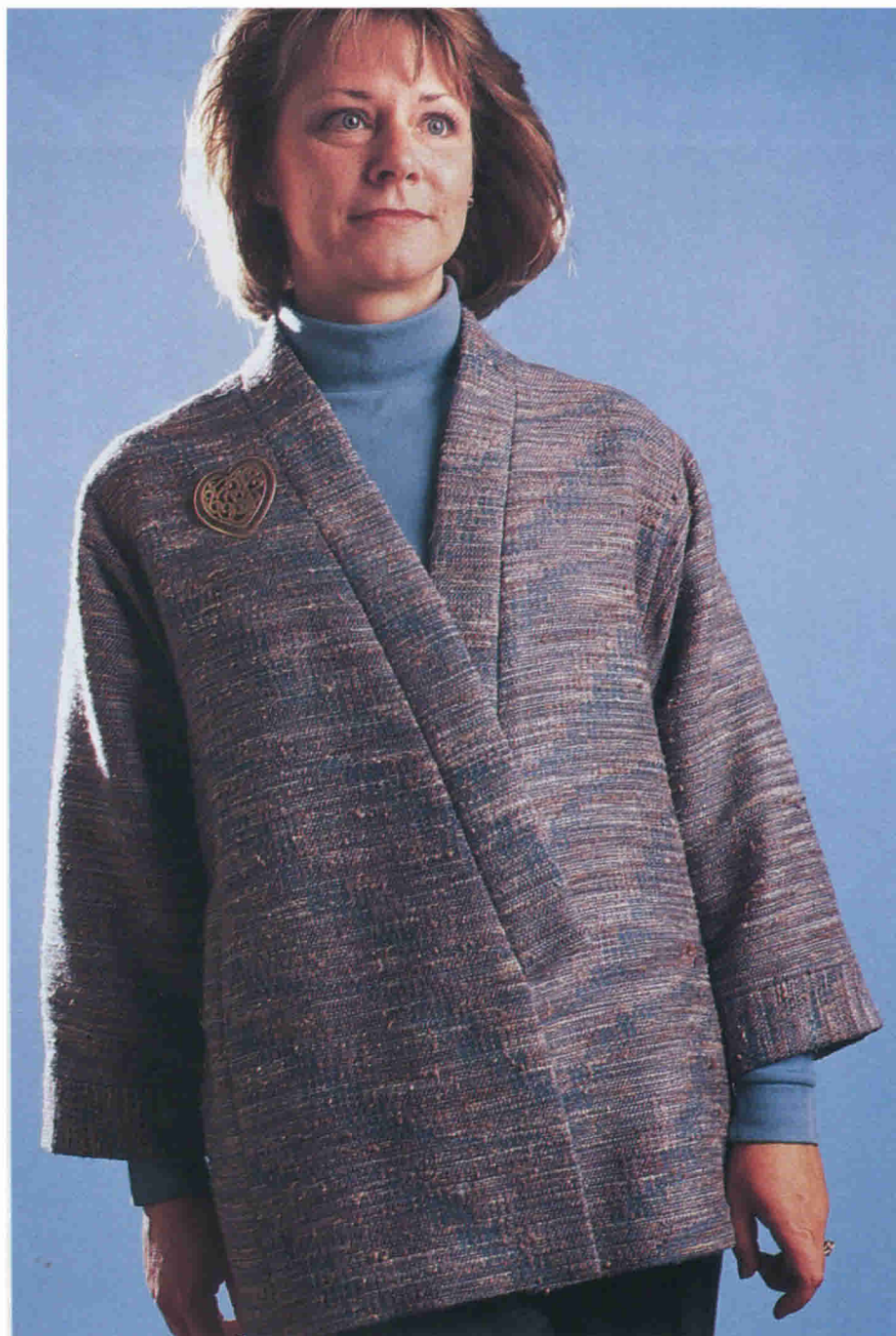
To add interest to your pattern, try eliminating a block or using a broken-twill sequence. When treadled with all four pattern combinations, there will be a break between the blocks that gives the effect of treadling a single block. When block C is next to block A and blocks C and D are treadled, only C

*Known in Sweden as Jämtlandsväv and introduced to American weavers by Mary Meigs Atwater in 1926, crackle is championed as a structure that permits weavers to design with four blocks on four shafts. This asset is not without its challenges, however.*



**M. Lynette Holmes designed her PERI-WINKLE CRACKLE SWEATER for four shafts. The strong zigzag movement of the pattern blocks is modulated by the close tones of color in the warp and pattern weft. Thick weft bundles across the yoke and sleeves break up the waves slightly. Details for this sweater are in the Instruction Section.**





An uneven treadling sequence produces asymmetric undulations in this eight-shaft crackle design. SHIMMERING WATERS JACKET by Suzanne De Atley combines two tabby yarns to create a watercolor wash background for the waves of pattern that appear to ripple over the surface. The predominant tabby weft, a space-dyed rayon and silk, is highlighted by a gold metallic sewing thread. The fabric's sheen is enhanced by the rayon warp and the wool/rayon-blend pattern weft. See the *Instruction Section* for weaving and assembly information. Yarns courtesy of Classic Elite Yarns and Plymouth Yarn Company.

Suzanne's scarf, SHOWN BELOW, uses the same threading and materials as the jacket but in a different colorway which shows the eight-shaft structure clearly. The tie-up retains weft-faced and warp-faced blocks, but the additional four shafts are used for a plain-weave background in which all the colors blend. To make the scarf, follow the weaving instructions for the SHIMMERING WATERS JACKET, using a portion of the threading for a narrower width.





weaves as pattern because the D block is not threaded.

#### FOUR- AND EIGHT-SHAFT TIE-UPS

With four shafts, two of the four blocks always weave together; however, with more than four shafts, you can weave two of the eight possible blocks, giving you an opportunity to introduce plain-weave areas around the pattern blocks. This not only creates a broader scale and more openness between the pattern blocks so that the design is not so busy, it also introduces a third area of tone in which pattern and tabby weft colors blend with those of the warp. The three-tone effect can be seen in the Shimmering Waters Jacket and the scarf on page 38. In one horizontal pattern area, the eight-shaft tie-up produces weft-faced pattern blocks, warp-faced "shadow" blocks next to them, and color-blended plain-weave ground cloth between the pattern blocks.

#### TREADLING VARIATIONS

Treadling is perhaps the most flexible aspect of crackle weave. As mentioned previously, crackle is typically treadled in an overshot manner, with a pattern weft of one color and a second, finer tabby weft that matches the warp in color and weight. Repeated pattern shots build pattern blocks to the desired height. The block pattern may be varied by changing the order of treadling and the number of pattern shots in the blocks.

By treadling blocks in a point-twill progression, you can add a feeling of movement to the design, as M. Lynette Holmes did in her sweater, or you can create interesting undulations using an irregular treadling sequence, as in the jacket and scarf. Eight shafts add to the options available in building such a sequence, and a dobby makes it easy to reproduce.

Add interest to your crackle fabric by weaving it other than as drawn in. Donna Muller threaded all four blocks for her scarf, shown at right, but she treadled only three. She created small reversing arrow motifs, staggered along the length of the fabric and separated by small bands of plain weave. You could also use these little motifs as a border or as accents within large areas of plain weave.

There are many other treadling styles that can be used with crackle. Dixie Thai's Buttercup Baby Blanket, pictured on page 40, uses summer & winter treadling to add an interesting texture to the crackle blocks. Instead of the columnar effect characteristic of the overshot treadling, the blocks are open and lacy, yet the two-tone characteristic is preserved by different textures in the pattern and background blocks. The diagram on page 41 shows the drawdown for the blanket; there you can see that the effect is achieved by weaving the blocks in pairs with alternating tabby shots.

Polychrome treadling greatly expands the color-blending and



The colors of the space-dyed chenille in Donna Muller's CRACKLE SCARF WITH ARROWS are reminiscent of a pine forest. Threading four blocks but treadling only three, Donna created small reversing arrow motifs that glint like fresh needles. Chenille for the warp and tabby weft combined with a finer rayon floss for the pattern weft reverses the yarn weights traditionally recommended for the weave structure. Project directions may be found in the Instruction Section. Yarns courtesy of Webs.





**Nubby cotton yarn used as a pattern weft and summer & winter treadling add textural interest to Dixie Thai's BUTTERCUP BABY BLANKET. Pattern blocks are sprinkled over a warp-dominant background in this four-shaft crackle pattern. The figure on page 41 shows the drawdown of a simplified version of this block design. For full project information, see the Instruction Section. Yarn courtesy of Henry's Attic.**

design effects you can create. Susan Wilson discusses one method in detail; her Polychrome Crackle Table Runner on page 45 will inspire you to experiment on your own.

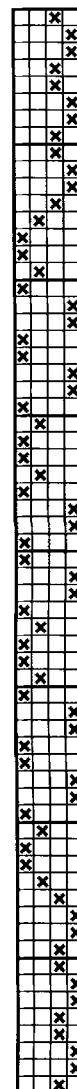
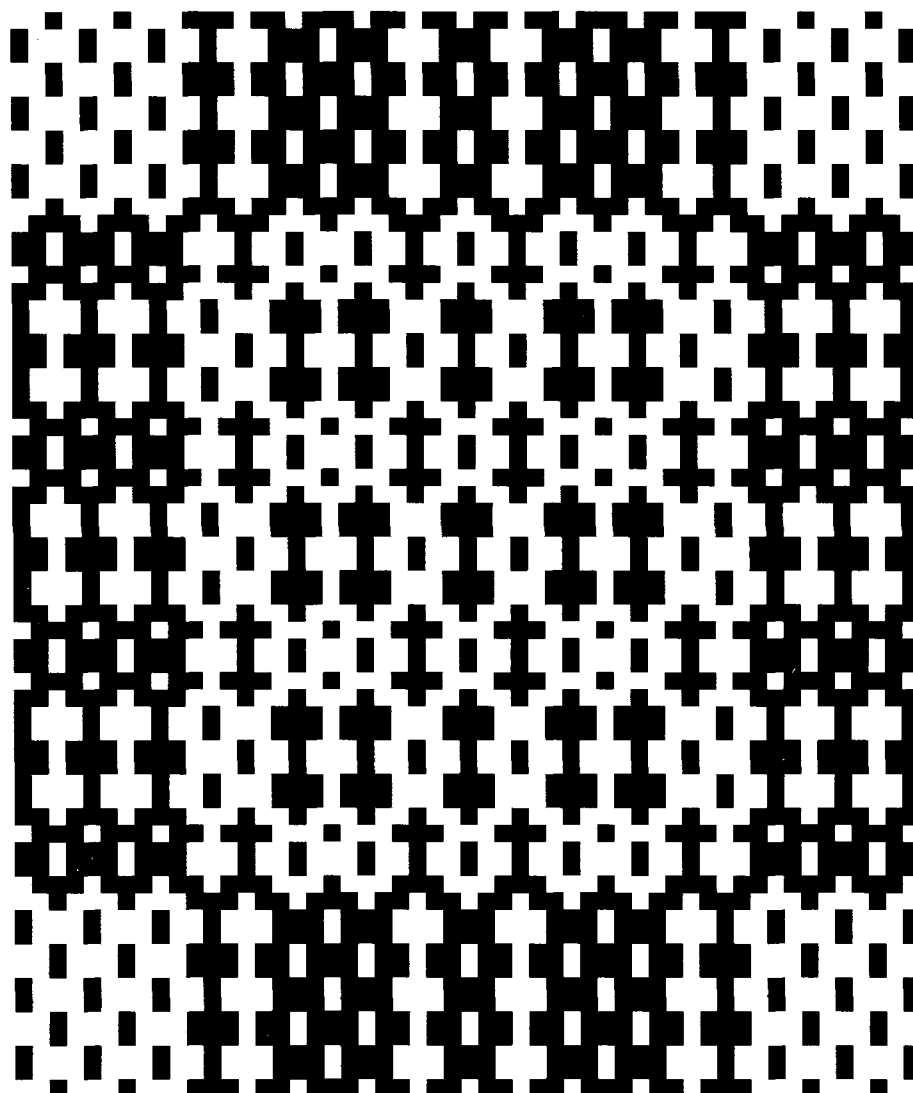
## **MATERIALS**

Many of the crackle patterns designed by Mary Meigs Atwater called for fine cotton such as 20/2 for the warp and tabby weft and a pattern weft of a contrasting color and heavier weight. This combination certainly has its uses, but there is no reason to limit yourself to these choices.

Although the designers featured in this issue appear to share Berta Frey's opinion that crackle weave often looks best when pattern and background colors are nearly equal in value or when pattern is subordinated to texture, they have given their projects a fresh and contemporary feeling with nontraditional yarn choices.

Textured or other novelty yarns such as the nubby cotton weft in the baby blanket give basic block patterns a completely different feel and look. Reversing the traditional weights for pattern yarns and tabby and warp yarns shifts the emphasis so that pattern doesn't dominate but provides spots of color over the fabric. For example, by using chenille for the warp and tabby weft in her scarf, Donna Muller created a wonderfully soft fabric with an excellent drape; the finer pattern weft acts as an accent to a yarn that needs little embellishment.

The drawdown at the right illustrates aspects of crackle structure. In this three-block design, the blocks are of different sizes, depending on the number of threading units per block: there are two repeats in block A, one in block B, and five repeats in block C. The central unit of C is separated from the others by a different incidental thread from that used between the other C blocks. This is the same incidental thread used for block B, and it acts as a B block in separating the center C block from the others. The diagram also shows how each woven block appears to be expanded by the two threads from the adjacent blocks that also weave when the block is treadled. A summer & winter treadling is used to create a cross-hatched texture in the blocks. Tabby shots are used but not shown.



Space-dyed yarns are effectively combined with simple designs in the projects. In the Periwinkle Crackle Sweater, a fine rayon space-dyed yarn placed randomly throughout the warp subtly highlights the garment. Space-dyed tabby weft plays a dominant role in the Shimmering Waters Jacket, creating a watercolor wash background that avoids the streaky effect usually

obtained with such yarns. By selecting a warp color to match the overall hue of the space-dyed yarn and a pattern weft close to one of its component colors, soft color blends emerge as the eight-shaft crackle structure integrates the separate elements. Even when the contrast between the colors of the pattern and warp yarns is strong, as in the scarf on page 38, the space-dyed

tabby weft softens the effect, uniting the two in the plain-weave section.

As you explore crackle, try new combinations of weight, texture, and color in addition to designing block patterns. A serendipitous result is sure to delight you. ♦

SUZANNE DE ATLEY weaves in Boulder, Colorado, when she isn't working on HANDWOVEN.

# CRACKLE PATTERNS FROM TWILL PROFILES

BY MANUELA KAULITZ

VIEWED CLOSE UP, MANY 2/2 TWILL PATTERNS ARE VERY ATTRACTIVE, BUT STEP AWAY AND THEIR DETAIL IS LOST. CONVERTING THESE TINY DESIGN TREASURES TO CRACKLE WEAVE MAGNIFIES THEIR SIZE WHILE PRODUCING A DRAPEABLE, PRACTICAL CLOTH THAT CAN BE VARIED IN WEIGHT ACCORDING TO YOUR NEEDS.

Crackle has gained new support as weavers explore block structures that use shafts efficiently. Crackle offers as many blocks as shafts; its well-integrated structure is pretty and free of long floats. The price paid for this efficiency is a quirk in the threading. An extra tie-down end, often called an incidental, is needed between blocks to permit a smooth transition.

## THREADING

Crackle blocks are threaded as three-end point twills. Weavers vary in the way in which they write and label these blocks, but it's easy enough to figure out any draft when you understand the principle behind the threading. I find it easiest to use the traditional threading convention, beginning (and ending) each block with the tie-down thread. A unit of block A is threaded 1, 2, 3, 2, which can be repeated any number of times for a wider block before ending with 1. A unit of block B is threaded 2, 3, 4, 3, and ends with 2 when you've completed its repeats. Block C begins

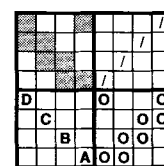
with 3, block D with 4. The blocks may be used in any order, but the underlying order, ABCD, or its reverse order, DCBA, must be observed. Thus, when you skip a block, you must thread the missing block's tie-down end to maintain the odd-even alternation of threads.

## TREADLING

Crackle is treadled with a standard 2/2 tie-up. Like summer & winter, its pattern weft forms floats over three ends against a background of tabby. When repeated, a crackle block reveals an interesting detail—the unit threading is not so much a point twill with a tie-down thread as it is a twill with two points. Here are two units of block A.

	3		3
2	2	2	2
1			1

Both 2, 3, 2 and 2, 1, 2 form points. When shafts 2 and 3 are lifted, block A weaves as a pattern block tied down by shaft 1. When shafts 1 and 2 are lifted, block A again weaves as a pattern block, but tied down by shaft 3. Each crackle block weaves on two different treadle combinations and always weaves with another block. Block A weaves whenever block B or block D is



treadled. Thus, crackle blocks always weave in pairs: AB, BC, CD, and DA.

## USING 2/2 TWILLS AS PROFILES

Like a 2/2 twill, in which the weft covers half of the ends in steady progression, half of the blocks of four-shaft crackle weave as pattern, half as background. This similarity to 2/2 twill points to a vast store of potential crackle patterns. All of the 2/2 twills can be converted to four-shaft crackle—bird's eye, rosepath, diamonds, roses, and herringbones make a wide variety of zigzags and diamond patterns. Threadings for basket weave, crepe, thousand flowers, undulating twills, and even overshot can become profile designs for crackle.

Here's how it's done. Look at the threading and treadling of any 2/2 twill as a profile draft—substitute crackle blocks for individual ends, and you've got a crackle pattern. With each end in the original draft signifying a crackle block, an end on shaft 1 becomes block A, shaft 2 becomes block B, shaft 3 becomes block C, and shaft 4 becomes block D.

Here is Marguerite Davison's Four-Thread Herringbone rewritten as a crackle profile draft:

4			4
	3		3
2		2	
1			1

Twill

D			D
	C		C
B		B	
A		A	

Crackle

repeat	repeat	repeat	repeat
4	4	4	4
2	3	3	2
1	1	2	1
Block D	Block C	Block B	Block A





# POLYCHROME CRACKLE

BY SUSAN WILSON

ONE OF MY FAVORITE WAYS OF WEAVING CRACKLE IS POLYCHROME TREADLING. POLYCHROME MEANS TO WEAVE MORE THAN ONE COLOR IN EACH ROW OR PASS OF PATTERN.

Several treadling methods such as rotation bound weave or weaving on opposites are polychrome techniques which can be used with crackle threading to make weft-faced fabrics. For a lighter-weight, balanced fabric, here is a particularly effective method for weaving polychrome crackle.

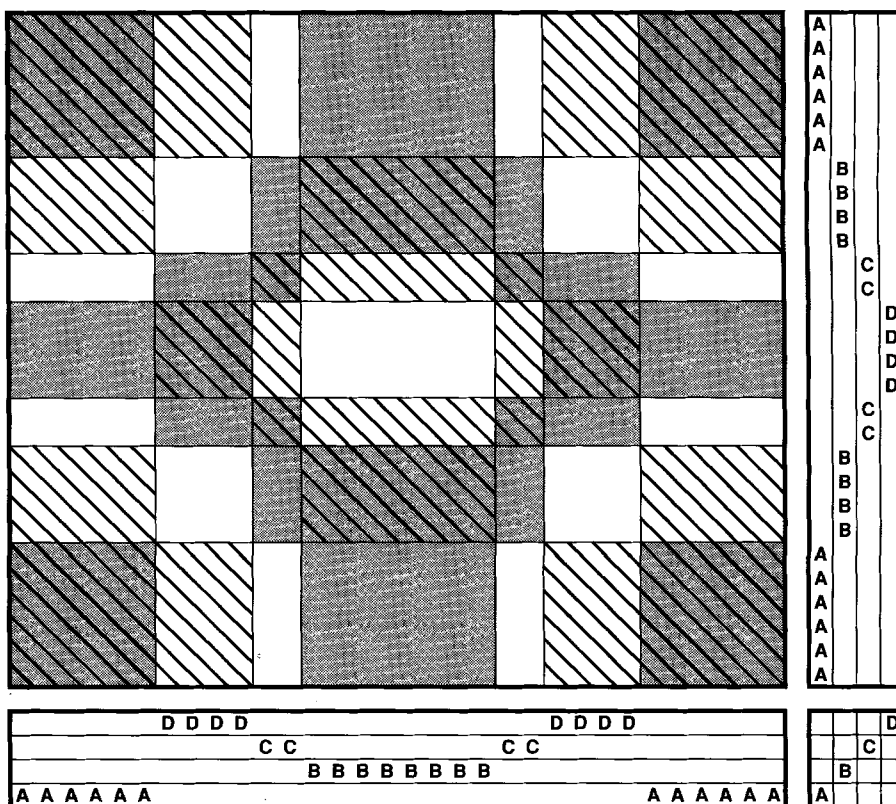
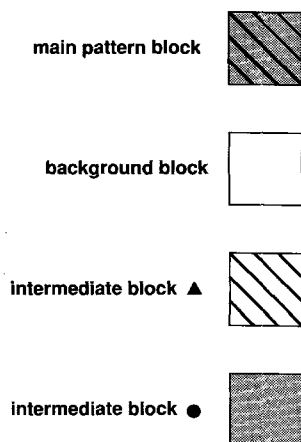
## DESIGNING POLYCHROME CRACKLE

Crackle is traditionally treadled in the overshot manner: a pattern pick in a contrasting color alternates with a tabby pick in a yarn that matches the warp. Polychrome adds a second pattern color to this treadling for a dramatic expansion of design possibilities. Compare the

two crackle fabrics in the smaller photo at right. The blue-and-white fabric on the left was woven in the overshot manner. The russet-peach-and-white polychrome fabric on the right shows a greater depth of color and complexity of design due to the interaction of two pattern colors in the weft.

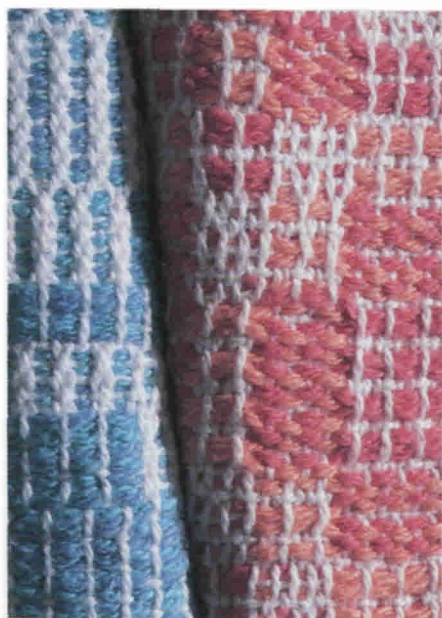
Woven in the overshot manner, four-shaft crackle produces two blocks of pattern and two blocks of background in each horizontal design area. In contrast, polychrome crackle produces four distinctly different blocks. The *main pattern block* shows both pattern colors equally, in a nearly weft-faced fabric. The *background block* is mostly the warp and tabby color, with dots of the two pattern colors showing through. In addition, two *intermediate pattern blocks* show pattern weft floats, one block in each pattern color.

FIGURE 1. Polychrome crackle produces four distinctly different blocks. The two pattern wefts show in their own blocks and combine in the main pattern block.



Against a speckled background, the blue and brown linen pattern wefts of Susan Wilson's POLYCHROME CRACKLE TABLE RUNNER create solid-colored blocks of their own and a two-tone main pattern block of both colors. See the *Instruction Section* for details.

The blue-and-white fabric woven in the overshot manner contrasts with the multi-colors of the polychrome treadling of the russet-peach-and-white piece.



The main pattern block is the treadled block around which the design is planned. The background block is the opposite block—the one not adjacent to the main pattern block when the blocks are arranged sequentially in ABCD order. The remaining two blocks are the intermediate blocks. For example, in a horizontal design area with a main pattern block A, the background block is C, and the two intermediate blocks are blocks B and D, which are the blocks adjacent to A.

To design polychrome crackle, I like to start with a profile drawdown that shows the position of the main pattern blocks. On graph paper, draw the outlines of the blocks in their correct positions. After you have located the four types of blocks in the drawdown, it's time to decide on color placement.

Though many colors may be used in the overall design, for your first attempt at designing polychrome crackle it is simplest to use only two pattern colors throughout the entire piece. With colored



Look at the first horizontal design area, or treadling block, in figure 1, for example. The profile indicates that the main pattern block is A. If your two pattern colors are blue and red, fill every block A in the first design area with both blue and red. Block C is opposite block A and is, therefore, the background block; leave any block C empty. Now assign colors to the intermediate blocks. If you use blue in the B blocks, then color all D blocks red. Continue through the profile draw-down, assigning colors in each horizontal area or treadling block.

To make a threading and treddling draft from the profile draw-down, I use the threading keys or units shown below for the four crackle blocks.

Below are the threading and treadling keys or units for each block in the profile. In the first treadling key, the main pattern block is A, the background is C, and intermediate blocks are B and D. Block D is in the first pattern color in the sequence and block B is in the second pattern color. If you reverse the order in which the pattern colors are placed in the treadling key, the intermediate blocks switch colors. Use these treadling keys to determine the treadling and color order for each block in your profile draw-down.

To see clearly how the polychrome structure works, weave samples of your profile drawdown using

After you have a feel for the technique, expand your polychrome designing skills with a few more samples. Try reversing the order of the two pattern colors. Which do you like better? Change the block order in the treadling, change the size of the blocks, make a new profile drawdown. Experiment with combining several colors in one polychrome design. Try a different tabby color. Weave the polychrome table runner shown here, or design your own project. Enjoy polychrome crackle! ♦

SUSAN WILSON specialized in crackle for her Certificate of Excellence from the Handweavers Guild of America. She lives in Laramie, Wyoming.

46 HANDWOVEN SEPTEMBER/OCTOBER 1994



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## TOOLS & TECHNIQUES

# HOW TO USE A TEMPLE

BY ANJA HÖYKINPURO

WHEN I MOVED TO MINNESOTA FROM MY NATIVE FINLAND, I WAS SURPRISED TO DISCOVER HOW MANY AMERICAN WEAVERS WERE UNFAMILIAR WITH A TEMPLE.

In Finland, weavers use this tool for all types of weaving. A temple consists of an interlocking pair of bars with teeth at each end; it is used on a weaving in progress to keep it at a fixed width. My weaving instructor always reminded me if I forgot to use a temple, and she would often come over and attach one to my weaving.

I have met weavers who see using a temple as a form of cheating; they believe that every good handweaver should be able to produce cloth of uniform width without the aid of a gadget. It is a misconception to think that a temple replaces weaving skill. Temples, or “stretchers” as they are also called, are not designed to stretch poorly woven cloth to its intended width; instead, I like to think of the tool as a guide that helps the weaver establish and maintain the correct width while

preventing excessive draw-in. The key to even selvages is still in the consistent bubbling of the weft, but with the temple in place it is easier to see if the cloth starts to get narrower or wider in the course of weaving.

There are other advantages as well. The temple prevents selvedge threads from breaking by positioning them to run in a straight line through the reed without rubbing against it. I find this extremely helpful when weaving with fibers such as linen which do not withstand abrasion well.

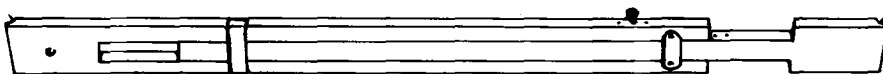
If that is not enough reason to use one, a temple also helps eliminate the convex curve at the fell line that often plagues handwoven pieces. A member of our local rag rug study group recently shared a dramatic example of how using a temple improves weaving. She showed us two placemats woven on the same warp: one was woven without a temple and the other was woven with one. The first placemat, even though lovely and meticulously woven, had curved ends. The second placemat was an inch wider and had nice, straight lines.

### WEAVING WITH A TEMPLE

Before attaching the temple, adjust it to the width of the warp at the reed. The selvedge yarns should run just inside the tips of the teeth.



A temple secured to the fabric during weaving helps keep the cloth a uniform width. Adjust the length of the temple to match the width of the fabric in the reed. Metal temples (ABOVE) hook together and are secured with a plastic collar. Wooden temples (BELOW) have a U-shaped channel which allows them to slide apart. A metal pin maintains the position and a metal collar holds them flat.





When the weaving has advanced a distance equal to the width of the temple head, it is time to release and reattach the temple 1/2" from the fell line.

Insert the hook on one bar into the hole in the other bar that best corresponds to the correct width of the warp. Never set the temple wider than your warp, and keep it at the same width throughout the weaving. Place a piece of masking tape next to the hole you are using to mark it in case you drop the temple and it comes apart.

Attach the temple as soon as you have woven enough to spread the warp and provide a base for the teeth. Leave about 1/2" between the temple and the fell line to prevent damage to the reed or the shuttle race. Insert the teeth just inside the selvedge yarns, first at one side of the weaving and then at the other. Attaching the left end first works best for me as I am right-handed. Press down on the two bars and lock them together by sliding the collar over both of them.

As the weaving advances, remember to move the temple. This takes some getting used to in the beginning but will become second nature after a while. Since both advancing the warp and moving the temple can affect the hand of your cloth, I recommend the following sequence to avoid compounding their effects. To be sure that every part of the cloth is stretched equally, move the temple toward the fell line every few inches (the distance equal to the width of the temple head). With the temple in its new position, weave a few picks before advancing the warp.

When you use a temple to weave delicate fabrics, it will leave small gaps where the teeth have

been inserted in the cloth. In my experience, these gaps disappear in the first washing as the yarns settle. However, if you are weaving a decorative piece which will not be finished by washing, the gaps may be permanent. You have to either plan the piece so that the selvages are not visible or weave it without a temple. Removing the temple every time you take a break from weaving will help minimize unsightly gaps.

#### SELECTING A TEMPLE

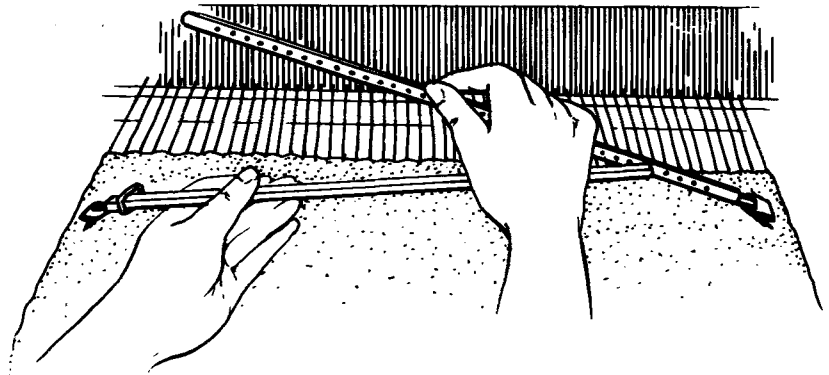
Temples have different ranges in width, and you need to find the one that best fits your needs. For example, if you are a rug weaver, you might want to purchase a temple with a 24"–38" range for small- and medium-sized rugs, or a 32"–52" one for larger rugs. For placemats, a 12"–16" range is sufficient.

Because the temple has to be attached, released, and reattached frequently during the course of weaving, it is important that this can be done easily. Unfortunately, I have seen some temples that were so cumbersome that a good weaving

rhythm could not be established. The method for locking the two bars together should be quick to use, such as a collar that slides back and forth. Also look for a model that covers as little of your weaving as possible. By design, wooden temples usually obscure the last few inches of the weaving, whereas metal temples, such as those from Finland, are slimmer and let you see more. Avoid models whose teeth stick straight out from the ends: the teeth should be set at an angle to grip the cloth efficiently.

Knowing how to use a temple correctly and using it consistently will give your pieces beautifully straight edges. Try one and see how good your handweaving can look. ♦

*ANJA HÖYKINPURO learned to weave in Finland, and there she acquired a passion for weaving traditional weft-faced rag rugs. When she moved to Minnesota in 1988, her hobby turned into a business, and she started to weave Finnish rag rugs for sale at craft shows and shops. Anja also has taught rug weaving at the Weavers Guild of Minnesota, and her article "Rag Rug Weaving in the Finnish Tradition" was published in Weaver's in 1992.*



# HOLIDAY PROJECTS

*T*he holiday season will be upon us before we know it. Here are some projects to weave now in time for giving in December. Mary Bentley included her family's pet along with fir trees, snowmen, and angels on her Christmas stockings. Barbara Eychaner's stockings have cuffs to be embroidered or left plain; weave some to have on hand to finish for last-minute gifts. Anne Sneary's tree skirt dresses the tree in style whether or not it's piled with presents.

Here's a suggestion for making your loom an asset during the holiday season when you'll be entertaining family and friends. When you've cut off the last holiday project from your loom, save enough time to warp it in red and green. The cheery holiday colors will brighten the room and convey to guests your love of weaving. In January, after the holiday rush has subsided, weave off the red-and-green warp, and you'll have a headstart on next year's holiday season.

Stockings personalized for each member of the family adorn Mary Bentley's mantelpiece during the holidays. Woven on eight shafts, CHRISTMAS IN SUMMER & WINTER uses polychrome treadling with two different pattern colors for expressive shading. See the *Instruction Section* for complete details.







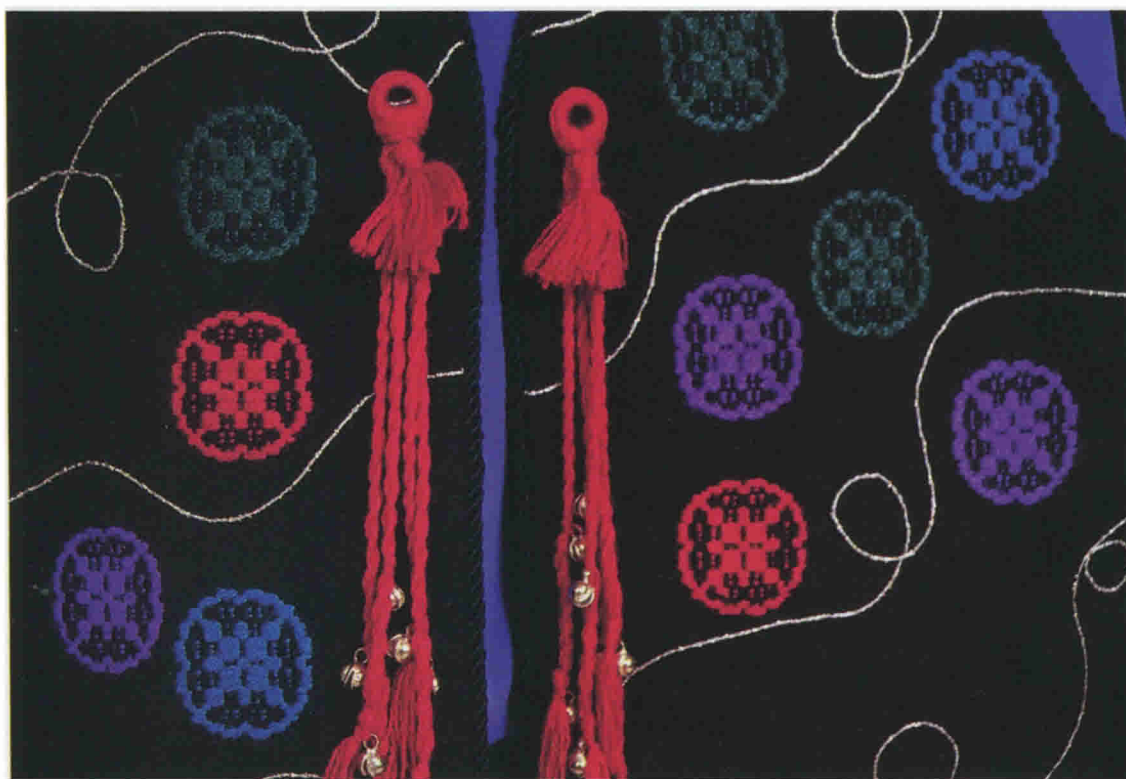
**Barbara Eychaner's four-shaft CHRISTMAS STOCKINGS** make gifts for special people. The striped cardy cane stocking is cut on the bias and has a separately woven and embroidered cuff. The cuff and overshot body of the violet stocking are woven on a single warp. *Directions for both projects are included in the Instruction Section.*



**Anne Sneary designed her hexagonal FELTED CHRISTMAS TREE SKIRT to be cut economically from a narrow strip of fabric. The lightly felted fabric is woven on four shafts. Please see the Instruction Section for details. Yarn courtesy of Harrisville Designs.**



The holidays are a time to celebrate with handwoven clothing. Lynn Lesselroth threaded a four-shaft overshot and inlaid colorful circles on her CELEBRATION VEST. The gold thread entwining the motifs was embroidered before the vest was sewn. See the *Instruction Section* for complete directions.





# THE TWELVE WOES OF WEAVING

BY MARGARET BAILEY

In the first inch of weaving,  
My lovely warp required  
A washer to weight a loose  
thread.

By the fourth inch of weaving,  
My pretty warp required  
Three washers more  
And a teaspoon to weight a  
loose thread.

By the twelfth inch of weaving,  
My pretty warp required  
A much larger washer,  
A somber German novel,  
Three rice-filled baggies,  
A roll of fishing line,  
And a bath towel in the back beam.

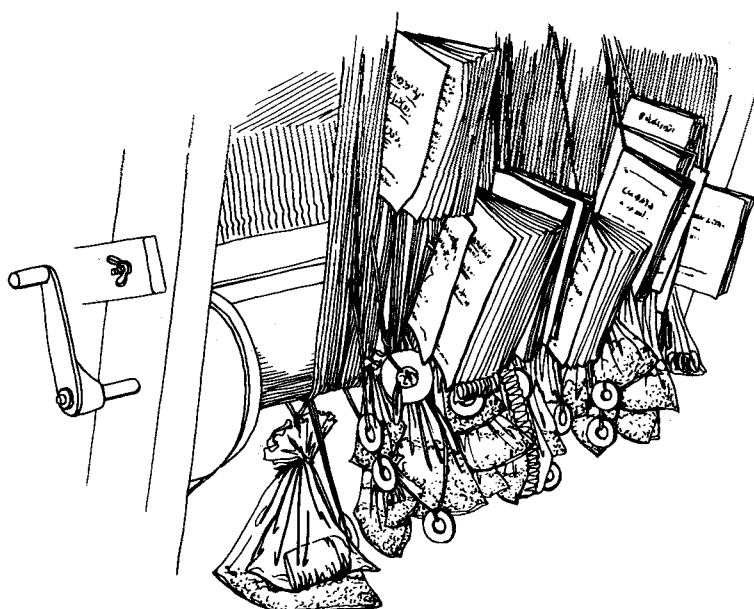
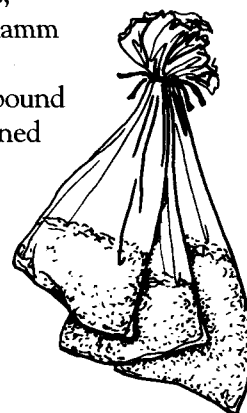
By the thirtieth inch of weaving,  
My pesky warp acquired  
Eight more sacks of rice,  
Ten more German novels,  
Three more heavy washers,  
One bag of keys,  
One film can with pennies,  
Nuts and bolts in baggies,  
And a dish towel in the cloth beam.

By the fiftieth inch of weaving,  
My hateful warp acquired  
Bath towels in the cloth beam,  
Six more bags of rice,  
Another heavy film can,  
One key chain,  
Forty jingling washers,  
Three S-hooks,  
Fifteen of my lamm  
chains,  
And another pound  
of long-grained  
rice.

When the tie rod cleared the back  
beam,  
My spiteful warp required  
That each thread be retensioned,  
Snipped off and reknotted;  
Get an inch of clean sheds,  
Then ten loose threads,  
Two window handles,  
Foul swear words,  
And the whole disaster reappeared.

By the ninetieth inch of weaving,  
My victorious warp required  
T.P. in the cloth beam,  
Another round of washers,  
One pair of scissors,  
One small bag of rayon,  
One candle,  
A dead battery,  
One corkscrew,  
And a straitjacket for the weaver.

*Despite MARGARET BAILEY's first difficulties  
with doubleweave, she continues to weave in  
Frisco, Colorado.*



# IN SEARCH OF INDONESIAN IKAT

BY PATRICIA HUNZEKER

**S**cenés from my childhood imaginings appeared before me in living color: natives in tribal costume encircled me, small brown children touched my light skin and laughed at the hair on my arms, and gray furry monkeys chattered in the village trees. I was in a Dayak tribal village on the island of Kalimantan (formerly Borneo), Indonesia, touring with twelve Americans who share my interest in textiles unique to this remote area. Located in the rain forest on the shore of Lake Jemprang, Tanjung Isuy was our first stop to see textiles dyed and woven in the traditional ikat manner.

Several days earlier, we had boarded a bright blue houseboat to travel several hundred miles up the Mahakam River in East Kalimantan. To reach Tanjung Isuy, we left the river and hired native guides and longboats to cross Lake Jemprang, a broad expanse of smooth, shallow water and swamp grasses. Aided by signposts sunk in the mud at strategic intervals, the guides followed a map found only in their heads. Accustomed as I was to insignificant bodies of water, I found the hour-and-a-half trip across the lake intimidating.

No less intimidating were the powerfully built men who surrounded me as I disembarked to the sound of drumbeats and remembered that not too long ago the jungles of Borneo were inhabited by headhunters. My impression of their fierceness

was soon dispelled by the villagers' hospitality and gentle curiosity. The weavers whom we had come to see welcomed us into their homes and were as interested in our long journey to meet them as we were fascinated by the warps unfolding before us on their looms.

The term ikat derives from the Malay word *mengikat*, meaning "to wind, tie, or wind around." This meaning was evident as the women set out to show us the process, explaining as best they could with gestures, giggles, and limited knowledge of our language. One member of our group could speak the village dialect, and soon a spirited exchange of ideas and techniques began to unfold.

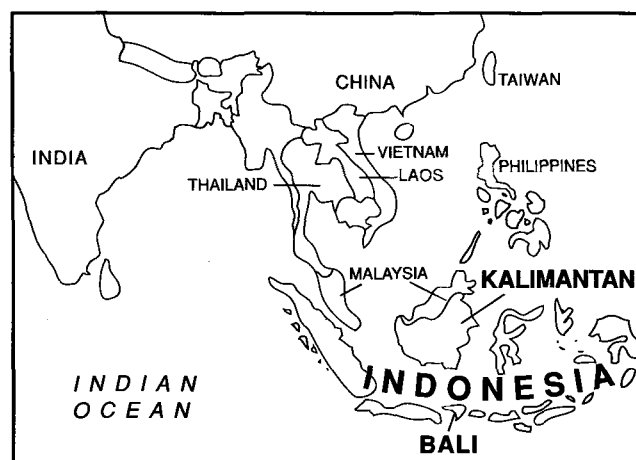
In addition to preparing fibers and dyes, each weaver makes the tools necessary for her craft. Stick shuttles, shed sticks, tapestry-style bobbins, warping frames, and sup-

port frames for the back-tensioned looms are all handmade from a jungle hardwood, polished and smoothed to a satiny finish. Lacking electricity or other Western amenities, weavers set up their looms in the open doorways or in front of windows of their homes to take advantage of the sunlight.

In Tanjung Isuy, ikat decoration is applied to warp threads made of bast fibers. The fibers are prepared from plants such as pineapple, agave, and lemba that grow close to the weavers' homes, often right outside the door. After drying and shredding the spiky leaves, the weaver bundles them into manageable handfuls. To make the thread, she draws out a small group of fibers from the bundle and loops the strand around her big toe to hold it taut. Carefully separating the fibers with a large knife, she twists them together to form a very thin thread. She continues to draw fibers from the bundle to increase the length of thread for warps of perhaps six feet in length. Finally, she soaks the thread in water nearby and dries it in the sun.

Preparing the warp for resist-dyeing is a time-consuming process. After winding the warp on a warping frame, the weaver creates the design

**A variety of ikat techniques are practiced throughout Indonesia. Warp ikat is a specialty in some villages in Kalimantan (formerly Borneo), but double ikat is restricted to Tenganan Village in Bali.**



by tightly winding a vegetal fiber similar to raffia around the parts of the warp strands that are to remain uncolored. When immersed in the dyebath, the raffia protects the warp that it covers from the dye. After dyeing the warp, the weaver removes the ties, and the design appears on the warp threads in negative.

The dyes used for ikat in this Dayak village are prepared from local plants. Charcoal gray and a rusty red-brown were the most common colors I saw, but there were also brighter reds, soft greens, and straw yellow. The generally muted colors are a strong contrast to the crisp, clear colors of Indonesia: the brilliant blue sky, lime green rice paddies, and the glowing reds and pinks of the flowers. These warp ikat cloths are usually dyed with one color; on the occasions that more than one color is used, the weaver must bind areas of the warp dyed in the first bath to protect them from being overdyed with the color in the second dyebath.

We learned that Indonesian textiles are a major form of artistic and religious expression; the patterns so laboriously crafted are symbolic and carry historical meaning for each village, each weaver, and her family. Each design element and its wrapping pattern has been passed from mother to daughter through many generations. The Dayak weavers learn the patterns as part of their craft, but as a weaver who relies on cartoons and computer-assisted design, I couldn't help feeling that each weaver performed a remarkable feat as she marked, wrapped, and dyed her warp from memory.

Even more extraordinary than the Dayak warp ikat cloths are the rich textiles woven by the women of Tenganan, on the island of Bali.

This village is the only location in Indonesia where the complex double ikat technique is practiced.

In contrast to our journey to Tanjung Isuy, Tenganan was relatively easy to reach. We traveled by bus into the mountains, leaving cities and towns behind, and finally arrived in this traditional village where ancient laws still strictly prescribe the life-style. Members of the community are prohibited from marrying outside the village, divorcing, or having more than one wife. The villagers' struggle to preserve the purity of their bloodline has a cost: fewer than 300 families remain and marriageable males are few.

Their conservatism is rooted in history. According to legend, the Hindu god Indra rewarded the peo-

ple of Tenganan for their service with a large gift of land. Communally owned through the centuries, the land is a source of wealth that is unusual for these islands, and it supports the elaborate rituals that take place here. Textiles are essential elements in the ceremonies and practices that are interwoven into daily life. The double ikat textiles we came to see, known as *gerinsing*, are used in sacred rituals and are believed to have magical qualities.

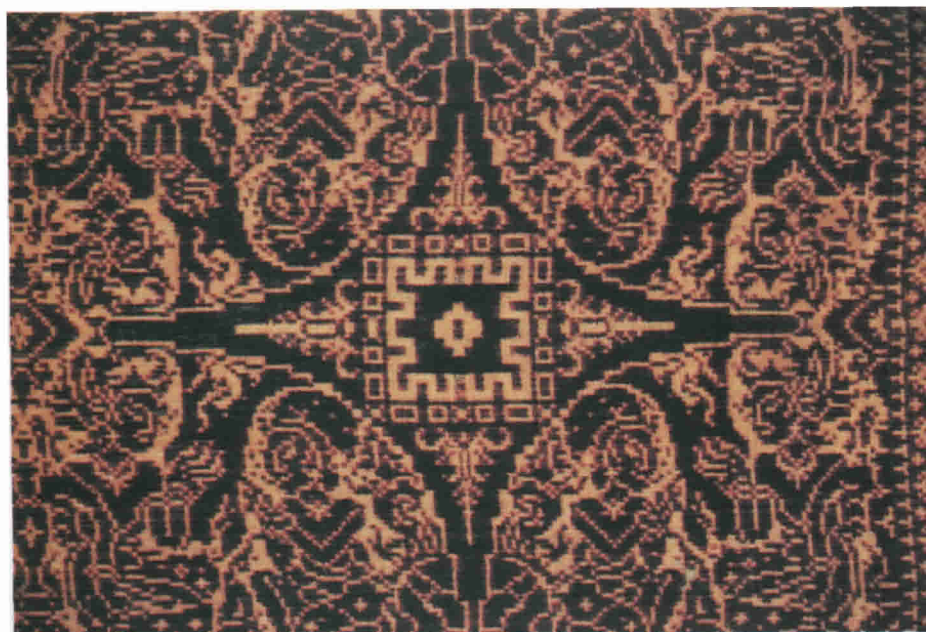
The rituals related to weaving the textiles are exacting and are not shared with outsiders. Only perfectly executed *gerinsing* can be used by the villagers in their religious rites. Inferior pieces are sold, at very high prices, to collectors or visitors to the village. I was offered the opportuni-

**Weavers from  
Tanjung Isuy,  
Kalimantan, apply  
ikat patterning to  
bast-fiber warp  
threads, then weave  
their cloth on back-  
tensioned looms.**

**Photo by Marcus L.  
Goodbody.**







Detail of a double ikat shawl (*gerinsing*) from Tenganan Village, Bali, Indonesia. Length 210 cm (without fringe), width 47.5 cm. Peabody Essex Museum, Salem, Massachusetts. Photo by Mark Sexton.

ty to purchase one small piece for \$600 because it had begun to come apart. It was very old, with beautiful, soft colors and a strongly visible pattern of an animal.

In double ikat, weft threads as well as warp threads are wound and dyed so that the resist areas intersect to form a pattern in the finished cloth. The picture created by the double ikat is often of an animal, or it may be an image of gods or figures with religious symbolism. Again, the patterns are passed from mother to daughter, but they may also come to the weaver in a dream.

The fibers used in double ikat are usually handspun cotton or kapok rather than the bast fibers used by the Dayak villagers. The dyes used in Tenganan are similar, though, and ground nuts or ashes are frequently used as mordants. As in the warp ikat, the colors are muted and soft: distinctive shades of

reddish brown, off-white, and blue-black, as well as an unusual shade of gray-green.

Preparation and weaving of double ikat patterns is even more complex and time-consuming than warp ikat: one cloth can take as long as five years from its conception in the weaver's dream to its completion. Weavers in Tenganan use a warping frame similar to that of the Dayak and wind vegetal fibers around the warp threads to resist the dye. In addition, using a separate winding frame, the weaver binds and dyes the weft threads. The weaver must take care to ensure that the resist areas of warp and weft will coincide perfectly. Multicolored ikats, more common here than in Tanjung Isuy, add considerably to the preparation time for a double ikat cloth.

After the warp and weft have been dyed in the desired pattern

and the warp threads are in place on the loom, the weaver begins the painstaking placement of the weft threads to align the weft design precisely with the color areas in the warp to produce design elements with precise edges and no color shading. The excellent selvages and clear images on the pieces I observed are testimony to the weavers' skill.

The finished textiles are soft, smooth, and fabulous to touch. Even the smells of the fabric are compelling; wood smoke from the cooking fires permeates the cloth and intimately connects it to the place it was woven. I was captivated by *gerinsing* and longed to have a tangible piece of Indonesian living history; however, my attempts to purchase a warp prepared for dyeing and still on the warping frame were rebuffed. Weavers told me that the warps took too long to prepare and were not for sale.

Although I was disappointed to leave without an ikat textile, the memories afforded by my brief glimpse into the weavers' lives, their techniques and working conditions, and the significance of their finished cloth will stay with me. I came away from Indonesia with appreciation for the rich textile heritage that persists there as part of daily life. ♦

PATRICIA HUNZEKER weaves to relax and travels in search of ethnic textiles throughout Southeast Asia and China.

#### Further reading

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# BOUND-WEAVE BASICS

BY HENRIETTA LEWIS



Woven in bound weave on opposites, shades of brown and green make diamonds and columns on a threading of rosepath.



Color rotation in the weft makes a bound-weave fabric that looks like bargello embroidery. The threading draft is shown on the facing page.

Krokbragd is a bound weave threaded in three-shaft point twill. The color order here shows smooth edges at one end of the diamond-shaped motifs and saw-toothed edges at the other.

BOUND WEAVE MAKES A THICK, WEFT-FACED FABRIC WITH A PATTERNED SURFACE. THE HEAVY FABRIC IS USUALLY USED FOR RUGS AND WALL PIECES. LIGHTER-WEIGHT VARIATIONS WOVEN WITH FINE YARNS FUNCTION AS PILLOWS, COUCH AND CHAIR COVERS, AND GARMENTS SUCH AS COATS, JACKETS, AND VESTS.

Threadings are usually based on twill, especially the point twills. Twill variations, including broken and extended twills, are a rich source of drafts to explore. Miniature overshots are very decorative in bound weave; their small motifs which mix twills with short blocks provide great variety. Whatever threading you choose, the float length should be fairly consistent throughout to distribute the wear.

A sett wider than plain weave lets you beat the weft picks down to touch each other and cover the warp. Too wide a sett allows you to

pack the weft so closely that it springs back when the beater moves away. However, to make a firm rug, you need to pack the weft closely.

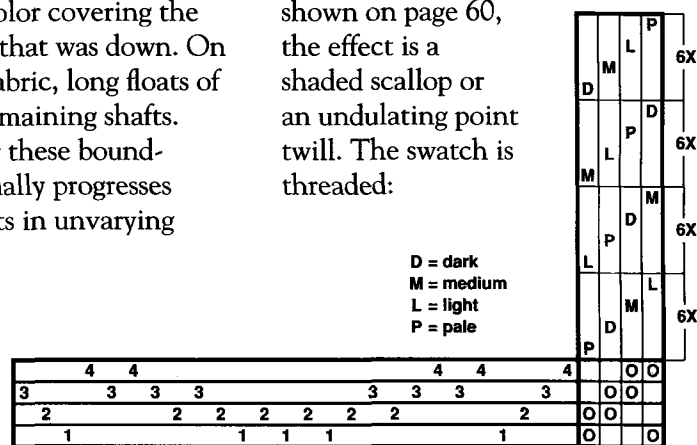
Bound weave is characterized not only by a great number of weft shots, but also by frequent color changes. Smooth, even selvages thus can be difficult to achieve. Using floating selvages helps make good edges because each weft color is carried all the way to the edge and wraps the last end. Sometimes, however, the threading works just as well without a floating selvage. Experimenting on a sample before





Two types of treadling are used. The first type, called on opposites, divides the the shafts into complementary pairs of sheds. On a four-shaft threading, the twill pairs are used. Shafts 1-2 are paired with their opposite pair, shafts 3-4. Likewise, 2-3 are paired with 1-4. A color can be used in any of these sheds, making four color placements possible. To weave on opposites, alternate two colors on a pair of opposite sheds. After repeating these rows as desired, change to another pair of opposite sheds and

The color pattern is often designed, at least initially, on graph paper. However, the squares of the graph make only a crude representation of the pattern because each square represents several picks, any one of which could initiate a change in sequence. Also, rather



Bound weave offers a wealth of small, geometric patterns repeated across the width of the cloth. You'll find it not only decorative but great fun to weave. ♦

SEPTEMBER/OCTOBER 1994 HANDWOVEN 61

# TALES FROM THE LOOM: STORY CHARACTERS ON FOUR SHAFTS

BY REBECCA ARKENBERG

I HAD NEVER FELT THE LIMITATIONS OF MY FOUR-SHAFT LOOM MORE KEENLY. THE FORT WORTH WEAVERS GUILD HAD SCHEDULED A PROGRAM ON WEAVING POLYCHROMATIC FIGURES, AND AS I ADMIRED THE LITTLE ANGELS, COWBOYS, AND TREES, I REALIZED THAT THEY ALL HAD BEEN WOVEN ON 8 TO 12 SHAFTS.

"Don't worry," Guild member Lois Robertson told me, "I have a pattern for weaving a bound-weave Santa Claus on a four-shaft loom. I'll send it to you."

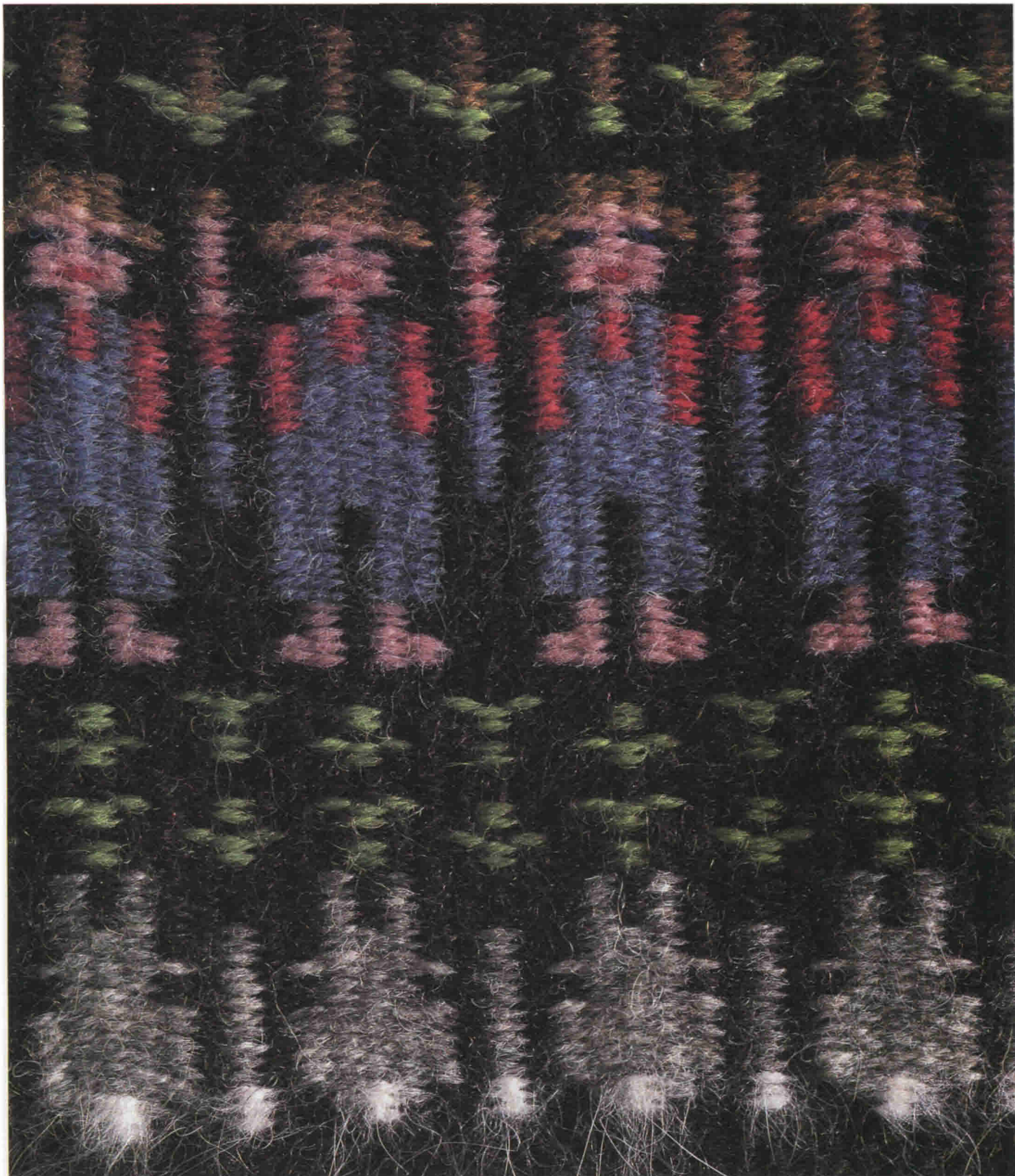
When it came a few days later, I had already warped my loom with an optimistic three yards, and after some false starts, I began to weave the pattern. Tiny black boots appeared, then red pants and a fur-lined jacket (I had some angora) with buttons and belt. The angora also worked for Santa's beard. His blue eyes almost twinkled, and by the time I'd finished off his hat with an angora pompon, I was hooked. But who wants to weave three yards of 2-inch-high Santas? I wove another batch of them holding trees, which made me think of *Macbeth*, the bringing of Birnam Wood to Dunsinane Castle. Well, why not kilted Scotsmen? What next? Mary Poppins? The wizard Merlin and his owl? Turtles?

Weaving figures soon became an obsession. Nothing was sacred or safe. I wove figures from Shakespeare, the Bible, lives of the saints, fairy tales, folklore, history, kachi-

nas, professions, the animal kingdom, anything. I confounded my friends and family, who had to guess the character I created. "No, it's not a chimney sweep, it's Lincoln—see, he's holding the Gettysburg Address on an envelope in his hand." I've been pushing that four-shaft loom to its limit, and here's how you can do it, too.

First, you have to decide what kind of person you are: do you want to plan things before you start or do you like to jump in? If you are the latter, bear with us until we get to the loom; you can choose to skip designing on paper and do your creating while you weave.

For planning, get out your graph paper and colored pencils. Pick a line on the bottom of the graph paper and write these shaft numbers horizontally, one to a box: 143212341. Shaft 1 will be the center axis of your figure, and it will be repeated at each side of your figure. Start by charting a simple one- or two-color symmetrical shape: a heart, a butterfly, a snowflake, or a carrot. Pretend you are at your loom and work from the bottom up. Be



With details added above and below the main figure, story-telling is easy in bound weave.  
Here, Mr. McGregor confronts a fluffy-tailed Peter Rabbit in the vegetable garden. See *Figure 4* for weaving instructions.



consistent—if you have colored a square 3 you must color all the 3s. Leave the background white.

Try a figure. Start the feet on 2 and 3; the legs continue on 2 only. The body expands to 1, 2, and 3 (remember to fill in the 1s on either side). The neck is on 1, then the head takes up 1, 2, and 3 again, allowing you to place the mouth on 1, the eyes on 2, and finish off with a hat or hairdo (see Figure 1). Repeat your figure horizontally if you want to see how a number of them look.

Accessories can be charted for your figures as well. Experiment with rows of small shapes—hearts, vegetables for the rabbits' garden, and so forth—on 212 and 414. Buildings, trees, fences, or other architectural details help identify your figure and can be put below or above it.

This exercise on graph paper is helpful, but it doesn't show the figure with the same proportions as on the loom. While the graph paper shows squares of color, the weave structure on the loom packs down to show a horizontal dash of color for each square. This is why it is sometimes easier to design directly on the loom; however, to use one of your graphed figures as a pattern, mask out all but this sequence: 1234 to show the treadling pattern and colors.

Now to the loom. Select a strong cotton or linen (I like to use 8/2 linen) for warp—it allows you to unweave if you need to. Work with a 5"- to 6"-wide web; determine the warp length by the number of samples you wish to make. The sett depends on the thickness of your warp and weft yarns. The weft needs to cover the warp completely, but as a general rule I set my warp ends closer together than for normal bound weave. Try 7–8 e.p.i. for Shetland weft yarns or 5–6 e.p.i. for thicker

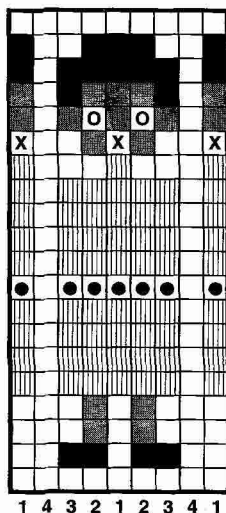


FIGURE 1. On graph paper, chart your figure based on a four-shaft rosepath threading, with shaft 212 as the central axis.

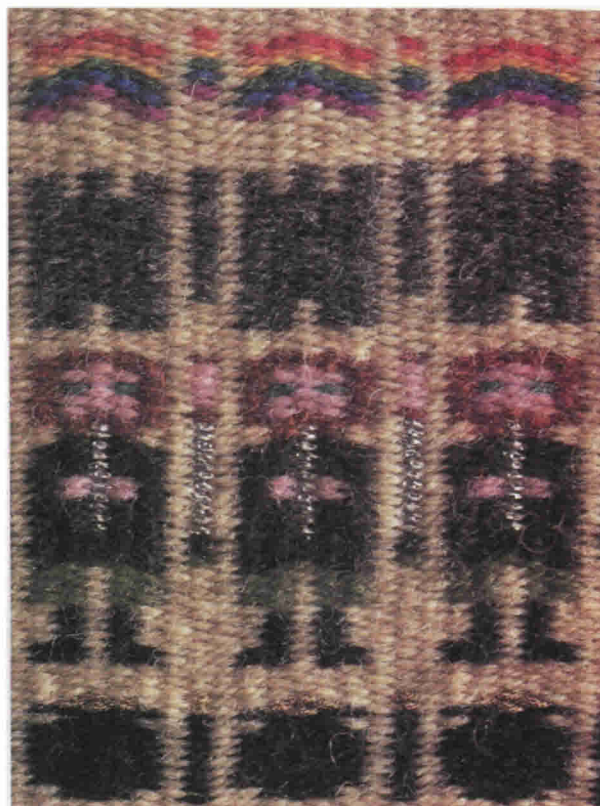
The slightly wavy fell line of bound weave gives an expressive slant to the eyes and a nice shoulder slope. The Navajo woman is centered on 212; to change the direction of the slant, as in the sheep ears, use 414 as the central axis. See Figure 5 for weaving instructions.



**FIGURE 2. Draft for bound-weave figures.**

Selvedges are messy with this kind of weave, but there are a number of ways you can deal with them. Floating selvedges, separately weighted, make a neat-looking edge if you carry only the background color out to them each time, winding it around the floating warp yarns when necessary to achieve a solid-color selvedge. When I want to hide the edge, I single-crochet around the finished sample.

For weft, gather an assortment of needlepoint yarns. They come in many shades and colors and can be combined with two-ply Shetland. For the woven samples, I have used two strands of three-ply Persian needlepoint yarn combined with various two-ply Shetland weaving



**Castles, rainbows, and pots of gold help define the leprechaun main figures while adding the elements of a story. As your figures take shape you can rely more on your eye while weaving and less on your charts.**



Proportion and color are critical in graphic weaving. Experiment with the sett so that the figures aren't massive and blocky but the warp is covered completely. The proportion of your woven figures will not match your charted pattern exactly because each weft shot packs down to make a dash of color. Here, the cowboys, cactus, and cow skulls are well-balanced.



wools. You need only a little of any one color, except for the background, but because every shot goes across the entire width and the yarns tend to pack closely, be sure you have enough.

Choose clear, bright, contrasting colors rather than heather shades, which tend to muddy the lines. For special effects, use novelty yarns such as angora, metallics, bouclés, and mohair, doubling them if they are too thin. Choose the background color carefully with consideration for the colors in your figure. The background should set off the character, not obscure it. For instance, use a light background for a dark figure or vice versa. Keep your weft yarns under control by winding them into yarn butterflies or around tiny bobbins.

Weave a few rows of cloth strips to spread and even out the warp yarns. I start with a row of twining in the background color to keep the beginning edge tight; then I weave 1/2" to 1" in the background color, treadling 1, 2, 3, 4. If the sett is right, the fell line should be slightly wavy. This gives a nice slant to the eyes and shoulders.

Now refer to your design on graph paper, reading from bottom to top and from left to right. What color is on shaft 1? Background? Then weave a shot of background color on treadle 1. Change to treadle 2—what color is indicated on your graph now? Weave that color on treadle 2. Do the same with treadles 3 and 4. Repeat that sequence to make the foot. Go to the next 1, 2, 3, 4 sequence on the graph paper. It may be all background except for the leg on treadle 2. Repeat as necessary. Your figure should start to take shape and you will be able to rely more on your eye and less on the chart. Don't weave the ends of



**For special effects, use novelty yarns such as angora for Father Christmas's beard and trim and metallics for stars and highlights. Embellishments like the gift ribbons can be embroidered on the finished piece. See Figure 3 for weaving instructions.**



**FIGURE 3.** In this pattern for weaving Father Christmas, Gifts, and Tree, pictured opposite, the numbers 1, 2, 3, 4 across the bottom of the chart refer to the tie-up shown in Figure 2. Each row represents one complete treadling sequence (1, 2, 3, 4), and each square in a row indicates the weft color to be used with the corresponding treadle. Repeat each row the number of times shown at the right. Begin reading the pattern at the bottom of the chart. For example, treadle 1, 2, 3, 4 in the background color (W) for 1/2"-1" as desired (variable). Move up to the next row. Treadle 1, using red weft (E), 2, 3 with the bright green (G), and 4 with the background color (W). Do this five times (5X), then move to the next row and continue in this manner until you have completed the figure.

L L L L	variable	
M L L L	2X	W = white
D L L L	3X	R = dark red
D L L D	1X	G = bright green
D L L L	1X	P = pink
D L L D	1X	E = red
D L D L	1X	M = metallic silver
D L L D	1X	L = light blue
D L D L	1X	D = dark green
D L D D	1X	K = black
L L L L	1X	A = white angora
R L L L	1X	
R R L L	4X	Embroider red
P R R L	1X	ribbons on the
P P R L	1X	packages.
P L R L	1X	
P P R L	1X	
A P R L	1X	
E A A L	1X	
A A L L	1X	
A A R L	2X	
A R R L	1X	
R R R L	2X	
M R R L	1X	
M M R L	1X	
E E R L	1X	
E P R L	2X	
E E R L	2X	
R R R L	16X	
A A A L	2X	
L K L L	2X	
L K K L	1X	
W K K L	1X	
W W W W	variable	
W E W W	1X	
E E W W	1X	
E W W W	1X	
E G G W	4X	
E E E W	2X	
E G G W	5X	
W W W W	variable	
1 2 3 4		

the weft back in; just let them hang from the selvages.

As you are weaving, be aware of the effect that proportion and color have on your figure. These are the two crucial elements in weaving a graphic design. Don't be afraid to unweave if it doesn't look right: sometimes just a tiny adjustment in your sequence or color makes all the difference. Start with a simple clothed figure, a woman in a skirt, for example. We all know that clothing can hide figure flaws, and the same is true here. The most difficult figures I have woven are Adam and Eve and skeletons—their proportions have to be perfect.

If you suddenly notice that your figures look too squat, it's probably because you've been beating too hard. I stop once in a while and gently work the woven web toward the unwoven warp to reestablish the figure's proportions. Also, if the yarn is packed in too tightly, it springs apart when you cut your piece off the loom, and you may lose the fringe.

Don't be a slave to the graphed figure—experiment with the slope of the shoulders, hair, or hat. For example, omitting the neck and moving the head down makes a figure that looks slightly hunched. To give a slant to cats' eyes, change the center axis from 212 to 414.

The line which appears between the figures bothered me for some time. I tried different ways of incorporating it into the design, some more successful than others. Usually you can just ignore it, but sometimes the line is visually confusing and detracts from the design. Go back to the graph paper and try changing the figure slightly.

After you have finished a figure, weave the background color for 1/2" to 1", gently work the woven web

toward the unwoven warp to relax the tightness of the weave if necessary, and add a row of twining. Separate the samples with a generous amount for fringe. I weave 5" to 6" of cloth strips, which is not too much, especially if you have woven tightly.

When you have woven all the warp, remove the samples from the loom and cut them apart. The tightness of the weft will relax a little. This is fine, but make sure that the warp yarns are still covered as you tie off the fringes firmly and evenly with overhand knots. Don't pull the warp yarns too tightly. With a needle, darn in the ends of all the colors which have been hanging off the selvages; then gently block the pieces.

You may want to sew other details to the figures—tails for the mice or bunnies, a sequin "star" for your sheriff, or beads. You can also hide the lines between the figures by embroidering over them.

Now, what can you do with a stack of samples? I like to take them to a good copy center and have several sheets photocopied in color. I cut the paper copies to make stationery, bookmarks, and note cards. The woven people are also nice as framed miniatures, especially if you have created a favorite hobby, profession, or book character. You can weave book covers, bookmarks (using thin crochet cotton as the warp and embroidery floss for the weft), mats, mug rugs, pillow tops, wall hangings, or any number of other flat pieces. The weight of the bound weave is nice for liturgical stoles. I have woven St. Laurence and St. Patrick, and my dream is to weave a St. Francis stole with lots of birds and beasts.

If you want to wear your design, you are somewhat limited. The thick fabric does not drape well,

seams would be unwieldy, and the long floats on the back of this weave make cut edges disintegrate. A better option is to appliqué a small piece to an existing garment or design a simple tabard top or vest without darts. To reduce the bulk of seams, shape the shoulder line and armholes on the loom. Cut a paper template to the shape or angle you need and hold it under the warp while you are weaving. Weave back and forth only on the yarns over the template. When you cut, the fabric from the loom, leave long warp yarns which can be tied together to join edges. Finally, darn the ends back into the fabric.

Graphic weaving is a lot of fun. The figures work up quickly and are great conversation pieces. Demonstrating this technique is almost a performance art—people keep coming back to see the figure in progress, and kids love to guess them—but I must warn you: they are addictive. Though your friends and family may not appreciate your attempts to immortalize them in woven fabric, you will have a good time, developing your eye for color and proportion, weaving great gifts, and searching for new characters. Keep a notebook of possibilities. I have one here: Josephine Baker, in her little skirt of bananas. Maybe I could weave the Eiffel Tower in the background . . . excuse me, my loom is calling!

REBECCA ARKENBERG lives in Grapevine, Texas, with her husband and two teen-age sons. She freelances in music, art, and writing, and is presently teaching Renaissance art and music at a summer camp and working on books for children. Rebecca learned to weave as an art education major at the University of Kansas and received her first loom as a wedding present from her brother-in-law, Mike Arkenberg. While this article was in progress, Mike suffered a fatal heart attack. Rebecca would like to dedicate this article to him, remembering his sense of humor.

FIGURE 4. Weaving chart for Mr. McGregor, Peter Rabbit, and Garden pictured on page 63.

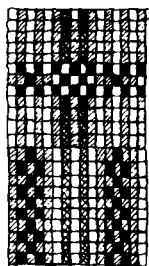
U	U	U	U	variable	
Z	U	U	U	4X	U = dark brown
Z	U	J	U	1X	A = white angora
Z	U	U	J	1X	F = light gray
J	U	U	J	1X	J = yellow-green
J	U	U	U	1X	P = pink
U	U	U	U	3X	L = light blue
Z	Z	U	U	2X	R = red-orange
P	Z	U	U	1X	E = red
P	P	Z	U	1X	B = royal blue
P	P	U	U	1X	Z = gold (nonmetallic)
E	P	U	U	1X	
P	P	U	U	1X	
P	U	U	U	1X	
R	L	U	U	1X	
R	L	R	U	3X	
L	L	R	U	6X	
L	L	L	U	5X	
U	L	L	U	8X	
U	P	U	U	3X	
U	P	P	U	2X	
U	U	U	U	3X	
J	U	U	J	1X	
J	U	U	U	1X	
U	U	U	U	1X	
J	J	U	U	1X	
J	U	U	U	1X	
U	U	U	U	3X	
J	J	U	U	1X	
J	U	U	U	1X	
U	U	U	U	1X	
J	U	U	J	1X	
J	U	U	U	1X	
U	U	U	U	1X	
U	F	U	U	4X	
F	F	U	U	3X	
F	F	F	U	1X	
F	F	U	U	2X	
F	F	F	U	5X	
A	F	F	U	1X	
A	F	U	U	1X	
A	U	U	U	1X	
U	U	U	U	variable	

1 2 3 4

FIGURE 5. Weaving chart for Navajo Woman, Sheep, and Rug, pictured on page 64.

N	N	N	N	variable	
L	N	N	N	1X	N = sand
L	N	N	L	1X	K = black
L	N	L	L	1X	W = white
K	N	L	K	1X	R = dark red
K	N	K	W	1X	Y = gray
K	N	L	K	3X	L = charcoal gray
K	N	L	L	1X	T = dark tan
L	N	L	L	8X	P = deep purple
N	N	N	K	4X	M = metallic silver
N	N	N	N	variable	Q = turquoise
K	K	N	N	1X	E = red
T	K	N	N	1X	
T	T	K	N	1X	
T	K	K	N	1X	
T	T	K	N	1X	
E	T	N	N	1X	
T	T	N	N	1X	
T	N	N	N	1X	
T	M	K	N	1X	
K	M	K	N	2X	
M	M	K	N	1X	
Q	K	K	N	1X	
M	K	K	N	1X	
K	K	K	N	1X	
M	K	K	N	1X	
Q	M	N	N	1X	
M	M	N	N	1X	
K	K	K	N	2X	
P	P	P	N	12X	
N	T	N	N	2X	
N	T	T	N	2X	
N	N	N	N	variable	
K	N	N	N	1X	
R	K	K	N	1X	
R	Y	K	N	1X	
W	Y	K	N	1X	
W	R	K	N	1X	
R	R	K	N	1X	
R	W	K	N	1X	
Y	W	K	N	1X	
Y	Y	K	N	1X	
R	W	K	N	2X	
W	R	K	N	2X	
R	Y	K	N	2X	
K	K	K	N	1X	
N	N	N	N	variable	

1 2 3 4



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## PRODUCT NEWS

by Sharon Altergott

The Oregon Worsted Company of Portland, Oregon, in business since 1918, produces 100% virgin wool Willamette 2-ply and Nehalem 3-ply yarns in 12 basic colors; 30 colors are also available in limited quantities. Yarns are put up on cones of 2½ lb each. The company offers custom dyeing with a 100-pound minimum. Send \$3 and a SASE for a color card to PO Box 82098, Portland, OR 97282-0098. (503) 786-1234.

The Shepherds' Coat, a retail weaving and spinning supplier located in southern California, carries high-quality yarns for weavers not generally available elsewhere, as well as their own blends of exotic spinning fibers. They sell weaving and spinning equipment from Ashford, Glimakra, Reeves Woodworks, Harrisville, and Schacht. For their new catalog, send \$3 to 2567 San Jacinto Ave., San Jacinto, CA 92583. (909) 766-9221.

Brush Creek Wool Works offers a line of solid wood inkle looms made with 1" hand-turned dowels tenoned into a 1½" rounded uprights; a bead on the front dowel makes warping easier. A left-handed inkle loom called the *Southpaw* is a recent addition to the line. All looms are available in cherry, red oak, and red maple, with other woods by special order. For more information contact owner Anthony Slatcoff at R.D. #1, Box 63D, Glencoe, PA 15543. (814) 267-5651.

Cotton Clouds has taken the guesswork out of weaving with chenille with their new *Weave with Chenille* scarf kit, designed by Sharon Alderman. The kit contains a rich variety of colors and textures of rayon chenille to weave a 10" x 60" scarf that's machine washable and dryable. Included with the weaving instructions is a discussion of the Fibonacci series and its application to design. The kits come in eight color combinations including *Spring Peaches*, *Summer Ocean*, *Fall Nights*, and *Winter Sky* and sell for \$39.95 postpaid. The *Fibonacci Series and How to Use It* that accompanies the scarf kit is the first in a series of fabric design mini-workshops produced and marketed by Cotton Clouds. Contact owner Irene Schmoller at 5176 South 14th Ave., Safford, AZ 85546. (800) 322-7888.

With the addition of ten colors each in 10/2, 20/2 and 40/2 linen Webs now offers an expansive range of sizes and colors in linen yarn. The complete line also includes 20/1, 16/2, and 30/2 wet-spun line as well as 8/2, 8/4, 8/5, and 8/6 in wet-spun tow linen, available in a variety of natural colors. A set of linen samples is \$5; a complete sample book of all yarns that they carry is \$32.50. Order from Webs, PO Box 147, Northampton, MA 01061-0147. (413) 584-2225; fax (413) 584-1603. ♦

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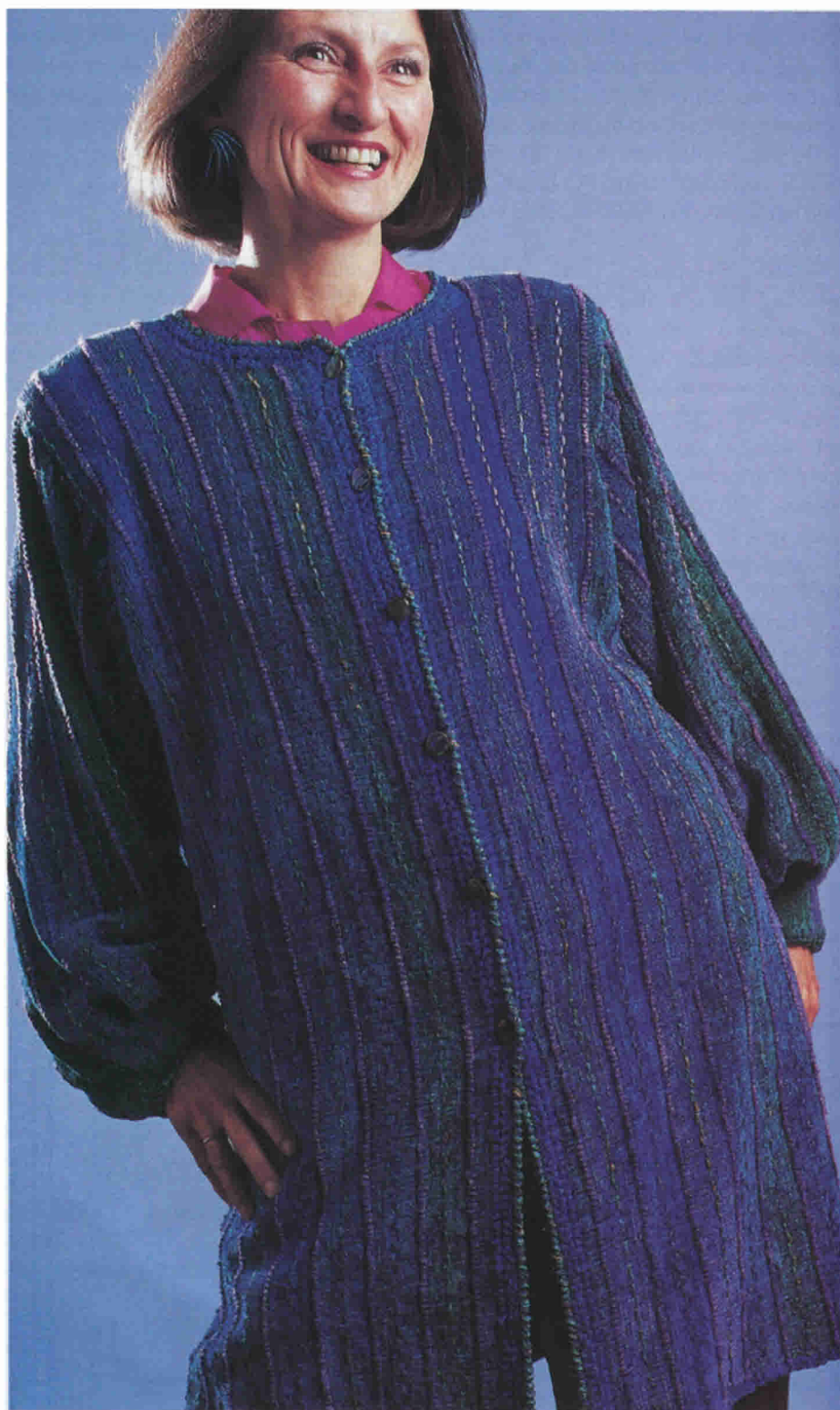
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# FIRST PICK



LOOK TO "FIRST PICK" FOR A DELIGHTFUL DESIGN WITH SPECIAL DETAILS THAT ARE FUN TO WEAVE.

Terry Newhouse has perfected her design for this very wearable three-quarter-length ROYAL BLUE CHENILLE JACKET shown at left. Rayon chenille in intense jewel tones of blue, purple, teal, and jade make a sumptuous fabric that begs to be touched. Shiny accents of novelty rayon and ribbon as well as an extra-thick chenille yarn define the wide stripes and create a plaid effect across the back of the shoulders.

Pleats at the shoulder gives a sharp line; shoulder pads are optional. Dropping straight from the shoulder, the luxurious fullness of the sleeve is drawn in at the wrist with a series of inverted pleats stitched down to resemble a cuff. Thanks to the deep shoulder pleats, the body of the jacket is a roomy rectangle. The neckline is cut and stitched twice to reinforce it before the crochet edging is added.

Cutting into the fabric is minimized by using tucks and pleats, eliminating the shoulder seam, and using two shuttles to weave the front panels side by side. Buttonholes are worked easily in the crochet edging, and the final row of shrimp stitch (backward crochet) looks like a braided cord and stabilizes the edge.

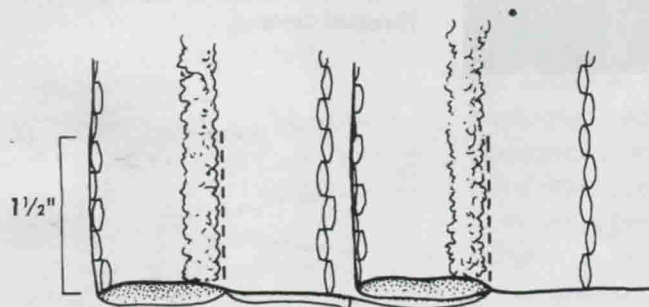
Woven in plain weave with the novelty yarns in basket weave, the chenille in this fabric is held snugly in place with a firm sett and will not work its way out in little "worms." If you love this fabric but feel that weaving and sewing a jacket is too much to tackle, you can thread several repeats of the pattern for an equally luxurious scarf.

## A PLEATED CUFF

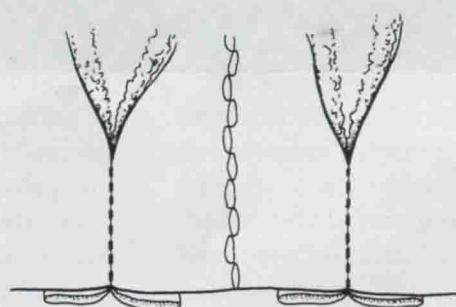
A beautifully detailed sleeve is the finishing touch for Terry Newhouse's chenille jacket. Seven inverted pleats encircle the wrist of each full sleeve. The pleats are centered on every other stripe so that the novelty stripes edged with thick chenille alternately run all the way to the cuff or disappear within a pleat.

The sewing is easy. Mark the stripes to be pleated. (Terry tapered the sleeve seam slightly to reduce bulk). Fold each pleat with right sides together, centering the novelty-yarn stripe at the edge of the fold. Starting the stitching line at the edge of the fabric, sew just outside the neighboring thick chenille yarn for  $1\frac{1}{2}$ ". End with backstitching to hold.

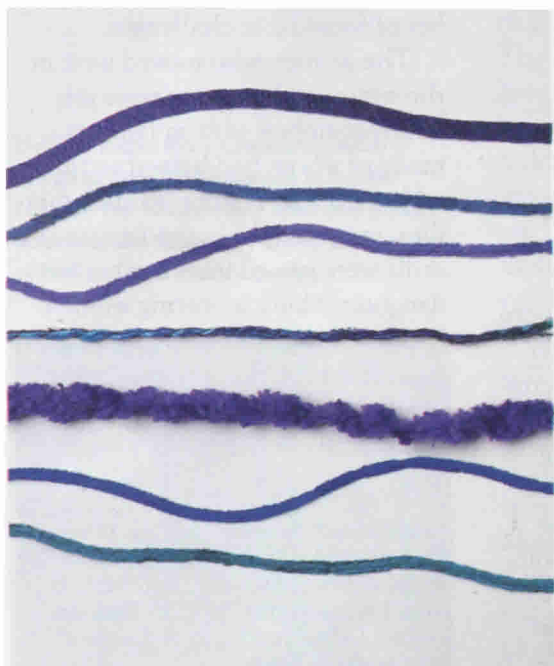
With your fingers, press the fullness of the inverted pleat equally to each side of the stitching. To hold the pleat in place, turn the fabric right side up and "stitch in the ditch" (stitch in the groove of the previous stitching) through all thicknesses. Sew and finish the sleeve seam and you're ready to add the crochet edging.



1. On the inside of the sleeve, fold and stitch a tuck centered on every other novelty stripe. Stitch  $1\frac{1}{2}$ ", just beyond the thick chenille.



2. With right side out, fold each tuck in half beneath the stitching line. Stitch in the ditch to hold the tuck in place.



The yarns used in ROYAL BLUE CHENILLE JACKET include:

Hayfield's Next Addition DK (rayon knit ribbon at 1000 yd/lb)  
Twil #027 (purple ribbon)—80 yd

Silk City's Rayon Chenille (viscose rayon chenille at 1300 yd/lb)  
Teal #014 (teal)—525 yd  
Neptune #271 (periwinkle)—455 yd

Skacel's Disk (viscose rayon blend novelty yarn at 925 yd/lb) (any substitute must be slick, not sticky)  
#726 (variegated)—170 yd, including crochet

Berroco's Koala (extra-thick 90% viscose rayon/10% cotton chenille at 225 yd/lb)  
#E373 Periwinkle (purple)—90 yd

Silk City's Rayon Chenille (Viscose rayon chenille at 1300 yd/lb)  
Limoges #111 (royal blue)—1125 yd royal, including crochet  
Sea Breeze #124 (jade)—750 yd, including crochet

Please see page 96 in the Instruction Section for a continuation of the directions.





Until cotton and wool culture became established in western frontier communities, coverlets were usually treasures brought from a previous home. When the materials and equipment were available, frontier women who knew how to weave patterns produced overshot coverlets like this one by Louisa Philips Garland of Hood County, Texas. Made in the nineteenth century, it has a cotton warp and wefts of cotton and indigo-dyed wool. Courtesy of Winedale Historical Center.

## OUR FRONTIER WEAVING HERITAGE

BY PAULA MITCHELL MARKS

**W**hen Mary Jane McCurdy was growing up in Arkansas, everything from clothing to sheets was woven on her family's home loom. Already a fair spinner by age ten, Mary Jane moved enthusiastically to the loom and was soon setting ambitious goals for herself, once producing five yards of heavy twill in a single day of steady effort. Even more striking than this feat,

however, is that Mary Jane was born in 1855, at least two decades after the growth of industrial manufacturing had led most homemakers in the Northeast to store their spinning wheels and scrap their looms.\* Images of the spinning and weaving New England goodwife of the Colonial and early Republic eras have obscured for us that many women on the expanding western frontier

spun and wove well into the late nineteenth century despite a number of formidable challenges.

The women who moved west in the nineteenth century were primarily members of farm families, many of whom had helped settle earlier frontier regions. In such families, preindustrial home-factory skills were passed from mother to daughter. Many westering women had learned as youngsters to card, spin, and knit. Although weaving needs were frequently handled by older family or community mem-

---

\* Estimates of the end of the "age of home-spun" in the Northeast vary. Jack Larson in *The Reshaping of Everyday Life* (Harper & Row, 1988) says that "by 1830, the loom and wool wheel had begun to disappear" from northern homes.



bers, numerous young women also had experience with the loom and the dyepot as they matured and started their own families.

Facing a move to a new region, each woman set about providing apparel for her family, aware that the cost of provisioning for the journey left little money for purchasing clothing. Through the winter of 1847–1848, Kitturah Belknap, a young Iowa woman, worked almost around the clock to keep her mother-in-law and a neighbor supplied with spun yarn for the loom, then stitched the resulting fabric, as the three prepared for the Belknaps' emigration to Oregon. Entire families moved westward clad in brown homespun, each member having perhaps two or three simple outfits; but clothing represented only part of women's pre-journey textile contributions, for they spun, wove, and sewed everything from blankets to flour sacks and wagon covers.

Packing proved a problem. Anything that occupied precious space in a wagon had to be both compact and a compelling necessity. This meant, of course, that travelers had to limit extra clothing and linens. The idea of carrying an unwieldy loom, even broken down, was beyond consideration in most households. A spinning wheel took up valuable space, but might be considered important enough to warrant inclusion; immigrants to the American frontier brought them from as far away as Europe. Some families carried cotton, wool, or flax to process in their new home. One woman immigrating to the Texas frontier from Germany carefully transported a box of unworked flax. Most, however, arrived in a rugged new environment with no textiles but a few well-worn articles of clothing, an equally well-worn blan-

ket or two, and perhaps some homemade sheets and a single best outfit.

At first, as families struggled to survive and fabric frayed beyond repair, even women skilled in spinning and weaving had to resort to fashioning rough buckskin suits for their men or cutting up wagon covers for their families' clothing. When they could at last turn their attention to producing fabric, many frontier women were unable to do so. A traveler in Texas in the late 1820s found the women in one of the sparse Anglo-American colonies eager to resume their productive activities of spinning and weaving but lacking equipment.

For women who had brought wheels or who had a male relative or immigrant carpenter fashion one for them, a lack of suitable fiber was the limiting factor. In the "Old Northwest"—Ohio, Indiana, Illinois, Michigan, Wisconsin, and part of Minnesota—women experimented with buffalo wool and bear's fur, spinning them with milkweed or wild nettle down to achieve a rough yarn. One Oregon pioneer later recalled that it was years before cotton or wool became available in his new home, and attempts to spin the hair of wolves proved dismally inadequate.

As flax and wool culture developed in the frontier Midwest, and cotton and wool culture was established in the Southwest and the Far West, looms appeared. Like the wheels, they were usually fashioned by male immigrants using materials at hand. Some of the equipment must have been roughly and clumsily made, but it was much welcomed. Mary Crownover Rabb, a member of one of the earliest Anglo immigrant families in Texas in the 1820s, was delighted when her brother-in-law presented her with a homemade

Until John and Mary Crownover Rabb settled at their final homesite in frontier Texas in the 1820s, Mary spun and wove outside under temporary shelters. Courtesy of Barker Texas History Center.





**Working in poor light with a rifle at the ready, frontier women spun and wove an amazing array of textiles despite the demands of their numerous daily chores. Photo from the Joseph Taulman Collection, courtesy of Barker Texas History Center.**

spinning wheel, and she was equally pleased when her husband later constructed a loom in only two days.

In the Rabbs' case, as in others, the spinning wheel and even the loom came before an established home. Trying out various Texas locations, the couple loaded the wheel on their pony and the wheel bench on their oxen each time they moved. Mary spun under trees and sheet tents and old boards. Finding a likely site, the couple stopped and husband John made the loom. Mary set to work weaving mosquito netting and clothing material outdoors. The house—and a loom shed—were constructed soon thereafter, although the Rabbs abandoned both house and loom a few months later when John decided the site was too isolated.

Even when families could enjoy a fixed home, with flax or cotton growing in the newly plowed field, sheep grazing in the pasture, and spinning wheel and loom sitting

ready in the cabin, most frontier women found it difficult to devote the time necessary for textile production. Although their menfolk crushed flax and sheared sheep, and whole families gathered around the fireside in the evening to pick the burs from wool or the seeds from cotton, these were only small steps in the process of textile production. Women, meanwhile, were busy from dawn to dark with a host of chores, from making lye soap for washday to preparing large meals for family members made ravenous by hard outdoor work. Because men traveled frequently, making long trips to urban centers or further exploring the country, women were also responsible for running the farm or other business affairs for extended periods, in addition to child care and household management. The time-consuming work of producing cloth had to be fitted into an already exhausting schedule.

Still, women spun and wove an

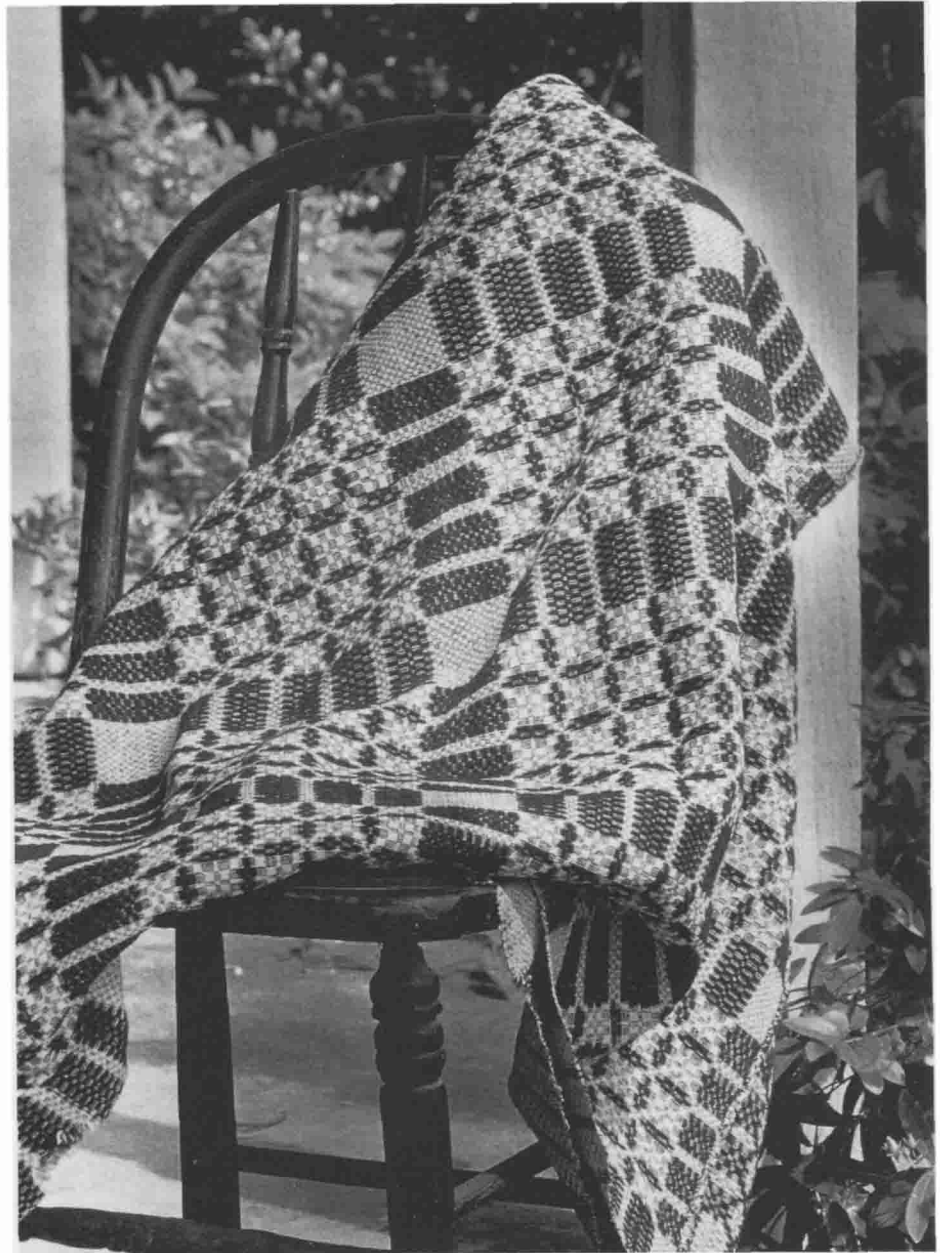
amazing array of textiles—pants, shirts, dresses, coverlets, pillowcases, blankets, rugs, towels, sheets—and also knitted and sewed incessantly. Malinda Jenkins relates in *Gambler's Wife* that while awaiting the birth of her third child on an Indiana farm in the 1870s, she “spun and wove four blankets. And made up all the clothes, the jeans and flannels for the whole family, knitted all the stockings and everything.” She had barely finished weaving a rag carpet on the loom when her eleven-pound son arrived.

Most of the fabric woven by frontier women was strictly utilitarian: jean (cotton or cotton-and-wool twill) and linsey-woolsey (usually cotton and wool rather than the flax and wool of the previous era). Often, however, the weaver would add interest to the linsey-woolsey by creating stripes and plaids. The “snowy white counterpanes” that occasionally enter the descriptions of frontier homes were almost invariably treasures brought from a previous home, as were many of the coverlets. Even so, frontier women did produce some intricate overshot coverlets, most with cotton warps and cotton and wool wefts.

Working conditions were difficult in the rude pioneer dwellings and loom sheds. Good lighting must have been a rarity, as windows were a luxury, and the activity of the evening hours was often only feebly illuminated by burning dried cane or pine knots or by lighting a wick stuck into a tin cup of lard. Candles, some made of beef tallow or from wax taken from bee trees, were treated with salt to extend their life, but the result was a sickly, flickering flame. By such light, women might spin and knit, but most saved their weaving of anything but plain goods for the daylight hours.

Poor light counted little compared with some of the other difficulties that presented themselves. Indians were known to ransack isolated frontier homes, carrying away or destroying precious clothing and linens. Often, of course, Indian-settler hostilities escalated, and women surrendered their handwoven sheets as shrouds in which to bury neighbors and passersby killed in Indian attacks. Just as male settlers had to keep their rifles nearby as they plowed or went about other farm chores in certain frontier areas, so female settlers kept rifles at the ready beside spinning wheel and loom, and added molding bullets to their list of chores.

As families became less isolated in each developing western region, women and girls continued to spin, knit, and sew in the home, but weaving activity changed. At first, as they had in their former communities, women might go to a relative's or neighbor's home to use a loom rather than maintaining one of their own. Then, as weaving skills began to die out, one or more experienced weavers would produce cloth for other community members. Nineteenth-century frontier census records include women identified as spinners and women and men identified as weavers. The men were usually professional weavers from Europe or New England, but with the exception of the jacquard weavers who arrived in the Midwest in the 1840s, few of these craftsmen appear to have produced textiles once on the frontier. Instead, the weavers were usually female homemakers who followed in the tradition of those Colonial women who had extended their domestic skills to the community. E. S. Richards, a Michigan pioneer, recalled that his



**Produced in Texas before or during the Civil War, this coverlet is reputed to be the work of the wife or mother of the prominent frontier Texan Sam Houston. Photo by James T. Hershorn, courtesy of Gillespie County Historical Society, Texas.**



mother in 1835 produced "more than 700 yards of woolen cloth for her neighbors."

Sometimes these women wove at their neighbors' homes, sometimes at their own. Sometimes they were called upon only for patterned work, the other homemakers being capable of plain weave but unable to read drafts. The weavers often received barter in return. In *Pioneer Women in Texas*, Annie Doom Pickrell reports that one woman "wove cloth for her neighbors on her home loom or on the loom of her patron, taking many times in payment for such labor just as much corn as she could herself carry home." Others contributed significantly to the family cash funds: in the 1840s and 1850s, a Michigan woman earned enough from her weaving to partially finance a new house.

Whatever the weaving arrangements, dyeing was generally left to the family for whom the cloth was intended, and the smelly dyepot sitting near the fireplace was a fixture in many a frontier home. Women and children gathered bark, herbs, berries, and roots to add color. Indigo, logwood, cochineal, and madder dyes could sometimes be obtained from frontier merchants. In some regions, settlers found wild indigo or cultivated indigo bushes for the dye.

Mary Ellen Flowers was born in 1874 and raised in the Big Thicket of Texas, a region that in its rural isolation and self-sufficient traditions resembled Appalachia. When she was growing up families still carded cotton, spun, and wove fab-

... WHEN RELIGIOUS REVIVALS  
WERE HELD, GIRLS WOULD DYE THEIR  
DRESSES A DIFFERENT COLOR  
EACH NIGHT TO MAKE IT APPEAR  
THAT THEY HAD A LARGER  
WARDROBE.

ric for clothing, and used indigo and tree bark for dyes. Mary Ellen recalled that when religious revivals were held, girls would dye their dresses a different color each night to make it appear that they had a larger wardrobe. Despite such efforts, the handwoven clothes produced under frontier conditions remained far from the beautiful fabrics of many a pioneer girl's and woman's dreams. On the Texas frontier, German immigrant Emilie Ploeger Schumann used hickory bark to redye a wool skirt each autumn, each time achieving the same muddy brown hue. Even the most romanticized accounts of frontier life acknowledge that the cloth produced was often coarse, ugly, and drab—as well as a lot of work.

Still, frontier women took justifiable pride in their ability to provide woven textiles for themselves, their families, and communities. They showed innovation, perseverance, and—when circumstances allowed—some creative flair in pattern and color. They expressed pleasure in the rhythms of the spinning wheel and loom, the nature of the work itself fostering a sense of peace and community. "Yes, we had some good times, too," explained Mary Hill Williams in *Pioneer Women in Texas*. "We worked. We spun thread both

cotton and wool and we wove it into cloth. Sometimes the Indians would bother [us] . . . but then we'd forget even Indians when we got together." ♦

PAULA MITCHELL MARKS teaches American women's history and frontier history at St. Edward's University in Austin, Texas, and is working on a book for Texas A&M Press, *Hands to the Spindle: Texas Frontier Women and Home Textile Production*.

#### Bibliographic Note:

Although a number of good discussions of New England textile production and weaving tradition can be found, references to nineteenth-century frontier weaving are scattered and usually tantalizingly brief. This article is drawn primarily from information in published and unpublished pioneer accounts, with some reference to secondary studies of frontier life, various property and government records, and existing woven artifacts. The most extensive secondary study I have found of home textile production in western settlements is contained in John Mack Faragher's "The Midwestern Farming Family, 1850" in *Women's America: Refocusing the Past*, edited by Linda Kerber and Jane Sherron DeHart (New York: Oxford University Press, 1991). Interested readers will also enjoy "Kitturah Belknap Prepares for the Trip to Oregon, 1847–1848" in *Major Problems in the History of the American West*, edited by Clyde A. Milner II (Lexington, Massachusetts: D. C. Heath, 1989); Mary Crownover Rabb's reminiscences in *Texas Tears and Texas Sunshine: Voices of Frontier Women*, edited by JoElla Powell Exley (College Station, Texas: Texas A&M University Press, 1985); *Gambler's Wife*, by Malinda Jenkins (Boston: Houghton Mifflin, 1933); and Annie Doom Pickrell's *Pioneer Women in Texas* (Austin, Texas: Pemberton Press, 1970).

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Weaving isn't always a solitary process. We often find opportunities with our study groups, guilds, or with a few of our friends to join in inspiring, educational, and entertaining weaving activities. Look for interesting collaborative projects in Weavers' Circle.

### "TEA FOR TWO"

Five years, ago the Cleveland West Weaver's Guild in Cleveland, Ohio, started a Saturday study group for members unable to attend main guild meetings. Our group of six to eight weavers meets monthly at members' houses for discussion, support, and show and tell. We especially enjoy the study group format because it is more intimate than the larger guild. As in the sewing circles and quilting groups of the past, members share much more than their craft.

Each year, we select a project that challenges and involves the entire study

group. We often choose small projects that are relatively inexpensive, and we also consider our members' equipment limitations so that no one is at a disadvantage. With limited weaving time available, it's important to our members to "end up with something," so we prefer projects that result in finished and useful articles, whether art pieces or household items.

For us, an exchange is a good motivating device: we don't want to let the other members of the group down by not completing our projects on time. "Tea for Two," based on an idea in a past issue of

HANDWOVEN, was an ideal group project.

We decided to weave table runners that reflected the decorative styles of our dishes, but we each designed for another member of the group instead of for ourselves. Each person brought a teacup to exchange with her weaving partner. Cups ranged from a 59-cent coffee mug in primary colors to subtly patterned heirloom china. We consulted with each other as to size preference for the runners, but each weaver was free to select yarn and create an appropriate design.

—Cinda Williams Chima  
Strongsville, Ohio



The Cleveland (Ohio) West Weaver's Guild study group used "Tea for Two" as a theme for an exchange that resulted in a number of beautifully designed placemats.



## WE LIVE BY THE RIVER

*We Live by the River* was planned, designed, and created as a cooperative project by the weavers of Kamloops Arts and Crafts Club in British Columbia to celebrate our city's centennial in 1993.

Inspired by the view from the club studio windows and by the lovely colors of our semiarid environment, our goal was to represent our landscape: the foreshore beach, the river, Mt. Paul beyond, and the sky. The particular expression took form as we thought about the rosepath rugs we had been weaving, the bag of beautiful natural-dyed yarns by Marrion Fleming, and George Dewey's rugs, woven in bound weave on a rosepath threading. We decided to adapt George's Northern Lights design for a wall hanging and combine commercial yarns with Marrion's natural-dyed materials.

We gathered a large group to discuss color; one-third earth colors and two-thirds water and sky colors seemed to create the balance we wanted. When our yarns arrived, we met again, sitting in a circle around our chosen yarns on the floor of my weaving room. To clarify our design ideas, we did wrappings. Then, with the wrappings before me and our discussions fresh in my mind, I wrote a detailed weaving plan, rather like a task analysis, so that weavers with various levels of experience could follow it with confidence.

Years ago, our club had inherited a very old Leclerc four-shaft counterbalance loom; it seemed an appropriate choice for our centennial project. We warped it in rosepath with 8/4 cotton set at 8 ends per inch, and six members started weaving in October. When we finished in late February, we presented our 38" by 60" hanging to the city as a



Ellen Russel and Mona Banek remove the hanging *We Live by the River* from the loom upon its completion in 1993. Produced by members of the Kamloops (British Columbia) Arts and Crafts Club weavers, the hanging was presented to the city on its centennial.



Crystal Sato of the Handweavers Guild of Lincoln, Nebraska, is almost overshadowed by the guild's project *Colorfall*, dedicated to the Lied Center for the Performing Arts.

legacy gift to symbolize the spirit of learning and sharing on which our club is based.

—Mona Banek, Kamloops  
British Columbia, Canada

## COLORFALL

Several years ago, the Handweavers Guild of Lincoln was approached about donating visual art to hang in the Lied Center for the Performing Arts, a 2210-seat performing arts facility then under construction on the University of Nebraska campus in Lincoln. Dee Knisely, of Lincoln, submitted a colorful and creative design for a hand-dyed and hand-woven piece that permitted many of our members to participate, regardless of their skill level.

We began work in January 1990. It took two-and-one-half years and more than 2500 hours to complete *Colorfall*, our 9½' by 12½' wall hanging. We dyed many pounds of wool yarn, and 21 weavers wove the component parts of the piece on several different looms. The engineering department at the university manufactured the metal cones needed to support the heavy woven strips.

In the past, our guild has had hand towel, placemat, and coverlet block exchanges, but those projects have not educated and exposed our community to fiber arts the way *Colorfall* has. From designing to creating guidelines for the work, from acquiring funding to finishing and hanging the piece, this project took dedication and determination on the part of the entire membership.

—Bonnie Luckey  
David City, Nebraska

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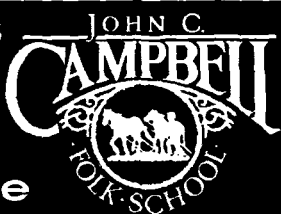
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## PROJECT INDEX (FOR COMPLETE INFORMATION, SEE INSTRUCTIONS FOR INDIVIDUAL PROJECTS.)

Designer/Weaver	Project Name	Page #	Weave Structure	Shafts	Width in Reed	E.P.I.	Notes	Finishing/Assembly
Rebecca Arkenberg	Bound weave figures	64-68	bound weave	4	—	—		
Mary Bentley	Christmas in Summer & Winter	51/93	6-block summer & winter with polychrome treadling	8	27"	18	dobby or table loom recommended	average sewing
Suzanne De Atley	Shimmering Waters Crackle Jacket	38/86	8-block crackle with plain weave	8	21"	16		average sewing
Barbara Eychaner	Christmas Stockings	52/90	3/1 broken twill/ plain weave/overshot	4	22"/15"	30		average sewing
M. Lynette Holmes	Periwinkle Crackle Sweater	37/85	4-block crackle	4	30"	20		average sewing, crochet
Lynn Lesselroth	Celebration Vest	54/88	plain weave with inlaid overshot	4	24"	18	inlay pattern	average sewing, embroidery
Donna Muller	Crackle Scarf with Arrows	39/83	4-block crackle with plain weave	4	4"	12		
Terry Newhouse	Royal Blue Chenille Jacket	70/96	plain weave with basket weave warp floats	4	27"	12		average sewing, crochet
Anne Sneary	Felted Christmas Tree Skirt	53/90	3/1 twill variation	4	39"	8		easy sewing
Dixie Thai	Buttercup Baby Blanket	40/83	3-block crackle with summer & winter treadling	4	40"	16		easy sewing
Susan Wilson	Polychrome Crackle Table Runner	45/84	4-block crackle with polychrome treadling	4	17"	18		

### INSTRUCTION GUIDE

The Instruction Guide contains several sections of information for weaving the projects:

—The Project Index lists the page numbers where the project and its instructions can be found and a summary of each project's characteristics.

—The Weaving Guide tells how to read the drafts and warp color orders and describes procedures that recur in several projects.

—The Yarn Chart shows the yarns used and their generic descriptions. Use the Yarn Chart to find substitutes when the yarn specified is unavailable.

—Product Information lists the names and addresses of manufacturers and suppliers of the yarns used.

### WEAVING GUIDE

#### Drafts

Read the **threading draft** from right to left, starting at the tie-up. When you sit at your loom, your threading should match the draft; the threading at the left edge of the draft should match the thread-

ing at the left edge of your loom.

The **brackets** in the draft show repeated sections. When there is more than one level of brackets, repeat the sections

#### Print too

SMALL

#### for comfortable reading?

Take your issue of **HANDWOVEN** to a copy shop and ask for help to enlarge the pages the amount you'd like. Enlarging at 125% onto 11" by 17" paper leaves enough room at the top or bottom for your own notes. If you want the draft really big, one page carefully placed on the copier and enlarged 150% just fits on 11" by 17" paper.

closest to the draft first before repeating the larger section contained in the outer bracket.

The **tie-up** is written with circles to indicate shafts which are lifted on each treadle. For jack or rising-shed looms, tie

up the treadles to the shafts marked with circles. For counterbalance or sinking-shed looms, tie up the treadles to the unmarked shafts. For countermarch looms, tie the lower lamms to the shafts marked with circles and tie the upper lamms to the unmarked shafts.

The **treadling sequence** starts at the tie-up and reads upward in the same way that picks are entered on the loom. If plain weave is used in the project, its treadling appears first, followed by the pattern treadling. Interpret the brackets the same way as in the threading.

**Colors** of individual ends and picks appear as uppercase letters accompanied by a key near the draft. A **floating selvage** is noted by a bullet below the draft at either side.

**Profile drafts** are frequently used for block drafts to conserve space and make the draft easier to read. Threading and treadling keys which accompany the profile draft show the actual ends to be threaded or picks to be woven for each letter in the profile draft. (See "Essentials" on pages 34-35 for a further discussion of profile drafts.)



**PRODUCT INFORMATION.** Your local yarn shop will carry many of the yarns featured in this issue. If they don't have a particular yarn in stock, check with them about substituting similar yarns or ordering yarns for you.

If you don't have a local yarn shop, you can write to these suppliers about locating the dealers nearest you. Wholesale suppliers have been noted with an \*.

**C.L. Blomqvist**, S-510 20 Fritsla, Sweden.

**\*Classic Elite Yarns**, 12 Perkins St., Lowell, MA 01854.

**Coats & Clark** threads can be obtained from most retail fabric shops.

**Halcyon Yarn**, 12 School St., Bath, ME 04530.

**\*Harrisville Designs**, Harrisville, NH 03450.

**\*Henry's Attic**, 5 Mercury Ave., Monroe, NY 10950.

**JaggerSpun**, Water St., PO Box 188, Springvale, ME 04083.

**Just Dyeightful**, 2629 West Colorado Ave., Colorado Springs, CO 80904.

**Plymouth**, PO Box 28, 500 Lafayette St., Bristol, PA 19007.

**Robin and Russ Handweavers**, 533 N. Adams St., McMinnville, OR 97128.

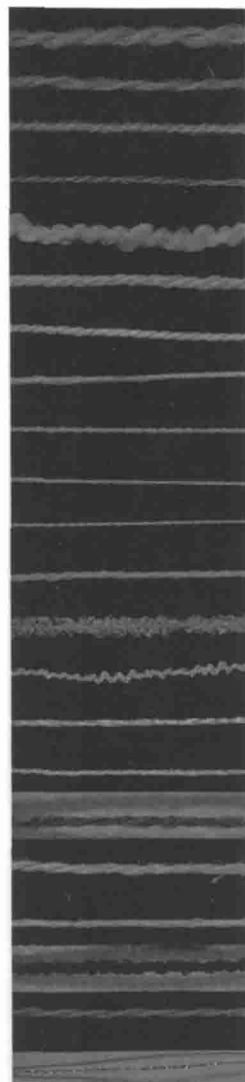
**Scott's** is available from **Plymouth**, PO Box 28, 500 Lafayette St., Bristol, PA 19007.

**\*Silk City Fibers**, 155 Oxford St., Paterson, NJ 07522.

**UKI** cottons are available from most retail weaving shops.

**Webs**, PO Box 147, Northampton, MA 01061.

**YARN CHART.** To help identify yarns and make creative substitutions in your weaving, use this yarn chart.

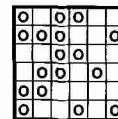


- Two-ply wool at 900 yd/lb (1810 m/kg)
- 8/2 worsted wool at 2240 yd/lb (4500 m/kg)
- 2/12 merino wool at 3360 yd/lb (6775 m/kg)
- 20/2 worsted wool at 5600 yd/lb (11,280 m/kg)
- cotton novelty at 1150 yd/lb (2310 m/kg)
- Three-ply unmercerized cotton at 1300 yd/lb (2615 m/kg)
- 5/2 pearl cotton at 2100 yd/lb (4230 m/kg)
- 10/3 unmercerized cotton at 2800 yd/lb (5628 m/kg)
- 10/2 mercerized cotton at 4200 yd/lb (8442 m/kg)
- 16/2 unmercerized cotton at 6340 yd/lb (12,800 m/kg)
- 16/2 unmercerized cotton at 6700 yd/lb (13,500 m/kg)
- 20/2 linen at 3000 yd/lb (6040 m/kg)
- viscose rayon chenille at 1450 yd/lb (2915 m/kg)
- novelty space-dyed rayon at 2000 yd/lb (4020 m/kg)
- rayon floss at 2325 yd/lb (4673 m/kg)
- 10/2 rayon at 4200 yd/lb (8442 m/kg)
- 85% rayon/15% silk at 1040 yd/lb (2090 m/kg)
- 46% rayon/34% cotton/20% linen at 1600 yd/lb (3216 m/kg)
- 75% viscose/25% silk noil at 2100 yd/lb (4230 m/kg)
- 70% wool/30% rayon at 2400 yd/lb (4824 m/kg)
- 18/2 50% wool/50% silk at 5040 yd/lb (10,150 m/kg)
- Polyester metallic sewing thread

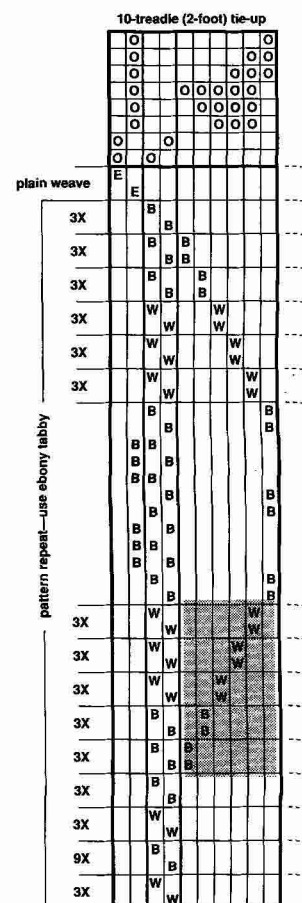
## CORRECTIONS

Mar/Apr 1992, "Towels on a Striped Warp", p. 82: A better yarn size to use with this sett is 8/2 unmercerized cotton at 3600 yd/lb for the warp and weft and 5/2 pearl cotton at 2100 yd/lb for the pattern weft.

Sept/Oct 1993, "Swatch Collection #28", Swatch #3: In the tie-up, the last treadle on the right should be tied to shafts 1 and 5 instead of 1 and 6.



Jan/Feb 1994, "Chief's Blanket Sweater", p. 85: The shaded area shows an omission that occurred in the treadling:



Jan/Feb 1994, "Twenty-five Snowballs Coverlet", p. 93: The number of heddles on each shaft was listed in the wrong order. The correct numbers are:

- Shaft 1—391
- Shaft 2—446
- Shaft 3—362
- Shaft 4—306

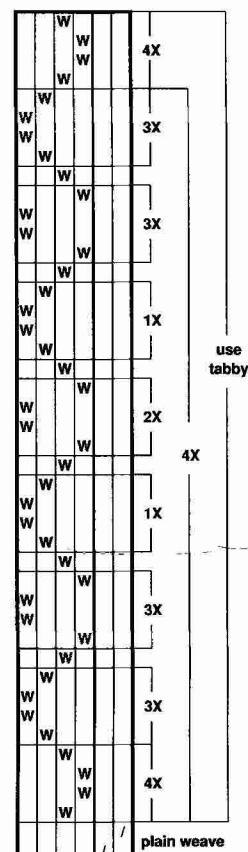
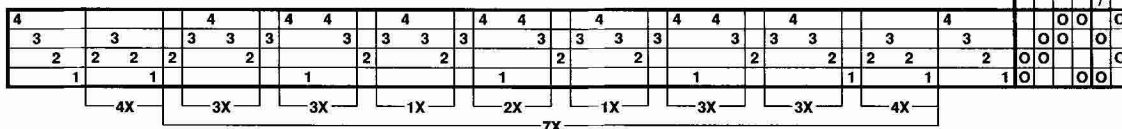
One of the brackets in the treadling sequence is missing a repeat number. The G-W-G-E bracketed section is repeated 2X.

woven by Dixie Thai  
Loveland, Colorado

4

**YARN SOURCES & COLORS:** The pearl

**ASSEMBLY:** Fold over each hem twice, so the edge of the hem meets the pattern. Stitch by hand or machine.



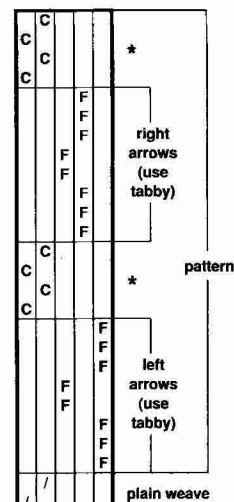
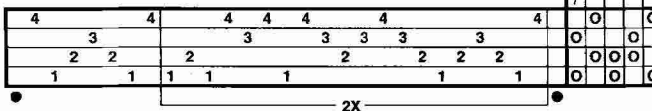
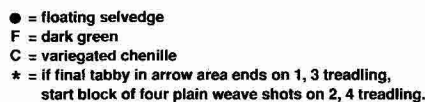
**designed by Donna Muller  
Flagstaff, Arizona**

4

**FINISHED DIMENSIONS:** 3½" wide by 84" long. Hems use an additional 1½"

**E.P.I.: 12.**

**TOTAL WARP ENDS:** 49, including a floating selvedge at each edge.







# PERIWINKLE CRACKLE SWEATER

designed by M. Lynette Holmes  
Littleton, Colorado

page 37

4

**PROJECT NOTES:** Treadling uneven numbers of shots in each block and going back and forth in the order of the blocks treadled creates a wave-like effect in the color flow. This undulation, coupled with the fabric's soft hand, led me to turn a swatch woven for a sample exchange into an award-winning sweater—last year it won the Schacht Shuttle Award in Fiber Celebration '93, Fort Collins, Colorado.

**FABRIC DESCRIPTION:** Four-block crackle weave.

**SIZE:** Women's size large. Circumference at chest 49". Length from shoulder 27½". Sleeve length from center back 32". Before cutting, the fabric measured 26" wide by 105" long.

**YARN:** Warp & Accent Weft Bundles—Size 20/2 worsted wool at 5040 yd/lb: 1860 yd light lavender. Size 8/2 worsted wool at 2240 yd/lb: 725 yd periwinkle blue, which includes 55 yd for crocheted edges. Novelty space-dyed rayon at 2000 yd/lb: 225 yd variegated blues. Size 10/2 rayon at 4200 yd/lb: 75 yd each green and turquoise. **Main Weft**—Size 18/2 50% wool/50% silk at 5040 yd/lb: 1755 yd pale teal.

**YARN SOURCES & COLORS:** The 20/2 wool used in the warp and the 8/2 wool are Jagerspun's Maine Line: Violet (light lavender) and Periwinkle (periwinkle blue). The 18/2 wool/silk for the weft is Jagerspun's Zephyr in Teal (pale teal). The novelty space-dyed rayon is a variegated rayon novelty from Just Dye-lightful in a soft light blue, green, and a little brown. The 10/2 rayon is from Scott's in Misty Jade (green) and Smokey Turquoise (turquoise).

**NOTIONS:** Ski or rag shuttle, 1/2" shoulder pads, blue sewing thread, 1/4 yd lining fabric (to cover the shoulder pads), crochet hook size 0.

**E.P.I.:** 20.

**WIDTH IN REED:** 29¼".

**WARP COLOR ORDER:** Make a warp chain of 50 ends of the novelty rayon and sley the ends randomly

across the reed.

Putting 2 ends

per dent in a

10-dent reed,

follow the color order of 3 ends light lavender, 1 end periwinkle blue across the width. Where a rayon end is already placed, use one end of light lavender or periwinkle blue to maintain two ends per dent. When following the threading draft, note the single warp ends marked with a star. These are "incidentals," a feature of crackle, which provides a clean transition between repeats of the same block.

**TOTAL WARP ENDS:** 582 ends (399 light lavender, 133 periwinkle blue, and 50 novelty rayon).

**WARP LENGTH:** 4¼ yd, including take-up, shrinkage, and 27" loom waste.

**P.P.I.:** 16.

**TAKE-UP & SHRINKAGE:** 10% in width and 15% in length.

**WEAVING:** Prepare accent weft yarn bundles by winding two ends each of light lavender, periwinkle blue, green, and turquoise onto a ski or rag shuttle.

With the pale teal weft, weave 23" following the crackle treadling: create a "wave" by varying the block lengths between 4 to 10 repeats each and moving either forward to the next block in the sequence or back to the previous one to

keep the color blocks flowing back and forth. For example, from block A always go to either block B or D and never to C. After weaving 23" of crackle treadling, lift shafts 2 and 3 and weave one shot of the yarn bundle. Weave eight shots of any block and another shot of the yarn bundle in the 2-3 shed: repeat for a total of 24". Weave 35" of crackle wave, then repeat the bundle and 8-shot block combination 6 times and end with a seventh bundle, weave 18" of crackle wave, another six bundle-and-blocks sequence ending with a seventh bundle, and finish up with 13" of crackle wave.

**FINISHING:** Machine stitch or serge the ends of the fabric. Hand wash or soak in the washing machine and spin out the excess water. Lay flat to dry. Steam press. **ASSEMBLY:** To mark the stitching lines, I use a crepe drafting tape, used in engineering, approximately 1/16" or 1/32" wide: it is pliable and gives an easy line to follow when serging. Always steam press seam allowances after stitching.

Using the pattern layout as a guide, serge a 55"-long body panel and two sleeve panels 23" long each. Before measuring and serging, be sure that the shoulder line is centered in the 24" accent band and that the wrist line is centered between the accent bands on each sleeve. Mark the neck opening, stitch around it twice, and cut close to the stitching.

Lay the body panel flat. At the shoulder line, measure in 3" from the edge and form a 1½"-deep pleat. Sew the pleat 6" centered at the shoulder. Fold out the 3" width and steam press the pleat over a tai-

\* = "Incidental" warp end. Use only at block change as noted in profile draft.

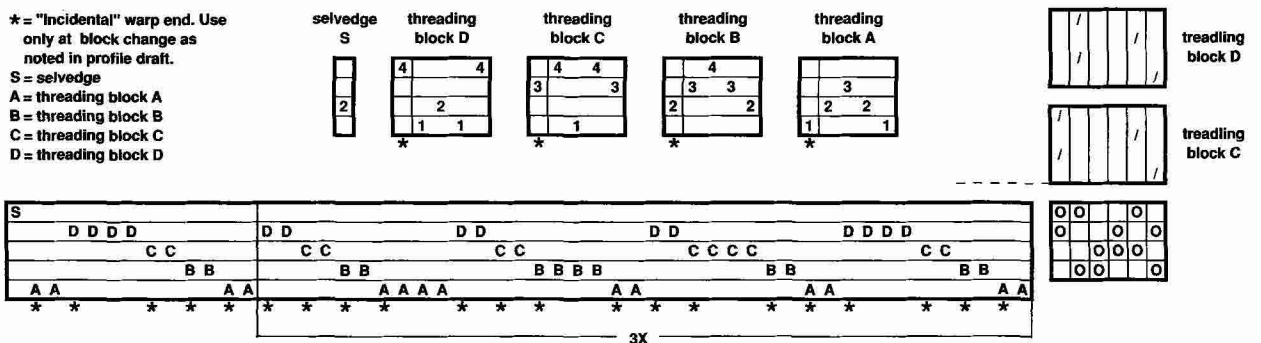
S = selvage

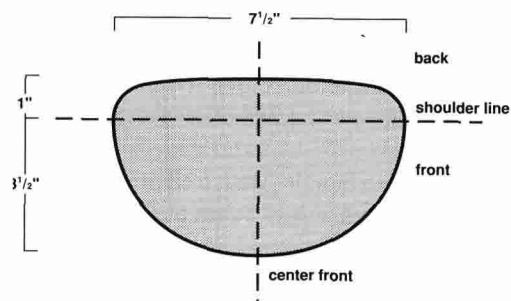
A = threading block A

B = threading block B

C = threading block C

D = threading block D



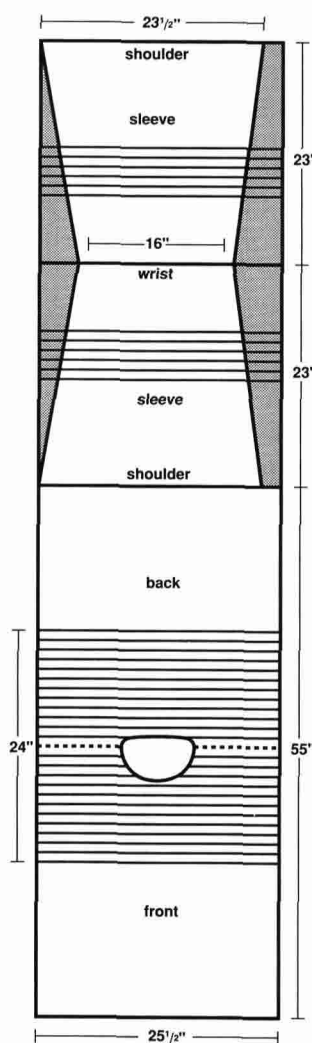


Neckline Template

lor's ham. Repeat on the other side.

Mark and cut out the sleeves following the pattern layout; machine stitch or serge raw edges. Sew the sleeve seam with  $3/4$ " seam allowance. Sew the side seams of the body with 1" seam allowances and leave 11" open at the top for the armhole. With right sides together, sew sleeves into armholes. Crochet edges as described below. Cover shoulder pads with the lining fabric and tack in place at the shoulders.

**CROCHET:** Fold under the serged edge  $1/2$ ". With right side facing you, work a round of single crochet over both layers of the fold with one strand of periwinkle blue and a size 0 crochet hook. Follow the additional directions for each edge as follows. **Hem**—single crochet (sc) three rounds, decreasing one stitch (st) approximately every ten st to pull in the edge slightly. Double crochet (dc) three rounds, sc three rounds. **Neckline**—sc one round, dc one round, sc one round. **Sleeves**—sc three rounds, decreasing one st approximately every five to ten st. Dc three rounds, sc three rounds. After all crocheting is done, steam press, being careful not to stretch the edge.



Pattern Layout

teal. 85% rayon/15% silk at 1040 yd/lb: 1100 yd silver-brown variegated. Polyester metallic sewing thread: 1100 yd gold. **YARN SOURCES & COLORS:** The 10/2 rayon is Scott's color #3 from Plymouth, the wool/rayon is Plymouth's Woolray in #42 Teal, and the rayon/silk is Classic Elite's Fame in Stone. The metallic thread is Coats & Clark Decorative Sewing Thread in Gold.

**NOTIONS:** Three shuttles, matching sewing thread, cotton lawn underlining, rayon lining.

**E.P.I.:** 16.

**WIDTH IN REED:**  $20\frac{1}{2}$ ".

**TOTAL WARP ENDS:** 330, including a floating selvedge at each side.

**WARP LENGTH:** 6 yd, including take-up, shrinkage, and 27" loom waste.

**DRAFT:** on next page.

**P.P.I:** Patterned area—20 (10 each pattern and tabby). Plain area—10.

**TAKE-UP & SHRINKAGE:** 9% in width and length.

**WEAVING:** When using two or more yarns in the same shed, keep each on a separate shuttle. The spool of the metallic sewing thread can be used in a boat shuttle by centering it on the spindle between empty sewing thread spools or machine bobbins. To keep the thread from snagging on the small slit at the spool edge, file the edge. To prevent loops of the metallic thread at the selvages, lay it in the shed with little or no angle or bubbling.

Using all three weft yarns in each shed, weave 64" plain weave. Weave the balance of the warp (about 96") following the pattern treadling and using the wool/rayon yarn for the pattern weft followed by one shot each of the metallic sewing thread and the rayon/silk yarn in the same tabby shed.

The first section of the pattern treadling shows the number of shots for each pattern treadle and the number of repeats of this section. Notice that each repeat of this part of the sequence ends on treadle 8.

Above this section you see a different notation. The +s indicate the order in which you press the treadles as before. However, the number of shots on each pattern treadle progresses as shown in the list of numbers from A to B. The first time you complete the A-B sequence, you will end by pressing treadle 6 twice; when you

## SHIMMERING WATERS JACKET

designed by Suzanne De Atley  
Boulder, Colorado

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**PROJECT NOTES:** With its soft drape, this rayon, wool, and silk jacket is a wonderful cool-season garment. The fabric used for the main body pieces and cuffs features a wave-like progressive treadling in the crackle blocks which gives a sense of movement to the design. For a subtle sparkle, a metallic thread is used in the same shed as the tabby weft. The sleeves

and side panels are plain weave, but to be consistent in color and weight with the patterned section, all three weft yarns are placed into each shed for this section.

**FABRIC DESCRIPTION:** Crackle and plain weave.

**SIZE:** Women's size large. Circumference at chest  $50\frac{1}{2}$ ". Length from shoulder  $28\frac{1}{2}$ ". Sleeve length from center back 28". Before cutting, the finished fabric measured 19" wide by 144" long.

**YARNS:** **Warp**—Size 10/2 rayon at 4200 yd/lb: 2080 yd silver-gray. **Weft**—70% wool/30% rayon at 2400 yd/lb: 1100 yd

complete the A-B sequence the second time, you will end on treadle 4, and so on. By repeating A-B four times, you will move through treadles 1-8 seven times. Then return to the beginning of the treadling sequence (the first section) and repeat this procedure until you have woven all the pattern yardage. These shifts in the treadling give a dynamic quality to the crackle undulations.

**FINISHING:** Remove the fabric from the loom and secure the raw edges with two to three rows of straight stitching or serging. Steam press to set the weave.

**ASSEMBLY:** Before you begin to assemble the garment, make a muslin to check the fit and to determine the correct shoulder slope for the jacket.

Referring to the cutting diagram, cut apart the pieces and mark the fabric's face on each patterned piece. Immediately serge all cut edges because this fabric ravels excessively. If you do not have a serger, use two rows of straight stitches and zigzag over them. Orient the front pieces with the diagonal patterning angling upward from the center front to each shoulder. Half-inch seams are used for the jacket construction unless otherwise indicated. All seam allowances are pressed open to reduce bulk.

Cut underlining and lining pieces for the front pieces, back, side panels, collars and sleeve bands. *Throughout the garment, stitch the underlining fabric and handwoven fabric as one.* Sew the lining separately and attach it to the completed shell to finish it.

To shape the back neckline, mark 1/2" down from the edge of the center back and mark a curve up to each shoulder so that the back neck area is 6" wide and each shoulder section is 6 1/2" wide. Staystitch and cut the curve for the back neck.

Next, measure the shoulder slope and

mark the shoulder seam line on the front and back pieces. On each piece, mark the 1/2" seam allowance point at the neckline. Measure 5 1/2" from the edge of the neckline toward the shoulder edge, then measure down 2 1/8" and mark the point. Draw a chalk line between the two points to indicate the seam line. With right sides together and matching the dots, sew the front and back shoulder seams. Try on the garment and check to see if it hangs straight; adjust if needed. Trim, serge or finish the seam allowances, and press open.

Sew the sleeve bands to the lower edges of the sleeves and press the seam allowances open. To fit the sleeves to the body, fold each sleeve in half vertically and place it next to the body with the fold continuing the straight line of the shoulder. At the underarm, a portion of the sleeve will overlap the body. Mark the area of overlap and serge or staystitch this line before cutting. When the sleeve is opened out, you will see that a shallow sleeve cap has been formed.

To establish the taper of the sleeve, fold the sleeve along the centerline as before. Fold the underarm panel in half vertically and place the top of the panel against the underarm portion of the sleeve, as indicated in the diagram. The raw edges of the panel will face the same direction as the raw edges of the sleeve cap. Mark the sleeve band 7" down from the fold. Draw a chalk line from here to the fold of the underarm panel as it abuts the underarm edge of the sleeve. This marks the *seam line*. Leaving a 1/2" seam allowance, trim the excess fabric, and serge or finish the edges immediately.

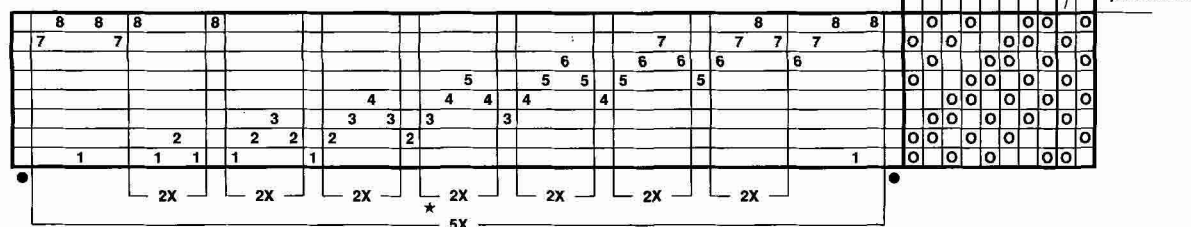
Sew the underarm sleeve seam you have just marked, backstitching at the point where the sleeve meets the fold of the underarm panel. Press the seam open. With right sides together, center the

underarm panel in the remaining sleeve seam. Pin the panel in place and stitch from one edge of the underarm panel to the backstitching on the sleeve seam and backstitch; flip the sleeve over and do the same on the other side. Reinforce this stress point with hand stitching, if necessary.

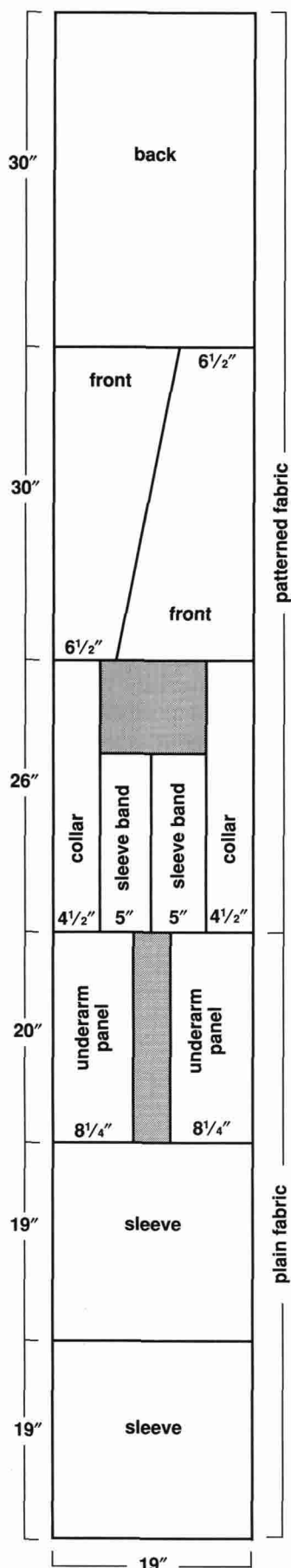
Now that the panels have been attached to each sleeve, you are ready to sew them to the body. With right sides together, match the center line of the sleeve to the shoulder seam and pin. Continuing down from the shoulder, pin the sleeve and panel to the body evenly in both back and front. Pin the other sleeve and panel in place, and when you are satisfied that both sides match, sew the sleeve and underarm panels in place. I recommend that you start at the top of the sleeve and sew down one side, then sew the other side from the top of the sleeve down. Cut off the excess length of the side panels and serge the raw edges.

Sew the collar band next. To orient the diagonal pattern on the fabric upward toward the nearest shoulder, turn one band upside-down and backwards. You will want the selvages on the inside of the collar band after sewing. Sew the ends together with a 1/4" seam to make one long strip. Press the seam open. Match

- = floating selvage
- ★ = end here on fifth repeat
- + = Following this treadling order, repeat each block the number of times shown from A to B. Each repeat of the treadling order will have a different number of shots in the block for a given treadle.





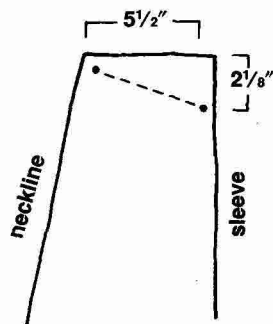


Cutting Diagram

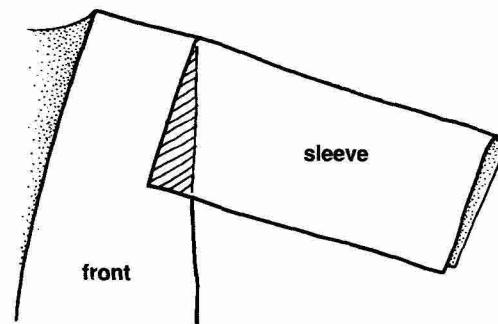
the collar seam to the center back of the neckline. Pin the raw edge of the collar to the front pieces. With the collar on top and sewing from the bottom edge toward the center back, sew the collar to the body pieces. Clip the back neckline and press the seam open. Fold the collar band to the inside, bringing the selvedge to meet the seam; press in place.

Turn the sleeve bands to the inside so

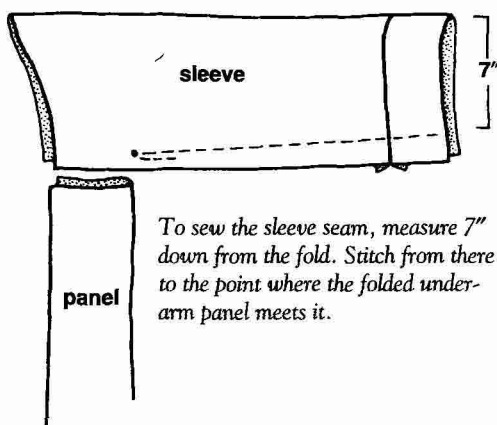
that the bands are 2" wide, press the fold, and hand stitch. Mark and hand stitch a 1" hem on the jacket. Below the collar band at the front edges, fold the excess fabric to the inside leaving a straight, vertical edge; stitch by hand. Line the body of the jacket, lap the selvedge of the collar band over the raw edge of the lining, and hem by hand.



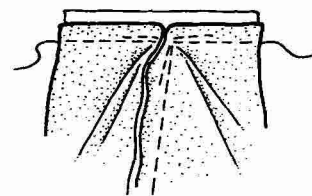
To mark the shoulder seam line, measure 5 1/2" from the neckline edge, then down 2 1/8".



To shape the sleeve cap, place the folded sleeve in a straight line with the shoulder seam. Cut away the excess fabric from the sleeve.



To sew the sleeve seam, measure 7" down from the fold. Stitch from there to the point where the folded underarm panel meets it.



To sew the top of the underarm panel to the remaining sleeve seam, place the sleeve on top and stitch from each edge to the middle, backstitching at the end of each seam.

### CELEBRATION VEST designed by Lynn Lesselroth Las Vegas, Nevada

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**PROJECT NOTES:** This vest combines a plain-weave background, a random sprinkling of overshot inlay circles, and simple gold embroidery for a festive look. For the threading, I selected "Chariot Wheels No. 2" from *Miniature Patterns for Hand Weaving* by Josephine E. Estes. By doing a drawdown, I was able to isolate the circle in the pattern.

After sampling the weave structure and perfecting the cut and fit of the vest in muslin, I planned the placement of my

circles. The method I found easiest was to cut circles from colored construction paper, pin them on the muslin vest, and move them around until I was satisfied with the design. I then used the muslin as a cartoon beneath the warp as I wove the fabric.

**FABRIC DESCRIPTION:** Plain weave with inlaid overshot.

**SIZE:** Women's size small. Circumference at chest 37". Length from shoulder 18 1/2". Before cutting, the fabric measured 21" wide by 50" long.

**YARNS:** Warp & Weft—75% viscose/25% silk noil at 2100 yd/lb: 1875 yd black. Inlay Weft—Size 18/2 50% wool/50% silk at 5040 yd/lb: 10 yd each blue,

**YARN SOURCES & COLORS:** The viscose/silk noil is Contessa from Silk City in Black (black). The inlay yarn is Zephyr from JaggerSpun in Royal (blue), Iris (purple), Emerald (green), Real Red (red). **NOTIONS:** Simplicity pattern #7985 or comparable, black sewing thread, lining fabric, interfacing, and black cording as specified in the pattern. For embellishment, you will need 10 yd gold metallic thread, gold sewing thread, two 1/2"-diameter plastic rings, and 16 small brass bells.

**E.P.I.:** 18, sleyed 3 per dent in a 6-dent reed.

**WIDTH IN REED:  $23\frac{3}{4}$ ".**

**TOTAL WARP ENDS: 424.**

**WARP LENGTH:** 2½ yd, including take-up, shrinkage, and 27" loom waste.

P.P.I.: 18.

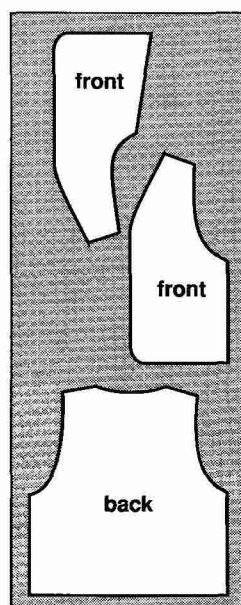
**TAKE-UP & SHRINKAGE:** 10% in width and length.

**WEAVING:** Make and fit a muslin vest; mark the placement of the colored circles as described above. Using the pattern layout and the muslin vest as a guide, weave plain weave to the beginning of the first circle inlay. Continuing to weave a tabby shot from selvage to selvage between each pattern shot, open the first shed of the pattern treadling and lay in the pattern weft under the appropriate pair of five-thread floats to start the circle. Since the fabric is woven face up, push the pattern yarn beneath the warp after each inlay and retrieve it for next inlay. (If you prefer to weave the fabric face down, transpose the shafts which sink and rise in the tie-up.) After the first shot, the inlay placement is simple to follow.

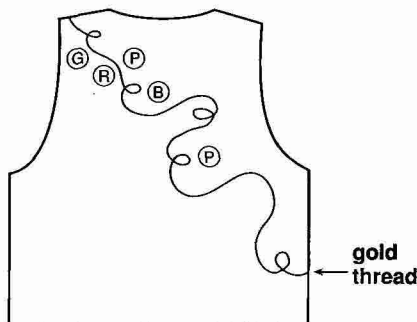
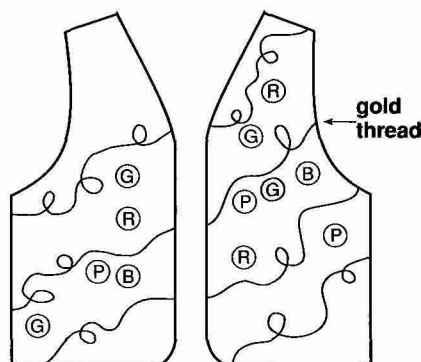
To start a second circle before the first circle is completed, lay in the appropriate pattern shot for the first circle, and before weaving the next tabby shot, open the first pattern shed for the next circle and lay in the weft. Follow with the tabby shot. I found that I could keep my place for each circle in the treadling sequence by marking off the rows with a marker in a corresponding color.

**FINISHING:** Remove the fabric from the loom and machine stitch or serge the raw ends. Hand wash in cool water with Orvus Paste or mild detergent. Use fabric softener in the final rinse. Tumble dry on low heat with clean towels. Remove

fabric while still damp and lay flat to dry. Press lightly, if needed, being careful not to flatten motifs.



### Pattern Layout



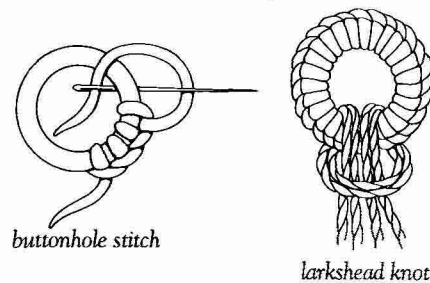
## Design Layout

R = red      P = purple  
G = green    B = blue

**B = black**

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**ASSEMBLY:** Place the muslin pattern pieces on the fabric matching the placement of the inlay motifs. Outline the pattern pieces with tailor's chalk or hand basting. Before cutting out the pattern pieces, lay out the gold metallic thread in loops and curves between the circles. Pin or baste in place before sewing down with gold sewing thread. Follow the pattern instructions for assembly.



To make the cord-and-bell embellishment on each side of the front of the vest, cover a plastic ring with buttonhole stitch as shown. For the twisted cord, measure six ends of red yarn, each two yards long. Keeping the yarns under tension, twist the group of yarns in the direction of the ply until tight. Fold them in half, let them twist around themselves to form a cord, and secure each end with an overhand knot. Cut the cord in half and knot the newly cut ends to make two cords. Lay the cords side by side, fold them in half, and attach them to the plastic ring with a larkshead knot. Adjust the lengths of the cords to hang at different lengths, about 7"-9" below the ring. Make a tassel by wrapping red yarn 20 times around a 1½" strip of cardboard. Tie and bind the tassel, and sew it to the larkshead knot. Sew two bells to each cord, one at the cord's knot and the other about 2" higher. Stitch the ring to the vest. Make another ring, set of cords, and tassel for the other side of the vest.





### STRIPED CANDY CANE STOCKING

**FABRIC DESCRIPTION:** 3/1 broken twill and plain weave.

**FINISHED DIMENSIONS:** The stocking is 11" wide by 19" long overall. Before cutting, the twill fabric was 19" wide by 42" long; the plain-weave fabric was 10" wide by 22" long.

**YARNS: Warp & Weft**—Size 16/2 unmercerized cotton at 6340 yd/lb: 2240 yd unbleached, 1785 yd red. Quantities reflect that the weft yarns are doubled on the bobbin for the twill fabric.

**YARN SOURCES & COLORS:** This is Nr 16/2 Kulört Bomullsgarn from C.L. Blomqvist in oblekt (unbleached) and #615 (red).

**NOTIONS:** Sewing thread in off-white and red; about 10" of commercially woven tape or ribbon for the stocking hanger (a twisted braid made of the same yarns could be substituted); six-strand embroidery floss: a yard each of tan, brown, black, green, and pink; two star-shaped sequins.

**STRIPED FABRIC FOR STOCKING BODY**

E.P.L.: 30.

**WIDTH IN REED: 22".**

**TOTAL WARP ENDS:** 668, including 4 ends on each side to be doubled in the heddles and reed.

**WARP LENGTH:** 2 yd, including take-up, shrinkage, and 27" loom waste.

**DRAFT:**

U = unbleached

U U	U	U U	O				
U U	U	U U	O	O			
U U	U	U U	O	O			
U U	U	U U	O	O			
U U	U	U U	O	O			

**P.P.I.:** 26 with the weft yarn doubled on the bobbins.

**TAKE-UP & SHRINKAGE:** 12% in width and length.

**WEAVING:** Both unbleached and red weft yarns are used doubled on the bobbin. Begin with a 1/2" heading using the unbleached. Weave eight picks red, six picks unbleached, two picks red, two picks unbleached, two picks red, two picks unbleached, two picks red, six picks unbleached and repeat until the fabric measures 45" long. Machine stitch raw edges, finish, and assemble as described in the cuff section below.

### PLAIN-WEAVE FABRIC FOR CUFF

E.P.I.: 30.

**WIDTH IN REED: 12".**

**TOTAL WARP ENDS:** 368, including 4 ends on each side to be doubled in the heddles and reed.

**WARP LENGTH:** 1½ yd, including take-up, shrinkage, and 27" loom waste.

**DRAFT:**

P.P.I.: 28.

**TAKE-UP & SHRINK-AGE:** 15% in width and 12% in length.

**WEAVING:** Using a single strand of red, weave in plain weave for 23".

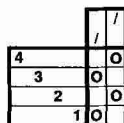
**FINISHING:** Machine stitch raw edges.

Wash both fabrics in cold water by machine, machine dry and press lightly.

**ASSEMBLY:** Lay pattern on the bias so that the stripes appear to wind around the body of the stocking. Be sure to turn the toe of the pattern to the right when cutting one piece and to the left when cutting the second piece, since the fabric is not reversible. The stripes will not match. Use off-white sewing thread unless red is specifically stated. With right sides together and 1/2" seam allowance, stitch the stocking pieces together leaving the top open. Finish the raw edges of the seam allowance by zigzagging the two layers together, except at the top few inches on each side to prevent excessive thickness when attaching the stocking to the cuff. Press open this top portion of each seam. Turn the stocking to the right side and steam press.

Cut the plain-weave cuff fabric into two pieces 10" square, and zigzag raw edges with red thread. On one piece, center the embroidery pattern starting 1¼" from the top as shown. Using two strands separated from the floss, embroider the pattern.

With right sides together, sew the sides



of the two cuff pieces together to form a tube, using 1/2" seam allowance and red thread. Press open both seam allowances. Fold the tube in half crosswise with the embroidery on the outside. Holding the cuff with the motif upright and facing you and raw edges up, slip the cuff inside the stocking, matching seams and top edges. Using a 1/2" seam allowance, stitch around the top edge and zigzag or serge the raw edge. Turn the cuff to the outside of the stocking. The embroidery will now be properly oriented. Press lightly. Attach stocking hanger by hand on the inside of the heel side of cuff.

## VIOLET'S OVERSHOT STOCKING

**FABRIC DESCRIPTION:** Plain weave and overshot (Mary Atwater's Solomon's Delight).

**FINISHED DIMENSIONS:** The stocking is 11" wide by 19" long. Before cutting, the fabric was 12" wide by 65" long.

**YARNS:** **Warp & Tabby Weft**—Size 16/2 unmercerized cotton at 6340 yd/lb: 2085 yd violet. **Pattern Weft**—Three-ply unmercerized cotton at 1300 yd/lb: 420 yd unbleached.

**YARN SOURCES & COLORS:** The 16/2 cotton is Nr 16/2 Kulört Bomullsgarn from C.L. Blomqvist in color #614 (violet). The three-ply cotton is Alpine Petite from Henry's Attic in Natural (unbleached).

**NOTIONS:** Matching sewing thread, about 10" of commercially woven tape or ribbon for the stocking hanger.

E.P.I.: 30.

**WIDTH IN REED: 14 $\frac{1}{4}$ ".**

**TOTAL WARP ENDS:** 431, including 4 ends on each side to be doubled in the heddles and reed.

**WARP LENGTH:** 3 yd, including take-up, shrinkage, and 27" loom waste.

**P.P.I.:** 28 for the plain weave, 20 each pattern and tabby for the overshot.

**DRAFT FOR VIOLET'S OVERSHOT STOCKING**

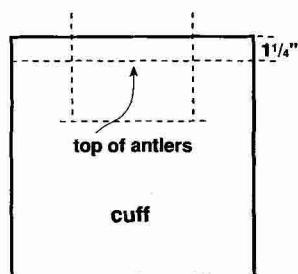
[illegible]

**Note:** Double the first and last four ends at each selvedge in reed and heddle.

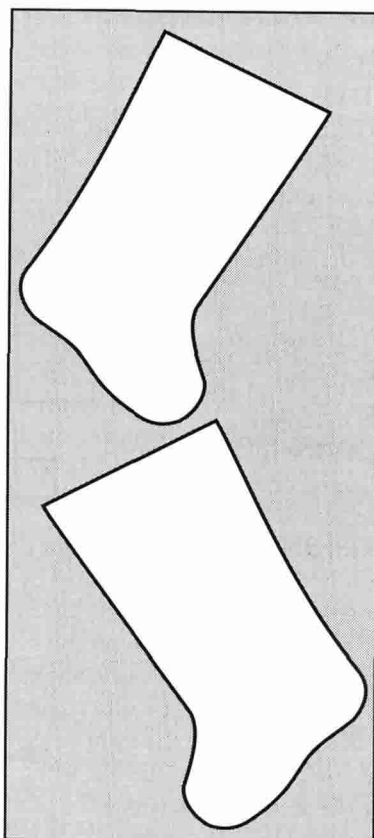
**TAKE-UP & SHRINKAGE:** 10% in width and 16% in length.

**WEAVING:** Using the violet yarn, weave 25" of plain weave for the cuff. Weave the rest of the fabric following the treadling sequence with violet yarn for the tabby and unbleached for the pattern weft.

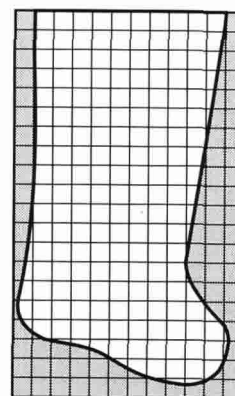
**FINISHING & ASSEMBLY:** Finish and assemble the stocking following the directions for the Striped Candy Cane Stocking with the following two exceptions: lay out the stocking pieces on the lengthwise grain rather than on the bias, omit the embroidery.



Place the embroidery 1 1/4" down from the top of the cuff.



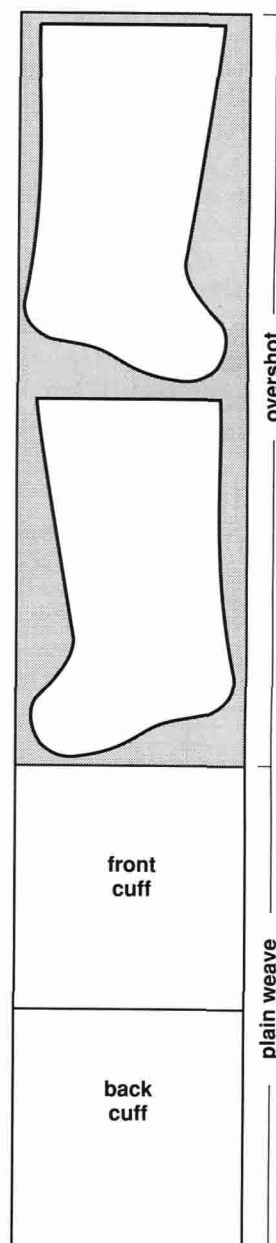
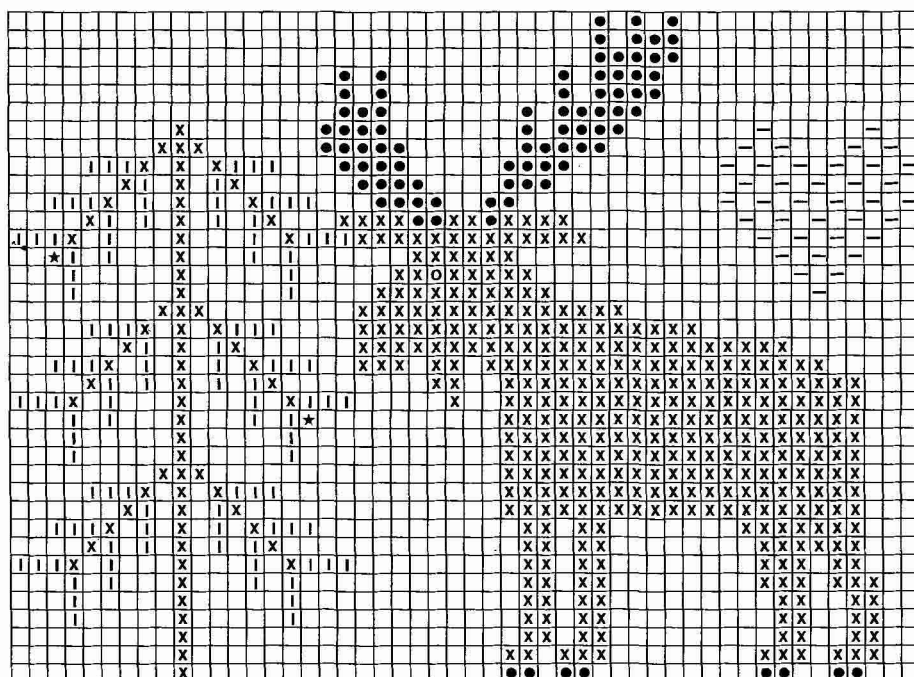
Pattern Layout for Candy Cane Stocking



Stocking Pattern  
1 square = 1"

- = tan
- x = brown
- o = black
- | = green
- = red
- ★ = star-shaped sequins

Each square represents a cross stitch over 2 warp ends and 2 weft picks



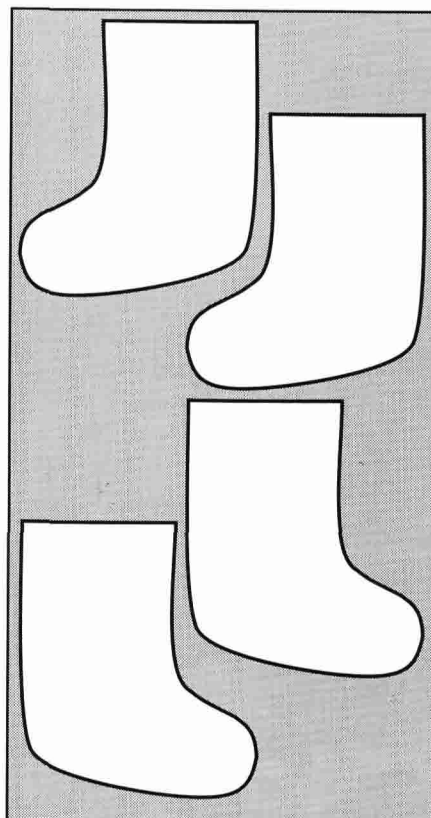
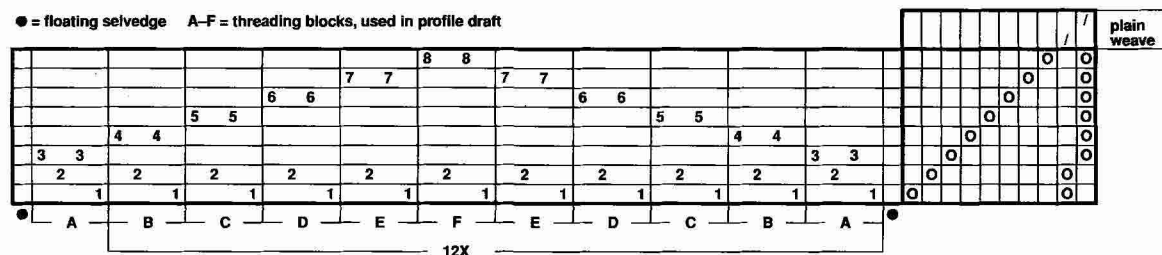
Pattern Layout for Violet's Overshot Stocking

**WARP COLOR ORDER:**

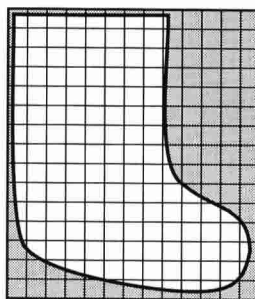
	121X			
16/2 cotton, doubled	1	1	1	= 244
2/12 merino		1		= 121
10/3 mercerized cotton			1	= 121

**DRAFT:**

● = floating selvedge    A-F = threading blocks, used in profile draft



### Cutting Diagram for 2 Stockings



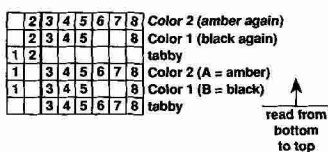
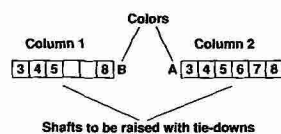
Stocking Pattern  
1 square = 1"

Start and end with a few picks of plain weave. Treadle the motifs for the balance of the warp. (The yarn quantities given allow each motif to be repeated up to three times in any order you choose.)



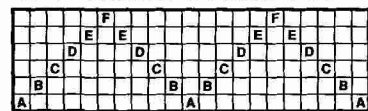
This treadling draft:

Means:

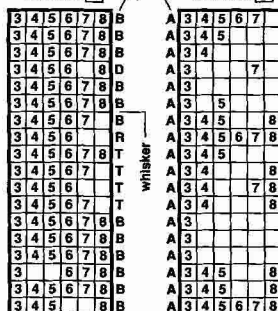
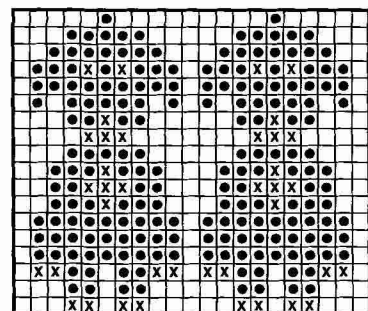


R = red W = white B = black S = sky blue G = medium green P = pink D = dark brown  
A = amber/rust T = tan Y = yellow-gold V = violet K = dark green tabby  
X = first pattern weft color ● = second pattern weft color □ = background warp color

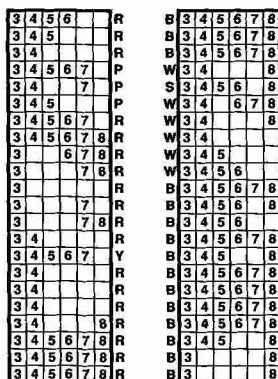
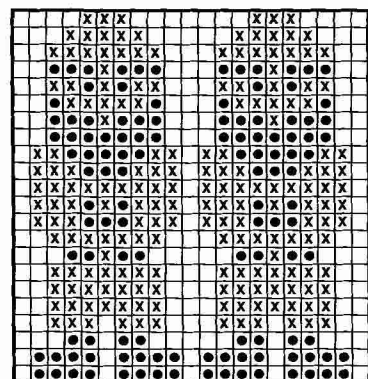
# BLOCK PROFILE & DRAWDOWN



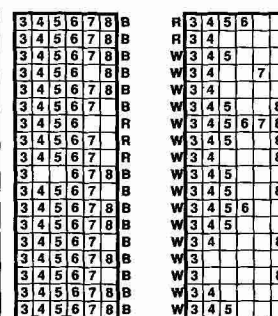
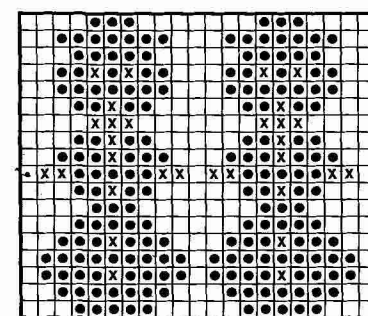
# TREADLING



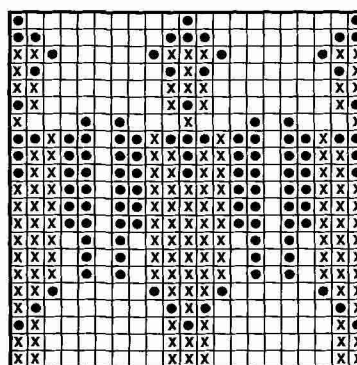
Golden Retriever



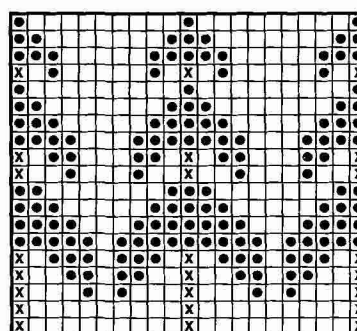
Santa



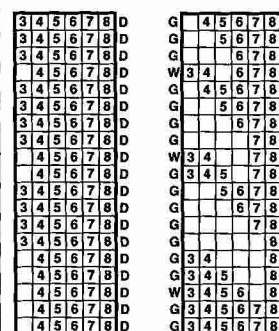
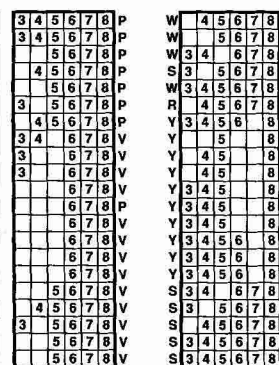
Frosty



Angel



Fir tree



To weave one row of the motif:

1. Weave one shot of tabby lifting shafts 3-4-5-6-7-8.
2. Lift shaft 1 plus the shafts shown in the first row at the bottom of Column 1 and weave one shot using the Column 1 pattern weft color.
3. Lift shaft 1 plus the shafts shown in the first row at the bottom of Column 2 and weave a pick with the Column 2 pattern weft color.
4. Weave one shot of tabby lifting shafts 1-2.
5. Lift shaft 2 plus the same Column 1 pattern shafts as before and weave one shot with the Column 1 color.
6. Lift shaft 2 plus the same Column 2 pattern shafts as before and weave one shot with the Column 2 color.

This completes the first row of the pattern. Move up to the next row and repeat the entire sequence.

For the names, follow the warp color order and letter threading draft shown. Make certain that the block threading order from left to right as seen from the front of your loom is the same as that shown in the draft. Using red for pattern weft, start with about an inch of background weave as a heading. The names will appear next to each other as shown on the assembly diagram. Weave a total of 10" for each name and add an extra inch of background weave between the two names. The longest name possible is five letters and requires 1" of background treadling at each end, a four-letter name needs 2", a three-letter name requires 3", and a two-letter name needs 3 1/2" of background at each end.

This treading draft:

Means:

3 5 7 8

	2	3		5		7	8
1	2						
1		3		5		7	8
		3	4	5	6	7	8

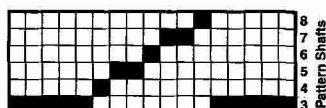
Pattern weft (red)

tabby

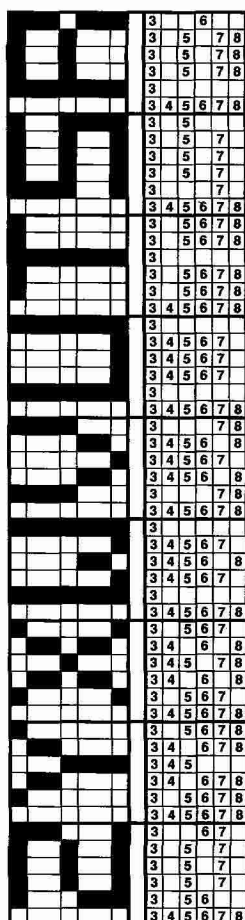
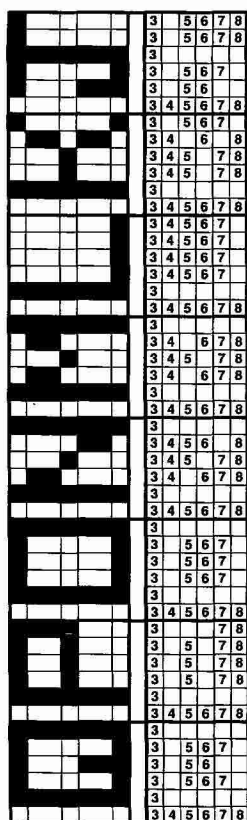
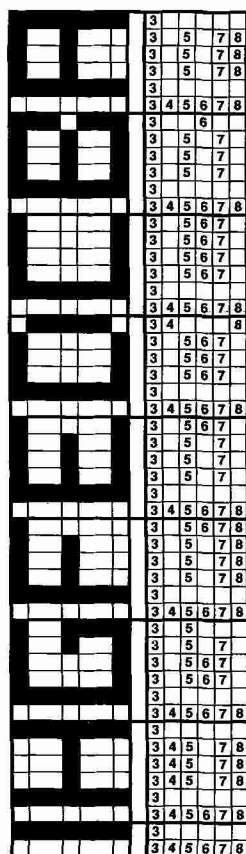
2X Pattern weft (red)

tabby

↑  
read from  
bottom to top



Notes: Each line in the treading draft is 8 shots total. Weave names from the bottom of the draft upward.

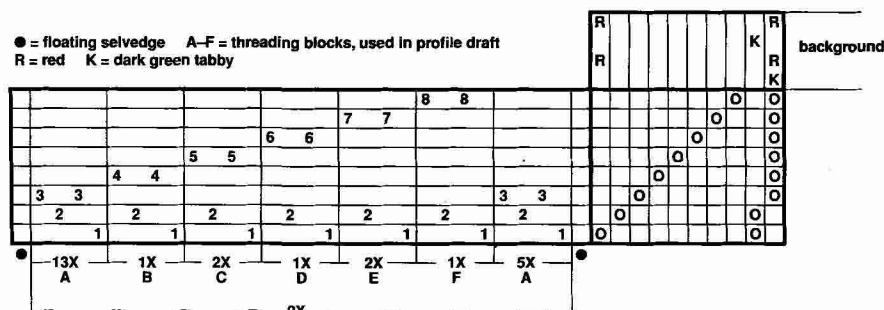


## Namebands Warp Color Order

	50X		
16/2 cotton, doubled	1	1	1 = 102
2/12 merino	1		= 50
10/3 mercerized cotton	1		= 50

## Namebands Draft

● = floating selvage A-F = threading blocks, used in profile draft  
R = red K = dark green tabby

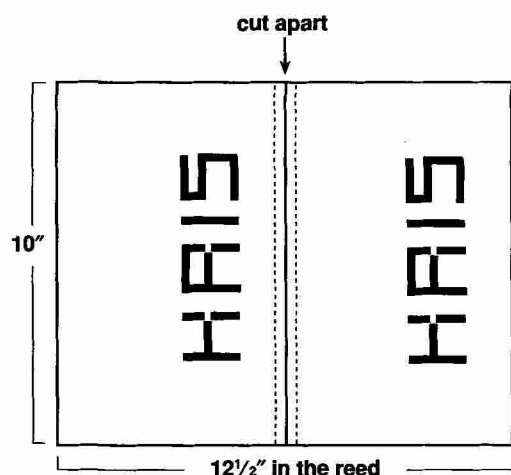


To weave one graphed row of the names:

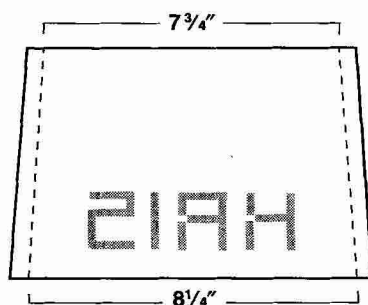
1. Weave one shot of tabby lifting shafts 3-4-5-6-7-8.
2. Lift shaft 1 plus the pattern shafts for the first (bottom) row of the first letter and weave one pattern weft shot.
3. Weave one shot of tabby lifting shafts 1-2.
4. Lift shaft 2 plus the same pattern shafts as before and weave one pattern weft shot.

Repeat these four shots once more to complete the first row. Each row consists of an 8-shot sequence. Move up to the next graphed row and repeat the entire sequence.

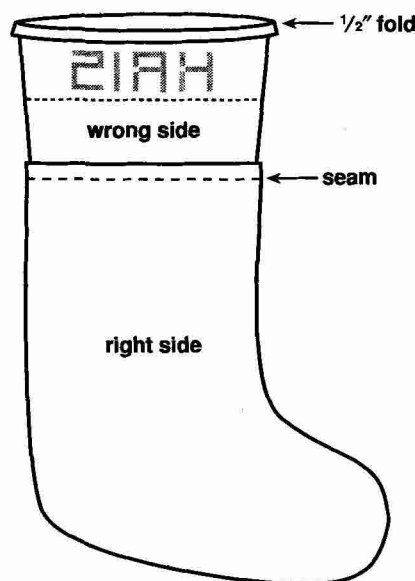
(In order to achieve a background color in the name bands that is consistent with the stocking background color, you have the option of adding a second, dark green pattern weft and following the polychrome treading sequence used in the stocking. By lifting a tie-down shaft with all the pattern shafts 3-4-5-6-7-8, this second weft always weaves as background. Yarn quantities given do not include yarn for this option.)



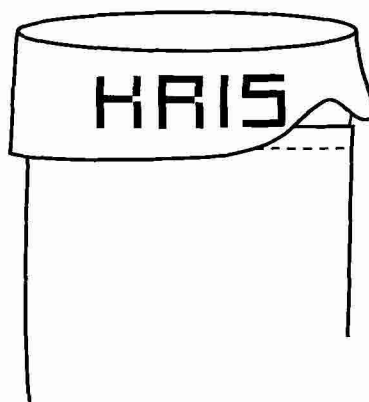
1. Weaving Diagram for the cuffs: After weaving, stay stitch on either side of the middle and cut into 2 pieces.



2. Place the two halves of the cuff right sides together and sew the side seams as shown to allow for the thickness of the folded cuff.



1. At the top of the stocking, place the right side of the cuff against the wrong side of the stocking and stitch together with a 1/2" seam allowance.



2. Fold the cuff to the outside and bring the 1/2" fold to meet the stitching line. Sew in place by hand.

**ASSEMBLY:** The fabric is not washed before assembly. Iron fusible interfacing to the back of the stocking fabric (but not the name-band fabric). Cut out the stockings as shown and serge the raw edges. With right sides facing, sew a stocking front and back together using 1/4" seams. Turn right side out and press. Cut apart the name bands into two 10"-long sections with the two names centered in each section. Mark the warpwise center

line and staystitch 1/8" on each side of the center. Cut apart the two names as shown. Align the names right sides together. Centering the names between the seams, make a tube by sewing seams which angle from 8 1/4" at the bottom of the name to 7 3/4" at the top. Finish and trim the raw edges; press the seams open.

Insert the name-band tube inside the sock with the wrong side of the sock facing the right side of the band and the nar-

row part of the tube at the top of the sock. Ease and baste the narrow end of the band to the stocking edge matching side seams carefully. Sew a 3/8" seam around the top. Pull up the band as shown and press the seam well. Fold the band in half and press. Turn under the raw edge 1/2", press, and hand sew into place. For care, dry cleaning is recommended.

#### ROYAL BLUE CHENILLE JACKET designed by Terry Newhouse Baltimore, Maryland

see pages 70—71

4

**SIZE:** Women's size medium. Circumference at chest 44". Length from shoulder 34". Sleeve length from center back 29". Before cutting, the fabric measured 24" wide by 110" long.

**E.P.I.:** 12 for the chenille, sleyed 2, 1 in an 8-dent reed. Both ends of the novelty or the ribbon are crowded with an end of chenille in the same dent. The thick chenille is sleyed in a separate dent.

**WIDTH IN REED:** 26 1/4".

**WARP COLOR ORDER:** on next page.

**TOTAL WARP ENDS:** 336.

**WARP LENGTH:** 4 1/2 yd, including take-up, shrinkage, and 27" loom waste.

**DRAFT:** on next page.

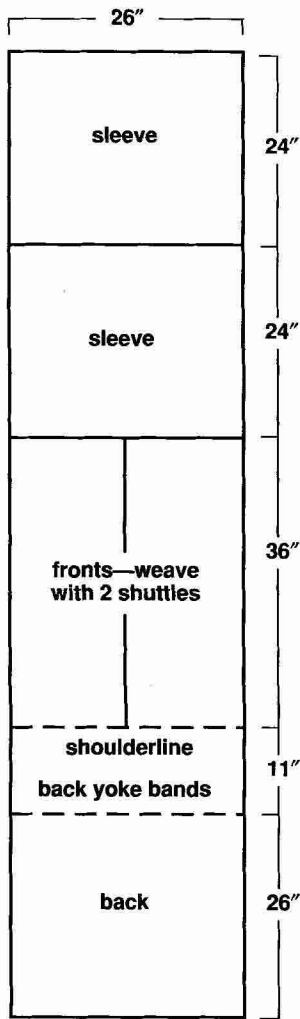
**P.P.I.:** 12.

**TAKE-UP & SHRINKAGE:** 9% in width and 15% in length.

**WEAVING:** Following Weaving Diagram, start at the lower edge of the back and treadle the basic pattern for 26" using royal blue weft. Weave the back yoke using periwinkle weft for the first band, followed by teal, jade, teal, and periwinkle again. (If the back yoke measures less than 11", finish the 11" length using royal blue weft following the basic pattern.) Using two shuttles, one for each front panel, to leave a center front opening, weave 36" of the basic pattern with royal blue. (Weaving the fronts in this method is a little slower but makes selvages at the center front to which the button bands can be easily attached.) Go back to one shuttle and use the jade weft to weave 48" (24" for each sleeve) following the basic treadling pattern (increase this amount for longer arms).

**FINISHING:** To stabilize the raw edges





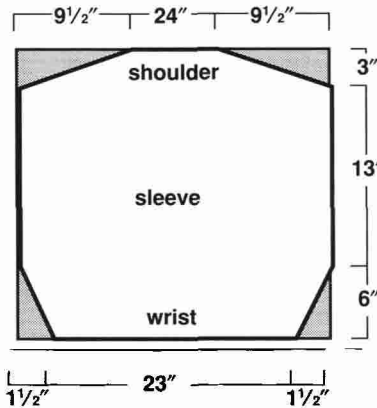
Weaving Diagram

before washing, machine staystitch two rows 1/4" apart at 15 stitches per inch, then zigzag over them. Using mild dishwashing liquid and lukewarm water, soak fabric in the washing machine for 30 minutes without agitating. Spin out the suds. Refill, agitate for one minute, and spin again. Hang to dry over a shower rod, gently pulling the fabric into shape. Don't panic at this point: the fabric will look like it has shrunk, but it will relax and soften as it dries.

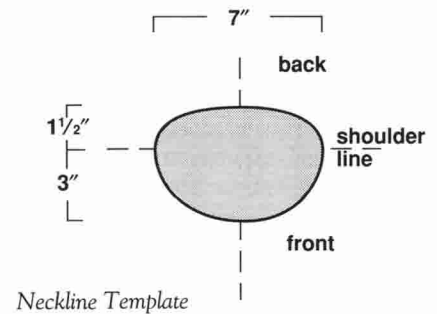
**NOTIONS:** Sewing thread that does not match (it is very hard to see machine stitching on chenille), six buttons 5/8" or

3/4", covered shoulder pads, crochet hook size E.

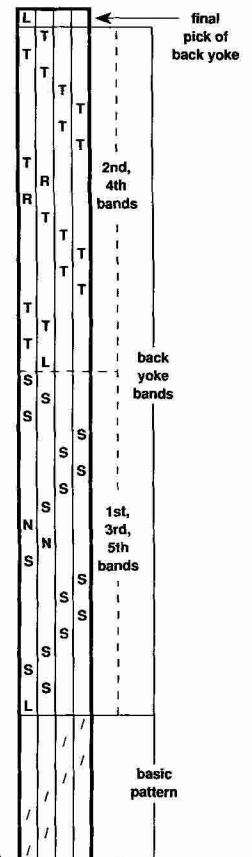
**ASSEMBLY:** Using the Weaving Diagram as a guide, mark the cutting lines with tailor's chalk. On both sides of the cutting lines, machine staystitch two rows and zigzag over them as noted above. Cut body and sleeves apart. Make a paper pattern for the neck opening as shown. Baste the outline by hand or mark with chalk. Machine staystitch two rows and zigzag, then cut out the opening. Try on the body to see if the neck is deep enough, and adjust if necessary.



Sleeve Shaping



Neckline Template



# WARP COLOR ORDER:

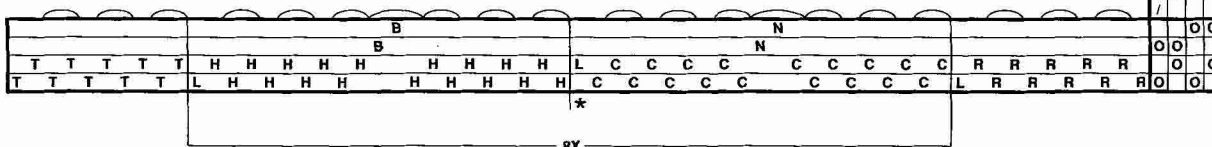
	2X										
royal											10 = 46
periwinkle											= 90
teal	10		9	9				9	9		= 100
jade		9	9						9	9	= 54
thick purple	1		1		1		1		1		= 16
novelty		2		2		2		2		2	= 16
ribbon			2		2		2		2		= 14

# DRAFT:

= sley in one dent  
 \* = end here on eighth repeat  
 R = royal blue  
 T = teal  
 L = thick purple

N = novelty  
 B = ribbon  
 C = Use periwinkle on first, third, fourth, sixth, and seventh repeats. Use jade on second, fifth, and eighth repeats.

H = Use teal on first, second, fourth, fifth, and seventh repeats. Use royal on third and sixth repeats.  
 S = chenille weft. Use periwinkle for first and fifth bands; use jade for the third band.  
 / = chenille weft. See weaving section for color.



# CALENDAR

## EXHIBITS, SHOWS & SALES

### ARIZONA

- **Through October.** Patterns and Sources of Navajo Weaving, an exhibit of Navajo textiles at the Arizona Historical Society, 949 E. 2nd St., Tucson, AZ 85719. (602) 628-5775.
- **Oct. 7-9.** Fiber Arts Festival in Bisbee. Call Bisbee Chamber of Commerce, (602) 432-5421.
- **Oct. 9-17.** Juried fiber arts and quilt shows in Bisbee. Contact Pat Baldwin, (602) 432-5924.
- **Nov. 5-Jan. 2, 1995.** Exhibition of handcrafted and antique textiles at Riordan Mansion State Park, 1300 S. Riordan Ranch St., Flagstaff. Call Katherine Farr, (602) 556-0567.

### ARKANSAS

- **Through Sept. 25.** Work by Kay Sekimachi and Bob Stocksdale, exhibit of fiber (paper) and wood at The Arkansas Arts Center, Decorative Art Museum, Little Rock. Contact Palo Alto Cultural Center, 1313 Newell Rd., Palo Alto, CA 94303. (415) 329-2366.

### CALIFORNIA

- **Nov. 6.** Southern California Handweavers' Guild show and sale at Torrance Civic Complex, Recreation Center, 3341 Torrance Blvd., Torrance. Call Edeltraut Theissen, (818) 991-0302, or Virginia McCauley, (818) 766-0119.

- **Nov. 19.** Designing Weavers annual show and sale at The Ruskin Club, 800 S. Plymouth, Los Angeles. Call Trudie Roberts, (213) 666-5664, or Ellen Shipley, (805) 297-3845.

### COLORADO

- **Sept. 9.** Artwear '94, juried fashion show at Lincoln Center, 417 W. Magnolia, Ft. Collins, CO 80521. (303) 221-6735; fax (303) 484-0424.

### DISTRICT OF COLUMBIA

- **Oct. 7-Spring 1995.** Rugs and Textiles of Late Imperial China. The Textile Museum, 2320 S St. NW, Washington, DC 20008. (202) 667-0441.

### IDAHO

- **Sept. 17.** Sandpoint Fiber Fest, talks and demonstrations in Sandpoint. Contact Sandpoint Fiberarts Guild, PO Box 655, Sandpoint, ID 83864. Marti Ashford, (208) 263-8473.

### ILLINOIS

- **Through Oct. 8.** Fiber '94, contemporary fiber art exhibit. Textile Arts Centre, 916 Diversey Pkwy., Chicago, IL 60614.
- **Oct. 16.** Uncommon Threads, juried runway fashion show in St. Charles. Contact Denise Kavanagh, The Fine Line Creative Arts Center, 6N158 Crane Rd., St. Charles, IL 60175. (708) 584-9443.

### INDIANA

- **Oct. 15-16.** Interwoven Expressions, annual show and sale by the Duneland Weavers' Guild of Northwest Indiana at Marc T. Nielsen Interiors, 734 N. Old Suman Rd., Valparaiso. Contact Carol Costakis, 406 Audubon Dr., Valparaiso, IN 46383. (219) 464-4172.

### KANSAS

- **Through Oct. 30.** Rare and Historic Coverlets, exhibit at Elizabeth M. Watkins Community Museum, 1047 Massachusetts St., Lawrence, KS 66044. (913) 841-4109.

### MASSACHUSETTS

- **Sept. 29-Oct. 30.** Juried show of original handcrafted clothing at Cambridge Artists' Cooperative, 59A Church St., Cambridge, MA 02138. (617) 868-4434.
- **Nov. 3-5.** Weavers' Guild of Boston Annual Exhibit and Sale at Josiah Smith Barn, Boston Post Rd., Weston Center, Weston. Call Deb Whitmore, (508) 927-1744.

### MICHIGAN

- **Sept. 1-Oct. 2.** 8th Biennial Fiber Show of Michigan League of Handweavers at Saginaw Art Museum, Saginaw. Contact Martha Town, 7211 Tamarack Rd., Pittsford, MI 49271.

Mark the sleeves, double staystitch and zigzag as before, and trim as shown. To pleat the cuff, make 7 inverted pleats, centering each one on a novelty-yarn stripe and skipping a novelty-yarn stripe between each pleat. With right sides together, fold each pleat and stitch upward from the selvedge  $1\frac{1}{2}$ " just outside the neighboring thick chenille row. To hold the pleat in place, finger press the fullness of the inverted pleat equally to each side of the stitching and stitch in the ditch from the right side through all thick-nesses. Pin the top of the sleeve to the body and machine stitch at 12 stitches per inch. Pin and stitch the side seam of the body and sleeve with a narrow seam allowance, tapering the sleeve seam allowance from  $\frac{1}{4}$ " at the underarm to  $1\frac{1}{2}$ " at the wrist as shown.

To make the shoulder pleats, stand in front of a mirror and pull up about a 2" pleat at the shoulder, lining up its edge with the seam at the top of the sleeve. Adjust the size of the pleat to fit. From the inside, hand or machine stitch 5"

down from the shoulder line along the seamline at the top of the sleeve on both front and back. Tack the shoulder pads in place.

**CROCHET:** Stitches should be worked firmly so that the band will wear well. On the first row, work to a gauge of 4 stitches to an inch. The following method of working the first row of crochet covers the edge without creating a ruffle. With the right side facing you, start at the bottom right hand corner of the front. Attach the royal blue yarn with a single crochet (sc) stitch and work as follows: \*skip two warp ends and insert the crochet hook through the fabric, pull up a loop and hold it on the hook, skip two warp ends and pull up another loop, yarn over and pull through all three loops\*. Repeat between \*s around the entire jacket, working three sc into corners at the neckline and taking a bigger "bite" into the fabric when working over the machine sewn and cut edges. Join with a slip stitch to the first stitch.

Mark 6 buttonholes on the right front,

one buttonhole every  $3\frac{1}{2}$ " starting at the neckline. Beginning at the bottom corner, chain (ch) 1, continue in sc up the front, 3 sc into the corner st, sc around the neck working one decrease 12 st after and before corners. Sc to first buttonhole marker, \*ch 2, skip 2 st, sc to next marker\*; repeat between \*s. Ch 1, turn, sc as above working sc into each buttonhole chain. End. With the right side still facing and using the novelty yarn, work one row of shrimp stitch (single crochet worked from left to right instead of right to left) all the way around. This stitch does not stretch and gives a nice corded finish. For the cuffs, use the jade yarn and work the first row as for the front edges, join. Ch 1, work 1 row sc, end. Join the novelty yarn and work 1 row shrimp st.

- **Nov. 18-19.** Weavers Guild of Kalamazoo sale and exhibit at Kalamazoo Valley Community College, 6767 W. O Ave., Kalamazoo. Call (616) 673-3744.

#### MINNESOTA

- **Oct. 1-2.** Fiber/Metal '94, juried show and sale at Fine Arts Center, Minnesota State Fairgrounds, Snelling and Como Aves., St. Paul. Minnesota Crafts Council, Hennepin Center for the Arts, 528 Hennepin Ave., Suite 308, Minneapolis, MN 55403. (612) 333-7789.

#### MISSOURI

- **Nov. 4-6.** Annual sale and demonstrations by Weavers' Guild of St. Louis at Des Peres City Hall, Manchester Rd. at Ballas Rd. Call Jane Olson Glidden, (314) 343-5643.
- **Nov. 18-Dec. 30.** Work by Kay Sekimachi and Bob Stocksdale, exhibit of fiber (paper) and wood at The Forum for Contemporary Art, St. Louis. Contact Palo Alto Cultural Center, 1313 Newell Rd., Palo Alto, CA 94303. (415) 329-2366.

#### NEW HAMPSHIRE

- **Oct. 8-9.** Annual Wool Arts Tour of Monadnock area sheep farms and wool studios. For map, send SASE to Anne Hennessy, Meadow Brook Farm, PO Box 324, Antrim, NH 03244. (603) 588-6637.

#### NEW JERSEY

- **Nov. 4-6.** Focus on Fiber, annual show and sale by South Jersey Guild of Spinners and Handweavers at Barclay Farmstead, Cherry Hill. Call Barclay Farmstead, (609) 795-6225, or Carol Clark, (609) 461-1353.

#### NEW MEXICO

- **Sept. 16-Oct. 12.** Black & White: Drama in Tapestry, group show of new work by New Mexico tapestry artists at Weaving/Southwest Gallery, 216B Pueblo Norte, Taos, NM 87571. (505) 758-0433.
- **Oct. 1-2.** Taos Wool Festival in Kit Carson Park, Taos. Sales, exhibits, demonstrations. Call Coralie Silvey Jones, (505) 751-0306, or Taos County Chamber of Commerce, (800) 732-TAOS.

#### NEW YORK

- **Through Oct. 9.** Bauhaus Workshops 1919-1933, exhibit at American Craft Museum, 40 W. 53rd St., New York, NY 10019. (212) 956-3535; fax (212) 459-0926.
- **Sept. 8-Oct. 1.** Faculty show including textiles at Fashion Institute of Technology, 7th Ave. at 27 St., New York, NY 10001. (212) 760-7642.
- **Oct. 1-4.** The New York Home Textiles Show at Jacob K. Javits Convention Center, New York. George Little Management, 10 Bank St., White Plains, NY 10606. (914) 421-3200.

#### NORTH DAKOTA

- **Sept. 10-11.** North Country Fiber Fair at North Dakota Winter Show Bldg. in Valley City. Exhibits, sales, demonstrations, classes. Contact Kim Owen, PO Box 343, Valley City, ND 58072. (701) 845-2544.

#### OREGON

- **Through Sept. 30.** Navajo Textiles exhibit. Mission Mill Museum, 1313 Mill St. SE, Salem, OR 97301. (503) 585-7012; fax (503) 581-4540.
- **Sept. 9-10.** After a Fashion textile festival. Mission Mill Museum, 1313 Mill St. SE, Salem, OR 97301. (503) 585-7012; fax (503) 581-4540.
- **Oct. 6-30.** Works in paper by seven American Indians from Oregon at the Centrum. Oregon School of Arts and Crafts, 8245 SW Barnes Rd., Portland, OR 97225. (503) 297-5544; fax (503) 297-9651.

#### PENNSYLVANIA

- **Oct. 8-9.** Harvest Festival, demonstrations of traditional crafts at Quiet Valley Historical Farm, 1000 Turkey Hill Rd., Stroudsburg, PA 18360. (717) 992-6161.

#### SOUTH DAKOTA

- **Through Sept. 4.** Cofradia—Mayan Ceremonial Clothing from Guatemala, exhibit at Siouxland Heritage Museums, 200 W. 6th St., Sioux Falls, SD 57102. (605) 335-4210.

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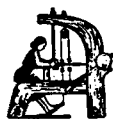
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## MORE CALENDAR . . .

### TEXAS

- **Sept. 9-11.** Fabric of Our Culture, juried exhibit of quilts, wearable art, weaving, hooked rugs, crochet, tatting, stitchery, knitting, and needlepoint at Victoria Community Center, Victoria. Cultural Council of Victoria, PO Box 1758, Victoria, TX 77902. (512) 572-2787.
- **Sept. 18-Oct. 28.** Materials: Hard & Soft, juried crafts exhibition at Meadows Gallery, Center for the Visual Arts, Denton. Contact Denton Arts Council, 207 S. Bell, Denton, TX 76201. (817) 382-2787.
- **Oct. 7-8; Nov. 18-19.** From Hands That Weave, Contemporary Handweavers of Houston annual show and sale, demonstrations. Contact Patricia Zilinski, 12426 Boheme Dr., Houston, TX 77024. (713) 935-0319.

### VIRGINIA

- **Oct. 8-9.** Fall Fiber Festival, exhibits, demonstrations, animal shows featuring natural fibers at Montpelier Estate, Orange County. Contact Dan or Caroline Hershey, Rt. 1, Box 127, Stanardsville, VA 22973. (804) 985-7083.

### WASHINGTON

- **Nov. 18-20.** Best of the Northwest, A Celebration of Fine Crafts, craft sales at Seattle Center Exhibition Hall, Seattle. Contact Northwest Crafts Alliance, PO Box 9937, Seattle, WA 98109. (206) 781-1903.

### WISCONSIN

- **Sept. 30-Oct. 2.** The Gathering at Sievers School of Fiber Arts. Lectures, demonstrations, exhibits, sales, fashion show. Contact Ann Young, Sievers School, Spring Rd., Washington Island, WI 54246. (414) 847-2264.

### CANADA, ALBERTA

- **Nov. 5.** Fall sale by Edmonton Weavers Guild at Pleasantview Community League, 10860 57 Ave. Contact Carole Dodd, (403) 463-3702.

### CANADA, ONTARIO

- **Sept. 30-Oct. 2.** Festival of Fibres, exhibition, sale, and demonstrations of textile crafts at Harbourfront Centre, 235 Queen's Quay W., Toronto, ON M5J 2G8. (416) 973-4600 or Jean Johnson, (416) 973-4928.
- **Oct. 28-30.** Sale, exhibition, and fashion shows by Ottawa Valley Weavers' and Spinners' Guild at Glebe Community Centre, 690 Lyon St., Ottawa. Contact Joanne Penicud, 1179 St. Jerome Cres., Orleans, ON K1C 2A7. (613) 824-2997.

### UNITED KINGDOM

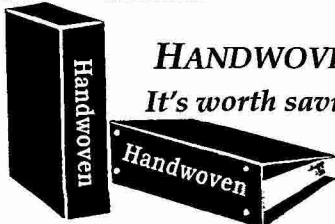
- **Through Sept. 11.** Association of Weavers, Spinners, and Dyers 1994 National Exhibition, at Glynn Vivian Gallery, Alexandra Rd., Swansea, Wales. (0) 792-655006.

### CONFERENCES

- **Sept. 17.** 10th Anniversary Gathering, Sutton Valley Weavers Guild in Quebec. Contact Doreen Page, 132 Holmes Rd., R.R. 4, Sutton, PQ J0E 2K0, Canada. (514) 538-3846.
- **Sept. 22-24.** Contact, Crossover, Continuity, 4th biennial symposium of Textile Society of America at Fowler Museum of Cultural History, UCLA, Los Angeles, CA. Contact Patricia Anawalt or Louise Mackie, Fowler Museum, 405 Hilgard Ave., Los Angeles, CA 90024.
- **Oct. 14-16.** Textile Museum Rug Convention, featuring Chinese rugs. Lectures and exhibits at The Textile Museum, 2320 S St., NW, Washington, DC 20008. (202) 667-0441.
- **July 13-16, 1995.** Frontiers of Fibre, conference of the Association of Northwest Weavers' Guilds in Prince George, B.C. Preconference workshops July 10-12. Contact Jean Curry, 2848 McKenney Cres., Prince George, BC V2K 3X9, Canada. (604) 962-8819; fax (604) 964-6404.

### TO ENTER

- **Fiberart International '95**, juried exhibit June 9-July 2, 1995, at Pittsburgh Center for the Arts, Pittsburgh. Slide deadline Jan. 31, 1995. SASE to Catherine McConnell, 6426 Jackson St., Pittsburgh, PA 15206.



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- **Greater Midwest International X**, all-media juried exhibit Jan. 23-Feb. 26, 1995, in Warrensburg, MO. Adults, no student work; **entry deadline Oct. 14**. LSASE to Billi R.S. Rothove, Central Missouri State University, Art Center Gallery, Warrensburg, MO 64093. (816) 543-4498.
- **If The Art Fits, Wear It**, juried fashion show of one-of-a-kind artwear Nov. 5 in Chicago. **Slide deadline Sept. 19**. Prospectus: SASE to Textile Arts Centre Fashion Show, 916 W. Diversey Pkwy., Chicago, IL 60614. (312) 929-5655.
- **In Praise of Fields: Contemporary Interpretations of Agrarian Themes**, national juried fiber show Jan.-June 1995 in five south Georgia venues. Prospectus: Arts Experiment Station, ABAC 45, 2802 Moore Hwy., Tifton, GA 31794.
- **International Textile Design Contest '94** Nov. 30-Dec. 4 at The Space, Omotesando, Tokyo, Japan. Constructed or embellished fabric, open to residents of U.K., U.S.A., Japan, France, Italy, Germany. **Entry deadline Sept. 20**. Contact INFAS, 853 Broadway, Room 804, New York, NY 10003. (212) 228-8933.
- **1995 Juried Fiber Network Textile Exhibition** Jan. 12-Feb. 22, 1995, at Delaplaine Visual Arts Center. Open to residents of MD, VA, WV, DC, PA. **Slide deadline Nov. 1**. SASE to Margaret Hluch, 102 E. 8th St., Frederick, MD 21701. (301) 662-0369.
- **Visual Play**, juried show of fiber art exploring humor and wit Dec. 16-Jan. 27, 1995, in Chicago. **Slide deadline Oct. 8**. SASE to Textile Arts Centre, 916 W. Diversey Pkwy., Chicago, IL 60614. (312) 929-5655.

## INSTRUCTION

### MASSACHUSETTS

- **Horizons**. Oct. 8-10. Painting on Silk with Jodi Waltier; Weaving a Rag Rug with Johanna Erickson. 108 N. Main St., Sunderland, MA 01375. (413) 665-0300; fax (413) 665-4141.

### NEW HAMPSHIRE

- **The Weaving Center**. Sept. 12-16: Beyond Tabby & Twill, Constance LaLena. Sept. 19-23: Tapestry, Micala Sidore. Sept. 26-30: Double Weave, Leslie Voiers. Oct. 7-8: Designing & Drafting, Leslie Voiers. Oct. 21-22: Warping with Speed & Accuracy, Nancy Lyon. Oct. 28-29: Summer & Winter, Nancy Lyon. The Weaving Center, PO Box 806, Harrisville, NH 03450.

### NEW YORK

- **Cooperstown Textile School**. Sept. 21-24. Textile identification workshop with Rabbit Goody. RD 2, Box 75, Cherry Valley, NY 13320. (518) 284-2729 (phone or fax).

### NORTH CAROLINA

- **John C. Campbell Folk School**. Sept. 4-10: Beginning to advanced weaving, Pam Strawn. Sept. 18-24: Basics of Loom Weaving, Linda Snow; Natural Dyes, Rita Schwab. Oct. 9-15: Floor Loom Handweaving, Betty Hancock-Smith. October 16-22: Weaving Explorations, Ruthanne Webb Kah. Oct. 22-28: Options in

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- Overshot Pattern Weaving, Barbara Miller. Oct. 28-30: Loom Constructed Baskets, Sandy Webster; Wheat Weaving, Elizabeth Smathers. Oct. 30-Nov. 5: Traditional Dyeing—Cotton, Basketry, Jim Liles. The Folk School, Rt. 1, Box 14A, Brasstown, NC 28902. (800) 365-5724.
- **Penland School of Crafts**. Sept. 26-Nov. 18. Intensive study in fiber and paper with noted instructors. Penland, NC 28765. (704) 765-2359; fax (704) 765-7389.

### PENNSYLVANIA

- **The Weaver**. Sept. 2-5: Shibori, Karren Brito. Sept. 19-23, Oct. 17-21: Beginning weaving, Kathy Schwietz. Oct. 7: Piqué, Donna Sullivan. Oct. 8-10: Color interaction, Donna Sullivan.

- Oct. 22: Fimo clay, Wendy Stahlman. Housing and gift certificates available. The Weaver, Box 80, Smicksburg, PA 16256. (814) 257-8891, 257-8150.

- **Land of the Vikings Cultural Center**. Sept. 25-30: Krokbragd, Åse Froysadal. Contact Louise Rasmussen. (717) 461-3500.

### WISCONSIN

- **Sievers School of Fiber Arts**. Sept. 18-23: Double Weave, Judith Yamamoto; Basic Weaving, Barbara Heike. Oct. 2-5: Magic Pouch, Anita Luvera Mayer. Jackson Harbor Rd., Washington Island, WI 54246. (414) 847-2264.

—continued on page 103



# HANDWOVEN BACK ISSUES

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## MORE CALENDAR . . .

### GREECE

- Sept. 14-27, Sept. 28-Oct. 11. Greek weaving workshops on Milos Island taught by Katerina Kalamitsi, Arkadiou 4, 15231 Halandri, Athens, Greece. 01-64 76 463; fax 01-64 75 936.
- Sept. 24-Oct. 8. Fibers Retreat in Greece, workshop in Aegean tapestry crochet and nomadic design in a Greek fishing village. SASE to Gail Jacobson, 0245 SW Nebraska St., Portland, OR 97201. (503) 246-5225, or call Karen Haber, (800) 937-8087.

### TRAVEL

- Guatemala. Dec. 28-Jan. 11, 1995. La Ruta Maya tour. Holly Brackmann, Mendocino College, 1000 Hensley Creek Rd., Ukiah, CA 95482. (707) 462-5734.
- India. Jan. 7-30, 1995. Textiles and Handcrafts of South India with Anita Luvera Mayer. Booking deadline Nov. 8. Contact Tom Wilson, Craft World Tours, 6776 Warboys Rd., Byron, NY 14422. (716) 548-2667; fax (716) 548-2821.
- Japan. Oct. 18-Nov. 1, 1994, May 22-June 6, 1995. Textile tours sponsored by The Textile Museum. Contact Ishimoto Tours, 210 Powell St., Suite 305, San Francisco, CA 94108. (415) 781-4350.

- Mexico. Oct. 22-Nov. 3, 1994. Tour craft villages in Oaxaca, including villages specializing in weaving. Contact Linda Craighead, 416 Laurent St., Santa Cruz, CA 95060. (415) 473-9610.

Please send your event information at least 10 weeks prior to the month of publication to "HANDWOVEN Calendar", 201 East Fourth Street, Loveland, CO 80537. Listings are made as space is available. While we try to include as many events as possible, we cannot guarantee that your listing will be included.

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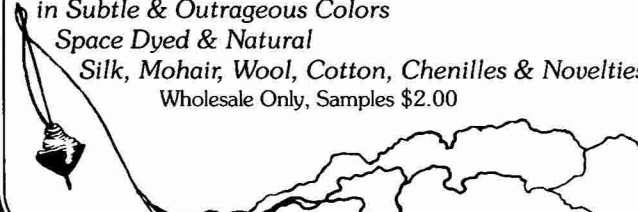
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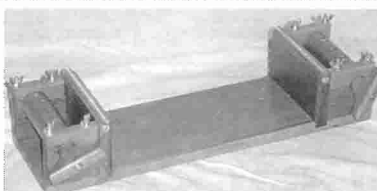
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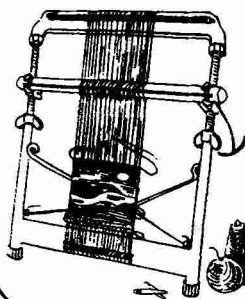
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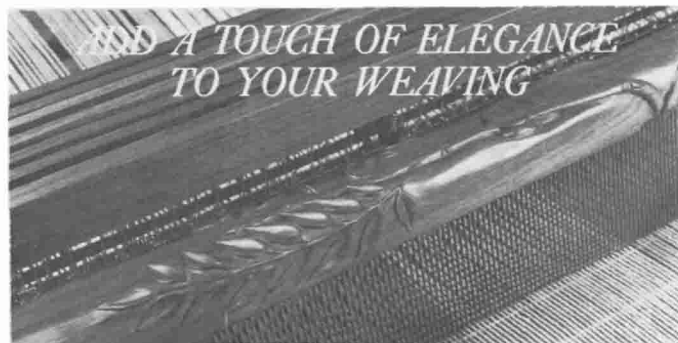
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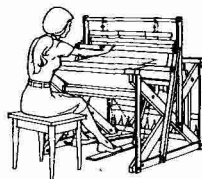
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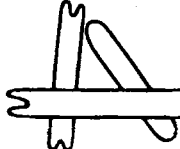
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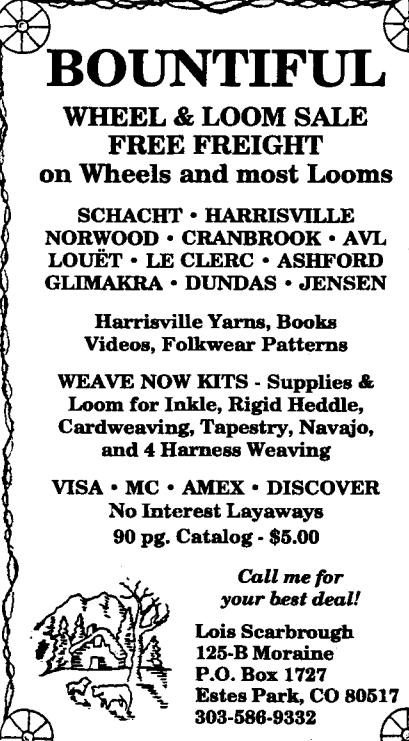

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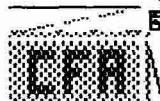


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"Flax Appeal," *Women's Wear Daily*, October 1993

## A DIFFERENT FABRIC

Maintenance of the pinnacles and gargoyles atop the National Cathedral in Washington, D.C., is a full-time job

for the church's maintenance staff, including Anthony Segreti, who helps with periodic detailed inspections. Segreti's title is "Surveyor of the Fabric."

Bill Broadway, *The Washington Post*, 1994

## BLANKET INVENTOR

Blankets are named after their inventor, Thomas Blanquette, a Flemish weaver who lived in Bristol, England, during the fourteenth century.

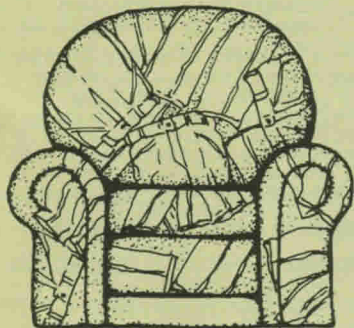
Selkirk Weaver,  
November/December 1993

## EXPORT AGENTS

Circa 1602, Shah Abbas ordered the Armenians, some thirty thousand strong, to relocate from their city, Julfa, and mountain dwellings in Azerbaijan to settle in his new capital, Isfahan. In that way, he secured for his city hard-working, skillful craftsmen to whom he made special concessions and gave guarantees of religious freedom. The Armenians, whose Christianity gave them a natural link to the countries of Europe, organized the export

who use naturally colored, organically grown cotton have an edge with ecology-minded customers. Bernhardt Furniture Company plans to open boutiques to sell its "environmentally correct" furniture, covered with Sally Fox's natural brown and green cotton, along with clothing and accessories made from apparel fabrics of the same fibers.

adapted from Yvonne Eaton, *Louisville Courier Journal*

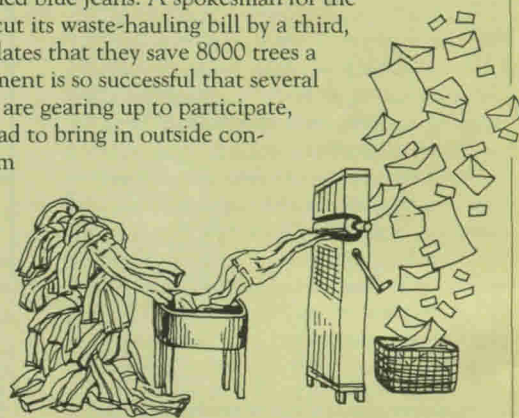


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Stefan Watson, a maker of fine art papers in Albuquerque, New Mexico, learned that the local Levi's plant was burying millions of pounds of denim scrap in a landfill. So he offered to make it into paper. Now the Levi Strauss plant has entered into a full-circle agreement that provides Watson with 100,000 pounds of scrap per month. In return, the dungaree maker gets stationery, cardboard, shopping bags, even business cards—all the telltale color of faded blue jeans. A spokesman for the plant reckons it's cut its waste-hauling bill by a third, and Watson calculates that they save 8000 trees a year. The arrangement is so successful that several more Levi's plants are gearing up to participate, and Watson has had to bring in outside contractors to help him meet the demand.

Watson is now working on plans to recycle the denim paper, which can be reprocessed twice as many times as wood pulp stocks.

Audubon, March/April 1994



of Persian carpets to that continent so efficiently that the Shah was assured revenues for his endless construction projects. The Armenians proved themselves indispensable to Isfahan's commercial success.

Gourmet, March 1977 (contributed by Manuela Kaulitz, Louisville, Kentucky)

## ANCIENT TEXTILES RETURNED

High in the Andean mountains of Bolivia, expert Amyra weavers once produced woven garments with vibrant colors and the texture of silk for the Inca nobles. Remarkably, some of the ancient weavings remain and are worshipped in many parts of the Andes. They are not only consulted as oracles and venerated as encoding the history of the

people, but are believed to contain the souls of the ancestors. Carefully preserved, the weavings survived the Spanish conquest and later anti-Indian policies of Bolivian governments.

In no village are the textiles more ancient, more beautiful, or more valued than in Coroma, Bolivia. Since before Columbus landed in the Americas, the people of Coroma have hidden away their sacred weavings, bringing them out only on November 1, the Day of the Dead.

In recent years, art dealers who saw these precious garments on display made deals with intermediaries, and at least 200 of the finest weavings left Coroma for the United States, where collectors paid thousands of dollars for them.

Now, thanks to interna-



# THE HANDWOVEN COMMUNIQUE

tional pressure and legal proceedings, many of the weavings have been returned to Coroma. The Coromans managed to catalyze a network of lawyers (including those from the Center for Constitutional Rights), anthropologists, Native American activists, U.S. Customs officials, and the Bolivian government, to pressure dealers and collectors into returning the weavings. The Bolivians say their achievement was due to the intervention of the ancestral spirits who reside in the weavings.

John Anner, *The Progressive*, January 1993 (contributed by Janet Meany, Duluth, Minnesota)

## HIKE IN HEMP

Merrell Footwear is introducing boots made from hemp (*Cannabis sativa*), the Eco Terra High (no pun intended) and Eco Strata Low. "Hemp is 8 to 12 times more durable than cotton," says John Birrenbach, founder of the Institute for Hemp, based in St. Paul, Minnesota. Organically grown, hemp does not



sully the environment with pesticides or herbicides. For those who might wonder, if you chop up the boot and smoke it, it would be no different from smoking any other canvas boot, since hemp comes from *Cannabis* stems, not the leaves and flowers with their psychoactive properties.

Knight-Ridder News Service

## MORE ABOUT HEMP

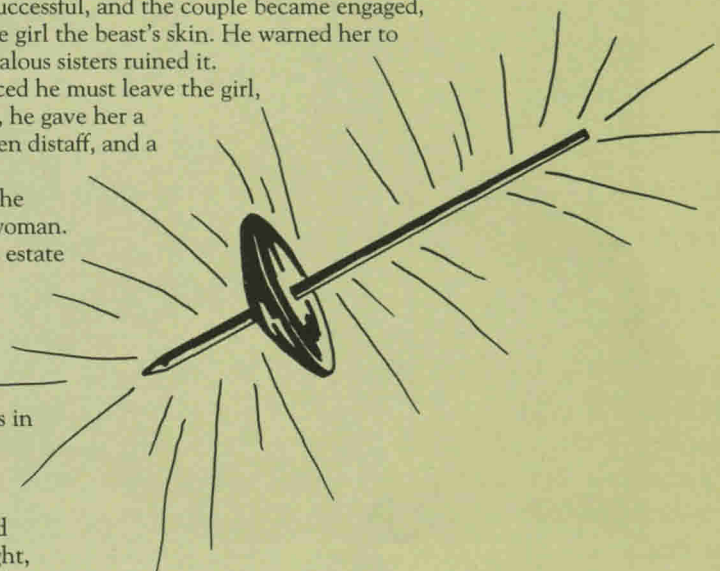
Hemp, a bast fiber processed like flax, has been cultivated for cordage and textiles for

## A FRENCH TALE

A handsome prince disguised himself as a dying beast to win a young girl's sympathy. His ruse was successful, and the couple became engaged, whereupon the prince gave the girl the beast's skin. He warned her to keep it safe and dry, but her jealous sisters ruined it. Dismayed, the prince announced he must leave the girl, but as tokens of remembrance, he gave her a golden spinning wheel, a golden distaff, and a golden spindle.

At his father's insistence, the prince later married another woman. His first fiancée hired onto his estate as a turkey maid and tempted the new bride with the golden tools, exchanging them for the opportunity to spend successive nights in the prince's bedroom. On the first two nights, the crafty wife drugged her husband with a potion so that he would not wake up. On the third night, however, the prince avoided the potion, his maids having told him of the turkey maid's visits. He and his first love talked all night, and he claimed her as his new wife.

adapted from Genevieve Massignon, *Folktales of France*, 1968



thousands of years. In the United States, hemp is most frequently used for making strong rope and sacking; however, in Italy and some central European countries, hemp yarns have been woven into fine apparel fabrics comparable to linen. One of the strongest natural fibers, hemp tolerates a wide range of climates and growing conditions.

"Communique" reader Kathleen Chippi of Nederland, Colorado, points out that Columbus's sails and Levi Strauss's first jeans were actually made of hemp, not cotton denim, as implied by an item in the March/April 1994 "Communique." She recommends two references for information about this useful fiber: *The Emperor Wears No Clothes*, by Jack Herer, and *Hemp: Lifeline to the Future*, by Chris Conrad.

## MINERVA

The popularity of the Gaulish goddess Minerva was evidence of the great prestige given the

technical skills in early Celtic society. Her cult was especially strong among the lower social orders, and as patron of the domestic arts, her memory survives in the admonition of

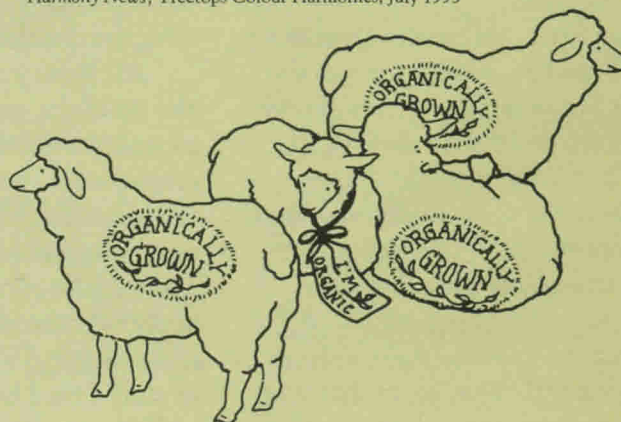
St. Eligius (seventh century) not to invoke Minerva when engaged in weaving, dyeing, or other such tasks.

Proinsias MacCana, *Celtic Mythology*, 1983

## BIOWOOL

A New Zealand company, Biowool NZ Ltd., is specializing in the production of chemical-free knitting yarn called Naturlich. Sheep raisers who supply the wool must use organically fertilized feed, as well as special medications for their sheep. Creative Yarns International, a Seattle company, is producing a line of natural dyes for Biowool yarn and has developed the first commercial-scale facilities for natural dyeing.

Harmony News, Treetops Colour Harmonies, July 1993



# KEEPERS

LINDA LIGON

YOU CAN ORGANIZE YOUR YARN BY COLOR, WHICH CAN BE VERY PRETTY, OR BY FIBER, OR BY GRIST, OR BY WHAT KIND OF THING YOU HAD PLANNED TO MAKE OUT OF IT WHEN YOU FIRST PURCHASED IT,

if you can remember. You can organize it by quantity (enough to make a blanket vs. enough to make a warp for a small towel). You can even sort according to how much weaving time might be required of any given lot and thus integrate your yarn management into a larger time management program, if you're so inclined. Or organize it by how each yarn unit is organized: put all the spools together, and all the cones, and perhaps hang all the skeins in artistic bundles.

You can store it on shelves (open or closed), in ice cream tubs or fancy wire bins, in handmade baskets or old plastic laundry baskets or fruit crates. You may *not* store it in various boxes neatly covered with wallpaper left over from your kitchen or with self-sticking shelf paper so they will all match; the time making the boxes presentable would be much better spent weaving, or at least thinking about weaving.

• The little odd bits left over from actually making something can go in shoe boxes or plastic storage trays or egg cartons (if they're really little). Thrums are something else again because while their individual elements are little, they often add up to rather large wads. You can chain them if they're long, since they might sometime make a short warp for a little bitty loom that you might someday own, or put them in

old transparent bread sacks or tidy Ziploc bags, or secure them with rubber bands and toss them casually into a thrums basket.

Maybe you could even organize your yarn chronologically according to when you bought it; this would lend itself to plans about using up the old stuff first. It would also be nostalgic and offer insights into personal and social history (such as that shade of green!).

If you don't have a single location to keep all your yarn in, but rather spread it around the house in a drawer or closet here, an under-the-bed storage container there, then by all means consider organizing it according to that which you really, really plan to use soon and that which will not be required in this lifetime. Or alternatively, by that which is very pretty and an inspiration to look at, and that which is ugly beyond any recollection of why you bought it in the first place (which very likely intersects with the chronological method).

All these suggestions are only the tip of the iceberg when it comes to storage. We will not talk about grease fleece, washed fleece, tops, rolags, punis, linters, mawatas, and especially-interesting dryer lint, for many of the yarn storage schemes apply to these items as well. But you must also deal with small tools, such as all the reed hooks which are not your favorite one, and the bobbins

that flop or bind, as well as the bobbins that still have a very great deal of very fine yarn from a very-long-ago project left on them, which must be wound off if you're to use that bobbin again, and then what will you do with the yarn.

There are also workshop notes, planning notebooks, journals of your creative growth, clippings from old fashion magazines that show capes and suits that actually could be woven using yarn that you actually own, if you wanted to, and photographs from old calendars that have wonderful color sequences to be emulated (except that you'd have to buy more yarn, or take up dyeing). There are yarn samples that need to be categorized according to whether they are or are not obsolete and, if the latter, whether they are or are not useful for color inspiration or for keeping a young child happy on a rainy afternoon, if you happen to get a young child around and the television happens to blow up.

And what about the magazines?

I know a true story about a wise Osage Indian woman in northeastern Oklahoma, a wealthy widow whose very large home was simply packed with a great many interesting things (though they had nothing to do with weaving). When she died, her instructions were that the bulldozers should come knock the house and all its contents down and bury the lot. And it was done. Whether this has to do with taking it with you, or not taking it with you, or with creating a twentieth-century Indian burial mound to confound future archaeologists, is moot. It has merit. ♦

LINDA LIGON is *publisher of HANDWOVEN and recently participated in her first garage sale.*



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(We have assumed the New Zealand tour formerly organized by Mary Fletcher Tours.)

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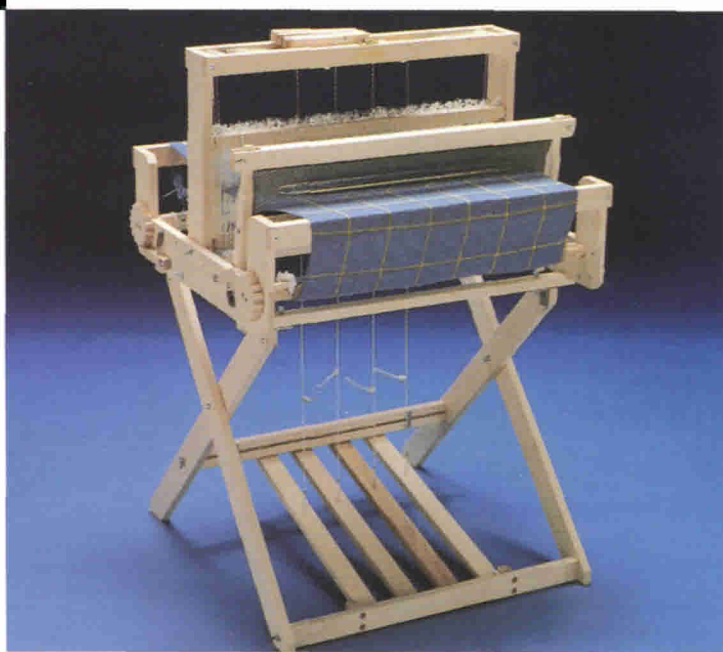
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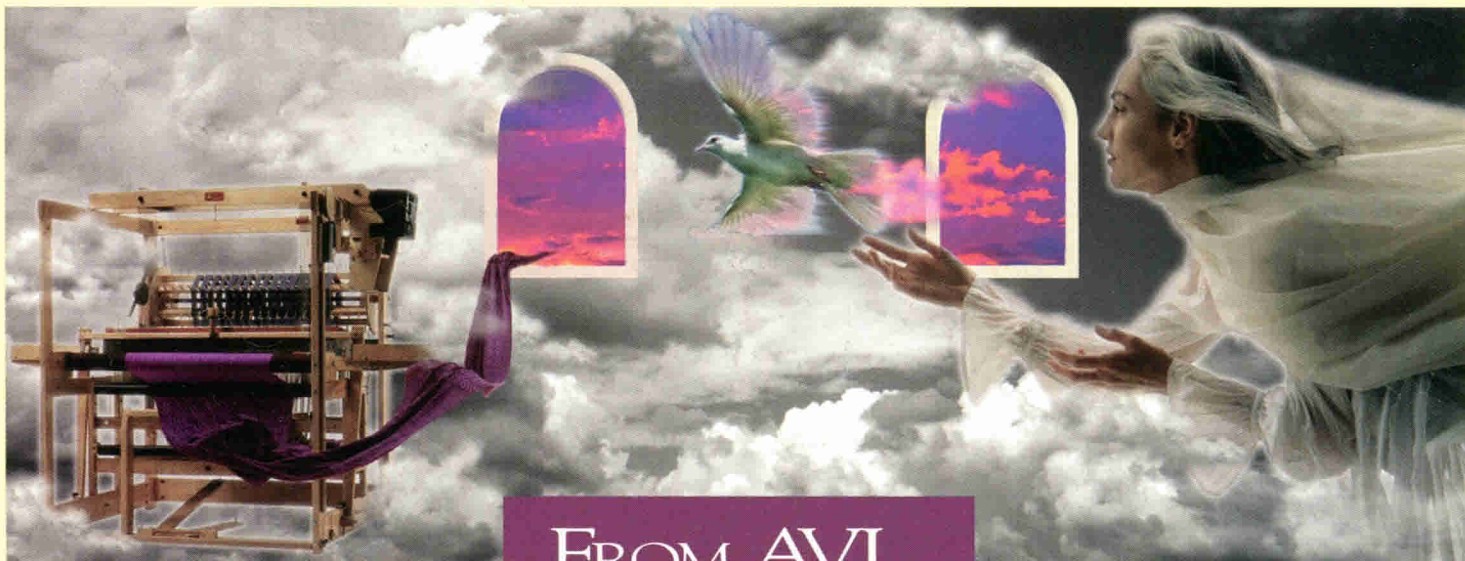
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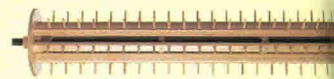
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