INFLUENCES ON SHAKERS ▪ BEYOND BASIC CABINETS ▪ DESIGNERS' NOTEBOOKS

home furniture

BENT PLYWOOD BUILDS POSTURE

09>
SEPTEMBER 1997

$6.95 U.S.
$7.95 Canada
£4.25 U.K.

74851 64537 6

home furniture

AUGUST/SEPTEMBER 1997 NO.12

On the cover: *Using the same bending form for both the seat and the back in his plywood and maple chair, Gary Nakamoto created a comfortable and ergonomic design. See p. 28. Photo by Zachary Gaulkin.*

Taking Kitchen Cabinets Beyond the Basic Box, p. 64

DEPARTMENTS

6 Letters

10 On Display
In North Carolina, a walk through Southern furniture history

14 Calendar

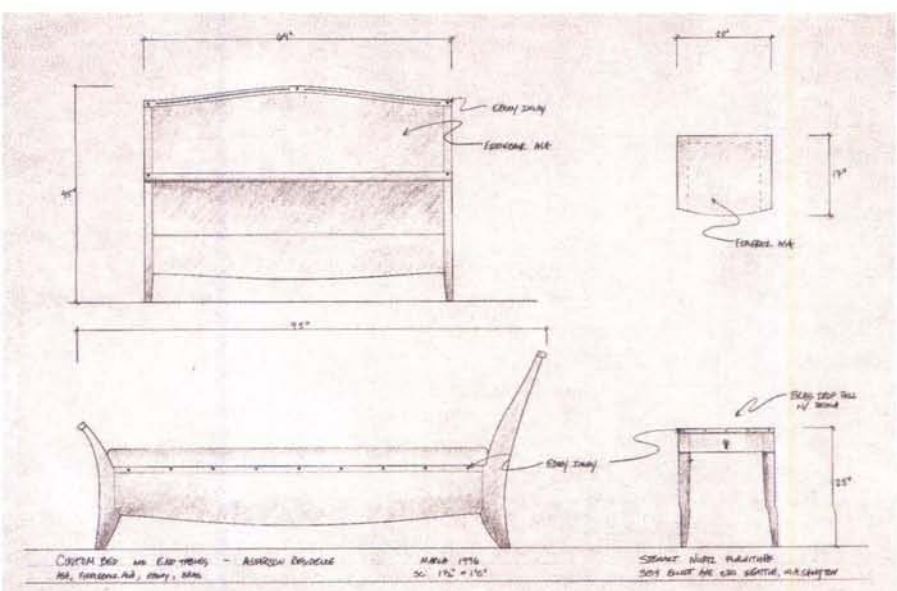
18 The Drawing Board
Getting the maximum out of medium-density fiberboard

70 Fine Furniture Timbers
Rediscovering tenacious mesquite

74 Materials
A good sense of leather

78 About the Authors

82 Furniture Stories
Legend on a bicycle: preserving the traditions of Chinese furniture



Peeking over the Designer's Shoulder, p. 44

Home Furniture (ISSN 1076-8327) is published six times a year, by The Taunton Press, Inc., Newtown, CT 06470-5506. Telephone (203) 426-8171. Periodicals postage paid at Newtown, CT 06470-5506 and at additional mailing offices. U.S. newsstand distribution by Curtis Circulation Co., 730 River Road, New Milford, NJ 07646-3048 and Eastern News Distributors, Inc., One Media Way, 12406 Route 250, Milan, OH 44846-9705. GST #123210981.

FEATURES

22 The Origins of Shaker Furniture
Cabinetmakers brought their skills and their designs into the communities from the outside world
BY JEAN M. BURKS

28 A Bent-Plywood Chair Built for Good Posture
BY GARY NAKAMOTO

30 Customizing the Home Office
Computer work can be easier on the mind and body with a desk designed around work habits
BY PHILIP PONVERT

36 Breakfast Table Blossoms from Two Designs
BY JOHN H. ROSS

38 An Unabridged Look at Dictionary Stands
Forget the Net—a smart stand-up desk is all you need
BY LES CIZEK

42 Tabletop Inlay Mimics Legs
BY JOE EISNER

44 Peeking Over the Designer's Shoulder
A look into the design notebooks of six prominent furniture makers
BY JONATHAN BINZEN

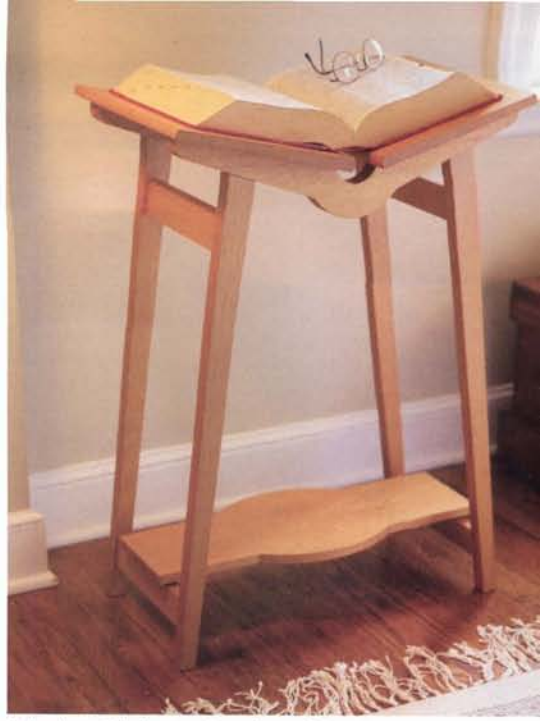
52 Finding One's Legs On a Demilune Table
BY BRIAN NEWELL

54 Bending Wood to Fit a Human Form
BY JOHN BICKEL

58 Inspiration from a Japanese Castle Wall
BY JEANNE HYYPIO

60 Two Chinese Tables Balance Delicacy and Strength
BY RANDOLPH DEMERCADO

64 Taking Kitchen Cabinets Beyond the Basic Box
Furniture and architecture blend in Hiro Morimoto's inviting kitchens
BY JONATHAN BINZEN



A Look at Dictionary Stands, p. 38

Inspiration from a Castle Wall, p. 58

A Breakfast Table Blossoms, p. 36

Postmaster: Send address changes to *Home Furniture*, The Taunton Press, Inc., 63 S. Main St., P.O. Box 5506, Newtown, CT 06470-5506. Printed in the USA

letters

SHOULD *HOME FURNITURE* SERVE DETAILED PLANS?

In the letters section of *HF* #11 (June/July 1997), Arnold Nelson complains that the items featured in the magazine cannot be built because there is only vague or insufficient information about each piece. I say, why go to a four-star restaurant and complain that they don't serve hot dogs? There are plenty of magazines readily available to woodworkers of every caliber.

Each woodworking magazine has its own style and appeals to a specific niche. Mr. Nelson says *Home Furniture* is only suitable for either "professional furniture builders or consumers who wish to commission custom-made furniture." Not so. I've subscribed to *Fine Woodworking* for decades, but even that does not appeal to the niche of furniture design represented by *Home Furniture*. I don't expect (or want) *Shopnotes*, for example, to feature the finest elite woodwork, but by the same token, I don't expect *Home Furniture* to provide full-sized plans for birdhouses or lawn ornaments. Can I make every piece featured in *Home Furniture*? Absolutely not. And that is part of the reason why I value it. It feeds my imagination and that's precisely what will improve my craftsmanship.

—Juan Christian, Brush Prairie, Wash.

As a charter subscriber to *Fine Woodworking* and an appreciative reader of *Home Furniture* I had no choice but to respond to Arnold Nelson's comments. I have been a full-time designer and builder of custom furniture for 22 years. I do not pretend to be in love with everything I see in your magazine. But I am encouraged and inspired by every issue to know others are meeting challenges of dealing with clients, being true to their own vision and building things to the best of their ability.

This is not a how-to magazine. It is one thing to learn from the experience and expertise of others. It is something else, namely theft, to reproduce their creative works in detail, and it is incredible to me that someone would be angry with your magazine for not giving them the cut lists and other specifics to commit the crime.

—Roger Deatherage, Houston, Texas

All right, all right. *Home Furniture* is not a perfect magazine. It could have more of this, less of that. I subscribe to it, and have from the first issue, because almost no one else is talking about *why* a piece is. It's easy to find magazines that will describe how to draw, build and finish a piece of furniture or other piece of wood; what I appreciate about *Home Furniture* is that it exists for furniture makers to talk about how they made their design decisions, why a particular piece wound up looking like it did. In fact, the better they're able to articulate the subtle designing process, the more I like it.

—Bill Houghton, Sebastopol, Calif.

Arnold Nelson takes the old criticism of the magazine to new extremes: "a catalog for one-of-a-kind furniture ... so vague that you cannot hope to

home furniture

EDITOR
Timothy D. Schreiner

ART DIRECTOR
Mary Terrizzi

ASSOCIATE EDITORS
Jonathan Binzen, Zachary Gaulkin, Jefferson Kolle, Marc Vassallo

COPY/PRODUCTION EDITOR
Lawrence Shea

ART ASSISTANT
Jody Hankinson

EDITORIAL ASSISTANT
Jennifer Matlack

EDITOR-IN-CHIEF
John Lively

DESIGN DIRECTOR
Susan Edelman

CORPORATE CIRCULATION DIRECTOR
Douglas Newton

PUBLISHER
James P. Chiavelli

ADVERTISING SALES MANAGER
Norman Sippel

SENIOR NATIONAL ACCOUNT MANAGER
FINE WOODWORKING
Dick West

NATIONAL ACCOUNT MANAGERS
Tom Brancato, David Gray, Linda Abbett

SENIOR ADVERTISING COORDINATOR
Kathryn Simonds

ADVERTISING SECRETARY
Hilda Fernandes

TO CONTACT *HOME FURNITURE*

Telephone: (800) 283-7252
(203) 426-8171
Fax: (203) 270-6751
E-mail: hf@taunton.com

CUSTOMER SERVICE:
Orders: (800) 888-8286
Other inquiries: (800) 477-8727
E-mail: hfservice@taunton.com

ADVERTISING SALES: (800) 283-7252 x 512
E-mail: hfads@taunton.com

TAUNTON TRADE CO:
Retail Sales: (800) 283-7252 x 265

build the furniture yourself."

This is simply untrue. I should know; when I read Nelson's letter I was sitting in my rendition of the Stickley settle from *HF* #4. True, I did not make an exact duplicate. Mine is eight inches shorter to fit our living room, with other dimensions altered to keep the piece in proportion. It's made of cherry instead of quartersawn white oak. I used standard-sized removable cushions for ease of cleaning because I have two small children.

There are two lessons here. First, there really is value in presenting finished furniture as a source of inspiration. Second, detailed construction information is not always needed. It takes no great sophistication to design mortise-and-tenon joinery that will hold the piece together.

Home Furniture is not perfect, but it's pretty good at what it does. It would be a shame to allow criticism from those who neither understand nor appreciate its unique mission to deflect it from its course.

—Eric Hamilton, Durham, N.C.

I would suggest that Mr. Nelson take some of the ideas presented in *Home Furniture* and incorporate them into his own designs. This, I feel, is how a designer benefits most from viewing works of others. Using new ideas that you find pleasing in your own designs allows for growth in all designs. Each furniture period is made of many pieces with similarities, not copies. And as each piece evolves from a collection of ideas, so too evolves the next period. I urge the editors to keep the present format of this fine magazine with the knowledge that by providing a forum for the sharing of ideas, the magazine can become an integral part in the evolutionary process.

—Gary Straub, Columbia, Mo.

ARNOLD NELSON HAS AN IMPORTANT POINT

I was immediately struck by Arnold Nelson's letter. I don't know how many of your readers fall into the novice or intermediate category, but for those of us who do, his comments were right on point.

Home Furniture, like many new publications, appears to be hunting for its niche in the market. If novice and intermediate woodworkers are a substantial segment of your target market, I'd suggest the following:

1. Select at least a few pieces each issue that we can afford, use and build. For example, I plan to build bathroom cabinets based on a dresser that appeared in one of your earlier issues. As to the level of detail, I don't want plans or measured drawings. Instead, a bit more detail could explain why, for example, a particular technique was chosen.

2. Include more articles or features on specific techniques or methods. One issue contained an excellent discussion of selecting height to width dimensions based on the golden mean. We salvaged a poorly sized wall opening by relying on that article, and the room would never have looked as good without that input. Similarly, some issues have featured sidebars on unusual techniques or materials. These hardly make the magazine a how-to-do-it affair, but they do serve to educate those of us who need it.

3. Limit the largely esoteric and emotional debate over what styles to feature. Use the space instead to feature a wide variety of styles, from all periods. I don't care what style a piece is, as long as I like the way it looks and functions. Your magazine highlights the fact that the styles run into one another at the edges, and that good woodworkers frequently incorporate foreign elements that make their works less than pure, but more beautiful.

—Joel Handelsman, Round Lake, Ill.

Submitting an article. *If you have an interesting story about how you designed a piece of furniture, we'd like to hear about it. Send a letter with photos to* Home Furniture *Editorial, 63 S. Main St., P.O. Box 5506, Newtown, CT 06470-5506. We pay for articles we publish and return materials we can't use.*

Taunton PUBLICATIONS
for fellow enthusiasts

The Taunton Press: Paul Roman, chairman; Peter Chidsey, president; Diane Patterson, secretary. **Corporate Editorial:** John Lively, editor-in-chief & vice president. *Books:* Carolyn Mandarano, editor; Ruth Dobsevage, Peter Chapman, Thomas C. McKenna, Robert Olah, Jennifer Renjilian, Diane Sinitsky. *New Products:* Suzanne Roman, editor; Jefferson Kolle, Marc Vassallo. **Human Resources:** Carol Marotti, director; Linda Ballerini, Christine Lincoln. **Finance/Accounting:** Janice A. Roman, chief financial officer; Wayne Reynolds, controller; Sarah Roman, Elizabeth Conklin, Jennifer Glass, Carolyn Kovaleski. *Accounting:* Patrick Lamontagne, Irene Arfaras, Keith Chapman, Mary Sullivan, Andrea Henchcliffe, Carol Diehm, Margaret Bafundo, Dorothy Blasko, Susan Burke, Lawrence Rice, Gayle Hammond, Lydia Krikorian, Lorraine Parsons, Elaine Yamin. **Corporate Design:** Susan Edelman, director; Laura Bergeron. *Book Art:* Jodie Delohery, Amy Bernard, Susan Fazekas, Thomas Lawton, Lynne Phillips, Henry Roth, Carol Singer, Cynthia Smith, Kenneth Swain, Rosalie Vaccaro. *New Product Design:* Mary Terrizzi, Jody Hankinson. *Photography:* Boyd Hagen, Anthony Phillips. *Promotion:* Philip Allard, Francesca Arminio, D. J. Arneson, Wendy Bowes, Julia Brine, Mary Beth Cleary, Leigh Haeger, Jennifer Winston. **Corporate Services:** Thomas Luxeder, director; Jane Torrence. **Fulfillment:** *Client Services:* Patricia Williamson, Carolyn Arneth, Kathryn Dolson, Holly Smith, Eileen Swirsky. *Order Processing:* John Comerford, Nancy Brown, Barbara Lowe, Eileen McNulty, Dawn Teixeira, Marylou Thompson. *Customer Services:* Patricia Malouff, Donna Baxter, Christi Heuer, Penny Lefferts, Karin McMahon, Jennifer Severino, Barbara Smith. *Data Entry:* Carole Ando, Bonnie Beardsley, Margaret Fainer, Madelaine Frengs, Tracy LeBrun, Debra McCormack, Gina Pabis, Andrea Shorrock. *Distribution:* Paul Seipold, Mary Ann Costagliola, Deborah Greene, Linnea Ingram, Brian Leavitt, Aaron Lund, Frederick Monnes, Jonathan Pond, Elsie Rodriguez, Alice Saxton, Eileen Sheehan. **Manufacturing:** Kathleen Davis, director; Kathleen Donovan. *Prepress:* Austin Starbird, John Garofalo, Stephen Roma, Patricia Sigetti, Deborah Cooper, William Bivona, David Blasko, Richard Booth, James Chappuis, Mark Coleman, Lisa DeFeo, Tina Foster, William Godfrey, Florence Nichols, Joseph Petrahai, Linda Reddington, Martha Stammer, Chansam Thammavongsa, David Kenney, Amy Evon, Kathy Martin, Monica Murphy. *Print Production:* Dee Flanagan, Nicole Anastas, Lynda Morris, promotion; Thomas Greco, Deborah Baldwin, Michael Gyulay, books; Philip VanKirk, John Cavallaro, Tracie Pavlik, magazines. *Video:* Craig Umanoff, Thomas Menard. **Management Information Systems:** Robert Peters, director; Brendan Bowe, Arthur Caron, James Courtright, Maurice Downey, Gabriel Dunn, J. Larry Kinnear, Marjorie Omalyev, Roger Seliga. *PC Applications:* Heidi Waldkirch, Robert Nielsen, Andrew Wiles. *PC Systems:* Margaret Archer, Joanne Bisson, Rita Myers, Lisa Northrop. **Operations:** *Purchasing & Facilities:* William Schappert, Christopher Myers, Peter Bishop, Michael Capalbo, Lionel Jones, Jeannette Pascal, Patricia Rose, Charles Hollis, Jeffrey Meslin, Aaron Nobel, Susan Nerich, Oscar Carranza, Alvin Jack, Lincoln Peters. *Cafeteria:* Donna Freeman, Geraldine Benno, Diane Nutter, Norma-Jean Taylor. **Taunton Direct:** Claudia Allen, Maryann Diette, Brenda Hamilton, Dennis O'Brien, David Pond, Megan Sangster, Jeanne Todaro. **Taunton New Media:** Roy Swanson, director; Christopher Casey, Sean Messenger. **Taunton Trade Company:** Dale Brown, president; Thomas Johnson, Frances Allen, John Bacigalupi, Peter Bill, Barbara Buckalew, Linda Yurchishin.

BY EMYL JENKINS

A Walk Through Southern Furniture History

Legend has it that after Joseph Downs' 1949 Williamsburg Forum talk on American furniture, someone asked him why he had not touched on Southern furniture. Downs matter-of-factly replied that no furniture of any great merit had been made south of Baltimore.

Most took his statement for gospel. But not Frank Horton, then a young scholar working at Old Salem, the fledgling Moravian village restoration in Winston-Salem, North Carolina. Probably a little out of spite, Horton and his mother, Theo Taliaferro, decided to turn their attention to collecting the best examples of Southern furniture, art and decoration. By the early 1960s their remarkable collection had already outgrown their home.

As luck would have it, at the same time a vacant eyesore of a grocery store on the edge of the charming Old Salem village needed an occupant. And so, in 1965, MESDA, as the Museum of Early Southern Decorative Arts would be called, opened.

Although it sported an austere exterior, the small building lived and breathed history inside. Hand-hewn 18th-century paneling from Georgia, gleaming silver from South Carolina, simple and primitive stoneware crocks made in rural North Carolina joined the amazing furniture, plain and fancy, that Horton had gathered from Maryland to Kentucky to Alabama.

From that noble, but humble beginning, MESDA has grown to become a complex of museums, with its new 1997 addition aptly named The Frank L. Horton Museum Center. MESDA is now so impressive that it is often referred to as "a little Winterthur."

Today, 21 period rooms provide visitors a walk through Southern life, ranging from an austere medieval-influenced, 17th-century Virginia great hall furnished with an exceptional turned and paneled oak, walnut, and pine court cupboard and the usual uninviting, but sturdy, wainscot armchair, to an elegant and much more livable antebellum plantation parlor from Charleston, South Carolina. As you step progressively through the centuries, time falls away as each furniture style evolves naturally and logically.

Period lighting, glazed windows, and inviting fireplaces add realism to the perfectly reinstalled architectural details brought to this one site from the South's swamplands and its

The museum's Chowan room shows North Carolina furniture design circa 1755 with a simple gateleg table, a boldly turned armchair and a bun-footed secretary and bookcase.

Photos: Museum of Early Southern Decorative Arts, Winston-Salem, N.C.

READER SERVICE NO. 25

READER SERVICE NO. 14

READER SERVICE NO. 50

READER SERVICE NO. 54

READER SERVICE NO. 801

READER SERVICE NO. 64

westernmost mountains. Here, three centuries of ever-changing lifestyles gleaned from the South's vastly different geography are mirrored in the furniture of each region, be it quirky or sophisticated.

Among the quirky pieces is William Shearer's walnut Chippendale secretary bookcase, circa 1805, from western Virginia—a piece unlike any secretary bookcase ever made in New England. The handles on its combination serpentine/blockfront drawers are attached vertically, not horizontally. And from the vast Southern Piedmont region are many Federal pieces, typical in form, except they are inlaid with folk art like trailing vines, bold geometric designs, and even an occasional chicken, denoting their provincial origins.

In contrast, much of the furniture from Southern cities such as Charleston and Baltimore is as well-crafted and sophisticated as pieces made in Philadelphia and Boston. Those pieces show intricate fretwork, complicated moldings, masterful carving and sophisticated forms that more than vindicate Frank Horton's original intention to prove the virtues of Southern-made furniture.

Of additional particular interest to today's furniture maker are the native woods the Southern craftsmen of yore used to fashion their pieces. Years of research has gone into the correct identification of these woods (yellow pine, cypress, black walnut, to name a few), as well as the joinery and woodcrafting techniques that distinguish Southern pieces from those made in other regions of the country.

Realizing that serious historians, present-day craftsmen and decorative arts students crave more information than can be gleaned from viewing room settings, Frank Horton also established MESDA's remarkable Research Center. There, at your fingertips, are over 15,000 photographs of regional objects, information on more than 60,000 Southern artisans working in some 125 trades and some 5,000 books relating to Southern decorative arts and history. It is supplemented by a seemingly endless microfilm library, *plus* a storehouse of objects not on display in the museum proper.

In addition to the remarkable overview of Southern life housed within the museum's walls, outside, Old Salem awaits. Here, visitors can leisurely and effortlessly wander the timeworn streets of this beautiful, fully restored original town, and see, firsthand, late 18th- and early 19th-century everyday community life.

Year-round, the gardens and meadows are irresistible. Friendly costumed guides welcome you into the village's homes, filled, of course, with period antiques. In the commercial buildings, craftsmen, seemingly oblivious to the approaching 21st century, continue ancient skills: making violins and candles, weaving, baking bread. All told, many visitors find Old Salem's manageable size and authentic simplicity more to their liking than larger, more sprawling Colonial Williamsburg.

Hour-long, guided tours of MESDA begin on the hour and half-hour Monday through Saturday. The first tour begins at 9:30 a.m.; the last begins at 3:30 p.m. Sunday afternoon tours begin at 1:30, the last one starts at 3:30. For more information about MESDA and Old Salem, call (910) 721-7300; for automated information, call 1-888-Old Salem.

The circa 1769 Summers Parlor at MESDA is indicative of the fine furniture and architectural millwork that was made in the cosmopolitan seaport of Charleston, South Carolina.

Emyl Jenkins is the author of several books on furniture, including Reproduction Furniture *and* Guide to Buying and Collecting Early American Furniture *(Crown Books).*

ARIZONA

Craft as Furniture

To August 30. Obsidian Gallery, Tucson

A wide range of craftsmen and industrial designers will present tables, chairs, lamps and fiberworks in this multimedia show. Call (520) 577-3598.

CALIFORNIA

Charles Rennie Mackintosh

August 3-October 13. Los Angeles County Museum of Art, Los Angeles

The latest stop for this large touring exhibit of the furniture, art and interiors of the noted Scottish designer. Call (213) 857-6000.

American Decorative Arts Forum

De Young Museum, San Francisco

Anna T. D'Ambrosio will lecture September 9 on furniture from the Munson Williams Proctor Institute. On October 14, the subject will be the work of L. and J.G. Stickley. Call (415) 499-0701.

DELAWARE

Craft Festival at Winterthur

August 30-31. Winterthur

Over 180 craftsmen will participate in this juried show which includes a woodturning exhibition. Call (800) 448-3883.

HAWAII

Woods of Hawaii: 5th Annual Statewide Furniture & Woodworking Exposition

Aloha Tower Marketplace, Honolulu

Works by Hawaiian woodworkers from Hawaiian woods are featured in this show sponsored by the Hawaii Forestry Industry Association. Call (808) 239-5563.

ILLINOIS

Valley Woodland Expo

August 15-16. Marshall-Putnam Fairgrounds, Henry

This celebration of everything wood will include work from a variety of craftsmen, seminars, and demonstrations of woodworking such as chairmaking and joinery. Call (309) 364-3979.

MAINE

Useful Designs: Maine Chairs from Tool to Utility

To September 30. The Blaine House, Augusta

Chairs, benches and stools from a number of Maine furniture makers, including Duane Paluska and Steven Thomas Bunn, will be shown in settings throughout the historic Governor's Mansion. Call (207) 287-2724.

MASSACHUSETTS

Close to Home

Through August 31. Fuller Museum of Art, Brockton

An installation by studio furniture artist Stephen Whittlesey. Call (508) 588-6000.

Order and Elegance: Masterpieces of Federal Furniture from Coastal Massachusetts

Through December 31. Peabody Essex Museum, Salem

On Wednesday, Fridays and Saturdays at 1, this exhibit is the starting point for a gallery talk and tour that includes a visit to a nearby Federal-era home. Call (508) 745-9500.

This Is the Modern World: Furnishings of the 20th Century

To September 1. Museum of Fine Arts, Boston

A collection of furniture and decorative arts, including chairs by Marcel Breuer and Arne Jacobsen, that explore how culture and technology have influenced the look of everyday objects.

Furniture/Wood Centennial Exhibition

September 13-November 2. Society of Arts and Crafts, Boston

As part of a yearlong celebration, this craft organization presents an exhibit of work by established artists, as well as a separate exhibit of emerging artists (September 16-October 31) with work from students and recent alumni of furniture/wood programs across the country. Call (617) 266-1810, or (617) 345-0033 for information about the emerging artists show.

NEW HAMPSHIRE

64th Annual League of New Hampshire Craftsmen's Fair

August 2-10. Mt. Sunapee State Park, Newbury

With more than 150 craftsmen presenting a variety of works, the fair features craft demonstrations, musical performances, and "Living with Crafts," a selection of works in room settings. Call (603) 224-3375.

NEW YORK

Pritam & Eames Gallery

Through August 5. East Hampton

"In Case," a group exhibition of boxes. August 9 to September 23, there will be a show of work by furniture maker Judy Kinsley McKie. Call (516) 324-7111.

Making His Mark: The Work of Shaker Craftsman Orren Haskins

Through November 2. Shaker Museum and Library, Old Chatham

This exhibit recreates the life and work of a Shaker master cabinetmaker through more than 30 objects he made between 1833 and 1890, including sewing desks, cabinets and woodworking tools. Call (518) 794-9100.

NORTH CAROLINA

Country Workshops

Marshall

John Brown teaches a workshop July 28-August 1 on making Welsh stick Windsor chairs, and Dave Sawyer teaches advanced Windsor chairmaking August 4-8. The two craftsmen will lead a symposium August 1-3 that examines different approaches to making Windsors. Call (704) 656-2280.

PENNSYLVANIA

Welcome Back

August 1-30. Snyderman Gallery, Philadelphia

Andy Buck's polychromed poplar piece "Drummer" (shown in photo below) will be among the works in this group show of leading studio furniture artists who are now again being represented by this gallery. Other participants include Garry Knox Bennett, Wendell Castle, Michael Hurwitz and James Schriber. Call (215) 238-9576.

WASHINGTON

Northwest Fine Woodworking Gallery

To September 14, Seattle

Classical woodworker Ross Day, a student of James Krenov, will be showing his tables, chairs, mirrors and cabinets. From September 18 through October, the gallery will show tables, screens and cabinets featuring the marquetry and inlay of Santa Barbara furniture maker Paul Schürch. Call (206) 625-0542.

CALL FOR ENTRIES

Furniture of the '90s: 1997/1998

Entries due October 31, 1997

This competition for handcrafted furniture (functional or nonfunctional) is sponsored by ASOFA (American Society of Furniture Artists), the Parsons School of Design and others. For a prospectus, send a SASE to Furniture of the '90s: 1997/1998, ASOFA, P.O. Box 35339, Houston, TX 77235-5339.

Listings in this calendar are free. Send complete materials, including a phone number to call for more information, to ***Calendar,*** Home Furniture, *63 S. Main St., P.O. Box 5506, Newtown, CT 06470-5506. The deadline for the October/November issue is July 10.*

Photo: Courtesy of Snyderman Gallery, Philadelphia

craftsman's corner

Furniture Buyers:

When you call *craftman's corner* advertisers, please tell them you saw their ad in *Home Furniture*.

the drawing board

BY ROSS DAY

Getting the Maximum Out of Medium-Density Fiberboard

At the heart of building a piece of furniture is finding a way to develop a design that has form, nice lines, good proportions and a sense of wholeness. In addition, it should weave aesthetics, workmanship and structure in a way that appeals to you.

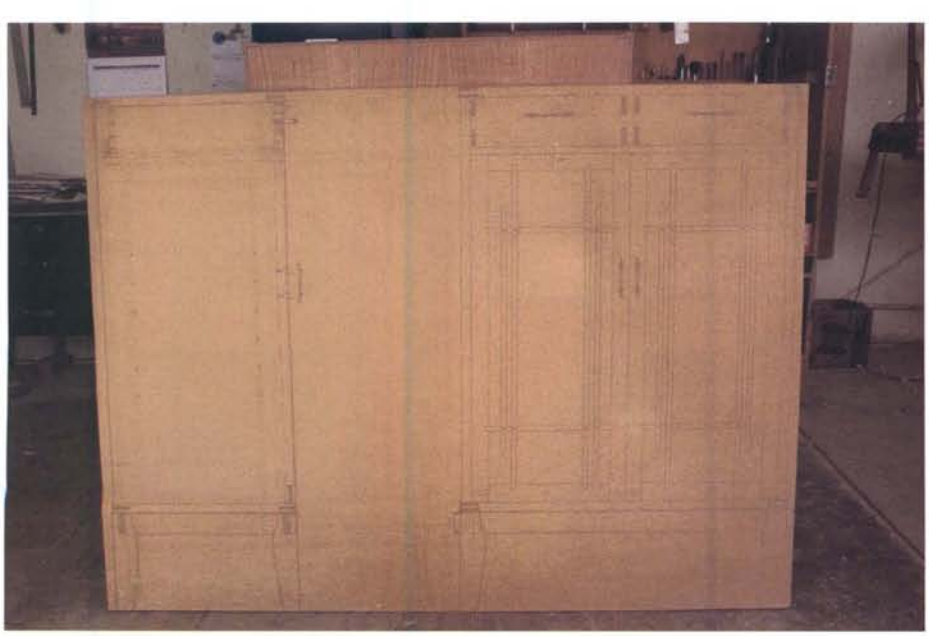
Some people advocate using classic mathematical formulas such as the golden section, but I feel that this is a very mechanical and stiff way to design. It's fine if you're building a Greek temple or a very traditional, architectural piece of furniture, but it is much more important to develop trust in your eyes and your gut. I once read about someone who analyzed several pieces of James Krenov's furniture using the golden section as a yardstick. They reported that every principle of this system of design had been violated. So much for formulas.

I have developed a process that works very well for me. I start with rough sketches for a loose, free flow of ideas and then move to a more refined sketch or scale drawing for more clarity and definition. In the end, I draw a full-scale layout on ¼-inch medium-density fiberboard (see the photo below left). I do front and side views, and also a top view if needed.

The finished piece. Using ¼-inch MDF to work out his design, the author was able to visually construct this cabinet before he built it.

Why MDF? After several years of drawing full-scale on paper and witnessing its degeneration with wrinkles, folds, stains, rips and aging, I knew there had to be a better way. One day I didn't have a large roll of paper to draw on, so I used MDF. When I used paper, I had to tape it to a hard surface anyway. So I immediately noticed how easy it was to draw directly on the MDF. Storage doesn't take up much room and it's easy. I just slip it into a plywood bin (see the left photo on p. 20).

It is great to be able to simply pull out the drawing to refer to or to show to a client. You can lean it against a wall, stand back and look at the changes that you've made. This is also a great way to work out thicknesses, widths and heights, along with details and the joinery. It's a complete aesthetic and technical record of your design. It's handy and, unlike paper, you're not



A maximum-density sketch pad. MDF's stability and durability makes drawing and viewing full-scale designs a breeze. It doesn't wrinkle or have to be unraveled like paper and it can be propped up against anything for a look.

Top photo: Courtesy of Pritam & Eames Gallery, East Hampton, N.Y.; bottom photo: Ross Day

craftsman's corner

Big bin. A plywood bin serves as a kind of extra-large filing cabinet, and makes storing MDF sketches easy.

distracted by wrinkles or rips.

By working all these things out during the layout process, you have already built the piece mentally. Thinking ahead helps to eliminate costly mistakes down the line. And if it is not quite clear in the layout how something will look in three dimensions—a curved leg at a three-quarter view, for example—you can do a partial mock-up out of poplar or alder. This enables you to check yourself and make changes if needed. However, all the elements of the piece don't need to be figured out at this stage. In fact, with some elements, if you have questions it's a good idea to wait and answer them once you have the actual piece in front of you. That way, you are able to see the design more clearly. Then if necessary, you can construct mock-ups to help you make the right choice. Drawer pulls are a good example of this.

Because MDF is stiff, transferring curved lines for templates, jigs or forms is also easy. You simply overlay tracing paper on the portion you want to copy, trace the lines, apply it with spray adhesive to cardboard for a template, or ½-inch MDF for a shaper jig, and then just work to your lines.

If you want to see the piece in three dimensions instead of as a flat layout drawing, simply cut the MDF on the tablesaw. Cut along the front and side views of the drawing and then clamp them together with corner blocks. I find this much easier to do than finding cardboard or scrap lumber to build a full-scale mock-up. When I'm done, I can store it away.

I used MDF and made a partial mock-up when I built a small cabinet for a furniture show. I wanted to use exposed joinery in interesting ways to highlight the puzzle quality of furniture construction and to create visual patterns. I decided to use a small quantity of Japanese oak that I had, so the dimensions of the piece were somewhat dictated by the material at hand. One thing I learned moving from the smaller drawing to the full-scale layout is that dimensions and details that looked good at small-scale didn't when full-sized. The cabinet was too wide, too deep and the base was too short.

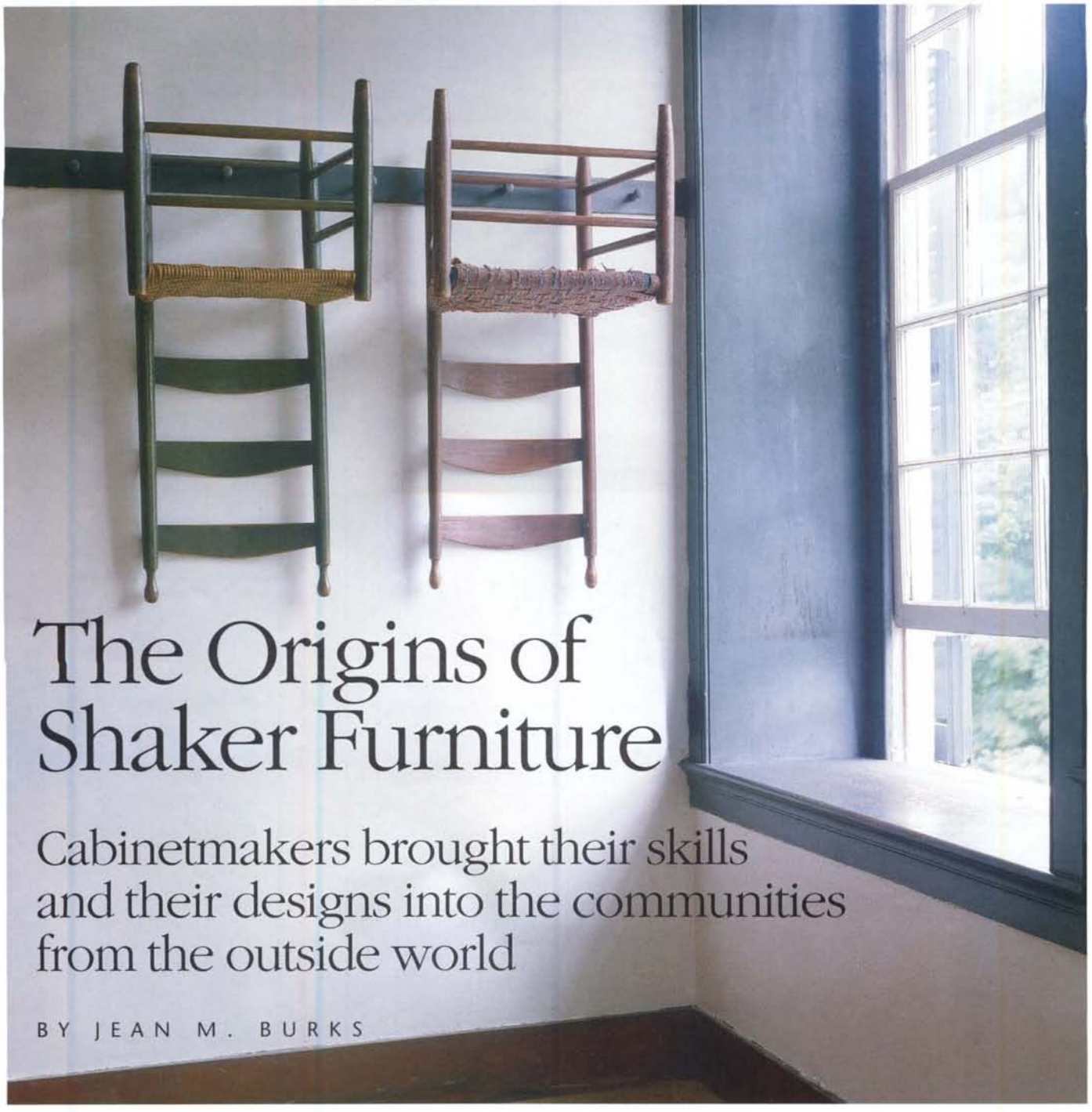
Drawing in pencil on MDF made it a lot easier to make corrections. The design changed quite a bit from the first draft. But even after erasing lines and changing the dimensions until they looked right, something was still missing. I decided that more interest was needed in the detailing. In the process of working this out, I changed the joinery from mortise-and-tenon to slip joints. To see whether this worked, I made a partial mock-up (see the photo below). I also decided to change the latticework in the doors to go outside the panels, and into the frames themselves. By using MDF and a partial mock-up, it was a lot easier to see the changes that had to be made. In turn, this process helped to make the cabinet a much more visually interesting piece.

Ross Day teaches furniture design in Seattle, Wash. His work is sold through Seattle's Northwest Gallery of Fine Woodworking.

Making a mock-up. A good way to see whether your design works is by making a partial mock-up out of poplar or alder.

Photos this page: Jonathan Binzen

Let Reader Service work for you.
Receive information direct from your choice of advertisers by using the Reader Service form located next to the inside back cover.



The Origins of Shaker Furniture

Cabinetmakers brought their skills and their designs into the communities from the outside world

BY JEAN M. BURKS

When I started work as the Curator of Collections at Canterbury Shaker Village, in New Hampshire, one of my first jobs was to sort through a building once occupied by a recently deceased Shaker sister. The 6,000-square foot, 22-room building was packed with everything from furniture to thimbles. The furniture was, to my inexperienced eyes, Queen Anne, Chippendale and Federal in style, and it included tables, chests over drawers,

Derived from English ladderbacks, Shaker chairs were lightweight and portable. Woven wool seat tape was removable for washing, and the chairs were often hung upside down so dust wouldn't gather on the seats.

Photos: Timothy Rieman, unless otherwise noted

and lots of cases of drawers. Due to the similarity to worldly country furniture, I assumed most of it was made outside the community, until I noticed subtle differences in the designs.

To identify the distinctive elements of Shaker design, I learned about their community ideals, their institutional needs and their products. I examined the design and construction of signed Shaker furniture, I read Shaker documents, and I talked to the last remaining Eldresses.

It became clear that although the Shakers lived apart from "the world," as they called nonbelievers, their furniture was not created in a vacuum. No one was born a Shaker—celibacy was considered an important virtue—and early Shaker craftsmen were trained in "the world" before converting to the faith. These cabinetmakers brought their skills, tastes and awareness of current styles with them into the Shaker community and influenced the direction of Shaker design during the 19th century. The Shaker style, is, then, a result of worldly design traditions inflected with a distinct Shaker sensibility.

Ideologically, the Shakers' religious beliefs required that their products reflect perfection; functionally, their communal society demanded furniture that met the needs of many brothers and sisters.

The spare look of early Shaker furniture comes not only from the Shakers' belief in simplicity, but also from their desire to be practical and efficient. Their furniture had to be easily cleaned, thus potentially dust-catching ornaments were eliminated. The furniture had to be easily moved for dusting, so, for example, beds were made with casters. And the furniture had to be versatile so that several members could work together simultaneously to complete a community work task.

FURNITURE BUILT FOR TWO

Desks in many forms—kneehole, fall-front, slant-front and lift top—were all based on worldly prototypes and were

Chippendale influence. The Shaker desk above is based on a slant-front design, right, common during the 18th and 19th centuries. Shaker trustees often worked in pairs.

Left photo this page: From the collection of Hancock Shaker Village, Hancock, Mass.; right photo: Courtesy of Skinner, Inc., Boston, Mass.

Women's furniture. A highly veneered Federal lady's desk, left, was the design influence for a Shaker sewing desk, right. The sewing desks were often pushed back to back so that two Shaker sisters could face each other.

produced at various Shaker communities throughout the nineteenth century. However, these types were adapted to suit the needs of the community business officers, called trustees, who worked in pairs and were responsible for keeping accurate records while conducting affairs with the world. As a result, many desks, like the one in the left photo on the previous page, were designed so that two people could work at them. I found it interesting that the interiors of each side of that desk are not identical, but probably customized for the specific Shaker trustees for whom it was built.

Shaker women also worked in pairs at specialized sewing desks that are very close in form to Federal-style ladies' secretaries made at the turn of the 18th century (see photo at left). The Shaker sewing desk, shown above, was probably designed and built so that it could be pushed back to back with another desk, as shown in the photo at top left. Here, the sisters could work face to face in pairs. Perhaps they stored their patterns in the shallow drawers at the top and cut fabric on the extra space-saving board that pulls out in front to increase the work surface.

LOOKING INTO THE SHAKERS' DRAWERS

Storage units, such as cupboards and cases of drawers gradually assumed

Lower left photo this page and upper left photo facing page: Courtesy of Skinner, Inc., Boston, Mass.

their familiar design in "the world" during the 17th and 18th centuries. Most of these had a symmetrical layout of three to seven full-length drawers, and they were designed and built to suit the needs of an individual or a small household.

In contrast, Shaker cases of drawers provided storage space for four to six people who shared a single sleeping space. In this arrangement each member had the use of two or three drawers, resulting in the need to create a massive case of many drawers (see photo below).

As a result, Shaker dwelling house and work furniture drawers were customized to house specific items, whether these were different articles of clothing, tools of various sizes, or even herbs and seeds.

Another popular form, the chest over drawer, was made throughout the 18th century in colonial New England, and it served as a model for the Shakers. To this basic design, the cabinetmakers at the Harvard, Massachusetts, community added a distinctive underhung drawer below the dovetailed bracket base to provide extra storage for com-

Graduated drawers. The Chippendale chest, upper left, served the needs of a single person. The large Shaker cabinet, above, probably served the needs of five or six Shakers. At lower left, a Shaker cabinetmaker added an extra drawer to the common chest-over-drawer form.

A table for communal dining. Long, knockdown trestle tables were first used in medieval halls. The Shaker's trestle tables were permanently assembled and had a stretcher close to the tabletop, so as to not interfere with diners' legs.

munity members (see the lower left photo on the previous page).

STURDY SHAKER TABLES

Historically, long trestle tables were used in medieval monasteries and baronial halls where they were centrally positioned during dining and later dismantled and stowed away after the meal. Although the Shakers adopted the overall length and same basic support system to seat large groups of people, they raised the horizontal stretcher on their tables from floor level to a position beneath the top, which provided stability as well as additional legroom for a large quantity of diners (see photo above).

The trestle tables at the various Shaker communities differed somewhat in the design of their legs, tops and stretchers. After crawling under many of these tables and looking at the permanent bridle or mortise-and-tenon joints, it was apparent to me that the Shakers' versions are not meant to be disassembled, but used in a permanent location in the dining room.

Smaller Shaker tables come in many styles for a variety of purposes. Perhaps most recognizable are the tripod stands with round top, vase-shaped shaft, cabriole legs and snake feet—a close copy of Queen Anne tables that evolved during the 18th century. With an eye for simplicity and functionality, the Shakers pared down the turning on the pedestal, flattened the legs in cross section and, most importantly, added the distinctive underhung "push-pull" drawer, positioned below the rectangular top (see bottom left photo facing page). The stand and storage unit below could be accessed from either side by two sisters working on their sewing projects simultaneously.

THERE IS NO DIRT IN HEAVEN

Trundle beds are low children's beds fitted with casters which allow them to roll underneath another bed for storage. This form was popular in England until the 18th century and was probably the prototype for adult Shaker single beds. The Shakers added wooden wheels, called rollers, which allowed the furniture to be easily moved for sweeping the floor underneath (see right photo facing page). The Shakers believed that "there is no dirt in heaven," and they consciously designed their earthly living spaces and their furniture with cleaning in mind.

Photo this page: Courtesy of David A. Schorsch

Even their chairs are designed to be easily cleaned. Shaker side chairs, arm chairs and rocking chairs are based on the early British prototypes of the ladderback style. English and Shaker chairs have slats wider at the top and narrower at the bottom, turned posts and mushroom-shaped finials.

Shaker chairs are very lightweight, and they were often hung from wall-mounted pegboard to facilitate floor sweeping (see photo on p. 22). The chairs were always suspended upside down so that dust would not settle on top of the seats.

Three-legged stands, like the one at left, were popular during the 18th and 19th centuries. The Shakers added a push-pull drawer, below, that was accessible from either side of the table.

What appears to be a true Shaker invention is the use of woven woolen tape for seating materials, which was more durable, comfortable and easier to install than the typical cane, rush or splint used by the people in "the world." Fabric seats woven in plain checkerboard or herringbone patterns seem to have been common as early as the 1830s. A further benefit of the tape is that it could be easily removed, washed and reinstalled. Fie, evil dirt!

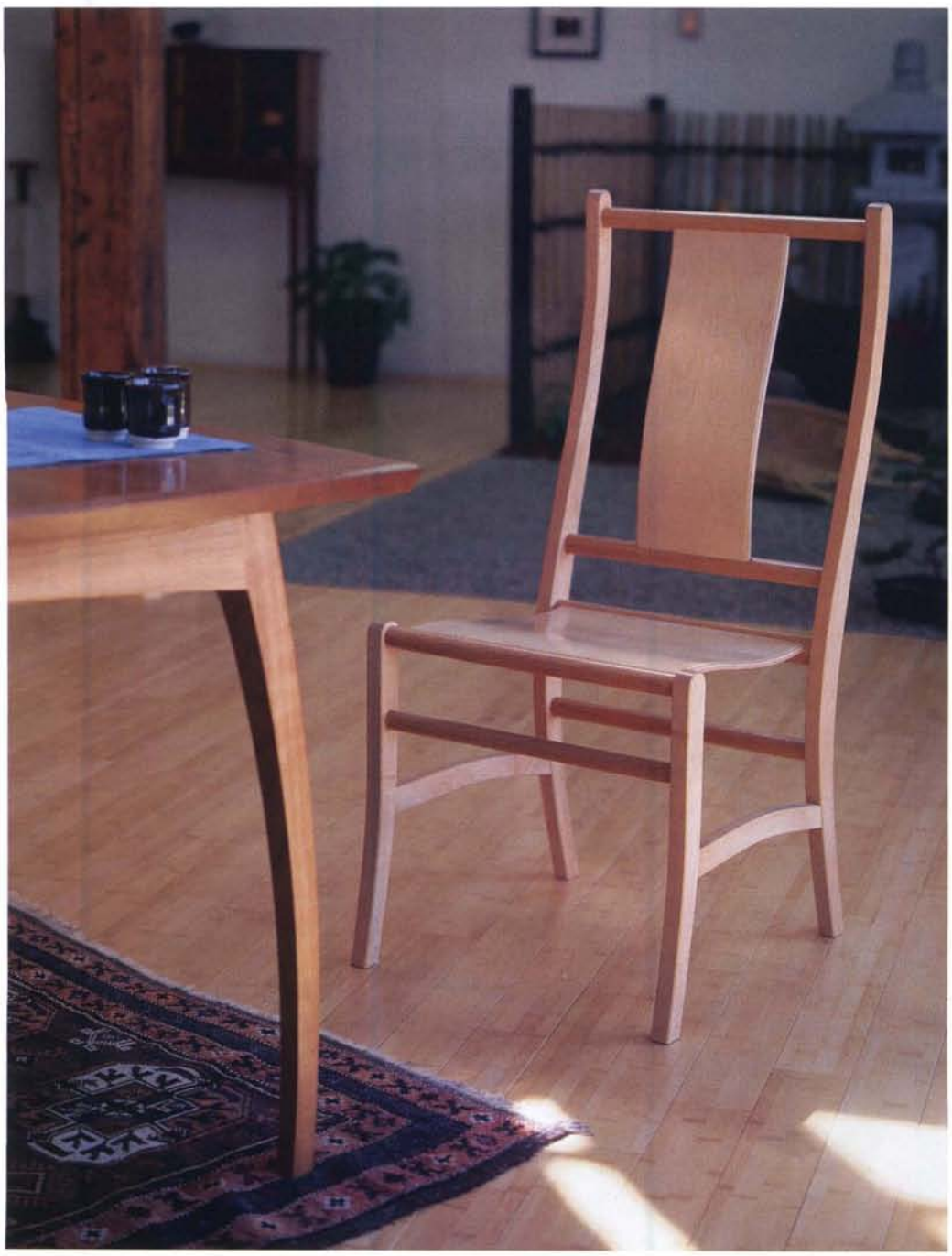
Worldly design, once adapted from the outside, was passed on from Shaker master craftsman to young adopted and apprenticed children who learned the trade from the inside out. When these young craftsmen became masters in their own right, they perpetuated the design methodology and were responsible for defining the classic Shaker furniture design that we know and recognize today. ■

Chasing dust bunnies. Based on an English trundle bed, the Shaker bed (below) had wheels so that it could be moved around the room to facilitate floor sweeping.

Top photo this page: Courtesy of Skinner, Inc., Boston, Mass.; right photo: Courtesy of John Keith Russell Antiques, South Salem, N.Y.

A Bent-Plywood Chair Built for Good Posture

BY GARY NAKAMOTO



I designed the prototype for these chairs while I was studying art at the California College of Arts and Crafts. My aim was to harmonize cylindrical elements with rectangular, the straight and angular with the curved and fluid. I wanted to balance structural soundness with light weight, elegance with straightforward joinery and, most importantly, good posture with comfort.

In the chairmaking class that I was taking, two San Francisco furniture makers —Carolyn and John Grew-Sheridan—demonstrated a bending form that produced a curved, laminated plywood seat. The intent of the form was to visually streamline the seat's profile by minimizing its thickness. The Grew-Sheridans graciously let me borrow the bending form, which I used to make several seats. As I played with them and tested

Sawn curves, bent plywood and cylinders come together in this side chair to produce a gracefully curved shape. The same bending form was used to create the seat and the back.

Photos: Zachary Gaulkin; location courtesy of Misugi Design, Berkeley, Calif.

An angular variation. After making the chair with curved legs and stretchers, the author decided to straighten out the parts, bringing down the cost of the chair and changing its look.

Sketching never stops. As a student at the California College of Arts and Crafts, the author made numerous thumbnail sketches of chairs before developing one into a prototype. Even after three versions, he continues to play with the design.

them on other people in the class, I discovered that I could flip the seat over and use the same shape for the back of the chair.

The first version of this design (not shown here) was rather blocky and ponderous, although its construction was similar to that of the later versions. The plywood seat and back—made of three layers of 5/32-inch birch plywood—are glued into grooves, or dadoes, in the cylindrical crest rail and seat rails. The cylinders have turned tenons at both ends that are glued into the legs.

I tried to refine the first version by adding curves to the legs and stretchers. I liked the play between the opposing curves of the plywood and the legs and stretchers, but it made the construction much more complicated. With the final version, I returned to the rectilinear legs and stretchers, which speeds production considerably (see the photo above).

Throughout the evolution of these chairs the focus was on the comfort of the seat and the back. The curves and tilt of the seat allow the sitter to slide back into the chair while the curves of the back provide lumbar support and encourage good posture. I call the design the "G.S. Poschair" in an attempt to incorporate "posture" with "chair" while acknowledging the Grew-Sheridans' contribution. ■

The chairs are made of maple, red oak dowels and birch plywood; they are 19 in. wide, 22 in. deep and 39 in. high.

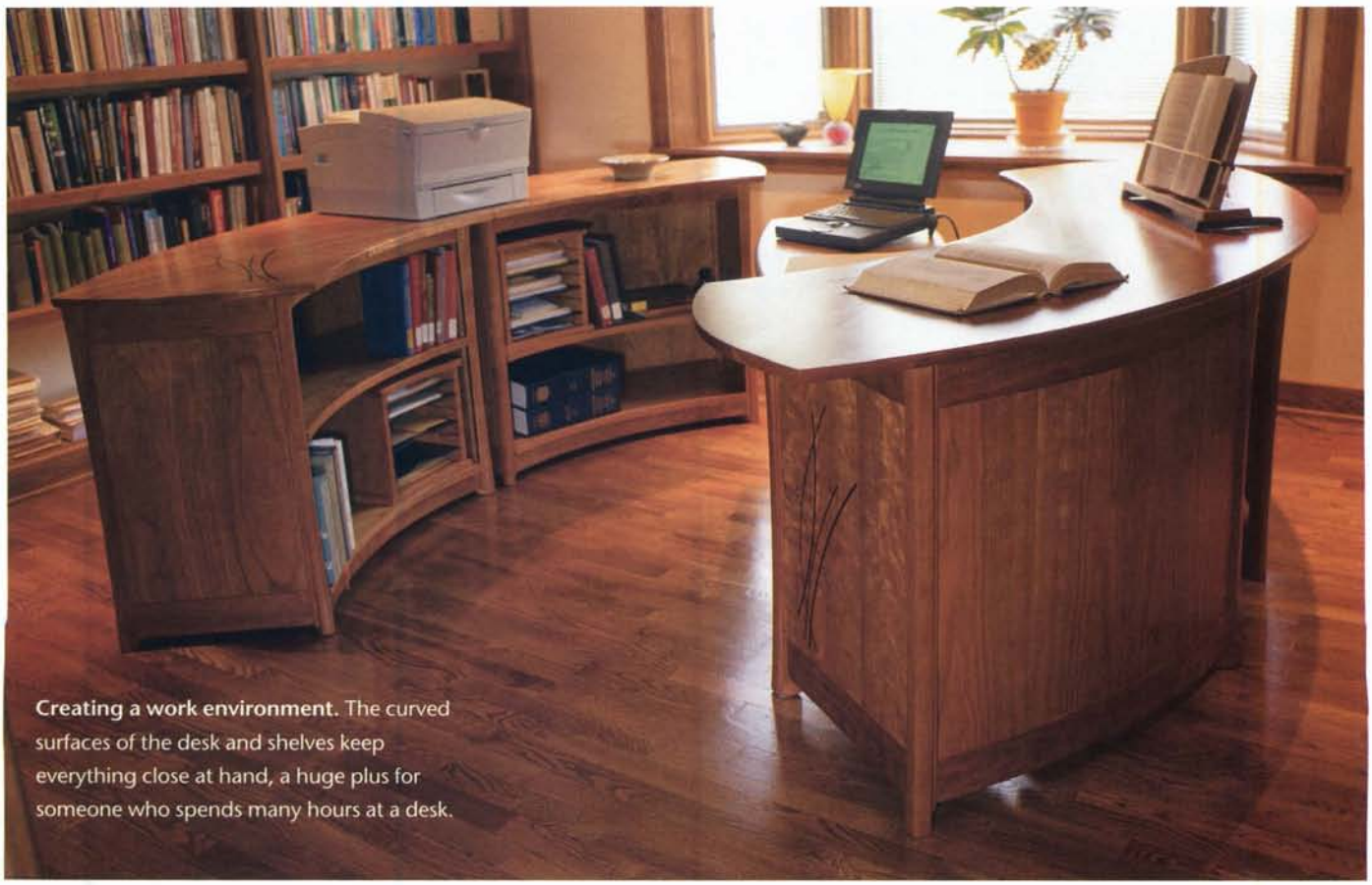
Customizing the Home Office

Computer work can be easier on the mind and body with a desk designed around work habits

BY PHILIP PONVERT

Worried about my income, or lack of it, my dad once gave me some advice. "You might think about getting into computer work," he suggested. I had never used a computer.

Shortly after this conversation, a good customer of mine (who owns a computer supply company) traded a computer for a piece of my furniture. I played around with it and gradually developed a sense of how these machines are used. I then made a desk for myself (photos on p. 33) with a nice big keyboard tray at a comfortable height and a top large enough for the monitor



Creating a work environment. The curved surfaces of the desk and shelves keep everything close at hand, a huge plus for someone who spends many hours at a desk.

Photos: Zachary Gaulkin; drawings: Author

and some personal items. Everything else was off to the side, out of the way. My father would have liked this desk, but I'm sure what he really was advising was a change in careers.

Maybe he was on to something, though. Before I could get that first desk home, someone bought it. I was sorry to see it go, but the experience got me thinking about computer desks, so that when a commission came my way, I was prepared.

HARD WORK SHOULD BE REWARDING

It amazes me how much time we spend working at computer terminals and the huge impact these work environments have on our bodies and minds. This was certainly the case for my customer, Jerry Weinberger, a political science professor who spends a great deal of time at his desk—sometimes 10 hours or more in one day.

Jerry wanted to solve some of the ergonomic problems associated with working at a computer all day. "I have a bad back," he told me, "and I need this desk to be at the right level." I thought

'A real workhorse'

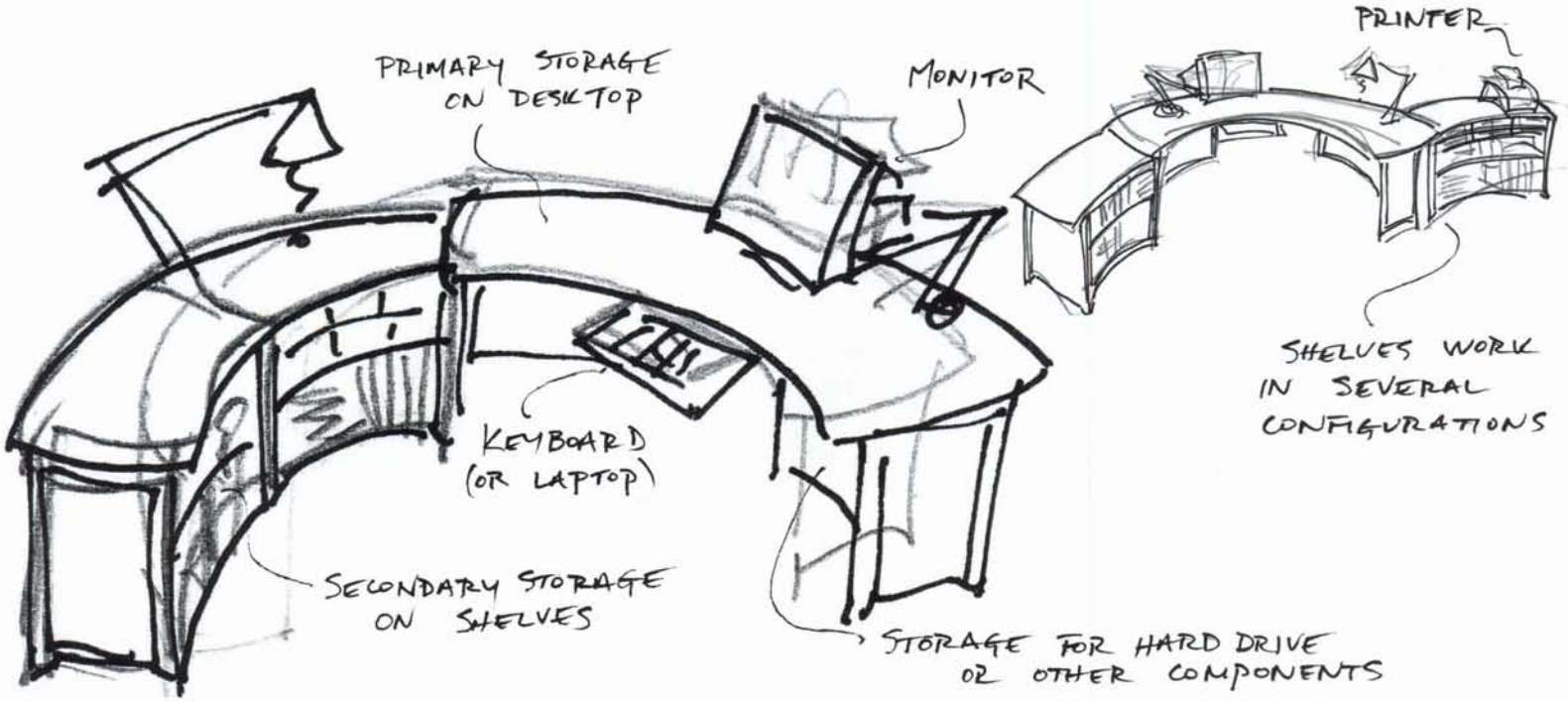
Jerry Weinberger, a political science professor, was so enthusiastic about the design of his computer desk—he said he worked more efficiently and with less physical stress on his back—that we asked him to write a few words about it:

Supple details take the edge off. The desk's owner, a university professor, finds the contoured surfaces and inlays a pleasing distraction as he works.

The desk Phil built for me is such a feast for the eyes that I still delight in seeing it for the first time each day. It may sound like an overstatement, but as I work, I'm actually soothed by the warmth of its subtle curves and inlays.

For all its beauty, however, the piece is a real workhorse. Phil asked me to consider my work habits and the layout of the materials I use when writing and doing research. We were especially mindful of ergonomics and comfort, since I often work for many consecutive hours without getting up.

To accomplish this, Phil brought sawhorses and plywood mock-ups of the three separate desktops. We adjusted the height and cut up pieces of cardboard to decide on the exact sizes of the finished pieces. All this took some time and effort, but the results are magnificent. I am more relaxed and efficient working at this desk than any other I have used.



Nesting components are adaptable. By making the shelf units slip under the desktop, the author built in flexibility. The three sections can be put together and angled in a variety of ways without looking mismatched.

of this project as an opportunity to design a computer user's *environment*, one that facilitated intense and unique work habits yet rewarded the worker with a comfortably ergonomic design.

Comfort is a slippery concept, though. Everyone has his own idea of what "fits." To find out what might work for Jerry, I thought I would spend some time with him in his study, watching him work and asking questions.

ONLY STORAGE WAS ON THE FLOOR

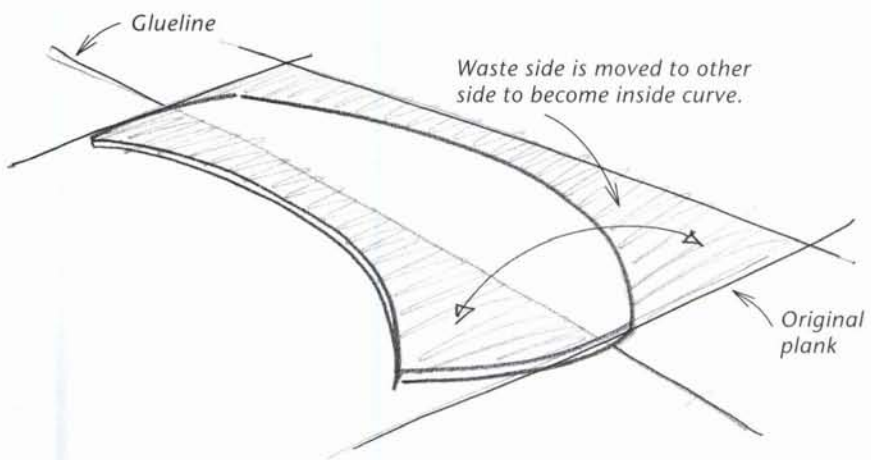
In Jerry's study, as in many home offices, the floor and the furnishings were the chief storage options, other than the built-in bookcases. A single bed along one wall was covered with books, and more volumes were stacked on the floor along with piles of periodicals, student papers and printer supplies. Everything was in a circle, in the center of which was his chair and computer, on a plywood desk that rested on two file cabinets.

I didn't want to tell this professor not to accumulate his stuff. Instead, I wanted to encourage him to store items where he could retrieve them easily. As I listened to him describe his work habits, I noticed a need for primary and secondary storage. The primary materials were those he needed on the desktop and the keyboard tray, such as a pad and pen, certain reference books and material directly related to a particular task. The secondary materials included those items he only needed on occasion, which could be stored on top of the shelves or below.

As I worked out the shape of this desk, I took all of these elements into consideration, along with a few of my own. First, I wanted the piece to have a

A CURVED TOP FROM A STRAIGHT PLANK

To get the curved desktop out of one piece, the author laid out the arc so that there would be enough material on the waste side to give him the inside, concave curve. He notched the two pieces for his clamps and glued them together along their straight edges, then cleaned up the curves by hand. He used the same method for the tops of the shelves so that the grain would match.



signature quality, making it clear that it came out of my shop. I also wanted it to be flexible and adaptable rather than locking the customer into a single arrangement. One benefit of freestanding furniture is that you can take it with you if you move. So I try, whenever possible, to build in options that may be helpful later on in a new house or a remodeled room. Finally, I wanted to maximize the desk surface without interfering with his access to the built-in bookshelves lining the walls.

CURVES PUT EVERYTHING WITHIN ARM'S REACH

I figured out the curved shape of the desk elements by estimating the arc created by the arm's reach of someone sitting down at the computer. Ideally, a person sitting at the desk would only have to swivel to reach something.

I also decided to make the desk in three separate parts that could be arranged in different configurations. To pull this off, I made the larger, main desk slightly higher than the two shelf pieces, allowing them to slip under the curved overhang of the main desk (see photo facing page). Because the main desktop is curved at both ends, the shelves can be angled at any orientation and still "fit" without any gaps. The two shelves also can be placed together to form a larger arc, leaving the desk standing on its own.

The trick to making the three separate pieces look correct in any configuration was to match the grain on all the desktops so that the color and pattern are similar. I also used inlays, some large and some small but all with the same motif. The inlays serve to unify the pieces but their asymmetry allows for any configuration.

I made some sketches (see p. 31) but before moving from concept to final drawings, I put together a three-piece plywood mock-up on sawhorses and brought it to Jerry's study for a test fit. To figure the height and placement for the keyboard, we bought a freestanding and adjustable keyboard tray. This tray turned out to be too wiggly for the final piece, but we stuck with the idea, ultimately buying another tray from the Herman Miller furniture company and outfitting it with a cherry top.

CUSTOM DESK LEADS TO A KNOCKDOWN VERSION

We have quite some time in this commission (300 hours plus materials and overhead). Recognizing that many people have a need for a desk, but few can afford a custom piece, I decided to

Same principles in a simpler design. The author's first computer desk (above) contained similar elements in a more basic form. All the components as well as paper storage are off to the side so the top is kept clutter-free, and the generously sized keyboard tray gives the user some flexibility.

Recipe for a knockdown computer desk:

Not everyone wants or needs a custom-made computer desk and not every shop can build one. A small furniture business like mine requires a steady cash flow to allow for improved techniques, marketing and new product development, and one-of-a-kind designs often can't produce the income a small business needs to prosper and grow. These are some of the reasons I decided to design a simplified, knockdown computer desk. I also like challenges. Here's how I did it:

1. Use only fresh ingredients. I wanted to design a limited-production piece, but one with custom elements that said "somebody made that." For example, I faceted and tapered the legs, a simplified version of a leg design I often use on my custom work.

2. Blend in ergonomic elements. Just as in the custom desk, the knockdown is made so that only the monitor sits on the desk and everything else is off to the side. This puts it at a more comfortable height and cleans up the clutter on the desktop. I also kept the pullout tray large enough so the user can move the keyboard around and put papers on the tray.

3. Preheat the price point to $1,600 and work backwards to figure out where to make the compromises. Knockdown furniture should cost quite a bit less to make and to buy than custom work. Divide in half to establish the wholesale price.

4. Reduce with readily available materials. Efficient use of materials is critical to a sensible designed-for-production piece. Two desktops and trays, for example, are made from a single sheet of veneered plywood with little waste.

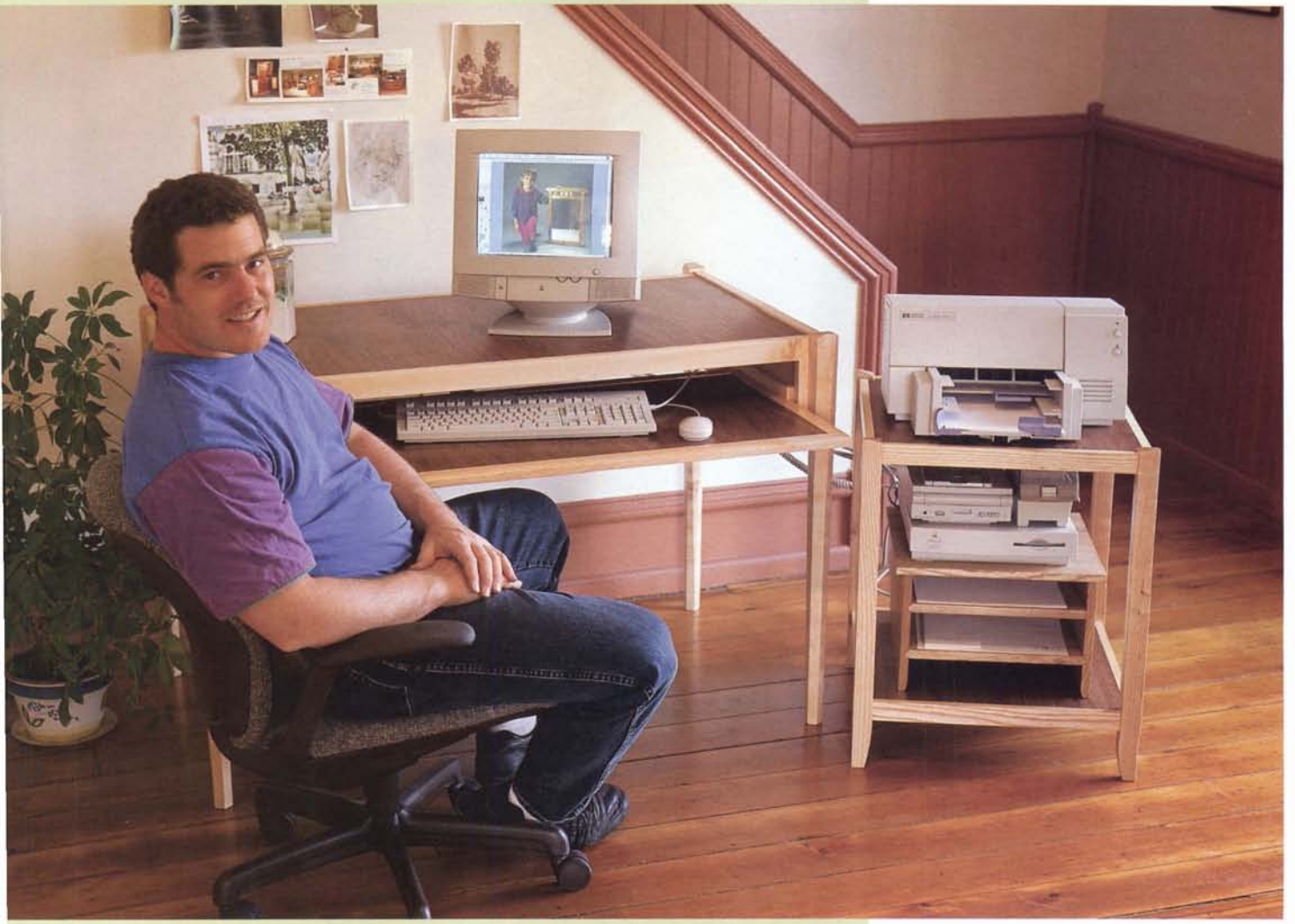
5. Bake at 900 degrees in a UPS truck to make sure the finish won't peel off. Allow to cool, then hire someone to design a bombproof box. Shipping is the linchpin of any production design, so I made the desk parts nest together in two flat boxes, with simple assembly instructions and an Allen wrench included. The furniture is now ready for delivery.

6. Baste with energy and optimism. *New products* are like seedlings—they need lots of nourishment and constant attention. Send out mailings, get a Web site, write an article—anything to get the idea out.

design a simpler version that could be knocked down for shipping (see the sidebar on these two pages).

In this knockdown design I returned to my first desk—a generous, uncluttered workspace with components on a separate stand—but with fewer custom (and expensive) details. I wanted a design that would be functional, fun to make, unique and artistic enough to create a work environment everyone can enjoy. Thanks for the advice, Dad. I really love computer work. ■

The desk on p. 30 is 6 ft. long, 29 in. deep, and 31 in. high (the shelves are slightly lower). The desk on p. 32 and the knockdown desk are 47 in. long, 29 in. deep and 32 in. high. The keyboard tray is 28 in. high.



Inspiration at first sight. Neither of the author's arms needed to be twisted for him to make this version of Thomas Elfe's breakfast table. All it took was one look at the table's beautifully carved apron and unique stretcher design.

Breakfast Table Blossoms from Two Designs

BY JOHN H. ROSS

Photo this page and top left photo on facing page: Jonathan Binzen

A dual design. In his design (left), Ross used a variation of elements from two of Elfe's Charleston breakfast tables. While the stretcher design is reminiscent of the Heyward-Washington House table (top right photo), the carved apron was inspired by the table at Middleton Place (bottom photo).

It stood alone in a central room against a backdrop of April azalea blooms that reached into the distance. The location was Middleton Place, a historical home in Charleston, South Carolina, where I had my first fleeting glimpse of the breakfast table that inspired mine (see lower photo above right). The pierced carved apron of the table attributed to Thomas Elfe caught my eye, as did the leg stretcher assembly and the traditional hinged leaf supports. Thinking it would be fun to build my own version, I acquired the necessary mahogany.

The only pictures I found to work from were of another Elfe breakfast table in E. Milby Burton's *Charleston Furniture 1700-1825* (University of South Carolina Press, 1997). Although this second table (top right photo), which sits in Charleston's Heyward-Washington House, was similar to the table I had seen, there were differences in the design of the apron and the stretchers. I decided I wanted to open up the pierced carved apron. I rounded and expanded the figure-eight element, carving out about half an inch more than in the Middleton Place apron. I also added small vertical scrolls. In matching the basket weave section, the crisscross lines became more vertical.

The bottom profile of the front and back aprons roughly follows the curved outline of the tabletop. In addition, these front and back aprons are thicker at the top to help support the tabletop, and thinner at the bottom to help make the carving look as delicate as possible.

Having thinned and opened up the aprons, I decided to reflect those changes in the stretcher assembly. While the exterior outline seemed about right, it seemed appropriate to carve away the interior sections and emphasize the four scrolls where the lap joints meet.

I used two pullout leaf supports on each side, rather than traditional hinged supports, to lighten the appearance when the leaves are up. The supports run out two-thirds of the way under the leaves. A slot and a screw serve as a guide and catch. This way, there is a clean view of the underside of the table as well as balanced support. Carving of the aprons and stretchers was done with hand tools, as was shaping the legs. I used a router to form the edge of the tabletop. Vanity suggested brass rule-joint hinges.

Excellent drawings of the Middleton Place and Heyward-Washington House tables in Samuel A. Humphrey's *Thomas Elfe: Cabinet Maker* (Wyrick & Co., 1996) were invaluable for reviewing each table's design. I hope the eminent Thomas Elfe would cast a friendly nod toward my deviations. Regrettably a background of azaleas is not readily available for a true comparison. ■

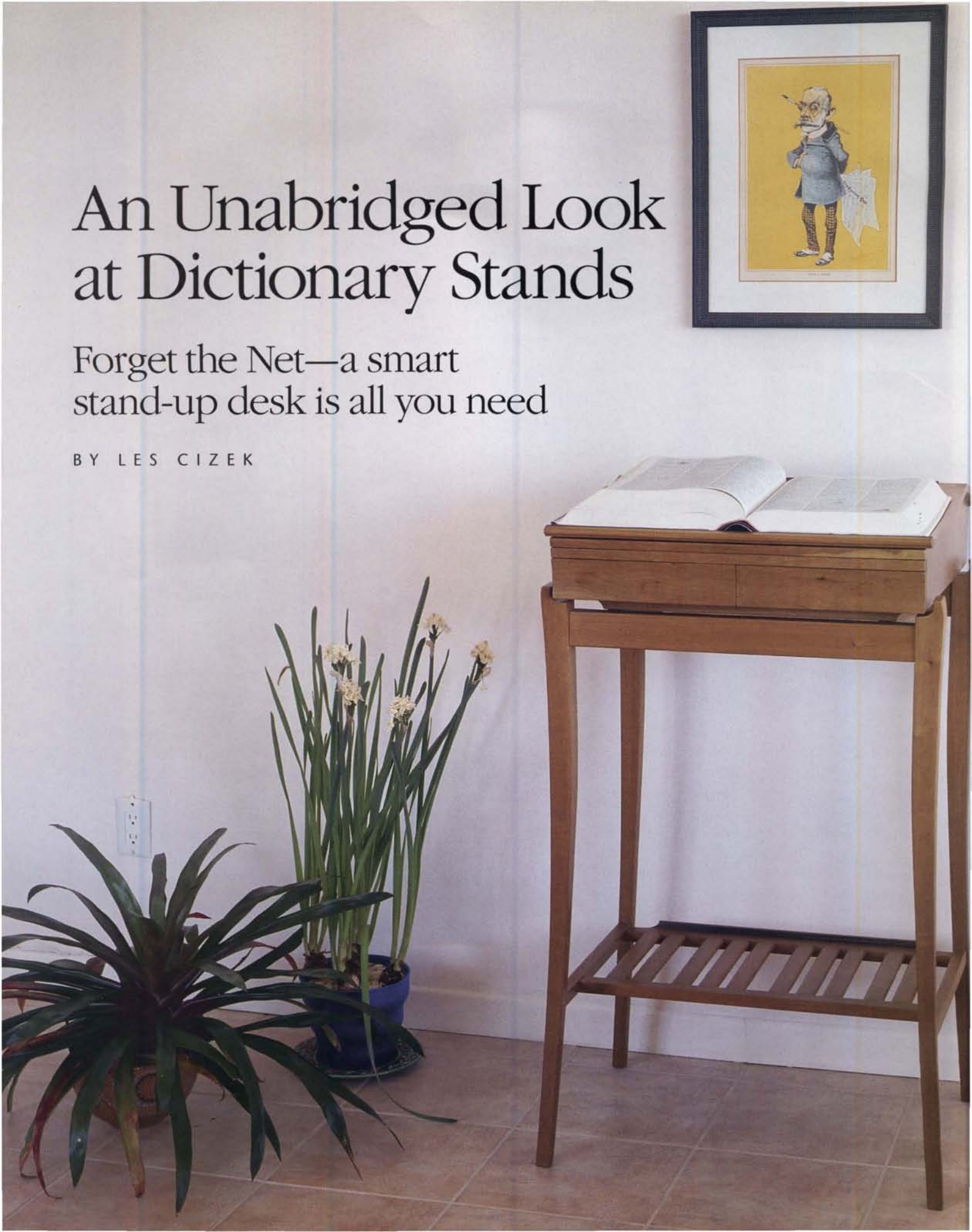
This mahogany table is 45¾ in. long, 25⅞ in. wide and 29 in. high.

Top right photo: Rebus, Inc.; bottom right photo: from the permanent collection of the Middleton Place Foundation, Middleton Place National Historic Landmark, Charleston, S.C.

An Unabridged Look at Dictionary Stands

Forget the Net—a smart stand-up desk is all you need

BY LES CIZEK



Deipnosophist? Rebarbative? Hircine? How well have you been complimented by the first word and insulted by the latter two? Some go to the Internet for answers. I go to a place that is closer and quicker—a stand-up desk.

My willingness to look up words is in direct proportion to the availability of a dictionary. Not the one on a high shelf in another room or the stingy volume in the computer, but a fat, unabridged book near my easy chair, invitingly open at a convenient height on a well-lit stand.

"Deipnosophist; Rebarbative; Hircine"

A STAND-UP DESK DELIVERS

Stand-up desks—for writing, reference or to display a handsome volume—have been around almost as long as books themselves. They have been used to hold everything from the family Bible to the arcane and obscure. To the French, this type of desk was called an *escritoire.* The British, showing their usual disdain for the French language, called it a *scrutoire.* In 17th-century America, the word became *scritoire,* scriptor and finally, mercifully, writing desk.

Names aside, many of the early Bible boxes, schoolmaster desks and writing stands look like dungeon furniture. The appearance moderated some in the 17th and 18th centuries and then exploded into magnificence under the influence of Chippendale and his contemporaries. American versions made in 17th-century New England had slant tops and drawers or other provisions for writing gear and often were made to be used on tables. Later examples were made with stands. Thomas Jefferson owned several stand-up desks (plus a music stand that folds into a box and holds sheet music on five different stands, for a quintet).

The elegant davenport desk was first made in England in the 1700s for a ship's captain named Davenport, and in the 1800s it became a popular style at home and at sea. Davenports—not to be confused with the American meaning of the word, which would be an upholstered sofa—had drawers that pulled out from the side and a hinged, slanted lid, sometimes with a gallery along the top. These desks were highly detailed and were often crafted from exotic tropical hardwoods.

COMPUTERS ARE NO MATCH FOR A STINGRAY

I made my first reference desk when I was a student of furniture making at the College of the Redwoods in northern California (see photo facing page). Utility was the quality I was after; that and complexity. The top forms a gentle curve of figured cherry veneer, with storage under the hinged lid and in two drawers. There is a sliding writing surface—it pulls out like a drawer—onto which I veneered blocks of end-grain royal palm veneer, a material

Royal palm gives note-taking new meaning. The end-grain royal palm veneer on the pullout writing surface of the author's desk in cherry looks like snakeskin.

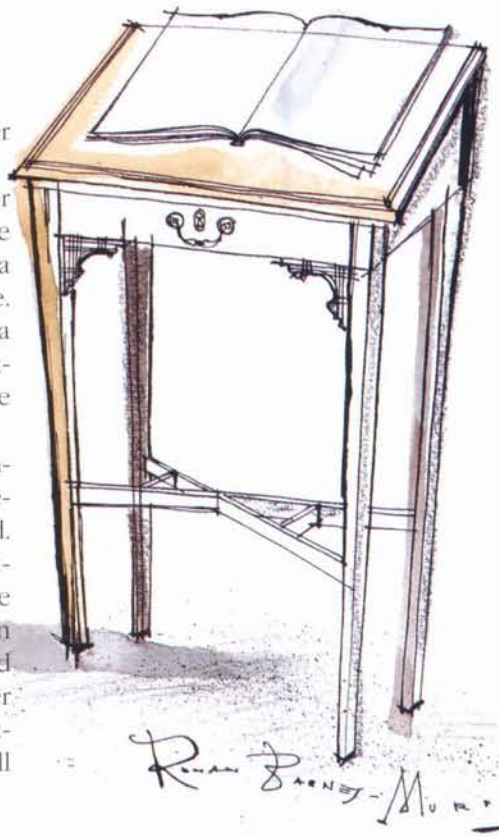
Leather from the deep. Made for a Miami Beach writer, the slanted top of this mahogany desk is covered with the dyed skin of a stingray. How can a keyboard compare?

Photos: Zachary Gaulkin, except where noted; lower right photo: George Shiavone; illustrations: Rowan Barnes-Murphy

often mistaken for snakeskin. A lower shelf holds additional references.

I made a second desk for a writer friend on Miami Beach. This piece omits the curved top, providing a place for a lamp and a cup of coffee. The top is made of stingray skin dyed a rich crimson, adding an unusual texture which is emphasized by maple edge banding.

Other designs have different beginnings. I asked Peter Korn why he decided to make a dictionary stand. "Because it appeared in my sketchbook," he told me. "It was the first time that a design really reflected my own sense of aesthetics." An author, avid reader and teacher (he runs the Center for Furniture Craftsmanship in Rockport, Maine), Korn uses a dictionary all the time. This activity gives him frequent contact with his 1980 design, one that led to several subsequent variations, all inspired by the tension between the curved legs. The stand is elegant and spare; nothing can be added or removed to improve its loveliness. Korn describes his piece as having "simplicity, integrity and grace."



REFERENCE DESK TO THE RESCUE

Hank Gilpin says that his tall bookstand was the product of necessity. His Lincoln, Rhode Island, home was once an old church and now has a dictionary in every room. Hank's wife, Risa, a librarian and writer, had an immense dictionary crowding her desktop. The bookstand came to

"It appeared in my sketchbook," says the maker, Peter Korn, of this simple stand in walnut (above). A furniture maker and teacher, Korn says he uses his desk every day.

Descendent of the davenport. Peter Shepard's stand-up writing desk in oak has a leather surface and drawers tucked away in the sides, like a minimalist davenport desk.

The slightly canted top on David Ebner's design (above and at right) is joined to the legs with a clever dovetail. The sinuous carving at this joint demonstrates Ebner's interest in Art Nouveau.

No perch is too lofty for the language. In Hank Gilpin's design for limited production by Pritam & Eames Editions (left), the dictionary is cradled in the top. The lower shelf was designed for more books, or to display a treasured object.

the rescue. The Gilpins own more than 1,500 reference books and use them regularly. One day, when looking up "mahogany," Hank was led to "trade," which brought into question an 18th-century British king, which led naturally to "tea." The intellectually curious surf books to find answers, relationships, connections and consequences.

Gilpin told me that some owners of his limited-production desk (he made 15 of them) use the lower shelf to show off a piece of pottery or sculpture. With raptorial elegance, the stand appears to be winging away with its prize.

In 1992, Peter Shepard switched careers from book publishing to woodworking. Is it a surprise that his first piece was a stand-up desk? His robust interpretation, rooted in tradition, presents a handsome leather top and loads of storage (see photo at near left). The nifty side drawers remind me of the davenport's sleek eccentricities. He can produce this piece in about five weeks at his shop in Concord, Massachusetts.

David Ebner remembers building two or three writing desks in the 1980s, the first for a physicist from Brookhaven Laboratories on Long Island, New York. The physicist said that Albert Einstein worked at such a desk, and hoped, perhaps, that imitation might breed inspiration.

As you can see, reference desks come in a multitude of shapes and sizes, but whatever the name and style, these useful old friends have for centuries encouraged our fond regard for books and the magic of words.

deip·nos·o·phist, *a person who is an adept conversationalist at table;*
re·bar·ba·tive, *repellent, from the Latin equivalent of a woman with a beard;*
hir·cine, *resembling a goat; having a goatish odor; lustful, libidinous.* ■

Left photo facing page: Courtesy of Peter Korn; right photo facing page: Dean Powell; top center and top right photos this page: Gil Amiaga

Tabletop Inlay Mimics Legs

BY JOE EISNER

Inlay pattern tells a story. The two longer ebony inlay patterns atop this end table show where the legs are attached underneath. Two ebony slots are "removed" to complementary quarter sections.

Photos: Jeff Cohen, except where noted; bottom photo this page: Timothy D. Schreiner

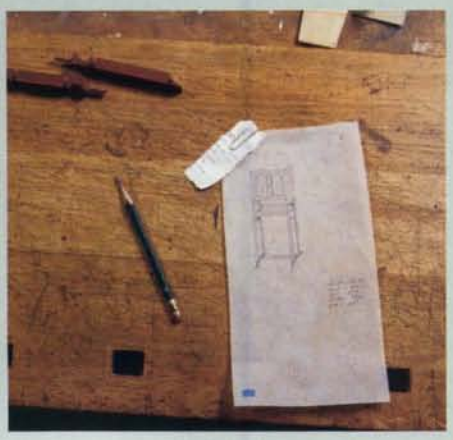
The two contemporary club chairs needed an end table that would nest between them. The chairs sat in front of the sunny west wall of an addition that I had designed for a Connecticut home. In choosing woods for the table, I selected pearwood veneer as the dominant wood, to match a pearwood coffee table and a large wall unit across the room. The ebonized accents imitate the color of the tapered black leather front legs of the club chairs.

The two pearwood-veneer legs of my table also taper from the top, where each represents a full quarter-circle of the round tabletop, to the floor. The table is also quartered by the veneer of the tabletop, which is laid up in four pie segments with the grain running out from the center and over the side, like a waterfall. Arcs of ebonized inlay on the tabletop mimic the curve of the leg connection underneath.

There are three cutouts in the ebonized inlay, each ⅜-inch wide, breaking the arc into four equal segments. The middle slot extends 2½ inches to the table's edge and is actually a slice taken out of the tabletop. This cutout slot is then picked up in the top 11⅝ inches of the leg, exactly below the slot in the tabletop. The other two ⅜-inch pieces that are "missing" from the ebonized arcs are put into the tabletop in corresponding quarter sections, 90° from where they were removed. ■

The table is 18 in. high, and its top is 24 in. in diameter. It is made of pearwood veneer, Ebon-X and medium-density fiberboard.

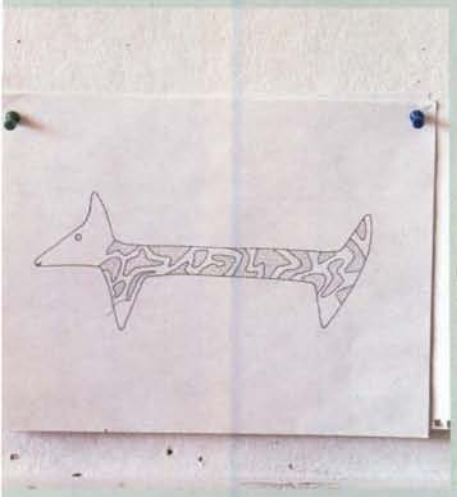
Built for the room. The table was designed specifically to nest between two 20th-century club chairs. The pearwood was chosen to match a large wall unit nearby.

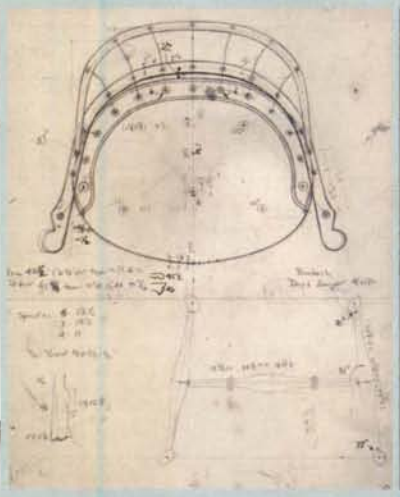


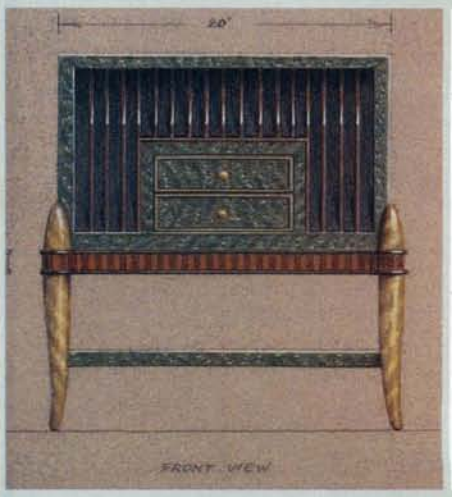
Peeking Over the Designer's Shoulder

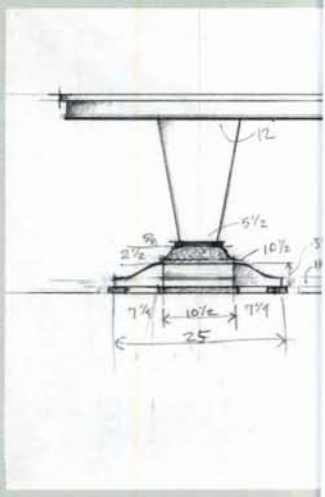
A look into the design notebooks of six prominent furniture makers

BY JONATHAN BINZEN









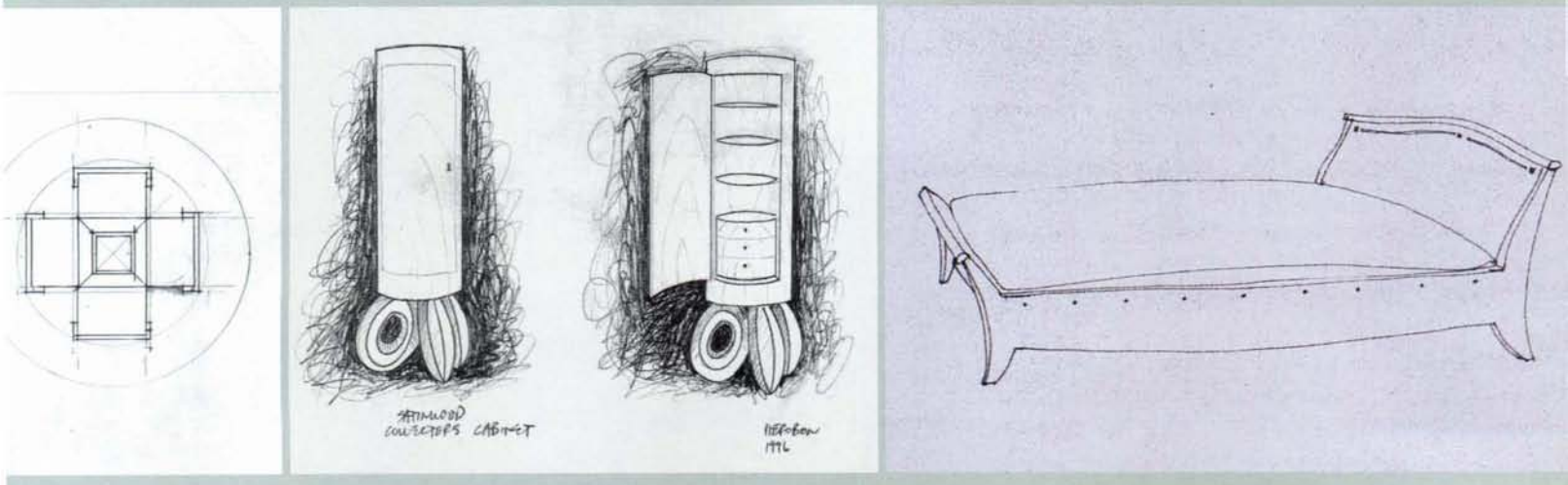
Vehicles of design. The road to a good piece of furniture usually goes across paper. But all sorts of vehicles travel that road successfully, as the disparate drawing styles shown on these pages make plain. Top drawing, this page: James Krenov, pencil on onionskin paper, for a cabinet-on-stand.

Photos: Jonathan Binzen, unless otherwise noted

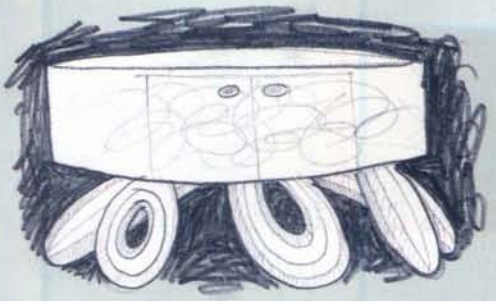
I can't draw. If our sketches tell a tale, mine is a chilling one. But I keep trying. I slowly fill sketchbooks with wobbly, lopsided, laughable renderings of furniture, buildings, people and, because I am often on the road alone, tables set for one. So far I've drawn one pepper shaker that I think is not too bad. My lack of facility doesn't hinder my appreciation for good drawing, however; quite the reverse. I'm attracted to a good line the way some are pulled in by a good book, a good buy or a good trout stream. I'll travel for it. One of the great pleasures of the scores of visits I've made to furniture makers' shops has been in seeing their drawings. And I've seen all kinds, from scribbles on scrap wood to finely rendered, framed presentation drawings. Hoping to share that pleasure, I've selected drawings by half a dozen contemporary makers for this article. I picked them for their quality, but also for their diversity of approach—not something I needed to worry much about, since everyone seems to draw differently—and in hopes of presenting work that will, in Horace's phrase about the best writing, instruct as well as delight.

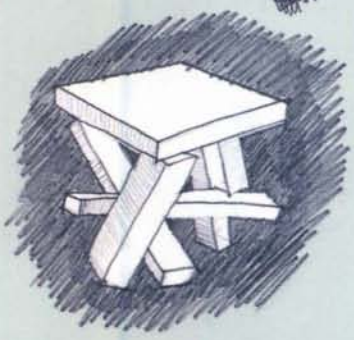
"drawing and making are very different processes"

As a group, I discovered, furniture makers are bashful about their drawings. When I began calling around to ask for drawings and then for recommendations of others who draw well, nearly everyone said, "Um ... That's a hard question. I never see anybody else's drawings." But while drawing may be a private activity for many furniture makers, it is also a critical one. There are those of us who persist in trying to make furniture without the aid of this basic tool. And it can be done, as witnessed by the highly refined early furniture of Philadelphian Bob Ingram, much of it designed and built without drawings. And by the powerful work of James Krenov, whose Lilliputian concept sketches (like the one at the top of the facing page) are the only map he requires to set him on a course that he then navigates more by hand than by pencil. But a glance at the teeming sketch pad of a maker who has a good grip on the pencil makes it clear how advantageous this skill can be. Just as most people discover what they think by writing or talking, furniture makers can discover and refine visual ideas by drawing. Of course, there's no reason to think a furniture maker should be a natural artist, since, as Judy McKie commented to me, "drawing and making are very different processes." But with practice, drawing can make the furniture maker's job immensely easier. Or so I tell myself.



Bottom drawings, from left to right: Judy McKie, roller-ball pen on bond paper, for a bench; David Sawyer, pencil on paper, for a sack-back Windsor chair; Stephen Daniell, Prismacolor pencil on Canson Mi-Tientes colored paper, for a letter cabinet; Scott Wynn, drafting pencil on tracing paper, for a dining table; Peter Pierobon, pencil on tracing paper, for a collector's cabinet; and Stewart Wurtz, blueline print, for a bed.





Serious scribbling. Their distinctive scribbled backgrounds give Pierobon's furniture sketches vibrancy and a sure foothold on the page. Sometimes such scribbling leaps from his sketchbook, as with the padauk-veneered sideboard above, which he decorated with looping lines of colored pencil.

Peter Pierobon

Back in high school in Vancouver, Peter Pierobon drew a comic strip that landed in an underground paper on occasion. So if his current sketches of furniture appear cartoon-like, it is no coincidence. He does a lot of drawing, and keeps various sketchbooks going at home, at his shop, in his truck, and in his office at Philadelphia's University of the Arts, where he teaches furniture design and making. The myriad sketches that precede each piece of his furniture do hard work, but he doesn't want them to feel that way. He avoids making drawings perfect "in order to keep it fun. I don't want to have to think too hard and play by the rules." To retain the playful spirit while submitting an idea to the rigors of true dimensions, Pierobon will lay out a *design* in vanishing-point perspective at the drafting board and then trace the drawing freehand. The bed drawing at right is an example of that technique.

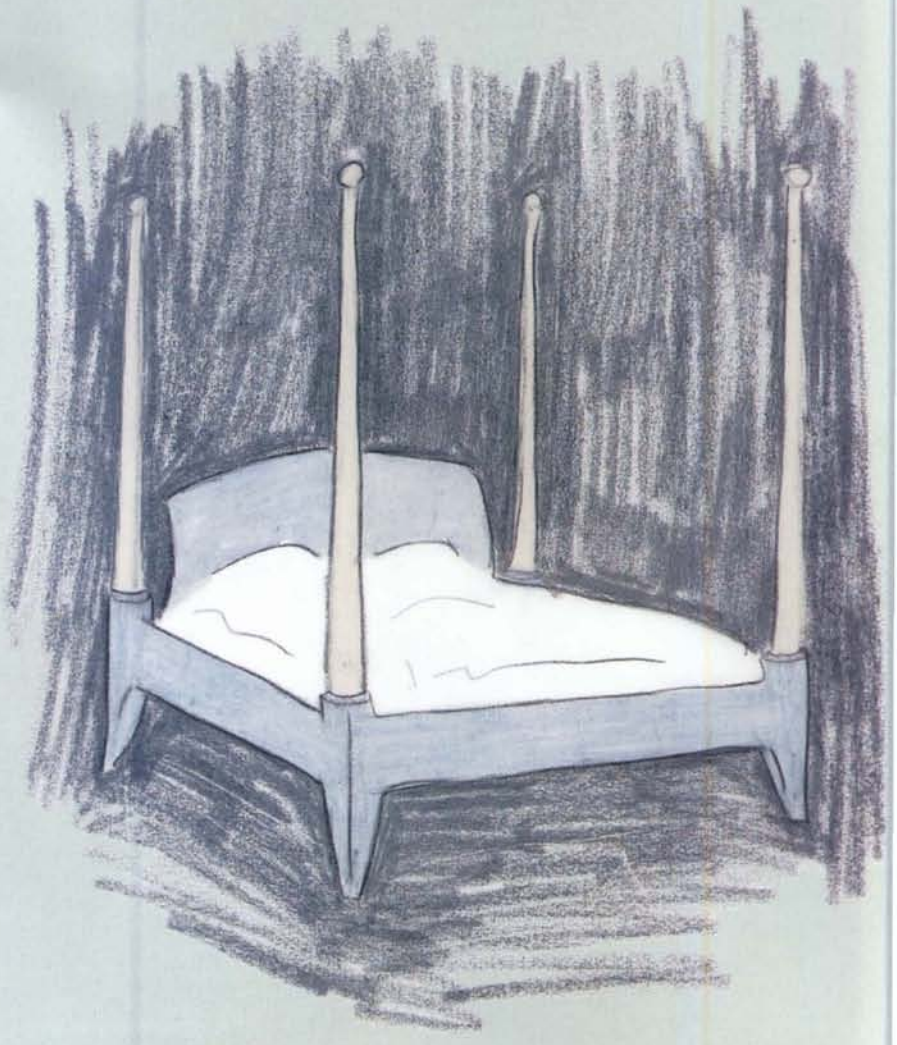
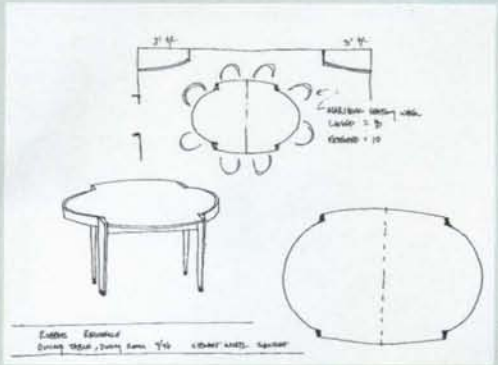
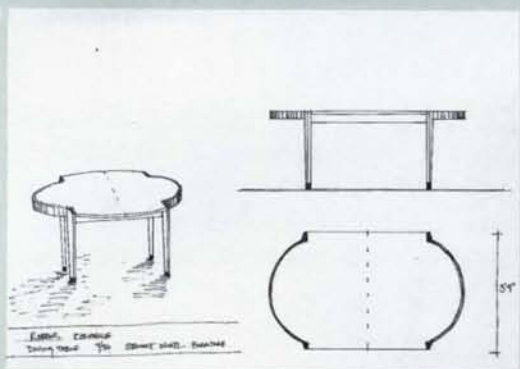


Photo this page: Thom Brummett; photo facing page: Terry Reed





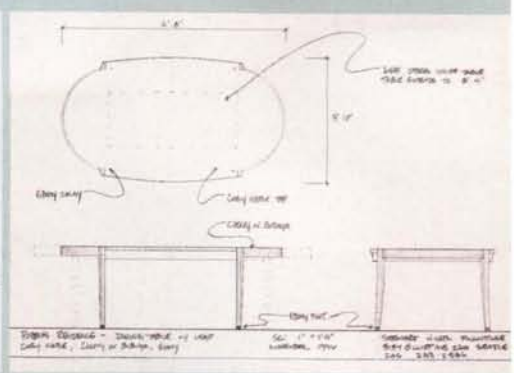
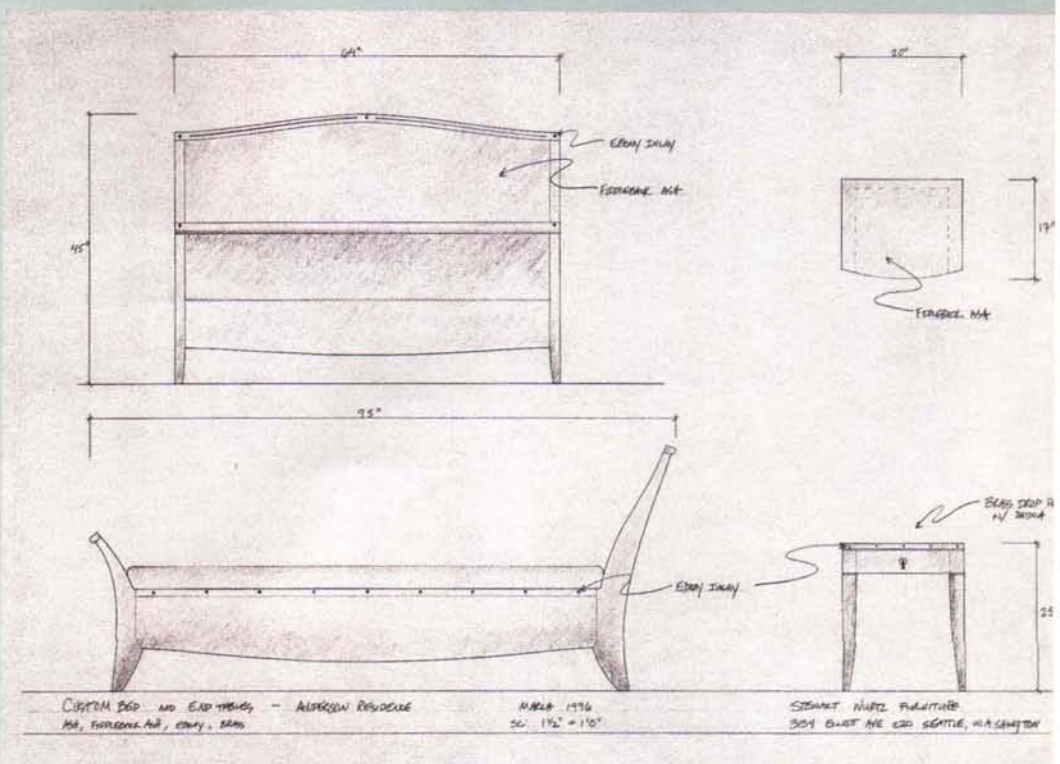


Table in transition. For initial presentation of a design idea, Wurtz does very simple drawings like the ones at far left, above. The middle drawing, above, was done for a second meeting with his client, and shows him nailing down the dimensions of the table with plan and elevation views, but also retaining a loose perspective sketch, which he enlivens with shading on the rim and with shadows on the floor. The drawing above right is a copy of the final presentation drawing after he annotated it to use as a shop drawing.

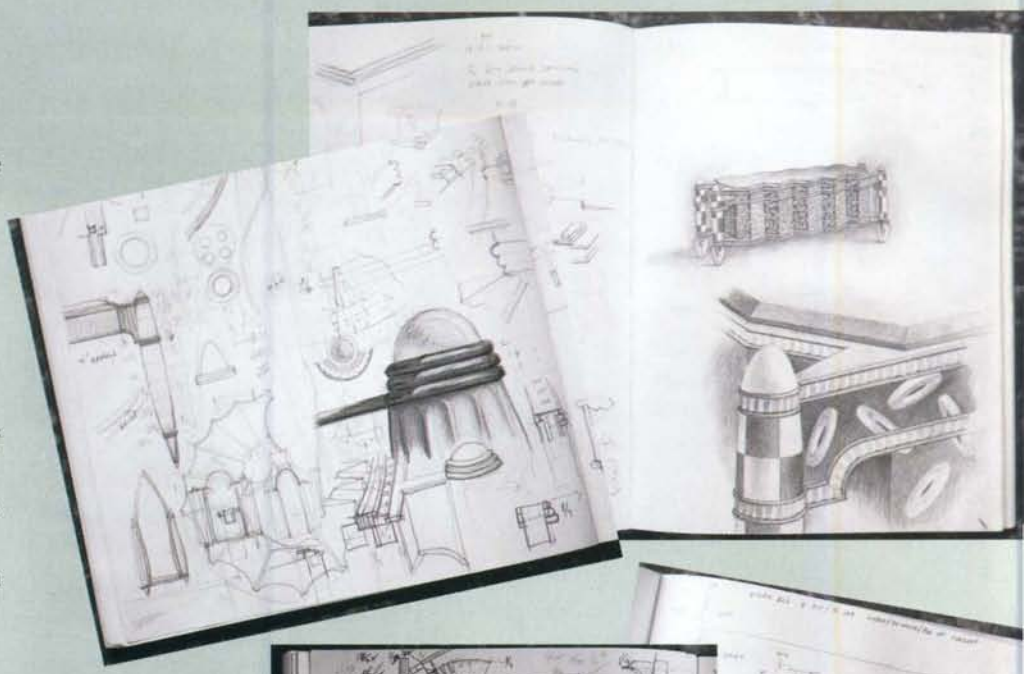
Stewart Wurtz

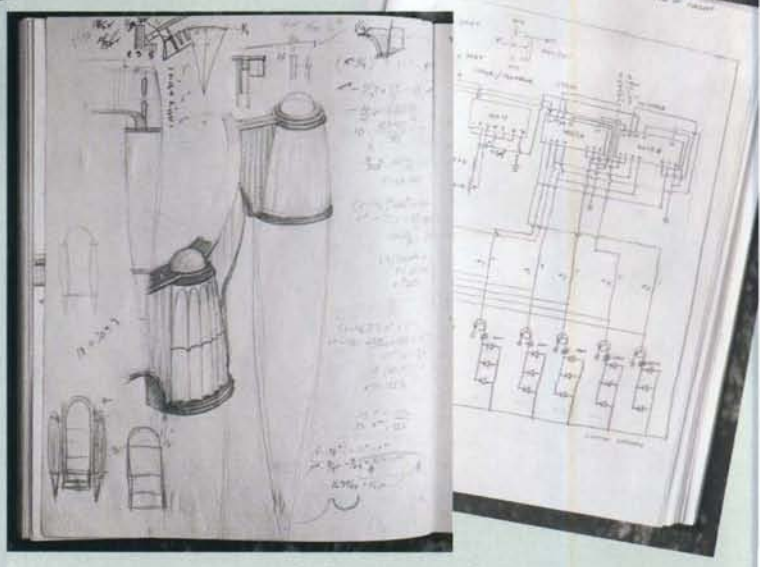
The brownline prints that Seattle furniture maker Stewart Wurtz uses for presentation drawings are a relative of architect's blueprints. Wurtz, who briefly studied architecture, does his final drawings with drafting pencils on vellum and then has brownlines made like the one of the bed and nightstands at right. He sends one copy to the customer and keeps another to mark up and use as his working drawing. He likes brownlines for their formality and finesse. Brownline prints, Wurtz says, "pick up shading and tonal values that you don't get in other copies." He points out that the customer "is going to be thinking about the drawing while I'm making the piece, so I want it to be nice."

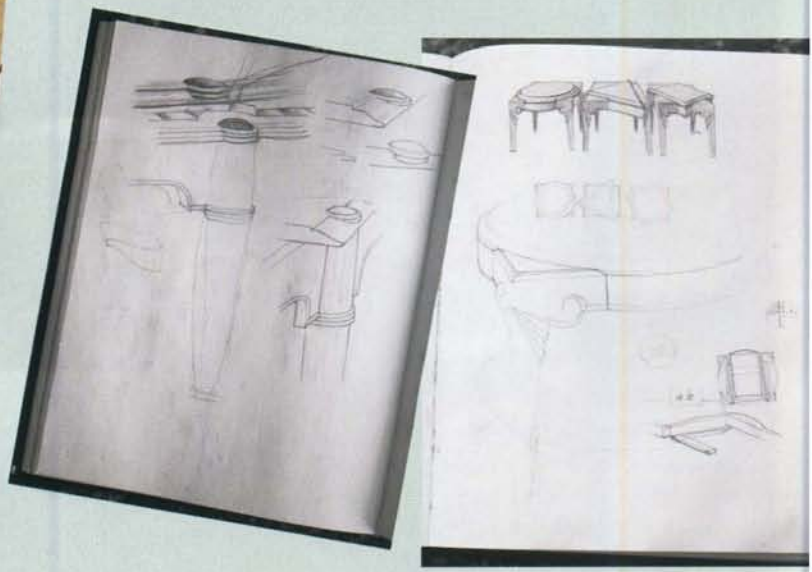


Stephen Daniell

Lift the hood of a Jaguar and you'll see something analogous to a page in Stephen Daniell's sketchbook: all engine and no open space. Daniell, who makes furniture in Easthampton, Massachusetts, says he does so many drawings on a page because "if you're riffing on an idea it's good to have the previous drawings to refer to as you redraw. And it becomes a bit like a multiple choice question—which one of these is best?" Daniell often leaves the facing pages entirely blank, however, so that when he flips through the sketchbook later he can develop an idea further right there where it was born.

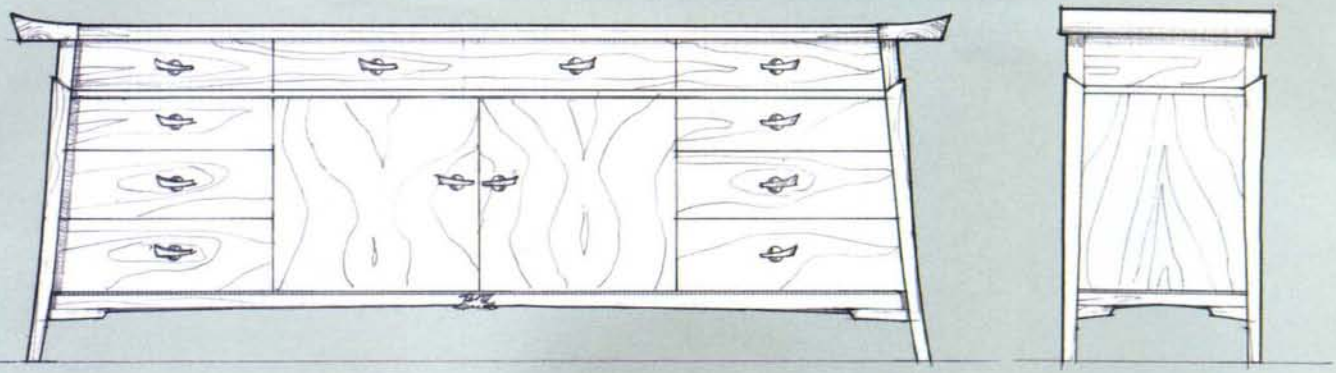






Evolution of an idea. In Stephen Daniell's sketchbooks, variations of the fluted leg seen on the bed in the photo above were worked out over dozens of pages, rougher sketches jumbled with highly detailed ones. To control the light-emitting diodes he set into the perimeter of the bed's headboard, Daniell designed his own circuit board pattern like the one in the center right drawing.

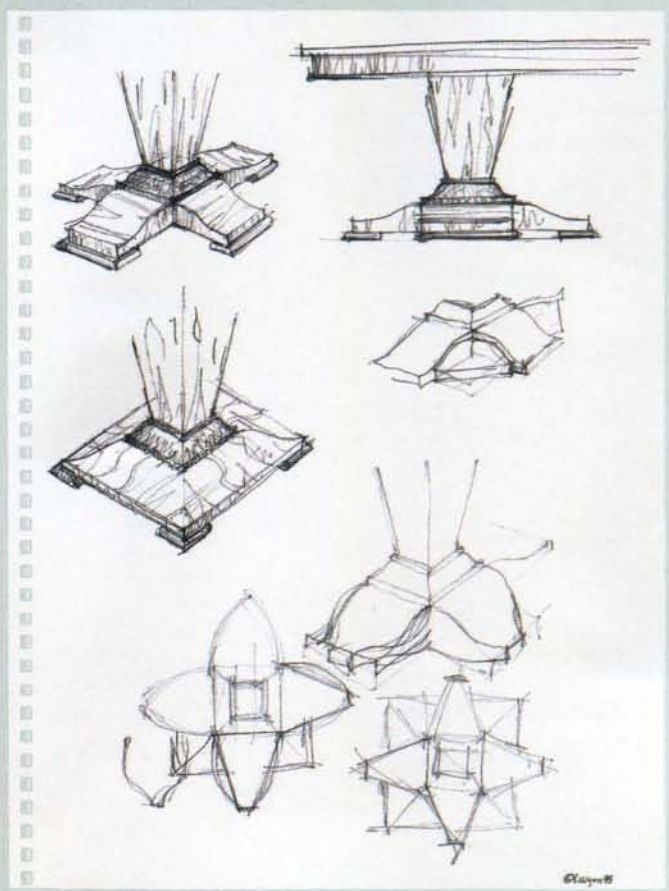
Left photo this page: David Ryan; photo facing page: Scott Wynn



Scott Wynn

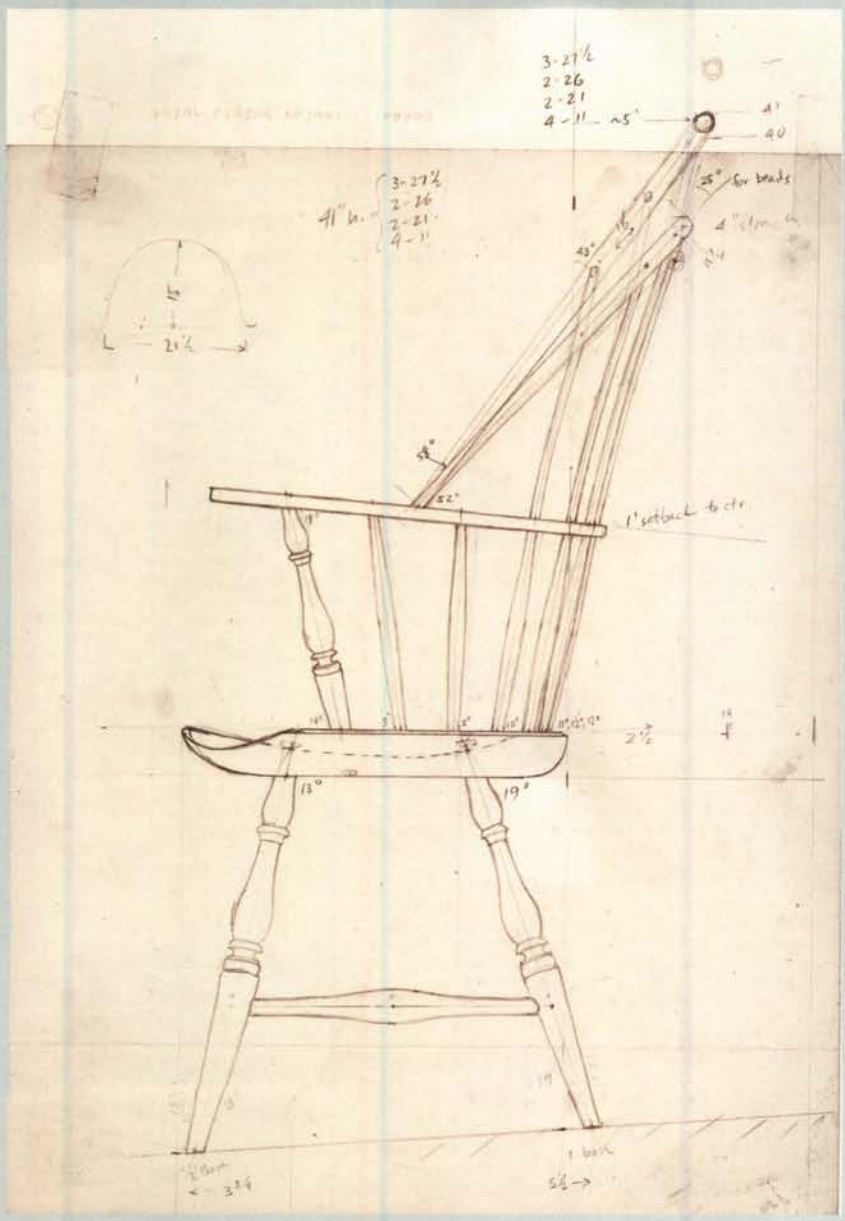
When he is working in his sketchbook, San Francisco furniture maker and architect Scott Wynn draws small. It keeps him from getting distracted by the details before the overall proportions of a piece are set. In general, he says, when he starts sketching he has "one aspect of a thing in mind. I haven't got the whole thing fleshed out. If you work large, you're almost forced to flesh out the details, and you can get stymied." He feels that the size of the sketchbook influences the size of the drawings, so he carries a smallish one—8½ by 5½ inches. Wynn sometimes sketches with a felt-tipped pen, sometimes with a sharp-point drafting pencil. He prefers the pencil (and an eraser) for drawing curves, because "in ink, if you change the curve, it winds up being a blob."

Base beginnings. A page of pencil drawings from Wynn's sketchbook, below, shows him working out the base of the table in the photo below left. The bird drawing at left was one of a number Wynn considered for a chair some years ago. He pulled out those sketches when he needed a carving beneath the doors of the sideboard, above, which he designed in collaboration with Ed Abbot.



David Sawyer

Vermont chairmaker David Sawyer does green woodworking in the Green Mountains. You could say he does green sketching, too, because he employs a spare and functional drawing style that doesn't waste an ounce of energy. The drawing below left is typical of what he produces to work from. Because he generally reproduces chairs from photographs, his drawings are more documentary than exploratory, mostly a way of working out drilling angles and dimensions. Sawyer makes ⅛ scale drawings in pencil on graph paper with ⅛-inch squares, so one square on the paper equals one inch on the chair. The presentation drawings at the top of the page, he notes wryly, were working drawings that "have been cleaned up for propaganda."



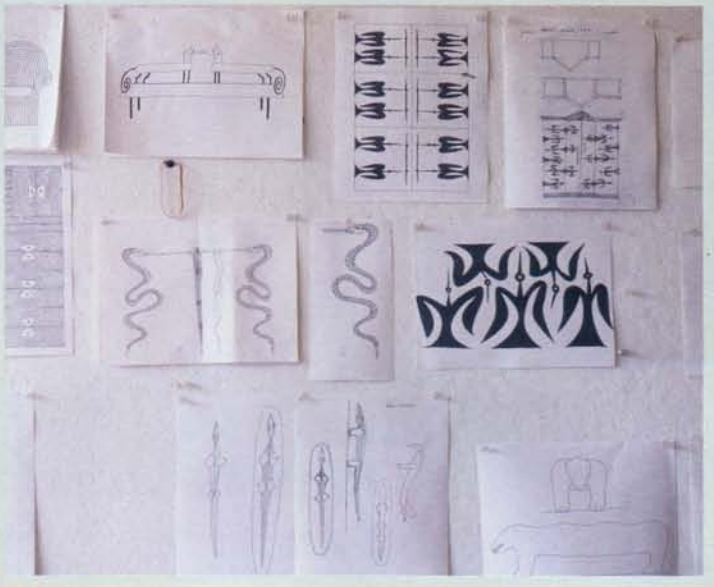
Just enough to get it built. David Sawyer's straightforward chair drawings reflect his uncluttered approach to making furniture. His drawings show a sensitive line, but they are primarily his means of establishing and recording a chair's vital statistics.

Photo this page: David Sawyer

Drawing on color. Color is as vital as form in Judy McKie's furniture, and she develops it with the same intensity. Her files bulge with color samples and color studies for each design that she contemplates.

Judy Kensley McKie

The first inkling of one of Judy McKie's playful, primitive, charismatic pieces of furniture is usually a playful, primitive, charismatic outline drawing on plain bond paper. "I used to start on graph paper," she says, "but it made me really tight right away. It was too much about limitations—how high, how wide—and not enough about the idea." For her, the life of an idea is in the first sketches, and she tries to retain that spirit in the finished piece of furniture. The bronze bench at top right began life as a sketch like those that were pinned to the wall in her shop this spring (photos above and lower right) as she considered bench ideas for a show in August. If she needs a full-scale drawing, she'll often put her original sketch on an opaque projector and trace it, because "if I try to redraw it, something gets stale. If I use the crude drawing I did at the beginning, it keeps its original life."



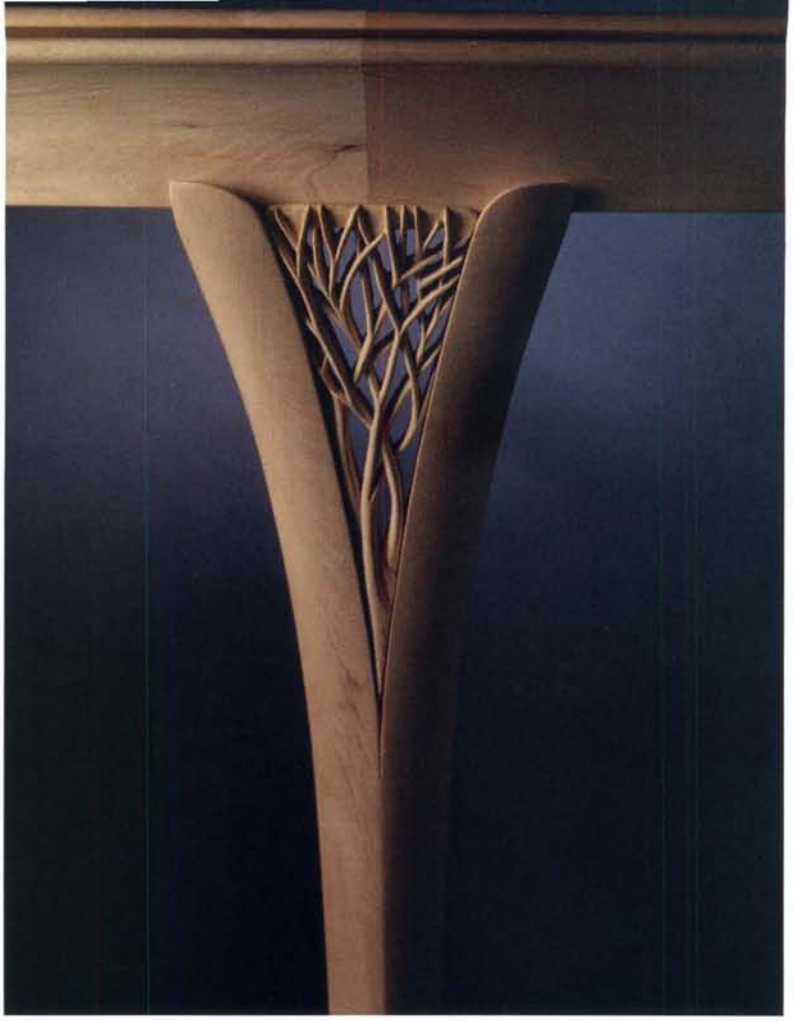
Top right photo: Eva Heyd; bottom left photo: David Caras

Finding One's Legs On a Demilune Table

BY BRIAN NEWELL

Into the land of legs. In his first attempt at a piece with legs, Newell designed a demilune table with split legs cut from solid hornbeam. The sycamore-veneer shelf mirrors the top and anchors the table both visually and structurally.

Photos: Doug Bening



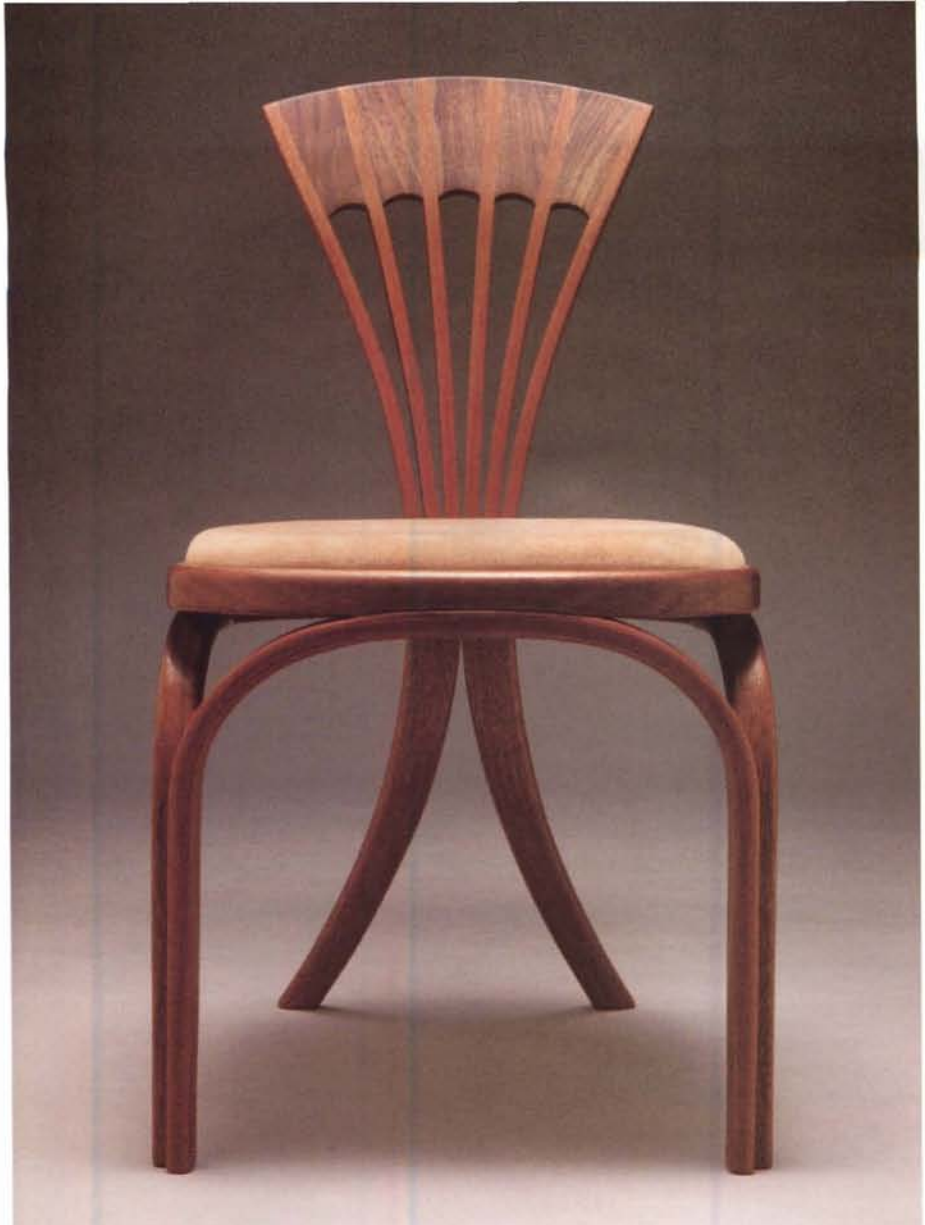
Branching off. The table's curved and carved legs employ tree imagery: stylized branches part to reveal a tracery of twigs carved in holly.

This table happened when I could no longer avoid making something with legs. For years I had managed to remain within the relative comfort of two dimensions, doing variations on the square box. There were wall-hung square boxes, with glass or without, decorated with carving or not, and there were, in certain muted acts of courage that hinted at an approaching metamorphosis, slightly curved cabinets sitting directly on the floor. But nothing ever sprouted legs. I rested safely in the land of leglessness, where I could limit someone's experience of a piece to two basic views, the one from the front and the one from the side; and of these two the side view hardly mattered at all. I didn't think myself capable of orchestrating all the drama implicit in walking around a piece—all the incremental visual changes in 180°. Surely the quarter-view or eighth-view would reveal something glaringly askew if not horrendously ugly.

While I don't know exactly what provided the idea for this table, I do know what provided the courage to try it. Living for a time in Italy, with so many graceful masterpieces in stone displaying such astonishing craftsmanship, my fear of the mere wooden leg seemed absolutely childish. If the stoneworkers of 500 years ago could seamlessly join six-ton blocks of marble into compound curves—doing so while perched on wooden scaffolding 200 feet in the air—then I could certainly shape a modest wooden leg and find a way to attach it to a table.

The legs that came to mind, of course, were foolishly radical for a first attempt. Several visually and technically failed mock-ups guided me closer to a solution, but even as I started cutting the hornbeam for the legs I didn't know exactly how everything would work out. As usual, there wasn't any extra wood to save me, so every moment I spent poised with a saw or chisel in my hand became a less-than-peaceful experience—exhilarating and dreadful both. While I can say that making this little table expanded my horizons considerably, I don't recall being truly relaxed until the day it left my shop. ■

This demilune table in curly sycamore veneer, European hornbeam and holly is 31 in. high, 40 in. wide and 15 in. deep.



Hardly a straight line in sight. All the pieces in this chair are made up of bent laminations. "After all, the human body is all curves," says the chair's maker, John Bickel.

Bending Wood to Fit a Human Form

BY JOHN BICKEL

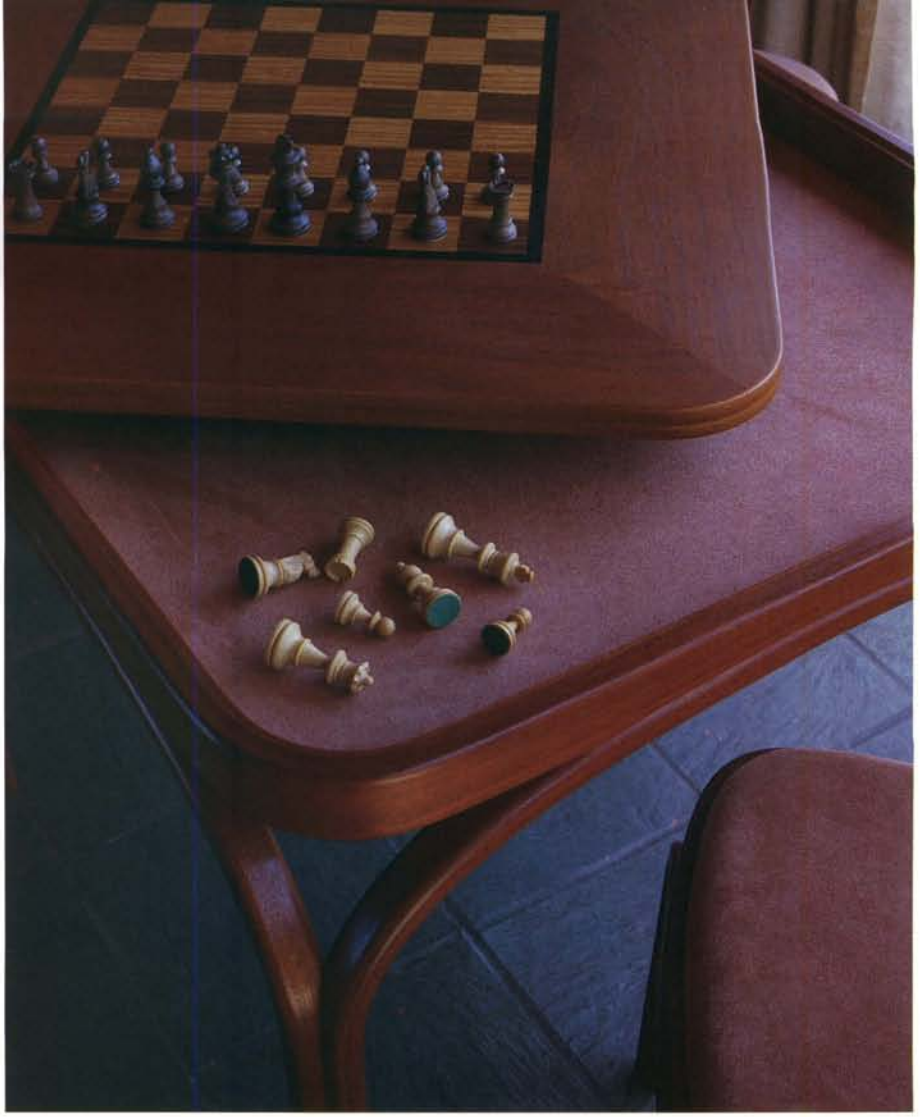
There are just a few guidelines I follow when I set out to design a chair: The form must be useful, sound, comfortable and enduring. In this chair, I think, both its look and its feel spring from the fact that there are hardly any straight lines. The seat rail is made by laminating thin strips of mahogany veneer and the front legs and fan-shaped back are constructed of tapered laminations.

These chairs were originally designed to go with a dining table that has a pedestal base and a glass top. The mahogany pedestal was made out of

Photos this page: Author; all other photos: Zachary Gaulkin

Bringing the outdoors in. The many curves in these chairs, echoed in the table, give the appearance of tree limbs merging and spreading.

Shadowlines enhance the curves. The author routed V-grooves to bring out the curve where the legs merge into the seat rail and the table apron.



The tabletop is actually a lid, enclosing storage for game pieces. The top is also reversible: The underside is veneered in mahogany without the inlaid game board.

bent, tapered laminations, so it seemed natural to apply those principles to the chairs. And because dining chairs are often seen from the back, I thought the fan shape would make the back visually interesting. The back couldn't be too high, though, because the customers did not want the chairs to interfere with their picture-window view.

I had used laminated construction for a long time but I wanted to find an application for using bent laminations in two planes, creating a compound curve. I thought these dining chairs would be an excellent opportunity to apply this technique. After making a set of eight chairs, I made two more for myself and a companion game table of similar design and construction.

Producing a chair like this requires many forms to bend all the laminated parts into the right shapes, as well as a number of jigs to cut the joints (see sidebar on facing page). Fortunately, there was no pressure to meet a deadline; I could take all the time I needed. I started with rough sketches and then made a number of models (at ¼ scale) to test the visual effect of applying these ideas (top photo facing page).

I brought the models to the customers, who suggested (and I agreed) that a full-size mock-up should be made. It would allow us to try the chair for comfort as well as see how it would fit into their dining room.

The mock-up had a seat frame with square corners at the front. The customers wondered if the seat could be made in a continuous curve. It seemed like an improvement, although it would require more bending forms and joinery jigs, complicating my life considerably; there are a total of 128 separate pieces of wood in this chair.

But the luxury of time allowed us to consider this change late in the design stage. It added quite a bit of time to the project but it turned out to be a significant improvement over the original concept. ■

The chair is 32 in. high, 21 in. deep and 18 in. wide; its seat is 18½ in. high.

Using Double-Tapered Laminations to Create a Compound Curve

The technique of bent laminations—bending and gluing thin strips of wood—has long been used to produce strong and uniform curved parts. To create a laminated curve that also tapers, however, it is necessary to taper each individual strip of wood that makes up the whole part. When I made the fan-shaped back of this chair, I tapered the laminations at both ends—a double taper—so that the back is thickest and widest at the seat rail, where it needs strength. By tapering the back at the top and bottom, the chair looks more delicate and refined.

The fan-shaped back of this chair curves in both the front and side views, so I had to perform two separate steps in the lamination process. First, I made the C-shaped curve that you see in the side view of the chair, with the laminations tapering gradually toward the top and the bottom.

Models test ideas. As he developed the fan shape of the back, the author made several models at ¼-scale (above) before proceeding with a full-size mock-up.

Mahogany laminations are nearly seamless. Because of mahogany's tight, uniform grain, the 12 laminations across the width of the chair's back (left) are hardly noticeable.

I glued these laminations together as one wide piece over a curved form and then sliced it into thin strips on the bandsaw. After cleaning up the bandsaw marks using a drum sander, I tapered these curved, laminated strips into the fan shape that you see in the front view of the chair. (In this view, the strips are also tapered so that they are thickest in the middle.)

To glue the strips into the fan shape, I used a curved wedge-shaped block to separate the laminations above the seat, so that later I could insert the walnut blocks that produce the fan-like appearance (see photo). Below the seat, the tapering laminations come together to form the two rear legs. I glued the back together on a curved form, one half at a time, and then joined them together in the final assembly.

(For more on tapered lamination techniques, see the articles by Jere Osgood in Fine Woodworking on Bending Wood, *published by The Taunton Press.)*

—JOHN BICKEL

Tapered laminations require lots of forms. The author first glued the tapered laminations, in one piece, to the curved form at the bottom of this photo. He then sliced them into strips and glued them into the fan shape, using curved wedges to separate the slats at the top of the chair.

Form for furniture. An ancient castle fortification was drawn by the author's husband during their trip to Japan. Years later, the wall's form inspired a piece of furniture.

Sculpture study. The red grid was superimposed on the drawing of the castle wall as a study for a laminated-wood sculpture that was never made.

Inspiration from a Japanese Castle Wall

BY JEANNE HYYPIO

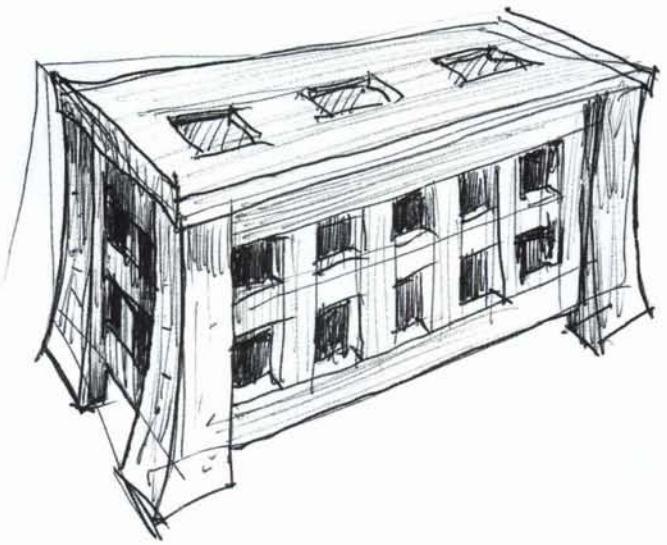
The night my husband, Bob, and I flew to Japan, we spoke of our planned adventures to the ancient cities of Kyoto and Nara, our interest in Zen Buddhism and the quiet strength found in the old Japanese primitive arts. Later that night, as we landed in our tiny Fukuoka apartment, the smell of food filled the air along with the noises of tiny cars, the clanking of undersized elevators, and the songs of some businessmen on their way to the next whisky bar.

Using our apartment as a base, we made many forays into the Japanese countryside. The modern cities seemed Occidental, too familiar. It was our love of the old that took us to many places *ee naka*, which means in the middle of nowhere. In the small country towns we found some of the simple grounded aesthetic we had hoped for when we came to absorb and experience Japan.

The tansu furniture in the Japanese country houses was inspiring. When we saw the rare, 200-year-old kaidan tansu—stair trunks—that led to the large upstairs rooms, Bob and I decided we wanted to live with tansu furniture when we returned to California.

Upon our return home, when we were unable to find a Japanese tansu to fulfill our specific needs, Bob and I designed and built a tansu-inspired piece of furniture for our home. With Bob's background in boatbuilding, construction and design, and my design and marketing skills, we decided to make tansu for sale when a client from our construction business commissioned a piece. The rustic feeling of the furniture we saw in the country homes of Japan was the inspiration for our pieces.

The Kumamoto Castle Trunk, named after a great castle in southern Japan, began with drawings of the castle-wall fortifications that Bob had made while we stayed in the city of



From wall to sculpture to sketch. After building tansu-inspired furniture, the Hyypios returned to the castle-wall form when sketching for a trunk design.

Fukuoka. We had carefully measured the stone wall by establishing a grid of string. Then Bob drew the wall with pencil. At the time, he thought the drawing would be a study for a laminated-wood sculpture capturing the powerful structure and the delicate curve created by the massive, shaped rocks. A further study shows the red grid of the sculpture concept superimposed on the form of the wall.

This curved plane of the castle walls, said to help deter spies or ninja, continued to evolve into a free-standing shape. As we got further from fine art and more involved in making furniture, a trunk seemed the ideal vehicle for rendering the feeling of the castle walls' protective form.

Our trunk has open wooden grids—reminiscent of the once-planned sculpture—that are recessed within the frame of the curved legs. We think the design conveys the sense of weight and beauty found in the castle walls crafted of huge cut stones placed in perfect symmetry. ■

The Alaskan cedar trunk is made with 70 mortised joints and 50 half-laps; it is finished with organic, water-based dye and Danish oil.

Finished form. The weight and grounded beauty of a Japanese castle wall are reflected in a trunk made of Alaskan cedar.

Photo: Jeanne Hyypio; drawings: Bob Hyypio

Two Chinese Tables Balance Delicacy and Strength

BY RANDOLPH DEMERCADO

Cutting everything but corners. By cutting into the frame stiles and allowing the corners to protrude, above, the author heightened the slenderness of his taller table, leaving nothing at the corners but joinery, all of it deftly hidden.

Tables so light they seem to levitate. The minimalist aesthetic of classic Ming furniture, though it evolved 500 years ago, is timeless. These tables work with any decor and will never be out of style.

Left photo facing page: Jonathan Binzen; all other photos: Scott Phillips

A few years ago, I decided to make two small rosewood tables for my wife, so that she could display plants, or bonsai trees or pottery. We don't have too many things in our house, but what we do have we really appreciate. These diminutive tables would have to look sharp without taking away from whatever was placed on them. I happen to be a maker of classical Chinese furniture, so, not surprisingly, I chose to design the tables in the Chinese tradition. It is a tradition particularly well suited to furniture that needs to be unobtrusive, because it relies on simplicity of form rather than on elaborate detail or ornamentation.

INTERPRETING THE MING TRADITION

The great flowering of arts and culture in China took place during the long Ming dynasty, 1368-1644, and it was during this golden age that furniture making reached its pinnacle.

There are two classic Ming table forms. One form, typified by round legs that slant inward, is based on wooden pillar-and-beam architecture. The other form is the result of an evolution that began 1,000 years before the Ming dynasty with a box-like Buddhist pedestal whose solid side panels eventually developed ornamental openings. The openings grew larger over time until the remaining edges became thin and leg-like, though still connected at the feet by a base stretcher. In its final form, the stretcher moved up the legs to become an apron, and the legs at last stood free. And so the quintessential Ming

Making a point. By mitering the frame stiles and the legs at 45° angles, the author brings all three pieces to a fine point.

horse-hoof foot protrudes inward, implying the turn of a corner on what was once a box.

I adopted this second form for my tables. For the short table, I employed the traditional horse-hoof foot; for the tall table, I carved gently tapered, paw-like feet. The dimension of each leg is ¾-inch by ¾-inch, and the tabletop is thinner still. Because I wanted the tops to feel as delicate as possible, I decided against either an apron or braces.

Each top consists of a panel that fits, without being glued, into grooves cut in a mitered frame, a design that allows the panel to expand and contract without affecting the structural integrity of the piece. To further diminish the impact of the frame on the tall table, I cut into each frame stile so that the mitered corners protrude from the frame. The result is that an object placed on the top seems to float above it. The cross-grain on the protrusions is vulnerable, however, so I built the full frame and fitted it to the legs before cutting away the wood.

With only the corner joints securing the legs to the top, I felt the tables needed the added structure of stretchers between the legs. I placed the stretchers far down on the legs so they wouldn't impinge on the airiness of the top, and I gave them a humpbacked shape, a cloud motif developed by Ming furniture makers, long before it became the signature cloud lift of the Greene and Greene style.

THE VIRTUES OF HUANG-HUA-LI

There is really no way to consider the form of the two tables without also considering the nature of rosewood. Rosewood—in particular, the native Chinese variety known as huang-hua-li—was the principal hardwood of the finest Ming furniture. Rosewood is so named because of its fresh scent, which the Ming writer Cao Zhao described as resembling "that of truth-bringing incense." Delicate though its scent may be, rosewood is remarkably strong. Indeed, the Chinese purportedly used rosewood for the spokes of their chariot wheels. In *Classic Chinese Furniture*, Wang Shixiang writes that "the color of huang-hua-li is perfect, neither too subdued nor too showy." Perfect, that is, for Ming furniture makers whose focus was not on embellishment but on line, curve and proportion.

I am truly inspired when I plane a piece of rosewood, and the color and grain reveal themselves. To enhance the natural figure, I use tung oil, and—contrary to the prevailing view—I think that the Ming furniture makers used tung oil or something akin to it. I have also heard that they encouraged the handling of their furniture, as the oils from one's hands would add to the luster and patina of the wood. I agree.

JOINERY—THE HIDDEN ASSET

One theory has it that Ming furniture relied on joinery alone rather than on glues and fasteners so that the furniture could be disassembled and reassembled as its owners traveled from place to place. I don't subscribe to this theory. Rather, I think, the oils in rosewood made it difficult to glue with the weak hide-and-fish-based glues available to Ming artisans. Free of glue and fasteners, complex joinery would have allowed for the repeated expansion and contraction of the wood caused by the extreme temperature fluctuations typical

Cloud-lift stretchers boost stability. Rosewood, strong and dense, lends itself to the slender proportions of these table legs.

throughout much of China.

Like the Ming furniture makers, I used no fasteners to construct my tables, but I did use glue, and the multifaceted joints offered plenty of gluing surface, greatly improving the strength of the joints. But strength wasn't my only concern. The joinery is also important in my tables because the miters preserve the flow of the grain, enhancing the fluidity of the lines.

Working out the intricacies of Ming joinery has given me endless appreciation for the skill and cleverness of the Ming furniture makers. Clearly, they weren't in a hurry. Only great patience and attention to detail over time could have produced such sophisticated joinery. I had the advantage of the photographs and measured drawings of Gustav Ecke. In fact, a drawing of the joints I used appears in Ecke's book *Chinese Domestic Furniture.*

WORKING AT SIMPLICITY

Ecke left me the challenge of turning a line drawing into a three-dimensional wooden joint. The joint I used to connect the stretchers to the legs wasn't too difficult; it's a mortise and tenon with a triangle on the outside surface that miters into the leg.

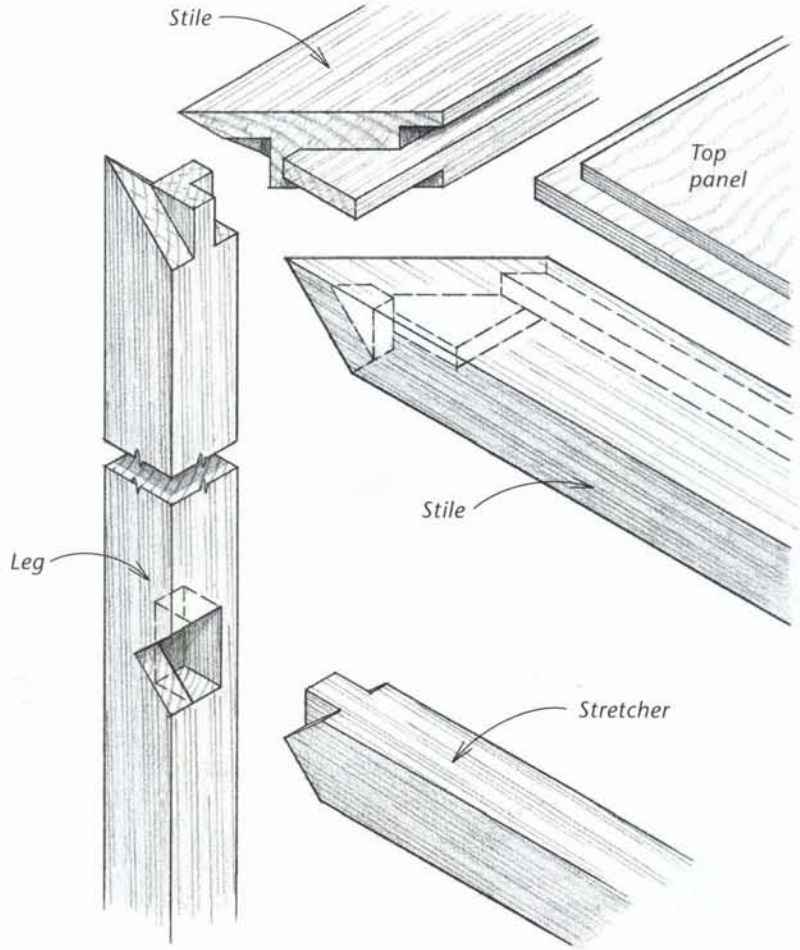
The real trick—the joint that makes or breaks these tables—is the one at the top corner, where the leg interlocks with the frame. It's a compound joint: first, a 45° miter with a mortise and tenon connects the two frame pieces, leaving an L-shaped socket, and then a beveled leg with an L-shaped tenon locks into the socket. The three mitered pieces meet neatly at the outermost corner.

The joint looks clean, and it preserves the flow of the grain from the top through to the legs. I've been asked whether it is necessary to use one piece of wood to preserve this flow. My answer is that using a single piece of wood isn't important so long as you select your wood with care.

I've also been asked, by certain would-be buyers, why my furniture costs as much as it does. I guess what these potential customers are telling me is that furniture lacking surface detail and decoration doesn't shout loud enough about how much money was spent on it. I can only say that simplicity is an acquired taste. Looking at these two tables, you have to believe in joinery you cannot see. The quality, I think, shows through. ■

STRENGTH IN NUMBERS

In both tables (the shorter table is depicted below), the mortise-and-tenon joint locking together the mitered stiles of the frame is made stronger by the interlocking L-shaped tenon of the leg. The front face of the stretcher below miters into the leg, adding further stability and avoiding the abruptness of a butt joint.



The high table is 39 in. tall and 12 in. square; the other is 24 in. tall, 17¾ in. wide and 14 in. deep. Both are made of rosewood.

Drawing: Vince Babak

Taking Kitchen Cabinets Beyond the Basic Box

Furniture and architecture blend in Hiro Morimoto's inviting kitchens

BY JONATHAN BINZEN

Photos: Jonathan Binzen

For many woodworkers, kitchen cabinets represent a dependable source of income—and an equally dependable source of mild embarrassment. Kitchens may be a cash cow, but they often look a little too bovine to make it into the furniture portfolio. For Hiro Morimoto, they represent something different—an opportunity to work another minor miracle. Morimoto, an architect in the San Francisco Bay Area who designs furniture as well as interiors and architecture, is a veteran of dozens of kitchen remodels. Stylistically, his kitchens can seem disparate. He's done pure-white kitchens that are all planes and hard edges; cherry-clad kitchens that are essays in Arts and Crafts sensuality; and kitchens like the one on these first pages that give standard cabinets a sculptural twist. It isn't the style that marks out a Morimoto kitchen, it's the approach.

Three keys to Morimoto's method: First, he looks at the kitchen as one element of a larger whole, the house, and draws inspiration, details and materials from the surroundings. Second, he thinks of cabinets collectively; rather than banding a room with bland boxes, he turns a group of cabinets into an overall composition. And third, he designs furniture and fixtures for his kitchens and adjacent areas that give the kitchen the feeling of a living space and help bind it to the rest of the house. In a Morimoto kitchen, the cabinets, furniture and architecture all grow together, making you feel comfortable in the kitchen and making the kitchen feel comfortable in the house.

NO BLAND BOXES

An arcing line of inlay and a custom stove hood are the simple elements that

Thinking outside the box. One slope-sided cabinet in a kitchen full of standard-shaped ones helps Morimoto turn a common kitchen plan into a fresh composition.

Unifying line. An arcing line of inlay unifies the upper cabinets in one bold stroke. Morimoto bolstered its graphic impact by running the grain of the cabinets' European ash veneer vertically below the line and horizontally above it.

Functional cabinets with a sculptural spirit. "Once I have the pure function determined," Morimoto says, "I freeze it; then I can do anything to the surface or shape of the cabinets."

DNA borrowed from the building. Morimoto absorbs the vernacular of a house before remodeling its kitchen. His kitchen for this 1913 house draws on the Arts and Crafts aesthetic evident in its beautifully divided original windows.

Composing room. Under Morimoto's hand, every group of cabinets is a composition. Here the bridge cabinets in a built-in hutch are linked by the continuous curves of their top rails and their bowed fronts.

elevate the design of Morimoto's European ash kitchen on pp. 64-65. With those two gestures, Morimoto proves even minor adjustments can lend a standard arrangement of boxes-on-the-wall a completely different feeling.

Morimoto always picks a focal point to build his kitchen compositions around. Here, he chose the stove and used the hood above it to create the focus. By designing his own stove hood (he had it fabricated by a sheet-metal shop for about double the cost of a standard hood), Morimoto turned what could have been a black hole—a clunky, cold, institutional hood—into the keystone of the kitchen. He angled one side of the hood and the adjacent cabinets and angled the hood's whole front plane, creating a shape that contrasts in a provocative way with the unbroken flat fronts of the cabinets. The bold shape of the hood is especially effective because it is so stark, uncluttered by the knobs and logos typical of store-bought hoods.

To preserve the focus he had chosen, Morimoto kept the lower cabinets relatively plain. He used the quartersawn European ash veneer straightforwardly on them—vertically on the island and

Better than a boiler room. Carved out of a basement, this cozy kitchen shows Morimoto designing columns, cabinets and a table to bring new life to a turn-of-the-century house.

the cabinet doors, horizontally on the drawers—thus keeping them in the background. Then he drew a curving line of dark veneer across the bank of upper cabinets. It has no functional purpose, but, along with the hard-angled hood, that unexpected line brings the kitchen alive. Morimoto reinforced the line's effect by having his cabinetmaker, Miles Karpilow, run the ash grain vertically below the line and horizontally above it. Here quiet materials create a strong visual impact and a compelling sense of place.

It may be a coincidence that the arc of inlay mimics the fall of window light across the cabinets, but it is no coincidence that plenty of light streams into the kitchen. In all his kitchens he brings in as much as he can, happily sacrificing a cabinet or two for extra light.

In this modern house with its open plan, Morimoto strove to find ways—short of putting up walls—to give the kitchen added definition. He found one when he designed a system of ash-trimmed soffits and ceiling fixtures. By bringing the cabinets and the lights down a foot or so from the ceiling and putting some wood overhead, they create a more intimate space and also make a visual bond between the cabinets and the architecture.

TYING THE KITCHEN TO THE HOUSE

In ten minutes you can drive from Morimoto's office to one of Berkeley's culinary landmarks, the restaurant Chez Panisse. To Morimoto, the proximity is significant. It was at Chez Panisse that Alice Waters touched off New American cooking. With its emphasis on fresh ingredients grown locally and prepared simply, this trend has helped move the art of cooking toward the center of many people's lives. This has had a profound effect on domestic architecture. With the greater emphasis on cooking, Morimoto says "the kitchen has become the center of the house. ... It used to be that the living room was the metaphoric center of the house—with its hearth and its view, the room that had the most money lavished on its design. Now, the kitchen is the place that has the warmth, the food, the action."

If the kitchen is the heart of a house, then remodeling the kitchen of a fine old building is a bit like performing a heart transplant. How do you make sure the new heart takes? Morimoto does it in part by matching the tissue of his cabinets and furniture with that of the house. He recently renovated the kitchen of one of the finest old houses in Oakland, the Wintermute House of 1913, designed by John Hudson Thomas (photos on facing page). Thomas worked in the Craftsman idiom but with the inflection of an architect steeped as well in classical and progressive European design.

Like many older houses, Wintermute had a dim, cramped kitchen designed for servants, not for guests. After taking down several interior walls to enlarge the kitchen, bring in natural light and open the views to the gardens, Morimoto set out to make a kitchen full of modern appliances feel like it belonged in the turn-of-the-century house. He studied the style of the architecture, visible here in the kitchen's slender, artfully divided original windows, and blended influences from Thomas and from Charles Rennie Mackintosh (a favorite of his clients and an influence on Thomas) to create a pattern of shallow arcs and incised squares. He also introduced some minor architectural elements inspired by details elsewhere in the house.

In the basement of the Wintermute House, Morimoto created a small second kitchen in a space that had been devoted to storage and the boiler (see photo above). As he did upstairs, here too he designed cabinets that play off the rhythm of the window bars, employing a pattern of glass-backed cutouts in the cabinet doors and even grillwork cut into the toe kick.

To give the kitchen a shape and intimacy of its own, he designed columns that hint, with their blend of geometric and organic lines, at the affinity be-

The maker's mark. Hiro Morimoto (above) uses a motif of square cutouts (left) that reveals both his Japanese heritage and his interest in Arts and Crafts design.

tween the work of Thomas and Mackintosh. For this slip of a kitchen, with its quarter-ellipse floor plan, Morimoto designed a table with an elliptical Corian top. Taken together, the columns, the table and the cabinets describe Morimoto's method of stitching a kitchen seamlessly into a house.

Drawing the kitchen out of its shell. Dining furniture in the woods and the style of the kitchen's cabinets (left) helps to integrate the kitchen with the living area of the house.

FURNITURE FITS THE KITCHEN

As he often does, Morimoto here used furniture in a room adjacent to the kitchen that incorporates details, materials and overall lines similar to those he uses in the kitchen cabinets. These chairs, based on a Morimoto design, pick up the cherry, the rectilinearity and the theme of decorative squares used in the cabinets. The hefty cherry frame of the glass-topped dining table corresponds with the cabinets and with the big redwood timbers defining the opening to the kitchen. The same few paces would have seemed like a mile if the table and chairs had been Chippendale.

Throughout Morimoto's work, whatever the style, you see clusters of incised and cut-out squares. Such patterns were a leitmotif in Arts and Crafts furniture and architecture, one used by Frank Lloyd Wright as well as by Mackintosh and Thomas. For Morimoto, they have special significance. Mackintosh, Thomas and Wright all were influenced by Japanese design, and Morimoto, who was born in Japan and lived there until he was 15, says that the patterns they designed were derived from a Japanese symbol called a *mon*. Something like a family crest, the *mon* is often embroidered on formal or festive clothing in Japan or inscribed near the entry of a house. For Morimoto, the *mon* forges one more link between his furniture and his cabinets, between his native Japan and his adopted America, and between design at the opening of the 20th century and at its close. ■

Jonathan Binzen is an associate editor at Home Furniture.

fine furniture timbers

BY JAMES H. FLYNN

Rediscovering Tenacious Mesquite

If you were a rancher in old Texas, and rode your horse into hot and dusty San Antonio, you might have witnessed the first paving of the main streets. They were being "cobble stoned" with blocks of mesquite. On the other side of the equator, as late as the 1940s, the major avenues in Buenos Aires, Argentina, were paved the same way. The blocks were set in a bed of sand and lightly coated with tar. A tough wood to be sure!

Mesquite, in the genus *Prosopis,* is in the great legume family which also includes, besides peas and beans, trees such as honey locust and the various rosewoods. The most familiar species of mesquite to woodworkers is *Prosopis glandulosa*, formerly known as *Prosopis juliflora*.

The nutritious beans of the mesquite were feeding early Southwesterners for centuries before the tree's lumber made it to fine furniture or its wood chips to backyard barbecues.

Tougher than the rest. Thriving in hot, dry areas, mesquite trees produce this hard and durable wood, which shrinks and swells much less than other fine woods.

A 1979 report by the National Academy of Sciences pointed out possible uses of the legumes for food, fuel and timber. The North American Indians of the Southwest knew this long ago, and the mesquite was considered the staff of life to them. The wood was used for building shelters and as fuel for cooking and warmth. Best of all, the extremely nutritious beans were storable and provided sustenance for both man and wild game.

In ideal environments, the trees will reach heights of 35 feet, with short and sometimes contorted trunks as stout as three feet. The U.S. Registry of Big Trees reports the "Champion" mesquite growing in Real County, Texas, has a height of 52 feet and a circumference of 152 inches. To some stockmen mesquite are a curse because they occupy valuable rangeland and are too prolific to eradicate. On the other hand, the wood makes durable and strong fence posts! To others it is an

Photo: Scott Phillips; drawings: Michael Rothman

ideal tree/bush for soil stabilization. Mesquite doesn't need much encouragement to grow; thick taproots, penetrating down 40 feet or more, search for subterranean water.

Now to the wood. It varies in color, and is often a marbled yellow or a medium to dark brown. Depending on where it grew, it can be very dense and tight-grained with a wavy pattern. All mesquite is not uniform in hardness—an important consideration in applications such as flooring—but culling through cut timbers one can find wood whose extreme hardness far surpasses that of oak or walnut.

Don't expect long, clear lengths of mesquite, and be surprised to find large pieces 6 to 10 feet long and 6 to 8 inches wide. One praiseworthy attribute is mesquite's small and uniform shrinkage rate. It is hard to work unless tools are sharp and care taken to watch the grain orientation. This is also one wood where you should take advantage of the character of the wood in making a project, rather than design the piece and then search for the wood. Mesquite is a woodturner's delight when its characteristics such as bark pockets, ring shakes and twists and turns in the grain are emphasized and brought to life. The wood glues well and takes a beautiful finish. It has been equated with walnut, rosewood or mahogany in beauty.

Today, there is a renewed interest in mesquite, largely brought about by organizations such as Los Amigos del Mesquite and the Texas Mesquite Association, and encouraged by the Texas Forest Service. For more information on sources of mesquite and how the wood is being used today, contact Los Amigos del Mesquite (P.O. Box 310, Lufkin, TX 75902; 409-639-8180).

Many people know mesquite makes a great charcoal for barbecuing hamburgers or ribs. Ah! but using mesquite in the woodworking shop is a great experience as well. If wood has feeling I am sure it would appreciate getting out of the hot sun and spending its new life as a fine piece of furniture. A piece of jewelry, beautiful parquet flooring, an unusual turning or just a plain small box, all of mesquite, will be a lasting reminder of the old Southwest. *Adios, amigos!*

James H. Flynn is an Associate Editor of World of Wood, *the journal of the International Wood Collectors Society.*

Wood with character. Twisting trunks and gnarly bark help give mesquite wood its swirling grain and unique characteristics.

BY JENNIFER MATLACK

A Good Sense of Leather

Leave it to leather to liven your senses. It's a material that looks and feels wonderful. And as far as its smell, well, who doesn't like the smell of leather? In addition, it's natural, durable, ages well and is available in a variety of colors. These are just a few reasons to incorporate leather into a furniture design. But before you do, it's a good idea to make some sense out of your senses. Quality leather has a certain look and feel to it. So knowing what to look and feel for will enable you to make a smart buy. When you purchase leather, your eyes and hands will serve you well. Not to mention your nose.

The cattle industry does more than supply us with red meat. It also gives us leather. And while the quality of meat may not depend on whether an animal has to forage or not, the quality of leather does. Because there is a lot of grazing land in North and South America, cattle there often suffer hide damage. Barbed wire, ticks and brands batter coats. When cattle lie on the ground, their skins are stained by urine.

In Europe, because space is limited, cattle don't forage. Instead, they live on farms where they are fed and cleaned. Their fences are wooden and the animals are usually taken in at night. Such a lifestyle is gentle on hides and leaves them virtually unmarked. It's because of this reason many people choose to buy European leather. But something to keep in mind is that its quality not only makes it more attractive but more expensive as well.

The two grades of leather are top and full grain. Top grain comes from blemished hides and full grain from unblemished. Teddy Edelman, one of the East Coast's top leather suppliers, explains that "top grain, or corrected leather, is leather that has been abraded to remove imperfections such as scars, brands, and scratches." After the hide is sanded, pigment is applied to its surface. Acting like paint, the pigment fills into the pores of the leather and coats its surface. Edelman adds that "top grain leather is basically painted over with house paint." When you touch it, you can feel the coating. Hank Holzer, a custom furniture builder who has worked with leather (see "Walnut Chairs and Dining Table," *HF* #6, Spring 1996), notes that "the more finish on leather, the more it'll feel like plastic." Good leather, on the other hand, says Edelman, "is wonderful to the touch."

Full grain leather is largely unmarked. So it doesn't need an application of paint. When you look at it, you are able to "see" into the skin (see lower left photo on p. 76). With top grain leather, however, the pigment saturates the hide, covering the natural grain patterns. In time, top grain leather cracks. Full grain leather does the opposite. "As it ages, it develops a beautiful patina," says Edelman.

It's the process of tanning that allows leather to age without putrefying. The two methods used are vegetable and chrome and each affects leather differently. Vegetable

Sit on it. A sky-blue leather seat is a subtle accent in this bold bar stool by John Christie. Malleable and soft, the leather hide made upholstering the seat's curves and corners easy.

Photos this page: John Christie

Attention Furniture Makers

Our dedicated readers know, care about and want the kind and quality of furniture you build.

Reach this strong new market with your ad in *Home Furniture*. Contact the *Home Furniture* Advertising Department at 1-800-926-8776, ext. 829, or write to:

Advertising Department, *Home Furniture*
63 S. Main St., P.O. Box 5506
Newtown, CT 06470-5506

Protect Your Back Issues

SLIPCASES FOR *HOME FURNITURE*. Bound in dark green and embossed in gold, each case holds at least 8 issues of *Home Furniture* (two year's worth), and costs $8.95 ($24.95 for 3, $45.95 for 6). Add $1.50 per case for postage and handling; outside the United States, add $3.50 each (U.S. funds only). PA residents add 7% sales tax. Send your order and payment to the address below, or call toll free, 1-800-825-6690, and use your credit card (minimum $15).
Jesse Jones Ind., Dept. 95 HF, 499 E. Erie Ave., Philadelphia, PA 19134 (No P.O. boxes, please).

tanning is a natural method that uses tree bark to cure the hide. This method makes leather more resilient. Leather with more body is best for cabinets, wall panels and especially for desk tops where the leather needs to be extra resilient.

Chrome tanning is a more common, quicker method. It involves using minerals and chemicals. The result is leather that is soft, supple and strong. Because chrome-tanned leather is pliant, its best use is for upholstery.

The best place to go sniffing for better leather is at a local design center. Typically it's sold in full hides. Cows and bulls yield approximately 55 square feet while calves average around 28 square feet. However, you may find a place willing to sell a half hide of low-quality leather.

Edelman advises bringing plans or a template to the center. This way, you will be told exactly how much square footage your design requires. Gene Martin, a furniture designer (see "Dining Set in Cherry and Imbuya," *HF* #3, Summer 1995), explains how he bought a hide for chairs that he was making. "I wanted the leather to look crisp and endure repeated sittings." Familiar with leather, the center told him he wouldn't be able to use the belly portion of the hide because it's too stretchy. Martin was then able to make the adjustments needed to upholster his chairs. To find a design center, check your yellow pages or the ad pages in mail order catalogs.

How to decrease creases. To avoid deep lines in your leather, drape the hide as soon as you get it home. Here, layer upon layer of hides wait to be sold.

Once you buy your leather, Holzer recommends draping it immediately to avoid creases (see top right photo this page). He remembers the time he received a folded hide via UPS. "The creases were so deep," he explains, "that it looked like a 500-pound gorilla sat on it." To avoid this, "leather should be rolled and shipped in a tube," Edelman advises.

Something to keep in mind is that although all leathers fade, quality dyed leather fades the least. When buying leather, Martin looks for dye that has penetrated all the way through the hide, so he knows he's getting quality leather.

There are a lot of reasons for using leather in a furniture design. Speaking of chairs, Jere Osgood, a teacher and furniture maker (see "What Makes a Chair Stand Up to Abuse?," *HF* #11, June/July 1997), says that "leather is a design solution. It avoids a complicated fabric decision." Holzer adds, "if the backs of your chairs have a lot of grain pattern, leather helps to keep the design monochromatic." It's clear that leather can be used for a variety of reasons. And for some people, using it simply makes good sense.

Jennifer Matlack is the editorial assistant at Home Furniture.

Looking into leather. You know you're looking at quality leather when you can "see" into it. The top three samples of full grain leather show natural, fine lines while the bottom two samples of top grain leather show an embossed grain and painted, flat finish.

Photos this page: Jennifer Matlack

about the authors

Home Furniture *prints the addresses and telephone numbers of the furniture makers featured in each issue, unless the maker requests that they be omitted.*

JOHN BICKEL

(photo below right) was a fashion photographer for Eastman Kodak in New York in the 1950s and '60s. He has been building furniture in his one-man shop in the Hudson River valley for more than 20 years now, working close to nature—planting, pruning, hauling logs to local sawyers and milling small logs himself. His designs often have elements that appear like branching limbs and twisting roots. "My first rocking chair was a conscious attempt to utilize the branching which nature accomplishes so beautifully" (6 Grants Lane, Ossining, NY 10562). *"Bending Wood to Fit a Human Form"* on p. 54.

JEAN M. BURKS

is the curator of decorative arts at Shelburne Museum in Shelburne, Vermont. She has worked at numerous museums and written for many magazines on topics ranging from brass candlesticks to Shaker sweaters. *"The Origins of Shaker Furniture"* on p. 22.

LES CIZEK

closed his Miami Beach shop recently and now lives in Fort Bragg, California, where he and a partner run a cooperative furniture-making shop. Since the 1960s, Cizek has been both a student and teacher of woodworking. He taught cabinetmaking at Miami-Dade Community College in the 1980s and then took two years off to study furniture making with James Krenov at the College of the Redwoods in Fort Bragg. His furniture ranges from custom commissions to one-of-a-kind pieces for his own home (Four Sisters Woodworking, 400 North Harrison St., Fort Bragg, CA 95437; 707-964-4141). *"An Unabridged Look at Dictionary Stands"* on p. 38.

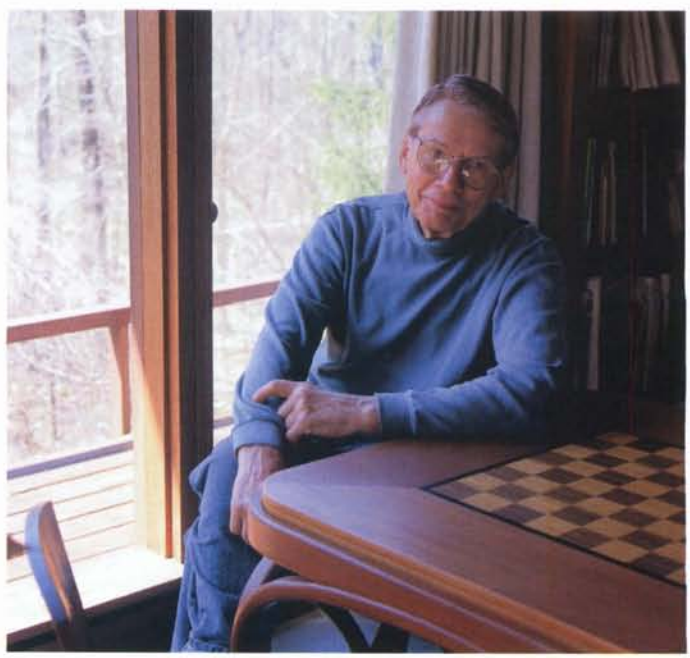
The makers of the other desks featured in Cizek's article can be contacted as follows: **David Ebner**, 12 Bell St., Bellport, NY 11713; 516-286-4523; **Peter Korn**, 25 Mill St., Rockport, ME 04856; 207-594-5611; **Peter Shepard**, 43 Bradford St., W. Concord, MA 01742; 508-369-2403. The desk by **Hank Gilpin** is available through Pritam & Eames, 27-29 Race Lane, East Hampton, NY 11937; 516-324-7111.

RANDOLPH DEMERCADO

came to woodworking by way of bonsai trees, when, years ago, he needed some small display stands for his charges. The making of wood stands blossomed into the making of furniture and then took over. DeMercado now earns his living crafting reproductions and interpretations of Chinese furniture (Alexious Designs, 306 Lakes Rd., Warwick, NY 10990; 914-986-2815). *"Two Chinese Tables Balance Delicacy and Strength"* on p. 60.

JOE EISNER

is a New York City architect who often designs the furniture for his commercial and residential interiors. He explores materials and textures by juxtaposing wood and the industrial qualities of materials such as glass and metal. He received his Masters of Architecture from Harvard and worked at Knoll International in France, among other jobs, before founding his company in 1990 (Eisner Design, 595 West End Ave., Suite 2A, New York, NY 10024; 212-860-0299). *"Tabletop Inlay Mimics Legs"* on p. 42.



JEANNE HYYPIO
and her husband Bob are Hyypio Design and Furniture. Their diverse lives have included stints traveling and studying in Japan, designing for Chrysler Motors and boatbuilding on the Great Lakes (616 St. Mary Drive, Santa Rosa, CA 95409; 707-539-0923). *"Inspiration from a Japanese Castle Wall"* on p. 58.

GARY NAKAMOTO
(photo at right) grew up on a small island off Oahu, Hawaii. He learned carpentry in Hawaii and then traveled to New York, North Dakota and then San Francisco working on large commercial projects. Now living in Oakland, California, Nakamoto recently received an art degree at the California College of Arts and Crafts. His "G.S. Poschairs" are available from Misugi Design (2233 5th St., Berkeley, CA 94710; 510-549-0805), a custom furniture retail gallery (Gary Nakamoto, 5529 Taft Ave. Oakland, CA 94618; 510-654-6052). *"A Bent-Plywood Chair Built for Good Posture"* on p. 28.

BRIAN NEWELL
was mesmerized at the age of eight when he first saw wood being carved. He was soon running a wooden-sign business from his parents' basement. He went to the University of Michigan, where he studied Germanic languages. Like night follows day, that led to three years as a model maker in the toy industry. Then he spent a year studying furniture making under James Krenov. Since 1993 he has been making custom furniture in his solo shop (2041 W. Carroll St., Chicago, IL 60612; 312-226-2540). *"Finding One's Legs on a Demilune Table"* on p. 52.

PHILIP PONVERT
A Rhode Island native, Philip Ponvert got his start in woodworking as a model builder in the naval architecture department at the University of Michigan in Ann Arbor. Today he runs his own custom woodworking business and recently started up a new business, The Greenbridge Furniture Company, for manufacturing knock-down and production furniture designs (3045 Broad St., Dexter, MI 48130; 313-426-5415). *"Customizing the Home Office"* on p. 30.

JOHN H. ROSS
taught woodworking classes for several years before leaving to attend the North Bennet Street School in Boston. He now teaches a Saturday class in old woodworking tools. Recently, he traveled to China to learn more about the craft of Chinese woodworking and to discover new inspiration (40 Garden Street, Cambridge, MA 02138). *"Breakfast Table Blossoms from Two Designs"* on p. 36.

INDEX TO ADVERTISERS

A&M Wood Specialty Inc.	77	Groff & Hearne Lumber, Inc.	79	The Old Fashion Milk Paint Co.	77
Adams Wood Products	3	Howard Hatch Fine Furniture	16	Old Village Paint	11
Ben Adriance	16	Hearne Hardwoods, Inc	9	Oneida Air Systems, Inc.	3
George Ainley	21	Heuer Woods	77	Paxton Hardware Company	75
Airware America	73	Homestead Hardwood	75	H. H. Perkins Company	77
Alva Hardwoods	75	Horton Brasses	9	Phantom Engineering	13
American Furniture Designs	81	Michael Hurtenbach	15	Pootatuck Corporation	77
Bar Maid Refrigeration	11	Hut Products	75	Powermatic	9
Jonathan P. Baran	15	Imported European Hardware	13	Professional Discount Hardware	73
Barr Specialty Tools	81	Inca Corporation	7	Quality Vakuum Products	11
Big Tree Tools, Inc.	73	Incra Rules	9	Red Hill Corporation	77
Blue Ox Hardwoods	77	Japan Woodworker	3	Dana Robes Wood Craftsmen	73
Bradco Chair Co.	13	Jensen Design	21	Safranek Enterprises, Inc.	13
BrandNew	73	Jonah's Cabinet Shop	21	M. L. Salas Cabinetmakers	19
J. Brubaker Hand Crafted Fine	19	Kardae Supply Co.	79	Sandy Pond Hardwoods	79
Kristian Brunsdale, Inc.	15	Keller & Company	7	Shows Inc.	7
Larry & Faye Brusso Hardware	81	Kwick Kleen	77	SpaceMax Furniture	19
Burak Furniture	75	Laguna Tools	2	G.J.W.Spykman Cabinetmaker	15
Bernie Campbell Cabinetmaker	17	Peter Lang Co.	77	St. James Bay Tool Company	13
Carving Workshop	17	Lavinia Interiors	77	Sterling Pond Hardwoods	73
Certainly Wood	75	Leigh Industries	71	Harold W. Stevenson	15
Chestnut Woodworking	73	Liberon/Star Supplies	73	TRG Products	3
Conover Workshops	79	Lie-Nielsen Toolworks	11	Target Enterprises	73
Cotswold Furniture Makers	16	Lind Woodworking	19	Tool Chest Books & Tools	77
Robert Dalrymple	73	MEG Products	77	Treebeard Designs, Inc.	16
Danielson Gillie Associates	21	MacBeath Hardwood Company	75	Tropical Exotic Hardwoods	73
J.B. Dawn	75	Mario Macina Designer	15	Peter S. Turner	15
Devine Marketing Group	3	Manny's Woodworker's Place	83	Uncomin Woodworks	19
Diefenbach Benches	79	John Mc Alevey	17	Vacuum Pressing System	9
Dimestore Cowboy	79	McFeely's Square Drive	11	Van Dyke's Restorers	77
Charles Durfee Cabinetmaker	16	Mercury Vacuum Presses	71	R. Damian Velasquez	19
EXCEL/Ambel	73	Mykl Messer Designs	17	WGB Glass	7
Chris Efker/Craftsman Hardware	11	Mission Spirit	16	Garrett Wade Company	11
Doug Evans	16	Misugi Designs	3	Wallace & Hinz	13
Fein Power Tools	83	Mitchell Graphics	81	Gary Weeks Woodworking	16
Furniture Designs	83	Modern Postcard	71	Wet Paint	17
Gilmer Wood Company	77	W. Moore Profiles, LTD	73	Whitechapel Ltd.	9
Michael Gloor	19	Newport Exhibition Group	21	R.S.Wilkinson	17
Goby's Walnut Wood Products	75	Norman's Reproductions	17	Wood Classics	13
Thomas Golding	79	North Star Lumber	73	S.R. Wood	73
Gougeon Brothers Inc.	79	Northwest Timber	79	Debey Zito Furniture	21
Grandview Design	15	Oakwood Veneer Co.	75		

BY CURTIS EVARTS

Legend on a Bicycle

Wang Shixiang, the internationally renowned Chinese scholar and author of *Classic Chinese Furniture*, will be 83 this year. He rises at six each morning and rides his bicycle to buy fresh produce at a market just outside the walls of the Forbidden City near where he lives with his wife and scholarly companion, Yuan Quanyou. Doing his research is not quite as easy as it used to be; eye problems have developed and now Wang relies on his wife's eyes for reading. But still he rides the bicyle. For Wang Shixiang (pronounced wang shih-sheeang), it is an indispensible scholarly tool. He has been using one for 50 years to travel the countryside in search of the antique furniture that he has brought to the world's attention in his books. On occasion, when he bought a piece of furniture, he took it apart and bound up the parts to carry them on his bicycle like a bundle of firewood. Such inconspicuous transport was sometimes more than a convenience: while Wang has been fighting to preserve and describe classical Chinese furniture, others have at times been as busy breaking up such high-style antiques either for precious materials or because they were "anti-revolutionary" symbols of the pre-Communist past.

Wang Shixiang's life has been full of reversals as well as accomplishments. He was raised within a family of privilege and rank, inheriting a large courtyard compound with numerous rooms where he could display his collection of Ming and early Qing hardwood furniture as it grew. He was educated in Beijing, but fled the Japanese occupation during World War II. Upon returning in 1945, Wang received an official post with responsibility for identifying cultural relics looted by the Japanese during the war. He also began gathering materials related to a new interest—the history of Chinese furniture.

Under the new Communist regime in the late 1940s, he was appointed Head of Exhibitions at the Palace Museum. But in 1953, during the Movement Against the Three Evils, Wang was accused and dismissed. Undaunted, he finished his draft of *Ancient Chinese Furniture from Shang to Early Qing*, and in 1961 he received tenure to teach the history of Chinese furniture at the Central Academy of Arts. But then, amid the general persecution of scholars during the Cultural Revolution of the 1960s, Wang's antique furniture and research materials were confiscated. So was his house. And he was interned in a work camp to tend pigs and oxen. After being released, he and his wife were permitted the use of one room in the family house. Their impounded furniture was returned a piece at a time. With quarters so cramped, Wang and his wife disassembled many of the pieces to store them more compactly, and at one point, the two of them slept inside a large cupboard with the doors removed.

The image of Wang inside the cupboard is apt, since his scholarship has illuminated the inside as well as the outside of Chinese furniture. His books are full of lucid line drawings (in addition to superb photos) that convey the essential anatomy of each piece of furniture. To understand old furniture, Wang bicycled around to restoration shops, gaining first-hand knowledge from old furniture craftsmen with links to the past. Returning home, he would sometimes recreate a newly discovered joint by carving a turnip, which his wife would then use as a model from which to produce a drawing of the joint for publication.

Resourceful and resilient, Wang has shown that extraordinary work can be carried out with humble tools. Over the last decade, classical Chinese furniture has joined the ranks of the world's great furniture traditions—and this is due in no small part to one man on a bicycle.

Curtis Evarts is a furniture historian and consultant now living in Taiwan. He was associate curator of the former Museum of Classical Chinese Furniture in California.

Drawing: Scott Bricher

Dust-Free Sanding

Eliminate hazardous dust *Before* it becomes airborne

Airborne dust is now being recognized as a major health hazard. Imagine sanding in a dust-free environment, where 98% of the dust created by sanding is gone.

How It Works

Dust produced by sanding is immediately sucked away through holes located in the sandpaper, the bottom of the sander's pad, AND around the outside edge of the pad (a FEIN exclusive). The extracted dust is contained by a powerful vacuum.

Unbeatable Finishes

Typically when you sand with normal sanders, your sander ends up riding on a bed of dust and broken abrasive. With the FEIN Sanding System, this "bed" of dust doesn't exist. Your paper cuts faster, cleaner, and lasts up to 10 times longer. You simply can't get the same finish by any other sanding method.

Automatic Vacuum

When you turn your Fein sander on, the vacuum starts. When you switch your sander off, the vacuum stops. . . automatically. The Fein Turbo II Vacuum is built to handle large amounts of super-fine dust.

It's easy to get more information, simply call and ask for a free color brochure: (800)441-9878

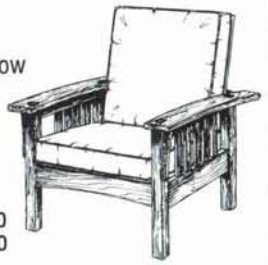
FEIN Power Tools Inc.

3019 West Carson St.,
Pittsburgh, PA 15204
(412)331-2325 fax: (412)331-3599

READER SERVICE NO. 61

Full-Size Professional Plan

MORRIS CHAIR



Build this comfortable chair with wide bow arms and adjustable 3-position back. an excellent example of the Arts & Crafts style. Overall size:
33" wide x 38½" high x 33⅝" deep

Plan #724(postpaid) $19.50
Catalog (free with order) $3.00

Fine Furniture Plans Since 1968

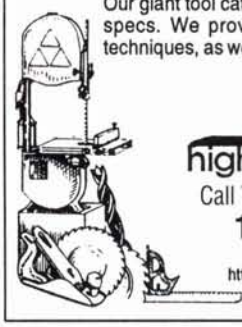
FURNITURE DESIGNS, INC., Dept. HM-87
1827 Elmdale Ave., Glenview, IL 60025
1-800-657-7692

READER SERVICE NO. 752

FREE TOOL CATALOG

Helping You Become a Better Woodworker

Our giant tool catalog gives more than just manufacturer's specs. We provide detailed tool descriptions, useful techniques, as well as a schedule of educational seminars.



highland hardware

Call Toll Free for Free Catalog

1-888-500-4466

Visit us on the Internet at
http://www.highland-hardware.com

READER SERVICE NO. 74

DISCOUNT PRICES ON BOOKS & VIDEOS

Call Toll Free 1-800-243-0713
No shipping charges in US on orders over $35 others add $3
Canada & Overseas add 15%
Fax 606-255-5444
phone inquiries call 606-255-5444

Manny's Woodworkers Place
555 South Broadway
Lexington, KY 40508

The Most Complete Catalog of Woodworking Books & Videos Sent FREE with Your Order or send $2 for Catalog

The Stickley Craftsman Set of 3 Books
1) Making Authentic Craftsman Furn.
2) Mission Furniture/How to make it
3) Craftsman Homes/Architecture and Furnishings **$30 for the Set**
Furniture of Gusav Stickley (Bavaro) $19
Woodshop Dust Control (Nagyszalanczy) $16
Spray Finishing (Charron) $16
Design Book Seven $22
American Furn. of 18th Century (Greene) $39
Making Heirloom Toys (Makowicki) $16
Turning for Furniture (Conover) $18
Make Plastic Laminate Centertops (Kimball) $18
Making Elegant Jewelry Boxes (Lydgate) $18
Building Doors & Entry ways (Weis) $18
Practice of Woodturning (Darlow) $18
Make Traditional Wood Planes (Whelan) $19
Hoadley - Understanding Wood $27; Identifying Wood $32; Both $58
Toolbox Book, Workshop Book, Workbench Book $27 ea; **all 3 for $75**
Tage Frid - Vol 1,2,3 $45
Lee - Sharpening $19
Nakashima - Soul of a Tree $40; Maloof $45; Both $83
Vandal - Queen Ann Furniture $35
Lincoln - World Woods in Color $45
Flexner- Understand Wood Finishing $14
Krenov - 3 book set $40

Videos

"Fine Woodworking" and "Fine Homebuilding" Videos $16 ea!

Handplanes in Woodshop • Router Joinery • Repair Furniture • Mastering Machines • Mastering Band Saw • Refinishing Furniture • Router Jigs and Techniques • Bowl Turning • Radial Arm Saw Joinery • Turning Projects • Make a Shaker Table • Turning Wood • Mortise & Tenon Joints • Chip Carving • Making Boxes • Carving Techniques • Installing Kitchen Cabinets & Countertops Woodfinishing (Dresdner) • Dovetail Drawer • Sm Shop Tip • Sam Maloof • Table Saw • Finishing with Frank Klausz • Framing Floors • Tiling Countertops • Tiling Walls • Tiling Floors • Framing Roofs • Framing Walls • Basic Stairbuilding • Building Decks • Building Kitchen Cabinets • Installing Trim • Laying Hardwood Floors • Sanding and Finishing Floors • Installing Doors & Windows •

READER SERVICE NO. 703

home furniture

Some of the more than 30 pieces featured in this issue:

42

60

30

22

54