

6 GREAT ROUTERS
For router tables

Better Homes and Gardens®

WOOD

THE WORLD'S LEADING WOODWORKING MAGAZINE

September 1995 • ISSUE NO. 81

Please display until September 9

Collector's

COFFEE TABLE

See page 42

Projects For Everyone!

- Compost Bin
- Sanding Cabinet
- Turned Desk Clock
- Whale Bank
- Letter Opener
- Scrollsawn Circus



LOOK TO Grizzly

IMPORTS, INC.

"Importers of Fine Machinery"

OSCILLATING SPINDLE SANDER

MODEL G1071
ONLY \$495⁰⁰

- 1 H.P., 110/220 V motor
- Ten spindle sizes: 1/4", 3/8", 1/2", 5/8", 3/4", 1", 1-1/2", 2", 3", and 4"
- Cast-iron 24" x 24" table tilts to 45°
- Built-in 4" dust collection port
- Floor-to-table height of 35-1/2"
- Shipping weight approx. 325 lbs.



1-1/2 H.P. SHAPER

MODEL G1035
REG. \$435⁰⁰
ONLY \$395⁰⁰

- 1-1/2 H.P., 110/220 V motor
- 2 Interchangeable spindles (1/2" & 3/4")
- Table size 20" x 18"
- Dual speed, reversing switch
- Shipping weight approx. 225 lbs.



3 H.P. SHAPER

MODEL G1026
REG. \$745⁰⁰
ONLY \$725⁰⁰

- 3 H.P., 220 V motor w/ reversing switch
- Table w/ standard wing attachment measures 28-7/8" x 28"
- Cast-iron wing
- Heavy-duty all-steel miter gauge
- Shipping weight approx. 375 lbs.



12" PLANER

MODEL G1017
ONLY \$395⁰⁰

FREE EXTRA SET OF KNIVES!

- 2 H.P., 110 V/16 AMP motor
- Capacity: 12" wide x 5-1/2" thick stock
- Dual-knife cutterhead
- Complete with instruction manual
- Optional dust hood available
- Shipping weight approx. 90 lbs.



15" PLANER

MODEL G1021
ONLY \$765⁰⁰

WITH HEAVY-DUTY STAND!

- 2 H.P. motor, 220 V, single phase
- 3 knife cutterhead
- Comes with 3 HSS knives and 2 sided knife setting tool
- Table measures 15" x 20"
- Shipping weight approx. 475 lbs.



20" PLANER

MODEL G1033
ONLY \$1195⁰⁰

- 3 H.P. motor, 220 V, single phase
- 2-speed automatic feed
- Dust exhaust hood w/ 5" dust port
- Precision-ground table top
- Shipping weight approx. 800 lbs.

6" X 47" JOINTER HEAVY-DUTY

MODEL G1182
REG. \$375⁰⁰
ONLY \$355⁰⁰

- 1 H.P., 110/220 V motor
- Cabinet type stand
- 47" bed (longest in its class)
- Heavy-duty center mounted fence
- Shipping weight approx. 250 lbs.



8" X 65" SUPER HEAVY-DUTY JOINTER

MODEL G1018
REG. \$650⁰⁰
ONLY \$625⁰⁰

- 1-1/2 H.P., 110/220 V, single phase motor
- 3-knife cutterhead is 3" in dia.
- 220V magnetic safety switch
- 32" from floor to top of bed
- Shipping weight approx. 450 lbs.



2 H.P. DUST COLLECTOR

MODEL G1029
REG. \$275⁰⁰
ONLY \$255⁰⁰
FREE 4" x 10' HOSE!

- 2 H.P., 220 V motor
- Two 4" outlets
- 610 C.F.M.
- Height: 76"
- Shipping weight approx. 140 lbs.



10" HEAVY-DUTY TABLE SAW

MODEL G1022
REG. \$375⁰⁰
ONLY \$345⁰⁰

- 1-1/2 H.P., 110/220 V motor
- 2 Cast-iron wings
- Precision ground cast-iron table top w/ T-slots
- Table size with extension wings: 41" x 22"
- Shipping weight approx. 270 lbs.



10" TILTING ARBOR SUPER HEAVY-DUTY TABLE SAW

MODEL G1023
REG. \$795⁰⁰
ONLY \$750⁰⁰

- 3 H.P., 220 V motor
- Precision ground solid cast-iron table and wings
- Steel miter gauge
- Table size w/ wings 36.06" x 22.08"
- Shipping weight approx. 425 lbs.



NEW

15" BANDSAW

MODEL G1148
ONLY \$425⁰⁰

- 3/4 H.P., TEFC/ Induction motor
- Includes fence and miter gauge
- Multi-directional tracking
- Cam-lock door closures
- Built-in 3" dust port
- Shipping weight approx. 180 lbs.



16" DRUM SANDER

MODEL G1079
ONLY \$795⁰⁰

- 1-1/2 H.P., 220 V, single phase motor
- Separate 1/4 H.P. belt feed motor
- Dual belt-driven sanding drum
- Heavy-duty steel cabinet
- Built in dust collection ports
- Shipping weight approx. 325 lbs.



24" DRUM SANDER

MODEL G1066
REG. \$1095⁰⁰
ONLY \$1075⁰⁰

- 5 H.P., 220 V, single phase motor
- Separate 1/4 H.P., belt feed motor
- Dual belt-driven sanding drums
- Heavy-duty magnetic switch
- Shipping weight approx. 500 lbs.



ALL MACHINES ABOVE ARE F.O.B. BELLINGHAM, WA OR WILLIAMSPORT, PA



1-800-541-5537

P.O. BOX 2069
BELLINGHAM, WA 98227
Customer Service (360) 647-0801
FAX (800) 225-0021

CALL FOR YOUR FREE CATALOG!

IF YOU LIVE WEST OF THE MISSISSIPPI

IF YOU LIVE EAST OF THE MISSISSIPPI

1-800-523-4777

2406 REACH ROAD
WILLIAMSPORT, PA 17701
Customer Service (717) 326-3806
FAX (800) 438-5901

Better Homes and Gardens®

WOOD®

THE WORLD'S LEADING WOODWORKING MAGAZINE

SEPTEMBER 1995 • Vol. 12, No. 6 • Issue No. 81

Publishing Director **MAX RUNCIMAN**

Editor **LARRY CLAYTON**

Managing Editor **JIM HARROLD**

Art Director **C. L. GATZKE**

Design Editor **JAMES R. DOWNING**

Senior Editor/Features **PETER J. STEPHANO**

Senior Editor/How-To **MARLEN KEMMET**

Assistant Managing Editor/Products **BILL KRIER**

Special-Interest Editor **LARRY JOHNSTON**

General-Interest Editor **TOM JACKSON**

Associate Art Director **PERRY A. McFARLIN**

Project Builder/Assistant Design Editor **JAN HALE SVEC**

Project Builder **CHARLES I. HEDLUND**

Graphic Designer **CHERYL A. CIBULA**

Production/Office Manager **DARLENE REYNOLDS**

Administrative Assistant **MARGARET CLOSNER**

Art Business Office Secretary **NATALIE COOLEY**

Correspondence Writer **DON MOSTROM**

Contributing Editors **KIM DOWNING, DAVE HENDERSON,**

LORNA JOHNSON, ROXANNE LeMOINE, BOB McFARLIN

Publisher **WILLIAM R. REED**

Director, Marketing/Advertising **CHRISTOPHER W. SCHAFFT**

Sales/Marketing Representatives **JON BOOK, JAMES N. FORD**

Direct Response Marketing **JANA WEDDELL, LISA WIEMKEN**

Marketing/Advertising Services Manager **SIGRID ANDERSON**

Promotion Supervisor **RICK PALLISTER**

Marketing/Advertising Services Supervisor **PAT HENDERSHOTT**

Administrative Assistants **KATHY GARLAND, SHERYL MUNYON**

ADVERTISING OFFICE: 1912 Grand Avenue, Des Moines, IA

50309-3379. Phone 515/284-2235

Circulation Director **SUSAN SIDLER**

Associate Circulation Director **KATHI PRIEN**

Business Manager **JANET NELSON**

Senior Product Manager **ROBERT BROWN**

Meredith Magazine Group

Magazine Group President **CHRISTOPHER M. LITTLE**

Meredith Custom Marketing **BILL MURPHY**; Magazine Group

Controller **MAX RUNCIMAN**; Circulation **HAL ORINGER**;

Operations **DEAN PIETERS**

Meredith
CORPORATION

Chairman and Chief Executive Officer **JACK D. REHM**

President and Chief Operating Officer **WILLIAM T. KERR**

Chairman of the Executive Committee **E. T. MEREDITH III**

Better Homes and Gardens® *WOOD*® magazine (ISSN-0743-894X) is published nine times a year in January, February, April, June, August, September, October, November, and December by Meredith Corporation, 1716 Locust St., Des Moines, IA 50309-3023. Second-class postage paid at Des Moines, Iowa, and additional mailing offices. *Better Homes and Gardens* trademark registered in Canada and Australia. Marca Registrada en México. ONE-YEAR SUBSCRIPTION PRICES: U.S. and its possessions \$24.97; Canada, \$34; other countries, \$43. ©COPYRIGHT MEREDITH CORPORATION 1995. ALL RIGHTS RESERVED. Canadian GST Reg. #R123482887.

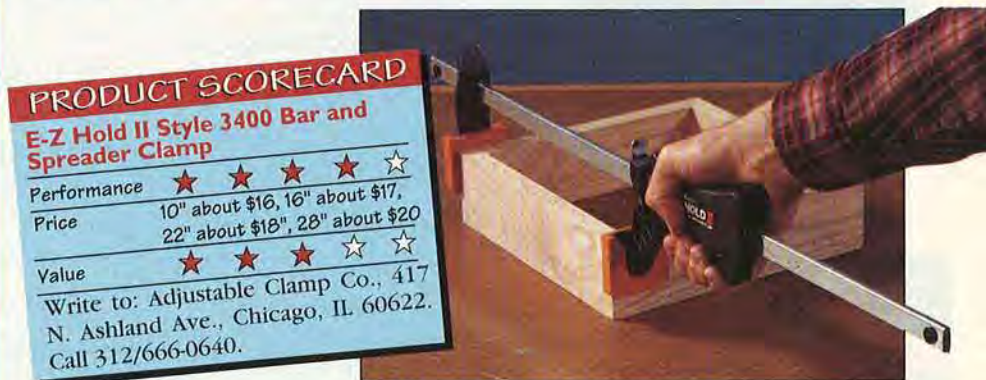
CUSTOMER SERVICE INFORMATION: For service on your magazine subscription, including change of address, write to *Better Homes and Gardens WOOD Magazine*, P.O. Box 55050, Boulder, CO 80322-5050. Please enclose your address label from a recent issue. Or, phone toll-free 800/374-9663.

Address letters and questions to **THE EDITOR, WOOD Magazine**, 1912 Grand Avenue, Des Moines, IA 50309-3379.

PRINTED IN U.S.A.

THE EDITOR'S ANGLE

WE'VE TAKEN TOOL TESTING TO ANOTHER, HIGHER LEVEL



Most readers, when we question them about what they think of our tool-evaluation articles, give us high marks. They appreciate the fact that several of our staff members, together with freelance technical consultants, really put the tools through their paces. Then, after our hearty band of product testers finish their work, they report what they've discovered in a clear, unbiased way. And most of all, our readers like our in-depth comparison charts.

One thing you might not have noticed is that for the past couple of years we have included two overall-rating columns in our tool-comparison charts—"performance" and "value." Doing this allows us to fairly compare higher-priced tools with lower-priced models. At the same time, these ratings help you get the best tool value for the money you spend.

We think these ratings are so important in helping you make wise tool- and product-buying

decisions that beginning with this issue we've decided to use them in our "Products That Perform" and "Tool-Buyer's Update" columns as well. Along with every tool or product we feature in these columns, you'll see a Product Scorecard like the one above.

Tom Jackson, our general-interest editor and the person who will be coordinating the ratings, told me, "For a product to get in *WOOD*® magazine, it will have to earn at least three stars. There are lots of two-star products out there, but they're not worth our readers' time." Tom continues, "Five stars will be rare. A product will have to outperform everything else in its category or offer incredible value for the price to get a five-star rating."

With our new rating system in place, we think we have all our product-evaluation bases covered. But if you've got some other ideas on how we can serve you even better in this area, please drop me a line. ♣

Print this article

Larry Clayton

CONTENTS

- 37 Classic canoe craftsmanship**
Watch an expert make a cedar-strip canoe.

- 42 Collector's coffee table**
Build a showplace for your old pocket watches, rare baseball cards, or other collectables.

- 48 Big-top extravaganza**
Create a scrollsawn circus with this design.

- 50 Up-to-the-minute clock**
Turn a striking timepiece in just a few hours.

- 54 Whale of fortune**
Save big by storing coins in this creature's belly.

- 56 Best of the bunch**
We pick the top six routers for table mounting.

- 62 Gardener's gold mine**
Build a stylish pen for composting yard waste.

- 66 Shellac—one old way to a perfect finish**
Coat projects with a turn-of-the-century favorite.

- 68 Customized sanding-supply center**
Keep all sorts of sanding items in this organizer.

- 74 Letter-perfect loon**
Carve and paint a North Country letter opener.

SHORT-SUBJECT FEATURES

- 1** The Editor's Angle

- 4** Develop Your Shop Skills

- 10** Yesterday's Tools

- 12** Tips From Your Shop (And Ours)

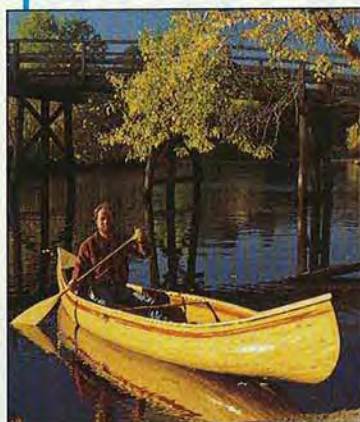
- 18** Talking Back

- 22** Products That Perform

- 24** Tool Buyer's Update

- 92** What Woodworkers Need To Know

- 96** Finishing Touches



Page 37



Page 56



Page 42



Page 66



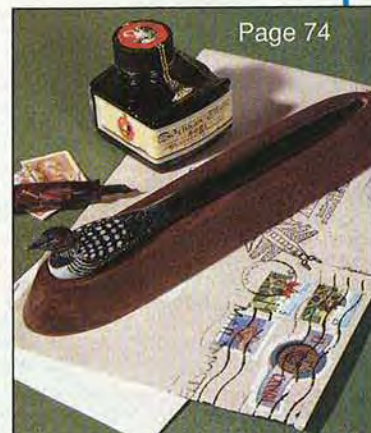
Page 50



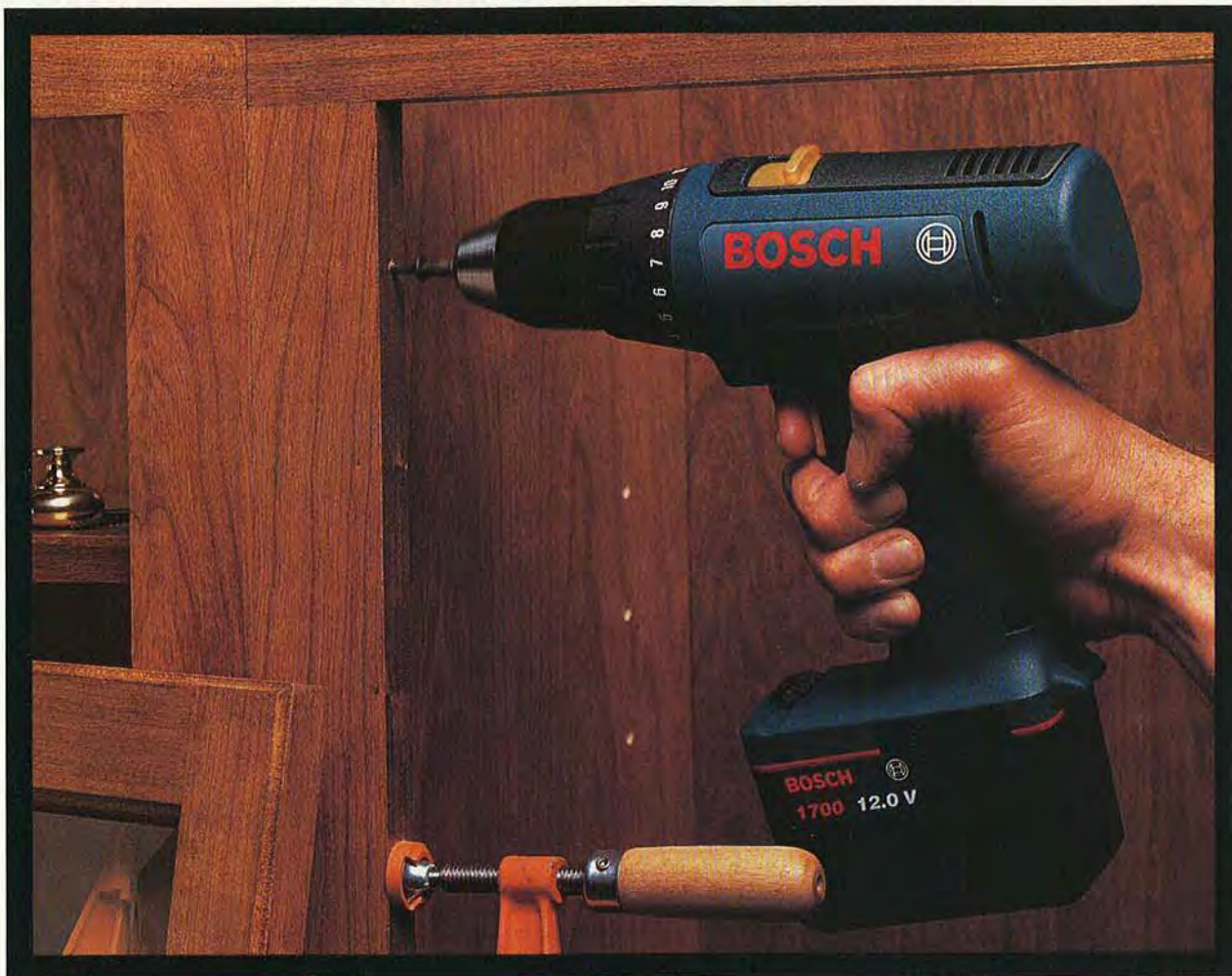
Page 68



Page 54



Page 74



© 1995 S-B Power Tool Company, 4300 W. Peterson Ave., Chicago, IL 60646

It only has a bit in common with other cordless drills.



Through an unprecedented combination of run-time, reliability and ergonomic design, Bosch cordless drills redefine *Total Performance* for the entire category. In test after test, nothing outperforms our T-handle and pistol grip drill/drivers or impact drivers.

The reason they work harder is that their 9.6 and 12.0 Volt High Endurance power packs are designed to get more work out of a charge. Up to 30% more. Run-time is further enhanced by an innovative low resistance switch that minimizes power lost to heat. So more energy goes to the job at hand.

Other exclusive features include the Perma-Brush™ motor which eliminates brush replacement for the life of the tool. Plus the perfect balance, comfort and weight of our industry leading ergonomic design.

One last bit of difference these exceptional tools offer is a one year warranty, 90 day satisfaction guarantee and one year service protection plan.



BOSCH
Power Tools

ENGINEERED FOR PERFORMANCE™

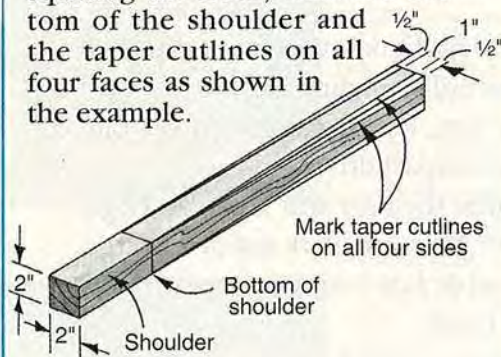


TAPERED LEGS

with your tablesaw or jointer

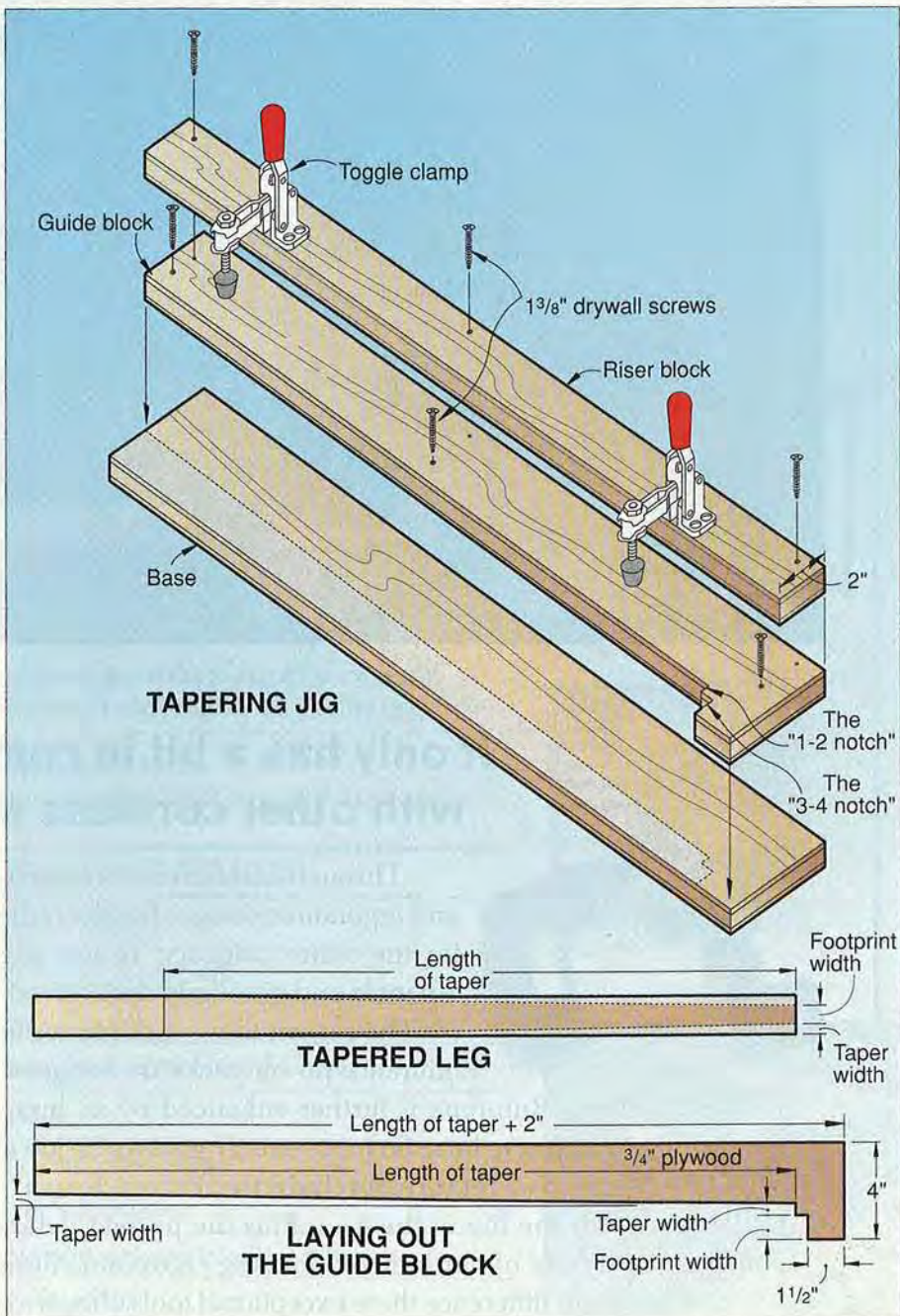
Tapered legs add a graceful touch to any furniture piece. And, you might be surprised at how easy they are to make using the steps shown here. First, we'll show you a method for tapering legs with a tool nearly all of us own—a tablesaw. Then, we'll share our preferred method that uses a jointer (the jointer has to have an infeed table that's at least as long as the leg you intend to taper).

No matter which method you use, you need to start with a piece of stock that is square along its entire length. (For tips on squaring leg stock, see the Develop Your Shop Skills article on page 71 of the January 1992 issue of *WOOD* magazine.) After squaring the stock, mark the bottom of the shoulder and the taper cutlines on all four faces as shown in the example.



How to cut tapered legs with your tablesaw

Start by building a tapering jig like the one shown right from three pieces of 3/4" plywood. For safety we incorporated toggle clamps that securely hold the leg blank as you saw the taper. (You can buy toggle clamps through



most woodworking-supply stores and catalogs.) As you can tell by looking at the Laying Out the Guide Block drawing, the size of your jig pieces will vary depend-

ing on the size of leg you're making. All three pieces should be the same length, and the width of the base should match the width of the guide block.

THE REVOLUTIONARY TROY-BILT® CHIPPER/VAC!



Chipping Chute feeds branches into blade spinning at 3,600 rpm.



Vacuum Collector draws in leaves effortlessly as you walk!

Auto-fill Bag neatly contains the pulverized leaves; holds 3/4 bushels.



Shredding Blades instantly REDUCE debris with 360 bites per second.

BREAKTHROUGH TECHNOLOGY MAKES YARD CLEAN-UP FAST & EASY!

Introducing the Amazing TROY-BILT® Chipper/Vac!

The TROY-BILT® Chipper/Vac revolutionizes yard care by eliminating raking, hauling and bundling yard debris! You simply walk behind the Chipper/Vac as it picks up, shreds and bags leaves, sticks and yard debris! Plus, the chipper reduces branches up to 3/4" thick into tiny chips – no more time consuming breaking or bundling!



No More Raking, Hauling, Bundling!



REDUCE leaves and other yard debris for easy disposal...or use as free mulch!

Leaves DISAPPEAR!

Fall leaves that once filled 10 yard bags now fill just 1...because the Chipper/Vac shreds & reduces them 10-to-1. Leaves, brush, branches and much more...are reduced quickly, easily, for recycling as landscaping mulch or simple disposal.



Backed by Exclusive 7-Year Warranty!

The New TROY-BILT® Chipper/Vac is built to last, covered by an exclusive 7-Year Warranty against defects in workmanship and materials. (Engines warranted separately for 3 years.) For a free copy of the warranty, please write to the address below.

FREE CATALOG! CALL TOLL-FREE:

1-800-538-8900

Dept. 4905

TROY-BILT Mfg. Co. Dept. A4905
102nd St. and 9th Ave.
Troy, N.Y. 12180

YES! Please rush me facts on the all new TROY-BILT® Chipper/Vac line... including your Catalog, TROY-BILT EASY PAY PLAN, and your current Offer! **3 76**

Name _____
Address _____
City _____
State/Zip _____
Phone () _____

Also Available in Canada

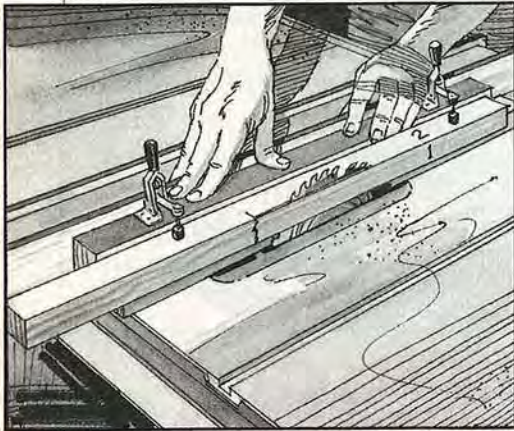
© 1995 Garden Way Inc.

Develop Your Shop Skills TAPERED LEGS

Continued from page 4

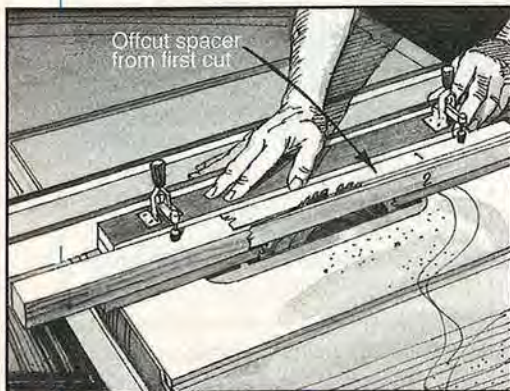
2 Set the tablesaw rip fence for a ripping cut that matches the width of your tapering jig. Place the foot end of the leg into the 1-2 notch in the jig, and secure it with the toggle clamps. (We call it the 1-2 notch because you make the first and second cuts with the foot placed in this notch.)

Turn on the tablesaw and pass the jig and workpiece through the blade as shown *below*. Note that we removed the blade guard and numbered the faces for clarity.

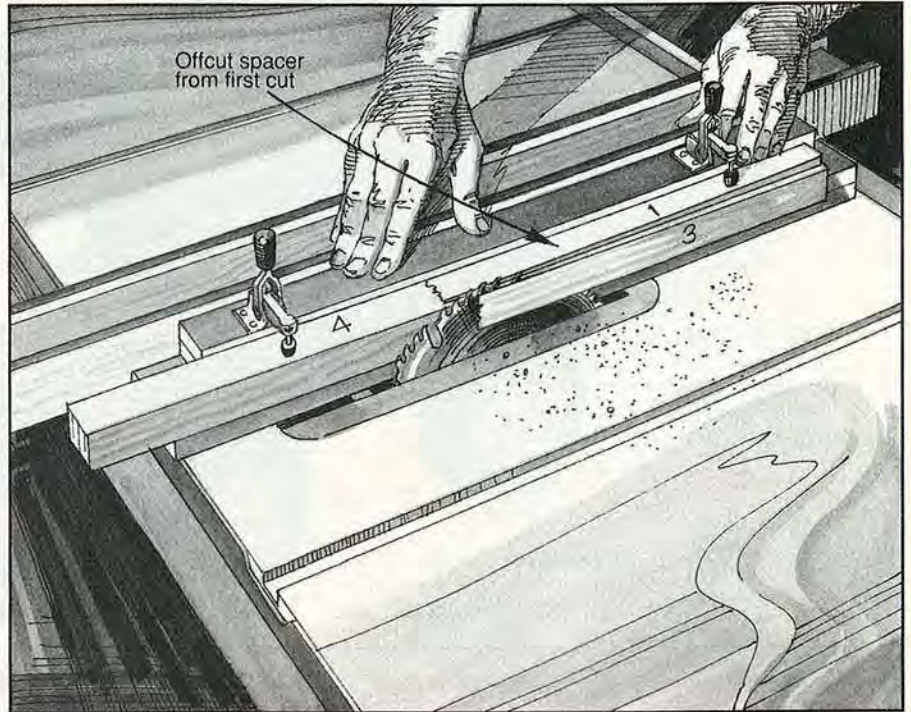


3 Now, remove the leg blank from the jig. Replace it in the 1-2 notch so that you will cut one of the faces adjoining the face you cut in Step 2.

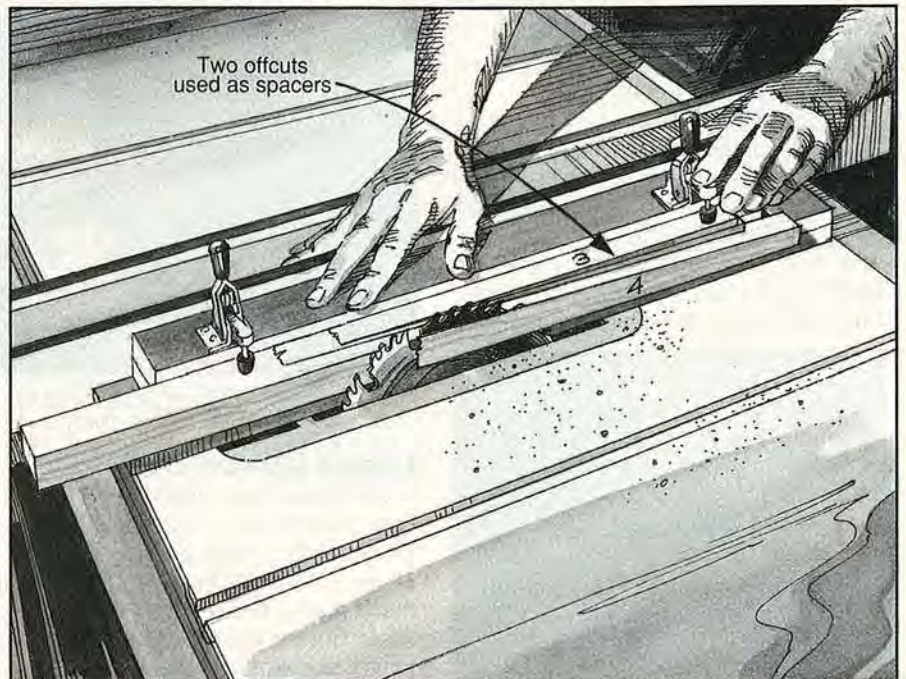
To make the toggle clamp at the foot end of the jig work, you'll need to use the offcut from Step 2 as a spacer block. Place it between the leg blank and the clamp as shown *below*.



4 Remove the leg blank and replace it in notch 3-4 to cut either of the remaining nontapered faces. Note that you need to again use the offcut from the first cut as a spacer block beneath the foot-end toggle clamp as shown *below*.



5 To cut the fourth taper, place the leg in notch 3-4 and use two offcuts under the foot-end toggle clamp. Finally, sand away the saw marks with sandpaper and a hardwood block.



Continued on page 8

THE BEST TOOL IN THE JOINT.



When it comes to making the highest quality joint constructions faster and more accurately, nothing performs like the DeWalt Plate Joiner.

DeWalt's exclusive rack and pinion control provides precise vertical adjustment and fence alignment, so the risk of making an inaccurate cut is virtually eliminated. And its integral, adjustable fence tilts 0°-90° so you can make the cut at exactly the proper angle.

For cabinet construction, flush cuts can be made at 0° without having to remove the fence. And for fine woodworking, the fence can be located on either the inside or outside face of the mitered joint.

For exceptional features, high performance and quality construction, try the DeWalt Plate Joiner. Because superior joints come from a superior tool. Call 1-800-4-DEWALT.

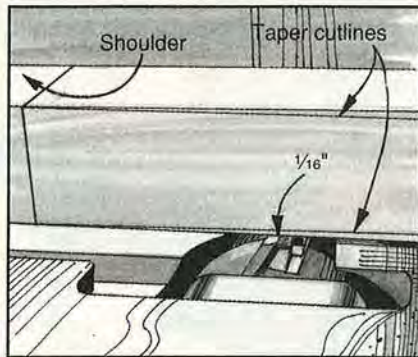
DEWALT
High Performance Industrial Tools
GUARANTEED TOUGH.

Develop Your Shop Skills TAPERED LEGS

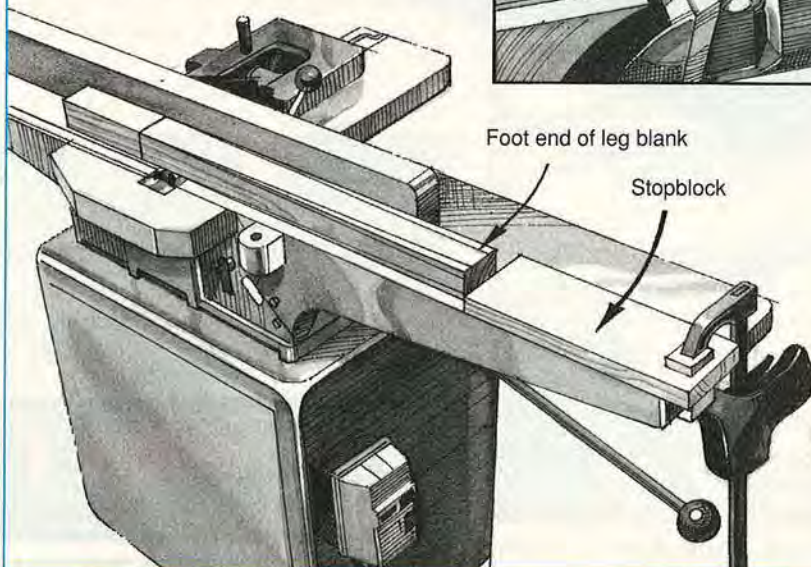
Continued from page 6

The jointer: your ticket to smooth, accurate tapers

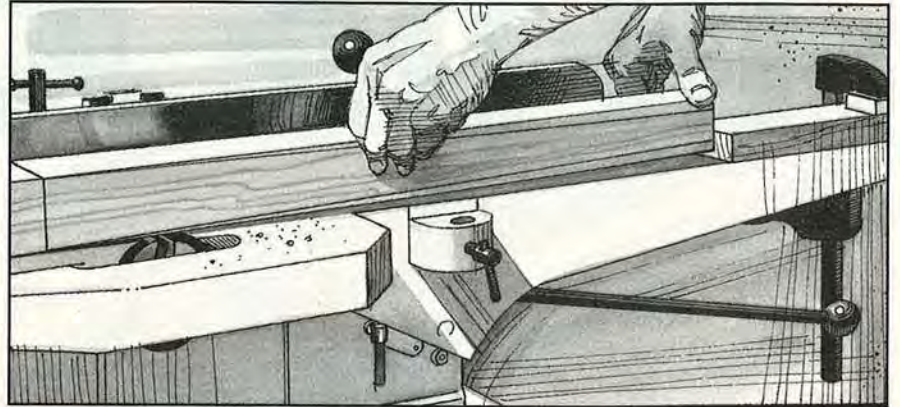
To get things started, set your jointer to remove $\frac{1}{16}$ " of material. With your jointer unplugged, carefully turn the cutterhead by hand so one of its knives is at the top of its cutting rotation. Now, mark the point along one of the taper cutlines where the material to be removed is $\frac{1}{16}$ " wide. Place the workpiece onto the jointer bed so this mark sits directly above the cutterhead knife as shown below.



2 With your workpiece positioned exactly as described in Step 1, place a $\frac{3}{4}$ "-thick stopblock onto the infeed table so it contacts the foot end of your leg blank. Clamp the stopblock to the infeed table as shown below.

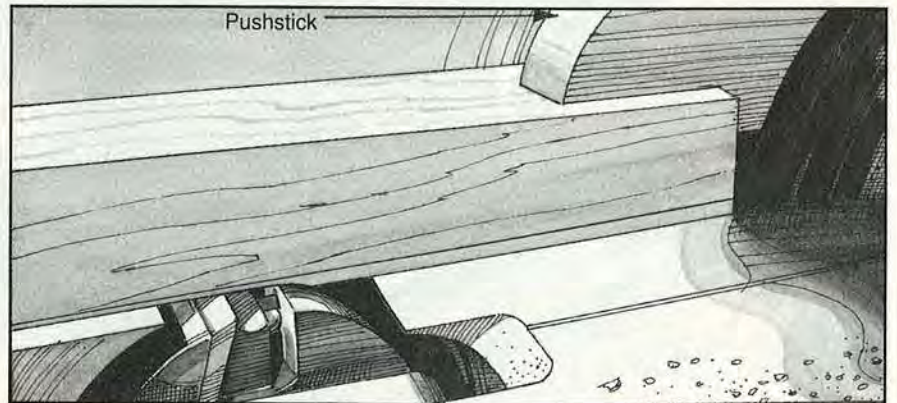


3 Lift the workpiece off the jointer bed, and turn on the jointer. Then, position the workpiece with the end of the shoulder contacting the outfeed table, and the foot raised off the table but touching the stopblock as shown below.

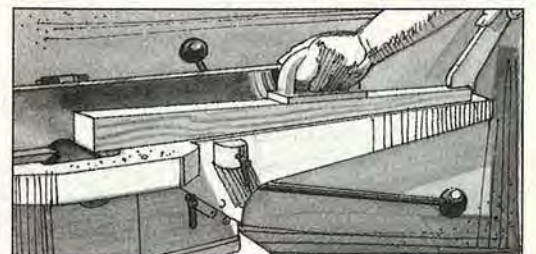


4 Lower the foot end of the leg blank onto the infeed table, and slowly feed the blank over the turning cutterhead. Before the foot end of the blank comes within 6" of the cutterhead, switch to a pushstick to complete the cutting pass. For consistent results, blow away debris from the jointer bed before each pass. Repeat this process until you cut to within $\frac{1}{16}$ " of the taper cutline along its entire length.

Repeat Steps 3 and 4 for each face of the leg blank. Remember to leave $\frac{1}{16}$ " extra material along each taper cutline.



5 Remove the stopblock, and pass each face of the leg blank over the cutterhead once. That's it! You should have a smooth, perfectly uniform taper on each face. ♣



Illustrations: Jim Stevenson

WOOD MAGAZINE SEPTEMBER 1995

Rip Fence Technology at its Best

Craftsman's New EXACT-I-RIP Fence and 10" Table Saw

Exact-I-Rip Advantage #1:

You get plenty of room to rip even your biggest work pieces—up to 24" on the left side and 30" on the right!

Deluxe miter gauge has positive stops at 90° and 45°. Includes hold down clamp for more precise crosscutting.

Thin kerf carbide-tipped blade stays sharper longer than a regular steel blade for fast, smooth cuts.

Exact-I-Rip Advantage #2:

Lock the fence into place—at the front and rear—with just one lever, for consistent cutting width.

Exact-I-Rip Advantage #3:

Includes additional aluminum extension to help stabilize table for really large work pieces (such as 4x8 plywood sheets).

Cast iron table and extensions dampen vibration.

The smooth-running 3 H.P. (Max. Developed) capacitor-start, capacitor-run induction motor packs plenty of punch at 120V or 240V to cut stock up to 3-3/8" thick! Notched belt drive and spring-loaded motor mount reduces belt slippage for faster cuts.

Exact-I-Rip Advantage #4:

Get pin-point accuracy in setting up your cuts, with the micro-adjust mechanism that lets you align the fence with precision.

Exact-I-Rip Advantage #5:

Set-up's a breeze, thanks to the high-tech thermoplastic polymer bearing surfaces built into the Exact-I-Rip fence system. The fence always slides smoothly and easily—so you can get right to work!

Sawdust collection kit makes clean-up a snap.

Think all table saws are pretty much alike?

Then you haven't checked out the Craftsman 10" Table Saw and Exact-I-Rip Fence Combo. Stock No. 29911. Together they cut the toughest jobs down to size—with an incredible new rip fence technology that gives you silky-smooth position changes, accurate cuts and a huge appetite for those large work pieces. In fact, the Exact-I-Rip fence is so terrific, we're offering it separately as a retro-fit option for other belt drive Craftsman table saws. Ask for accessory fence 29901.

CRAFTSMAN®

Only At Sears

THE SLITTING CUTTER

Here's how cabinetmakers of yesteryear cut thin stock

Cabinetmakers have always spent much of their time sawing stock into parts. So, they have often embraced new tools or procedures that speed the cutting while preserving or increasing accuracy. Consider one operation: ripping thin stock for drawer bottoms.

Today, you simply set the table-saw fence and feed the wood into a fine-toothed, carbide-tipped blade. The cut piece comes out uniformly wide, with a smooth, true edge. From start to end, the operation can be timed in seconds. And you can cut any number of pieces to precisely the same width.

A century ago, however, circular tablesaws were far less common. To rip thin stock back then, a craftsman had to measure and mark a cutting line on the wood before sawing it with a hand rip-saw. Aside from the tendency for the rip-saw to follow the grain instead of the line, there was the problem of cutting additional pieces the same width. Then, too, the edge often required jointing.

A fence-guided slitting cutter (also called a slitting gauge) like the one shown *above right* enabled the early cabinetmaker or joiner to work faster. Using one, he could cut thin material simply by slicing through it with the sharp blade. The fence maintained uniform width and helped keep the grain from leading the cutter off the intended path. While severing a piece of stock might take several passes, this was still quicker than marking and sawing.

Some craftsmen made their own slitting cutters, usually attaching a knife blade to a marking gauge.



1



2

Commercial slitting cutters, widely available, ranged from rudimentary to elaborate.

The one shown belongs near the elaborate end of the spectrum. Nicely made of brass and rosewood, it was patented Sept. 9, 1873 by Thomas Rice, according to an inscription on the side. Thanks to the saw-type handle, a craftsman could bear down on the cutter while guiding it. Cutting depth was adjustable, and the 7¾"-long fence could be set for widths from ¼" to 12".

The round blade (it's about 1¾" in diameter) is an unusual but practical feature. Instead of taking time to resharpen a dulled straight blade, a cabinetmaker could loosen the blade on this slitting gauge and rotate it to expose a fresh cutting edge.

A slitting cutter came in handy for other tasks in the cabinet shop, too. The cutter could scribe a guideline on stock too thick to slice through. And the tool proved to be ideal for both ripping and crosscutting veneer.

Don't expect to find a slew of slitting cutters at old-tool sales and auctions, however. "Slitting

1. With the fence in position, the Thomas Rice slitting cutter is ready to go to work. Cabinetmakers used tools like this to rip thin stock a century ago.

2. The slots in the brass foot provide cutting-depth adjustment. The round blade doesn't turn when cutting, but can be rotated easily to reveal a fresh edge.

gauges with maker marks are among the rarest of all cabinetmaker's tools," one dealer notes. When they turn up, prices vary widely—a 1994 catalog listed one at \$135; the fancier one here was priced around \$300 in 1993.

Similar tools are sold today for veneer cutting. And modelers often use a smaller version called a balsa stripper. But you probably won't find any modern cabinetmakers ripping with a slitting cutter; the tablesaw just does it so much better and faster. ♣

Photographs: John Hetherington
Tool courtesy of Neill Stoll, Glenbrier Antiques, Dexter, Michigan
Written by Larry Johnston



Let your imagination run wild.

Circle No. 1321

Create beautiful edges, from a classic round over to a multi-pass cut, Freud bits can turn your router into a real dream machine.

Freud router bits cut super smooth profiles that you never have to sand. The **relief angle** of each bit is ground precisely to prevent the friction that causes rough edges and burning. Proper grinding also extends the life of your bit.

Our **micro-grain carbide** tips are the thickest in the industry. This makes them less prone to chipping and insures a long resharpening life. **Tri-metal** brazing is flexible enough to allow the carbide and steel to contract without any residual stresses.

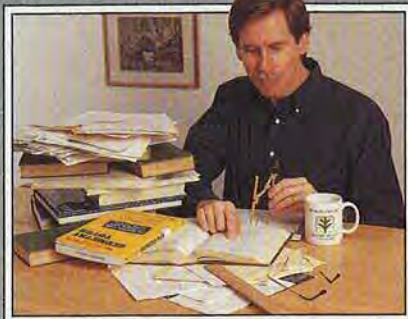
Your safety is always most important, so we've made every Freud router bit with a special **anti-kickback design** that really works. It doesn't interfere with the speed or performance of your bit, but it does help keep you safe.

When you need just the right profile to turn your project into a masterpiece, Freud offers the **widest selection** of bits for any woodworking application (Including hard to find architectural and complex moulding profiles). Try one and you'll see why Freud is **precisely what you need.**

freud[®]
Precisely what you need.

Call us for a free catalog 800-472-7307.

TIPS FROM YOUR SHOP (AND OURS)



Ah, here it is, the formula for dividing a circle into segments.

When we published Vernon Raaen's shop tip on how to divide a circle in the December 1994 issue, dozens of readers wrote in to inform me that I was stepping into one of the hottest mathematical debates of all time. Jack Porter of San Diego even ran calculations which indicated the tip has an error factor of about .004" on a 10" circle. Since .004" is barely thicker than a human hair, you shouldn't have too many problems applying this formula to small wood projects!

Many of you also sent in chord charts that give formulas for dividing a circle. Unfortunately, printing these charts would take up more space than we have in Shop Tips. But we're always interested in your tips, mathematical or otherwise. If we choose your tip, we'll pay you \$40, plus you get a shot at winning the top-tip tool prize. Send your entries to:

Tips From Your Shop (and Ours)

WOOD® Magazine
1912 Grand Ave.

Des Moines, IA 50309-3379

We try to publish original shop tips, so please send your idea to only one magazine. Also note that we cannot return submissions. Thanks!

Tom Jackson
General-Interest Editor



Cut compound miters easily with this tablesaw jig

Here's a way to cut compound miter picture frames without an expensive compound miter saw. Start by making an 18x28" base from a piece of 1/2" plywood. Attach parallel miter-gauge guides on the bottom. Then, push this base through the sawblade to create a kerf that extends about 12" across the plywood.

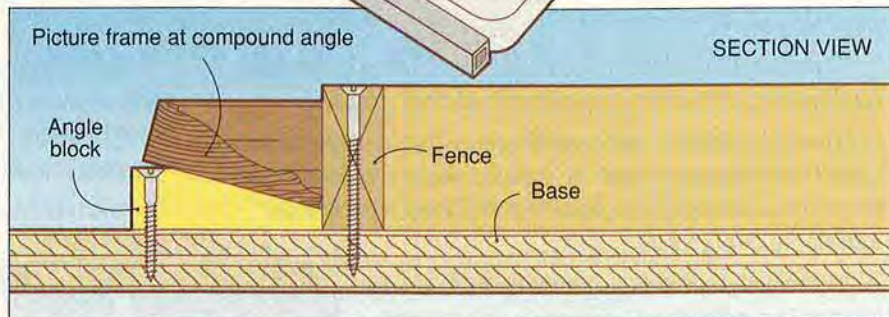
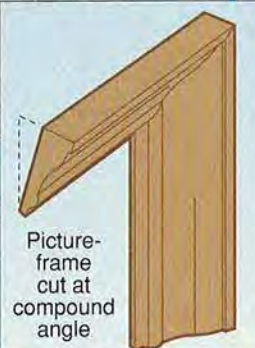
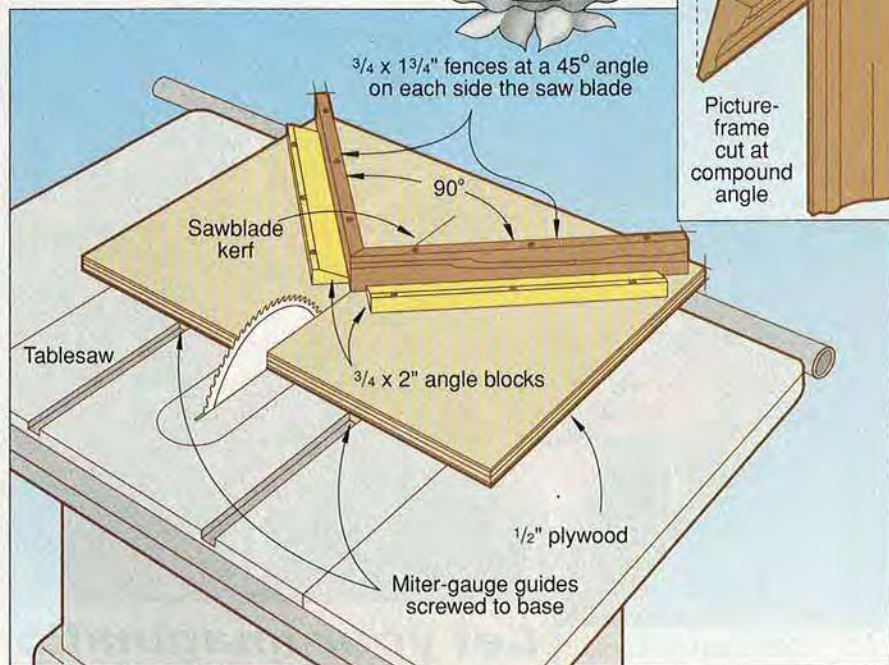
Using this kerf as a centerpoint, screw the two fence pieces and the two angle blocks to the base as shown in the drawing below. You can bevel the angle blocks at any angle you like, but 25° works well for most picture frames. Now, clamp or hold your picture-frame moldings against the fence and cut the compound



For submitting the top shop tip in this issue, David Mattichak will receive a Skil model 3370 benchtop belt/disc sander.

angle by pushing the jig and the picture-frame molding through the tablesaw blade.

—David Mattichak, Port Republic, Va.



Continued on page 14

OK, Hold It.



Now Spread 'Em.



The innovative POWER PRESS™ Pipe Clamp, from the makers of QUICK-GRIP® Bar Clamps, is more than just a pipe clamp. By simply reversing the two movable clamping sections, it quickly becomes a spreader. Perfect for all kinds of woodworking applications, the POWER PRESS Pipe Clamp can do anything a regular pipe clamp can do, only faster. It works on both threaded and unthreaded pipe. And two rubber pads keep gripping surfaces from marring your work. The most versatile pipe clamp to hit the shelves, the POWER PRESS Pipe Clamp is going to revolutionize the way you work.

Look for it wherever quality tools are sold.

Power Press™
AMERICAN TOOL
COMPANIES, INC.

FROM THE MAKERS OF QUICK-GRIP® BAR CLAMPS

TIPS FROM YOUR SHOP (AND OURS)

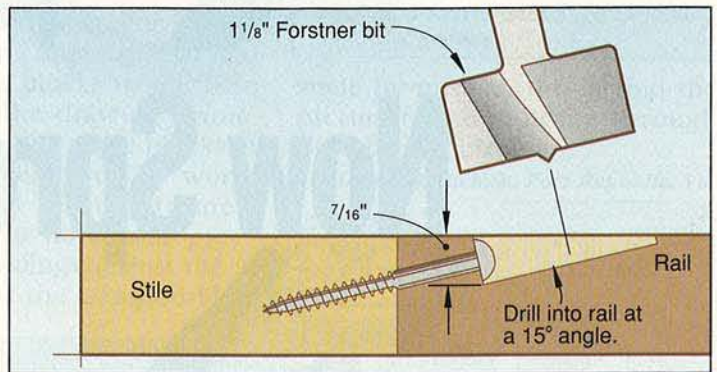
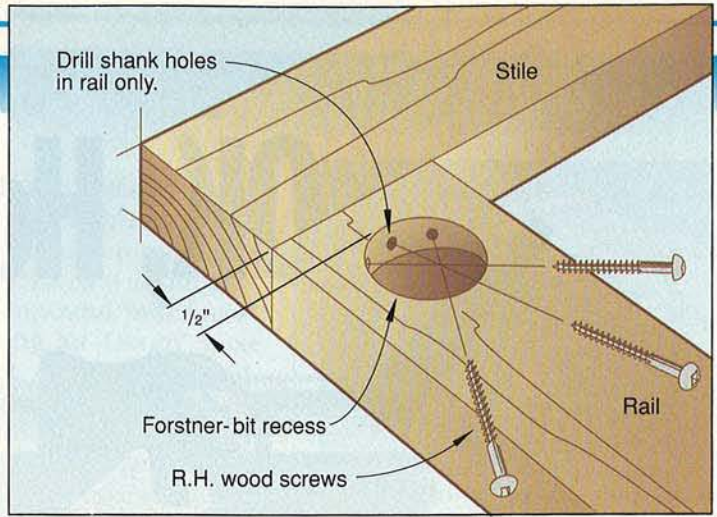
Continued from page 12

Forstner bit doubles as a pocket-hole jig

If you would like to make some pocket-hole joints on a rail-and-stile assembly, but you don't have a pocket-hole jig, try making the pocket hole with a Forstner bit. First, chuck a $1\frac{1}{8}$ " Forstner bit in your drill press and angle the table 15° from vertical. Then, bore a shallow hole in the rail, as shown in the drawing *right*, on the side of the frame that won't show. Bore the hole just deep enough to position the heads of the screws below the surface of the stile.

Next, drill three shank holes for the screws where shown, but don't continue the holes into the stile. Apply glue to the mating surfaces, clamp the rail and stile together, and drive three screws into the shank holes. Continue attaching the remaining rails to the stiles in this manner. After you've driven the screws tight, remove the clamps. The screws will hold the joint securely until the glue dries. For the best results, use the pocket-hole screws that you find in woodworking catalogs that sell pocket-hole jigs. These round-head screws seat tightly and help to prevent the wood from splitting.

—from the WOOD® magazine shop



NOW THERE'S A FINE LINE BETWEEN PR



If bargain tools do less than you bargained for, and high-end tools cost more than you want to at affordable prices. Ryobi - so much precision and performance for your money. Suddenly,

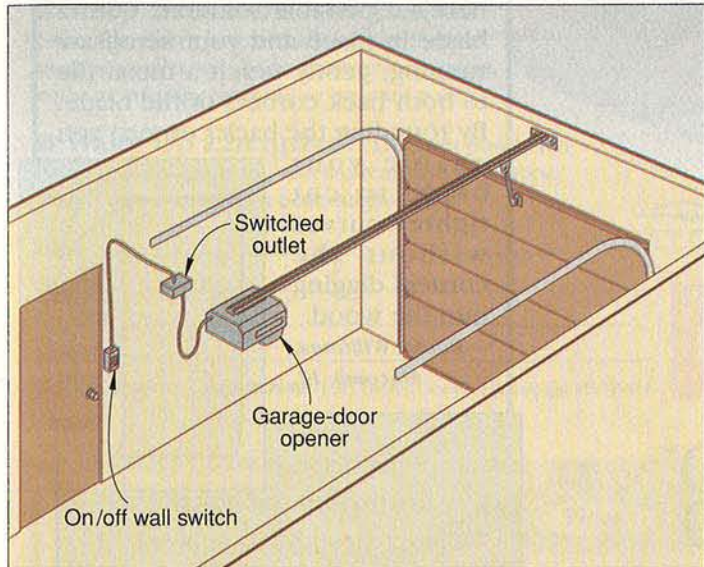
Foil would-be thieves—wire the garage door to a switch

A shop in an attached garage with an automatic garage-door opener poses a security risk if you leave the remote control in your car parked outside. All a thief has to

do is to break into the car, grab the remote control, and he's as good as in your shop.

To eliminate this risk, wire your garage door opener to a wall switch as shown in the drawing *left*. When you park your car outside, just switch the door opener off before you step in from the garage. Your shop and house will remain secure, and you won't have to lug your remote control back and forth between the car and the house.

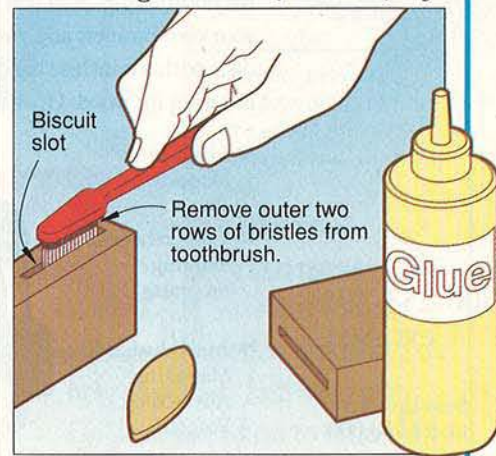
—Robert Raquet,
Norristown, Pa.



Old toothbrushes make great glue applicators

When your toothbrush wears out, put it back into service as a glue applicator for biscuit joints. After you remove the two outside rows of bristles with a sharp knife, the remaining center rows will fit neatly in most biscuit slots.

—George Senmartin, Belleville, N.J.



Continued on page 16

PRICE AND PERFORMANCE. AND THIS IS IT.



pay, check out Ryobi®. A complete line of power tools with pro features
other tools either cost too much or do too little.

RYOBI
Exceed Your
Expectations™

If you enjoy working with wood, we can show you how to build a business.

The first step to building your own business is calling Guardsman WoodPro. Our mobile furniture touch-up and repair service is expanding into select markets. Guardsman's profit centers include Commercial & Residential, Kitchen Cabinet Refurbishing and Deck Reconditioning. So if you've always wanted to own your own business and you enjoy working with wood, do it with a franchise backed by 80 years of experience in caring for wood. Guardsman WoodPro offers:

- High Gross Margins
- Comprehensive Training Programs
- Individualized Marketing/Advertising Program

1-800-253-3957
ext. 864

Start-up costs
under \$20,000



**GUARDSMAN
WOOD
PRO**

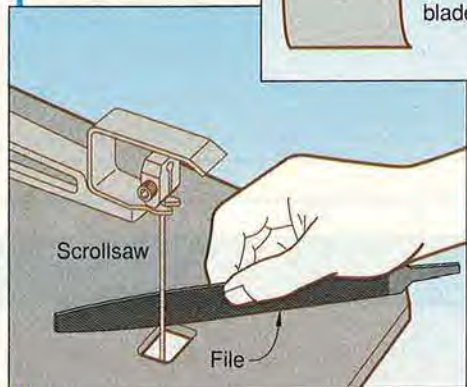
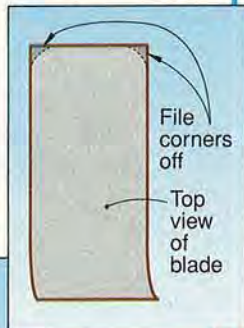
TIPS FROM YOUR SHOP (AND OURS)

Continued from page 15

Round the back of scrollsaw blades for smoother cuts

If you've ever been surprised by rough edges or burn marks on stock that you've cut on your scrollsaw, particularly thick stock, here's a possible solution. With a blade in place and your scrollsaw running, gently touch a metal file to both back corners of the blade. By rounding the back corners, you enable your blade to cut tighter curves without the corners digging into the wood.

—Rocky Williams,
Macomb, Ill.



Econ-Abrasives

WE MAKE ABRASIVE BELTS ANY SIZE, ANY GRIT!

ABRASIVE SHEETS:

(9 X 11)

CABINET PAPER

	50/pk	100/pk
40D	\$18.90	\$35.60C
50D	17.80	32.25
60D	16.70	30.00
80D	15.60	27.80
100 thru 150C	13.00	23.00

FINISHING PAPER

80A	\$11.15	\$18.90C
100 thru 280A	10.00	16.70

WET/DRY PAPER

220 thru 600	\$15.56	\$26.67C
--------------	---------	----------

NO LOAD PAPER

180 thru 400A	\$12.25	\$21.25C
---------------	---------	----------

C = 100 SHEETS

ABRASIVE BELTS

PLEASE SPECIFY GRITS

1X30	\$.81 ea.
1X42	.81
1X44	.81
2 1/2X16	.85
3X18	.86
3X21	.90
3X23 3/4	.93
3X24	.93
3X27	.96
4X21 3/4	1.06
4X24	1.10
4X36	1.35
6X48	3.50
2 1/4X80	3.25

Other sizes priced upon request

JUMBO ROUTER PAD(24" x 36")

It will not allow small blocks of wood to slip out under router or sanding applications. ROUTER PAD

ONLY \$8.95ea.

* OTHER PRODUCTS*

*WIDE BELTS*ROLLS*FLAP WHEELS*PUMP SLEEVES
*PSA DISCS*ROUTER BITS*WOOD GLUE*WOOD BITS

VELCRO® VACUUM DISCS 8 Hole pattern For Bosch Sanders

NEW

Grit	Price	Dia.	Grit	Price
5*	60 \$.48 ea.	6"	60	\$.65 ea.
5*	80 .46	6"	80	.63
5*	100* .45	6"	100*	.62

Note: * = thru 320 grit * Now in 5 hole pattern *

Nuisance Dust Mask

This double absorbent filter material screens out dust, and lets air pass freely!



ONLY

\$10.50/box of 50

STEEL BAR CLAMPS

Size	Price
2-1/2 x 6	\$6.50ea.
2-1/2 x 12	7.00
2-1/2 x 24	7.75
2-1/2 x 36	9.50

SPRING CLAMPS

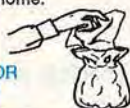
Clamps come with PVC tips and grips.

Size	Price
4"	\$1.75 ea
6"	2.25
8"	3.50

Lint-Free Wiping Cloths

Handy for all your cleaning or finishing jobs around the shop or home.

3LBS. FOR
\$4.50



TACK CLOTHS



1-10 - \$.95 ea.
Box of 10 - \$7.60

*MINIMUM ORDER \$25.00
*MasterCard, VISA, Check or C.O.D
*SATISFACTION GUARANTEED!!!
*CALL FOR FREE CATALOG

- TX & NV Add Sales Tax
- Continental U. S. Shipping
Charges add \$5.50

ORDERING LINE
(800)367-4101



Econ-Abrasives

P. O. Box 1628
Frisco, TX 75034
(214)377-9779

A FEW MORE TIPS FROM OUR WOODWORKING PROS

- Create an antique effect with crackle medium and acrylic paints. We applied the treatment to the base for our Whale of Fortune bank. See the article on pages 54-55 for details.

- Whittle our loon letter opener (pages 74-75) without the long tail, and you'll have an ornament for a desk set, clock, or other project. Paint it differently, and you can make it a duck.

- Have you ever puzzled over the right "cut" of shellac to use on a project. Discover all the tricks to this ancient finish in the article on page 66.

The Best Sleep Money Can Buy!

Frustrated With The Quality Of Your Sleep?

Do you toss and turn at night? Can't seem to find a comfortable position? Does your back ache when you awake? These are signs that your metal coil mattress or waterbed isn't supporting you properly and isn't right for your body. Select Comfort can help you sleep better with a revolutionary mattress that's so comfortable and supportive, it's recommended by doctors.



With Select Comfort, you each get exactly the firmness you need.



Select Comfort's patented air cushion design has no springs or coils that can create pressure points and uneven support.



Metal coil mattresses tend to support only the firm parts of your body, which can create pressure points, and uneven spinal support.

You Control The Firmness

With Select Comfort, you can change the firmness depending on how your body feels each night. Go from extra-firm to extra-soft, simply at the touch of a button. In



Customize the firmness of each side of the mattress.

fact, the firmness adjusts independently on each side of the bed so you and your partner can get custom support without compromising comfort or quality of sleep.

Call For More Information

You owe it to yourself to learn more about this revolutionary way to a better night's sleep.

For a FREE Video and Brochure, Call
1-800-831-1211
Ext. 4345

Sleep Better On Air

A Select Comfort adjustable firmness mattress doesn't rely on springs or water. Instead, it supports your body on a cushion of air. Air is better because it gently contours to your body's shape and keeps your spine in its natural alignment. And that lowers the tension in the surrounding muscles. So you can sleep comfortably in any position and wake feeling great—without back pain.



Select Comfort contours to your body.



The Only Mattress with Push Button Firmness Control.

Yes! Please rush me a FREE Video and Brochure.

Name _____
 Address _____
 City _____ State _____
 Zip _____ Phone _____

Ext. 4345

SELECT COMFORT™

Mail to: **Select Comfort Corporation**
 6105 Trenton Lane North, Minneapolis, MN 55442

TALKING BACK

The lure of lures

After reading "The Lure of Wood" in the October 1994 issue, I found myself wanting to make some for my own use. However, as I didn't have a lathe to work with, I developed a way to turn the blanks with a $\frac{3}{8}$ " variable-speed drill and a scrollsaw.

First, I cut the lures to rough shape with my scrollsaw and remove the corners of the block and tenon with a carving knife. Then, I chuck the lure blank into my $\frac{3}{8}$ " drill and turn it round by spinning it against 60-grit sandpaper fastened to the workbench with double-faced tape. To smooth the lure surface, I repeat this step with 100-grit sandpaper, followed by 120-grit paper. I then cut the lure free from the driving pin, and it's ready to paint!

—Dan Bleck, Libertyville, Ill.

We welcome comments, criticisms, suggestions, and even compliments. Send your correspondence to: Talking Back, *Better Homes and Gardens*® WOOD® Magazine, 1912 Grand Ave., Des Moines, IA 50309-3379.
CompuServe address: 74404,3516 (or)
Internet: 74404.3516@compuserve.com

Help from a manufacturer

I needed an 8" circular saw blade with a 1" arbor hole, to fit the tablesaw arbor of my old Paramount woodworking machine, and have looked for years to find a company that would make such a blade. In the November 1994 issue of WOOD® I found the answer—Forrest Manufacturing Co. The folks there will bore arbor holes in their blades up to 1½" on special order. Good for Forrest!

—Erwin Sias, Bonners Ferry, Ind.

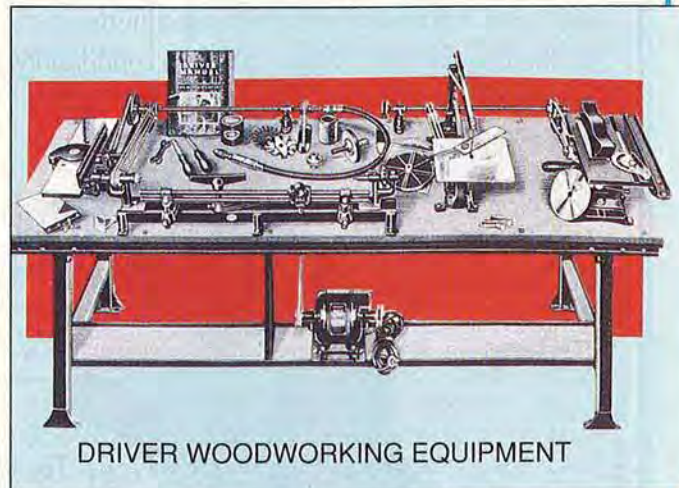
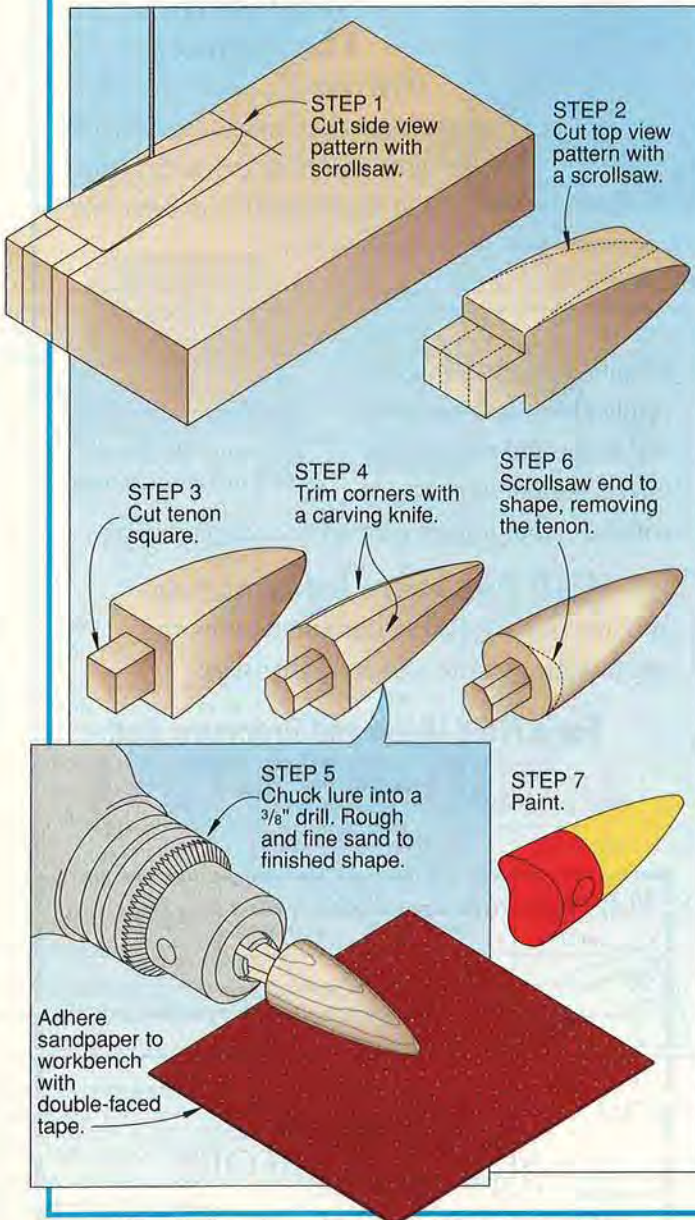
Article brings back memories of a fun and successful venture

The "Woodworking Trivia" article in the November 1994 issue almost brought tears to my eyes. In 1930, my closest friend and I scrounged up \$9. It was spent as follows: a Driver tablesaw - \$5, 6" planer blade - \$2, and a second-hand ¼-hp induction motor - \$2.

Then, by streetcar, we crossed town to the only lumberyard in Los Angeles that carried balsa wood (at that time, priced at 15¢ per board foot). For a few bucks, we got all we could carry on the streetcar. We then went home and sawed it into model airplane strips, which we carried downtown and sold to the model department of the Broadway Department Store. This was in our first year of high school, and we kept the Broadway in balsa wood model supplies for quite some time.

I still have the original 6" combination blade that came with the Driver tablesaw. The ¼-hp motor was installed on a Delta scrollsaw in 1946, and it finally burned out in 1981.

—Robert P. Shea, Santa Maria, Calif.



Continued on page 20

"You can earn up to \$50.00 an hour, too!"

Put Yourself In Charge Of Your Money-making Business

*Free opportunity kits
tell you how to earn good money in
these expanding fields*

Ever dream of being the boss...in charge of your own profitable business? You can turn those dreams into cold, hard cash — if you get into a growing field where service is in constant demand.

Foley-Belsaw's unique in-home training programs let you gain skills in different career fields where the demand is growing and will continue to grow through the twenty-first century.

You learn highly profitable skills at home, at your own pace from Foley-Belsaw, world leaders in training since 1926.

There's no better time, no easier way, to start your own money-making full or part-time business. And there's no obligation or cost involved in learning the easy steps you can take to make your new career a reality!

1 Locksmithing. As millions of Americans demand greater protection, this becomes a high demand field. We provide the training to make you a professional locksmith who commands \$25 per hour.

2 Small Engine Service & Repair. There are more than 65 million small engines in use today (a number growing at a rate of 1,000,000 each month). You can make \$45 in just 1/2 hour for a simple tune-up, and even more for many of the simple repairs you'll learn on everything from snow blowers to bass boats.

3 Professional Saw & Tool Sharpening. Imagine a business where 90 cents out of every dollar you take in is cash profit! You'll earn \$18 to \$25 per hour running machines that do the work for you.

4 VCR Cleaning, Maintenance & Repair. The VCR has become a basic part of nearly every American household. You can make up to \$50 per hour in this fast growing field.

5 Computer Repair, Maintenance & Upgrade. There's no doubt about it, the computerization of America is taking place! Get a jump on a high paying occupation or business of your own in a field with an unlimited future.

6 TV & Satellite Dish Repair. You see them popping up in yards all over town. The demand is growing for the variety in entertainment only a satellite dish can provide. Get the skills you'll need to profit in this growing field.

7 Professional Gunsmithing. Skilled gunsmiths — when you can find one — charge up to \$50 per hour for simple repairs. That's money you can put in your pocket with the training you'll get from Foley-Belsaw.

8 Professional Woodworking. Build over \$3,000 worth of valuable furniture while you learn! You'll start the Foley-Belsaw course with the simplest of projects then move on to creating heirloom-quality furniture! You'll save thousands on your own home repairs alone.



"I chose Locksmithing, but that's just one of many fast-growing fields in need of skilled professionals. And with Foley-Belsaw, you train at home in your spare time while earning money from the start."

Bill Smith

9 Upholstery. As furniture prices rise and quality noticeably decreases, it makes good sense to pursue a career in upholstery. You'll learn to make big profits in both commercial and consumer markets.

10 Computer Programming. It's a fact: Computers are more widespread than ever before. And programmers with the right skills command top dollar for their work. Learn the languages most in demand — Q Basic, C, C+ and C++ — and watch your income soar.

11 Vinyl Repair. A fascinating business that will lead you to a profitable career repairing vinyl and similar materials.

**Mail this coupon or call today
Toll Free 1-800-487-2100!**

Your free opportunity kit will be rushed to you!

If coupon is missing, write to: Foley-Belsaw Company, 6301 Equitable Road, Kansas City, MO 64120

Call or complete & return this coupon to: Foley-Belsaw Institute, 6301 Equitable Road, Kansas City, MO 64120

YES! Send Me The Following Free Opportunity Kit.

- Locksmithing, Dept. 12693
- Small Engine Repair, Dept. 52577
- Saw & Tool Sharpening, Dept. 21522
- VCR Repair, Dept. 62372
- Computer Repair, Dept. 64269
- TV/Satellite Dish Repair, Dept. 31148
- Gunsmithing, Dept. 92180
- Woodworking, Dept. 43460
- Upholstery, Dept. 81128
- Computer Programming, Dept. 35096
- Vinyl Repair, Dept. 71062



**Don't wait.
Call now!**



I understand that there is ABSOLUTELY NO OBLIGATION and NO SALESMAN WILL CALL.

Name _____

Address _____

City _____ State _____ Zip _____

PERFORMAX® - A Planer Plus

Drum and Brush Sanders for Maximum Performance and Maximum Value

You could get lost comparing the many brands of bench-top planers or you could go beyond to a new way of dimensioning.

The new way is the PERFORMAX® way!

Now you can smooth a rough-sawn board to a ready-to-stain finish more efficiently than the combined use of a planer and a hand-held belt sander.

The Performax® way eliminates scraping, planer tear-out, snipe and narrow width limitations that require you to rip and glue.

The Genuine Performax® Drum Sander, the only **MADE IN THE USA** drum sander with patented features. Models are available

with 1, 1½ or 5 HP motors to satisfy a wide variety of thickening AND fine finish sanding needs.



Call for a free brochure and the dealer nearest you.



PERFORMAX 1-800-334-4910
PRODUCTS, INC. X (612) 895-9922

12257 Nicollet Ave. So. • WD08 • Burnsville, MN 55337

Circle No. 78

The Tool That Your Workshop Needs...

With 208 pages of full-color, our Free Catalog is the biggest in the business. We also think it's the best.

We have the high quality woodworking supplies and tools that are nearly impossible to find anymore. Everything from traditional old-style hand planes and saws to the very latest in power tools and accessories. We've got Precision Measuring tools, Chisels, Carving tools, Turning tools, Sharpening tools, plus Glues, Stains, Top Coats and much more.

Send us a post card or letter with your name and address to the address below. Or Call Toll-Free 800-221-2942 to receive your Free 1995 Garrett Wade Catalog.

Garrett Wade Co., Inc.
161 6th Avenue, Dept. 1043
New York, NY 10013
800-221-2942



And It's Free, From Garrett Wade

Circle No. 44, 855, 1427

TALKING BACK

Continued from page 18

Giving credit where it's due

Don Mostrom, *WOOD*® magazine's correspondence writer, designed the Corian-topped plant stand featured in our February 1995 issue. We inadvertently omitted Don's name from the list of credits for this project.



IDEA SHOP® 2 creates more ideas

I have come to count on *WOOD* magazine for interesting projects and tips. And after reading about IDEA SHOP 2 in the September 1994 issue, I arrived at a solution to a problem I was having in my shop, where space is also at a premium.

Here's my shop problem: pieces of wood that I rip on my tablesaw crash to the floor after they pass through the blade. And I am never comfortable with hanging over the blade while trying to balance the wood to keep it from falling.

To solve this problem, I adapted your idea of the drop-leaf extensions from the "Drop-Leaf Mobile Workbench" and added a drop-leaf extension to the back of my tablesaw that adjusts flush with the top of the tablesaw. I covered the extension table with plastic laminate so the wood slides easier.

—H. Foltz, Hagerstown, Md.

Glue prices drop as container size increases

Officials at Franklin International, the maker of Titebond II Wood Glue, have raised a couple of points about our June 1995 review of woodworking glues. According to Sharon Pantelis at Franklin, consumers can purchase Titebond II at prices lower than those listed in the article. She also said that, when compared with similar-sized containers of polyurethane glue, Titebond II offers a better value than our chart indicated.

Since the polyurethane glues come in non-standard sizes, an apples-to-apples comparison is not possible. Nonetheless, in the chart below we've listed the full range of prices and sizes we found as of May.

In the same article we also said that aliphatic resins (AR) glues contain solvents as opposed to the polyurethane glues which are solvent free, or nearly so. To avoid any confusion, we should point out that the "solvent" used in AR glues is only water, which does not have any of the health or environmental hazards normally associated with oil-based solvents such as paint thinner or acetone. ♣

—Tom Jackson
General-Interest Editor

COMPARING GLUE COSTS			
BRAND	CONTAINER SIZES (OZ.)	PRICES (\$)	COSTS PER QUINCE
TITEBOND II	8 - 128	3 - 18	.38 - .14
ELMER'S WEATHER-TITE	4 - 8	1.67 - 2.27	.42 - .28
GORILLA GLUE	18 - 36	20 - 32	1.11 - .89
EXCEL	8.5 - 25.4	7 - 17	.82 - .67

Makita

- LS1211**
12" Compound Miter Saw **\$809**
- 2012 12" Planer 538
 - 2414B 14" Cutoff Saw 234
 - 2708W 8 1/2" Table Saw 297
 - 3612BRA Plunge Router 173
 - 4301BV Jig Saw 157
 - 5007NBK 7-1/4" Circ. Saw 127
 - 5090DW 3-3/8" Cord's Saw 137
 - 5090D tool only 80
 - 5402A 16" Beam Saw 529



- 6095DWE 9v. Cordless-2batt 137
 - 6405 3/8" Drill 53
 - 9820-2 Sharpener 204
 - 9901 3 X 21 Belt Sander 129
 - 9924DB 3 X 24 Belt Sander 183
 - BO4510 Square Pad Sander 4.9
 - BO5000 Random Orbit Sander 6.8
 - JR3000V Recip-Saw 134
 - LS1030 10" Miter Saw 195
 - LS1020 10" Miter Saw 228
 - N1900B 3" Planer Kit 129
 - N9501B Mini Grinder Kit 98
- BATTERY SPECIAL**
- 9.6 V "Black" Battery 23.50
 - 7.2 V "Orange" Battery 22.00
 - 12 V "Black" Battery 39.00
 - ML900 9V Flashlight 36.00

- AIR MAKITA**
- AN8300 Framing Nailer 439
 - AN451 Coil Roofing Nailer 398
 - AF501 Brad Nailer 277

Makita

- MAC1000 1-1/2hp Compressor 299
- MAC2000 2hp Oilless Compressor 354

VIXBITS

- size #3 8.95
 - #5 7.99
 - #9 7.99
 - #12 35.99
 - #14 35.99
- self centering bits for hinges

"the place wise woodworkers shop"

ROCK BOTTOM PRICES ON ALL YOUR FAVORITE TOOLS

PORTER+CABLE

- 556 Biscuit Joiner \$147**
- 100 7/8 hp Router 101
 - 1700 HeatGun 73
 - 2620 3/8" Drill 4.5 amp 87
 - 2621 3/8" Keyless Drill 88
 - 310 Laminate Trimmer 144
 - 312 Offset Trim Router 144
 - 332 RO Sander 65
 - 347 7" Circular Saw 126
 - 743 Left hand saw 127

PORTER+CABLE

- 361 3X24 Belt Sander 181
- 363 4X24 Belt Sander 190
- 410 Betterly™ Underscribe 147
- 411 Betterly™ MiterFold 164
- 447 7 1/4" Framers Saw 133
- 5008 12" Dovetail Jig 77
- 511 Door Lock Kit 138
- 5116 16" Dovetail Jig 252
- 6611 3/8" Drill 5.5 amp 123
- 6614 1/2" Drill 127
- 6615 1/2" Keyless Drill 127
- 666 3/8" Drill 124

PORTER+CABLE

- 690 1-1/2 hp Router 139
- 693 1.5hp Plunge Router 168
- 6931 Plunge Base 72
- 695 Router Table w/motor 215
- 696 Router Table only 127
- 7116 24" Dovetail Jig 292
- 7399 Drywall Cutout 78
- 743 7-1/4" Right hand Saw 267
- 7518 Vari Sp 3hp Router 126
- 7519 3hp Router 232
- 7536 2hp Router 201

- 345 6" Saw Boss \$103**

- PORTER+CABLE**
- 7537 2 hp D-Handle Router 207
 - 7538 3 hp Plunge Router 234
 - 7539 VS Plunge Router 268

- PORTER+CABLE**
- 7549 Jig Saw 133
 - 7800 Drywall sander 328
 - 7810 Vacuum 252
 - 9118 3 1/4" Planer Kit 204
 - 9314 Trim Saw Kit 151
 - 9345 Sawboss w/ case 123
 - 9690 1.5 hp Router w/ case 144
 - 9645S Screwgun w/ case 128
 - 97310 Trimmer Kit 193
 - 97366" RO Sander w/ case 136
 - 9743 7-1/4" Saw Kit 139

Call for your copy of our new catalog—full of great tools and accessories at our super low Abbey Tool prices

It's the long-awaited, much-requested, you'd better hold onto this one because who knows when we'll print another.

ABBHEY'S REALLY BIG WORLD OF TOOLS CATALOG

Look inside for fantastic buys on over 3,000 quality items for your every tool need

- Milwaukee**
- 0225-1 3/8" Magnum Drill \$123
 - 0228-1 3/8" 0-1000rpm Drill 108
 - 0229-1 3/8" Keyless Drill 108
 - 0234-1 1/2" Magnum Drill 128
 - 0238-1 1/2" Magnum Kit 148
 - 0236-1 1/2" 0-850rpm Drill 128
 - 0239-1 1/2" Keyless Drill 128
 - 0244-1 0-600 rpm Magnum 127

- 0375-1 3/8" Close Qtr Drill 128
 - 0379-1 1/2" Close Qtr Drill 148
- 0407-1 Cordless Drill Kit-2batt 172
- 0421-1 12V Cord's Hammer Drill 189
- 0567-1 Drain Cleaner 234
- 3307-1 RT Angle Drill 189
- 3107-1 VS Fit Angle Drill 213
- 5192 Die Grinder 174

- DEWALT**
- DW682K Biscuit Joiner \$218**
- DW100 3/8" Drill 67
 - DW106 3/8" Keyless Drill 73
 - DW411 Palm Sander 58

- DW930K Cordless Saw 198
- DW935K Cordless Saw 219
- DW972K2 12V Cordless drill 188
- DW974K 14V Cordless drill 188

- DEWALT**
- DW705 12" Compound \$358**

- Milwaukee**
- 6494 10" Compound Miter \$309**
- 5362-1 1" Hawk Hammer 328
 - 5365-1 1" Hawk Hammer Kit 348
 - 5369-1 3/4" D-handle Falcon Kit 238
 - 5371-1 1/2" Hammer Drill 184
 - 5375-1 1/2" Hammer Drill Kit 178
 - 5392-1 3/8" Hammer Drill 126
 - 5397-1 3/8" Hammer Drill Kit 138
 - 5460 7" Polisher 168

- Milwaukee**
- 5682 2 Hp Router 165
 - 5936 4 x 24 Belt Sander 227
 - 6008 1/3 Sheet Sander 123
 - 6010 1/2 Sheet Sander 123
 - 6140 4 1/2" Grinder 94
 - 6142 4 1/2" Grinder Kit 123
 - 6175 14" Chop Saw 278
 - 6266 NEW!! Jig Saw 187
 - 6365 7-1/4" Circular Saw 119
 - 6368 6365 w/Carbide bid 128
 - 6368 7-1/4" Saw Kit 138
 - 6480 10" Circular Saw 268
 - 6490 10" Miter Saw 254
 - 6491 10" Miter Saw w/80t Bid 274
 - 6527 VS Super Sawzall 171
 - 6528 VS Super Sawzall 169

- Milwaukee**
- 6539-1 Inline Screwdriver 74
 - 6548-1 2 spd Inline Screwdriver 81
 - 6547-1 2 spd Screwdriver Kit 108
 - 6758-1 Drywall Screwgun 98
 - 6767-1 Screwdriver Kit 137
 - 8975 Heat Gun 55
 - 8980 Heat Gun Kit 91

- Milwaukee**
- 6535 Dual range VS Sawzall \$115**

BOSCH

- 1581VS \$144 VS**
- Orbital Jigsaw**
- 3283DVSK RO Sander Kits 117
 - B4050New! Inline Jig Saw 113
 - 1139VSR 3/8" Hammer Drill 139
 - 1347A Mini Grinder 99
 - 11222EVS SDS RobHammer 229

BLACK&DECKER

- NEW! 2872K2 with 2 batteries 12V \$188**
- 2874K 14.4V \$208**
- 1180 1/2" Drill \$113
 - 2037 Drywall Screwgun 96
 - 2037W Drywall gun w/soft cord 119
 - 2038 HD Screwgun 96
 - 2660 Drywall Screwgun 86
 - 2670 1/2" Impact Wrench 149
 - 2721 1.5hp Router 1/2" collet 148
 - 3105 Reciprocating Saw 148
 - 3339 3hp VS Plunge Router 268
 - 4075 7" Wildcat Grinder 165

DELTA

- 37-070 \$247**
- 6" Table Top Jointer**
- 14-650 Hollow Morse Chisel 279
 - Set of 4 Mortise bits 99
 - 22-540 12" planer 388
 - 28-180 10" band saw 163
 - 31-050 1" belt sander 78
 - 31-080 1" Belt 5" Disc Sander 84
 - 31-340 1" Belt 8" Disc Sander 203
 - 31-460 4" Belt 8" Disc Sander 126
 - 32-100 Plate Joiner 258
 - 36-040 8" Compound Miter 154
 - 36-090 Sidekick 10" Miter Saw 213
 - 36-220 10" Compound Miter 228
 - 40-150 15" Scroll Saw 115
 - 40-560 16" Scroll Saw 177
 - 40-640 20" Scroll Saw 298
 - 35-617 10"x50T Carbide Blade 34
 - 35-677 14"x108T Carbide Disc 75

SANDPAPER

- STIK-ON DISCS**
- 10 yards 4 1/2" pieces 6" round 5" round
- 60 N/A 100 pc 12.95 11.95
 - 80 9.95 100 pc 11.95 10.95
 - 100 8.85 100 pc 10.95 9.95
 - 120 8.85 100 pc 10.95 9.95
 - 150 8.85 100 pc 10.95 9.95
 - 180 8.85 100 pc 10.95 9.95
 - 220 8.85 100 pc 10.95 9.95
- hook & loop**
- any grit 10 pcs \$3.95
- triangle sanders**
- Ryobi 30 pc assorted \$4.25
 - Feln 30 pc assorted 6.95
 - Bosch 50 pc assorted 10.50

- FEIN Detail Sander**
- Kit w/ case & paper \$188**
- Scraper Blade attachment 15.95
 - 30 pc assorted PSA paper 6.95

STABILA

- LEVELS - Hand holes. Two vertical vials. Two milled faces. Yellow coat.**
- 2464 24" w/ hand hole 43
 - 2469 36" w/ hand hole 46
 - 2467 48" w/ hand hole 49
 - 2468 72" w/ hand hole 99
- 2501 10" Pocket level 25
- 2699 6 ft —3vial 99
 - 2700 6 ft 6" —3vial 115
 - 2701 8 ft —3vial 125

RYOBI

- OSS450 Spindle Sander \$159**
- AP10 Replacement Blades 2.95
 - BS900 NEW! 9" Band Saw 168
 - DP80 8" Drill Press 99
 - DP100 10" Drill Press 119
 - DS1000 Detail Sander 39
 - J60VK Jig Saw Kit 85
 - TRMK2 Trimmer w/2 bases 99
 - RJ100VK Reciprosaw 99
 - RS115K RO Sander Kit 69
 - SC162 Scroll Saw 119
 - SS162VS 1/2" VS Scroll Saw 57
 - TS254 10" Miter Saw 169
 - TS254 10" Miter Saw 197
 - TS380 15" Miter Saw 365

AIRY

- NAIL GUNS 241SK**
- 18 G 3/8-1-1/2" Kit \$98
 - EZ1 snools pins & staples 98
 - 250SK 18 G 3/4" 2" Kit 164
 - 350K 16G 3/4" 2" Kit 194
 - ES251 1-2-1/2" Finish Gun 204
 - 626SK 14" Crown 1" SaperKit 104
 - 8290 6d-16d Framing Nailer 314

Emglo

- AIR COMPRESSORS**
- AM39HCV 3/4 HP - 2 tanks 293
 - AM78HCV 1 1/2 HP - 2 tank 307
 - AM78DOLHC4V New! Oilless 307

SENCO

- SFN2B Finish Nail Gun 1 1/2" to 2 1/2" \$359**

Rob-Air

- COMPRESSORS D1500HP5 1.5hp 4.5 gal tank \$307**

freud

- 94-100 5 pc Router Bit Cabinet set \$158**
- JS102 New! Cordless Joiner 179
 - EDS132B 13V Cordless Drill 209
 - TR215 8" Compound Miter Saw 349
 - LU85M010 10" 80T Finish 58
 - LU84M011 10" 50T Combo 40
 - LM72M010 10" 24T Fin 36
 - RU85M015 15" 108T Finish 99
 - LU82M010 10" 60T Chipboard 47
 - LU89M010 10" 72T Aluminum 55
 - LU92M010 10" 60T Corian® 55
 - LU98M010 10" 80T Laminate 67
 - LU93M010 10" 60T Crosscut 45

Construction Master IV

The NEW!!! world's best feet-inch-metric-ratio calculator. Solves reatters hips, valleys, stairs

Pockethole maker \$109.95

- KREG JIG** for joining faceframes, butt joints and other pocket hole applications
- K2 two hole 109.95
 - K1 one hole 99.95
 - Extra Drill bit 15.95
 - Face Clamp 15.95
 - 100 Screws 3.25
 - Driver Bit 2.95

BIESEMEYER

- T50 50' Commercial Fence \$ 297
 - H552 50' Home Shop 237
 - H540 40' Home Shop 207
- TABLE SAW INSERTS 9.95**

- 7pc Forstner Bit Set
7pc Countersink Set
7pc Bradpoint Set
- your choice **\$17.95**

HITACHI

- C8FB2 COMPOUND SLIDE SAW \$577**
- C10FA 10" Miter Saw 269
 - C10FC 10" Comp'd Miter 258
 - C15FB 15" Miter Saw 669
 - NR83A Framing Nailer 398
- TRIGRIP**
- Clamp 'n Tool Back-to-Back Guide Bench Clamp
- 50C \$ 29.50 BB50 \$ 45.95
 - 36C 26.50 BB36 37.95
 - 24C 22.50 BB18 31.95

Panasonic

- EY6100EQK NEW! PREDATOR 12 V CORDLESS DRILL IRONMAN \$198**
- EY6100EQKW PREDATOR IRONMAN w/2 Batteries 224
 - EY6100CQKW PREDATOR 15Min.Charge w/2 Batteries 198

SMARTLEVEL

- SL224 2' economy Level \$ 54
- SL248 4' economy Level 64
- PR24S 2' Pro Level w/ case 88
- PR48S 4' Pro Level w/ case 105

REG

- STSE380 Jig Saw 59
- VS280 1/2 sheet sander 39

ROLLER STANDS

- HPR2 \$39.95
- HPR13 \$29.95

USE VISA, MC, DISCOVER
FREE SHIPPING on orders from this ad over \$50. Within continental 48 states, HI and AK extra. Sales limited to stock on hand.

ABBHEY TOOLS

1-800-225-6321

1132 N. MAGNOLIA, ANAHEIM CA. 92801
OPEN 8-5:30 WEEKDAYS 9-2 SATURDAY
Calif. residents add 7.75% state sales tax
SERVING YOU FOR OVER 18 YEARS
Prices subject to change without notice.



PRODUCTS THAT PERFORM

Reversible clamp also works as spreader



If you've ever spent time modifying a clamp to use it as a spreader, you'll be pleased to note that the new Jorgensen E-Z Hold II clamp converts to a spreader clamp in just seconds. You simply knock out the nylon stop pins on the ends of the bars, slide the clamping jaw forward, and install the non-clamping jaw behind it.

Other than the spreader-clamp function, the E-Z Hold II works a lot like a Quick-Grip clamp. On both, you squeeze a handle to advance the clamping jaw. The main difference I found was that the E-Z Hold II's grip felt less cumbersome when I held the bar horizontally. With the bar held vertically, the Quick Grip's pistol-style handle feels more comfortable.

The E-Z Hold II comes with big 2x2" clamp pads and 3 1/2"-deep jaws. You can also slide the front (non-clamping) jaw on the E-Z Hold II up and down the bar. This comes in handy when your workpiece is smaller than the clamp and you need to balance the clamp over the workpiece.

—Tested by Bob McFarlin

PRODUCT SCORECARD

Jorgensen E-Z Hold II Style 3400 Bar and Spreader Clamps

Performance	★ ★ ★ ★ ☆
Price	10" about \$16, 16" about \$17, 22" about \$18, 28" about \$20
Value	★ ★ ★ ☆ ☆

Write to: Adjustable Clamp Co., 417 N. Ashland Ave., Chicago, IL 60622. Call 312/666-0640.

RBI 812 makes milling your own stock affordable

In the past, purchasing a machine that could thickness plane, drum sand, and cut molding might cost you in excess of \$1,400. But I recently had a chance to try out the RBI 812, and it does all three of these things and offers a competitive price. This is the smallest machine of its type in the RBI line-up, but it uses a lot of the same features as its bigger brothers.

As a thickness planer and drum sander, the RBI 812 handles stock up to 8" thick and 12" wide. For the molding head, the company offers knives with stock profiles, and you can special-order knives ground to your own design. As for power, the RBI 812 comes with a wood-gobbling 3-hp, 220-volt Baldor motor.

In setting up the machine, I adjusted the outfeed tables and the rolled-steel bed quickly and without a hitch. Knife adjustment on the three-knife planer head also proved easy. The knife-and-gib system allows you to clamp the planer knives without them slipping out of alignment.

I found the sandpaper installation less convenient. The solid-steel sanding head comes with hook-and-loop backed sandpaper, but the replacement paper is not tapered on the ends or cut to length, which would make installation easier.

Changing from the planing head to the sanding or molding head also proved challenging. The formed-steel flanges that surround the shafts of these heads require that you hold several pieces together while tightening the retaining bolts—a tricky task unless you have tiny fingers. This also made it more time consuming to adjust the different heads parallel to the bed. These drawbacks require a bit of patience, but they don't affect the performance of the machine. And I consider these acceptable tradeoffs for a machine



that provides professional performance at a price home woodworkers can afford.

Overall, I think there are three reasons you might want to invest in the RBI 812. First, you can save money by turning rough lumber into finished stock, and by creating your own moldings. Second, it can help you get more woodworking done in less time than you would using portable power tools. And finally, the 28x35" footprint of this machine eats up a lot less space than three separate machines. Besides the three-head model I tested, you can order the 812 with the planer head only for \$949, and with the planer and molder head or the planer and sander head for \$1,089.🌲

—Tested by Dave Henderson

PRODUCT SCORECARD

RBI 812 Planer with molder and sanding heads

Performance	★ ★ ★ ★ ☆
Price	\$1,229 (includes outfeed roller stand, guide board, knife-setting gauge, and an extra set of knives.)
Value	★ ★ ★ ★ ★

Write to: RB Industries, P.O. Box 369, Harrisonville, MO 64701. Call 800/487-2623.



ENLON[®]

IMPORT CORPORATION

The Power You Can Trust

ORDERS

1-800-888-9697

Mon.-Fri. 7:00am-5:00pm (Pacific Time)
Sat. 9:00am-1:00pm (Pacific Time)

Prices & Specifications are subject to change without notice.
*F.O.B. City of Industry, CA or Clarksburg, WV

Summer Sale

STARTS JULY 1ST, ENDS SEPT. 30TH, 1995
10 % OFF ON ALL ACCESSORIES DURING THIS SALE PERIOD.

We guarantee the finest quality machinery produced by the best import manufactures with up to 20 years experience in manufacturing quality machinery. With 1 year limited warranty and satisfaction guaranteed with no restocking fee when you return your products within 10 days of the purchase for refund, we offer the best deal this summer.

6" JOINTER

- 1 H.P., 110/220V
- 3-KNIFE CUTTERHEAD
- 47" BED LENGTH
- CENTER-MOUNTED CAST IRON FENCE
- BUILT-IN CHIP CHUTE

***EN3101** NEW
REG.: \$365.00
SALE: **\$335.00**

HEAVY-DUTY
ONE PIECE
STAND



8" HEAVY DUTY JOINTER

- 1 1/2 H.P., 220V
- 3-KNIFE CUTTERHEAD
- 65" BED LENGTH
- MAGNETIC SWITCH

***EN3102**
REG.: \$640.00
SALE: **\$615.00**
***EN3106** (2 H.P.)
REG.: \$675.00
SALE: **\$650.00**



2 H.P. DUST COLLECTOR

- 220V, 12 AMPS
- 1,182 C.F.M.
- 2 INTAKES @ 4"
- ALL STEEL IMPELLER

***EN-DC20**
REG.: \$289.00
SALE: **\$275.00**



FREE
4" X 10'
P.V.C.
HOSE!
A \$12.95
value

20" INDUSTRIAL BAND SAW

- 3 H.P., 220V, SINGLE PHASE MOTOR
- SEALED BALL-BEARING CONST
- BUILT-IN WHEEL BRAKE & BRUSH TO CLEAN WHEEL
- BUILT-IN DUST COLLECTOR PORT
- INCLUDES: 1'x 155" BLADE

***EN3506**
REG.: \$ 1,195.00

SALE: **\$1,095.00**



1/4 H.P. POWER FEEDER

- 110V, SINGLE PHASE REVERSING MOTOR
- 3 WHEELS
- OPERATES FORWARD AND REVERSE
- VARIABLE SPEEDS

***EN3701**
REG.: \$385.00
INTRODUCTORY PRICE: **\$365.00**



(EN3201 SHOWN)

10" H.D. TABLE SAW

- 1 1/2 H.P., 110/220V
- 41" X 27" TABLE SIZE W/CAST IRON EXTENSIONS
- BUILT-IN CHIP CHUTE
- PRECISION SINGLE LEVER RIP FENCE W/MICRO-ADJUSTMENT

***EN3201**
REG.: \$370.00
SALE: **\$335.00**
***EN3205** (2 H.P.)
REG.: \$525.00
SALE: **\$495.00**



Optional 4'x8'
Capacity
Sliding Table
and 56" Rip
Capacity Rails
are Available

15" PLANER

- 3 H.P., 220V, 15 AMPS
- 2 FEED RATES: 16 & 20 F.P.M.
- 3-KNIFE CUTTERHEAD
- BUILT-IN DUST EXHAUST HOOD
- MAGNETIC SAFETY SWITCH

***EN-PN15**
REG.: \$899.00
SALE: **\$869.00**



20" PLANER

- 3 H.P., 220V, 15 AMPS
- 2 SPEED: 16 & 20 F.P.M.
- 4-KNIFE CUTTERHEAD

***EN-PN20**
REG.: \$1,295.00
SALE: **\$1,275.00**
***EN-PN25** (5 H.P.)
REG.: \$1,395.00
SALE: **\$1,375.00**



10" TILTING ARBOR SUPER H. D. TABLE SAW

- 3 H.P., 220V, 15 AMPS
- PRECISION GROUND CAST IRON TABLE
- PRECISION LEVER LOCK FENCE SYSTEM
- W/36" RIP CAPACITY
- STEEL BASE CABINET

***EN3202**
REG.: \$795.00
SALE: **\$750.00**



1 1/2 H.P. SHAPER

- 110/220V, 7,000/10,000 R.P.M.
- 1/2" & 3/4" SPINDLES
- CAST IRON TABLE
- OPTIONAL HOLD-DOWN ROLLER SET

***EN3302**
REG.: \$395.00
SALE: **\$385.00**



3 H.P. HEAVY DUTY SHAPER

- 220V, 7,000/10,000 R.P.M.
- 1/2", 3/4" & 1" SPINDLES
- CAST IRON TABLE
- OPTIONAL HOLD-DOWN ROLLER SET

***EN3303**
REG.: \$745.00
SALE: **\$715.00**

20% off Regular Price
for Staples/Nails with
Purchase of Stapler/ Nailer



HEAVY DUTY FINISH NAILER

- DRIVES 16 GAUGE NAILS
- NAIL CAPACITY 3/4"-2"
- MAX. AIR PRESSURE 100 PSI
- INCLUDES CARRING CASE

EN3604
REG.: \$149.95
SALE: **\$129.95**

NEW

6" X 48" BELT/ 9" DISC SANDER

- 3/4 H.P., 110V
- MITER GAUGE
- ADJUSTABLE TABLE 0-45°
- BELT OPERATES VERTICALLY OR HORIZONTALLY

***EN-SN69**
REG.: \$195.00
SALE: **\$179.00**



24" DUAL DRUM SANDER

- 5 H.P., 220V, 25 AMPS
- MAGNETIC STARTER W/REVERSING SWITCH
- 2 REVERSIBLE FEED RATES 11 & 17 F.P.M.
- DUAL 24" RUBBER COATED SANDING DRUMS
- HEAVY DUTY STEEL STAND
- TWO 4" DUST COLLECTOR PORTS

***EN3409**
REG.: \$1,200.00
INTRODUCTORY PRICE: **\$950.00**

NEW



OSCILLATING VERTICAL SPINDLE SANDER

- 1 H.P., 110/220V, SINGLE PHASE MOTOR
- SPINDLE SPEED 1,720 R.P.M.
- 75 OSCILLATIONS PER MINUTE
- 10 SPINDLES (W/SLEEVES) FROM 1/4" TO 4" DIA. INCLUDED

***EN3407**
REG.: \$575.00
SALE: **\$555.00**



TOOL BUYERS' UPDATE

Safe and efficient **RADIANT** **HEATING**

Due to high reader interest in this subject, and our ongoing study of safe ways to warm your workshop, we recently tested an infrared radiant heater made by Detroit Radiant Products Company. Compared to competing shop-heating choices, our ceiling-mounted unit offers several unique advantages that readily offset the somewhat stiff initial investment.

Infrared radiant heating in a nutshell

Fueled by either natural or propane gas, and powered by a 120-volt electrical outlet, Detroit Radiant's radiant heater consists of a heating unit with an internal fan. Attached to this is a 4"-diameter aluminized steel tube (called a burner tube) that carries the heated products of combustion and vents them outside, and an aluminum reflector hood that helps direct the heat from the tube downward. This infrared heat warms the objects below, much like the sun's infrared rays on an absorbent surface.

Like the sun's rays, an infrared radiant heater's tube and reflector heat the surfaces below. These same surfaces—like a shop floor—warm up and return heat to the surrounding space.

In a shop, this might be the concrete floor or a stationary tool table. These surfaces, in turn, grow warm and radiate heat up and out, improving the temperature in the space as shown *below*.

What's so hot about radiant heating?

So far, only Detroit Radiant makes radiant heaters approved for residential applications, such as home workshops, garages, and indoor swimming pools. These "Re-Verber-Ray" models are the DBS10-25 (having a 10'-long radiant tube and generating 25,000 Btus), and the DBS20-40 (with a

20'-long tube capable of dishing out 40,000 Btus). While the smaller unit best suits one- and two-car garage shops, Joe Wortman of Detroit Radiant advised that we use the larger unit for our 22×30' garage/workshop. Joe also recommended the L-shaped configuration *above*. This localized the heat over the garage's workshop area.

After a month's trial during January of this year, when outside temperatures dipped to a chilly 5 degrees below zero, many of radiant heating's advantages became obvious. First, equipped with an electric ignition device, the heater kicked in with a quick turn of the thermostat. In less than five minutes, infrared heat penetrated the icy air below the tubing, making it comfortable to work there.

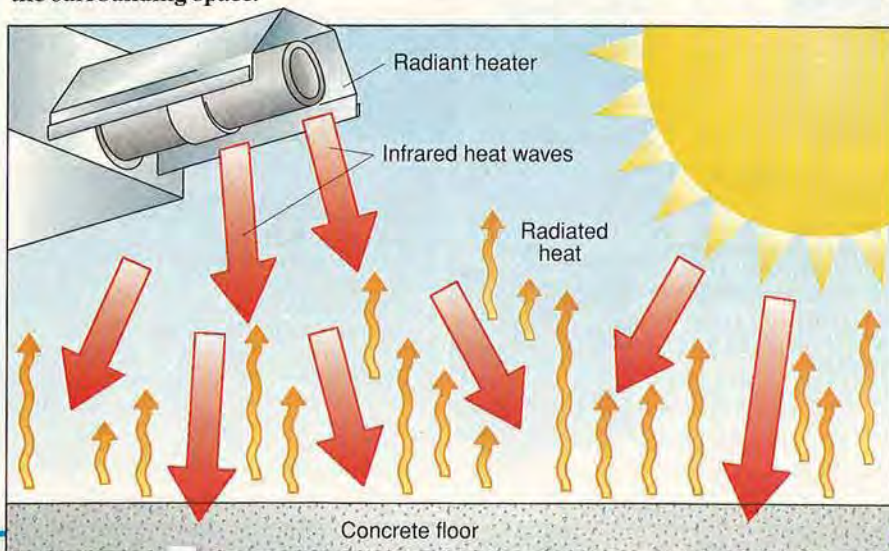
Second, though a fan inside the heating unit moves heated combustion products through the tube, a radiant heater does not *blow* wood dust around like heaters that rely on blowers for heat distribution. That makes for cleaner shop air.

A third advantage is that the igniter and gas burner are sealed within the heating unit and isolated from the room atmosphere. Outside air feeds the flame, reducing the potential for explosion by volatile vapors or dust.

Continued on page 26



Jim Harrold, managing editor of *WOOD*® magazine, enjoys a cold January day woodworking in his garage shop. An overhead radiant heater spreads warmth throughout the space.





HARBOR FREIGHT TOOLS



● LOW PRICE GUARANTEE ●
 WE'LL BEAT ANY COMPETITOR'S PRICE ON ANY IDENTICAL ITEM -EVEN IF IT'S AN ADVERTISED SPECIAL

FREE SHIPPING! ★
 FOR ALL ITEMS SHOWN BELOW!

CENTRAL MACHINERY

5 SPEED BENCH DRILL PRESS

- 2" stroke, 8-1/4" swing
 - 1/2" chuck
 - ITEM 05901-6VEA
- \$4999**

25 PC. BRAD POINT WOOD BIT SET

- Sizes: 1/8" through 1/2" by 64ths
 - ITEM 03376-3VEA
- \$1299**

CENTRAL PNEUMATIC CONTRACTOR SERIES

8 TO 10 GAUGE AIR FRAMING NAILER

- The angled magazine stays clear of your work surface for maximum visibility and toe nailing. Allows fast loading of up to 3 sticks of nails (75 or 105 nails per stick).
- 70-100 PSI • 7 lbs. tool weight
- Accepts 8 to 10 gauge stick nails, 2" to 3-1/2" long
- 12-3/8" H x 5-7/16" W x 18-3/8" L overall dimensions
- 1/4" NPT air inlet

ITEM 06872-4VEA

\$13999

CONTROLLED PRESSURE NON-MARRING HARDWOOD CLAMPS

JAW LENGTH	OPEN-JAW CAP.	ITEM	PRICE
6"	3"	06986-1VEA	\$399
7"	4-1/2"	06987-5VEA	\$499
8"	4-3/4"	04852-2VEA	\$499
10"	6"	04853-2VEA	\$599
12"	8-1/8"	04854-3VEA	\$799

DRILL MASTER



TIN COATED FORSTNER BIT SETS

Includes 3/8" cut down shanks and individually organized wooden case. Rockwell hardness range from 55-65HRC. 20

16 PC. SET

- 16 sizes 1/4" to 2-1/8" by eighth's

ITEM 32404-8VEA

\$2999

20 PC. SET

- 20 Sizes from 1/4" to 3/4" by 16ths, 7/8", 15/16", 1" to 2" by eighth's

ITEM 31130-7VEA

\$3499

CENTRAL MACHINERY

10" PLANER

- 2 HP, 110V, 1 phase, 11 amp, 8000 RPM
- 19" x 16-5/8" x 16" overall dimensions
- 5-1/8" working distance
- 10-1/8" x 9-1/8" feed table
- 2-blade cutter head
- 10-1/8" blade size
- Stand sold separately

LIMIT 1

BLOW OUT PRICE!



ITEM 32377-3VEA

\$19999

BUY NOW & SAVE!

12-1/2" ROLLER AND BRACKET SET

Double your table saw capacity! Make your own roller table.

ITEM 30026-3VEA

\$499

Pittsburgh

Pittsburgh LIFETIME WARRANTY

1/2 OFF!

2 PC. 3/4" HEAVY DUTY PIPE CLAMP SET

- Pipe not included.
- Handle screw operating range: 2-1/8" • Weight: 2-7/16 lbs.

ITEM 31255-4VEA

\$299

CENTRAL PNEUMATIC CONTRACTOR SERIES

18 GAUGE AIR FINISH NAILER

- The excellent balance and 2-1/2 lb. weight make this brad tacker easy to use in tight spots. Uses brads 5/8" to 1-3/16".
- Air consumption: 3.5 CFM at 75 PSI
- Uses 18 gauge brads

ITEM 02039-4VEA

\$4999

CENTRAL MACHINERY

MORTISING MACHINE

- Make a square hole in the fraction of the time it takes by hand!
- Includes 1/4", 3/8", and 1/2" chisels
- 5" maximum work piece height
- 3-1/2" swing
- 1/2 HP, 110V, 2.3 amps

ITEM 30036-5VEA

\$17999

Pittsburgh



10 PC. SPRING CLAMP SET

- Made of nickel-plated, heavy gauge steel, with heavy duty tempered springs and comfortable vinyl coated handles.
- Contains four 1" capacity clamps, four 2" capacity clamps, & two 3" capacity clamps

ITEM 05968-2VEA

\$799

CENTRAL MACHINERY

REDUCED 20%

1" x 30" BELT SANDER

- Remove the belt back plate and sand all types of curves and odd shapes.
- Motor: 1/4 HP, 2 amp, 60 Hz, 120V, 3450 RPM • Table: 5" x 5"
- Shipping weight: 19 lbs.

ITEM 07830-5VEA

\$3999

SCOTCH BRITE™ 1" x 30" MEDIUM GRIT BELT

- For surface finishing
- Incredibly durable

ITEM 32816-0VEA

\$699

CENTRAL MACHINERY

LOWEST PRICE WE'VE EVER OFFERED!

FREE ACCESSORIES: Stand, 6" belt, 9" disc, open-end wrench, hex key

COMBINATION 6" BELT & 9" DISC SANDER

- 1 HP, 110V, 16 amps, 3450 RPM, all ball bearing motor; overall height: 40"; table tilt 0° to 50°; table surface: 6-1/2" x 12-3/4"; two position work table for disc or belt use; disc speed: 1720 RPM; belt: 6" W x 48" L; belt speed: 2100 FPM; wt: 121 lbs.

LIMIT 1

ITEM 06852-5VEA **\$14999**

GEN-TECH

SLASHED 32%

25' x 1" TAPE MEASURE

Smooth power return. Graduated in 16ths, inches and feet. Stud markings every 16 inches.

ITEM 04004-2VEA

\$399

CENTRAL MACHINERY

10", 2HP BENCH TABLE SAW

- Max. depth of cut @ 90°: 3"; @ 45°: 2-1/2"
- Motor: 2 HP, 115V, 60 Hz, 13 amp, 4500 RPM
- Blade sold separately

ITEM 32648-3VEA

\$7999

10" SAW BLADE

- 40 Tooth carbide tips

ITEM 00529-4VEA

\$999

* Within the 48 States / \$2.95 handling on all orders

Call To Order or Ask for Free Catalog:

Order 24 Hours a Day/7 Days a Week
Most Phone Orders Shipped in 48 Hours



1-800-423-2567

Or Send Check or Money Order to: Harbor Freight Tools,
 3491 Mission Oaks Blvd. Box 6010, Camarillo, CA 93011



Make your saw a precision sander and a better cutting tool with CMT's Set & Sand Disk



These precision-machined disks are perfect for setting the arbor & miter gauge of your radial arm or table saw. Apply our Klingspor sanding disks and your saw is a super sander!

Item	Description	List	Sale
SBS-008X	8" Set & Sand Disk with 15 sanding disks (5 each 60, 80 & 120 grit)	\$56.40	\$39.00
SBS-010X	10" Set & Sand Disk with 15 sanding disks (5 each 60, 80 & 120 grit)	\$81.55	\$49.00
ACS-001	Abrasive Cleaning Stick, 2"x8"	\$9.90	\$8.40

Shipping and Handling \$5.00
CMT TOOLS, 310 Mears Blvd, Oldsmar, FL 34677
 Call toll-free 24-hours a day:
1-800-531-5559
 Toll-free FAX: 1-800-870-7702
 813-891-6160, FAX: 813-891-6259
 In Canada call 1-800-387-7005

Circle No. 1310

STAINED GLASS VIDEO & CATALOG



Improve the looks and value of your home with:

- Entry Doors and Sidelights
- Kitchen Cabinet Inserts
- Tiffany Style Lampshades

Save money and make it yourself - our video shows you how!

The perfect way to get started in stained glass. Our 25 minute video covers all the basics. Filled with clear, simple instructions, hints, close-ups, and examples to help you craft your own stained glass windows, lamps, and more. Package includes video, written instructions, plus 88 page full-color catalog. #6149VW...\$10.95 + \$3.00 shipping/hand.

To Order, Call Toll Free 1-800-248-2048

DELPHI STAINED GLASS Since 1972
 2116 E. Michigan Ave. Lansing, MI 48912

Circle No. 1920

TOOL BUYERS' UPDATE

Continued from page 24

Finally, a radiant heater, according to Detroit Radiant, proves to be significantly less expensive to operate from a fuel-savings standpoint than blower-type heaters. That's by 30 percent on average.

A little chilly news

Is there a downside of radiant heaters? We found a few negatives, but they're easy ones to live with. To avoid dinging the overhead reflector or tube, care must be taken when handling sheet goods or long boards beneath the heating system. In fact, Detroit Radiant recommends having a ceiling height of 8' or higher for this and fire safety reasons.

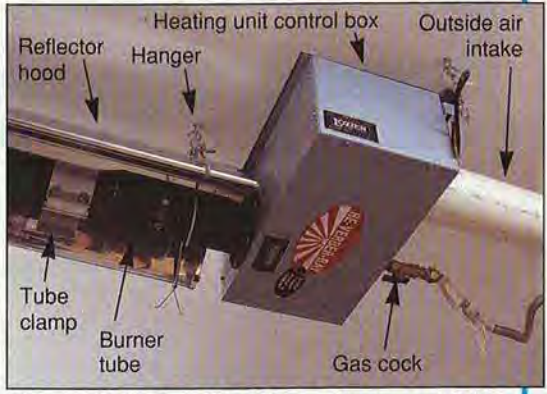
Clearance to combustibles must be watched with a radiant heater. Standard installation clearances are established for each model in the manual, but you must also take care where you place cans of finishes, wood, and other flammables when working in the shop. Parking a vehicle too close to an operating radiant heater could also be a problem, resulting in a damaged paint finish.

Finally, to prevent dust from collecting on the hoodlike reflectors and creating a fire hazard, you need only vacuum the surfaces of the unit occasionally, or blow it off with an air-compressor hose.

The price of staying warm

Our installation required extensive gas line work. That, coupled with our contractor's inexperience with Detroit Radiant's products, and the fact that hanging the unit amounts to a two-person job, resulted in a \$1,100 installation cost. Add to this the \$1,080 list price of the DBS20-40, which included the 90° elbow and thermostat, and you have a sizable initial investment. But, ways exist to trim this cost considerably.

Most home woodworkers may need the smaller unit, which lists for \$940. And, according to Joe,



The metal-enclosed heating unit uses outside air for combustion, separating the flame from the shop environment.

"Contractors familiar with Detroit Radiant's heaters, and who buy in quantity, often drop the unit price by several hundred dollars." By doing the lion's share of the installation, including the gas-line work and running wiring, you can easily bring the total cost down to well under \$1,000. But, Joe cautions, "all connections must be within code and checked by local heating and electrical inspectors."

In the end, it comes down to how much woodworking you do, or would like to do, during winter, and how much you value having a warm, comfortable shop. Our experience tells us that whether you wish to heat a one-car garage, or a 40x50' production shop, you won't go wrong installing an efficient, effective, overhead radiant heater. In the long haul, you'll be dollars ahead.

Note: For more on shop heating, see the "Hot Choices in Heaters" article in the September 1994 issue of *WOOD*® magazine.

PRODUCT SCORECARD

Detroit Radiant Heater	
Performance	★★★★★
Value	★★★☆☆
Write to: Detroit Radiant Products Co., 21400 Hoover Road, Warren, MI 48089. Call 800/525-2579.	

Tested by Jim Harrold
 Illustration: Kim Downing
 Photograph: Craig Carpenter/King Au

BOSCH	
1003VSR	3/8" VSR DRILL W/KEYLESS CHUCK 65
1194VSR	1/2" VSR, 2 STAGE HAMMER DRILL 145
1272D	3" X 24" DUSTLESS BELT SANDER 208
1273D	4" X 24" DUSTLESS BELT SANDER 214
1273DVS	4" X 24" VS DUSTLESS BELT SANDER 229
1370DEVS	6" VS DSTLS RNDM ORB SNDR 234
1584VS	CLIC BARREL HANDLE JIG SAW, VS 148
1584VSB	1584VS JIG SAW W/CASE 164
1584VSB	1584VS JIG SAW W/CASE & 20 BLADES 179
1584DVS	BARREL HANDLE JIG SAW, DUSTLS 193
1587VS	TOP HANDLE JIG SAW, VARSP 148
1587VSA	1587VS JIG SAW W/CASE 164
1587VSB	1587VS JIG SAW W/CASE & 20 BLADES 179
1587DVS	TOP HANDLE JIG SAW, DUSTLESS 193
1604	1 3/4 HP ROUTER 142
1608	LAMINATE TRIMMER 97
1609KX	DELUXE INSTALLERS KIT W/4 BASES 229
1613EVS	2 HP VAR SP PLUNGE ROUTER 196
1613EVSK	1613EVS 2W/RA1051 EDGE GUIDE 216
1614EVS	1 1/4 HP VAR SP PLUNGE ROUTER 158
1615EVS	3 1/4 HP VAR SP PLUNGE ROUTER 289
1615EVSK	1615 EVS W/RA1051 EDGE GUIDE 216
3051VSRK	9.6V CRDLS KIT W/2 BATT KEYLESS 139
3054VSRK	12V CORDLESS KIT W/2 BATT, CASE 185
3283DVS	5" VS DUSTLESS RANDOM ORBIT 95
3283DVS	INCLUDES CASE, SANDER & ACCESSORS 119
3306K	12V CRDLS VSR DRILL W/2 BAT, CS & CHRGR 193
3310K	12V CRDLS W/T HANDLE W/2 BAT, CS & CHRGR 197
B7000	TRIANGULAR CORNER SANDER 69
B7000A	B7000W 10 PCS PAPER, EXTENDER & POLISH PAD 84
B7000I	VAR SP CORNER SANDER 92
B7000A	B7000I W/10 PCS PPR, EXTNDR & POLISH PAD 107
B2360K	12V CORDLESS DRILL KIT W/2 BAT 178
B4050	NEW IN LINE GRIP JIGSAW 113

Jorgensen	
ITEM	JAW LENGTH OPEN CAP OUR PRICE EACH BOX OF 6
ADJUSTABLE HANDSCREWS	
#0	5" 4 1/2" 11.70 57.95
#1	6" 5" 12.50 67.95
#2	8" 6 1/2" 14.50 77.95
STYLE 37 2 1/2" THROAT 1/4" X 3/4"	
3706	6" 6.00 32.50
3712	12" 6.50 35.00
3718	18" 6.95 37.75
3724	24" 7.95 42.50
3730	30" 8.80 47.75
3736	36" 8.95 53.95
PONY CLAMP FIXTURES	
#50	3/4" BLACK PIPE CLAMPS 7.90
#52	BOX OF 12 \$88.95
#54	1/2" BLACK PIPE CLAMPS 6.75
#56	BOX OF 12 \$72.95
PONY SPRING CLAMPS - 3201HT 1" .. 1.25	
3202HT 2"	1.78
3203HT 3"	3.88

DELTA	
14-650	HOLLOW CHISEL MORTISER 289
17-960	OSCILLATING SPINDLE SANDR ATTCHMT 69
22-540	12" BENCH TOP PLANER 385
28-180	BENCH TOP BAND SAW 157
31-460	4" BELT/7" DISC SANDER 127
34-182	TENONING JIG 84
37-070	NEW 6" VS BENCH JOINTER 258
40-560	16" SCROLL SAW, 2 SPEED 184

AIRMARK	
AT64	16 GAUGE FINISH NAILER 1" - 2 1/2" CAP 184
AT550S	1 1/2 HP SHUTTLE COMPRESSOR 265
AT550T	1 1/2HP TWIN TANK COMPRESSOR 285
AT550P	1 1/2 HP PANCAKE COMPRESSOR 285

HITACHI	
C8FB2	8 1/2" SLIDE COMPOUND MITER 589
C10FC	10" COMPOUND MITER SAW 255
C10FS	NEW 10" SLIDE COMPOUND MITER SAW 745
M12V	3 HP VAR SPEED PLUNGE ROUTER 235
NT45A	18 GA. FINISH NAILER W/CASE 289
NV83A	FULL HEAD CONSTRUCTN COIL NAILER 429
P205B	3 1/4" PLANER, 3.4 AMP 92
TR12	3 HP PLUNGE ROUTER 192

RYOBI	
AP12	12" PORTABLE PLANER 397
DC500	DETAIL CARVER 62
DP80	8" DRILL PRESS 109
EDS2000	DETAIL SANDER 62
OSS450	OSCILLATING SPINDLE SANDER 165
SC182VS	16" VS SCROLL SAW 169

POWERMATIC Int	
ALL PRICES INCLUDE FREIGHT!	
14	OSCILLATING SPINDLE SANDER 298
15	15" PLANER 1296
60	8" LONG BED JOINTER 1695
63	ARTISAN 10" TABLE SAW W/26" VEGA 695
66	3 HP, 1 PH 10" T.A. SAW W/50" FENCE 1945
66	5 HP, 1 PH 10" T.A. SAW W/50" FENCE 2045
73	1 1/2 HP DUST COLLECTOR 394

WE ACCEPT VISA, MASTERCARD, DISCOVER, & AMERICAN EXPRESS
ALL CHECKS WILL BE HELD 10 BUSINESS DAYS

INTERNATIONAL TOOL CORPORATION

BUSINESS HOURS: MON-FRI 8-5 PM EST
SATURDAY: 8-12 EST

2590 DAVIE RD., DAVIE FLORIDA 33317
* FREE FREIGHT & SAME DAY SHIPPING

FAX US YOUR ORDER AT 1-305-792-3560

ON MOST UPS ORDERS OVER \$50 MINIMUM PURCHASE WITHIN THE CONTIGUOUS U.S.A.

1-800-338-3384

QUANTITIES LIMITED - NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS - PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PORTER-CABLE Model 556 - Biscuit Joiner with tilt fence & case	
OUR PRICE \$138.00	
100	7/8 HP ROUTER \$104
310	PRODUCTION LAMINATE TRIMMER 144
314	4 1/2" TRIM SAW 141
315-1	7 1/4" BUILDERS SAW 129
330	SPEED BLOCK FINISHING SANDER 60
330K	330 WITH CASE & 2-10 YD ROLLS PAPER 94
332	QUICKSAND 5" RNDM ORB W/STKIT PAD 68
332K	332 W/CASE & 100 SHEETS PAPER 95
333	QUICKSAND W/HOOK & LOOP, DUSTLS 75
333K	333 W/CASE & 50 SHEETS PAPER 102
334	QUICKSAND W/STKIT, DUSTLESS 75
334K	334 W/CASE & 100 SHEETS PAPER 102
340	1/4 SHT FIN SANDER W/DUST P/U 52
340K	340 WITH CASE & 10 SHEETS PAPER 75
345	SAW BOSS 6" CIRCULAR SAW 104
347K	7 1/4" FRAMERS SAW, 15 AMP WITH CASE 128
351	3" X 21" BELT SANDER 156
351K	351 W/10 ASST BELTS & BELT CLNR 169
352	3" X 21" BELT SANDER W/DUST BAG 160
352K	352 W/10 ASST BELTS & BELT CLEANER 173
360	3" X 24" BELT SANDER W/DUST BAG 198
360K	360 W/10 ASSORTED BELTS & BELT CLNR 211
361	3" X 24" BELT SANDER 189
361K	361 W/10 ASST BELTS & BELT CLEANER 202
362	4" X 24" BELT SANDER W/DUST BAG 209
362K	362 W/10 ASST BELTS & BELT CLEANER 225
363	4" X 24" BELT SANDER 199
363K	363 W/10 ASST BELTS & BELT CLEANER 215
410	UNDERSCRIBE LAMINATE TRIMMER 148
411	MITER FOLD LAMINATE TRIMMER 165
444	PROFILE SANDER 85
447	7 1/4" FRAMERS SAW W/BRAKE 15 AMP 137
505	1/2 SHT FN SANDER 126
505K	505 W/CASE & 2-10 YD ROLLS PAPER 162
511	CYLINDRICAL LOCK INSTALLATION KIT 139
550	NEW POCKET CUTTER 178
556	BISC JOINER W/CASE & TILT FENCE 138
556K	SAME AS ABOVE W/1000 BISCUITS 160
690	1 1/2 HP ROUTER W/11/4" & 1/2" COLLETS 138
690K	690 W/CS, EDGE GUIDE, & TEMP GD KIT 194
691	1 1/2 HP "D" HANDLE ROUTER 155
691K	691 W/CASE, EDGE GD & TEMP GD KIT 214
693	PLUNGE BASE ROUTER, 1 1/2 HP 174
695	SHAPER TABLE W/ 1 1/2 HP ROUTER 222
696	SHAPER TABLE 128
743K	7 1/4" FRAMERS SAW, LEFT SIDED WITH CASE 128
843	7 1/4" FRAME SAW, 15 AMPS 138
2620	3/8" VSR DRILL, 0-1200 RPM W/CHK 87
2621	3/8" VSR DRILL, 0-1200 RPM, KEYLESS 87
5008	DOVETAIL TEMPLATE 77
5009	MORTISE & TENON JIG 47
5116	OMN JIG 257
5931	PLUNGE ROUTER BASE 73
7116	NEW 24" OMN JIG 293
7310	LAMINATE TRIMMER, 5.6 AMP 94
7312	OFFSET TRIMMER 127
7319	TILT BASE TRIMMER 109
73333	RANDOM ORBIT DUST EXTRACTION 24
7499	CUTOFF TOOL 63
7518	3 1/4 HP FIXED BASE ROUTER-5 SPEED 267
7519	3 1/4 HP FIXED BASE ROUTER-1 SP 233
7536	2 1/2 HP FIXED BASE ROUTER 204
7537	2 1/2 HP FIXED BASE "D" HNDL RTR 213
7538	3 1/4 HP PLUNGE ROUTER-1 SPEED 242
7539	3 1/4 HP PLUNGE ROUTER-5 SPEED 269
7549	TOP HANDLE BAYONET SAW 134
7549K	7549 W/CASE & 10 BLADES 152
7649	BARREL GRIP BAYONET SAW 147
7700	NEW 10" LASERLOC MITER SAW 344
7800	DRYWALL SANDER 327
7810	POWER TOOL TRIGGERED WET/DRY VAC 258
9118	PORTA PLANE KIT W/CASE, CRBD BLD 214
9314	4 1/2" TRIM SAW KIT 154
9315	7 1/4" BUILDERS SAW KIT 149
9345	SAW BOSS 6" CIRCULAR SAW KIT 128
9444	PROFILE SANDER KIT WITH ACCESSORIES 114
9447	7 1/4" CIRC SAW W/BRAKE & CASE 156
9637	TIGER SAW VAR SPD RECIP SAW KIT 146
9647	TIGER CUB RECIP SAW KIT 118
9843	7 1/4" LEFT SIDE SAW W/BRAKE & CASE 156
9853S	12V CRDLS KIT W/2 BAT, CASE 163
97310	LAMINT TRIMMR KIT W/4 BASES & CS 198
97335	5" RANDOM ORBIT SANDER W/CASE 129
97336	6" RANDOM ORBIT SANDER W/CASE 134
97355	5" RANDOM ORBIT W/STEEL CASE & DUST EXT 149
97366	6" RANDOM ORBIT W/STEEL CASE & DUST EXT 159
7335K	5" RNDM ORB W/STEEL CASE, 73333 & PAPER 162
7336K	6" RNDM ORB W/STEEL CASE, 73333 & PAPER 165

INTERNATIONAL TOOL

EXCLUSIVE OFFER

Purchase any Porter Cable power tool and receive either "THE WORLD OF PORTER CABLE ROUTERS" or "THE WORLD OF PORTER CABLE SANDERS" video tape for only \$2.95 (regular price \$5.95) Each video covers subjects from adjustments & set up, to techniques & accessories to make your tool more versatile & enjoyable to use! Included in each video is a **COUPON GOOD FOR \$5.00 OFF** of a future Porter Cable accessory purchase from INTERNATIONAL TOOL. Call for complete details!

Panasonic	
EY6181CQKW	NEW PREDATOR 9.6V CORDLESS KIT VSR W/KYLS CHUCK, 22 STAGE CLUTCH W/2 BAT, CASE & 15 MIN CHRGR .. 182
EY6100CRKW	NEW PREDATOR 12V CORDLESS KIT VSR W/KYLS CHUCK, 22 STAGE CLUTCH W/2 BAT, CASE, & CHARGER 184
EY6100CQKW	12V CORDLESS VSR KIT W/2 BAT, CASE & 15 MIN CHARGER 196
EY6207EOK	1/2", 12V CORDLESS DRIVER/DRILL W/BATTERY & CASE 235
EY6780CQK	9.6V CORNER MASTER W/15 MIN CHARGER, CASE 199

ALRY	
0241NK	16 GAUGE BRAD NAILER 3/8"-1 9/16" WITH CASE & 5000 NAILS 98
0250NK	18 GAUGE BRAD NAILER 3/4"-2" W/CASE & 5000 NAILS 164
0350NK	15 & 16 GA. FINISH NAILER 3/4"-2" W/CASE & 5000 ASSORTED BRADS 194
0565T	ANGLE FINISH NAILER 1"-2 1/2" 204
0626NK	NARROW CROWN 1/4" STAPLER 1.2"-1" WITH CASE & 5000 STAPLES 104
0645S	NARROW CRN 1/4" STAPLER 3/4"-1 3/4" .. 189
EZ-1	SHOOTS 1/4", 3/8", 1/2" CRN STAPLES & BRADS, 5/8" CAP, W/CASE & 5000 ASSORTED FASTENERS 98

OUR PRICES WILL NOT BE BEAT!

Makita	
6172DWE	7.2V CDLS DRILL KIT W/2 BATT 99
6095DWE	9.6V CDLS DRILL KIT W/2 BATT 145
DA391DW	9.6V ANGLE DRILL KIT 175
6211DWE	12V KIT W/2 BATTERIES 175
5007NBK	7 1/4" CIRC SAW W/CASE & BLADE 129
LS1011	10" COMPOUND MITER 539
LS1211	12" COMPOUND MITER 849
N1900B	3 1/4" PLANER 129
BO5001	5" RANDOM ORBIT SANDER 69
DA3000R	3/8" ANGLE DRILL 189
9.6V BATTERY	..... 29
7.2V BATTERY	..... 24

Emglo	
AM78HC4V	1 1/2 HP COMPRESSOR \$308.00

SKIL	
77	7 1/4" WORM DRIVE CIRCULAR SAW 145
77M	7 1/4" MAGNESIUM WORM DRIVE SAW 164
1605-02	BISCUIT JOINER 136
2736-04	12V VSR CORDLESS DRILL KIT 148
3400	10" TABLE SAW W/CARB BLADE & STAND 169

DEWALT	
DW420	5" RANDOM ORBIT SANDER, PSA 68
DW421	5" DSTLS RNDM ORB SANDER, VELCRO 78
DW430	3" X 21" DUSTLESS BELT SANDER 165
DW431	3" X 21" DSTLS BELT SANDER VAR SP 184
DW443	6" ROS SANDER VAR SP, VELCRO 145
DW444	SAME AS ABOVE WITH PSA PAD 145
DW610	1 1/2 HP ROUTER, 9 AMP 149
DW615	1 1/4 HP PLUNGE ROUTER, VAR SP 164
DW625	3 HP HVY DTY PLUNGE RTR, VAR SP 275
DW670	NEW LAMINATE TRIMMER WITH GUIDE 97
DW682K	BISCUIT JOINER KIT 224
DW930	12V CORDLESS CIRCULAR SAW 116
DW930K	12V CRDLS CIRC SAW KIT W/BAT & CS 198
DW935	14.4V TRIM SAW 149
DW935K	14.4V TRIM SW KIT W/BAT, CHRGR, CS 239
DW972K2	NEW 12V CRDLS KIT W/BATTERY & CASE 189
DW991K	14.4V CRDLS KIT W/BATTERY & CASE 199

SUPER SPECIAL!	
636	OSCILLATING TRIANGULAR SANDER \$188
INCLUDES CASE & PAPER ASSORTMENT	
Milwaukee	
0407-1	12V KYLS CDLS DRILL KIT W/2 BAT, CS 174
6490	10" MITER SAW 264
6494	10" COMPOUND MITERSAW W/CARB BLD 322
6507	VAR SPEED SAWZALL W/BLADES & CSE 145
6511	SAWZALL 2 SPEED WITH CASE 139
6527	SUPER SAWZALL W/BLADES & CASE 176

SENCO	
SLP20	BRAD NAILER W/CASE 5/8"-1 5/8" CAP 278
SFN40	FINISH NAILER 1 1/4"-2 1/2" CAP 388
SLS20	1/4" CRWN STAPLER, 3/8"-1 1/2" OILLESS W/CS 248

MIRKA Abrasives, Inc.	
5" SOLID PSA PAPER - 100 PER ROLL	
80 - 320 GRIT	\$12.95
5" HOLED PSA PAPER - 100 PER ROLL FOR PORTER CABLE 5" HOLED PADS - 80 - 320 GRIT	12.95
6" SOLID PSA PAPER - 100 PER ROLL	
80 - 400 GRIT	15.95
5" HOOK & LOOP PAPER FOR PORTER CABLE 5" HOOK & LOOP PADS - 50 PER BOX 80 - 320 GRIT	10.95
5" HOOK & LOOP PAPER FOR BOSCH 3283DVS 50 PER BOX 80 - 320 GRIT	10.95

freud	
TR215	8 1/2" SLIDE COMPOUND MITER SAW 369
J5100	BISCUIT JOINER 164
FT2000E	3 1/4" hp ROUTER VAR SPD 205
EB100	EDGE BANDING SYSTEM 208
EDS132	13.2V CRDLS DRILL KIT W/2 BAT 239
F410	10" X 40T QUIET BLADE 49
F810	10" X 80T QUIET BLADE 74
LM72M010	10" X 24T FLAT TOP RIP BLADE 36
LU82M010	10" X 60T CROSSCUT/RIP BLADE 45
LU84M010	10" X 50T ATB COMBO BLADE 40
LU85M010	10" X 80T ATB FOR MIRROR FINISH 58
LU87M010	10" X 24T RIP BLADE THIN KERF 39
LU88M010	10" X 60T CROSSCUT THIN KERF 45
LU89M010	10" X 72T TCH NON FERROUS METAL 57
LU92M010	10" X 80T TCH - BEST FOR LAMINATES 59
LU98M010	10" X 80T TCH LAMINATES OR WOOD 67
SD308	6" SAFETY DADO WITH CASE 116
SD508	NEW 8" SUPER DADO SET 168
94-100	CABINET DOOR SET 158

ASK WOOD

How wide a board can I edge-glu?

What is the maximum width of board I should use when edge-gluing them into a panel? Someone told me not to use boards wider than 4".

—Paul Hoesch, Planer, Wis.

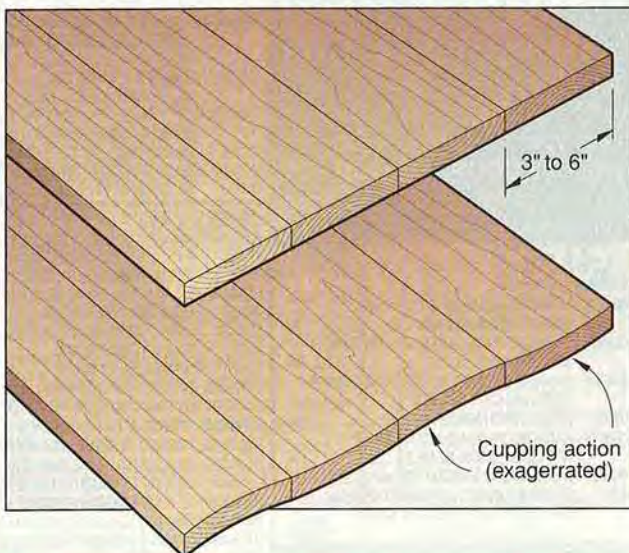
Paul, for most applications we recommend edge-gluing boards that are 3–6" wide, with an end-grain pattern like that shown in the drawing below. Keeping the boards within this range of width reduces the tendency of the boards to "cup" with changes in humidity.

Cupping or across-the-grain curving of a board happens because the wood on the side of the board closer to the center of the log expands more than wood closer to the outside. This difference in expansion results in the face of the board developing a curve or "cup" (see drawing right).

However, with care, you can successfully edge-join boards wider than 6". Here's how to do this:

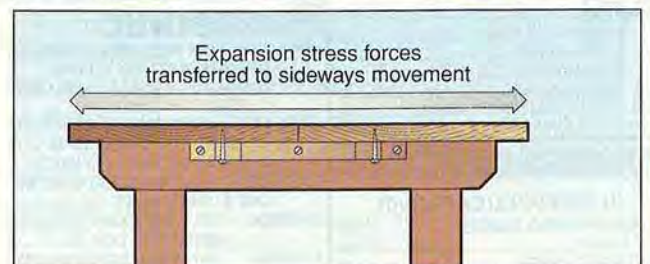
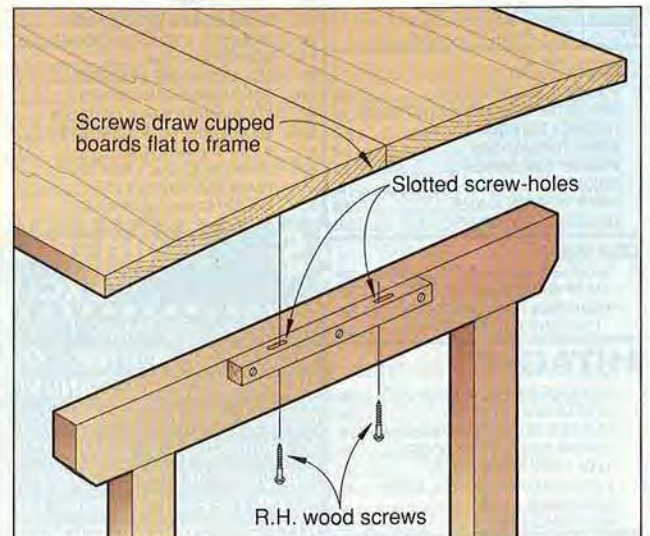
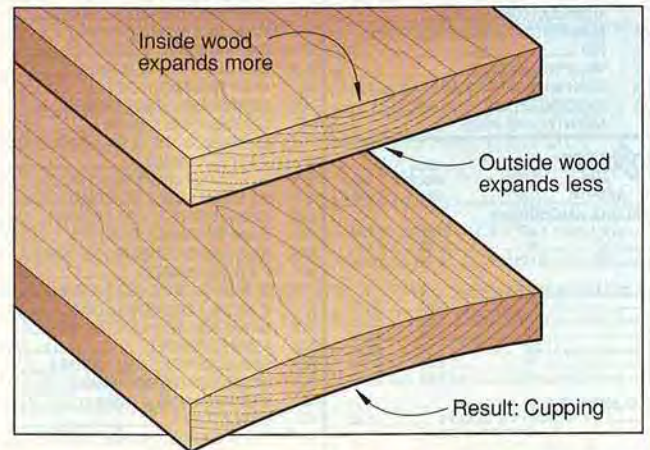
1 Make a tabletop, or the top of a chest of drawers, by edge-joining wide boards with the inside wood facing up. Then, secure the top to the table apron or chest sides with cleats or other tabletop fastening devices, mounted near the center of the panel (as shown right center). These will hold the center of the panel flat to the frame or sides, while allowing the wood expansion and stress to be transferred across the grain of the top.

2 To edge-glu wide boards into a free-floating panel, first rip the boards into narrower (3–6" wide) boards. Then, reassemble and edge-glu these narrower pieces back into a wide board, aligning the grain to match the original as closely as possible. Cutting a wide board into narrower strips reduces the stresses that cause cupping. And, when edge-glued into a panel, the narrower lumber maintains a continuous grain figure and color.



Whether your woodworker's license reads "Beginner," "Intermediate," or "Advanced," you're bound to have a few questions about your favorite hobby. We can help by consulting our staff and outside experts. Send your questions to Ask WOOD®, *Better Homes and Gardens® WOOD Magazine*, 1912 Grand Ave., Des Moines, IA 50309-3379. CompuServe address: 74404,3516 (or) Internet: 74404.3516@compuserve.com

3 Build your panels from quartersawn or riftsawn lumber. The nearly vertical grain of these boards makes them more stable and less likely to cup than plain-sawn lumber.



Continued on page 30

You will run out of these

*before you run
out of power*

Introducing the Super MAKPAK System that keeps you working 40% longer

> Whether you're a professional or do-it-yourselfer, Makita's new family of Super MAKPAK power tools provides the power you need and the convenience you demand. With 40% more capacity per charge and an optional EZ read power display, the new Makita Super MAKPAK series has the power to keep you on the job.

Makita

IT'S ALL THE POWER YOU NEED.®

MAKITA U.S.A., Inc.
14390 Northam Street, La Mirada, CA 90638
800-4-MAKITA

Titebond®



Trusted by craftsmen for over 35 years.

Franklin International

2020 Bruck Street
Columbus, Ohio 43207
(614) 443-0241

PROJECT HELP LINE 1-800-347-GLUE
Assistance available 8:00am-5:00pm Monday-Friday EST

■ **Original Titebond Wood Glue**
Superior strength and fast set.

■ **WeatherProof Titebond II Wood Glue**
Passes Type II water resistance.

■ **New!**
Titebond Dark Wood Glue
Original formula now available
for use with darker woods.

ASK WOOD

Continued from page 28

What speed do I have here?

Can you tell me how to determine the spindle speeds I will get by using a 4-step pulley on my drill press?

—Dale Potts, Athens, Ohio

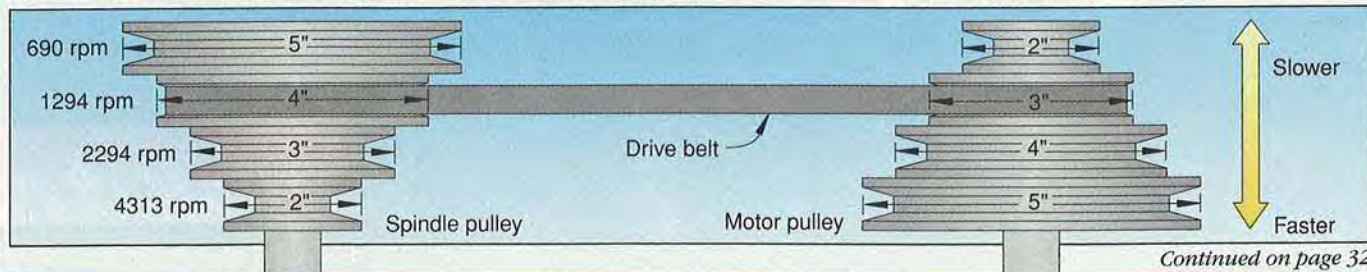
We sure can, Dale. However, to do this we will need to know a couple of things more than just the number of pulley steps. We also need to know the motor speed and the outside diameter or diameters of the drive or motor pulley. Also, 4-step pulleys are most often used in combination with a second 4-step pulley. Here's an example of the calculations, based on a motor speed of 1725 rpm, with the motor pulley and the spindle pulley having equal step diameters but inverted placement (see drawing below). We will assume the 4-step pulleys

have step diameters of 2", 3", 4", and 5". Follow these steps to find the approximate spindle speeds:
1 Divide the diameter of the driving (or motor) pulley step by the corresponding step size of the pulley mounted on the drill press spindle:

$$\begin{aligned} 2 \div 5 &= 0.4 \\ 3 \div 4 &= 0.75 \\ 4 \div 3 &= 1.33 \\ 5 \div 2 &= 2.5 \end{aligned}$$

2 Then, multiply the motor speed by the results of the above calculation to get the approximate spindle speed at each pulley step:

$$\begin{aligned} 1725 \times 0.4 &= 690 \text{ rpm} \\ 1725 \times 0.75 &= 1293.75 \text{ rpm} \\ 1725 \times 1.33 &= 2294.25 \text{ rpm} \\ 1725 \times 2.5 &= 4312.5 \text{ rpm} \end{aligned}$$



Continued on page 32

THE COMPETITION CALLS US
LIGHTWEIGHTS...
... and they're **RIGHT!**



Model No. 0241NK

Our competitors are learning what our customers have known for years - AIRY's line of professional quality nailers and staplers are lightweight, powerful and reliable. *Wood Magazine* gave our model 0241S 18 ga brad nailer their highest rating "10 Overall Value". And listen to what *Popular Woodworking* said about our 0350 16 ga brad, "This nailer is one of the best."

Innovative design, consistent quality and LIGHTWEIGHT PRICES have always been AIRY's trademark - now fine woodworkers everywhere can own these fine tools.

Booth #1913 at National Building Products Expo of the Hardware Show

AIRY®
AIRY SALES CORPORATION

14535 Valley View Ave., #N
Santa Fe Springs, CA 90670
310-926-6192 • (FAX) 310-404-1400

SCROLL SAWING EASY·EASY·EASY

with HEGNER...the better scroll saw



Try a HEGNER Scroll Saw and experience the pleasure of smooth, quiet operation, quick and easy blade changes, and perfect results everytime. With the world's top-rated scroll saw, scroll sawing will be easy for you! Call today for a FREE catalog!

800-322-2226

(please tell the operator your code is 676)

Advanced Machinery Dept. 676, P.O. Box 312 New Castle, DE 19720

Circle No. 3



IMPORTS, INC.
"Importers of Fine Machinery"

NEW FOR 1995!

Say hello to the newest members of the Grizzly family...

15" HEAVY-DUTY BANDSAW

- 3/4 H.P. TEFC Induction motor
- Includes fence & miter gauge
- Depth of cut nearly 8"
- Cam-lock door closures
- Built-in 3" dust port
- Shipping weight approx. 180 lbs.



ONLY \$425⁰⁰

G1148

PORTABLE DUST COLLECTOR

- 1 H.P. motor
- 110/220V
- 17" in height
- Quick-lock bag
- Low noise output
- Includes wall brackets
- Shipping weight approx. 58 lbs.



ONLY \$149⁹⁵

G1163

16" DRUM SANDER

- 1 1/2 H.P. motor
- 220V single-phase
- 1/4 H.P. belt feed motor
- Max. lumber width: 16"
- Max. board thickness: 3 1/2"
- Min. board thickness: 1/8"
- Min. board length: 9"
- Shipping weight approx. 325 lbs.



ONLY \$795⁰⁰

G1079

9" HEAVY-DUTY BENCHTOP BANDSAW

- 1/2 H.P. motor
- Table tilts 15°L, 45°R
- 110V A.C. operation
- 11 1/2" x 11 1/2" cast aluminum table
- Max. cutting height: 4 1/2"
- Overall height: 29"
- Shipping weight approx. 100 lbs.



ONLY \$169⁹⁵

G1052

OSCILLATING SPINDLE SANDER

- 1 H.P. motor
- 110/220V
- Spindle speed: 1720 R.P.M.
- 24" x 24" cast iron table
- Table tilts to 45° - 20°
- Shipping weight approx. 345 lbs.



ONLY \$495⁰⁰

G1071

4" x 24" OSCILLATING BELT SANDER

- 1/3 H.P. motor
- Uses 4" x 24" standard sanding belts
- 1 1/2" dia. x 4 1/4" tall spindle
- Table tilts to 45°
- Quickly converts from belt sander to spindle sander
- Quick belt release lever
- Shipping weight approx. 48 lbs.



ONLY \$159⁹⁵

G1173

IF YOU LIVE WEST OF THE MISSISSIPPI:

1-800-541-5537
BELLINGHAM, WA



IF YOU LIVE EAST OF THE MISSISSIPPI:

1-800-523-4777
WILLIAMSPORT, PA

ASK WOOD

Continued from page 30

Easy remedies for sawblade resin-buildup

I have worked with wood for a few years, and have several types of saws. The manuals for these tools discuss maintenance of the saws themselves, but none of the manuals discuss the maintenance of the saw blade. How often should I clean circular saw

blades, and what are the proper methods of cleaning them?

—Edward C. Laner, West Covina, Calif.

Ed, for an answer to your question we talked with LeRoy Bell, a technical services representative for DML, Inc., a large manufacturer of industrial-quality saw blades. Leroy gave us these tips for maintaining circular saw blades:

“Saw-blade cleaners that are readily available to woodworkers include oven-cleaners and white-wall-tire cleaners. Both of these products work well for removing built-up resin and pitch. Just remember to wear rubber gloves when using the oven cleaner.

“To slow down the accumulation of resin and pitch,” LeRoy says, “several of my customers treat their blades with WD-40 or a silicone spray before cutting

wood. Just be sure to wipe the sawblade thoroughly after spraying, and start the saw with the blade completely lowered to keep any overspray inside the saw cabinet. Then, make a couple of cuts on scrapwood to prevent the coating from rubbing off and staining the wood in your project.”

At *WOOD*® magazine, we have found that how often you need to clean your sawblades depends on the type and the dryness of the wood being cut. Cutting green wood results in a much faster resin buildup than does dry wood. And woods such as pine and cherry, with a high-resin content, will cause a faster accumulation of resin on the sawblades than will low-content woods such as oak, maple, walnut, and mahogany. ♣



Give Yourself Some Breathing Room.



Recent medical studies show that breathing wood dust can be hazardous to your health. The JDS AIR-TECH 2000 will dramatically improve the quality of the air in your workshop.

Our model 350 delivers 350 CFM of filtered air. This will clean the air in a 20 x 20 x 8 foot shop six and a half times per hour. For larger areas, our dual speed model 8-12 will deliver 800 or 1,250 CFM of filtered air for only \$495. Our model 10-16 will deliver 1,000 or 1,600 CFM of filtered air for \$695.

The JDS AIR-TECH 2000 systems will remove 99% of dust particles as small as five micron and 80% of the particles as small as one micron.

Our unique design makes both ceiling installation and filter changing quick and easy.

For the removal of odors, fumes and smoke, our optional charcoal filter is available.

Another quality product from
Manufactured in the U.S.A.

To place an order or for the dealer nearest you call us toll-free. And give yourself some breathing room.

\$259.00

Model 350

**JDS
COMPANY**
1-800-382-2637

FALL COMBO SALE

FREE \$45 IN SHARPENING COUPONS

GOOD ON ALL FORREST OR OTHER MAKES OF CARBIDE BLADES OR DADO SETS. EXPIRES 9-30-95.

Must mention *WOOD* magazine to receive coupons & extra bonus.

CHOPMASTER FOR SLIDING COMPOUNDS & MITER SAWS

New specs, 5° Neg. Pts. & flat, runs out less than .002 for perfect, tight, smooth, splinter-free miter joints.

EXTRA 10% - 20% OFF FALL SALE!

NEW SIZES AVAILABLE	LIST	SALE
Delta Sidekick 6-1/2"x40Tx5/8"	\$149	\$ 89
Sears 8-1/4" & Delta 8-1/4"x60Tx5/8"	\$170	\$ 99
Hitachi 8-1/2"x60Tx5/8"	\$179	\$109
DeWalt 8-1/2" & Ryobi 8-1/2"x60Tx5/8"	\$179	\$109
Delta 9"x80Tx5/8"	\$204	\$119
Ryobi-Makita & all 10"x80Tx5/8"	\$207	\$129
DeWalt, Makita, B&D, Hitachi 12"x80Tx1"	\$229	\$139
Ryobi-Makita 14"x100Tx1"	\$266	\$179
Hitachi 15"x100Tx1"	\$277	\$189

For good general purpose cuts use Woodworker II 30T & 40T or Woodworker I. Use small stiffener where possible.

WOODWORKER I - For TABLE and RADIAL SAW

This trim and crosscut ALL PURPOSE blade gives scratch-free polished cuts on all materials RIP or CROSSCUT UP TO 2".

- ALL 60T AND 3/32" THIN KERF 30° ATB and 5° face hook on 10" diameter and under. 12" and 14" are 20° ATB 1/8"K.
- DOUBLE HARDER and 40% STRONGER carbide.
- THIN KERF: Saves 1/3 wood loss on each cut, radial or table. Feeds easy when used for moderate rip and crosscut on table saw. Reduces "JUMP IN" for better "PULL CONTROL". Practically eliminates bottom splinter on RADIAL CROSSCUT.
- Totally stops ALL bottom and top splinter on ply veneers in push-cut mode on RADIAL.
- Our STIFFENER STRONGLY RECOMMENDED AGAINST outside blade for best cuts. Made and serviced in U.S.A. for your benefit.

	LIST	SALE
14"x60Tx1" 1/8"K	\$224	\$159
12"x60Tx1" or 5/8" 1/8"K	\$198	\$139
10"x60Tx5/8" 3/32"K	\$162	\$129
9"x60Tx5/8" 3/32"K	\$156	\$119
8"x60Tx5/8" 3/32"K	\$150	\$109

NEW!

8-1/4"x60Tx5/8" 3/32"K	\$150	\$109
7-1/4"x60Tx5/8" 3/32"K	\$150	\$109

RYOBI RA200
SEARS TS200
MAKITA 500B NBA
HITACHI PSM8
PORTER CABLE 368-1

SPECIAL FALL SALE
EXTRA 10%-20% OFF

BUY 1 BLADE OR DADO AT **10% OFF** SALE PRICE
2ND BLADE **20% OFF** (EQUAL OR LESSER VALUE)
15% OFF DADO AS SECOND CHOICE.

WOODWORKER II

With this one ALL PURPOSE blade you can RIP & CROSSCUT 1"-2" ROCKHARDS and SOFTWOODS resulting in a SMOOTH AS SANDED surface. PLY-VENEERS of OAK and BIRCH will crosscut with NO BOTTOM SPLINTER at moderate feed rates.

- DOUBLE HARD and 40% STRONGER C-4 CARBIDE
- Ends blade changing
- Ends scratchy saw cuts
- Ends second-step finishing
- Ends cutting 1/16" oversize to allow for RESURFACING
- **BUY AND SHARPEN 1 BLADE INSTEAD OF 3**

5/8" holes, boring thru 1-1/4" add \$7.50. Larger at Time Basis—Shipping \$4.50

WOODWORKER II	LIST	SALE
14"x40Tx1"	\$215	\$149
14"x30Tx1"	\$195	\$139
12"x40Tx1"	\$183	\$129
12"x30Tx1"	\$162	\$119
10"x40Tx1/8" or 3/32"	\$156	\$119
30T 1/8" or 3/32"	\$135	\$ 99
9"x40T	\$146	\$ 99
30T	\$125	\$ 99
*8-1/4"x40Tx 3/32"	\$136	\$ 99
8"x40T 3/32"	\$136	\$ 99
30T	\$115	\$ 89
7-1/4"x30T 3/32"	\$112	\$ 69
**6"x40T 3/32"	\$136	\$ 89

*NEW for Sears & Makita Table Saws **New For Saw Boss



THE ONE BLADE THAT LEAVES A SMOOTH-AS-SANDED SURFACE!

ONLY

BUY OUR BEST SELLER 10" X 40T FOR ONLY \$119 PLUS EXTRA 10%-20% OFF FOR FALL SALE!

\$74

RECEIVE WITH EVERY FORREST BLADE OR DADO LISTED, 9 SHARPENING COUPONS WORTH \$5.00 EACH!

NET COST TO YOU AFTER USING SHARPENING COUPONS

Outperformed 36 other premium blades, both foreign and domestic! *WOOD* Magazine test, Sept. '93, pg. 45

TRY A FORREST CARBIDE BLADE TODAY!

NEW DELUXE DADO-KING!

FROM THE LEADER IN DADO TECHNOLOGY!

"No tearout on all five woods tested"

(INCLUDES MELAMINE) Fine Woodworking J/A '91, page 51 "Best Value" *WOOD* Magazine, Oct. '91, pg. 62, 63

• NEW 3/32" CHIPPER

- allows twice as many groove widths to match thin plywood

• FREE SHIMS INCLUDED

- when cross-cutting oak, ply-veneers, and melamine

• PERFECT FLAT BOTTOM GROOVES

- not staggered steps or round-bottoms like a wobble-dado leaves

• CUTS IN ALL DIRECTIONS

- rip, cross-cut, miter any depth

• CUTS ALL SIZED GROOVES

- 1/8" through 29/32" in 1/32" increments

• SUPER-HARD CARBIDE

- gives up to 300% longer life, especially good on plywoods and abrasive particle boards



Dado
FOR AS LOW AS
\$229
(PLUS \$45 IN SHARPENING COUPONS)

Here is why this great Dado Head has no equal!

C-4 Carbide Tips — 24 on each saw blade — twice as many as most competitors!



C-4 Carbide Tips — 4 on each chipper with special negative face hooks.

	LIST	SALE	10%	15%
6" D. 5/8" Bore NEW	\$299	\$269	\$242	\$229
8" D. 5/8" Bore	\$321	\$289	\$260	\$245
10" D. 5/8" & 1" Bore	\$389	\$349	\$314	\$297
12" D. 1" Bore	\$499	\$449	\$404	\$382

(Bore up to 1-1/4" Add \$25 — Plus \$5.50 S&H)

DURALINE HI-A/T FOR TABLE & RADIAL SAWS ALL FLAT FACE

5/8" HOLES. Boring up to 1-1/4" \$7.50 extra. Larger holes—time basis. Shipping \$4.50.

SIZES AVAILABLE	LIST	SALE	SIZES AVAILABLE	LIST	SALE
7-1/4"x60Tx3/32" K	\$149	\$129	12"x100Tx1-1/8"K	\$253	\$215
8"x80Tx1/8" & 3/32" K	\$202	\$169	14"x80Tx1"	\$232	\$197
9"x80Tx1/8" & 3/32" K	\$207	\$179	14"x100Tx1"	\$266	\$226
10"x80Tx1/8" & 3/32" K	\$207	\$159	16"x80Tx1"	\$262	\$223
12"x80Tx1-1/8"K	\$212	\$181	16"x100Tx1"	\$294	\$243



Above 1" bore standard.

CARBIDE IS THE HARDEST OF THE C-4 GRADES AND 40% STRONGER, NOT WEAKER! FOR 50% TO 300% LONGER LIFE.

SPECIAL FALL SALE
EXTRA 10%-20% OFF

Standard C-2 Carbide (below, left) and FORREST still sharp Oxidation and Corrosion Resistant Sub-Micron C-4 Carbide (below, right). Each shown after cutting 3,500 feet of MDF. Similar results obtained cutting particle board, melamine, and plywood.



STILL SHARP
AFTER 3,500 FEET OF CUTTING!

BLADE DAMPENERS-STIFFENERS

FOR BETTER CUTS on all brands of blades, use our large 1/8" DAMPENERS-STIFFENERS against one side.

- Parallel and flat to .001
- Stop vibration, flutter, cutting noise, and blade ring
- Tryable and returnable for full cash refund.

4"	\$21
5"	\$24
6"	\$25

7" AND LARGER AVAILABLE

FULL RANGE OF OTHER INDUSTRIAL SIZES
REDUCES NOISE 50%-75%

WE RECOMMEND OUR FACTORY SHARPENING as some local sharpening creates problems with MICRO-CHIPPED EDGES reducing blade life & cutting quality. 2-4 DAYS ON THESE AND ALL MAKES OF FLAT FACE & CONCAVE CARBIDE TIP SAWS. Ship via UPS. Typical 10x40T \$15.00, 60T \$17.75. Add return UPS \$5.00, \$1.00 each additional blade.

FOR SPECIAL PRICE COUPONS AND BONUS MENTION *WOOD* MAGAZINE.

We honor AMEX, VISA, MasterCard & Discover, Money Orders, Personal Checks, and CODs. Specify Dept. WD when ordering.

PHONE TOLL FREE! 1 (800) 733-7111 (In NJ: 201-473-5236) FAX: 201-471-3333

Quality is why we're different!

FORREST

BUSINESS OPEN ACCOUNTS AVAILABLE



CA, FL, NJ, NY, PA Residents Please Add Sales Tax. SATISFACTION GUARANTEED OR FULL CASH REFUND. Fine American saw making & sharpening since 1946.

DEALER INQUIRIES WELCOME

FORREST MANUFACTURING COMPANY, INC. • 461 RIVER ROAD, CLIFTON, NJ 07014 • TOLL FREE 1 (800) 733-7111

One Stop Wood Shop

Where the finest cabinet makers select & blend domestic & exotic hardwood in plywood, veneer & lumber.

- 30 species
- Custom Cutting
- Plywood & Veneer made to order
- Competitive Pricing
- We bundle & ship to U.S. & Canada

Call (617) 666-1340 today for catalog and quote.

Boulter Plywood Corp.
24-WD Broadway, Somerville, MA 02145

Circle No. 512



PROFESSIONAL GRADE ELECTRIC STAPLE GUN

MODEL
ETF50P™

- Extra Heavy Duty Components.
- Extra Heavy Duty 10 Foot Cord.
- Long Life Solid State Circuitry.
- Extra Heavy Duty Switch.
- Patented Jam-proof Staple Drive System.
- Flush Front Gets Into Tight Corners.
- All Steel Channel and Track for Durability.
- Shoots 6 Different Size T50® Staples.
- Limited 1 Year Contractor's Warranty.



Available
Wherever
Fine Tools
Are Sold.



HEAVY DUTY

EXTRA



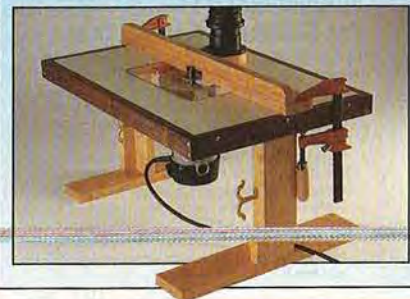
ARROW FASTENER COMPANY, INC., 271 Mayhill Street, Saddle Brook, N.J. 07663
IN CANADA: JARDEL DISTRIBUTORS, INC., 6505 Metropolitan Blvd. East, Montreal, Quebec H1P 1X9
IN UNITED KINGDOM: ARROW FASTENER (U.K.) LTD., 14 Barclay Road, Crowdon, Surrey CR0 1JN

Router-table plans to beef up your shop

If your shop still doesn't have a router table, here's a great opportunity to beef it up with either or both of our two trusty projects shown below. For smaller shops and portability, choose our Benchtop Router Table plan. For a larger tabletop, superior dust collection, and noise reduction, try our Heavy-Duty Router Table plan.

BENCHTOP ROUTER-TABLE PLAN WT- #1001, \$9.95

For added usability, we've added instructions for a router-bit guard and router-table fence to this low-cost, last-for-a-lifetime table. It's ideal for 1½-hp or smaller routers.



HEAVY-DUTY ROUTER-TABLE PLAN WT- #1002, \$12.95

This project boasts a 24x36" work surface, dust-collection capabilities, and can house a 3-hp variable-speed plunge router that handles the ever-increasing variety of large-diameter router bits on today's market.



To order: Send your name, address, and the name and number of the plan(s), plus a check or money order (U.S.). Postage and handling plus state and local taxes, if applicable, are included. Allow 4-6 weeks for delivery. Mail to: WOOD PLANS, P.O. Box 9255, Dept. WD-35, Des Moines, IA 50306. Or, call 800/572-9350 for Visa/MC orders.

Print this article

THE DUST STOPS HERE.

The danger is obvious: the wood dust that coats your clothing can also contaminate your lungs.



**AIR-MATE 3
STOPS DUSTS
AND MISTS**

AIR-MATE 3 — Ideal respiratory protection for woodworkers!

- Sturdy Helmet/Head Protection
- Flip-up Visor/Eye & Face Protection
- Low Initial Investment Price
- Lightweight, Compact
- Portable Battery-Powered Air Filter Unit
- Dust/Mist Filter



RACAL HEALTH & SAFETY, INC.

7305 Executive Way, Frederick, MD 21701-8368
(301) 695-8200 • (800) 682-9500 • FAX (301) 695-4413

RACAL © Racal Health & Safety, Inc. 1993

Get your **FREE** copy

THE WOODTURNERS CATALOG



Craft Supplies USA offers the best in woodturning tools and supplies available.

Artisan™ brand pen turning supplies, letter openers, key rings and Mont Blanc® style pen kits are only a few of the many turning projects available.

Choose from:

Woodfast Wood Lathes	Artisan™ Project Kits
Axminster Chuck System	Dymondwood
Henry Taylor Tools	Corian Turning Squares
Sorby Tools	Ray Key Videos
	Dale Nish Workshops

For a **FREE** copy of

The Woodturners Catalog

Call toll free **1-800-551-8876**

Write to: Craft Supplies USA

P.O. Box 50300 Provo, UT 84605-0030

Circle No. 830

Like Having A Lumberyard Right In Your Shop!



**FREE
30-DAY
TRIAL!**

Craftsmen everywhere are using the low-cost Woodmaster to bring in welcome extra cash and to save on all their lumber needs. You can, too!

With the big 18-in. Woodmaster or the standard 12-in. model, you can quickly convert low-cost, rough lumber into valuable finished stock. You can turn out perfect picture frame moldings, crown, bed and base moldings, tongue & groove, door and window trim... all popular patterns...any custom design.

You can do custom work for friends, neighbors, lumberyards, picture framers, home remodelers, hobby shops and businesses.

Because it takes just seconds to convert a \$2 rough board into \$10 worth of finished trim, you can see why so many Woodmaster owners enjoy substantial extra incomes!

Variable Speed Makes The Difference!

Just a twist of the dial gives you perfect control for planing, sanding or sawing...from 0 to 1,000 cuts per inch. Creates mirror-smooth molding with no sanding required!

Here's what Woodmaster owner L. C. Griffin of Los Angeles writes: "The shop test article in *Wood Magazine* that said they loved your Variable Feed Rate is what sold me. They were right."

Call or write today for free facts on how you can try this American-made tool in your own shop for one full month. Easy terms.

CALL TOLL-FREE

1-800-821-6651 Ext. PW80



Woodmaster's Quick-Change Molding Head lets you create custom moldings from any stock. Choose from over 250 standard trim and picture frame patterns...or design your own!



Power-fed sanding speeds production and improves the quality of your work. No more waves or cross-grain scratches. Separate sanding head installs in just minutes.



New rip saw attachment lets you gang-rip with power feed in a fraction of the time it takes for multiple hand-fed passes on an ordinary table saw.



YES! please rush me your **FREE** Information Kit plus details on your **30-DAY FREE TRIAL GUARANTEE!**
WOODMASTER TOOLS, INC., DEPT. PW80
1431 N. TOPPING KANSAS CITY, MO 64120

Name _____
Address _____
City _____ State _____ Zip _____
Telephone () _____

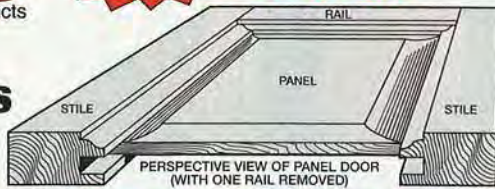
SAVE 55%

REGULAR VALUE OVER \$150.00!

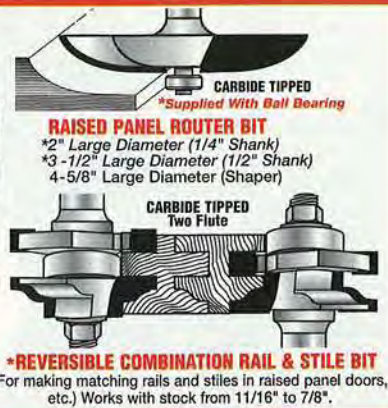
Make Beautiful Raised Panel Doors

with your 1/4" or 1/2" Router, or with your 1/2" or 3/4" Shaper.

Professional production quality router bits and make it quick and easy to produce matching rails and stiles. The panel raising bit with ball bearing guide makes the raised panel perfect every time!



SIZE & FORM	ITEM #	PRICE/SET
1/4" Shank Router	#1301	\$69.95
1/2" Shank Router	#1302	\$79.95
1/2" Shaper	#1303	\$99.95



PROFESSIONAL PRODUCTION QUALITY GUARANTEED

1/4" SHANK CARBIDE TIPPED ROUTER BITS

FREE SHIPPING IN CONTIGUOUS USA

ROUND OVER BITS

- #1314 \$11.00 (1/8" Radius)
- #1315 \$11.00 (3/16" Radius)
- #1394 \$13.00 (1/4" Radius)
- #1316 \$14.00 (5/16" Radius)
- #1369 \$15.00 (3/8" Radius)
- #1370 \$17.00 (1/2" Radius)

TONGUE & GROOVE BITS

- #1333 \$29.00 Straight
- #1335 \$29.00 Wedge

FLUSH TRIM BITS

- #1337 \$8.50 (3/8" Diameter, 1" Cutting Length)
- #1338 \$9.50 (1/2" Diameter, 1" Cutting Length)

PATTERN/FLUSH TRIM

- #1340 \$15.00 (1/2" Diameter, 1" Cutting Length)
- #1341 \$17.00 (3/4" Diameter, 1" Cutting Length)

OGEE RAISED PANEL BIT

- #1353 \$29.95 (2" Large Diameter)

BULL NOSE BITS

- #1330 \$16.00 (1/2" Dia. of Circle)
- #1331 \$21.00 (3/4" Dia. of Circle)

45° CHAMFER BITS

- #1404 . . . \$14.00 (1" Lrg Diameter, 3/8" Cutting Length)
- #1405 . . . \$16.00 (1 1/2" Lrg Diameter, 5/8" Cutting Length)
- #1406 . . . \$22.00 (1 3/4" Lrg Diameter, 1" Cutting Length)

KEYHOLE BITS

- #1407 \$8.50 (3/8" Large Diameter)
- #1408 \$9.00 (1/2" Large Diameter)

14° DOVETAIL BITS

- #1409 \$7.00 (1/2" Large Diameter)
- #1410 \$9.50 (3/4" Large Diameter)

RABBETING BITS

- #1411 \$15.00 (3/8" Depth, 1/2" Height, 1 1/4" Lrg. Diameter)
- #1412 \$17.00 (1/2" Depth, 1/2" Height, 1 1/2" Lrg. Diameter)

QUANTITY DISCOUNT!
When ordering three or more bits deduct \$1.00 each!

TECHNICAL HELP & EXPERT ADVICE • CUSTOMER SERVICE BEFORE & AFTER SALE • FREE 40 PAGE CATALOG

WOOD STORAGE BOX INCLUDED!

FORSTNER BIT SETS FOR PERFECT HOLES

Forstner bits are designed to drill flat bottom or through holes cleanly in end grain, thin stock, veneers & regular stock. Comes with it's own attractive wooden box.

7 PIECE SET
Reg. \$40.65 Sale **\$25⁹⁵**
Item #1386, 1/4" TO 1", in 1/8" Increments

16 PIECE SET
Reg. \$141.20 Sale **\$69⁹⁵**
Item #1387, 1/4" TO 2-1/8", in 1/8" Increments

24 PIECE SET
Reg. \$298.80 Sale **\$189⁹⁵**
Item #1388, 1/4" TO 3-1/8", in 1/8" Increments

ROUTER SPEED CONTROL

CONTROLS THE SPEED OF YOUR ROUTER! Gets the best results with the wood and bit you are using!

- Works with all routers 3-1/4" HP or LESS- 120V 15 Amp
- Full horsepower and torque at all speeds
- Gives your router a feature only available on routers costing hundreds of dollars!

Reg. \$49.95 **SALE \$34⁹⁵**
Order Item #1304

25 PIECE BRAD POINT DRILL BIT SET

Drill accurate holes in wood, plastics & composites.

Bit sizes from 1/8" to 1/2" by 1/64" increments. Bits are deep fluted to clear chips quickly.

Reg. \$34.95 . . . **SALE \$22⁹⁵**
Item #9154

METAL CASE & BIT HOLDER INCLUDED!

WOOD STORAGE BOX INCLUDED!

22 pc TAPERED DRILL BIT SET

For exceptional thread "bite".

Includes sizes 5, 6, 7, 8, 9, 10, 12, seven matching countersink heads with adjustable stop collars, & Allen key.

Item #9156 Reg. \$34.95 **SALE \$22⁹⁵**

Special

BISCUIT JOINING SET

5/32" Slot Cutter- 1/4" Shank & 250 #20 Biscuits

"Biscuit Joining with your Router", Instructional sheet included.

Reg. \$35.00 **SALE \$29⁹⁵**
Order Item #1385

FAST & EASY

Classic CANOE CRAFTSMANSHIP

New Englander Carl Bumbaca turns his finish-carpentry skills to building cedar-strip canoes.

You normally wouldn't think of the historic Lexington-Concord area of Massachusetts as canoe country. It's dotted with Revolutionary War monuments, national historic sites, and Colonial inns. But to Carl Bumbaca, of nearby Bedford, the placid water of the Concord River above and below famed North Bridge—site of the second clash between American patriots and the British in the spring of 1775—is canoe country indeed.

Any time Carl can get away from his finish-carpentry business, you'll find him there, paddle in hand. And even the tourists who flock to the battlefield pause from their wanderings to admire the lone canoeist's handsome craft afloat on the river. For Carl, their admiration is as rewarding as the sense of accomplishment he felt in building his graceful craft.

That's because "the stripper" as he calls the canoe, was skillfully constructed of thin strips of white cedar, then carefully fiberglassed, sanded, and varnished. In total, the lightweight craft (a 16-footer weighs but 72 pounds) represents nearly 80 hours of his labor. But far more than an example of his craftsmanship, the wooden canoe represents an emerging entrepreneurial dream: a new business of his own, but doing what he has always wanted to do.

Continued

The historic North Bridge at Concord, Massachusetts, forms the backdrop for Carl Bumbaca deftly paddling one of his handcrafted, white-cedar-strip canoes.

CANOE CRAFTSMANSHIP

The theft that launched a business

An avid outdoorsman since childhood, Carl, 45, recalls how he first came to build a cedar-strip canoe. "Back about eight years ago, my friend Wally and I were doing a lot of duck hunting on the Concord River. We used an old 11½' johnboat that we chained to a tree when it wasn't in use. Then one day it turned up missing. Someone had cut the chain and stolen it."

Rather than replace the stolen boat with a similar craft, Carl and his friend decided to build something special—a craft to be proud of, and tailored to their needs. After trips to the library, they decided to tackle one made from strips of white cedar. "We could have used marine plywood and built a johnboat, but that's definitely not me. Whatever I do usually has got to have detail in it, not just slam-bam construction," says Carl.

The pair selected a canoe design that would work for

them. "It was a 1920 Old Town Grand Laker," explains Carl. "But I modified the design by raising the gunwales and flattening out the bottom a bit more. That way it would be more stable and carry more gear. As it turned out, the canoe has a 800-pound payload. We use it on camping and fishing trips to Maine, but I don't sell the plans for it."

Carl and Wally's 20' cedar-strip canoe took nearly 10 months of spare time—and learning—to build. But it has proved itself in years of service. And for Carl, the project spawned an idea for a brand new business.

"A year or so after we finished the canoe, I was lying in bed one night thinking about all the fun

we had building that first stripper," Carl

r e m e m b e r s .

"Then I began thinking about my finish-carpentry business and how I find that most people can't

visualize. That is, they can't look at a stack of wood and see the fireplace mantel that I'm going to build for them. But after 25 years of finish carpentry, I can. That's why building the strip canoe was easy for me. I just read the book and visualized the steps.

"Suddenly, it came to me," Carl continues. "What about doing a video on strip-canoe building? People could actually see how one goes together. And with a video, if you don't catch on to some aspect of the construction, you just hit the reverse button and replay it as much as necessary."

The video didn't come quickly. It took the experience of building a couple more strip canoes before Carl felt confident enough to "teach" others. Two he donated as raffle prizes to local charities. Another he kept for display and promotion purposes. But building them sparked another idea that hitchhiked on the first.

"I was having a good time making them [the canoes] and thought that others could, too," says Carl. "And I saw what they brought as raffle prizes—nearly \$2,000 each. So I thought that kits just might work. A youth group, for instance, could buy a kit from me, build the canoe as a project, then make money raffling it. After all, the strip canoe is a real eye-catcher." His ideas—the video and the canoe kits—were enough to launch his business dream, the Paleo Canoe Company.

Video help for canoes in a box

Carl adopted the name for his canoe company from the Paleo Indians, an early primitive hunting people who were said to roam New England. "Of course, the Paleo Indians probably never conceived of a thing called a canoe!" he notes.

A real do-it-yourselfer, Carl decided to tackle his video idea himself. "My cousin used his camcorder to film me at work building a canoe



 Print this article

Carl likes to add a redwood accent stripe to his canoes' white-cedar hulls.

“Whatever I do usually has got to have detail in it.”

right here in my shop,” he explains. “It took six weeks of evenings and weekends to film, then I had it professionally edited down to 2½ hours. In all, we covered the entire 24 steps that it takes from start to finish to make a cedar-strip canoe.”

Kits were a natural extension to the video. “I went ahead with them because it occurred to me that not everybody who bought a video would be able to get all the material and supplies needed,” Carl comments. “White cedar, for instance. I have a source up in Maine where I can get it by the truckload. But what about someone in California? And fiberglass. How many places will sell you enough for a whole canoe? Yet, I had developed good sources for everything that goes into one.”

As it stands, Carl now can assemble the complete canoe kit (14' kit, \$595; 16' kit, \$670, with instructional video and full-sized patterns) and put it in a 10' box in about two hours. And that includes all that's needed except

the plywood for the forms, two sawhorses, the wood for the rack to build it on, called a strong-back, and the glue.

“The white cedar goes out as 1x4s, more than enough to rip the 75 strips required for a canoe,” says the craftsman. “Then there's the epoxy resin, the fiberglass, and the white oak for the gunwales, thwart, and decks [see drawing *below*]. The ash seats come ready to install. Besides a small tablesaw to rip the strips—or a portable circular saw mounted upside down in a stand—all the buyer needs are basic tools.”

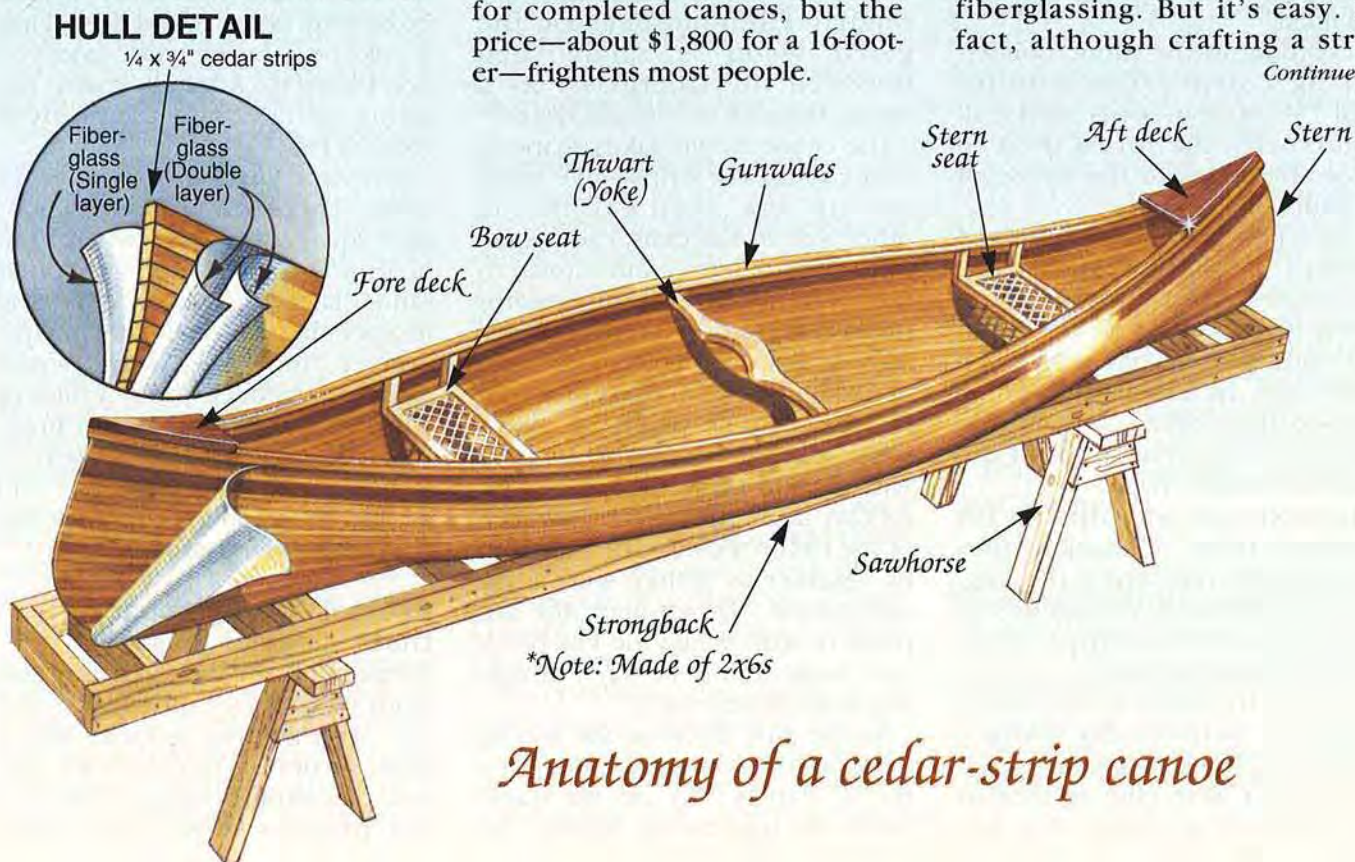
Since he began marketing the video in 1990, it has outsold kits by at least 10-to-1. He has sent videos to Japan, Australia, New Zealand, and the Netherlands, besides all across the U.S. “The video has been popular because people who have access to all the materials don't need the kit,” says Carl. “For those who can't get all the parts and supplies they need, I'll sell them separately.” Of course, Carl also will fulfill orders for completed canoes, but the price—about \$1,800 for a 16-footer—frightens most people.

Where does Carl advertise? He began marketing the kits and videos at New England hunting and fishing expositions and was pleasantly surprised. “Frankly, not everyone who canoes is a woodworker or even wants to try to build one,” he says. “And several people who bought videos don't even canoe, but just wanted the satisfaction of building one. So, I've had the best luck running ads in woodworking and do-it-yourself magazines. Then, of course, there's word of mouth. And it never hurts to carry a canoe on top of my truck. Why, I've even been pulled over by the highway patrol, just so they could find out more about the neat canoe!”

The “cookies and milk” of strip-canoe building

“More people are afraid of the fiberglassing in building a strip canoe, rather than the woodworking part,” comments Carl. “And that's understandable since most people haven't done any fiberglassing. But it's easy. In fact, although crafting a strip

Continued



Anatomy of a cedar-strip canoe

CANOE CRAFTSMANSHIP

Building a cedar-strip canoe with Carl



It takes only about 45 minutes to rip the 75 $\frac{1}{4} \times \frac{3}{4}$ " cedar strips for a canoe. But gluing each one and stapling it to the hull forms requires days of labor.



The white cedar bends easily to the shape of the canoe's hull forms. Occasionally, Carl must use a small hand plane on a strip to obtain a better fit to the form's contour.

canoe is labor intensive, it's really as simple and satisfying as cookies and milk."

According to the canoe builder, making a strip canoe requires from 75–100 man-hours. And it all begins with the forms used to guide the strips to the shape of the hull.

Carl's kits come with full-sized patterns for the five hull forms. And Carl starts by gluing them down to pieces of $\frac{3}{4}$ " plywood and cutting them out with a jigsaw. Then, he builds the strong-back—a ladderlike platform that sets atop sawhorses to hold the canoe as it takes shape.

He next rips $\frac{1}{4}$ " strips on his tablesaw from $\frac{3}{4}$ "-thick white-cedar boards measuring 10' long. It goes fast; about 45 minutes to saw all the needed strips. Then comes the tedious part.

"It's really labor intensive to apply the strips to the forms," notes Carl. "That's because each strip has to have glue applied to all its mating surfaces—the top

and bottom edges and the ends where the strips join. And I use regular Titebond because the glued wood is sandwiched between the fiberglass. As a result, the glue never sees water."

The canoe slowly takes shape as Carl lays up the strips—five strips on one side, then five on the other side of the craft, each glued to the one before it and stapled to the forms, as shown in the photos *above*. "If you add too many strips on one side, you take the chance of kicking the stem off center a little," he cautions, pausing to shave some wood off the back of a strip with a hand plane for a better fit. As Carl nears the bottom, or keel, of the canoe, he cuts the pieces to fit together as if they were a jigsaw puzzle. "Down here, the last piece of strip is like the key block in a stone arch," he says, chuckling at his observation.

As the glue dries on the laid-up strips, Carl backtracks, pulling out the $\frac{5}{8}$ " staples. "To me, the staple holes are interesting details," he

offers. "But some woodworkers have told me that they would bead and cove the strips. That would be a lot of work, and you don't have to. After all, you're not going to take the canoe over Niagara Falls!"

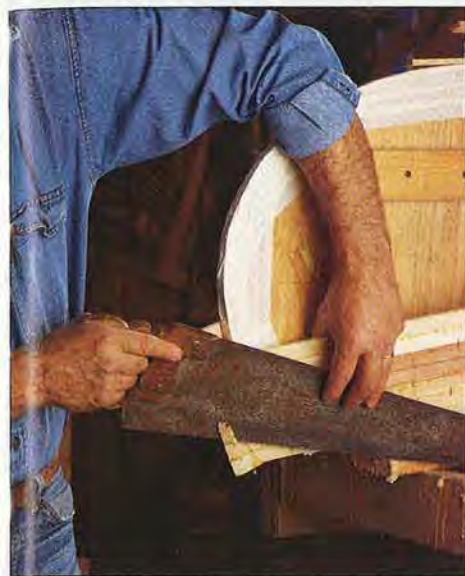
Carl stands back to look over his work. There are yellow beads of glue squeeze-out everywhere. But he'll sand them down with a belt sander later. Right now he's trying to spot the inevitable small gaps, gouges, and holes in the wood where knots once were. A filler of Durham's Rockhard Wood Putty will take care of them. Next, a sanding with 80-grit outside and in, and the canoe is ready for the next step, fiberglassing.

Presto! A tough coating that's clear as glass

It takes about 45' of fiberglass cloth to cover a canoe inside and out. And at first, it looks like a scary process. But, as with the rest of canoe building, Carl has the process down pat. First,

"It's as if you owned a treasured '59 Corvette."

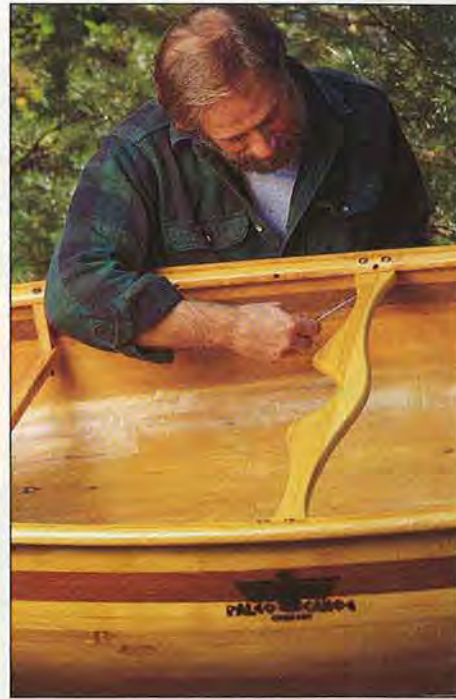
Bumbaca



At the stem (front) of the canoe, the strips from each side must be mitered where they meet. Carl simply lays the saw against the form to get the right angle.



After priming the white cedar with a coat of resin, Carl drapes the hull with the first coat of fiberglass cloth. When he works resin into the cloth, it becomes transparent, letting the wood show through.



The finished canoe has fiberglass inside and outside, and a coat of spar varnish. The ash thwart that Carl fastens in place functions as a yoke that fits against the neck when portaging the 72-lb. canoe.

though, he uses a paint-roller-type spreader to prime the cedar hull with a coating of resin (West System Two-Part Epoxy), then lets the base coat dry a day.

"I've found that in fiberglassing a canoe, it works best to do the outside first, which is easier than the inside. That way, you get used to the technique," Carl advises. Eventually, the wooden hull will get three fiberglass coats—two on the outside, one on the inside. "The first outside coat only covers the hull up to the waterline without any folds," explains the canoe builder. "You learn to work the material on that one. Then, the next coat is a full 60" width of goods, so there's no piecing (see photo above). It goes right around the whole boat."

According to Carl, fiberglassing is not without its own brand of magic. "The first time I fiberglassed, I couldn't believe how that silvery white cloth turned clear as glass when I worked the

resin into it with the spreader. It was fascinating! Even the wrinkles disappeared. But, you do have to work fast. The two-part resin sets up in about half an hour."

A good finish preserves a wooden canoe

Carl gives the newly fiberglassed canoe at least a day to fully cure. Then, he sands the hull down lightly with 100-grit sandpaper to provide better adherence for the coat of spar varnish with ultraviolet-light inhibitors that he'll brush on. "If you don't put on spar varnish, the wood darkens and the fiberglass resin will break down," he says. (Note: Carl has used these brands with good results—Helmman by Minwax, Z-Spar Flagship, and Interlux Clipper Clear Varnish.)

To complete the canoe, Carl cuts, shapes, installs, and finishes the white-oak gunwales, fore and aft decks, the ash-and-cane seats, and the thwart (or carrying yoke)

that runs between the gunwales (see photo above). For the final step, Carl brands his company logo on the sides of the craft.

"A strip canoe is something you're going to have for the rest of your life and get a lot of enjoyment out of," says Carl proudly of his creation. "It's rugged, but remember you have to care for it like a classic car. You should keep it waxed for protection. And depending on whether you store it indoors or out, and how much you use it, you might want to sand it down once a year and revarnish it. It's as if you owned a treasured '59 Corvette."

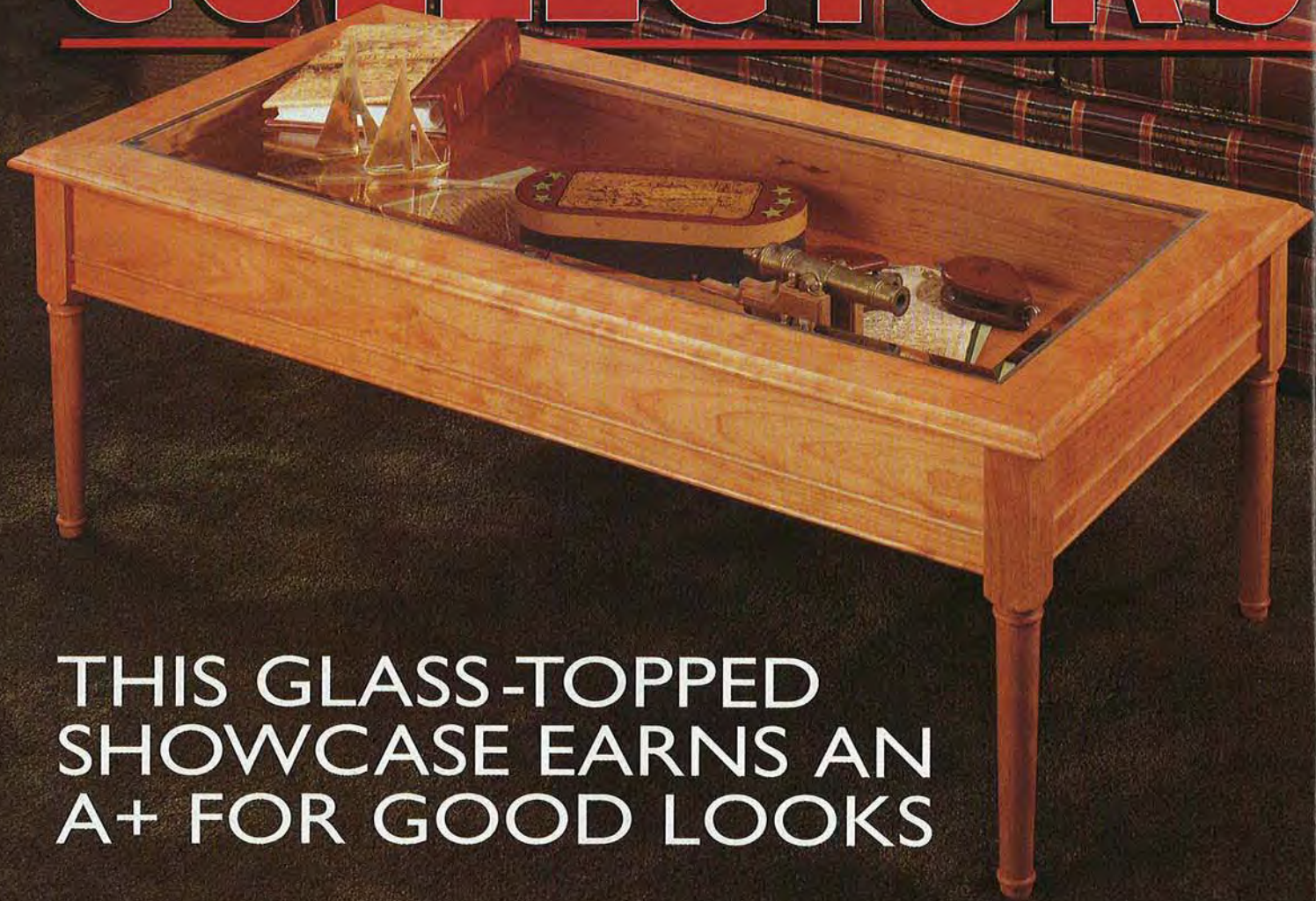
Curious about canoes?

Carl's 2½-hour video, "Building Your Cedar Strip Canoe," is available for \$39.95 (U.S.) plus \$3 shipping, from Paleo Canoe Co., Box 491, Bedford, MA 01730. 617/275-3004. 🌿

Written by Peter J. Stephano

Photographs: Steve Uzzell Illustration: Jim Stevenson

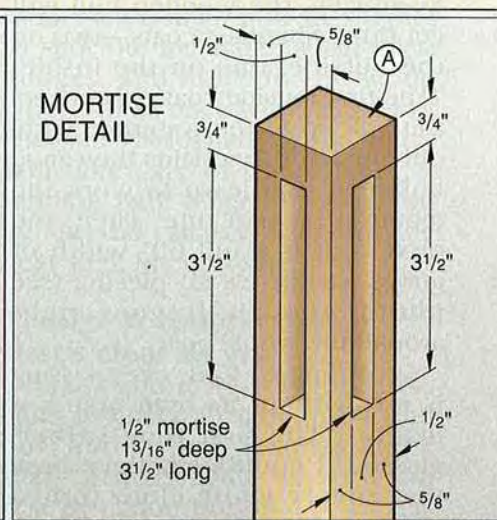
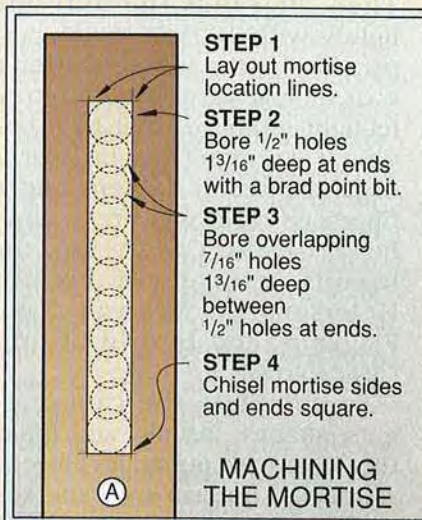
COLLECTOR'S



THIS GLASS-TOPPED SHOWCASE EARNS AN A+ FOR GOOD LOOKS

If you have a treasured collection of curios, you probably understand how difficult it can be to find just the right place to display it. But now, with this traditionally styled coffee table, you have a unique option.

If you're not a turner, don't let the legs discourage you from building this project. You can purchase custom-turned legs from the Buying Guide in the Bill of Materials.



Print this article

COFFEE TABLE

A foursome of legs holds the project upright

1 To make the legs (A) you'll need four pieces of cherry $1\frac{3}{4}$ " square by $17\frac{1}{4}$ " long. If you don't have stock this thick, you can laminate thinner stock. If you laminate thinner stock, make the blank extra long, and trim both ends for a $17\frac{1}{4}$ " *preturned length*, allowing for 1" waste at the bottom (headstock) end of each leg. See the Turned Leg drawing for reference.

2 Mark diagonal lines on each end of each leg to find center. Indent each centerpoint with an awl.

3 Mount a leg blank between centers on your lathe. The bottom end of the leg blank will be the end at the headstock spindle. Using a skew or gouge and a parting tool, turn the taper and beads on the bottom $10\frac{1}{2}$ " of the leg to the shape shown on the Turned Leg drawing. Sand the turned area smooth, and trim the bottom of the leg for a $16\frac{1}{4}$ " *finished length*. Repeat for each leg.

4 Mark mortises on adjacent surfaces of each leg where shown on the Mortise detail accompanying the Turned Leg drawing.

5 Following the four-step procedure on Machining the Mortise drawing for reference, machine the mortises where marked.

Cut the side and end rails

1 From $\frac{3}{4}$ " cherry, cut the side and end rails (B, C) to size.

2 For securing the tabletop to the end rails (C) later with a brass screw, drill a countersunk mounting hole centered from end-to-end and $\frac{3}{8}$ " from the top edge on the *outside* face where shown on the Section View detail accompanying the Exploded View drawing.

3 Fit your tablesaw with a dado blade and your miter gauge with a wooden extension. Cut the $1\frac{1}{8}$ "-long tenons on the ends of each rail. See the Tenon detail accompanying the Rails drawing for reference. (We cut scrap stock first to verify the fit of the tenons into the mortises in the legs. When checking the fit of tenons in mor-

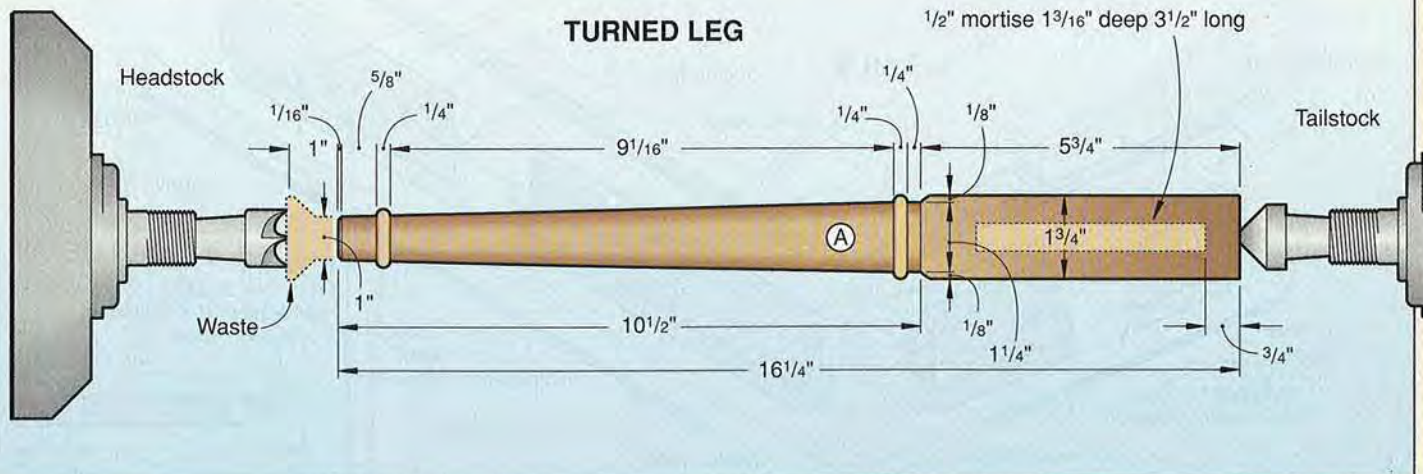
tises, we wrapped a piece of paper over the end of the tenon, and then slipped the tenon into the mortise. The paper ensures you have enough room for glue coverage for a strong joint. An extremely tight fit can force the glue off the mating surfaces when fitting the pieces together and make for a glue-starved joint.)

4 Mark the notches on the rail tenons where dimensioned on the Tenon detail accompanying the Rails drawing. For correctly fitted mating joints later, carefully note the configuration of the tenons on the Tenon detail. The mating tenons at each leg overlap. Next, position the fence on your bandsaw and cut the notches to shape as shown in the photo *below*.

Continued



After cutting the rabbets to form the tenons on the tablesaw, mark the notches and cut them to shape on the bandsaw.



COFFEE TABLE

5 Referring to the Exploded View and Rails drawings for reference, cut a $\frac{1}{4}$ " groove $\frac{1}{8}$ " deep 1" from the *bottom* edge along the *outside face* of each rail (B, C). This groove will house the decorative bead strips (G, H) later.

6 To house the cherry plywood bottom (D), cut a $\frac{1}{4}$ " rabbet $\frac{3}{8}$ " deep along the bottom edge on the *inside face* of each rail.

7 Dry-clamp the tenoned rails between the legs to check the fit. Note that the *top edge* of the rails must be $\frac{1}{4}$ " from the *top end* of the legs to leave room for adding the top bead strips (E, F).

8 Measure the rabbeted opening, and cut the $\frac{1}{4}$ " plywood bottom (D) to size, notching the corners.

9 Rip and rout the top and bottom decorative bead strips (E, F) to size plus 2" in length.

10 To make the narrower bead strips (G, H), start with one $\frac{1}{4}$ "-thick strip 2x21" and a second strip 2x45". Rout a $\frac{1}{4}$ " bullnose on each edge of each of the two strips where shown in Step 1 on the Bead detail accompanying the Rails drawing. Now, as shown in Step 2 of the detail, rip $\frac{1}{4}$ " off the edges of each strip for the bead pieces (G, H). (We found it much easier and safer to rout wider stock initially, and then rip the bead strips from the edges.)

Continued

Bill of Materials

Part	Finished Size			Mati.	Qty.
	T	W	L		
BASE					
A* legs	1 $\frac{3}{4}$ "	1 $\frac{3}{4}$ "	16 $\frac{1}{4}$ "	C	4
B side rails	$\frac{3}{4}$ "	4 $\frac{1}{2}$ "	45 $\frac{1}{4}$ "	C	2
C end rails	$\frac{3}{4}$ "	4 $\frac{1}{2}$ "	21 $\frac{1}{4}$ "	C	2
D bottom	$\frac{1}{4}$ "	20 $\frac{3}{4}$ "	44 $\frac{3}{4}$ "	CP	1
E* side-rail bead	$\frac{1}{4}$ "	$\frac{7}{8}$ "	43"	C	4
F* side-rail bead	$\frac{1}{4}$ "	$\frac{7}{8}$ "	19"	C	4
G* side-rail bead	$\frac{1}{4}$ "	$\frac{1}{4}$ "	43"	C	2
H* end-rail bead	$\frac{1}{4}$ "	$\frac{1}{4}$ "	19"	C	2
TABLETOP					
I* frame sides	$\frac{3}{4}$ "	3 $\frac{1}{2}$ "	48"	C	2
J* frame ends	$\frac{3}{4}$ "	3 $\frac{1}{2}$ "	24"	C	2
K cleats	$\frac{3}{4}$ "	1"	18 $\frac{15}{16}$ "	C	2

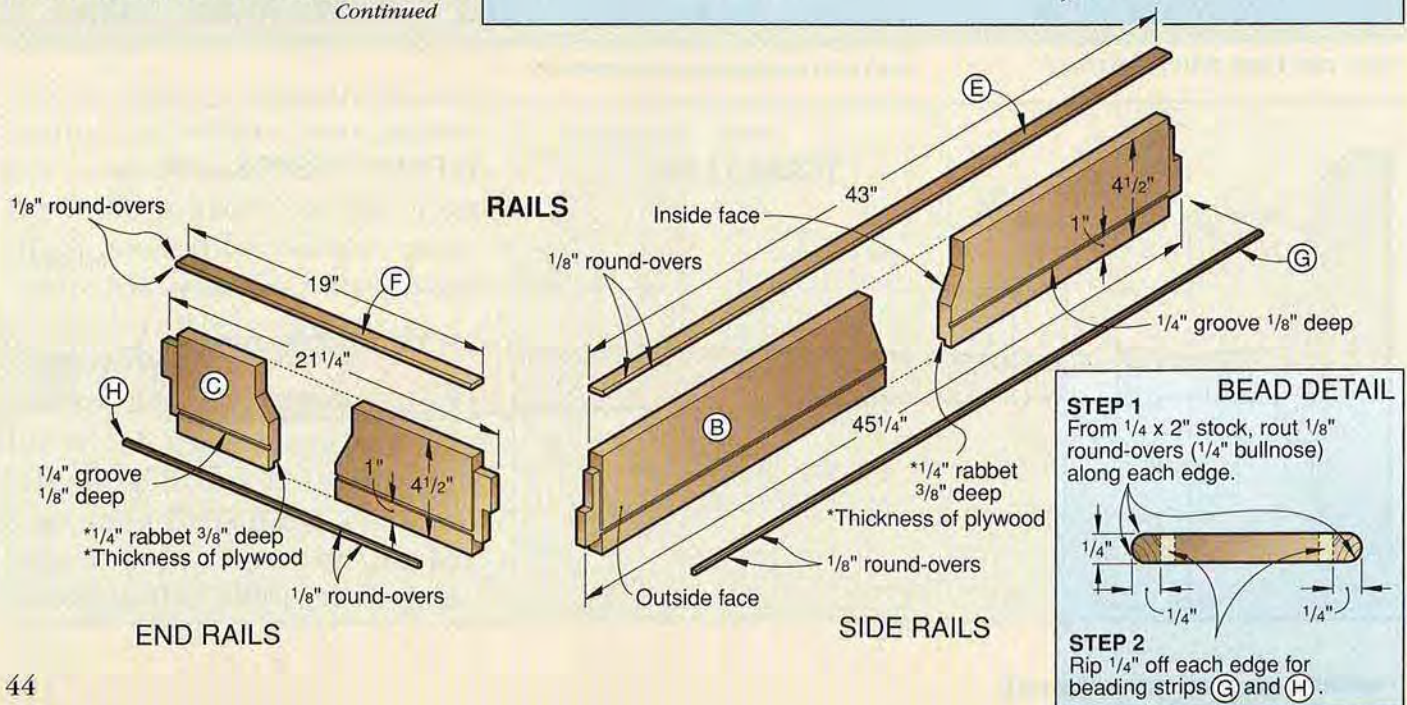
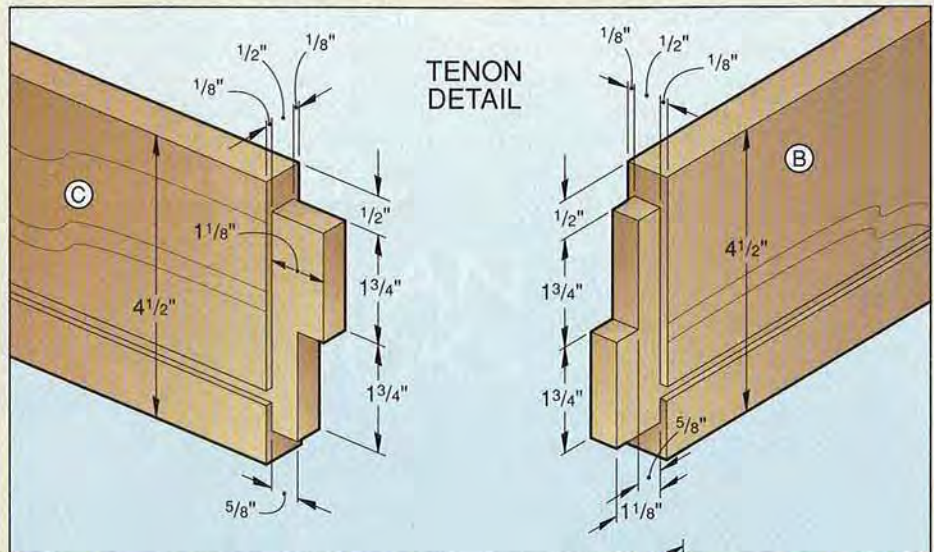
*Initially cut parts marked with an * oversized. Trim to finished size according to the how-to instructions.

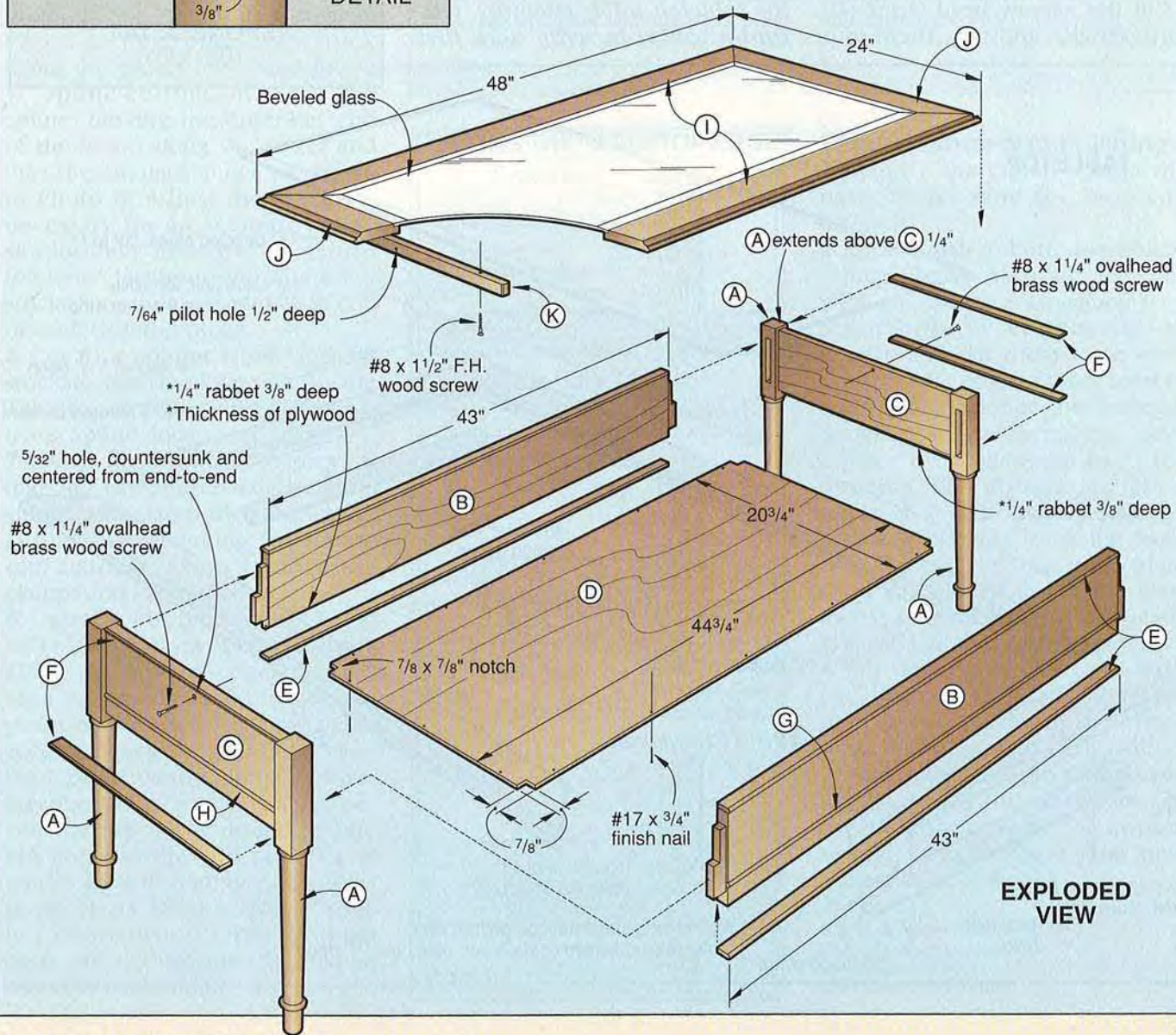
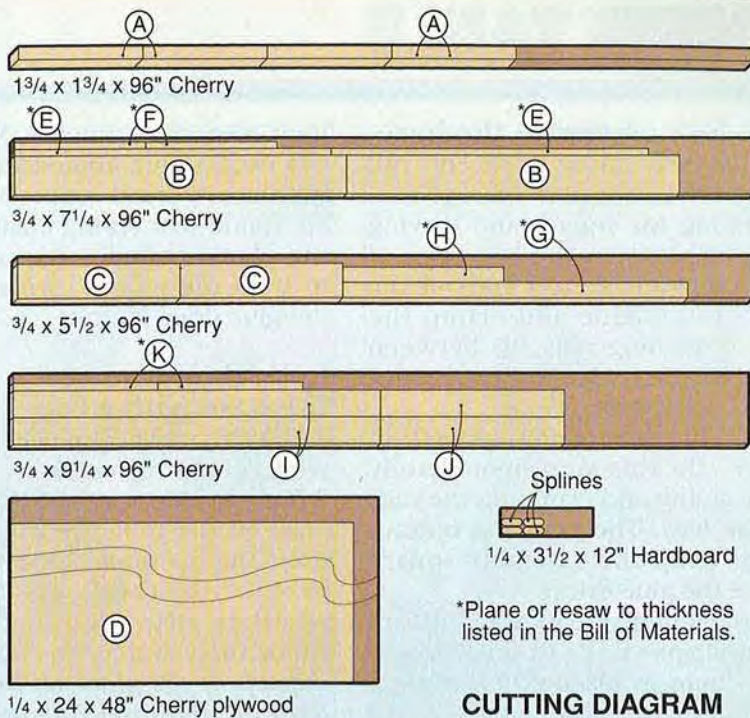
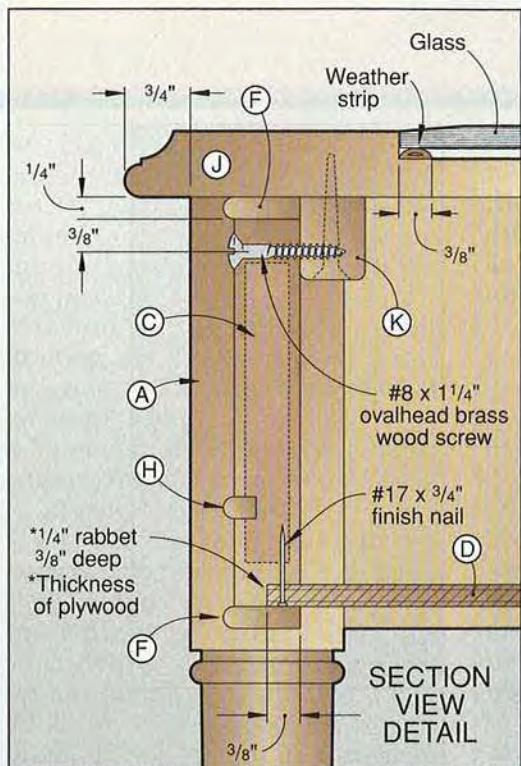
Materials Key: C—cherry, CP—cherry plywood

Supplies: #17x $\frac{3}{4}$ " finish nails, $\frac{1}{4}$ "-thick glass, $\frac{3}{8}$ "-wide adhesive-backed weather strip (we used Dennis brand, measuring $\frac{7}{32}$ " thick, $\frac{3}{8}$ " wide, by 17' long and made from EDPM rubber), 2-#8x1 $\frac{1}{4}$ " ovalhead brass wood screws, 4-#8x1 $\frac{1}{2}$ " flathead wood screws, $\frac{1}{4}$ "-thick hardboard or plywood for splines, clear finish.

Buying Guide

Leg and lumber kit. 1 $\frac{3}{4}$ "-square pretuned cherry legs 16 $\frac{1}{4}$ " long, \$29.95 ppd. for four legs, kit no. 300990. Add \$98.50 for enough cherry stock (cut slightly oversized) for the rest of the table, kit no. TBL-WOOD. Add \$4.95 for 11' of $\frac{3}{8}$ " weather strip, kit no. TBL-STRIP. Schlaubaugh & Sons Woodworking, 720 14th Street, Kalona, IA 52247, or call 1-800-346-9663 to order.





COFFEE TABLE

OK, let's assemble the base

1 Glue and clamp each end rail (C) between a pair of legs (A), checking for square and leaving $\frac{1}{4}$ " gap between the top edge of the rails and the top ends of the legs. Later, glue and clamp the two remaining rails (B) between the two end assemblies. Again, check for square.

2 Nail the plywood bottom (D) in place. Do this step immediately after gluing and clamping the rails to the legs. The plywood bottom helps keep the assembly square while the glue dries.

3 Crosscut the top and bottom bead strips (E, F) to length, and glue them in place where shown on the Section View detail.

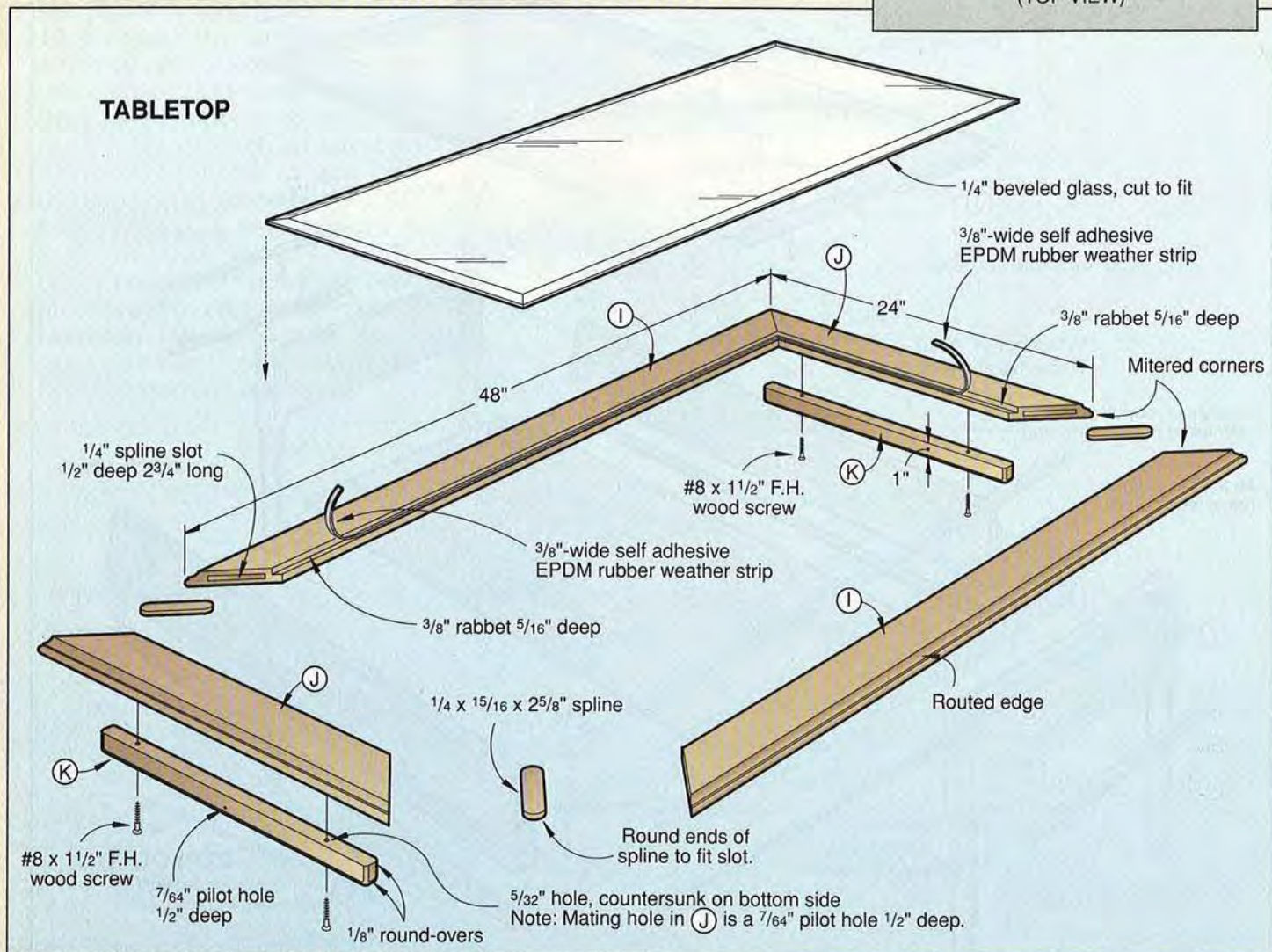
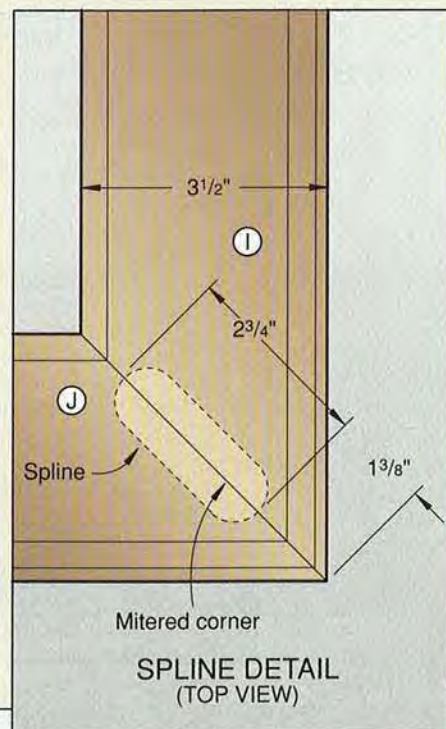
4 Cut the narrow bead strips (G, H) to length, and glue them into

their respective grooves. Wipe off any excess glue immediately. (For the narrow bead strips G and H, we found that spring clamps with the plastic-coated ends work well to hold the pieces in place until the glue dries.)

Let's showcase the base with a top

1 Cut the tabletop pieces (I, J) to width plus 1" in length.

2 To provide a cushion for the glass in the tabletop rabbet, we used Dennis brand EPDM brown rubber $\frac{7}{32}$ "-thick by $\frac{3}{8}$ "-wide weather strip. See the Buying Guide for a source. *To ensure that the top of the glass will sit flush with or slightly below the top of the tabletop after assembly, test-rout a rabbet in scrap stock first*



to verify the depth of cut for a proper fit of the weather strip and the 1/4" glass. Then, cut a 3/8"-wide rabbet to the verified depth along the top inside edge of each tabletop piece.

3 Following the instructions on Routing the Tabletop Edge drawing, rout the outside edge of each tabletop piece.

4 Miter-cut tabletop pieces (I, J) to length. Test-cut scrap first to verify an accurate 45° setting.

5 To rout the spline slots in the ends of the tabletop pieces, mark the 2 3/4"-long spline slot location on a piece of miter-cut scrap stock where dimensioned on the Spline detail accompanying the Tabletop drawing. Now, using a double-fence system as shown in Photo A, push the scrap stock along the router fence and into a 1/4" spline-cutting bit. Rout the spline, moving the miter-cut end of the wood along the cutter and into the auxiliary fence as shown in Photo B. Adjust the fences as necessary for an accurate spline slot location. After you've verified the fence locations with the scrap stock, cut a spline slot in each end of each tabletop piece.

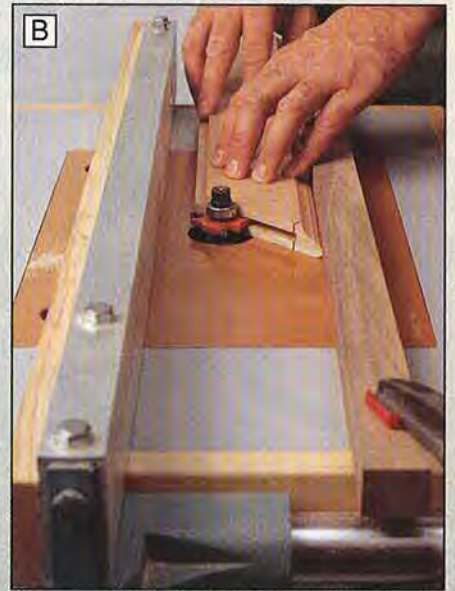
6 Cut four splines from 1/4"-thick stock to the shape shown on the Tabletop drawing and accompanying Spline detail.

7 Using clamp blocks to prevent marring the routed edges, glue, spline, and clamp the tabletop (I, J) together, checking for square and flatness. Later, remove the clamps and sand smooth.

8 Cut the cherry cleats (K) to 3/4" x 1" x 18 1/16". Rout 1/8" round-overs along the bottom edges of each cleat. Glue and clamp the cleats in place. See the Section View detail accompanying the Exploded View for positioning particulars. Position the tabletop on the base. Use the previously drilled mounting holes in the end rails (C) as guides to drill mating pilot holes in the cleats. Drive a #8 x 1 1/4" oval-head brass wood screw through each end rail and into the mating cleat to check the fit.

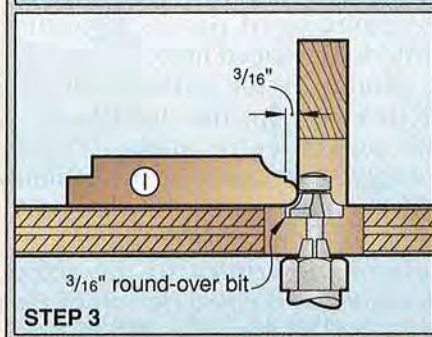
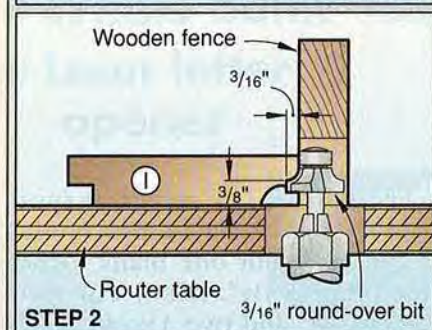
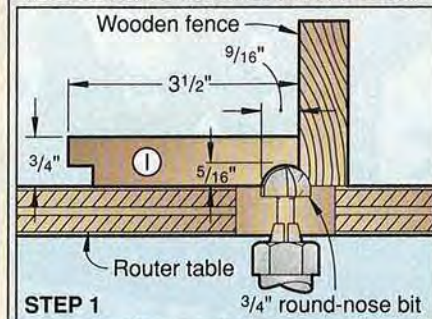


Slide the miter-cut tabletop piece along the router fence and into the spline-cutting bit.



Rout across the end of the piece until it comes in contact with the auxiliary fence.

ROUTING THE TABLETOP EDGE



Final cleanup and finishing

1 Remove the tabletop from the base. Finish-sand the base and tabletop.

2 Apply finish to both assemblies. (Since cherry naturally darkens with age, we left it unstained.)

3 Cut strips of weather strip to length, and cut them to fit onto the shoulder of the rabbet used to house the glass. See the Tabletop drawing for reference. Now, have a piece of 1/4" glass cut to fit the opening. (To do this, we cut a piece of 1/4" hardboard to fit the rabbeted opening, took the hardboard template to a local glass shop and had them cut the glass to the same size as the template. We also had the glass beveled.)

4 Fill the top of the base with your favorite collection. Position the tabletop on the base. Drive a brass screw through each end rail to secure the tabletop to the base. Finally, install the glass, and call the neighbors over for coffee, served, of course, on your new showcase table. ♣

Written by Marlen Kemmet
Project Design: Don Mostrom
Photographs: Studio Au
Illustrations: Kim Downing

BIG TOP



Scrollsaw a three-ring circus



Don't run away to join the circus—put on your own three-ring spectacular with these phenomenal patterns. You'll amaze folks with dazzling feats of scrollsawery! They'll applaud as you bring out the elephant! They'll gasp as you perform delicate cuts on the high wire! They'll cheer as you parade a prancing pony into the big top! And after all that, you'll still be home for dinner.

1 From $\frac{1}{8}$ "-thick material (you could use $\frac{3}{32}$ " Baltic-birch plywood, too), cut one blank 7×14 " and one $3 \times 3\frac{1}{2}$ ". Also, cut two pieces 2×4 " and two $1\frac{1}{2} \times 3$ ". Stack the same-sized pieces together with double-faced tape.

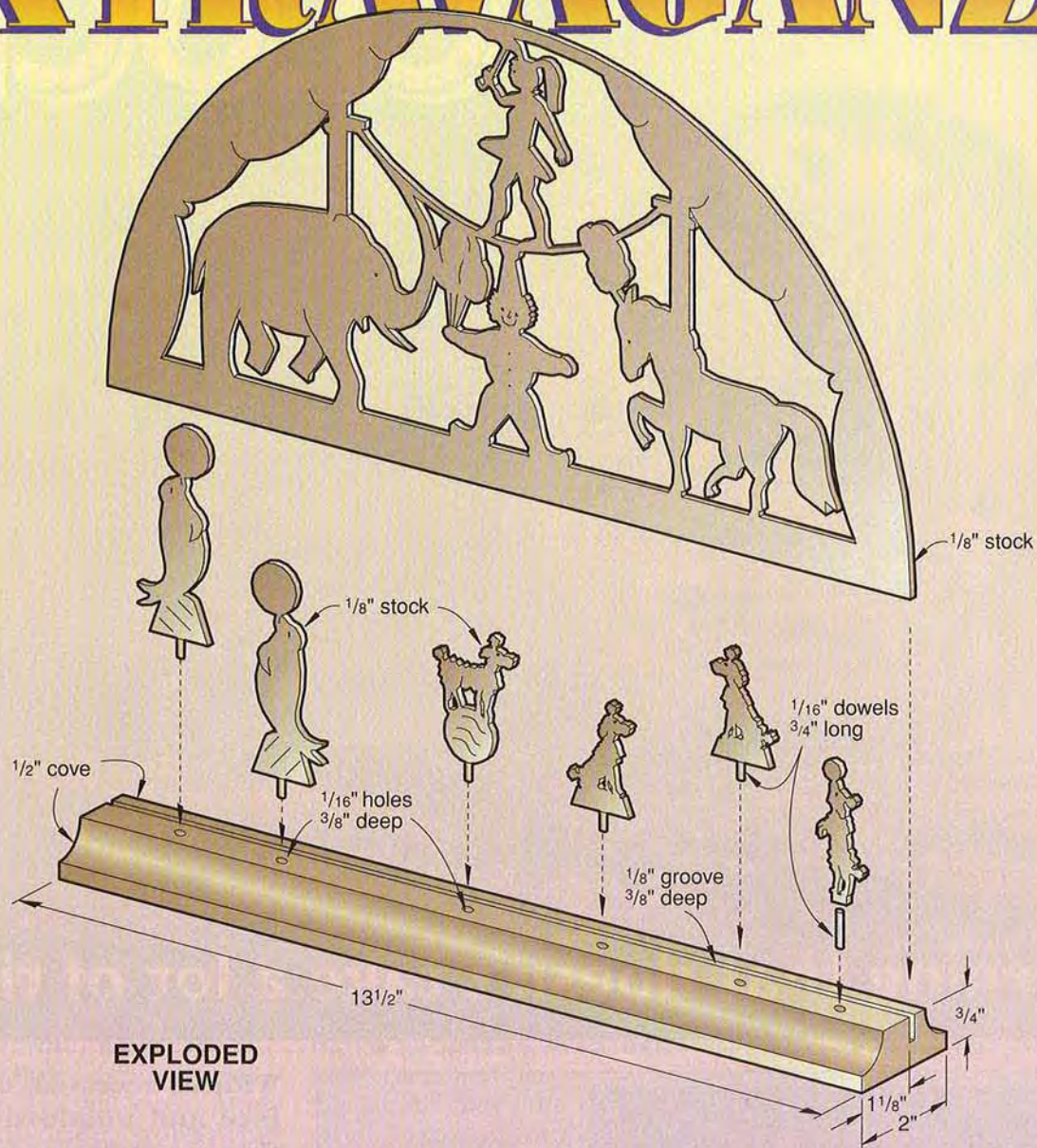
2 Photocopy the patterns for the arched big top, the poodles, and the seal (they're in the *WOOD PATTERNS™* insert in the middle of the magazine). With spray adhesive or rubber cement, adhere the copies to the sized stock. Place the seal on top of the two 2×4 " pieces, the sitting poo-

dle on the other stacked pair. Stick the other two poodle patterns to the remaining blank.

3 Begin cutting with the largest part, the big-top extravaganza. First, drill $\frac{1}{8}$ " blade start holes in the background areas to be cut away, indicated by \times 's. Then, drill holes where shown for the eyes, buttons, and other details.

4 Using a #4 scrollsaw blade (.035 \times .015", with 15 teeth per inch), saw the interior detail lines. Then, cut away the background areas. Notice that some of the cutting lines extend into the design,

EXTRAVAGANZA



EXPLODED VIEW

then stop. Saw into each of these lines in turn, stop at the end, then back the blade out along the saw kerf to continue cutting. After you complete the inside cutting, saw around the outside pattern line.

5 Next, cut out the individual animal figures. Again, start with the interior cuts, such as the lines on the seals' pedestals and the poodle's ball. Continue by cutting away the background between the poodles' legs. Complete each animal figure by cutting around the outside pattern line.

6 For the base, cut a $\frac{3}{4} \times 2 \times 13\frac{1}{2}$ " piece of hardwood (we used maple). Adjust your tablesaw blade to $\frac{3}{8}$ " cutting depth. Refer to the Exploded View drawing, then saw a blade kerf into the base's top surface $\frac{1}{8}$ " from the front edge. Test-fit the circus scene in the groove—it should fit snugly. If not, move the rip fence slightly to widen the groove.

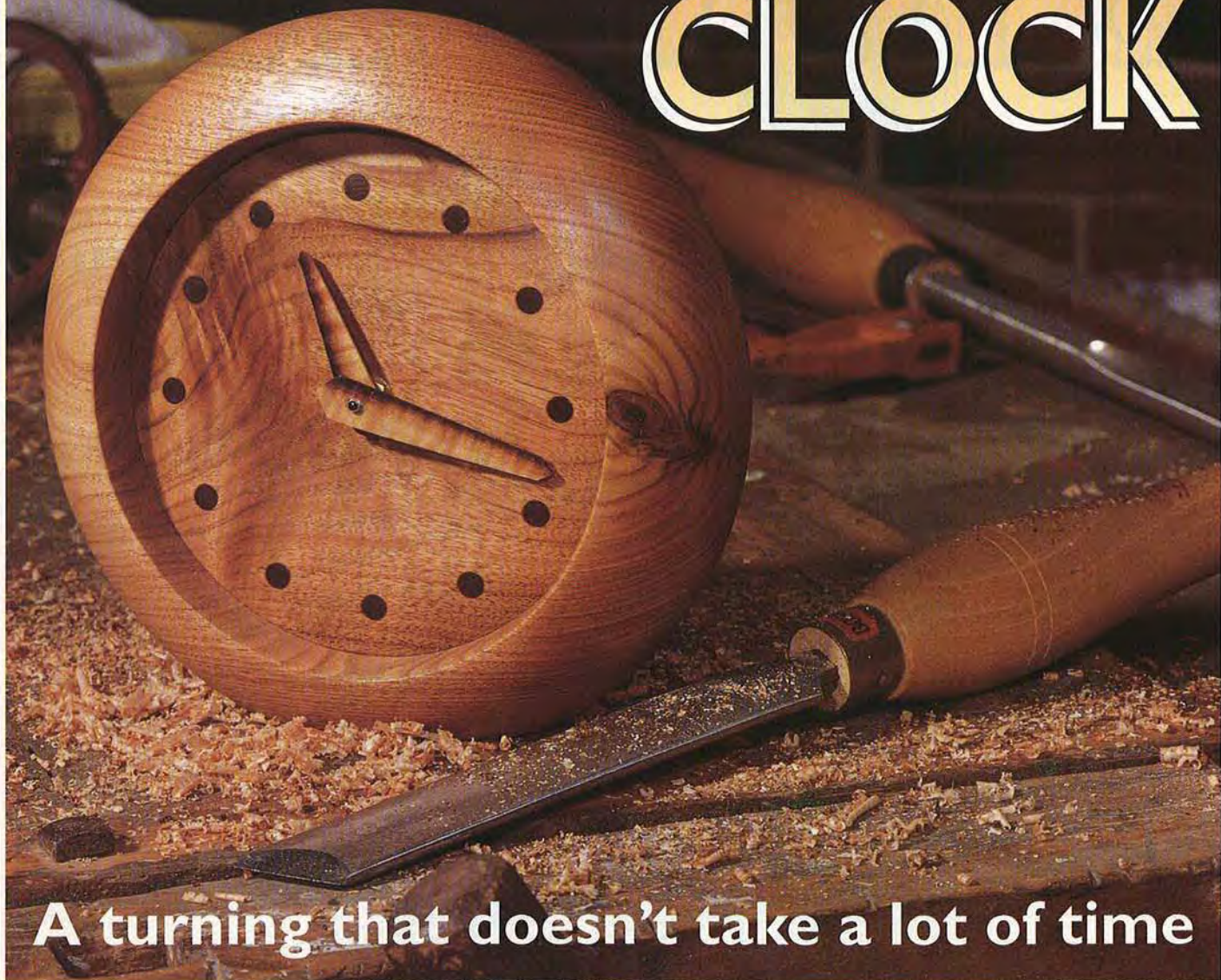
7 With a table-mounted router, form a $\frac{1}{2}$ " cove along the front and back edges where shown. Sand the base.

8 Drill $\frac{1}{16}$ " mounting holes for the performing animals where shown in the Exploded View drawing. Then, carefully drill a $\frac{1}{16}$ " hole in the bottom of each animal cutout.

9 Using a piece of a toothpick, a snapped-off brad, or a piece of wire as a dowel, glue each animal into position in front of the big top. Glue the big-top cutout into the groove. After the glue dries, apply your favorite finish. ♣

Project Design: © Christl Iausly
 Illustrations: Lorna Johnson
 Photograph: John Hetherington

UP-TO-THE-MINUTE CLOCK



A turning that doesn't take a lot of time

Project prep

Stock: $2\frac{1}{2} \times 7\frac{1}{4} \times 7\frac{1}{4}$ " for body, $\frac{3}{4} \times 6 \times 6$ " for face. Use the domestic or exotic hardwood of your choice. Body and face can be different species.

Lathe equipment: 3-4" faceplate.

Tools: $\frac{1}{2}$ " gouge, 1" round-nose scraper, $\frac{3}{16}$ " parting tool.

Lathe speeds: Roughing, 800-1000 rpm; finishing and sanding, 1200-1500 rpm.

Buying guide

Clock movement and hands. Quartz movement with three metal hands and mounting hardware, kit no. 6402, \$7.95 ppd. in U.S., Turncraft Clocks, P.O. Box 100, Mound, MN 55364-0100, or call 800/544-1711 to order.

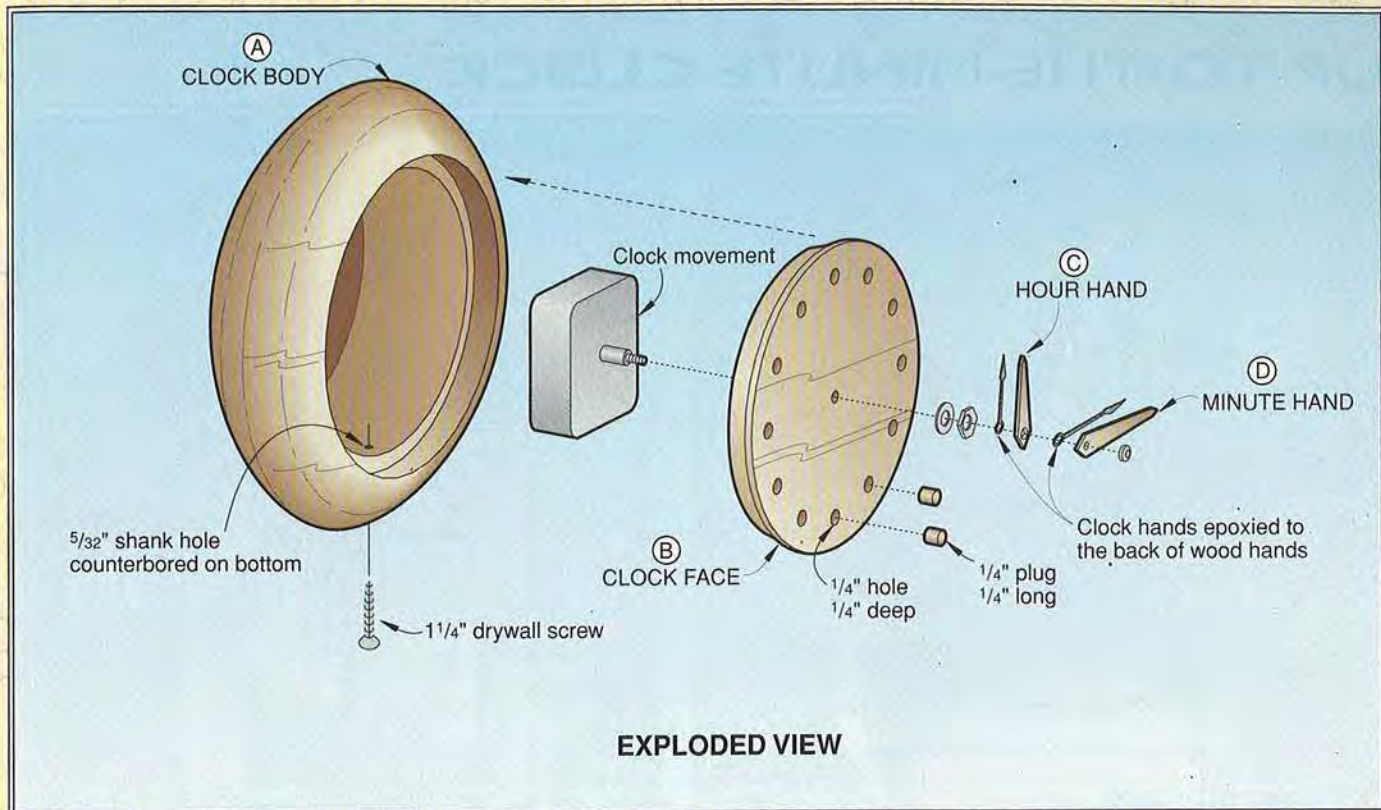
With its recessed, contoured face and unadorned lines, this contemporary clock casts wood grain in a starring role. You'll earn top billing in this production, too, just by following our easy directions.

Begin with the body

Screw a $\frac{3}{4}$ "-thick scrapwood disc to your lathe's 3-4" faceplate. Turn this wooden auxiliary faceplate to the diameter of the metal faceplate, and true the face with a scraper. Dismount the assembly from the lathe.



Print this article



EXPLODED VIEW

Sand or plane smooth the back of a 2½×7¼×7¼" piece of stock (butternut shown *opposite page*, sycamore in how-to photos). On the back, draw diagonal lines to locate the center. With a compass, draw around the center a 7¼" circle (or the largest possible) and another the diameter of your auxiliary faceplate.

Bandsaw around the outside line to cut out the blank. Glue the auxiliary faceplate to the back of the bandsawn blank, centering it inside the circle. Either woodworker's yellow glue or cyanoacrylate adhesive will work. After the glue has dried, mount the faceplate on the lathe.

Round down the stock to 7" diameter. This is not a critical dimension, so if your blank ends up slightly smaller, don't worry. Turn the blank to 2¼" thick.

Refer to the Full-Sized Section View drawing on the *next page*, then form the edge profile shown at the top of the body (Part A). To keep the corner curvatures the same on the front and back, draw limit lines on the blank's front and back. Here's how: On each face of the blank, measure 1⅝" in from the edge. Then, with the lathe

running, hold a pencil against the mark to draw a circle on the blank. Similarly, draw a centerline around the blank's edge.

Shape the curved corner on one side first, cutting with the gouge from the centerline on the edge down to the limit line on the face. Then, match that curvature on the other side. To match the curves accurately, cut a cardboard template of the first corner to aid in turning the other.

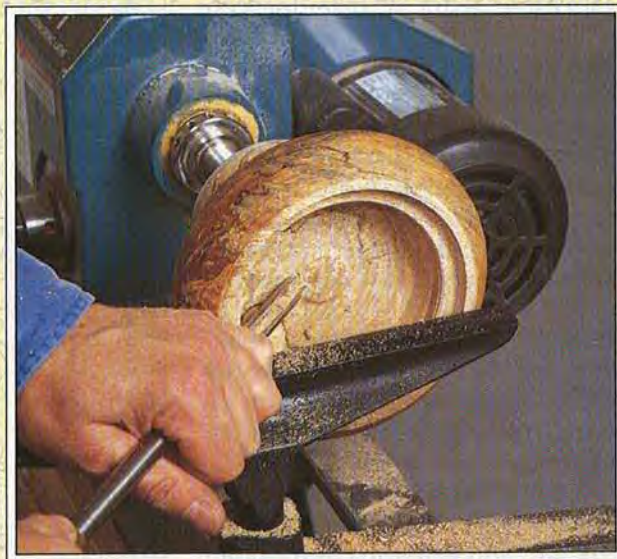
Make room for the clock

Now, turn the opening for the face and clock movement. Start by marking a 5"-diameter circle on the blank's face. With the parting tool, cut straight in just inside the line to a depth of ½". Then, with the gouge, clear the waste from the recess.

Scribe a 4½"-diameter circle inside the recess. Mark your gouge 1¼" from the business end (a piece of tape around

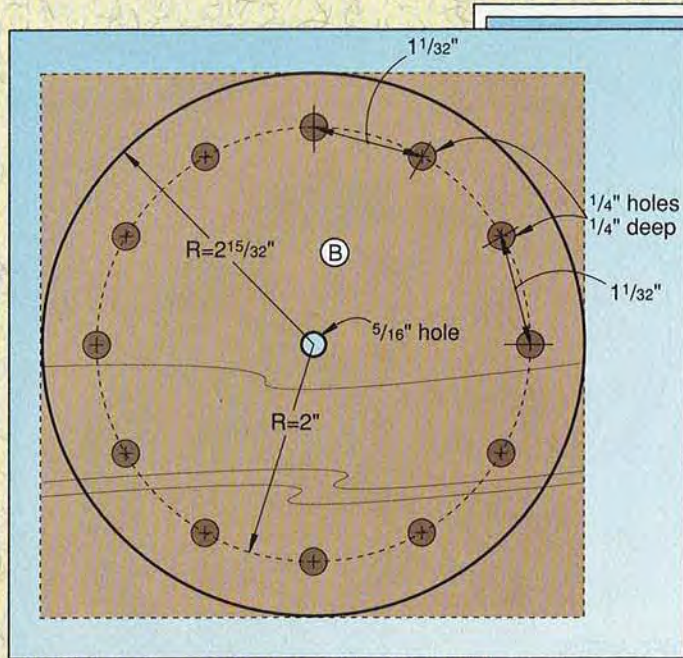
the shaft will do the trick), then bore into the center of the recess to the mark. Hollow out the turning inside the 4½" circle to that depth, creating an opening with a rabbeted edge, as shown *below*.

Sand the body front and edge with progressively finer sandpapers to 220-grit. Sand the side of the rabbet, too—it will show after assembly. Part off the body, and set it aside for the time being. Then, take a light cut on the auxiliary faceplate to remove glue traces and true the face.



Continued

UP-TO-THE-MINUTE CLOCK



Make a pretty face

Find the center on the back of the $\frac{3}{4} \times 6 \times 6$ stock for the clock face (B). Draw a 6" circle and a smaller circle for the auxiliary faceplate, as you did for the body mounting. Similarly, bandsaw the face blank, then glue it to the auxiliary faceplate. Round the blank to about $5\frac{1}{2}$ " diameter.

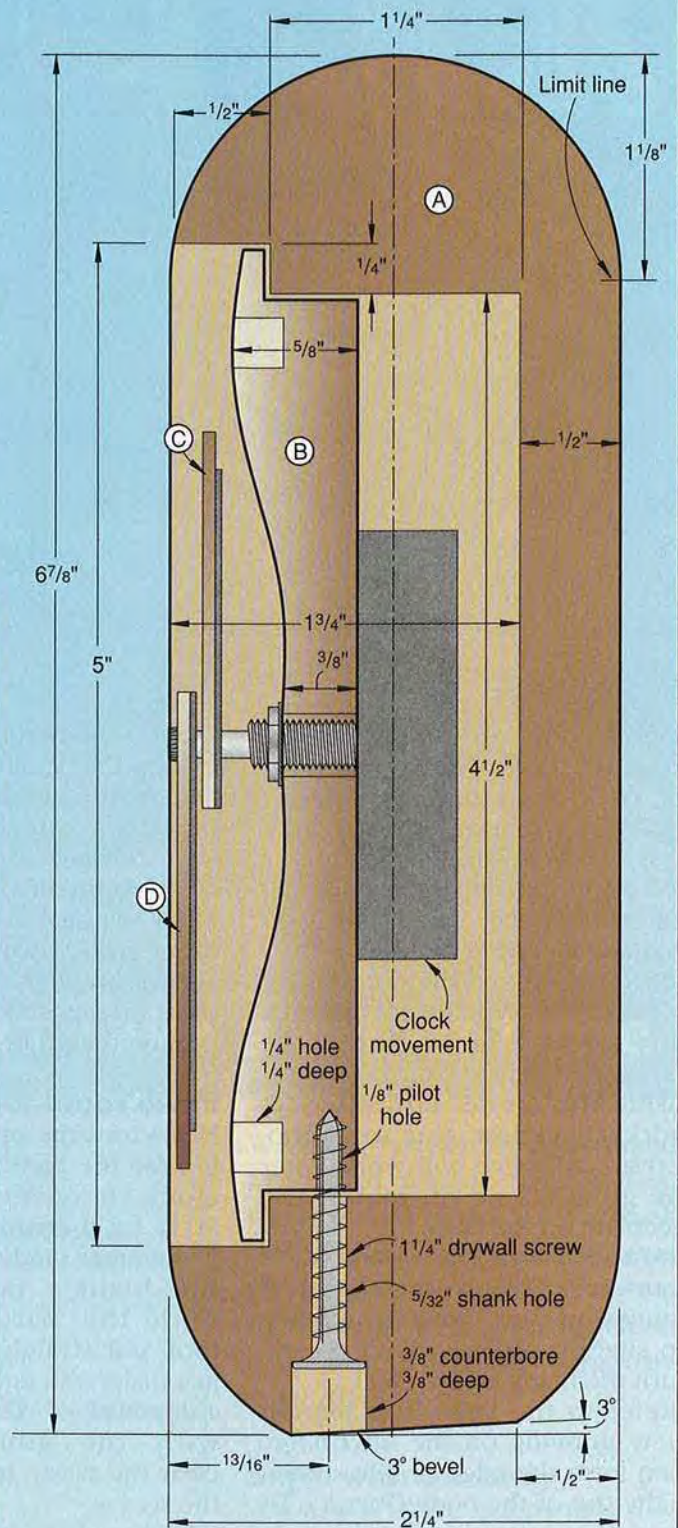
With the lathe running, locate the center of the face with a pencil. Then, with a corner of the parting tool, make a small center mark to help you drill a hole through the face later. With the lathe running, hold a pencil against the blank, 2" from the center. Remove the blank and faceplate from the lathe.

The pencil line will be the circle shown as a dotted line in the Clock Face drawing above. Following that drawing, lay out the marker locations. Arrange them so the grain runs horizontally across the face, not at an angle.

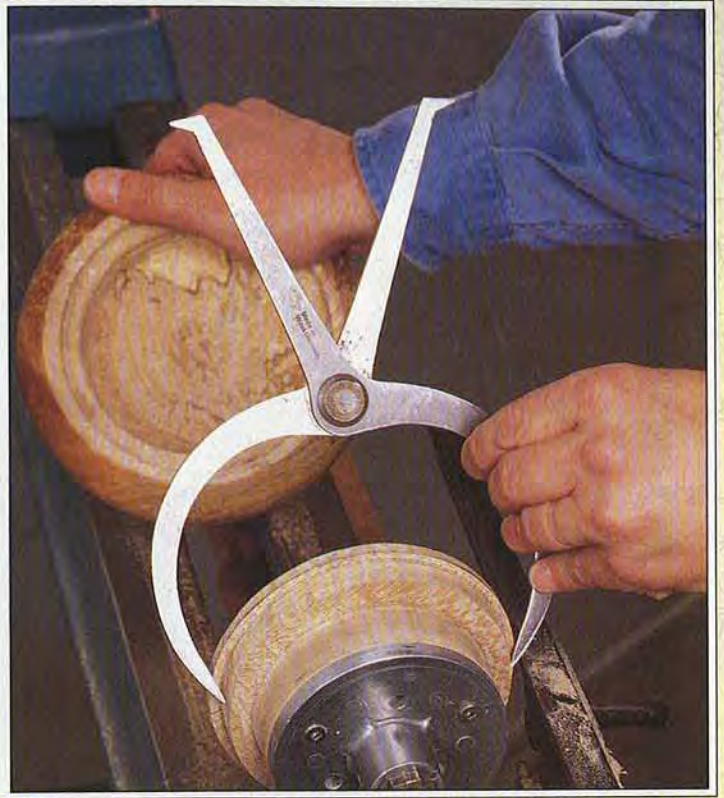
Drill a baker's dozen holes

Grip the faceplate with a hand-screw clamp, and set it flat on your drill-press table. With a $\frac{1}{4}$ " brad-point bit, drill $\frac{1}{4}$ " deep at each hour-marker spot, as shown opposite page, top left. Change to a $\frac{5}{16}$ " bit, and drill the center hole.

FULL-SIZED HAND PATTERNS



FULL-SIZED SECTION VIEW



Glue a $\frac{1}{4}$ " length of dowel stock into each marker hole. Use dowels that contrast with the face, such as the walnut markers shown in our butternut clock. (Cyanoacrylate adhesive allows you to get right back to work.)

Remount the faceplate, then turn the face front to the profile shown in the Full-Sized Section View. Use a sharp gouge and take light cuts to prevent tearing out the end grain of the dowels.

Make the face's outside diameter about $\frac{1}{16}$ " smaller than the rabbet's inside diameter. Check by fitting the body over the face. Make adjustments in small increments until you get the fit right.

Then, rabbet the back of the face to fit inside the clock-body opening. Measure carefully to achieve a snug fit between the face and the body. (We used an inside-outside caliper, as shown *above right*.)

Sand the face with progressively finer grits to 220. Part off the completed face, then dismount the faceplate from the lathe.

Now, complete the body

Remove the auxiliary faceplate from the lathe faceplate. In its place, screw on a 6"-diameter scrapwood disc $\frac{3}{4}$ " thick for a jam chuck. To make the jam chuck, just turn the disc to fit snugly inside the body rabbet. Give the edge a slight taper so the body will wedge on firmly. Double-faced tape or a few dabs of hot-melt glue can help hold the body.

Seat the body squarely on the jam chuck. If glue marks remain on the body's back, clean them off with a light gouge or scraper cut. Using a gouge, shape the back edge to match the front, then sand as you did the front.

Tilt your bandsaw table to 3° to cut the bottom bevel on the body. With double-faced tape, fasten the body to a 7" square of scrapwood, $\frac{1}{4}$ - $\frac{1}{2}$ " thick (a piece of plywood works well). Align the body's grain with one edge of the scrapwood carrier board. Then, with the bandsaw's miter gauge against an adjacent edge, saw the bottom from the body where shown.

Drill the $\frac{3}{8}$ " counterbore where shown, centered side-to-side on the flat base. Temporarily install the face, aligning the grain to run horizontally when the clock is standing on its base. Drill the pilot hole through the body and into the face, then enlarge the shank hole through the body. Apply your favorite finish to the body and face.

It's assembly time

Photocopy the Full-Sized Hand Patterns for the hour and minute hands, *opposite page*. Cut them from veneer, then epoxy them to the metal clock hands as shown in the Exploded View drawing.

Following the instructions packed with it, mount the clock movement on the back of the face. Install the hands, aligning them with the 12 o'clock marker. Then, install a battery in the movement, set the correct time, and place the face assembly into the clock body. Fasten the assembly with a screw through the bottom where shown. ♣


Project Design: Mark Reschke Illustrations: Roxanne LeMoine Photographs: John Hetherington

WHALE OF



This deep-sea depository makes a great gift for any youngster just learning the value of saving for a rainy day. And building it won't bust your bank—it's made from ordinary construction lumber.

Note: You can build the whale bank out of standard softwood stock from the lumberyard. Cut the 1½"-thick parts (A, D, and F) from 2×6 material. A 4' board will be plenty long. For the ⅛" and ¼" stock, resaw and plane 1×6 lumber.

 [Print this article](#)

Begin with the body

1 Photocopy the full-sized patterns in the *WOOD PATTERNS™* insert in the middle of the magazine. You'll need two copies each of the A/B and F patterns.

2 Using spray adhesive or rubber cement, attach one of the A/B patterns to a 15"-long piece of 2×6 for part A. Extend the dotted lines that mark the coin-slot sides up to the top of the stock. Then, with a try square, draw the lines across the top edge to mark the length and location of the coin slot.

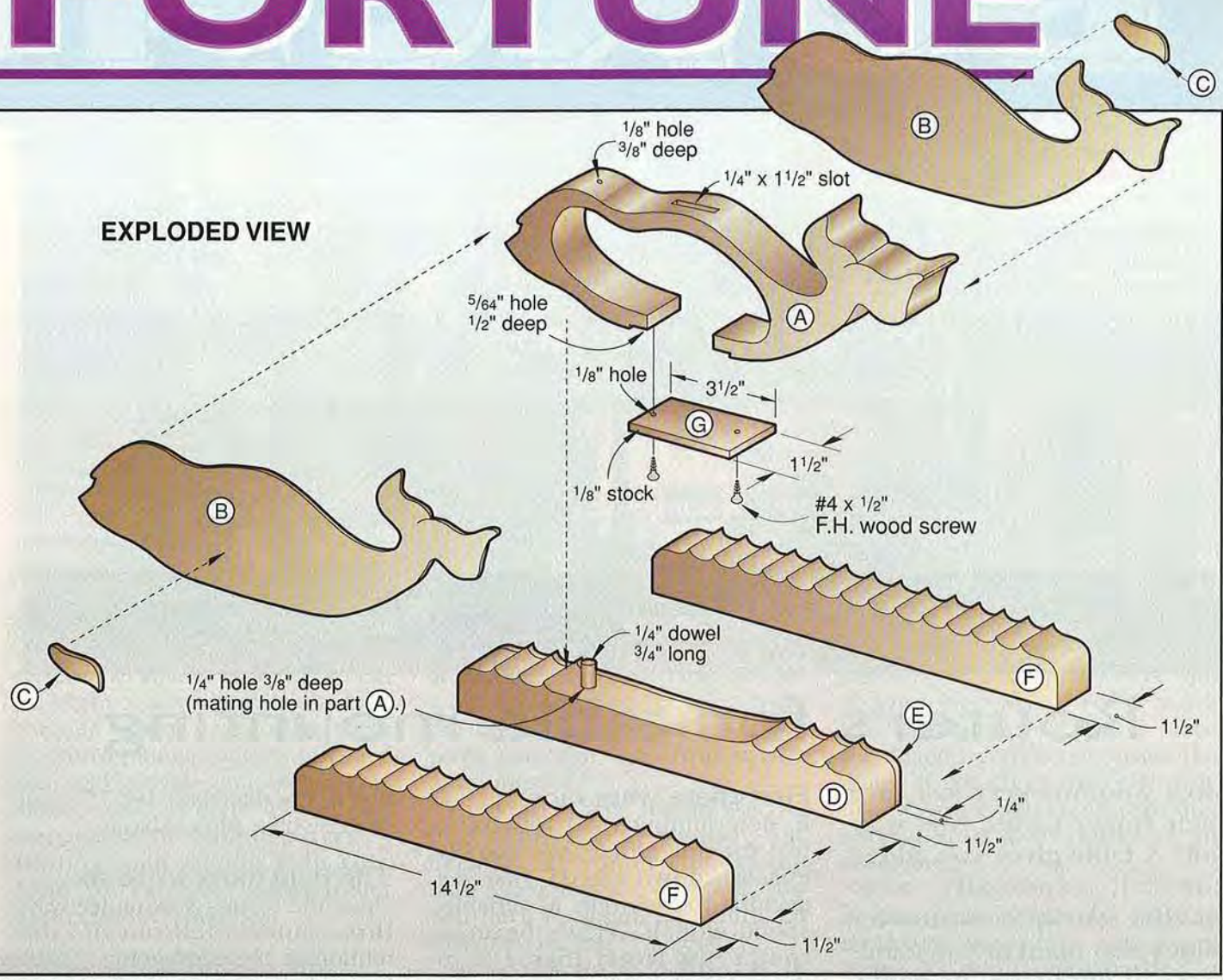
3 With a drill press, drill a series of overlapping ⅞" holes centered on the edge between the two lines. Drill deep enough to reach into the area surrounded by the broken pattern line (about 2").

4 Now, scrollsaw or bandsaw the bank's coin cavity. Starting from the bottom of the pattern, saw around the broken pattern line. Cut the thick stock with a ⅛" bandsaw blade or a no. 9 scrollsaw blade (.053×.019" with 9–13 teeth per inch). After cutting the cavity, saw around the outside line.

5 Next, cut out the body sides (B). Using double-faced tape, temporarily laminate two ⅛×5¼×15" pieces of stock, good faces out. Apply the remaining A/B pattern to the lamination, and scrollsaw around the outside line only. To scrollsaw the thinner stock, you can use a finer blade, such as a no. 4 (.035×.014" with 16 teeth per inch).

6 Glue the sides (B) to the body (A). When you clamp the sides,

FORTUNE



use 1x6 scrapwood for clamp blocks. That way, you won't inadvertently punch a clamp through the whale's thin sides.

7 Cut the 1/8x1 1/2x3 1/2" closure for the bottom opening. Place it in position, and drill a 3/64" hole through the cover into the body at each end. Remove the cover, and enlarge the holes through it to 1/8". Countersink them. Install the cover with two #4x1/2" flathead wood screws.

8 Sand the body edge flush. A strip sander, belt sander, and drum sander will all come in handy. File and sand the coin slot smooth, bringing it to 1/4" wide.

9 Install a 1/8" round-over bit in your table-mounted router, and rout along the edge on both sides.

In the tight areas the router can't reach, sand or file the round-overs. Finish-sand the body.

10 Temporarily laminate two pieces of 1/8"-thick stock (about 1 1/4x2" would be big enough) with double-faced tape. Attach the fin pattern (C) to the top of the stack. Scrollsaw the fins, and separate them. Round over the edge on one side of each by sanding. Glue the fins to the body where shown.

Build the wavy base

1 Cut three pieces of stock 1 1/2x2x14 1/4" and one 1/4x2x14 1/4". Glue the thin piece to one of the thick ones.

2 Apply the pattern for part D/E to the glued-up blank, the two part F patterns to the two remaining

thick pieces. Scrollsaw the three base sections.

3 Hand- and drum-sand the waves as necessary. Glue the three pieces together, placing part D/E between the two parts F. Align the bottom edges. After the glue dries, sand the ends flush. Then, finish-sand the base.

4 Chuck a 1/4" bit in your drill press, and drill the dowel hole in the base where shown. Drill slightly more than 3/8" deep. Drill a mating hole 3/8" deep in the whale.

5 Cut a 3/4" length of 1/4" dowel rod. Sand a chamfer on one end so the dowel will slip easily into the hole in the whale body. Glue the other end into the hole in the base. This will help keep the whale in position when it's sitting on the base.

Continued on page 90

BEST OF THE BUNCH

Back row:
Ryobi RE600,
Porter Cable 7518,
Freud FT2000E

Front row:
Makita 3612C,
DeWalt DW625,
Hitachi M12V



Routers for table mounting

Most woodworkers just love their router tables. And why not? A table gives you added control, especially over smaller workpieces. Router tables also open to you a universe of purchased or home-made fences and jigs, and dust collection proves easier. But as we've discovered, many routers aren't designed to be used upside down. On the other hand, certain ones work just great in a router table. Here's the low-down on those models, as well as some tips for making them perform even better.



First there were nine

In determining what routers to test for this article, we quickly established two criteria. First, we decided to look only at variable-speed models. That's because router bits larger than 1½" in diameter should run no faster than 18,000 rpm, and single-speed routers typically operate in a 20,000-24,000 rpm range. Today, you can buy router bits up to 3½" in diameter, and these should spin no faster than 12,000 rpm. The routers in our test have bottom-end speeds of 8,000 to 10,000 rpm, and top speeds no faster than 23,000 rpm.

Second, because of the considerable mass of large bits, and the amount of wood they remove, we decided to test only routers that draw 15 amps. These powerful models include the Bosch 1615EVS, DeWalt DW625, Freud FT2000E, Hitachi M12V, Makita 3612C, Porter-Cable models 7518 and 7539, Ryobi RE600, and Sears Craftsman 27506. With the excep-

tion of the fixed-base P-C 7518, all of these have plunge bases.

The field narrows to six

Once the testing was under way, three models fell out of contention in the early going. That's because they just don't work well when suspended upside down.

For example, the Bosch 1615EVS performs with distinction for handheld work, but you can't raise it when attached to a router table unless you assist it with one hand while turning the height-adjustment knob with your other hand. Chris Carlson of S-B Power Tool Company, the manufacturer, explained that his company is aware of the situation and plans to make a design change to remedy it. As Carlson told us, "The router-bit market has changed drastically since that router came out. Today, woodworkers are using panel-raising bits in a router table, making it do the work of a small shaper. But the 1615EVS was designed pri-

marily for handheld work such as plunge cutting of sink cutouts."

Another casualty was the Sears Craftsman model. It falls short in two areas. First, to remove its springs you must split the motor housing apart. This can prove tricky and we don't recommend trying it. (We'll explain later why you should remove the springs.) And, this router has the same type of collet system found on inexpensive Sears routers. With these machines, the collet is formed into the motor armature; if you damage the collet you'll have to replace the armature. Our contacts at Sears tell us they have a two-piece collet system on the drawing board for this model.

The Porter-Cable 7539, another fine router for handheld operation, was dropped from contention because it does not accept a height-adjustment knob. Like the one shown on *page 59*, these fit onto a plunge router's threaded rod, and provide you with a convenient and accurate way of raising a table-mounted router. By turning such a knob with your hand, you can easily raise a router in precise increments.

Three questions for the routers still in the hunt

1. Can you quickly and easily change bits? To conveniently change a bit in a table-mounted router, you should be able to get a wrench on the collet nut without removing the router from the table or crawling under the table. Two factors largely determine how easily you can do this.

First, the larger the hole in the router base, the better. This gives your wrench more maneuvering room, something that comes in handy with large-diameter bits. All of the routers in our test have sufficiently large holes, but the Porter-Cable 7518, with a 4 $\frac{3}{8}$ "-diameter hole, has the largest in our test by over an inch.

The P-C 7518 also came out on top with regard to the maximum

height of the collet nut. The P-C nut sticks $\frac{1}{2}$ " above the router-table surface. (All of the routers were tested with a $\frac{3}{8}$ "-thick table insert in place of their standard base plate.)

The collet nuts on the other tested routers do not stick above the table surface, but the Hitachi nut rises to within $\frac{1}{8}$ " of the top. This proved high enough for getting a wrench on the collet nut, even with a panel-raising bit in the collet as shown *below*. The collet nut on the DeWalt DW625 only comes to within $\frac{1}{2}$ " of the table surface, making bit changes possible, but more complicated. With the DeWalt we had to bend its wrench as shown *below right*, to change a panel-raising bit.

In our trials we discovered that the *type* of collet system also affects how easily you can change a bit. As shown on the *next page*, the tested routers have collet systems that fall into four major groupings.

The Porter-Cable system was the most convenient to use, but because the router comes only with a $\frac{1}{2}$ " collet/nut assembly, you will have to spend an additional \$10 or so for the $\frac{1}{4}$ " assembly.

Hitachi's setup proved easy enough, but we found that tightening and loosening the collet required a greater burst of force.

That's because it's the only tested collet/nut system with steeply tapered collet walls. So, tightening it is like driving a steeply tapered wedge between two objects: it goes fast if you provide powerful force. Likewise, loosening it takes a quick burst of force.

The DeWalt, Freud, Makita, and Ryobi collets require that you first loosen the nut, turn it another revolution or two, then loosen it again to pull the collet out of its tapered hole. This proved to be slightly time-consuming. Of these three, the DeWalt was our least favorite because to change between $\frac{1}{2}$ " and $\frac{1}{4}$ " bits, you have to remove the nut completely and snap another collet into it.

The Freud, Makita, and Ryobi, like the Hitachi, require that you simply keep the $\frac{1}{2}$ " collet in place and drop a $\frac{1}{4}$ " adapter sleeve into it when necessary. These work fine as long as you always place the adapter completely inside the collet. If you don't, the collet may distort under tightening pressure. (Freud sells a $\frac{1}{4}$ " collet as an accessory.)

2. Can you raise the router without wearing out your arm? As mentioned earlier, a height-adjustment knob is essential for raising a table-mounted plunge router. Fortunately, the

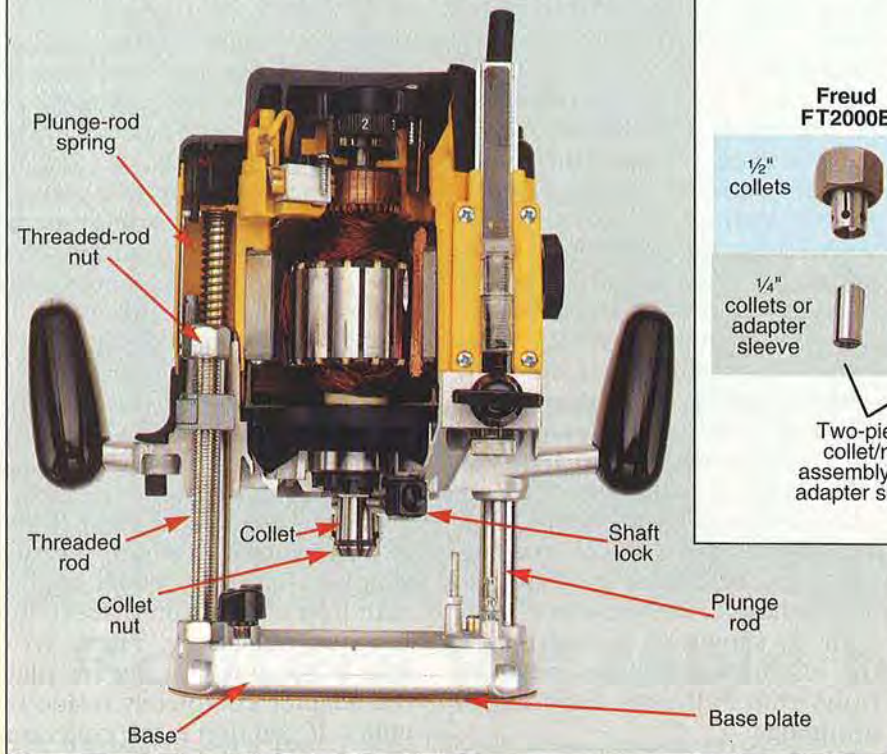
Continued



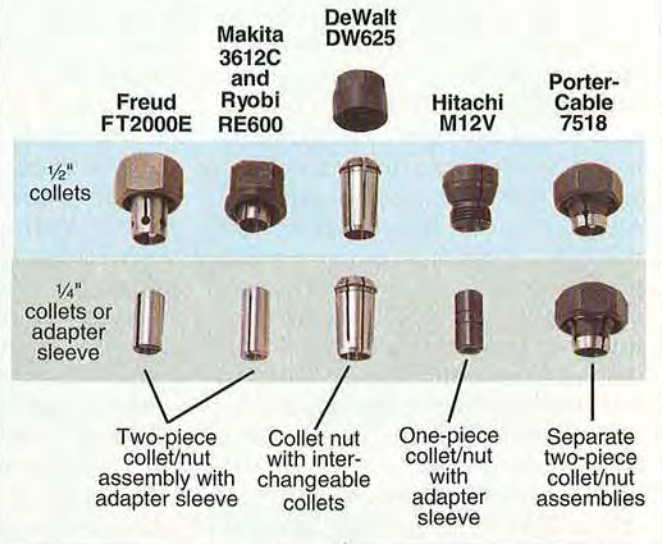
The collet nut on the Hitachi M12V (left) comes to within $\frac{1}{8}$ " of the top of a $\frac{3}{8}$ "-thick router-table plate, making it simple to change large-diameter router bits without removing the router from the table. To do this with the DeWalt DW625 (right), we had to bend the wrench to reach the collet that comes to within $\frac{1}{2}$ " of the top.

BEST OF THE BUNCH

YOUR GUIDE TO PLUNGE-ROUTER PARTS



Collet-system types



Freud, Makita, and Ryobi routers include one as standard equipment with each router.

Even with such a knob in place, you'll appreciate a router that smoothly slides on its plunge rods. All of the machines were satisfactory in this regard, but the DeWalt was easily the smoothest.

Although the springs housed inside the plunge rods serve an essential function when you hand-hold a plunge router (they return the motor and bit to their full upright height after a plunge cut), they serve no useful purpose in a table-mounted router. In fact, they just make it harder for you to raise the router. So, we removed all of them from the tested plunge routers as shown in the photo *right*. To do this, you simply remove the threaded-rod nut or height-adjustment knob and take the motor housing off of the rods. Doing this proved easy on all of the six finalist plunge routers.

3. Does the router maintain consistent speed under load?

All of the tested routers have circuitry that senses additional motor load (caused by a heavy cut in hard stock, for example), and ups the current to the motor to maintain consistent speed. So, when you start a heavy cut, the motor will slow down momentarily, but then quickly "recover" to its speed prior to starting the cut.

All of the finalist routers performed well in this area except for the P-C 7518. While the other machines recovered their speed almost immediately, the P-C router took a second or two when running at speeds less than 15,000 rpm. One or two seconds may not seem like much of a delay (and it isn't), but it proved annoying in our tests. Of the other finalist machines, the Hitachi M12V and Makita 3612C recovered quickest, with almost no perceptible delay at any speed.

You can raise a table-mounted plunge router with greater ease by removing the springs inside of the plunge rods.

More points to consider

• **Noise.** Although all routers are inherently loud, we found that the Hitachi and Makita models were less irritating to our ears than the other tested machines. The loudest tested router, the P-C 7518, produced a whine that was noticeably louder than the others.

Note: We recommend you wear bearing protection when operating any router.

• **Runout.** This is a measure of how much a router bit deviates from a perfectly concentric orbit when placed in a router. Routers

Continued

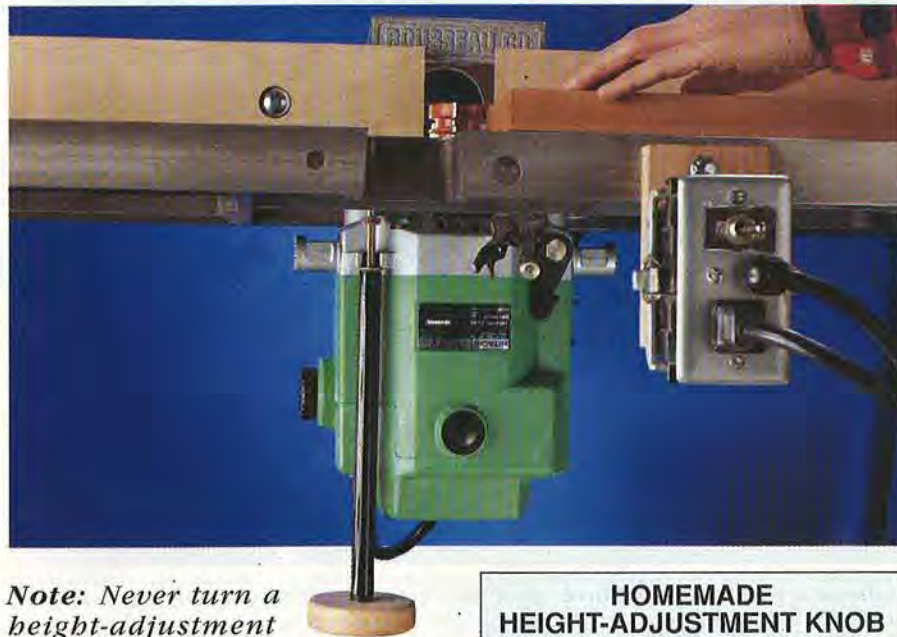
One man's ultimate router table

In the course of trying out the routers in this article, tool tester Bob McFarlin put together a router-table setup that comes close to matching the performance and convenience of a shaper. As shown in the photo *right*, Bob began by putting the router in the best table on today's market, a cast-iron version by Nucraft (800/624-2027). Although it cost \$300, Bob has never regretted buying the model he bolted to this tablesaw top. "It's solid, rigid, heavy enough to absorb vibration, and perfectly flat," Bob says. "But I'm a tool junkie; you can build an acceptable table with \$20 in particle-board and plastic laminate. Just make sure it has no flex."

Although Bob considers his Nucraft table to be a luxury item, he finds a Rousseau Deluxe Router Plate, or one like it, to be absolutely essential. As shown in the photo on the *following page*, the Rousseau product has two rings that snap into it and provide support around the base of bits up to 4" in diameter. With the smallest ring in place, you can use rub collars for template work, or remove both rings for easy wrench access to the collet nut. The Rousseau plate costs about \$35. For more information call 800/635-3416.

"To make the raising process convenient and precise, I built a homemade height-adjustment knob that threads onto my router's threaded rod. Most woodworking catalogs sell these for under \$20, but it was easy to make one for the Hitachi M12V (see the drawing *right*)."

The Hitachi threaded-rod nuts fit tightly inside a 1/2" copper pipe, but other routers have nuts of various sizes that may not fit well into available pipe or conduit. With these, you're best off buying a manufactured version.



Note: *Never turn a height-adjustment knob completely off the threaded rod of a table-mounted router. If the plunge lock is not engaged, the motor housing will separate from the base and fall to the floor.*

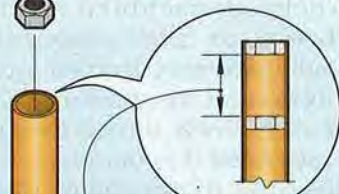
Next, Bob removed the handles from the router so it fits through the opening in the table. Then, he clamped a small, long-nosed, Vise Grips Locking Pliers onto the shaft lock to make it easier to reach and engage.

In choosing a fence, Bob looked for a sturdy and affordable version, and found it in the cast-aluminum Rousseau Basic Router Fence. It has a dust port, and wooden faces that adjust for router bits of various sizes (about \$65). "I tapped two holes into the tabletop for holding the fence, but it was worth it," Bob said.

Finally, our intrepid tool tester added an on/off switch on the front edge of the table for convenience. "I've since discovered that the version I used isn't offered anymore, but you can buy one like it from Sears (catalog number 25060, \$20.99) that has a removable locking key.

HOMEMADE HEIGHT-ADJUSTMENT KNOB (This version fits the Hitachi M12V)

- Place washer on top of tubing/nut assembly before installing onto router.
- Router threaded-rod nuts (supplied with router)



SECTION VIEW

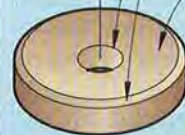
Press nuts into end of tubing, leaving about 1" between

1/2" rigid copper tubing, 9" long. Epoxy into hole in knob.

5/8" hole
1/2" deep

1/4" round-over top and bottom

3/4 x 3" diameter wooden knob





We placed a precision-machined shaft into each router's collet and measured runout with a dial indicator.

with excessive runout will yield choppier cuts, and will vibrate greatly when they spin large-diameter router bits.

To measure runout, we mounted a precision-machined shaft in each router and placed the spring-loaded arm of a dial indicator against it as shown *above*. Then, we slowly turned the shaft and measured the runout.

All of the routers were within acceptable limits, with less than .003" of runout. The Hitachi was tops with only .0005" of runout.

In the course of our trials, we also put to the test the notion that 1/4" collet-adapter sleeves contribute to runout. We found that the machines with adapters—Freud, Hitachi, Makita, and Ryobi—had no more runout with the adapters than without them.

• **Dust collection.** Table-mounted routers spew large amounts of sawdust above and below a table. So, we appreciate that the Freud comes with a clear-plastic dust-collection shroud and port that attaches to the base for under-table collection. You can buy a similar accessory for the DeWalt.

Our recommendations

You could mount any of the six "finalist" machines into a table and have good results. But, our nod goes to the Hitachi M12V and Makita 3612C because they were the only machines that scored seven "excellent" ratings in the comparison chart. The Makita has a slight edge for dedicated table use because it comes with a standard height-adjustment knob. It's the only tested router with an electric brake. We found this feature nice, but not essential. If you intend to remove the router from its table and use it for handheld work occasionally, opt for the Hitachi. Its lighter weight makes it easier to handle.

The Freud and Ryobi units come in a close second. If you can buy the Freud at a time when its manufacturer offers a \$30 rebate (which happens periodically), the price of the unit dips as low as \$175, making it a "10" in the value column.

Although we don't recommend the DeWalt DW625 for table mounting, it was the best of the lot for strictly handheld work.

BEST OF THE

MANUFACTURER/ IMPORTER	MODEL	NO-LOAD SPEED RANGE (RPM)	AMPS	TYPE (1)	COLLET		BASE HOLE SIZE (INCHES)
					MAXIMUM HEIGHT (2)	SPINDLE LOCK (Y, N)	
DeWALT	DW625	8,000- 22,000	15	D	-1/2	Y	2 5/8 x 3 3/8
FREUD	FT2000E	8,000- 22,000	15	B	-3/8	Y	2 1/2 x 3 1/8
HITACHI	M12V	8,000- 20,000	15	A	-1/8	Y	3 1/2 ROUND
MAKITA	3612C	9,000- 23,000	15	B	-1/4	Y	2 5/8 ROUND
PORTER- CABLE	7518	10,000- 21,000	15	C	+1/2	N	4 5/8 ROUND
RYOBI	RE600	10,000- 22,000	15	B	-1/4	Y	3 3/8 ROUND

NOTES:

- (A) One-piece, 1/2" nut/collet with 1/4" adapter sleeve.
(B) Two-piece nut/collet assembly with 1/4" adapter sleeve.
(C) Separate, 1/2" and 1/4" two-piece nut/collet assemblies.
(D) Nut with interchangeable 1/2" and 1/4" collets.
- Maximum height, in inches, of raised collet, above (+) or below (-) the top surface of a 3/8"-thick mounting plate.

Router table vs. shaper:

During the course of our testing, it occurred to us that you can spend as much money on a complete router-table system as you can on some shapers. For example, Bob McFarlin's setup on the *previous* page set him back about \$650. Now, stop to consider that for that amount of money you can buy a 1 1/2-hp Taiwanese-made shaper with a router-bit spindle, and have money left over for some bits or a mobile base.

Of course, most shapers, especially larger, domestic-made versions, cost well over \$1,000. And, you can put together a router-table setup for less than \$300 by making your own table and fence. With that in mind, here are some more points to consider if you're still torn between a shaper and a router table.

TOP ROUTERS FOR A TABLE

	PERFORMANCE EVALUATION (4)											OVERALL RATING (8)		WEIGHT (POUNDS)	COUNTRY OF ASSEMBLY (9)	SELLING PRICE (10)	COMMENTS	MANUFACTURER PHONE NUMBER
	HEIGHT-ADJUSTMENT KNOB (3)	EASE AND SMOOTHNESS OF RAISING ROUTER	LOCKING LEVER EFFECTIVENESS AND EASE OF USE	EASE OF REMOVING SPRINGS	SPEED CONSISTENCY UNDER LOAD	EASE OF INSTALLING AND REMOVING BITS		COLLET RUNOUT (5)	VIBRATION (6)	NOISE (7)	PERFORMANCE	VALUE						
						BITS UNDER 1 1/2" DIAMETER	BITS OVER 1 1/2" DIAMETER											
O	E	E	E	E	G	F	E	E	G	8	7	11 1/4	SW	\$270*	A great handheld router. Changing large bits in a router table can prove difficult.	800/433-9258		
S	E	E	E	E	G	G	G	G	G	8	9	12 1/2	SP	205	Comes with a height-adjustment knob and dust-collection attachment for its base. A good value.	800/472-7307		
O	E	E	E	E	G	G	E	E	E	10	10	11 1/4	SI	235	One of our top-rated routers. You will need to make or buy a height-adjustment knob.	800/706-7337		
S	E	E	E	E	G	G	E	E	E	10	*	13	U	NA	One of our top-rated routers. Comes with a height-adjustment knob. Heavy for hand-held use. Only model with an electric brake.	714/522-8088		
N	E	G	NOT NECESSARY	F	E	E	G	F	F	7	6	15	U	270	Would be our top choice if it recovered faster after encountering a load at slow speeds.	800/487-8665		
S	E	E	E	E	G	G	E	E	G	9	9	13 1/2	U	230	Comes with a height-adjustment knob. A good value. Bulky for hand-held use.	800/525-2579		

3. (N) None needed for routers that do not have plunge mechanism.
 (O) Optional model available from dealer.
 (S) Standard item packed with router.

4. **E** Excellent **F** Fair
G Good **P** Poor

5. **E** Less than .002" runout
G .002-.003" runout
 6. With 3/2"-diameter panel-raising bit installed.

7. Determined with machine running at full, no-load speed.

E 92 decibels
G 94 decibels
F 98 decibels

8. Based on a 1-10 scale with 10 being the highest score.
 (*) Depends on price, which was not available at press time.

9. (SI) Singapore
 (SP) Spain
 (SW) Switzerland
 (U) United States

10. Selling prices based on mail-order advertisements at time of article's production. Prices at local full-service dealers may be higher.
 (*) At time of article's production, DeWalt price included a free depth-of-control knob.
 (NA) Not available at press time.

Which makes more sense?

- Shapers come with a conveniently located on/off switch, completely adjustable fence with built-in dust collection, quick and easy-to-use height-adjustment controls, and a miter gauge.

- Most shapers have two speeds (7,000 and 10,000 rpm). We've found these speeds fast enough for all router bits except straight and rabbeting bits. With these you will experience slightly choppy cuts at 10,000 rpm.

- Most shapers have a motor-reversing switch that allows you to stack a cutter upside down on the machine's spindle. This increases the versatility of your shaper cutters.

Also, you can often increase your working safety by flipping a cutter to avoid a "captured" cut that may lead to kickback.

- Shapers make considerably less noise than routers because they have induction motors rated for continuous duty. Routers have shrill-sounding universal motors.

- A shaper takes up valuable floor space. You can stow away a benchtop router table and easily take it anywhere you go. For the ultimate in space savings, you can make a router table that's an extension of your tablesaw top.

- With a shaper you will still need a router for hand-held shaping operations. But you can quickly remove a table-mounted router and use it for hand-held work.

- Finally, large shapers can flat-out do heavier work than any router. For example, you'll need a shaper with a 1 1/4" spindle to handle big cutters that produce many large-scale, architectural profiles.

Looking to build your own router table? Here's help.

The best way to set yourself up with a dandy router table is to build one yourself. You'll save money, and you'll have some fun and probably learn a thing or two in the process of building one. No matter if you're looking for a full-featured, floor-standing router table, or a portable benchtop version, we can supply you complete, shop-tested plans. Our Benchtop Router Table and Heavy-Duty Router Table are available in large, blueprint-style plans. See page 34 for photos and complete ordering information.

Note: The Benchtop Router Table will hold a 15-amp. router, but you may need to lengthen the legs to make room for a height-adjustment knob. 🛠️

GARDENER'S

YOU, TOO, CAN COMPOST YARD WASTE IN THIS NEIGHBORHOOD-FRIENDLY CEDAR BIN



COMPOST: WORTHY WASTE FOR GARDENERS

How it works. Compost piles work by generating intense heat and biological activity, breaking down the materials in the pile into rich, usable, organic matter. Commonly called "black gold," compost aids in soil aeration and drainage. It is especially good for soils with too much clay or sand.

Compost's benefits. Unlike chemical fertilizers, compost minimizes the danger of contaminating water supplies. Instead, it gives nutrients back to the soil. And, just by composting, you can do your part to help relieve overburdened landfills. Today, yard trimmings and food scraps

account for 25 percent of America's municipal solid waste.

The "secret ingredients" for a rich compost. Fill your compost bin with any plant or animal product except fats, which decay very slowly. Also, avoid putting in meat, fish, or dairy products. Bacteria and fungi combine to

GOLD MINE

Our thanks go out to **WOOD**® magazine reader Wallace Leeker for sharing this clever compost bin design with us. Note how its slats slide out for ease in turning the compost mixture, adding new materials, or removing usable compost. Note, too, that the design adapts nicely to either stationary or portable construction. (If you're not familiar with the finer points of composting, see the box below for additional information.)

Start with the corner posts and top rails

Note: This design lends itself to two different setups, stationary and portable. For the stationary bin, cut the four corner posts to 58" long, build the unit, and bury the post ends. For a portable bin that you can relocate from time to time, cut the posts to 34" long and add the optional bottom braces (E) for rigidity. See the Exploded View and Portable Bin drawings for comparison.

1 Crosscut the four corner posts (A) to length. (We used cedar 4×4s; pressure-treated stock also would work.)

2 For adding the decorative finials later, mark diagonals on the top end of each post to find the center. Then, drill a ¼" hole 1½"

deep. See the Corner Post detail accompanying the Exploded View drawing for reference.

3 Angle-cut or rout a ⅜" chamfer along the top end of each 4×4 corner post.

4 From 2×4 stock, cut the top rails (B) to length.

5 Using the Corner Post detail for reference, drill a pair of angled mounting holes near the end of each 2×4 top rail.

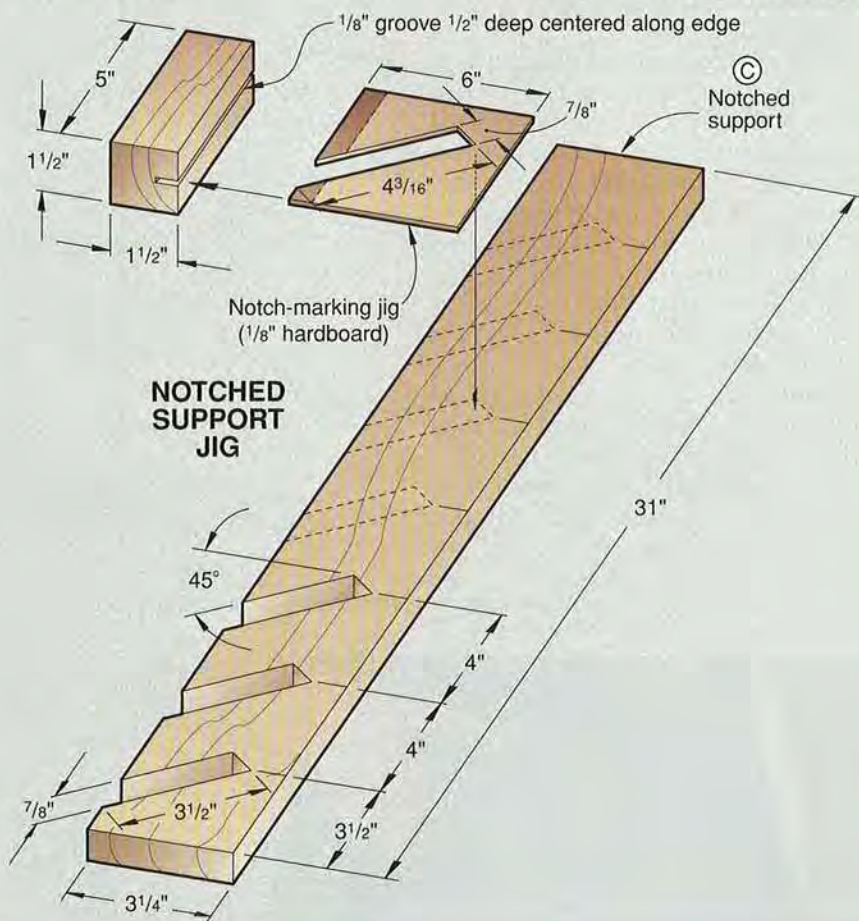
Now for the notched supports and slats

1 Cut the eight supports (C) to size from 1×4 or 1×8 stock.

2 Construct a notch-marking jig using the Notched Support Jig drawing below for reference.

3 Using the dimensions on the Notched Support Jig drawing, mark seven notches on each support blank (C), spacing the notches 4" apart.

Continued



break down the materials, leaving a pile about half the original size.

The decaying process works best with a mixture that's 50 to 75 percent "brown" material—dried leaves, hay-like grass, and old prunings—and 50 to 25 percent greens—recent prunings, leaves, and freshly cut grass. Shredding

leaves before placing them in the pile will yield quicker results and prevent caking. Turning the pile is not absolutely necessary, but it does hasten the process by providing the bacteria with sufficient air. Turning helps to ensure that the whole pile effectively decomposes, not just the center.

Harvest time. Compost is ready to use when it's uniformly dark in color, crumbles readily, and has a clean woody odor. Till annually into the soil to a depth of 8" to 12". To make your own potting soil, filter the compost with a ¼" or ⅜" wire-mesh screen to filter out the large chunks.

GOLD MINE

4 Using a bandsaw or portable jigsaw, cut the notches to shape as shown in the photo *below*. For ease in removing the slats (D) later, cut the notches $\frac{1}{8}$ " wider than the thickness of the slats.

5 Cut 28 slats (D) to the size listed in the Bill of Materials.

6 For a portable bin (posts not buried), miter-cut four bottom braces (E) and screw in place.

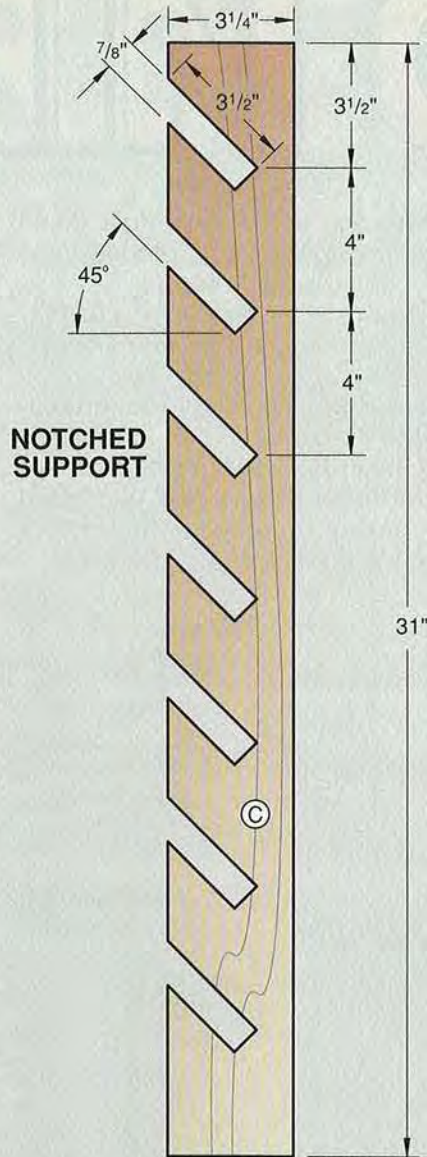
Assemble the pieces, and fill the bin

1 Using 7d galvanized nails, attach the notched supports (C) to the corner posts (A). As dimensioned on the Corner Post detail, the top ends of the supports are 3" from the top ends of the corner posts.

2 Attach the top rails (B) and optional bottom braces (E). See the Corner Post detail for reference before securing the top rails to the corner posts.

3 Slide the slats (D) in place, and fill the bin. Add the four decorative finials. (We used EMCO's cedar post top balls, stock no. CPT-1. Call 800/933-3626 for the dealer nearest you.)

Mark the angled notches on the supports with the notch-marking jig. Then, use a jigsaw to cut the notches to shape.



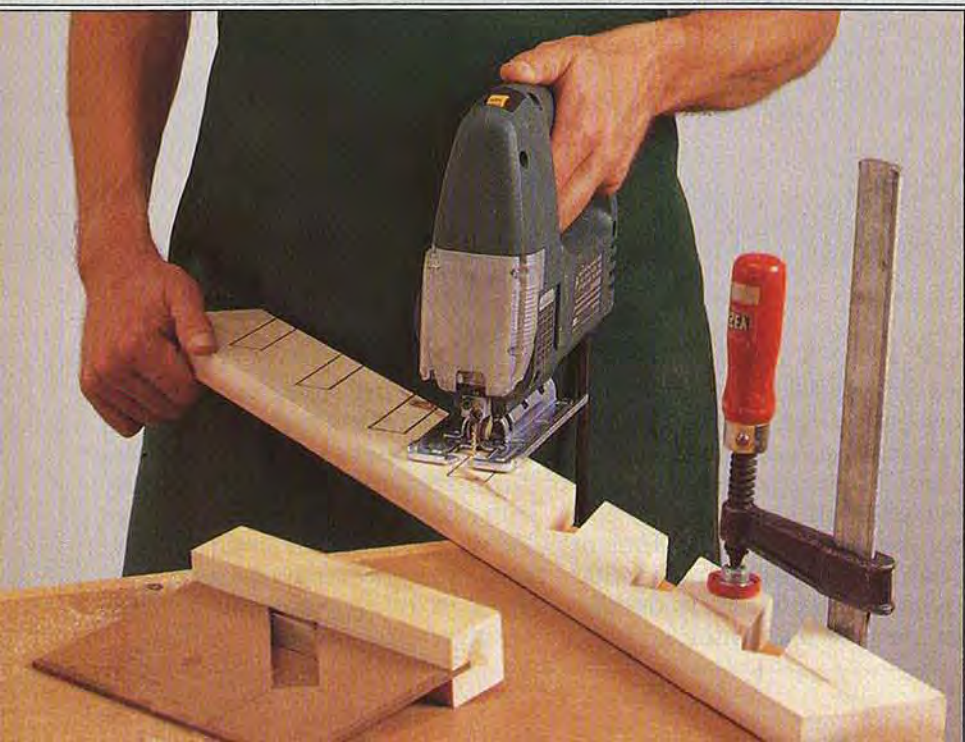
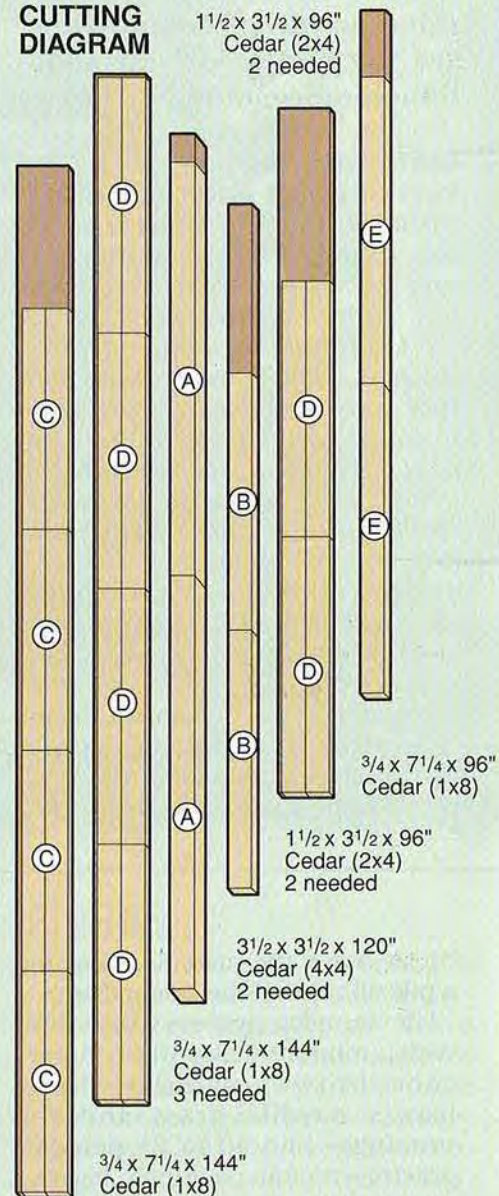
Bill of Materials					
Part	Finished Size			Mtrl.	Qty.
	T	W	L		
A* corner posts	3 1/2"	3 1/2"	58"	C	4
B top rails	1 1/2"	3 1/2"	36"	C	4
C notched supports	3/4"	3 1/4"	31"	C	8
D slats	3/4"	3 1/2"	35 5/8"	C	28
E** braces	1 1/2"	3 1/2"	43"	C	4

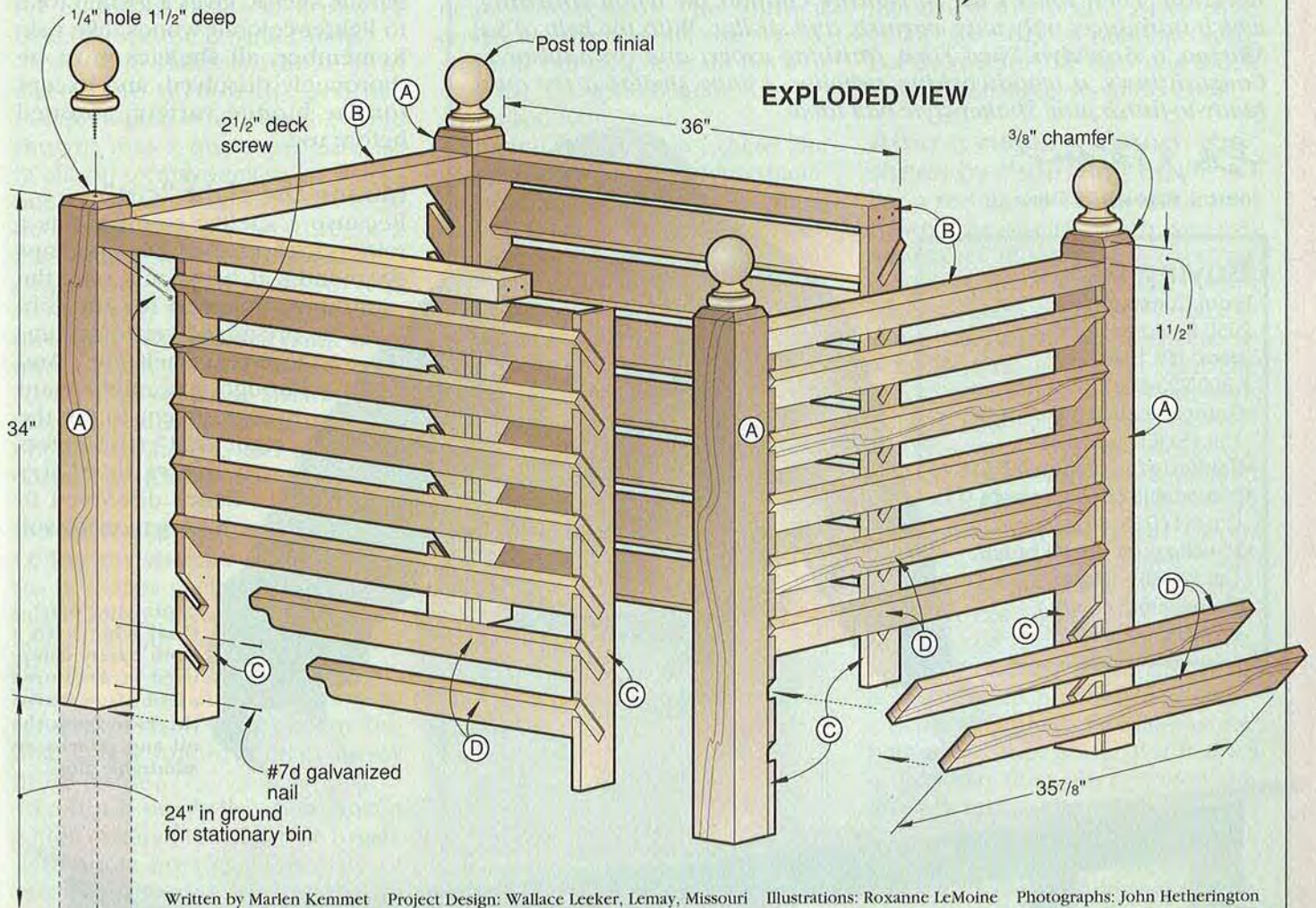
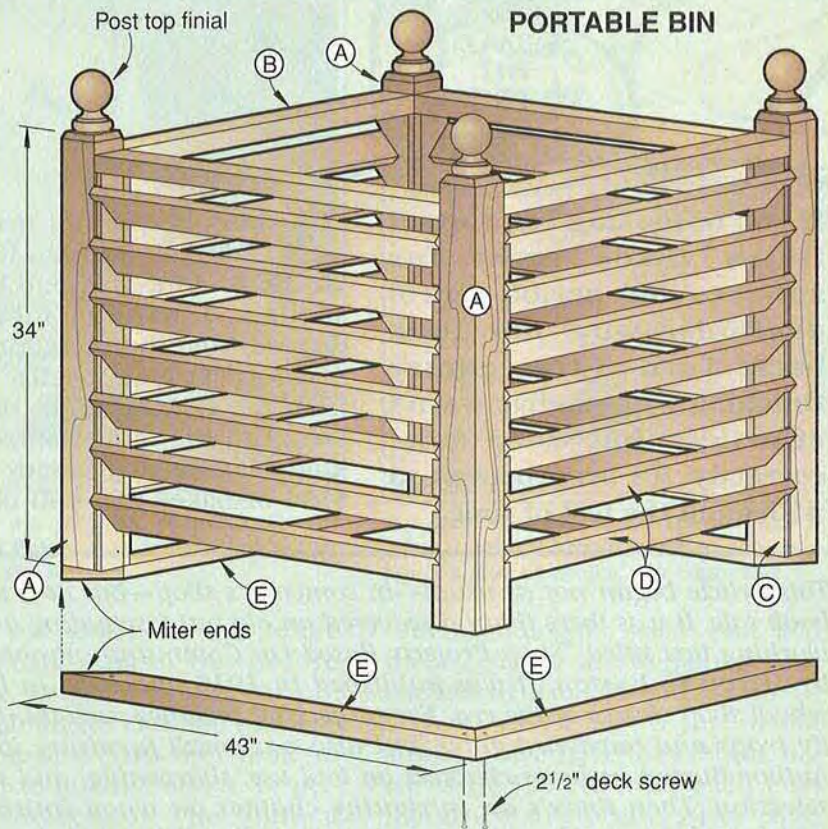
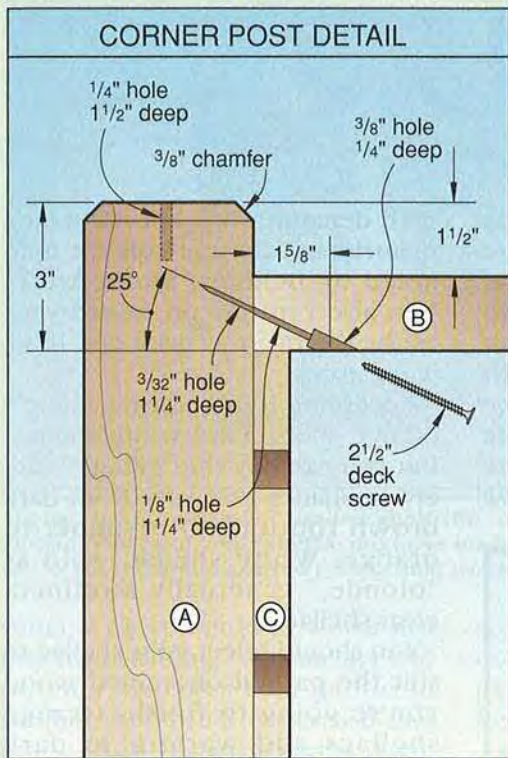
*For a stationary bin, use 58"-long corner posts; for a portable bin, use 34"-long posts.

**For portable bin only.

Material Key: C—cedar
Supplies: 2 1/2" deck screws, 7d galvanized nails, finials.

CUTTING DIAGRAM





Written by Marlen Kemmet Project Design: Wallace Leeker, Lemay, Missouri Illustrations: Roxanne LeMoine Photographs: John Hetherington

ONE OLD WAY TO A PERFECT FINISH

SHELLAC

If you're looking for a wood finish that's great for antiques and period reproductions, why not look back? Turn-of-the-century finishing with shellac wasn't effortless, but when done correctly, it's been proven to withstand the test of time.

Although the old textbook failed to mention it, there is more than one kind of shellac, a natural substance derived from the secretion of an Asian insect (see "Shellac: a gift from the insect world," on page 96). And the most controllable kind for finishing comes in the form of flakes that you dissolve

with denatured-alcohol (Behkol, a proprietary alcohol solvent marketed by Behlens, works well). You also can buy pre-mixed shellac by the quart at paint and hardware stores.

According to Sal Marino, there's orange shellac and white shellac. But you can buy the "orange" variety in shades that vary from dark brown (buttonlac) to amber to orange. White shellac, sold as "blonde," is actually a refined, clear shellac.

You should select your shellac to suit the natural or stained wood you're going to finish. Orange shellacs add warmth to dark woods, such as walnut, while blonde shellac gives a golden tone to lighter-colored woods, like oak. Remember, all shellacs must be thoroughly dissolved, and except for the blonde variety, strained before use.

Mixing the right "cut"

Because a shellac solution has a relatively short shelf life—perhaps six months at best—mix only the amount you need for the job.

(The pre-mixed version claims a three-year shelf life.) And although you might want to experiment to get the right "cut" (this refers to the ratio of dry flakes dissolved in one gallon of sol-

"Spiriting off," a final wipe with a cloth barely dampened in denatured alcohol, removes the haze from the oil and returns an admirable gloss.

This article began not as usual—in someone's shop—but at a used-book sale. It was there that I discovered an old but fascinating woodworking text titled "Shop Projects Based On Community Problems" by Myron G. Burton. It was published in 1915 and used in high-school shop classes of the era. For projects, it includes such things as fly traps and barnyard gates, but also has small furniture items. Author Burton includes chapters on tool use, sharpening, and stock selection. Then there's an intriguing chapter on wood finishing, which introduces only wax, varnish, and shellac. With the help of Sal Marino, a Brooklyn, New York, finishing expert and an advisor to Constantine's, a woodworking supplier, I gave shellac a try on a ready-to-finish pine Shaker-style ball table.

Peter J. Stephano

—Peter J. Stephano, Sr. Editor

 Print this article

Buying Guide

From Constantine,

2050 Eastchester Rd.,

Bronx, NY 10461

1-800/223-8087

- Orange shellac flakes, 1 lb.,
Cat.#SHEL 1, \$18.45
- Behkol, qt., Cat.#BB803, \$15.45
- Disposable cone strainers (12),
Cat.#HYD38, \$3.25
- 2"-wide pure bristle brush,
Cat.#49B61, \$14.45
- Cheesecloth (4 yds.),
Cat.#31FM72, \$2.75





Shellac has a somewhat limited shelf life, maybe six months, so mix only the amount you need. Most shellac mixtures made from flakes must be strained before use to get rid of undissolved residue that would mar the finish.

vent), a two-pound cut works just fine for brushing. That means two pounds of flakes to a gallon of alcohol, but you'll never use that much. For your purposes, two-pound cut translates to one-quarter pound of flakes to a pint of Behkol. (See the Buying Guide.)

Pour the flakes (orange produced the turn-of-the-century pumpkin-pine effect on the table shown) into a quart-size glass jar (a Mason or mayonnaise jar works fine), then add the solvent. Screw on the lid. Let the mixture sit a few hours, with occasional stirring, until it's fully dissolved. Next, strain the shellac solution through a cone-shaped paint filter into a clean glass jar for storage. Never mix or store shellac in a metal container because it discolors the finish. You can use metal during application, however.

It takes even passes to lay on shellac

Sal describes shellac as an evaporative finish, meaning that all the coats you put on "melt" together to form a single thick coat. Therefore, it's not necessary to sand after each coat except the first, unless you leave many messy brush tracks.

To brush on shellac, you'll need a high-quality natural-bristle brush with short bristles. This type of brush will carry a load of shellac

so that you won't run out before completing a pass. But before using it, dampen the bristles in Behkol. It makes clean-up easier.

For the first coat, thin some of the shellac mixture about 50 percent with Behkol. The thinned coat effectively seals the wood, and you can sand it in an hour or so with 150-grit to knock down any raised wood grain.

Brushing shellac isn't quite like applying varnish or polyurethane. Because shellac sets up so quickly, you have to work fast, brushing in long strokes with the grain. If you're really quick, you can go back and smooth out areas of the finish. Wait too long, though, and you'll only end up with ugly brush marks. And it's really better to let any runs dry, then sand or scrape them off later.



Rubbing down the final coat of shellac with 320-grit sandpaper moistened with linseed oil ensures a smooth ending.



It takes long strokes with the grain using a natural-bristle brush to properly apply a coat of shellac. Do edges last.

After sanding the sealer coat, add three coats of the two-pound cut shellac. If it takes you a pass or two to catch on to the brush stroke, you'll have to level the finish with 320-grit after each coat has dried overnight. After that, you'll have a good built-up finish, but there's still the finishing touch that Burton suggests in his book.

After a rubbing, return the sheen by "spiriting off"

For a real glossy finish, add a final rub of the shellac with 320-grit sandpaper moistened with a few drops of linseed oil. But, don't apply enough pressure to actually sand the finish down. Then, to remove the oil and return the gloss, follow that technique with what Burton calls "spiriting off." That's a pass over the shellacked wood with a cheesecloth pad barely moistened with the Behkol solvent, as shown in the photo *opposite page*. The fresh cloth must be just barely damp, though, and you can't apply any pressure at all to the surface or it will dull. Instead, quickly glide the cloth across the finish with the grain.

Working with shellac takes some patience and practice. But it dries quickly so dust isn't picked up, gives depth to the wood, rates as a great protector, and can be easily repaired. It's also non-toxic—safe for food and children's toys. ♣

Photographs: Craig Carpenter/Studio Au

Customized **SANDING.**

Left in the open, sandpaper will cup due to humidity. To keep this perennial problem in check and keep our sandpaper organized and away from dust, we came up with this multi-purpose cabinet for IDEA SHOP 2. See the September, 1994 issue 72 for matching cabinets. We've made room for sanding belts, a sandpaper cutter, a mini shelf for your sanding blocks, a holder for your scrapers, and clips to hold sanding discs in place.

Start with the basic cabinet assembly

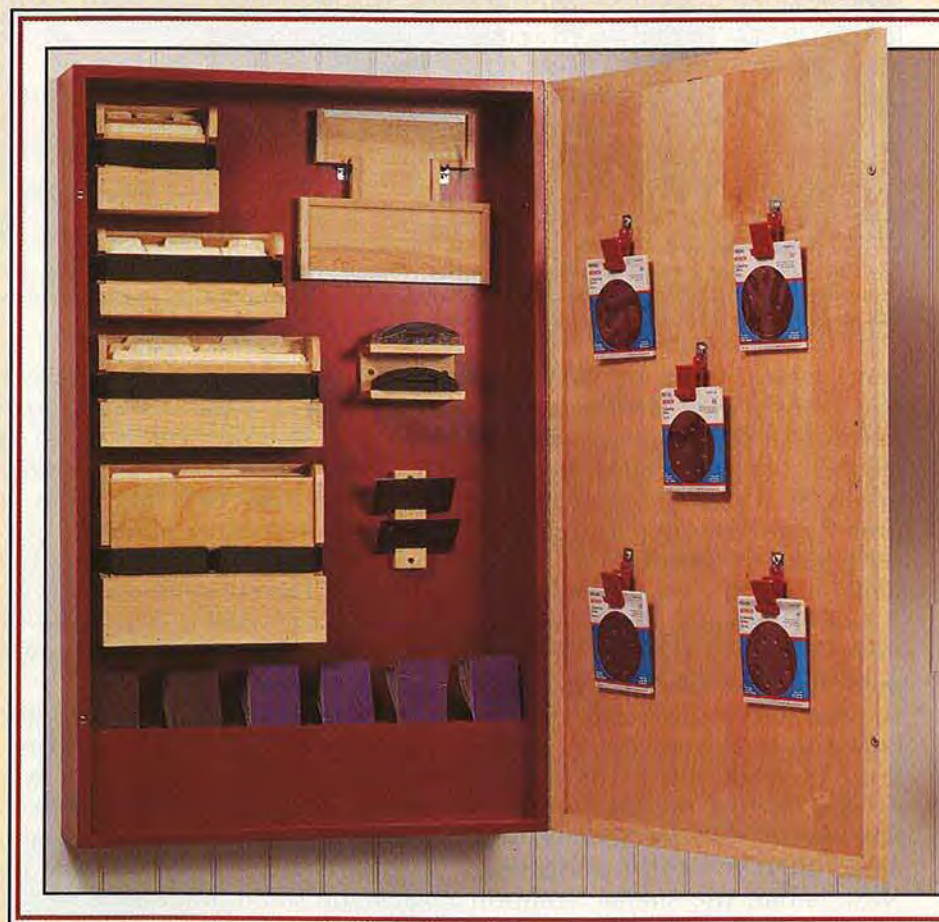
1 Using the the Bill of Materials and the Cutting Diagram for reference, lay out and cut the cabinet sides (A), top and bottom (B), and door panel (C) to size from $\frac{3}{4}$ " birch plywood.

2 Cut the door banding pieces (D, E) to size plus 1" in length from maple stock.

3 Rout a $\frac{1}{16}$ " chamfer along the front mating edges of the door panel (C) and banding (D, E). When joined in the next step, the chamfers form a decorative V-groove where shown on the Cabinet Exploded View drawing.

4 Miter-cut the banding pieces (D, E) to length. Glue and clamp them to the door panel (C).

5 Set your tablesaw rip fence $\frac{1}{4}$ " from the inside edge of the blade, and rip edging strips (F, G) from the edge of a $\frac{3}{4}$ "-thick maple board. Crosscut the edging strips to length plus 1". (We used the edging to hide the exposed plies



of the plywood sides, top, and bottom panels.)

6 Glue and clamp the edging strips to the front edges of plywood pieces (A, B). Later, trim the ends of the edging flush with that of the plywood.

7 As dimensioned on the Rabbet detail accompanying the Cabinet Exploded View drawing, cut a $\frac{3}{8}$ " dado $\frac{3}{8}$ " deep $\frac{3}{8}$ " from the top and bottom ends of the cabinet sides A/F. Next, cut a $\frac{3}{8}$ " rabbet $\frac{3}{8}$ " deep along both ends of the top and bottom pieces B/G. (We test-cut scrap pieces of stock first to verify the settings.)

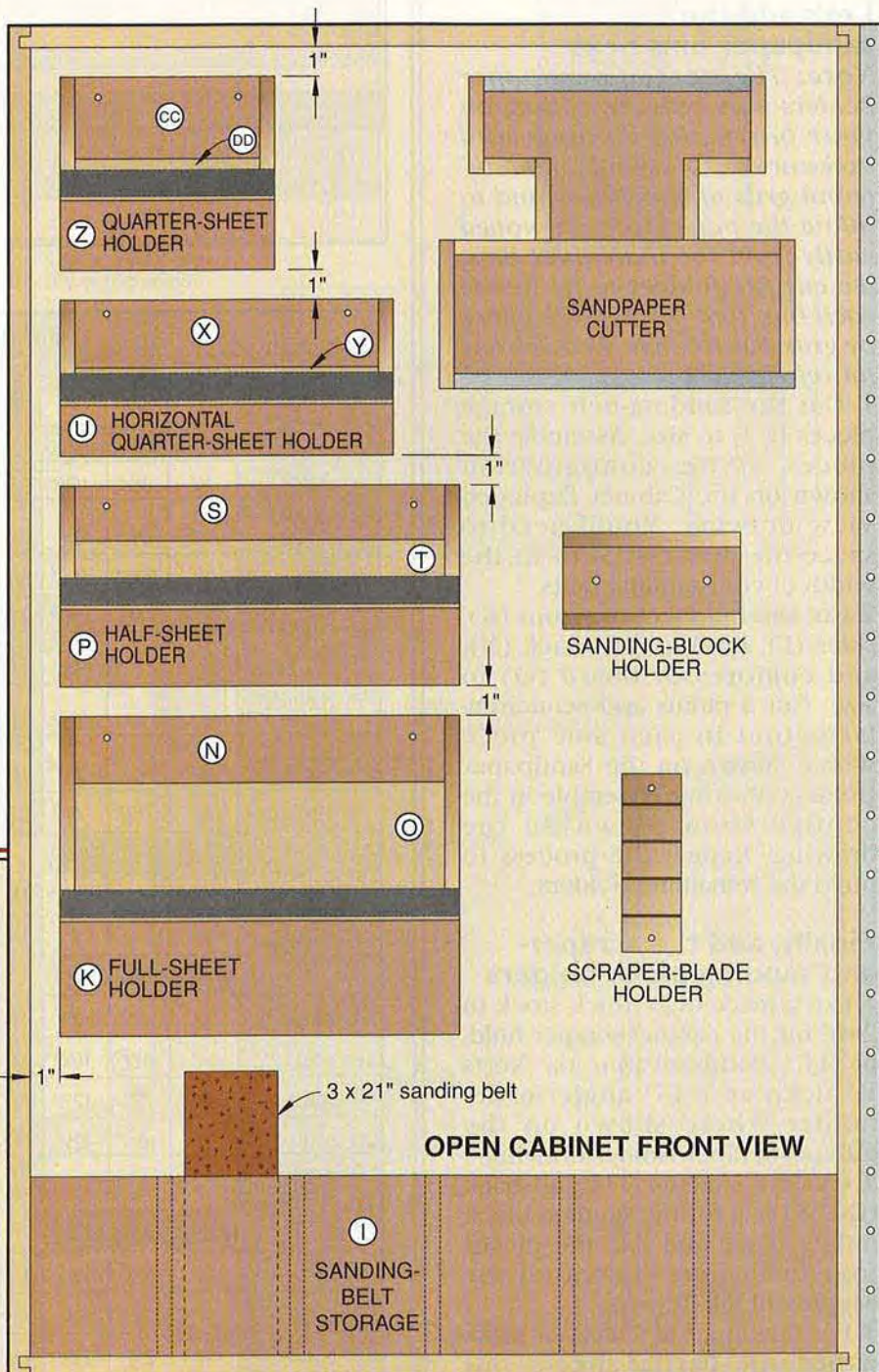
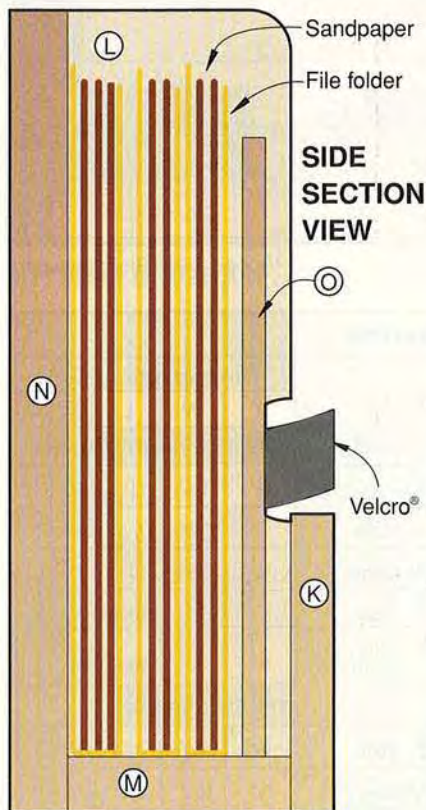
8 Glue and clamp the cabinet assembly, checking for square.

9 Measure the opening, and cut the cabinet back (H) to size. Drill counterbored mounting holes through the cabinet sides (A), and screw the back in place.

10 Use a $\frac{3}{8}$ " plug cutter to cut $\frac{3}{8}$ " plugs $\frac{5}{16}$ " long. Plug the counterbored holes in the cabinet sides, and sand the plugs flush, being careful not to sand through the birch veneer.

11 Crosscut a piece of $1\frac{1}{2}$ " continuous (piano) hinge to $45\frac{1}{2}$ " long. Using just three screws, secure the continuous hinge to the cabi-

SUPPLY CENTER



net. Then, using three screws, attach the hinge to the back side of the door. Close the door to verify that the edges and ends are flush with those of the cabinet. (By using just a few screws, it makes it easier to adjust the hinge placement if necessary for a flush closing door.) Now, using the existing holes in the hinges as guides, drill $\frac{1}{16}$ " pilot holes into the cabinet and door. Finish attaching the hinge.

12 Locate and drill the holes, and attach a 3" wire pull to the door.

13 Mark the locations and drill a pair of mounting holes in the left-hand cabinet side for the round

Continued

SANDING-SUPPLY CENTER

magnetic catches. Install the catches, close the door, and squeeze the door against the cabinet to indent the strike locations on the back side of the door. Attach the strikes.

Let's add the sandpaper bins next

Note: The sizes of sandpaper holders may vary depending on your particular sanders and accessories. To organize the different grits of sandpaper and to allow the paper to be removed easily from the individual bins, we cut file folders to fit inside each bin, and divided the paper by grits. See the Side Section View for reference.

1 Cut the sanding-belt storage pieces (I, J) to size. Assemble the pieces in the configuration shown on the Cabinet Exploded View drawing. You'll need to space the dividers (J) to fit the width of your sanding belts.

2 Cut the full-sheet bin front (K), sides (L), bottom (M), back (N), and compressor board (O) to size. Cut a radius and semicircular cutout in each side piece where shown on the Sandpaper Holders drawing. Assemble in the configuration shown on the drawing. Repeat the process to build the remaining holders.

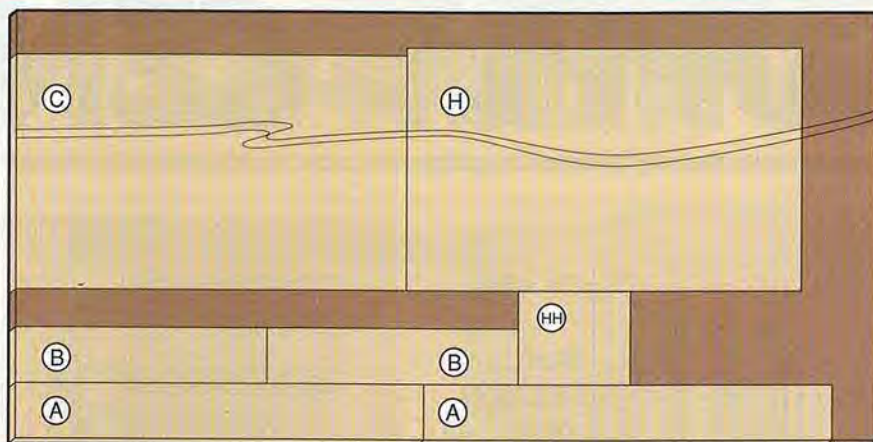
Finally, add the scraper- and sanding-block holders

1 Cut a piece of 3/4"-thick stock to 2x6" for the cabinet-scraper holder (EE). Bandsaw four 1/16" kerfs 1/2" deep at a 45° angle in the holder where shown on the Cabinet-Scraper Holder drawing.

2 Cut the shelves (FF) and back (GG) to size for the sanding block holder. Glue and nail the pieces together where shown on the Sanding Block drawing.

3 For dividing full sheets of sandpaper into partial sheets, our

Continued

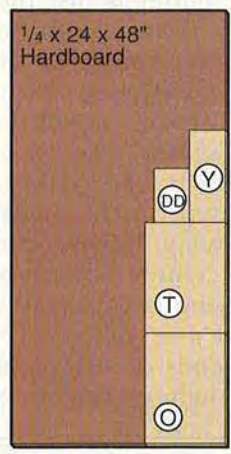
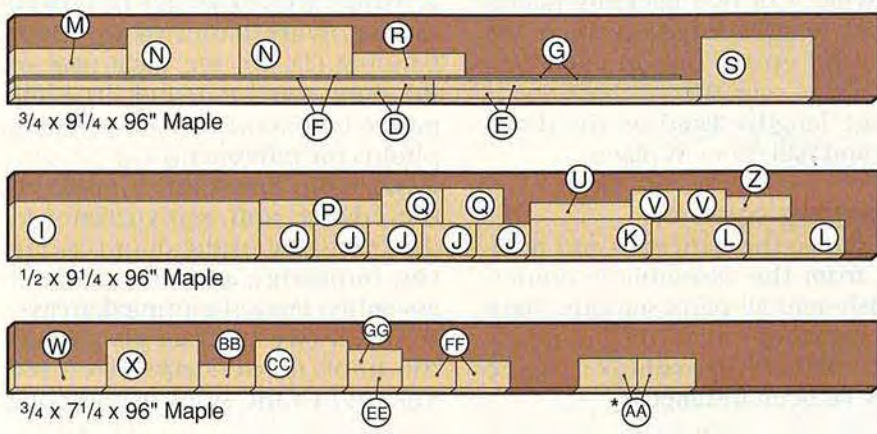


3/4 x 48 x 96" Birch plywood

Bill of Materials

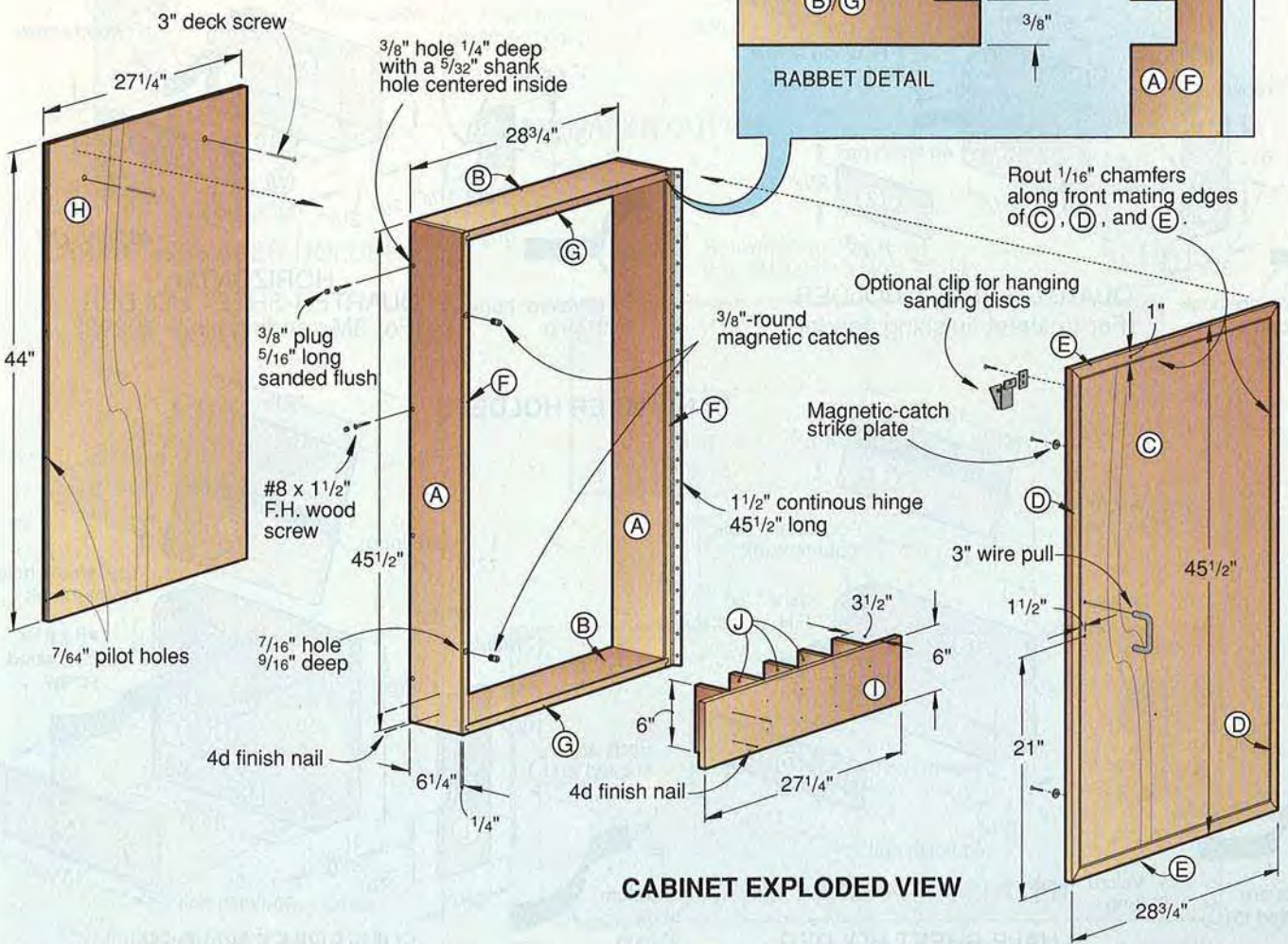
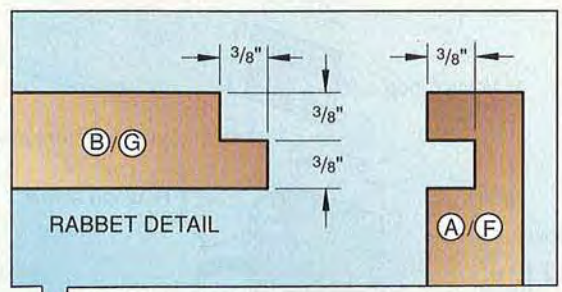
Part	Finished Size			Mati.	Qty.	Part	Finished Size			Mati.	Qty.
	T	W	L				T	W	L		
CABINET						HORIZONTAL QUARTER-SHEET HOLDER					
A sides	3/4"	6 1/4"	45 1/2"	BP	2	U front	1/2"	1 7/8"	11 1/4"	M	1
B top & bottom	3/4"	6 1/4"	28"	BP	2	V sides	1/2"	3 1/4"	5 1/4"	M	2
C door	3/4"	26 3/4"	43 1/2"	BP	1	W bottom	3/4"	2 1/2"	10 1/4"	M	1
D* side bands	3/4"	1"	45 1/2"	M	2	X back	3/4"	5 1/4"	10 1/4"	M	1
E* top & btm. bands	3/4"	1"	28 3/4"	M	2	Y comp. board	1/4"	4"	10 1/8"	HB	1
F* cab. side edging	1/4"	3/4"	45 1/2"	M	2	QUARTER-SHEET HOLDER					
G* cab. top & btm. edging	1/4"	3/4"	28"	M	2	Z front	1/2"	2 1/2"	7 1/4"	M	1
H cab. back	3/4"	27 1/4"	44"	BP	1	AA sides	1/2"	3 1/4"	6 1/2"	M	2
SANDING-BELT STORAGE						BB bottom	3/4"	2 1/2"	6 1/4"	M	1
I front	1/2"	6"	27 1/4"	M	1	CC back	3/4"	6 1/2"	6 1/4"	M	1
J dividers	1/2"	3 1/2"	6"	M	5	DD comp. board	1/4"	4"	6 1/8"	HB	1
FULL-SHEET HOLDER						SCRAPER-BLADE HOLDER					
K front	1/2"	4"	13 1/2"	M	1	EE holder	3/4"	2"	6"	M	1
L sides	1/2"	3 3/4"	10 3/4"	M	2	SANDING-BLOCK HOLDER					
M bottom	3/4"	3"	12 1/2"	M	1	FF shelves	3/4"	3"	6"	M	2
N back	3/4"	10 3/4"	12 1/2"	M	1	GG back	3/4"	2 1/4"	6"	M	1
O comp. board	1/4"	9"	12 3/8"	HB	1	SANDPAPER CUTTER					
HALF-SHEET HOLDER						HH cutting board	3/4"	10 1/2"	12 1/16"	BP	1
P front	1/2"	2 5/8"	13 1/2"	M	1	*Initially cut parts marked with an * oversized. Then, trim each to finished sized according to the how-to instructions.					
Q sides	1/2"	3 1/4"	6 3/4"	M	2	Supplies: 4d finish nails, #8x1 1/4" and #8x1 1/2" flathead wood screws, 3" deck screws, 1 1/2x45 1/2" continuous (piano) hinge with screws, 2-3/8" round magnetic catches and strikes, 3" wire pull, primer, enamel paint, satin polyurethane, hook and loop fabric strips (we used Velcro®). For sandpaper cutter; hacksaw blades and #17x1/2" brads.					
R bottom	3/4"	2 1/2"	12 1/2"	M	1						
S back	3/4"	6 3/4"	12 1/2"	M	1						
T comp. board	1/4"	4 1/2"	12 3/8"	HB	1						

Materials Key: BP—birch plywood, M—maple, HB—hardboard.



CUTTING DIAGRAM

*Plane or resaw to thickness listed in the Bill of Materials.



Rout $1/16$ " chamfers along front mating edges of C, D, and E.

CABINET EXPLODED VIEW

SANDING-SUPPLY CENTER

sandpaper cutter is just the tool. The guides allow you to position the sandpaper square to the cutter, in this case a portion of a hacksaw blade. To make the sandpaper cutter, start by cutting the cutting board (HH) to the shape shown on the Sandpaper Cutter drawing, bevel-cutting the ends at 5° where shown on the accompanying Bevel detail. Then, cut or rout a 1/2" rabbet 1/32" deep along the ends of (HH) to fit the saw blade where shown on the

drawing. Cut two hacksaw blades to the lengths listed on the drawing, and epoxy one in each rabbet. Now, cut the 1/4"-thick strips to the lengths listed on the drawing and nail them in place.

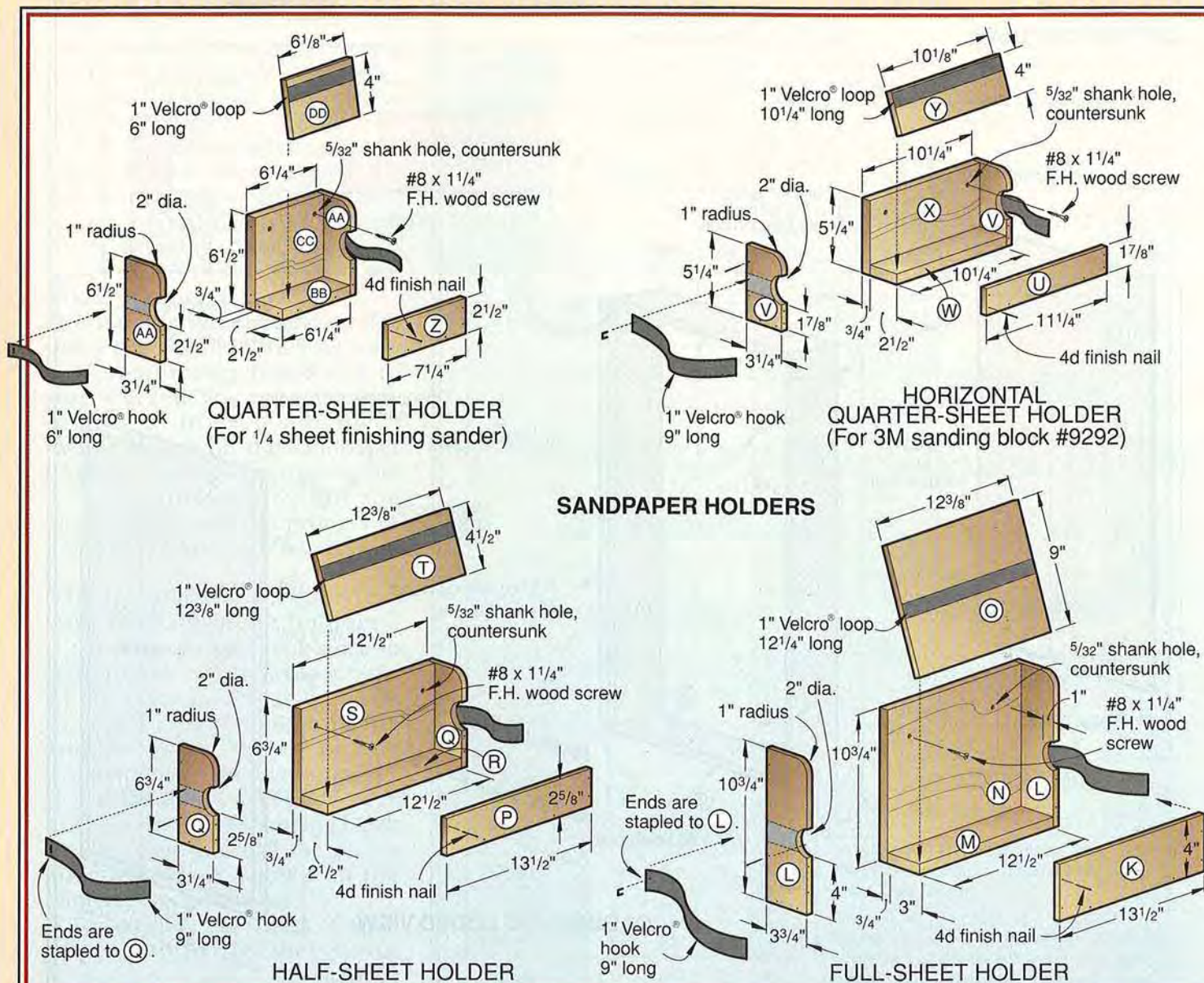
Finishing touches

1 Remove the hardware and holders from the assembled cabinet. Finish-sand all parts smooth. Mask the magnetic catch (they're nearly impossible to remove once they've been installed).

2 Apply a clear finish (we used satin polyurethane) to the door banding (D, E), the back face of the door panel (C), and the sandpaper holders. (See the opening photos for reference.)

3 After the finish dries, mask off the edging, and apply primer to the front face of the door (except the banding) and the cabinet assembly. Paint the primed areas.

4 Attach (we used an air stapler) the hook fabric strips (we used Velcro®) to the sides of the hold-

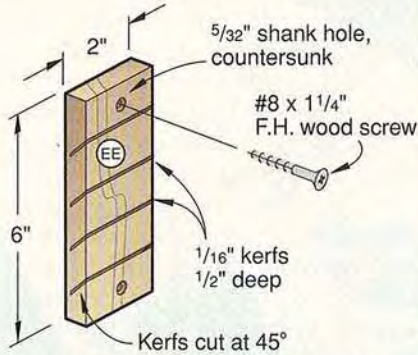




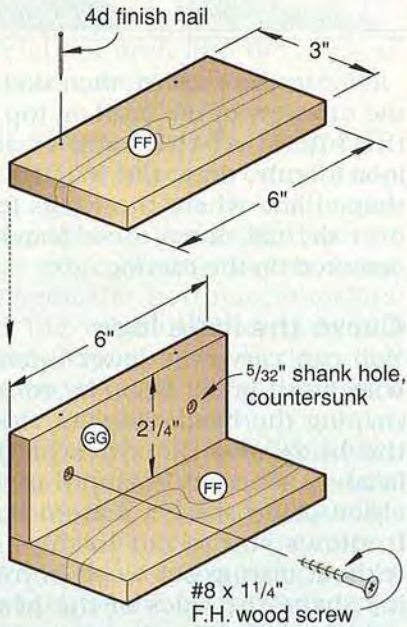
ers and the mating loop fabric to the front surface of the compressor boards.

5 Using a helper and a level, hang the cabinet on the wall, being sure to hit all available studs. Attach the holders to the front face of the cabinet back and secure clips to the back face of the door. Reattach the pull to the door, and add the sandpaper.

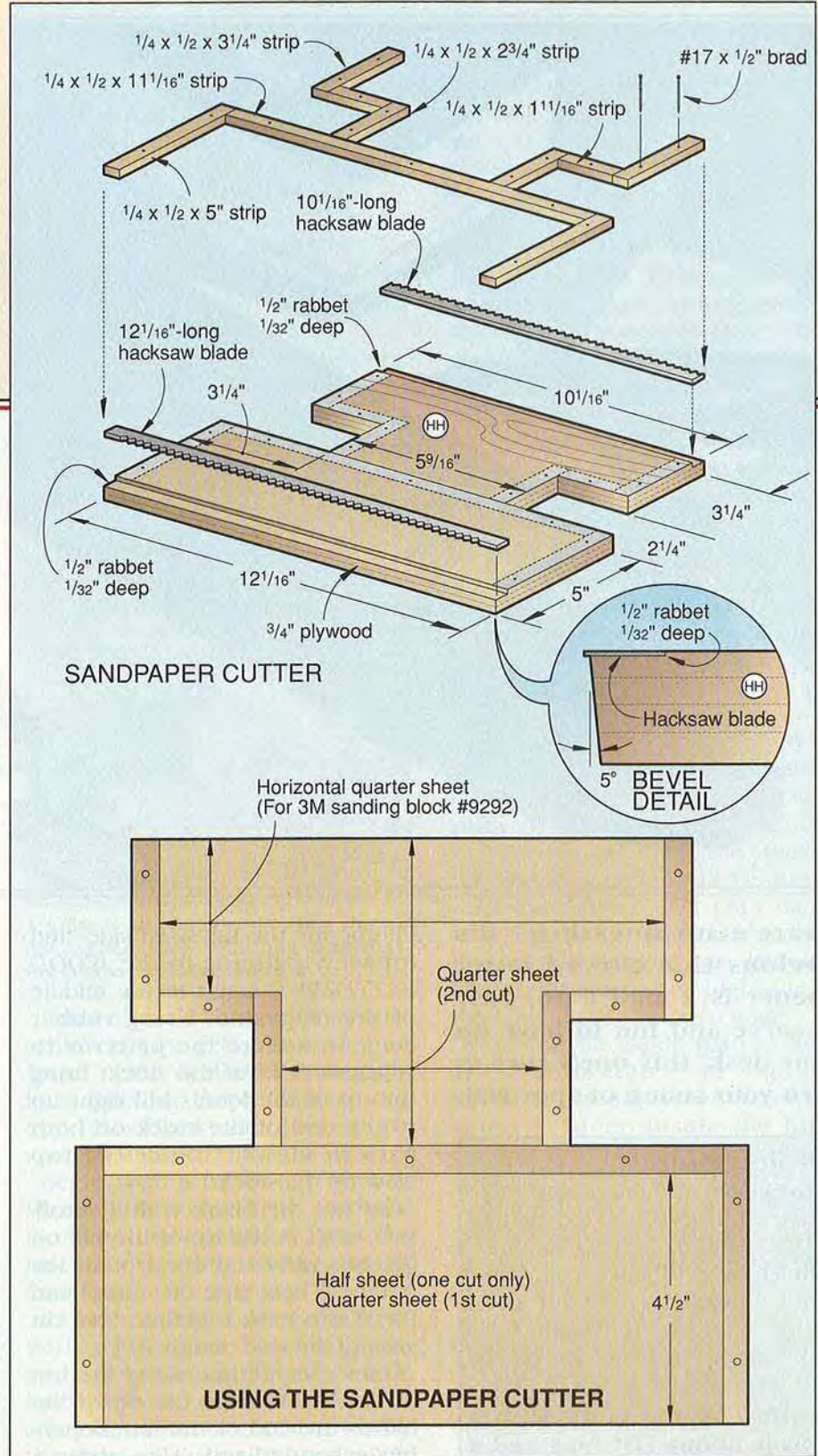
Written by Marlen Kemmet
Project Design: Jim Boelling
Illustrations: Roxanne LeMoine
Photograph: William Hopkins



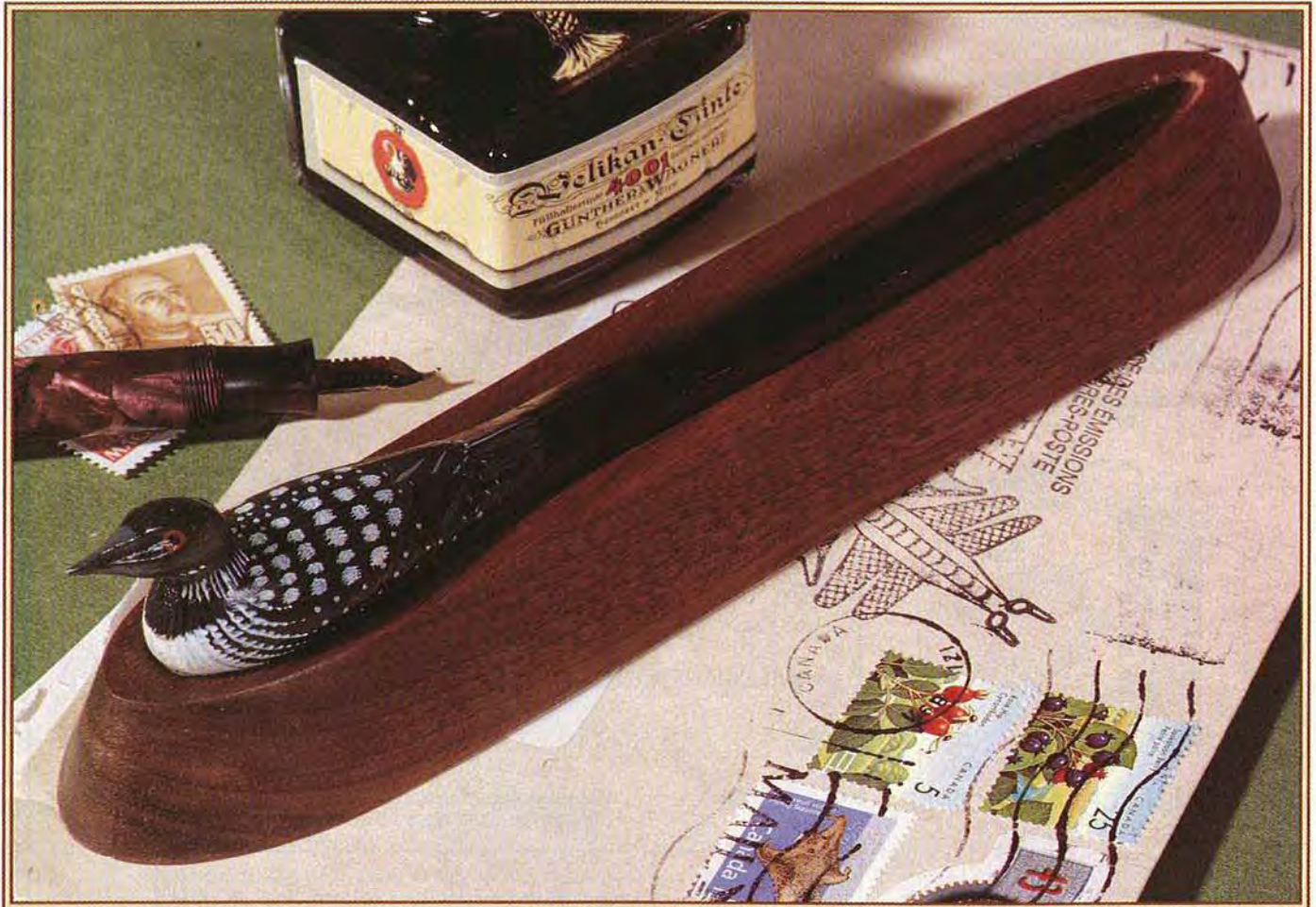
CABINET-SCRAPER HOLDER



SANDING-BLOCK HOLDER



LETTER-PERFECT



There's no question—it's obvious this carved letter opener is a mail loon. Easy to carve and fun to have on your desk, this one's sure to earn your stamp of approval.

Project prep

Stock: For a painted carving, use basswood or pine $1\frac{1}{4}\times 1\frac{1}{4}\times 8\frac{1}{2}$ ". Carve a natural-finish letter opener from walnut, butternut, or other suitable wood of that size. For the base, you'll need a piece of walnut $\frac{3}{4}\times 2\times 10$ ".

Knife: Carving knife with a blade about $1\frac{1}{2}$ " long and a sharp tip.

Gouges: $\frac{1}{4}$ " no. 5,
 $\frac{1}{4}$ " no. 7 or 9

V-Tool: $\frac{1}{8}$ " no. 12

Photocopy the full-sized side- and top-view patterns in the *WOOD PATTERNS™* insert in the middle of the magazine. Using rubber cement, adhere the patterns to adjacent sides of the stock. Bring the tip of the loon's bill right up to the end of the stock on both pattern views. Center the top view on the stock.

Cut out the blank with a scroll-saw. Start at the tip of the bill on the top view and cut around the outline. Then, tape the cutout and the waste back together, and cut around the side outline.

Draw a centerline along the top of the blank, from the tip of the bill to the end of the letter-opening extended tail. Also, draw a centerline along the bottom and each edge of the long tail.

Refer to the pattern, then sketch the top-view of the head on top of the blank. At the back of the loon's body, draw the roughly M-shaped line where the wings fold over the tail. Keep these features centered on the carving.

Carve the little loon

You can carve the letter opener with just a knife. Begin by rough-shaping the head. Stop-cut along the body and the sides of the head. (A stop cut is simply an incision made along a pattern line. It allows you to cut to the line without tearing out wood beyond it.) Shape the sides of the head, cutting to the line drawn on top. Make small shaving cuts, laying the knife blade almost flat on the wood, as shown *opposite page*.

LOON *Carve a North Country desk accessory*

Round the corners on the bill and head. As you carve the sides of the head, form slight hollows for the eyes, indicated by the shaded area on the pattern.

Take care at the tip of the bill—it's easy to chip off the end. Small cuts will serve you well here. It can help also to soak the bill with cyanoacrylate adhesive or thinned woodworker's glue.

As you carve the head and the rest of the loon, watch the grain direction carefully. On a small carving like this, even a tiny tearout can be disfiguring. If you do tear out a chip, glue it back into place with cyanoacrylate adhesive or woodworker's glue.

Stop-cut the folded wings at the back, then round the body. Start by cutting the corners on the body at about a 45° angle. Then, with light shaving cuts, pare the body to shape. Curve it from the centerline on the back to a line about two-thirds of the way down each side, shown by the dotted line on the pattern. Don't leave any flat surfaces or square corners on the body, except a small flat area on the bottom for it to sit on.

Blend the head into the body as you carve. Sand the loon smooth.

The short tale of a long tail

Carve the letter-opener blade next. Cut a plane from the top centerline to the centerline on each edge. Then, do the same between the bottom centerline and the edges, creating a diamond-shaped cross section. For best appearance, keep the edges and center ribs straight.

The blade should look like a long tail extending from the loon's body, with the folded wings laying over it. To achieve that effect, carve to the stop-cut wing line at the back of the body, letting the wings stand about 1/32" above the tail surface along the M-shaped line. It helps to undercut the edge, too.

Blend the blade into the body along the sides. Underneath, the tail flows right into the body, maintaining the slight V-shape. Blunt the pointed end slightly for safety. Sand the blade, bringing it to a sharp edge on each side.

It's ready for finishing

If you prefer a natural-finish letter opener, finish-sand, then apply the finish of your choice.

For the painted letter opener, finish-sand to 150-grit. Prime the carving with a coat of white acrylic gesso, available from art-supply or crafts-supply dealers.



A knife is all you need to carve the letter opener. Make whittling-style shaving cuts to minimize chip-out.

Paint the carving with acrylic artist's colors, also available from art or crafts dealers. Painting the loon calls for three standard colors: Mars black, titanium white, and cadmium red medium.

Begin with a base coat of Mars black. When that dries, add the loon's white markings. Paint the necklace feathers with a small liner brush (no. 0 or 1).

Represent the breast feathers with white lines flowing down and back. But don't paint solid lines. Instead, dab on a series of adjoining dots. In the area below the front of the neck, wash over the dotted lines with thinned white to create a shadow effect.

Now, add the distinctive white markings on the back. Paint them as rectangles with ragged ends. An easy way to do that is to paint each as a series of adjoining lines using your small liner brush. The loon shown has six rows of markings from front to back.

Scatter random white dots on the lower sides. Don't overdo it, and don't worry about making them all the same size. Paint a few along the center of the back, too.

Mix a dark gray (about half titanium white and half Mars black), and paint the bill. As an extra touch, add a few streaks of gray near the tips of the wings, and paint tailfeathers about 1/2" onto the long tail. For the loon's eyes, paint a dot of cadmium red medium where shown, then center a slightly smaller dot of black on it. Protect the paint job with a clear, semi-gloss coating.

Make a stand for the loon

To build the base, affix a photocopy of the pattern to a 3/4x2x10" piece of stock (we used walnut). Center the pattern on the stock—the finished piece will be larger than the pattern. Tilt your band-saw table to 20°, then saw around the outside pattern line, keeping the workpiece on the high side of the table. Sand the sawn edge.

Stop-cut the inside pattern line. Then, with a no. 7 or 9 gouge about 1/4" wide, carve a recess about 1/8" deep inside the line. Smooth the bottom of the recess with a shallower gouge, say a no. 5, and cut the edge straight and true with the knife or a V-tool. Set the letter opener into the recess to be sure it fits.

Sand the base, including the inside of the recess. Slightly round all edges. Apply a clear finish. When it's dry, set the loon letter opener on the base. ♣

Project Design: Robert E. Whiteside
Illustrations: Roxanne LeMoine
Photographs: John Hetherington

Woodworker's Marketplace

ONE-MAN SAWMILL

Turns Your Timber Into

CASH!



30-Day Free Trial!

Call NOW for FREE FACTS!

1-800-942-4406 ext. SW27

TIMBERKING, INC. Dept. SW27
1431 N. TOPPING, KANSAS CITY, MO 64120

SPIRAL STAIRS

Coast to Coast Delivery

FREE ENCLOSED
TREAD ENDS
\$220.00 VALUE

Save 30 % to 50%
Stock & Custom Stairs
Strong Steel Frame
Oak or Brass options
3'6" to 7' Diameter
Easy To Install

FREE BROCHURE
Call or Write -

SALTER INDUSTRIES

PO BOX 183 EAGLEVILLE PA 19408
610-631-1360 FAX 610-631-9384



Circle No. 1995

SHAKER PEGS CANDLE CUPS MUG PEGS

\$15.95 per 100, prepaid.
Wide selection of other
wood products.

Catalog \$1.00 or free with order.

Benny's Woodworks

P.O. Box 840, Dept. WD77

Shelbyville, TN 37160

1-615-684-8995 • 1-800-255-1335



Shaker Peg



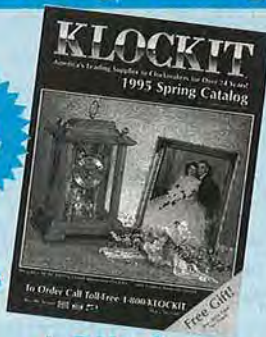
Mug Peg

Circle No. 810

FREE

Clockmaking Catalog

25th
Anniversary



Clocks
Make

Treasured Gifts!

Your complete source of clockmaking supplies. Classic wall, mantel and grandfather designs available in kits or easy-to-follow plans. Clock movements, dials, pendulums fit-ups and more. Kits are easy as 1-2-3. Sand, assemble and stain. It's that simple.

Send for your **FREE** catalog today.
Or call 1-800-556-2548.

Name _____
Address _____
City _____
State _____ Zip _____

KLOCKIT Dept. WD95
P.O. Box 636, Lake Geneva, WI 53147

Circle No. 2335



*FREE PLANS

for Woodworkers



*FREE

Plans for:

- Sliding Glass Door Lock
- Yard Whirlygig
- Trapeze Tumbler
- Two Table Saw Cars
- Dalmatian Decoration

*Send \$2.00 for our catalog and we will include a FREE project plan featuring full sized patterns for six different projects (\$7.99 value). Our catalog offers over 400 woodworking plans for furniture, country projects, toys, lamps, whirlygigs, and many other indoor and outdoor projects. We are the #1 plan source for the woodworking hobbyist.

I am enclosing \$2.00. Please send catalog and plans for six projects.

Name _____
Address _____
City _____ State _____ Zip _____

Meisel Hardware Specialties
P.O. Box 70 W9
Mound, MN 55364-0070

Circle No. 401

MAKE IT MOBILE

WITH HTC MOBILE MACHINE BASES

For a FREE
Full-Color Catalog
of HTC's Complete
Product Line Call:
1-800-624-2027



Circle No. 1245

SWEDISH SILICON STEEL

BAND SAW BLADES



Electro Heat
Induction
Hardened
Milled Sharp
Teeth

BEST?
FREE
CATALOG
Bi-Metal - M-2/M-42

Flex & Hard Back - PC: Series
AS: Series: Veneer Bands

TIMBER WOLF BANDS

HIGH PERFORMANCE PALLET & BAND MILL BLADES

SUFFOLK MACHINE 1-800-234-SAWS 12 Waverly Avenue
Patchogue, NY 11772

18 YEARS OF GROWTH NATIONWIDE

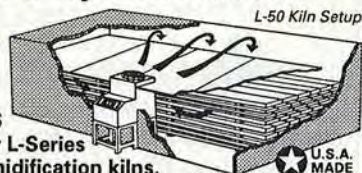
Circle No. 1370

Woodworker's Marketplace is a section of advertisers offering products by mail. Please contact the advertisers directly or use the number below each ad to request information through the Woodworker's Resource section.

Quality Kiln Drying

It's Easy and Affordable with a Nyle DH Kiln!

Call today for **FREE FACTS** on our L-Series dehumidification kilns.



L-50 Kiln Setup

U.S.A. MADE

FINANCING AVAILABLE

- ◆ Made for small operations
- ◆ Compact and easy to operate
- ◆ Unbeatable power and quality

nyle

800-777-NYLE
(207) 989-4335

P.O. Box 1107, Bangor, ME 04402-1107 USA

Circle No. 1260



The Kreg Jig

"Cuts project time in half, eliminates the need for an expensive arsenal of clamps and is simple to use. The Kreg Jig outperformed its competition by a wide margin. It's worth the investment."
Wood Magazine, Jan. 1995

DISCOVER THE POCKET HOLE ADVANTAGE



THE POCKET HOLE PROFESSIONAL

Discover the pocket hole secret for yourself. 30 day trial. Order today! Free catalog!

800-447-8638

Circle No. 877

CONVERTIBLE SUNSPACE



INSULATED WINTER SUNROOM CONVERTS TO A SUMMER SCREEN ROOM!

MOUNTS READILY ON DECKS, PATIOS, OR TIES.



Send \$2 for Color Catalogue, Prices, SENT FIRST CLASS MAIL.

VEGETABLE FACTORY, INC.,
P.O. Box 1353, Dept. WOO
Stamford, CT 06904-1353

Circle No. 2078

SECO DUST COLLECTORS



UFO-40

1HP, 500cfm, one 4" inlet, 1.5ft capacity bag, 40lbs.

~~\$150~~ \$120



LR76429

UFO-90

1HP, 610cfm, one 4" inlet, 2.5ft capacity bag, 75lbs.

~~\$190~~
\$167

~~\$288~~
\$255

UFO-101

2HP, 1182cfm, two 4" inlet, 5.24ft capacity bag, 135lbs.



1-800-CAL-SECO. ORDER ONLY



SECO INVESTMENTS COMPANY
WOODWORKING DIVISION

145 W. Hillcrest Ave., San Bernardino, CA 92408
Tel: (909) 889-1799 Fax: (909) 885-1799

Circle No. 91

Bunk Beds



Easy to Operate Part Time

Right Out of Your Home!

"I started making bunk beds in my garage 7 years ago with just \$120 of tools and no woodworking experience. Over the years I have successfully built it into a substantial business."

Robert O'Reilly, Founder

Clear UP TO \$300/Day

With the help our video **HOW TO MAKE A BUNK BED** and step by step Operations Manual, you can do the same thing. There is plenty of business almost everywhere.

SOME EXAMPLES:

- \$185 Profit on a \$269 Sale
- \$273 Profit on a \$477 Sale
- \$411 Profit on a \$666 Sale

Very Low Startup Costs

Bunks, Inc 7713 Morgan S Dept CD
Mpls MN 55423 800-382-3180 Ext 124

Circle No. 1500

New TRIMMER ON WHEELS!

Rolls "light as a feather" on two **BIG WHEELS!**

TRIMS far easier, better, more precisely than hand-held trimmers. Plus **MOWS** everything from whole lawns (even wet!) to tough waist-high growth with ease! Rocks, roots, stumps, etc., do it no harm because the "DR" has no steel blade to bend or dull. Perfect for ALL mowing and trimming around smaller properties, vacation homes, etc., or for finish-up mowing/trimming after riding mowers on larger parcels. A delight for anyone to use!



TOLL FREE
1(800)
438-3223

Please mail this coupon today for **FREE DETAILS** about the Revolutionary **DR® TRIMMER/MOWER** including prices of Manual, Electric-Starting and All-Electric Models, "Off-Season" Savings now in effect, and 30-Day Risk-Free Trial. There is no obligation.

Name _____ WOO
Address _____
City _____ State _____ ZIP _____

To: **COUNTRY HOME PRODUCTS®**, Dept. 707
Ferry Road, Box 89, Charlotte, VT 05445

© 1995 CHP, Inc.

Woodworker's Marketplace

BROKEN ARROW DESIGNS

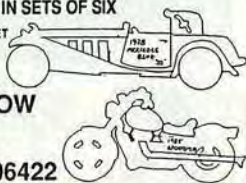
PATTERNS FOR YOUR SCROLLSAW
NEW AND EXCITING DESIGNS

- ◆ 1920's Cars
- ◆ 1930's Cars
- ◆ Motorcycles
- ◆ Leaves
- ◆ Woodland
- ◆ Ocean
- ◆ Farm
- ◆ Zoo

SOLD IN SETS OF SIX

Only \$7.95 PER SET
PLUS \$1.00 S & H

CHECK OR M.O. TO:
BROKEN ARROW
DESIGN
PO BOX 591
DURHAM, CT 06422



Circle No. 324

→ AMITY ← Water-Based Finish Solutions

The most complete line of water-based stains, sealers, topcoats, glazes, fillers, more. Perfect for all woodworking projects.

- Easy-to-use; safe
- Clear & tough
- Quick clean-up

Sample Kits Available - Call for details or for catalog:

AMITY Industrial Water-Based Finishes

P.O. Box 36, Ste. 17, Waterloo, WI 53594

1-800-733-1776

The Only Complete Water-Base Line!

Circle No. 202



Supergrit® SANDPAPER

Only 35¢ Each



FOR BOSCH 87000
DETAIL SANDER
Hook & Loop, Vacuum
Alum. Oxide \$17.50/50
Grits 50, 80, 120,
Assorted.

- DISCS - H&L, PSA, VAC
- DRUM SANDER HOOK & LOOP ROLLS
- BELTS - AO, SC, ZIR
- ROLLS - Jwt, Xwt, Cloth A, E, Fwt Paper
- SHEETS - AO, SC, GARNET, EMERY

For Wood, Autobody and Metal

FREE 28 PAGE CATALOG
& Incredible close-out sheets.
Best prices and shipment.

RED HILL CORP.

P.O. BOX 4234

GETTYSBURG, PA 17325 800-822-4003

Circle No. 1267

CHOICE OF PROS NOW AVAILABLE AT 40% LESS!

INTRODUCING THE NEW
WAGNER L609
MOISTURE METER...



L 4.5" x
W 2.75" x H 1.0"

WAGNER
ELECTRONICS

"The Choice of the Pros"

1-800-944-7078

326 Pine Grove Road
Rogue River, OR 97537
(503) 582-0541 Fax (503) 582-4138

© 1995 WEPI

Circle No. 1285

Be a Furniture Restoration Specialist

Discover Minuteman

Complete
Shop Concept

Strip • Repair
Touch-Up • Fake Grain
Marbelize • Resilver • Refinish
Duplicate Parts • Repair Frames • Veneer

Why Minuteman?

- Proven, Low-Risk, Cash Return
- Low Start-Up Costs; Expert Training
- Environmentally Friendly System
- Wholesale Supplies
- Handy Sample Kits Available
- Systems From \$1,500-\$11,000
- 28 Years Experience; 3,000+ Shops

No Experience Necessary

- ◆ Part-Time, Full-Time ◆
- ◆ Ideal for Men & Women

→ Try it before you buy it! ←

FREE 2-Day Career Seminar

No Obligation to buy!

Register Now - Limited Seating!

Call For FREE Catalog

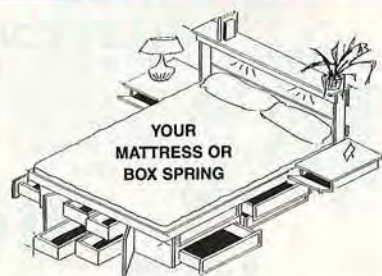
MINUTEMAN, INC.

Ste. 17, P.O. Box 8, Waterloo, WI 53594

1-800-733-1776

Circle No. 1661

Anderson™ ULTIMATE BED



PUT UP TO 16 DRAWERS
UNDER YOUR BED!

World's most advanced state-of-the-art bed. Ready to assemble kit. Made of pine and aspen. Cedar lined drawers glide on ball bearings. 6' long center drawers. Optional headboard, side tables, and revolutionary hydraulic mattress. Save space! End clutter! Eliminate underbed cleaning! Satisfaction Guaranteed. From \$159.00 FREE 44 page catalog.

FREE CATALOG 40
1-800-782-4825

Circle No. 1795

Woodworker's Marketplace is a section of advertisers offering products by mail. Please contact the advertisers directly or use the number below each ad to request information through the Woodworker's Resource section.



FREE Woodworking Catalog
BIG savings on wide selection of:

- Band Saw Blades - hard edge, bi-metal and wood band
- Fret/Scroll Saw Blades - 5" plain and pin end
- Sanding Belts and Discs
- Books, Lettering Guides, etc.

Walnut Creek Woodworking Supplies
 3601 W. Harry, Dept. WM, Wichita, KS 67213
800-942-0553

Circle No. 954

Classic Heirloom Cradle
 Two Cradle Plans
 One for Babies
 One for Dolls



You can easily build this classic cradle which will become a cherished family heirloom to pass from generation to generation. Two sizes available... Baby or Doll.

Full Size Plans
 Baby size Plan (21 x 35) \$14.95 ppd.
 Doll size Plan (10 x 18) \$8.95 ppd.

Spindles available in Oak or Maple. See our catalog which is sent free with your order.

M/C VISA orders call toll-free 1-800-292-8296
 ARMOR Box 445 A, East Northport, NY 11731

Circle No. 315

HARDWOODS
EXOTIC & DOMESTIC
OVER 75 SPECIES
 LUMBER • VENEER • TURNING STOCK

COLLECTORS SAMPLE KIT
 30 GORGEOUS WOODS
 Exotic & Domestic from Around the World
 1/2" X 3" X 6" Sanded Finish **\$39.00**
*ppd in Cont US

Together with Book of Fine Hardwoods \$51.00
*ppd in Cont US
 Over 70 woods shown in full color. Charts compare physical properties. 60 pgs



1-800-423-2450
WOODWORKERS Source
 5402 S. 40th Street • Phoenix, AZ 85040
SATISFACTION GUARANTEED

Circle No. 598, 2090

Free Workshops • Prizes • Hundreds of Products • Seminars by Mastercraftsmen

See the Widest Variety of Woodworking Products All Under One Roof!!



★THE WOODWORKING SHOWS★
 tools • supplies • education

FREE BROCHURE!

1995/1996 SHOWS

• Atlanta	• Cleveland	• Indianapolis	• North Jersey	• Syracuse
• Baltimore	• Columbus	• Kansas City	• Portland	• Tampa
• Buffalo	• Delaware Valley	• Massachusetts	• Quad Cities	• Twin Cities
• Charlotte	• Denver	• Milwaukee	• Seattle	• Washington, D.C.
• Chicago	• Detroit	• No. California	• So. California	• plus others!
• Harrisburg		• St. Louis		

Call for free brochure Monday - Friday 8:30 am - 5 pm Pacific Time
 1-800-826-8257 or 310-477-8521

Circle No. 2095



pierced tin

Add that **Distinctive Look** to your woodworking projects. Quality handcrafted, yet reasonably priced panels. Many finishes & designs. Do-it-yourself materials, too!
 Colorful catalog \$5.00; catalog with 12-pc. sample-pack \$19.95 ppd.
 MasterCard/Visa accepted.

Since 1979
Country Accents®, P. O. Box 437, Dept. WD/95,
 Montoursville, PA 17754 • Ph. (717) 478-4127

Circle No. 1910

FREE CherryTree Woodcrafting Catalog!

Hundreds of hard to find Wood Parts, Clock Movements, Plans, Toys, Whirligigs, Paints & Brushes, Tools and more, at affordable prices with guaranteed quality & Fast delivery!



NAME: _____
ADDRESS: _____
CITY: _____
STATE: _____ **ZIP:** _____

Mail to:
 Cherry Tree • Box 369-WO8
 Belmont, OH. 43718
 or call TOLL FREE
1-800-848-4363 ext. WO8

Circle No. 1420



Woodworker's Marketplace

WILLIAM ALDEN COMPANY WHOLESALE DIVISION

#7 Stanley Bailey Jointer Plane
Your Choice - Regular or Corrugated Base **\$63.99**
(22" Long, 2 1/2" Bld. w.)

#60 1/2 Block Plane (6" L, 1 1/2" Bld. w.) **\$25.39** #9 1/2 Block Plane (6 1/2" L, 1 1/2" Bld. w.) **\$26.73**

27 STUART ST. BOSTON, MA 02116
1-800-249-8665
Fax 1-800-984-4483 24 hours/7 days
Mon. - Fri. 8am-4:30pm E.S.T.

SHIPPING & HANDLING CHARGES		Checks, Money Orders or  
If your purchase totals: Your S&H Charges:		
\$0-\$50.00	\$3.50	
\$50.01-\$150.00	\$5.00	
\$150.01-\$500.00	\$7.00	
Over \$500.00	FREE	

Circle No. 801

Oscillating Spindle Sanders for discriminating woodworkers who demand the best

FREE Color Catalog
1-800-971-5050



CLAYTON
MADE IN USA

Circle No. 18

CORIAN®

THE NEXT GENERATION OF CRAFTSMANSHIP

FOR THE FIRST TIME EVER

You Can Own a 16 Piece CORIAN®
Collector Sample Kit. PLUS
Gain Access to Larger Stock For All
Your Workshop Projects

The Sample Kit comes complete with 16 of the
most luxurious granite and solid colors available.

16 piece kit \$29.95

\$5.95 for S&H
Add 5.5% Sales tax in Nebraska

ORDER NOW... Get a FREE fabrication guide
direct from a certified CORIAN® fabricator!

1-800-721-7501 

or mail your order to: Solid Surface Sales,
224 N. Main, Suite 5, Fremont, NE 68025

YOUR SOLID SURFACE SUPPLY
HOUSE FOR WOODWORKERS

Circle No. 443

AMAZING SCROLLSAW FRETWORK PATTERNS

Easy to advanced designs

Clocks
Photo
frames
Jewelry
boxes
Candle
holders
Furniture



Silhouettes
on
Christmas
religion
farming
western
nature
transportation
& more.

Books
Saw blades
Hardwoods

FREE
catalog

1-800-470-9090

WILDWOOD
DESIGNS
P.O. Box 661-S
Richland Center
WI 53581

Circle No. 475

Pen Turning Manual

Contents: ●wood selection to marketing
●work station-dust collection system with
drawings ●trouble shooting ●Spiral bound
●7 illus ●35 p. Cost \$9.95 US Ppd.

HUT Perfect Pen Polish Introductory Special

HUT Products announces the release of
their new Perfect Pen Polish, a two step
lathe application process for pen finishing.
Satin Gloss or High Gloss Bar @ \$4.95 each + \$2.50 S&H
HUT PPP Special - Both Bars @ \$7.90 + \$2.50 S&H
Buy both Pen Manual & HUT PPP Spec. & we pay S&H

HUT Products For Wood

15361 Hopper Road - Columbia MO 65284

For orders or free wood turning/pen supply catalog

CALL 1-800-547-5461

Circle No. 230

Put some Uncommon tools to work for you and achieve Uncommon results!

Our tools are uncommon, and unmatched, in quality,
variety and value. Over 60 pages of woodworking
tools provide you with the largest selection of router
tables and accessories available in the U.S., as well
as, many other unique and useful tools. More than a
catalog, it's also a wealth of information that will
enlighten and inform anyone who works with wood.

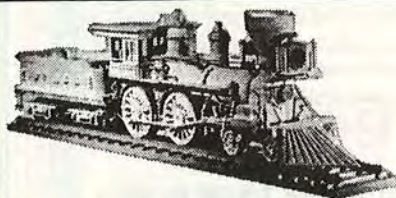


WOODHAVEN

Call Today!
800-344-6657

5323 W. Kimberly
Davenport, IA
52806-7126

Circle No. 1290



Build a wooden 4-4-0 Steam
Engine and Tender over 48" long.
More than 100 pages of drawings
for more than 350 pcs and
instructions. \$29.95 US Ppd. WI
residents add 5% sales tax.

GPH Enterprises
P.O. Box 51429
New Berlin, WI 53151-0429

Futon Frame Plans



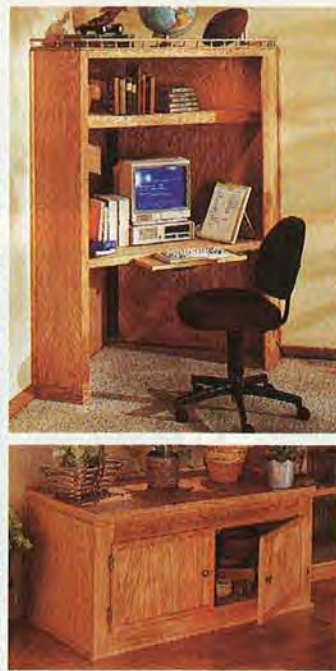
Style A Twin, Full & Queen Size. \$12.95 + \$3.00 S&H
Style B Twin, Full & Queen Size. \$12.95 + \$3.00 S&H

NO SPECIAL HARDWARE NEEDED (Please indicate Style A or B)

Specialty Furniture Designs
797 W. Remus Road, Dept. W-33
Mt. Pleasant, MI 48858 • 1-800-892-4026
MI Sales Tax 6%

Visa/MC/Discover Accepted
Color Catalog \$3.00 FREE with order.

Circle No. 445



Create Your Own Custom Built-Ins

Examine *Built-In Projects For the Home* **FREE** for Two Weeks!

Discover how to customize any area of your home with an attractive built-in using this revolutionary step-by-step book. *Built-In Projects for the Home* is packed with do-it-yourself projects that provide useful storage, visual appeal and efficient use of unique spaces in your home.

We Show You How

Over 300 full-color photographs and clear instructions take you from start to finish. *Built-In Projects for the Home* begins with project previews and how to adapt them to your needs. Next, we'll show you some basic built-in procedures. Then, using everyday tools and materials, and easy techniques, you'll learn how to construct:

- Recessed Shelving
- A Room Divider
- A Platform Bench
- An Entertainment Center
- A Corner Cabinet
- And more!

Preview FREE For Two Weeks

We're confident that you'll find *Built-In Projects for the Home* so easy-to-read, practical and informative that we'll give you two weeks FREE to preview this 8 1/2" x 11", 128-page hardcover volume. Look it over. Study the projects. Then decide if you want to keep it. Remember, there's no obligation.

Order Now!

To receive your free gift and your first volume in the Black & Decker® Home Improvement Library™, just complete the Free Preview Card and drop it in the mail. If the card and coupon are missing, write to: Black & Decker® Home Improvement Library™, 5900 Green Oak Drive, P.O. Box 3070, Minnetonka, MN 55343-0970.



Receive A Free Gift
As a thank-you for simply previewing *Built-In Projects for the Home*, we'll send you a Black & Decker® Hardware Wall Chart. This big reference guide lists common hardware pieces and shows them actual size so there's no guesswork on your next project.

**NO RISK!
NO
OBLIGATION!**

If order card is missing, detach and mail for your two-week preview!

FREE

BLACK & DECKER®
HOME IMPROVEMENT LIBRARY™

WW44

Preview Coupon

Mail this coupon to:
Black & Decker® Home Improvement Library™
5900 Green Oak Drive
P.O. Box 3070
Minnetonka, MN
55343-0970

YES! Please send me *Built-In Projects for the Home* from the Black & Decker® Home Improvement Library™ to preview **FREE** for two weeks. I need send no money now and I will receive the Hardware Wall Chart as a **FREE GIFT**. If I decide to keep the book, I will pay \$14.95 plus postage and handling and have the opportunity to preview other books from the Library **FREE**. If I don't keep *Built-In Projects for the Home*, I'll return it with no obligation, keep the **FREE GIFT** and pay nothing.



Signature _____ (all orders must be signed)
Please Print
Name _____
Address _____
City _____ State _____
Zip _____ Phone (____) _____

Woodworker's Marketplace

WOODWORKING BOOKS OVER 300 HARD TO FIND TITLES

Looking for information? We have it!

The Best Books on

CARPENTRY • BLACKSMITHING
FURNITURE • CABINET MAKING
STAIRBUILDING • JOINERY • CARVING
COACHBUILDING • FINISHING
WOOD & TIMBER • TOOLS
TOYS & GAMES • TURNING • VIDEOS
Send \$1.00 for two year catalog subscription

SPECIALIST PUBLISHERS & BOOKSELLERS



LINDEN PUBLISHING

SINCE 1977

3845 N. BLACKSTONE
FRESNO, CA 93726

Circle No. 1140



Add a touch of charm to your garden, as well as the songs of spring year round. This handsome redwood feeder has four seed compartments to attract all the little guys, from Cardinals to Wrens. 24 pages of plans and specifications make for easy construction. This style and quality seem in stores for \$379.50. A great item for backyard family enjoyment, the craft shows or as a gift. Size 12x30 in. overall.

BIRD FEEDER

PLANS...\$18.95 + S&H KITS...(106 precision cut pcs.) \$127.50 + S&H
Send ck or money order or call 800-421-8221, Visa, Mcard, add 6%
GOOSE POND MILL
P.O. Box 578, Great Falls, VA 22066-0578

Circle No. 1033

Quality MECHANISMS For Making WOODEN BARREL

- ✎ Pens
- ✎ Pencils
- ✎ Roller Balls
- ✎ Fountain Pens

plus other related items.

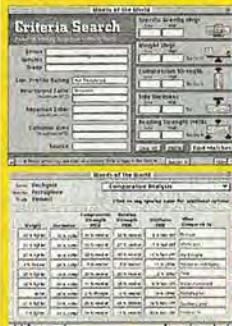
Wholesale/Retail

Call or Write:

BereaHardWoods.co.
6367 Eastland Rd. Brookpark, Ohio 44142
216-234-7949 Master Card/Visa

Circle No. 510, 1900

WoodMatch CD (floppy version also available) Discover the perfect woods for your work!



WoodMatch is a powerful, user-friendly, multimedia resource tool providing detailed information on 350 wood species and products. WoodMatch is designed for architects, woodworking firms, hobbyists, schools, and wood researchers. Features include:

- Data on more than 300 temperate and tropical species, including all the world's commonly-traded, and many lesser-known, species. Plus, information on 50 wood-based composite products.
- Aesthetic, mechanical, physical and woodworking properties—up to 85 categories of information on each species! Thousands of common names. Environmental status of hundreds of woods. Full-color, high-resolution pictures of every wood and composite product. Color maps showing the location of each species.
- Search for woods fitting any combination of color, common use, environmental status, weight, hardness, and more!
- Instantly compare five common properties of any one species to any other nine species you choose, or compare appearances of nine different woods at one time.
- A real database. Store your information on woodworking properties, sources, etc.
- All numerical data in metric and English. A truly international product.
- Extensive wood glossary, on-line tutorial, data on certified "sustainable" wood sources and environmentally-sensitive wood products, and more!

WoodMatch is available for PC and Mac computers, in CD-ROM or floppy versions!

\$39

Woods of the World Pro, covering 950 species, is available for \$249.

We also sell CD-ROM drives and software bundles.

Tree Talk, Inc.
P.O. Box 426, 431 Pine St.
Burlington, VT 05402 USA
PHONE 800-858-6230
FAX 802-863-4344

30-day money back guarantee!

"The most important computer resource on wood you can own..." *Workbench Magazine*
"A fabulous concept..." *John Arno, Fine Woodworking Magazine*
"We tried it, we liked it..." *Popular Woodworking Magazine*
"A real winner...a great deal of extremely useful information about wood..." *G. Berlyn, Yale University, J. Sustainable Forestry*

For All Your Woodcarving & Sign Carving Needs

Terrco provides a full line of machine carving and sign carving equipment. Beginning models are the T-110 single spindle bench carver and our CM614 single spindle sign carver.

Intermediate models include the K-Star, a two-spindle heavy duty bench model, and the Northstar, a heavy duty floor model available in one to eight spindles.

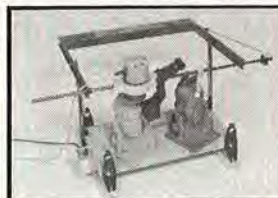
Our advanced model is our Master Carver series, which is an extremely heavy duty floor model with from eight to forty spindles.

Write or call for more information.

Circle No. 2150

Terrco, Inc.

222 1st Ave. NW
Watertown, SD 57201
USA
(605) 882-3888
Fax (605) 882-0778



Model T-110 Dupli-Carver



Model CM614 Sign Carver



Multi-Spindle Carving Machine

STEVE WALL LUMBER CO.

Quality Hardwoods and Woodworking Machinery For The Craftsman and Educational Institutions

Ash	..... 4/4	Select	2.15	.....	\$67.00
Basswood	..... 4/4	Select	1.70	.....	\$57.00
Birch	..... 4/4	Select	2.25	.....	\$69.00
Butternut	..... 4/4	1C	1.85	.....	\$59.00
Cherry	..... 4/4	Select	3.30	.....	\$83.00
Hickory - Pecan	..... 4/4	Select	1.80	.....	\$61.00
Mahogany (Genuine)	..... 4/4	Select	3.30	.....	\$86.00
Maple (Hard)	..... 4/4	Select	2.35	.....	\$71.00
Maple (Soft)	..... 4/4	Select	1.80	.....	\$59.00
Poplar	..... 4/4	Select	1.55	.....	\$54.00
Red Oak	..... 4/4	Select	2.35	.....	\$70.00
Walnut	..... 4/4	Select	3.00	.....	\$85.00
White Oak	..... 4/4	Select	2.30	.....	\$69.00
Cedar (Aromatic Red)	..... 4/4	1C+Btr.	1.55	.....	\$56.00
Cypress	..... 4/4	Select	2.10	.....	\$64.00
White Pine	..... 4/4	F.G.	1.10	.....	\$45.00
Yellow Pine	..... 4/4	Clear	1.55	.....	\$55.00

Above prices are for 100' quantities of kilndried rough lumber sold by the Bd. Ft. FOB Mayodan, NC. Call for quantity discounts. Other sizes and grades available.

Above prices are 20 bd. ft. bundles of clear kilndried lumber 3"-10" wide x 3'-7' long (Random widths & lengths) Surfaced 2 sides or rough. Delivered UPS prepaid in the Continental U.S.

LOG RUN SPECIALS

100 bd. ft. Bundle
4/4 Cherry \$120
4/4 Walnut \$140
Add \$20 for S2S
Motor Freight Only
FOB Mayodan

STEVE H. WALL LUMBER CO.

BOX 287
MAYODAN, N.C. 27027
910-427-0637
1-800-633-4062
FAX 910-427-7588

Send \$1.00 For Lumber Catalog

Circle No. 592

Woodworker's Marketplace is a section of advertisers offering products by mail. Please contact the advertisers directly or use the number below each ad to request information through the Woodworker's Resource section.

SUMMER LIQUIDATION!!!

STEEL BLDGS.



SAVE UP TO 45%

Buy factory Direct: 16 X 24 • 20 X 26
Build it yourself !!! 25 X 38 • 40 X 72

The Perfect Building For All Your Needs !!!

CALL TODAY **800-888-4606** **STEELMASTER.**

Circle No. 2030

FREE!



The most complete **Woodworking Catalog!** Now featuring over **500 NEW** items, and over 4,500 hard-to-find products for your next woodworking project!

Dept. 53112

Call 1-800-403-9736 Today!

41 Years of Service



The Woodworkers' Store

Hardware, Wood, Tools & Know How

Circle No. 965

Van Dyke's

Presents a **Catalog** with supplies for upholstery, antique restoration, wood working, caning, brass hardware, carvings and many related trades!

40 Years in Creative Arts & Trades

Many Hard-To-Find Items!

SEND \$1.00 FOR CATALOG TO:
VAN DYKE'S RESTORERS
Dept. D55, P.O. Box 278, Woonsocket, SD 57385

Supplies for Creative Arts and Trades

Circle No. 2077

CHRISTMAS PROJECTS

Santa's Busy Workshop \$16.95

Our most popular Santa stands 66" tall with actual arm movement. Everyone will love to watch santa and his elves making christmas toys.

A - Snow Family \$5.95
B - Snow Buddy \$3.99
C - Five Elves \$5.95

!!!!SAVE!!!!
All three plans for \$13.95

Potty Chair \$9.95 With T.P. holder & magazine rack

Bachelors Chair \$8.95 Stepstool, Ironing Board & Chair

Octopus Rocker \$8.95 Easy-to-build and fun-to-decorate.

Bear Clothes Chair \$12.95 This cheerful little chair has hooks for hanging, and a lift-up seat for extra storage.

The Woodworkers Source for Plans, Patterns and Projects

MC/VISA 1-800-576-9174
CATALOG \$4.00 - FREE with \$20 order
Foreign orders add 35% S/H IN Res. add 5%
Add \$4.00 S/H U.S. Funds Only

Creativecraft Plans
11420 E. Bayhill Way, Ste. 59
Indianapolis, IN 46236

An Authorized Dremel Distributor

Circle No. 330,331

Make Your Own Lumber!

WITH A WOOD-MIZER PORTABLE SAWMILL

Sawing your own lumber lowers costs and improves quality. LT25 mills without trailer from: **\$6995!**

All-products mill, kiln, and edger catalog*: \$2.00; 60-minute video: \$10.00.
*Catalog has mill specs.



Over 13,000 Sawmills World-Wide!

1-800-553-0219

Wood-Mizer Products, Inc.
8180 West 10th St., Dept. G093; Indianapolis, IN 46214-2400

Circle No. 94

The amazing walk-behind brush cutter!

The DR® FIELD and BRUSH MOWER

CLEAR & MAINTAINS meadows, pastures, woodlots, wooded and rough non-lawn areas with ease. CUTS tall grass, weeds, brambles, tough brush and saplings up to 1" thick.

CHOPS/MULCHES most everything it cuts. Leaves NO TANGLE of brush to pick up like hand-held brushcutters and sicklebar mowers. Perfect for low-maintenance wildflower meadows, European-style woodlots, walking paths, or any area you only want to mow once a month or once a season!

- Self-Propelled
- Mows up to 1/2 acre per hour!

8 HP

TOLL FREE 1(800) 438-3223

Please mail this coupon TODAY for complete FREE DETAILS of the DR® FIELD and BRUSH MOWER including prices, specifications, and "Off-Season" Savings now in effect. There is no obligation.

Name _____ WOO
Address _____
City _____ State _____ ZIP _____

To: COUNTRY HOME PRODUCTS®, Dept. 707F
Ferry Road, Box 89, Charlotte, VT 05445

Woodworker's Marketplace

Buckboard Bench Kit with Trestle Table (Real Springs)



- Buckboard Bench Kit (42" x 22" & regular seat height) Authentically designed steel springs, steel arms & backrails Complete hardware and full-size instructions **\$49.00**
- Trestle Table Kit (45" x 28" x 29" tall) Complete hardware and detailed instructions **\$12.00**
- **SPECIAL:** Purchase 2 Bench Kits for \$98 and get Table Kit FREE!!

Prices include shipping UPS - Visa, MC accepted

The Roudebush Company
PO BOX 348A • STAR CITY, INDIANA 46985
800-847-4947

Circle No. 1085

Dunham Hardwoods

Specializing in Red Oak

- Kiln Dried Exotics & Domestics
- 22 Species in various thicknesses and grades
- Example: 4'-6" Clear 4/4 Red Oak surfaced & straight lined one edge - \$2.15/bd. ft.
- Finishes, wood pegs, buttons, hardwood dowels, etc.
- Ship UPS or common carrier

Call or Write For Free Information

Phone: 712-643-5320 R.Rt.1, Box 126
FAX: 712-643-2142 Dunlap, IA 51529

Circle No. 530

Wood Moisture Meter

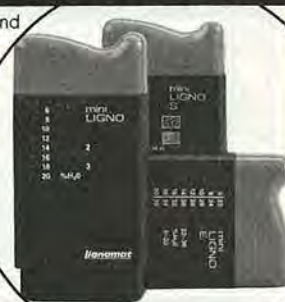
Professionals and hobbyists can choose from 8 different Mini-Ligno moisture meters:

Versatile
Affordable
Sturdy!
Over 100,000 units sold.

Also introducing
New Mini-Ligno XL

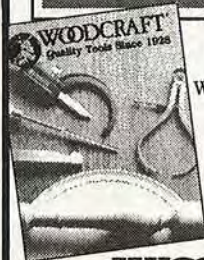
For brochure contact:

Lignomat USA, Ltd. PO Box 30145
503/257-8957 800/227-2105 Portland, OR 97230



Circle No. 1250

FREE TOOL CATALOG!



Your Best Work Starts With Us...

With over 4,000 of the finest woodworking tools in the world, Woodcraft can help you work more efficiently and skillfully than ever.

Call for your
Free copy today.

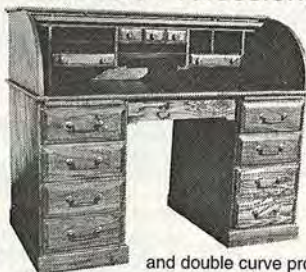
1-800-542-9115

WOODCRAFT

210 Wood County Industrial Park Dept. 95WI09T
PO Box 1686, Parkersburg, WV 26102-1686

Circle No. 955

Full-Size Professional Plan ROLL TOP DESK



Authentic
Roll-top desk
30" deep
52" wide
44" high

Both single and double curve profiles included!

- Plan #139 (Double Pedestal Desk) \$14.95
- Plan #140 (Roll-Top Unit) 14.95
- Complete Desk Plans 28.00
- Catalog (free with order) 3.00

Fine Furniture Plans Since 1968
FURNITURE DESIGNS, INC., Dept. BD-95
1827 Elmdale Ave., Glenview, IL 60025
1-800-657-7692



Circle No. 345

WOOD TOY

- ★ Patterns
- ★ Parts
- ★ Wheels
- ★ Many New Patterns to Choose from.
- ★ Executive toys



SEND \$1.00
FOR
NEW CATALOG

toys and joys

Box 628 w Lynden, Wash. 98264

Circle No. 465

FREE SCROLL SAW PATTERNS

We offer **FREE** full-size scroll saw patterns for all sizes of clocks and weather instruments that we sell.

- Quick & Easy
- Fun & Profitable
- Projects for all skill levels

**Turn Your Scrapwood
into BIG Profits!**

THE BERRY BASKET

P.O. BOX 925-W8 • Centralia, WA 98531

Fax 360-736-7336 • Check, MO, accepted

FREE 40 PAGE CATALOG!

1-800-206-9009

We carry a full line of woodworking patterns and accessories:

- Shelves
- Mirrors
- Baskets
- Books
- Doll furniture
- Videos
- Blades
- Finials
- Drill bits
- Foot switches

Circle No. 323

OWN A MACHINE SHOP

Do your own machining and shop work with a Smithy 3-in-1 Lathe • Mill • Drill

FIX IT YOURSELF!

- Easy to use!
- Save Money!
- Save Time!
- As low as \$895



For **FREE** Catalog Call:
1-800-345-6342
(Ask for operator Wood)

Smithy

or write:
Smithy Dept. Wood
PO Box 1517
Ann Arbor, MI 48106-1517

Circle No. 99

Woodworker's Marketplace is a section of advertisers offering products by mail. Please contact the advertisers directly or use the number below each ad to request information through the Woodworker's Resource section.

Quality FULL SIZE Woodcraft PATTERNS

Fun • Profitable • Fast Service • Satisfaction Guaranteed

Over 1500 designs - 78 jumbo blueprint sets -
Pick from our most popular pattern sets & order today!

EACH SET INCLUDES:

- Patterns
- Sketches
- Material Lists
- Painting & Finishing Info
- Plus Tips & Techniques

- 200 "CREATIVE CUT" Patterns for Scroll, Band or Jigsaw.
- COUNTRY CRITTERS - 100 Patterns, decorative projects!
- 40 GREAT GIFTS - Popular projects for fun & profit.
- Over 30 CHRISTMAS decorations & centerpieces.
- SHOW STOPPERS II - 22 Craft Show best-sellers!
- Attractive DUTCH WINDMILL - 5 feet tall.
- Create over 20 "Quick and Easy" BIRD HOUSES.
- 100 YARD ORNAMENTS - Animals, birds, signs, more!
- 25 Fun & Profitable "wind-action" WHIRLIGIGS.
- HALLOWEEN yard Witch, Ghost, Skeleton, more!
- THANKSGIVING yard Pilgrim, Indian, Turkey, more!
- SANTA'S REINDEER - 33" tall by 28" long, 3 poses.
- Waving SANTA in SLEIGH - 35" tall by 44" long.
- Santa, Snowman, Soldier & Candle - ALL 3FT. TALL!

Send \$8.00 per set - Pick 3 for \$18.00 - 6 for \$34.50
MC/VISA - 24 Hour Fax (603) 332-4579
ACCENTS, Dept. MA95, Box 7387, Gonic, NH 03839
ILLUSTRATED CATALOG - \$2.00 (Free with order)

Circle No. 310

Heavy Glass Table Tops

FACTORY DIRECT DISCOUNT PRICING



- Table Tops
- Shelves
- Doors
- Display Cases
- Entertainment Centers
- Tempered Glass

TABLE TOPS BY PHONE SATISFACTION GUARANTEED!

WGB GLASS ■ SHAPES ■ THICKNESSES ■ EDGE DESIGNS

FOR FREE IDEA CATALOG AND PRICE LIST SEND POST CARD TO:
WGB GLASS 19785 W. 12 MILE RD., STE. 357
SOUTHFIELD, MI 48076
TO PLACE ORDERS: CALL 1-800-288-6854

Supplement Your Income From Your Home With A Computer!



Begin part-time and still retain the security of your present position. We offer 20 services you can perform for your community from your home. No experience necessary—easy to learn. We provide training and computer. For FREE explanation cassette and literature call:

1-800-343-8014, ext. 184
Computer Business Services, Inc.

SJÖBERGS OF SWEDEN



"The SJÖBERGS 2200 BS will faithfully serve several generations of woodworkers" Wood Magazine August 1995

Weight: 180lbs
Length: 8'3"
Width: 2'4"
Height: 2'10"

TOP QUALITY MADE IN SWEDEN

- Europe's biggest manufacturer of traditional cabinet makers workbenches
- Full range to suit all requirements
- Contact Sjöberg USA for full color catalog and list of dealers

Tel: 1-800-586-7635

Circle No. 440

WOODEN WEDDY BEAR COLLECTION presents:

- Dinosaur Puzzles** \$8.95
14 full size dinosaur puzzle patterns from 8 to 28 inches tall - work them standing up or laying flat.
- Scrollsaw by Land, Sea & Air** . \$12.95
57 full size scroll saw patterns of antique to modern day cars, trucks, trains, planes, helicopters, and sailing ships.

Add S/H \$3.00
Catalog - \$1.00 - Free with order

The Printed Word (503) 761-9149
16409 SE Division, #216-296
Portland, OR 97236-1931
Visa / MasterCard Accepted

Circle No. 460

RIP SAW

The Portable Sawmill.

The "affordable portable" one man band sawmill. Weighs only 45 lbs. Cuts 20" diameter logs into lumber. Minimum 1/8" to maximum 9" thickness. 14"W x 9"H throat capacity. Write or call for free brochure. Videos also available.



Better Built CORPORATION
(508) 657-5636
845 Woburn St., Suite 3, Dept. W9, Wilmington, MA 01887

MasterCard VISA DISCOVER

Earn up to \$30 an hour **GUARANTEED**

Award Winning Manual
"Crafts That Sell"

Enables You to Successfully **Start Your Own Highly Profitable Home-Based Woodcraft Business**

40 Comprehensive Pages Provide Everything You Need Including:

- Business & Trade Secrets (Learned the Hard Way)
- Complete Marketing & Production Techniques
- Best Discount Suppliers
- Learn to Pick Winning Projects That Make You \$!

ORDER TODAY & Get 11 of Our Best \$30/hr Patterns Free
Send U.S. Check or M.O. for \$14.95 (+2.95 S&H) to: J'n'A Crafts #281-W3
9B-1150 N. Terminal Ave., Nanaimo, BC Canada V9S 5T8
Free catalog included: Allow 2 weeks for M.O. & 6 weeks for Personal check orders

Circle No. 1550

GREAT ENCOURAGEMENT FOR SHIPWRIGHTS!



All gentlemen shipwrights and able bodied modelists who have a mind to provide for themselves amusement and satisfaction through the traditional craft of ship modeling, an opportunity now offers to acquire, through the minimal cost of one Colonial Dollar (\$1.00), a catalog of fine and unique ship model kits, plans, books and fittings from the renowned company of Model Expo located in Mt. Pocono in the state of Pennsylvania.

Send \$1.00 for a catalog to:
MODEL EXPO, INC.
Dept. WD95, PO Box 1000, Mt. Pocono, PA 18344

Name _____
Address _____
City _____
State _____ Zip _____

Circle No. 1075

Woodworker's Resource

Print this article

You can get useful ideas and product information by mail. Use the coupon in this section to order your choice of literature listed below. Each company mails the catalogs or information directly to you.

POWER TOOLS

ABBEY TOOLS—The much-requested, long-awaited, you'd-better-hold-on-to-this-one-because-who-knows-when-we'll-print-another tool catalog, is here. Packed with 1000's of top brand name power tools and accessories—all at the lowest possible prices. Whether you are a beginning woodworker or an old pro you'll find just the tool you need. Remember—if you can plug it in, we've got it! **ABBEY TOOLS**. \$1.00. *Circle No. 2.*

SCROLL SAW, CRAFT & WOODWORKING CATALOG—Specialty products from the exclusive distributors of HEGNER, the critically acclaimed scroll saws. Complete information on scroll saws and accessories, including blades and lettering guides. Also ZYLISS Portable Vise, HEGNER Lathes, PLANO Vertical Glue Press, and more. Toll-free customer service hotline included! **AMI, LTD.** Free. *Circle No. 3.*

TRANSPOWER, CP TOOLS INC.—A fine line of quality woodworking machinery, saws, shapers, planers and more. Send for free catalog. **CP TOOLS INC.** Free. *Circle No. 15.*

CLAYTON MACHINE—Sand curved pieces with ease. New American-made oscillating spindle sander features many unique details. Quality built, for a lifetime of enjoyable and dependable service. Dust collector hook-up, ground steel top, dynamically balanced spindle with sealed oil-bath cam and quick change drums are all standard. Several models to choose from. Catalog. **CLAYTON MACHINE**. Free. *Circle No. 18.*

INCA MACHINERY INFORMATION—Complete information on the famous line of Inca woodworking machines. Designed for precision work by the small to medium sized cabinet shop. Used by thousands of hobbyists and professionals. Table saws, bandsaws, joiner/planners, dust collector, radial arm saw. **GARRETT WADE CO.** Free. *Circle No. 44.*

HARBOR FREIGHT TOOLS CATALOG—The finest professional quality tools and equipment at the lowest prices...**GUARANTEED!** Our NEW Woodworking catalog has been expanded to contain hundreds of additional brand name woodworking tools & supplies. See why millions of woodworking professionals and Do-It-Yourselfers have shopped at Harbor Freight Tools for over 27 years. **HARBOR FREIGHT TOOLS**. Free. *Circle No. 46.*

INTERNATIONAL TOOL CORPORATION CATALOG—features the finest tools & accessories at the absolute lowest prices anywhere! Whether you're a home woodworker or an industrial user, you will find an incredible selection featuring Porter Cable, Bosch, Skil, Freud, Delta, Powermatic, Milwaukee, Makita, Hitachi, and many, many more. We offer same day shipping, the most knowledgeable sales staff and free shipping on most UPS orders in the contiguous U.S. **INTERNATIONAL TOOL CORP.** \$2.00. *Circle No. 49.*

GET TO THE FINISH LINE FASTER—with a Performax drum sander. Don't spend hours with a hand-held belt sander. Sand ultra-wide stock ultra-smooth in just minutes. Models start at \$300 to \$3495. Select the model that fits your budget and your needs. New metal abrasive fasteners keep sandpaper tight without re-wrapping. **PERFORMAX PRODUCTS**. \$1.00. *Circle No. 78.*

RBINDUSTRIES, WOODWORKING TOOLS & ACCESSORIES—100% Made in USA. The NEW 1994-1995 RBI catalog features the all new HAWK Precision **ULTRA** Scroll Saws, "4-in-1" and "3-in-1" Universal Woodplaner Systems, and 26" Variable

Speed Drum Sander, 38" Drum Sander, the all NEW Panelmaster II Raised Panel Door Machine, Router Tables, Books, Accessories, Patterns, and Much More. When you buy from rbindustries, you're saving big money by buying factory-direct from one of America's premier woodworking tool manufacturers. We stand behind every piece of equipment we manufacturer with our exclusive 30-Day, Money Back Guarantee and 5-Year Warranty. Send today for your FREE catalog. **RBINDUSTRIES, INC.** Free. *Circle No. 84.*

THE ADVANTAGE—That's what you'll have over other woodworkers when you are using SECO MACHINERY. With choices of straight-line rip saws, wide belt sanders, dust collectors, power feeders, and lots...lots...more. Write today for a catalog of this woodworkers choice. Se habla espanol. Dealer inquiries welcome. Send for catalog. **SECO INVESTMENT CO.** Free. *Circle No. 91.*

TOOLS ON SALE™—A division of Seven Corners Ace Hardware, Inc. offers a catalog of over 400 pages of the most popular brands of power tools available anywhere, all at discounted prices. Included are saws, planers, sanders, routers, drills and more from manufacturers such as Milwaukee, Makita, Porter Cable, Black & Decker, Dewalt, Freud, Bosch, Delta, and many more. Now introducing a full range of Werner brand ladders. Tools on Sale™ division of **SEVEN CORNERS ACE HARDWARE, INC.** \$1.00. *Circle No. 92.*

PORTABLE SAWMILLS—Convert logs into valuable lumber—Wood-Mizer® Products manufactures a line of portable bandsaw mills that allows the novice as well as the experienced sawyer to safely convert standing logs into lumber. Then, with the use of our SolaryDry™ Kiln or Vacu-Kiln™ to dry your lumber, you could increase the value of every board you produce. We manufacture some of the most progressive woodworking equipment on the market today. Product videos available. Send for our 31-page catalog. **WOOD-MIZER PRODUCTS**. \$2.00. *Circle No. 94.*

OWN A MACHINE SHOP—Do your own machining and shop work with a Smithy 3-in-1 Lathe-Mill-Drill. Save time and money with versatile, easy to use Smithy machines. 60-page catalog features over 500 machine tools and accessories. **SMITHY**. Free. *Circle No. 99.*

STAINS / FINISHES

AMITY WATER-BASE FINISHES—Get all your water-base finishing needs from one source. Complete line of water-base clears, tabletops, stains, glazes, fillers, toners, tints, and more. Ask about our new "Danish-oil" like water-base finish. Professional classes in water-base application and technical assistance in conversion from solvent- to water-base. Catalog gives complete product details and seminar dates. **AMITY**. Free. *Circle No. 202.*

PERFECT PEN POLISH—NEW Developed for pens but great for any small lathe turned object. Pen Turning Manual, everything you need to know from wood selection to marketing. A complete line of pen making supplies—many styles of mechanisms, unusual pen turning materials such as dyed stabilized burls and spalted woods. Send for catalog of wood turning and pen supplies. **HUT PRODUCTS FOR WOOD**. \$1.00. *Circle No. 230.*

PLANS

PATTERNS! PATTERNS! PATTERNS!—Huge assortment of popular shop-tested designs! OVER 1500 FULL SIZE PATTERNS conveniently grouped into 78 jumbo blueprint sets. We've also included sketches, material lists, painting & finishing info. PLUS tips & techniques! Beginner or pro will enjoy creating 100's of unique projects for fun or profit. Fast service, satisfaction guaranteed! Illustrated catalog PLUS sample pattern. **ACCENTS IN PINE**. \$2.00. *Circle No. 310.*

WOODWORKERS' PLANS AND SUPPLIES—Wood projects are simplified with the high quality plans, specialty hardware and other supplies offered by Armor Products. Over 100 plans are available for making toys, desks, clocks, pool tables, lamps, chests, and other furniture. Movements, dials, mold-

ings, ornaments, dollhouse kits, door harp supplies and tuning pins are also available. **ARMOR PRODUCTS**. \$1.00. *Circle No. 315.*

FREE BOOK OFFER!—If you like scroll sawing, here's an offer you can't refuse! Send today for our latest full-color catalog and see how easy it is to qualify for your FREE pattern book with over 400 full-size, top quality clock patterns! These quick and easy projects make great useful gifts for the holiday season or any occasion. Fun and profitable, you'll use these unique, shop-tested patterns time and time again to turn your scrap wood into BIG profits. So, don't delay—send for your catalog today. This FREE book offer is for a limited time. **THE BERRY BASKET**. \$1.00. *Circle No. 323.*

SCROLLSAW PATTERNS—In sets of six or more. 1920's cars, 1930's cars, motorcycles, woodland, ocean, farm, zoo, Christmas, dogs, or beasts. Some intarsia, others very detailed or multi-piece. These patterns grab attention. **BROKEN ARROW DESIGN**. \$1.00. *Circle No. 324.*

THE "CADILLAC OF CATALOGS"—You've never seen anything like this—promise! Our catalog has thousands of plans and patterns from over 45 companies. The selection seems endless and the quality guaranteed. We are proud to offer so many unusual & unique plans. Many of these plans have been at our customer's request. We also have a new line of "Nothing but..." catalogs featuring ten different related subjects. The first, and our favorite, to be introduced will be "Nothing But Christmas" (see next listing for details). Catalog. **CREATIVECRAFT PLANS**. \$4.00. *Circle No. 330.*

CREATIVECRAFT PLANS—Offers you its newest catalog in the "Nothing But..." series! What is the "Nothing But..." series you ask. Every catalog features *nothing but* a particular subject, e.g., *nothing but* Christmas, *nothing but* bird houses and feeders, *nothing but* lawn & garden, etc., etc., etc. The first and ready for the Christmas season is "Nothing But Christmas". Don't miss the boat, order your catalog of Christmas plans & patterns today. **CREATIVECRAFT PLANS**. \$2.00. *Circle No. 331.*

FULL-SIZE FURNITURE PLANS CATALOG—Illustrates and describes over 200 plans for making furniture of quality found in museums and fine furniture stores. Plans include rollout desk, cradles, dining tables, chairs, buffets, chests, gun cabinets, poker table, children's furniture, rocking horse, spinning wheels, and more. Bill of materials exploded drawings assist the woodworker. **FURNITURE DESIGNS, INC.** \$3.00. *Circle No. 345.*

PROJECT PLANS—Full-size patterns for over 750 easy-to-build woodworking projects. Nation's leading source for scroll saw patterns, cow projects, toy plans, yard ornaments, wood furniture, etc. Over 3000 hard-to-find specialty items. Send for big new 96-page full-color catalog. **MEISEL HARDWARE SPECIALTIES**. \$2.00. *Circle No. 401.*

SJÖBERGS WORKBENCH CATALOG—Full-color catalog which illustrates the full range of cabinet makers' workbenches from Europe's largest manufacturer. Sjöbergs workbenches are made in Sweden and have many unique features including the hold-fast facility. There is a wide range of models to suit all requirements for home or industry. **SJÖBERGS**. Free. *Circle No. 440.*

CORIAN® PROJECT GUIDE—5 separate projects you can create in your own workshop. Comes complete with a step-by-step guide and directions on where to purchase Corian® for these projects and others. **SOLID SURFACE SALES**. \$3.00. *Circle No. 443.*

WOODWORKERS—Send for our color catalog with many exciting new plans available. Six styles of bed plans such as 2 Car Beds, Gingerbread Bed, Futon Sofa, Lounge and Bunk/Sofa Combo. New designs in lawn furniture are Adirondack Tete-A-Tete, Patio Rocking Gilder, Small Garden Wishing Well, Bird Feeders and Bird Houses. We have added a Doll Cradle, Baby Cradle, Toddler Caster Horse and a variety of craft items. Full size templates, material list, instructions and cutting diagram. **SPECIALTY FURNITURE DESIGNS**. \$3.00. *Circle No. 445.*

INTARSIA & SCROLL SAW PATTERNS—Geared strictly to the intarsia or scroll saw worker, you will find patterns, books, instructions, and more in this brand new catalog. Patterns range from simple to intricate, and include dinosaurs, ships, trains, animals, and more. **THE PRINTED WORD**. \$1.00. *Circle No. 460.*

WOOD TOY PATTERNS—Patterns for all ages including children's patterns and executive toys. New catalog has many new patterns to choose from including parts and wheels. Send for new catalog today. **TOYS AND JOYS**. \$1.00. *Circle No. 465.*

SCROLLSAW FRETWORK PATTERNS—& supplies catalog. From simple cutouts to 50" tall clocks. Over 300 patterns for the scrollsaw enthusiast. Also clock movements, tools, books, plywood, hardwood, sawblades. Great projects for the hobbyist or for profit. Catalog. **WILDWOOD DESIGNS, INC.** Free. *Circle No. 475.*

LUMBER

QUALITY EXOTIC LUMBER/TURNING WOODS—We offer a comprehensive selection of fine quality exotic woods. Also available are mechanisms for making wooden barrel pens/pencils/roller balls/fountain pens. Ebony, Kingwood, Tulipwood, Snakewood, African Blackwood, Cocobolo, Bloodwood, Figured Maple, Spalted Maple, Padauk, etc. Unique and unusual turning woods and burls are also available. Send for catalog. **BEREA HARDWOODS**. \$1.00. *Circle No. 510.*

ONE STOP WOOD SHOP—Domestic and exotic hardwood plywood and lumber, marine plywood, over 30 species in stock—all under one roof. Custom cutting services to your exact specifications with little or no waste at competitive prices! We specialize in bundling and shipping. Send for catalog. **BOULDER PLYWOOD CORP.** Free. *Circle No. 512.*

DUNHAM HARDWOODS—Specializing in red oak and other quality hardwoods. Send for a complete listing of species, prices, thicknesses and grades. All lumber is kiln dried and graded according to NHLA rules. We have twenty-two species of hardwoods and can ship small orders UPS; large orders, common carrier. Quality, price and service are the name of our game. **DUNHAM HARDWOODS**. Free. *Circle No. 530.*

STEVE H. WALL LUMBER CO—Quality hardwoods and woodworking machinery for the craftsman and educational institutions. 16-page catalog lists 17 species of popular hardwoods at wholesale prices. Also dealers for MiniMax, Freud and ProCut woodworking machines. **STEVE H. WALL LUMBER CO**. \$1.00. *Circle No. 592.*

EXOTIC IMPORTED AND DOMESTIC HARDWOODS—Select from more than 100 different woods. Lumber, bowl blanks, turning squares and veneer. Samples ($\frac{1}{2}$ " x 3" x 6") available, fully sanded. Ideal for collectors, craftsmen, furniture and cabinet makers, architects and designers. Custom cutting and thin stock manufactured. Satisfaction Guaranteed. Send for catalog. **WOODWORKERS SOURCE**. \$1.00. *Circle No. 598.*

GENERAL WOODWORKING CATALOGS

WILLIAM ALDEN CO.—Brings wholesale pricing to you through our full color, 48-page tool catalog. Stanley "Bailey" planes at unbelievably low prices. Clamps, layout tools, chisels, Freud router bits, hardware, safety equipment and much more. Your satisfaction—always guaranteed. **WILLIAM ALDEN CO.** Free. *Circle No. 801.*

WOODWORKING SUPPLIES—Blocks, pegs, cups, hearts, hardware, bandsaw blades, abrasives, toy parts, glue, clock parts, miniatures, balls, dowels, spindles, knobs, beads, picture hangers, cup hooks, finials, screw eyes, game pieces, novelty items, and much more. **BENNY'S WOODWORKS**. \$1.00. *Circle No. 810.*

THE WOODTURNERS CATALOG—48 color pages of the finest woodturning tools, machinery and supplies available. Featuring Henry Taylor, Sorby, Richard Raffan and Dale Nish workshops. Catalog price refunded with order. **CRAFT SUPPLIES USA**. \$2.00. *Circle No. 830.*

MASTER TOOLS CATALOG—1994-95 236-page master woodworking tools catalog. Full line of the best hand tools, power tools & accessories, machinery, glues, finishing supplies, workbenches, and much more. Hundreds of books included. All four-

color. Lots of technical information. **GARRETT WADE CO.** Free. *Circle No. 855.*

GRIZZLY IMPORTS, INC.—1994 is our 11th year of providing woodworkers with an incredible selection of machines, tools and accessories at prices you can afford. Send for your free 1994 catalog today and celebrate with tremendous savings on all your wood-working needs. **GRIZZLY IMPORTS INC.** Free. *Circle No. 860.*

KREG TOOL CO.—Specializes in pocket hole tools, supplies and how-to videos for pocket hole joinery, including THE KREG JIG. Catalog also includes hinges, drawer slides, Crystalac water-based stains and finishes, KTC high quality router bits and more. **KREG TOOL COMPANY**. 50c. *Circle No. 877.*

WOODWORKING BLADES AND SUPPLIES—Large selection of top quality band, scroll, and fret saw blades including the new Olson PGT precision ground tooth fret saw blade with reverse teeth. Also high quality coated abrasive belts, discs, and sheets, plus power carving accessories, book & more. **WALNUT CREEK WOODWORKERS SUPPLY CO.** Free. *Circle No. 954.*

COMPLIMENTARY TOOL CATALOG—Woodcraft offers over 4,000 of the finest quality woodworking tools, books, supplies, and cabinetry hardware in our complete full color catalog. Craftsmen, cabinetmakers, carvers, woodturners, and hobbyists have depended on Woodcraft since 1928. Backed by Woodcraft's unconditional guarantee. Free technical assistance. **WOODCRAFT SUPPLY CORP.** Free. *Circle No. 955.*

THE WOODWORKERS' STORE CATALOG—New! The Woodworkers' Store 1994/95 catalog with hundreds of new items features 112 full color pages of domestic and exotic hardwoods, veneers, wood parts, specialty hardware, kitchen accessories, finishing supplies, tools, books, and plans... Many exclusive items and hard to find specialties. Orders shipped in 24 to 48 hours. Toll free ordering. Over 40 years in business! Satisfaction guaranteed. Catalog. **THE WOODWORKERS' STORE**. Free. *Circle No. 965.*

KITS

OUR QUEEN ANNE FURNITURE KITS—are ready to assemble and finish. They include dining room chairs, a variety of occasional tables, and a personal desk. All are made in solid cherry, oak, walnut, and mahogany. We also stock individual Queen Anne legs for every project. Complete information in our brochure packet. **ADAMS WOOD PRODUCTS**. Free. *Circle No. 1002.*

NEW ON THE WOOD MARKET SCENE—Top quality, creative design for an exquisite bird feeder. Detailed plans or a kit with 91 precision cut redwood pieces. Plans and kits for a unique, weight-balanced squirrel feeder. Add a touch of charm and whimsy to your garden. Give as a gift or sell for profit at craft shows. Send for information. Price credited with order. **GOOSE POND MILL**. \$1.00. *Circle No. 1033.*

THE IRON SHOP—The Best Buys in Spiral Stairs! From the leading manufacturer of affordable, high-quality spiral stair kits, designed to fit any height. Available in steel, oak, or Victorian cast aluminum. Color catalog. **THE IRON SHOP**. Free. *Circle No. 1045.*

SHIP MODELING CATALOG—Historic Ship Models—Museum quality replicas you build yourself. Pre-cut wooden parts, metal and brass fittings, cloth sails, plans and instructions. Send for 80 page color catalog. **MODEL EXPO, INC.** \$1.00. *Circle No. 1075.*

BUCKBOARD BENCH KIT—Kit includes steel springs that give a little, metal arms and back rails, hardware, and full-size instructions. New matching trestle table kit. **THE ROUEBUSH CO.** 50c. *Circle No. 1085.*

PUBLICATIONS

THE WOODWORKERS LIBRARY—30 pages of the best books on carpentry, joinery, blacksmithing, carving, furniture, design, stairbuilding, wood turning, finishing, and wood and timber. Plus videos. Send \$1.00 for two-year catalog subscription. **LINDEN PUBLISHING**. \$1.00. *Circle No. 1140.*

SHOP ACCESSORIES

ECON-ABRASIVES—Offers a complete line of sandpapers and woodworking related accessories. We custom make abrasive belts in any size and in any grit. Catalog. **ECON-ABRASIVES**. Free. *Circle No. 1229.*

EASY DOES IT—with HTC'S power tool accessories. Discover many unique items, designed only

with you, the dedicated woodworker, in mind. Make your machinery safer, increase the working area of your shop and accomplish nearly impossible tasks easily, quickly, accurately. Full-line catalog and price list. **HTC PRODUCTS, INC.** Free. *Circle No. 1245.*

WOOD MOISTURE METER—Avoid moisture defects such as cracking, warping, splitting, delamination. The pin-type moisture meter "Mini-Ligno" can read surface or core moisture in any thickness of lumber, from veneer through heavy timbers. A flat surface is not necessarily required, thus the Mini works on rough sawn lumber and curved or round pieces. A most versatile instrument. Many hobbyists and professionals use the Mini-Ligno C or E/C with attachments to monitor lumber during air or kiln drying or use external electrode for depth readings. Catalogue describes complete line of moisture meters. **LIGNOMAT USA, LTD.** Free. *Circle No. 1250.*

ROUTER SPEED CONTROL—Reduces speed electronically without reducing torque. Route at the speed that gives best results with the wood and bit you are using. Speed adjustable from full speed to 0 RPM. Less tear out—stops burning—less wear on bits—easy to use. Send today for information. **MLCS LTD.** Free. *Circle No. 1251.*

LUMBER DRYING—Dry your own lumber using our equipment and your insulated chamber. Dehumidification systems from 300 BF to 45,000 BF. Easy to operate equipment offers high quality kiln-dried lumber for pennies per foot. These long-lasting made-in-the-USA units can pay for themselves in one month! Send for free catalog. **NYLE STANDARD DRYERS, INC.** Free. *Circle No. 1260.*

SUPERGRIT® SANDING/REFINISHING CATALOG CLOSE-OUT SHEET—Belts (aluminum oxide, silicone carbide zirconia), discs (plain, PSA, Hook & loop vacuum), sheets (cabinet, crocus, emery, non-loading, waterproof), rolls (cloth or hook & loop), bowl turning & lathe supplies, dust masks, scuff pads, tack cloths, tape. **RED HILL CORP.** Free. *Circle No. 1267.*

"WOOD-FRIENDLY"™ L606 MOISTURE METER—uses advanced electromagnetic wave technology to accurately measure wood moisture content from 8% to 30% to a depth of $\frac{3}{4}$ ". No pins to "abuse" wood and leave ugly holes. Check out boards from top to bottom in just seconds before you buy and avoid the headaches of splitting, warpage, delaminating and failed glue joints. The Wagner L606's convenient pocket size, easy-to-read analog meter, and low price make it a must for anyone working with wood. Literature. **WAGNER ELECTRONIC PRODUCTS, INC.** Free. *Circle No. 1285.*

UNCOMMON WOODWORKING TOOLS—American made quality router tables and fences, dovetail jigs, unique router biscuit joinery system, mortise machines, pin router, books, videos, commercial grade router bits and more. Buy from the manufacturer. Fast, friendly, knowledgeable service. **WOODHAVEN**. Free. *Circle No. 1290.*

BITS, BLADES, CUTTING TOOLS

ASK FOR CMT'S CATALOG AND WE'LL GIVE YOU \$5!—CMT Tools will send you our free, full-color router bit catalog and we'll give you a \$5.00 discount on your first order! CMT bits feature anti-kickback design, Teflon coatings and micrograin carbide cutting edges. Our catalog is packed with accessories, project ideas and safety tips—it's one catalog you'll want to keep! **CMT TOOLS, INC.** Free. *Circle No. 1310.*

FREUD—Premier line of carbide-tipped sawblades, router bits, shaper cutters and other woodworking tools. Freud offers a full-line on anti-kickback carbide-tipped router bits. Send for a free new router bit catalog. **FREUD**. Free. *Circle No. 1321.*

SUPER-SMOOTH, EXTRA-DURABLE, CARBIDE-TIPPED CIRCULAR SAW BLADES—Get a smooth-as-sanded surface with our all-purpose 40-tooth Woodworker Blade. You will be able to rip and cross-cut 1 - 2 in. rock hards and soft woods with an unbelievably smooth finish. You will also be able to cross-cut oak and birch ply-veneers with no bottom splinters. Send today for our information pack. **FORREST MFG. CO., INC.** \$1.00. *Circle No. 1322.*

PRODUCTION QUALITY CARBIDE TIPPED ROUTER BITS—Large discounts. New expanded catalog featuring a huge selection of Carbide Tipped Router Bits, Raised Panel Door Sets, Shaper Cutters, Solid Carbide Bits. The Router Speed Control, plus our unique line of clamps, tools and supplies. Save 50% to 70%. Value, quality, and prompt service guaranteed! **MLCS LTD.** Free. *Circle No. 1350.*

OLSON SAW COMPANY FOR ALL YOUR SCROLL AND BAND SAW BLADE NEEDS!—Contact Olson for a complete listing of companies that sell their extensive line of superior quality band and scroll saw blades for all your woodworking needs, including the new PGT™ Scroll Blade—"The Best" scroll saw blade available! A catalog of every type of scroll saw blade used on nearly every domestic and imported saw is also available. **OLSON SAW COMPANY.** Free. Circle No. 1367.

SWEDISH SILICON STEEL BAND SAW BLADES—Special low tensioned silicon steel bands available from 1/16" thru 1 1/4". We manufacture over 60 special band saw blades for wood workers. The "AS" series Verneer Bands, Timber Wolf Pallet and Band Mill Blades, Impactor-Pallet Disassembly Band, Special Scrolling Bands, Furniture Bands and many more. Catalogue. **SUFFOLK MACHINERY CORP.** Free. Circle No. 1370.

HARDWARE/ WOOD PARTS

FREE WOODCRAFT CATALOG FROM CHERRY TREE!—68 full-color pages of plans, parts, kits and supplies for all skill levels. Clocks, whirligigs, doll-houses, door harps, banks and many more attractive items—plus wooden dowels, pegs, wheels, knobs, & more. Tools, paint supplies, stencils, stamps and much more! Wholesale prices available. Catalog. **CHERRY TREE TOYS.** Free. Circle No. 1420.

HARDWARE CATALOG—A unique 48-page catalog of the very finest in classic, traditional solid brass cabinet hardware. All of British or No. American manufacture. Double & single post handles, knobs, escutcheons, standard & specialty hinges, box hardware, brass screws, castors, latches, catches, locks, and more. **GARRETT WADE CO.** \$3.00. Circle No. 1427.

INCOME OPPORTUNITIES

BIG PROFITS WITH BUNK BEDS—Clear up to \$300 per day making bunk beds. Start out at home in your spare time and expand the business at your own pace. Information Pack. **BUNKS, INC.** Free. Circle No. 1500.

START YOUR OWN HIGHLY PROFITABLE WOODCRAFT BUSINESS—We have shown hundreds of woodworkers how to turn their hobby into a highly profitable homebased business. Learn how to:

make up to \$30/hr. doing what you enjoy! Pick winning projects that make money! Our award winning manual "Crafts That Sell" (advertised in the market place) is a step by step guide showing you everything you need to know to make a lot of money doing what you enjoy! Our catalog is full of projects that are proven money makers that you can earn up to \$30/hr. with. Guaranteed! Order now for more information and a refundable catalog of \$30/hr. projects. **J'n'A CRAFTS.** \$2.50. Circle No. 1550.

SECURE FUTURE IN FURNITURE RESTORATION WITH MINUTEMAN—Earn \$200–\$1,000 per day stripping, repairing, refinishing, mirror resilvering, veneering and more at home or in shop; part- or full-time. We provide complete training; no experience necessary. FREE workshop teaches you latest in furniture restoration. Featuring Amity, the first complete line of water-based furniture restoration products. Catalog. **MINUTEMAN.** Free. Circle No. 1661.

MISCELLANEOUS

UNDERBED STORAGE DRESSER—Top quality, solid wood, ready-to-assemble kits provide convenient space-saving storage. Can have 3–16 drawers. Start at \$159.00. FREE freight for limited time. Send for FREE 44-page catalog. **ANDERSON MFG. CO.** Free. Circle No. 1795.

MECHANISMS FOR MAKING WOODEN BARREL PENS—Pencils/Roller Ball Pens/Fountain Pens. High quality. Low prices. Wholesale/Retail. Plus other related items. **BEREA HARDWOODS CO.** \$1.00. Circle No. 1900.

LOOKING FOR PIERCED TIN? COME TO THE SOURCE!—70+ page color highlighted catalog introduces you to a treasury of pierced metal panels affordably priced and ready to install in your woodworking projects. Available in a wide variety of sizes, 16 different types of metal (copper & brass, tool) & over 300 designs. Custom size & design a specialty. OR all the materials and tools needed to create it yourself. Catalog includes furniture plans you can order, lantern kits, specialized metal piercing tools and MORE. **COUNTRY ACCENTS.** \$5.00. Circle No. 1910.

DELPHI STAINED GLASS—100 page color catalog of stained glass and related supplies. Beveled glass, hard-to-find tools, hundreds of unique patterns, kits, books, videos, and lots more. For 22 years, we've supplied both hobbyists and professionals with quality products, friendly advice, and fast 24-hour shipping. All products guaranteed 100%. **DELPHI STAINED GLASS.** \$5.00. Circle No. 1920.

SALTER INDUSTRIES—Salter Industries manufacture high quality spiral stairs to meet the design needs of today. Oak and brass options are available to combine with a sturdy steel main frame. Stock or custom stairs range in diameter from 3'6" to 7'. Brochure. **SALTER INDUSTRIES.** \$1.00. Circle No. 1995.

GET THE BACK SUPPORT YOU NEED—and the comfort you want with the Select Comfort Air Sleep System, the only mattress with adjustable firmness— from feather soft to super hard—at the touch of a button. This is the revolutionary air support mattress that lets each sleeping partner select their comfort level— while sleeping in the same bed. Get the best night's sleep possible! Try it in the comfort of your own home with our 90 night free no risk trial. **SELECT COMFORT.** Free. Circle No. 2010.

STEELMASTER BUILDINGS—are available in almost any size for almost any use. From 10' to 100' wide and any length imaginable. Whether you need a back yard shop... an industrial shop... equipment storage building... whatever your requirements, you'll find a Steelmaster that's just the right size for the job. Our buildings are so easy to construct, most owners opt to construct their buildings themselves which adds up to even bigger savings. Send for information. **STEELMASTER.** \$1.00. Circle No. 2030.

IF YOU ARE INTERESTED IN RESTORING ANTIQUES—this 280-page catalog packed with unusual, hard-to-find items is just for you. Included are hundreds of essential items for antique restoration including top quality brass reproduction hardware, oil lamps and accessories, numerous wood component repair parts and kits, caning and basketry supplies, everything needed for wood refinishing, related tools, books, and a complete line of upholstery equipment and supplies. All at wholesale prices. Send for this informative catalog. **VAN DYKE'S RESTORERS.** \$1.00. Circle No. 2077.

CONVERTIBLE SUNSPACE—Unique new concept for year-round enjoyment. Insulated winter sunroom converts to a breezy screen room in summer. The two-in-one Sun-Porch features do-it-yourself assembly, shatter-resistant glazing, no special foundation. Colorful catalog, prices, sent first-class mail. **VEGETABLE FACTORY, INC.** \$2.00. Circle No. 2078.

LEGAL IVORY—Virtually identical to animal ivory. Tagua is the nut from a tropical palm tree. Ideal for jewelry, knobs, small turnings, inlay, or scrimshaw. Available in 3 sizes. Send for information. **WOODWORKERS SOURCE.** Free. Circle No. 2090.

***THE WOODWORKING SHOWS* MACHINERY, TOOLS AND SUPPLIES**—Hundreds of products for the woodworker demonstrated and sold at discount prices at every "Woodworking Show". In-depth seminars and free workshops on a variety of woodworking topics. Shows are scheduled in 27 cities. Send for free brochure. ***THE WOODWORKING SHOWS*.** Free. Circle No. 2095.

CARVING SUPPLIES

WOOD CARVING MACHINES AND ACCESSORIES—make all types of wood carving easy, fun and profitable. The machines do the work. Whether for sign carving, flat 3-D, decoys, panels, gun stocks or furniture, we have the proper machine for the job. Professional woodcarving for the hobbyist and superior quality for the professional. Begin your hobby or full or part-time business by ordering our catalog and price list. **MARLIN INDUSTRIES.** \$1.00. Circle No. 2150.

CLAMPS

MERLE ADJUSTABLE CORNER CLAMP—Quick & easy to use. It forces your work into square. Fully adjustable from 2" x 2" to 69" x 69" in. Perfect for clamping picture frames, cabinets, or anything that requires 90° corner clamping. The Merle Clamp is cast aluminum & steel construction, a true industrial quality tool. Send today for information. **MLCS LTD.** Free. Circle No. 2250.

CLOCKS

KLOCKIT—The leading supplier of clock-making supplies for over 25 years: Quartz and mechanical movements, clock inserts, dials, easy-to-follow plans and kits for all skill levels. **KLOCKIT.** Free. Circle No. 2335.

WOODWORKER'S RESOURCE

Better Homes and Gardens®
WOOD Magazine, September 1995
Dept. SEWO95
P.O. Box 11736
Riverton, NJ 08077-7931

TO ENSURE PROMPT HANDLING OF YOUR ORDER FOLLOW THESE INSTRUCTIONS:

- Circle your choice
- Enclose check or money order for cost of booklets plus \$2.00 service charge (no stamps accepted)
- NO FOREIGN ORDERS ACCEPTED
- Send coupon and remittance to address above
- ALLOW 4-6 WEEKS FOR DELIVERY
- Coupon expires October 10, 1996

WOOD SUBSCRIPTION

A 1 year WOOD subscription (9 issues) for \$24.97 (U.S. price)—a \$19.58 savings off newsstand rate (Circle No. 4000). Allow 6-8 weeks for first issue. Be sure to include payment with total below. NO FOREIGN ORDERS ACCEPTED ON THIS COUPON.

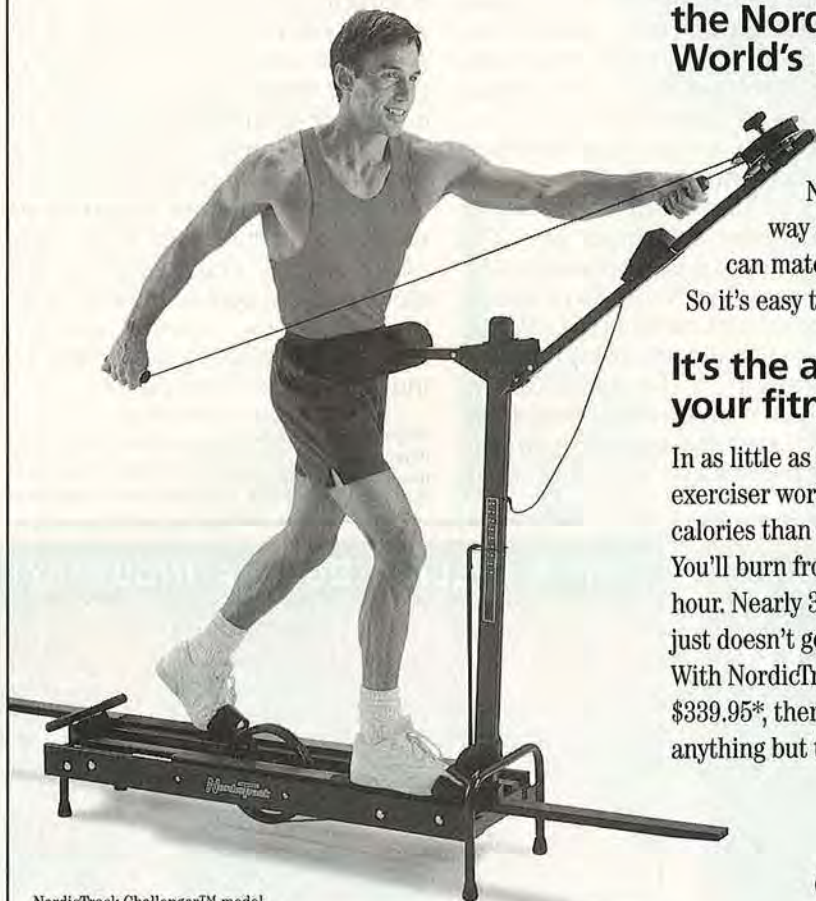
Circle numbers below corresponding to items in this issue. Please include \$2.00 for handling charge.

2.....\$1.00	99.....Free	443.....\$3.00	830.....\$2.00	1140.....\$1.00	1350.....Free	1995.....\$1.00
3.....Free	202.....Free	445.....\$3.00	855.....Free	1229.....Free	1367.....Free	2010.....Free
15.....Free	230.....\$1.00	460.....\$1.00	860.....Free	1245.....Free	1370.....Free	2030.....\$1.00
18.....Free	310.....\$2.00	465.....\$1.00	877.....50c	1250.....Free	1420.....Free	2077.....\$1.00
44.....Free	315.....\$1.00	475.....Free	954.....Free	1251.....Free	1427.....\$3.00	2078.....\$2.00
46.....Free	323.....\$1.00	510.....\$1.00	955.....Free	1260.....Free	1500.....Free	2090.....Free
49.....\$2.00	324.....\$1.00	512.....Free	965.....Free	1267.....Free	1550.....\$2.50	2095.....Free
78.....\$1.00	330.....\$4.00	530.....Free	1002.....Free	1285.....Free	1661.....Free	2150.....\$1.00
84.....Free	331.....\$2.00	592.....\$1.00	1033.....\$1.00	1290.....Free	1795.....Free	2250.....Free
91.....Free	345.....\$3.00	598.....\$1.00	1045.....Free	1310.....Free	1900.....\$1.00	2335.....Free
92.....\$1.00	401.....\$2.00	801.....Free	1075.....\$1.00	1321.....Free	1910.....\$5.00	4000.....\$24.97
94.....\$2.00	440.....Free	810.....\$1.00	1085.....50c	1322.....\$1.00	1920.....\$5.00	

Name (please print) _____ I AM ENCLOSING:
 Address _____ \$ _____ for priced items
 City _____ \$ 2.00 for handling
 State _____ Zip Code _____ \$ _____ total remittance
 Phone (Optional): _____

Why settle for anything less?
**With prices starting at \$339⁹⁵
 you can afford a NordicTrack.**

**There are good reasons why
 the NordicTrack is known as "The
 World's Best Aerobic Exerciser®."**



NordicTrack Challenger™ model

While lesser cross-country ski exercisers provide an awkward shuffling motion, the NordicTrack uses a patented flywheel and one-way clutch mechanism that no other ski machine can match. It's gentle on your knees, hips and back. So it's easy to use.

**It's the affordable way to meet
 your fitness goals.**

In as little as 20 minutes, three times a week, a NordicTrack® exerciser works all your major muscle groups, burning more calories than exercise bikes, treadmills and stairsteppers. You'll burn from an average of 890 up to 1,100 calories per hour. Nearly 3 million people already know that exercise just doesn't get any better than NordicTrack. With NordicTrack models as low as \$339.95*, there's no reason to own anything but the best.

**30-DAY
 IN-HOME
 TRIAL**

At these prices you
 can own a NordicTrack!*

**FREE VIDEO & BROCHURE
 CALL: 1-800-942-1890
 Ext. 08B15**



Please send me a FREE video & brochure
 My main fitness goal is (check one) Weight loss
 Shaping & toning Cardiovascular fitness Overall health

Name _____ Phone () _____

Street _____

City _____ State _____ Zip _____

Call or send to: NordicTrack, Dept. 08B15
 104 Peavey Road, Chaska, MN 55318-2355

©1995 NordicTrack, Inc., A CML Company • All rights reserved.
 *Shipping, handling and applicable tax are extra.

**NordicTrack Challenger™
 only \$339⁹⁵!**

**NordicTrack Sequoia™
 only \$429⁹⁵!**

**NordicTrack Excel™
 only \$499⁹⁵!**

Other models priced from \$599⁹⁵

NordicTrack®

WHALE OF FORTUNE



Continued from page 55

Now, for some painting

1 Prime the whale and base with white gesso or latex interior primer, then paint with acrylic artist's colors. The colors shown, all from Plaid's Folk Art line, are no. 731 Aqua Bright (AB), no. 903 Tapioca (TA), no. 934 Plum Pudding (PP), and no. 964 Midnight (DB). We also used no. 695 crackle medium on the base. All are sold by many crafts-supply dealers and Wal-Mart stores.

2 Paint the base first. Begin with an overall coat of AB. Then, apply crackle medium over the dried paint. Allow the crackle medium to dry, but don't expect any excitement yet—the action doesn't start until you put on the topcoat.

3 For that coat, mix DB and TA. Thin the paint slightly, then brush it over the dried base. Apply a sin-

gle, uniform coat, and don't go back over it. The topcoat will crack as it dries, revealing the basecoat color through the cracks. A heavier topcoat will make larger cracks.

4 Paint the whale PP. Then, using a small liner brush, outline the mouth and eye with DB. Also, paint thin, parallel lines in the mouth to represent baleen. (Instead of teeth, some whales, including grays, have baleen, thin plates of fingernail-like material hanging from the upper jaw. The baleen act like a strainer; the whale expels a mouthful of seawater through them to extract food.)

5 Paint the details, using the colors shown on the Paint Colors drawing. Where mixed colors are shown, start the mixture with the color listed first, then add small

amounts of the other colors until you reach a color approximating the one shown in the photo.

6 After the paint dries, coat the whale and base with matte acrylic varnish. For the plume, cut enough 3½-4" pieces of 4-lb. monofilament fishing line to make a bundle about ½" in diameter. (We cut them easily by wrapping a number of turns around the end of a 1¼"-diameter dowel, sliding them off, then cutting them.)

7 Bundle the pieces together so they fan out, then glue them with plastic-model cement. Extend the glue about ½" up the bundle, making sure you cement all the strands. When dry, glue the plume into the hole in the body. ♣

Project Design: Bill Zaun
Photograph: John Hetherington
Illustrations: Lorna Johnson

AMERICA'S FINEST SCROLL SAW



5 Year
Warranty
30-Day
Money Back
Guarantee

The rbindustries Hawk Ultra scroll saws have become the finest and most advanced saws in the woodworking industry. Why? because we listened to our customers and geared the Hawk Ultras to fit their woodworking needs. With having sold over 40,000+ scroll saws to date, it's really simple....

"The best is just getting better!"

Call 1-800-487-2623 for **FREE** Catalog

rb industries
The American Tool Manufacturer

© 1995 rbindustries. All rights reserved. E111

Circle No. 84

JOIN A BILLION DOLLAR INDUSTRY!*



We have the most advanced surface restoration system available. Everything from countertops to tile, porcelain to fiberglass and metal furnishings can be maintained and beautified in both commercial and residential locations. As a Surface Doctor™ franchise owner, you have a unique service to offer your customers that can save them thousands of dollars while producing like new results.

Whether you see yourself as an owner/operator or managing a large multi-truck operation, take a look at Surface Doctor™.

NO EXPERIENCE NECESSARY.
INVESTMENT STARTS AT \$13,800*

* Home Remodeling Industry
* See Prospectus for details.
Price does not reflect Master Licenses.

Call today for a free video & information: 1(800)735-5055 or (404)362-2868

Be a Home Inspector Earnings of up to \$900 per day possible!

Train at home in your spare time...no previous experience needed!

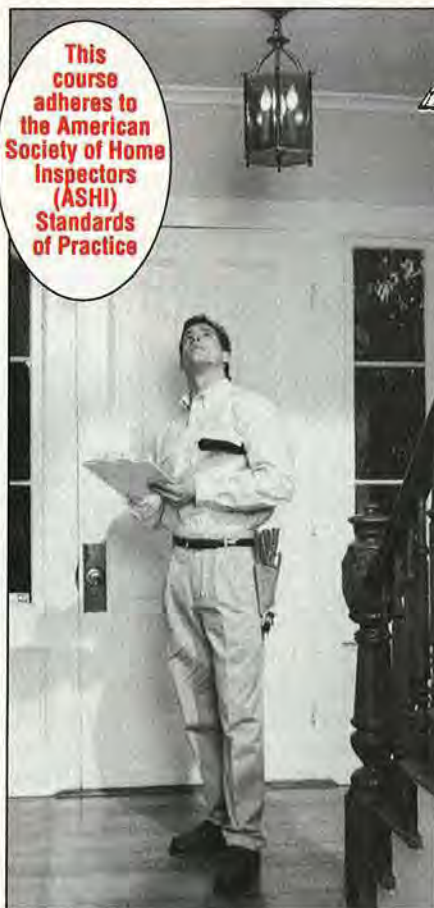
Home inspection is one of the hottest career fields of this decade. Over 60% of all homes sold today are inspected for structural and mechanical defects... banks, mortgage companies and potential home owners want to know about a house before they invest their money. According to ASHI Home Inspectors throughout the country are charging up to \$300 per job, and many are performing three or more inspections per day. And there's plenty of opportunity for you to earn this kind of money, because the demand for Home Inspectors exceeds the supply. Once you've gained some experience and established your reputation as a top-notch Home Inspector, it's possible for you to start earning up to \$900 a day!

Only ICS gives you training this practical, this complete. Our unique "Quick-Learn" method enables you to start making money while still training!

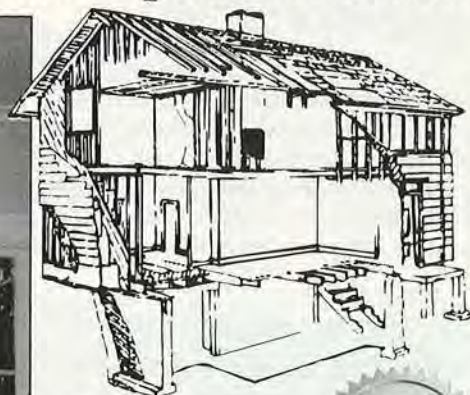
You get real-world instruction in all the important areas of home inspection. When you finish your training you'll be a skilled professional, confident in your abilities to deliver thorough "top to bottom" inspections. Step-by-step lessons show you how to inspect basements... crawl spaces...heating and cooling systems...electrical systems...plumbing... interior structure...attics...doors and windows...garages...exterior structure... grounds...appliances and much more. You're also taught about checking for pests, radon gas and other health hazards.

We give you special tools and test instruments to use during your training and later on the job.

These include wire gauges, circuit analyzer, pocket caliper, punch/awl, screwdriver set, high-powered professional flashlight, inspection mirror, binoculars and more. Unlike many home inspection courses, we go beyond the mere technical aspects and teach you how to prepare special forms and reports that document your inspections. You'll be able to provide your customers with clear, detailed reports on your conclusions and recommendations about the property. You'll be amazed at how quickly the word spreads that you are an expert inspector who can be relied upon to deliver top-quality home inspections. Your business will grow by the day as more and more people request your services.



This course adheres to the American Society of Home Inspectors (ASHI) Standards of Practice



ICS training is nationally accredited.

ICS is a member of the National Home Study Council in Washington, D.C. whose accrediting commission is listed by the U.S. Department of Education as a nationally recognized accrediting agency.



Call Now or Send for FREE information!

We'll send you full information and color literature ABSOLUTELY FREE. Everything you'll need to know about our revolutionary Home Inspection Course is explained in complete detail...including all the facts on the opportunities waiting for you in this high-paying career field.



Sent Free

MAIL THIS COUPON TODAY FOR FREE FACTS! OR CALL TOLL FREE!
1-800-595-5505 Ext. 8972
Call Anytime—24 hours a day, 7 days a week.

Whether you want a full- or part-time job or want to start your own Home Inspection business, ICS training is the fastest way to get started in this high-paying field.

With ICS you train at home, during the hours you choose. Keep your present job while you train for a better one. Everything is explained in plain English. And our tuition is the lowest of any Home Inspection correspondence course!



School of Property Management, Dept. A8DS855
925 Oak Street, Scranton, PA 18515

YES! I want to know how ICS training will help me make more money, start a new career, even get into a business of my own. No obligation and no salesman will visit you.

Name _____ Age _____
Address _____ Apt. # _____
City _____ State _____ Zip _____
Phone () _____

Accredited Member, National Home Study Council

What
woodworkers
need to know

LOOKING INTO GLASS

Working with glass makes a lot of woodworkers nervous. It's brittle, breakable stuff with edges that can cut like—well, glass. And woodworking tools are useless for sizing or shaping it. But some projects, ranging from picture frames to coffee tables, just wouldn't be the same without glass.

When it comes time to incorporate glass into a project, you can count on your local glass dealer to ease your anxiety. The folks at the glazier's shop can help you select the right stuff, cut it to size and shape, then grind the edges so they'll look better and won't lacerate your hands. All you'll have to do is install it.

Do the woodworking first

You may be tempted to have glass cut to the dimensions shown on the plans while you're out buying lumber for your project. But, you'll avoid a lot of headaches if you build the project first, then buy a piece of glass cut to fit the actual opening.

If you're building a table with a beveled-glass top, though, do visit the glass dealer first to determine the edge thickness of the beveled glass. You can then make the rabbet for the glass to the exact depth for better appearance, as shown *opposite page, bottom*.

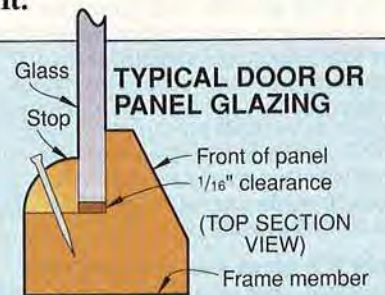
Just get the information on that first visit, though. Don't order an expensive piece of beveled glass until you know the exact dimensions of the glass.

When you construct a rabbeted opening for glass, take care to make the inside face—the surface the glass will bear against—flat

and smooth all around. Anything that sticks up from the surface—even a lump of squeezed out glue—puts pressure on the glass at that point and could cause a crack. Be careful, too, that screw points don't poke through the rabbet into the glass.

To determine the glass size, first measure the completed opening's length and width. Take measurements at several points and across the diagonals to verify that the opening is square.

The glass must be smaller than the opening to allow clearance all around. "You need at least $\frac{1}{16}$ " clearance along each edge," advises Chuck Hedlund, *WOOD* magazine's project builder. He allows a little more than that minimum this way: "After I measure the opening, I subtract $\frac{3}{16}$ " from both the width and length; that gives me the glass size."



Remember, you can't plane a smidgen off a corner of a piece of glass, and you certainly can't flex it into an out-of-square frame. So if the opening's corners aren't quite square or the sides aren't exactly parallel, cut a paper or cardboard template for the opening. Trim it to glass size, then take it to the glass shop as a pattern for cutting.

Always take the glass cutter a pattern for any oval or oddly shaped piece of glass, too. "In fact," Chuck says, "you should make a pattern for any piece of glass. It's the best way to be sure that the glass will fit."

Buying glass for your project

For most woodworking projects, clear (untinted) flat glass will suffice. It's generally available in six thicknesses— $\frac{3}{32}$ ", $\frac{1}{8}$ ", $\frac{3}{16}$ ", $\frac{1}{4}$ ", $\frac{3}{8}$ ", and $\frac{1}{2}$ ". Different applications call for different thicknesses, but the glass itself is all the same.

Standard window glass— $\frac{3}{32}$ " thick—works well for picture frames. Though many people, even within the trade, still refer to this as Single Strength glass, that's

old hat, along with other traditional glass designations, such as Double Strength, Sheet, and Plate.

"Those terms go way back to old ways of making glass," explains a spokeswoman for PPG Industries, a major glass manufacturer. "Now, it's all float glass, and we classify it by thickness. So, what used to be called Double Strength, for example, is now simply $\frac{1}{8}$ " glass." (*Float glass* refers to the manufac-

turing method in which molten glass is flowed across a pool of molten tin, resulting in smooth glass of uniform thickness.)

For cupboard doors, display case sides, and similar uses in the home, Chuck likes to use $\frac{1}{8}$ " glass. Tabletops, shelves, and other horizontal surfaces that may have objects placed on them should be thicker. "We always recommend glass at least

Continued on page 94

\$12,900* • PATENT PENDING • PROVEN CONCEPT

HOBBY TO PROFIT



"The ability to turn a hobby into an income producing venture while building net worth has greatly contributed to my motivation to succeed."

-Dave Raybeck,
Furniture Medic® Franchisee

Exclusive patent pending environmentally conscious restoration techniques allow Furniture Medic® to restore wood and furniture damage/defects *on site* for a fraction of replacement costs.

We provide equipment, specialized training, kick-off marketing campaign, national advertising/accounts and continuous support.



Turn Your Hobby Skills Into Business.

Free video for qualified candidates. (800) 877-9933 or (404) 361-9933
Master and Unit Licenses Available Worldwide.



FURNITURE MEDIC®
"the prescription for damaged furniture.™"

For Nationwide
On-Site Service Call
1-800-408-SERV

*See prospectus for details.

3 HP 1" SHAPER  \$695-Cash	3 HP 16" PLANNER  \$695-Cash	1 HP 6" JOINTER  \$345
14" BAND SAW  \$265	20" PLANNER  \$1250	POWER FEEDER  \$385
3 HP 10" TABLE SAW  \$750	WIDE BELT SANDER  \$799	DRUM BRUSH SANDER  \$295

TRANSPOWER

Tel: 818-815-9897
Fax: 818-815-9807

Order Desk: 1-800-654-7702

CP TOOLS, INC. 611 DUGGAN AVE., AZUSA, CA 91702

Circle No. 15



YOU NEED THIS FREE SAMPLE OF

Saral®

Wax-Free Transfer Paper
Here's Why:

- Transfer your design to any surface with Saral® Transfer Paper
- Waxless and greaseless - erases like pencil with no smear
- Ink or paint over the tracing - won't skip
- Re-usable
- Available in 5 colors graphite, white, blue, red, yellow
- Comes in Sampler and Toile Kit packages, and 12-ft. Rolls

To get your FREE SAMPLE send a self addressed, stamped business envelope to

Saral Paper Co., Inc., Dept. WD
322 W. 57th St., Suite 30-T
New York, NY 10019
(212) 247-0460

REEDED TABLE BASE

Stocked in
6" and 10" diameter
MAPLE - CHERRY
OAK - MAHOGANY
No Minimum Quantity



legs bolted to hollow column for everlasting stability

FREE COLOR CATALOGUE



Adams Wood Products™ L.T.D., L.P.
974 Forest Drive, Dept. M34
Morristown, TN 37814
Phone 615-587-2942 • Fax 615-586-2188

Circle No. 1002

New from

OLSON®

PGT™ Scroll

Precision Ground Tooth
Free Blade Offer

The experts agree, PGT Scroll are "The Best" Scroll Saw Blades You Can Buy!

They are the Smoothest, Most Accurate, and Longest Lasting Blades Available.

Available from your Olson Dealer
5" Plain End Blades with Reverse Teeth.
Univ. Sizes 5, 7 & 9.

Send for your FREE BLADE in the size of your choice.



(circle size 5, 7 or 9)

Name _____

Address _____

City _____

State _____ Zip _____

The Olson Saw Company
16 Stony Hill Road, Dept. WM
Bethel, CT 06801

Circle No. 1367

What
woodworkers
need to know

LOOKING INTO GLASS

Continued from page 92

"¼" thick for tabletops," says Des Moines, Iowa, glass dealer Tom Ballard. "We've seen ⅛" tabletops crack just from setting glasses on them," he adds.

Tom limits his ¼" recommendation to moderately sized tops fully supported along all edges. Glass that rests only on a leg at each corner, for instance, or on a central pedestal, should be at least ⅜" thick, he cautions. In all cases, an unusually large piece of glass should be thicker—your glass dealer can advise you.

Sanding gives glass the edge

When you buy glass for shelves or tabletops, ask for seamed—or sanded—edges. This doesn't add much to the cost of the glass, and it looks much better than plain cut edges. Seaming makes the glass safer to handle, too. (You could have this done on any piece of glass, if you like.) Many dealers can radius the corners for you, too—to fit neatly into a routed rabbet, for instance.

For a fancier look, Tom suggests two inexpensive rounded-edge treatments—the pencil edge and the polished edge. The pencil edge has a dull, sanded finish while the polished edge is, of course, as smooth as glass. Most glass dealers can do these.

Fewer glass shops have the expensive equipment needed for beveling glass edges, so your dealer may have to order beveled glass. You usually can specify the width of the bevel, between ¾" and 1½". (Bevels are commonly 1" or 1½".) The cost depends on the width and total length of the bevel. Figure on spending a lot if your project calls for beveling a curved edge.

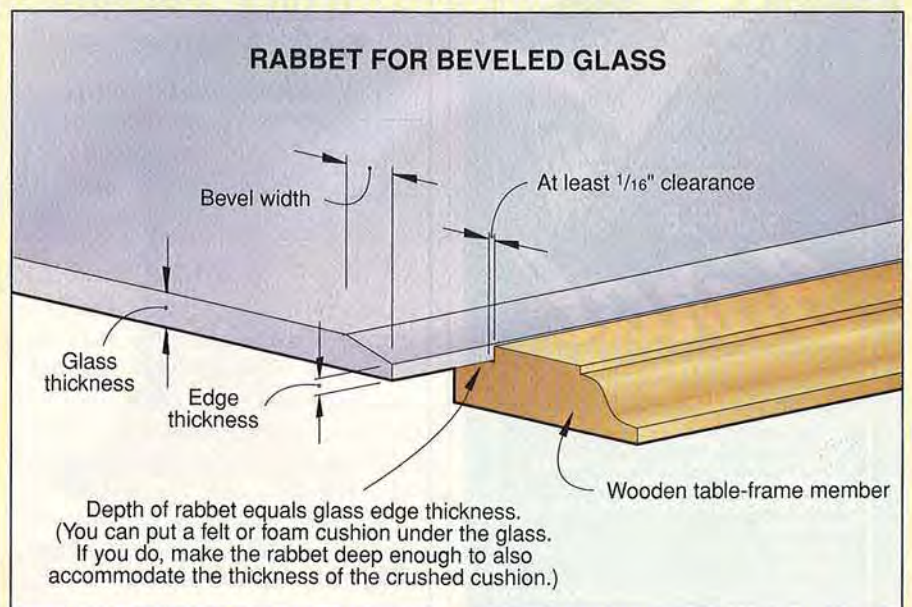
Install the glass

When you're laying the glass into a rabbeted opening for a tabletop, duct tape prevents pinched fingers and broken glass. Fold a piece of tape about 10-12" long into a handle, like the one on the glass in the photo *right*. Stick it to the middle of the glass near one end, then position the opposite end of the glass in the opening. Lower the glass as far as possible into the opening, then finish laying it in place by hanging onto the tape handle, as shown. (Use the same trick to lift one end of the glass when you need to remove it.)

For glazed doors or panels, set the glass into the opening and apply the stops. The illustration *opposite page* shows how stops are typically installed.

Pre-drill pilot holes for the brads or small finishing nails through

the stops. This will prevent a nail from splitting the stop or going astray and breaking the glass. Press the glass firmly against the inside face of the rabbet with the stops. Add cushioning material, if you wish. ♣



Photograph: Hopkins Associates Illustrations: Roxanne LeMoine

DELTA TOOLS			
Model	Description	List	Sale
23-700	Wet/Dry Grinder	234	155
23-680	6" Bench Grinder 1/4 HP	86	75
11-950	8" Belt Press	199	135
31-050	1" Belt sander 2" amp	104	75
31-460	4" Belt Disc Sander	129	129
40-560	16" 2 speed Scroll Saw	266	178
11-990	12" Bench Drill Press	276	184
11-090	32" Radial Bench Router	399	305
43-505	12" Bench Router/Shaper	369	289
22-540	12" Bench Top Planer	Sale	365

FREE SET of extra knives included!

36-220	10" Compound Mitre Saw	350	219
28-180	Bench Band Saw	322	158
28-190	NEW 12" Band Saw	465	395
40-640	20" Radial Arm Saw	466	295
37-070	NEW 6" w/ispd Bench Joiner	337	258
14-560	Hollow Chisel Mortiser	668	289
46-700	12" Wood Lathe	548	449
33-990	10" Radial Arm Saw	818	695
37-280	6" Motorized Joiner	488	389
50-179	3/4 HP 2 stage Dust Collector	483	358
33-055	8-1/4" Sawbuck comp w/legs	865	625
36-040	8-1/4" Compound Mitre Saw	224	149
36-905	30" Unifence	385	249
34-897	50" Delta Unifence	525	299
36-755	10" Tilt Arbor Saw	1264	1015
17-900	16-1/2" Floor Drill Press	482	399
33-080	"Sidekick" Mill Saw	510	389
37-190	NEW 6" Deluxe Joiner	554	479
36-275	NEW 8-1/4" Builders Saw	444	265
36-210	NEW 10" Compound Mitre Saw	438	255
36-070	NEW 10" Mitre Saw	284	165
36-830	NEW 10" Contractors Saw II	700	579
34-555	NEW Sliding Table	459	319
28-283	14" Band Saw w/enc. stand	910	779
22-661	13" Planer w/ 2HP motor	1513	1215
37-154	DJ15 6" Joiner w/3/4HP motor	1451	1215
34-444	Contractors Table Saw	812	649
34-445	34-444 Saw w/30" Unifence	1200	829
34-445X	34-445 Saw w/mobile base & carbide blade	Sale	899
36-250	NEW 10" Slide Compound Saw	825	489

MILWAUKEE TOOLS

6527	NEW Sawzall with case	320	172
6528	NEW Sawzall w/wired cord	316	172
0407-1	12V Drill w/keys chuck & bit	172	122
0406-1	9.6V Drill Kit with 2 batteries	332	159
0224-1	3/8" Drill 4.5 amp magnum	227	124
0234-1	1/2" Drill 4.5 amp 0-850 rpm	237	132
0244-1	1/2" Drill 4.5 amp 0-600 rpm	237	132
0222-1	3/8" Drill 3.5 amp 0-1000 rpm	198	115
0228-1	3/8" Drill 3.5 amp 0-1000 rpm	195	112
0375-1	3/8" close quarter Drill	237	139
0379-1	1/2" close quarter Drill	268	158
6546-1	cds Screwdr 200 & 400 rpm	141	84
6547-1	6546-1 w/bits, 1/4" chuck, & case	176	105
5399	12" D-handle Hammer Drill Kit	332	194
6507	Original SawZall with case	264	144
5397-1	3.8" var. spd Hammer Drill Kit	255	142
5371-1	1/2" var. spd Hammer Drill Kit	340	188
3107-1	1/2" w/ispd right angle Drill Kit	399	219
6754-1	Drywall Gun 0-4000 5.4 amp	196	114
3300-1	1/2" var. spd right angle Drill	356	194
5680	Router 2 HP w/ 1/4" & 1/2" collets	362	195
0235-1	1/2" Drill w/keyless chuck	237	138
6142-1	1/2" 4-1/2" Grinder w/case & access	208	124
6749	Drywall Gun 0-2500 5.4 amp	218	128
6365	7-1/4" Circular Saw 13 amp	218	122
6366	6365 w/fence & carbide blade	228	129
6368	6365 w/fence, carb. blade, & case	249	139
6377	7-1/4" Worm Drive Saw	330	189
6256	Top Handle Jig Saw	284	152
6290	10" Mitre Saw	444	248
6491	6490 w/ carbide blade & bag	532	279
6494	NEW 10" Compound Mitre Saw	444	315
0422-1	NEW 12V Hammer Drill w/2 batteries	340	249
0431-1	NEW 12V Drill w/ 2 batteries	385	229

QUICK DRIVE KITS

SG-2000	Subfloor/drywall, drives screws 1" - 2", complete kit incl. extension	765	485
SG-3000	Deck/subfloor, drives screws 2" - 3", complete kit incl. extension	936	595

FREUD CARBIDE TIPPED SAW BLADES

Item	Description	Teeth	List	Sale
LJ72M010	Gen Pur. A.T.B. 10"	40	69	39
LJ82M010	Cut-off 10"	60	93	45
LJ84M011	Comb 10"	50	78	42
LJ85M010	Super Cut-off 10"	80	115	59
LJ87M010	Ripping 10"	24	69	38
LJ87M010	Cut off 10"	60	94	45
LJ87M010	Ten Kerf 10"	24	72	39
LJ88M010	Ten Kerf 10"	60	88	45
LJ89M010	Ultimate 10"	80	128	68
LJ91M010	Compound Mitre 10"	60	88	54
F410	NEW Quiet Blade 10"	40	95	49
F810	NEW Quiet Blade 10"	80	135	74
TK303	7-1/4" Finishing	40	38	22
TK906	10" Combo	50	53	32
SD308	8" Dado - Carbide	230	119	
SD506	6" carbide w/case & shims	292	155	
SD508	8" carbide w/case & shims	344	168	
F10	1-3/4" x 5/8" Biscuit 1000 Qty	43	29	
F20	2-3/4" x 1" Biscuit 1000 Qty	45	29	
FA	Assorted Biscuits 1000 Qty	45	29	
FB100	16 piece Forstner Bit Set	338	189	
94-100	5 pc. Router Bit Dado System	320	159	
TR215	10" Slide Compd Mitre Saw	688	369	
FT2000E3-1/4	HP v/ispd Plunge Router 410	205		
FT2000E	comes with FREE FT2010 Guide			
JS100	Biscuit Joiner & Biscuits	334	164	

MAKITA TOOLS			
Model	Description	List	Sale
60700D	3/8" v/ispd Reverse Drill 7.2V	128	64
6172DWE	3/8" v/ispd Drill Kit w/ 2 batt.	220	109
50900D	3-3/8" Saw Kit 9.6 volt	270	145
60930D	Incandescent Flashlight 9.6V	346	37
DA391DW	3/8" angle Drill Kit 9.6 volt	312	179

6012HDWE	2 speed Drill Kit w/2 batt.	243	135
60930D	60930D Drill Kit w/2 batteries	270	139
60950D	60950D Drill Kit w/2 batteries	270	139
60950D	60950D Drill only & case	Special	79
632007-4	9.6 volt Battery	47	30
632002-4	7.2 volt Battery	39	28

NEW CORDLESS DRILLS

WITH HIGH CAPACITY BATTERIES			
6202DWDG	6V 3/8" Drill Kit w/ LED batt	390	219
6212DWDG	12V 3/8" Drill Kit w/ LED batt	412	239
6212DWDG	12V 1/2" Drill Kit w/ LED batt	432	259
6201DWH	9.6V 3/8" Drill Kit w/ 2 batt.	351	185
6211DWH	12V 3/8" Drill Kit w/ 2 batt.	369	195
6211DWH	12V 1/2" Drill Kit w/ 2 batt.	399	205

5007NBA	7-1/4" Saw w/electric brake	263	135
9900B	3" x 21" Belt Sander w/bag	344	175
9924DB	3" x 24" Belt Sander w/bag	329	184
4301B	Orb. var. spd Jig Saw 3.5A	292	158
JR3000V	var. speed Recip Saw w/case	252	135
9820-2	Blade Sharpener	394	215
N1900B	3-1/4" Planer with case	244	129
N6154B	4" Disc Grinder 4.8 amp	111	65
KA0452	1/4 sheet Pad Sander w/bag	98	52
DA3000R	3/8" Angle Drill	314	179
27008	8-1/4" Table Saw	585	298
2711	10" Table Saw with brake	1067	593
6404	3/8" Drill Rev. 0-2100 rpm	112	68
6510LVR	3/8" Drill Rev. 0-1050 rpm	168	98
6013BR	1/2" Drill Rev. 6 amp	280	149
9401	4" x 24" Belt Sander w/bag	378	229
4303C	var. speed Orbital Jig Saw	351	205
5077B	7-1/4" Hypoid Saw	281	155
5007NB	7-1/4" Circular Saw 13 amp	232	124
5007NBK	5007NB Saw w/ plastic case	Sale	129
LS1011	10" Slide Compound Saw	946	525
LS1211	NEW 12" Slide Compd Saw	1550	865

SENCO AIR NAILERS

SPN1	Finishing Nailer 1" - 2"	448	309
SN325	Nailer 1-7/8" - 3-1/4"	665	419
SLP20	New Pinner w/case 5/8" - 1-5/8"	399	276
SKS	Stapler 5/8" - 1-1/2"	390	275
SN70	Fram. Nailer Clip Hd 2"-3-1/2"	690	479
SN60	Fram. Nailer-Full Hd 2"-3-1/2"	638	449
SPN40	NEW Finish Nailer 1-1/4 - 2-1/2	351	189

BOSTITCH AIR NAILERS

N80S-1	Stick Nailer	Super Sale	348
RN45	Cool Roof Nailer 3/4" - 1-3/4"	845	395
RFN05-F	Finishing Nailer	650	335
BT35-2	Brad Tacker 5/8" - 1-3/8"	275	165
BT35-2K	BT35-2 w/ case, oil, & brads	299	175
CWC100	1 HP Pancake Compressor	463	289
MIFFS	Flooring Stapler 15 gauge	931	529
S325X-2	Finish Stapler - 1/2" - 1-3/8"	275	165
S325X-2KS325X-2	with case & oil	269	179
PC5000-1	NEW Power Crown Stapler	300	159

SKIL SIZZLERS

2735-04	12 volt cordless Drill Kit	249	144
2736-04	2735-04 with keyless chuck	269	148
1605-02	Biscuit Joiner w/case	221	135
3400	10" Table Saw - Bench Top	270	189
77	Famous 77-1/4" Worm Drive Saw	Sale	144
77M	NEW 77 Mag Saw - 2 lbs lighter than Model 77	Sale	159

PANASONIC CORDLESS

EY6205EQK	Same as EY6205BC but comes with Ironman battery	388	192
EY6207BC	NEW 12 volt 1/2" Drill w/keyless chuck var. speed w/15 min. charger & case	420	222
EY6282EQK	Var. spd 9.6 volt Drill with 15 min. charger, case & NEW Ironman battery	315	169
EY62821DKW	9.6 volt Drill Kit w/2 batt.	395	162

NEW PREDATOR DRILLS

EY6181CRKW	NEW 9.6V Compact Drill Kit w/2 batt. - 10% more power than EY62821DKW305	165	
EY6100CRKW	NEW 12 volt Drill Kit with 2 batteries, 1 hour charger, & case	358	186
EY6100CCKW	Same as EY6100CRKW but has 15 minute charger	420	198
EY6100EOK	NEW 12 volt Drill Kit with NEW Ironman battery, 15 min. charger, & case	375	199
EY6100EOKW	Same as EY6100EOK but w/2 Ironman batteries	473	225

PASLODE IMPULSE GUNS

IM250	Trimspice Finish Nailer Kit	849	565
IM325	Impulse Framing Nailer Kit	849	565

WAGNER PAINT & SPRAYER PRODUCTS

230HD	Power Painter/Sprayer	100	95
255	Airless Kit	180	135
375E	Airless System	195	159
505	High performance Airless Painter	440	369
HVLP	Fine coat finishing HVLP System	195	155
CS2000	Pro fine finish HVLP System	339	278

1995 TOOL CATALOG AVAILABLE
 Call Toll-Free 1-800-328-0457 in Minn. Call (612)224-4859
 FAX: (612)224-9263
 CHECK • MONEY ORDER • VISA • MASTERCARD • DISCOVER
SEVEN CORNERS ACE HDW. INC.
 216 West 7th St. • St. Paul, MN 55102 • Est. 1933

Airy Air Nailers

0241SK	Brad Nailer 3/8" 1-9/16" Same as Senco SKL 20	List 180	Sale 98
0250SK	Brad Nailer 3/4" 2"	List 296	Sale 164
0626SK	1/4" Crown Stapler 3/8" 1"	List 194	Sale 104
0635SK	1/4" Crown Stapler 1/2" 1-3/8"	List 310	Sale 175

EZ-1

New Multi-purpose nailer & stapler
 List 180 Sale 98

0565T

Angle Finish Nailer 1"-2-1/2"
 List 386 Sale 205

DELTA #34-080 10" MITRE BOX XTRA SPECIAL 194.00

Above Nailers come w/case, fasteners, oil, & wrenches

DEWALT TOOLS

Model	Description	List	Sale
DW36A	7-1/4" Circ. Saw w/brake	285	158
DW945			

FINISHING TOUCHES

IN SEARCH OF MOBY DICK

At *WOOD*® magazine, we expect readers to put a personal twist on published project plans. But we gasped in unison when the photo *right* arrived in the mail.

Reader Larry Crosby of Mosheim, Tennessee, sent an accompanying letter to explain the scene. "The article on Ron Mirable and the 'Lure of Wood' [*WOOD* magazine, October 1994] was very good and will be helpful

to many," wrote Larry. "But back in the spring, my boy couldn't catch any fish, so he said that we should make lures to scare the fish out of the water. Here is what we came up with."

Larry and his 8-year-old son, Andrew, carved the 4'-long lure from basswood. Although the giant plug hasn't yet put fish on the table, Larry reports that an even larger lure is under way.



Andrew Crosby pauses to show off his new monster fishing lure designed to scare a trophy from the waters of Tennessee's Norris Lake.

WHAT'S REALLY BEHIND AUTUMN COLOR?

The colorful change of tree leaves from green to red, orange, and yellow each fall signals something far more significant than autumn's arrival. According to the National Arbor Day Foundation, the changing colors indicate that trees are preparing for winter. The vivid

reds, for instance, occur when a pigment called *anthocyanin* develops as the leaves' food-processing function begins to shut down. As the flow of water and glucose slows, the tree's woody tissues transform it into starch, a form of energy that will sustain it through the winter. And starch won't

freeze as temperatures drop, as would summer's watery sap mixture flowing in the tree.

What if your trees don't turn color? Don't worry, they're probably okay. The transformation can be altered by warm nights, above-normal soil fertility, or lots of moisture.

SHELLAC: A GIFT FROM THE INSECT WORLD

Before the advent of easier-to-apply lacquer in the 1920s, and later polyurethane, shellac was a popular finish for furniture, floors, and woodwork. But because shellac is non-toxic, dries fast, and has little odor, today's woodworkers might want to acquaint themselves with this old standby that comes from nature's insect world (see "In Search of the Perfect Finish" on page 66).

The "lac" in shellac stands for the tiny lac insect (*Laccifera lacca*) of India and Thailand. To protect its larvae, it secretes a waxy resin which natives collect from the twigs of trees. After the lac incrustations have been scraped off, crushed, screened, and cleaned, they're processed into flakes or powder. Mixed with a solvent, the flakes become the flowable finish called shellac, first introduced in the U. S. in 1849 by William Zinsser, founder of the company that still bears his name.



▲ In India and Thailand, natives scrape secreted bug resin from collected twigs to obtain the raw material for shellac.

► Much like pulling taffy, a native puller stretches molten shellac resin into large sheets that are later broken into small, thin flakes.

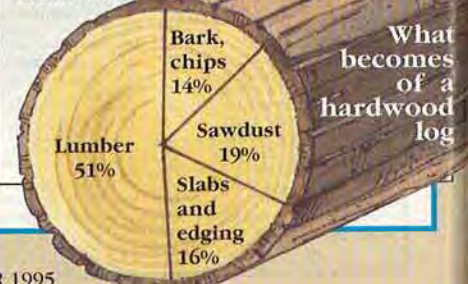


Photographs: Larry Crosby; Wm. Zinsser & Co., Inc. Illustrations: Jim Stevenson

GETTING THE MOST OUT OF A LOG

When sawmills saw rectangular-shaped boards from nearly round logs, there's bound to be waste. Yet, this waste has value, points out the *Missouri Conservationist*, a publication of the Missouri Conservation Commission.

Here's what becomes of a typical red oak log: Bark becomes fuel and mulch. Chips are turned into particleboard and "reconstituted" wood products, such as molded toilet seats. Side slabs and edging end up as charcoal briquettes. Sawdust takes special handling, but can be used for fuel, compost, and the production of methanol and ethanol. ♣



BIG TOOL PERFORMANCE. NOW IN A HANDY TAKE-HOME SIZE.



Sure, maybe someday you'll be working in a shop the size of a warehouse. No telling just where your woodworking might take you. But keep in mind that success starts with a straight edge and a flat, uniform surface. And that most woodworkers have about enough room in their shop for themselves and a bench.



At Delta we figure you shouldn't be limited by the size of your shop. And that you deserve to surface stock with the same precision as the professional who's using one of our monsters. Consider the new Delta 6" Variable Speed Bench Jointer—teamed up with our 12" Portable Planer. Professional precision on a benchtop budget.

Create a perfect edge or a smooth, uniform surface on stock up to 6" wide, on the jointer's 30" table. Tilt the fence to 45° for beveling and chamfering.

Then it's on to the planer for any thickness you like, (1/8" up to 6") on boards up to 12" wide. The two-knife cutterhead makes 16,000 cuts per

minute, for perfectly smooth finishes. Four-post design (the only one of it's kind) adds stability and eliminates vibration. This is the most powerful planer in its class. A real workhorse of a machine.

Both units are hefty enough to take on some real woodworking—yet portable enough to be stowed away when not in use.

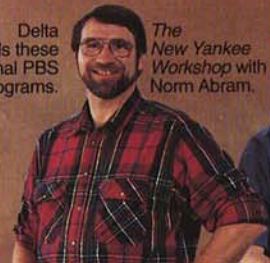
For the name of the nearest dealer, home center or hardware store carrying Delta tools, call Delta International Machinery Corp., 800-438-2486. In Canada, 519-836-2840.

**THE
POWER
OF THE
PROS**

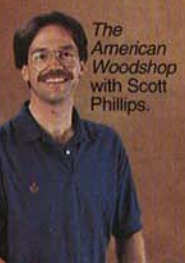


A Pentair Company

Delta funds these national PBS programs.



The New Yankee Workshop with Norm Abram.



The American Woodshop with Scott Phillips.



A self-lubricating screw drive.
Nylon bushings. Tested over 30,000 cycles.
Makes a great family heirloom.

In tests, our screw drive garage door opener lasted the equivalent of 30 years. That's because its 18% larger screw dramatically reduces harmful wear. Its nylon bushings eliminate metal-on-metal fatigue.



And its self-lubricating design doesn't require a bit of messy



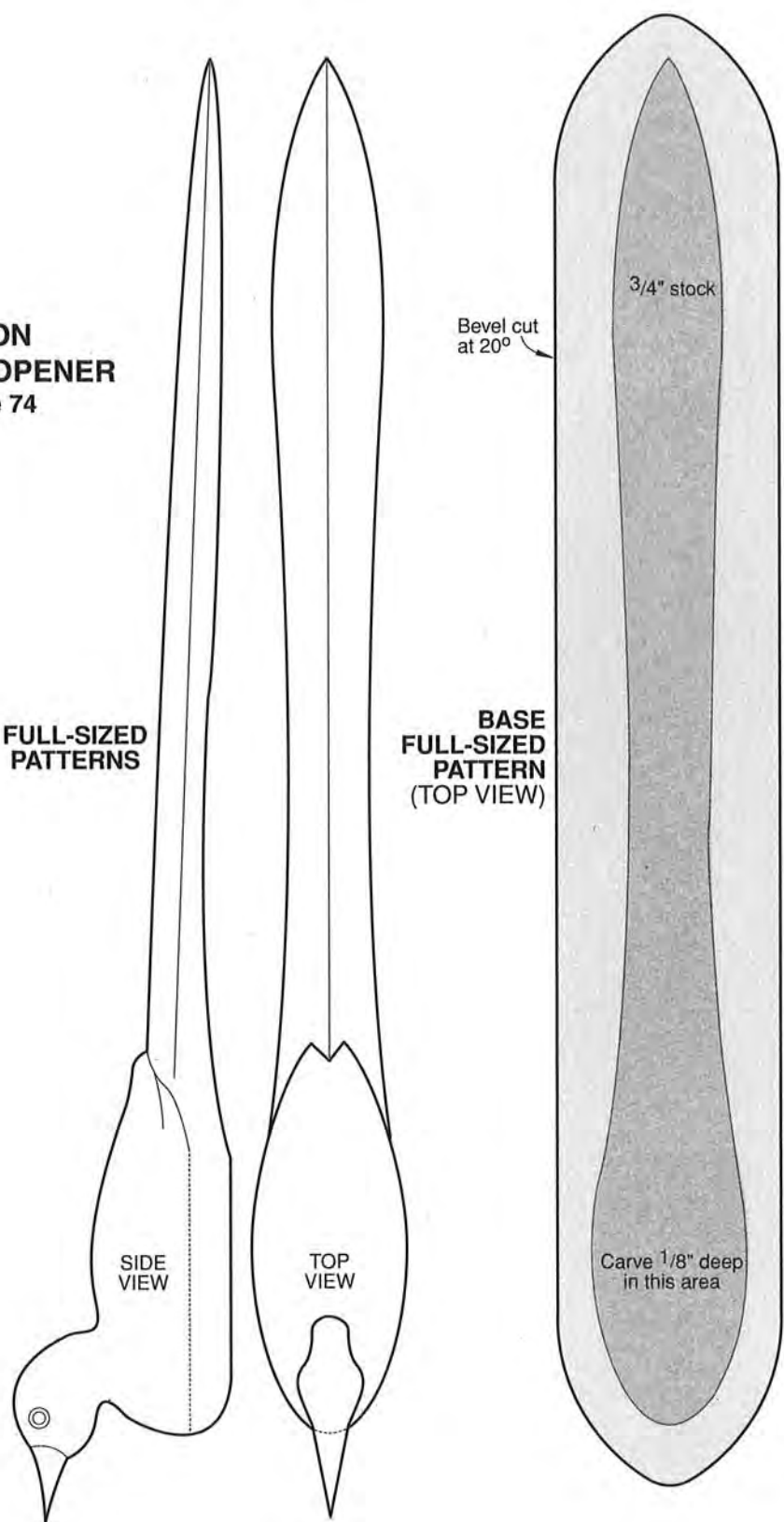
grease. That's a lot of thought for a garage door opener, we agree. Yet that's what led us to build a staple gun that won't jam and a fiberglass-jacketed hammer that resists breaking. And why the longevity of our products isn't measured merely in years, but in generations.

STANLEY
helps you do things right.

LOON
LETTER OPENER
Page 74

FULL-SIZED
PATTERNS

BASE
FULL-SIZED
PATTERN
(TOP VIEW)



Better Homes and Gardens®

WOOD PATTERNS™

Full-sized for your woodworking convenience

SEPTEMBER 1995

ISSUE 81

Dear Reader: As a service to you, we've included full-sized patterns on this insert for irregular-shaped and intricate project parts. You can machine all other project parts using the Bill of Materials and the drawings accompanying the project you're building.

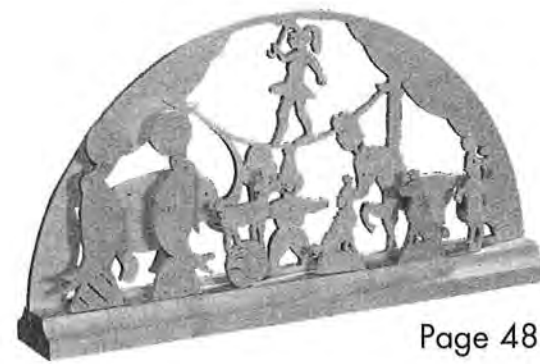


Page 42

- Collector's coffee table
- Scrollsawed circus bow
- Whale bank
- Loon letter opener



Page 54



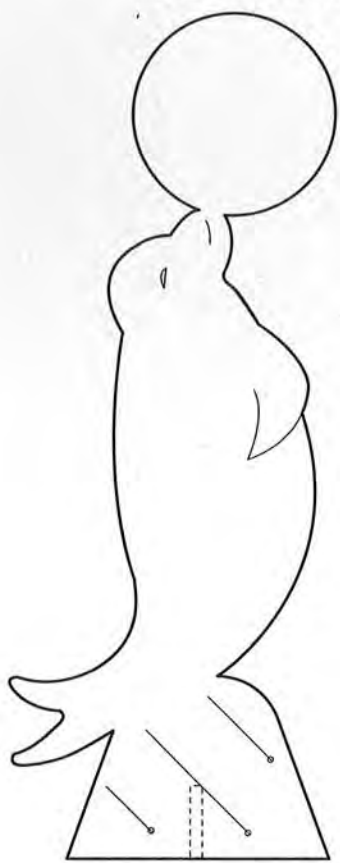
Page 48



Page 74

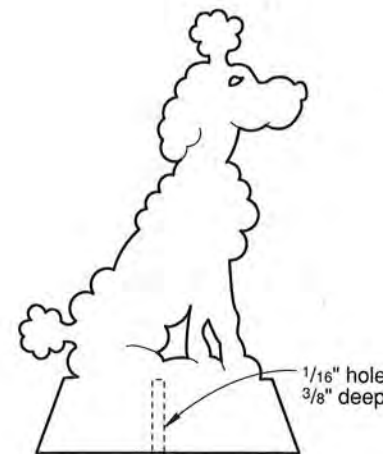
© Copyright Meredith Corporation, 1995. All rights reserved. Printed in the U.S.A.

FULL-SIZED PATTERNS

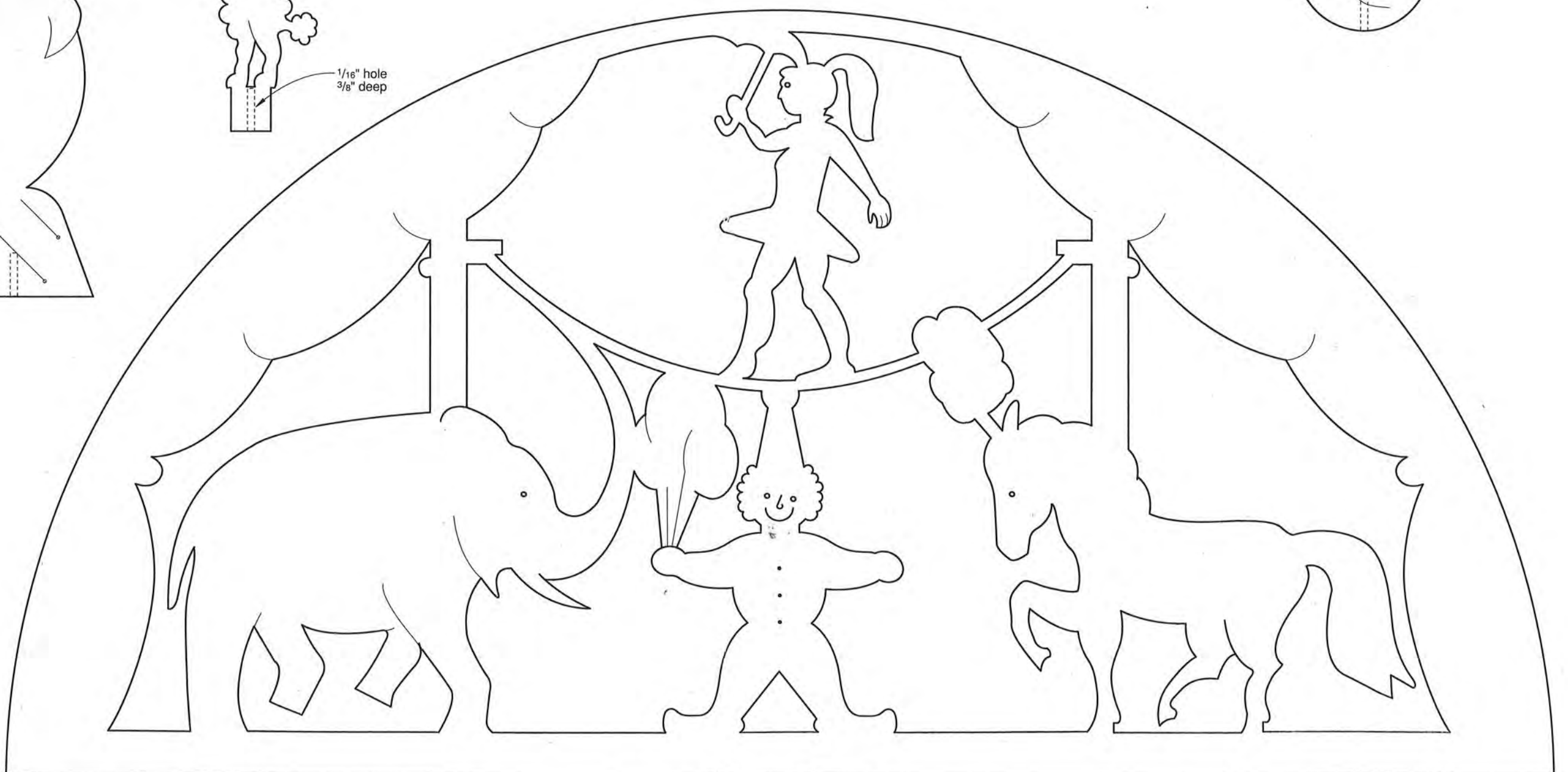
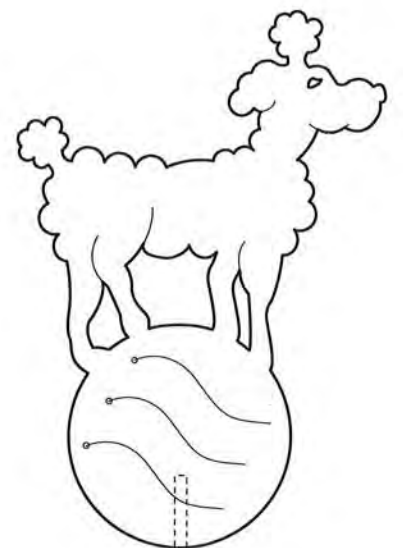


1/16" hole
3/8" deep

SCROLLSAWED
CIRCUS BOW
Page 48



1/16" hole
3/8" deep



FULL-SIZED PATTERN

