Inside This Issue:
Fences & Gates ........... 5
Architectural Millwork ... 13
Shakes & Shingles ........ 27
Registers & Grilles ........ 34
All editorial and advertising material in Traditional Building is organized according to the industry-standard MASTERFORMAT divisions published by the Construction Specifications Institute (CSI).

SPECIAL FEATURES
Profile:
Chicago-School Architect .......................... 4
Fences & Gates .................................. 5
Moldings & Millwork .............................. 13
Shakes & Shingles ................................. 27
Grilles & Registers ................................. 34
Book Reviews .................................... 40
Project Report:
Neo-Traditional Home ............................. 44
Product Literature ................................. 46
Siegel's Scratchboard ............................... 47

Division 2
SITEWORK

SPECIAL REPORT:
FENCES & GATES

IN THE NEWS
HISTORICAL FENCES & GATES ............ 5
FENCES SOURCELIST ................. 6, 8

RELATED PRODUCT ADVERTISING
Bow House ......................................... 9
Cross Industries .................................. 7
Dutch Products and Supply Co. ........ 9
Eastern International .......................... 7
Goldenrod Ironworks .......................... 9
Heritage Fence Co. ............................... 9
Historical Arts & Casting .................... 9
Historical Fence & Ironworks ............ 11
Land Marks, Inc. ................................. 7
Monumental Iron Works ..................... 7
New England Tool Co. ........................ 7
Salvage One ..................................... 9
Steph & Wife .................................... 11
Stewart Iron Works .............................. 9
Texas Standard Picket Co. .............. 7
White Oak Forge ................................. 7

Division 4
MASONRY

RELATED PRODUCT ADVERTISING
Ahren's Chimney Technique ................... 11
Brickyard ......................................... 11
Lyemance International ......................... 11
National Supafi Systems ....................... 11

Division 5
METALS

RELATED PRODUCT ADVERTISING
Campbellsville Industries ..................... 11
Salt & Chestnut Weathervanes ............. 11

Division 6
WOOD & PLASTICS

RELATED PRODUCT ADVERTISING
WOOD MOLDINGS REVIEW ............... 13
MILLWORK SOURCELIST ........ 14, 16, 18
MILLWORK PORTFOLIO ............. 20, 22

Division 6, continued
Conservation Services ....................... 12
Craftsman Lumber .............................. 25
Cumberland Woodcraft ....................... 17
DHM Cabinet Makers .......................... 23
Draper & Draper, Ltd. ......................... 17
Drums Sash & Door Co. ....................... 24
Durable Goods ................................ 12
Empire Woodworks ............................ 24
Fancy Front Brassiere Co. ................... 24
Forest Wood Products ......................... 24
Goodwin Lumber Co. ........................... 24
Harmony Exchange ............................. 24
House Of Moulding ............................ 21
Iron Shop ....................................... 11
Jelliff & Sons .................................. 23
The Joinery ..................................... 12
Kreider Brothers ............................... 23
Mad River Woodworks ....................... 12
Mauer & Shepherd Joinery ................... 12
Maye Woodworking ............................ 24
Moorwood ....................................... 26
National Decks, Inc. ......................... 24
Northfield Restorations ..................... 21
Ornamental Mouldings ....................... 13
P.C. Work ....................................... 17
Pagliacco Turning & Milling ............... 25
Partelow Wood Turnings ..................... 12
PRG, Inc ......................................... 12
R.I. Millwork .................................... 24
Raymond Enkeboll Designs ............... 15
Readybuilt Products ......................... 25
Schwend Manufacturing ....................... 19
Shuttercraft .................................... 23
Silver Creek Mill ............................... 25
Silverton Victorian Millworks ............. 19
Speciality Wood Co. ............................ 21
Sunshine Architectural Woods ............. 25
Torrington Millwork ............................ 26
Vixen Hill Shutters ............................. 21
White River Hardwood ....................... 25
Wood Factory ................................... 24
Woodchute Woodworks ...................... 19
WoodTech, Inc. ................................ 24
Worthington Group ............................. 13
Yoenger Wood Moulding ..................... 19

Division 7
MOISTURE PROTECTION

SPECIAL REPORT:
WOOD SHINGLES

IN THE NEWS
SPECIFYING WOOD SHINGLES .......... 27
SHINGLES SOURCELIST .............. 28

RELATED PRODUCT ADVERTISING
Bellvale Roofing Slate ....................... 29
Cedar Guild .................................... 26
Cedar Shake & Shingle Bureau .......... 26
Cedar Valley Shingle Systems .......... 26
FibreCem Corp. ................................ 28
Granville Manufacturing Co. ........... 29
Liberty Cedar .................................. 29
CONTENTS

Division 7, continued
Shamokin Trail Shingle Co. ...........................................26
Sky Lodge Farm ..........................................................26
South Coast Shingle Company ......................................29
Tilesearch .................................................................26

Division 8
DOORS & WINDOWS

RELATED PRODUCT ADVERTISING
Allied Windows .........................................................31
Ball & Ball Hardware .................................................48
Bathroom Machineries--Hardware .............................31
Cirecast, Inc. .............................................................30
Elegant Entries ..........................................................30
Kenmore Industries ..................................................40
Midwest Architectural Wood Products .......................30
Old Smithy Shop .......................................................30
Riceston Woodwork ..................................................31
Schemowitz, Inc. .........................................................31
WoodstoneCo. ..........................................................30

Division 9
FINISHES

RELATED PRODUCT ADVERTISING
Above View, Inc. ........................................................32
Architectural Reproductions ......................................32
Aristocast Originals ..................................................32
Bradbury & Bradbury ...............................................31
Cameron Noriega .......................................................32
Chestnut Specialties ..................................................31
Classic Carvings .......................................................33
Fe Fi Faux .................................................................32
Fischer & Jirosh Co. ....................................................32
Helen Williams Rare Tiles .........................................32
J. R. Burrows & Co. ....................................................31
Polytek Development Corp. ........................................32
Teresia ....................................................................31
W.F. Norman Metal Ceilings .......................................33

Division 10
SPECIALTIES

RELATED PRODUCT ADVERTISING
Buckley Rumford Fireplace Co. ..................................33
Country Cupolas ......................................................33
Country Iron Foundry ...............................................34
Nixalite .................................................................33
Pennsylvania Firebacks .............................................34
Smith-Cornell .........................................................33
Thermo-Rite Manufacturing ......................................33

Division 15
MECHANICAL

SPECIAL REPORT: GRILLES & REGISTERS

IN THE NEWS
GRILLES & REGISTERS SURVEY ..................................34
REGISTERS SOURCELIST .........................................36

RELATED PRODUCT ADVERTISING
American Home Supply .............................................37
Antique Hardware Store ...........................................39
Midget Louver Co. ....................................................34
Monarch .................................................................34
Reggio Register ........................................................35
Triaco, Inc. ...............................................................35
Watercolors, Inc. .......................................................34

Division 16
ELECTRICAL

RELATED PRODUCT ADVERTISING
Authentic Designs .....................................................38
Lighting by Hammerworks ........................................38
Porcelli Studio .........................................................38
Roy Electric Co. .........................................................38
Sunfeather Reproductions .........................................38
Urban Archaeology ....................................................38
Victorian Lighting Works .........................................38
Yankee Barn ............................................................40

Division 17
BOOK REVIEWS

IN THE NEWS
TRADITIONAL DETAILS .............................................40
NEW CLASSICISM .....................................................41

RELATED PRODUCT ADVERTISING
John Wiley & Sons ....................................................41

ON THE COVER: Carved and sculptured architectural ornament by Raymond E. Enkeboll Designs. For more information, see page 16.

COMING IN THE NEXT ISSUE:
Cupolas, Steeples, Weather vanes Carved Ornament Molded Plaster & Lookalikes Roofing Slates & Tiles

Clem Labine's
TRADITIONAL BUILDING

Historical Products For Today's Professional
69A Seventh Avenue
Brooklyn, NY 11217
(718) 636-0758 FAX: (718) 636-0750

Editor & Publisher Clem Labine
Managing Editor Judith Siegel Lief
Contributing Editor Eve M. Kahn
Art Director Judith Siegel Lief
Advertising Manager Susan Littman
Circulation Assistant Tiffany C. Meetens
Data Security Magnolia C. Shepherd
Compositor Barry Kornblum

A Note To Contributors: TRADITIONAL BUILDING solicits reviews of historical products from building and preservation professionals. A query letter to the editor describing the product and scope of the review is suggested. Photos of outstanding examples of Neo-Traditionalism and Architecture are also sought. While we will be careful of all materials submitted, we cannot be responsible for non-receipt or loss; please keep copies of all materials sent.

TRADITIONAL BUILDING (ISSN 0898-0284) is published bimonthly by Historical Trends Corporation, 69A Seventh Avenue, Brooklyn, NY 11217. Telephone: (718) 636-0756 FAX: (718) 636-0750. Subscription rate to professionals in architecture, construction, and preservation in the U.S. and possessions: $18/yr. (6 issues). Rate for non-professionals and subscribers outside U.S.: $30/yr. U.S. funds.

Contents of TRADITIONAL BUILDING are fully protected by copyright and must not be reproduced in any manner whatever without written permission from the publisher. © Copyright 1991 by Historical Trends Corporation. All rights reserved.

PRINTED AT THE LIGHTHOUSE PRESS
Manchester, New Hampshire

TRADITIONAL BUILDING is indexed in CONSTRUCTION INDEX

March/April 1991 3
WILBERT HASBROUCK:
Learning From
The Chicago School

BY EVE M. KAHN

For nearly 20 years, Chicago-based restoration architect Wilbert R.
Hasbrouck has worked on buildings by all the local greats: Louis
Sullivan, Frank Lloyd Wright, and Burnham & Root. "I've come to feel
like they're my partners, like I know them," he says. He feels especially
close to Wright, because recently his firm has tackled three projects that Wright
undertook eight decades earlier: The 1904 interior renovation of Burnham &
Root's 1888 Rookery; the Martin House in Buffalo; and the Dana-Thomas House
in Springfield, Ill.

"I've learned a lot about Wright, working on these three," he says. "He
was a great designer, of course, and a great manager of people, to get the
quantity and quality of work that he did. But he was also a master marketer.
I've met 50 original owners of Wright houses, and they all say the same thing:
That theirs was Wright's favorite house, and that they really designed it, he just
helped. I'd give anything if I could get a client to say that — wouldn't you?"

All modesty aside, Hasbrouck's clients have the right to be almost as
pleased as Wright's. Among restoration accomplishments by the firm of
Hasbrouck, Peterson, Zimoch and Sirrattumrong: The 1871 Delaware Building
— the first office building erected after the Chicago Fire (with the oldest
cast-concrete skin in America); the 1885 turreted Dearborn Station in Chicago;
and Sullivan's 1911 People's Savings Bank in Cedar Rapids. "Our forte," says
James Peterson, Hasbrouck's longtime partner, "is reconciling what a great
architect intended with what the current owner wants, without spoiling the
building."

The firm attracts business with the principle of "enlightened greed." "I've
been criticized a lot for using that phrase," Hasbrouck explains, "but I believe
in it. We save buildings by showing owners how, if restoration is done right,
it can make a rich man richer. The process may be expensive, but the results
are more valuable. We teach owners how to massage the program to fit the
building, rather than the other way round."

His first job out of Iowa State College's architecture school was with the
Illinois Central Railroad, where he soon rose to architectural engineer of the
system. "The line ran from New Orleans to Sioux City, with 10,000 buildings
along the way, from three-hole outhouses to boxcar manufacturing facilities," he
says. "At least one building was on fire all the time." But the wealthy
railroad's structures tended to be solidly built, many dating back to the 19th
century, and a few had been designed by such well-known names as Daniel
Burnham. Hasbrouck found his interest in and respect for historic architecture
rising. In 1963, he and his wife Marilyn (now the proprietor of Prairie Avenue
Bookshop, one of the country's largest architectural bookstores) founded The
Prairie School Review, an academic publication full of essays on Prairie Style and
other avant-garde turn-of-the-century American architecture.

"Landmarks were being torn down all over town, enthusiasm for Wright
and Sullivan was increasing, and we were writing editorials lambasting the
architectural profession for not paying more attention to restoration," he says.
The magazine, he adds, "gave me great entree. I could go anywhere and show
it and be taken seriously." Taking him especially seriously in 1968, the AIA
invited him to serve as executive director of its Chicago Chapter and Illinois
Council. He gave up hands-on work to accept the job: "The AIA needed a
spokesman with no practice, with no ax to grind."

But the more architects he met through AIA, the more he realized that
Chicago lacked restoration specialists. "Maybe two or three were active," he
recalls, "and those had a certain reluctance, because they didn't want to spend
the time and money to do it well." He left AIA in 1975 to hang out his own
continued on page 42
KEEPING YOU POSTED: From Pickets To PVC

By Eve M. Kahn

Fences and gates give a site its first opportunity to impress visitors. Whether low, simple, and friendly or high, sharp, and forbidding, they reveal the homeowner within. The earliest fences in America, however, were purely functional; made of rough lumber, they kept intruders out and animals in, and delineated the boundaries of newly settled land. Progress brought wrought iron to many of the colonies in the latter half of the 18th century, while wood fences, for the wealthy, became increasingly decorative. Cast iron became prevalent in the second half of the 19th century, as did elaborately detailed wood fences, but many of these disappeared in the early 20th century. Ornament in general fell out of favor, and metalwork was often melted down for military purposes.

Today a enormous variety of fencing has become available, including types unknown until recently, such as PVC and metals with high-tech finishes. But the basic requirements of fences and gates have remained the same. Creative design and good workmanship are still crucial.

How do you specify and get high-quality fences and gates? What are the signs of shoddy workmanship? What are the advantages and disadvantages of different materials and finishes? What are the best installation techniques? We interviewed manufacturers who work with wood, including

Fred Good of Brattle Co.; Richard Ross of Heritage Fence; and Gary Womble of Acorn Fence; manufacturers who work in metal, including Robert Baird of Historical Arts & Casting; Scott Howell of Robinson Iron, and Dave Beukamp of Historical Fence and Ironworks. We also spoke to PVC supplier David Blum of Bufftech, and to antique fence and gate sources Joe Ley of Ley Antiques and John Greet of Governor's Antiques.

FENCE & GATE DESIGN CHECKLIST

GENERAL ADVICE

- Consider the landscape: Certain fence styles, such as curve-topped or flat-topped rails, don't adapt easily to hills, while pickets can rise and fall gracefully with the terrain.
- Allow for future landscaping: Will the owner change the gardens often, or soon install a pool?
- Avoid the common mistake of overfencing; the owner may not need a big barrier around the property, but only privacy in certain areas.

WOOD

- DESIGN: Nails, screws, mortise-and-tenon joints, and dowels are all options. Mortise-and-tenon joints look handsome, as do dowels, but both are prone to rot. Screws allow changes to be made without ripping apart the fence.
- WOOD SELECTION: For visible areas, western red cedar or northern white pine boards and rails with kiln-dried pressure-treated southern yellow pine (CCA 40) in-ground posts are best. (Pressure-treated rails and boards are fine for less visible spots.) The posts, which lose their color, are an option, but they have not yet proven their long-term durability and they cost 15% more. Another option is cedar in-ground posts. They age well and do not pose the environmental hazards of pressure-treated, which has to be handled with gloves and sawn wearing masks, and which can't be burned and so will one day end up in a landfill.
- FINISHES: Latex stain is low maintenance, comes in opaque formulas, and does not fade readily. (Prime northern white pine before staining.) However, its finish is flat and not well suited to visible areas.
- FLAT TOPS: In re-application but gives a more polished look.

WORKMANSHIP: Watch for open joints, missing structural pieces, thin pieces (commercially available pickets can be as thin as 1/2 in. and last perhaps 3 or 4 years); gaps where boards meet posts or rails; nails or screws not well sunk.

INSTALLATION: Fence posts should extend 3 ft. and 1/2 in. into the ground.
- Path holes should be filled with soil. (For pressure-treated, concrete hole filler is overkill, and for non-pressure-treated, concrete holds water.)
- If the soil is loose, stick it, or, wet, stiffen it by mixing in some Portland cement.
- Gate posts should be thicker than fence posts and set in concrete.

METAL

- DESIGN: In general, need to be supported by a post every 5 or 6 ft.
- To reinforce heavy gates unobtrusively, continuous welding and the least louvered sides are options, as is an I-beam along the gate's bottom. Scrolls and other small ornament can also serve as braces.
- Masonry posts for heavy gates should be equipped with steel reinforcing rods, or the gates should be hung directly on steel columns disguised in masonry.
- The best hinges for heavy gates contain stainless-steel pins and ball bearings and can be lubricated. (Lawler and Stanley are two recommended manufacturers.)
- Use two hinges rather than three; gates with too many hinges get stuck easily.

MATERIALS: Aluminum is 1/3 the weight of steel or iron; steel and iron are stronger and easier to repair. Bronze and copper are rust-free but expensive and prone to theft.
- Tubular iron, unless galvanized, will rust inside. Tubular is acceptable if budgets are tight, if weight is a consideration, and if tubs are installed so that they can drain.

WORKMANSHIP: Watch for welds that look like webs of bubble gum; weld splatters; and discontinuous lines on either sides of posts.

INSTALLATION: In most cases, set the posts in concrete.
- Lead, the predominant 19th-century setting material, can be used if the posts are being set in holes drilled in stone, or if there is danger of abuse (a fallen post set in lead can be re-erected easily). However, lead is costly, and its lumes, of course, are hazardous.

GALVANIZING: Advantages: The Rolls Royce of coatings, galvanizing is tough and environmentally safe to apply; it can be patched with spray, and if it is pierced, its molecular properties are such that it tends to heal itself. Disadvantages: Even a top-notch galvanizing job will leave runs and drips that need to be sanded off; not many galvanizing shops can handle large gate or fence sections, and smaller sections require more drilling and gouging to assemble, causing more rust-prone holes, and a bad galvanizing job can ruin details.

EPoxy: Recommended Formulas: DuPont's Corlar, a zinc chromate; also Tnemec's system: 90-97 Tnemec-Zinc primer, Series 73 Endura-Shield III enamel, and Series 66 Hi-Build Epocoline. (Tnemec Co., Box 411749, Dept. TB, Kansas City, MO 64141 (816) 463-3400.)

Advantages: Two-part epoxy systems are the BMWs of coatings. They are cheaper than galvanizing and only slightly less tough, and they can be touched up.
- Disadvantages: Epoxy application is not a job for laypeople, and it requires spraying, an environmentally unhealthy technique. Also, the surfaces sometimes need sanding before touch-ups will bond to them.

PAINT: Red primer over industrial alkyl enamel is an old favorite, and cheap. Re-apply every two years, strip every 40 years, and ironwork can easily last a century.

OTHER FINISHES: Nonsanded baked-enamel and powder-coating systems are now on the market; all the have the disadvantage that repairs are difficult.

MISCELLANEOUS ADVICE: Reserve yourself to the knowledge that no matter how much money you spend on coatings, some rust will occur.

PVC

Advantages: Difficult to damage and generally comes with long warranties; never needs repainting; a number of handsome traditional designs now available; looks like wood and a distance.

Disadvantages: Limited custom workmanship, and only a few colors, and colors other than white can cost extra. If damage occurs, replace is the only attractive solution, and up close PVC does not convey the warmth and solidarity of wood.

ANTIQUE FENCING

Advantages: Handsome antique design and workmanship: the pleasure of owning something with a provenance.

Disadvantages: Pieces badly rusted or bent may be difficult to repair. Repairs must be handled by specialists, so buy from a source who can re-store ironwork or knows where to get the work done properly.

Who's In This Special Report

The 36 companies included in the Special list on page 6 and 8 include manufacturers of wood, metal, and PVC fences and gates. They range from one-man shops with a custom line to major manufacturers of stock products, and from new establishments to 100-year-old companies still offering vintage designs. Some specialize in fences and gates, others produce them as part of broader selections. We've also included several antique dealers who supply old metal fences and gates.

As noted, some of their literature is free and some is not. If you need information immediately, call or write the companies directly. We've provided all contact information on the Source List. (Please mention TRADITIONAL BUILDING.) If you simply need information to update your files, you may find it more convenient to use the enclosed Product Information Card or the Form on page 46.
<table>
<thead>
<tr>
<th>COMPANY</th>
<th>SPECIALTY</th>
<th>Literature</th>
<th>Materials</th>
<th>Style/Type</th>
<th>% Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acorn Fence</td>
<td>4-year-old wood fence and gate manufacturer; specializes in elaborate traditional designs; 25 finals and 10 picket shapes; gates range from simple raised panels to Chinese Chippendale fantasies. Also lattice, trellis, gazebos, pergolas, and bridges.</td>
<td>Free</td>
<td>western red cedar</td>
<td>as specified, (Colonial &amp; Victorian specialties)</td>
<td>100%</td>
</tr>
<tr>
<td>Antique Cast Iron</td>
<td>Cast-iron restoration specialists who can reproduce antique fences and gates, working from originals or images, and can repair.</td>
<td>None</td>
<td>cast iron</td>
<td>as specified</td>
<td>100%</td>
</tr>
<tr>
<td>Bokenkamp's Cherry</td>
<td>Portfolio</td>
<td>metal as specified</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bokenkamp's</td>
<td>Five man forge that can work in any metal or style and has extensive design experience.</td>
<td>Free</td>
<td>Write in No. 345</td>
<td>as specified</td>
<td>100%</td>
</tr>
<tr>
<td>Bokenkamp's</td>
<td>Wood fences and gates, most based on 18th- and 19th-c. designs; museum-quality reproductions, rounded corners, elaborate posts and finals, and latticework are specialties.</td>
<td>Free</td>
<td>Write in No. 356</td>
<td>as specified</td>
<td>50%</td>
</tr>
<tr>
<td>Bufftech</td>
<td>PVC picket fences, most available in 3-, 4-, or 5-ft. heights and many with traditional finials and posts.</td>
<td>Free</td>
<td>PVC</td>
<td>Colonial, utilitarian</td>
<td>5%</td>
</tr>
<tr>
<td>Charting Cross Roads</td>
<td>Importer of aluminum reproductions of 19th-c. ironwork, including wide variety of filigree fences and gates.</td>
<td>Send $2 for catalog</td>
<td>aluminum</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Cross Industries</td>
<td>Manufactures PVC lattice in 9 colors plus white, in diagonal and rectangular patterns; minimizes maintenance headaches.</td>
<td>Free</td>
<td>Write in No. 23</td>
<td>PVC</td>
<td>utilitarian</td>
</tr>
<tr>
<td>Dutch Products &amp; Supply</td>
<td>Gates and fences imported from Holland, topped by scrollwork alternating with spears. Stock gate width, 12 ft.; stock fence heights, 33 or 44 in., with custom sizes (but not patterns) available.</td>
<td>Free</td>
<td>Write in No. 705</td>
<td>galvanized steel</td>
<td>Colonial</td>
</tr>
<tr>
<td>Eastern International</td>
<td>&quot;Creative Mix-N-Match&quot; system: 21 modular components for traditional wood fences and gates. Patterns include solid panel, pickets with or without ornamental tops, cut-outs, and lattice. Gates can be 3-1/2 or 5 ft. W and any height.</td>
<td>Free</td>
<td>Write in No. 652</td>
<td>northern white cedar</td>
<td>Colonial, Victorian</td>
</tr>
<tr>
<td>Elm Industries</td>
<td>30-year-old metalwork manufacturer that specializes in fences, gates, and security gates, primarily for residential buildings. Will make house calls in Cincinnati area.</td>
<td>Free</td>
<td>iron</td>
<td>as specified</td>
<td>100%</td>
</tr>
<tr>
<td>Empire Woodworks</td>
<td>Family-owned woodwork shop that produces Victorian balusters, newel posts, finials, and rails for fences and gates as well as other architectural ornament.</td>
<td>Free</td>
<td>Write in No. 683</td>
<td>redwood, cedar, poplar</td>
<td>Victorian</td>
</tr>
<tr>
<td>Goldenrod Ironworks</td>
<td>Small custom fabricator that produces, among other architectural metalwork, fences and gates, typically for projects in the New York area. Specialties include castings and &quot;challenging or unusual designs and restorations, in any metal.&quot;</td>
<td>None</td>
<td>Write in No. 685</td>
<td>metal as specified</td>
<td>as specified</td>
</tr>
<tr>
<td>Governor's Antiques</td>
<td>4-1/2-acre salvage yard that has &quot;more longer runs of antique fencing that anyone else.&quot; Iron gates to 25 ft. W. fence runs to 4300 ft. L., all restored; installation service available. Also copies of antique fences and gates based on originals, images, or 750 stock patterns.</td>
<td>Free</td>
<td>iron</td>
<td>Colonial, aluminum</td>
<td>Victorian, utilitarian</td>
</tr>
<tr>
<td>Heritage Fence</td>
<td>Specialists in accurate reproductions of historic wood fences and gates, based on patterns found in old books or at historic buildings. Also arbor, trellis, lattice panels, and &quot;anything other fence companies can't offer.&quot; Will travel to install in Pennsylvania.</td>
<td>Free</td>
<td>Write in No. 559</td>
<td>pine, western red cedar, spruce</td>
<td>Colonial, Victorian, utilitarian</td>
</tr>
<tr>
<td>Historical Arts &amp; Casting</td>
<td>Major cast-metal restoration and fabrication company that builds fences and gates based on originals or images, including pictures from its own collection of Victorian foundry catalogs.</td>
<td>Free brochure; send $5 for catalog</td>
<td>bronze, iron, aluminum, steel</td>
<td>as specified, with Victorian specialty</td>
<td>100%</td>
</tr>
<tr>
<td>Historical Fence and Ironworks</td>
<td>Fence and gate specialists for large and small projects; staff will travel to install. 14 stock designs include hirnings and spears linked by crooks and rails. Line and newel posts, 13 gates, and 20 finals also available.</td>
<td>Free</td>
<td>Write in No. 668</td>
<td>iron, aluminum, bronze</td>
<td>as specified</td>
</tr>
<tr>
<td>Land Marks</td>
<td>Small forge that restores or fabricates fences and gates in any style &quot;from very modern to French Provincial.&quot; Specialists in complicated forge work for high-end residential or commercial buildings.</td>
<td>Free</td>
<td>Write in No. 689</td>
<td>iron, aluminum, bronze</td>
<td>Colonial, Victorian</td>
</tr>
<tr>
<td>Lawley Machine &amp; Foundry</td>
<td>1,000 types of metalwork, with fences and gates mainly in elaborate Victorian styles, including a reproduction of the famous Comstock fence in New Orleans. Also fence and gate parts such as Victorian newel posts and over 100 types of finials/spears.</td>
<td>Free brochure; send $5 for catalog</td>
<td>iron, aluminum, bronze</td>
<td>as specified</td>
<td>100%</td>
</tr>
<tr>
<td>Lcy Antiques</td>
<td>Two acres of architectural antiques, including iron fences: Loop and spear, picket, and other traditional Victorian styles, typically in 6-ft. lengths. Also a wide variety of antique gates as well as custom fences and gates based on originals or images.</td>
<td>None</td>
<td>iron</td>
<td>as specified</td>
<td>25%</td>
</tr>
</tbody>
</table>
Distinctive Ideas in Affordable Picket Fence and Gates.

Choose swing or slide gates if you choose MONUMENTAL IRON WORKS you can be sure they will work.

Galvanized Steel With Baked on Polyester Overcoat Finish Guaranteed 15 Years.

Monumental Iron Works’ piers can be used in place of stone or brick columns in the line of fence shown above. They can also be used as gate posts.

CREATIVE MIX-N-MATCH™ CEDAR FENCING

- Design your own fence from 21 stock components
- 10,000 possible combinations
- 100% Northern white cedar
- Beautiful grain & texture
- Resists termites & decay
- Can be stained or weather naturally
- Aluminum nails
- 15-year warranty

Send for our Mix-N-Match Cedar Fencing Brochure.

Eastern International, Inc.

515 Johnson Ave., Dept. TB, Bohemia, NY 11716 (516) 563-2900

FUNCTIONAL ART IN METALS

INFORMATION BY REQUEST

LAND MARKS INC.

AA 2 BOX 8036 • MILFORD, PA 18337 • (71) 296-8354

FINE ARCHITECTURAL METALSMITHS

Forgework and fine hand construction. Project development from client specs or from our own design archives. Drive gates, fencing, grillwork, railings, furnishings and accessories.

Recent commissions include textured steel rails for the Federal Reserve Bank of New York, and the restored City Hall of Lewiston, Maine.

Gate Folds $3.50 • For project queries:

NEW ENGLAND TOOL CO., LTD.
PO Box 30, Chester, NY 10918 • (914) 782-5332

These rare, historically documented Victorian fence pickets were popular in Texas around the turn of the century. Our firm is recreating this classic formal-deco motif designed by your choice of lumber starting at $0 each. The dimensions are 3' X 2 1/2" X 47". For free mail order information call or write to:

Texas Standard Picket Co.
600 West 17th St., Box 304
Austin, Texas 78701-1161
(Use: $2.25 for cypress picket sample.)

P.H. Moursy, Prop.

WRITE IN NO. 572

Never Needs Painting

Now or soon to be available at over 1000 fine stores

Lasts A Long Time

For more information call 1-880-521-9878

WRITE IN NO. 23

WRITE IN NO. 688

WRITE IN NO. 572

WRITE IN NO. 689

WRITE IN NO. 246
The International Fence Industry Association (IFIA) is a trade association representing manufacturers and suppliers of traditional fencing and gate products. It has members from various regions, including North America, Europe, and Asia. The association provides information on traditional fencing styles and gate designs, as well as resources for architects, designers, and homeowners interested in using traditional materials and styles in their projects.

IFIA offers a variety of resources, including educational seminars, trade exhibits, and a directory of members. The organization promotes the use of traditional materials such as iron, wood, and brick, and encourages the preservation of historic and traditional fencing styles.

For more information, contact: IFIA, 5300 Memorial Drive, Ste. 116, Stone Mountain, GA 30083 (800) 822-IFIA or 404-299-5413.
Over a century ago, craftsmen fashioned cast metal into elegant store fronts, grand entrances, canopies, light fixtures, furniture, fountains and a number of other architectural details.

A hundred years later, designers and craftsmen at Historical Arts & Casting are creating traditional cast metal ornamentation with the same care as their predecessors in iron, bronze and aluminum.

Please call or write for more information.

HISTORICAL ARTS & CASTING, INC.
1939 South 4130 West, Unit F
Salt Lake City, Utah 84104
Tel: 801-974-0242  Fax: 801-974-5832
FENCES & GATES SHOWCASE

Shown are some traditionally styled fences in a variety of materials. For contact information, please consult the SourceList on pages 6 & 8.
Division 6
WOOD & PLASTICS

RESUE DETERIORATED MATERIALS WITH ABATRON PRODUCTS

Here are 3 uses for Abatron's Restoration Products. If you've got a different problem, call us. It's likely we have a formulation that will do the job.

WOOD RESTORATION

LiquidWood and WoodEpoxy give new life to severely rotted window sill, sash, frames, shutters, columns, decorative wood elements. The Abatron system is especially valuable when original wood must be saved for historic reasons. LiquidWood consolidant reinforces and waterproofs by hardening after penetrating. WoodEpoxy is a structural adhesive putty that fills, repairs, and replaces missing wood. It can be sanded, milled, stained, etc., like wood.

CONCRETE RESTORATION


CRACK-INJECTION

ABOJECT: Series of structural crack-injection resins is a proven method to restore structural integrity to cracked load-bearing elements, such as foundations, abutments, swimming pools, concrete pipes, columns, and sculptures. ABOJECT resin is injected into the crack, filling and welding it. ABOJECT makes a permanent bond that is stronger than concrete. Besides concrete, ABOJECT can weld masonry, marble, stone, wood, ceramics, metals, stucco, and gypsum. Call or write for additional information on these cost-effective restoration materials.

ABATRON, INC.

33 Center Drive, Dept. TB, Gilberts, IL 60136
Phone: (708) 426-2200  FAX: (708) 426-5966

WRITE IN NO. 130
Architectural Millwork: ENRICHING DETAIL

BY JUDITH SIEGEL LIEF

We all know that millwork adds enriching detail to an architectural design. Similarly, the specifier must provide plenty of enriching detail to the millwork supplier in order to complete a highly aesthetic and reasonably economical project. Here are some guidelines provided to bridge conflicts that may arise between professionals and their clients.

How does one become an informed purchaser of architectural millwork? John Walker at Walker Brothers says, "Ask someone! Call up a millwork shop with a good reputation and ask questions." Julie Ryder at Silvertown Victorian Millworks declares, "Educating our clients is our strongest sales tool. We would never withhold information from anyone." However, before you call, consider the following guidelines; they may help you ask questions that will lead to writing more precise specifications.

- Does the client really want wood? Wood, as a living material, has natural variations, some of which don't become apparent until it's stained. Paul Singelyn at Yuenger Wood Moulding notes, for example, that there are 6-8 different types of Red Oak. So even if you've specified Red Oak, he can't guarantee that there won't be color or consistency variations from one piece of wood to another. He adds, 'Some clients ask for wood but they really want plastic laminate. Wood is for clients who understand that the natural variation in tone, texture, and grain is what makes wood pretty.'

- Submit only complete plans for bidding. In fact, many suppliers don't even quote on 'preliminaries' anymore. The more complete the drawings, the more likely a job will receive a precise quote — without padding to cover unknown contingencies. John Walker estimates that on a $1 million job, if the architect spends $10-15,000 extra on finishing the plans, he'll probably have saved several times that amount by the time the job is completed.

- How do you determine wood quality? First of all, be sure of the wood grade you want. Wood guidelines are very complex, and different species are graded differently. Once you've decided on a wood, make sure you understand the grading for that species — and the grade that will be specified. Find out what grade a company uses. For instance, Silvertown uses only FAS 2-face oak — the highest grade of oak — for its moldings, a grade with virtually no blemishes or imperfections on either side. With that grade of wood, there's no danger of checking, mineralization, bad color, pitch pockets, or knots. Frequently lumberyards — likely to sell low-cost prepared millwork — stock a lower grade of wood and lack the expertise to compete on high-end jobs (they sometimes call millwork shops for advice.)

- The second part of judging millwork quality is examining the surface or finish, which reveals the speed at which the wood is run through the molding knives. Materials that are run through machinery at a very fast rate are likely to have a wavy finish. The knives get dull and make deeper and more conspicuous marks in the wood. "At Silvertown," Ryder says, "we run our molders very slowly and have operators at both ends. As soon as knife marks are perceptible, we stop the machine and regrind the knives, etc. That's the only way to keep the finish flawless.'

We've consistently heard from suppliers that when jobs go over budget, clients panic and begin to cut costs on the finishes. Millwork, lighting fixtures, carpeting, appliances, etc. When this happens — as it invariably does — make sure the client understands the trade-offs of skimping on millwork. Appliances and carpeting will eventually wear out and be replaced, but inferior millwork is something the client and all successive owners will have to look at and live with for years.

Who's on the Source List
There are hundreds of millwork shops across the country. To keep the Source List to a manageable size, we included only suppliers that turn out a significant quantity of traditional decorative millwork: Moldings, columns and capitals, gingerbread, etc. (We did not include turnings, for example.)

The list was further limited to suppliers who showed an interest in serving the special requirements of historical architects and contractors — as evidenced by their willingness to respond to a detailed questionnaire and provide product literature. From the 73 replies, the editors selected the 54 that seemed most relevant to our readers' needs.

WORTHINGTON
THE PREMIER NAME IN COLUMNS

Catalog 5.00

WRITE IN NO. 163

A Touch of Class
Give your home a classic touch of elegance! Our selection of solid wood cornice, chair rail, casing and baseboard mouldings let you capture the ornate detail of plaster moulding in the warmth of natural wood.

Ornamental
mouldings limited

WRITE IN NO. 706

P.O. Box 336, Dept. TB
Waterloo, Ontario
CANADA N2J 4A4
(519) 884-4080
<table>
<thead>
<tr>
<th>COMPANY</th>
<th>SPECIALTY</th>
<th>Literature</th>
<th>Ornamental Millwork</th>
<th>Columns &amp; Capitals</th>
<th>Carved</th>
<th>Plating</th>
<th>Roofing</th>
<th>Straight</th>
<th>Run</th>
<th>Dentil</th>
<th>% Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Design 190 Highland Pl, Dept. TB Brooklyn, NY 11208 (718) 467-5000</td>
<td>Manufacturer of balusters, newel posts, handrails, and full line of stair parts. Can customize any design, restorations a specialty. Wood type: Oak, Poplar, Mahogany, or as specified.</td>
<td>Free&lt;br&gt;Write in No. 677</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>80%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Custom Millwork 9940 Newton Rd., Dept. TB Albany, GA 31706 (912) 888-3303</td>
<td>Embossed architectural moldings, corbels, chair rails, and baseboards crafted from American hardwoods. Also, design service for mantels, entryways, door treatments, cabinetry, and panelwork. Wood type: Appalachian Poplar.</td>
<td>Free&lt;br&gt;Write in No. 676</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amberst Woodworking PO Box 715, Dept. TB Northampton, MA 01060 (413) 584-3003</td>
<td>Full range of doors, windows, and moldings. Wood type: White Ash, Birch, Butternut, Cherry, Honduran Mahogany, Maple, Red Oak, White Oak, Poplar, Walnut, and Pine.</td>
<td>Free&lt;br&gt;Write in No. 410</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>95%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anderson-McQuaid Co. 170 Fawcett St, Dept. TB Cambridge, MA 02138 (617) 876-3250</td>
<td>All domestic species plus over 40 species of exotic woods in stock.</td>
<td>Free&lt;br&gt;Write in No. 595</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural Components 26 No. Loverett Rd., Dept. TB Montague, MA 01351 (413) 367-9441</td>
<td>Specialize in building custom and reproduction windows, doors, entran- ces, moldings, mantels, shutters, paneling. Wood type: Pine or as specified.</td>
<td>Free&lt;br&gt;Free&lt;br&gt;Write in No. 385</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Architectural Paneling 979 Third Ave., Dept. TB New York, NY 10022 (212) 717-6832</td>
<td>Specialize in designing and executing traditional full-paneled rooms with built-in furniture. Wood type: Cherry, Maple, Oak, Walnut, Mahogany.</td>
<td>Free&lt;br&gt;Write in No. 630</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bendix Mouldings, Inc. 37 Ramland Rd. S., Dept. TB Orangeburg, NY 10962 (800) 526-6240</td>
<td>Carved and embossed hardwood moldings, embossed pine moldings, chair and crown moldings, and embossed wood ornaments. Wood type: Ramin, Poplar.</td>
<td>Free&lt;br&gt;Write in No. 578</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Blanch Millwork &amp; Fixture 4301 Claude Court, Dept. TB Denver, CO 80216 (303) 295-2464</td>
<td>All types of architectural woodworking: Radius molding work, custom doors, and wood windows. Wood type: as specified.</td>
<td>Free&lt;br&gt;Write in No. 18</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Blue Ox Millworks Foot of X St., Dept. TB Eureka, CA 95501 (707) 444-3437, (800) 248-4259</td>
<td>Historically accurate custom reproduction woodwork. They can match existing patterns of everything from moldings and turnings to carved appliques. Wood type: Redwood.</td>
<td>Free&lt;br&gt;Free&lt;br&gt;Write in No. 660</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Boise Moulding &amp; Lumber 116 E. 44th St., Dept. TB Boise, ID 83714 (208) 322-6066</td>
<td>Full line architectural woodworking manufacturer specializing in custom and reproduction moldings, doors, paneling, flooring, etc. Small or large jobs. Wood type: as specified.</td>
<td>Free&lt;br&gt;Write in No. 319</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>95%</td>
<td></td>
</tr>
<tr>
<td>Chadsworth Incorporated PO Box 3266, Dept. TB Atlanta, GA 30355 (404) 876-9100</td>
<td>Classically designed wood columns and capitals. Wood type: Pine, Redwood, Poplar.</td>
<td>Free&lt;br&gt;Write in No. 19</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Center Lumber Co. 85 Fulton St., Dept. TB Paterson, NJ 07509 (201) 742-8300</td>
<td>Mantels, entryways, doors, windows, paneling, and over 1,200 molding profiles. Wood type: Domestic hardwoods, Mahogany, Pine.</td>
<td>For free&lt;br&gt;Write in No. 680</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>Coastal Millworks, Inc. 1335 Marietta Blvd., NW Dept. TB Atlanta, GA 30318 (404) 351-9400</td>
<td>Remill southern longleaf heart pine into flooring, architectural paneling, moldings, doors, windows, and cabinetry. 225 profiles; will work from sketched. Wood type: Southern Longleaf Pine, Maple, Oak, Cypress, Mahogany, Basswood, Cherry, Poplar.</td>
<td>Free&lt;br&gt;Write in No. 339</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Creative Woodworking Co. 1370 Ralph Ave., Dept. TB Brooklyn, NY 11236 (718) 451-0460</td>
<td>High-end corporate and residential work. Wood type: as specified.</td>
<td>Free&lt;br&gt;Free&lt;br&gt;Write in No. 131</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Cumberland Woodcraft Co. PO Drawer 609, Dept. TB Carlisle, PA 17013 (717) 243-0663, (800) 367-1884</td>
<td>Architectural woodwork, Victorian gingerbread, fretwork, carvings, moldings, panels, turnings, corbels, brackets, capitals, wainscoting, doors and screen doors, and more. Wood type: Red Oak, Poplar, or as specified.</td>
<td>Free&lt;br&gt;Write in No. 493</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>DFM Cabinetmakers Re. 4, Box 173, Dept. TB Floyd, VA 24091 (703) 745-3825</td>
<td>Made-to-order millwork, moldings, flooring, casing, paneling, doors, carving, and casework. Both domestic and exotic woods.</td>
<td>Free&lt;br&gt;Write in No. 493</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Drivwood Moulding Co. PO Box 1729, Dept. TB Florence, SC 29503 (803) 669-2478/662-0541</td>
<td>Ornamental woodwork, embossed moldings, custom millwork, compri- cated double-handled stairways. Wood type: Poplar, Walnut, Cherry, Red &amp; White Oak, Mahogany.</td>
<td>Send $6 for catalog</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Empire Woodworks PO Box 407, Dept. TB Johnson City, TX 75636 (512) 686-7520</td>
<td>Specialize in brackets, corbels, spandrels, gable trim, running trim, awn balustrades, porch posts, newel posts, headers, mantel shelves, finials, spindles, corbice, and more. Wood type: White Pine, Poplar.</td>
<td>Free&lt;br&gt;Write in No. 683</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>
ARCHITECTURAL ACCOUTREMENTS
Carved and Sculptured in Solid Woods

Surround yourself in grand expression with our elegant moldings, crowns and mantels. Designed for both town and country, they will enhance any decor. They turn the ordinary into the extraordinary.

Raymond Enkeboll Designs
Catalog Available.
<table>
<thead>
<tr>
<th>COMPANY</th>
<th>SPECIALTY</th>
<th>Literature</th>
<th>Ornamental Millwork</th>
<th>Columns &amp; Capitals</th>
<th>Carved Wood</th>
<th>Embossed Wood</th>
<th>Pluteing/Beading</th>
<th>Straight-Line Run</th>
<th>Dentil</th>
<th>Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raymond Enkeboll Designs</td>
<td>Elegant carvings of architectural accents including balusters, newels, posts, capitals, finials, moldings, corbels, and more in many designs and styles. Wood type: Maple, Oak.</td>
<td>Free Write in No. 577</td>
<td>x x x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Fancy Front Brassiere Co. PO Box 2847, Dept. TB Roseville, CA 95747 (916) 791-7733</td>
<td>Authentic Victorian gingerbread, brackets, corbels, corner and pilaster blocks, post caps, gable trim, pickets, runnings trim, balusters, screen doors, and more. Wood type: Poplar or as specified.</td>
<td>Free Write in No. 704</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Forest Wood Products 1407 21st St., Dept. TB Des Moines, IA 50311 (515) 243-8415</td>
<td>Solid wood curved moldings for round top windows and doors. Wood type: Pine, Oak.</td>
<td>Free Write in No. 684</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>75%</td>
</tr>
<tr>
<td>Goodwin Lumber Co. Rte. 2, Box 119-A, Dept. TB Micanopy, FL 32667 (904) 373-WOOD</td>
<td>Heart Pine stair parts, and moldings and trim to accompany flooring appointments.</td>
<td>Free Write in No. 253</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>65%</td>
</tr>
<tr>
<td>House of Moldings 15202 Oxnard St., Dept. TB Van Nuys, CA 91411 (818) 781-5300</td>
<td>Solid hardwood and softwood moldings, carved and embossed, corbels, finials, and stairway parts. Wood type: Pine, Oak, Walnut, Birch, Mahogany, Poplar.</td>
<td>Send $7 for catalog</td>
<td>x x x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Jelliff Mill 67 Jelliff Mill Rd., Dept. TB New Canaan, CT 06840 (203) 966-9475</td>
<td>Custom millwork, windows, cabinets, doors, trim, paneling, and moldings. Wood type: as specified.</td>
<td>Free Write in No. 687</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Knipp and Company, Inc. 3401 S. Hanover St., Dept. TB Baltimore, MD 21225 (301) 355-0484</td>
<td>Wood type: as specified.</td>
<td>Free Write in No. 536</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>90%</td>
</tr>
<tr>
<td>Kreider Brothers, Inc. PO Box 1065, Dept. TB Lancaster, PA 17605 (717) 397-3788</td>
<td>50-year-old family-run millwork and cabinetry shop. Doors, windows, moldings, paneling, cabinets, stairways, trim, and related products. Complete finishing facility. Wood type: as specified.</td>
<td>Free</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Lange Bros. Woodwork 3920 W. Douglas Ave. Dept. TB Milwaukee, WI 53209 (414) 466-2226</td>
<td>Custom moldings, sile-and-rail doors, windows, stairs, and cabinets. Wood type: Oak, Walnut, Cherry, Mahogany, Poplar, Birch, Pine.</td>
<td>Free</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Larkin Company 210 Carter Dr., Unit 4 Dept. TB West Chester, PA 19382 (215) 696-6096</td>
<td>Molding, wainscoting, tall and low mantels, pediments, and mantel over panels in 18th- and early 19th-century American and English designs. Wood type: Poplar, Cherry, Oak, Mahogany, Walnut, Antique Pine, or as specified.</td>
<td>Free brochure or send $6 (refundable) for catalog</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Littitz Planing Mill Co. 302 E. Front St., Dept. TB Littitz, PA 17543 (717) 626-2186</td>
<td>Specialize in restorations, window and door frames, raised-panel treatments, and special moldings. Wood type: as Specified.</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>95%</td>
</tr>
<tr>
<td>Louisville Millwork PO Box 36095, Dept. TB Louisville, KY 40233 (502) 459-8710</td>
<td>Custom woodwork and casework for historic, commercial, and institutional applications. Moldings, paneling, cabinets, doors, turnings, and columns. Wood type: Oak, Poplar, Hard Maple, Cherry, A. Walnut, Mahogany, and more.</td>
<td>Free</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Mad River Woodworks PO Box 163, Dept. TB Arcata, CA 95521 (707) 826-8629</td>
<td>Victorian millwork, gable tops, shingles, brackets, corbels, pickets, post finials, balustrades, newels, turned posts, hand rails, spandrels, moldings, wainscoting, and more. Wood type: Redwood or as specified.</td>
<td>Free Write in No. 35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Oakwood Woodworks 5 Pine Hill Dr., Dept. TB Pittsford, NY 14534 (716) 381-6009</td>
<td>Specialize in window and door moldings, chair rails, base moldings, ceiling crown moldings, rosettes, and pit blocks. Wood type: as specified.</td>
<td>Free</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Ornamental Moldings PO Box 7123, Dept. TB High Point, NC 27264 (336) 884-4080</td>
<td>Manufacture decorative architectural wood ceilings, chair rails, casing and baseboard moldings, corner blocks, pit blocks, and custom millwork. Wood type: White Hardwoods, Oak, or as specified.</td>
<td>Free Write in No. 706</td>
<td>x x x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Reliance Industries, Inc. PO Box 129, Dept. TB Richland, IA 52585 (319) 456-6030</td>
<td>Four styles of traditional moldings. Wood type: Oak, Poplar, Cherry, Ash, Maple, Mahogany, Pine.</td>
<td>Free (also free samples).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>RI Millwork 390 Shipppee Rd., Dept. TB East Greenwich, RI 02818 (401) 885-5172</td>
<td>Premium grade hardwood moldings (long or short run). In-house toolmaking to match any profile from wood sample or drawing. Wood type: Oak, Mahogany, Cherry, Walnut, Poplar.</td>
<td>Free Write in No. 695</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>90%</td>
</tr>
</tbody>
</table>
TRADITIONAL BUILDING

Your Award-Winning Source for Elegant Woodwork

Everything you need in Victorian gingerbread, turnings and carvings, in premium grade solid hardwoods. Factory-direct savings.

Period Bars, Backbars, Servers, Ceilings, Seating, Galerie Ríx & accessories.

We'll build to your specifications, supply any or all component parts. Complete custom design services. Interior-exterior restoration projects, Victorian to Ultra-Contemporary, our specialty.

Send for Catalog. Over 135 color pictures of products and design ideas. $4.50. Free if ordered on Company letterhead.

DOORS & WINDOWS

Specialists in 18th & 19th century architectural millwork including Colonial style mortise and tenon small pane window sash, plank window frames, fanlight windows, interior and exterior doors, entryways, French doors, mantelpieces, wainscoting, raised panel walls, mouldings and more. Custom orders and orders to “match existing” welcome. Illustrated brochure $3.00.

ARCHITECTURAL COMPONENTS

26 North Leverett Road
Montague, MA 01351
413-367-9441

WRITE IN NO. 131

CUSTOM MILLWORK

Panelling/Moldings/
Flooring/Restoration/
Millwork

- All hardwoods & softwoods, exotic & domestic
- 50 species of hardwoods available
- 100,00 board ft. in inventory
- 10,000 board ft. on display
- No job too large or too small

Hours: Mon.-Fri. 7:30 to 4; Sat. 9-1

For price quote, send sample or drawing with details on species of wood and lineal footage required.

ANDERSON-MCQUAID CO., INC.
170 Fawcett St., Dept. TB, Cambridge, MA 02138
Tel. (617) 876-3250 FAX (617) 876-8928

WRITE IN NO. 595

TRADITIONAL BUILDING

DIVISION 6 - WOOD & PLASTICS

Draper & Draper

The FINEST HAND-BUILT, HAND-CARVED, CUSTOM-MADE MANTELS

Draper & Draper, Ltd., 200 Lexington Avenue, New York, NY 10016
Tel. (212) 679-6417 FAX (212) 679-8928

WRITE IN NO. 533

THE LARGEST CAD MOULDING LIBRARY
OVER 1300 PROFILES
ALSO AVAILABLE IN BOOK FORM
SUITABLE FOR TRACING

FOR INFORMATION

P.C. Mouldings

P.C. WORK INC.
25 Moody Ave.
St. Louis, Missouri
63119

314-962-5677 962-5232 FAX

WRITE IN NO. 694
## Traditional Building's Source List of Architectural Millwork

### By Judith Siegel Lief

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>SPECIALTY</th>
<th>Literature</th>
<th>Ornamental Millwork</th>
<th>Columns &amp; Capitals</th>
<th>MOLDINGS</th>
<th>% Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saco Manufacturing</td>
<td>39 Lincoln St., Dept. TB</td>
<td>Originally founded to make wooden water pumps; now specialize in restoration work, columns, and more. Wood type: Eastern White Pine, Poplar, or as specified.</td>
<td>Free</td>
<td></td>
<td></td>
<td>95%</td>
</tr>
<tr>
<td>A.F. Schwerd Manufacturing</td>
<td>3215 McClure Ave., Dept. TB</td>
<td>Specialize in columns with tongue-and-groove staves; custom work. Columns from 4 in. to 50 in. dia. and up to 35 ft. long. Wood type: Northern Red Oak and Poplar.</td>
<td>Free</td>
<td>Write in No. 181</td>
<td></td>
<td>95%</td>
</tr>
<tr>
<td>Silver Creek Mill</td>
<td>1335 W. Hwy 76, Dept. TB</td>
<td>Specialize in spandrels, gable ends, and more. Wood type: Pine, Poplar, and Walnut.</td>
<td>Free</td>
<td>Write in No. 708</td>
<td></td>
<td>60%</td>
</tr>
<tr>
<td>Silverton Victorian Millworks</td>
<td>PO Box 2987, Dept. TB</td>
<td>Specialize in production of high-end Victorian moldings, gingerbread, and doors. Wood type: F.A.S. 2 Face Northern Red Oak and C-Select of better Southern Yellow Pine, Poplar.</td>
<td>Free</td>
<td>Write in No. 45</td>
<td></td>
<td>30%</td>
</tr>
<tr>
<td>Southeastern Supply Co.</td>
<td>PO Box 516, Dept. TB</td>
<td>Custom millwork, wood doors, and complete building materials yard. Wood type: Red Oak, Poplar, Walnut, Cherry, Mahogany, Maple.</td>
<td>Free</td>
<td>Write in No. 709</td>
<td></td>
<td>85%</td>
</tr>
<tr>
<td>Specialty Wood Co.</td>
<td>85 W. Queen St., Dept. TB</td>
<td>Architectural moldings, curved moldings, sold hardwood paneling, restoration, rosette blocks, profile sanding, priming, and finishing. Wood type: Foreign and domestic hardwoods.</td>
<td>Free</td>
<td></td>
<td></td>
<td>98%</td>
</tr>
<tr>
<td>Star Moulding &amp; Trim Co.</td>
<td>6606 W. 74th St., Dept. TB</td>
<td>Mantels in paint and stain grade, paneled walls, Colonial shutters, bookcases, moldings, and more. Wood type: Poplar, Oak, Cherry, Walnut, Honduras Mahogany.</td>
<td>Free</td>
<td>Write in No. 541</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>Sunshine Arch. Woodwork</td>
<td>2169 Sunshine Dr., Dept. TB</td>
<td>Manufacturers of architectural hardwood moldings; smooth and ornamentally embossed. Wood type: Red Oak and Poplar.</td>
<td>Free</td>
<td>Write in No. 488</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Walker Bros. Millworks, Inc.</td>
<td>PO Box 771093, Dept. TB</td>
<td>Specialize in manufacture and installation of premium and monumental grade architectural woodwork. Wood type: as specified.</td>
<td>Free</td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>West Gate Cabinet &amp; Millwork</td>
<td>862 West 13 Ct., Dept. TB</td>
<td>High-end millwork and case goods. Wood type: as specified.</td>
<td>Free</td>
<td></td>
<td></td>
<td>85%</td>
</tr>
<tr>
<td>White River Hardwood</td>
<td>1197 Happy Hollow Rd., Dept. TB</td>
<td>Manufacturers of architectural hardwood moldings; smooth and ornamentally embossed. Wood type: Red Oak and Poplar.</td>
<td>Free</td>
<td>Write in No. 488</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Wigand Corporation</td>
<td>850 Elkton Dr., Dept. TB</td>
<td>Manufacturers and install custom woodwork, moldings, and cabinetry. Wood type: Poplar, Oak, Maple, Cherry, Mahogany, Walnut, Birch.</td>
<td>Free</td>
<td></td>
<td></td>
<td>90%</td>
</tr>
<tr>
<td>Windham Millwork</td>
<td>PO Box 1358, Dept. TB</td>
<td>Victorian designs: Doors, gables, shingles, gingerbread, porticos, moldings, and turned parts. Wood type: Redwood &amp; Cedar (interior), Pine or as specified (moldings), Oak, Ash, Honduras Mahogany (doors).</td>
<td>Free</td>
<td>Write in No. 712</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Woodchute Woodworks</td>
<td>Box 43, Dept. TB</td>
<td>Specialize in spandrels, gable ends, and more. Wood type: Pine, Poplar, and Walnut.</td>
<td>Free</td>
<td>Write in No. 699</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Woodchute Woodworks</td>
<td>Jerome, AZ 86331 (602) 634-4116</td>
<td>Specialize in spandrels, gable ends, and more. Wood type: Pine, Poplar, and Walnut.</td>
<td>Free</td>
<td>Write in No. 699</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>The Woodstone Company</td>
<td>PO Box 223, Dept. TB</td>
<td>Specialize in spandrels, gable ends, and more. Wood type: Pine, Poplar, and Walnut.</td>
<td>Free</td>
<td>Write in No. 700</td>
<td></td>
<td>85%</td>
</tr>
<tr>
<td>Woodwork</td>
<td>Box 69, Dept. TB</td>
<td>Specialize in columns and capstones in Ponderosa Pine and Redwood; door surrounds in Mahogany; and moldings in Poplar, Pine, or as specified.</td>
<td>Free</td>
<td>Write in No. 163</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>Worthington Group</td>
<td>PO Box 53101, Dept. TB</td>
<td>Specialize in spandrels, gable ends, and more. Wood type: Pine, Poplar, and Walnut.</td>
<td>Free</td>
<td>Write in No. 701</td>
<td></td>
<td>90%</td>
</tr>
</tbody>
</table>
the standard of quality since 1860

**SCHWERD'S**

wood columns

- **COLUMNS**
  - Schwerd columns are durable. Our 120+ years of experience in manufacturing wood columns has proven that the durability of a wood column depends upon the strength of the joint and the quality and thickness of the wood. Schwerd column construction was developed to meet each specific requirement. The wood is thoroughly seasoned Northern White Pine. The pride of craftsmanship and skilled techniques acquired by 120 years of specialized experience is applied. The resulting product is a "Schwerd Quality Column" specified by architects with complete confidence. Both standard and detail columns can be furnished from 4 in. to 50 in. in diameter and up to 35 ft. in length with matching pilasters.

- **SEND FOR OUR FREE CATALOG**
  - Schwerd's complete aluminum bases for 9, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, and 30 in. dia. columns.

  - Schwerd's - Aluminum ventilated plinth and aluminum turned member base are manufactured of thick metal and are recommended for all exterior columns in the above diameters to provide a maintenance free, seamless base which is guaranteed against deterioration for a lifetime.

A. F. SCHWERD MANUFACTURING COMPANY
telephone: 412-766-8122
3215 McClure Avenue
Pittsburgh, Pa. 15212

**EXCLUSIVE DEEP-SCULPT MOULDINGS, CARVINGS AND FIREPLACES IN WALNUT, CHERRY & OAK**

(Many in stock).

**56 PAGE CATALOG AVAILABLE.**

If you get involved in any of the above then you will find this catalog most helpful. Send for your copy today.

**Catalog $10. deductible from first order.**

- **NAME**
- **COMPANY**
- **ADDRESS**
- **CITY**
- **STATE**
- **ZIP**
- **Video Tape Send $20.00 (refundable)**

**ANTHONY LOMBARDO, PRES.,**
ARCHITECTURAL PANELING, INC.
979 THIRD AVE., D & D BUILDING, NEW YORK, NY 10022
212-371-9632 • FAX: 212-759-0276
WRITE IN NO. 530

- **WRITE IN NO. 46**
  - Classic Embossed
  - Hardwood Mouldings
  - Crown/Cornice/Chair
  - Rail/Cove/Cap
  - Quality hardwood mouldings in classic styles
  - Authentic Handmade embossing wheels
  - Deep embossing with pressure and heat
  - Moulding patterns duplicated

  - Yuenger Wood Moulding, Inc.
  - 5215 S. Keeler — Dept. TB
  - Chicago, IL 60632
  - (312) 735-2102
  - FAX (312) 735-3251

- **WRITE IN NO. 701**
  - Woodchute Woodworks
  - Established 1972 to provide a wide range of custom architectural millwork
  - Interior & Exterior Millwork
  - Doors & Windows
  - Period Store Interiors & Showcases
  - Coffered Ceilings
  - Installation Services

  - Woodchute Woodworks
  - P.O. Box 43 — Dept. TB
  - Jerome, AZ 86413
  - (602) 634-4116

- **WRITE IN NO. 699**

- **MARCH/APRIL 1991**
ARCHITECTURAL MILLWORK SHOWCASE

Shown below (and on page 22) is a sampling of historical millwork from a variety of suppliers. For contact information, see the Source List on pages 14, 16, and 18.
House of Moulding

TRADITIONAL BUILDING

The Largest Selection of
- Hardwood & Softwood Moulding in Stock
- Corbels
- Wood Turnings
- Decorative Plaques
- Fireplace & Mantle Mouldings
- Send Check for $7.00 to receive a Full Catalog.

House of Moulding
Dept. TB
15202 Oxard St.
Van Nuys, CA 91411
Phone (818) 781-5300
Fax (818) 994-7848

This Catalog should be in your files

Over 150 illustrations of decorative wood mouldings and ornaments for every furniture need. Write for your copy today.

BENDIX MOULDINGS INC.
37 Ramland Road South, Orangeburg, New York 10962
Tel: (914) 365-1111 • 1-800-526-0240 • Fax: (914) 365-1218

ANTIQUE WIDE PINE FLOORING

Antique Oak & Chestnut Available

Widths to 22" Wide
Antique Wide Pine and Hard Long Leaf Yellow Pine
Lengths up to 18' Long - Widths up to 14" Wide
Planed and Ready to Install

For price info, call Mark Phillips: (508) 948-2722
Northfield Restorations, Box 741, Rowley, Mass. 01969

DOES THE WORD POLYSTYRENE MAKE YOU SHUTTER?

Our all-cedar shutters endure for generations.

Cheap pine shutters with steel staples can fail in as few as five years. And plastic is . . . well, plastic. So to build the Vixen Hill shutter, we use only clear, Canadian red cedar. Joints are mortise-and-tenon, with teak locking pins. Both panels and louvers are of generous dimensions, ensuring lasting beauty for generations.

For a detailed brochure, contact:

Vixen Hill Cedar Shutters
Elverson, PA 19520
1-800-423-2766
ARCHITECTURAL MILLWORK SHOWCASE, continued

Littleton Millwork Corp.

Sunshine Architectural Woodworks

Oakwood Woodworks

Silverton Victorian Millworks

Architectural Components, Inc.

Reliance Industries, Inc.

Louisville Lumber

Mad River Woodworks

Vintage Lumber Company

Blue Ox Millworks
ARCHITECTURAL MILLWORK

CHADSWORTH COLUMNS

Unsurpassed Craftsmanship
In Wood.

American Custom Millwork is your prime source for embossed moldings and custom designs. We serve the specialized demands of architects, designers, builders, and homeowners nationwide. Beautifully carved columns, chair rails, and wainscoting are crafted in fine hardwoods like Appalachian poplar, walnut, oak, cherry, mahogany, and other fine woods—and there's nobody better than ACM's skilled artisans at designing and creating special treatments like mantels, entryways and door treatments, elegant cabinetry, and panelwork.

AMERICAN CUSTOM MILLWORK, INC.
3904 Newton Road • P.O. Box 1808
Altanta, GA 31706
(912) 881-1031 • (912) 884-6848

CUSTOM TURNINGS & HANDRAIL

Handrail
Finials
Balusters
Newel Posts
Specialty Turnings
Any Design/Any Wood
Full Line Of Handrail Parts

Restoration Specialists • Rope Twists
Fluting • Handcarving

No job is too small or complex; our 55 shop craftsmen love a challenge! We can handle all the tough jobs that are too complicated for the job shops. Serving satisfied clients nationwide for over 30 years.

Write, call, or FAX for a quote on your job.
ADVANCED DESIGN WOODTURNING, INC.
190 Highland Place, Dept. TB, Brooklyn, NY 11208
(718) 647-5600 • FAX (718) 827-4250

WRITE IN NO. 676
DISTINCTION THROUGH DETAIL

If you appreciate high-quality woodwork, but also want it on-time, on-budget per your specification — contact Torrington Millwork. We pay attention to the details; we're obsessed with making every part of your job come out just as you expect. From initial consulting through final installation, our capabilities include:

- Custom Doors & Windows
- Custom Cabinets & Furniture
- Architectural Paneling
- Exterior Woodwork

Torrington Millwork is equipped to design and build the finest architectural woodwork from colonial reproductions to contemporary designs.

We welcome your inquiry on any project.

Torrington Millwork Company, Inc.
184 Berry St., Dept. TB, Torrington, CT 06790
(203) 482-2165 FAX (203) 696-7016

WRITE IN NO. 697

Beech River Mill

Shutters
Blinds and
Hardware
that are
history

Custom louvred or panelled shutters.
Authentic mounting and
holdback hardware.

Beech River Mill Co.
- Hardware
- Blinds & Shutters
RR 1, Box 168
C. Orsanio N.M. 18814
(603) 539-2636 Phone & Fax
$5.00 for catalog

WRITE IN NO. 411

For FREE product information, use the enclosed Postcard or the Form on page 46.

The Ultimate Choice in Roofing

Non-woodshake Southern Slate adds beauty, durability, and value to a structure by providing a thrilling high class look at a cost lower than natural slate.

Made from a proven fiberglass-reinforced cement, FibreCem simulated shingles can be installed in various Rockcroyder designs (tagged) or custom designed, they come with a 5-year limited transferable warranty and in standard charcoal, sea green, silver, and pewter colors.

Discover Southern Slate today.

Cal. 1-800-346-0147

RIGHT ON TOP OF THE MARKET

WRITE IN NO. 377

Historically Accurate
Cedar Shakes & Shingles

- Complete line of roof &
sidewall products
- Can make any width,
length or thickness
- Fire retardant or CCA
treatment available
- Unique & ordinary patterns cut

No Minimum Order
Send for free brochure
Or call us with your problems; we can help.

The Cedar Guild
51579 Gates Bridge C, Dept. TB
Gates, OR 97346
(503) 897-2541 FAX (503) 897-2442

WRITE IN NO. 674

© 1991 SHAMOKIN TRAIL SHINGLE COMPANY

WRITE IN NO. 567

WRITE IN NO. 464

Traditional Building

TRADITIONAL BUILDING
The Romance Of Wood Shingles

By Clem Labine

Nothing — with the possible exception of slate — makes as handsome a roof as wood shakes or shingles.* The subtle variations in shape, texture, color, and size give a life and vibrancy to a surface that other materials are still trying to imitate. And for sheer exuberance, nothing can match a Queen Anne house with a siding pattern composed of half a dozen different shapes of fancy-cut shingles.

Wood shingles have been widely used in North America for roofing and siding, from the earliest settlements through the 20th century. As a result, there is a wide variety in the size, shape, and fabrication methods of wood shingles through the years. In historic applications, especially, the specifier must be aware of the subtle differences in wood roofing and siding products. A full exploration of the historic aspects of wood shingles will be found in Preservation Brief #19 (see below).

Traditionally, wood shingle roofs were expected to last 40 to 60 years. As first-growth cedar became scarce during the past 15 years and fewer builders used proper installation methods (especially the lack of furring strips or nailing lath), the life expectancy of untreated wood roofing products declined. This reduced life expectancy, combined with cost and fire code issues, caused wood shingles to lose market share on all but historic restorations and high-end custom houses.

But that situation has changed — in large part because of the industry-wide "Certi-Last" and "Certi-Guard" product specifications. Certi-Last shakes and shingles are pressure-treated with CCA preservative and carry a 30-year warranty. Certi-Guard shakes and shingles are pressure-treated with fire retardant for areas where combustion hazard is a major issue. The Certi-Guard and Certi-Last trademarks (as well as "Certi-Split" and "Certi-Grade") appear on products manufactured according to industry standards established and supervised by the Cedar Shake & Shingle Bureau.

In the box on page 29 you'll find some critical factors to pin down when specifying a wood shingle roof — for either replacement or new construction.*

---

*Manufacturers today use the term "shakes" to refer to split products and "shingles" to designate sawn products. Historically, however, the term "shingle" was used to refer to both sawn and split wood roofing and siding materials.

---

A roof restoration with 3/4-in. thick, 18" long, round butt, Tidewater Colonial Shingles custom-cut in white oak by Shamokin Trail Shingle Co.

Detail of an interior wall panel created by The Cedar Guild to show design possibilities created by overlapping shingles with different colors and butt cuts.

Example of the shingle installer’s art created in heavy-butt Western Red Cedar by Liberty Cedar Co.

---

TECHNICAL ASSISTANCE: The trade association for the cedar shake and shingle industry, in addition to supplying copious amounts of technical literature, also provides technical support to architects and contractors who are specifying and installing cedar shingles. The association has field representatives for on-the-spot consultation, in addition to a central technical service staff. CEDAR SHAKE & SHINGLE BUREAU, 515 116th Ave. N.E., Suite 275, Dept. TB, Bellevue, WA 98004 (206) 453-1323.


MAINTAINING WOOD SHINGLE ROOFS: Most property owners don’t realize that proper maintenance can materially lengthen the life of wood shingle roofs. Attack by ultraviolet rays, as well as water, can cause wood shingles to break down prematurely. This technical manual offers detailed procedures and preservative formulas — as well as sample specs for cedar shake and shingle roofs so that they’ll meet tight local building codes. "How To More Than Double The Life Of Your Roof" can be ordered for $15 from: THE CEDAR GUILD, 51579 Gobles Bridge East, Dept. TB, Lyons, OR 97358 (503) 897-2541.
<table>
<thead>
<tr>
<th>COMPANY</th>
<th>SPECIALTY</th>
<th>LITERATURE</th>
<th>Machine-Cut Shingles</th>
<th>Handsplit Shakes</th>
<th>Fancy Butt Shingles</th>
<th>Wood Species</th>
<th>% Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cedar Guild</td>
<td>Custom-cut cedar shakes &amp; shingles; matching odd patterns, lengths, and thicknesses is a specialty. Extensive experience in historic restorations. They have 12 basic patterns for fancy-cut shingle butts — but can duplicate any pattern. Small orders welcome. Technical consultation available for specialty roofing.</td>
<td>Free</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Western Red Cedar</td>
<td>100%</td>
</tr>
<tr>
<td>Cedar Shake &amp; Shingle Bureau</td>
<td>Trade association that represents over 250 shake and shingle mills. Develops manufacturing and application standards, including the Certi-Last (50-yr. warranty), Certi-Guard, Certi-Split, and CertiGrade trademarks. Also provides in-depth technical assistance to professionals on proper use of cedar shakes.</td>
<td>Free</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Western Red Cedar, Redwood</td>
<td>NA</td>
</tr>
<tr>
<td>Cedar Valley Shingle Systems</td>
<td>Produces premium-grade architectural cedar shingle siding panels in exposures of 4&quot;, 5&quot;, or 7&quot; to weather, with either straight or staggered butt line. All panels are 36&quot; x 21&quot; regardless of exposure. Matching prefabricated corners available. Also: Single fancy-cut shingles in boxes.</td>
<td>Free</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Western Red Cedar</td>
<td>10%</td>
</tr>
<tr>
<td>Harmony Exchange</td>
<td>Produces shingles from Cypress and Juniper (Eastern White Cedar) in two grades for both roofing and siding. The sawn shingles (rustic butt cut) come in 18&quot; and 24&quot; lengths. Also sells Red Cedar shingles.</td>
<td>Free</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Western Red Cedar, Redwood</td>
<td>50%</td>
</tr>
<tr>
<td>Liberty Cedar</td>
<td>Specializes in heavy tapersawn shingles and shakes: 5/8&quot; and 3/4&quot; butts in lengths of 18&quot; and 24&quot;. Fire retardant treating and CCA treating for extended roof life are available. Also: Hip/ridge caps, stainless steel nails, stock and custom fascies.</td>
<td>Free</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Western Red Cedar, Eastern White Cedar</td>
<td>55%</td>
</tr>
<tr>
<td>I.WO Corp.</td>
<td>Produces a line of fancy-butt Western Red Cedar decorative shingles. Four traditional profiles: Round, fishscale, arrow, and diamond. Other patterns on special order. The 18&quot; long shingles are parallel-cut to 4-15/16&quot; wide.</td>
<td>Free</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Western Red Cedar</td>
<td>0%</td>
</tr>
<tr>
<td>Julius Seidel &amp; Co.</td>
<td>Distributor and custom fabricator of Red Cedar shakes and shingles. Products stocked include natural, fire-retardant treated, and CCA-treated, and shake &amp; shingle panels.</td>
<td>Free</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Western Red Cedar</td>
<td>10%</td>
</tr>
<tr>
<td>Shingle Mill, Inc.</td>
<td>Manufactures custom wood shingles for roofing and siding in historical work. Wide variety of special architectural shapes: butts from 1/4&quot; to 3/4&quot;; lengths from 8&quot; to 21&quot;; widths from 3-1/2&quot; to 9&quot;.</td>
<td>Free</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Eastern White Pine</td>
<td>100%</td>
</tr>
<tr>
<td>Shakertown Corp.</td>
<td>Produces fancy-cut shingles in 9 patterns — either as individual shingles or panels. The 8-ft. panels come with 5&quot; or 7-1/2&quot; exposures.</td>
<td>Free</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Western Red Cedar</td>
<td>0%</td>
</tr>
<tr>
<td>Shamokin Trail Shingle Co.</td>
<td>Manufacturer of quarter-sawn and hand-split Northern White Oak shingles. Sawn shingles are custom-cut to length, width, and thickness. Fancy butts. Hand-rived and trimmed shingles to 40&quot; Double-tapered and trimmed shingles to 40&quot;. Hand-rived horizontal roof clapboard to 48&quot;.</td>
<td>Free</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Northern White Oak</td>
<td>100%</td>
</tr>
<tr>
<td>South Coast Shingle Co.</td>
<td>Manufacturer and supplier of a wide range of roofing materials, including Red Cedar shingles. Produces hand-cut fancy-butt shingles in 7 patterns. Fancy-butt shingles are 5&quot; wide and 16&quot; long. Pressure-treated fire-retardant shingles are available.</td>
<td>Free</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Western Red Cedar</td>
<td>0%</td>
</tr>
</tbody>
</table>
**Traditional Building**

- Western Red Cedar
- Douglas Fir
- Redwood
- Cypress
- Mahogany

Roofing • Siding • Decks • Trim

**Roofing for Historic Projects: A Specialty**

- Hip & Ridge Cap
- Stock & Custom Fancy Cuts

**Custom Orders Welcome**

535 Liberty Lane, Dept. TB, West Kingston, RI 02892
800-88CEDAR 401-789-6620

We support sustainable & renewable resource management

---

**Fancy Butt Hand-cut Shingles**

Our low maintenance and high durability Western Red Cedar shingles will make your home beautiful and energy efficient. Seven historical patterns; fire treated available. Since 1946. Call or write for information.

South Coast Shingle Company, Inc.
2220 East South Street, Long Beach, CA 90805
(213) 634-7100

---

**Specification Factors For Wood Shingles**

- Shingles: Wood Species; Grade; Sawn or Split; Surface Dressing; Acceptable Widths; Length; Butt Thickness; Tip Thickness
- Coatings & Treatments: Factory-Applied Pressure Treatment; Surface Treatment; Treatments Required After Cutting (e.g., CCA-treated shingles should be brush-treated after cutting); Treatments For Color
- Underlayment: Disposition Of Old Roof; Repairs to Existing Underlayment; Method to Ensure Air Circulation Under Shingles (Furring Strips or Nailing Lath)
- Fasteners: Nail Type & Length (e.g., Double hot-dipped galvanized, aluminum, stainless steel, or copper sized to penetrate 3/4 depth of nailing surface)
- Shingle Installation: Shingle Pattern; Exposures (Full triple layering, etc.)
- Ridge Treatment: Projecting Comb; Board Ridge; Alternating Closed Ridge; Rolled Metal Ridge Cover; Boston Capped Ridge, etc.
- Valley Treatment: Closed Swept Valley; Open Valley With Metal Flashing; Open Valley With Wooden Wedge, etc.
- Hip Treatment: Alternating Shingle Lap; Boston Capped Hip; Rolled Metal Hip Cover; Fanned or Swirled Alternating Shingle, etc.
- Flashing Details: Specify flashing details for chimneys, dormers, porch roofs, etc.
- Flashing Material: 20 oz. Lead-Coated Copper; Terne-Coated Stainless, Galvanized, etc. (Bear in mind possible interaction of treatment chemicals in the shingles with the metal flashing and fasteners.)
- Installation Methods: Detail any special installation instructions (e.g., avoid pneumatic staple guns; avoid interwoven building felts; avoid sinking nail heads below shingle surface, etc.)

---

**Quartersawn Clapboard Siding**

**Building Materials**

Wide pine and hardwood flooring

**Quartersawing**

produces a vertical grain clapboard.
- Twists and warps less
- Wears more evenly
- Bonds paint and stain better

Also featuring...

**Olympic's Machinecoat™**

Exterior Pre-Finish for all types of siding.

Allows finishing prior to installation with 10 year warranty:
- Crack, Peel and Flake Resistant
- Washable without damaging finish
- Non-Yellowing

**Granville Manufacturing**

Company, Inc. • Established 1857
Granville, Vermont 05747
802-767-4747

Call or write for free brochure

---

**Bellvale Roofing Slate**

Roofing Slate and Copper Work for Historic Preservation. Accepted contractor by NYC Landmarks Commission. Limited number of projects per year to insure our standards of excellence.

Consultation available. For further information on system design, delivery, and cost estimate, call:

**Bellvale Construction Co.**
Box 127, Dept. TB, Bellvale, NY 10912 (914) 986-5107 fax (914) 986-6709

---

**Tradition Building**

Division 7 - Moisture Protection

March/April 1991 • 29
**Division 8**

**DOORS & WINDOWS**

**TRADITIONAL & CONTEMPORARY WOODEN WINDOWS & DOORS**

- Authentic Historic Reproductions
- One Inch Muntin With Insulating Glass In Virtually Any Shape
- Weather And Pulley Counter Balance Systems

---

**WOODYSTONE**

DEPT T B, BOX 223, WESTMINSTER • VERMONT 05158
(802)722-9217 • FAX(802)722-9526

---

**Choose from our standard selection of 28 solid hardwood exterior and interior doors — plus 10 sidelite systems. Or we’ll custom-build a door to your specifications. Select from our premium hardwoods: Mahogany, Rosewood, Teak, or Red Oak. Every exterior door measures 1-3/4” thick (1-1/4” panels) with absolutely no veneer or implanted wood. Standard and custom stained glass panels available.**

---

**Bronze Restoration Hardware**

Made by the Lost Wax Process for superb detail, then machined to strict tolerances — achieving highest product quality. Our hardware has been specified for the finest restorations, including:

- Union Station, Washington D.C.
- Georgia State Capitol, Atlanta, GA
- New York State Capitol, Albany, NY
- Union Oil Co. Museum, Santa Paula, CA
- Michigan State Capitol, Lansing, MI

Select from our stock patterns — or we can manufacture to your specifications. Send $2.25 for catalog and price list.

**CIRECAST**

"When the job demands quality."

380 7th Street, Dept. TB, San Francisco, CA 94103 (415) 963-8319

---

**WRITE IN NO. 593**

---

**The 50 most beautiful Doorways in America.**

Or anywhere! Our hand-carved doorways are the most beautiful available. In traditional Georgian and Federal styles from under $2000 to $8500. Carved overdoor motifs from $350. Color brochure $3.

---

**WRITE IN NO. 389**

---

**Elegant Entries**

Affordable Elegance

20 Washington St. (Rt. 20), Auburn, MA 01501
800-343-3432

---

**REPLACE ROTTED SASH**

Any style, any size. Wood storms and screens, too. Cost less than you think. Fast turn-around. Insulated glass available. Call or write for facts.

**WRITE IN NO. 146**

---

**HAND FORGED**

Reproduction Colonial Hardware

Old Smiddy Shop
425 Predmore Rd.
Springfield, MA 01104
(413) 732-8702

**WRITE IN NO. 591**
Division 9

HEART PINE FLOORING
A tradition you can stand on

OLD HEART PINE — From the heart of the South, ancient timbers have been reclaimed and thoughtfully re-milled for YOUR FLOORS.

NEW HEART PINE — From virgin pine we select the highest-quality heart pine which has an enduring patina as seen in the re-milled old material. Kiln-dried.

TIRESIAS, INC.
P.O. Box 1864, Dept. TB
Orangeburg, SC 29116
Or call today. (803) 534-8478

WRITE IN NO. 661

J.R. BURROWS & CO.
HISTORICAL-DESIGN MERCHANTS
617/514-1795

Burrows & Co. offers the restoration community an extraordinary collection of Wilson and Branch carpenters in nineteenth century patterns. Period pattern papers in the mill's archives are the source for a diverse range of designs from 1800 - the 1910's. Custom services to order on antique looms in 100 tuft per inch woven Wilson quality.

WRITE IN NO. 493

Victorian Door and Cabinet Hardware
Our Victorian Door and Cabinet Hardware Catalogue has what we have found to be the most asked for hardware plus many hard-to-find items such as floor registers, bar rails, towel bars, stair rods and ice box hardware.

Classic Brass & Hard-To-Find Parts
Send $5. For Complete Color Catalogue

Bathroom Machineries
BOX 1020-DB • MURPHEY'S, CA 95247
(209) 738-2301

Also: Victorian Plumbing Catalogue, send $5.

WRITE IN NO. 566

Ricketson Woodwork
specializes in custom wood windows, glazed with true divided lites of half inch insulating glass.

Since 1902
Whatever your woodworking requirements, we welcome your inquiry.

One of hundreds of windows replaced at the historic Providence County Courthouse. Mahogany sash with small lites of insulating glass.

Ask about our new tilt-turn window and lift slide doors.

WRITE IN NO. 719

Historic Wood Windows
(718) 592-2313 • Fax (718) 592-0079

WRITE IN NO. 720

Chestnut Flooring
Custom Milled From Antique Barn Lumber
Genuine and Remilled Antigue
Oak & Pine Planks
Antique Floors Installed
Hand Hewn Beams
Barn Siding
Have Dry Kiln
Dave Wasky
(203) 889-5765

WRITE IN NO. 648

Victorian Wallpapers
• Handpainted Borders, Friezes, Ceiling Papers & Coordinated Wall Fills.
• Available Directly from our Studio by Mail Order.
• In-house Design Service.
• Color Catalog with Binder: $10.00

BRADBURY & BRADBURY WALLPAPERS
P.O. BOX 155-L • BENICIA, CA 94510
(707) 746-1900

WRITE IN NO. 13
WHEN YOU DON'T HAVE ALL THE PIECES...
YOU NEED MORE THAN A PILE OF PARTS

ARCHITECTURAL REPRODUCTIONS offers a wide range of products and services for ornamental problems such as the reproduction of over 1,000 terracotta details at Seattle's Franklin High School. Our work included:

- DESIGN and structural engineering drawings of parts and attachments based on field conditions and material options.
- MOLDMAKING from shop fabricated models like the entry mockup (at right) and from original parts.
- INSTALLATION COMPONENTS, subframes and jobsite assistance.
- PART PRODUCTION using a cost-effective mix of materials. The new entries combined shop painted concrete, fiberglass and cast aluminum moldings.

For over ten years we've tackled detailing challenges from classical cast stone facades to contemporary plaster interiors. We give you more than just the pieces.

ARCHITECTURAL REPRODUCTIONS, INC.
523 North Tillamook Street
Portland, Oregon 97227
(503) 284-9007
FAX (503) 281-6926

WRITE IN NO. 613
The Nation’s Most Complete Collection Of

Architectural Sheet Metal

Decorative Metal Ceiling & Wall Panels
Hi-Art™ Steel Ceiling systems are made using original 80-year-old dies. The Hi-Art™ line includes center plates, corner plates, border plates, cornice and filler plates — permitting classic designs proportioned for an exact fit. Over 140 patterns in either steel or copper.

Send for 84-page Sheet Metal Ornament Catalog.

Sheet Metal Ornaments
Our 94-year-old line of sheet metal ornament contains over 1,300 items available in zinc or copper.
- Comices
- Window Heads
- Moldings
- lintels
- Capitals
- Brackets
- Corbels
- Rosettes
- Balusters
- Lintels
- Caps
- Fasihons
- Sconces
- Leaves
- Friezes
- Canopies
- Marquees
- Glass pendant frames
- Cresting
- Garlands
- Panel Ornaments
- Lion Heads
- Conductor heads & fittings
- Weather vanes

WANTED: 1991... says the world about sheet metal design and construction. Our sheet metal ornaments can be used in any combination. See the picture and you will be convinced.

Metal Roofing Shingles
Original 1908 line of metal roofing shingles... available in galvanized steel or solid copper. Spanish Tile, Mission Tile, Victorian, and Slate styles. Cresting, frinals, and trim also available.

Custom Reproductions
Our manufacturing process enables us to make reproductions of original panels on a custom basis... or to produce your original design. Call us to discuss your needs.

Rumford Fireplaces
Traditional
- Tall and Elegant
- Efficient
- The Fireplace that Keeps You Warm

We must never forget that it is the room that heats the air, and not the air that heats the room.
- Count Rumford, 1798

Available from Buckley Rumford Fireplace Co.: 219-925-1172, 800-641-4038

Buckley Rumford
P.O. Box 323, Nevada, MO 64772

Bird Barrier
NIXALITE BIRD CONTROL

Nixaite architectural bird control protects any exterior structure (except from birds) from damage. It is non-toxic, highly effective, and completely eliminates pest problems. Call, fax or write for details.

NIXALITE® OF AMERICA
18875 Medicine Lake Hwy., Chanhassen, MN 55317

Divison 10
SPECIALTIES

SMITH-CORNELL, INC.
Plaques of Distinction

THIS PROPERTY HAS BEEN PLACED ON THE NATIONAL REGISTER OF HISTORIC PLACES BY THE UNITED STATES DEPARTMENT OF THE INTERIOR

P.O. Box 408, 78
Phone: 312-929-1172
Fax: 312-353-6016

Custom - Stock - Free Brochure

1108 Box 323, Nevada, MO 64772

Buckley Rumford Fireplace Co.

1-800-641-4038

WRITE IN NO. 52

WRITE IN NO. 716

Thermo-Rite
GLASS FRAPPLACES ENCLOSED

CUSTOM - STOCK - FREE BROCHURE

16-033-6860

FAX 1-833-1879

P.O. Box 408

Akron, OH 44309

WRITE IN NO. 533

Classified advertising.

Traditional Building

MARCH/APRIL 1991 33
Decorative, cast iron firebacks have been used for over 200 years, partly to radiate heat, but primarily to protect the rear walls of fireplaces from heat damage. Today, that protection also lets you upgrade quality with alternatives to common yellow refractory brick, e.g., white plaster, old paving brick and stones.

The Country Iron Foundry offers the largest selection of firebacks in the nation. Whether replicas of antiques or of contemporary design, all are meticulously handcrafted. They truly make the fireplace a room's focal point. A request on your letterhead brings you our 31-page catalog of 32 antique and contemporary designs.

---

**Sizing Up Grilles & Registers**

To provide the finishing touch on your HVAC ducts, you have the choice of everything from plain-vanilla stamped steel registers to highly decorative grilles in cast brass, iron, aluminum—or even wood.

---

**By Clem Labine**

**The Plain Facts:** If function, engineering precision, or the controlling factors in the selection of grilles and diffusers for a job, you'll probably wind up selecting a stamped aluminum unit from one of the major suppliers. (A few of these suppliers are included in the Source List on page 36). The big companies supply a vast range of products that will channel air in any direction or fashion you wish. And their product literature provides enough engineering data to keep your HVAC person happily crunching numbers for hours.

However, if aesthetic or historical considerations play a big part on a job, chances are you'll select decorative registers (with air control louvers) or grilles (without louvers) from one of the specialty suppliers shown in the Source List. You won't have as wide a range of products and sizes to choose from, and you won't have charts full of engineering data to toss at your HVAC specialist. But you'll end up with a unit that will function satisfactorily — and will be more visually appealing than plain-vanilla diffusers.

One unusual aspect of this market is that it can support a company (Reggio Register Co.) that specializes in nothing but decorative cast grilles and registers. When asked how Reggio can thrive with a product line so narrow, president Mike Reggio explains: "Because we specialize in grilles and registers, we can provide more standard sizes (30") in more materials (cast iron, brass, and aluminum) than other supply houses that sell lots of other things." Also, Mike says that because of the in-depth knowledge they've accumulated through specialization, he's able to provide technical information to system designers on the more complicated jobs.

---

**Triarc: Wood air vents in a wide range of hardwoods.**

Buffing heads can exert up to 400 psi on the brass, much higher than you can get with hand polishing. The end result, he declares, is a very smooth, even appearance across a large surface area.

**The Size Nightmare**

Many of the problems in decorative cast grilles are size-related. Tim Judge, proprietor of The Antique Hardware Store, says (only partly in jest): "Selling registers is a nightmare! People call and say, 'I want one just like in your catalog, but 2 inches longer and 1 inch wider.' As soon as they find out what custom registers cost, however, the majority quickly decide they can make do with one of our standard models."

(continued on page 37)
Largest Selection Available!
• 90% of orders shipped within 48 hours •

USA made Reggio Registers® enhance the beauty of your wood floors and fine carpets. Maximize heat circulation from woodstoves, solar collectors, gravity and forced-hot-air heating systems. Choose from elegant brass or traditional cast-iron registers and grilles. Request our new color catalog for styles, sizes and prices.

The Reggio Register Co.
Dept. Z103, P.O. Box 511, Ayer, MA 01432 • (508) 772-3493
### Traditional Building's SourceList

**Registers & Grilles**

**Company** | **SPECIALTY** | **LITERATURE** | **Cast Registers** | **Stamped/Extruded** | **Wood** | **% Custom**
--- | --- | --- | --- | --- | --- | ---
American Home Supply | Sells cast solid brass grilles. They are especially proud of their "Auto-power" polishing machine which, by polishing a large surface area in a single pass, assures a flat smooth final product — avoiding the wavy surface that can result from hand polishing. Smallest size: 2-1/4" x 10". Largest: 14" x 18". | Catalog No. 52 | | | |
Antique Hardware Store | This purveyor of a wide range of period hardware, plumbing, and lighting fixtures offers a selection of cast brass and cast iron floor registers — including a round register made to fit an 8" hole. Largest size rectangular register: 20-1/2" x 16-1/2". | Free | | | |
Grillworks | Manufacturer of wood grilles that accommodate a standard metal register (to control air flow) just below the wooden grille. Red oak drop-in models fit standard duct openings from 2-1/4" x 15" through 6" x 16". Come prefinished or unfinished. | Free | | | |
Historical Arts & Casting | Custom foundry produces all types of cast metal architectural ornamentation — including grilles. Will work to client's drawings — or they can produce patterns from their extensive design library. No stock products. | Free | | | 100%
Krueger | Wide selection of stamped and extruded registers, grilles, diffusers — plus security grilles and registers — in contemporary designs. | Free | | | 10%
Lima Register | A wide range of contemporary-styled registers, grilles, diffusers, sized to fit every standard duct. Residential and commercial models. Capabilities to manufacture almost any size from 6" x 4" to 8' x 6' (and larger if needed). | Catalog No. 1 | | | 10%
Brian Leo Custom Hardware | Small custom hardware manufacturer makes, among many other things, cast grilles to your specifications and drawings. | Free | | | 100%
Reggio Register Co. | Manufacturer of a complete line of cast iron, cast aluminum, and cast brass decorative grilles and registers based on historic originals. Has stock models that will fit standard ducts from 2-1/4" x 10" to 30" x 30". | Free | | | 10%
Register & Grille Mfg. Co. | Custom manufacturer of decorative stamped grilles made in steel, aluminum, or bronze in a variety of finishes and designs. Custom linear bar grilles for wall, floor, or ceiling in aluminum or solid bronze in various finishes. | Free | | | 85%
Register Unique, Inc. | Solid brass cast floor registers manufactured in two patterns: A simple contemporary design or traditional Victorian. They come in a variety of sizes in polished brass, antique brass, and chrome. | Free | | | 10%
Triarco, Inc. | Wood air vents, grilles, and louvers in red or white oak, ash, rosewood, and many other hardwoods. Standard or self-rimming models duct sizes from 2" x 6" to 12" x 32". Wood vents handle cold air or warm air from standard forced-air heating systems. Also solid cast brass grilles and solid stamped brass grilles. | Catalog No. 1 | | | | 20%
Wood Ventures | Wood air grilles available in two models: Self-rimming and flush mount. All models are stocked in both red and white oak, and in all common duct sizes. Custom sizes accommodated. | Free | | | 25%

---

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>SPECIALTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Home Supply</td>
<td>Sells cast solid brass grilles. They are especially proud of their &quot;Auto-power&quot; polishing machine which, by polishing a large surface area in a single pass, assures a flat smooth final product — avoiding the wavy surface that can result from hand polishing. Smallest size: 2-1/4&quot; x 10&quot;. Largest: 14&quot; x 18&quot;.</td>
</tr>
<tr>
<td>Antique Hardware Store</td>
<td>This purveyor of a wide range of period hardware, plumbing, and lighting fixtures offers a selection of cast brass and cast iron floor registers — including a round register made to fit an 8&quot; hole. Largest size rectangular register: 20-1/2&quot; x 16-1/2&quot;.</td>
</tr>
<tr>
<td>Grillworks</td>
<td>Manufacturer of wood grilles that accommodate a standard metal register (to control air flow) just below the wooden grille. Red oak drop-in models fit standard duct openings from 2-1/4&quot; x 15&quot; through 6&quot; x 16&quot;. Come prefinished or unfinished.</td>
</tr>
<tr>
<td>Historical Arts &amp; Casting</td>
<td>Custom foundry produces all types of cast metal architectural ornamentation — including grilles. Will work to client's drawings — or they can produce patterns from their extensive design library. No stock products.</td>
</tr>
<tr>
<td>Krueger</td>
<td>Wide selection of stamped and extruded registers, grilles, diffusers — plus security grilles and registers — in contemporary designs.</td>
</tr>
<tr>
<td>Lima Register</td>
<td>A wide range of contemporary-styled registers, grilles, diffusers, sized to fit every standard duct. Residential and commercial models. Capabilities to manufacture almost any size from 6&quot; x 4&quot; to 8' x 6' (and larger if needed).</td>
</tr>
<tr>
<td>Brian Leo Custom Hardware</td>
<td>Small custom hardware manufacturer makes, among many other things, cast grilles to your specifications and drawings.</td>
</tr>
<tr>
<td>Reggio Register Co.</td>
<td>Manufacturer of a complete line of cast iron, cast aluminum, and cast brass decorative grilles and registers based on historic originals. Has stock models that will fit standard ducts from 2-1/4&quot; x 10&quot; to 30&quot; x 30&quot;.</td>
</tr>
<tr>
<td>Register &amp; Grille Mfg. Co.</td>
<td>Custom manufacturer of decorative stamped grilles made in steel, aluminum, or bronze in a variety of finishes and designs. Custom linear bar grilles for wall, floor, or ceiling in aluminum or solid bronze in various finishes.</td>
</tr>
<tr>
<td>Register Unique, Inc.</td>
<td>Solid brass cast floor registers manufactured in two patterns: A simple contemporary design or traditional Victorian. They come in a variety of sizes in polished brass, antique brass, and chrome.</td>
</tr>
<tr>
<td>Triarco, Inc.</td>
<td>Wood air vents, grilles, and louvers in red or white oak, ash, rosewood, and many other hardwoods. Standard or self-rimming models duct sizes from 2&quot; x 6&quot; to 12&quot; x 32&quot;. Wood vents handle cold air or warm air from standard forced-air heating systems. Also solid cast brass grilles and solid stamped brass grilles.</td>
</tr>
<tr>
<td>Wood Ventures</td>
<td>Wood air grilles available in two models: Self-rimming and flush mount. All models are stocked in both red and white oak, and in all common duct sizes. Custom sizes accommodated.</td>
</tr>
</tbody>
</table>
Registers & Grilles, continued from page 34

Reggio Registers: Widest selection of cast grilles & register

Because decorative grilles and registers is a specialty market, suppliers can't pay for tooling and inventory to cover every possible request; they have to stick to sizes and styles that the bulk of the market is asking for. On new systems, of course, it's possible to size ductwork so as to take advantage of the closest standard size. And on retrofit jobs, you can usually adapt an old duct to a stock register by splicing in a new section of sheet metal to make the transition.

Materials Limitations
With cast metal registers, there aren't many application limitations. One caution: With lacquered brass grilles because of the tarnish factor — it's probably best to avoid floor installations in kitchens and baths where water is present. Also, in high-traffic areas, lacquered brass floor registers can suffer partial wearing away of the lacquer — which may require stripping and refinishing.

Wood grilles have enjoyed increasing popularity in the past couple of years because of their ability to complement wood interiors. Unlike metal, however, wood is affected by changes in temperature and humidity. So if you're considering wood grilles, be sure you deal with a company whose products have a track record in the type of heating or air-conditioning application you're considering.

SPECIFICATION FACTORS FOR DECORATIVE GRILLES & REGISTERS

- MEASUREMENTS: Grilles and registers are normally referred to by the dimensions of the hole or ductwork it is meant to cover (NOT the outer dimensions of the grille). This sometimes causes confusion with property owners who aren't familiar with this measurement convention.

- SIZES: Be aware that cast registers and grilles do not come in every conceivable size. If you don't find the size you want in a catalog, it means (1) You have to have a custom unit made (which is quite expensive); or (2) You'll have to do some sheet metal work to adapt the duct to accommodate a stock unit.

- ENGINEERING FACTORS: Product literature for decorative grilles does not contain the kind of performance data on CFM, pressure drop, outlet velocity, horizontal throw, etc., that you find for conventional steel grilles. If your HVAC specialist is clamoring for this kind of data, call the vendor. They may be able to supply some information that will help.

- FINISH: Castings should have no burrs, sharp edges, or pin holes. The surface should appear flat and free of surface defects and blemishes. For the highest polish on cast brass, specify a US3 finish.

- LOUVERS: Air flow control louvers are sometimes attached to the back of the register; other times, louver units (designed to be attached directly to the duct) are sold separately from the grille. Some building codes require louvers attached to the register, so check your local code.

- THICKNESS: If a grille or register is being used on the floor, and it may be subject to unusual loads, check metal thickness and the rated load-bearing capacity.

American Home Supply: Focusing on polished brass.
Strong, durable wooden vents are made from over 40 different select woods in 57 standard sizes and 6 style configurations.

Send $1.00 for catalog to:
TRIARCO, INC.
Dept. TB
P.O. Box 66
Blissfield, MI 49228

WRITE IN NO. 574

ARCHITECTURAL ALUMINUM CASTINGS

We offer a superior quality line of cast-aluminum reproductions of antique period lights in a variety of styles at comparatively low prices.

Outdoor lamps and related accessories for: Parks, Streets, Driveways, Entrances, Gardens, Decks, Patios, Pools

Send $2.00 for catalog.

WRITE IN NO. 660

FOR FREE PRODUCT LITERATURE, USE THE COUPON ON PAGE 46 OR THE ENCLOSED POSTCARD.

Lighting by
HAMMERWORKS

We offer the finest quality and most complete catalog in handmade colonial reproduction lighting and forged hardware

Custom Blacksmithing & Lighting

6 Fremont St., TB3
Worcester, MA 01603
(508) 732-3434

WRITE IN NO. 604

For Free Product Literature, Use The Coupon On Page 46 Or The Enclosed Postcard.

WRITE IN NO. 299

New Lights

Urban Archaeology

New 54,000 sq. ft. gallery
285 Lafayette Street, New York City 10012
212-331-5926

WRITE IN NO. 467

WRITE IN NO. 477

TRADITIONAL BUILDING
THE ANTIQUE HARDWARE STORE

The Antique Hardware Store

2G

2A

EPH

UHW

9B

2UDS

SCR

CIVC

Beautiful heavy cast iron country store light (electrified). Opal glass font, shade & smokebell; chimney included. 24" H x 13" dia. Can be converted to gas/oil; hanging ht. adjust w/gas (must be stationary with electric) $279.00

9B Solid brass Victorian hinge. 4"x 4" loose pin. $29.95

UHW White ceramic knob set. 2 1/4" dia., 2 1/4" backset. Fits 2 3/4" predrilled doors. Passage set $37.95/Privacy set $39.95

2UDS Tub mount soap holder. Bends to fit tub rim. $21.95

SCR One dozen brass shower clips. $14.95 doz.

EPH Victorian picture hook. Hooks to old fashioned molding in old homes and used to hang pictures with rope. $5.95

2G Solid brass water feeds (1/2" O.D.) $84.95 per pr.

2F Solid brass clawfoot tub drain/overflow with chain and plug. (1 3/4" dia. pipe) $77.95

3B Widespread faucet set with "HOT/COLD" porcelain cross handles and 1 1/2" pop-up drain. (Variable centers) Solid brass. $189.00

4C Charming Colonial/Victorian Pedestal Sink with fluted base. (5" centers) 25 1/2" W x 19 1/2" D x 31 3/4" H. (35 1/2" to top of backsplash) $389.00

2A OUR MOST POPULAR ITEM at The Antique Hardware Store...The Solid Brass Clawfoot tub shower conversion. $459.00

Call 1-800-422-9982 for our NEW catalogue!

DEPARTMENT 300

WRITE IN NO. 673

MARCH/APRIL 1991

TRADITIONAL BUILDING
Proprietary Value Can't Climb If Communities Are Crumbling.

When neighborhoods crumble, property values tumble. That's why a non profit partnership called NeighborWorks is working to reverse housing decline. To find out more, call (301) 345-6005 Or write NeighborWorks, PO Box 41406, Baltimore, MD 21203-6406.

гляд

Traditionally Building

and

The National Preservation Institute present:

20th-Century Architectural Metals: Preservation & Replication

April 18, 1991

National Building Museum

Washington, D.C.

This ground-breaking 1-day Workshop will deal with the increasingly common problem of conserving 20th-century architectural metals: Steel, Aluminum, Bronze, Copper, and Stainless Steels.

Workshop faculty includes Diana Waite, author of Cast Iron in Troy; Jack Waite, author of Metals in America's Historic Buildings and principal in the firm of Messick, Cohen, Waite; and Robert Baird, Vice President of Historical Arts & Casting.

For complete program details and registration information, write or call:

The National Preservation Institute

National Building Museum

Judiciary Square, N.W.

Washington, D.C. 20001

(202) 393-0038

GraphiC Standards for the Rehab Generation


Probably no single event symbolizes the changes sweeping through the architectural and building industries as the appearance of this new volume from John Wiley & Sons. Traditional Details is a collection of period building details designed to assist people working on buildings erected in the first half of the 20th century...a sort of Graphic Standards — Antique Edition.

The volume contains selected plates from the first four editions of Architectural Graphic Standards published between 1932 and 1951...material that does not appear in the 8th edition, published in 1988. (In fact, the 1988 edition contains only two-thirds of a single page from the 1932 edition.) Obviously, a lot of material got dropped by the wayside in the effort to keep successive editions of Architectural Graphic Standards abreast of modern building practice. But the dropped material is clearly of value to practitioners working on buildings constructed according to those earlier editions of Graphic Standards. The editors of Traditional Details sifted through the castoffs from the main edition to see what would be relevant to today’s historical architect and renovation contractor. In his introduction, John Belle emphasizes that the volume is designed to be a working tool — not a historical curiosity.

The old plates have been organized into 11 sections, roughly comparable to the major CSI divisions: General Planning & Design Data; Foundations & Site Work; Masonry; Metals; Carpentry; Thermal & Moisture Protection; Doors, Windows & Glass; Finish Materials; Specialties & Equipment; Furnishings; Mechanical, Electrical & Plumbing.

It's an extremely valuable volume for anyone who has to understand how early 20th-century buildings were put together...or who has to detail repairs on structures of this vintage. Among the more than 2,600 details, you'll find such things as how to design a Boston hip on a slate roof (p. 131); joint hanging metal in balloon framing (p. 94); the geometry of a brick Tudor arch (p. 64); and how to frame residential steel casement windows (p. 162).

After looking through Traditional Details, historical architects and restoration contractors are likely to exclaim: "At last, Architectural Graphic Standards for the rest of us!" — CI.
THE MOST IMPORTANT ARCHITECTURAL BOOK IN 10 YEARS!

HUMANE ARCHITECTURE


For those of us who believe the re-exploration of architecture's classical roots is the most important trend in design today, Rizzoli has just provided an important touchstone: New Classicism. This book contains a serious examination of the work and thought of the world's leading architects practicing in the classical tradition.

Allan Greenberg: Treaty Room, Department of State, Washington, D.C.

The volume is far more than a look at the latest ways of handling columns, capitals, and pediments. It provides a serious exploration of the human values that classicism offers the late 20th century world — especially in urban projects. It moves far beyond the frivolous use some Post-Modern designers made of classical motifs, and provides us with stimulating ideas by people who can write as well as design. Though there are plenty of the polysyllabic abstractions inherent in a scholarly work, the book is nonetheless suffused with a quality that can only be described as humane.

There is a stunning section on the more traditional forms of the new classicism, featuring the work of such architects as Allan Greenberg (his work shown), John B#+&eau, and Quinlan Terry. In an essay, "The Architecture of Democracy," that accompanies some magnificent photos of his work, Allan Greenberg sets forth some of the reasons he has adopted classicism as a basic tenet of his practice. He states in part: "Psychological comfort in architecture is achieved through aesthetic satisfaction, easy orientation within the building, and a logical relationship between rooms, corridors, and all parts of the programme... The concept of psychological comfort also encompasses our need to embody in architecture significant social experiences, political ideals, and religious beliefs."

And if you're one of the majority who believes classical architecture can always be recognized by columns and capitals, there is an illuminating section on abstract classicism — proving classicism is not so much a style as a way of thinking about our world.

In what is probably the most important part of the book, there are illustrations and discussions of the importance of classicism for urban environments. As Demetri Porphyrios declares in his essay, Cities Of Stone: "Nobody is born a traditionalist; he/she becomes one only after realizing that the traditional city is still today the most pleasing City." In the opinion of this reviewer, New Classicism is the most important book on architecture in the last 10 years. Anyone who dreams that the 1980's will see the built environment infused with a greater spirit of humanism hopes that this volume finds its way into the hands of every architect, city planner, builder, and developer in the country.
PROFILE

PROFILE: WILBERT HASBROUCK
continued from page 4

Burnham & Root designed the Rookery in 1888, Wright reworked its interior in 1904, and Hasbrouck restored it in 1990. Photo: Hedrich Blessing

Shingle, and his first commission, fortunately, was a very visible one.
The c.1836 Widow Clarke house, Chicago's oldest dwelling, survived the 1871 fire because it had been moved to the south side of town. Hasbrouck was hired to move it back north, to serve as a museum near H. H. Richardson's Glessner house (a building whose preservation he had orchestrated while with AIA). To reach its destination, the timber-frame Clarke home had to be hoisted over the El tracks. "It took weeks to get it up, hours to get it across, and weeks to get it back down," he says. "It was a real media event." And better than any press release, it validated his firm's existence. "When we opened," he says, "we thought we'd have to take on a great deal of new construction to keep the door open, but from day one we've had enough restoration work to keep everybody busy." (Most of the 10% of his practice that is new construction involves creating buildings that suit historic contexts.)

The Delaware Building gave him his next opportunity to make a splash. Begun two months after the fire, its eight simply ornamented stories set precedents for its neighbors in the Loop. "Everybody thought it was cast-iron, but we got lucky and discovered it was cast concrete, which was easier to repair," says Hasbrouck. "It's the only Chicago building that ever became a landmark after it was restored, and one of the few in the Loop that Sullivan and Wright would recognize."
Enter James Peterson, an architect who concentrates on the tech-

Sears' towering headquarters echoes Dearborn Station. Photo: Ron Gordon

Hasbrouck converted Chicago's prominent — and unused — Dearborn Station into a retail/office complex.

Hasbrouck met partner James Peterson when the two collaborated in 1981 on revamping the Grand Traverse County Courthouse in Traverse City, Michigan. Photo: Jack H. Murchie
nical rather than historical aspects of
restoration. He asked Hasbrouck to
collaborate on the Grand Traverse
County Courthouse in Traverse City, Michigan. The county was ready to
tear down its Romanesque 1899
courthouse in search of more room, until Hasbrouck and Peterson
demonstrated how inexpensively the
façade could be rejuvenated and how
easily spaces could be reorganized.
One of the partners’ better received
ideas, for example, was to convert the
previously ignored attic into offices.
Project cost per sq. ft. was $49, while
new construction then would have
cost $70. And the two men have
worked together ever since. (On
January 1, they added to their list of
partners, Henry Zamoch, an expert
draftsman and longtime friend, and
Jay Sirirattumrong, a former senior
designer at the firm.)

"We don’t divide duties very

strictly," says Hasbrouck, "but frank-
ly I’m not a detail man. I like research
and marketing, convincing an owner
to restore a building. Jim leans
towards defining and executing the
work, and the new partners each
have their own strengths. So we all
get along great."

The Rookery and Dana-
Thomas House have occupied much
of the firm’s time for the past few
years. Burnham & Root designed an
ornament-encrusted two-story lobby
for the Rookery that Wright
moderated. He replaced newel-post-
capping electroliers with low-slung
stone urns and covered the interior
web of iron supporting columns with
white marble sheaths incised with
gold-leaf arabesques. Hasbrouck
chose to restore the space to its 1910
appearance, when the building was
fully occupied and heading into a
commercial heyday; the project (with
day-to-day administration by Mc-
Cler Corp.) cost $50 million.

The Dana-Thomas House, al-
though its overhaul cost only $3.5
million, was no less challenging. "It
had suffered a total lack of main-
tenance and some misguided up-
dates," says Hasbrouck. "The subtle
wall colors had all been painted
beige, and the woodwork’s shellac
had darkened to bluish-black." He
restored the walls to sixteen shades
of green, red, gold, and brown, using
the same "scumbling" technique
Wright used in 1904. He recreated
the woodwork’s finish by staining it
brown with red highlights, exactly as
Wright did.

"The Wright experts disagree
with me over the red residue, but I’m
certain of it, based on chemical
analysis and the fact that Mrs. Dana
loved sumac," Hasbrouck says. "The
form and color of sumac are in the
stained glass, and the woodwork
now is exactly the color sumac turns
in the fall. I have no proof Mrs. Dana
ever said, ‘Frank, I love that color,’
but I know that the Danas were two
of his wealthiest clients, I know that
money talks—and I know Wright."
DESIGNING IN A NEW TRADITION

Versaci Neumann & Partners have created a modern home that combines creature comforts of today with psychic comforts of yesterday.

Russell Versaci, managing principal of Versaci Neumann & Partners, sums up the firm’s design philosophy in a single sentence: "We champion the simple notion that designing traditional homes is rich with creative possibilities." Versaci says he senses a renewed spirit in domestic architecture, which he refers to as "New Traditions." This trend is characterized by a growing appreciation of the distinctive patterns, textures, materials, and craftsmanship found in America’s heritage of fine old houses. An outstanding example of how the firm translates that vision into bricks and mortar is a large new residence, called "Pleasant Hill," which is patterned after 18th-century Georgian houses originally built in New England. The client, a family of four, expressed a strong desire to live in a New England style colonial home. The program dictated 12,500 sq. ft. of living area, which could have resulted in a house so large and grand that it would overwhelm the scale of the original colonial prototypes.

The firm’s solution to the problem of scale was to break the design into a composition of many additive parts — making it look as if the house had grown over many years. The central classic Georgian house appears to be the "original" building, which "grew" by attaching one-and-a-half story wings to each side. In turn, the wings were added onto with a gable-end block on one side and an open porch on the other. Each new section provides a variety of window patterns, roof forms, and construction details — presenting a rich array of architectural features.

While this five-part composition is original and unique to Pleasant Hill, the development of its architectural details relies heavily on historical source materials, in particular the The White Pine Series of Architectural Monographs on Early American Architecture. Many of the design motifs at Pleasant Hill are creative adaptations of neoclassical forms, manipulated into new, yet recognizable, forms — just as was done in the 18th century. As with all good classical revival architecture, this design uses the vocabulary of the classical language as source material for new translations suited to today’s requirements.

The elongated composition of Pleasant Hill also owes a debt to American domestic architects of the 1920’s, who reinterpreted Early American styles for town and country houses. Architects of that time, among them Charles F. McKim, Dwight James Baum, and Aymar Embury II, developed design solutions that adapted traditional Colonial styles to large estates while maintaining simple domestic proportions.

For Pleasant Hill, large-scale architectural drawings were prepared for every detail in the elevations, including the custom windows, door surrounds, fanlight dormers, bay windows, cupolas, and lanterns. Full-size custom molding profiles were drafted for the cornices, casings, and other trimwork because stock moldings did not have the correct proportions and heft of the Colonial originals.

The house was constructed with meticulous attention to detail by general contractor Brendan O’Neill, who has made extensive studies of New England and Williamsburg period houses. Master carpenter Raymond (Sonny) Wolfe, Jr. saw to it that every detail was crafted as intended in the drawings. Moldings were milled from clear white pine by Barrons Lumber, who also furnished the western red cedar clapboard siding. The true divided lite windows were fabricated by Kolbe & Kolbe. McCormick Paint Co. furnished the range of historical paint colors used throughout. The Glen-Gery bricks for foundation and paving were laid by masons of A. E. Paolletti Co. Interior casework, fireplace mantels, and wall paneling were fabricated by The Fireplace Mantel Shop. All wood flooring throughout the house is resawn southern yellow pine from Vintage Lumber Co. — CL.
The five-bay central block of the house is centered on a pedimented Doric doorway surmounted by a Palladian window that proclaims the main entrance. The three-car garage was designed as a separate carriage house structure with a projecting eave supported on five stout columns.

A composition of porches, overhanging roofs of differing materials, walkways with a variety of pavings and level changes add character to the connection between the kitchen wing and carriage house.

The kitchen wing (set left) is located in a hyphen flanked by a secondary porch. Varied windows in the "additions" add to the richness of architectural detail throughout.
FREE PRODUCT LITERATURE

These suppliers will send free literature about historical products to TRADITIONAL BUILDING's professional readers. Write in the appropriate number on the enclosed postcard—or use the form below.

Division 2 — SITEWORK

345. Gazebos, Fencing, Bridges — Lovely ornamental species to grace an elegant accent to romantic landscapes. Gazebos and other outbuildings also available in kit form. Free brochure. Bow Fence Co.


121. Custom Fencing — Foundry-cast architectural ornament in iron, aluminum, and bronze. Works from your specs, or can adapt your site's existing ornament. Free brochure. Historical Arts & Casting.


691. Fence Pickets & Gates — Galvanized steel with baked-on polyester finish guaranteed 15 years. Choose swing or slide gates. Their piers can be used in place of stone or brick columns. Free brochure. Monumental Iron Works.


47. Cast-Iron Staircases — The Kensington revisits tradition of cast iron for straight porch steps. Modular components, too. Also circular stairs. Complete catalog. Steeples & Stairs Co.


572. Victorian Fence Pickets — Run, historically documented pocket fence system in mail-order quantities.


Division 4 — MASONRY


Division 5 — METALS


411. Custom Shutters — Exterior or interior shutters; panels or slats, stained or unpainted, all cut-to-size. Also can duplicate any antique shutter. Free brochure. Donley's Architectural Hardware.

Division 6 — WOOD & PLASTICS

130. Wood Restoration — 2-part epoxy system restores rotted wood; saves historically significant and unique architectural elements which can be drilled, sanded, and painted. Free brochure. Abraham.


233. Non-Rotting Lattice — Keeping porch lattice dairies a real dairies. Instead, use PVC lattice. It looks like wood (no fake wood grain), costs 11 in color, and can be cut, nailed, and installed like wood Free color brochure. Cross Industries.


lovers are of generous dimensions. It traditional styles in standard and custom sizes. Veen Hiul Shut- 

tergs — Large inventory of embossed hardware, including hinges, latches, pulls, repair items, and interior woodwork. Each display is designed for maximum efficiency, and is stocked with a wide variety of quality brands. Free brochure. May 26 to June 7.


96. Black Walnut Shingles — Black walnut shingles are available in a wide variety of styles and colors. Free brochure. May 26 to June 7.

376. Plate Steel Panels — Plate steel panels are ideal for finishing off the most difficult to reach areas of any building. Free brochure. May 26 to June 7.

293. Authentic Restoration Hardware — The hardware and millwork are made of the finest wood and materials available. Free catalog. May 26 to June 7.

309. Modern Hardware — Modern hardware is designed to meet the needs of today's homes. Free catalog. May 26 to June 7.

48. Hand-Turned Hardware — Hand-turned hardware is designed to meet the needs of today's homes. Free catalog. May 26 to June 7.

16. Replacement Wood Sash — Wood sash in any size and shape. Divided light, round top, curved, double-hung, fixed, casement, or storm. Insul-}

— "How can we say that's not an honest use of material?"
**Authentic Historical Hardware**

**Door & Window Hardware, Fireplace Accessories, Period Lighting**

Ball & Ball is the largest supplier of authentic period hardware in the U.S. — both antique and reproduction. Our 45 skilled workers draw upon knowledge accumulated through 3 generations of management by the Ball family. And our study collection of antique hardware provides Ball & Ball with more in-depth knowledge of historic hardware than any other supplier.

For example, our X90 box locks (shown) combine modern convenience with charm. Faithful to the historic originals, this lock has a brass box covering an iron plate on which the operating mechanism is mounted. Because of our attention to historical detail, these locks may be used in the most important restorations as well as in the well-appointed home.

Many other types of authentic historic box locks are shown in our 108-page catalog — along with a wealth of other hardware for architectural and furniture applications.

**Lighting Fixtures**

Ball & Ball offers the finest selection of reproduction Early American lighting fixtures. All brass is solid — not plated — and glass used is hand-blown lead crystal. Pure copper, tin and iron are used for fixtures that require these metals. Shown: The Independence Hall chandelier, identical to fixtures supplied by Ball & Ball for the restoration of Independence Hall in Philadelphia.

We have a varied stock of authentic reproduction thumb latches, ranging from Colonial times up to 1850. Many special thumb latch shapes can also be made at the STOCK PRICE. Left: 10-1/2" hand-forged spade-end latch. Right: 9-3/4" semi-hand made bean-end latch.

**Historic Hardware**
**Hinges**
**Window Hardware**

**Shutter Hardware**

We carry a wide selection of iron and brass hinges from the Early American and Victorian periods. Shown: the H1877 4x4 brass steeple-tip door hinge with bronze load-bearing bushings, typical of the style used in the late 1880's.

**Catalogs In 2 Sizes**

Our MINI-CATALOG provides an introduction to the range of products and services furnished by Ball & Ball and is available FREE. (You can write in no. 293 on the Reader Service Form.) Or for $5 we'll send you — via U.P.S. — our handsome, lavishly illustrated 108-page product catalog. Our catalog incorporates useful information about antique hardware that will help you appreciate the subtle differences in the manufacture of reproductions. But even the 108-page catalog doesn't show all 2,000 of our hardware products. If you're looking for something rare or unusual, call or FAX us.

**BALLEndBALL**

**Authentic Historical Hardware**

463 West Lincoln Highway
Exton, PA 19341
(215) 363-7330
FAX only (215) 363-7639