

# The Old-House Journal

Restoration and Maintenance Techniques For The Antique House

Vol. X No. 9

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NEXT MONTH....Repairing Wood Columns

## Relining Your Chimney Flue

By John Mark Garrison

*Whether you're reactivating a fireplace, buying a wood or coal stove, or adapting your heating system, you'll probably have to reline a flue or two. There are several different chimney-relining methods. Sorting out these options wasn't easy — we had to resolve conflicting information from manufacturers, installers, homeowners, fireplace specialists, and building codes — but now we've finally got it!*

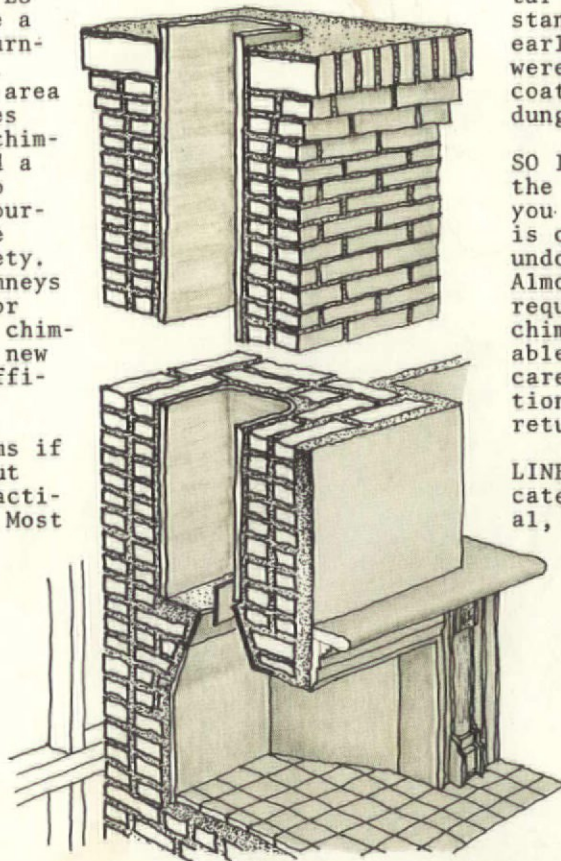
**T**HE DO-IT-YOURSELF SHELVES of most bookstores have a crowd of books about burning wood or coal. But, unfortunately, there's one area that's overlooked, sometimes with tragic results: the chimney. It seems people spend a lot of time learning how to make an intelligent stove purchase, but very little time thinking about chimney safety. This is alarming! Old chimneys have often been neglected or altered. And even a sound chimney may be unsuited to its new fuel or these new, super-efficient wood stoves.

**YOU FACE** additional problems if you have been thinking about adapting, reopening, or reactivating an unused chimney. Most heating systems in older buildings were converted once or more in the past. A flue pipe may have been cut into an old fireplace flue for a coal-burning stove; vents for basement oil or gas burners may have been run up the existing chimney stack. An entire fireplace could have been sealed up and then hidden behind a new wall.

**MOST OFTEN**, you'll be required to install a liner in an old masonry chimney. A house built in the 20th century probably had a baked-clay flue liner as part of its original construction. But older chimneys, as they were being built, were parged on the inside with a special refractory mortar that was capable of withstanding high heat. And very early houses had chimneys that were either unlined or else coated with a mixture of cow dung and mortar.

**SO IF YOU'RE** about to change the fuel you burn or the way you burn it, and your chimney is old and unlined, it will undoubtedly need a new liner. Almost all building codes now require it. And even if your chimney already has an acceptable liner, please note that a careful, professional inspection should be made before you return an inactive flue to use.

**LINERS** fall into three basic categories: (1) the traditional, baked-clay liner; (2) a variety of metal liners; and (3) a poured-cement "liner" that hardens around a temporary, deflatable form inside the flue. All of these liners are UL approved and can be recommended for use under certain circumstances. This article will clarify precisely what those differing circumstances are.



continued on page 188



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*A rustic gazebo, c. 1860,  
in Kingston, New Jersey.*

## Letters

*Coincidentally, this first letter came to us while the August issue — with its articles on brownstone patching and gazebos — was still at the printer.*

WE'RE IN the midst of rehabilitating a mid-19th-century brownstone mansion in Kingston, N.J., so I've been following your summer articles on patching limestone (and brownstone). The house, Heathcote Farm, was originally designed by the firm of King & Kellum, of Orange and Fulton Sts. in Brooklyn, for use as a House of Refuge. King later designed the Brooklyn City Hall; Kellum designed the Tweed Courthouse in Manhattan. I'm interested in information any of your readers might have about this firm.

MY PRIMARY reason for this letter is to send you a photo of the summerhouse at Heathcote. It appears on the original landscape drawing when the building was converted to a private residence c.1860. The summerhouse resembles a rustic building illustrated in Andrew Jackson Downing's "Landscape Gardening & Rural Architecture."

WHILE LUNCHING in the summerhouse on a warm day, I discovered that the building really works! The open cupola acts as

a flue which draws hot air through the roof, pulling a breeze through the walls. The gazebo is built of cedar and laurel root, and sits on top of a 22-foot-deep brownstone icehouse.

-- Clifford Zink  
Princeton, N.J.

AS A previously intermittent reader (via my library's copies) and a recent subscriber (via your seductive Combination Package--which was meant to be bedtime reading for weeks, but was consumed very rapidly), may I compliment you on the success with which you have mixed articles, some aimed at the Victorian purist, some at the Southern log cabin set, others targeted nearer the vintage of my own house (±1910), but all of some interest to the thoughtful restorer of any period piece. Well done!

-- Colin F. Hasse  
Berkeley, Calif.

I'D LIKE to congratulate you on one of the most unique and useful publications on the market. We were preparing to replace our double-hung Queen Anne windows with those new-fangled vinyl ones at \$280 a pop. Thank you for coming to their (and our!) rescue in the nick of time.

-- Phillip Garnes  
Jersey City, N.J.



unmuddling...

# Removing Formstone & Other Indignities

By Ron Pilling

WE KNOW that there are some purist preservationists who won't like this article. They'll say Formstone is part of the history of the building and therefore should not be disturbed. I'll admit we even found ourselves excitedly looking for the little bronze signature plaques proclaiming "good" Formstone jobs by the "original" Baltimore installer.

BUT FORMSTONE, Permastone, and other troweled, sprayed, nailed, or otherwise stuck-on sidings violate some preservationist rules too:

- (1) They are not true to the style of the building, masking the architecture of the facade.
- (2) The installers often removed ornamentation and architectural detail, destroying good old work as well as lessening the historic character of the building.
- (3) Such coatings are subject to poor installation, mechanical damage, and weathering. Once their integrity is broken, water can and does enter. Substantial deterioration — of the coating and the building — is a reason why people want to remove the stuff today.

THIS ARTICLE proves it's not impossible to unmask your building. — P. Poore

ANYBODY BOTHERING to track down patent number 2,095,641 will find "a process by which artificial stone building surfaces can be applied to masonry, wood, etc." This patent, filed in 1937 by Albert Knight of the Lasting Products Company in Baltimore, protected his Formstone fortune. (In other cities, it went by the aliases "Permastone," "Fieldstone," "Dixie Stone," and "Stone of Ages.")

THE ADS FOR IT proclaimed that "Formstone makes your home the neighborhood showplace." They called it "beautiful," "long lasting," and "maintenance free." However, the ads failed to say one important thing: It's temporary. In city after city, homeowners have

learned this particular lesson the hard way. Baltimore, by virtue of Knight's residence, is undoubtedly the Formstone capital of the United States. But this is changing: In recent years, the city has seen more of the gray, lifeless stuff come off than go on.

WHEN YOU remove Formstone, you'll find that you'll also have to repair the uncovered masonry surfaces. This is not a weekend job, but it is certainly within the realm of a serious and ambitious restorationist. And even if you decide to hire a contractor to strip away the Formstone, you should understand the procedure so you can protect yourself from a shoddy job. When done properly, there is minimal damage and the masonry beneath can be completely restored. Done wrong, it can create permanent damage.



Close to half the Formstone facade was removed in only 4 hours.



**Y**OU CAN FIND FORMSTONE and its competitors on almost any surface that normally would have been painted. Bill Gasser, past Director of the Butcher's Hill restoration area in Baltimore, has commented that, "After the owner painted the front for the umpteenth time, he finally said, 'I've had it,' and on went the Formstone."

SOMETIMES, IT WAS PART of a major remodeling scheme. Examples abound where not only was the front Formstoned, but the windows and doors doors were reduced and replaced with aluminum sash. Often, the homeowner went crazy with modernization while he was about it. The result: Cornices and door surrounds removed, lintels taken off, and stone sills stoned over.

"FORMSTONE IS BASICALLY pretty easy to put on, and therefore easy to get off," says Gasser. First, a metal lath was nailed to the surface, ideally with galvanized nails. Then a scratch coat of mortar was troweled on and roughed up before it dried. Next, the skin coat went on, followed by the top coat. While still wet, the top coat was rolled with the stone pattern or cut with a trowel to imitate the joints between stones. "Natural stone colors," usually from bright pink to weak flesh in tone, were applied to some of the fake stones. Finally, tiny chips of mica or marble dust were sprayed onto the surface at high pressure. The whole veneer is usually about three quarters of an inch thick.

**I**N YOUR PRE-REMOVAL INSPECTION, study the facades of your non-Formstoned neighbors. If the house next door has some nifty terra-cotta ornamentation and your Formstoned facade is as flat as the sidewalk, you may be in for some sad surprises when the gray cement falls away. It isn't unusual to find that the Formstone contractors have chipped off terra-cotta decoration and corbelling to even the surface. They may have even chiselled away a belt course or hacked off the edges of the window sills to make the lathing easier.

MELVIN KNIGHT, of All American City Contractors in Baltimore, told me of a contractor who pulled off the Formstone only to find that large areas underneath had been filled with cement to even out a bulging wall. "The cement, put right on the brick, was pretty much on to stay." You can never be sure of what you'll find when you remove Formstone.

SEE IF THE DOORS AND WINDOWS seem to be the original size. When windows were shrunk to accommodate aluminum storm sash, the facades were not always bricked up very carefully. After all, the whole front was going to be covered up anyway, so why not fill in the window with cinder block, cement, or gravel and mortar? If you uncover such remuddling, you will have to chip it all out to restore the window to its correct size.

FORMSTONE CAN CONCEAL structural difficulties, covering up moisture damage, cracks, and insect infestation. But if the fake stone facade is cracked and bulging, it's usually the Formstone itself that's crumbling. A house settling over time will normally shift, eventually buckling the Formstone facade.

FORMSTONE CAN ALSO CAUSE structural damage. If the cornice has been removed and the gutters are faulty, water can seep between the Formstone and the wall. Gasser described this situation: "The cornice was on the house for a reason. Remove it and you're asking for water problems. If the contractor cut corners by using non-galvanized nails to hold the lath on, water will rust the nails when it gets under the Formstone. Eventually, the stuff gets loose and can cause real trouble if it's left on."

IT'S NOT HARD to spot these problems in advance. Look for water stains on interior plaster, especially under windows or where gutters are missing or rotted. Water can get in along any open edge, particularly at the top and around doors and windows.



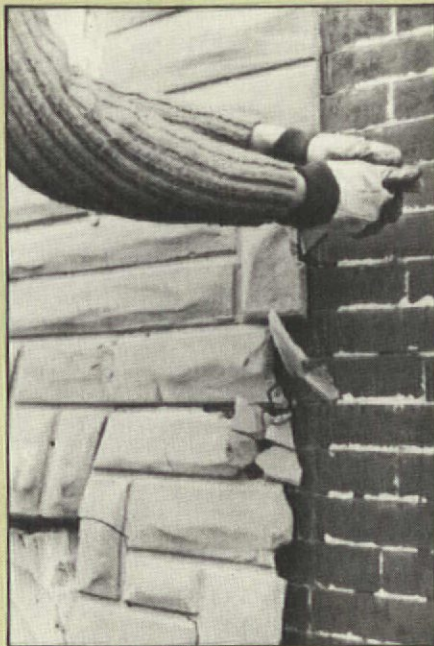
It's most likely that, before Formstone, the house on the right had a cornice, windows, and terra-cotta ornamentation just like the painted house on the left.

**W**HEN YOU'RE PRETTY SURE you can handle whatever you're likely to uncover, you can begin the removal. Gasser reminds homeowners doing it themselves that "Getting it off is the easy part. What is hard is the cleaning, repair, and repointing that follows." The only tools you'll need are a pry bar, hammer, cold chisel, goggles, hardhat, and heavy work gloves. Gasser recommends working from a scaffold. "Formstone is pretty heavy stuff,"





Left: Using a hammer and the short end of the pry bar, an opening is made at a raw edge of the Formstone. Center: Once the long edge of the pry bar is introduced under the facade, you can begin to pull the stuff



back from the wall. (If you have to strain to pull the bar toward you, try driving it further under the Formstone with the hammer.) Right: When a large section is loose, you can grab the Formstone and lift it away.

he says, "and it's best to be able to stand above your work while you're pulling it away."\* Be sure to cordon off the work area so no passersby can be hit by falling debris.

**FORMSTONE WENT ON IN BIG AREAS** and can be pried away in equally large sheets, so don't waste time chipping at it with a hammer and chisel. Get your pry bar under the lath and then pull the lath, Formstone and all, away at one time. "Start at a window edge or a place where you can chisel an opening large enough to accommodate the end of your bar," counsels Knight. "Then begin working the bar behind the lath, pulling straight back to loosen the Formstone as you go. Because of the weight, it will eventually break off and fall away."

**FORMSTONE IS HEAVY** and Gasser cautions against working with too big a sheet. "When the sheet is heavy enough to fall back away from the wall, break it off by cutting through the lath. Then start prying off another section. I always start at the top, and of course, never let anyone work above someone else." He also advises not to pry too hard against the brick. "When a hunk is loose, grab it and pull straight back. Too much hammering and prying on the brick wall can damage the masonry."

**A CERTAIN AMOUNT OF DAMAGE** is inevitable in even the best of circumstances. Normally, the nails were driven into the mortar joints to secure the lath. If the bricks were laid with

\* Scaffolds are dangerous, so be aware of the restrictions on their use. Do you need a license or permit to use a scaffold in your city? Do you know a reputable rental company with well maintained equipment? Can the company advise you on the right kind of scaffolding for the job (probably tubular welded)? Will their people set it up and take it down? Are you calm about heights? If you can't meet all these requirements, better hire someone to do the job.

thin joints, the edges of the bricks can get chipped, but that's about the worst you can expect. It's a different matter, however, if nails were driven into the face of the brick. "We've had to chip out broken bricks from time to time," says Knight, "and then replace them with matching face bricks."

**BRICKS WITH CHIPPED EDGES** create little difficulty, but you should try to avoid chipping. Generally, edges are damaged when the nail is extracted. You can't do much about nails that come out when the Formstone and lath are pulled away. However, many nails will remain firmly in the mortar joints after all the Formstone's off. "I pull those out as I'm raking the joints prior to repointing," says Knight. A pry bar is handy here. Use a small block of wood against which to lever the bar. Pull in a direction parallel to the mortar joint, to avoid further chipping of the brick's edge.



Use a piece of wood when you pry out nails.

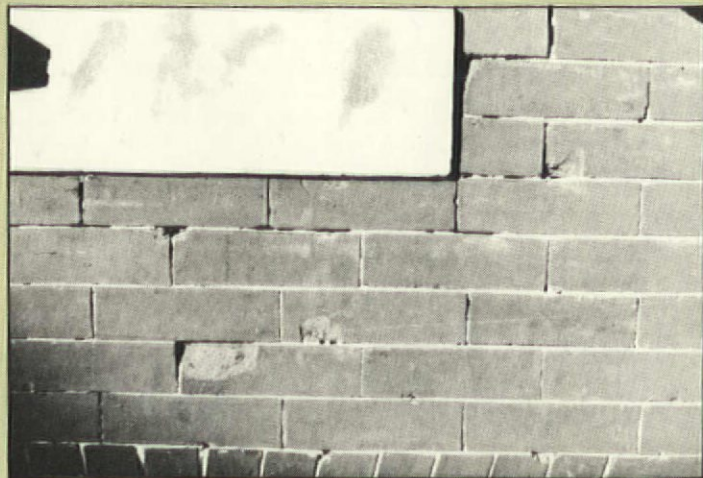


**P**OST-REMOVAL WORK is not unlike normal masonry restoration. The uncovered brick will have been painted and so must be chemically cleaned by the usual methods. "Paint seems to come off more easily if it has been Formstoned over," Knight points out. "For one thing, a lot of it comes off on the backside of the Formstone. For another, since the building was Formstoned, there aren't as many layers of paint." Removal of the paint that remains is generally carried out in the same fashion as removal when there was no Formstone.

**REPLACEMENT OF BROKEN BRICK** is usually limited to the edges of door and window openings. Bricks surrounding doorways are most subject to damage because the contractor often used a lot of nails there--perhaps suspecting harder wear at entrances. Large chips will be more evident here because every guest must pass through your front door. You may have to find some old, sound, face brick to replace bricks that were damaged during removal of the Formstone. When cutting back the mortar joints prior to repointing, you can remove the chipped bricks and set in the new ones.


**THE CHIPS ON OTHER BRICKS** are insignificant as long as the pointing is done carefully. If you use a buff-colored mortar, they seem to disappear. "Bright white or dark-colored mortar makes every chip stand out," warns Knight.

**ALL THIS ASSUMES**, of course, that you don't find shrunken windows, chiselled terra cotta, and missing wooden door surrounds. Damaged terra cotta is the most serious of these difficulties and will require trips to good salvage yards or consulting some brick dealers (especially those in the used brick business) in the OHJ Catalog. It is, naturally, easier to replace damaged terra cotta before repointing.



Above: The Formstone is off, the mortar joints have been cut back slightly, and the brick has been cleaned. If the job has been done properly, this is about as bad as the brick will look. Right: All three of these circa 1840 Federal rowhouses were once Formstoned. And unless you get really close, the bricks look fine, don't they?

**F**ORMSTONE, Permastone, Silver Stone, or whatever is not the only affront to be sprayed, rolled, poured, or smeared over original exteriors. For instance, there was the "Merit Wall Method," marketed by Merit Enterprises in Baltimore. (Fortunately, it never caught on with the success of Formstone.) A thick, rubbery material was sprayed over everything but the window glass--cornices, gutters, and door frames were not exempted. Suspended in the goo was fine stone dust. The effect was that of a huge metalflake balloon having been stretched over the house and then cut out at the doors and windows. It comes off like paint, only a good deal more slowly and with a much bigger mess.

"THERE'S A HOUSE around the corner," Knight pointed out from his office in Baltimore's Ridgely's Delight neighborhood, "that has plain stucco put directly over the brick--no lath at all. The owner wanted me to take it off. I looked at it and then told him to paint it. Some jobs are doomed from the start, and without the lath, the stucco would be next to impossible to get off. You have to know your limits in this business." 

RON PILLING, one of our original subscribers, is a frequent contributor to The Old-House Journal. A Baltimore resident, he also has a deep interest in hunting down and exorcising Formstone.





# Helpful Publications

This month's books are related to home energy. The four devoted to solid fuel burning were chosen for their clear presentation of the basics. They give an essential education to anybody who's thinking about burning wood or coal.

—Reviews by Jacqueline MacDonald

## 1983 Woodstove Directory

Clifford Martel, Jr., publisher  
1983 (264 pp., profusely illustrated) Paper

**T**HIS CATALOG CONTAINS listings of woodstoves, coalstoves, fireplaces, chimney sweep training schools, furnaces, boilers, solar systems, and helpful accessories. (Up-to-date wood and coal stoves are shown in both antique and modern styles.) Each listing has a photograph, the manufacturer's description of the product, and the manufacturer's address. Retail outlets nationwide are indexed; for hard-to-find items, consumers can use the directory's free product locator service.

To order, send \$2.95 plus \$0.55 postage to:  
Woodstove Directory  
105 West Merrimack St.  
P.O. Box 4474  
Manchester, New Hampshire 03108  
(603) 622-8206

## Coal Comfort: An Alternative Way to Heat Your House

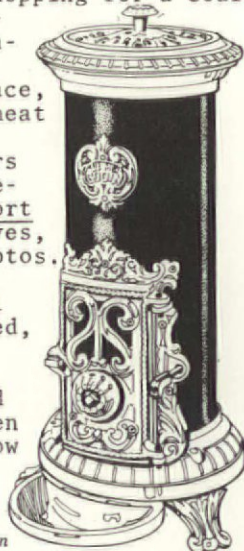
Peter Hotton  
1980 (167 pp., generously illustrated) Paper

**T**HOSE WHO FIND MOST technical manuals cumbersome will enjoy Coal Comfort. Peter Hotton, home and garden editor for the Boston Globe, writes in a manner anyone can understand.

READING Coal Comfort is like shopping for a coal heating unit with a patient expert. Hotton explains what features to look for in an efficient coal burning stove, furnace, or boiler (like air vents and heat resistant lining). A complete list of questions to ask dealers gives the reader shopping guidelines. In addition, Coal Comfort features a catalog of coal stoves, furnaces, and boilers, with photos.

TIPS ON overseeing professional installations are also presented, along with information useful after you purchase and install your coal burner: how to build a coal fire, what to expect when burning coal in a new stove, how to dispose of coal ashes, and complete do-it-yourself directions for building a coal storage bin.

*Petit Godin*



To order, send \$8.95 plus local sales tax to:  
Little, Brown and Company  
200 West Street  
Waltham, MA 02154 (617) 227-0730

## Coalburning Stoves and Furnaces

James W. Morrison  
1981 (172 pp., generously illustrated) Paper

**T**HE INFORMATION IN THIS semi-technical manual overlaps that in Coal Comfort, but is more detailed. The book is scattered with tables such as "Figuring Comparative Costs of Various Fuels and Electric Energy to Supply One Therm of Usable Heat," and diagrams of chimneys, hot water systems, and coal heating systems.

THIS BOOK provides no catalog, but the author describes and recommends several coal stove, furnace, and boiler brands and tells where to shop for these items.

To order, send \$6.95 plus \$1.00 postage to:  
Arco Publishing, Inc.  
215 Park Avenue South  
New York, New York 11003  
(212) 777-6300

## Wood Heat Safety

Jay W. Shelton  
1979 (165 pp., generously illustrated) Paper

**H**HEATING WITH WOOD SAFELY "requires safe equipment, a safe installation, and safe operation and maintenance." These four topics are covered extensively for wood stoves and heating systems in this book. The book does not compare wood heating with other home heating methods, nor does it provide exact woodstove shopping guidelines, but deals entirely with safety. All safety factors are explained clearly with the aid of abundant diagrams and photographs. A mandatory reference for woodstove owners!

To order, send \$9.95 plus \$2.00 postage to:  
Shelton Energy Research  
P.O. Box 5235  
Santa Fe, New Mexico 87502  
(505) 983-9457

## Conserving Energy in Older Homes: A Do-It-Yourself Manual

Jeffrey M. Seisler  
1982 (44 pp., profusely illustrated) Paper

**T**HIS IS AN EASY-TO-FOLLOW manual written by an OHJ subscriber and preservationist. The manual starts with a simple, one-hour test that determines where energy conservation steps are necessary in the home. When energy gobbling areas are detected, you are referred to other sections of the book for further information. Price estimates for suggested energy saving conversions are also given.

THIS WAS to be the third book in the familiar HUD trilogy (In the Bank...or Up the Chimney?; The Energy-Wise Homebuyer)--but was published instead by the author when HUD's publications budget was cut.

To order, send \$4.95 plus \$0.65 postage to:  
Analytech Suite C-30  
915 King Street  
Alexandria, VA 22314 (703) 836-7962



## Window Update:

# More About Double-Glazed Inserts

By Larry Jones, Salt Lake City, Utah

**I**N THE APRIL 1982 OHJ, there was a brief reference to a special way of retrofitting old window sash. This method involves replacing the glass with a sealed, double-glazed insert. I have found that this is an option worth serious consideration if you have 1-over-1 sash that is deep enough to rabbet for the new glazing unit.

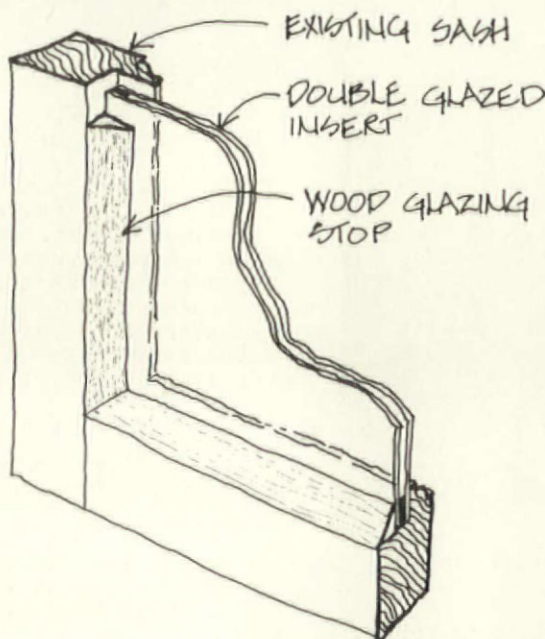
THE UNITS ARE FABRICATED according to your window measurements and can be obtained fairly easily. In fact, locally fabricated, sealed, double-glazed window glass has become a big business. It's available from window dealers, glassworks, and some lumberyards. (Look at it this way: If we have it in Utah, everyone must have the stuff!)

SIMPLY ADDING a second layer of glass into existing sash will not offer the same energy efficiency as these units. They have a lasting edge seal made with a patented process (described in the sidebar on the next page). They also have an aluminum spacer filled with a desiccant that prevents condensation between the two sheets of glass.

THESE UNITS may be more expensive than storm windows, but they're also more effective. And they are certainly less expensive than new windows. They also come with good guarantees and follow-up support from the glass companies that produce them.

IN THIS ARTICLE, I'll be sharing with you some tips on how to handle, install, and maintain these units.\* Frankly, I wish I'd had all this information prior to my own initial work with thermal glazing--some of the breakage would have been avoided.

\*Some of this information is based on an article by Irving Fenman which appeared in *Glass Digest* of March 15, 1982.



## Pre-Installation

■ THE WINDOW SASH itself should be square, tight, and capable of carrying the extra weight of thermal glass. (Any twisting or racking of the frame could break the glass.)

■ LAMINATED THERMAL GLASS shouldn't exceed 25 sq.ft. in area; if possible, it shouldn't be over 40 inches long in any one direction. The length-to-width ratio shouldn't be any greater than 2½:1.

■ AN AIRSPACE of 1/4 inch between the glass is considered to be the minimum; less would suggest questionable cost effectiveness and insulative value. The maximum functional airspace is generally thought to be 1 inch, with 5/8 inch considered ideal.

■ THE THERMAL GLAZING UNITS should be delivered to the job site in appropriate crates. Keep them that way until you're actually going to use them. Never lean the units on each other or against a wall; their weight can cause the upper light to shear the sealant, which in turn can result in misalignment or distortion of the shape of the window.

■ THE CORNERS of the thermal units are the weakest points. Never cartwheel them onto their corners.

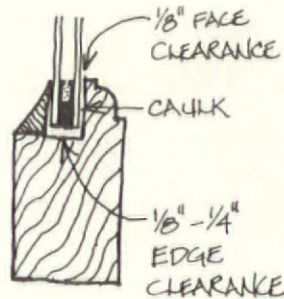
## Installation

■ SHIMS are recommended around the top and sides of the glass at 18- to 24-inch intervals. (Fill the voids with glazing compound.) Neoprene setting blocks, 6 inches long and 1/8 inch wider than unit thickness, should be used. Along the bottom of the glass, these are placed at the two quarter points. (In



other words, if the unit is 36 inches wide, the bottom blocks would be placed at two points, each 9 inches from the corners of the unit.)

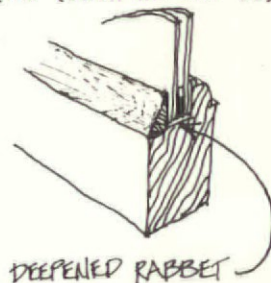
**INSUFFICIENT** clearance for expansion due to temperature changes will result in broken units. (NEVER force fit them.) Leave an edge clearance of 1/4 inch between glass and frame for large windows; 1/8 inch for the smaller ones. For face clearance, leave 1/8 inch between the face of the glass and the wooden sash.



**THE GLAZING COMPOUND** or glazing stops, as well as the rabbet depth, must be sufficient to cover the metal spacer of the unit. Seal failures can result if the metal spacer is continuously exposed to solar ultra-violet rays.

**GLAZING COMPOUNDS** must be compatible with the edge sealants. Consult your source of units for appropriate types (such as DAP 33).

**MANY SOURCES** favor wood glazing stops to hold the glass in the sash. Such stops can even be routed to match the detail of your sash interior, or cut at a diagonal to resemble the glazing compound angle.



**USUALLY**, THERMAL GLAZING will more than double the weight of the sash, so heavier sash weights will be required when the units are installed. Larger weights can be found at demolition sites or salvage yards. A welder

can add on additional metal. If you have adequate clearance, large metal nuts can be used. Untie the sash cord, slip them on, and then reattach the cord. The nut rests on top of the sash weight. Additional weight can also be epoxied onto the bottom of the sash weight.

### Other Considerations

**BE CERTAIN** that water can't be trapped by the sash or sill. If the edges of glass and sealant are left standing in water, the sealant will rapidly deteriorate. Tight seals or caulking, the use of setting blocks, and good drainage are all essential.

**THE THERMAL GLAZING** described in this article is not recommended for insulated skylights or for use on any slope more than 15 degrees out of vertical. The glass can break if it cannot freely float. Also, rain, snow, and ice could deteriorate the sealant. Heat-strengthened glass could help alleviate some of the problem, but not all.

**TRIPLE-GLAZING** is also possible with the system. However, there is some question about the cost effectiveness of triple-glazing in all but the coldest climates.



Photo: Larry Jones

The glass must be carefully test fitted to the sash--any binding or forcing of the glass will usually break it.

### HOW THEY MAKE IT

Two pieces of glass are cleaned with a solution that is compatible with the sealant to be used. An aluminum extrusion of a specified thickness serves as the spacer. When manufactured, this aluminum frame was filled with dessicant beads, and the side of the aluminum which faces into the airspace was perforated. These tiny holes allow the air trapped between the glazing to be dried by the beads. (You've definitely gotten a bad thermal window if the chemical has gotten loose and fallen into the airspace.)

The spacer is carefully inserted between the glazing. It is inset from the outside edge of the glass either 1/2 inch (residential glass) or 5/8 inch (commercial glass). The glazing is then sealed, either with butyl rubber or polysulfide. An extruder feeds molten butyl to an application gun that is hand operated. The gun forces the butyl into the channel formed by the spacer and the glazing. Once it has cooled, the material is trimmed and inspected for any gaps or defects. (Polysulfide works much like butyl, but must set up and cure before the glass can be put into service. The butyl system is ready for installation as soon as the sealer has cooled.)

**ALL OF THESE CAUTIONS** might prompt you to wonder if insulating glass is really worth the trouble. Can it be used effectively in the average home? I think the answer is yes, most definitely. These precautions are simply guidelines to help homeowners and tradespeople get the best use possible out of double-glazed thermal units.

LARRY JONES is Preservation Consultant to the Utah State Historical Society. With carpenter Jack Churchill, he was responsible for the reconditioning and thermal glazing of about forty windows last year and has been delighted by their performance. He extends a special thank you to Gib Groutage of Olympus Glass in Salt Lake City for his assistance in the researching of this article.



# How To Hide A Heat Pump


Installing a heat pump in an old house can be quite disruptive because of the cumbersome ductwork. With its slender 3½-in. air supply pipes, the Space-Pak system allows you to conceal ducts inside partitions.

**H**EAT PUMPS have attracted a lot of attention in new construction because of their thermal and cost efficiency. A single unit can both heat a home in winter and cool it in summer. But for old houses, heat pumps have a major disadvantage: They can only be used on a circulating air heating/cooling system. And that means ductwork--which can be quite an eyesore if it is running through a beautiful plaster cornice.

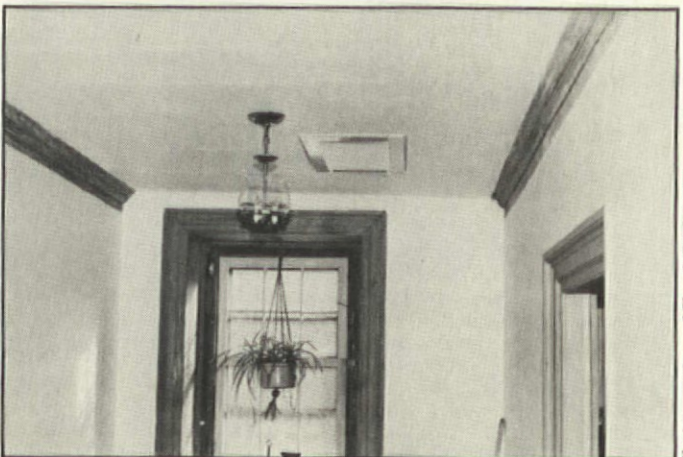
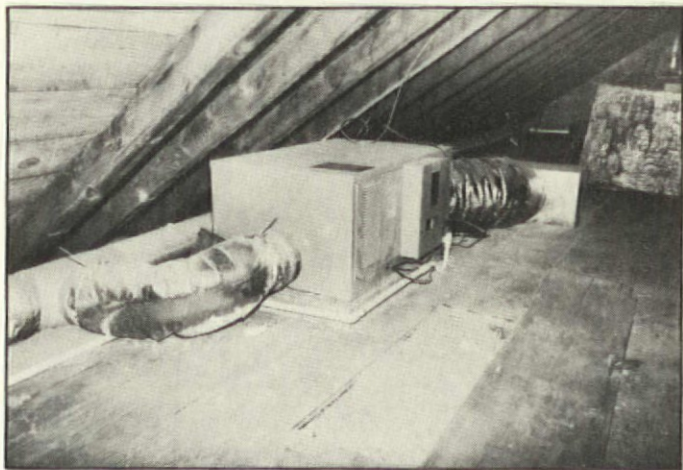
ONE HEAT PUMP SYSTEM, though, avoids most of the ductwork problems. It's the Space-Pak system manufactured by Dunham-Bush. Several OHJ subscribers have installed the system in the past few years and have been very pleased with it.

THE BASIC DIFFERENCE between Space-Pak and other heat pump systems is the velocity of circulating air. Space-Pak uses high-velocity air, and thus can get by with much smaller ducts. The 3½-in. O.D. air supply tubing can usually be snaked through closets, partitions, attics, etc. As a result, all you see are the small circular terminator plates for each air duct, and one air return grille (about 14 in. by 26 in.).

**N**ORMALLY, THE OLD-HOUSE JOURNAL doesn't advocate replacing the entire central heating system in an old house. This is not cost-effective if you are just seeking to improve energy efficiency in your home. But if you're doing a top-to-bottom renovation--or if you have to replace your heating plant anyway--then you should take a look at heat pumps. Air-to-air heat pumps are now cost-effective in much of the U.S. In colder climates you'll need a hybrid system--one with a fossil fuel backup system for very cold days. (See OHJ, Sept. 1981, p. 211.)

IF YOU'D LIKE more information about the Space-Pak heat pump, you can get free literature by contacting the Residential Div., Dunham-Bush, Harrisonburg, VA 22801. (703) 434-0711. 

*PHOTOS: Top--Indoor coil/blower unit takes up little room in the attic. Behind blower is the plenum, from which individual 3½-in. air ducts branch out. Middle--In each room, the individual air ducts with their terminator plates are barely visible. Bottom--Biggest visual intrusion is the single return air grille, which here was placed in the ceiling of the top floor hall.*



Photos courtesy of Ken & Barbara Weaver, Spring City, PA



## A Vinegar Spray

**M**Y OLD HOUSE had layer after layer of old wallpaper. The best and least messy way I found for removing it was with a regular weed sprayer. I used hot water with vinegar and gave the wall a real fine spray by adjusting the nozzle. I waited a bit and then scraped it off with a wide putty knife. This method worked wonderfully--and it was a lot easier on my arms and neck. It's less messy and certainly cheaper than renting a steamer. It works well on ceiling paper too.

Claire Ashling  
Dawson, MN

## Furniture In Bondage

**A**LL OLD-HOUSE OWNERS seem to have rickety old chairs that need to be reglued or drawers that are falling apart because the old glue has dried. It can be very difficult to clamp together the many odd-sized pieces that need to be glued. Sometimes extensive and expensive clamping systems seem to be needed.

**MY SOLUTION** is a length of sash cord or similar rope. It can conform to any shape, inexpensively clamp large pieces, evenly distribute the required pressure, and it will not mar the surface. First do a dry run. Make sure all pieces fit together well and then tie them together with the rope to insure proper fit and alignment. Then take the pieces apart again and apply the glue. To take up the slack in the rope and increase the clamping pressure, use a dowel or stick, tourniquet style. Tighten until the rope is taut, but don't overtighten.



John Kornbluh  
Cincinnati, OH

## The Joy Of Oil-Dry

**B**EING INSPIRED by Daniel Mehn's article, "Floor Finishing--A Radical Alternative" (August 1977 OHJ), we searched for someone to help us strip our floors. Finally, we found Charles McKee of McKee Chemical & Supply

Company, Stamford, Conn. Charles used a water-soluble paint stripper on 4 ft. by 4 ft. squares, let it work, and scrubbed a bit to loosen the varnish. Then he sprinkled on some oil-dry, a claylike substance that looks like sawdust. It's usually used by garage mechanics to absorb oil spills. (Common brand names include Dri-Zorb and Safety-Dri.) He brushed off the oil-dry with a push broom and revealed beautiful bare wood. After being cleaned with paint thinner and receiving two coats of Watco Oil, the floor looked so terrific that we just buffed it and left it un waxed.

**THIS METHOD** is quick and surprisingly free of mess. Three men were able to strip and oil our 1000-sq.ft. living room and dining room in one day; late the next day, they returned to buff it and replace the furniture. The oil-dry eliminated the scraping up, the rags--all the mess that usually accompanies paint stripper. It is amazingly quick, and results in a floor with a deep, soft lustre and the rich, warm patina of age.

Kathy Richards  
Old Greenwich, CT

## Stripping Wood

**H**ERE'S A WOOD-STRIPPING METHOD used by a lot of people in my area. It's quite good on the cedar millwork, fireplaces, doors, panelling, and so on, in Victorian houses of British Columbia.

**FIRST, USE A HEAT GUN** to remove as much paint as you can without scorching the wood. Then brush water-soluble stripper on the panelling--leave it on for at least 20 minutes. Then take a tough scrub brush and wash it off with a solution of 1 cup TSP for each gallon of boiling water. (Don't be afraid to use a lot!) The secret is the heat--the hotter the water, the better it'll work.

**THE PAINT AND VARNISH** practically explode off the wood. The few bits left are soft and easy to remove. There is much less damage to the soft cedar panelling than would happen if you were to pick and scrape at all the grooves. I also suggest wearing a mask when you do this; fumes arise when the hot water goes on. It's a messy job, but it's good, successful, and probably the quickest way to do it.

Lucy Chambers  
New Westminster, BC

**Tips To Share?** Do you have any hints or short cuts that might help other old-house owners? We'll pay \$15 for any short how-to items that are used in this "Restorer's Notebook" column. Write to Notebook Editor, The Old-House Journal, 69A Seventh Avenue, Brooklyn, NY 11217.



## Clay Liners

**C**LAY (TILE) LINERS have long been the approved method for new construction, so they have a known track record and could therefore be considered the most reliable. They are also readily available from a local building-materials yard or your installer, and come in a variety of round or rectangular sizes. (Round liners create a better draft, as smoke spirals as it travels upward; the corners in the rectangular tiles impede the flow. On the other hand, round tiles may reduce the functional size of the flue. See sidebar on p. 190.) Most contractors prefer to use the rectangular liner because it's easier to store and install. Liners come in thicknesses from 5/8 inch up to 1 1/2 inches; 5/8 inch is sufficient for most residential use.

THE PRIMARY DISADVANTAGE of this method is that, in all cases, it requires partial demolition of the existing chimney. The installation is therefore messy and time consuming. The exact extent of demolition depends on specific conditions: If the chimney is relatively straight, it's possible simply to remove a section of bricks at each floor level and slide the liner up and down inside the flue.

IF THERE ARE BENDS OR OFFSETS in the chimney, these sections will have to be dismantled as well in order to cut and fit the liner. The whole operation requires a knowledgeable and skilled contractor who can make sure that the joints fit tightly and are well mortared, and that the sections of liner align with one another to provide a smooth, unobstructed surface. A botched job, with gaps in the mortar or badly fitting joints, means a chimney that is still dangerous.

IF YOUR EXISTING CHIMNEY needs partial rebuilding anyway, this method won't involve much extra demolition. On the other hand, you'll want to consider adjacent building materials. Installing a clay liner may require breaking through sections of plaster walls or wood panelling.

THE INSULATION FACTOR is not a crucial one with this method. A clay liner increases the insulating capacity of a chimney slightly, by the amount equivalent to the additional thickness of masonry. It does, of course, leave an insulating airspace between liner and existing stack walls.

## Metal Liners

**I**NSERTING A METAL LINER is usually simpler and cheaper. If the chimney is a straight run from top to bottom, the installation is easy. If there are bends or offsets, however, these will have to be handled in the same way as with clay liner . . . by removing a section of brick at each bend. Angle sections of pipe are available for this purpose.



Above: This section of clay liner has been buttered with refractory mortar. It will be lowered onto another, similarly coated section, and will have another section lowered onto it. Below: In this photo, you can see that the chimney stack has four flues, only one of which is being lined.



THE MOST COMMON VARIETY of metal pipe is stainless steel sections from 6 to 36 in. in length, and from 5 to 10 in. in diameter. These fit together with small sheet-metal screws. Starting from the top of the chimney, one section is lowered down at a time, the next section is screwed to it, and so on to the bottom of the chimney. Rain caps and other fittings are available to complete the installation.

A NEW, FLEXIBLE, stainless steel liner overcomes the difficulties of installing metal pipe in curved or offset chimneys. (Word isn't in yet on how easy it is to clean.) This corrugated metal tube, in diameters from 5 to 8 inches, is sold by the linear foot. (see page 192) A rope is first lowered down the chimney. The liner is fastened to it at



the top using a special bracket. The liner is then fed down the chimney and guided with the rope from below. (For a stove, the pipe itself is simply led through a hole in the side of the chimney, eliminating the need for a thimble to the appliance.) A metal cap is installed, same as for rigid pipe.

**SINGLE-WALL STEEL LINERS** don't provide any additional insulation for the flue, and in fact probably decrease the insulating capacity of the chimney somewhat, due to the tendency of metal to transmit heat to the outside. This disadvantage may be partially overcome if you fill the space between the liner and the masonry with an insulating material such as mica chips or vermiculite. Do not use fiberglass, as moisture will render it useless. **ABSOLUTELY** avoid the use of any flammable material, such as styrofoam.

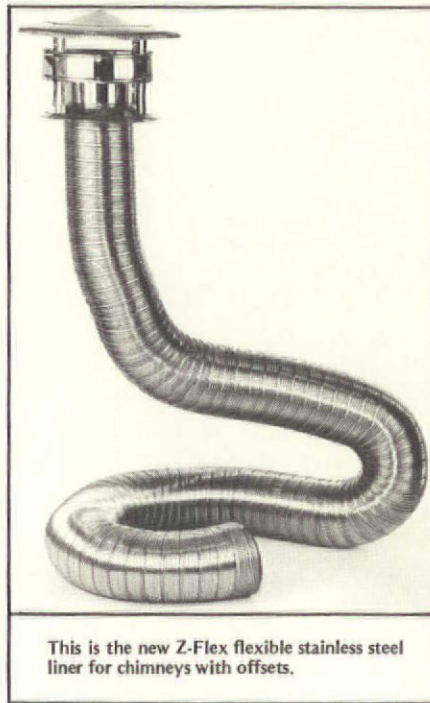
**THE DOUBLE- AND TRIPLE-WALL, "self-insulating"** steel flue pipes are designed to be used as unenclosed stove pipe. Double-wall pipes have the space between the steel walls filled with asbestos or mineral wool. The triple-wall pipes use air space to insulate and are actually less insulative because the air is allowed to circulate between the inner and outer chamber. These have little application for relining an existing masonry chimney.

**ONLY STAINLESS STEEL** should be used for flue lining. Simple stove pipe will not stand up to the high temperatures and prolonged exposure to tars and acids. Stainless steel is classed by Underwriter's Laboratories as "Class A, All Fuel" pipe. Nevertheless, because of recent evidence, The OHJ goes on record as recommending that NO metal liner of any sort be used with coal, due to the metal's inability to resist attack by sulfuric and nitric acid. An attempt has been made to overcome this problem by using a different steel alloy in installations for use with coal stoves. Molybdenum steel, resistant to chemical attack, is available--but this is too new and unpredictable, and also too expensive for most residential purposes.

A **MORE TRIED-AND-TRUE ANSWER** to the problem of metal's vulnerability is the enamel-coated steel liner, which is similar to single-wall steel pipe but has a baked-on coating that's resistant to chemical attack. See page 192 for more information on this product.

### Poured-Cement Liners

**YOUR THIRD CHOICE** is new in the States, although it's been used in England since the 1960s. There, extensive use of coal made metal liners impractical, and an alternative to the relatively destructive installation of a clay liner was sought. In outline, the



This is the new Z-Flex flexible stainless steel liner for chimneys with offsets.

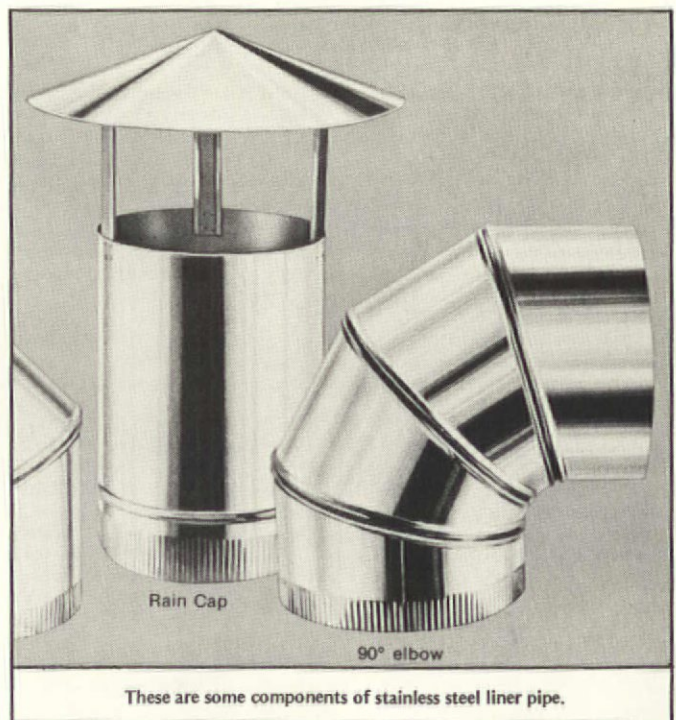
process is simple: A new cement lining is pumped into the chimney around a flexible, inflatable form, which is removed after the cement has cured. In practice, of course, the procedure is a little more complicated.

**IN THIS COUNTRY**, the system is marketed by at least four operations. The two with widest distribution are National SUPA-FLU Systems, Inc., and the BPF or British Poured Flueliner system, available through Chimney Relining, Inc. (see p. 192 for listings). Both of these companies market the system through certified dealers only, so availability is limited in some parts of the country.

**AFTER A DETAILED** inspection and repairs, a rubber "former" (which before inflation resembles a fire hose) is dropped down the chimney from the top, extending all the way down and out through the fireplace or furnace opening. The installer

places a wooden form around the bottom of the hose, bracing it to prevent mortar from escaping at the bottom. Any secondary fireplaces or openings are similarly sealed. The rubber former is inflated to the desired flue size (usually 6 to 8 in. in diameter). Spacers hold the rubber former away from the chimney's walls and center it in the opening.

**IN CHIMNEYS WITH OFFSETS**, as with the other liner types, it's usually necessary to cut a hole in the side of the chimney in order to position the former properly. A special cement mortar in a slurry consistency is mixed on the



These are some components of stainless steel liner pipe.



ground and pumped by hose to the top of the chimney, then down around the form. This mix, a proprietary formula, is basically a cementitious, refractory mortar with admixtures to decrease its weight and increase its insulating capacity, as well as aid its workability, durability, and fire retardancy. Properly applied, the mixture also seals cracks and increases the stability of the chimney.

AFTER THE MIX HAS CURED (10 to 12 hours), the former is deflated and removed, along with the other formwork. Any finish work is done now. Barring major repair work to the chimney, the whole process can be completed in two days.

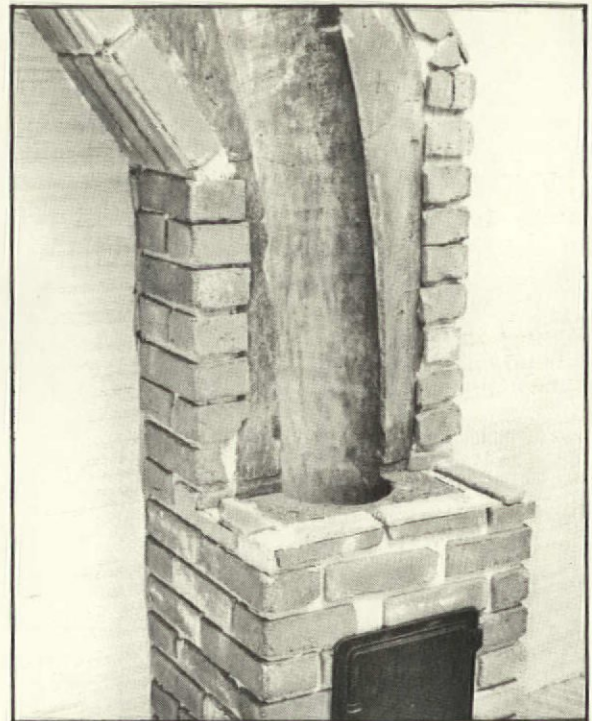
THE MORTAR MIXTURE can withstand temperatures in excess of 2000° F., while clay or metal liners both start to melt at about 1700°. Temperatures over 1700° would be encountered only during a chimney fire. Still, it's nice to know that a cement-lined chimney could survive such a fire . . . IF, that is, the installation was done right.

### The Bottom Line

**A** COMPARISON OF THE COSTS of these different systems is nearly impossible on paper. You can, of course, get estimates locally for each type of lining permitted by code. Cost factors include chimney size and condition, number and acuteness of angles, local regulations, and finish work. Materials vary in cost, too, but that cost is negligible in comparison to labor costs.

CLAY LINERS come in two-foot sections and sell for about \$4 apiece for a per-foot price of \$2. That doesn't include mortar or labor.

A THREE-FOOT LENGTH of standard, stainless steel, single-wall pipe, 6-in. diameter, is about \$23, or about \$7.50 per foot. Shorter sections and angles are higher. Labor costs for this system, however, should be considerably lower. Also, a straight-forward installation isn't beyond the abilities of a handy do-it-yourselfer.



In this demonstration photo of PermaFlu, supplied by Chimney Relining, Inc., you can see the round flue formed by the cementitious refractory mortar. Supafllu is the trademark name of a similar process.

FLEXIBLE STEEL LINER is more expensive, with 6-in. diameter selling for about \$10 per linear foot. Here again, speed and ease of installation probably justify the added material cost.

THE FORM-AND-CEMENT METHOD COSTS vary with the nature of the chimney, but a standard installation in a two-storey house runs between \$700 and \$800. This is comparable to the cost of a clay-tile installation in an internal chimney—where the installer has to break through interior walls.

### Basics Of Chimney Construction

Chimney design varies, but basic principles of good construction are the same for all chimneys. The chimney has three functions: (1) to conduct waste gases out of the building; (2) to keep the gases hot while in the flue; and (3) to protect the other building materials from this heat. Good building practice and code regulations reflect these three objectives. If your chimney doesn't stack up to these basics, maybe you should think twice about reactivating unused flues.

- Think of the smoke leaving your stove or fireplace as a stream of water. Any sharp corners or turns, or any projections or roughness on the inside surface, will impede the flow. At no point should the chimney bend more than 30 degrees away from the vertical.

- In buildings where there is more than one flue in a single chimney stack, each flue should be completely separated by at least 4½ inches — the width of one brick. Holes or gaps in the masonry separating one flue from another will interfere with the draft of each. This is especially dangerous when one flue services a fireplace or woodstove and the other vents an oil- or gas-burning furnace. In such a case, the draft from the fireplace could cause back-puffing in the furnace flue, forcing flammable exhaust gases back into the furnace, creating an explosion. (This is also the reason why two heating appliances should not be vented through the same flue; in some areas, building codes specifically forbid it.)

- When a chimney runs along the outside of a building, the wall facing the outside should be 9 inches (the width of two bricks) in thickness, to adequately in-

ulate the flue from the colder outside air during the winter. This, unfortunately, is a rule that's ignored in all but the best construction. In an extremely cold climate, an air space is sometimes built into the chimney on the outside wall to insulate even more.

- There should be no wood touching the chimney in any place. The usual clearances are 2 inches for all framing members and ¾ inch for flooring and sub-floors. A firestop or spacing member in the framing should be installed at every floor level.

- The flue should extend one to two feet above the highest point on the building to prevent eddying air currents from causing back-puffing. On flat roofs, three feet is recommended. If two flues run in the same chimney, the tops should be set at different heights to aid the draft in each. A variety of chimney caps is available to keep rain out of the flue and still provide adequate draft (see p. 192).

- As to the size of the flue: For a fireplace, the flue area should be 1/10 the size of the area of the fireplace opening for a chimney over 15 feet tall. For a shorter chimney, this should be increased slightly.

- There are standard practices for safe and efficient stovepipe installation and stove hookup. You should, of course, become absolutely familiar with these before burning solid fuel.



## HERE'S WHAT TO CONSIDER FIRST

If Your Chimney Is . . .		And Your Heating System Is . . .			
↓		Coal-Burning	Woodstove/Insert	Wood Fireplace	Gas/Oil Furnace
Single-Flue	Straight	cement; clay	cement; clay	stainless; cement; clay	stainless; cement; clay
	Slightly Offset	cement; clay	cement; clay	flexible	flexible
	Moderately Offset	cement	clay; cement	flexible	flexible
Multi-Flue	Straight	clay; enam.	stainless	stainless; clay	stainless
	Slightly Offset	clay	clay	flexible	flexible
	Moderately Offset	clay	clay	flexible	flexible
A Do-It-Yourself Job (straight flues only)		<i>don't</i>	<i>don't</i>	stainless; flexible	stainless; flexible


cement = poured cementitious refractory mortar; clay = clay tiles; enam. = enamelled steel; stainless = stainless steel liner pipe; flexible = flexible stainless steel. *We've based these guidelines for choosing a liner on conservative safety standards first, then economy. It should not override the recommendations of a competent installer or building codes.*

### Some Conclusions

**W**E CAN'T DISMISS any of the three basic relining systems, nor can we pick out one as "best." We've never before seen a clear discussion of these options, never found a logical list of dos and don'ts. So the OHJ editors and I have come up with a set of conservative guidelines to help you make a choice. We welcome any further experience or expert commentary from any of our readers.

- The single, most important factor is that you trust your installer. If one mason or fireplace specialist comes highly recommended, buy that person's time AND expertise. If she or he has been installing clay tile for 30 years with the approval of the building inspector, for heaven's sake don't insist on an explanation of how many pennies you'd save by using metal.
- Don't trust someone who's never done it before to install clay tile in a chimney with offset angles. It takes special skill to mitre the clay tiles and mortar them in the bends. (Be sure refractory cement is used.)
- Unless your circumstances are unusual, metal isn't cost-effective for wood-burning stoves. It lasts from 4 to 10 years. Clay tile lasts upwards of 50 years, as does a poured liner.
- You can get away with a metal liner for exhausting a little-used fireplace. Just be sure to have it cleaned every year or so.
- We have doubts about the flexible steel liner for use with wood, because of the difficulty of cleaning creosote from the corrugations. In a few years, sweeps will know more about it. But it sounds like a great answer for any masonry chimney, straight or not, that is just used to

vent exhaust from a gas or oil furnace.

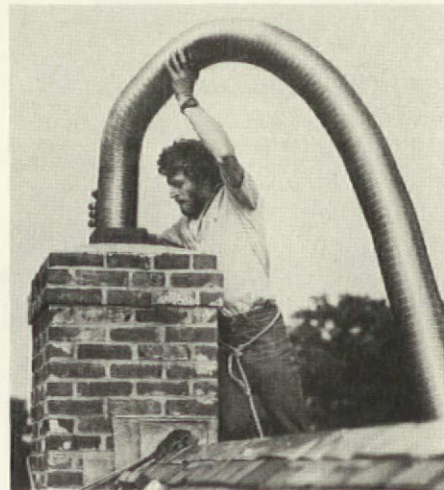
- DO NOT use metal liner if you're burning coal. Enamelled metal may be okay, but won't last as long as clay or poured lining. It makes sense only if you'd save a lot on labor costs for a straight chimney. (Installing enamelled metal in an offset chimney costs as much as clay.)
- The ONLY method we consider do-it-yourself is steel liner--and then only if the chimney is straight and sound, you're not burning coal, and the job is inspected by a fire marshal, qualified chimney sweep, professional installer, or code officer before its first use.
- Poured linings have the advantage of no seams--important for chimneys with offsets, because there's no seam or shelf for creosote to collect on. But it will cost as much or more than clay liner, because the installer will have to break the masonry, just as with clay.
- Dealers of the poured linings themselves expressed doubts about its use in multi-flue chimney stacks. It's virtually impossible to be sure of the condition of the brick partition between the flues. If there were any structural weakness in that partition, the added weight of Supaflu or Permaflu might cause it to give way. Also, any cracks would allow the slurrylike cement mixture to flow through into the other flue.
- Now for the requisite mention of reversibility: A clay liner or a metal liner can be removed--not easily, but it's possible. A poured lining, bonded to the original masonry chimney, cannot. This isn't a serious consideration for most old houses, with one exception: If the installation job is botched, you've got a real mess. We're back to the importance of finding a competent installer. 



# Restoration Products News

## Chimneys...

In collaboration with this month's cover article, we have listed some national sources for flue liners or dealer information. Products like stainless steel or clay liners are generally available through your installer. Material costs do vary, but your most significant cost will be installation. Labor costs vary depending on your chimney and your location. So for local prices, consult your yellow pages under "Fireplaces" and "Chimney Builders and Repairers" for a dealer or installer.



plicated installation. Available in 3- to 22-inch diameters, the liner is recommended for use only in masonry chimneys. The average installed cost is \$400-\$700, depending on the work involved, and the liner is said to last at least 4-5 years. Sold through distributors or direct; free literature is offered by Energy House, 105 W. Merrimack St., PO Box 4035, Dept. OHJ, Manchester, NH 03108. (603) 668-5195.

If you are considering a solid, stainless steel liner (an economical and practical choice for venting furnace gases), then you should know that no. 304, 24 gauge stainless is most often recommended as having the best performance at a residential cost. Mirror Stove Pipe Co., a long-time manufacturer of stove pipes, offers this product in a variety of sizes. A 6 in. diameter, 36 in. long stainless steel section is about \$30; a direct 30 ft. liner would cost about \$350-\$400, installed. This product should only be used for relining a masonry chimney; it's approved for use with wood, but we wouldn't recommend it for use with coal. No literature is offered, but they will put you in contact with a distributor in your area. Mirror Stove Pipe Co., *Mirror Stainless Flue*, Box A, Dept. OHJ, Bloomfield, CT 06002. (203) 243-8358.

Europeans have used enamel-coated steel chimney liners for many years. Unlike uncoated steel, these can be used when burning coal. Heat-Fab's liner is enamelled inside and out; the cost is \$10/ft. — about the same as stainless steel liners. These liners, as well as a #304, 24 gauge stainless-steel liner, are sold through distributors. Free information. Heat-Fab, Inc., 38 Haywood St., Dept. OHJ, Greenfield, MA 01301. (413) 774-2356.

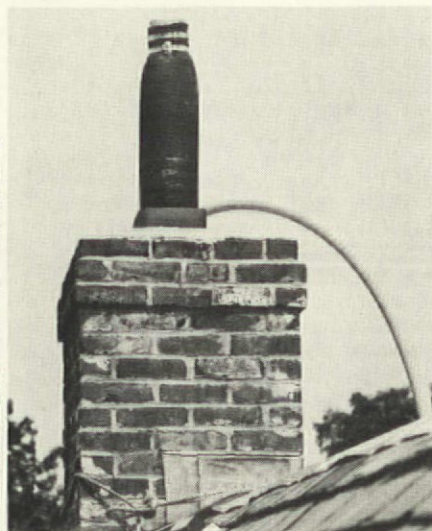
Almost identical to *Supaflu*, *Permaflu* is also a poured masonry reliner. The cost is comparable. For free information and the location of an installer in your area, write Chimney Relining Inc., 105 W. Merrimack St., PO Box 4035, Dept. OHJ, Manchester, NH 03108. (603) 668-5195.



*Superior Clay makes these pretty chimney tops, as well as clay liners.*

Best known for their handmade clay chimney tops, Superior Clay is also a manufacturer of traditional clay chimney lining. Available in a variety of sizes—7½ in. x 7½ in. to 24 in. x 24 in. (outside diameter), and 6 in. to 36 in. round (inside diameter)—clay liners can even be used in chimneys with wood frames. However, the manufacturer doesn't recommend use of this product in chimneys with severe offset angles. (Refractory cement only should be used to connect clay sections together.) Maintained properly, clay liners can last a lifetime. Write for a free brochure to Superior Clay Corp., PO Box 352, Dept. OHJ, Uhrichsville, OH 44683. (614) 922-4122.

*Z-Flex* is an air-tight, flexible, stainless steel liner that resembles a giant Slinky toy. Once installed, the liner is surrounded by Vermiculite, a loose-fill mineral insulation. Its advantages are in its seamless construction and uncom-



*The temporary rubber former in place for a poured masonry chimney liner.*

*Supaflu*, recently introduced in this country, has been used for many years in England and Europe. The process, described on page 190, involves inflating a stiff, tube-like former in the chimney, and pouring a patented refractory cement around it. After the cement sets, the rubber former is removed. Although it's no less expensive than traditional methods at \$700-\$800 for a direct chimney, and there isn't a proven track record in this country, *Supaflu* does provide an alternative for offset angles. Dealers/installers are in many areas of the U.S.; free literature. National *Supaflu* Systems, Inc., Rt. 30A, PO Box 289, Dept. OHJ, Central Bridge, NY 12035. (518) 868-4585.

(Photo courtesy of Chimney Relining, Inc.)





For the Victorian buff who has everything: A unique collection of rubber stamps with designs dating from 1885 to the turn of the century! These aren't exactly a necessity for the old house, but we couldn't resist bringing them to your attention. The deeply etched rubber stamp is mounted on a wooden block; a turned wooden handle is a nice finishing touch. About 300 different designs — many of which are authentic copies of Victorian patterns — are yours to play with for \$1.95 to \$12 each. Gift certificates are also offered. Send \$1 to see all the delightful designs and letter samples. Good Impressions, 1126 Avery St., Dept. OHJ, Parkersburg, WV 26101. (304) 422-1147.

## Solar/Conservation Products Catalog

If you are confused by the endless number of ads you see for solar components, then a catalog compiled annually by the Solar Components Corp. could help. It lets you see many different solar/energy products all at once, with write-ups that point out their various functions and specifications. Because energy conservation is an important adjunct to solar power, energy-saving products such as insulation (movable and fixed), window shades, and heat reflectors are described

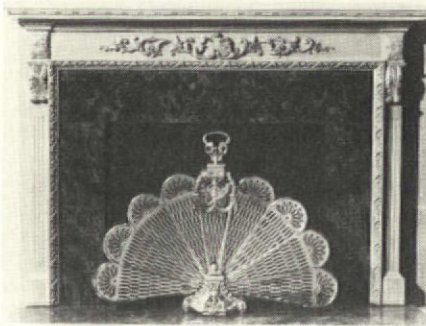
## Shades Of The Past

Elegant, flamboyant, vibrant...Victorian and turn-of-the-century lamp shades we thought we'd never see again are



as well. Products listed are geared toward the do-it-yourselfer. Dozens of manufacturers are represented, but you can buy all the products from this single source. In addition, an extensive selection of books for beginners and experts is listed. The 82-page catalog is \$3 from Solar Components Corp., PO Box 237, Dept. OHJ, Manchester, NH 03105. (603) 668-8186.

## Wood Mantels



*This imported English mantel is one of Readybuilt's top of the line.*

Wood fireplace mantels in Classical, Colonial and Colonial Revival, and Louis XV styles are offered by Readybuilt. Two reproductions of early 18th-century English mantels have recently been added to their line. Imported from England, these mantels are hand-carved from pine, have a wax finish, and are designed to fit American fireplaces. The mantel shown here is \$1800; their other mantels begin at \$200. (Custom models are also available.) Send \$2 for their catalog to Readybuilt Products Co., Box 4425, 1701 McHenry St., Dept. OHJ, Baltimore, MD 21223. (301) 233-5833.

## Paint Stripping

As we mentioned in our August issue, we have been flooded with inquiries about *Peel Away* and other wonder products, all promoted as solutions for the most hated restoration task — stripping paint. So to be honest, when we heard about *QRB* our reaction was "so, another chemical paint stripper." But after a demonstration by Ronald Hack, the manufacturer of the product, we were quite impressed. *QRB* can be used without immediately burning your skin, and has only a bare trace of obnoxious fumes. It's applied in the usual liquid stripper fashion; you have to be sure to keep the surface moist, and wait until the stripper penetrates through all the paint layers (about the same length of time as any quality stripper).

On our oak sample, *QRB* barely raised the grain of the wood; we'd expect that only minimal sanding would ever be required. Also, the chemical doesn't need to be neutralized. But the feature we liked the best was clean-up: The terry-cloth rag the stripper was applied with was used again, like a shoe-shine rag, to remove the loosened paint. This was especially effective on spindles and carved details. Excess stripper can be wrung out and saved for reuse. Then, with a gentle shake of the rag, the paint chips are removed from the cloth (unlike most chemical strippers where the cost of paper towels seems to equal the cost of the stripper).

Drawbacks? The stripper is a soup of petroleum products and thus is highly flammable. The price is \$15.98/gal. not including U.P.S. shipping. For free information and order forms write *QRB Industries*, 3139 U.S. 31 N., Dept. OHJ, Niles, MI 49120. (616) 683-7908 or 471-3887.

OHJ subscriber Clinton Kenneth Lokey of Princess Anne, Maryland, told us he's tried many different tools to aid in the stripping of exterior paint. He reports that the Red Devil #3005 tungsten-carbide scraper is the most helpful. Our experts agree that it's one of the best scrapers on the market. It costs about \$30, and is so durable that it doesn't need frequent sharpening.

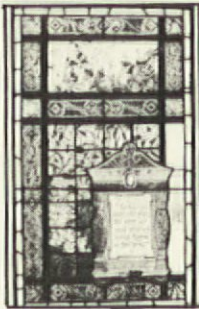
The OHJ staff recently learned of another great tool for paint strippers: A tapered, polypropylene, automotive-parts cleaner brush. Ask for ¾ in. or 1 in. size at most automotive stores; cost is about \$4. These durable, stiff brushes are ideal for use with chemical stripper (which doesn't eat away at it) to get the paint out of details and carvings without damaging the wood.



# The Old-House EMPORIUM

## FOR SALE

**ANTIQUE SWITCHPLATES.** Original 'new' 2-button solid brass switchplates. Brush finish, .040 thick. \$4.25 each. 5 or more, \$3.50 each. Limited quantity. Shipping included. Check with order. J.B. Vetrano, 1601 Park Ave. So., Minneapolis, MN 55404.



**MAGNIFICENT STAINED GLASS,** c. 1850. European window with quote from Shakespeare's "As You Like It." Glass size, 28 in. x 47 in. \$5000. Remembrances Of Things Past, Box 994, 376 Commercial St., Provincetown, MA 02657. (617) 487-9443.

**STAIRCASE,** newel post, and rail. Removed from 100-year-old house. \$150. (607) 637-4500.

**STAGE COACH INN** dated 1830. To be moved, make offer. PO Box 626, Killbuck, OH 44637.

**REED ORGAN,** vintage Victorian, made by Esty, Brattleboro, VT. Fully restored; all parts are originals in mint condition including ivory keys, stops, wood carvings, foot treadle needlepoint. Only bellows were replaced; an electrical hidden unit added to make pumping optional. Burnaford, Apt 12A, 28 E. 73rd St., New York, NY 10021. (212) 734-6341 or (516) 283-1185.

**1 FIREPLACE MANTEL,** cherry. Free standing, approx. 10 ft. tall. Excellent condition. Eastlake period. \$4,000. Cash—firm. A. Rohbacher, 10456 Parent Rd., New Haven, IN 46774. (219) 493-2867.

**ORNATE SPIRAL STAIRCASE,** c. 1890, Victorian cast iron. Stair dia. 54 in. with 6 in. center post, treads 24 in. w. x 8 in. h., 32 risers. Overall height, 22 ft. Stored in MI summer house. Barry Goodman c/o Jakubowski, Rt. 2, PO Box 186, Hagar Shores, MI 49039. (616) 849-1575.

**OIL FURNACE** and burner, excellent performers, used only 2 years; owner converted to gas. Elegant pedestal sink, hand-painted blue stripes on white. 3 wallpapers, Nancy McClelland French handprints, 'Resistanced', 12-16 rolls each. (212) 674-7205 or (516) 261-2041.

**VICTORIAN U-staircase,** mahogany spindles and rails, 118 1/2 in. floor to floor, 15 risers, each 7-7/8 in., occupies 84 in. square space (approx.). \$500. James E. Carr, 112 Prospect Ave., Buffalo, NY 14201. (716) 854-2556.

**WROUGHT IRON driveway gates,** c. 1880, each leaf 3 ft. 11 in. wide by 5 ft. 3 in. high. Marble surround sink, back splash, original faucets. Hall rack, c. 1900, and other items. C.P. Irwin, (201) 438-8280 (after 4:00 PM).

**FOR 20s-30s KITCHEN—"Cecil"** white porcelain gas stove. Lots of nickel & in good condition. G.E.'s first coil on top refrigerator, in good working order. Stove \$400, frig. \$275. Also sugar-salt-pepper in milk glass, each a model of frig.—\$45. Chicago (312) 991-4337.

**BEADED CEILING:** 1 in. x 4 in. x 3/4 in. center matched tongue-and-groove. A perfect match to old beaded ceiling. Cut in no.1 clear fir with original old blades. Excellent for ceilings, soffiting, or wainscoting. Priced at only \$.60/ft. Hirsch House, 1216 Jackson St., Alexandria, LA 71301. (318) 448-1885.

**WALNUT STAIRWAY,** total rise 9-1/4 ft., 15 risers, 40 in. length tread. Attractive railing, spindles, and newel post. Varnished, excellent construction. Removal deadline Nov. 1, 1982. \$1,000 in place or best offer. R.J. Riggins, Princeville, IL 61559. (309) 695-6171.

**OAK BREAKFRONT/sideboard** with bevelled glass mirror—\$325. Oak dentist's cabinet with 23 drawers—\$300. Mission oak hallstand in the style of Gustav Stickley, 7 1/2 ft. tall—\$250. Fancy oak side table—\$125. Square oak dining table—\$200. All old but in good condition, plus some stained glass. Brooklyn, NY (212) 783-8177.

**FOOTED BATH TUB,** Kohler, made about 1900, still in original crate, never used or even unpacked. White porcelain. New condition. \$200, you haul. R.A. Showalter, 125 Calabone Rd., Doylestown, OH 44230 (near Akron). (216) 658-2645.

**WINDOW SASH:** 4 ft. x 4 ft. 4 in., 12 light, from an old school. \$60, 2 for \$100. Granite entry stoop from my 1816 home, 4 ft. 6 in. x 2 ft. 2 in., \$50. Ray Adler, RD 1, Box 121B, Norfolk, CT 06058.

**2 ENGLISH VICTORIAN fireplaces,** c. 1880. Marbled slate surrounds, and original floral tiles. Complete with grates. 4 ft. high, 4 1/4 ft. wide, mantel 5 ft. wide. 1 in perfect condition, \$500. 1 slightly damaged, \$250. 2 kilims: Turkish, 6 ft. 9 in. x 4 ft. \$300; Persian, 8 ft. x 4 ft. 8 in. \$600. (212) 643-0419 (evenings).

**EARLY ATLANTA gas streetlight.** 7 ft. cast iron, fluted post. 3 ft. copper light frame topped with bronze eagle. Converted for electricity. \$350. R. Oades, 4359 Ashwoody Trail, Atlanta, GA 30319. (404) 458-5302.

**ROOF TILES:** Belgian terra-cotta, c. 1909. Over 4000 sq.ft. Call (516) 767-0987. Port Washington, NY.

**ROLLING LADDERS,** (six) 10ft. high, excellent. Some track available. 1000 sq.ft. T&G old oak flooring, no nails, ready to go. Also, three 3 ft. x 6 ft. 8 in. old oak 5-panel doors, very thick and in good shape. P.J. Hightower, Bx K, Keyser, WV 26726. (304) 788-2080.

**STONE DOORWAY arch** salvaged from c. 1890 Washington DC townhouse. 32 separate pieces. Complete, excellent condition except for paint on capital faces which can be restored. Will price to sell, best offer. Anne Lewis, 1635 Connecticut Ave., N.W., Washington, DC 20009. (202) 328-0200.

**HAND-HEWN BEAMS:** Recovered from a church built in early 1700s. Long & short lengths. Sizes—4 in. x 4 in. to 12 in. x 12 in. Also, some boarding and window frames. Will sell all or part. Hatfield Historical Society, Hatfield, MA 01038. (413) 247-5545 or 247-5585.

**AFTER RENOVATION** of brownstone many unique items available such as fixtures, sinks, wainscoting, fretwork, antique furniture, plus more. Call 8 AM to 12 PM weekdays only. (212) 580-4437.

## FREE ADS FOR SUBSCRIBERS

Classified ads are FREE for current subscribers. The ads are subject to editorial selection and space availability. They are limited to one-of-a-kind opportunities and small lot sales. Standard commercial products are NOT eligible.

Free ads are limited to a maximum of 50 words. The only payment is your current OHJ mailing label to verify your subscriber status. Photos of items for sale are also printed free—space permitting. Just submit a clear black & white photograph along with your ad copy.

The deadline for ads is on the 15th, two months before the issue date. For example, ads for the December issue are due by the 15th of October.

Write: Emporium Editor, Old-House Journal, 69A Seventh Avenue, Brooklyn, NY 11217.

**10 COLUMNS:** Each 14 ft. long, tapered and fluted. Cast iron bases and top caps. Very heavy pressed steel shafts. From a Pittsburgh bridge. They were light poles but could be used architecturally. Great for driveway, porch, gazebo. Approx. 50 years old. \$300 each, or all for \$2500. Peter Kriss, PO Box 203AA, Lemont Furnace, PA 15456. (412) 628-2905.

## INNS & HISTORIC HOUSES

**WORLD'S FAIR** home away from home. Comfortably furnished 2 br. family home. Perfect location halfway between Great Smokeys and fair site. Fully equipped kitchen, laundry, and more. Rental—day or week. (615) 856-6192 or 982-1127.

**TAMWORTH INN**—a village inn off the beaten track. Charming 22 room inn (c. 1830) with gourmet restaurant and cozy pub. New Hampshire's oldest summer theatre is located just across the street. Only 15 min. from the site of "On Golden Pond." (603) 323-7721.

**SEVEN WIVES INN**—Bed & breakfast in historically recorded pioneer home (c. 1873) in southern Utah near Zion Park, Bryce Canyon, and Las Vegas. 7 bedrooms furnished in period antiques. Kittycorner from Brigham Young's winter home in St. George, UT. Jay & Donna Curtis, Innkeepers. (801) 628-3737.

**CAMELLIA INN**—c. 1869, an elegant example of a true Italianate Victorian townhouse. Bed & breakfast rooms furnished with antiques. 1 Hour N. of San Francisco on the Russian River Wine Rd. with wine tasting, swimming pool, canoeing, picnicking, 211 N. St., Healdsburg, CA 95448. (707) 433-8182.

**COUNTRY HOUSE INN:** Bed & Breakfast in a home built in 1886. Beautiful gardens, king & queen beds. 32 miles from Hearst Castle, 20 miles N. on 101 from San Luis Obispo halfway between Los Angeles and San Francisco. PO Box 179, Templeton, CA 93465.

**BURTON HOUSE,** Chicago. Bed & breakfast in historic Gold Coast Mansion, National Register. Beautifully furnished. Lake Michigan, Michigan Ave. shopping and entertainment are but steps away. Reservations a must. Brochure available. 1454 N. Dearborn Pkwy., Chicago, IL 60610. (312) 787-9015.

**SPRING BANK:** A bed & breakfast inn. Frederick, MD (301) 694-0440.

## BOOKS & PUBLICATIONS

**CONSERVING ENERGY** in Older Homes: A Do-It-Yourself Manual, tells homeowners how to solve energy problems inexpensively. Beautifully illustrated and simply written, it contains 44 pages of money-saving ideas. \$4.95 (plus \$.65 postage). Analytech, Suite C-30, 915 King St., Alexandria, VA 22314. (VA residents please add 4% sales tax.)

**PAINT REMOVERS** available commercially are expensive. Send \$2 for my formulas and instructions for making your own equally effective product. Naturals, PO Box 403595, Miami Beach, FL 33140.

## MEETINGS & EVENTS

**RESTORATION SEMINARS:** Oct. 2, "Investment Opportunities For Old Buildings" and Oct. 23-26, "Rehabitech" (an on-site workshop). R.A.C.C., Adult Education, 2nd & Penn Sts., Box 1706, Reading, PA 19603. Or call Mrs. Wagner (215) 929-5032. Also, Oct. 15th, "Investment Opportunities For Old Buildings" and Oct. 16th, "Buying & Fixing Up An Old House: You Can Do It Yourself." Sacred Heart University, Dept. of Continuing Education, Box 6460, Bridgeport, CT 06606. (203) 371-7830. Brochures on all seminars are available.

"REBUILDING AMERICA: Challenge to the Construction Industry," a 2 part seminar, Oct. 18-21. To be held at MA Institute of Technology. Phone Laura McShane for information (617) 253-7406.

**ANNUAL APT CONFERENCE**—Oct. 24-27, Banff, Alberta, Canada. Training sessions on Stained Glass Restoration & Wood Preservation Technology, Oct. 22-24. Registration fee, \$85 (US). For information, and post-conference tours, write to Walter Jamieson, c/o APT '82, Faculty of Continuing Education, Univ. of Calgary, Calgary, Alberta, Canada T2N 1N4.



## POSITION WANTED

RETIRED COUPLE with small poodle seek winter rental for 6 mos. beginning Nov. 10. Desire nicely furnished, decorated home in the Carolinas, Georgia, or No. Florida. We are super caretakers of property! R. Greer, RD 1, Box 30, Center Rd., Scipio Center, NY 13147. (315) 364-8601.

## REAL ESTATE

**CENTENNIAL BRICK HOME** in Lyons, (Ionia County) between Grand Rapids/Lansing, MI; an easy drive to either city. 3 blocks from Grand River's salmon fishing. In excellent condition, large lot. Double brick, insulated, newly rewired, all new plumbing. 13 rooms, 5 bedrooms, 1½ baths, rich woodwork, gas heat. Also large oak barn with attached garage. Land contract possible. Payments as low as \$150 by buying out equity. \$45,000. (517) 769-6110.

**STATEN ISLAND, NY**—Richardson Romanesque home with original appointments and detailing including quarter-sawn oak parquet floors & panelling, 7 fireplaces, ornamental ceilings, stained glass, wine cellar. 4 bedrooms including oversize master suite with fireplace, bath & sitting room. Featured in 1897 Scientific American. \$198,000. Call K. Bercaw at (201) 741-0771.

**PUTNAM VALLEY.** Lovingly restored 19th-century center-hall Colonial. 4 bedrooms, 2 baths, 3 fireplaces, plank floors. Family neighborhood. 2 plus acres. \$165,000. Spain Agency, Rte. 6, Mahopac, NY 10541. (914) 628-3464.

**1 ROOM ADIRONDACK** cabin on bank of wild Cedar River. Pure spring, built-in bunks, gas plate, Franklin stove, flush toilet. Almost 5 wooded acres, 235 ft. river front. Park Agency restrictions assure no close neighbors, no building upstream. \$20,000. Jane Carroll, Indian Lake, NY 12842. (518) 648-5532.

**UNREMUDDLED GREEK REVIVAL** cottage in picturesque village of Hancock, Delaware County, NY. 2½ hrs. from NYC. In good condition. 8 rooms, 1½ baths, stone basement, and well situated for antique business. 50 ft. x 150 ft. lot. Furnace is 2 years old. \$17,800. Also, 8-room house on approx. 2 acres with scenic view of the Delaware River. Only 2½ hrs. from NYC. Mechanically sound; interior is pretty good, but exterior needs some work. Aluminum storm windows and basement. Presently rented for \$240/month. \$15,000. Call owner at (607) 637-4500.

**HUNTSVILLE, AL:** Restored 1860 Historic Register home on 1¼ acres close to medical district. 2-story heart pine construction. 9 rooms, 3½ baths, foyer, central hall. Huge den/kitchen features Mexican tile flooring, passive solar. 5000 sq.ft. Energy efficient solar system, insulated, triple heating, cooling system, 10 ft. ceilings, 4 ceiling fans, 6 fireplaces & Lange woodburner. New roof & wiring. Detached double garage & storeroom. Private brick patio. 2 hrs. from Nashville & Birmingham. (205) 533-6254, 883-1200.

**PHILADELPHIA, PA:** 3-story colonial Victorian stone-stucco, c. 1902. Carriage house rented—large new 3rd floor apt. 200 amp. electric, renovated partially, mahogany stair railings, oak floors, original shutters, wrap-around porch, evergreen plantings, 15 rooms. Excellent public transportation. \$89,000. A. Sobol, 1300 S.E. 1st St., Apt. 35, Ft. Lauderdale, FL 33301. (305) 524-5336.

**WI QUEEN ANNE,** c. 1882. Living room, formal dining, music, updated kitchen, 6-7 bedrooms, 3 full/2 half baths. Beautiful woodwork, marble fireplaces, 3-car garage. Approx. 1 acre, landscaped. New gas boiler, new wiring, insulation. Quiet community on Lake Michigan. Mrs. Thomas Pollom, 821 Dodge, Kewaunee, WI 54216. (414) 388-4894.

**RESTORED PLAIN STYLE** home in Watkinsville, GA, c. 1890. 6 large rooms, 2 baths, 2100 sq.ft., pine floors, French doors, and 4 fireplaces. 7 miles from U. of GA. \$48,500. B. Sconyers, 54 Jackson St., Watkinsville, GA 30677. (404) 769-7096.

**2½ HRS DRIVE FROM NYC.** Delaware County, NY, post-Victorian lumber baron's family home. Built in the 1920s, always maintained, & still in excellent condition. 98.44 acres with 2 ponds, 2 streams, old apple orchard, hills, mts., and fields. Main house: 11 rooms, 2½ baths, fireplace, concrete basement, wood & oil central heat, quarter-cut chestnut, birdseye & curly maple woodwork. Property also includes barn, milkhouse, & 6-room caretaker/tenant house. \$169,900. (607) 637-4500, 637-2966.



**18TH-CENTURY** Germanic house, northern Lancaster County, PA. 3 bedrooms, 2 baths, vaulted basement, central chimney with walk-in fireplace. 355 A in beautiful rural setting bordered by 2 public roads. Calalico Creek runs through property. 30 min. from Lancaster & Reading. Garvin Ross, PO Box 71, Denver, PA 17517. (215) 267-5429.

**LOG HOUSE**—dating back at least 150 years. Very unique in every way. Massive wooden doors, George Washington fireplace in dining room, library lined with shelves, and huge stone foyer. Hidden stairway going up to a perfect studio. Situated on 2 wooded acres with a creek. Bristol, VA. C-21, Tri-Cities Realty, (800) 525-8910, ext. AK56LC.

**CHARMING** antebellum Greek Revival Hancock Hall, on National Register, 47 acres. Kentucky fenced, in cultured LaGrange, TN near Memphis. General U.S. Grant temporarily occupied. Twin porticoes, 7 bedrooms. Acreage negotiable. Ken Rhineberger & Assoc., Realtors, 376 Perkins Extended, Memphis, TN 38117. (901) 767-1770.

**NEAR SEVERAL RESORTS,** 31-2 beautiful acres. GA plantation house of original wood, late 1700s style, 9 rooms, 2½ tiled baths, 3 large porches (2 screened), 3-section portico, 6 rare mantels—1 hand-carved & 1 stone. All modern comforts yet secluded. Negotiable over \$150,000. Financing. Owner, PO Box 122, Talbotton, GA 31827. (404) 327-8535.

**FORMER HOTEL,** Westmoreland County, VA. 2-story frame structure, c. 1900. 8 bedrooms, 2 baths, living room, large dining room, kitchen. Located in Kinsale, an historic Northern Neck community on the Yeocomico River. Excellent potential as bed & breakfast. \$75,000. Owner-financing. Harry Lee Arnest, Realtor, Kinsdale, VA 22488. (804) 472-3202.

**1845 BRICK ITALIANATE** near Wright-Patterson A.F.B. Classical setting on 15 acres. 10 rooms, 5 fp., 1½ baths, curved cherry staircase, chestnut floors, butler's pantry, summer kitchens, smokehouse. No remodeling, partially restored, very liveable. Large barn plus furniture stripping shop. Fruit, berries, asparagus, stand of walnut trees. \$110,000, help financing. Ronald A. Hall, PO Box 107, Tremont City, OH 45372. (513) 969-8139.

**KEZAR LAKE, ME.** Magnificent lodge, 1920s (former corporate retreat), now an inn. ½ mile of waterfront, 100 wooded acres with spectacular views of White Mts. Includes cottages, tennis courts, boat house, stables, bowling alleys. Approvals in place for subdividing. 4-season area. Beacon Ventures, Inc., 6 Beacon St., Boston, MA 02108. (617) 367-0223.

**PROVIDENCE, RI.** 1806 Federal. 8 rooms, 9 fireplaces. In beautiful, historic district near Brown University. New plumbing, electrical service and wiring. Most renovation completed. Possibility of additional 3 rooms or apartment in basement. \$130,000. Owner financing available. Gordon Belsey, Agent, (401) 274-3636 or 274-9595.

**3-STORY HOUSE,** c. 1910. Roman brick, 12 rooms, center hall with 5 carved newels, 7 mantels (5 mirrored, 1 nacre inlay), 3 stained glass windows, art glass vestibule, 1st floor parquetted, 3 double sliding doors, wainscotted dining room with 2 full china cupboards. Ruth Lambie, 1303 Singer Pl., Pittsburgh, PA 15221.

## RESTORATION SERVICES

**AIR INFILTRATION**—documented fuel savings on Queen Anne and earlier homes. The most technically knowledgeable staff in the business. Publications, energy audits, air infiltration and insulation services. Ask about our new "Leakfinder." Energyworks Inc., 45 Border St., W. Newton, MA 02165. (617) 332-3600.

**TAX ACT CERTIFICATION** papers for income producing rehabilitation projects. Plan in advance of work & protect your 25% Investment Tax Credit. Our services also include project feasibility studies, marketing and brokerage of historic properties in the New England area. American Landmarks, Inc., 489 Common St., Belmont, MA 02178. (617) 489-2999.

**ARTISTIC MASONRY** contractors specializing in stone & brick restoration. Rebuilding & repointing of historic structures. Byron L. Hawkins, PO Box 173, Frederick, MD 21701. (301) 663-1306.

**RESTORATION CONTRACTORS**—every aspect of renovation using 18th & 19th century methods and materials. Services include restoration planning, research, design, restoration of existing structures, period additions, custom cabinet work, brickwork, plastering & contemporary kitchens. Jericho Valley Builders, PO Box 262, New Hope, PA 18938. (215) 598-7390 or (609) 397-8272.

**STONE MASONRY:** Architectural restoration, rebuilding & repointing of stone buildings, steps, walls, fireplaces, brownstones, etc. Consulting. Building cleaning and paint/graffiti removal. NYS Historical Assn. & Central Park references. Have trowel, will travel. William H. Parsons, Jr. & Assoc., 133 Raymond St., Darien, CT 06820. (203) 655-2607, evenings. (212) 860-3330, NYC answering service.

**RESTORATION CONSULTANT** & contractor for historic buildings, 1840s to 1930s. Complete or partial restoration from foundation to roof, exterior and interior, comprehensive planning and budget consultations, and National Register nomination preparations. Mike Byrnes, Olde House Restoration Services, 10300 SW 4th, Portland, OR 97219. (503) 244-0012.

**IS YOUR HOUSE** antique or just old? Either way, we can help you deal with it: full preservation and architectural services, research, project planning, design, technical consulting, pre-purchase inspection, & much more. Allen Charles Hill, AIA, Historic Preservation & Architecture, 25 Englewood Rd., Winchester, MA 01890. (617) 729-0748.

## POSITION OFFERED

**PLUMBER (craftsman)** needed to work on an old house in Freeport, NY. Mike Byrnes, 172 So. Long Beach Ave., Freeport, NY 11520. (516) 379-9795.

## WANTED

**NEWEL POST** light fixture—either a light fixture or statuette with light. R. Egbert, 102 Cleveland Ave., Milford, OH 45150. (513) 831-9647.

**TRADE CATALOGS:** Saloon, soda fountain, barber shop fixtures, e.g. Brunswick, Rothchilds, Passow, Lippincott, Walrus, Matthews, Liquid Carbonic, Paldar, Koch, Koken, Kern, Berninghaus, etc. Greg Spiess, 246 E. Washington, Joliet, IL 60435. (815) 722-5639.

**IRON OR WOOD GATE,** preferably older, of good esthetic value & quality. Should be about 10 ft. wide and at least 5 ft. high. Call collect (303) 761-2266.

**RIBBED GLASS** sliding doors for Morton metal kitchen cabinets with mitred corners, c. 1950s. 2 prs. needed. Size: each panel (½ pr.) 20¼ in. wide x 24½ in. high. Chicago area only—will pick up. (312) 348-4709.

**VICTORIAN FENCE:** Decorative cast or wrought iron, 160 ft. Must be a minimum of 4 ft. tall. Ken Hays, Box 646, Pewee Valley, KY 40056.

**ARCHITECTURAL DETAILS,** Victorian. Staircase parts, balusters, newels & handrails, original gas/early electric lighting fixtures, interior door hardware, locks, doorknobs & hinges. All for recreation of 1860 Victorian house. Victorian Details, 326 Captains Walk, New London, CT 06320. (203) 443-1864.

## WANTED

**PATTERN BOOKS** and "house books" of the early 20th century, showing elevations, floor plans, photos, etc. Write or call giving title, description of contents, size, condition, and price. Librarian, Old-House Journal, 69A Seventh Ave., Brooklyn, NY 11217.



One of the best ways to help the cause of old-house preservation and sensitive rehabilitation is to get more subscribers for *The Old-House Journal*...

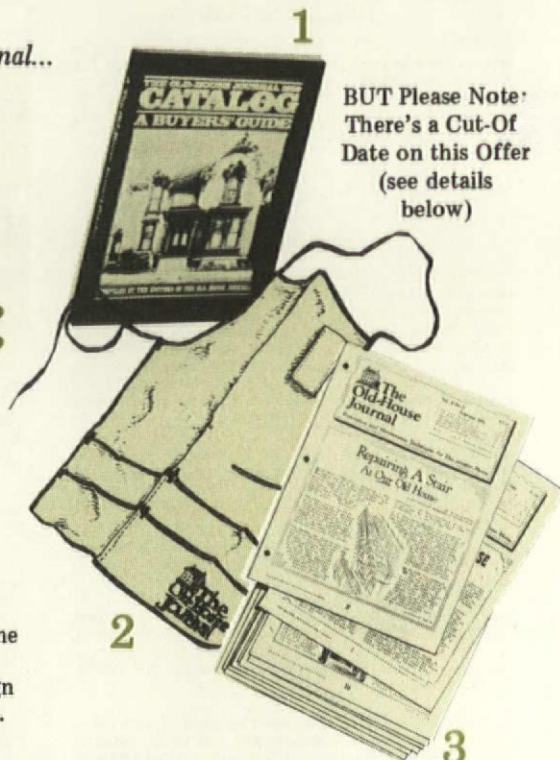
(It's an excellent way to help *The Old-House Journal* too!)

So, to enlist your active interest in helping both *OHJ* and the cause of old-house preservation, here's an interesting proposition:

# Get us a new subscriber and get yourself a Valuable Gift

It's all very simple: If you persuade an old-house lover of your acquaintance to become a subscriber to *The Old-House Journal*, we'll give you, ABSOLUTELY FREE, your choice of any one of the three gifts shown here. And if you're energetic enough to sign up more than one new subscriber, you get a gift for each (up to a maximum of three).

CHOOSE ANY ONE OF THESE AS YOUR GIFT FOR GETTING A NEW SUBSCRIBER TO *OHJ*:



**BUT Please Note:**  
There's a Cut-Of Date on this Offer (see details below)

## 1 The Old-House Journal CATALOG Up-to-date 1982 Edition

Every month we tell you how-to, and our famous Catalog tells you where-to. It lists nearly 10,000 old-house products and services, with the names, addresses, and phone numbers of more than 1200 sources. Regularly \$11.95 (\$8.95 to subscribers).

YOURS FREE for signing up a new subscriber.

## 2 OHJ'S Exclusive 5-Pocket WORK APRON

Maybe you've been thinking about ordering one of these authentic old-style work aprons but just haven't gotten around to indulging yourself? Here's your chance: 5 roomy pockets hold supplies, small tools, what-have-you; one size fits all. Bar-tack reinforced at all the stress points. Off-white, brown binding. Regularly \$10.95

YOURS FREE for signing up a new subscriber.

## 3 Your Own OHJ Subscription EXTENDED for a Year

No matter when your current subscription is due to expire, we'll extend it for 12 more issues—and the renewal is on us. You get your next year of *OHJ* free. Regular renewal rate \$16 per year.

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I ENCLOSE \$16 for a one-year subscription, 12 monthly issues. (My check is payable to The Old-House Journal.)

*New Subscriber Signs Here*

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Address \_\_\_\_\_

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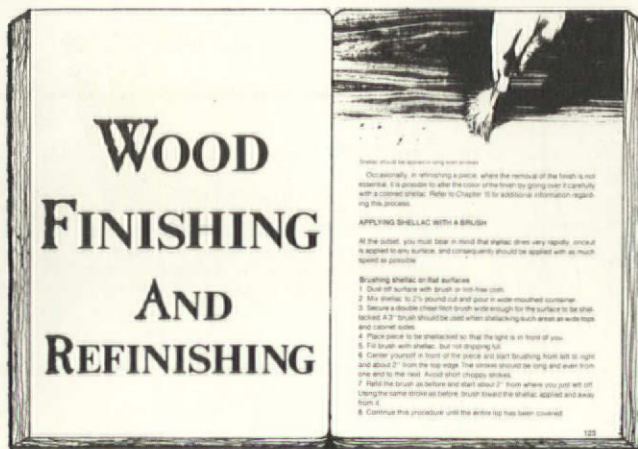
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The editors of The Old-House Journal have spent months examining all the available books on wood finishing. We saw lots of over-simplified treatments padded with photos and dopey captions. Other books, aimed at professionals, were unnecessarily esoteric. But one book stood out from the rest as a thorough, informative resource for the serious beginner. S.W. Gibbia's **WOOD FINISHING AND REFINISHING** is, in our opinion, the most intelligent, comprehensive, and well organized book in its field.

**WOOD FINISHING AND REFINISHING** explores in detail all the options you'll face when finishing wood, without being obscure or overly complicated. It offers valuable, step-by-step information on special traditional finishes as well as practical advice on common materials such as polyurethane.

Most importantly, **WOOD FINISHING AND REFINISHING** deals with wood as wood, and not simply as antique furniture. Whether you're working with a chair or a baluster, a table or a handrail, this book has the answers to your questions.

These are the topics covered in **WOOD FINISHING AND REFINISHING**:

1. Preparing For Finishing
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  - Preparing a finished surface for refinishing
2. Selecting The Finishing Materials
  - Wood stains
  - Wood fillers
  - Shellac
  - Varnishes
  - Lacquers
  - Rubbing and rubbing materials
3. Selecting The Appropriate Finish
  - Bleached and pickled finishes
  - Traditional, Mediterranean, and Scandinavian finishes
4. Painting, Decorating, And Antiquing
  - Painting finished and unfinished surfaces
  - Antiquing and other decorative effects
5. Preserving The Finished Surface
  - Cleaning and polishing
  - Making minor repairs

A special appendix explains how to set up your own wood-finishing shop. There's also a glossary and a list of suppliers and manufacturers.

*Illustrated. 316 pages, 6 1/4 by 9", hardcover.*

To order your copy of **WOOD FINISHING AND REFINISHING**, just check the box on the Order Form, or send \$14.95 + \$2 postage and handling to

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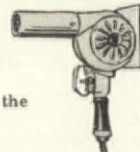
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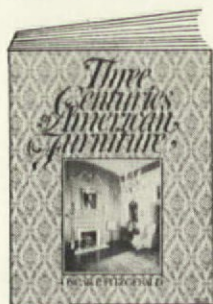
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# PAINT STRIPPING:

## Does It Have To Be So Tedious?

**Y**OUR RESPONSES to the dip-stripping survey resulted in the most helpful article that has ever been published on the dos and don'ts of dip-stripping (OHJ, August 1982). Now, we're asking you to take part in an even bigger--and potentially even more helpful--project.

THE OHJ EDITORS want to pool all of the know-how that our readers have accumulated on the subject of paint stripping, both interior and exterior. We'll share these collected hints and tips with all of you in an upcoming series of articles.

WE ALL KNOW that paint stripping is a pain in the neck. However, as in all things, little tricks of the trade can make paint stripping faster and easier. And no single person has amassed as many hints and tips as all of the 65,000 subscribers to OHJ combined.

**T**HE QUESTIONNAIRE BELOW is intended merely as an idea-starter. You may prefer to answer the questions right on the form and mail it to us. Or, maybe you'd rather tell us about your experiences in a letter. If you don't want to tear this page out of your issue, that's OK. You could Xerox the questionnaire. Or else use the format below as an outline and jot your answers on a separate piece of paper.

YOUR ANSWERS, when combined with all the rest, will be of great value to all OHJ readers. So please, while you're thinking about it, won't you drop us a line? Many thanks!--C.L.

### THE 19 TOUGHEST PAINT STRIPPING PROBLEMS

How do you strip paint from:

#### INTERIOR

- (1) . . .carved and moulded woodwork?
- (2) . . .carved and moulded plasterwork?
- (3) . . .flat plaster walls?
- (4) . . .flat plaster ceilings?
- (5) . . .metal ceilings?
- (6) . . .balusters and grillework?
- (7) . . .cast iron radiators?
- (8) . . .louvered shutters?
- (9) . . .fireplace brick?
- (10) . . .Lincrusta-Walton (without destroying the material)?
- (11) . . .marble mantels?

#### EXTERIOR

- (12) . . .wood shingles?
- (13) . . .porch balusters and spindlework?
- (14) . . .a sheet metal roof prior to repainting?
- (15) . . .cast or wrought iron fencing?
- (16) . . .exterior wooden clapboards?

#### OTHER STRIPPING PROBLEMS

- (17) How can you remove paint from a marbled mantel or grained door without destroying the underlying layer of marbling or graining?
- (18) How do you remove remaining paint flecks from the pores of open-grained woods?
- (19) How do you remove the paint residue that sticks in the corners of wooden mouldings, such as door panels?

### PAINT STRIPPING SURVEY: What Has Worked For You?

1. Which paint stripping methods have you tried?

#### HEAT METHODS

- Heat Gun
- Heat Plate
- Heat Light
- Propane Torch

#### MECHANICAL METHODS

- Rotary Disk Sander
- Belt Sander
- Wire Wheels
- Abrasive "Flapper" Wheels
- Hand Scrapers

#### CHEMICAL METHODS

- Liquid Paint Stripper
- Semi-Paste Stripper
- Peel-Away Blanket
- Commercial Dip-Stripping
- Do-It-Yourself Dip-Stripping

#### OTHER METHODS (Please Describe)

2. Which method has proved most effective for you? From what were you removing paint?

3. Which method has been least satisfactory? Why?

4. What paint stripping project was the most difficult for you? What special techniques did you develop to handle it?

5. Do you have any solutions to one or more of the 19 toughest paint stripping problems listed above?

6. What other paint stripping hints or tips do you have to pass along to OHJ readers?

Mail answers to: Refinishing Editor, The Old-House Journal, 69A Seventh Avenue, Brooklyn, N.Y. 11217.

The  
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Opinion...

# Remuddling

— Of The Month —

**B**EHIND THAT CUBIST facade (look hard!) are two handsome 19th century row-houses. We know they are owned by an educational institution, but we don't know the history of this unfortunate addition. However, just by looking at the new facade--which is nearly devoid of function--we can construct the probable scenario.

CAN'T YOU ALMOST hear the school's Dean of External Appearances declare: "Let's do something to update those dowdy old buildings!" So the school architect is unleashed and told to create a bold contemporary statement.

A BOLD CONTEMPORARY statement is fine...on a bold contemporary building. But to so blatantly destroy the integrity and character of someone else's work is self-indulgent--and a cultural crime.

**I**N 100 YEARS (if the new wall lasts that long), architectural historians will find this clash of styles fascinating. But for those of us who mourn the loss of still two more 19th century buildings, this misguided improvement is merely another tiresome example of remuddling.--C.L.

Submitted by: James W. Rhodes, AIA  
New York, N.Y.



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