Exterior Wood Columns
Practical Repairs For Do-It-Yourselfers

By John Leeke

Houses with columned porches and facades have been built in this country for over 150 years. These Classical and Colonial Revival homes are still popular today. But the quiet dignity of such houses is ruined when a rotting column threatens to let the porch roof collapse. This article explains methods for repairing columns, so your house can maintain its composure and serenity.

Exterior columns are made of components that work together to provide massive visual and structural support for the entablature and roof framework. The main shaft is supported by a round base and square plinth. The capital visually terminates the column and serves to spread the load from the span above.

Inspection

Before you begin working on your columns, you should carefully inspect your porch.

- What is the condition of the porch foundations?
- Do the joists and other structural floor members provide adequate support for the deck?
- Does the floor have weak or loose boards?
- Does the structural span above the columns sag between them? (If there is evidence of water trickling out between the soffit and architrave or fascia, remove these boards and inspect the timbers beneath.)

If structural members have been damaged, have an engineer or architect make a more complete assessment. Of course, you may not be able to proceed immediately with major repairs of the porch structure. Nevertheless, the condition of your columns should be stabilized or improved right away.

Rot can progress to such a point that you'll have to remove the column to work on it. (Rot can damage a column so severely that it's no longer supporting anything.) Removing a column isn't a complicated job. Use a system of wedges and heavy timbers to provide temporary shoring. Make sure that the load is being transferred to the ground. Place wooden plates at the top and bottom of the timbers to spread the load. Then remove the base of the column and drop down the shaft. If you're going to work on the porch before repairing the column, store it in a cool, dry place.

Sprung staves, large cracks, and chunks of rotten wood that have fallen away are the obvious indications that your columns need repair. But there are more subtle clues as well, such as the condition of the paint. If the paint is peeling, there's probably a lot of moisture in the wood. This moisture can also deteriorate the glue in the joints.

A high moisture content in the wood can cause expansion, stressing the structure.
After all these energy-conservation measures, the solar demonstration wall was added, with financing from the Department of Energy, to the tune of $10,000 to $17,000 additional.

Undoubtedly, the house is more energy efficient than it was. But how much more energy efficient did it become after the addition of the solar wall to an already much-improved house? Most individuals would not be able to justify the additional cost and payback time of adding solar after making all the conservation improvements listed above.

Then there are the not-insignificant historical and aesthetic considerations...about which our readers have commented passionately on the following page.

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United States Department of the Interior
NATIONAL PARK SERVICE
WASHINGTON, D.C. 20240

The Old-House Journal
69A Seventh Avenue
Brooklyn, NY 11217

Dear Ms. Poore:

I can assure you that the rehabilitation of the 19th century residence shown in the Rodale brochure does not meet the Secretary of the Interior's "Standards for Rehabilitation." It clearly would be denied certification for tax purposes. The guidelines for applying the Standards call for "installing necessary mechanical systems in areas and spaces that will require the least possible alteration to the structural integrity and physical appearance of the building." The alterations to the roof lines, walls, windows, and porches have effectively destroyed the character of this historic building.

You may wish to call to the attention of your readers our recent publication, "Energy Conservation and Solar Energy for Historic Buildings: Guidelines for Appropriate Designs." Published in 1981, copies are available for $6.95 apiece from: The National Center for Architecture and Urbanism, 1927 S Street, N.W., Suite 300, Washington, DC 20009.

Sincerely,

Ward Jandl
Chief, Technical Preservation Services Branch
Preservation Assistance Division
National Park Service
Attached is a nomination for the Remuddled section, except this seems to be a re-remuddle.

I love Rodale Press and their publications. But, bless their collective hearts, I don't consider these pictures to be good advertising.

- Judith Abbott, Denton, Texas

I don't know if I will be the first of thousands of submissions you should get for Rodale Press as your Remuddling of the Month winner. Granting the overwhelming need to use renewable energy sources, and granting that not every Victorian house must be saved in pristine purity; nevertheless, defacing an old house needn't be displayed to the public as the ideal path to the future.

The sin which most offends me with its needlessness is the corrugated roofing.

Many of your remuddling winners are quiet, simple houses in residential neighborhoods, whose only crime may be to offend the taste and sensibility of a few hundred people. With this example, Rodale has the capability to ruin innumerable houses and offend even millions of people.

- Verne Windham, Spokane, Wash.

This advertising came in the mail a few weeks ago. As the owner of a building about [the same] size, I vote for being cold and broke rather than doing something like this.

- Ed Beno, Green Bay, Wisc.

Normally I don't write letters to editors but this was too much. The article attached almost made me sick. It was such a screw-up, I felt you must know about it.

This poor house was destroyed. . . . I'd love to see this example exposed by OHJ.

- Rich Schauffert, Glendale, Missouri

"The article appeared in Home Improvement Contractor magazine. Their title for the article? "It May Not Look Like Much, But It's Certainly Energy Efficient!" - ed.

Enclosed is a photo candidate for the remuddling of the year! The material is a promotional piece from our (usual) friends at Rodale. I buy many of their books but wouldn't buy this one, out of disgust for their poor taste.

- L. Reath, Philadelphia

Inside this brochure is a picture of the remuddling of the decade. Actually, as you can see, it is a re-remuddling of a Queen Anne. The back of the brochure, under the big '5,' claims the designs are 'aesthetically pleasing,' and that 'it is difficult to spot a retrofit.' The card we are to use to order the book wears a picture of a beautiful old house – just waiting, I suppose, for some solar retrofitting so it can look like the other house.

What is even more devastating to me is that Rodale Press is the company doing this. I'd have expected more respect from them. I suggest the OHJ write Rodale in protest and give them some valuable information on the subject of old houses.

- Judee Reel, Red Hook, N.Y.

Here's a grotesque remuddling that one normally tasteful publisher actually found commendable. If a compromise between historical integrity and energy efficiency had to be made (as it often does), increasing the exterior wall thickness on the inside and adding more insulation, or placing solar collectors on the roof where they'd be less obtrusive, would have been a gentler solution. As it is now, the house looks like an architectural skeleton.

Rodale Press usually keeps a tasteful eye open toward aesthetics in its New Shelter magazine, but this time someone fell asleep.

- Donald Smith-Weiss, Westbrook, Maine

As you can guess, I was quite disgusted by the cruel costume this proud old house is being forced to wear, but at the same time amused that anyone could call such a weird-looking place home.

The saddest part is that the owner could've achieved the same high fuel efficiency with proper storm windows, blown-in insulation, and good quality weatherstripping. I shudder to think how many people received this piece of trash, and who are thinking now of making a bad mistake. I don't know where this place is, and it's a good thing because I don't think I could stomach seeing it every day.

- David M. Doody, Wilmington, Del.

Rodale's books and magazines are excellent sources on solar energy, but in Solarizing Your Present Home, a happy marriage between renovation/restoration and solar energy does not exist.

- Bob Steigerwaldt, Tomahawk, Wis.

I didn't have to look far for this example; it came in the mail. Also, look at 'Solar Myth No. 5' on the back. Doesn't quite jive with the photo!

- Bo Curtis, Curtis & Litzinger Bldrs., Long Beach, Calif.

I cannot believe that Rodale is pushing this!

- Mr. Schlesinger, Libertyville, Ill.

Enclosed is a brochure...it shows 'before solar' and 'after solar' pictures of a home which exemplifies technology at its worst. At first, I thought the second picture was a photographic hoax, but I am now convinced that author Joe Carter and Rodale Press believe that the house (as shown) in the second photo is a substantial improvement...They may be right, but only in one sense: the energy efficiency of the house.

- Wayne E. Stiefvater, San Francisco

From the book's author...

I recently received a letter from Ms. Judith Abbott in which she declared the appearance of the solar retrofit I did on my house. Her main contention seemed to be that the beauty of the building was destroyed by the passive solar space-heating system I built.

My essential response is that all old houses do not merit preservation as much as they very much need energy conservation improvements. The solar project at my house was funded by the U.S. Dept. of Energy as a demonstration to the public and to the building trades of just what is possible for using solar space heating on existing houses. The solar wall, as I call it, includes a Trombe-type wall, a greenhouse, a solar porch, and an air-heating collector (non-mass), along with the direct-gain dormer and skylights that heat and light the attic, which is being converted to living space.

Ms. Abbott stated that she was sending a photo of my house, which was used in a promotional piece for my book on solar retrofitting, to you for consideration in your remuddle of the month column. I'm rather surprised at the woman's temerity in this, and I trust you all will have the good sense not to run the picture. In any event, I also refuse permission for the use of my house to be represented in any negative way. The house is not a remuddle by any means, but a carefully planned series of energy and aesthetic improvements. Thank you.

The Spanish Colonial Revival Style

By Alan Gowans

It could well be that more single-family houses were built between 1890 and 1930 than during all the preceding years of America's existence. A sizable minority of these belong to what is most commonly called the "Spanish Colonial Revival."

At first, this style was usually called Mission; by the 1920s, it was being called Mediterranean in California, Venetian in Florida, or (by the more erudite) Andalusian. A variant of it was called Pueblo, especially in New Mexico. But most consistently, it has been called Spanish Colonial.

The bulk of Spanish Colonial buildings, especially the kind of small and medium-sized houses that most concern OHJ readers, generally have some or all of the following features:

- Tiles are orangey-red or reddish-brown (sometimes terra cotta, sometimes painted metal) and cover all or at least the visible parts of roofs. This is perhaps Spanish Colonial's most distinctive characteristic. (Magazines of the period often call American Foursquares "Spanish" simply because they have such tiled roofs.) Most of these houses were built in areas having little rainfall or snow, and so the typical Spanish Colonial roof is low pitched.

- Walls are white--sometimes painted concrete, more often stuccoed.

- Ornament, if any, consists of terra-cotta patches set into both interior and exterior walls. Occasionally, these were made of painted, moulded concrete. Patterns are vegetal and/or abstract; sometimes, they're borrowed from Islamic as well as Spanish patterns.

- Exposed wood (in verandah posts or ceilings, for example) is stained and otherwise darkened.

- Wrought iron grillework is thin and often appears at windows or archways.

- Openings (at least one, sometimes all) are round-headed.

- Forms of pediments or walls, especially in more elaborate buildings, tend to be slightly rounded. Gable-ends are scalloped, with vaguely parapet-like terminations.

These are, of course, only the most general characteristics of the style. But they identify as "Spanish Colonial" those rows and rows of box-bungalows lining streets in suburbs and small towns of California and Florida (and, more sparsely, in Texas and on through the more northerly states). Or rather, they identify vernacular, speculative Spanish Colonial for the lower and lower-middle classes. Spanish Colonial, as handled by professional architects for upper and upper-middle class clients, had additional characteristics that identify four or five distinct variants. In due course,
these details, too, came to be incorporated in speculatively built suburban houses.

BROADLY SPEAKING, each of these Spanish Colonial substyles was dominant over a particular period of time: Mission, from the mid-1880s to c. 1910; Mediterranean, from c. 1910 to 1930 (and within that, Andalusian, during the 1920s). And there were substyles that run across the whole period, such as the Pueblo.

Mission Houses

THE MISSION REVIVAL got its name from a romantic interest in the missions built between the 1780s and the 1820s by Spanish missionary padres from Mexico.* Built in a string reaching from southern California to north of San Francisco, they were mostly fallen into ruin and abandoned after the Mexican Revolution of the 1820s, which nationalized and secularized them. They began to recover by the 1880s, and by the turn of the 20th century became objects of romantic pilgrimages (and often, unfortunately, romantic restoration) for the American population of California.

THE MISSIONS gave California a special romantic character. They made it seem as though it had long been settled—a quality that appealed to its 20th-century American population. The Mission substyle of Spanish Colonial, while featuring generally "Spanish" characteristics, is identifiable by elements copied or adapted or supposedly derived from mission churches. Among these elements:

- **FACADES** resemble mission-church facades, with prominently scalloped outlines and clearly recognizable parapets. They sometimes have towers on one end; occasionally on both.

- **ARCADES** are used to form an entranceway or side porch.

- **BELL-TOWERS** are seen most frequently on public buildings like railroad stations and city halls, but occasionally they appear on pretentious mansions. These have tiled roofs covering a series of diminishing squares, capped with a round or elliptical cupola.

- **CLASSICAL DETAILS** are extremely simplified, such as pilasters and tapering columns.

- **ORNAMENT** , when there is any (and there usually is some), is of simple floral or abstract form, derived from churrigueresque churches or church interior furnishings of Mexico. (In general, Mexican churches were more lavish, bigger, and above all older than the Californian missions. They still had the tradition of patches of lavish ornament associated with the Churriguera family—sculptor-architects active in Barcelona from the 1680s through the 1730s. Their "churrigueresque" effects could be easily simplified and replicated in plaster, iron, or cement.)

- **CEILINGS** are treated to resemble the open-timberwork ceilings of missions. In practice, this means beams (or boards imitating the effect of beams) are dark (usually stained) and exposed.

USING CHURCHES as primary models for houses or hotels or public buildings posed some obvious problems. In many cases, bell-towers were inappropriate and arcades impractical. Churches provided no models for interior plans. Similarly, California's missions didn't offer much in the way of ornament. This was at a time when most people still felt that a house without ornament definitely lacked something. So interior plans and ornament in the Mission style were, in general, borrowed:

- **INTERIOR PLANS** of mansions and public buildings in Spanish Colonial Mission tend to be along the same lines as those in other styles (e.g., Georgian or Tudor Revival). For small houses, Gustav Stickley's typical, simple boxlike rooms were characteristic from around 1910 on. Insofar as Spanish Mission had a distinctive character, it was represented by a greater emphasis on arcades leading from room to room (although most styles of the 1890-1930 period had this feature to some degree).

Mediterranean Houses

BORROWING FROM MODELS other than California mission churches became an accepted practice, and so it was a short step to borrowing elements that looked more or less Spanish, wherever they came from. Acceptable models included the domestic buildings of adobe brick, which were built in California from the late 18th through the early 19th century; that, the domestic buildings of Spain itself; then Spanish churches: Italian architecture; and details from Islamic North Africa.
HENCE, the term "Mediterranean" seemed appropriate, because California's coastal climate is one of only five areas on earth classified as Mediterranean. (The others are southwestern Africa, southwestern Australia, and coastal Chile.) High style architects, as usual, led the way. But details and concepts from famous mansions like "The Breakers" at Newport (R.M. Hunt, mid-1890s) or the Gillespie house in Montecito (Bertram Goodhue, 1903) or Goodhue's churriguersque extravaganzas for the San Diego Panama California International Exposition (1915) soon began filtering down into ordinary speculative building. These are some of the resultant characteristics:

- WALLS, exterior and (especially) interior, are plastered to simulate adobe: rough, lumpy texture; white or earth-hue colors.
- TRIM is scarlet, orange, azure blue, and other "Mediterranean" colors.
- CASEMENT WINDOWS are used, often framed with iron grilles.
- VERANDAHS are treated like an arcade, atrium, or cloister typical of Mediterranean domestic building.
- WALKS and driveways are paved with random flat stones, often painted a variety of colors to match the trim.

- ONE WALL is extended to make an entrance (usually a round-headed arch) into the back yard or the garage—an obvious attempt, like the verandah treatment, to suggest the effect of an internal atrium typical of Spanish domestic architecture.

- ARCHES are featured in a rather sophisticated manner, outside and in. Round-headed, Mission-type arches persist, but pointed, flattened, or scalloped Moslem-type arches also appear.

- FIREPLACES set into walls are common, often with ceramic tiles of Spanish or Moorish design in addition to or instead of niches.

- ROOF TILES tend to be red and semi-cylindrical, in imitation of Spanish peasant and vernacular building; an uneven effect is thereby produced. Sometimes, these tiles are real terra cotta, but often the effect is reproduced in metal.

- INTERIOR ARCHES often repeat exterior forms, both in walls separating rooms and in recessed niches flanking fireplaces.

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The Spanish Colonial Revival style is typified by the features of this house: tiled, low-pitched roof; white walls; round-headed windows and doors.

The Mission substyle adds elements suggestive of mission churches to the basic Spanish Colonial design: here, a pseudo-cloister.

The Mediterranean substyle brings new qualities to Spanish Colonial: an extended wall forming an archway into the backyard; the verandah with tower, reminiscent of Italian architecture.
of Pasadena, Gregory Ain, or (to a lesser degree) Julia Morgan used Spanish Colonial as a vehicle for personal expression. Nor can we more than mention such proto-Modern Spanish Colonial buildings on the popular level as you find in the "Art Deco Historic District" of Miami. However, the Pueblo substyle, or Santa Fe Revival as it is sometimes called, deserves more extended mention.

Pueblo Houses

ENTERED IN NEW MEXICO, Pueblo is, in one sense, not part of the Spanish Colonial Revival, because its forms derived not so much from Spanish buildings as from pueblos (villages) built by Native Americans of the region that became New Mexico. (The old pueblo outside Taos is perhaps the most famous of them.) These forms were adopted by the Spaniards more by necessity than choice, because virtually the only labor force available was Native American. The Governor's Palace at Santa Fe, originally built in 1609-10, is the best known Pueblo model. The Pueblo Revival style has several distinguishing features:

• BEAM ENDS project at the tops of walls. These are the beams that carry ceilings; normally, they would be sawn off level with the top sill of the wall framing. But in the original manner of building they weren't sawn off because adobe walls decayed faster than wood in this arid climate, and the same beams could be used in another building that might be bigger (and so require longer beams). Of course, in modern versions, the beam ends are sometimes artificial.

• WAllS are treated as a moulded, sculptural unit (properly rounded, but in mass-produced houses, sharp-angled). This is a distinct contrast with the thin, flat plane of Spanish Colonial proper.

• WINDOWS are recessed and squarish, rather than round-headed. In Pueblo buildings proper, there were no arches, vaults, or domes.

IN MORE ELABORATE BUILDINGS--shopping centers, theaters, and the like--other features appear:

• TOWERS are squarish and tapering, with open "belfries." Sometimes, they have a grillwork of metal or wood in the openings.

• COLUMNS consist of posts with simple crosspieces for capitals. (A version of these also appears in Spanish Colonial proper; a famous example is Maybeck's Packard Showroom in San Francisco.)

A FEW Pueblo STYLE EXAMPLES had already appeared in New Mexico in the 1890s; a hotel had been built in California in this style by 1893. Like other Spanish Colonial substyles, Pueblo flourished mightily in the 1920s and on into the 1930s. Unlike them, it is still very much alive today.

DRIVING WEST OUT OF TEXAS, you're struck by the appearance of Pueblo rather than Spanish Colonial proper as soon as you cross the New Mexico border. Native New Mexicans will tell you that Texas tried to annex the much poorer territory of New Mexico several times, but were resisted because New Mexico was a free state and Texas a slave state. Hence, New Mexicans have always felt a need to distinguish themselves from their richer, aggressive, and more powerful neighbor. Be that as it may, this style does indeed mark the border, giving New Mexico a distinct regional character. This may well be why Pueblo continues to flourish: Architecture whose social function is still vital never really goes out of date.

The Hollywood Halo

WHICH BRINGS US to a general consideration of social function. Why should Americans have built in Spanish Colonial at all? In 1898, Americans were engaged in a war against Spain, undertaken to rescue Spanish colonials from a corrupt and decadent regime. Less than 30 years later, they were putting up courthouses (Santa Barbara's is the famous example) in pure Spanish style--"most appropriate to the traditions of California" and (from the Santa Barbara guidebook) "an example of government service to coming generations."

TRULY, THE APPEAL of exotic, tropical Spain, its dances and romances, overwhelmed all reservations. Combine that with glamorous movie stars living in Spanish Colonial mansions, and one can understand how Spanish Colonial mansions might be built in the fogs of Seattle, the snows of Ottawa, and the freezing winters of Minnesota. But that is another, book-length, story.

DR. ALAN GOWANS is a Fellow at the Center for Advanced Study in the Visual Arts at the National Gallery of Art in Washington, D.C. He is also a Professor of History in Art at the University of Victoria in British Columbia and the author of numerous articles and books. Currently, Dr. Gowans is writing a book about post-Victorian architecture, to be published by The Old-House Journal.
Can The Democratic Wallcovering Be Revived?

By Bruce Bradbury

IN 1877, LINCROSTA-WALTON was patented by Frederick Walton, the Englishman who had previously scored an international success with his revolutionary floor covering 'linoleum'. (See OHJ, Jan. & Feb. 1982.) Basically a thin and beautifully embossed version of linoleum mounted on either canvas or waterproof paper, Lincrusta-Walton was the first durable embossed wallcovering to be machine-made and mass marketed. It's still found in many American houses, most commonly as a wainscoting, or as a wallcovering in dining areas. If unpainted, it may be in excellent condition, but more frequently its delicate relief has been obscured by successive layers of paint.

AMERICAN MANUFACTURE of lincrusta was started in 1883 by Fr. Beck & Co. of Stamford, Connecticut, under license from the original English firm. The restrained and 'artistic' patterns of England were soon joined by an avalanche of new designs intended to feed the American public's insatiable appetite for novelty. By 1885, Beck & Co. was offering 150 different patterns in Egyptian, Greek, Persian, Moorish, Japanese, Medieval, Renaissance, Louis XVI, and Eastlake styles.

SPECIAL PATTERNS were produced for dados, dado rails, wall fillings, mantels, book bindings, splash plates for washstands, table mats, and fingerplates. In the American West, where fine wood for wainscoting was extremely expensive, lincrusta became the logical and ubiquitous substitute.

LINCROSTAS'S immediate success on both sides of the Atlantic was partially due to its own intrinsic merit, and partially due to its embodiment of specific virtues held in high esteem by the Victorians.

IT WAS INHERENTLY IMITATIVE. The Victorian middle class took keen delight in machine-manufactured items that imitated materials previously available only to the wealthy. A shrewd businessman as well as an inventor, Walton produced a series of patterns in close imitation of expensive, hand-tooled Cordovan leather, which since the Renaissance period has been a hallmark of wealth and conspicuous consumption.

LINCROSTAS'S delicate relief and ability to take a broad variety of finishes enabled not only the imitation of leather, but also fine plasterwork, carved wood, repoussé metalwork, and carved ivory. The intrinsic beauty of the material was recognized by leading architects and decorators of the period, who frequently specified its use either in its plain state (with a protective coating of varnish), or given a simple glaze to highlight the relief pattern.

IT WAS "SANITARY." Great strides in hygiene were made in the Victorian era, and by 1877 a strong interest had developed in "sanitary" or washable wall surfaces to replace calcimine paint and water soluble pigments in wallpaper. Lincrusta was, as a linoleum derivative, impervious to water and could easily be scrubbed without damage. So wholesome was its reputation that it was even recommended as a hygienic decoration for hospital wards.

IT WAS DURABLE. Enthusiastically touted as the "indestructible wallcovering," lincrusta lived up to its reputation. Period advertisements claimed that it could be trodden, beaten, struck with the sharp end of...
Here is a small sampling of the many patterns Lincrusta-Walton was embossed in. Besides numerous decorative patterns, imitation leather and "oak panelling" were popular. Perhaps the most common use of lincrusta was as a dado or wainscot in stairhalls, but it was also used in panels on a wall, or as a frieze. By 1885, an American manufacturer offered 150 patterns. The material was usually finished in place with an endless variety of glazing techniques.
ONCE EMBOSSED, the material was hung to dry in heated sheds for two weeks, after which it was ready for shipping. In 1887, the canvas backing was replaced by a waterproof paper. When lincrusta is damaged or pulled away from a wall, it's this paper backing that separates and gives rise to the erroneous impression that lincrusta is some sort of paper or cardboard composite.

ROLLS OF LINCRUSTA are 22 in. wide, 11 yards long, from 2 to 7 millimeters thick, and can weigh up to 28 lbs. depending on the design. Lincrusta is as pliable as a stiff cloth, and when warmed can easily bend to cover a curved or uneven surface. It was pigmented in the manufacturing process, the most popular shades being bone and a pale brick color. These tints were generally intended to serve as suitable backgrounds for more elaborate finishes applied by the purchaser, although some ready-finished patterns were made available by 1885.

IT WAS DEMOCRATIC. The bulk of lincrusta was sold in its raw state, ready to be finished in place. Lavishly decorated in imitation of leather, it was found to be suitable to adorn the walls of the mansions of Rockefeller and Carnegie. The same material treated with a simple glaze could be found in middle class houses and workingman's cottages from Maine to California. Although comparatively more expensive than wallpaper, its extreme durability made it a cost effective wall treatment for all classes.

Linoleum For The Wall

THE MANUFACTURING PROCESS was similar to that of linoleum, but cork was removed from the formula to allow for greater embossed detail and a finer texture. Oxidized linseed oil, gum, resin, wood fiber, paraffin wax, and pigment were mixed together and then spread on a canvas backing. The canvas and mixture was then run, under great pressure, through two rollers set close together on a parallel axis. One of the cylinders was engraved with the desired pattern, which was then transferred to the lincrusta mixture.

Reviving Your Lincrusta

NOT SURPRISINGLY, lincrusta has often been obscured by layers of paint in an old house. There is no reliable way to strip paint from lincrusta, because chemicals eat away at it, heat makes it pliable and easily damaged, a flame will set it on fire, and it's an uneven, unscrapable surface.

ANDY LADYGO, Workshop Director for The Society for the Preservation of New England Antiquities in Boston, has been experimenting with lincrusta stripping. He's been generous enough to reveal his current experimental method -- but warns that it doesn't always work, and doesn't remove all the paint: Carefully warm the embossed...
or bronzing powder on a nearly dry varnish coat; and gilding tended to obscure the beauty of the finer detailed embossing--something that is still true today.)

1) BEGIN BY CHOOSING YOUR COLOR. Mix a glaze consisting of colors-in-oil (finely ground color pigments in linseed oil), and a small amount of Japan drier. Thin this mixture with turpentine to the consistency of a stiff paste. The mixture should be able to stay on a board without running. (It might be tricky to match an existing glaze, so take your time and test the color in an inconspicuous place.)

2) TAKE A STIFF BRUSH, such as a stencilling brush, and "rub in" the color across the surface. "Rubbing in" doesn't require that the entire area be covered with a uniform layer of color, only that the entire surface be covered. Slight variations in tone enrich the final appearance. When half a wall is covered (the time needed for the penetration of the color), go back over the surface with a rag to wipe off the excess glaze and highlight chosen details, such as the rib of a leaf.

3) WHEN DRY, coat with gloss varnish and then add a second coat of flat varnish (flat, satin, and gloss varnishes were all used --- flat and satin were preferred for the finish coats).

LIGHTER SHADES OF COLORING can be had by mixing the colors in oil with a commercial glazing liquid. More elaborate treatments could include the laying on of gold leaf, Dutch metal, or bronzing powder on areas of the pattern; painting various elements in oil colors straight from the tube; and the sprinkling of gold dust or bronzing powder on a nearly dry varnish coat and then polishing the surface with a chamois cloth. The decorating trade of the period soon realized that the simplest treatments were often the most effective. Elaborate painting and gilding tended to obscure the beauty of the finely detailed embossing--something that is still true today.)

INCRUSTA IS A LINSEED OIL COMPOUND and thus absorbs into itself a portion of any oil-based glaze applied to it. Transparent glazes were much preferred for finishing as they built up rich variations of tone in the crevices and valleys of the pattern. The following traditional glaze can be adapted to re-glaze your lincrusta:

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INCRUSTA-WALTON IS STILL BEING MANUFACTURED in England today, using the original machinery and only slight variations in formula. It's a very inexpensive wallcovering readily available in English hardware stores. Unfortunately, no designs dating before 1900 are being produced at present and the patterns available (fake brick, stucco, barnboard, and some quasi-psychedelic geometrics) could not satisfy even the most desperate historic-house renovator.

FOUR ORIGINAL ROLLERS have been located at the mill, including an Eastlake dado and a Renaissance damask wall pattern. These rollers sit unused for several reasons. (1) Lincrusta machines were made for mass production and cannot be economically employed for runs of under 1000 rolls. (2) The British public, with a conveniently long decorative-arts history, is not as imbued with enthusiasm for the Victorian era as their American counterparts, who have little else to choose from. No domestic English market for Victorian lincrusta is thought to exist by the company. (3) The linseed oil base that gives lincrusta many of its desirable qualities makes it unable to meet current fire codes for new construction and major rehabilitation jobs, such as hotels, from which a manufacturer would derive a considerable percentage of sales.

DESPITE THESE DRAWBACKS, company officials have indicated a willingness to produce some of the old designs, should a suitable market be proven to exist. If you would care to write a letter of encouragement, the address is:

Gordon Fearnley
Crown Decorative Products, Ltd.
Paint Division
PO Box No. 37
Crown House
Hollins Road
Darwen
Lancashire, England
BB3 0BG

IN THE MEANTIME, another of the great Victorian embossed wallcoverings, Anaglypta, is currently being test-marketed by Crown in California. Its invention, uses, and current availability will be discussed in another article, coming soon.
Don't Despair...Bondo's Here

How To Patch Your Linoleum

There are numerous techniques currently being used by preservationists to reproduce/recreate linoleum and other embossed papers (or to mould patches for existing sections). However, all of these methods have one or more of the following drawbacks: They're expensive; you might have to handle potentially dangerous chemicals; some require an artist/sculptor to carve fine details; and the casting materials are usually not pliable.

But don't despair. When repairing a damaged dado for rock star Graham Nash, Jerry Goss, a California sculptor, developed a simple and inexpensive process that is practical for the average homeowner. This process enables you to create a patch where only a small area has been damaged—much better than ripping it all off because of a small hole!

INGREDIENTS (and where to find them):
- Micro-crystalline wax (art supply store)
- Silicone lubricant spray (3-M Spray-Mate Dry Lubricant or equivalent—hardware store)
- Auto body putty (Bondo or equivalent—hardware store or auto supply shop)
- Aluminum window screening (hardware store)
- Contact cement (building supply store)
- Fiberglass primer (marine supply)

TOOLS:
- Pencil and sheet of paper
- Pan of hot water
- Shallow baking pan or heavy canvas
- Small sculptor's modelling tool
- Tin snips

PROCESS:
1. Begin by creating a tablet of wax about 1/8 in. thick and a little larger in area than the projected patch. Melt some micro-crystalline wax (be sure to use indirect heat such as a double-boiler—it’s flammable), and pour it into a shallow baking pan that has been sprayed with silicone lubricant. You can improvise a ‘pan’ by using damp canvas or heavy cloth placed on a flat surface with the edges propped up to prevent the wax from spilling. It’s advisable to make a few wax tablets in case your first attempt at mould-making is unsatisfactory. Once the tablets are made, set them aside and proceed with the following steps:
2. Cut out the damaged section(s). A jigsaw-shaped patch will generally be less noticeable than a geometric one.
3. Tape a sheet of paper over the cut-out area and, with a pencil, make a rubbing of the edges of the area to be patched and the surrounding linoleum pattern (as if making a brass rubbing).
4. Remove the paper from the wall and carefully cut away the central area that’s to be patched with a matte knife, creating a paper template.
5. Take the paper template and tape it over a section of linoleum that is in good condition, matching it to the same repeating elements as marked by the “rubbing” on the template.
6. Spray the linoleum that’s exposed, through the hole in the template, with silicone lubricant.
7. Soften the wax tablet by soaking it in a pan of hot water. Remove from water, wipe dry, and press against the template. With your fingers, work the wax gently into the linoleum to achieve an accurate impression.
8. Remove paper template and wax together from wall and check the quality of the impression. This is now your mould for the linoleum patch.
9. Spray the wax mould with silicone lubricant.
10. Mix up some Bondo or other auto body putty according to the directions on the label. With a small palette knife, gently work the putty into the wax mould until the thickness of the putty approximates the thickness of the linoleum on the wall.
11. Take a piece of aluminum window screening, slightly larger than the intended patch, and press it gently down into the Bondo to provide a stable backing for the patch.
12. When the Bondo has set, remove it from the mould with the paper template attached to the Bondo. Turn it over and cut the finished patch (Bondo plus screening) as marked by the paper template, using tin snips.
13. Use contact cement to stick patch to wall. Fresh Bondo applied with a modelling tool can be used to patch the seam between the patch and the original linoleum. Coat the patch with fiberglass primer and it’s ready to be painted or glazed.

(Note) The Bondo continues to harden with time, so it can be glued to a wall when still pliable—a great asset in older houses with uneven wall surfaces.
How To Clean And Polish MARBLE

By Lynette Strangstad

IF YOUR OLD HOUSE has marble mantels, no doubt you consider yourself quite lucky. A marble mantel lends grace and elegance to any room. But a marble mantel can also pose quite a restoration challenge if it's covered with paint—or else so badly stained that you almost wish it were painted! No need to despair, however: Restoring marble mantels is a task that you can undertake yourself. The secret lies in first carefully analyzing what needs to be done, and then proceeding slowly until you've had a chance to thoroughly test the treatment method you've chosen.

DO NOT, under any circumstances, use bleach and ammonia together. Laundry bleach and ammonia produce toxic chloramine gases. Severe irritation of the respiratory system can result after prolonged exposure or in sensitive individuals. Don't mix bleach and oxalic acid, either.

Paint

PAINT, the second likeliest camouflage of your marble's beauty, can be removed with standard chemical paint strippers used according to manufacturers' directions. Since marble can be easily gouged with a single misguided stroke of a metallic scraper, remove paint sludge with a wooden scraper with rounded corners. You can also use Teflon or wooden spatulas of the type used with Teflon-coated frying pans.

TO REMOVE THE LAST TRACES of paint, re-apply the paint remover and let it soak. If you are using a methylene chloride stripper, at this point you could use water, alcohol, or liquid paint remover to wash the surface, scrubbing with a natural bristle brush. (DO NOT use steel wool!) If you're using a solvent-type, liquid paint remover such as QR8 (see OHJ, Sept. 1982 p. 193), you should be able to just brush the softened paint off with a polypropylene-bristle parts cleaning brush.

Poultice For Stains

STAINS ARE TROUBLESOME because in most cases the discoloration is down in the pores of the stone. Commercially available poultices can deal with most marble stains, but if you want to try your hand at making your own poultice, the process is outlined below.

A FEW STAINS can be removed by washing with solvent alone. In using this procedure, however, it is important to pre-wet the marble surrounding the stain with water to

Dirt & Grime

THE MOST COMMON AILMENT that afflicts marble mantels is simply a layer of dirt and grime that obscures the beauty of the stone. This film can usually be removed with water and a non-ionic detergent (e.g., Ivory Liquid), applied with a medium-stiff natural-bristle brush. A tampico masonry brush will also work, as will a plastic-bristled brush. Avoid wire brushes and steel wool, as the metal can scratch the marble and possibly create rust stains. A toothbrush is handy for cleaning carvings.

ANY DIRT remaining after the initial washing calls for a stronger cleaning agent. Try household ammonia diluted with water, or full-strength ammonia if necessary. Some stains will respond better to hydrogen peroxide and water. If you prefer, a commercial alkaline masonry/marble cleaner may be used as well.

TWO OTHER POSSIBILITIES—not particularly recommended—for evening out the color of unevenly cleaned marble are: (1) Washing with oxalic acid (available in crystal form in drugstores) diluted with water; or (2) Washing with dilute household bleach. Oxalic acid and bleach are both weak acids, and so will react chemically with marble. Even fairly weak solutions may cause etching and removal of the highly polished marble surface.
### Poultice Solvents For Removing Marble Stains

<table>
<thead>
<tr>
<th>Stain Type</th>
<th>Solvent Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoke Stains</td>
<td>Absorbent + powdered alkaline cleaner and water (baking soda is a good choice)</td>
</tr>
<tr>
<td>Oil Stains</td>
<td>Absorbent + acetone, or naphtha, or mineral spirits</td>
</tr>
<tr>
<td>Organic Stains</td>
<td>Absorbent + full-strength household ammonia or 20% hydrogen peroxide</td>
</tr>
<tr>
<td>Rust Stains</td>
<td>Rust is one of the most difficult stains to remove. The commercial &quot;Italian Craftsman&quot; poultice will take out some rust stains. More difficult rust spots require a two-step process: first wetting with a sodium hydrosulfate solution, then treating with sodium citrate crystals and a water-wet poultice. Professional help may be needed.</td>
</tr>
</tbody>
</table>

The poultice absorbent can be any absorbent white material, such as whiting (powdered chalk), marble dust, talc, Fuller's earth, tin oxide, white blotting paper, white facial tissue, white paper towels, etc. There are also commercial poultices, such as the "Italian Craftsman" brand. The thicker the poultice layer, the better it will draw; minimum thickness is about ¼ inch.

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1. Test fragment of marble had surface grime cleaned off by scrubbing with a soft brush and detergent solution. An unidentified stain remains in the marble. (2) A poultice of Fuller's earth and mineral spirits was applied. In photo, the poultice is almost dry. (3) After dried poultice powder was removed, some of the stain is gone—indicating that some of the components of the stain were oil-based, since they dissolved in the mineral spirits. (4) Test fragment is completely clean after a second poultice of Fuller's earth and ammonia was applied. Successful use of the ammonia solvent indicates that some of the stain was organic.
SUPPLIERS OF MARBLE CLEANING PRODUCTS

Suppliers of marble cleaning products who will sell small quantities to homeowners are apparently few and far between. Fairly extensive searching has turned up the following suppliers of quality products. Additions to this list would be welcome.

Eastern Marble Supply, P.O. Box 392, Scotch Plains, NJ 07076. (201) 753-9171. Suppliers of, and experts on, both foreign and domestic marbles. They carry a complete line of the excellent "Italian Craftsmen" products, including marble cleaner and polish, poultices, buffing powders and marble glues. They are primarily a wholesale supplier to 700 shops around the country. They will sell small quantities to homeowners if there isn't a shop near you. Application instructions are included with shipment. No literature; call for name of nearest shop or for mail-order prices.

ProSoCo, P.O. Box 1578, Civic Center Station, Kansas City, KS 66101. (913) 281-2700. Sales offices also located at: 111 Snyder Rd., South Plainfield, NJ 07080 (201) 754-4410; and 1601 Rock Mountain Blvd., Stone Mountain, GA 30083. (404) 999-9890. Suppliers of Sure-Klean products. These include a complete line of marble-cleaning products, such as a marble poultice, cleaners and paint strippers. Technical assistance and product information are available by phone. Send stamped, self-addressed envelope for product literature.

The result of a successful cleaning project.

Avoid spreading the stain to a larger area. After pre-wetting, apply the proper solvent, allow it to set, then soak it up with paper towels. In most cases, however, a poultice will provide better results than a solvent alone.

A POUltICE IS MADE by combining a highly absorbent white material with either water or a solvent to form a creamy paste. This mixture is then troweled on and allowed to dry. Upon initial application, the dry stone will pull in the solvent, which will in turn dissolve the stain. As the poultice starts to dry out through evaporation, the solvent in the stone migrates back into the poultice, carrying the stain with it. For greatest effectiveness, the poultice should be applied in a thick layer—at least 4-inch. The thicker the poultice layer, the more solvent that can come into contact with the stain.

TO ALLOW MAXIMUM working time for the poultice, cover the treated area with Saran Wrap or other plastic for up to 48 hours. Then remove the plastic and allow the poultice to become thoroughly dry. Once dry, it can be carefully scraped (that wooden scraper is again a good idea), brushed or vacuumed off the marble. In stubborn cases, you may have to apply a poultice two or three times to get complete removal.

THE POUltICE MATERIAL can be Fuller's earth (available in many drugstores) or tin oxide (available through lapidary supply stores). You can also use whiting (powdered chalk), or even shredded white facial tissue, or white commercial marble cleaner. The result, shown in photo at the right, was almost complete removal of the stains.
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RUST STAINS are among the most difficult to remove. Beware of commercial rust removers; most are acidic and will etch the surface of the marble. Commercial poultices will remove some rust stains—but not all. Difficult rust stains call for a two-step process: First, make a soaking solution from 1 qt. of water and \( \frac{1}{4} \)-lb. of sodium hydrosulfate crystals. Apply this solution to the stain with a wet cloth, and leave the cloth on the stain for at least 15 min. Then, place about \( \frac{1}{4} \)-in. of sodium citrate crystals over the damp stain, and cover the sodium citrate with a thick poultice made from water and a powdered absorbent such as whitening or talc. Cover the poultice with Saran Wrap, and keep it in contact with the stain for at least 48 hours. Then remove the plastic and allow the poultice to dry. Since the chemicals are not readily available, you might prefer to leave this to a professional marble refinisher. (Look in the Yellow Pages under "Marble" to see if any of the installers offer refinishing services.)

WHEN WORKING ON VERTICAL surfaces, the poultice has to be extra thick to have the proper adhesion. On black or other dark marbles, don't use the white powder poultices because you may not be able to get all the white powder out of the pores. The white blotting paper type poultices should be satisfactory, however.

Sticky Spots & Fungi

FOR REMOVING adhesives, such as tar or gum, try chilling with dry ice. The intense cold will make the adhesive brittle, and fairly easy to pop off. If dry ice is unavailable, a carbon dioxide fire extinguisher—or even ice blocks—will sometimes work. When using dry ice, be sure the marble is completely dry; if there's any moisture in the stone it could turn to ice and crack the marble.

IF THE CHILLING METHOD doesn't work, try acetic acid. If the HOUSE has been damp and empty for a long period of time, there could even be lichen or other fungal growths on the marble. These can sometimes be removed with detergent and water plus a natural-fiber scrub brush. If necessary, add a little household bleach to the scrubbing solution. Or, if the growth appears particularly tenacious, nearly any commercial herbicide, cautiously applied, will force these plants to release their grip.

Commercial Cleaners

COMMERCIAL CLEANERS are available that will handle most of these cleaning problems. While they may be more expensive, they'll do the job as well—and often better—than your own homemade formulations. However, beware of using commercial masonry and brick cleaners on marble. These are acidic, and will speedily dissolve the surface of your mantel. Make sure the cleaner is formulated specifically for marble.

COMMERCIAL MARBLE CLEANERS may be hard to find locally. We've listed some mail-order sources in the accompanying box. You might also check your local Yellow Pages for companies that fabricate and install either marble or ceramic tile.

MARBLE that has been cracked or chipped can often be repaired successfully. Procedures include gluing and clamping of cracked marble, as well as repair of chipped marble by applying a mortar of marble dust, white portland cement, and lime. See OHJ, July 1982, for step-by-step details on this process.

MISCELLANEOUS STAIN REMOVAL ADVICE: If an epoxy-based material is spilled on your marble, you may be able to remove it with ethylene dichloride solvent.

REMEMBER that marble is a natural material and that no two pieces will behave exactly alike. To clean and restore your particular piece, you may have to do some careful experimentation.
Columns continued from page 195

ture of the column and resulting in loosened joints and sprung staves. Extremes of wet and dry can cause solid and hollow-bored columns to check severely. Continuous high moisture is one of the main conditions leading to fungus rot. (See the May 1981 OHJ for methods of detecting and defeating decay.)

IN A STAVE-BUILT COLUMN, a sprung stave will have a raised surface that stands out from the surfaces of the staves next to it. More than one sprung stave in a row can indicate that the column is being unevenly loaded from above or that the support below is shifting position or failing through decay. If this is the case, you have more than just column problems--get a structural engineer to examine the situation.

AFTER INSPECTION, you'll have to decide whether to repair and reuse the existing columns or to replace them. Columns often cost less to repair than replace, but in some cases repair costs can be higher. Saving some original materials at a higher cost is justified if the structure has historical significance or the Department of the Interior's Standards for Rehabilitation are being followed for National Register or Tax Act purposes.

A NEW, 15-INCH DIAMETER by nine-foot high column can cost between $350 and $600; a lot of restoration can be done before replacement would be cheaper. Even if you hire a professional woodworker, the completely decayed end of a shaft can be restored, or a stave or two replaced, for less than the cost of a new shaft. Replacing a base and plinth or regluing open joints and sprung staves are jobs that can be done by any homeowner with experience in practical matters--and that's what this article is all about!

Defenses

IT IS CRUCIAL to keep water from entering the wooden parts of a column. The first line of defense is a sound, continuous film of paint that covers all surfaces. Caulk should be used to seal joints between various parts. Water can enter even through hairline cracks in the paint. Once it soaks in, it can cause the paint to peel down to bare wood. This peeling occurs near breaks in the film at opened joints of wood, or where the film has been scraped or scratched.

PEELING CAN ALSO OCCUR over large areas because there is too much moisture in the whole column. In that case, the only way water vapor can escape is to push paint off the wood. This peeling also happens if the paint film is not permeable enough. A too-thick film of paint (more than .015 inch--about the thickness of four pages of the OHJ) could be too resistant to the passing of moisture.

IN EITHER CASE, strip all the paint and recoat the columns. Bare wood, whether stripped or new, should be treated with a clear, paintable...
ANATOMY OF A COLUMN

The capital in this photograph is an example of the care and forethought that must go into a column part if it is to last. The endgrain of this plank-cut piece is covered with a mitred-in piece of sidegrained wood. Notice that the joint is caulked prior to assembly. It will be nailed on, which will allow for some expansion in the main piece (indicated by the arrows).

Types Of Columns

In the past, blanks were made from the trunk of a tree, with the heart of the tree down the center of the finished column. This type of column almost always develops large cracks, or checks, because it shrinks as it dries.

If the tree was large enough, a solid blank would be cut “beside the heart” of a log. Such wood is less likely to check.

With a hollow-bored shaft, the center of the blank has been bored out. This allows the wood to shrink without the stress that causes checks.

Shafts are also made by gluing up common lumber into a blank. After the rough blank is made, it is mounted between the centers of a lathe and the outer surface is turned down to the proper size and shape. These shafts can carry heavier weights. They usually fail by delamination, coming apart at their “seams.”

In a hollow, stave-constructed column, the individual stave is shaped with the correct bevel on its edges and a taper along its length. A set of staves is then assembled into a blank. These columns are more stable dimensionally than other types. However, they are subject to glue failure and stave separation.

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wood preservative such as Cuprinol #20. After two or three good dry days, a linseed oil or alkyd primer should be used, followed by two coats of exterior latex paint, which is more permeable than oil/alkyd paint. If the old paint is oil or alkyd paint and in good shape, use an alkyd primer and a latex or alkyd finish coat.

HOLLOW COLUMNS should be vented top and bottom. If yours are not, it's a design flaw that you should correct now. Even without removing the old columns, you can probably drill or cut inconspicuous holes in them.

SOMETIMES IT'S POSSIBLE to vent through the soffit above the capital. If not, drill the vent holes through the face of the capital on the non-weathering side. The vents should be located to keep out rainwater but to allow air to circulate into the column and to allow water vapor to exit. (Use screened vents if you have a problem keeping birds, insects, and so on, out of the column.)

AT THE BOTTOM, cut weep holes or slots to allow water drainage out of the column interior. You may be able simply to cut through floor decking under the hollow column.

THE DAMAGE caused by decay may force you to make replacements in your column. In this situation, the column should probably be removed so all of its parts can be inspected thoroughly. The replacement of shaft ends is a job for a professional woodworker who has had experience with columns. Careful attention should be paid to matching the species of wood as well as the direction of the grain. Also, the original method of construction for the blank should be used.

Repairing Checks

SOME CHECKS CAN BE REPAIRED with the shaft in place. Minor checks (1/8 inch or less) on solid and hollow-bored shafts can just be caulked. But larger checks demand special consideration. They should be filled with a long slat of soft pine, tapered very slightly in cross section and wider than the crack on its widest edge. (Have several thicknesses of slats on hand, so you don't waste time at the table saw, thinning down each slat.)

FIRST CLEAN ANY OLD PAINT OR PUTTY out of the check. Select a slat that is about the right width for the crack at hand. With checks that taper to nothing at each end, start at the middle and work towards each end with a separate slat. Apply a resorcinol resin glue (such as Elmer's Weatherproof) to only one side of the slat. To the other side, apply a thin layer of caulk. Drive the slat into the check with light taps from a hammer. Enough of the slat should be down in the check to make good contact with the sides of the check.

LEAVE SOME OF THE SLAT standing above the surface. After the glue has set, trim off the excess glue and slat. The caulk will seal the check but allow it to open up again without stress. Use this method only near the end of the wet season in your area; that's when the checks are narrowest. If you do this in the dry season, when the checks are wide, the wood of the shaft will expand later, build pressure on the slat, and possibly cause the shaft to crack elsewhere. This long-lasting solution is especially useful for checks wider than 1/4 inch. Never try to close a check by clamping. A solid shaft can't be clamped. A hollow-bored column will probably just crack somewhere else if you clamp it.

Staved-Column Repair

THE FOLLOWING METHOD is used to repair a staved column with joints that have become unglued. Work with the column laid across a couple of sawhorses. If more than one joint is open and the column is falling apart, make
a couple of cradles, each with an inside radius just larger than that of the column. These will hold the column together. Clean off all caulk, old paint, and glue from both sides of loose joints. Scrape down to bare wood but be careful not to damage the joint. Use weatherproof glue and heavy band clamps. (Lightweight web clamps that operate on a ratchet with a small wrench won't do.) Plan to glue one joint at a time until two are left, as nearly opposite each other as possible. Then glue both at the same time to form the complete shaft.

GLUING AND CLAMPING should be done by two people. Rehearse gluing and clamping procedures by putting the pieces together without glue and clamping them. (You have to get everything together in the time it takes the glue to dry.)

SPREAD GLUE on each side of the joint, assemble the staves into a cradle, and lay wax paper over the joint to protect the canvas bands. Loop the band clamps over an end of the shaft and tighten just enough to hold them in position, with the clamp heads directly over the joint. Use a clamp every 12 inches. (Clamps cost $40 each, but that's cheap compared with the cost of replacing a few columns. And you can also get clamps from a tool-rental store.)

TIGHTEN EACH CLAMP A LITTLE, in succession up and down the joint, until there is enough pressure to squeeze excess glue out of the joint. Use calipers to check that the shaft is still round. If the shaft is slightly oval, loosen the clamps a bit and insert internal braces that will hold it round. Retighten and check again for roundness. Allow one or two days for a full-strength cure, because the joint will be put under heavy stress when the next joint is glued up. When taking the clamps off, loosen each one a little at a time.

WHEN GLUING only one joint, be certain that there is enough flexibility in the shaft to allow the joint to close without breaking another joint or splitting a stave. If the joint can be completely closed by hand, it is flexible enough. (If it doesn't have sufficient flexibility, insert a wooden slat, using the procedure described earlier.) If the surfaces beside the joint don't line up, use the following method instead.

MAKE A "SCREW-STICK" out of an old broom handle. Cut off the head of a #12 or #14 steel wood screw. Use pliers to twist it into a pre-drilled hole in the broom handle. (Be careful not to mash up the threads too much.) Lock the screw into position by driving a hole through both the stick and the screw and driving in a thin finishing nail.

CUT SOME BLOCKS that have two surfaces that are the same angle as that of the flat inside surfaces of the staves. Clean the joint in preparation for gluing. Drill 3/16-inch countersunk holes, about 7/8 inch from the edge of the joint in the higher stave. Use a #10, rust-resistant (hot-dipped galvanized or better) screw. Starting with a block near the middle of the joint, hold it in position behind

--

**Base Problems**

1 Round bases, plinths, and capitals are sometimes made by cutting a piece of wood from a plank and shaping or turning it to the desired form. The problem with this method is that it exposes a lot of endgrain to weather. Endgrain is more likely to check, thus allowing water to enter and further deterioration to occur. 3, 4 It is preferable to construct them so that only sidegrain or a minimum of endgrain is exposed. 5 The more segments the round base is made from, the less endgrain there will be. However, too many joints can weaken the base; if the glue fails, water can enter.
the joint with the screw-stick. As it is screwed to the higher stave, the lower stave will be brought up level to it. Unscrew the screw-stick and fasten it in the next block. When all blocks are in place, the surface of the staves should be even; you can then proceed to glue the joint, using band clamps.

**Repairing Sprung Staves**

**Sprung Staves** are repaired in a somewhat similar manner. The plan is to push the stave back down and realign it with the surface of the adjacent staves. Use caulk instead of glue to seal the joint, if you find that you can't work fast enough to complete the procedure before the glue sets.

BEGIN BY supporting the ends of the sprung stave with a block cut precisely to fit the inside of the staves. Screw the block to the neighboring staves, not to the sprung stave itself; it must be able to slide out to the end of the shaft as it is pressed straight. If the stave is thin and flexible, you may be able to push it into place by hand, while a friend positions a block with the screw-stick and you screw it into place. But if it is stubborn, use one of the following approaches (which can be done working alone).

ARRANGE ONE OR TWO band clamps over the highest part of the stave, with a block of wood between the clamp head and the stave. Tighten the clamp, pushing the stave back into place. Use the screw-stick to position blocks that are then screwed into place.

IF THE BAND CLAMPS aren't powerful enough (or if you don't have any), get a blacksmith or welding shop to make a hoop of 3/8-inch mild-steel barstock, with an inside diameter just larger than that of the shaft plus the height of the sprung stave. Explain how you plan to use it so it can be made strong enough. (A hoop like this should cost much less than a band clamp.)

PROTECT THE OPPOSITE SIDE of the column by placing a 1/4-inch-thick slip of hardwood between it and the hoop. Arrange the wedges and drive them together with two hammers, forcing the stave down. Fasten it with blocks as before. Fill the countersunk holes with a good exterior filler, such as Woodepox-1.

**John Leeke** does historic-house restoration and architectural woodworking in the southern Maine and New Hampshire area. Readers who wish to contact his company can write to John Leeke, Woodworker, RR 1, Box 847, Sanford, ME 04073, or call (207) 324-9597.

A CONTRIBUTOR to *Fine Woodworking*, Mr. Leeke is also a member of the APT and does consulting on column restoration and installation. He wishes to thank Paul Morse of Saco Manufacturing Company and Virgil I. Pitstick for their help in the preparation of this article.

IN AN UPCOMING ISSUE, we'll be featuring another article by Mr. Leeke. This one will deal with how to install new columns. In the meantime, please see Restoration Products News — pages 218 and 219 — for a list of sources for replacement columns.
We at the OHJ get a lot of letters from people asking us what furniture styles are right for their old houses. As you know, furniture really isn't what we're about. Most of our pages are devoted to restoration and maintenance tips...we have no plans to feature articles about furniture. So, to assist readers who want to furnish in period style, we began looking for a good, thorough field guide that could be of practical use.

THREE CENTURIES OF AMERICAN FURNITURE by Oscar P. Fitzgerald offers the best overall survey of any book we've seen. With more than 500 illustrations, the book gives an accurate, wide-ranging representation of furniture styles from the late 1600s to the early 20th century.

This book helps you recognize and name furniture that is appropriate for the date and style of your house. Some furniture books are marred by glossy generalities; others are dissertations for decorative-arts experts who already know what they're looking for. THREE CENTURIES OF AMERICAN FURNITURE stands out as not just comprehensive, but comprehensible. The photo captions and accompanying text are detailed and sophisticated while remaining direct and helpful.

Here's a list of the areas discussed:

- The Jacobean Period
- William And Mary
- Queen Anne
- The Chippendale Style
- The Federal Period
- American Empire
- The Country Cabinetmaker
- Southern Furniture
- Shaker And Pennsylvania German
- Victorian Furniture: The Gothic And Rococo Revivals
- Victorian Furniture: The Renaissance Revival
- The Eastlake And Other Revivals
- The Connoisseurship Of American Furniture

From Chippendale chairs and American Empire armoires to Country cupboard and Colonial Revival rockers...they're all in THREE CENTURIES OF AMERICAN FURNITURE.

But that's not all. As a special bonus, the book features two rare and fascinating appendices: from the 18th century, Benjamin Lehman's "Prices of Cabinet and Chair Work," and from the 19th century, George Henkel's "Catalogue of Furniture in Every Style."

If you intend to furnish your house in period style, there's good news: THREE CENTURIES OF AMERICAN FURNITURE can furnish you with what you need to know.

To order your copy of THREE CENTURIES OF AMERICAN FURNITURE, just check the box on the Order Form, or send $16.95 + $2 postage and handling to

The Old-House Bookshop
69A Seventh Avenue, Brooklyn, NY 11217
Replacement Columns

The cover article of this issue features detailed instructions for the repair of wood columns — but sometimes the wood is beyond repair. So we have listed sources for replacement columns...in wood, aluminum, and stone. Unless otherwise stated, these columns are all load-bearing, and have entasis (the almost imperceptible convex swelling in the shaft of a column). All of the companies offer a large selection of sizes and styles including Tuscan, Doric, Ionic, Corinthian, and Square — fluted and plain. Simple capitals, e.g., Doric, are usually made of the same material as the column; detailed capitals, e.g., Corinthian, are usually composition.

Wood

American Wood Column can custom produce any column to your specifications. You can request any type of wood, and they will ship nationwide. For a price quote and a free brochure, contact American Wood Column, 913 Grand St., Dept. OHJ, Brooklyn, NY 11211. (212) 782-3163.

For 80-plus-years Hartmann-Sanders has been manufacturing columns in rot-resistant, clear, heart redwood. All of their columns are custom-made to meet your requirements, primed, and feature Koll's lock-joint (pictured here) for strong, interlocking construction. Sizes range from 8 to 36 inch diameters, and up to 35 feet tall. For a free catalog, write Hartmann-Sanders Column Co., 4340 Bankers Circle, Dept. OHJ, Atlanta, GA 30360. (404) 449-1561.

Manufacturers of wood columns since 1860, Schwed offers an extensive selection of stock columns; they will also do custom work. Constructed of seasoned northeastern white pine, these columns are primed before shipping. The sizes range from 4 to 50 inches in diameter, and up to 40 feet in height. For free information, specify the Column Brochure. A.F. Schwed Manufacturing Co., 3215 McClure Ave., Dept. OHJ, Pittsburgh, PA 15212. (412) 766-6322.

Columns, made from Ponderosa pine or Douglas fir, are stocked in 6 to 12 inch diameters; 8 to 12 feet in height. Custom sizes range from 12 to 30 inches in diameter, and 12 to 30 feet in height. Each column is treated with a wood preservative (penta), and shipped unprimed. These columns are sold through distributors in the South, Southeast, Midwest, and Mid-Atlantic; the company will be happy to send you a free Wood Column Brochure and the location of your nearest distributor. Henderson, Black, and Greene, Inc., PO Box 589, Dept. OHJ, Troy, AL 36081. (205) 666-5000.

In addition to northeastern white pine, Somerset's columns can be ordered in redwood and a variety of other woods. Two coats of primer are applied to the exterior, and the interior is sealed with asphalt. Stock columns are available in the no. 100 series with diameters up to 12 inches, and heights up to 9 feet; an 8-ft. high, 8-in. diameter column in this series is $100. Numerous other made-to-order columns ranging from 6 to 40 inches in diameter, and up to 40 feet tall are shown in their free Column Brochure. Somerset Door & Column Co., PO Box 328, Dept. OHJ, Somerset, PA 15501. (814) 445-9608.

Aluminum

Moultrie recently introduced aluminum columns that snap together. They are inexpensive, light-weight, can support up to 11 tons, and are easy to install. (According to the company president all you need is, "A husband/wife, 1 can elbow grease, two cokes, and a Saturday morning."). The columns are...
Nothing quite compares with the graceful and often fanciful fretwork patterns found in Victorian and early turn-of-the-century houses. If you would like to restore, recreate, or add this characteristic to your house—Cumberland can help. They have an extensive selection of wooden exterior and interior millwork, offering endless design possibilities with brackets, corbels, spandrels, and grilles. Some of these patterns are period inspired; others are reproductions of originals. A new addition is the two-panel fretwork screen pictured here. Each solid oak panel is 96 in. high x 24 in. wide. The cost, $695, includes shipping but not a center insert (an ideal spot for etched, stained, or bevelled glass, or a fabric insert). A 24-page color catalog is $3.50. Cumberland Woodcraft Co., Inc., 2500 Walnut Bottom Rd., Dept. OHJ, Carlisle, PA 17013. (717) 243-0063.

Campbellsville Industries is best known for their exterior metal ornament in aluminum (steeples, cupolas, cornices, etc.). They also make aluminum columns (without entasis), from 6 to 24 inches in diameter, and up to 24 feet tall, with a white-baked enamel or primed finish. An 8-ft. high, 8-in. diameter column with aluminum capital and base is about $70. The company pays shipping charges on orders over 300 pounds. Reproduction orders for historic buildings are welcomed. In addition to their free brochure, a free (and helpful) consultation service is offered. Mr. Jerry Bennett, Campbellsville Industries, Inc., PO Box 278, Dept. OHJ, Campbellsville, KY 42718. (502) 465-8135.

Architectural sculptors Albert Lachin & Assoc. specialize in ornamental plaster, cement, and cast-stone (a marble dust aggregate) work. Generally all their work is custom, but they do stock a line of Tuscan columns, in cast-stone or cement, ranging from 14 to 24 inch diameters, with heights of 5 to 22 feet. An 8- to 9-ft. column (about 16-in. dia.) costs $480 in concrete, and $580 in cast-stone. When writing for free information, specify the Cast-Stone Brochure. Albert Lachin & Associates, Inc., 618 Piety St., Dept. OHJ, New Orleans, LA 70117. (504) 948-3533.

SASH LOCKS, Ives patent 1884, iron, $12 each. Other styles available—send photo or detailed framing. Also have other miscellaneous burling-hardware. Want unusual sash locks. Barbara Willis, 44 Whitney Pl., Buffalo, NY 14201. (716) 847-1259.

PEDIMENTS—Victorian style, fit 37 in. wide opening for a window or door. I have (5) each at $50 each. Wooden mantels—$40 each. Cast iron 1870 mantel—$125. Stair parts, handrails, balusters, newel post—priced reasonably. S. A. E. B. Wolfson, 4507 Cumberland Ave., Chevy Chase, MD 20015. (301) 657-1677.


FRENCH DOOR UNITS (2 pair) to fit opening 79 in. high x 48 in. wide. Marian Hall, 2110 W. William, Decatur, IL 62522. (217) 428-0050.

OLD PINE WAINSCOTTING (never painted). Over 2,000 linear ft. in long lengths tongue-and-groove (beaded). Assortment of doors and restoration woodwork and 100's of other architectural artifacts. $5 Kohler lavatories 12 in. x 12 in. complete with woodwork and 100's of other architectural artifacts. $600. John Watt, 1546 Pullan Ave., Cincinnati, OH 45223. (513) 641-7563.

OLD CAST-IRON STORE FRONT removed from building scheduled for demolition. Manufacturer by Christopher and Simpson, St. Louis, MO. Call (311) 376-1513 for details. Mrs. Henry Burrell, 1001 N. Market, Marion, IL 62959.

CAST IRON RANGE: 66 in. x 37 in. overall, recceives into wall, takes wood or coal, maker's cast onto front "Carpenters Range, Boston, Mass. 1870." Consists of 2 warming ovens, 2 ovens, 5 range tops, fuel door, and adjustable vent. Beautiful casting $850. John Becker (617) 266-2067, Boston.

4 MAHOGANY 8-PANELLED DOORS with brass hinges, glass, matching bench, ivory keys. I have 1-9 ft. x 4 ft. x 44 1/4 in. Originally from Washington Square, NYC town house. Also simple, false door mantel 54 in. x 54 in., enco. 11 in., 3 in. Needs painting, Mary D. Smith, 44 Ohayo Ml. Rd., Woodstock, NY 12498. (914) 679-2429.

VICTORIAN PARLOR COAL STOVE. Pictured in Old House Journal $650. (516) 567-5966.

TUDOR golden oak double entry. 4 doors, 90 in. x 30 in. 2 interior panels, ceiling panel diamond design for chandelier, transom, mouldings. Elaborate dental pattern throughout. 115 in. x 36 in. Could be adapted to wet bar or wine storage. Also, English loo, "The Waterfall," wash down closet. Shown in Temples of Convenience, Lucinda Lamblent, Plate 82. Golden Movement said, "I of 7 left in existence." S. Thompson, 11 Eugenia, San Francisco, CA 94110 (415) 826-1082.

SLATE ROOFING—used 11 in. x 22 in. x 1/4 in. Vermont slate in all colors. Approximately 20 square at $.55 apiece. Also a reaper, 3-horse draw binder with 3000 straps. $100 or best offer. D. Viehmann, PO Box 149, Inmont, VT. (802) 483-3046, weekdays.

SMALL GRAND PIANO, period style case, original mahogany finish, matching bench, ivory keys, new strings. Plays nicely. Send for sketch. $2500. (717) 377-3073 Schenechady, NY.


TO THE OHJ FAMILY...

The Staff of The Old House Journal sadly informs our readers that Sally Goodman, our Office Manager, passed away unexpectedly in early September. Sally did many of our behind-the-scenes jobs, bringing order out of chaos with her special ability to organize things. She was a skillful librarian, too, and had enthusiastically developed a system for the OHJ library.

Beyond her official duties, Sally was a loyal friend to The Journal and to each of us here. We'll miss her very much.

OAK FOLDING BED. Looks like buffet. 52 in. x 57 in. x 20 in. $400. Pocket doors, from 1910 house, with hardware. $100 ea. set. $600. Fireplace tiles and coat grate. Tiles are about 2 in. x 4 in., and made blue and white. $150. Formulas & instructions for making your own metal cleaners and polishes including an instant dip silver polish. Naturals, PO Box 40355, Miami Beach, FL 33180.

“CONSERVING ENERGY in Older Homes: A Do-It-Yourself Manual,” tells homeowners how to solve energy problems inexpensively. Illustrated and simply written. Contains a wealth of money saving ideas $4.95 (plus $.50 postage). Anthology, Suite C-30, 915 King St., Alexandria, VA 22314. (Virginia residents please add 4% sales tax.)

9TH ANNUAL Back To The City conference in Jim Thorpe, PA. Oct. 22-24. Speaker include Glen Labine, editor of The Old House Journal. Late registration is limited. $100 for conference, $47/day, Jim Thorpe Civic Association PO Box 111, Jim Thorpe, PA 18229. (717) 325-3309.


40TH FAMILY...
REAL ESTATE


1876 NEO-GEORGIAN brick building, restored. Watervliet, NY. Restored restaurant in historic, antique business on 1st floor. 12 shops on 2nd & 3rd floors. 2 other stores included, plus parking for 35. Potential unlimited. Owner willing to hold stable mortgage. $250,000. Pearl Foremen (212) 273-6880 or Marty Pearmain (212) 975-5764. Stapleton, Staten Island, NY.

OLDEST remaining estate in Orlando, FL area. 1877, Victorian 3-story house of cypress pioneer. Located 25 min. N of Disney World, nestled in giant oaks, pecans, azaleas, citrus. 15 rooms, 5 brs, 6 baths, 6 fireplaces. Balance $135,000 to $155,000. 8224 South Bay, Orlando, FL 32808. (407) 856-3200.

BISBEE, AZ—$400 ft. elevation, 6 mi. to Mexico. 1896 Territorial villa home, Henry Trust architect. 98% restored, 2900 sq.ft., 1200 sq.ft. garage and studio. 2 fireplaces, woodstove, fire double adobe with much preserved ornamental plaster. Craftsman-Tudor interior, fretwork screen doors, stained glass, original light fixtures, stone wall, Mediterranean蹼. Robert Boucher, 601 Campbell St, Bisbee, AZ 85603. (602) 432-2863.

RAHWAY, NJ. Queen Anne: Welcome by beveled stained glass! Enter French doors to parlor with fireplace. Exit to pantry & wainscoted kitchen. Ascend backstairs to 4 bedrooms on 2nd floor. Descent front turning stairs to dining room. 1 + (2) 1/2 baths. Garage with drive. 10 min. walk to NYC train. $85,000. (201) 499-9578.

1913 VICTORIAN completely remodeled over $300,000 invested. 4500 sq.ft., 4 brs, 5.5 baths, sep. carriage house org bit 1889 w/huge game room, or $300,000 invested. 4500 sq.ft, 4 brs, 5.5 baths, sep. carriage house. Robert Albright, 400 661 Campbell St, Bisbee, AZ 85603. (602) 432-2863.

CHICAGO: Walk to CNW commuter train. Live in charming Woodside! 1884 Victorian, complete, local landmark house. 10 rooms, 2500 sq. ft. 4 bedrooms, all new kitchen, original brick hardware, stained glass, and parquet floors. 3 blocks from National Register Opera House. Only $139,900. Century 21, (312) 338-6470.

NEWLY CONSTRUCTED Victorian style home in historical area of Chetwood, MD. 2 x 6 construction, fully insulated, all the benefits of modern know-how with Victorian charm. Subject to offers. $94,000. Nancy Sillcox, Anderson-Stokes, PO Box 533, Chesterton, MD 21526. (301) 778-5600.

VICTORIAN HOUSE in Milledgeville, GA. All new plumbing, heating, wiring, and insulation. 5 fireplaces, all new kitchen (complete w/ stove, dishwasher, & washer), 3 bedrooms, den, formal living/dining room combination. 2 new baths & 1 renovated. Newly painted exterior, needs wallpapering and refinishing. Bill & Edna Boone, Box 5, Harper, IA 52231. (515) 635-2026.


RESTORATION SERVICES

AUTHENTIC QUILTS handmade by Adult Education Quilting Instructor. I can duplicate an old pattern or design a one-of-a-kind quilt for you. I also restore antique quilts. Send size, pattern (or idea) for a price quote. Peggy JoAnn Perry, 5881 Woodville Rd., Haslet, MI 48840.

1 REPAIR, replace, or install plaster and wood mouldings & medallions. This service includes lath-plastering, drywall-construction, and custom-painting. If you are interested in my work, please phone (212) 467-0166 or (718) 773-7225, weekdays, 9 AM to 5 PM (Brooklyn). My name is Morris Pejicaj, registered professional.

HISTORICAL PRESERVATION consultants: Professional expertise & assistance to meet your historical renovation/preservation needs. Research & preparation for federal grants for accurate Register & tax-incentive applications. Chris Brewer, Brewer's Historical Consultants, 3204 Perry Place, Bakersfield, CA 93306. (805) 872-2423.


NEEDLEPOINT for all your antique furniture: I'll do half-cross stitch background needlepoint work. $0.33/"row (up to 2 ft. rows). Send yarn with pre-filled canvas, scissors, needle. Send plate, photo for a price quote. Mary Fenettl, RFD, New Hope, PA. 18936. (908) 872-3423.

ETCHED GLASS: Custom made, specialized in Victorian patterns. Send size and brief description of type of design desired, include lettering, etc., for a price quote. Etched Glass of Houston, Inc., 318 Tabor, Houston, TX 77009. (713) 868-2145.


VARDI CONSTRUCTION CO. Contractors & consultant. Restoration services for both commercial & residential structures. We believe in the integrity of restoration through semi-replica authenticity and a realistic economic framework. Do not doubt about your building! Call us for a free feasibility consultation. 114 Blue Ash Ct., Encinitas, CA 92024. (714) 942-1516.

TRADES AND SWAPS


PAINTING COUCH (tufted) with lion carvings, Victorian scrolled arm chair, 3 piece paperwork, set includes corner arm chair, and table. Will sell or trade for 1/2 ton truck, 300 brass. Also would like to find manufacturer of tin lightboxes. Dave (404) 217-1147.

SPLENDOR IN THE GRASS and trunks and ponds and streams! Will trade my exceptional 100 year-round country gentleman's/gentlewoman's estate: 2 1/2 hours from NYC valued at $200,000 ($130,000 equity) for your income-producing NYC metropolitan area real estate or free-and-clear Bronx waterfront home. (212) 647-2175.

FOR TRADE! Have: Quaint income-producing houses in small town 2 hrs from NYC. Good for your conscientious management available. Shows excellent income. Want: Income-producing real estate in NYC metropolitan area or single family house on waterfront property in the Bronx. (Brokers protected) (212) OL4-2175.

WANTED

TOWER CRESTING, need new or used, approx. 8 ft. x 8 ft., or ideas for same. Dave Ferre, Box 10150, Rochester, NY 14610.

SOLID WOOD COLUMN, 3 ft or taller. Light pine or oak. Any design divided into quarters, must be solid wood. Please send photo and price. Robert Albritt, 3059 Porter St., NW, Washington, DC 20008.


ANTIQUE DOOR KNOBS of any kind. Will answer all replies. Would appreciate receiving a picture. Darrelle O. Rasor, PO Box 456, Bellevue, WA 98009.

BLACK MARBLE MANTEL & fireplace surround for 1852 Victorian house. Rococo style with rounded opening and center shallot motif. Patty Offenberg, 33 N. Remington Rd., Columbus, OH 43209.

EXTUERIOR SHUTTERS (6 pair) for window openings 70 in. long x 29% in. wide. Prefer raised-panel, but brouser will do. Edwin Swann, R. 1, Box 286-F, Maxwell Hall, Hugo, OK 74637. (301) 274-3953.

BLACK TELEPHONE: 30s vintage reconditioned to modern system for use as a house telephone for GE A-64 dual band radio. K. Gallaher, 3150 Giencalm Rd., Shaker Hts, OH 44122.

ANTIQUE OAK HIGHCHAIR with tray. Prefer stationary type—not one that converts to stroller. Prefer original finish and period condition. 45c. Blue Ridge Bird., Kansas City, MO 64133. (816) 356-5844.

RECEPTOR for Victorian shower. 42 in. X 42 in. x 72 in., or ideas for same. Dave Ferre, Box 10150, Rochester, NY 14610.

OLDER APARTMENT OR HOUSE in Staten Island or Park Slope, Brooklyn, NY. Will help with restoration work (I don't even mind stripping paint) in exchange for some small part of the total cost. OIH editor, (212) 636-4514 (days) or 766-5755 (eve.).
Why would over 9,000 OHJ subscribers buy
The Master Heavy-Duty Heat Gun?

Faye Spidell of Eugene, Oregon, restores old houses in her spare time. Here's what she said in an unsolicited letter about the Master Heavy-Duty Heat Gun:

"I read each issue very carefully and have used quite a few hints from the Journal. The nicest thing, though, was being able to buy a heat gun. This last house had built-in bookcases, large windows, an archway between the living room and dining room, and the original cupboards, which had been moved to the back porch/utility room. They all look lovely now, but I tell friends that there are at least two acres of woodwork in the house. I could have never done it with a chemical paint remover. I have not been so pleased with any tool I've bought!"

Laura Lee Johnston, a homeowner from Long Island, New York, said this about the Master gun:

"Your heat gun is just what we needed to attack our heavily paint-laden newel post. It can't be removed (it is probably holding up the house!) and the thought of using chemical removers on it and coping with the mess has deterred me from getting to it since we moved in."

Patricia and Wilkie Talbert of Oakland, California, are the OHJ subscribers who first told us about the Master Heavy-Duty Gun:

"We wouldn't be without it! Interestingly, the more coats of paint, the better the gun works! The heat softened paint film tends to lift off intact out of cracks and crevices, rather than being dissolved and soaked back into the wood as often happens with liquid removers."

Faye Spidell, Laura Lee Johnston and the Talberts are no special cases. Over 9,000 OHJ subscribers have purchased the Master Heavy-Duty Heat Gun. And the raves keep coming in.

We sell this heat gun because it's the best one money can buy. It makes your job a lot easier...and minimizes inhalation of dangerous methylene chloride vapors, given off by most chemical removers.

The electric-powered heat gun softens paint in a uniform way so it can be scraped off with a knife. A small amount of chemical remover is suggested for clean-up and tight crevices, but the heat gun takes care of almost all the work.

In addition to minimizing chemical use, another important safety feature is a lower operating temperature than a propane torch or blowtorch. Thus the danger of vaporizing lead is eliminated, and fire danger is greatly reduced, too.

(Precautions should be taken when handling scrapings from lead-based paint and caution should be observed with wall partitions that contain dust.)

The HG-501 is an industrial-gauge tool. That means it isn't cheaply-made or cheaply-priced. But paint remover is going for $12 to $20 per gallon...so if you use the Master Heat Gun just a few times, it pays for itself.

When it comes to stripping paint, there are no magic wands -- but we think this is the best method and best gun for the job.

$72.95 postpaid, shipping via UPS

You may order your Master heat gun by filling out the Order Form in this issue, or by sending $72.95 to Old-House Journal, 69A 7th Ave., Brooklyn, NY 11217.

What it will do:
- The Master Heavy-Duty HG-501 Heat Gun is ideal for stripping paint from interior woodwork where a clear finish is going to be applied.
- Use the heat gun for stripping paint from:
  - Doors
  - Wainscoting
  - Window and door frames
  - Exterior doors
  - Porch columns and woodwork
  - Baseboards
  - Shutters and panelling.
- In addition, the Master heat gun can be used for such purposes as thawing frozen pipes, loosening synthetic resin linoleum pastes, and softening old putty when replacing window glass.

What it won't do:
The heat gun is not recommended for:
- Removing shellac and varnish;
- Stripping paint on window mullions (the glass might crack from the heat);
- Stripping the entire exterior of a house (too slow);
- Stripping Early American milk paint (only ammonia will do that);
- Stripping exterior cornices (could ignite dust or animal nests inside).

Note these outstanding features:
- Heavy-duty industrial construction for long life
- Pistol-grip handle; 3-position fingertip switch
- Rubber-backed stand keeps floors from scorching; stand swivels 90°; has keyhole for hanging and storage
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The Old-House Journal Guarantee: If your heat gun should malfunction for any reason within two months of purchase, return it to The Old-House Journal and we'll replace it.
The Best "First Aid" Book For Your House!

READER'S DIGEST
COMPLETE DO-IT-YOURSELF MANUAL

This big, illustrated book was born the same year as THE OLD-HOUSE JOURNAL, in 1973. Ever since then, we've been recommending it as the basic reference book for do-it-yourselfers. There's no specific old-house slant to it, no fine points of preservation technique— but then, that's why we're around! The Reader's Digest COMPLETE DO-IT-YOURSELF MANUAL is just what the title says — the complete how-to guide to nearly every common task around the house. The plain-talking text and hundreds of helpful drawings and photos demystify such topics as plumbing, electrical, carpentry, masonry, wallpapering, painting, sewage systems, insulation, doors, windows, furniture repair, gutters, roofs, and fences. There's even a helpful section on building a workbench and buying and using tools.

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WOOD FINISHING AND REFINISHING

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
   - Woods and why we finish them
   - Preparing new wood for finishing
   - 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

The Old-House Bookshop
69A Seventh Avenue, Brooklyn, NY 11217
Order Form

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Old-House Journal Yearbooks

Each Yearbook is a compilation of a full year’s worth of OHJ issues, packed with the restoration and maintenance techniques we’re known for. The softbound volumes each have a Table of Contents and an Index.

75 1976 — $10  77 1977 — $10

80 1980 — $16

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Become A Master Of
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Decorative Stenciling

FROM the early 1700s up to the 1940s, any self-respecting house painter had a set of stencils. Different styles of stenciling grace homes from New England Saltboxes to romantic 19th-century mansions and even post-Victorian houses. Today, stenciling is enjoying a renaissance as people across the country rediscover this economical, historical way to decorate their homes.

In THE OLD HOUSE JOURNAL, we've run several good articles on stenciling. But no article can cover all the fine points of stenciling with the detail and thoroughness of THE ART OF DECORATIVE STENCILING. This isn't a history book or a pattern book — there are plenty of those. THE ART OF DECORATIVE STENCILING is the best book we've ever seen on how to stencil.

THIS beautiful volume, written by stenciling experts Adele Bishop and Cile Lord, has clear, easy-to-follow chapters on making stencils, choosing brushes, tools, and paint, and on application methods. The authors explain all the details, including all-important layout: how to do corners, borders, all-over patterns, and floors. There's even a section on building up complex patterns from multiple stencils — and no one has written a better guide to mastering this difficult technique. Unlike other books, THE ART OF DECORATIVE STENCILING treats the stenciling of walls, ceilings, and floors, as well as furniture.

Stenciling will bring a unique quality to your house. With the skills this book can teach you, you'll be able to take any pattern you see — in a book or a museum, even from a fabric — and adapt it to your own home. You can recreate authentic period patterns or create something entirely new, because stenciling, unlike wallpaper, is infinitely flexible and adaptable.

I've been referring to and recommending this book for years, and we're pleased that now we have an opportunity to offer it to our readers. To order your copy of THE ART OF DECORATIVE STENCILING, just check the box on the order form, or send $14.95 + $2 postage and handling to

THE OLD HOUSE BOOKSHOP
69A Seventh Avenue, Brooklyn, NY 11217
YOU MAY ALREADY have seen this house. Rodale Press used it to illustrate their new "solarizing" book in a sales brochure that was mailed by the thousands. It has managed to turn off even moderate preservationists. Unfortunately for Rodale, they have probably turned off energy-conscious homeowners as well: Nobody wants to live in a house that looks like the inside of an air conditioner.

BY MAILING this brochure, author Joe Carter and Rodale have made public their opinion that (1) this house is a commendable example of solar remodeling, and (2) the solar apparatus was a necessary component of its energy retrofit.

THE OLD-HOUSE JOURNAL has an obligation to publish a contrary opinion, despite our fondness and respect for Rodale Press. This opinion is shared by people all over the country, including the Technical Preservation Services Branch of the U.S. Department of the Interior (see p. 196). The response we got from our readers was astonishing!

IN OUR OPINION, too, saving energy is sensible and moral. But draping expensive solar hardware all over an old building—irreversibly changing its architecture—is, we think, neither sensible, nor moral, nor necessary.

We couldn't say it all on one page this month. Please turn to pages 196 and 197 for more.

Solar Salvation ... or Technological Trashing? Rodale Press Makes It a Public Issue

The house in the photo above is not the unhappy result of changing fashion or a fast-talking remodeling contractor. Instead, it looks this way on purpose—the result of a carefully planned and executed solar demonstration project. The worst part is that the house is now being presented as state-of-the-art retrofitting in an influential book and mail-order brochure.