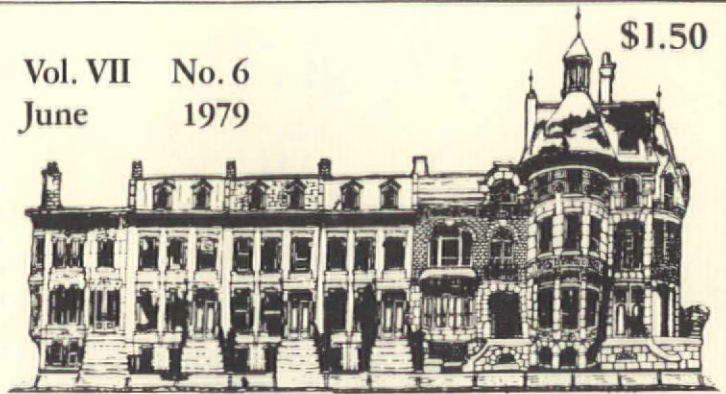


THE OLD-HOUSE JOURNAL

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Restoration And Maintenance Techniques For The Antique House



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Coming Next Month

STUCCO REPAIRS

By Frederick Herman, AIA

IN OLD HOUSES, that element which one usually regards as the most permanent often becomes the most troublesome. That element is the masonry work, be it brick or stone. Although there are many different types of masonry problems, this article is going to focus on repointing.

THE MOST COMMON MASONRY problem is that the mortar has deteriorated over the years; the face of the remaining mortar may be a half-inch or more to the rear of the face of the brick. Actually, this weathering of the mortar is the way things ought to be. The mortar is not meant to be a permanent part of a masonry wall, but rather a flexible, expendable component that does have to be replaced at periodic intervals.

REPLACING THE old missing mortar with new is a process called "repointing." In theory, the process is simple, but the "how to do it" aspect is not.

FAULTY REPOINTING has left more walls disfigured than any other cause with the possible exception of damage done by sandblasting. The latter, combined with indiscriminate pointing, can literally

transform a wall consisting of brick with mortar joints to one of mortar with brick polka dots—and a limited life span.

HERE ARE SOME of the key elements to keep in mind if you have a masonry wall in need of repointing:

THE EDGES OF BRICKS, over the years, usually become worn and rounded. If great care is not exercised to keep the new mortar recessed in the joint, a very wide mortar joint will result—which is completely out of character with the rest of the work.



IF THE EXISTING MORTAR has weathered, and if you had tooled joints of some type or other, the mortar will have lost the distinct profile it possessed originally. This means that you should not try to match the joint as it originally looked, but rather to try to create a joint that has the look of being weathered and aged. Avoid at all cost anyone or anything that promises that your wall will "look like new." The last thing you need on an old house is a "looks like new" exterior.

(Continued on page 66)



Insurance For Historic Houses

To The Editor:

REFERRING to your article in the February 1979 issue of OHJ on insurance coverage for historic homes, there is another possibility that might interest your readers.

HISTORIC HOUSES of museum quality usually contain a variety of features that are truly irreplaceable. These features often mean that the house, taken as a whole, is also irreplaceable. Therefore, the normal "replacement cost" evaluation for insurance purposes simply does not apply. If anything like a realistic replacement cost figure could be calculated, the premiums would be far out of reach of most owners.

OUR ORGANIZATION has secured "Stated Value" coverage from the Indiana Insurance Company of Indianapolis, IN, and from Wolverine Mutual Insurance Company of Dowagiac, MI.

CONSIDERING POSSIBLE LOSSES from many sources, including fire, windstorm and vandalism, we determined the extent of loss beyond which it would be meaningless to repair or restore our historic house. We arrived at an agreed figure of \$50,000. This is the maximum we would receive for any single loss.

IF THE HOUSE is struck by lightning and the roof is burned off, we have \$50,000 to repair it. If a vandal throws a stone through a stained glass window, we would have up to \$50,000 to repair it. If a wastebasket fire damages the carved sideboard in the dining room, we have \$50,000 to find a woodcarver who can repair it.

IN OUR JUDGMENT, the agreed value is sufficient to repair or restore damaged areas without voiding our right to present the house as an authentic "pure" restoration of 1888. If damage from a fire or other loss exceeds the stated amount, we would simply have to declare the game over and go out of business. But our feeling is that any repairs beyond the stated value of our policy would be so major that it would no longer be the same house anyway.

ANOTHER POINT OF INTEREST might be the insuring of volunteer workers against accidental injury or death. Through the National Casualty Insurance Company of Southfield, MI, we carry very liberal coverage on all our volunteer workers. Workers must sign a calendar "appointment book" whenever they enter the premises—regardless of how long they will be

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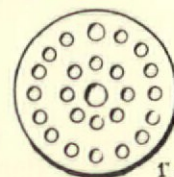
working. (Tourguides are usually on the property for three hours at a time; restoration workers usually work four hours per session.)

ON THE BASIS of the "sign in" book, we pay an insurance premium of 13¢ per person per work session—regardless of how much or how little time the volunteer actually puts in. In this manner, we have complete flexibility in the use of our volunteer workers. There is no need to keep a roster of those covered (in advance of their working), and we pay only for those who actually enter the work area.

TWICE EACH YEAR, the insurance company picks up the book for a few days, counts the names, and sends us an invoice.

Herbert A. Strum, Vice President
Hackley Heritage Association
Muskegon, Mich.

Wanted: Plaster Repair Discs



1 dia.

To The Editor:

I DO A GREAT DEAL of repair and restoring in old houses locally.

ENCLOSED YOU WILL FIND a sketch of what I call a "plaster repair disc." I have used thousands of these discs over the years to repair loose plaster. But recently, I lost my local source of supply.

BY ANY CHANCE do any of your readers know of a source for these discs?

J. Roland Morin
Brunswick, Me.

Mid-19th Century Wallpapers

By Carolyn Flaherty

OWNERS OF MID-VICTORIAN homes who have been looking for appropriate wallpapers are in luck. The Birge Company, which manufactures a moderate-priced wallcovering line, has just put some wallpapers on the market that have the advantage of being inexpensive, well-done and historically interesting.

BUT, MOST IMPORTANT, they are from a period (the 1850's) that generally receives scant attention from manufacturers. There are five patterns, all available from wallpaper and department stores around the country. If your local store carries Birge papers, but doesn't have this line, you can order the pattern by name. They are contained in the "Colonial Collection, Volume 59". The reason for bringing these papers to the attention of Victorian house owners in this article is my belief that one is not apt to go looking for a mid-Victorian wallpaper in a collection with that title.

HOWEVER, MANUFACTURERS are convinced that "Colonial" sells, and until their attitudes mature, some decorating detective work is necessary. Before describing the available designs, let me give you a brief history of the origin of the papers.

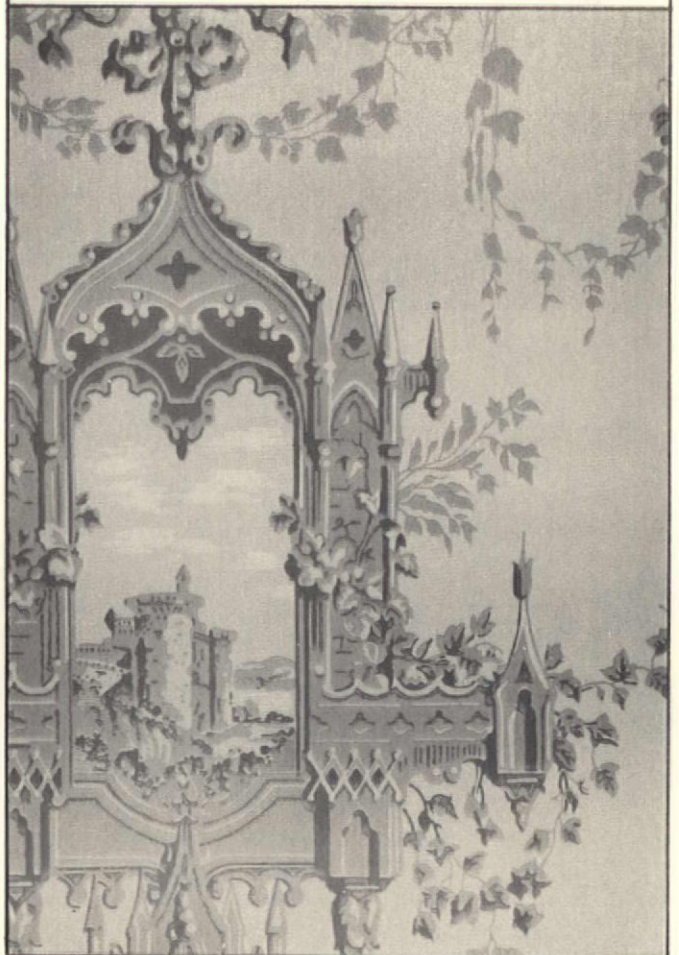
Origin Of The Designs

BIRGE WALLCOVERINGS, the oldest wallpaper company in America, made six wallpapers in 1923 for the newly reconstructed Theodore Roosevelt birthplace in Manhattan. In 1976, as part of an extensive restoration of the Roosevelt mansion, the National Park Service asked Birge to reproduce the papers made in 1923. Samples of the papers were found in the company archives and five were reproduced.

THE SIXTH PAPER defied Birge's present technology. A 23-color Rococo Revival design, originally handblocked, it required 23 separate silk screens. Sunnyside Prints, a custom-duplicating firm in Queens, N. Y., was able to produce the paper after more than a month of



Birge "New England" pattern as it appears in the dining room of the Theodore Roosevelt birthplace. Detail of pattern below.



artwork, screen production and color separation. Now in the Roosevelt mansion parlor, the paper is \$95 per roll (25 roll minimum order) through the Theodore Roosevelt Association. Inquiries can be directed to them at the address for the Roosevelt birthplace. (See caption.)

Gothic Revival Wallpaper

MY FAVORITE PAPER in the Birge collection is one absurdly titled "New England." It is actually a Gothic Revival design--a real rarity in today's market.

IN 1850, Alexander Jackson Downing, who popularized the Gothic Revival in America, was advising homeowners to paper with a Gothic design, preferably "those with some architectural expression." Gothic architectural papers had been popular in England for a long time. A more elaborate version of "New England" with multiple tall Gothic spires, c. 1840-1850, is on display at the Victoria & Albert Museum in London.

THIS PAPER is used in the Roosevelt dining room. Historically, dining rooms and libraries were the rooms most often decorated in the Gothic style. Downing also recommended architectural papers for halls.

A GOTHIC REVIVAL design is appropriate for many houses built after 1840 through 1870, especially those in the Gothic Revival style, Carpenter Gothic, cottage styles, or any plain house of that period that wants for a bit of dash.



Detail of the "Victorian" pattern.



Exterior of the Theodore Roosevelt Birthplace, now a museum open to the public at 28 East 20th Street in New York City.

Plasterwork Pattern

THE PATTERN USED IN THE LIBRARY is actually a true architectural paper. Rather than representations of actual buildings, it is a three-dimensional design of an architectural element. In this case it is ornamental plasterwork. While the plaster design is vaguely reminiscent of 17th and 18th century design, the paper is named "Victorian."



The walls of the Roosevelt library are covered with "Victorian," a red and cream pattern. The room typifies the decoration of the 1850's--Belter-type chairs upholstered in deep blue, elaborate plaster mouldings, a center table with lamp, and overall a solid look of respectability.


THE "VICTORIAN" is a versatile pattern and could be used in many 19th century homes. The warm red background would lend itself to a room with a lot of wood as well as rooms with decorative plaster.

THE BEDROOM AND NURSERY papers are of interest for their authenticity. The nursery paper, "Roosevelt," is the kind of landscape paper popular in the mid-Victorian era and the coloring is intense as it was then. It is a very strong design, however, and should be used sparingly. "The Jeffrey" is a good bedroom wallpaper and, while not unusual, it is quite charming and simple.

"COLONEL POPE" is an oddity. It was designed in 1923 by an architect working on the Roosevelt house. This kind of cut-stone pattern was often used in Early American homes. It is a good design for a hall, but note that it is not an authentic mid-Victorian paper.

ALL OF THE ABOVE MENTIONED patterns are included in the "Colonial Collection, Vol. 59." There are, of course, many other patterns in the collection but most are Early American of a kind that can be readily found.

BUT THERE IS AN exception I would like to mention. Also contained in this collection is a pattern called "Ford Theatre." It is a reproduction from a document found in the booth at the Ford Theatre in Washington, D.C. where President Lincoln was assassinated.

THE PAPER HAS a dark maroon background. A dull pink lace stripe and a leaf motif alternate and it has a small black motif also. The effect is quite rich and very Victorian. The cost is \$9.95 per roll. Birge has indeed done a good job of providing both attractive designs and historic authenticity at a reasonable price. 



"The Jeffrey" is an old chintz pattern of blue mini-flowers and is used in the master bedroom where Roosevelt was born.



The "Colonel Pope" paper is actually a 1923 design. The interesting cut-stone pattern makes it very appropriate for halls.



"Roosevelt" is the name given to this landscape paper in the nursery of the Roosevelt birthplace. Due to poor health, the young Theodore spent a great deal of time in this room.

The colors used in the pattern are deep and intense as was the fashion of this period. Unlike most designs for children's rooms today, this scene has nothing to do with childhood themes such as nursery rhyme figures or cute animals.



This job is so badly botched it barely requires comment—yet someone did it. The mortar color is incompatible with the old; the new mortar is smeared all over the face of the bricks; and the patching brick doesn't match the direction of the old brick courses.

(Cont'd. from p. 61)

Matching Old Materials

ANOTHER PROBLEM lies with the materials themselves. The composition of mortar used a century or more ago was different from that of today's mortar—and the ingredients lacked the uniformity and purity to which we are accustomed today. The results are colors and textures that are exceedingly difficult to match.

TO THIS, you have to add the effects of age and the weather. Even if you achieve an exact visual match with new mortar today, the continuing different rates of aging in the new as compared to the old materials will soon result in a visible difference in color and texture.

THE SAME PROBLEM that applies to mortar applies to brick. Old bricks can range in hardness from the very soft (not much better than sun-dried clay) to the very hard with glazed crystalline surfaces. Their sizes—especially if they are handmade—vary, and their colors can fluctuate widely depending on impurities in the clay, proximity of the brick to the fire during the firing process, and even the types of wood used during the firing.

IF YOU NEED BRICKS to repair an old wall, your best best is to try to find a building of the same period, built of a similar brick, which is being torn down. If this is unavailable, you might be able to re-use some of your own brick...or salvage some for re-use from

interior walls in the cellar or other inconspicuous place. The problem is further complicated because builders in the past often used several types of bricks in their buildings: A good grade for the front facade; something cheaper for the sides not exposed to "formal" viewing, and the very cheapest bricks for backup.

AS WITH MORTAR, bricks change with age, and no new brick will exactly reproduce an old weathered brick. Even if it should, it will react differently to the elements and today's perfect match will be tomorrow's mismatch.

DOES THIS MEAN that you cannot hope to create a match if you have to repoint or repair an old brick wall? Unfortunately, to a degree it does. Even time will not do it. I know of one building which was constructed in 1845 and which had an additional storey added 10 years later using the same mortar, joining and bricks. Yet the difference resulting from the ten-year age differential is still visible to this day if you look for it.

ASSORTED SUGGESTIONS such as smearing crankcase oil (with or without dirt mixed in), mud, soot, ashes and other substances on wall patches may sometimes temporarily disguise matters. But they will not provide long-term matching.

THE BEST ONE CAN HOPE FOR is to match the wall as closely as possible with respect to the brick, mortar and shape of the joints. Be sure the materials are compatible physically. And do not do anything that will cause irreversible damage—such as sandblasting in the name of repair and restoration.

YOU MUST REALIZE that brick, stone and mortar all age as an inevitable part of their life cycles—and that is part of masonry's charm. Regard a patch not as a disaster, but as part of



Double Trouble: Sandblasting has worn away the hard facing of the brick, making it vulnerable to water damage. A hard portland cement mortar used for repointing has encroached onto the face of the bricks; further spalling is likely.

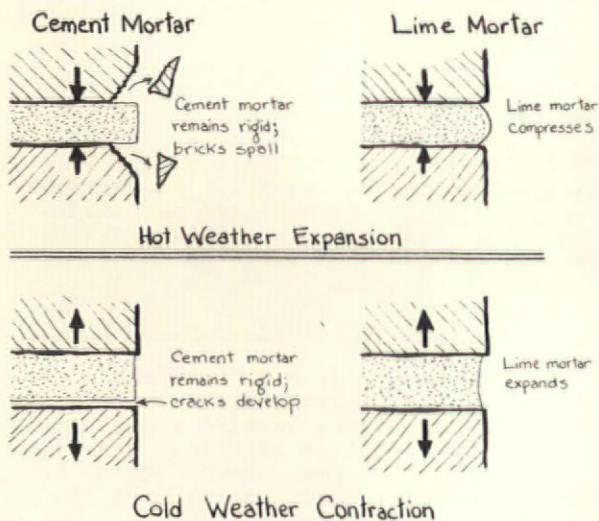
its character. Try to minimize the appearance differential of the patch as much as possible by careful choice of materials—but accept some difference as inevitable.

Do's And Don't's

TO A DEGREE, every brick restoration job is an individual problem and needs to be treated as such. There are, however, a set of general do's and don't's that should be followed in dealing with every masonry restoration project:

- Don't act hastily. You will regret later at your leisure.
- Don't sandblast. This permanently changes the nature of the brick and hastens its deterioration by exposing its soft interior areas to the elements.
- Don't use power tools such as masonry saws to cut out mortar joints. Invariably, these power tools eat into the edges of the brick, widen the mortar space and change the character of the joints.
- Don't use ready-mix or cement mortars if you are repairing or repointing old soft lime-based mortars.
- Don't use new bricks for repair. Their sharp edges and lack of weathering make them stand out too much from the old work.
- Don't try to turn the clock back and restore the wall to "as it was" a hundred or so years ago. All you will have is a new wall "in the style of" an antique which will not be compatible with the remainder of the original fabric. The only time that this should be considered is where an original wall has to be rebuilt because it has deteriorated structurally to a point that it is no longer safe.

Cement Mortars and Lime Mortars React Differently To Expansion and Contraction



Making Soft Mortars

THE TERM "soft mortars" relates to lime-based mortars that were in use until the introduction of cement mortars—which occurred roughly around 1850. Whenever you are patching or repointing an old lime-mortar wall, you should be sure to use a soft mortar that has the same physical characteristics as the old.

THE TRADITIONAL FORMULA for a lime-based mortar was as follows:

2½ to 3 parts of sand
1 part of hydrated lime

THIS WAS SOMETIMES IMPROVED by adding pulverized brick, clay or shells.

CONTEMPORARY MASONS find a pure lime mortar overly difficult to work with due to its softness and plasticity—and the time it takes to set up. To make a repointing mortar that is easier to work with—and yet compatible with the old soft mortars—a small amount of portland cement is added to the mixture. The formula is:

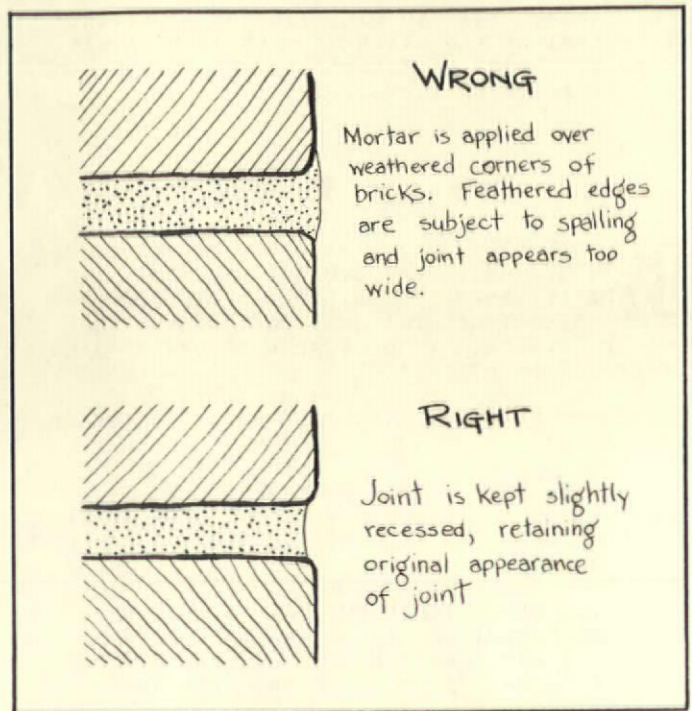
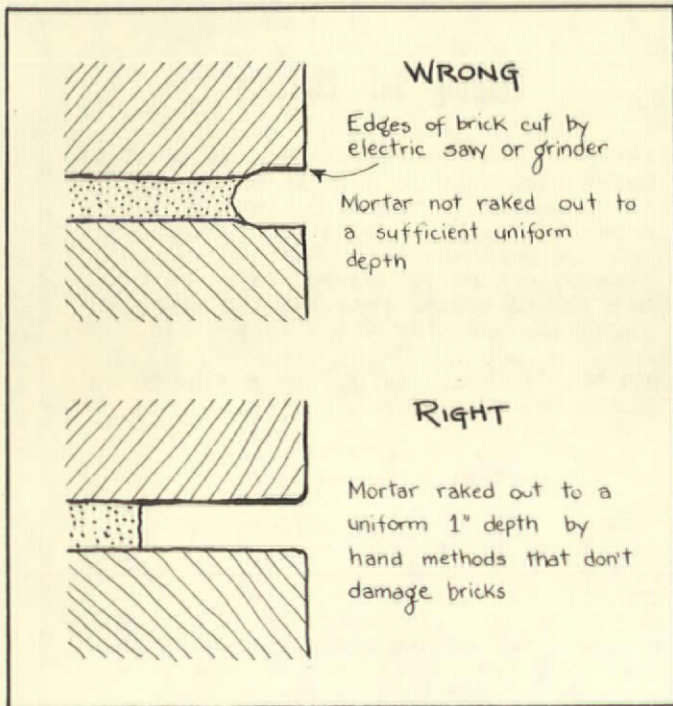
1 part portland cement
3 parts hydrated lime
12 to 20 parts sand

THIS MORTAR, though more rigid than an all-lime mortar, is still compatible with most early masonry work. There are some authorities who feel that you should only use an all-lime mortar in repointing early masonry. They cite the increase in rigidity caused by the addition of portland cement, and also claim that a better bond is obtained between the new and old mortar. This view, however, ignores the hydraulic reaction that apparently often occurred in old mortars, due to the many impurities present in both the sand and lime used.

EARLY MORTAR derives its color from three sources: (1) Impurities in the lime used. The lime could have come from anything ranging from fossil shells to limestone. (2) Variations in both the color and texture of the sand. (3) The effect of age and airborne chemicals on the mortar over the years.

YOU CAN MATCH the color of an old mortar by using chemical additives and coloring agents. But the match is only temporary. The additives will react differently to weathering than the old mortar—and so the patch becomes more apparent with time.

YOUR BEST COURSE is to try to match the original mortar materials as closely as possible—and then let time slowly blend the old and the new.



- Don't regard masonry repair and repointing as a do-it-yourself project. It is probably the most demanding form of brickwork, and only an expert mason should be used.

- Don't try to find a way to "do it cheaper." It cannot be done without sacrificing workmanship. Brick restoration is 95% labor and 5% material cost.

- Don't expect an invisible mending job. If the repair shows more than you had hoped, do not stucco or paint the whole thing out of frustration.

- Don't rush to apply sealants to a brick wall. You may find that you are not only keeping moisture out, but also in. This can create a whole new set of problems for you—including accelerated deterioration of the bricks.

AND NOW FOR SOME of the do's:

- Do realize that brick repointing and repair can be a slow and costly job. Obtain professional help if you have any special problems.

- Use compatible materials. Repointing with hard mortars in a wall laid with soft mortar will create a rigid area on the skin that will set up all sorts of new stresses and strains in the wall. Even in walls that were laid up with cement mortars, many experts feel that a high-lime mortar is best for repointing.

- Make sure that the mortar joints are raked out to a depth of about 1 in. by hand.

- Make sure that mortar joints are filled back properly. To fill in 1 in. of new mortar means it should be done in several layers rather than having them filled in at one time.

- Make sure that the joints are kept slightly recessed to avoid the creation of excessively wide joints. This can happen when the new mortar overlaps the rounded edges of weathered bricks.

- To create the appearance of age in the mortar joints, limit yourself to such methods as brushing or washing the joints before they are completely set up so as to expose additional sand to view.

- Reproduce the components of your old mortar as closely as possible. If your old mortar had bits of oyster shells in it, get some oyster shells, crush them and add them to your new mortar.

- Remember when using recycled brick to put the weathered side out. The side of a brick that has been buried in a wall will show no evidence of weathering. If the unweathered side is placed outward, you defeat the whole purpose of using old brick.

- Read as much as possible on the subject. One of the best sources is Preservation Briefs No. 2—"Repointing Mortar Joints in Historic Brick Buildings." You can get a copy free by writing to: Technical Preservation Services Division, Office of Archeology and Historic Preservation, Heritage Conservation and Recreation Service, U.S. Dept. of the Interior, Washington, D.C. 20240. ☽

Dr. Frederick Herman, AIA, has served as chairman of the Virginia Historic Landmarks Commission. He is also a partner in the architectural firm of Spigel, Carter, Zinkl, Herman & Chapman—Restoration Architects, 420 W. Bute St., Norfolk, VA 23510.

Removing Exterior Paint

By John F. Zirkle, Harrisonburg, VA

IT USUALLY DOESN'T TAKE an expert to tell when the paint on the outside of a house should be taken off before repainting. The obvious signs are peeling, cracking, scaling and alligatoring. Note that blistering is not mentioned. Blistering might indicate moisture behind the siding of the house and its consequent problems--more than just too much paint.

IF YOU EXPECT TO DO this work yourself (and we will discuss employing a contractor later) working from a ladder is the most practical method for one person alone. Three ladders are desirable, five and eight foot step ladders and a thirty-six or forty foot two-section extension ladder. If you do not own these, they are available usually at a local tool rental outlet. If necessary, you can get along with only one step ladder, but two sizes are more convenient. The extension ladder should be aluminum, but you, like myself, may prefer wooden step ladders.

Safety Rules

SAFETY IS YOUR MOST IMPORTANT consideration in using ladders. In placing an extension ladder against a house, the top of the ladder should be no more than four times the distance from the ground that the foot of the ladder is from the side of the house. In other words, the top of a ladder when placed against the house thirty-two feet above the ground should have its legs on solid footing about eight feet from the house. A two-section, forty foot extension ladder should not be extended beyond a length of approximately thirty-five feet.

AFTER WORKING FROM an extension ladder you may decide that it is easier to use your step ladders placed against the house just as you do the extension ladder, rather than trying to find a perfectly level patch of ground for all four feet of the the opened step ladder.

HERE I WILL REMIND you that sneakers and moccasins are not made for ladder work. Heavy soled shoes are going to be the most comfortable and best in the long run.

SO FAR I HAVE MENTIONED ONLY LADDERS as the means of reaching your work. This may be because, as a house painter, I grew up with the idea of working from a ladder. Some



persons may prefer to work from a scaffold. Metal scaffolding may be rented in many areas and the people renting it will be glad to show how it should be erected. This erection is usually a two-person operation, however.

Blow Torch Dangers

BY NOW YOU REALIZE that you are going to need plenty of time and energy, and that you should decide how you are actually going to remove the paint. Unless you want to risk becoming a volunteer fireman, eliminate any idea of using a blow torch. This includes either butane or gasoline style torches. They are risky around a new house and more risky around an old one.

IHAVE KNOWN PEOPLE TO set fire to their own homes with a blow torch. In one case, a man working from a twenty-four foot ladder, removing paint from a cornice, set fire to the remnants of a bird's nest. The nest had been located on the elbow of a gutter downfall, and was just beneath the cornice. The fire which started with the nest, went through a dust-filled crack between cornice and weatherboarding. Inside the house it became a full fledged attic fire, causing several thousand dollars in damage before it was stopped by a local fire department.

ANOTHER TIME A PAINTER using a blow torch on the base of an old porch column set fire to the inside of the column. The result was that a new column had to be custom-built to replace the one which had burned.

Stripping Devices

PAINT REMOVER AND SCRAPERS are a messy, expensive method and, in addition, takes two hands. A heat gun is excellent if you are standing on a solid surface and can use both hands to work

at the same time (Ed. Note: The Journal does not recommend the heat gun for exterior work as it is too slow.)

MY CHOICE OF METHOD is a heavy duty disc sander and the use of floor sanding paper. These sanders have a motor housing somewhat like an electric drill or automobile polisher, and they can be held in either hand, which is a practical advantage when standing ten to thirty feet above the ground. Both Sears and Black and Decker have these tools on the market. These sanders hold a sheet of paper 5 in. to 7 in. in diameter. The coarse or medium grit paper which should be used may be purchased at a paint, hardware, or floor sander rental store.

THERE ARE SOME PRECAUTIONS TO TAKE when using these machines. Get a heavy duty machine recommended for continuous use (they can be rented if necessary). Using extra pressure (pushing) on the working area of the disc can overheat and burn out the motors of good machines, not to mention the bargain-priced tools.

Let The Sandpaper Work

LET THE SANDPAPER DO THE WORK. Your extension cord should be OSHA or UL approved even though you will be using household current. This means that your electric source will be properly grounded. Nails protruding from the siding should be driven in before sanding is begun. Some type of safety glasses should be worn while using the sander. In addition to the fine powder formed by the dried paint being removed, the sandpaper will sometimes throw off sparks when passing over a nail head, but with the safety glasses you should not let this upset you.

THERE IS ALSO on the market a mechanical paint stripper called the "Thompson Roto Stripper." At the present time this is made in three industrial sizes. I believe that this tool, while efficient, is more difficult to use, and that the disc sander is by far the simplest to use.

REMEMBER THAT ONE of the big advantages in using a disc sander is that it can be operated with one hand. A disadvantage is the fact that since the working surface is round, there will be small triangular corner areas which are not sandable. A pull-type hand scraper rather than a broad knife or putty knife should be used in these areas. Wire brushes are not recommended. They make a fine noise but do very little work.

ONE OTHER CAUTION should be mentioned. Regardless of the method you use to remove paint, it is likely to be a hot, dry, thirsty job. Postpone serious liquid refreshment until you are through with the day's work.

Hiring A Professional

BY THIS TIME, you may have decided that this removal job is not for you, and that you will contract with a professional to do it. Experienced contractors are not likely to be enthusiastic about giving firm prices for this

sort of work. And if you run into an enthusiastic one, there is a good chance he is not experienced.

MAKE UP YOUR OWN SHORT SPECS. Use the phrase "remove paint" or "remove all paint" and not an expression such as "remove loose and scaling paint," which is capable of misinterpretation. The contractor should submit a certificate from his insurance agency or company that he has the necessary compensation and liability insurance required in your state. If not, you will have to make sure that your homeowner's policy covers anyone working on your property so that you are protected from damage suits.

ORDINARILY, I do not approve of telling a contractor what tools to use, but in this case, I believe you might specify what tools not to use in this manner:

"At no time shall a blow torch or similar tool be used for the removal of paint."

UNDER NO CIRCUMSTANCES would I recommend hiring a contractor who insists on using a blowtorch. If your contractor is using a disc sander, the specs should also include a clause about sanding marks. Since the disc sander is a rotary tool, it can leave circular marks on the boards if the operator works too hastily with too coarse paper.

LAST BUT NOT LEAST, if you still insist that you are going to take off all the paint on your house, you will have the satisfaction of knowing that you are doing the job right $\frac{1}{2}$

The Self-Stripping House

AS THE ARTICLE ABOVE indicates, stripping all the exterior paint from a house can be a tedious and/or expensive proposition. The alternative to stripping all at one time is the "Self-Stripping Process."

AFTER THE PAINT FILM on a house builds to 3/32 in. or so, it becomes so impermeable that the pressure of water vapor trying to push through will eventually curl and crack the paint. Given enough time, the house will strip all of its old paint all by itself.

WHEN REPAINTING, you make sure that all loose paint is scraped off, and that all bare spots are primed before finish coat is applied. Obviously, those areas that weren't scraped down to bare wood will have a tendency to continue to peel. So you don't regard painting as a once-every-eight-years event, but rather a continuing process. You stand ready every spring to scrape and spot-paint those areas that have peeled in the last 12 months.

THE DISADVANTAGES ARE: (1) There will be slight unevenness between the scraped areas and the old thick paint; (2) The touch-up paint may not blend perfectly with the paint that has aged for a year or two.

--Ed.

Restorer's Notebook

Painting Tips

HAVE YOU EVER STARTED a painting job only to find that the bristles on the brushes you used last time are twisted and bent out of shape? If you are using nylon brushes (the type designed for latex painting) there's an easy solution. Put the brushes under a flow of hot water from the tap. This will soften the bristles and return them to their original shape. If you want to paint right away, put the bristles under cold water for a moment to set them in the correct shape.

THE SAME PROCEDURE will also work to a degree with the bristle brushes used for oil-based paint. But the brushes can't then be used right away because the moisture that the bristles absorb will interfere with the oil-base properties of the paint.

Richard K. Ross
Abbey Decorating & Repair Corp.
Denver, Colo.

Preventing Rust

FOR MANY YEARS I tried to find a method to keep my tools from rusting. Out of all the methods I tried, the following was by far the most successful. Mix 2 oz. of paraffin in one pint of carbon tetrachloride. Apply this mixture with a brush and when it dries it leaves a wax-like film on the tool that will not attract dust or grime the way other rust inhibitors do. Also, it is less messy to handle and is easy to wipe off when the tool is to be used again.

Frederick A. Mohler III
Lancaster, Pa.

Cover Your Stripping

STRIPPING off old paint is often unpleasant and expensive because of the numerous applications of stripping agent necessary to remove and soften the paint. I was in the process of removing several layers of enamel from the creases and convolutions of a walnut table leg when the fumes of the paint stripper made their impression on my thought process. It is precisely the penetration of the liquid stripper into the paint that makes it most effective, so why let the stuff evaporate and make my life miserable by allowing it to spread itself around in the air where it is least useful?

I APPLIED A HEALTHY LAYER of stripper to the leg and wrapped the whole mess tightly in an old dry cleaner plastic bag. The stripper I

was using did not affect the plastic, but it is wise to test your stripper on whatever plastic (garbage bag, food wrap, etc.) you choose before wrapping the project. The plastic serves to hold the stripper closely to the old paint while preventing its evaporation.

AFTER TWENTY MINUTES I unwrapped the table leg and found that all the paint had been softened even in the deepest creases. A second application was necessary in only a few spots.

THIS PROCESS HAS PROVEN ITSELF useful on all stripping projects since then, regardless of the shape or size of the area being stripped. It allows the application of chemical stripper to proceed with reduced respiratory aggravation. It gives me the freedom to treat a large area without the fear that it will dry out before I have a chance to remove the loosened paint. It reduces the amount of stripper necessary to achieve the desired effect.

Peter Eliot
Portland, Maine

Removing Paint Spots

IF ONE DROPS a bit of latex, not alkyd, paint on a rug, and said paint isn't so fluid it goes directly into the pile, just let it rest. Don't run and get a wet rag and wipe or scrub at it, as all this accomplishes is to drive the paint deeper. Rather, just let it dry for at least four hours, covering it with a coffee can and blinking red lights if necessary to prevent traffic from stepping on it. Most times, the paint will dry in a blob on the tip of those members of the pile it covers, and can be neatly lifted off with the aid of a razor blade. The tiny amount of short pile won't be noticed.

ON THE OTHER HAND, if a rag is used and much vigorous rubbing follows, a light stain is almost inevitable. Further, in loose pile rugs, such as shags or floppy loop piles, vigorous rubbing will result in a bunch of the short fibers becoming untwisted and the whole area will have the appearance of a batch of lint. This takes combing and possible razor blade shaving to remove, and neither remedy will get rid of it all. The result is a blemish, in color and texture.

David E. Hardingham
Reidsville, N. C.

Got Any Tips?

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

Products For The Old House

Helpful Publications

Decorative Composition Embellishments

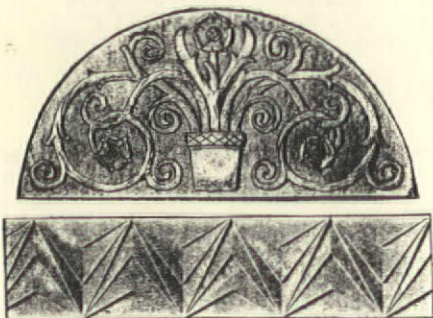
THERE IS A NEW SOURCE for composition ornament. The Lily Collection features hundreds of moulds for friezes, cornices, mouldings, beams, crestings, cartouches, ceiling medallions, niches, etc.

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THE ORNAMENTS are for interior or exterior use. Upon request, exterior ornaments will be sprayed with clear vinyl acrylic as a weatherproof.

TO ORDER THE CATALOG, send \$8.00 to: The Lily Collection, Dept. OHJ, 1313 N. Main Street, Ann Arbor, Michigan 48104. Telephone: (313) 668-6324.



Gaslighting In America

GASLIGHTING IS THE SUBJECT of a new book that focuses on the types and styles of gas fixtures that appeared in the rooms and on the streets of 19th and early 20th century America.

THE BOOK IS actually a copy of a report to Federal agencies and local and State governments concerning techniques for restoring these fixtures in historic properties as well as guidelines to prevent anachronisms.

WHILE ALL THAT SOUNDS RATHER dry, the book is anything but. As written by Denys Peter Myers, it is an extremely readable account of the history of gas lighting which provides an interesting and sometimes amusing commentary on the needs and decorative aspirations of our 19th century citizenry.

THERE ARE 119 full-page plates. Most are from early catalogs depicting gas fixtures (from

the simple iron "T" to the elaborate crystal chandelier) but there are also many drawings and photos depicting ballrooms, saloons, rooms of noted people, and street scenes.

"GASLIGHTING IN AMERICA" is a 279-page softcover book with bibliography and complete index. It is \$5.25, plus \$1.00 postage. Order from: Preservation Resource Group, Inc., 5619 Southampton Drive, Springfield, Virginia 22151.



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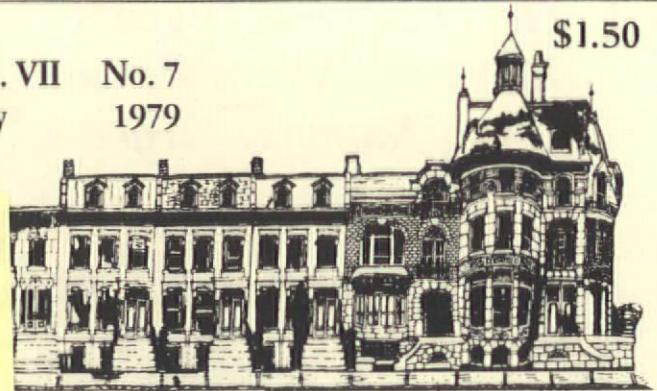
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Antiques For The Antique House

OHJ
1979-07



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Coming Next Month

REPAIRING A COLONIAL ROOF

By Catherine & Donald Minnery, Vermillion, S.D.

WE LEARNED the hard way about making repairs in stucco. Before sharing our experiences with other Journal readers, however, we wanted to expose our repair work to the rigors of South Dakota's winter and spring weather. Although this weather has been harsh, our repair work has held up well.

OUR HOUSE is a somewhat plain stuccoed 1½-storey bungalow-inspired structure built around 1915. When we purchased it in 1976, we knew some work was needed on the exterior. Two small areas of the stucco had cracked, and some of the lath was exposed. But once we started work on the house, it became clear that every side of the house needed some work. We ended up replacing nearly all of the front facade.

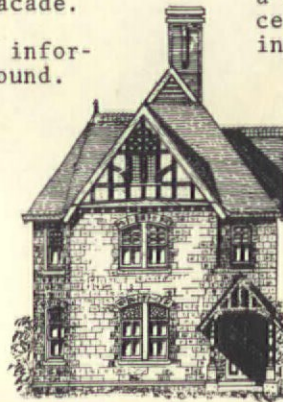
WE SEARCHED IN VAIN for helpful how-to information on stucco repair. Little was found. And none of what we found dealt with matching texture of large areas of new work to the old stucco. Our stucco appeared to have been applied in at least two coats—and small chips of stone and perhaps shell chips were applied to the top coat before it dried. It appeared that we would have to improvise a method using available materials.

FROM OUR PREVIOUS RESEARCH, we knew that a "soft" stucco mortar would

probably be desirable because it would be more elastic than a rigid portland cement mortar (see OHJ, June 1979 pp. 66-67). An elastic stucco would seem to have a greater chance of adhering to the wood lath during the wood's swelling and shrinkage with changes in moisture. But the stucco would also have to withstand moisture without weakening. So we decided that a good first or "scratch" coat would be:

- 1 part lime
- 1 part portland cement
- 5 parts sand

WITH THIS STARTING POINT, we purchased a half ton of sand, a half ton of pea gravel, a 50-lb. bag of lime and a 50-lb. bag of cement. We used a wheelbarrow as a mixing container, and a hoe served as our mixing tool. To apply the stucco, we purchased two trowels.



WE STARTED OUR WORK at the back of the house—reasoning that our initial experimental work should be in the least conspicuous area. Our application technique did indeed improve markedly as we gained experience, so we were very happy that our initial efforts are relatively inconspicuous.

(Continued on pg. 77)

The Old-House Journal Receives Award From The National Trust

THE STAFF AT The Old-House Journal, busily making preparations to celebrate our sixth anniversary, was delighted to learn that we had been selected to receive a coveted award from The National Trust for Historic Preservation.

THE GORDON GRAY AWARD for achievement in preservation was presented by James Biddle, president of the Trust.

MR. BIDDLE, in announcing the award during ceremonies at the Renwick Gallery in Washington, D.C., said in reference to The Journal: "This eminently practical guide addresses the most basic questions of renovation and maintenance for the owner of an historic house. Not only does it fill a vital need for the exchange of information among preservationists, but its usefulness is helping to attract new people to the field. You are rendering an outstanding service to the cause of preservation."

A TOTAL of 16 individuals, organizations and corporations were honored at the annual awards ceremony. The National Trust presents the awards as part of its mission to promote historic preservation in the United States.

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THE TRUST IS AN EDUCATIONAL and charitable organization chartered by Congress to help Americans preserve sites, buildings and objects of national significance or interest, and has more than 155,000 members.



The staff of The Old-House Journal happily exhibits the Gordon Gray Award presented by The National Trust. The award consists of a certificate plus a silver goblet—a replica of a goblet ordered from London in 1777 by Justice Benjamin Chew. The

original is in The Trust's collection at Cliveden—Chew's country house in Philadelphia. Left to right are: Joan O'Reilly, Charles Johnson, Clem Labine, Carolyn Flaherty, Mike Carew and Patricia Poore.

(Photo By Jim Kalett)

An Old Stone Federal House Redeemed

By Barbara Schiller

THE HOUSE PROUDLY BEARS a plaque proclaiming its birthdate. The stonework is beautifully crafted. The trim is carefully painted. Through the windows one can glimpse mellow old furniture. The grounds and garden are a delight.

IF YOU'VE EVER WONDERED about the lucky people who can afford to live in a house such as this, here is the story of one such family--Margaret and Carey Brush of Cooperstown, New York.

IT IS NOT A STORY of unlimited wealth. Carey is one of the staff of nearby Oneonta College. During the summers the Brushes rent rooms to people taking seminars at the New York Historical Association. It is, however, a story of great devotion and unceasing work to restore Greystone, their thirteen-room late-Federal style house built in 1831.

GREYSTONE HAD FALLEN on hard times even before the New York Historical Association had received it as a bequest in 1970. Feeling it wasn't feasible to retain ownership, they put it on the market in 1971. In March of that year the Brushes were shown through the house. The walls were smoked and streaked from the malfunctioning furnace and leaky roof.

FIFTEEN DISHPANS were placed in various positions in the attic in an attempt to catch the leaks. Much of the wallpaper was hanging in strips from the walls. The plaster was cracked. The kitchen was a nightmare. The second and third floors reeked of bat guano. The garden was a jungle. At least seventy five window lights were cracked. Carey could put his arm in up to the elbow between the wooden frames and the exterior stone walls of most of the windows.

THE BRUSHES BOUGHT GREYSTONE. It was the realization of a dream. For many years they had talked of buying and restoring an historic house. Now they had one.



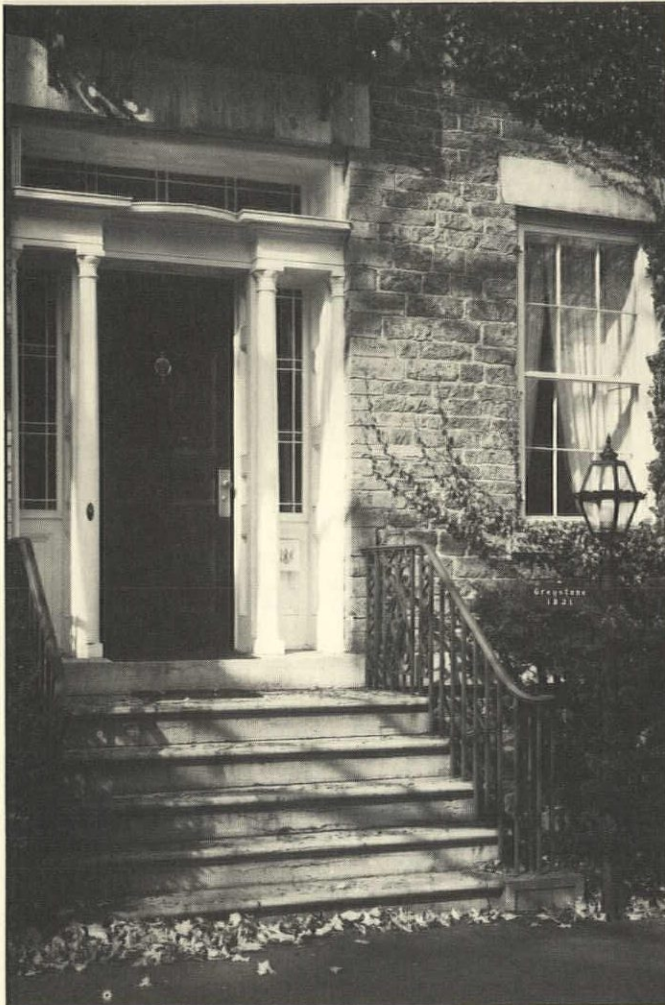
IN MAY, their twenty-one year old son, Bart, moved in and camped out for three months while doing all the dirty work involved in cleaning out the accumulation of a decade of neglect.

IN AUGUST, Margaret and Carey moved in. They had no kitchen, but they did have an ambitious five year plan. Rising costs and inflation have extended that plan another five years.

THEY PLANNED TO DO all the preparation work before the professionals came on the job to upgrade the plumbing, the heating and electrical systems. Chimneys had to be replaced. The garden was to be weeded, the shrubs cut back a third and a fence built in the 1930's to be scraped and sanded. The entranceway



The original section of Greystone is a forty-square-foot structure built of grey limestone. Dormers, porches and a wooden kitchen wing were added in the 1890's.



The main entrance is the only touch of richness on the classically simple facade. The paint was burned off the entranceway and it was painted white with a black trim.

was to be restored, too. But that first year the major work was centered on Greystone's interior.

SO THE BRUSHES scrubbed down everything, steamed off the old wallpaper and burned off all the paint. They learned by doing. The living room had been painted a light grey. Not very pretty, so Carey carefully painted over it. By morning his handiwork was peeling off. The light grey color wasn't paint, it was grease.

OF NECESSITY the second year was devoted to work that required less expenditure of money-- garden shrubs were cut back and the lawn reseeded. Pointing was begun on the exterior stone walls.

MORE WORK WAS DONE UPSTAIRS during the third year. New fixtures were installed in the bathroom. The master bedroom was completely renovated and restored--ceiling, walls, floors and fireplace. Outside, fences were restored and new gates put up. All exterior blinds were removed until they could be stripped and repainted.



The main entranceway, circa 1867.


THE THIRD YEAR saw the wooden trim of the stone part of the house painted and some storm windows installed.

THE FOURTH YEAR was the year of the bats. 150 gallons of bat guano had been removed from the attics a few years before, but the smell remained--overpoweringly so in one of the bedrooms. The chimney which had been so helpful to the bats had to be scraped, sanded and remortared, the room totally renovated.

RESTORING THE EXTERIOR OF Greystone is a long term ambitious project--one that the Brushes feel will give them great satisfaction. The fifth year was Operation Dormer. Leaky dormers were removed and the original Federal style hipped roofline was restored. More work was done that fifth year to restore the exterior appearance of Greystone. Porches built in 1890 were removed, grey steel clapboard siding was applied to all exterior walls of the kitchen wing and the 1890 windows were replaced with the six over six windows in the same style as those in the stone part of the house.

SINCE THEN THE BRUSHES have done some interior decoration, and work in the garden. Their son is building a windmill so they can look forward to having their own source of energy.

OVER THE YEARS while all this work was going on, Margaret set about researching the history of Greystone, both as an aid in restoration and as a labor of love. As she says:

"FOR NEARLY A CENTURY AND A HALF Greystone has endured. For most of those years, it has been well preserved, but twice neglect has endangered its existence. Now, once again, it is beginning to exhibit a vibrant and unified appearance." 

(Stucco—Cont'd. from page 73)

FOR REMOVING the loose stucco, we used a claw hammer and a small chisel. Sheets of plastic were used as dropcloths around the bottom of the house; this made for easier clean-up. To remove the stucco, we chiseled a clean line around the damaged area. Then with the hammer claw—or hammer and chisel—we pulled the loose stucco off.

THE LATH USED on our house consists of wide planks with keys or grooves cut into them. All of the old material had to be removed—especially from the grooves in the lath so that the new material would have a firm anchor.

FITTING THE CHISEL under the loose stucco, we could slide it along the groove and remove the surface material plus the stucco keys in the grooves fairly easily. At this point we should recommend that anyone doing this work should be wearing a good pair of safety goggles, heavy work gloves, and a hat with a brim.

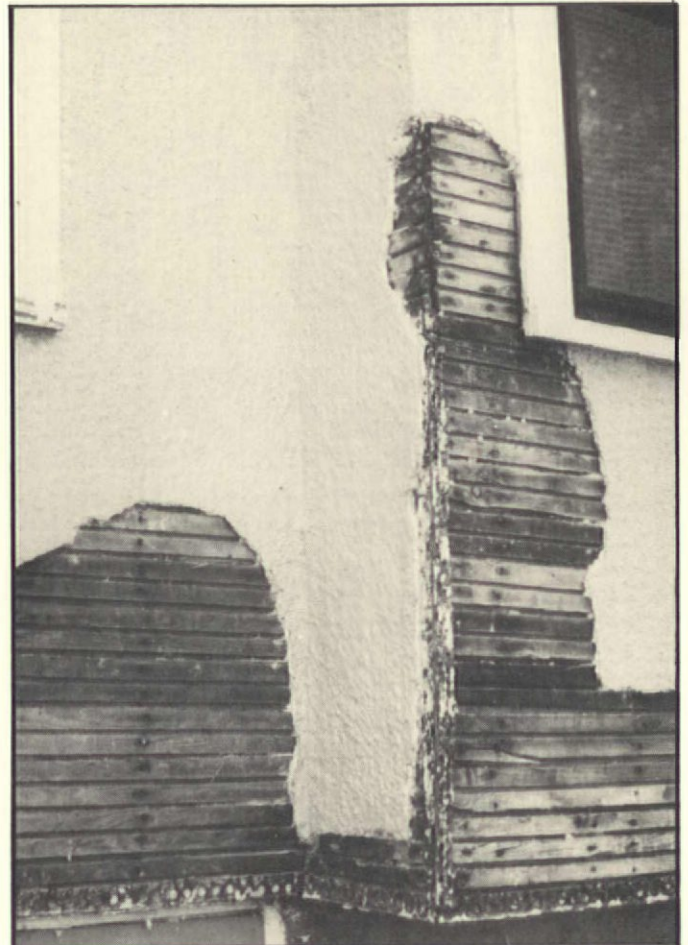
DURING THE REMOVAL PROCESS, don't get carried away and take off too much stucco at a time. If a heavy rain should come along, you can get a lot of water damage inside your house. Generally, we removed only what we knew we could replace that day or the next.

The Repair Sequence

THIS WAS THE SEQUENCE we normally followed in the stucco repair process:

- Loose stucco removed.
- Lath swept clean of all loose material.
- Any small areas of lath that were damaged were repaired by nailing wire lath in place.
- Any rusted corner beads were replaced with new corner beads.
- Wood lath was dampened by spraying lightly with a garden hose set for fine spray.
- Apply first coat of stucco (scratch coat)
- Cure first coat for several days, sprinkling it with water from time to time if direct sun or dry weather causes stucco to dry too rapidly.
- Apply top coat.
- Wait 1-3 hours, then wire brush top coat, using mild pressure. This exposed the pea gravel that gave the stucco texture.

OUR FIRST ATTEMPT at stucco application was rather comical. An apprehensive friend watched while we awkwardly tried to pretend we were masons. Most of the stucco mortar was splattering onto the ground. Our friend mercifully left. We soon realized that we were missing something other than experience: We needed a board to hold the stucco mortar close to the wall while we pushed it into place with our trowels. Masons call this mortar board a "hawk."



Loose stucco has been stripped, exposing the lath below. All stucco adhering to the lath must be removed so that new material will bond tightly.

WE CONSTRUCTED our own hawks out of some shelving pine and some thick dowel rod. Armed with these new tools, we soon had our first area covered.



We noticed that a steady pressure is needed for easy application. A gentle but firm pressure with the trowel plus a smearing motion (like icing a cake) gave best results. This also produced ridges in the scratch coat that help the top coat to adhere tightly. In addition, the scratch coat should be scratched with a piece of wire lath or the tip of your trowel to create cross-hatch markings on the surface to create bonding places for the top coat.

Matching Stucco Texture

MATCHING THE TEXTURE of the existing stucco required much trial-and-error. We mixed test batches of the top coat stucco mixture, varying the amount of pea gravel. The mixture we finally used contained the following:



Don Minnery is applying the finish coat over the scratch coat. Dark section at bottom is the finish coat that has already been wire-brushed for texture. Light area to the right is the original painted stucco.

- 1 part lime
- 1 part portland cement
- 4 parts sand
- 1 part pea gravel

THIS MIXTURE, plus the wire brushing technique mentioned earlier, gave a satisfactory match between new and old work.

THE ONLY PROBLEMS with our work that we noticed was that a few hairline cracks showed up in a couple of places...and sometimes the new patch shrank a bit from the old stucco. We attributed this to too much water in a few of the batches of mortar, and an excessively fast rate of curing caused by some hot dry weather. To fix the hairline cracks, we filled them with architectural grade caulk before painting.


THE ONLY OTHER PROBLEM we had was in developing uniform pressure with the wire brush when we were brushing the top coat. On a few occasions, we scrubbed too hard with the wire brush near the edges of the patches, which meant that the texture didn't match as closely as we would have wished.

WE APPLIED SEARS Masonry Primer to all the patched areas, following directions on the can as to proper curing time to allow for the stucco. We followed with a coat of regular masonry paint over both the old and new work.

Costs and Cats

OUR PROJECT, though ultimately successful, was at times quite scary. Seeing the front of the house stripped to its bones was frightening. Neighbors kept commenting on our courage. One other problem that we encountered, which hasn't been mentioned earlier, was keeping our cat—and all the neighbors' cats—out of the sand pile!

THE BIGGEST BONUS for us was the economy of the entire project. We ultimately purchased 2½ tons of sand, 1 ton of gravel, 250 lb. of cement and 250 lb. of lime. The entire cost for this material—plus the tools we mentioned—was about \$95.00.

ALTHOUGH IT WAS HARD WORK, we both agree that the project was more enjoyable than stripping the 8 fluted legs on our dining room table! 

More About Stucco

By The Old-House Journal Technical Staff

STUCCO HAS BEEN USED since Egyptian times as a coating for the inside and outside of buildings. So it can certainly be thought of as a "traditional" building material. Up until the late 19th century, it was most common to use stucco as a coating over brick and stone walls. With the advent of the Tudor revival and bungalow styles, stucco was applied over wood (and later, wire) lath.

BRICK OR STONE BUILDINGS of 18th or 19th century vintage sometimes had a stucco or "parging" applied as a waterproofing sealer. Often, this stucco was a simple lime and sand mortar—identical to the "soft" mortars used in the construction of masonry walls up to the mid-19th century. Sometimes animal hair was added to the stucco mixture for added mechanical strength.

HOMEOWNERS with an old stuccoed building who find that they have brick or stone underneath are often seized with the urge to strip off the stucco "to expose the natural beauty" of the stone or brick. Such a stripping operation should be approached with GREAT CAUTION—and only after consulting with a masonry expert who is familiar with old buildings. The stucco was doubtless applied for very sound reasons, and stripping it off could cause serious water penetration problems inside the house. An added consideration is that it is almost impossible to remove stucco from masonry (especially brickwork) without some mechanical damage to the stone or brick and the mortar joints.

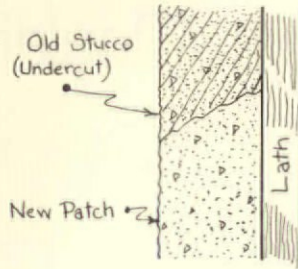
ALTHOUGH EACH STUCCO REPAIR problem has to be analyzed in terms of its own peculiarities, there are a few general principles to be observed in every case:

1. Priority should be given to preserving as much of the original fabric as possible. Many stuccos will last 100 years or more. The problem that usually arises is that the stucco comes loose from its lath or substrate. Defective areas should be cut out and new patches put in place.

2. When patching stucco, the replacement material should match the original as closely as possible in composition of the mortar, texture

and physical appearance. For example, a hard portland cement mortar would be inappropriate for patching an old lime-sand stucco, since different rates of expansion and contraction are likely to cause the new work to pull away from the old.

3. When cutting out defective areas for patching, the old remaining stucco should be undercut to provide firm bonding for the patch. Feathered edges between new and old work should be avoided, as these are very prone to cracking.



Lime or Cement Stucco?

OBVIOUSLY, the biggest problem in setting out to patch stucco is determining the composition of the old work. Stucco that was applied after 1870 is more likely to be based on portland cement rather than lime—but date alone is far from an infallible guide. Here is one test for a "soft" lime stucco:

TAKE A SMALL SAMPLE and crush it into a fine powder. Then put the powder into a glass with hot water and stir vigorously. If the bulk of the stucco dissolves, leaving sand and other aggregate at the bottom of the glass, then you are dealing with a lime-sand stucco.

AN ALL-PURPOSE STUCCO for patching the traditional lime-sand stucco would be:

BASE COAT—Two coats doubled up to a thickness of 5/8 in.

- 5 parts hydrated lime
- 15 parts aggregate (match to original)
- 6 lb./cu. yd. hair (½"-2" length, free of dirt, grease and impurities)
- 2-3 parts (maximum) Type II portland cement for workability

FINISH COAT

- 1 part hydrated lime
- 3 parts aggregate

THE USE OF ANIMAL HAIR to strengthen stucco was common (but far from universal) in 19th century work.

Repairing Cement Stucco

PRACTICE VARIES between applying stucco in two coats or three coats. In general, the rule has been to apply stucco in two coats unless a fancy special finish is called for. In that case, a third coat would be used.

AN EARLY 20th century masonry manual gives these instructions and formulas for stucco work:

FIRST COAT (Scratch Coat)—3 parts sand, 1 part cement, hydrated lime equal to 10% of the weight of the cement. Add small amount of cow

hair. Apply 3/8" to 1/2" thick and scratch it with trowel or piece of wire lath.

SECOND COAT (Brown Coat)—Apply following day. Dampen first coat, and apply brown coat to 3/8"-1/2" thickness, using same formula as above. Float surface with wooden float and lightly cross-hatch. Spray surface lightly to keep it from drying out for three days.

FINISH COAT (applied if special decorative finish is required)—Apply after brown coat has dried for a week. Use same mixture as first coat. Before applying the finish coat, the brown coat should be moistened with a garden hose so that it doesn't draw water out of the fresh stucco. Thickness of finish coat can vary, depending on texture sought, but it should always be at least 1/8 in. thick.

IF ONLY TWO COATS ARE BEING APPLIED, the second coat can be applied as soon as the first coat is stiff enough to accept the top coat; i.e., after some of the moisture in the scratch coat has evaporated but before it has set completely.

THE HIGH PORTLAND CEMENT CONTENT of this stucco makes it "hard." This would be appropriate for patching buildings where the stucco in place is based on portland cement.

Other Stucco Hints

BRICKS CAN ABSORB all of the water out of a stucco mixture, causing cracking and stucco failure. Thus, when applying stucco over brickwork, the bricks should be thoroughly wet down with a hose so that no water will be drawn out of the stucco. In addition, the mortar joints should be raked out to a ½" depth.

IN MIXING STUCCO, care should be taken not to add too much water; this will lead to cracking. In general, the dryer the mix the better. Adding too much cement or lime in an attempt to make the stucco "stronger" may also lead to cracking. Any mixture that has a richer cement content than the 1:3 cement/sand ratio called for in most formulas may cause trouble. Also, any mixture that is leaner than 1:4 should not be used.

PROBABLY THE MOST IMPORTANT factor for stucco success is avoiding too fast drying out of the coats. Thus the weather is critical. An overcast day is best for stuccoing. If the sun is out, try to work in the shade, following the sun around the house. Keeping the stucco moist by misting it with a hose will mitigate the impact of direct sun. Professionals sometimes hang canvas on their scaffolding to keep the direct sun off freshly applied stucco.

TRY TO HAVE enough help on hand so that you can complete the coating of each patch in a single session. You should avoid seams in the stucco coating caused by stopping and starting at different times. ☺

A Cake Decorator Method To Replace Plaster Mouldings

By Barbara Schiller

FOR SEVEN YEARS the brick Queen Anne house stood vacant--prey to squatters, vandals, fire, wind and water. Victim of a family feud, the four-storey rooming house had become a dangerous eyesore on an attractive street in Brooklyn's Park Slope Historic District.

IN THE SPRING of 1976 the street association and five individual homeowners brought suit against the owner for depreciation of real estate values on the block. The judge adjourned the case until fall on condition that the street association be allowed to take measures necessary to preserve the building until a buyer was found. That summer when Janice and Greg Etchison offered to buy the house, the street association helped to promote the sale.

GREG AND JANICE were exactly the sort of owner-occupiers the street association wanted as neighbors. Greg designs theater sets and costumes and manages a summer theater. Janice is a high school chemistry teacher.

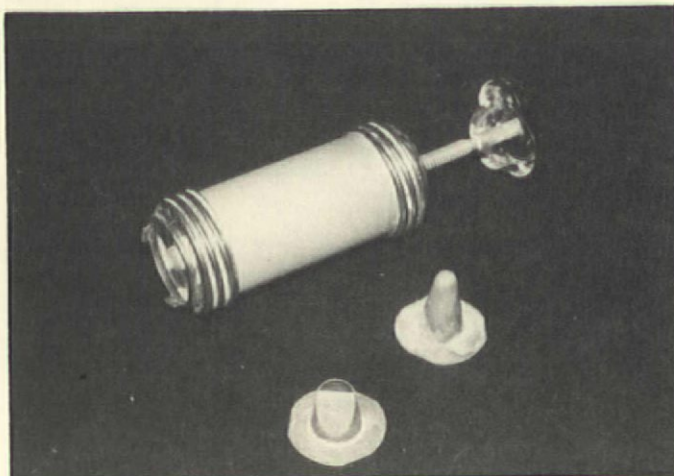
WHEN THE ETCHISONS moved into their house in January 1977, restoring its turn-of-the-century details had to be low on their list of priorities. There was not one surface in the entire house--ceilings, walls, floors, stairs--that did not have to be redone.

TO ACCOMMODATE 18 to 20 people, the well-proportioned rooms had been divided up with partitions. Each room had a sink and a stove. The old plumbing, the debris, the partitions, all had to be removed by Greg and Janice. The back yard had been a dump for the former occupants and for some neighboring renovators who had deposited bathtubs, sinks, rotted lumber and even an uprooted tree.

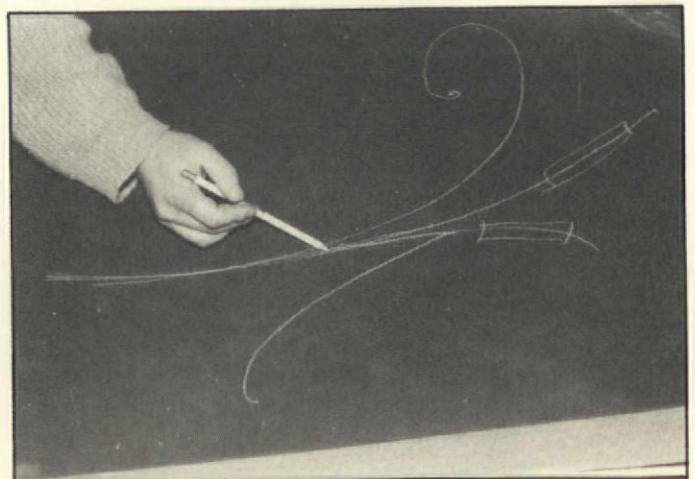
A Long, Cold Winter

PLUMBERS, ELECTRICIANS AND GLAZIERS were called in, but no one seemed to want to start work during that exceptionally cold winter. Greg, Janice and their baby were living on the first floor of what would eventually be their six-room duplex apartment, with only an old kerosene heater found in the cellar to keep them warm. Ironically, when they finally got someone to service the eight-year old furnace, it needed only a professional cleaning to be returned to working order.

THE ETCHISONS had to renovate from the top down since they needed the income that a rental unit would provide. So they camped out in makeshift quarters without a real kitchen or formal bathroom while Greg designed and constructed an attractive one and a half



The cake decorating kit is a standard item purchased at the local hardware store. Greg uses two different nozzles to create thick and thin lines.



For demonstration purposes, Greg has drawn the bulrush design with white chalk on black cardboard. On an actual surface use colored chalk or pastel crayon.



Before loading the compound in the cylinder mix it well to avoid lumps. When the cylinder is full thump it on a hard surface to get out all the air.

rotted beams and floors and destroyed plaster, so before they could think in terms of a kitchen and bathroom, heavy construction work had to be done. A flight of stairs was shored up, plaster was removed to the lath, floors were laid. For two summers work stopped when Greg and Janice went to Pennsylvania where he is executive producer for the Millbrook Playhouse.

The Decorative Elements

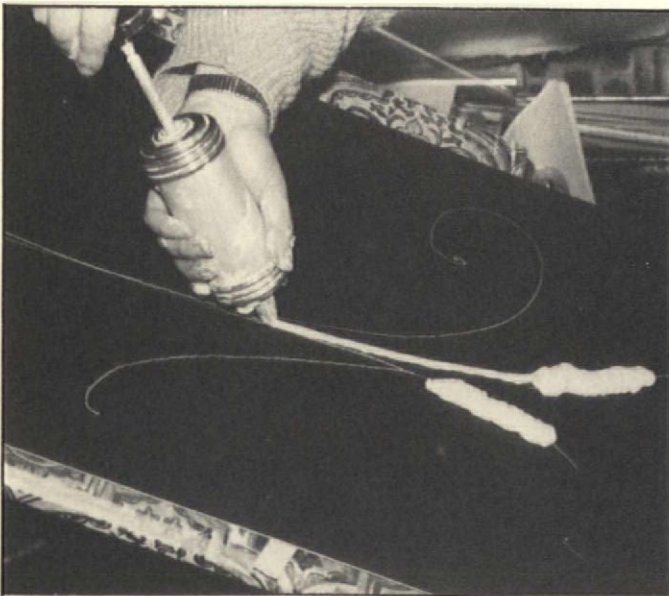
BY SEPTEMBER 1978 the Etchisons were far enough along in the renovation to start work on the decorative elements of their 1898 house. They set about stripping the massive oak front door, the panelling in the vestibule, the wood screen in the entrance hall. They needed a pair of doors for the living room--the original ones had been sawed in half. A neighbor told them about a 16-panel set that had belonged to Mark Twain's daughter and was now in a gatehouse in Tarrytown, New York. The Etchisons bought the doors which fit the style of their house as if made for it.

floor duplex. A studio apartment and terrace are still in the planning stage. Although his theater work equipped him with the know-how to do design, construction and decoration, Greg called in professionals for plumbing and electrical work.

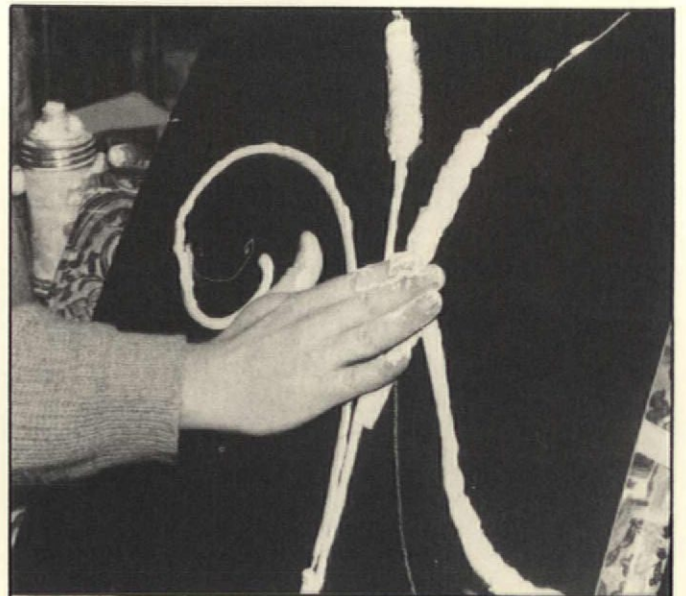
ONCE THE DUPLEX WAS RENTED, the Etchisons concentrated on their own quarters. Water had

ANOTHER NEIGHBOR GAVE GREG the inspiration for an ingenious method of restoring plaster ornament--a project he had been giving considerable thought to.

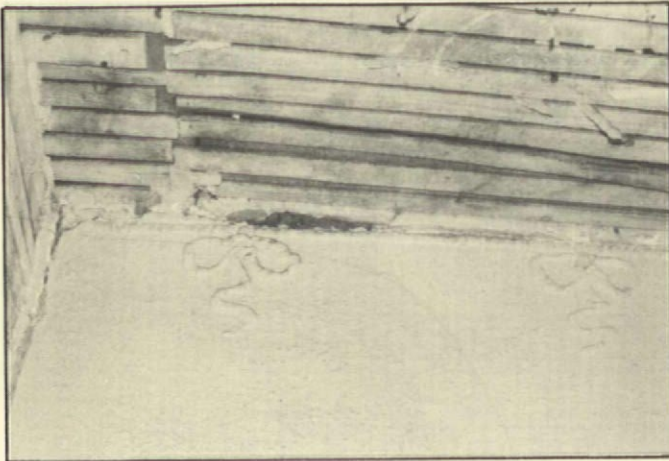
WHILE VISITING ACROSS the street, Greg examined the plaster floral motifs on the walls. "They looked like the decorations on a wedding cake. And that gave me an idea. Why not use a pastry tube to decorate the walls?"



After using the wide-mouthed nozzle for high relief, Greg switches to the smaller nozzle for the thin lines of the stems. Mistakes can be removed with a putty knife.

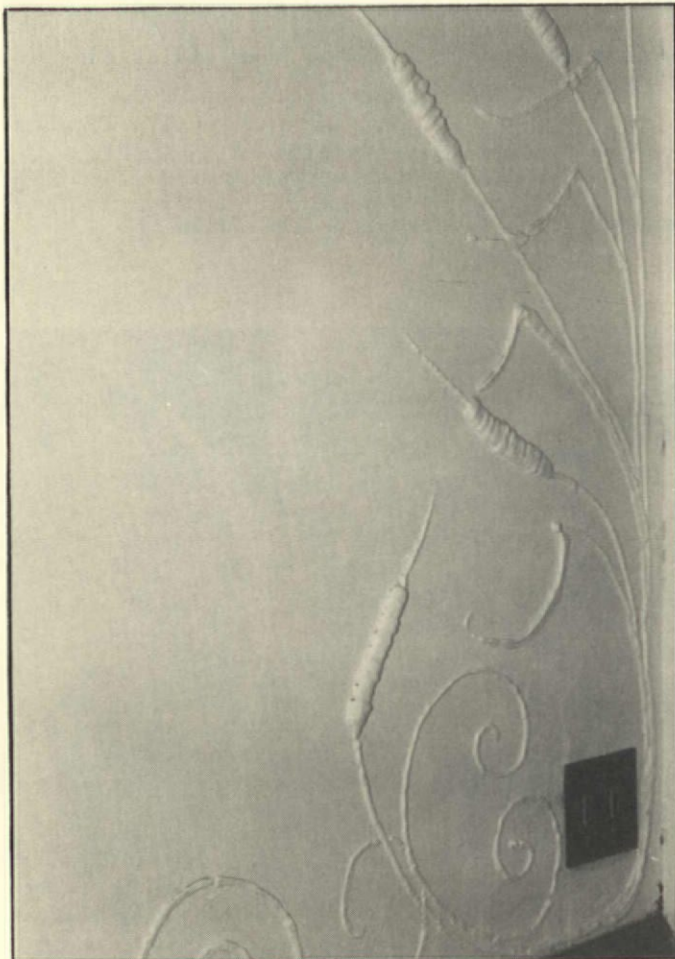


Pressing the motif gently with the fingertips helps it adhere to the surface. In doing the actual work, this should be done about four hours after making the motif.

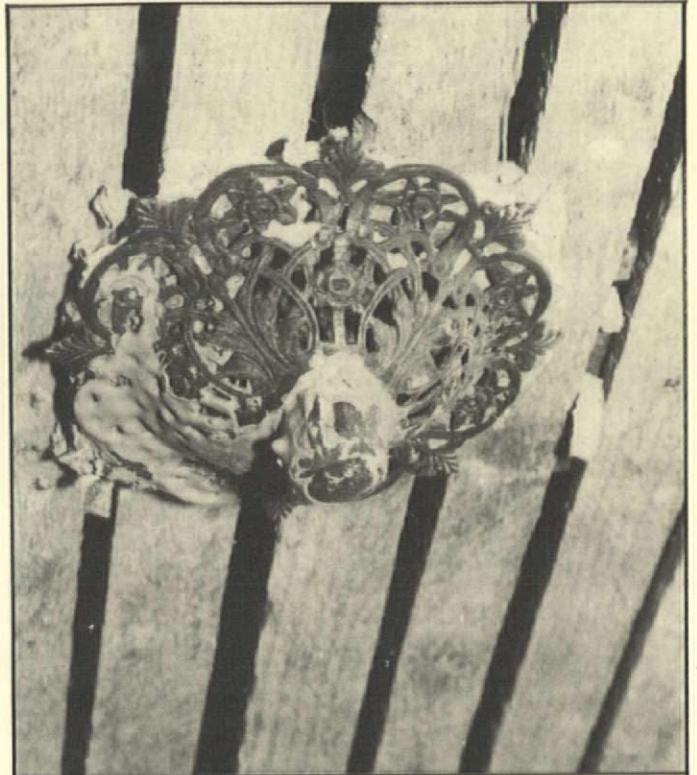


Two plaster bow ribbons on the second floor wall were all that remained of the original decorations.

AFTER EXPERIMENTING with a cake decorating tube at a local hardware store, Greg came up with what he calls "a new and exciting use of joint compound for the amateur plasterer."



Restored bulrush motif on the vestibule wall--it also appears in the entrance hall.



Walls and ceilings taken down to lath are typical of the work that had to be done throughout the house. In the process this unusual brass gas jet was uncovered. It had been hidden with layers of paint and plaster.


(Photos by Alan Pearlman)

Using the Decorating Kit

TO MAKE AN EXACT REPLICA of a decorative motif, do a drawing, photo or rubbing of the original for reference. Then with a sponge roller and a slightly watered down joint compound, roll out a textured stucco surface to match the existing wall or to create a new surface. The textured stucco is important since it holds the plaster motifs to the wall.

WHEN THE SURFACE IS DRY, draw or trace the design with colored chalk or pastel crayon. For a ceiling molding or a repeat design, make a stencil and tape it in place. Then lightly spray it with floral spray, a water-based paint available from garden supply stores. Moisten the area to be worked on and keep it moist.

USING A CAKE DECORATING KIT filled with joint compound, begin tracing the lines of the motif, working from the top down. Squeeze it out slowly for high relief, faster for low relief. If something goes wrong, remove the mistake with a spatula or putty knife.

WHILE THE ORNAMENT is still moist, gently press it to insure proper adherence to the wall. Allow it to dry. During the process, cracks will appear. They may be pressed closed while still moist or filled in when dry with additional compound. 

Restorer's Notebook

Liquid Solder

MY 80-YEAR-OLD STAINED GLASS WINDOW was accidentally damaged leaving an 8-inch hole in the center and many small pieces broken. However, the original leading was intact. After matching the colors and cutting the pieces of glass using the tracing-paper method, I wanted to replace the pieces without removing the entire window from its frame. (This would have meant a major carpentry job.)

WE BEGAN TO SOLDER, using the conventional method of holding the solder-wire up to the edge of a piece of glass while heating it with a soldering iron. We realized that the solder wouldn't fall into the crevices of the leading already there. Instead it fell to the floor.

WE FOUND THE SOLUTION at the local hardware store: A tube of non-metallic liquid solder. The solder has the consistency of toothpaste and can be squeezed into the existing leading. We used a Q-tip to spread it. After the solder hardened we scraped the excess from the glass with a razor blade.

Valarie Stewart
Richmond Hill, N.Y.

More Ideas

On Removing Wallpaper

WE TRIED USING CHEMICALS and scrapers to remove painted wallpaper, but found that the quickest method was to use a rented wallpaper steamer. Propane-powered steamers are possibly faster, but electric ones work just as well.

FIRST WE "SCRATCHED" THE WALLPAPER with very coarse sandpaper. If you have to remove a number of layers, it's best to scratch the surface again between steamings.

ONE CAUTION: steam condenses in the pan and drips down the wall. Wear long sleeves and gloves to avoid being burned. Never work under the pan (as in ceiling stripping)-- use a ladder so you can work in front of you rather than over your head.

THESE STEAM MACHINES can be rented from paint stores and large hardware stores.

Tom and Rica Vogel
Michigan City, Ind.
-and-
Marlene Cullen
Petaluma, Cal.

MY WIFE AND I HAVE FOUND that a common 2-inch wood chisel is a handy tool for removing layers of painted wallpaper. It is heavy enough to cut through to the plaster, and easy to use in long broad strokes for quick removal. This way water is not necessary for loosening the paper. Afterwards paste residue and scraps should be wiped away with a damp sponge.

THIS METHOD WORKS for those of us who are restoring on a tight budget and cannot afford the cost of renting steamers for days at a time-- and we can work at our own pace.

BE CAREFUL not to gouge the plaster underneath -- keep the chisel sharp!

David McConkey
Terre Haute, Ind.

Sealing Fence Posts

IN THE ARTICLE "Building A Picket Fence" (April 1979), it was recommended that treated posts be set in concrete. There are also other less expensive ways to seal wood posts. And of course if you have a big country yard to fence, setting each post in concrete would be too time-consuming.

I COAT EACH POST with roof cement to above ground level and let it set. For square posts I even add roofing paper. Roof cement is what saves your house; it will do the same for your post. Be sure the bottom surface is coated too.

AFTER SETTING THE POST in the hole, fill the space gradually with dirt, always tamping the ground firmly. Fill to slightly above ground level. This careful tamping will get rid of all voids that could hold water.

PRESERVATIVES ALONE won't keep water out of wood indefinitely. That's why I like to use roofing cement and roofing paper to create a waterproof membrane. Also, when concrete is used, the wood can shrink from the concrete, creating a pocket for water to enter.

ANOTHER NOTE: Don't just use a spacer gauge for pickets and call them plumb. Posts and pickets must be at a true plumb--especially at corners and gates. Use a level to check for vertical at least every six pickets. And use heavy nails (#8d on one-inch stock), not box nails.

Albert Henry
Boone, N.C.

Got Any Tips?

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

Products For The Old House

A Good Clamp

THE UNIVERSAL CLAMP Corporation manufactures a variety of clamps for repairing and restoring cabinetwork and fine woodwork. Their popular 805 Porta-Press jig is particularly good for the assembly of mitered frames and doors. It is a lightweight, self-contained jig that, when assembled, requires no tools to adjust from a 8 in. square to 36 in. x 48 in. frames. It can also be equipped with optional legs for complete support.

UNIVERSAL ALSO makes a non-twist C clamp for home and industry. Send a stamped, self-addressed legal size envelope for brochures and price list to: Universal Clamp Corp., Dept. OHJ, 6905 Cedros Ave., Van Nuys, CA 91405. Tel. (213) 780-1015.

18th Century Building Materials

A LARGE ASSORTMENT of 18th century building materials is inventoried by the Kensington Historical Company in New Hampshire. They regularly stock: Hand hewn beams, spruce, eastern white pine, white oak and chestnut as well as granite (step and sill) and red sandstone (step). Also antique millwork, doors, random width floorboards, chimney breasts, staircases and many other architectural elements from 18th century New England homes.

THEIR LINE OF SERVICES include: Dismantling homes for reconstruction, reproducing 18th century building materials and complete Colonial home designing, planning and building. For a free brochure, write or call: Kensington Historical Company, P. O. Box 87 (OHJ), East Kingston, New Hampshire 03827. (603) 778-0686.

Helpful Publications

A Stanford White House?

By Christopher Gray
Director, Office for
Metropolitan History, N.Y.C.

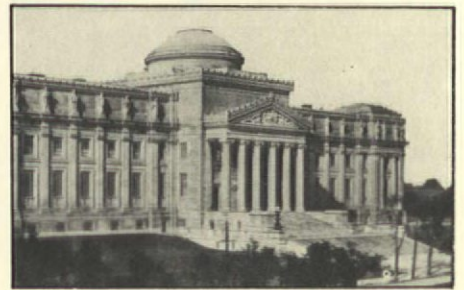
IF YOU HAVE HERETOFORE silently suffered through your neighbor's claims to a Stanford White designed house, there is a book for you. Leland Roth, the ranking McKim, Mead & White scholar, went through the firm's bill books to compile The Architecture of McKim, Mead & White, 1870-1920: A Building List (1978, Garland Publishing, 545 Madison Avenue, New York, New York; \$45.00.)

VERY LITTLE (only projects under \$1,000) slips through the net, and 945 buildings and 50-odd bookcovers, yachting cups, frames and other miscellany make up what is the most complete catalog of any large architectural firm ever published (XLVIII + 213 pp. + about 240 pages of plates.)

HALF OF THE BOOK is a section of photographs: A tenement house (!), the firm's only set of rowhouses (brownstoners take

note) and two identical office buildings in Omaha and Kansas City built for an insurance company are the lesser known works sprinkled in among the masterpieces.

MAKE NO MISTAKE: This is a reference work. Roth provides a spellbinding account of the workings of the firm's personalities and operations, but the meat is in the illustrated list. McKim, Mead & White: A Building List is an exceptional piece of research, providing extraordinary documentation of the work of the firm which is both famous and yet fundamentally unfamiliar to us all.



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