Combining solar collectors with old architecture is quite a design challenge. In the following article, the author describes a simple, unobtrusive unit he designed and installed that acts as a preheater for his hot water system.

By Kenneth M. Turner, Sacramento, Calif.

SING THE SUN’S ENERGY as a hot-water heat source is hardly a new idea. There were companies in California and other sun belt states making solar water heaters shortly after the turn of the century. But most of them went out of business during the recently ended era of cheap energy.

I HAVE USED some simple turn-of-century technology to install a passive solar hot water preheater in my 100-year-old home in Sacramento. The system consists of a heating coil on the back porch roof and a storage tank in the attic. It heats water to about 20°F higher than the daily maximum temperature as a pre-heat to the regular electric water heater. Water circulates through the coil by convection. No pumping is required.

THE COIL CONSISTS of 215 ft. of galvanized steel pipe painted black. A 16-year-old boy with no previous experience with plumbing put the coil together. As shown in the photo on the following page, there are 10 standard 21-ft. lengths of pipe laid level about 2 in. above an aluminum painted roof. (The aluminum paint reflects additional heat to the pipe coil.)

The cold water supply is connected to the lower end of the coil. Hot water is returned to the top of the tank from the high end of the coil.

THE PIPE HEATING COIL is laid with a slight upward tilt from the bottom (cold end) to the top (hot end) so as not to stop the convective flow. Stop and drain valves are provided to permit draining the coil to prevent freeze damage.

THE TANK used as an accumulator in my system is a modified version of tanks used to accumulate pressurized water from wells. Hot and cold water are prevented from mixing through installation of 90° bends in thinline conduit as shown in Figure 1. These are soldered to the inside of reducing bushings. I did a do-it-yourself insulation job on the tank, wrapping it in fiberglass insulation bats.

OPERATING EXPERIENCE WITH this preheater system indicates that the coil I’m using has the potential to heat 2-3 times more water than my storage tank will hold. Current plans call for expanding the heat storage capacity of the system by adding a second storage tank as shown in Figure 2. (Continued on page 56)
More On Wet Basements

To The Editor:

ONE RECOMMENDATION made in the article on wet basements (OHJ Feb. 1978) could cause problems and some qualifications should be added.

THE SUGGESTION WAS MADE that serious water problems could be treated laying drainage tile alongside the inside bottom of the footings, which might require breaking up the concrete floor adjacent to the footings. There are two possible dangers in this course:

(1) IF THE WALL is under high hydrostatic pressure, it might crack or fall inward when the restraining influence of the concrete floor slab is removed.

(2) IF A TRENCH is excavated below the level of the footings and immediately alongside, the footings and wall could settle sideways into the trench.

THE RISKS can be reduced by taking certain precautions, such as doing a short section at a time. But readers should be aware of the chance they take, and act accordingly.

David Morley, Fort Steele Historic Park
Fort Steele, B.C.

To The Editor:

REGARDING THE ARTICLE on wet basements, there is no assured solution to a water seepage problem short of removing the source of seeping water. This can be done by:

(1) REDIRECTING surface water away from the foundation wall through surface regrading, use of splash blocks and/or piping downspouts to a storm water drainage system. If the ground water table is high enough to cause seepage, a dry well probably will not be dry and very likely won't work. Piping storm water into a sewer system is governed by local ordinances. There's a chance your local sanitary engineer will not be amused if you start overloading his sewage system with storm water.

(2) INSTALLING subsurface drainage systems to carry water away from the foundation wall. Typical systems are drain tiles, French drains, or a combination of both. Care must be taken to insure that such drains carry water away from, and not toward, the foundation. Again, these should not discharge into sewage piping.

(3) REPAIRING AND SEALING the exterior surface of the foundation wall. For minor problems, repointing deteriorated masonry may prove sufficient. An exterior waterproof membrane or coating may be necessary.

A NUMBER OF CAVEATS should be discussed:

(1) EXCAVATION around very significant houses may be undesirable, especially houses on the National Register of Historic Places. An opinion from your state historic preservation officer could be useful in determining whether excavation might damage valuable archeological resources in the process of installing foundation waterproofing systems.

(2) THE USE OF high-strength portland cement mortar, especially as a stucco, is quite risky when dealing with old brick and stone masonry, whether in building or foundation walls. I recommend seeking advice from a preservation technologist or restoration specialist so that the wall is not inadvertently damaged. There are other hazards as well. According to my local gas company, portland cement repointing of my 1909 house foundation wall 20 years ago led to a corrosive deterioration of the natural gas service piping under my porch. I was fortunate to discover the leak before we had a tragedy.

(3) ANY COATING that might trap moisture in the wall will damage it. This includes cement stucco, waterproof paints or whatever. They should not be a last resort—they should not be ANY resort! As a matter of fact, I do not know of any reliable interior treatments for seepage problems that do not risk longterm damage to the foundation wall.

MY POINT is that half measures are not satisfactory over the long run and may create a larger problem than the one you are trying to solve.

John W. Kinney, Jr. AIA
Consulting Architect, Historic Sites Section, South Carolina Dept. of Cultural Resources
An 1834 Landmark House Finds A New Home

By Barbara Schiller

Allan and Len Rayburn's love for their Greek Revival house is quite literally a moving story. The city of Rochester, N.Y. owned the vacant, fire-damaged brick house and was willing to sell it to the Rayburns for one dollar if they would move it from its site.

The Rayburns were delighted until they found out that it would cost $25,000 to move the 150 ton, 20x50 ft. brick house. Back they went to the city officials. The Rayburns are determined people who were intent upon realizing their ambition to live in an old house in an urban restoration neighborhood.

Their arguments were good and they were not afraid to fight city hall. Their dream house was in the way of a new road, but because it was a landmark house the city could not raze it. However, its landmark status made the house eligible for Federal restoration funds.

These could be used for the moving costs. The several months that it took for reason to prevail over red tape were by far the most trying part of the Rayburns' experience.

House moving companies are easy to come by--just look in the yellow pages under "House and Building Movers." They have been at their trade at least since the Revolution, for the British expressed surprise at the colonists' propensity for moving their houses around.

Once the mover has been hired, the house owner (if one is the type) can sit back and relax. The moving company is responsible for getting the necessary licenses and permits and for taking care of any problems of clearance, such as overhead wires or tree branches. The company assumes total responsibility for the house; indeed, they buy the house from the owner for the duration of the move.

Because the Rayburns' house was built with walls three courses thick and thus was unusually heavy for a house of its size, the choice of a mover narrowed down to the company that had the equipment to do the job.

Before the movers and their million dollars' worth of sophisticated equipment appeared on the removal site, the interior was gutted and the damaged frame wing bulldozed. Then the movers bulldozed everything around the house.

Moving a house is an undertaking expressed in engineering terms--mass, weight, stress--and so it was that the Rayburns spent several days watching the crew of seven "play around" with the various procedures involving these factors.

Two steel girders were pushed the length of the house. The old foundation was removed a block at a time and hand jacks inserted. Then 35 foot steel girders were placed every two feet under the 25 ft. width of the house. Next, wedges were inserted above each girder all around the house at the stone lintel separating the bottom course of brick from the foundation.
HOUSE-RAISING TIME had been reached. In the course of the several days preceding the trip to the new site, the house was to be raised as much as four and a half ft. up in the air by strategically placed hydraulic jacks.

THE HOUSE WAS TO TRAVEL on its own wheels--28 airplane wheels attached to axles that ran through holes in the two main girders. One of the hazards in house moving can occur when the building sits on its wheels for the first time. It can crack. As the Rayburns watched, they heard a loud noise and saw a crack grow as the back wing moved a full two inches. It was eased back into place by driving the wedges in further. Prior to this unwelcome sight there had been no clue that the wing was not an integral part of the 1834 structure.

A ROAD OF 6x6 OAK BEAMS similar to railroad ties was built from the site to the street. The house, gooseneck attached, was now ready to travel behind a special low-gear truck with a built-in torque convertor. Moving at a walking pace, the trip took two and a half hours to travel five city blocks.

MEANWHILE, AT THE NEW SITE, the foundation had been excavated and footings built. On their architect's advice, Allan and Len had the foundation purposely overbuilt to avoid settling. The footings were reinforced as if to support an apartment building.

A ROAD LIKE THE ONE at the removal site was built. The house was set on jacks and cribbing was constructed in the excavation. The 4x4 oak beams were placed under the bearing walls to support the house until the masons laid the foundation blocks.

THE MOST IMPORTANT PIECE of advice Allan feels he can give is: "Get a good mason... A man who has a record of doing this sort of work successfully."

FILL-IN UNDER THE HOUSE required 12½ courses and eight days' work. The first eight courses were laid in the conventional way. But for the last four and one-half courses the movers returned with a crane and a flatbed trailer. As the steel girders were pulled, blocks were laid three at a time all around the house. The last half course was the trickiest because the blocks had to be hand-laid and the mortar stuffed in by hand.
PHOTO at right shows the house in its new site— with paint removed from the brick, small-pane windows restored and new twin chimneys.

WOULD THE RAYBURNS do all this again? They not only would, they have. To save a lovely Greek Revival cottage from demolition, they purchased it solely to preserve another of their neighborhood’s architectural treasures. The differences in cost are instructive.

WHEREAS THE BRICK HOUSE cost $25,000 for moving, backfill and seeding of the old site, the frame house cost $4,500. The other costs—excavation and backfill, $1,000; the hooking up of water and sewer lines, $1,000—are standard and were the same for both houses.

SO ENTHUSIASTIC is Allan about moving houses that he invites any Old-House Journal reader with questions about the subject to call him at his home after 8:00 p.m. (716) 546-1726.

Protecting Exterior Doors With Varnish

IF YOUR EXTERIOR DOORS are natural wood or are grained (a painted imitation of wood) it is necessary to have a good coat of varnish on them at all times to protect the wood or the graining from being attacked by the elements—and particularly, the sun.

THE PROBLEM is sun and weather also attack varnish. When this happens, your front door can quickly become unsightly. We have had many readers call us and tell us that their doors, beautifully refinished or grained only two or three years ago, are now badly deteriorating—flaking, discolored spots, peeling patches, etc.

THE SOLUTION to the problem is to maintain the varnish in tip-top condition. This means varnishing at least once a year. If your door is in a particularly sunny spot, it could mean varnishing even twice a year. Varnishing a door in good condition is a simple, brief procedure.

BEFORE APPLYING A NEW COAT of varnish, the old finish must be sanded. If the previous finish is still in good condition, you must sand to take down the slick finish to a rougher condition in order to get good adhesion.

IF YOUR OLD FINISH is in poor condition, you have, of course, a bigger sanding job on your hands. But sand until it is even, leaving no peeling patches or discolorations. Remember to sand with the grain of the wood—sanding across the grain will cause scratches.

AFTER SANDING IS FINISHED, all dust must be removed by wiping with a tack rag. You can buy one at a paint store or make one with any piece of dry, lint-free cotton cloth. On the cloth, sprinkle varnish that has been diluted with 25% turpentine. Fold tightly, then wring the cloth out until almost dry.

IT IS ESSENTIAL to a good varnishing job that everything be absolutely clean—brushes, materials and surfaces as well as surrounding area.

WEATHER ALSO PLAYS an important part. A temperature below 70 degrees is likely to cause trouble. Humidity is also a problem and can cause "blooming"—a thin deposit of foreign material—caused by moisture in some form on the varnish while it is drying.

USE A VARNISH THAT is clearly labeled for exterior use. This can be a spar varnish—a very durable varnish designed for severe weather conditions. It gets its name from its original use on the spars of ships. There are also varnishes, not as heavy as spar, that are intended for exterior use such as McCloskey's Exterior Satin Varnish.
EXPERIENCE HAS SHOWN that modern cedar shingle roofs are not lasting as long as the ones built in earlier times. Research into the causes for this shorter lifespan indicates that some additional notes should be added to C. R. Meyer's article on the use of western red cedar shingles for roofing (OHJ Aug. 1977).

NEW WESTERN RED CEDAR shingles are free of any living organisms. Although they possess a natural resistance to decay and fungal attack, it appears that some of this resistance is lost after a period of years. This loss of decay resistance has been attributed to water leaching out the natural chemicals that repel fungi attack.

PROBLEMS WITH SOFT ROT have been discovered primarily in moderate climate areas. Shingles were found to be soft and crumbly. Repairs became difficult because removing a shingle for replacement caused adjacent shingles to break because of their deteriorated condition.

RESEARCH HAS INDICATED that the reasons for more rapid decay are to be found not so much in the shingles themselves as in the way the shingles are applied.

SUBSTANTIAL CHANGES have taken place in the way wood shingles are applied when you compare historical and contemporary methods. Historically, shingles were nailed into small wooden slats that ran parallel to the ridge of the roof. Usually a double—or even a triple—decking was desired (Fig. 1). Generally, no sheathing was used.

THIS TYPE OF CONSTRUCTION is relatively open and leaves enough space for adequate ventilation. Of course, it makes the attic space quite drafty.

THIS DRAFTY assembly method is not desired in modern construction because most people want to insulate and use the attic space. As a result, the roof is completely closed by applying continuous wooden sheathing over the rafters. On top of the sheathing, a building paper or other impervious sheet material is attached to provide more protection against drafts, leakage and wind-driven rain (Fig. 2).

BY ELIMINATING THE VENTILATION, the shingles aren't dried as rapidly or as easily as in the historic construction. Any moisture that penetrates the shingle decking is contained on the building paper underneath the shingles. Obviously, the shingles will remain wet longer or, in some cases, will not dry out at all.

THIS CONTINUOUS PRESENCE of moisture will increase the rate of leaching out of the chemicals that give the shingles their natural rot resistance. Thus, the shingles become more prone to decay.

ANOTHER ASPECT has to be considered. Most historical roofs have quite a substantial pitch. As a result, runoff would be good and water would not linger on the roof. Modern roofs have a more shallow pitch—and therefore a less quick runoff. This can also contribute to faster decay.

CONSIDERING these possible problems in wood shingle construction, it is necessary to find ways to minimize the decay hazards. A number of options are open—and the choice of one or the other depends on the conditions encountered.

OMITTING THE CONTINUOUS sheathing and its cover of building paper is one consideration in new construction. If the roof cover is well maintained, the chance of leakage is limited, especially if a triple decking is used.

BECAUSE THE ATTIC SPACE would become drafty in this method, sheathing or insulation can be placed underneath or between the rafters. The latter method will allow the rafters to be seen as a decorative element but, because of the frequently uneven spacing of the rafters, making the sheathing fit will be very labor intensive (Fig. 3). This configuration allows the roof deck to remain ventilated, while the draft problem is mitigated.

WHEN SHEATHING and its protective layer of building paper is already in place, another possibility can be considered. Slats can be nailed on the sheathing at regular intervals and parallel to the ridge of the roof. In this way, a limited ventilation and drying out of the shingles can be obtained (Fig. 4).

THIS SYSTEM HAS one disadvantage. Water that does penetrate cannot easily run off because the slats form a barrier. This could be partially alleviated by raising the slats on small nailers...leaving an open space underneath the slats. This system makes the roof cover very complicated, however. Another possibility is to break the slats horizontally, leaving openings where water can possibly run down further. This is of only limited value, however.
HETHER OR NOT such construction methods are possible, consideration should also be given to using pre-treated shingles. Most common treatments are based on pentachlorophenol or different copper arsenate salts. Some leaching out of these preservatives by water will occur, but after a short period this will stabilize.

EVEN IN DECAY-PRONE areas, the pre-treated shingles will give a substantial increase in lifespan. In some cases, a reapplication of a wood preservative by brush or spray can be done while the roof is in place. Such applications, however, are not as effective as pre-treatment.

IT IS OBVIOUS that the occurrence of soft rot in shingles makes it necessary to remove the old roof cover before new shingles are applied. The old shingles will contain a substantial amount of moisture and fungi, which will more quickly attack the new shingles. In addition, the soft crumbly old shingles are an inadequate base for nailing the new shingles.

Theodore H. M. Prudon is a lecturer in Columbia University's Graduate Program for Restoration and Preservation of Historic Architecture. He is also a principal of Building Conservation Technology in New York City.

CONTEMPORARY CONSTRUCTION

This One

WFJG-H4Z-XJUQ
Heat collection coil is tucked on a back porch roof where it doesn't affect the appearance of the house. Aluminum paint on roof reflects heat back up to the black painted pipes.

COST OF MY SYSTEM was minimal because I purchased most of the parts at salvage yards, auctions, flea markets and—as a last resort—cut-rate plumbing supply dealers. If all the components were purchased new, the cost would run about $450 (based on prices in Montgomery Ward's Fall 1977 catalog). The key element—the storage tank—can be purchased from any supplier of equipment for domestic wells (including Ward's).

THERE'S ABOUT 40 HOURS of labor involved in assembling the system. I was fortunate in running the piping from the storage tank in the attic to the electric water heater in the basement because I was able to put the pipes in the wall when the plaster had been stripped off in the kitchen for another project.

ELECTRICITY SAVINGS amount to about $23 per year right now. Three facts should be noted about this figure: (1) The coil heats a tank of water in 2-3 hours. If there were more storage capacity, savings would be greater; (2) Electricity is fairly cheap in Sacramento (2.4¢/kwh.) Savings will be greater where electricity costs more; (3) Electricity costs will probably be going up faster than costs for material and labor used in the solar preheater system.
Finishing A Victorian Parlor

By Roberta S. Crane

WE’VE BEEN IN OUR OLD HOUSE almost five years now and have taken on the endless tasks that come with any conscientious restoration. After jacking up floors, repairing—yet carefully preserving—the original plaster, refinishing much-abused and painted woodwork, as well as other major projects, we hoped that putting the final decorative touches on the parlor would be easy.

WE’VE SINCE DISCOVERED that sanding a floor is mild compared to achieving an authentic window treatment or finding the right wallpaper. No one truly afflicted with old-house fever ever tires of leafing through book after book of restored homes and museums. Every room seems so perfectly balanced, every fabric and paper exquisite.

THESE PICTURES prove that it can be done, but we found that makers of custom draperies consider such proofs to be science fiction. In The Second Treasury of Early American Homes, by Dorothy and Richard Pratt, published by Hawthorn Books, Inc., on page 76, you will see the lovely drawing room of the "House of History," an Adamesque house in New York State. That is the very formal window treatment we chose. Perhaps too formal for our middle class Victorian home, but then the Victorians liked to put on airs.

The Fabric

NOW WE WERE DETERMINED to have even a similar fabric that would hang gracefully with the look of fine polished silk. The professionals told us that this entire statement was a contradiction of terms.

MODERN SILKS have no sheen. They are usually "slubbed" or purposely snagged at intervals to take away the gloss—now out of fashion and considered "cheapening." The same runs true with most satins and both are stiffened. They would no more fall into graceful folds than would Herculon tweed. Even the damasks bore huge, cumbersome prints and could double for upholstery material.

THE COLOR SELECTION was just as limited. We wanted "Dusty Rose." No one had ever heard of it. You could have "Baby Pink"—take it or leave it! We hunted in every fabric shop, interior design studio, discontinued fabric warehouse and even costume suppliers until thoroughly discouraged. If Providence had not intervened, we would still have bed sheets on the windows.

ONE EVENING, friends invited us to a musical program at a nearby college. A Renaissance Consort was to perform on antique instruments and in period dress. There were our polished damasks, satins and silks and, most important, the costumes looked newly made.

Immediately after the recital I cornered the best dressed musician and, after the customary remarks on her playing, I asked about her gown. She had gone to a little drapery shop scarcely two miles from our home which we didn't know existed.

THE SHOP WAS FILLED with remnants of discontinued lines of the kind of fabric we had been looking for. There was a beautiful dusty rose moire with the look of watered silk. It had an over-design of delicately embroidered flourishes and flowers. The effect was similar to the silks seen on Japanese kimonos.

The Fabric not only shines, but the background sheen contrasts with that of the pattern so that every detail catches the light and there are three shades of rose in the embroidery so that each little flower stands out. It could not have been more perfect.

HOWEVER, THE PROBLEM of transforming this wonder into actual draperies remained. Again, the professionals stood firm. Draperies must have sewn-in pleats, swags must stand out like awnings, and curtain rods must meet standards.
Straight draperies are shirred and hemmed on top and the pole is run through the opening while the swag is actually draped over the pole with wooden counterweight behind to hold it in place.

We had wooden rods with turned finials and wanted the drapery panels simply hemmed and gathered loosely with no pleats. This wouldn't do. The rods were on brackets so they stood out from the window about 3 in. The ends of the drapes could not, therefore, come up flush with the moulding. This would give an unfinished look to the treatment, we were told, and no swag can just hang in its natural folds. These must be rigidly sewn in. Again, the picture books were insufficient evidence.

Finally, one poor, harassed seamstress agreed to hem and line the material. The swag was too much for her abilities and she refused to run the fringe through her machine. Neither my husband nor I had ever done any sewing so patterns and diagrams did us little good. Somehow after hours of trial and error my husband managed to put together one swag, while I hand-sewed all the yards of fringe.

The swags are stapled to a thin strip of wood and the fabric at each end is gathered into folds with a few basting stitches and tacked to the wood with upholstery tacks. The edge of the swag with the wooden strip is then simply laid over the pole and acts as a counterweight. I am sure they are done all wrong, so it would be better for those of you who are more adept at such things to study the "How-To" articles that have appeared before in The Journal and do them the right way.

Ours will have to be completely taken apart to ever be cleaned, but our windows look beautiful to us—as close to the picture as we could ever hope. The undercurtains are real antique lace. I found them at a house sale for 25¢ a pair which somewhat compensates for our efforts with their elegant companions.

Wallpaper

As I said before, I would rather attempt a major structural problem than a minor decorative one. And selecting wallpaper is no exception. Our parlor is approximately 15 ft. x 13 ft. and broken up by three windows, two doors, and an archway. You cannot use a wallpaper pattern with a large repeat in a room so small with so many openings.

Most documentary papers have large patterns as they come originally from mansions with huge rooms. The other extreme is the tiny print taken from the lining of an old trunk or hat box. There is very little available in between. Documentary papers of any kind are not in abundance. If you haven't already visited the average wallcovering establishment you had best be prepared for book after book of vinyls, foils, burlaps and worse. That is why they call it wallcovering.

Wallpaper is becoming a thing of the past and just when we want to re-create that same past. I don't think anything compares with the authenticity of honest-to-goodness paper.

If, like us, you cannot use a large pattern, there is always the stripe. There are quite a few reproduced papers using stripes. They can fit in a small room, work around openings and make your ceilings seem higher. The next difficulty is the color. All is vivid scarlet, bright gold, royal blue, and even black. But almost lost are the mauves, saffrons and periwinkles. We thought a modest white print on a beige field would be best suited to the clutter of our Victorian parlor and blend well with our hard won draperies.

Beige simply did not exist. It is called off-white and a white-on-white effect can give you eye strain, trying to focus on a design which is constantly trying to slip away back into the background.

This time we ended our search in a remote paint store. The paper is striped, white on a pale mocha ground. Miraculous! There are flowers within wreaths and, the best treat, a two-handled urn which exactly matches the elaborate finial on our cast iron parlor stove. We were very lucky this time. The paper is of English origin, c. 1790.

I want to explain why we chose an 18th century paper for a late 19th century house. Most reproduced lines go no further into the Victorian
**Finding Wallpaper**

The wallpaper that Roberta Crane used in her parlor was manufactured by The Birge Co., but was discontinued about five years ago. This type of early 19th century pattern can be found in the lines of Birge, Old Stone Mill, Reed, Schumacher and Katzenbach and Warren. All of these companies are listed in the 1978 Old-House Journal Catalog.

The advertisement below is from a 1902 edition of the Sears, Roebuck Catalog. Typical of the way wallpaper was used around the turn of the century, the striped paper is accompanied by border and ceiling paper.

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**Hardware & Accessories**

We put the curtain rods together ourselves. We bought all the necessary parts at a building material and home supply center. The rod is a wooden pole with an outside diameter of 1-3/8 in. The finials and brackets are made by the Gould Mersereau Company. (If you cannot find these in your local store, write to them at 35 W. 44th St., New York, N.Y. 10036, and they will send you the name of your nearest distributor.) Their terminology calls them "wood pole ends" and "wood pole supports." The size of the pole ends is 1-3/8 in. and the supports are 1-3/8 in. x 3 in. They come unfinished, painted and stained. We bought unfinished ones and stained and varnished them to our liking.

The under-curtains are hung from a tension pole—a common hardware store item. It fits between the inner sides of the windows and is held in place by pressure only, a method which avoids damage to the woodwork with unnecessary nail holes.

Our picture cords are all old ones, found mostly at garage sales. I would suggest checking stores specializing in plate glass mirrors where such cords were once common articles. A drapery tie-back can be adapted to serve the purpose. Readymade drapery departments in most any department store carry such tie-backs. They are made of a very heavy cord which can support a picture. Actual picture cords are reinforced with wire so I would not use anything but a very heavy cord as a substitute. We did not use a ready-made tie-back for our draperies. The color selection in these is very limited. We bought a thinner cord, by the yard, and separate tassels to make our own. Drapery cord by the yard, tassels and fringe are stocked by most fabric shops.

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Robert S. Crane lives in a turn-of-the-century house in Olmstead Falls, Ohio. Its builders were influenced by earlier homes and it is known as a late Western Reserve Colonial. Roberta is not only an avid antique collector but has taught classes in antiques for seven years.
About 7 years ago, Shirley Platts and her daughter Cheryl were looking for a company to re-silver some antique mirrors they were working on. When they were unable to find anyone to do this kind of work they decided to start their own business.

After a great deal of study, research and experimentation, they can now offer a re-silvering service using the same process as that of the 1700 and 1800's. They use all silver and the work is done by hand, not with a spray as today's mirrors are done.

Today's mirrors also contain some aluminum and have only a 78% reflective power compared to the 98% the Platts' method produces.

Upon receiving a mirror, they completely remove the old silver backing. It is impossible to patch or replace part of the silver. Next is the preparation of the glass, a very important step in obtaining a gleaming coat of silver. Then the silver formula (a secret one the Platts will not divulge) is applied. After the tricky process of drying, the mirror is then given several backing coats.

The cost of re-silvering is $16 per sq. ft. and $16 for any mirror less than a sq.ft. All sizes and shapes can be restored. Work will take about a month.

For further information write to: Chimpmunk Hollow, Millbury, Massachusetts 01527, or call 1-617-799-0760.

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A Restoration Report

The Morse-Libby Mansion, located in Portland, Maine, is one of the finest Italianate villa-styled brick and brownstone townhouses in the U.S.

The mansion underwent a major restoration from 1973 to 1977. The published report on this restoration is the first of several model grant-in-aid project completion reports. The main value of this report is in its wide application of technical preservation philosophy. In addition to being a detailed written and photographic account of work on a particular structure, the report presents the entire process of an exemplary preservation undertaking, taking the approach of repairing rather than replacing original building material.


Helpful Publications

Tracing Our Roots

Family Heritage is a fascinating new magazine for anyone who enjoys searching for family or local history.

There are articles to interest the serious student of genealogy (such as those on using the National Archives) as well as those of general interest about the customs and occupations of our recent ancestors.

The historian in us is born with the realization and acceptance of our mortality. More and more people today are interested in more than the known names and dates of our own ancestors and in a wider perspective on our heritage. History, music, folklore, crafts, genealogy and material culture all form a picture of our past and "Family Heritage" will tell you how to create this picture for yourself.

Published bimonthly, the subscription price is $14 for two years. They will send you a sample copy for $1.50. Write to: Family Heritage, 26 Third Place, Brooklyn, N.Y. 11231.