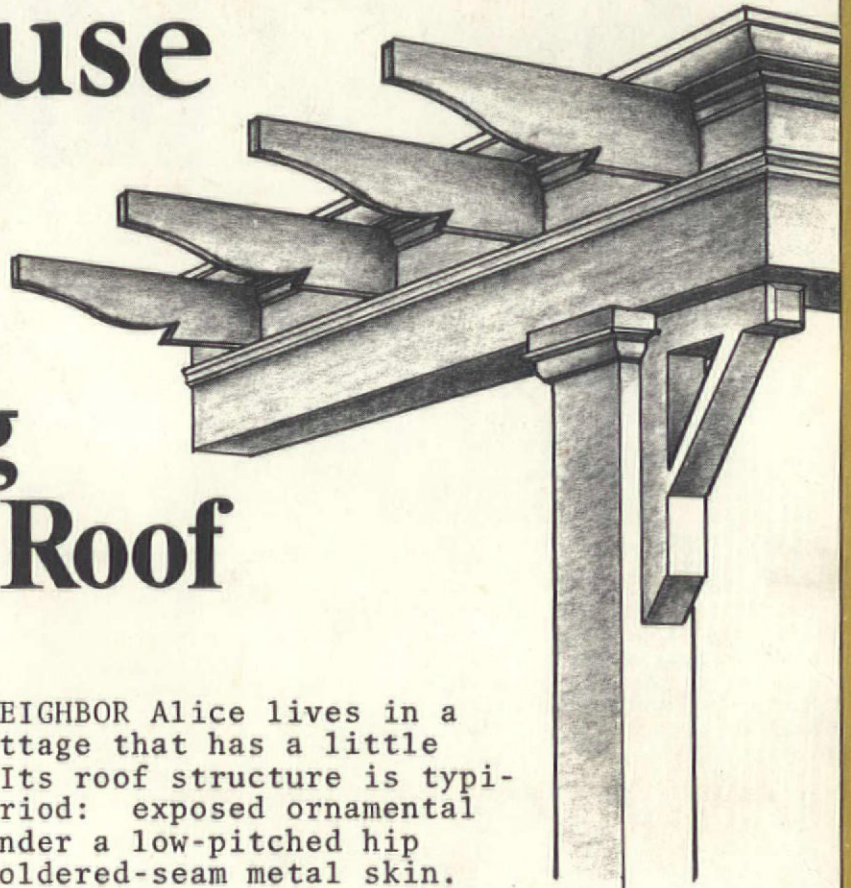


Restoration and Maintenance Techniques
For The Pre-1939 House

Jan.-Feb. 1984 / Vol. XII No. 1 / \$2.

The Old-House Journal



Rescuing A Porch Roof

by Walter Jowers



MY NEXT-DOOR NEIGHBOR Alice lives in a 1922 frame cottage that has a little side porch. Its roof structure is typical of the period: exposed ornamental rafter ends under a low-pitched hip roof, covered with a soldered-seam metal skin. All thoroughly rotten and rusted.

WHEN ALICE first asked me to take a look at her porch roof, the only obvious rot was on the tops of the ornamental rafter ends. Somebody had "cured" this problem once before by cutting out the tops of the rafter ends and splicing in new wood. This wasn't a stunning aesthetic success, but it didn't look too bad. Certainly, it had been less expensive than ripping out all the rafters and replacing them with new ones.

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In the next issue...
BUILDING A CIRCULAR TOWER



The honest hand of Jan C. K. Anderson, Executive Director of RESTORE*, pulls one of the \$1,000 winners out of the official OHJ hat. With her are Publisher Clem Labine and Editor Patricia Poore.

Preservation Groups Share \$17,000

THE NEW YEAR has gotten off to a prosperous start for 112 preservation organizations across the U.S. They are \$17,000 richer after participating in The Old-House Journal's 1983 Revenue-Sharing and Grant Program.

UNDER THE REVENUE-SHARING Program, preservation groups make OHJ subscriptions (new or renewals) available to their members at a special group rate. The organizations then keep half of all the money they collect.

IN ADDITION, six \$1,000 grants are given to participating groups. One grant goes automatically to the group that sells the most subscriptions. This year, the automatic grant went to the Gifford Park Assn. of Elgin, Ill. Under the guidance of their energetic Treasurer, Dan Miller, Gifford Park sent in 108 subscriptions. The other 5 winners were selected by a drawing.

MONEY FROM PREVIOUS OHJ grants has been put to good use in a variety of ways, such as funding a publications program (Dayton, OH), moving a courthouse (Charlotte, MI), creating

a slide presentation (Fonda, NY), restoring a landmark house (Jasper, IN), purchasing a historic meeting house (Bedford, VA), and starting a program for helping maintain the homes of the elderly (Albion, NY).

WINNERS OF THE SIX \$1,000 GRANTS

The Gifford Park Assn. — Elgin, Ill.
 Rock County Historical Soc. — Janesville, Wis.
 Historic Harrisburg Assn. — Harrisburg, Pa.
 Winchester Historical Soc. — Winchester, Mass.
 PACA — Champaign, Ill.
 Historic Windsor, Inc. — Windsor, Vt.

THE REVENUE-SHARING and Grant Program was started by the OHJ in 1980. Since that time, more than \$50,000 has been distributed to 265 preservation organizations. The aim of the OHJ program is to take money that would otherwise be spent on direct mail promotion and instead make it available to organizations that sell subscriptions to their members. That way, funds that would have been invested in paper and postage are instead channeled into preservation work.

IT'S EASY TO ENROLL your group in the 1984 Program, and become eligible for Revenue-Sharing and a \$1,000 Grant. You can get the necessary forms by writing to:

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Bringing It Back

House Restoration & Consciousness Raising In Malden, Mass.

By Richard Sarabia

WE HAD ADMIRERD one particular street in Malden for a while: three entire blocks, virtually all wonderful old Victorians with big wide lawns. We had looked at about 60 houses by this time, but we knew we'd seen our house after walking through just the downstairs of this 11-room, 1886 Queen Anne. At one point, Carol pulled me aside and whispered, "Even the closets have parquet floors!" We were fortunate that the house had a spacious one-bedroom apartment on the third floor. Without the income from that rental, we never could have afforded the mortgage and tax payment of almost \$1,000 per month.

WE PASSED PAPERS in November of 1980. Once spring came, we assessed our major problems. Practically all of the 42 double-hung windows needed reglazing. The exterior was a mess; the badly peeling paint hadn't been retouched in at least 12 years. The trim was rotten, there were three major foundation leaks, and we had no insulation at all. Squirrels had chewed into our walls. The enormity of it overwhelmed us, but we knew that many people before us had tackled worse things and succeeded.

WE STARTED with the windows. We probably broke another ten

panes of glass in attempting to dig out the remnants of old putty! But once we got the hang of it, our work proceeded quickly. The whole job took about three months. Then, while Carol caulked all the storm windows and openings around the house, I literally dug into the foundation.

EVERY TIME IT RAINED, we got water in the cellar in three places. The old mortar had crumbled for the most part, so I scraped it all out, removing all the rocks and stones I could pull out. In filling the holes I used over eighteen 80-lb. bags of cement. It was very messy and tiring. But there was more hard work to come.



When Richard and Carol Sarabia first saw their dream house, it was this peeling, drafty, neglected nightmare.

WE INSULATED the attic rafters in July of 1981. The floor studs were all spaced different lengths apart, so we could use rolls of fiberglass in only a few spots; for the rest, we used loose cellulose. We were so anxious to finish the chore, that it never occurred to us to work at night when it's cooler. I lost ten pounds laying loose cellulose in 90-plus-degree temperatures. But the things we discovered in the attic made it all worthwhile. We found a mahogany french door that was originally one of a pair which graced the doorway



The Triptych Of The Trim (Summer-Fall 1982): This trio of pictures should give you some idea of the effort involved in bringing back to life the exterior detail of a Queen Anne house. The photo at left shows how it all begins — that's Richard scraping off layers of old paint. The center photo catches some of the first results on

the porch. (Carol does the honors here.) The photo at right demonstrates that a person sometimes has to go to great lengths to finish the job. That's Richard's brother John on the ladder; he's a professional firefighter, and so was the natural candidate for such high-placed positions as this one.

between our twin parlors. Except for a lot of grease and dirt, the door and its brass hardware were in mint condition. Next year, we'll have a matching door made and hang the pair.

difficult. They took time and energy, and we were frequently left exhausted, but we could do them. There's hardly a thing to fix in our house that scares us anymore. That's a good feeling.

THE PAINTER we hired to do the exterior had terrific references and gave us a good price. He and a crew sanded and scraped the house--and that's all. For the next two months, all he did was pay us two solo visits, insisting that we shouldn't worry and that he would finish the job. I finally confronted him and he admitted that he was bankrupt and wouldn't be able to finish.

THAT FALL AND WINTER, much of the interior work was done. We sanded and polyurethaned the dining room floor, and its bird's-eye maple and oak pattern has become the showpiece of the house. The other floors were also refinished. When we stripped the kitchen wainscoting, we found a beautiful chestnut wood that looks much like oak.

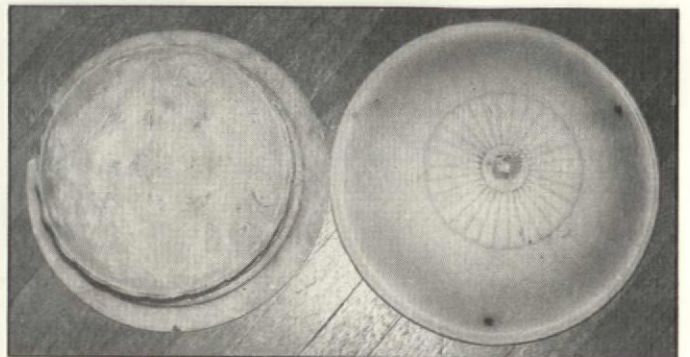
WE WERE quite stunned and angry. The house was all bare wood and winter was coming fast. So we started painting, with two hired kids for help (principally with the higher areas). We got the body primed and painted with one coat before the snows came. We went through the winter with bare trim, but it certainly could have been a lot worse.

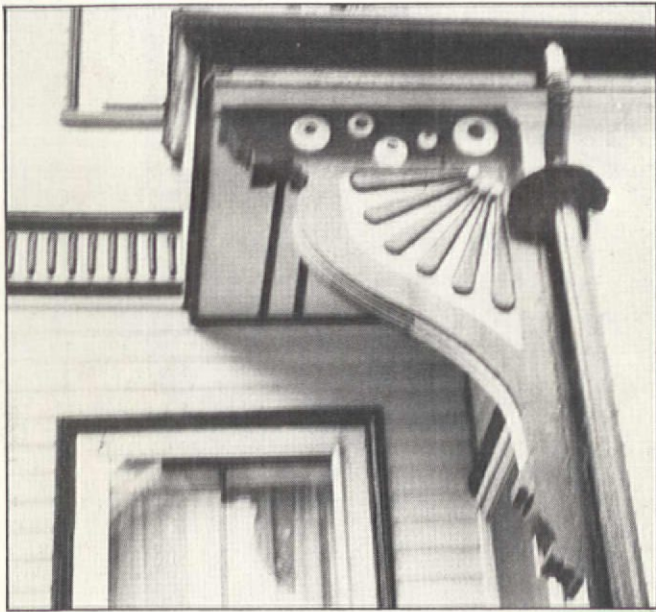
CAROL SPENT the better part of a year working on the fireplace mantel. Like the rest of the woodwork, it had been painted white early in the 1960s. She used dental picks, small screwdrivers, even safety pins, and uncovered a solid walnut mantel with the original brass heat shield underneath.

WE DID THE TRIM the following summer. Our house is a fairly simple Queen Anne, with features that didn't seem particularly outstanding. But once we got into it, we noticed many little details and began accenting them. Our color scheme soon became more elaborate than we'd originally intended. It took two solid months to finish the trim: It was slow, grinding work, but there was no way to hurry it. We got quite discouraged because the work went by so slowly. But then we started noticing the passersby who would stop and look at our progress--even shout admiring comments. Cars would slow down as they passed, and we could see the occupants looking out the windows and pointing. (They still do!)

WE DISCOVERED, tucked away in a corner of the cellar, two round soapstone light fixtures (see photo below). The man who lived here in the '40s showed us interior photos in which those lights were hanging in the bedrooms. This spring they'll go back to their original places. There was also a fully functional pull-chain toilet in the cellar. It's slated to go upstairs into the main bathroom.

MORE AND MORE our confidence grew. After a while, we realized that there were very few things we couldn't tackle. We'd never before attempted projects like these, and were actually quite surprised that they weren't more





Although the Sarabias describe their house as a "fairly simple Queen Anne," they drew out many distinctive features when they painted it. Here's Richard's account of their work: "Each bracket on the house has four small buttons of different sizes. We painted them the same color as the house body; it turned out to be an exceptionally pleasing touch. In addition, between the first and second floors, we have a horizontal band of trim that's like a ladder turned sideways. We painted the rungs and sides chocolate brown and kept the background yellow. Previously, it was almost unnoticed because it had been painted all white. Now it's the most visible and unique feature of the exterior."



It took her close to a year, but Carol freed this beautiful walnut mantel from its ignominious coats of white paint.

IN OUR BACK PARLOR, we had a floor outlet, which is illegal today. The wires had been disconnected and I removed the plate. Two pieces of parquet had a hole chiseled in them, and there was a one-ft. drop to the crossbeams under the subflooring. The parquet is only $\frac{1}{4}$ -in. thick--not strong enough for anyone to stand on. I took a sock and put it in the hole, nailing its top into the sides of the subfloor. The toe just reached where the braces met. I filled the sock with cement and replaced the damaged parquet with two strips from under the radiator. Now that particular area is the strongest part of the floor.

PERMEATING OUR LIVES is the task of stripping woodwork. It never ends! The entire house was painted, except for the dining room--which has more woodwork than any other room. We've used all kinds of strippers (Peel-Away's by far the worst). We've also evolved our own arsenal of tools, each one working best on a particular type of groove. We've actually become quite expert at it; what used to take us three or four days we now do in an afternoon.

ALTHOUGH WE'VE ACCOMPLISHED so much, we still have miles to go. Our plans for next year are ambitious. The kitchen will be totally redone and the wainscoting stripped. A tin ceiling will replace the dropped ceiling. All the cabinets will be torn out to make way for custom oak ones with leaded glass doors. We'll even take out the stove and put in a restored wood-and-gas combination antique stove.



This photograph of the Sarabias' dining room shows off many of its special features: the bay window area, all mahogany paneled; the floor, with its alternating strips of bird's-eye maple and oak; the antique 6-arm brass lighting fixture. The mural depicts Malden Square ca. 1860. A reproduction from a well-known local history of Malden, it was painted several years ago by the son of the previous owner.

OUR TENTATIVE PLANS for a Victorian Society in Malden began the summer we painted the trim. The more we got into fixing our house, the more wonder and respect we felt for the materials and workmanship that went into its construction. Our city is an older suburb of Boston, with over 50,000 citizens and a wealth of beautiful older homes. Sadly, many of the homes have been neglected or chopped up as rooming houses.


WE SAW AN ARTICLE in the Boston Globe about an old-house group in Newton, Mass. They were a sort of support group, sharing their love for their Victorian homes and pooling their information and resources to solve various restoration problems. We called the Globe reporter and asked to be put in touch with the group. We wanted to join and perhaps get some ideas for our future Malden society. It was a pleasure to get involved with such interesting people, who were also trying to bring back the beauty of their Victorians.

SOON AFTER WE JOINED, the reporter called us. She wanted an interview for a story about people who buy homes with tenants helping pay the mortgage. The article appeared in August 1982, and a week later an editor from Woman's Day magazine called us. She'd seen the story, loved it, and said her magazine was doing a similar feature--"Would we be interested?" You can imagine our reaction. We had to wait six months for the article to hit the newsstands, but when it did, our house was the one most prominently displayed. All this recognition of our efforts on the house was wonderful.

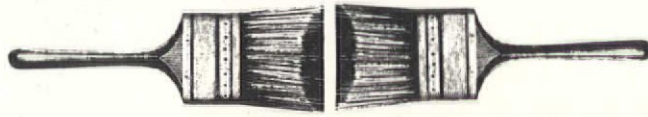
THE VICTORIAN SOCIETY OF MALDEN started in June 1983 and now has about 50 members. (We may soon have too many members to go on meeting at

different people's homes.) Generally, Malden hasn't appreciated or promoted the Victorian treasures it has. But things have begun. Our daily newspaper, the Evening News, has been extremely supportive, mentioning our society prominently and often. And we're going to have a public house tour in the fall of 1984.

A FRIEND OF OURS came to a meeting of the Victorian Society, even though she wasn't sure she'd like it. She thoroughly enjoyed herself and joined that same night. A few weeks later, her remuddling neighbor threw out some curved glass windows. Or friend called us and we were able to find someone in our group who could use the glass.

WE NEVER IMAGINED we'd get this much satisfaction and fun from what we're doing with our house and the Victorian Society. All of us share a love of the grace and grandeur of Victorian architecture. Carol and I have discovered people of similar interests with whom we now share bonds of friendship. That alone makes all our toiling worth it. 

Readers interested in learning more about how Richard & Carol set up their group can write the Victorian Society of Malden, 58 Dexter Street, Malden, MA 02148.



HOW TO MATCH PAINT COLORS

by Nat Weinstein, San Francisco, California

YOU'VE JUST BOUGHT some paint -- but the color doesn't look quite the way you expected on the wall, and you'd like to adjust it slightly. Or you need a small amount of a matching paint color to do some patch painting. Or you're trying to match your paint to a color in a wallpaper or fabric you've chosen. We've all faced these situations at one time or other. But haphazardly adding colors to \$20-a-gallon paint is risky.

MOST OF US learned basic color theory in our early school years. Remember the excitement at discovering that mixing blue and yellow crayons on paper miraculously changes into green, yellow and red into orange, and red and blue into purple? And we learned that all colors can, in theory, be produced from the three primary colors: red, yellow, and blue.

IN PRACTICE, however, color mixing is complicated by the nature of pigments. You are never dealing with "pure" color, such as you get from a prism. Pigments come with varying impurities and in varying concentrations. What is called red paint, for instance, is always tainted to some degree with yellow and blue.

THE MANUFACTURERS of tinting colors take this into account by producing a range of colors that come as close as possible to the true primary and secondary colors...then supplement these with additional colors that lean on either side. They also make a variety of greyed or tertiary colors for quicker color matching.

THE FOLLOWING PIGMENTS, along with a white base, are sufficient for matching most colors:

- Tohydine* — a clear or "true" red
- Chrome Yellow Light* — a clear yellow
- Phthalocyanine (Thalo Blue)* — a clear blue
- Chrome Green Medium* — a balance between blue and yellow
- Raw Umber* — a dark brown-grey on the yellow side
- Burnt Umber* — a dark brown-grey on the red side
- Raw Sienna* — a golden or greyed yellow
- Burnt Sienna* — a rust or greyed orange
- Lamp Black* — a black leaning on the blue side

INFREQUENTLY, these nine pigments may have to be supplemented with other colors to produce clearer purples, greens, and oranges.

Shades Of Meaning A COLOR GLOSSARY

CHROMA — The intensity, brilliance, or saturation of a color. The primaries are full-intensity, high-chroma colors. The greyed colors (mustard, olive, terra cotta) have low chroma.

COMPLEMENTARY COLORS — Every color has a complement, which is the color opposite to it on the color wheel. Thus, the complement of red is green. Mixing equal amounts of complementary colors produces grey.

CONTRAST — Differences among colors used to produce harmony in color schemes. A color scheme can use any combination of contrast of values, contrast of color hues, or contrast of intensities (chroma).

HUE — Another name for color, such as red or green. A tint is a hue lightened with white. A shade is a hue greyed with black. One hue can have many tonal values.

INTENSITY — See Chroma.

NEUTRALS — Black and white are not considered colors, or hues. They are neutrals.

PRIMARY COLORS — The three pure colors (red, yellow, and blue) that combine to make all the other colors in the color spectrum.

SECONDARY COLORS — The three colors that result from mixing equal parts of two primaries: orange (red + yellow); green (yellow + blue); purple (red + blue).

SHADE — A color (hue) darkened with black. Burgundy and maroon are shades, or low values, of red.

TERTIARY COLORS — Those made by mixing a primary with an adjacent secondary on the color wheel. (If you mix a primary with its opposite secondary, such as red + green, you get grey.) Additional tertiary colors can be mixed from secondaries: purple + green gives olive; green + orange gives citrine; orange + purple gives russet.

TINT — A color that has been mixed with white to produce a light (high) value.

TONAL VALUE — See Value.

VALUE — The lightness or darkness of a color (hue). A "shade" has low value; a "tint" high value.

Boxing For Color Uniformity

YOU'VE JUST MIXED three cans of a special paint color. Or you've just bought five gallons of custom-mixed color from the paint store. Problem: How can you be sure the color in each can is EXACTLY the same as in all the others? You can't-- unless you do some more mixing.

THE PROCESS IS SIMPLE if you have a mixing vessel large enough to hold ALL the paint. Simply empty each can into the mixing vessel, stir thoroughly, then refill the cans.

OFTEN, HOWEVER, you don't have a mixing vessel big enough to hold all the paint. If that's the case, you have to resort to a process that painters call "boxing."

1. Pour EQUAL AMOUNTS from each paint can into your mixing vessel.
2. Stir the paint in the mixing vessel thoroughly.
3. Pour equal amounts of paint back into each can--but don't fill each can so full that you can't stir it. (You may have to hold some paint back in your mixing vessel, but that's okay.)
4. Stir contents of each paint can.
5. Again, pour equal amounts from each can into the mixing vessel, continuing procedure through step 4. Repeat as many times as required for thorough mixing. Four to six cycles is usually enough.

The Color Wheel

COLOR THEORY is easier to understand by referring to the color wheel (see opposite page). The color wheel shows the three primary colors interspersed by their secondary and tertiary intermixes. The colors opposite each other on the color wheel are complementary. For example, red is the complement of green, yellow is the complement of purple, and blue is the complement of orange.

MIXING A COLOR with its complement in equal proportions results in grey. Adding less than an equal amount causes a "greying" of the color. The term "greying" is interchangeable with "muddying" a color.

MIX THE THREE PRIMARY COLORS together in equal quantities and they neutralize each other; they become grey. As you add white, the grey becomes lighter. Add black or raw umber and the paint becomes a darker shade of grey. If one of the primary pigments is present in greater quantity, the grey is reddish or yellowish or bluish.

IF A SECONDARY COLOR predominates, the grey becomes greenish, purplish, or orangey. Most wood colors are such greys...dominated to one degree or another by a secondary color.

THE ABOVE PRINCIPLES are the essence of color matching. It's fairly easy for the novice to come close to the target color. But the subtle variations in hue and tonal value are tougher to pin down. For example, in matching a target color, your mixture may look redder, greener, or yellower than the desired sample. (This problem can be solved by adding the complement of the unwanted cast.)

TIPS ON MIXING PAINT

AMONG MOST PAINTERS today, mixing paint colors is a lost art. And contemporary painting manuals almost totally ignore the subject. Fortunately, The Old-House Journal reference library has a wonderful old book on paint mixing. It's called *The Mixing Of Colors And Paints*, by F. N. Vanderwalker (1944). Since you're unlikely to find any of this old-fashioned know-how in any book you can buy today, we've culled these tips from the Vanderwalker volume.

—Ed.



1. To mix light tints, you can start with a white paint and add appropriate tinting colors.
2. To mix dark shades, start with a pre-mixed paint that is as close as possible to the color you desire. Then add appropriate pigments.
3. To tint an alkyd or other 'oil-based' paint, use either colors-ground-in-oil or universal tinting colors (both available at paint stores). Latex paints should be tinted ONLY with universal tinting colors.
4. Add color a little at a time and stir thoroughly before deciding if more color is needed. If you add too much color, you have to add a LOT more of the base paint to go back.
5. Mixing paints is messy. Be sure to protect your floor adequately. Have lots of rags or paper towels and solvent on hand to clean up spills. If possible, work in a garage or outdoors.
6. Never try to color all your paint at one time. Pour out a half pint into a small container and note the proportions of color required to tint it correctly. This way, if you make a mistake, you haven't ruined all your paint.
7. When a single tinting pigment is used to color white paint, you get a less interesting tint than you would by using two different pigments to arrive at the same color.
8. You can make grey by adding lamp black to white paint. But this is a cold, uninteresting grey. Rich greys always have

The Black-White Axis

ANOTHER DIMENSION of color mixing is the black-white axis. While the addition of white will lighten but not grey a paint, the addition of black will grey as well as darken it. A good general procedure to follow in paint matching is:

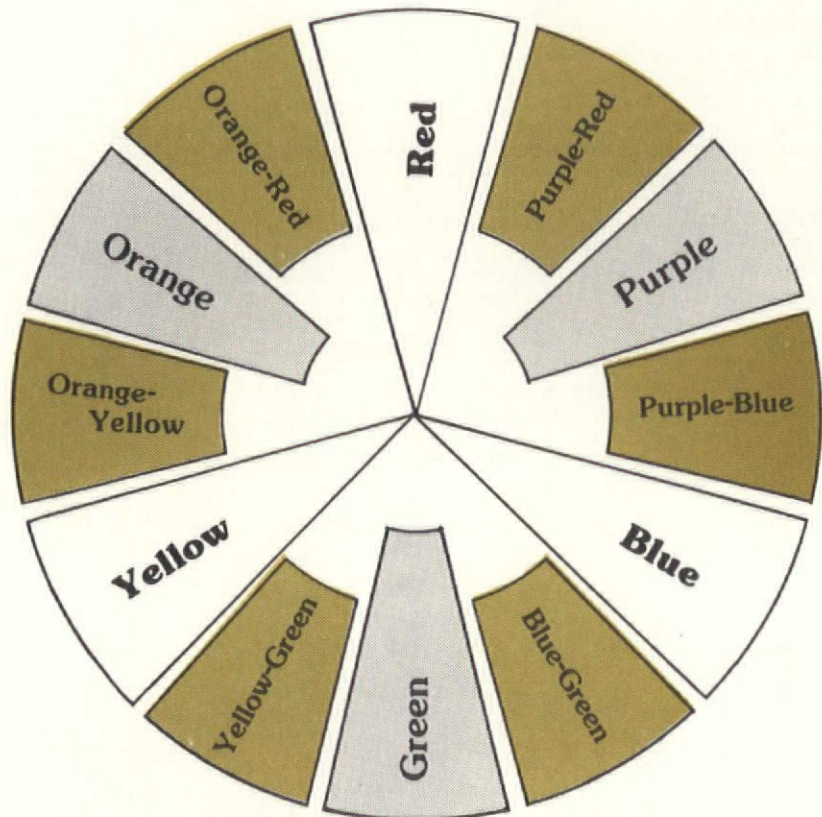
- (1) First reach the correct chroma, or depth of color.
- (2) Next, produce the correct hue by greying the color with its complement.
- (3) Last, if necessary, add raw umber or lamp black if additional darkening is needed.

LAMP BLACK will also add a blue cast to the paint. For that reason, it's usually better to darken your paint with raw umber, a more neutral pigment.

A COMMON MISTAKE is to use the black or raw umber to grey a paint when the correct depth of color has already been reached. The result in this case would be the correct color (hue), but the wrong shade. As noted above, the correct way to grey a color without darkening it is to add its complement.

NAT WEINSTEIN is a master decorator specializing in graining, marbleizing, and glazing. He resides in San Francisco, but his work can be found all across the country.

THE COLOR WHEEL



This basic color wheel shows the three primary colors, the three secondaries, and four of the tertiary colors. Colors opposite each other on the wheel are complements. Mixing equal amounts of complements produces grey.

small amounts of at least one other pigment, such as raw umber, yellow, red, or blue.

9. When matching colors, compare them in light that is identical to the light in which the final result will be viewed. Artificial light changes colors. A color will look different in daylight than it will at night under indoor lighting. Usually, a good north light is ideal for mixing colors.

10. Be aware that paint colors appear different when they are dry. After you've mixed a batch, paint a small section on a sample board. When dry, compare the test on your sample board to your target color.

11. Here's the simplest way to test the accuracy of your match when your target color is a liquid paint. When you think you've made an accurate match, allow your wooden mixing paddle to drain, then dip it 1 inch into the can of your target color. The line of intersection on your paddle shows how the two paints compare.

12. Sometimes you'll want to match a color in a wallpaper or fabric. But when it's painted on a large surface such as a wall, the color is entirely too strong. You can neutralize such a color, and produce pleasing harmony, by mixing it with grey, or making it lighter with white.

13. Add a little yellow pigment to any color to make it appear brighter.

14. White mixed with a color makes it lighter, but NOT brighter. White greys or softens a color with which it is mixed.

15. In theory, black results from mixing the three primary colors — red, blue, and yellow. When you mix these three primary pigments, however, what you actually get is a dark muddy grey of brownish or greenish hue rather than black.

16. If you need to grey a complex color, and you aren't sure what its complement is, you can find out by trial and error. Start by guessing what color you believe would be opposite on the color wheel. Mix up a small sample, and mix with an equal quantity of the paint you're working on. If the mixture results in a middle-tone grey, you've found the complement. If not, experiment until you find one that does. Once you've found the complement, you can add the appropriate amount to your paint to get the desired degree of greying.

17. Mixing any two pigments results in a shade that is darker than either pigment separately.

18. Matching paint to colors in high-sheen fabrics such as silk is difficult because the color changes depending on the viewing angle. Solution: Mix a color that matches the apparent darkest shade, and another color that matches the lightest. Mix these two paints in equal proportions and you'll have a color that will harmonize in a general way with the fabric.

Painting Galvanized Metal

by Larry Jones

GALVANIZED METAL is iron or steel with a zinc coating. It's a very common material in older houses and small commercial buildings, especially for exterior waterproofing details. Gutters, copings, roof decks, and chimney and roof flashings are often made of galvanized metal, even today. Decorative uses on older buildings include cornices, window hoods, cresting, finials, and pediments.

ALTHOUGH the zinc coating offers protection from rusting, galvanized parts must be kept painted. Otherwise, the zinc weathers away and the metal rusts. A little bit of special preparation before painting will help paint on new galvanized surfaces last for years. Preparation is a bit more difficult for old galvanized metal which has rusted, lost its zinc coating, or already shown paint failure.

Why The Paint Peels

THE MOST COMMON CAUSE of premature paint failure on galvanized metal is insufficient preparation before painting. Use of the wrong type of paint, or use of paints that are incompatible with each other, also leads to paint peeling. Corrosion, of course, will also cause paint to fail.

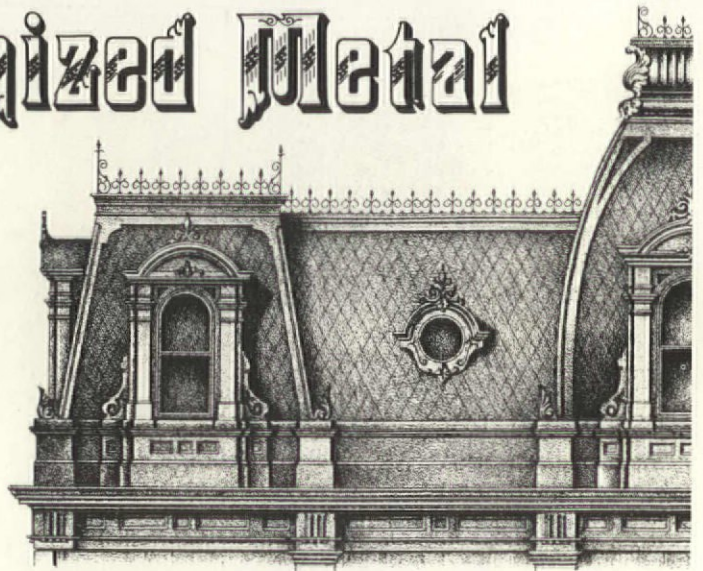
BY LOOKING at the back of a peeled paint chip or at the exposed metal, you can sometimes tell what went wrong. If the surfaces are slick, the metal may have been insufficiently sanded. Or there may have been oil contamination of the surface. A chalky residue might indicate that some oxidation such as "zinc bloom" had developed. A waxy film may indicate that an oil-based primer was used, causing a reaction that forced the paint off the surface.

INTERCOAT PEELING results when the top coat is applied over a primer or finish coat that's too slick for the paint to stick to. Paint can lift and crawl when the top coat and primer are incompatible.

Preparing Galvanized Surfaces

STANDARD WISDOM says to allow new exterior galvanized metal to weather for six months before you paint it. The weathering not only helps clean the surface of milling chemicals and oils, but also lets the galvanizing oxidize slightly, giving it a rougher surface that permits better paint adhesion. But there are a few problems with this approach:

- You may not want to wait so long before you paint.
- Uneven weathering can actually cause poor paint adhesion.
- Protected galvanized surfaces will weather very little, anyway.
- You still need to thoroughly clean and prime the surface prior to painting.



JUST BE SURE to paint before the metal rusts, and always prepare the surface well.

FOR BOTH OLD and new galvanized metal, a safe cleaning agent is water and TSP (trisodium phosphate, a heavy-duty cleaner available in paint stores), 2½ oz. to 1 gallon of water. Use it HOT, around 150 to 200 degrees, and follow with a thorough rinsing. New galvanized metal may require slight sanding to "moss" the surface and thus allow the primer coat to adhere well.

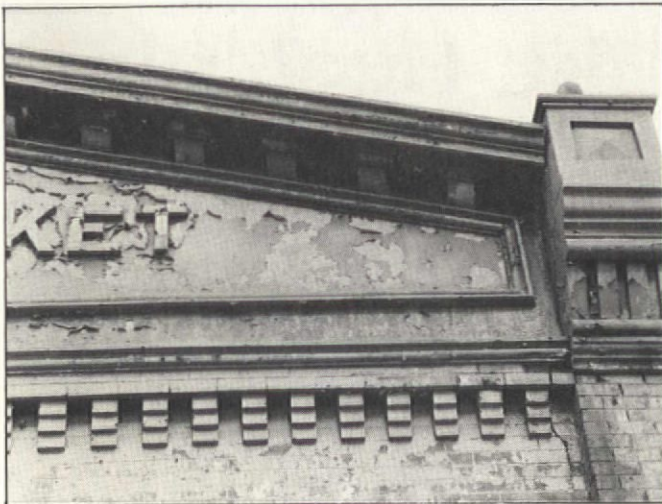
VINEGAR (weak acetic acid) has long been recommended for scrubbing and etching galvanized metal prior to painting. But it can eat into the zinc and remove some of the coating; worse, it may leave behind a residue that can cause paint peeling. It should be used only in a mixture of 1 pint vinegar per gallon of water, rinsed thoroughly with clear water.

Special Preparation of Old Metal

BEFORE YOU CAN PAINT older galvanized metal, you have to remove peeling paint and rust. Deteriorated paint layers can be removed by scraping, wire-brushing, and sanding. There is no easy way to strip paint from galvanized metal, especially if the surface is intricate and decorated. The heat plate works, provided you're careful to avoid setting fire to bird's nests and other behind-the-scenes accumulations.

CHEMICAL STRIPPING, either commercially applied or done yourself, works well, but great care must be taken to remove all the chemicals. Rinse thoroughly and re-rinse until the acids or alkalis used are completely removed from the surface and all cracks and joints. The danger is that residue from the stripping chemicals will continue to wash out of crevices, causing paint failure.

SANDBLASTING, that no-no, has been used successfully to clean metals, but it's risky on galvanized sheet metal. A very cautious and experienced sandblaster may be able to clean the surface without destroying the metal. Most often, holes will be shot into the metal; some-



Decorative galvanized metal pediment and cornice on an old market show typical paint film failure caused by application of oil-based paint without priming the metal. Water seeping into open joints probably contributed to corrosion and paint failure. Repair of the metal such as patches, soldering, and application of paintable sealants should be carried out prior to priming.

times, visible, permanent waves are left from the blasting pressure. And you'll have to immediately prime the metal to prevent rusting: Sandblasting removes whatever galvanized coating was left on the metal.

Priming The Metal

PRIMING is the most crucial and controversial part of maintaining galvanized metal house parts. The zinc-dust and zinc-rich paints which are most highly recommended for painting galvanized metal are specialty coatings -- not part of the regular house-paint lines of the familiar manufacturers. It is worth tracking down these paints for a long-lasting finish.

METALLIC ZINC-DUST PAINT is considered the best primer for both rusted and non-rusted galvanized metal. This is a heavyweight paint that contains upwards of 80% actual metallic zinc dust -- so you have to stir it a lot. The color is grey, but it can be painted over with one or two coats of a high quality, oil-based or latex house and trim paint or with machinery enamel. Look for federal specification TT-P-641, Type 1, on the label.

HERE ARE SEVERAL regional companies offering zinc-rich paints to retail customers:

- Allentown Paint Co. #s-15993
- Cook Paint & Varnish Co. #471-A-212.
- Dean and Barry. #2402 MZP Primer.
- Kansas Paint Co. #TT-P-641 Type 1.

ZINC-RICH PAINT is another zinc coating, especially recommended for spot-priming clean areas that have lost their galvanized coating. Such areas include badly rusted spots, soldered joints (soldering removes the galvanizing), and welds. Because these paints contain 90% or more zinc when dry, they are also referred to as "cold galvanizing." The paint is most commonly sold as an aerosol; Rust-Oleum's #7785 Zinc Sele is an example. It can be over-painted only with latex.

ACRYLIC LATEX PAINTS appear to hold up very well when applied to clean, rust-free galvanized surfaces. Sherwin-Williams has latex paint (in both their A-100 and Super Paint series) which can be applied directly to rust-free galvanized metal. As the paint is self-priming, only two coats are necessary.

BENJAMIN MOORE'S Ironclad galvanized metal primer is a vinyl acrylic latex suitable for new and rust-free surfaces. A tintable paint, it can also be used as the top coat, or can be over-painted with either oil-based or latex.

RUST-OLEUM has an acrylic non-hardening coating, their #770 Galvanized Metal Primer. Containing no rust inhibitors, it is designed for new or rust-free galvanized metal.

FOR OLD GALVANIZED metal that has rusted, Rust-Oleum also makes a corrosion-inhibiting iron-oxide acrylic latex paint: #5769 Red Primer. It should be followed with two top coats of latex paint.

OIL-BASED and alkyd primers should not be used on galvanized metal surfaces because a chemical reaction can occur which produces a soap between the metal and paint, driving the paint off the surface. However, oil-based primers can be used on extremely rusted and weathered surfaces that have lost all of their galvanized coating. For such surfaces, there are:

Benjamin Moore's #155 Ironclad Retardo Rust Inhibitive Paint. (Can also be used as a spot primer on very rusty areas.)

Red Devil's #9 Iron Oxide Primer. (Can be painted over with latex or oil-based top coat.)

Sherwin-Williams 'Kromic.' (Penetrates rust after surfaces have been brushed and sanded.)

Rust-Oleum #7769 Rusty Metal Primer. (Good for rusty areas where some corrosion remains.)

Top Coats

EVEN WITH PRIMERS that weather well, it's always a good idea to apply the top coats of paint as soon as the primer is dry. This prevents dirt, oils, and airborne contaminants from getting imbedded in the primer, later causing adhesion problems between coats.

MOST CRITICAL, though, is the compatibility of the primer with the top coat. Before purchasing the primer, know what top coat you'll want to use, and check their respective labels for compatibility information.

THE ZINC INSTITUTE, 292 Madison Ave., New York, NY 10017, has a free booklet entitled *Painting Galvanized Steel*. Designed to fit into a farmer's coverall pocket, this little booklet answers many questions about priming and painting galvanized metal. Those firms producing zinc-rich paints are also included.

Thanks to: Steven Baird, Architect; Barry Douglas, Red Devil Paints; Bruce Dargatz and John Jagielski, Rust-Oleum Paints; Robert A. LaCosse, National Roofing Contractors Association; David Look, Architect, National Park Service; Talbot Love, Benjamin Moore Paint Co.; Richard F. Lynch, Zinc Institute; David Mahowald, Sherwin Williams Co.; National Decorating Products Association; John Straton, Sheet Metal and Air Conditioning Contractors Association; John Waite, Architect, Preservation Design Group.

Don't Overlook The Heat Plate

It's More Versatile Than We Thought

by Larry Jones



A Hyde electric heat plate is being used to loosen paint from the surface, forming a large bubble behind the paint.



A clean varnished surface remains after paint is scraped.



Paint left in joints and cracks is picked out after softening.



One coat of paint remover is applied for final clean-up.



Stripper is removed with a putty knife and solvent.

WE'VE BEEN TRYING OUT all sorts of paint-stripping tools and techniques -- mostly on OHJ staff members' houses or antique furniture. In a recent project, we wanted to see what stripping method would prove fastest on a piece of hardwood furniture with flat surfaces and with minimal decoration. (In other words, something similar to woodwork.) OHJ circulation supervisor Joan O'Reilly trustingly lent an oak cabinet, heavily laden with eight coats of thick paint, for the job.

OUR GOAL was to remove the bulk of the paint quickly -- but more gently than if we'd dip-soaked it in the East River. From previous experience, I expected the electric heat gun to win the gentle-but-fast race. Working on the technical staff of the preservation office in Salt Lake City, I had been a staunch advocate of the flameless heat gun for years. I frankly didn't expect much from a tool called the heat plate. Why, the thing is downright unAmerican! It's cheap, insubstantial, no moving parts, it doesn't blow, doesn't even make any noise! "Slow as molasses," I thought, and was I surprised. As it turns out, it's a more useful tool than any of us around here realized.

I HAD SEEN heat plates on and off for years -- was it in Sears catalog? -- showing a sailor removing paint from a boat. They look like one of those plug-in barbecue gadgets used for lighting charcoal briquettes. A slender electric coil, a chrome reflective shield, a cord and plug, is about all there is to it. You plug it in and wait for it to get red hot.

ANYONE who has used a heat gun will find stripping with a heat plate is very much the same -- except, I think, faster in some cases. To remove paint, you simply hold the tool reasonably close to the painted surface and wait for the paint to soften up enough to be removed with a putty knife.

Using The Tool

THE REAL STRENGTH of flameless heat tools is their ability to loosen many layers of paint all at once. And the heat plate does it in a relatively large area. The tool works best on thick paint; it's of only marginal benefit on thin coatings or varnish. You have to experiment with the distance to hold the tool from the surface, as well as the optimum length of time holding it in one place. The paint will begin to swell up into a large bubble, about the size of the heat plate face, and perhaps just begin to smoke. Then you use a stiff, 1½-in. to 3-in. scraper or putty knife to remove the molten paint, leaving an almost clean wood surface beneath.

JUST LIKE THE HEAT GUN, the most efficient way to use the heat plate is to move continuously along the surface, following closely behind with the scraper. With a little practice, we were able to make the old paint come off in long unbroken ribbons, instead of smeary bits and pieces.

IF WE HELD THE TOOL in one place too long, not only would the paint bubble eventually burst, but it would also eventually flame up. In either case, the paint would end up smeared back into the surface we were trying to clean. After some practice, we seldom ignited the paint. (If you do, blow it out or pat it out).

AS WITH the heat gun, it is possible to actually scorch or char the wood, but you really have to work at it. A game that we played (if you can have fun when you're stripping paint!) was seeing how long a continuous strip we could remove without stopping or going back. Four feet was our longest run.

GETTING THE MOLTEN and soon-to-be-hard paint off the putty knives always poses an interesting challenge. Our unorthodox solution this time: an old metal dustpan with the open end of its handle forced onto a broom handle. It worked well to lean the device over an empty trash can and scrape the knife on the edge of the dustpan.

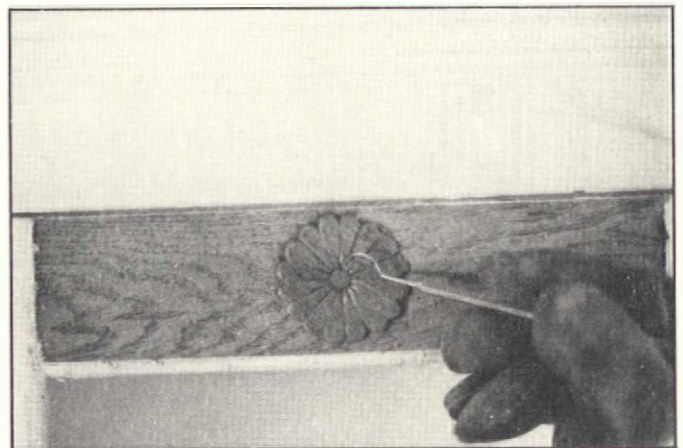
I HAD HAD the notion that the heat plate wasn't good for much of anything except large flat surfaces such as siding. But after using the tool on interior wood and even old furniture, I find that it works well on a variety of surfaces. The heat gun is still best for architectural detailing that has deep recesses, as the heat plate tends to overheat adjacent surfaces more than the heat gun does.

ARCHITECTURAL elements which have enclosures or hollow spaces (cornices, columns, partitions) may contain combustible materials such as bird nests, leaves, and insulation. For such elements, you **MUST NOT** use the blown-hot-air gun. A heat gun can start such materials smoldering by blowing hot air into cracks and open spaces. A heat plate comes in handy in such cases. Even with the plate, though, you must be alert.

Dental Picks & Details


CORNERS AND CRACKS are especially bothersome no matter what your technique, but I came onto some great little picks that helped. Stainless steel dental picks or probes are swell tools, and now we've found an inexpensive mail-order source. (See page 31.) The picks are sharp and springy but also unusually rigid. The points can be reshaped to suit your needs, with a little filing. They work well for chipping paint from intricate work without the use of heat. To lift out molten paint, you can fashion your own specially shaped tools: We used a sharpened teaspoon to scrape out a cove moulding on the cornice of the cupboard.

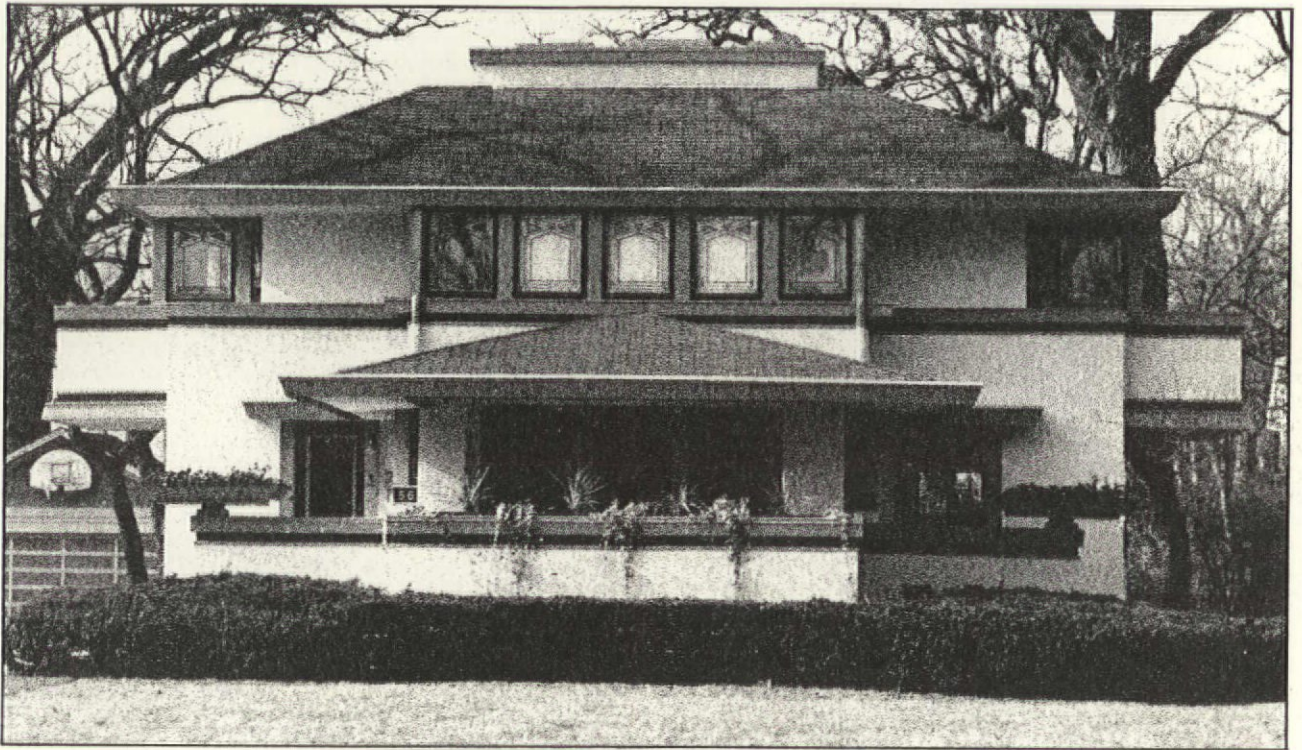
REMEMBER that while the heat plate is efficient, it, like the heat gun, cannot be expected to leave the wood surface totally clean. Depending on your project and the type of finish, clear or painted, you will have to follow up with a coat of chemical stripper or by sanding. Remaining paint is sometimes easier to sand after it's been cooked with a heat tool. Sanding will create dust that probably contains lead, so be sure to wear the proper mask.



Delicate, applied wood trim becomes soft with heat along with its paint covering, so use heat, stripper, and dental probes carefully to avoid damaging the wood.

STRIPPED PAINT CREATES quite a mess. In its own sticky, molten state, it can burn the heck out of any skin it contacts. A long-handled scraper, gloves, and a long-sleeve shirt offer good protection for you. A good dropcloth, preferably canvas, will protect your floor. As it falls to the floor, the paint is usually very hot; therefore, avoid using easily combustible materials such as newspaper to catch it. Always keep a fire extinguisher and a ready source of water nearby. Some home owners even keep a bucket of sand near the work area to quench small fires without causing water damage.

PLAN TO CLEAN UP OFTEN, ideally at the end of each work day, or sooner if required. Most old paint is lead based: You shouldn't breathe the fumes should the paint flame up during stripping. Nor should you breathe the fumes from most paint strippers you use. Buy a good mask, or several made for different substances. They really are a thoughtful gift for someone you care about (including yourself). 



Post-Victorian Domestic Architecture

THE PRAIRIE STYLE

By Frances H. Steiner

IN THE TWO DECADES following the Great Fire of 1871, Chicago witnessed the development of the skyscraper. Style was of little importance in commercial architecture of this time, until 1892, when Louis Sullivan demonstrated an aesthetic form appropriate for tall buildings. However, in the field of domestic architecture, clients were more style conscious, and a younger generation of architects under Sullivan's influence sought alternatives to the borrowed European modes. The Chicago rebels were determined to bring architecture closer to American life, and based their revolt on both patriotism and function. Sullivan later called the movement a "Secession," seeing a kinship with similar movements that broke from traditional styles in Berlin and Vienna.

FRANK LLOYD WRIGHT was the leader of the generation of architects who began their practice in the 1890s. Trained in Sullivan's office, Wright was eager to solve the problems that he saw with the pretentious "gingerbread" styles of the suburbs. He found no relationship between the ornateness of the homes and the character of their inhabitants. He felt that the needs of the inhabitants weren't met by the plans of the houses, with their separate, boxlike rooms, large hallways of wasted space, and attics and basements. By 1900, Wright evolved a personal style that he associated with the American prairie. But it was more than only a style of architecture--it was a school; a set of philosophical principles with broad implications.

THE CENTRAL THEME of Prairie architecture is the concept of the house as a part of nature. Wright had grown up in a rural setting in Wisconsin, with close family ties and a strong Unitarian faith. During his childhood, Wright's mother read to him from Emerson, Whittier, Lowell, and Thoreau. Wright came to believe that God is manifest in nature, and that all creative force works within the patterns of a greater natural order.

THE TRANSCENDENTALIST CONCEPT of the "Natural" was not far removed from Japanese thought, in which the highest form of beauty is nature. Wright's first encounter with Japanese architecture was a pavilion he saw at the Columbian Exposition of 1893, and it suggested to him possibilities for an architecture in harmony with nature. The pavilion had low lines, wide overhanging eaves, walls that functioned like screens, and continuous interior space. Wright was immediately enamored with Japanese culture and began to collect Japanese prints. By 1900 his architecture started to display some of the characteristics he'd seen in the pavilion.

APPLYING JAPANESE and Emersonian concepts to Midwest architecture meant harmonizing manmade structures with the natural environment. The broad, flat prairies inspired buildings with low lines paralleling the landscape instead of standing in contradistinction to it. Horizontality became the goal, achieved in a variety of ways. In Prairie homes, the walls are band-like, alternating solid portions called screens

with transparent, glazed ones. Windows are arranged in bands or ribbons, sometimes turning corners to create effects of transparency—a structure may appear as a series of floating roof and floor planes, periodically separated by solid portions.

THE SENSE OF HORIZONTALITY relates especially to the extension of the roof profile. Most Prairie houses have hipped roofs of shallow slope; some have flat slab roofs; and a few, gable roofs. Lower storeys often have their own "pent" roofs, or ledges, that parallel the main roof. Porches and porte-cocheres are included under the primary roof, or are given separate coverings that repeat the profile of the larger roof. Wide eaves often extend far beyond the wall surfaces, not only providing physical shelter, but also satisfying psychological needs for warmth and protection. They serve as awnings, protecting the house from the sun and allowing windows to be left open even during heavy rainstorms. The eave may come to a narrow pointed edge, or it may carry a perpendicular or slanted fascia that conceals the gutters.

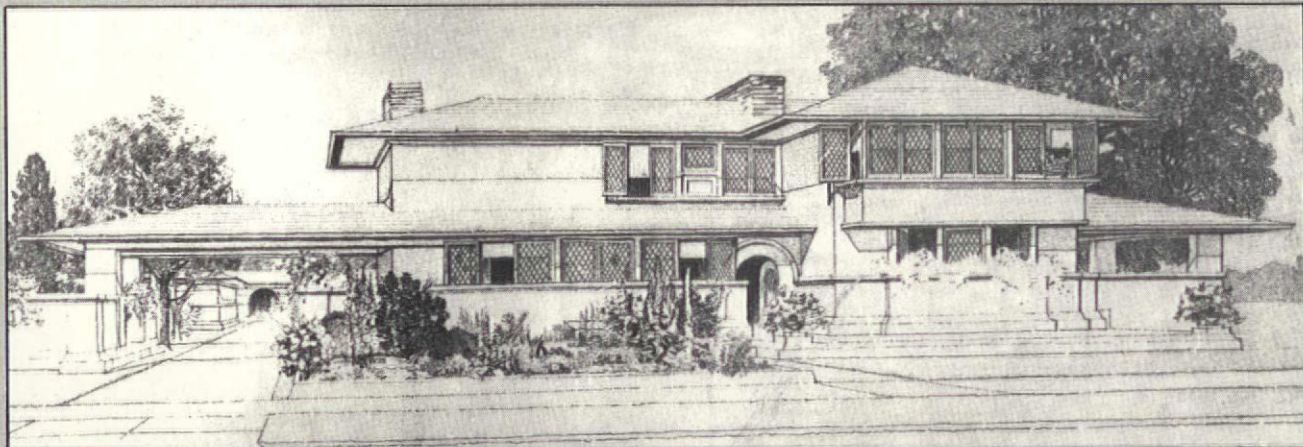
IDEALLY, THE PRAIRIE HOUSE has grounds that complement the structure itself. For Wright, most people spent too much money on their houses and too little on their landscaping. To relate house and garden, facade walls reach to the lot line; planned walkways lead visitors along a series of turns, preparing them for the entrance; and the materials of the structure pick up the earth tones and textures. A Prairie house also opens into nature with half-way spaces, transitional between interior and exterior, including porches, decks, terraces,

and balconies. Urns and planter boxes are integrated into the walls and terraces, softening the masonry surfaces with foliage.

ONE OF THE CENTRAL philosophical ideas associated with the Prairie School is the concept of organic form. The forces of growth in a plant travel out from the core or trunk, spreading in a logical manner through the stems to the leaves. The internal arrangement of a Prairie house parallels this natural growth process. Beginning with the needs of the individual family, the house is designed from inside out, arranging the rooms to provide togetherness as well as privacy for the family members. The core of a Prairie house is, in most instances, the fireplace; the center for family gatherings and social interchange. Various rooms are located radially or laterally from this core of activity.

ALTHOUGH CLAIMING to relate the house to their clients' needs, Prairie School architects actually may have encouraged clients toward a more open life-style by providing them with more open spaces. Instead of doors that open and close between major rooms, a Prairie house has wide rectangular openings, allowing a sense of spatial interpenetration and continuous flow. (Originally, greater flexibility was achieved with curtains that could be pulled to provide some privacy.) One advantage from interrelating community spaces is the resulting suggestion of greater spaciousness. Only the bedrooms and bathrooms, usually located on the second floor, are entirely private.

"A Home In A Prairie Town"



In January of 1901, Frank Lloyd Wright published "A Home In A Prairie Town" in Ladies' Home Journal. This was one of the first Prairie designs, and its characteristics were to be repeated in many variations during the years between 1900 and 1915.

Spread horizontally across the lot, the form of the house parallels the flat, straight lines of the earth. The hipped roofs of shallow slope project their eaves over rows of casement windows that form horizontal glass bands around the walls. A porte-cochere to the left is covered by a roof that continues as a ledge below the upper-storey

windows and picks up again over the porch on the right side of the house. Thus the eaves are continuous and parallel on two levels.

The window sills of the ground floor continue in a moulding that becomes the cap of the porch and terrace walls, horizontally linking up with an exterior garden wall extending to the property line. The house appears to reach into the landscape and become part of it. With no attic and no apparent basement (although one would presume a furnace in an excavated room), the house is of much lower proportions than the Victorian homes of its day.

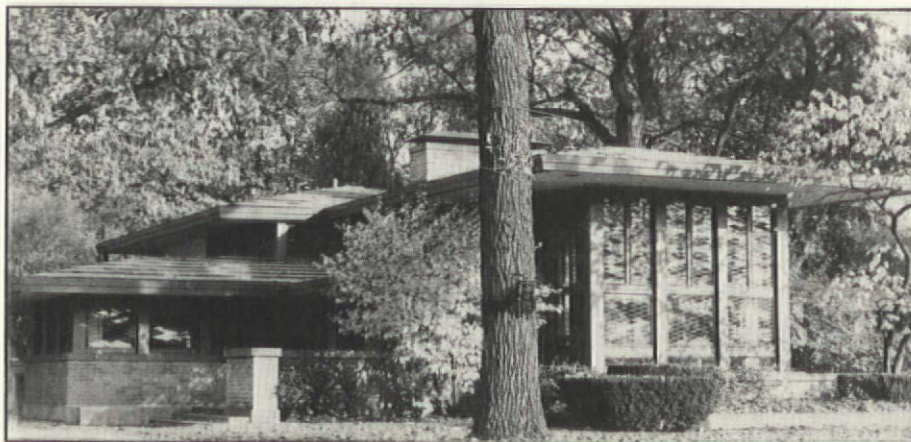
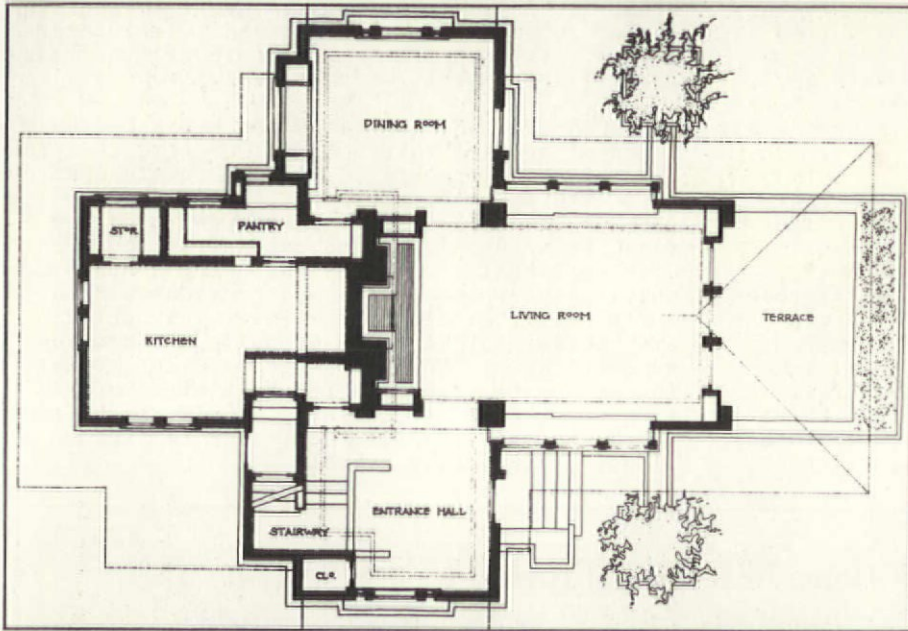


IN AN AGE when women were becoming involved in activities outside the home, efficient houses were more desirable than ever before, and Prairie houses met these new needs. Easy-to-wash wall coverings were being developed for kitchens and bathrooms; appliances designed to lighten housework were introduced; and built-in furniture was incorporated into the rooms for easier maintenance. Children's play areas were arranged for better supervision; mothers could attend to other duties and still care for their children.

WRIGHT HAD BEEN critical of the boxiness of Victorian homes, yet he himself designed a number of small rectangular houses that were probably more boxy than any of their Victorian precedents. "Modern" architecture appealed to young homeowners who couldn't afford houses of complex designs, and the cheapest Prairie houses have square or rectangular plans with minimum variety. However, they achieve a degree of asymmetry through the location of porches and entries on one side or off-center.

SOMETIMES larger, more complex Prairie houses are also rectangular, but generally they're T-shaped, L-shaped, or cruciform. Whether centrally placed or located to one side, a projecting wing brings variety to the massing of the structure. It also allows light to penetrate the rooms from multiple directions and provides possibilities for alternate traffic patterns.

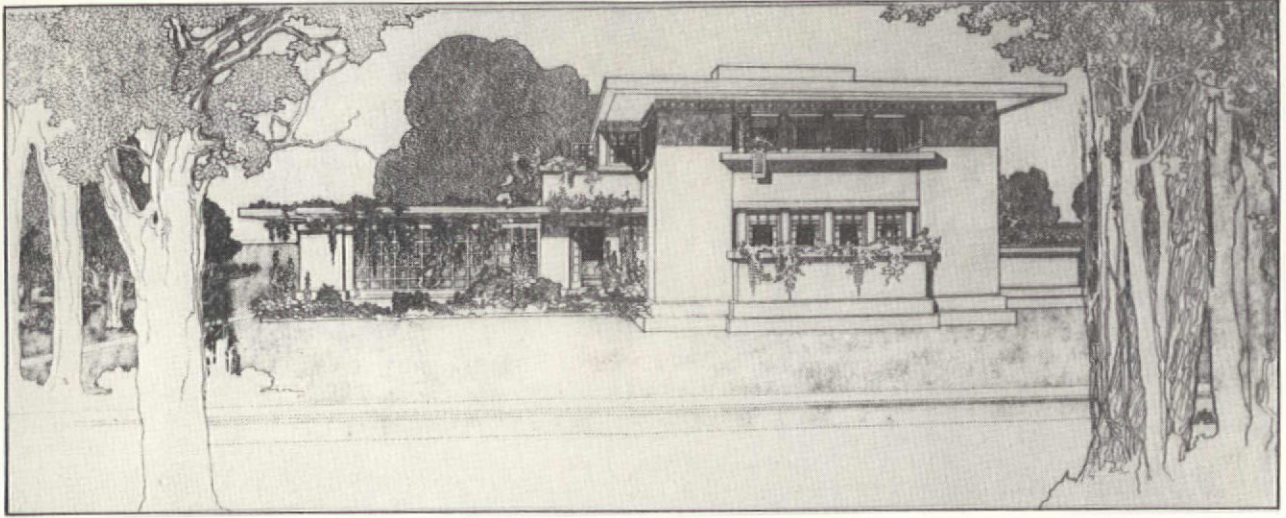
SPATIAL EFFECTIVENESS is sometimes increased in Prairie houses through changes of floor levels. As early as 1902, Walter Burley Griffin utilized partial floors at half-levels, connected by short flights of stairs. In the Prairie houses with level changes, these were commonly of one or two steps, thus giving individual rooms a separateness without sacrificing visual continuity. In some cases, two vertical storeys merge into a single space, such as in Wright's Isabel Roberts house in River Forest, in which a second-storey balcony overhangs the living room.



Top: Frank Lloyd Wright designed this house for J. Kibben Ingalls in River Forest in 1909. Ingalls had requested as much light and air as possible, because two of his children had tuberculosis. Wright gave him windows on three sides of every major room with this small cruciform house. (The stucco exterior was originally a pale grey and the trim a greyish green.)

Middle: Wright had been experimenting with cruciform designs since 1900. The Ingalls house, a late example, is considered by many to be a "classic" instance of the cruciform plan.

Bottom: Wright designed this house for his secretary, Isabel Roberts, and it too has a cruciform plan. Here, the entrance is tucked inconspicuously to one side. The house is a part of the forest-scape itself, and a tree actually grows through the porch, the roof being wrapped around its trunk.



PRAIRIE HOUSES are built of natural materials, the colors and textures harmonizing with the environment. Although Wright suggested concrete for residences, it was seldom used. On rare occasions Prairie architects delved into it, softening its texture with a colored stone aggregate. The best known example is Unity Temple in Oak Park, one of Wright's masterpieces of the period.

STUCCO was most frequently used for exterior surfaces. Rarely utilized in America in the 19th century, it became very popular after 1900. Usually tinted beige, grey, or tan, it could be given a variety of textures, depending on the method of application and the addition of pebbles or other aggregates. Stucco surfaces were commonly enlivened by applying patterns of stained wood trim which paralleled the corners of the walls and the slope of the roof. Trim was also wrapped around the corners, producing the illusion of a folded plane. The architects Tallmadge and Watson would overlap various polygonal shapes in the mouldings of triangular gable walls, using pebbled felt inside the framing surfaces. (Today the material is hard to recognize because of repeated coats of paint.)

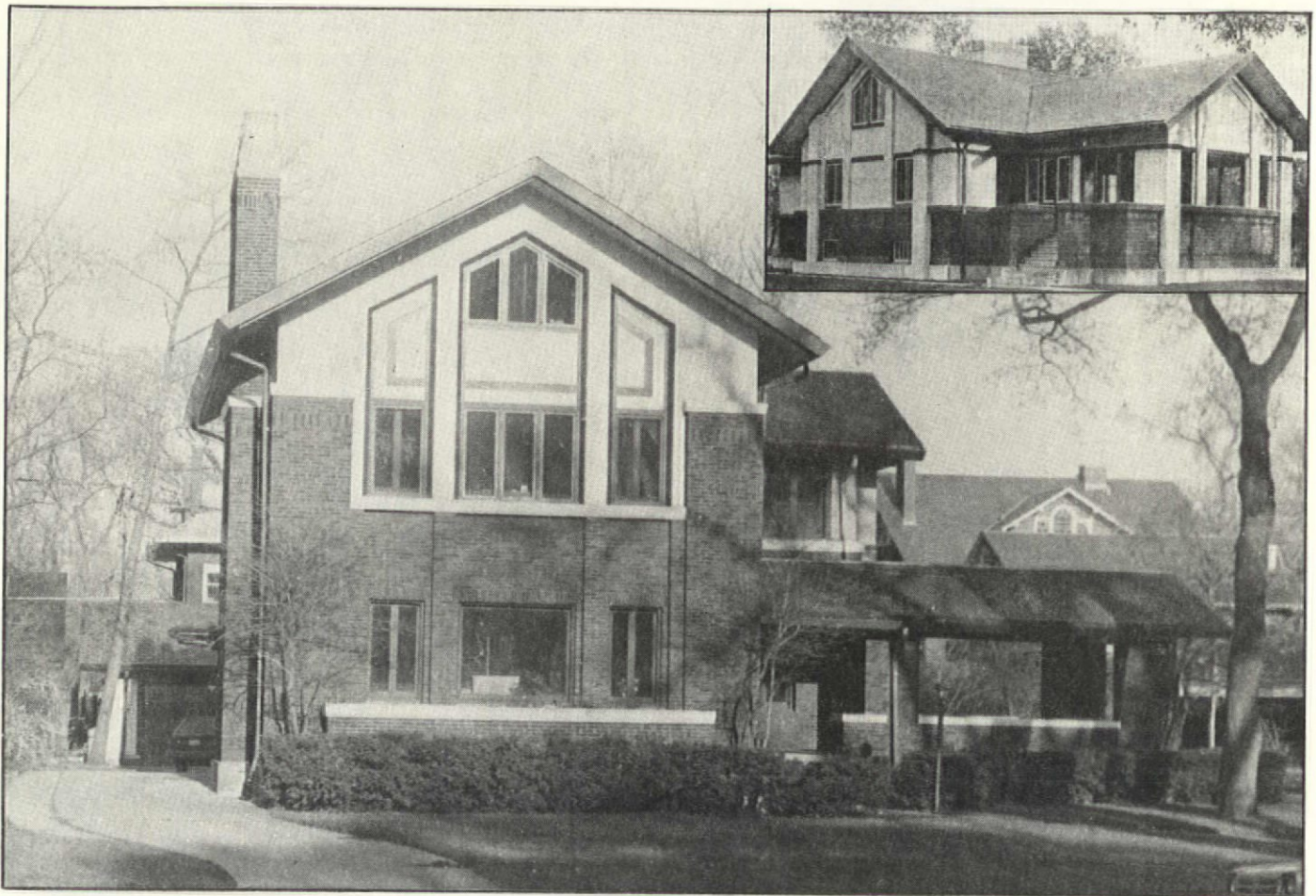
MANY EARLY PRAIRIE HOUSES were sheathed with horizontal board-and-batten siding, at least up to the sill level of the second-storey windows. The material, stained green or brown, is casual, rustic, and unpretentious in appearance, and was certainly popular in the vacation spots around Lake Michigan. The horizontal battens, covering the joints between the wider boards, create parallel rows of shadows that band the house and complement the effect of the wide eaves and ribbon windows.

Above: "A Fireproof House For \$5000" by Frank Lloyd Wright was published in the April 1907 Ladies' Home Journal. Only the living room, dining room, and kitchen are on the ground floor; the bedrooms are upstairs. Wright envisioned the house to be of concrete, but builders who copied its lines preferred stucco and frame, a more familiar and inexpensive means of construction.

Below: John Van Bergen's Albert H. Manson house in Oak Park, Illinois, was built in 1911-12 and is a modification in stucco of Wright's plan shown above. Van Bergen, the youngest and last member of Wright's Oak Park firm, designed many suburban homes based on the same design. Unlike the other Prairie School architects, he continued to build houses in the Prairie Style until his death in 1957.



BRICK IS FREQUENTLY used for Prairie houses, with stone or concrete trim. (Stone was seldom chosen except for trim.) In some cases, brick exterior walls were laid with projecting alternate courses, giving greater emphasis to the wall's horizontality. Sometimes the mortar in the vertical joints is tinted to match the brick and applied flush; horizontal joints, on the other hand, are laid with a lighter mortar and raked, creating shadows between each course of brick. Fireplaces on the interior are usually of Roman brick and often extend over a large portion of interior wall. Patterns of vertical and horizontal projecting bricks are generally the only surface ornamentation.



Here's one of the latest Prairie School houses: Tallmadge and Watson's Henry D. Goldbeck house in Oak Park, completed in 1915. The firm generally used gable roofs on their residential designs and enjoyed integrating the casement windows of the gable walls into abstract patterns created with wood banding. Inset: The John Piggott house in River Forest is another Tallmadge and Watson design.

Built in 1909, the house has a shingled base, banded with stringcourses, which rises from the water table to the sill level and is paralleled by another stringcourse connecting the heads of all doors and windows. The cruciform plan, casement windows, vertical pierlike projections, and polygonal gable windows are all typical of the work of this firm.

THE MOST IMPORTANT VEHICLE for the spread of the Prairie School was *House Beautiful*, a Chicago-based magazine directed toward the upper-middle-class American housewife. Its editors were influenced by the Aesthetic and Arts-and-Crafts Movements, and they were the first to publish Wright's work. *House Beautiful* continued to support his architecture for half a century.

ROBERT SPENCER, a close friend of Wright's, and Charles White, who had worked in Wright's office, published Prairie School articles in *House Beautiful* almost monthly from 1900 to 1914. The two authors, both Prairie School architects, wrote practical articles about windows, roofs, bathrooms, kitchens, and other topics relating to the home. Texts were illustrated with photos of Prairie School houses from Chicago's suburbs. *House Beautiful*, along with *Ladies' Home Journal*, *Country Life*, and several other nationally distributed publications, appealed to the aesthetic sense of women across the country, and they in turn must have played a major role in choosing their own architects and constructing homes in the "modern" mode. In the days before television and radio, periodicals were essential in the formulation of taste.

DURING WORLD WAR ONE, construction of Prairie houses slowed. Simultaneously, American taste took a swing back to more traditional, historical styles. But Prairie houses were only one variety of "modern" in the early 20th century; they represented a larger movement toward rectilinearity, simplicity, and lower proportions. Craftsmen homes and bungalows of the same period are not unrelated, but the principles that gave rise to the Prairie School have wider implications than those of any other building type. Thus, the Prairie School continues to influence 20th-century domestic architecture: in the minimum of space given over to attics, basements, and hallways; the openness of the plan; and the integration of all parts of the dwelling into a unified whole.

FRANCES H. STEINER studied Architectural History at the University of Chicago and at Northwestern, where she received her Ph.D. She now teaches Art and Architectural History at Rosary College. Her book *French Iron Architecture* will be published by UMI Research Press in April of 1984.

PRAIRIE INFLUENCE

VERY FEW HOUSES were actually designed by Frank Lloyd Wright, Walter Griffin, or any of the other architects associated with the Prairie School. Yet domestic architecture has never been the same. They popularized low houses and the open interior plan, built-in furniture and sunrooms. Many historians feel that the one-storey suburban ranch house of the mid-20th century is of Prairie School lineage.

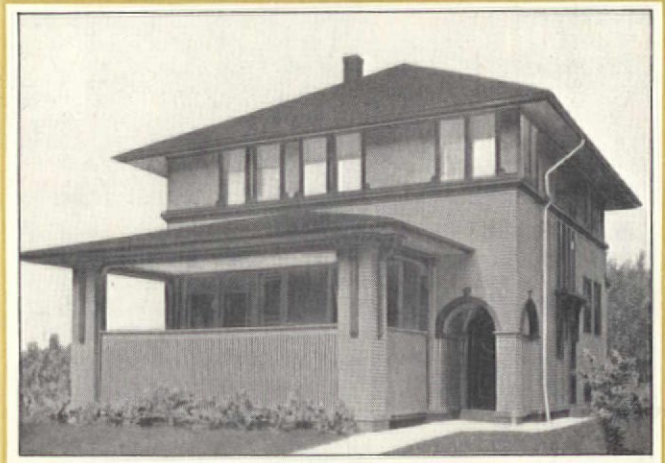
FOR EVERY HOUSE designed by an architect with a famous name, there were hundreds of plan-book houses and developers' houses built. Because these anonymous builders wanted their houses to offer modern styling, they borrowed many details from the Prairie School and Arts & Crafts movement. For example, the Radford Architectural Company was a large, early-20th-century mail-order plan service headquartered in Chicago. Thumb through any catalog of their plans and you'll find dozens of cottages and bungalows that took one or more of their details from the new Prairie School houses.

THESE LESS EXPENSIVE "Prairie Style" homes weren't pure in style or elaborate in detailing. But the Prairie School influence on them is quite clear. The American Foursquare was a post-Victorian house type that was particularly adaptable to Prairie features. Lower the roof and extend the eaves . . . put in a horizontal band of windows . . . add a low, open porch, and presto — a budget Prairie-style house. Whether you live in Montclair, New Jersey, or Monterey, California, you'll find houses like these familiar.

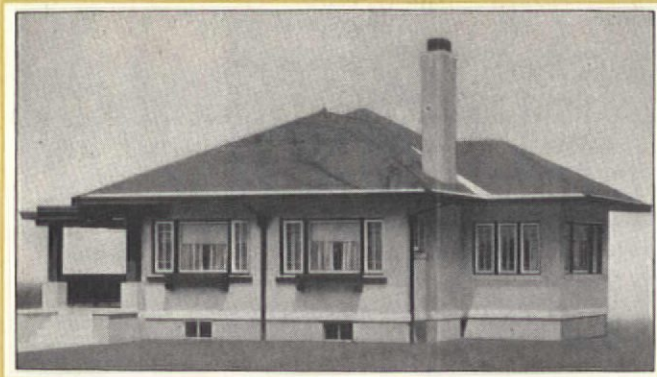
— The Eds.



This 1910 stucco house takes the basic American Foursquare shape and adds Prairie-style details: horizontal wrap-around windows, low horizontal lines, open porch with oversize columns and broad roof.



Here, Prairie-style touches come from the horizontal band of windows on the second floor, the accent on horizontality in the mortar joints, the large porch, and the wide eaves with flat soffits.



A simple, inexpensive bungalow, circa 1920. The broad flat eaves, the Chicago windows, and the general ground-hugging aspect are all Prairie touches. This is the forerunner of the '50s ranch house.



A 1909 Radford plan, this two-family frame house has the horizontal bands, wide flat eaves, and massive-columned porch that are characteristic of the Prairie style. The stuccoed exterior is another style trait.



Basically a Georgian shape, this house has some classically influenced details. But Prairie touches show up in the massive pilasters projecting from the facade, as well as the horizontal bands and windows.

DOCUMENTATION

For Creative Restoration of Old Houses

UNIQUELY PREVALENT in American Victorian houses, porches had four functions. **SYMBOLIC:** As unions between landscape and architecture, porches were adjuncts to both house and garden. What Olmsted wrote in 1869 about gardens being "the exterior drawing-room of the house" was true for porches. **PRACTICAL:** In addition to keeping ground-floor rooms from heating up in summer and foundations dry in storms, porches at night became the Victorian system of air conditioning: a place "to wait for the bedrooms to cool down." **SOCIAL:** The porch was the architectural badge of middle-class existence, with rank determined by the lavishness of detailing. **VISUAL:** Porches enlarged houses at comparatively little expense and were the chief means by which otherwise dull, boxlike structures were enlivened.

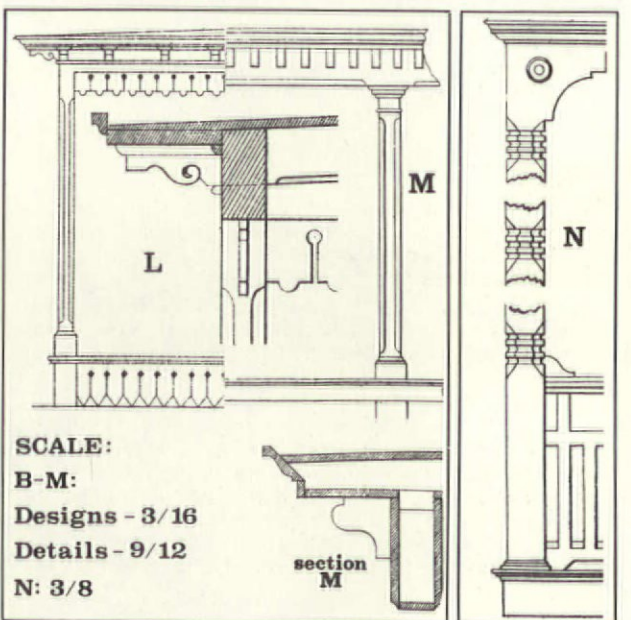
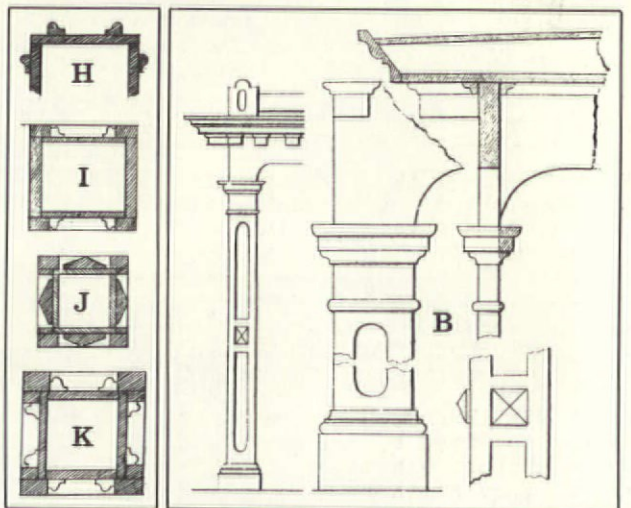
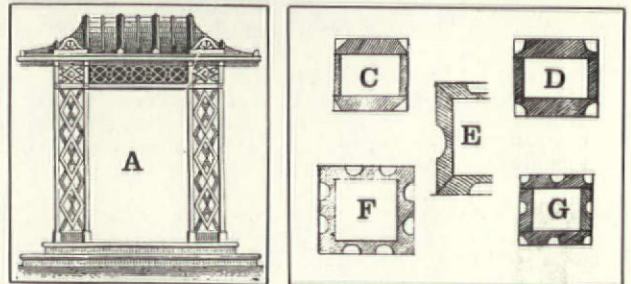
VICTORIANS used the terms porch, veranda(h), and piazza more to mark social differences than architectural ones. The minimum requirement was a roof and some form of support, be it pillar, post, or column. (A porch without such supports held on brackets is a canopy. A porch without a roof is a pergola.) Finials, balconies, balusters, railings, latticework, brackets, pedestal bases, and carved capitals were often parts of verandahs and piazzas, but they were not essential to making a porch.

A DOCUMENTATION SURVEY of Victorian wooden porch supports reveals three basic kinds: open, boxed, and solid. Each came in two varieties. **OPEN SUPPORTS** were either built up (i.e., assembled) or sawn out. **BOXED SUPPORTS**, four pieces of lumber nailed together to make a long, narrow box, were either routed and chamfered or further built up with geometric wood strips and curvilinear profile mouldings. **SOLID SUPPORTS** were either turned on a lathe or chamfered.

OF ALL THE DECORATIVE TREATMENTS, the chamfer was the most common. For centuries, it had been the easiest to make. As art, it was the symbolic borderline between civilization and barbarism: rude timbers (either round or square) were for hovels and cabins in the woods; chamfered posts or boxed pillars were for country houses. To dramatize the visual effect of chamfers, they were usually painted in a darker color than the rest of the porch.

VICTORIAN ARCHITECTURAL pattern-books are the best source for porch details and plans. The supports shown in the next column illustrate the various types and have been selected for ease in reproduction. A is from Downing, Cottage Residences, 1842; B through K and M are from Cummings & Miller, Architecture, 1868; L is from Cummings, Architectural Details, 1873; and N is from Comstock, Modern Architectural Designs and Details, 1881. (See the Old-House Bookshop for pattern-book reprints.)

PORCH SUPPORTS



SCALE:
B-M:
 Designs - 3/16
 Details - 9/12
N: 3/8

section
M



MOST VICTORIAN PORCHES were meant to be trellises, but Downing's verandah (A) begs for flowers and vines. Make it from 4x4s chamfered to octagons and connect them with lattice ripped from 2x4s. Porch B was sawn out of 2-in. plank, but today dimension the sides from 2x4s and bridge them with separate pieces. The pointed boss is applied and easily made in a mitre box or with a radial arm saw. The roof balustrade uses 2x6s. Finials, a common thing on Victorian porches that carry support verticals to the roof, are cut from a 1-ft. length of 2x10. The plain frieze uses 2x10s to which sawn arches are applied.

SECTIONS C THROUGH G show various ways to decoratively rout box supports. H through K show boxes built up with strips and mouldings. Porches L and M use solid, chamfered posts, but L has exposed rafters chamfered and with ends sawn as brackets. Porch N uses a solid, square post chamfered to rings cut 1/2-in. deep.



PORCHES don't have to be straight, one storey, open, and have hipped roofs. There are many alternatives. O is from Woodward, *Country Homes*, 1865; P and Q are from Cleaveland & Backus, *Village & Farm Cottages*, 1856; R and V are from Woodward, *Arch. & Rural Art II*, 1868; S, T, and U are from Reed, *House-Plans for Everybody*, 1878; and W is from Woodward, *Arch. & Rural Art I*, 1867.

ALTHOUGH P, Q, AND R are straight, the similarity ends there. P has a gable to signal a central door; R puts steps in the middle for an ersatz symmetry. Q is a gutsy solution to the problems of a hillside cottage and rises three storeys from basement to roof peak. (W, with an overdose of porch, is the Northern stereotype of a Southern house.) P has a shed roof and, along with U, a partial enclosure.

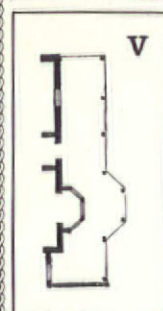
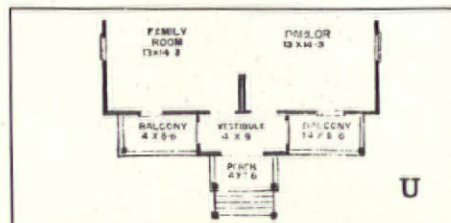
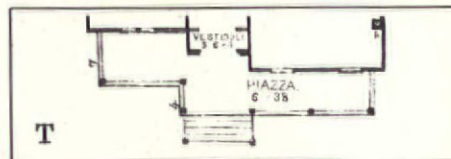
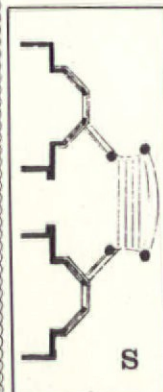
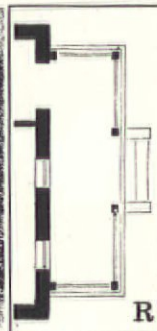
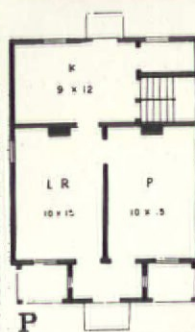
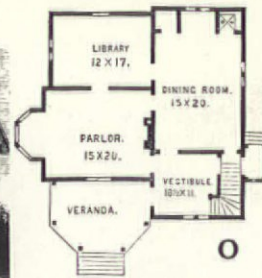
PORCH VESTIBULES, by creating air traps, are a clever solution to the energy problem for a house without a hall, lobby, or vestibule inside. They neither disrupt nor waste interior space. They direct traffic to either the parlor or U's "family room," an early use of that term. In U they create disconnected, private balconies reached by vestibule side doors. P's balconies enlarge interior space through full-length, hinged windows (French doors).



JOINING PARTS OF A HOUSE is another porch talent. O unites two wings with a five-sided verandah breaking beyond the building. This circle-like form enlivens the boxy house and echoes the parlor bay window nearby. (V also echoes a bay window, but it is underneath.) Note also the balcony. Full-length, second-storey windows often intersect porch roofs. Flatten the roof in front to expose them or make a balcony. T has the same building outline as O but creates a full-length piazza with a porch vestibule. S makes a three-sided porch to both echo and join a pair of bay windows. If you have a dull box, here is the perfect spice. Bay windows cheaply create new and exciting interior spaces for a conservatory/window garden and window-seat observatory.

John Crosby Freeman

PORCH PLANS



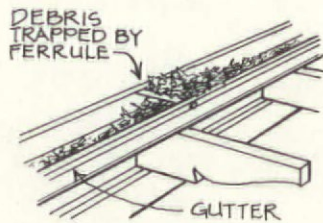
porch roofs (from p. 1)

NOW, SOME OF THE rafter ends had rotted at the joint at the back of the splice. To cut out all the rot, I had to remove the gutters. I knew I had a real problem when one tug on the gutter pulled all the spikes out of the rafters.

And What Did I See?

ROTTEN RAFTERS. Rotten decking. Rotten headers. Rotten fascia. The roof framing was Fungus-opolis. I had not expected this. Just a year before, I'd repaired a bit of flashing on this same roof. The gutters had showed some rust, but they appeared to be draining properly. I thought they should be replaced in the next year or two.

NOW THAT THE GUTTERS were off, I could hold them up to the light and see pinholes. The pinholes were always at a point where the gutter had been in close contact with the wood-- just over a rafter end, or at a point where a spike went through -- so the leaks were hidden. The gutter had leaked just enough to let water seep into the wood, but not enough to drip during a rain-storm. And over the years, debris had backed up at the spike-and-ferrule connections, adding to the deterioration. My simple carpentry job had turned into a major undertaking. I couldn't just replace the rafter end; the whole darn roof had to go.



Sneaky rot: Previously repaired rafter ends were visibly rotten. After the gutters were removed, it became clear the whole roof was rotten, interior framing and all.

the roof was less than two inches per foot, so we decided to install another soldered-seam sheet-metal roof, just like the first one. That suited me fine. But when was the last time you saw a work crew up on a roof bending and soldering metal pans?

I CALLED several roofing contractors in Nashville. I asked each of them for a price quote on the installation of a 125-square-foot terne roof, with half-inch soldered lock seams. Only one contractor was willing to quote a rough figure for the work. He wanted \$500-\$700 in labor to install the metal roof on a sound wood deck. That's when Alice asked me if I knew how to install a metal roof.

Read The Instructions

IDID KNOW how a metal roof is installed, but I'd never done it myself. My late father was a sheet-metal smith, and I'd watched and helped him bend and solder metal pans many times. But that didn't make me an authority on the subject.

LOOKING FOR INFORMATION on sheet-metal roof construction, I found some old textbooks that my father used to learn his trade. These books had been published in 1916 by the International Textbook Company in Scranton, Pennsylvania. A chapter in one of the books gave exquisitely detailed instructions and illustrations on how to install a soldered lock-seam metal roof. I also found charts for estimating the amount of terne metal needed, based on the number of square feet in the roof.

[If there are any books in print that cover seamed metal roofing in enough detail, we haven't found them. A trip to a large library or the library at an architectural school will usually turn up early 20th century sheet-metal manuals, written for the trade. -- ed.]

What To Do?

I WANTED TO SEE how other people had repaired similar roofs. I was lucky; almost all of the houses in my neighborhood were built between 1900 and 1930, and several of them had this same little porch roof.

MOST OF the successfully repaired roofs I saw had been reroofed with roll roofing. This is not a terrible idea, but I doubt these roofs will be intact sixty years hence, even with the best of care.

IN THE WORST REPAIRS, the old porch roof and columns had been torn down, and cheap, ersatz wrought iron and crinkle-cut fiberglass put up. (These porches usually had Astroturf on the floor and little stick-on quadrilateral house numbers over the doors.)

BECAUSE ALICE WANTED to use materials that would last as long as the original roof had, we didn't choose roll roofing. The slope of

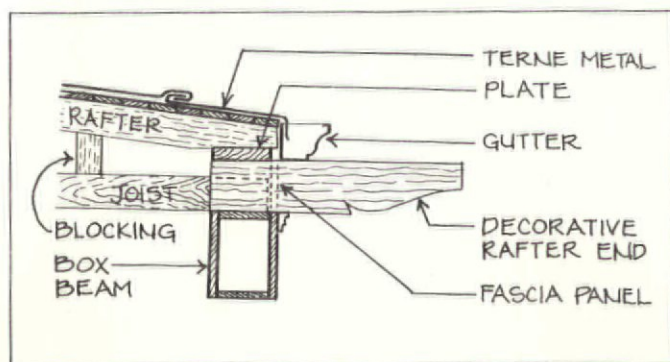
Part 1: The Carpentry

IHAD CONSIDERED all the repair options, I'd read a textbook, and I'd estimated all the materials ... but the roof was still rotten. So I tore it off. The metal skin went first. I was surprised to find that it had been installed with nails through the pans under the seams, not with metal cleats, as was (and still is) considered the superior method.

NEXT WAS the decking. I wanted to salvage most of it to use on the new roof. (I'm sure OHJ readers know that wood is never old, it's just well seasoned.) This noble idea didn't work out. Old 1x6 pine full of rusty nails is just a little too well seasoned. The decking broke into kindling when I tore it off.

THIS BROUGHT ME to the structural (as opposed to ornamental) rafters. I pried them loose very carefully and lowered them to the ground in multi-rafter sections. Once all the sections were on the ground, I placed them in the positions they had occupied on the roof. This would be my pattern for the new frame.

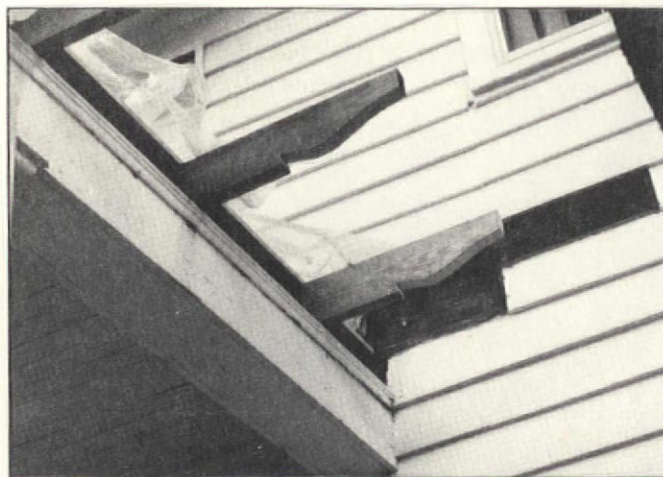
I REMOVED the remaining framing members, an almost random array of nailers and stretchers, all cut to give the ornamental rafter ends and fascia something to hold onto. I won't describe this puzzle in detail, but it worked essentially like this: Pillars held up box beams, to which ceiling joists were attached; the ornamental rafter ends were toe-nailed to the box beams, and a plate ran across the tops of the ornamental rafter ends. The structural rafters rested on this plate.



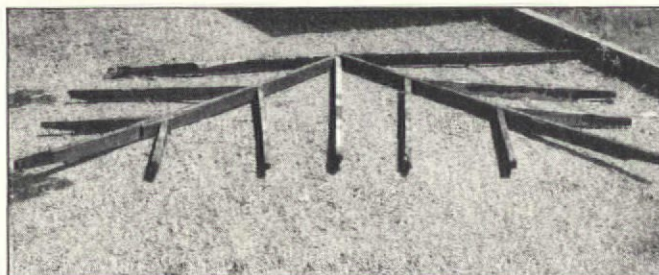
Long Live The Roof

THE OLD ROOF demolished, my first order of business was to install new ornamental rafter ends. The old rafter ends had been the first wood to rot, so I cut new ones out of pressure-treated stock. I used a saber saw with a long thick blade. (Shorter, thinner blades wandered away from perpendicular at curves.)

AFTER INSTALLING the ornamental rafter ends and the 1x6 plate, I turned to the structural roof rafters. I was worried about exactly duplicating the joint between the roof and the house siding, because I didn't want to risk removing any more of the brittle old siding than I already had. This meant the new rafters had to match precisely the position and pitch of the old ones.



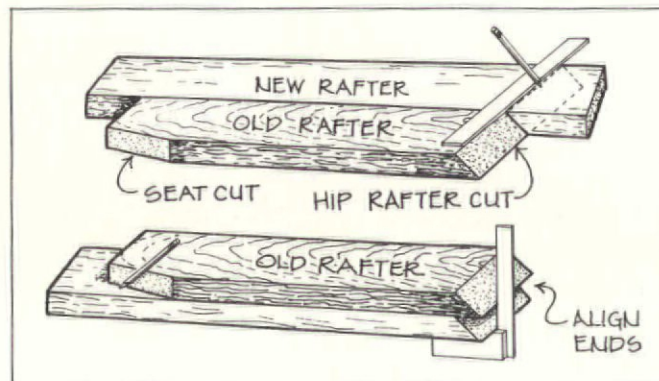
Old clapboards were temporarily removed at the joint between roof and siding. New ornamental rafter ends are visible here.



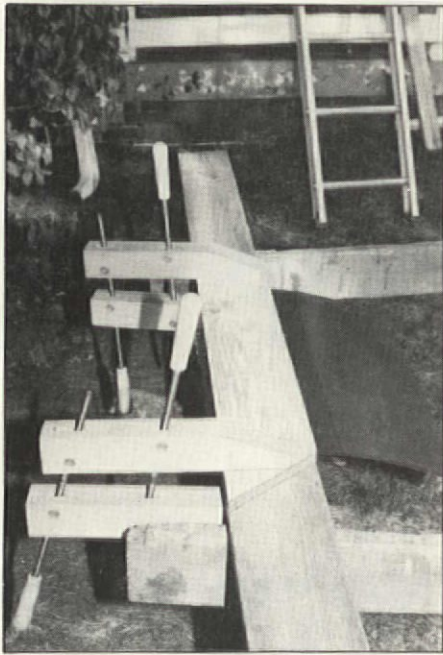
The old rafters were reassembled on the ground so that new rafters could be test-fit to the old skeleton before installation.

Rafter Clones

SO I COPIED the old rafters, using each old rafter as a pattern for the new one. First I made the hip cut. Placing the old rafter and the new wood edge to edge, I extended the angle onto the new piece with a straight-edge, and made a pencil mark to guide the saw. To match the bevel on that cut, I simply tilted my circular saw blade to match the angle of the old cut. For the seat cut, I placed the old rafter on top of the new one, carefully aligning them, and tracing the angle and length.



I LEFT THE OLD RAFTERS as they are in the photo above so I could carefully check the fit of each new piece. When I was sure a new rafter would fit just like the old one, I'd install it. It worked -- my rafters lined up with the "ghosts" of the old framework. I installed new decking and put away my carpentry tools.



A 'low-tech' sheet-metal brake. This is not the way pans are bent for large jobs.

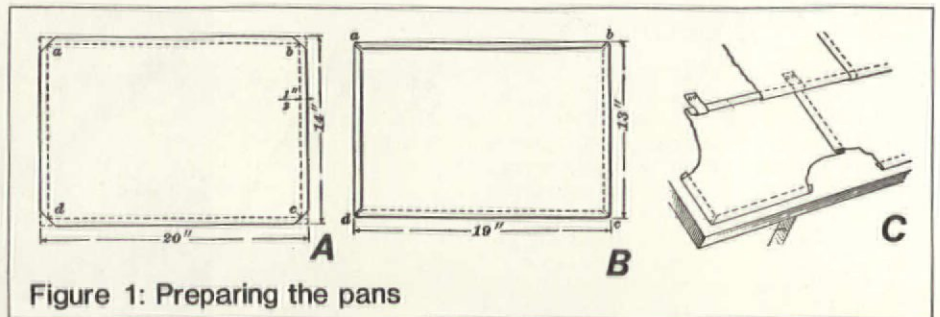


Figure 1: Preparing the pans

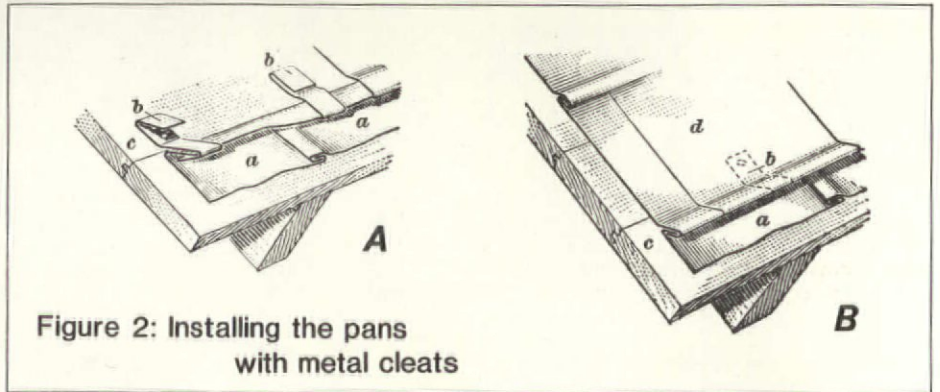


Figure 2: Installing the pans with metal cleats

Part 2: The Metalwork



MY WORK AS A CARPENTER finished, it was time to change hats. I had to become a sheet-metal worker.

FIGURE 1, above, shows how the terne-metal pans are cut, bent, and installed. After the pans are prepared, they are installed from the eaves, working toward the ridge. The turned-up side of one sheet is locked to the turned-down side of the next.

TO FLASH the connection between eave and gutter in my job, I overhung the first row of pans, bending them over to form a drip edge with a slight kick. This will keep water runoff from traveling up under the bottom row of metal roof pans; instead, it will flow into the gutter. See the photo on top of the next page.

THE PANS ARE FASTENED to the decking with 1½-in. by 4-in. metal cleats. The cleats are spaced on 8-in. centers, and there should always be a cleat at the intersection of the vertical seam and the horizontal seam, as shown in Figure 1 'C'. Once a row of pans is in place, the ends of the cleats are bent back over the nail-heads (Figure 2 'A'.) The seams are then flattened by hammering with a wooden mallet on a block of wood over the seam.

THE CLEATS and the undersides of the terne pans must be painted before the pieces are installed on the roof. (Use a brand-name metal primer.)

MY PHOTOGRAPH above shows the altogether-too-labor-intensive method I used for bending the pans. Sheet-metal shops in Nashville wanted an obscenely high price to do this work, and since I'm rather stubborn about that kind of thing, I rigged up a makeshift sheet-metal brake, a crude replica of the device the shop would have used. It worked like this: The

metal sheet, painted on its underside, is clamped between two straight-edges (boards), and bent by another straight-edge (another board) powered by a wooden mallet.

I FLASHED the roof connection to the side of the house by bending the top row of pans up and under the siding, as base flashing. Leftover terne-metal sheets were used as cap flashing, on the side of the house and bent over onto the roof. The siding was then reinstalled over it.

There Is No Easy Way To Solder

SOLDERING A ROOF for the first time was for me an adventure roughly akin to hunting wild boar with a bow and arrow. The drawings from my old sheet-metal manual guided me; with practice, my seams were creditable.

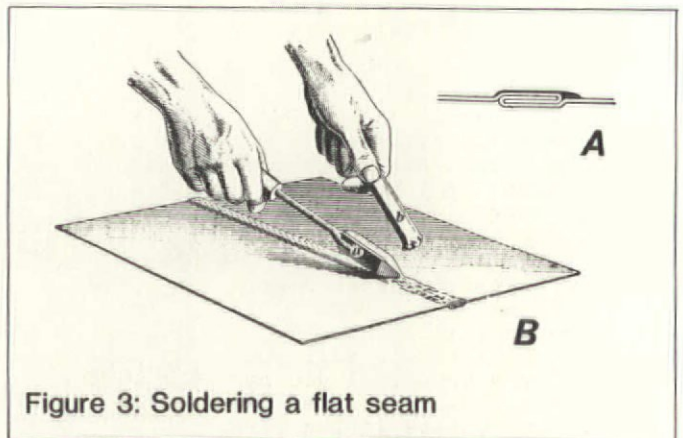


Figure 3: Soldering a flat seam

FIGURE 3 'A', above, shows how a soldered lock seam is supposed to look. If my seams had looked like this, I probably would have used

about six pounds of solder on my roof, instead of the nearly nine pounds I did use.

IN FIGURE 3 'B', the soldering iron (a) is held against the seam as the solder (b) is touched to the hot iron and made to flow over and into the seam. Flux (zinc chloride) is brushed into the seam before the solder is applied, to help the solder flow into the seam.

FIGURE 4 shows the proper way to solder a vertical seam. Sometimes you have to do this on flashings and gutters. First, a drop of solder is deposited at (d). The seam is built up from there by touching the solder (c) to the iron (b) just long enough to make the solder flow into the seam and rest on the drop of solder below. The iron is pulled away from the

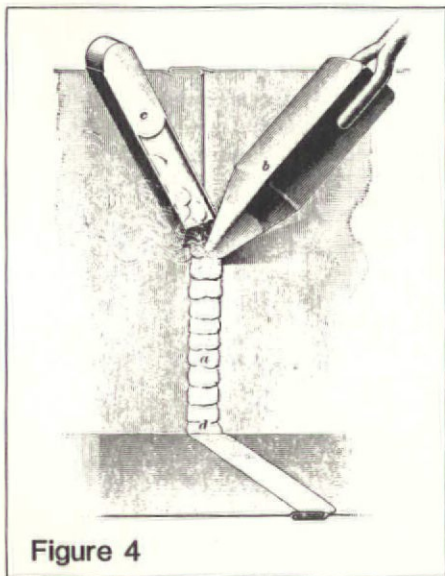
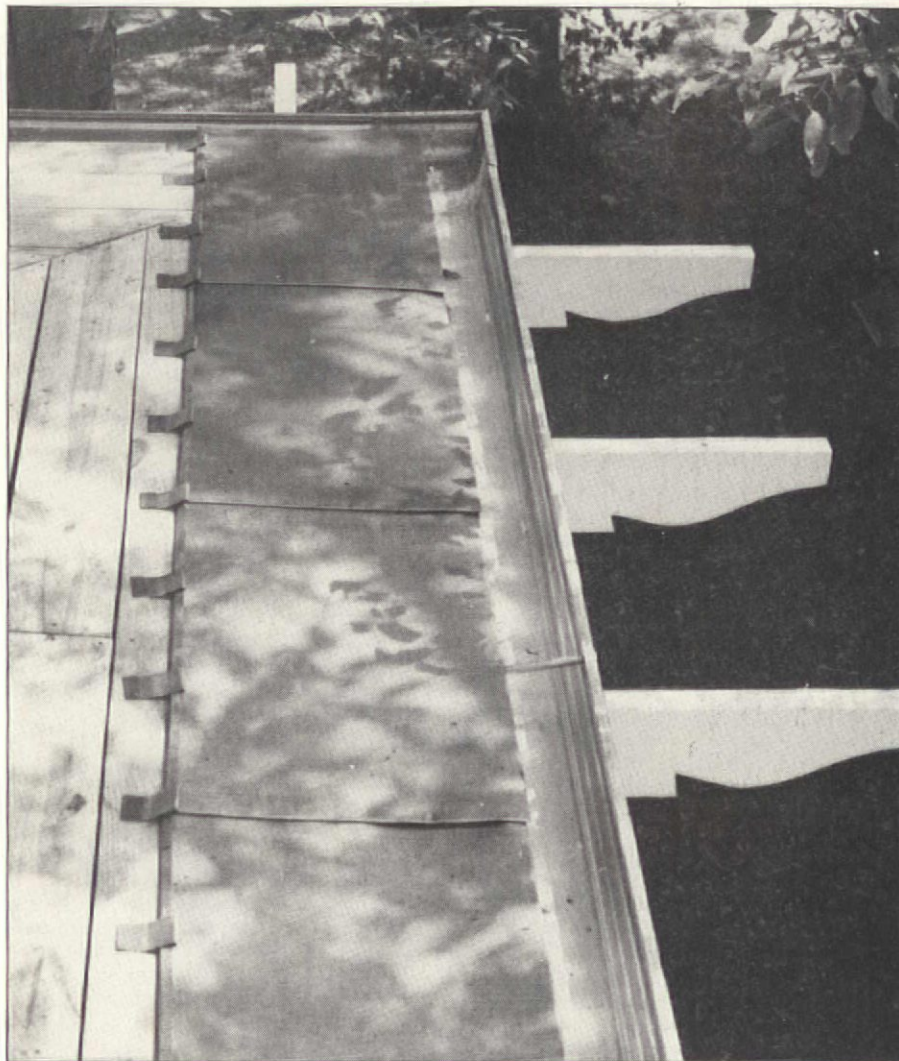


Figure 4

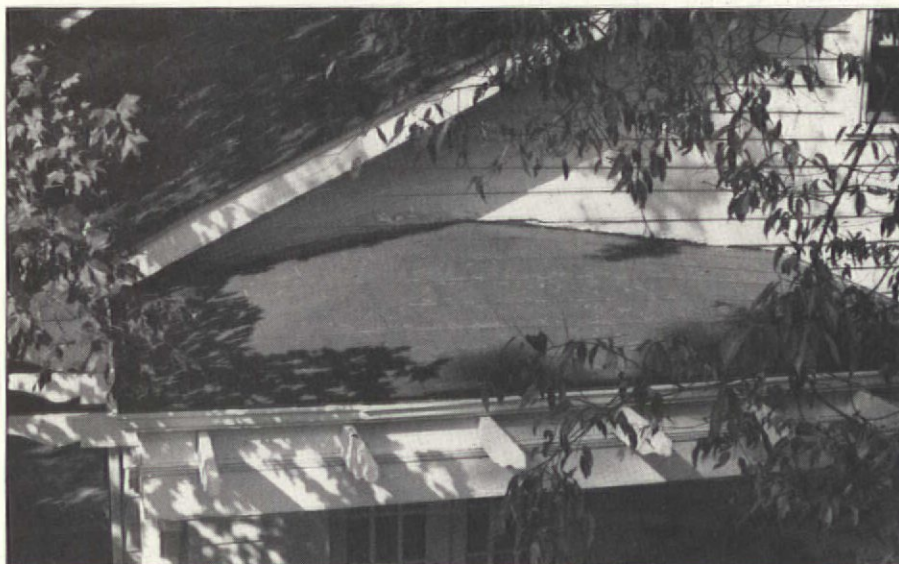
seam before it melts the solder below it. (This task, I think, is almost impossible, and I try to avoid it.)

FOR THE BENEFIT of any OHJ readers who are stout-hearted enough to take on a roof soldering job, I offer the following hints:

- **FIRST**, get two five-pound soldering irons and rent a propane-fired firepot. Don't get one of those little charcoal stoves they'll try to sell you at the supply house. I did and mine didn't work. You need two irons so one can be in the fire while you work with the other. Otherwise you sit on the roof a lot, waiting for your iron to get hot.



The first row of pans is installed at the eave, fastened to the decking with metal cleats. The pans overhang the gutter; they will be bent down to form a drip edge.



Here's the new soldered flat-seam, terne-metal roof, as seen from above. The connection between roof and siding is flashed and counter-flashed with terne sheets under the clapboards. A metal roof that's installed right and well soldered will last indefinitely — provided it's kept painted.

Neighborhood Porches

Old-house living is a joy, and old-neighborhood living is an even greater joy. Here in Nashville's Richland/West End neighborhood, we have nearly three hundred turn-of-the-century homes, street trees so big you can't put your arms around them, and enough architectural detail to fill a textbook. But I like the porches best.

Porches do more to improve the quality of life here than anything else in the neighborhood. They provide a space that is private enough for family events (my neighbors often have supper on their porches), yet public enough so you always feel comfortable going up to your neighbor's porch for a visit. When I'm out walking my dog, I wouldn't think of accepting an invitation to go into someone's house, basset hound in tow. But I'll sit in a neighbor's porch swing, visiting and scratching my dog's ears at the same time.

It makes me sad when I see an old porch neglected and rotting. I wonder how the sensibilities of the people who live there became so atrophied that they don't miss the part of their lives crumbling away with that old porch. These people miss all the new babies and pets in the neighborhood. Maybe they like it that way.

I am happy to say, though, that most of the homes here have perfectly sound porches, with perfectly friendly people on them from March through December. If I ever move out of my house or this neighborhood, it will be because I want a house with a bigger porch, in a neighborhood with more porches.

— Walter Jowers



The finished job: This little side porch is so characteristic of early 20th-century houses.

● LIGHT THE FIREPOT and heat up the irons. When one is hot enough to melt solder, set it on a brick and file off the crud. Dip it into the zinc chloride flux, then melt some solder onto the tip of the iron, put it back in the fire and repeat the process with the second iron. (You will continue to dip the irons in the flux whenever crud appears on the shiny tip of the iron. You must keep a separate supply of clean flux to brush into a seam just before you solder it.)


● TAKE A HOT IRON out of the fire, hold the tip to the seam, and touch the 50:50 solder bar to the iron. The solder should flow off the iron, over and into the seam. Move the iron across the seam at a rate that lets solder flow into the seam so it looks like figure 3 'A'. When the solder doesn't readily flow, switch irons. Never work a cold iron back and forth over a joint; the solder won't flow all the way into the joint.

● REPEAT THIS PROCESS for endless hours until you are satisfied that the roof is waterproof. Then clean off all the excess flux and paint the roof with a good metal primer. Repaint every other year and you won't have to worry about the roof failing for a couple of hundred years.

Epilogue

I THOUGHT I WOULD never finish soldering, but I did. The rest of the job was easily completed. I installed the new galvanized gutters, painted all the metal, and did the finish work on the fascia and moulding.

THE PORCH is now restored to its original 1922 condition -- or nearly. The plain wood railing was installed at a later date. We might remove the railing someday, but it should be replaced with some sort of barrier, for safety.

ALICE IS VERY HAPPY with her "new" porch. I've noticed her sitting on the porch a lot lately, content in the knowledge that she is not surrounded by rot and ruin. And now that she's enjoying the porch the way it should be enjoyed, she's found a new excitement in the charm and elegance of her old house. A few days ago she found some of the original light fixtures hidden in her basement. Now I am re-wiring the fixtures, and Alice is out buying brass cleaner. 

Besides being a student at Middle Tennessee State University, majoring in Historic Preservation, Walter Jowers calls himself "a freelance fixer of old houses."



Milk Paint Recipe

WOULD YOU please be so kind as to help me find a recipe for the old-fashioned milk paint? I know it's possible to buy it in a can, but I'd like to mix it myself.

--Faith E. Birkhead Hamilton, Geo.

HERE'S A MILK PAINT RECIPE that will do the trick. Take 1 cup ordinary, non-fat dry milk powder. Dissolve the powder in just enough hot water to make a thick soup. Then add pigment, a little at a time, and mix thoroughly. (Universal tinting colors--the kind used to tint latex paint--will work fine.) Test the mixture by applying it to a piece of raw wood, with brush or rag. To increase the opacity, add more pigment; to decrease it, add more hot water. When you have the intensity you want, apply the paint while it's still warm. For an antique look, apply the paint full strength, then rub it lightly with a damp cloth as it dries. The opacity of the paint caught in the corners will contrast nicely with the lighter look of the rubbed areas.

The Old Mouse Urinal?

YOU HANDLED the mongoose situation so well, I thought I'd seek your assistance on a somewhat related matter. In a wooden barrel in my father-in-law's barn, we found a set of Doultton-Burslem china in a Jersey pattern--really lovely, with pansies in pink, yellow, and pale blue on a tracery of brown leaves. Unfortunately, mice had found the barrel first and for many generations (about 50 years) used the straw as a home. There was even a nest in the tureen! To be frank, the dishes stink. I have washed them in varying strengths of Clorox and put them out in the sun. The dishes still smell of mouse urine and can't be used. Surely, someone on the staff or among your subscribers must have a solution. There has to be a chemical that will once and for all remove this horrible odor so that my family can use great-grandmother Allen's china set without clipping clothespins to our noses!

--Christine Allen Fraser, Mich.

WE HATE TO SAY IT, but it really sounds as if there's no hope of your ever eating off those dishes. You can get them clean enough to use them as 'objets d'art,' but it seems as though the "essence" of the problem has gotten under the glaze. However, if you absolutely refuse to give up, write to the people at Mateson Chemical Co., 1025 E. Montgomery Ave., Dept. OHJ, Philadelphia, PA 19125, or call (215) 423-3200. Tell them OHJ suggested that you contact them as a last hope.



To Treat Or Not To Treat

OUR FARM in Pepperell, Mass., dates back to around 1720. We recently exposed the structural wood beams; the larger ones are chestnut. So far, we've done nothing to the beams except scrape and wash them several times. But I feel they're so old and dry that they should be treated with a wood preservative, of course still maintaining their antique roughness and charm. Is there any treatment that you suggest for the preservation of these beams?

--Linda M. Berg Groton, Mass.

THE OLD BEAMS you describe don't need to be treated with anything to protect them: They're indoors, out of the weather, and they've lasted some 260 years without any treatment. You most definitely don't want to use wood preservatives because they contain fungicides and are far too toxic to be used indoors. If the dry appearance of the beams is what's bothering you, you might want to brush on a mixture of boiled linseed oil and turpentine. This will darken the color of the wood, so try it first in an inconspicuous place on the beams and see if you like the result. (You could also use a penetrating oil, the kind for floors; more expensive, but it has more predictable drying characteristics.)

Thin-sulation

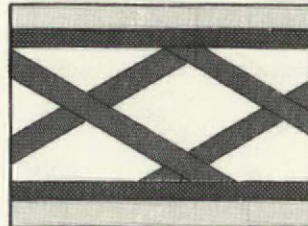
IHAVE PURCHASED an old (1840?) brick house. The interior was plastered directly onto the brick and is in such bad repair due to leaks that the plaster must be removed. We want to use this opportunity to do some insulating. The house is small, and I would like to avoid using 2x4 studs to accept 3-in. fiberglass. What alternative insulation of less thickness would you suggest? (I also intend to use real plaster on rock lath as a finish.)

--Margaret English Tomkins Cove, N.Y.

A THIN BUT EFFECTIVE INSULATION you can use is rigid-foam insulation. It comes in two varieties: urethane and isocyanurate. The second is more expensive, but of better quality. The problem with both of these, however, is that they release toxic fumes if they should catch on fire. In most areas, building codes require that they be covered with 5/8-in. Sheetrock. Now, this puts a crimp in your intention to use real plaster on rock lath as a finish. You will have to see if plaster, which is fireproof, is considered an acceptable legal substitute for Sheetrock in your area.

General interest questions from subscribers will be answered in print. The Editors can't promise to reply to all questions personally—but we try. Send your questions with sketches or photos to Questions Editor, The Old-House Journal, 69A Seventh Avenue, Brooklyn, NY 11217.

Restoring A



WHAT IS IT about a parquet floor that scares off many do-it-yourselfers? Maybe it's just the word; "parquet" sounds fancy. The truth is, restoring a parquet floor is not difficult. Parquet is old-fashioned and pretty -- but it's not nearly as exotic as it looks. All those little pieces were pre-sawn and pre-assembled before installation. To replace missing pieces today, all you have to do is cut, glue, and nail. There's no joinery.

THE FIRST PARQUET FLOOR we restored started out in terrible shape. The drawing below is exaggerated, but you get the idea: loose and warped boards, popped nails, and -- most distressing -- lots of puzzle pieces missing from the intricate border.

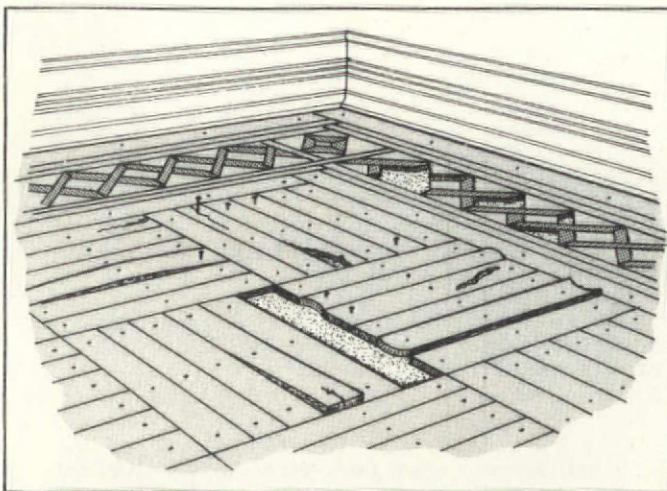
I SUPPOSE we would have wanted to hire someone to fix the floor, if our budget had allowed it. We would have found, however, that nobody wants such a small yet meticulous job. As it was, we tackled the job and now have some hints to pass along about parquet carpentry.

Those Missing Pieces

THE HARDEST PART is tracking down the right hardwoods to match missing sections. Your best bet is a flooring supplier that sells parquet strips, 5/16-in. thick, in various wood species. (The center of the floor is usually oak; the light parts of the border, maple or birch; the dark woods, cherry, mahogany, or walnut.) Don't buy strip-oak flooring; it's too thick and it's tongue-and-grooved.

BE AWARE that even parquet strips will be a slightly different size from the pieces in your floor. Flooring standards changed between 1900 and 1984. Also, new pieces will always be a bit too thick, because your floor has eroded over the years and, perhaps, been sanded.

IF THERE ARE NO flooring distributors nearby, find a real lumberyard that sells hardwoods. A yard that sells hardwood species almost sure-



Despite missing pieces, popped nails, warped and cupped boards, gouges and splits, this parquet floor is not hopeless.

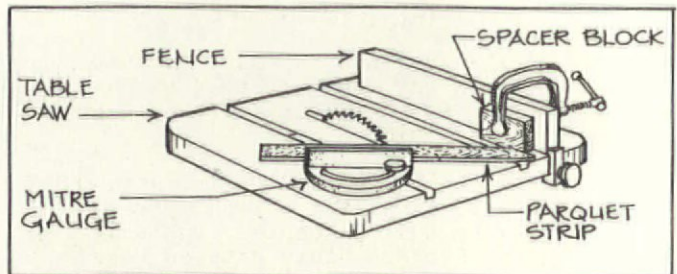
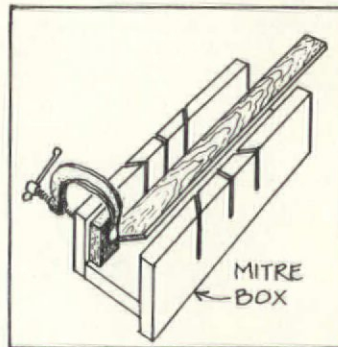
ly will mill lumber to order for you. (Stay away from the "hobby" suppliers of hardwoods. They're expensive and they won't cut your lumber to order.) Buy seasoned hardwood and have it milled to the right width and thickness to match your floor. "Milling" in this sense means power planing and ripping as necessary.

DON'T BE TEMPTED to stain blond wood to match exotic border pieces. The stain will wear away quickly. And you can never match the color of the existing wood in the floor.

THERE IS A SOURCE for parquet pieces that match exactly, right down to size and patina. We call it "selective cannibalizing" -- taking pieces from behind radiators or from inside closets to fill in more visible areas. This can be more trouble than it's worth if you need more than a very few pieces. Think twice: Will that radiator always be there? Will the closet floor be exposed in a coming renovation? Fill the cannibalized areas with pieces neatly cut to fit -- but they don't have to be the right color.

Cutting

IF YOU'RE rough cutting the lumber yourself, you'll need a table saw. A planer would come in handy, too. If you have bought the wood already cut to approximate width and thickness, all you really need is a mitre box, a backsaw, and a hand-plane. To duplicate border pieces, use an existing piece of wood as a pattern. Set up the mitre box as shown for repetitive cuts, with a stop block to set the correct length of each piece. If you own a table saw and have many pieces to cut, save time by setting up a simple jig on the table saw, as shown below.



IF YOU INTEND to power-sand the whole floor after repairs are made, the thickness of the new pieces is less crucial. The sanding will bring down the level.

by Patricia Poore
Illustrations by Jonathan Poore

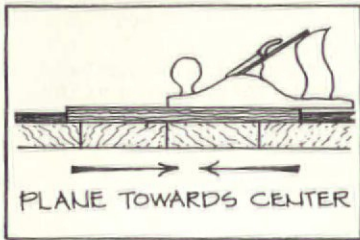
Parquet Floor



Installing New Pieces

DO A TRIAL FITTING of your new pieces. Some will have to be trimmed in width, using a plane. Use a sharp chisel to square up the opening and to clean edges of surrounding wood pieces of varnish and dirt.

IT'S NOT EASY to match new pieces to the surface level of the old floor. As you get close to flush, you'll probably begin scuffing the old wood surrounding the patch. This is true whether you use a scraper, plane, sandpaper, or a belt sander.



THE ANSWER IS sharp tools. Work slowly and carefully. A dull tool requires force, and that causes tearing (rather than cutting) of the grain. If you force the tool, you'll slip, scratching or gouging old wood nearby.

AMERICAN PARQUET FLOORS (ca. 1875-1925) were usually pre-assembled on a cloth backing. You may still find this backing under the parquet. Leave it intact, as it gives the glue something to grab. Glue down replacement pieces with plain white or yellow carpenter's glue.

ALL BUT the tiniest pieces should be nailed down also, following the existing nailing pattern of the floor. Use parquet nails; these are similar to finishing nails, but shorter and a bit stubbier to hold the thin parquet to the subfloor. Buy them at a flooring dealer or a well stocked building supplier.

IF THE NAIL is going near the edge of a piece of wood, pre-drill for it to avoid splitting. This means ALL nail holes in small border pieces should be pre-drilled.



General Repairs

OTHER REPAIRS are much the same as those you would make on any wood floor. You have to be especially careful working with parquet, because it is so thin.

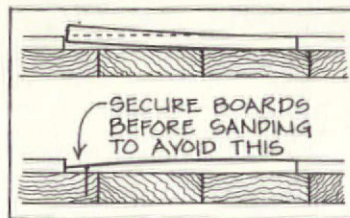
WARPED BOARDS can be persuaded flat with a few well placed parquet nails. Slightly cupped boards should be nailed securely and sanded or planed flush. Replace badly damaged boards.

SMALL GOUGES and splits can be filled with linseed-oil glazing putty, tinted to the finished color of the wood, or with a mixture of sawdust and white glue. Don't use "plastic wood." It shrinks, it is hard, and it will pop.

ANOTHER OPTION for getting rid of gouged boards is so obvious, you might not think of it. Turn them over. We had eight small center boards in a row that had been deeply scratched. They were loose anyway, so we pried them up and flipped them. A caution: Prying up an old board without first removing nails

will splinter the back face of the board. So chisel around the nail head to expose it, then pull the nail with wire cutters or pliers.

BEFORE SCRAPING -- and certainly before machine-sanding -- go over the entire floor, looking



for loose boards and popped nails. (Any loose boards will get caught by sanders or planes.) Set all nails below the surface with a nailset. On a large floor, this step will drive you

crazy, but it's worth it. Otherwise, you'll have constellations of shiny nail heads. Nail down all loose boards.

Before Finishing

IF THE WHOLE FLOOR is to be sanded, do it now before filling nail holes. Machine-sanding a parquet floor is meticulous and time-consuming work -- and it's risky: The parquet veneer was only 5/16-in. thick when it was installed. Check the current thickness of the floor before you take heavy sanders to it. See "Sanding A Parquet Floor," OHJ November 1980.

THE FIRST TIME we restored a parquet floor, we filled each nail hole individually. It was a small room, but even so, our knees ached for days. We've since used Benjamin Moore's Paste Filler. Use it right from the can, brushing it over the floor. Let it sit for a few minutes, according to the label. Then wipe it off, buffing it hard with a soft cloth. This step will fill the pores of the wood and fill all nail holes. It changes the color of the wood only slightly, adding a mellow yellow glow to very light woods.

OF COURSE, you can use this all-over filler only on floors that have had the finish removed. If you are repairing a floor where the old finish remains, you will have to fill each nail hole individually. Use linseed-oil glazing putty colored with a bit of stain or oil pigment. Stuff it into nail holes with your index finger and wipe.

YOU SHOULD NOT walk on a floor that has no finish on it. If you are working on refinishing a floor over a period of days, protect naked areas from scuffs by laying down rosin paper, available at a building supply house.

PICKING A FLOOR FINISH is the subject of another article. (See OHJ, May 1981.) Unless the floor is in very good shape, several coats of a penetrating oil finish looks better than a glossy varnish or polyurethane finish. Gloss calls attention to faults.



Epoxies



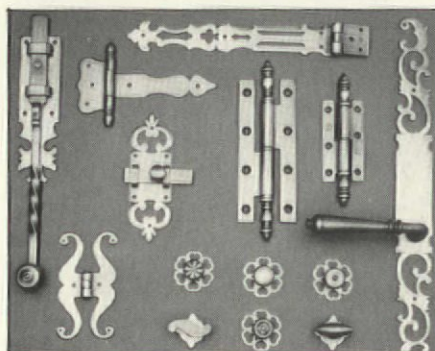
We've mentioned Abatron in OHJ several times in the past. Despite the company's relatively small size, they appear to be the best source of domestically produced epoxies for restoration use. Now Abatron has a kit for strengthening and filling rotted or severely weathered wood. The 5-can Wood Restoration System contains *LiquidWood* (a two-part wood impregnating consolidant), *WoodEpox* (two-part adhesive paste filler), and *Abosolv* (the solvent for *LiquidWood* and *WoodEpox*).

LiquidWood, with a viscosity about like that of motor oil, is for impregnating deteriorated or weathered wood.

Iron Hardware

Harvey Brotman, himself a blacksmith for ten years, has just introduced an interesting line of European wrought-iron hardware. The collection currently consists of door-latch sets and escutcheon plates. All pieces are treated with a special patinating process, called *Sherardize Patine*, which enhances the finish and resists corrosion. 'Sherardizing' is a thin zinc-alloy coating process which involves heating the hardware in an air-free chamber laden with zinc dust.

The hardware is especially appropriate for houses of French, Spanish, or Mediterranean influence. Their new catalog is hot off the press and can be obtained by sending \$2 to The Brotman Forge, PO Box 511, Dept. OHJ, Hanover, NH 03755. (802) 295-6393.

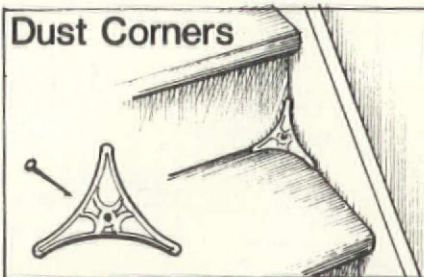


The more porous the wood, the further the consolidant soaks into it. Once brushed or poured on, *LiquidWood* hardens inside the wood, making it impervious to moisture, decay, and insects, while strengthening the wood.

WoodEpox often is used as a follow-up to *LiquidWood*, serving as a filler. It can be used to fill in areas where wood has decayed away or is missing. It can be sanded or painted just like wood.

As a kit, the Wood Restoration System might prove handy for consolidating and filling damaged wood such as window sills or exterior decoration. Epoxies are very useful where the cost of duplicating the original piece would be greater than that of the epoxies. The 5-pint kit is \$52, 5-quart kit is \$82, and the 5-gallon size is \$205. A 15% discount is available to OHJ readers on any of the kits until February 29th. A highly descriptive catalog is available for the Restoration System and other epoxies and compounds by writing to Abatron, 141 Center Drive, Dept. OHJ, Gilberts, IL 60136. (312) 426-2200.

Dust Corners



Not long ago, I visited an old building being forced into a new use. On a stair being demolished I noticed a small triangular brass plate nailed into each corner — where the tread, riser, and stringer all meet to collect dirt. A little research later revealed that they are called, aptly, 'dust corners'. Besides being decorative, they make it easier to sweep the stairs.

Now I hear Urban Archeology here in New York purchased a stash of about 1,000 of these little corners from a scrap-metal yard that had purchased the remaining inventory of a brass stamping plant in Buffalo. They're lightweight with an embossed design pressed into their surfaces. A round-headed nail or pin is supplied to hold each one in place; it makes a very small hole.

They sell for \$1 each, plus \$.50 postage for every five ordered. These as well as other hard-to-find architectural items are available from Urban Archeology, Dept. OHJ, 137 Spring Street, New York, NY 10012. (212) 431-6969.

Self-Stick Drywall Mesh Tape

Since the two articles on basic plaster repair appeared, I've gotten several letters about the new *self-adhesive* glass mesh for taping. (See "What's Possible In Plaster Restoration," Nov. 1983, and "Making the Perfect Drywall Patch," December 1983.)

Although I prefer fiberglass mesh tape to standard paper tape, I consider the stickiness an unnecessary 'improvement.' Self-adhesive tape is more expensive, comes in a smaller box (12 yds.), and tempts the amateur drywaller to lay it directly on the crack or joint without a bedding layer of compound.

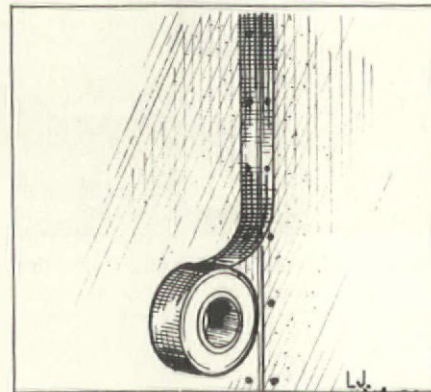
Fiberglass mesh tape has two advantages. Because it is a mesh, it will bed more easily and it will lay flat. Also, it has greater potential for expansion and contraction than paper tape, making it ideal for taping cyclical cracks.

For most uses, however, it is unnecessary for the tape to be *sticky*. For example, the first step in taping a drywall joint is to fill the joint with compound, laying a bedding layer in and around the joint. The tape is then pressed into the compound. The procedure is the same for taping the joint between existing plaster and a drywall patch.

The self-adhesive tape begs to be simply stuck over a joint, with compound added on top of it. You won't get as neat or permanent a joint that way.

The self-adhesive drywall tape is the easiest type to use over small cyclical cracks in plaster. That's a good application for it. Even here, though, it's not so hard to bed the tape once you've got the hang of it. If you're going to lay in a stock of one kind of drywall tape, make it fiberglass mesh — without the adhesive. It's more versatile than paper tape and cheaper than the sticky stuff.

— P. Poore



Clothes Drier-Humidifier?

Well, here it is wintertime again. You're probably beginning to see those advertisements for home energy-saving gadgets. We've had many queries from readers about products such as the 'dryer heat saver', a device that, once attached to your clothes dryer's hose, gives you the option to vent heat into your house instead of outdoors. At first glance, it sounds good: Make use of all that warm air that's being blown into the backyard. And maybe the extra humidity will help with winter dry skin, and preserve the furniture as well.

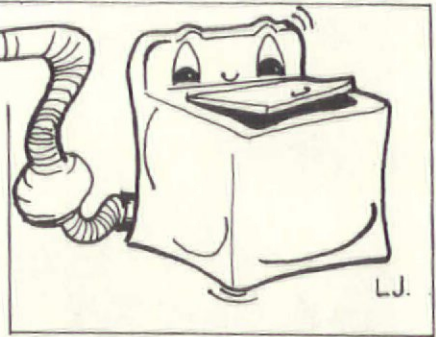
We asked Ron DiDonno, a Brooklyn architect and teacher of design and Life-support Systems, what his opinion is on these devices. Here's his reply:

The device is advertised as being able to recover 20,000 BTUs each time the dryer is used. Assuming you use it five to seven times per week, you might save about 1-1½ gallons of heating oil per week (or the equivalent in natural gas or electricity). Basically, that's an insignificant saving in winter, might be minimally helpful in spring or fall, and is of course no use in the summer. Frequency of dryer use has a lot to do with the payback period.

Then there are some potential drawbacks, aside from money. Some humidity, say, 40% or less, is desirable for comfort in the winter. However, excess humidity can be a real disaster at other times of the year. Whether increased humidity is a good thing or a bad thing depends on where you live, the climate and relative humidity, and the tightness of your house.

Excess humidity indoors can lead to a variety of serious problems, most of them relating to condensation. If the windows in your house uniformly sweat throughout the winter, you probably have too much humidity indoors. If your dryer is gas, that poses another concern. Venting gas-dryer exhaust into the house can be dangerous, increasing the level of carbon monoxide indoors. In some states, such a set-up would be considered an unvented space heater, and therefore illegal.

The devices usually have a filter of sorts. But based on my experience with furnace filters, I think that a significant amount of fine lint particles would manage to get through and settle on everything in the house. People with dust allergies -- look out!



All in all, the use of such 'energy-saving devices' and retrofitted gadgets should be considered carefully — before you invest your money. If in doubt about any energy-saving equipment or schemes, consult your state energy office for unbiased answers. Check out the mountain of available books on energy conservation. Purchase or borrow a humidistat and see just what the humidity is in your house in winter. Consider the payback period for investment. (Even if the device saves some money, how long will it take before the amount it saves pays you back for what you spent on the device itself?) Most gadgets won't stand up to close scrutiny. Perhaps a better energy saving can be had by locating your dryer in a place where it doesn't suck heat out of your house.

Copper Shingles



Copper shingles clad the roof of John and Susie Stone's 1904 house in Washington. The Mount St. Helens eruption sped up the formation of a rich patina on the copper shingles.

Zappone Manufacturing of Spokane, Washington, has recently introduced a line of interlocking copper shingles and accessories. The company believes they are ideal for reroofing and rehabilitation projects, as much as for new construction. While not a copy of the early pressed-metal shingles found on many turn-of-the-century houses, this design does blend sympathetically with older houses which may have had shingle roofs. The roofing system is designed for trouble-free installation, even by roofers who have not installed a copper roof before. (In fact, Joe Zappone suggests that installation is easy enough for an adventurous homeowner.) Complete instructions and technical assistance are provided to assure a successful application.

The shingles have a unique design, using embossing and a cupped surface to create light play and give them enough strength to be walked on without damage. The ten-ounce weight used in the shingles makes them lighter and more economical to purchase and install than the heavier copper often used for roofs. Their four-way interlocking channels and edges are designed to keep out moisture while allowing for thermal expansion and contraction.

Zappone also produces a half-size copper shingle that has all of the characteristics of their full-size shingle, except that it can be custom embossed at the plant with any symbol the customer desires. These shingles have a more vertical look, and could work well on bay window roofs or other steep, high-visibility applications where a more decorative look is desired.

A noteworthy recent installation of Zappone's embossed copper shingles was on a new building designed to house an outstanding Spokane landmark, a 1909 fully restored 60-horse carousel.

Joe Zappone estimates that the installed cost of his shingles runs from \$4.50 to \$6 per sq.ft., or from \$9,000 to \$12,000 for a 2000-sq.ft. roof.

A color brochure and specifications on these copper shingles and their line of aluminum shingles is available free. The shingles can be ordered from either of the following locations and shipped anywhere in the U.S.: In the West — Zappone Manufacturing, Dept. OHJ, N. 2928 Pittsburg, Spokane, WA 99207. (509) 483-6408. In the South & East, contact Hughes Manufacturing, Inc., Dept. OHJ, 11910 62nd St. N., Largo, FL 33543. (813) 536-7891.



If you've ever had occasion to visit Newport, Rhode Island, you probably recall seeing one of its premier mansions, Marble House, built for Mrs. Vanderbilt-Belmont in 1892. To celebrate the recent restoration of the beautiful little Tea House on the mansion grounds, I thought I would bring to the attention of OHJ readers the availability of a rather unique tea service.

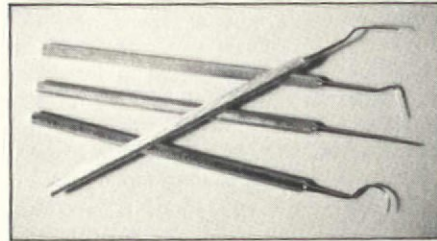
The Preservation Society of Newport County has commissioned the reproduction of Mrs. Vanderbilt's 1909 Suffragette Tea Set. The blue-on-white china set includes a cup, saucer, and luncheon plate, all inscribed with 'Votes For Women'. The set was made for use at a 1909 open house at the Marble House and was used again in 1914 at a second Suffragette rally held in her famous Chinese Tea House.



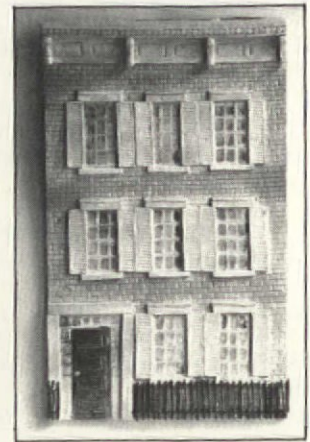
I'll bet I have more boxes of unused 'historic house' note cards than about anybody. You know, the kind with pictures of Independence Hall, The Alamo, and every other historic building I've ever visited . . . great places, boring cards. But I have just found the greatest cards ever! Although I came upon them while poking around in a museum shop, I've found a mail-order source.

Dental Picks

You don't have to be a dentist to make use of this excellent set of dental probes. I've found these stainless steel tools indispensable for all sorts of old-house projects. For example, they are great for picking paint out of crevices in woodwork. They also come in handy for picking decorative metal hardware clean. Each probe is 6 in. long and a different shape. The rigid and springy points can be filed to form tiny scrapers. A set of four is \$7.99; call toll-free number to find out postage. Buy them from U.S. General, 100 Commercial St., Dept. OHJ, Plainview, NY 11803. Toll-free (800) 645-7077.



The cost of each set is \$35 plus \$4 shipping and insurance, payable by cashiers check or money order to The Preservation Society of Newport Co., The Breakers, Ochre Point Ave., Attn. Museum Store, Dept. OHJ, Newport, RI 02840. All proceeds go toward restoration projects on the eight properties administered by the Society.



In her studio on 16th Street in New York City, Bess Schuyler creates handcrafted, glazed and fired portraits of houses, as well as iron-front and landmark buildings.

Besides producing portraits of her favorite buildings around the country, Bess accepts private commissions. Her portraits are usually done on a 1/2-in.=1 ft. scale. Her portraits of doorways are done at 1 1/2-in. scale. Prices range from \$125 to \$500.

A portrait of your house would make a wonderful gift to give yourself upon the completion of its restoration. For a color brochure contact Bess Schuyler Ceramics, Dept. OHJ, 246 W. 16th St., New York, NY 10011. (212) 255-4611.

Picture Hooks

Occasionally, you can find a few old picture hooks in antique stores (for use with picture mouldings), but they are few and far between. You can make your own, as described in our October 1983 issue. But John Worden of Boston writes to us that Shattucks, in business since 1857 and one of Boston's old-fashioned hardware stores, has simple moulding hooks. They're S-shaped, brass-plated hooks, about 2 inches long, available in widths of 1/4 in. and 1 in. They cost \$.15 ea. in person, with three dozen the minimum for mail order. The cost for three dozen is \$5.40 plus \$2 shipping and handling: R.W. Shattuck & Co., Dept. OHJ, 444 Mass. Ave., Arlington, MA 02174. (617) 642-0114.

Each card is actually a photo of a well executed cardboard model created by architect Jeffery Milstein. Each represents a traditional American architectural style. The colorful cards, cut to the shape of the house, have die-cut front doors that open, and descriptions of the house styles printed on the backs. I've been stingy with mine: They're almost too nice to part with.

Two sets of cards are available (D-1, D-2), all of different house styles. They cost \$8 per box of six, available through the A.I.A. Bookstore, Dept. OHJ, 1735 New York Ave. NW, Washington, D.C. 20006. Larger quantities (more than 6 boxes) are available wholesale from Paper House Productions, Dept. OHJ, PO Box 172, Woodstock, NY 12498. (914) 679-7553.



A Stencilling Short Cut

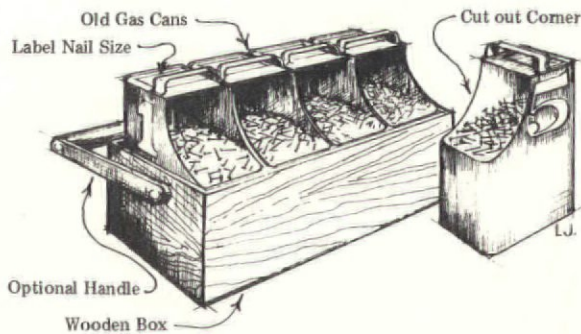
I HAVE DABBLED with stencilling for a number of years and have a short cut to share. (One word of caution: I use Mylar as my stencil--I'm not sure my tip would work well with other materials.) Even with the fast-drying paints, the drying time needed before you can move the stencil seems to last forever, especially if a large area is being worked on. I use a handheld blow dryer to speed up the drying time. It works great!

Celia H. Platt
Novato, Cal.

Get Control Of Those Nails!

MAINTENANCE WORKER Deswood Bitsoi of Canyon de Chelly National Monument in Arizona has come up with an idea to make his job--and perhaps yours--a lot easier.

MAINTENANCE PERSONNEL at the park had the same problem many of us have had at one time or another: how to keep nails of different sizes from getting mixed up. To simplify finding the right nail in a hurry, Deswood designed a container system using old one-gallon white gas cans (the kind that Coleman lantern fuel comes in). They're a ready commodity around our National Parks.

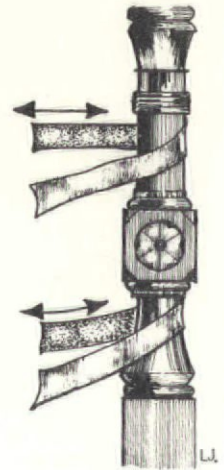


THE NAIL CONTAINERS were made by cutting one corner out of the can, painting it, and marking it with the nail size. Deswood then made simple wooden boxes that hold from four to six cans side by side. The boxes allowed nails to be separated into assortments such as framing, finish, brads, roofing, etc. They're easy to carry around, plenty of nails fit into each can, and they take up less space than non-portable bins.

WE FOUND Deswood's tip in the Summer 1983 issue of *Grist* (vol. 27, no. 3), a quarterly publication on practical solutions to everyday problems. It's published by the Park Practice Program, a cooperative effort of the National Park Service and the National Recreation and Park Association.

A Smooth Idea

GETTING A SMOOTH FINISH on turned objects (such as balusters) that have been stripped of paint is something of a challenge. My solution to this problem is to use an emery cloth rather than fine sandpaper. I cut the emery cloth into narrow strips and then pull them back and forth like a shoeshine rag. Because of its fabric backing, emery cloth is more flexible than sandpaper and lasts longer in this application.



Loretta Suk
Boise, Id.

Plastic Steel Wool

OUR NOVEMBER 1982 "Restorer's Notebook" recommended bronze wool as a good alternative to steel wool. Here's another innovation: plastic steel wool. It's put out by 3M Company and can be found in most hardware stores and lumberyards. It leaves no messy residue and holds up for a long time--it is really great for a number of chores.

Colleen McKinnell
Kansas City, KS

Frozen Brushes

T IRED OF CLEANING and re-cleaning paint brushes when you know you're going to use them again very soon? Wrap them tightly in aluminum foil and keep them in the freezer. When you're ready to use them again, just take them out and remove the foil. The paint, varnish, or other coating material in the brush will still be wet and ready to use again. Be sure to use aluminum foil, not plastic wrap; some coating solvents will dissolve plastic. Also, the solvents will migrate through the plastic and affect the food in the freezer. Aluminum foil works best and will save having a dangerous can of solvent sitting around with a brush in it.

Lorraine Clark
Dallas, Texas

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



BOOKS & PUBLICATIONS

FOR INNKEEPERS & would-be innkeepers: a monthly newsletter, written by an innkeeper, covering everything from attracting mid-week business in January to handling the reservation process. Yearly subscriptions, \$36. For a sample copy & information, send \$1 and a business-size SASE to Innkeeping, PO Box 267, Inverness, CA 94937.

HOW TO turn your old house into a Bed & Breakfast inn by someone who's done it. Booklet includes operating forms, do's, don'ts, & all kinds of hints. Send \$5 to "INN," PO Box 1116, St. George, UT 84770.

ENERGY CASE STUDY: Making Historic Districts Energy Efficient. 42-page study describes methodology in upgrading 1170 inner-city residences. Energy conservation stressed, some solar retrofit. All work in accordance with Sec'y of Interior Guidelines. Useful for architects, urban planners, energy specialists. \$6.50 ppd. Richard Glance & Assoc., 82 Pilgrim Rd., Dept. OHJ, Pittsburgh, PA 15106.

JSAH — 19 vols. of the Journal of the Society of Architectural Historians, 3/75 — 3/80 (except 5/79). All good condition. Make offer (plus postage costs) for lot. M.A. Newton, PO Box 593, Carthage, MO 64836.

INNS & HISTORIC HOUSES

THE BROWN PLACE: A distinctive short-term rental home in Leadville, CO. Tom & Myran Ten Eyck, 3477 W. Hayward Pl., Denver, CO 80211. (303) 433-3956.

ANNIE'S BED & BREAKFAST — Take a step back in time! Restored Victorian home with 14 charming guest rooms, gourmet breakfast included. Victorian interior design shop next door. Located 2 hours east of Dallas. Open year round. Tours available. Free brochure. Dept. OHJ, Box 928, Big Sandy, TX 75755. (214) 636-4307.

NATCHEZ, MI — Bed & Breakfast in charming, antique-filled Pleasant Hill, Greek Revival. Nat'l Register private home in heart of downtown hist. district. Guest rooms have private baths, canopy beds. 310 South Pearl St., Natchez, MI 39120. (601) 442-7674.

MEETINGS & EVENTS

KING WILLIAM House Tour & Fair, April 21. KWA, 222 King William, San Antonio, TX 78204. Part of Fiesta Week. See the Alamo, River Walk, & King William.

ASTM MEETING — Committee F-6 on resilient floor coverings. At the Americana Dutch Resort Hotel, Lake Buena Vista, FL, on March 22-23. Contact Ted Kochaba, (215) 299-5560.

49TH ANNUAL Savannah Tour of Homes & Gardens, March 25-29. Three evenings Savannah style, including tours of the finest museum houses, refreshments, & a taste of the arts. For full information and ticket order form, write Savannah Tour of Homes & Gardens, Advance Orders, 18 Abercorn St., Savannah, GA 31401.

19TH EUFAULA PILGRIMAGE, April 6-8. House tour & antique show. For further information, contact Eufaula Heritage Association, PO Box 486, Eufaula, AL 36027. (205) 687-3793.

JONESBOROUGH CIVIC TRUST

9th Annual Historic Preservation Conference
Co-sponsored by The Old-House Journal

Conference will open 9 AM, Thursday, April 12, and close 5 PM, Saturday, April 14, permitting more time with conference leaders & more time to explore many of the historic homes, churches, and shops of Jonesborough, TN. Conference leaders are Roger Moss, author of *Century of Color*; Frank S. Welch, Historic Paint Consultant, Bryn Mawr; Gail C. Winkler, specialist in historic interior design. Historic Jonesborough Visitor's Center & Museum will be conference headquarters. Participation limited; registration fee \$80 for individuals, \$140 for couples. For further information, send inquiries to Jonesborough Civic Trust, PO Box 451, Jonesborough, TN 37659.

WANTED

GAS CEILING FIXTURES, ornate, for 1860/65 house. Must be documented to this period & in original, unrestored condition. Send photos, price to Phoenix, MJM, 1805 Grand Avenue, Kansas City, MO 64108.

OLDER SADDLE HORSE, hackney pony, horse magazines & books. John E. Voth, 701-4809 Roanoke Pkwy., Kansas City, MO 64112.

INTERIOR 4-panel door (or other similar design) to install in circa 1794 house. Photo please. Skip Cribari, 13 State Street, Holcomb, NY 14469. (716) 657-6098.

COPPER SINK (antique, 1870s) for kitchen or wash-room. Antique lighting fixtures (Neo-Grec or Eastlake): 6 bracket lights; 3 single- or double-arm, ceiling-mounted plain gas lights; 2 wall-mounted gas lanterns; one 3- or 4-arm gasolier; pillar-style newel post gas fixture, 36-48 in. tall. Antique cast-iron woodburning cookstove, c. 1860-90. 16 antique locksets — plate size — 5 1/2 in. x 1 in.; mortise size, 3-5/8 in. x 3 3/4 in. x 5/8 in. 30 white porcelain antique knobs, 2 1/4-in. diameter w/ plain escutcheons 2-1/8 in. diam. 43 antique key escutcheons, 15/16 in. x 1-5/8 in. Snapshots, condition, & price to E.J. Sellers, 425 S. Perkins Rd., No. 2, Memphis, TN 38117. (901) 682-4463.

OPALESCENT GLASS SHADES for gas & electric light fixtures. Would like 4 gas and electric matching shades. Will also consider single or matching shades. Charles Sotir, 22 Nathan Hale St., New London, CT 06320. (203) 444-0379.

FURNITURE, Eastlake style only, for parlor, bedroom, & dining room. Jim Huntsman, 416 S. 4th Street, Stillwater, MN 55082.

CALLIOPE — must fit into bed of REO Speedwagon; needs to be adaptable to generator for power; in good working condition, please. John Cooney, PO Box C-109, Golden, CO 80401. (303) 279-1596.

CAST-IRON FIREBACKS and framing to go in 1865 marble mantels. One square, 38 x 31 1/2, frame & inset. Inset, rounded, 20 1/2 x 26 1/2. Inset, rounded, 19 1/4 x 25 1/4. Inset & frame, rounded, 27 x 31. Eastlake slate, square fireback, 26 1/2 x 28. Send photos, price to Phoenix, MJM, 1805 Grand Avenue, Kansas City, MO 64108.

COLUMNS — Old wooden or cement (preferably fluted) columns. Height need be only approx. 30 in. — or one 60-in. column w/ matching top & bottom so it could be halved. Snapshot and condition to L. Ebann, 824A W. Foothill Boulevard, Monrovia, CA 91016.

FREE ADS FOR SUBSCRIBERS

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

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

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

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

RESTORATION SERVICES

ANTIQUE PIANO restoration service — Specializing in Fortepianos & Square Grands. Complete ground-up restoration, including: refinishing of case & plate, restringing, action repair, etc. For more info & free estimates (send photo), contact Kenneth B. Brewer, PO Box 73, Portland, TN 37148. (615) 325-2525; 325-2474.

METAL FABRICATION slate shingles — all types of cornices made to order. Copper specialists — Miles Tinsmith & Roofing, 3 Horatio St., New York, NY 10014. (212) 929-9153.

METAL RESTORATION: Quality burnishing of all metals. Chandeliers, brass and brass & iron beds restored. Hardware stripped & polished. Lacquering, repairs. Kurt Anderson, The Polishing Shop, Box 479, Douglas, MA 01516. (617) 476-3838.

STAINED GLASS WINDOWS, Victorian, Art Nouveau, Art Deco, etc. Complete repair and restoration service; also large inventory of restored windows & panels for sale. Philip Stein, Box 32, Fitchburg, MA 01420. (603) 878-1031.

ORNAMENTAL IRON fence & gates, blacksmith quality; take down, sandblast, dip paint, reinstall. We make the original last another lifetime. Will quote estates anywhere travel is paid. New handcrafted gates w/ electric openers and fences. Bob Heath, Blacksmith, Industrial Enterprises, 627 Colfax Avenue, Bellevue, KY 41703. (606) 581-5303.

COMPLETE restoration services, all trades; the original house doctor, since 1960. N. Illinois, S. Wisconsin. (615) 923-2521, (312) 364-0161.

IS YOUR GARDEN as antique & lovely as your home? Let Old House Gardens help you recreate an historically appropriate landscape. 318 N. Park Street, Ypsilanti, MI 48197. (313) 482-2188.

STAINED GLASS: Professional artists specializing in precise period reproductions in leaded stained glass. Custom colors and designs to fit your home. Expert craftsmanship. Lynn Corrie, Corrie Art Glass, 302 West High, Urbana, IL 61801. (217) 367-2531.

M.J. MAY Antique Building Restoration. A large variety of old-building services — fretwork & trim repair; paint stripping; installation of structural antiques; sash repair, carpentry, painting, & refinishing; etc. Free estimates, insured, low rates; will travel for fee. 505 Storle Ave., Burlington, WI 53105. (414) 763-8822.

WINTER is planning time! Plan your old-house construction project now for spring execution. Our professional architectural & preservation services can help: Restoration & remodeling design, research, technical & historical advice, and more. Allen Charles Hill, AIA, Historic Preservation & Architecture, 25 Englewood Road, Winchester, MA 01890. (617) 729-0748.

REAL ESTATE

NEW BRAUNFELS, TX — Early Texas architecture w/ German influence. Some gingerbread, footed bathtubs, beautiful old doors. Needs restoration. Commercial zoning. Baese Realty, Inc. (512) 625-9667.



ASHEVILLE, NC — 1890 Queen Anne, 8 M sqft., 26 rooms. Must move by 3/84 to adjacent 6 1/2-acre wooded oak knoll overlooking French Broad River. Ancestral home of diplomat Richmond Pearson. Architect, James Hill. Nat'l Reg., tax credits available. Sound but needs restoration. \$70 M w/land, Brochure. Box 2806, Asheville, NC 28802. Doug Swaim, (704) 298-5024.

SAN ANTONIO, TX — Nat'l Register dist. Joske House, 1881 stone, enlarged 1900 to brick Queen Anne. 7 BR, 8 FP. Interiors almost intact. Circa 1910 2-storey brick quarters. Last major unrestored house on King William St. Covenanted for restoration; terms, Julia Cauthorn, owner, Vintage Real Estate, 217 King William St., San Antonio, TX 78204. (512) 223-9180.

AUGUSTA, MO — Turn-of-the-century Farmhouse, walnut construction, in Daniel Boone country. 3 BR, country kitchen, DR. Original "Rose of Sharon" ceiling in living room. Approx. 3 acres with view of surrounding countryside. \$47,000 or best offer. Genie Muser, Countryside Brokers, Augusta, MO 63332. (314) 228-4791.

WARRENTON, VA — Authentic restoration. 8 rooms, 3 baths, FP, center halls, high ceilings, energy-efficient gas furnace, fully insulated, weatherstripped windows. Eat-in beamed kitchen with custom cabinets, etc. On ¼ acre town lot with mature trees, 2-storey outbuilding. \$169,500. William Roush, (703) 548-1529.

PORT ALLEGANY, PA — Large, solidly built, older 2½-storey home. Hardwood flooring, storm windows, 2 gas FP, central gas-fired hot-air heat. Large LR, study, kitchen, ½ bath on first floor; 3 BR, bath on second; BR, LR, kitchenette, ½ bath on third. 1-car attached garage. Large shade trees & garden plot. Only 4 blocks to stores. Needs some remodelling. \$26,000. Mahlon D. & Sylvia Davenport, Real Estate Salespersons, 104 Dennis Ave., Port Allegany, PA 16743. (814) 642-2464.

STROUDSBURG, PA — The charm and elegance of the 1800s are yours in this impeccably restored Colonial w/ 8 BR, 16 x 32 LR, 2 FP, front & rear staircases. 1.29 acres plus commercial zoning. C100. Ro Mendez Real Estate, 112 Park Ave., Stroudsburg, PA 18360. (717) 421-7775.

TELLURIDE, CO — Successful Bed & Breakfast. Large Victorian built in 1893, restored 1978. Original stained glass. Linda M. Wooley, PO Box 1031, Telluride, CO 81435. (303) 728-3033.

LOS ANGELES, CA — 1888 3-storey California-style Queen Anne. Cultural Monument No. 39, attributed to Joseph Cather Newsom. Unique circular floor plan w/ 5 BR, 4½ baths, 5 FP. Large 100 ft. x 184 ft. lot in valuable downtown development area. Panoramic view. A great B&B opportunity. Asking \$535,000. The Victorian Register, 1308 W. 25th St., Los Angeles, CA 90007. (213) 734-1949.

WORCESTER, NY — 6 BR Victorian on quiet street in small village. Downstairs finished; upstairs needs work. Good family home within walking distance to historic village stores, etc. \$38,000. Jeri McCabe, (607) 432-0310; 397-9369. Century 21 Realtor.

DENVER, CO — 1872 Italianate; Dr. John Elsner house on Nat'l Register in historic Curtis Park. Completely restored & updated. 3000 sqft. plus attached 2½-car garage, 3 baths, 2 master suites, and adjacent city lot. Includes 3-color exterior paint to suit. \$238,000. Owner, 2810 Arapahoe St., Denver, CO 80205. (303) 294-9716.



NEPHI, UT — Queen Anne, 1895, potential Nat'l Reg., Eastlake mouldings, ornate golden oak mantel, stained glass, brass hardware. Rewired. 4 BR, 2 baths, remodelled kitchen, beautiful glass-fronted quarter-sawn oak cabinets, pressed tin ceiling, ceiling fans. 15 minutes to Uinta National Forest; 2 hours Salt Lake City, skiing. \$89,000. (801) 623-1601.

NEWARK, DE — 1842 brick, 3-storey, on 7 acres. Large LR, DR; 8 BR; efficient kitchen; bath & lavatory with toilet; full basement: 2 annex rooms, deep well. Owner, (703) 354-9020.

OLD MONROE, MO — C. 1900, 2-storey brick. 45 minutes NE of St. Louis. All original millwork, stained glass, 8 ft. x 9 ft. built-in wood kitchen cabinet, 1800-sqft. wrap-around porch. New wiring & insulation; storm windows, full basement, mature trees. Mid \$40s. F.X. Karll, Box 203, Old Monroe, MO 63369. (314) 665-5393.

ATLANTA, GA — Victorian Farmhouse, 1860. Completely restored, 3800 sqft., 4 BR, heartpine floors, 3+ acres, 6 FP, 3 porches. Flint Hill Co., (404) 441-3016.



N. TRURO, CAPE COD, MA — Historic 5 BR home, c. 1820, located in Nat'l Seashore Park, recorded HABS; FP, original wide-board floors, modern heating, electric wiring, & copper plumbing. Golf club ¼ mile, walk to beach. \$125,000. B.M. Goossen, owner, 35 Carmel Ave., Brewster, NY 10509. (914) 279-3635.

PUNTA GORDA, FL — 1920s home, 1 block from Christine Charlotte Harbor. Buyer must restore & assist historical preservation effort. \$60,000. PO Box 331760, Coconut Grove, FL 33233. (305) 854-4199.

DOVER, KY — On Ohio River near Augusta. 1820 Federal, brick, awaiting restoration. 8 rooms, circular staircase w/ hallways 1st & 2nd, large room originally used as dry goods store, 5 FP, approx. 2500 sqft. Listed at \$27,900 — owners anxious to sell. Enos Agency, Denny Pletzer, 11 East 5th Street, Newport, KY 41071. (606) 261-3600.

FOR SALE

VICTORIAN FURNITURE from estate: Bismarck 3-leg maple table, \$1300; rectory chair, \$325; 8-ft. birch linen press (armoire), \$1900; 8-ft. glass display case, \$2200; pine bureau desk, \$950; oak icebox, two-door, \$950; Queen Anne carving chairs, \$500. Osa, 2220 San Jose Avenue, Alameda, CA 94501. (415) 654-7913.

ANTIQUÉ MARINER'S compasses quilt, double size, in red, green, & gold on off-white background. Needs a nice old house to call home. \$1200. Photograph available. Barbi Harris, 1025 Central Ave., Ocean City, NJ 08226. (609) 398-8221.

HOUSE PORTRAITS: Handsome pencil renderings of your home. Send a clear photo of your house and \$35. Carolyn Thoben, 96 Plains Rd., New Paltz, NY 12561. (914) 255-6323.

CLAWFOOT bathtub with all fittings & fixtures. Good condition. Best offer. DC area. (703) 534-5046.

BAR/COUNTER, solid oak, chamfered panels, 6 fluted columns, 13 ft. 8 in. L. Beautifully refinished. \$1000. Oak buffet, 5 ft. x 77 in. H, bevelled mirror, carved lion heads, fluted columns, claw feet, very ornate, \$1500. Walnut table, 3 ft. x 4 ft. Pegged top & legs, old mustard paint, \$650. (304) 366-2870.

SALVAGED outside gingerbread trim or architectural millwork. Good condition. Sandt, RD 1, Box 280, Sligo, PA 16255. (814) 358-2630.

OLD SHOES: Attractive display for your home or place of business. About 14 in. H, in very good condition. 18 eyelets per side, original laces. \$45 per pair, \$25 singles. Eileen Erickson, Box 27, 219 North Third St., Montevideo, MN 56265.

4-FT. CLAWFOOT BATHTUB. Needs refinishing. We paid \$250 — will take best offer. (312) 642-5004 after 6 PM, Chicago.

IRON FENCING: 225 ft. w/ 3 gates & crnr posts, spear-point tops, \$1900. Iron roof cresting, 16 in. H x 5 ft. x 5 ft. square, \$425. 3 turn-of-the-century chandeliers, brass & etched glass, from \$175 to \$230 ea. 12 pr. black iron steeple-top interior door hinges (9 pr. 3 in. x 3 in., 3 pr. 3½ in. x 3½ in.). \$10/pr. or all for \$100. Pictures available. Dan Diehl, 6374 Waterloo Rd., Atwater, OH 44201. (216) 947-3385.

RAG RUGS, seamless, hand-woven, made to order up to 8 ft. wide. Also wall & floor stencilling and murals. Patricia Bates, Rt. 16, Washington St., Sherborn, MA 01770. (617) 655-0732.

STEINWAY Square Grand, 114 years old, rosewood cabinet, good condition. C. Schmitt, Box 411, Roslyn, WA 98941. (509) 649-2272.

REPRODUCING Player Piano — Starr, 1926, ebony finish, Ampico action. Completely restored: has been refinished & restrung. Kenneth Brewer, Box 73, Portland, TN 37148. (615) 325-2525; 325-2474.

EMPIRE SOFA, circa 1850. Solid rosewood, ornately carved cornucopia, lion's feet. Fan-shaped arms, cylinder pillows, tapestry upholstery. From historic Green Hotel in Pasadena, CA. Mint condition. \$1750. (213) 791-1714.

STAINED GLASS windows: 2 pr. mauve, 2 pr. blue. Not church windows; floral design. Orig. wood frames. Worn but still good. \$300. (304) 387-2050.

MELODEON — walnut, lyre-shaped legs, 20 in. x 39 in. Plays; good condition. C.L. Goldsmith, PO Box 546, "Woodland," Rt. 1, Crewe, VA 23930.

14-FT. IRON STREET LAMPS, early 1900s. Have only about 10 left. All are complete & are fabulous for outside lighting. Also have some nice barn hinges, 19th-cent. wooden valances, old nails, & gingerbread at reasonable prices or for trade of gas lighting fixtures, picture railing hooks. Price of lamps, \$350 ea. For more information, pictures, or orders, contact Dana Olsen, 203 Spring Street, Middletown, PA 17057. (717) 944-1965.

CORNER SINK, clawfoot bathtubs, combination laundry/ kitchen sinks, bathroom sinks. A. White, Jersey City, NJ. (201) 652-7408.

2 MATCHING fireplace mantels, c. 1906. Refinished w/ good silvered, bevelled mirrors, \$600. 4½ newels of fine quality, turned & carved black walnut, 4-in. hand-rail w/ stick & turn balustrade, stringer panels & all for housed stairs of wide "U" staircasing. \$750. W.W. Blanchard, 410 El Dorado Street, Vallejo, CA 94590. (707) 643-8019.

KITCHEN STOVE, Crawford black cast iron. Coal or wood. New grates, 6-burner top w/ oven & top-warming trays. Also has gas stove attachment w/ 4 top burners, oven, & broiler. Excellent cond. \$750. Charles G. Sotir, 22 Nathan Hale Street, New London, CT 06320. (203) 444-0379.

ORNATE, REFINISHED, high-back walnut bed with matching gingerbread trim for dresser, \$600. Mrs. Ruth Miller, Rt. 2, Box 148, Essex, IA 51638. (712) 379-3791.

KING-SIZE BRASS HEADBOARD, \$250. Days, (212) 636-4514; nights, 768-4740.

HISTORIC ARISTOCRATS! Classic structural beauty & elegance combined with gentle, affectionate disposition, intelligence, & sense of humor. Borzoi (Russian Wolfhound) youngsters in white & exotic colors. Fully guaranteed. L.K. Avery, Fair Haven, VT 05743. (802) 265-4492.

Spring Weekend at Sturbridge, March 24-25

Decoration & Design for your Early American House, 1750 - 1850



Old Sturbridge
Village

Come to Old Sturbridge Village for a relaxed spring weekend with other old-house folks. Homeowners, amateur historians, and interior designers are invited to lectures and clinics: guidelines for re-creating the historic interior; reproduction drapery for beds & windows; wallpaper and paint in early New England; conservation of architectural elements.

There will be a Saturday evening talk entitled "Living With History — How To Love Your Old House," by Patricia Poore, Editor, and Clem Labine, Publisher, The Old-House Journal. Expert faculty includes Jane C. Nylander, Curator of Ceramics & Textiles, OSV, and author of Fabrics For Historic Buildings; Richard C. Nylander, Curator of Collections, SPNEA, and author of Wallpa-

pers for Historic Buildings; Hope Alswang, New York State Council on the Arts; John Obed Curtis, Director, Curatorial Department, OSV.

Basic fee for the weekend is \$70 (meals & lodging not included). For information or to register, contact the Secretary of Special Events — EAH, Old Sturbridge Village, Sturbridge, MA 01566. (617) 347-3362.

FOR INTERIOR STRIPPING

And Small Exterior Jobs

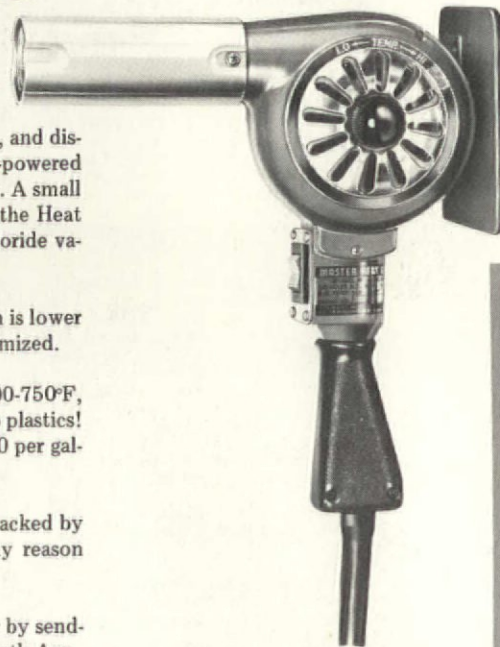
Nearly 10,000 OHJ subscribers have bought the Master Heavy-Duty Heat Gun, and discovered the best tool for stripping paint from interior woodwork. This electric-powered heat gun softens paint in a uniform way, so it can be scraped off with a knife. A small amount of chemical cleaner is suggested for tight crevices and clean-up, but the Heat Gun does most of the work. It reduces the hazard of inhaling methylene chloride vapors present in paint removers.

Another major safety feature is the Heat Gun's operating temperature, which is lower than a propane torch or blowtorch. Thus, the danger of vaporizing lead is minimized.

The Master HG-501 Heat Gun is an industrial-grade tool. It operates at 500-750°F, draws 15 amps at 120 volts, and has a rugged, die-cast aluminum body — no plastics! It isn't cheaply made or cheaply priced. But paint remover is going for \$15-20 per gallon ... so if you use the Heat Gun just a few times, it pays for itself.

The Heat Gun comes with complete operating and safety instructions, and is backed by The Old-House Journal Guarantee: If your unit should malfunction for any reason within two months of purchase, return it to us and we'll replace it.

You may order your Heat Gun by filling out the Order Form in this issue, or by sending \$72.95 (includes fast UPS shipping) to The Old-House Journal, 69A Seventh Ave., Brooklyn, NY 11217.



The Two Best Heat Tools For Stripping Paint

The Heat Gun has been a lifesaver for the 10,000 OHJ subscribers who have to strip paint from ornamental woodwork, shutters, window frames, and similar surfaces. But we're often asked if there's a comparable tool for larger jobs such as exterior clapboards (a task that takes forever with the Heat Gun). After testing all the available tools, the editors of The Old-House Journal are ready to recommend the best tool for the job: the HYDElectric Heat Plate.

Drawing 7 amps at 120 volts, the Heat Plate's electric resistance heating coil heats the surface to be stripped to a temperature of 550-800°F. A nickel-plated steel shield reflects the maximum amount of heat from the coil to the surface. And among the Heat Plate's safety features is a wire frame that supports the unit, so you can set it down without having to turn it off.

Gripping the Heat Plate by its cool plastic handle, you hold it close to the paint surface and soften the paint. Then you move

the plate along and scrape away the loosened paint with a scraping tool. It's that simple! With a little practice, you can remove paint rapidly in one continuous motion. This procedure may remind you of using the Heat Gun, but that's where the similarity ends. The Heat Plate isn't efficient for the small fussy work that's so simple with the Heat Gun: mouldings, corners, recesses, turned wood such as balusters. What the Heat Plate is designed for — and does better than anything else — are the big jobs: clapboards, shingles, flush doors, large panels, and any flat surface.

The Heat Plate comes complete with operating and safety instructions, and is backed by The Old-House Journal Guarantee: If your unit should malfunction for any reason within two months of purchase, return it to us and we'll replace it.

To order the HYDElectric Heat Plate, fill out the Order Form in this issue, or send \$39.95 (includes fast UPS shipping) to The Old-House Journal, 69A Seventh Ave., Brooklyn, NY 11217.



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And Any Large Flat Surface

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produce - that
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A BUYER'S GUIDE FOR
THE PRE-1939 HOUSE

NEW!

The Ultimate Buyer's GUIDE

1 The Old-House Journal Catalog is the "Yellow Pages" for pre-1939 houses. In this comprehensive buyer's guide are listed hundreds of hard-to-find old-house products . . . the kind that hardware store clerks will assure you "just are not made anymore."

2 The Catalog is the most complete & authoritative directory of the field. 1,251 companies are listed. There are almost 10,000 individual items and services offered for sale. Every listing is carefully screened for appropriateness by the editors of The Old-House Journal. Hard-to-find products, including marble mantels, hand-printed wallpapers, wooden porch ornament, & brass lighting fixtures, are now easy-to-find.

3 The Catalog is crammed with NEW information: There are 259 NEW companies that didn't appear in the previous edition. Also, 773 of the other listings contain NEW information — new products, new prices, new literature, new addresses, new phone numbers. But that's not all. This Catalog also has a brand new feature: a State Index that groups all the Catalog companies by city and state. It allows you to locate quickly and easily the old-house suppliers that are nearest you.

4 And for companies that aren't near you, the Catalog gives all the information you need to do business by mail or phone. The Company Directory tells you the full address, phone number, & what literature is available — and the price, if any.

5 The Catalog Index is meticulously cross-referenced. For example, if you're trying to find "ceiling rosettes," the Index tells you that the item will be found under "ceiling medallions." That Index is your guide through the biggest Catalog ever: 208 pages, full 8½ by 11 pages, soft-cover. But even though it's bigger than ever, the price is still the same as last year's.

6 Save \$2.00 as a subscriber to The Old-House Journal. Normally, the Catalog costs \$11.95 postpaid, but as a member of the OHJ Network, you can order a Catalog for only \$9.95 — and this price includes fast shipping via United Parcel Service. To get your Catalog, just check the box on the Order Form, or send a check for \$9.95 (\$11.95 for non-subscribers) to The Old-House Bookshop, 69A Seventh Avenue, Brooklyn, NY 11217.



ORDER FORM

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Each Yearbook is a compilation of a full year's worth of OHJ issues.

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Brand New! The 1984 OHJ Catalog

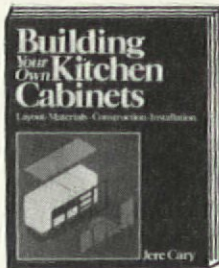
- Comprehensive buyer's guide to almost 10,000 hard-to-find products & services for the old house. This "Yellow Pages" for restoration & maintenance is bigger than ever this year — the most complete, up-to-date sourcebook available.
12 Softcover. \$11.95 — \$9.95 to current OHJ subscribers.

OHJ Binders / Work Apron

- 22 BINDERS — Brown vinyl binders embossed in gold with the OHJ logo. Holds a year of issues. \$6.25 each.
- 28 THE OHJ WORK APRON — \$10.95



The Old-House Bookshop



Building Your Own Kitchen Cabinets

- A do-it-yourselfer with basic carpentry skills can build kitchen cabinets — with the help of this excellent book from the publishers of *Fine Woodworking*. Straightforward instructions and over 150 illustrations see you through every step of the job, from basic kitchen organization to constructing and installing the cabinets. But that's not all. Author Jere Cary also includes information on estimating costs, buying hardware, selecting different woods, and much more.

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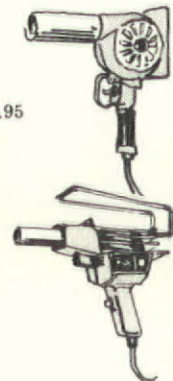
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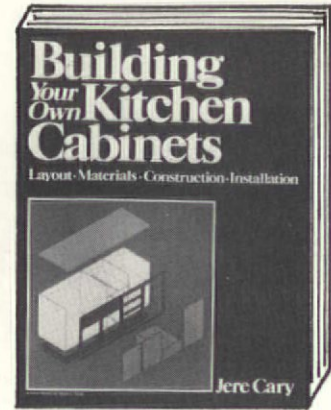


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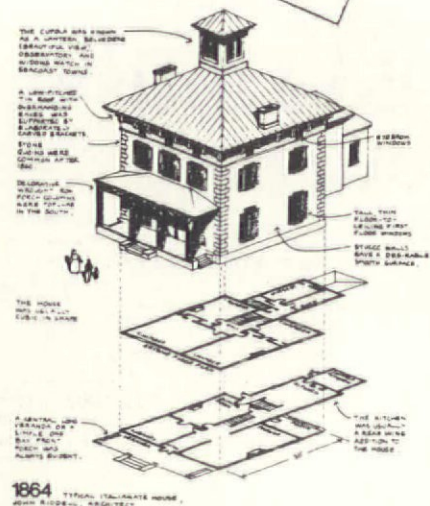
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HAVE YOU NOTICED that you don't read much these days about retrofitting solar devices to old houses? The photo above demonstrates one reason why: Many solar panel installations are badly designed and create horrible eyesores. Furthermore, most active solar additions have been financial disappointments.

WHEN A REMUDDLING involves high-tech gear, such as solar equipment, we call it "technological trashing." And the above example, submitted by Gerald R. Mosher of Janesville, Wis., certainly fits that category. He writes: "Solar panels have popped up all over, attaching themselves to the sides of some of the nicest old homes. However, this 'solar tumor'

is the worst example I've seen." The house had been resided 15 years ago, and much of the decorative trim was removed at that time. Perhaps the current owner, despairing of ever recapturing the house's original charm and character, was willing to gamble on unproven technology.

FORTUNATELY, because of dubious solar economics, we're seeing fewer examples of technological trashing than we were two years ago. But that is little consolation to the house above. It just sits on its corner lot, bearing reluctant witness to last year's fad.

--Clem Labine



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