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Id-HouseJournal January/February 1991



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Vol. XIX No. 1

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Cover: Moved once before by oxen in 1900, this 1884 Queen Anne in Water Mill, N.Y., is off again. Photographer and owner: Ron Ziel.

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EDITOR'S PAGE



You all know transferred touch, and go house every

You all know the feeling. You pass a derelict house, a house

that once was and still could be a wonderful place — if only somebody would buy it and care for it and, in some cases, save it from an untimely end. It can't be you, you think, because you've already bitten off more than you can chew. Or so it seems on most days. We know. We read your letters. In fact, we feel the same way. We see old houses with potential all the time. There just aren't enough lifetimes in which to adopt them.

As I've come to see it, though, the problem isn't the vast number of old houses (the figures, sadly, diminish every day), but rather the limited number of people — you, our loyal friends, notwithstanding — who appreciate these "things men have made." The words belong to D.H. Lawrence, who wrote in 1929:

Things men have made with wakened hands, and put soft life into are awake through years with on glowing for long years. And for this reason, some old things are lovely warm still with the life of forgotten men who made them.

The words resonate with truth, one that for me was heightened during the course of putting together this particular issue, with its focus on moving old houses. The reason: Relocating a house is sometimes the first step on the road to its preservation. This is not true in every case, of course. And not everyone would agree with us at OHJ. Strict preservationists decry house moving, citing as explanation the destruction of the historical integrity of the original site, the weakening of the building's structural integrity as well. It is not our intention to gloss over these concerns; quite the contrary, we believe that the preservation community should work together to formalize standards to ensure that when such a move is deemed necessary, proper attention is given to the

Up for Adoption

 Bucks County Frame Farmhouse: Traditional 2½-storey structure built circa 1880, with original clapboards and 2/2 Victorian sash, located in Lower Makefield Township, Pennsylvania. Contact: Michael Stadulis, 319 Kings Highway, Clarksboro, NJ 08020. West Virginia Farmhouse and Outbuilding: A two-storey structure, built circa 1888, with two rooms per floor, no foundation or interior plumbing. Located in Augusta. Contact: Ted Just, P.O. Box 5425, Washington, DC 20016.
Texarkana Queen Anne: A late-19th century house of approx. 2,000 sq.ft. with large rooms and a wraparound porch. Located in Texas. In need of restoration but structurally sound. Contact: Tyrone Ridge, 509 E. 11th St., Houston,

TX 77008.

Going, but not gone: a spacious gabled Victorian in Texarkana. house every mile along the way. But the bottom line for us is that in many cases, the house that doesn't get moved gets removed. Or it's left in an orphaned state in which its very fabric suffers from sheer neglect. And for anyone who owns an old house and faces having to leave it, isn't relocating the structure worth considering along with the other alternatives?

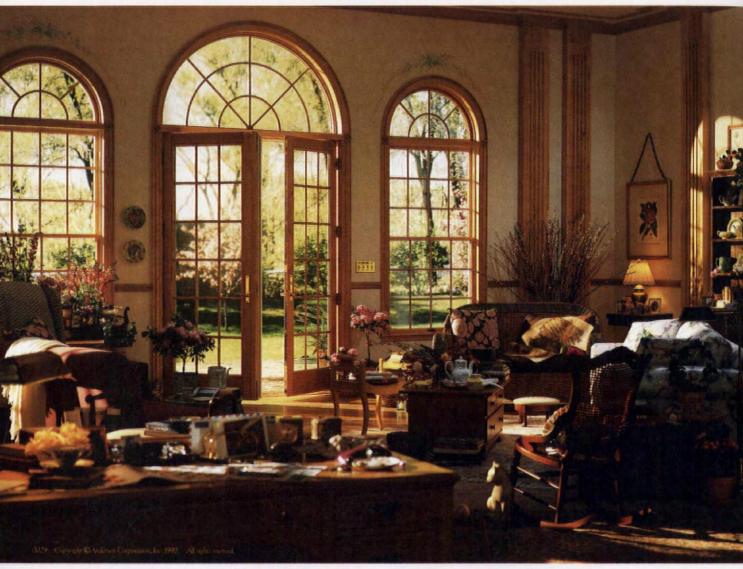
A concerned reader out in St. Louis telephoned me a few weeks ago to describe a case in point: An early-19th-century log house stands in the path of progress — it's precisely where a highway outerroad is scheduled to be built. There's no buyer in sight, and demolition is the structure's fate. The call underscored the importance of covering the topic of structural moving — far too few know of its long history, for instance — and also of informing people about the number of needy houses out there, just waiting to be moved.

The price is right on many of these houses, such as the one in Horn Lake, Miss. This modest tinroofed structure — a parsonage in the 1920s and later a farm manager's home — is also doomed, being in the path of a road-widening project. "Needless to say, it is in poor condition," writes Annie Ruth Brown. "But it has a dignity and charm and extremely high ceilings, and is FREE to anyone who might want to move it." (For information, contact: Winn D. Brown, P.O. Box 37, Horn Lake, MS 38637.)

Free, too, are the other buildings profiled at left. Could it be that you know someone who, with transferred touch, might bring new life to one of these old houses? a friend we could bring into the fold?

I hope so. **Editorial Director**

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LETTERS

More Skylight Advice Dear OHI.

Thank you very much for your kind endorsement of our company ["Ask OHJ," Sept/Oct 1990]. The shed-style skylight mentioned in your reader's inquiry is not a common style, but it is not unfamiliar to us. As it happens, we were in the process of fabricating one of these units when this query was brought to my attention. Although our skylight (right) will rest against a higher elevation wall at the ridge, the basics are the same as a unit which would be installed in the field of the roof.

The drawing you included in your response was very accurate. The sky-

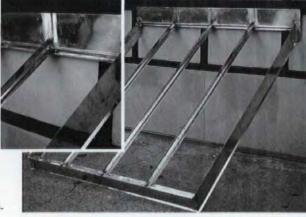
Porch Pride

Dear OHI.

On page 33 of your July/August 1990 issue is a beautiful house with a wrap-around porch. This picture was taken in the late 1970s during the Christmas holidays. The car under the porte cochere is a green Cadillac.

How do I know this? For 50 years I have been the proud owner of this house, built in 1860 by an architect named Corliss. The porch was added later by a shipbuilder to enhance the house (it was originally the same as its neighboring mansions), making it a replica

light should rest on a curb that is at least 6 to 8 inches above the plane of the surrounding roof, to minimize the possibility of wind-driven rain or snow gathering under the skylight curb. The two rafter sides should be properly base-flashed with metal "baby" shingles; the base of the skylight, with a base apron flashing. The skylight curb will act as the counterflashing.



Albert J. Wagner & Son know just bow to shed light on old-bouse fenestration.

of the "Brinkerhoff Ferry." John Brinkerhoff, who was the owner of the house and captain of that vessel, also added the balconies and the porte cochere to complete the replica. (The porch's balustrade represents a ship's wheel, by the way, and not a fan as mentioned on page 32.)

You are correct in calling the porch the house's most expressive element. It is also the most expensive to maintain, along with the second- and third-floor balconies. which represent the ship's bridge. - Marion Rutherford

Poughkeepsie, NY.



ing is the decorative key to this bandsome Italianate and its wraparound porch.

I would suggest that the top saddle flashing (whether straight saddle or of a cricket design) be integrated into the top of the skylight and run up the roof to a vertical distance higher than the top of the skylight. This will reduce the chances of the water running down the roof and entering the top of the skylight through a two-piece skylight-and-flashing design, or entering over the top of the saddle flashings.

> - Albert J. Wagner III Albert J. Wagner & Son Sheet-Metal Contractors Chicago, Ill.

Tile Style

Dear OHJ,

I have just completed reading "A Shower Stall Gets a Mud Job" (Sept/ Oct 1990) for the third time. Why thrice? I was compelled to find SOME explanation for the use of multi-hued, 'Tile World'-like, 1960s 1×1 tiles on the shower floor!

While I applaud the authors' concisely scripted guidelines and carefully researched antidote for a rotting shower floor, the poor choice of tile laid waste to what appears to have been a project of herculean proportion, particularly for a duo of amateurs.

I wouldn't hesitate to have them continued on page 8

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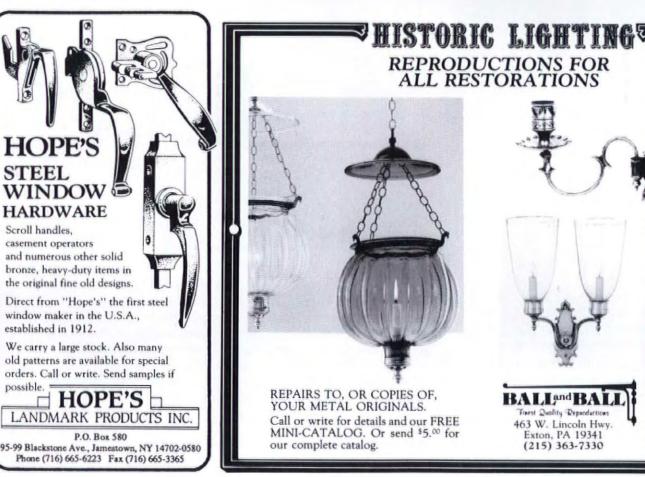
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- LETTERS

continued from page 6

perform the mechanics of such a task in my own home. However, I certainly WOULD NOT assign them to umpire an aesthetic decision.

Steven Fitzpatrick
 U.S. Virgin Islands

Reader's Soapbox

Dear OHJ,

Thank you for your article regarding the life of Elbert Hubbard ["Who They Were," May/June 1990]. It was



This box is a window on the past.

very interesting to read about Hubbard and his part in the establishment of the Larkin Soap Company. That name sounded familiar to me, and, sure enough, up in the attic, holding years of old receipts, sits a Larkin Soap Company box. You have opened a window onto the past for us!

> — Fran Teresi Garretsville, Ohio

Flooring Footnote

Dear OHJ,

In response to Dean Glatting's letter to "Ask OHJ" in your November/ December 1990 issue, I must advise that you shortchanged your readers in not mentioning Kentucky Wood Floors. We are an international source for reproductions of intricate fields and borders originally produced in the late 1800s and the first part of the 1900s.

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> — John P. Stern President, Kentucky Wood Floors P.O. Box 33276 Louisville, KY 40232

Sole-Saving Correction Dear OHJ,

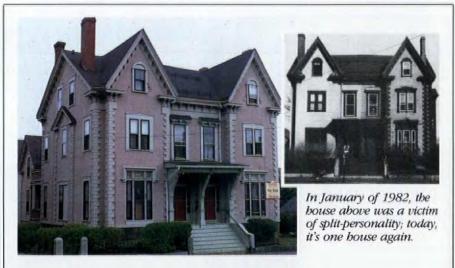
I am writing in regard to the letter from Mr. Storozuk in the September/ October 1990 "Restorer's Notebook." Jungle boots are spike resistant because they have steel plates laminated inside the soles. These are not removable. The nylon-mesh inserts he refers to are to help prevent mildew. Whether they offer any protection from penetration is questionable; that is not what they were made for. The inserts are available, but none of the catalogs selling them makes any claim for spike protection. Also, when new, you can clearly see the warning printed on them: "Do Not Boil." I hope you can make this information available to the public as quickly as possible, before someone gets hurt because they thought they had foot protection. — Michael F. Meacham

Phoenix, Ariz.

Bathroom Envy

Dear OHJ,

Patricia Poore's "Old Bathroom Woes" ["Editor's Page," Sept/Oct 1990] struck a chord. I regret to incontinued on page 10



Dear OHJ,

Like many readers, I have long enjoyed your "Remuddling" section, and it is the first page I turn to when we receive your magazine. I also realize, however, that it depresses some readers, so may I bring to your attention a house that could qualify as an "unremuddling"? This is a house in Portland,

Un-Remuddling

Maine, which was featured in your January 1982 issue, and which has been restored. Of course, it was a tame remuddling to begin with. Nonetheless, a dramatic reversal such as this may cheer your readers.

> — Roger G. Reed Architectural Historian Augusta, Maine



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LETTERS

continued from page 8

form her that I believe she is suffering from an ailment I first recognized and diagnosed in myself, but have since seen in many oldhouse owners: "bathroom envy." Take this quick test:

1. Do you go to house tours of new homes in new neighborhoods and come away with a smug feeling that, even though your neighborhood may not be considered the best, and even though your house is worth half that of the new "designer homes," you still like your house and neighborhood *much* better? You are a normal old-house owner. But after the smugness passes, do you suddenly blurt out, in a whiny tone of voice, "I want one of *those* bathrooms!"? 2. Do you publicly bemoan that mod-

ern bathroom the former owners added to your house, but secretly bypass the period bathroom to use the new one, even though it is down two flights of stairs?

3. When you travel and are *forced* to stay in a hotel rather than a cozy B&B, do you eschew room service, health club, and all other accoutrements to spend your time in the jacuzzi or tub with a glass of wine? 4. Have you spent a great deal of time and effort trying to convince your husband that, with proper shelter and landscaping, a hot tub would be the *perfect* focal point for a period garden?

If you answered "yes" to even one of the above, you are suffering from the dread "bathroom envy." There is no known cure, but most sufferers can find temporary relief by heading to the nearest "whirlpool tub big enough for two." Happy soaking!

- Karen Nickless Columbia, S.C.



Can a community enact standards against such borrors?

1892 Alice Druhot home, which is listed in the National Register and which I

A Revolting Development Dear OHJ,

Thought you'd be interested in seeing the photograph enclosed. The local weekly newspaper, *Willamette Week*, calls these three pairs of homes built by developer Ryan Lawrence "postmodernist decorations atop faceless skyscrapers." The "skyscrapers" — visible from many parts of the city — are 50foot stilts covered with plywood. They come within eight feet of the own and have been restoring since 1987. (I intend one day to restore the crenelated parapet that adorned the house in the days when Portland's only cable-car line climbed the huge trestle that stood in front.) The newspaper and I are calling for the city to enact community design-review standards to prevent future unsightly development projects in Portland.

 Lee Weinstein Portland, Oreg.

Our "Saturday Cabinet" Dear OHJ,

I enjoyed the articles on old bathrooms and fixtures in your Septem-



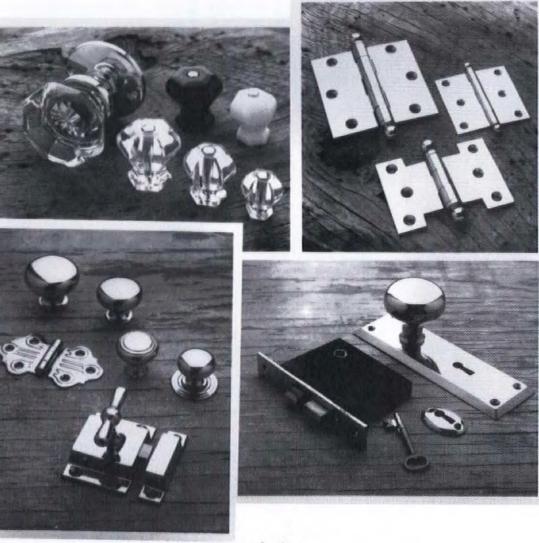
The 1895 "Mosely" (left) lowered its tub like a Murphy bed; this cabinet/bathtub (right) is a single unit.

bathtub is displayed. Great conversation piece! I like to have my customers guess what the "cabinet" is — and no one knows! It was set upright in the kitchen during the week, and then on Saturday (bath day), it was easily pulled down, filled with water, and "presto" — it became a bathtub! Did away with bringing in the old round tub from the washhouse. We call it a "Saturday Cabinet."

I do not know the approximate dates when it was used. If any of your readers do know, I would enjoy hearing from them.

> — Carol Turner Tincup Campers' Park Mahomet, Ill. *continued on page 12*

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continued from page 10 PSG Update

Dear OHI,

We were delighted, of course, by your coverage of our quarterly, *PSG Restoration Report*, in your November/December 1990 issue ["Restoration Products," page 56].

Your readers should know, however, that the quarterly ceased publication in September. However, all that restoration information will appear once a year, in every October's issue of *Professional Stained Glass*, the monthly magazine we've been publishing for the past 10 years.

— Albert Lewis Publisher The Edge Publishing Group Brewster, N.Y.

Professional Stained Glass *is available from The Edge Publishing Group, Tonetta Lake Road, P.O. Box* 69, *Brewster, NY 10509; (914) 279-*7399.

"Fainting" Memories Dear OHI:

The subject of "fainting rooms" in the Nov/Dec 1990 "Ask OHI" confirmed suspicions I'd held since childhood about a nook in the antebellum Greek Revival where I grew up. We had a broad hallway that, sometime in the 1950s, was filled on one side with bulky cedar cabinets. Three doorways led to it, from the bedroom, front parlour, and dining room; no other access was available. As a child, I tried to talk my parents into removing the cabinets so we could use "the little room" - without them, one could close the parlour and dining-room doors and recline in semi-gloom on the "swooning sofa" that undoubtedly had once been there. It also would have been cool in the summer. Alas, they didn't give in, but at least I now know what to call that wonderful dark place in the heart of the house. - Grant Michael Menzies Mariposa, Calif.



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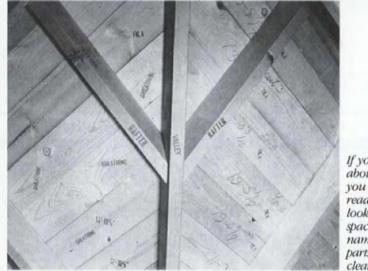
RESTORER'S NOTEBOOK

Hidden Clues

For those who are curious to learn if their home is a "mail-order" or "ready-built," I have a tip. The lumber for these homes was cut to fit at the mills, and each piece was marked or numbered before it was shipped out. An Aladdin Homes catalog dated 1917 states, "The lumber in the Aladdin house is cut to fit by machines in the Aladdin mills, marked and numbered for erection." A Lewis Homes catalog of 1925 boasts, "After the material is cut, it is marked and numbered, assembled, bundled, and loaded."

The old-house owner need only examine the joists, studs, rafters, or the backside of the siding or trim pieces for a name and number. The photograph is an interior shot looking up at the rafters of a Lewis home. This should give you an idea of what to look for.

— Michael Breza Curator, Historical Museum of Bay County Bay City, Mich.



If you're curious about whether you own a ready-cut house, look in the attic space — the names of the parts were often clearly marked.

Walkie-Talkies at Work

My husband and I spent years completely rewiring our three-storey (plus basement) Victorian, and were constantly trying to yell information to each other when we were floors apart. Although we always used a tester to make sure circuits were dead, it was still irksome to hear, "Did you say breaker number 8 or number 18?"

We solved the problem by purchasing a pair of reasonably good quality walkie-talkies for about \$75. Now we can each be on different floors and still hear, "Did the light come on?" The units are also useful for asking, "Can you come and hold something for me?" when one of us is working outside and the other is trying to hoist blueboard on the second floor. I just wish we'd thought of this idea at the very beginning of our project!

 Pamela J. Waterman Newton Corner, Mass.

Gloves for Small "Helpers"

I have noticed that many of your readers refer to their small children when discussing their renovations — or perhaps I'm sensitive about this because I have a three-year-old son. One problem for us has been locating suitable work gloves for our son; in a work area, he really needs them for protection from splinters and nails, as he picks up bits of this and that to "help."

I have discovered children's leather work gloves, and I think they might be useful to your readers. They come in several sizes and are exact copies of the adult, twillbacked, elastic-strapped, leather-palm and -fingers work gloves that you can find in any good hardware store. They are made by a company called Blue Hill Products in Ardmore, Pennsylvania.

My son loves them. They make him feel part of things and make me feel better about his being in a work area. Naturally, we do not keep him around when we're using power tools or doing other dangerous things, but there is no reason a child cannot "help" with smaller, routine projects. Everyone benefits from that, I think.

 Alisa Bearov Landrum Norfolk, Va

Gloves are available in four sizes extra-small, ages 3-5; small, ages 5-7; medium, ages 8-10; large, ages 11-13 — from Blue Hill Products, 34 W.

> Child-sized gloves will protect the youngest "belper."

Montgomery Avenue, P.O. Box 431, Dept. OHJ, Ardmore, PA 19003; (215) 642-9246.

Graining Oak in Distemper

My grandparents have a rare old book dating from 1888, entitled *Workshop Receipts for the Use of Manufacturers, Mechanics, and Scientific Amateurs.* Among the vast amount of "receipts" (we now use the word "recipes") offered by author Ernest Spon is this gem headed "Graining Oak in Distemper":

"This process is now seldom used, although it stands exposure to the weather, without fading, for a great length of time. For colour, dissolve gum arabic in hot water, and make a mixture of it with whiting, raw sienna, and Vandyke brown ground in beer. Colour the work evenly, brush it down with a dry dusting brush, comb while the colour remains wet, then let it get quite dry. Put in the veins with a small brush dipped in clean cold water. After a few seconds run a dry soft duster down the work to remove the colour from the veins. Then lay on a thin coat of Turkey umber ground in table-beer or ale, put on with an overgraining brush. If too much gum is put in the colour it is likely to crack and blister, whilst if there is not sufficient the veins will not be clearly marked by the wiping out."

It takes a little practice — and some surplus beer — but the results are handsome.

Nancy Perkins
 Pasadena, Calif.

TIPS TO SHARE? Do you have any hints or short cuts that might help other old-house owners? We'll pay \$25 for any how-to items used in this "Restorer's Notebook" column. Write to Notebook Editor, The Old-House Journal, 435 Ninth Street, Brooklyn, N.Y. 11215.





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OUTSIDE THE OLD HOUSE

by Jeff Wilkinson



selves. Although its history in the United States is not as extensive as it is throughout Europe, American gardeners nonetheless have used ornament to great advantage in gardens both formal and naturalistic in design. Andrew Jackson Downing, for instance, employed urns, statuary, and sundials in his 19th-century Hudson River villas. Of course, these were extensive grounds for expensive estates, but his principal belief applies to gardens of any budget, style, or size: Garden ornament is the ingredient that provides the "union between the house and the grounds."

In fact, the relation of house to the garden is one of several important things to consider when using ornament to create an historical garden. The architecture of your home to a great extent should dictate the choice of ornament. A Greek urn, for instance, most appropriate in the garden of a Georgian house, will look less than ideal in the garden of a Gothic Revival one. The most effective use of ornament, however, goes beyond considering architectural style. Since ornament creates a visual connection between a house and its grounds, you will achieve the best results by siting it where it will enhance one or more views from the house. thereby further integrating the two

(see plan, page 18).

Size and scale are also critical considerations when using ornament. Many people mistakenly believe that a small garden calls for small ornament. In general, a small garden looks much better with one stunning piece that serves as a focal point rather than many little pieces resulting in a china-shop effect. Before purchasing or placing any ornament, it's advisable to make a mock-up from, say, a large cut-out piece of sturdy cardboard to simulate the proposed piece in its designated site. Even a stick of the approximate height is useful to get an idea of how the ornament will look.

One additional consideration when selecting ornament is to keep to an overall theme. Landscape authorities thor of *Beautifying Country Homes*, 1870) considered it in poor taste to mix too many types of ornament classical urns, for example, with Victorian benches and animal statuary. Nothing is worse, they believed, than a garden scattered with ornaments that are unrelated to one another, either physically or figuratively.

Below are some specific suggestions for placing some of the more common garden ornaments.

Urns

The proper siting of an urn depends greatly on its size. Larger urns can be used to create a focal point, but smaller ones better serve as landscape accents; these look best in pairs, placed within close proximity of the house. Urns should never stand directly upon the ground but rather upon a plinth or pedestal, or even a balustrade or terrace. In the early-19th century, urns were regarded as a sculptural element.

Their advocates insisted they not hold bouquets as "glorified flowerpots."

Planters

Planters or jardinieres, as they are frequently termed, are *continued on page 18*

This cast-iron urn, a mid-19tb-century classical piece, bas a wooden pedestal that bas been sand-painted to resemble iron.

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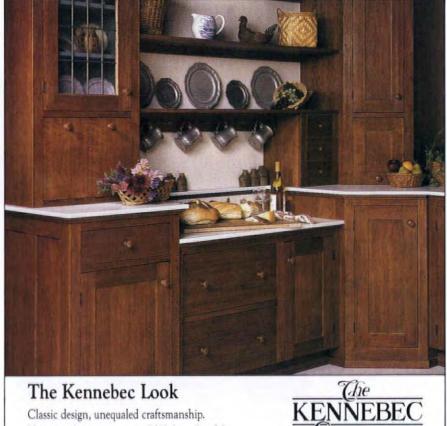


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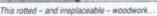
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OUTSIDE THE OLD HOUSE

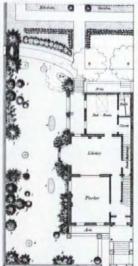
very useful for adding decorative interest to a landscape, at a bend in a path, for instance, and for the integration of flowers and walks. As the name suggests, planters usually are filled with an arrangement of flowering plants.

Sundials



undials are among the oldest decorations for the garden and grounds, and there are scarcely any which we think more suitable," said Downing in A Treatise on the Theory and Practice of Landscape Gardening. But placing the sundial has

some obvious restrictions. In order to properly interpret time, it must stand in the open and be correctly aligned with the sun, or celestial pole. These considerations aside, a sundial works perfectly well as a focal point in a small or large garden.



It may be positioned on a lawn, within a small bed of flowers or, as Downing

This plan sbows that ornament may be used successfully even in a garden of naturalistic design.

suggested, "in distant parts of the grounds, should a favorite walk terminate there." Sundials also look fine simply located at the intersection of two gravel walks.

Statuary

An art that has been all but lost in garden design is creating a literary theme. The use of statuary affords literary associations that, in days past, created a subtle dialogue within the garden. A statue of Eros or Cupid, for instance, would be used to suggest the theme of love and romance in a pleasure garden, whereas busts of philosophers and poets would be set in a spot for contemplation.

In general, large, free-standing statuary looks best with the sky as a backdrop or in front of a row of tall hedges. A bust also may be tucked into a niche, thereby providing a feeling of discovery. Statuary always should be displayed upon a pedestal, without the embellishment of flowers.

Fountains and Birdbaths

Fountains and birdbaths were infrequently used in American gardens until Victorian times, when they became popular because they were mass-produced. The traditional birdbath, a shallow basin set on a stone or column, provides a suitable focal point for a large or small garden. It

should be placed in the open, far from foliage, where enemies of our feathered friends may lurk. A fountain, too, may be set in any size garden, provided it's proportionate to the available space. A small, simply styled fountain, for example, would work well in a rowhouse lot, where it may be situated against a side wall. Sundials, a favorite in late-Victorian gardens, were often the focus for a rose or berb garden.

Obelisks and Columns

One of the most pleasing ways to add architectural interest to a garden is through the use of obelisks and columns. In formal gardens especially, these kinds of ornament act as classical referents to the architecture of times

gone by. The ideal place for an obelisk or column is at the end of a long vista or broad avenue, where it will be outlined against the sky. They also may be paired and placed, like sentinels at the gate, where one part of the garden leads to another.

SOURCES

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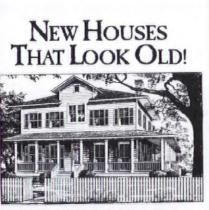
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Birdbaths are an easy way to incorporate ornament into the garden, to which they give an architectural quality. The one shown in this photo is situated on an axial path.

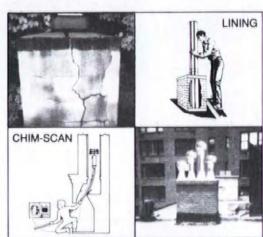


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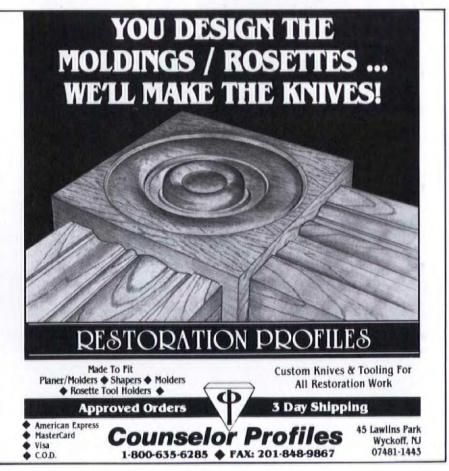
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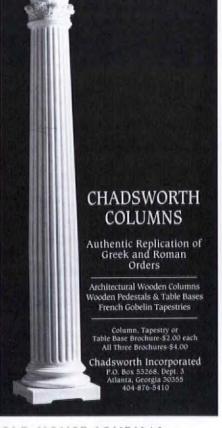


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ASK OHJ



Three of the five gables of this 1901 Folk Victorian bouse in Waverly Hall, Georgia, are easily visible from this angle.

Folk Victorian Participation of this or similar archildren of this or similar archildren of the source of t

> – Edward P. Sullivan Waverly Hall, Ga.

Your home is a nice example of a one-storey, side-gabled Folk Victorian house. Folk Victorians are simple, traditional, folk houseforms (gable-front-and-wing or Ihouse, for example) that have been embellished with Victorian ornamental details. In these houses, the basic side-gabled roof plan, in which the main roof ridge runs parallel to the front of the house, frequently has a single, centered, front gable added to it, but twin front gables such as yours also appear from time to time. The full-width porch is very characteristic of these normally symmetrical houses, and the extension off the back is a common addition.

Folk Victorian detailing is usually borrowed from either the Italianate or Queen Anne styles, and appears as elaborate sawn or turned woodwork on porches, cornices, and eaves. Houses such as these were built in many parts of the country in the late-19th century, as railroads expanded and inexpensive, machine-made woodwork became available, but they fell out of fashion after about 1910. You are lucky to have acquired the house with much of the original trim intact.

Cistern Story

In digging trenches for the footings for a new back porch to our c. 1900 Colonial Revival, we encountered an underground cistern with a manhole cover about two feet below grade. It is filled with water and very large — 10-plus feet in diameter and approximately 10 feet from the manbole cover to what seems to be a sandy bottom. (A pole sinks into it but shows no sign of mud when extracted.) With a flashlight, we can see down about four of five feet along a pipe leading toward the bottom. The "vessel" is constructed of finely laid brick on the outside and sealed on the inside with a thin layer of plasterlike cement.

Its location is almost directly under the kitchen wing, which was built sometime after 1910. At first we thought it was an old cesspool, but on further inspection it has none of the characteristics normally associated with one, and I am wondering if you could advise me as to whether it might be a fresh-water supply.

— Robert C. Metzge Scarsdale, N.Y

Cisterns were an important part of domestic fresh-water supply systems in the days before availableon-demand city water. They were pri marily reservoirs for water collected from various sources (wells, rainwater, etc.) in small or intermittent amounts, usually from hand- or motor-operated pumps or roof runoff. Many also incorporated secondary chambers and sand filters for clarifying the water. Cisterns commonly were located outside the house for optimum ventilation and ease of cleaning, but within easy reach of the kitchen and laundry room.

Looking Good as Old I am contacting you regarding formulas to simulate the patinal of aged copper. As a sculptor, I am interested in a variety of patina looks. (Currently, I am designing a piece to be mounted on the exterior of a warehouse built around the turn of the century.) I also would ap preciate any suggestions as to the method for applying the formulas. — Patrick Burke St. Paul, Minn

tural style?

Readers regularly ask us about techniques for making new copper look old (almost as often as they ask about cleaners to make old copper look new). We've noted commercial copper-sulfate solutions such as Patina Green (see "Restoration Products," May/June 1989), but there are other patinizing treatments. Here are two slower but inexpensive, oldtime formulas designed to add years

"Missing Brick" Syndrome Our bome, which we are restoring for our retirement, needs exterior painting and repairs to woodwork. Scaffolding is a necessity. In reviewing the size of the job, we noticed pockets of "missing bricks" around the entire house. I have been told that this feature was to permit the erection of a scaffold, and I seem to remember one in something I read. Can you verify

to clean, bright copper (or bronze or brass):

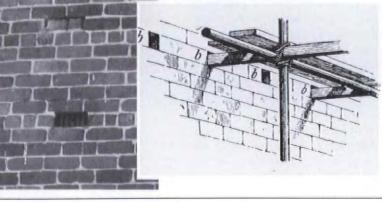
 Dissolve 1 pound of powdered sal ammoniac (ammonium chloride, available at chemical-supply houses) in 5 gallons of water, and allow to stand for 24 hours. Brush onto copper and allow to stand for one day, then sprinkle with clean water.
 Dissolve ½ pound of salt in 2 gallons of water. Apply as above.

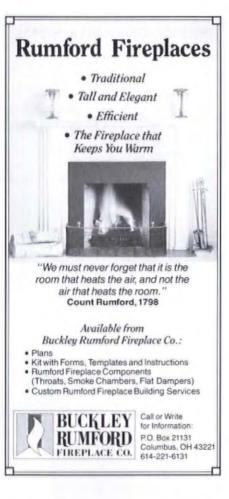
whether these were how the pockets were used?

— Warren E. Shindle Tarboro, N.C.

It is likely that the "missing brick" pockets in your walls were part of a single-pole scaffold that was originally used to build your house. In this system, horizontal crosspieces, called putlogs, were supported by the pockets at one end and by vertical poles at the other (see illustration below). Planks were then laid across the putlogs to complete the scaffold. The other common system is a double-pole scaffold, where the crosspieces are supported independently of the building by a second set of poles.

The "missing brick" pocket is visible in the lower portion of the photo at left; below, an illustration of how an early variant of this scaffolding was set up.







OLD-HOUSE JOURNAL

WHO THEY WERE

by Jeff Wilkinson

FREDERICK LAW OLMSTED

Anyone who has enjoyed a few moments of peace from the turmoil of the city by wandering through the meadows and woods of a city park can thank one man in particular: Frederick Law Olmsted. Farmer, writer, editor, surveyor, sailor, and the first practicing landscape architect in America, Olmsted spent his life attempting to bring what he called "the healing aspects of nature" to the industrialized city. He designed nearly one hundred significant landscapes, including city parks, college campuses, and private estates, and consulted on many more. Among his most famous projects are New York City's Central Park, Mount Royale in Montreal, the campus of Stanford University in California, and

the Fenway in Boston. Olmsted is also responsible for creating Brooklyn's Eastern Parkway, the first such parkway in America, and for helping preserve the important natural landscapes of Niagara Falls and the Mariposa Big Tree Groves in California. He also co-founded the magazine *Nation* with James McKim, father of architect Charles McKim.

Born on April 26, 1822, in Hartford, Connecticut, Olmsted came to his later vocations in a roundabout way. He was educated by various clergymen, after which he spent a year at Andover studying engineering before moving on to Yale. There he attended lectures only sporadically



In 1850, Olmsted set out with his brother John on a walking tour of England, where he visited Birkenhead Park: lovely, rambling grounds near Liverpool, encompassing both pasture and woods. Here he saw citizens of every class enjoying the outdoors, and realized that "in democratic America there was nothing comparable with this People's Garden." Upon his return, he wrote Walks and Talks of an American Farmer in England. With the publication of this work in 1852. Olmsted's attention turned increasingly to writing, and he soon after accepted an assignment from The New York Times to

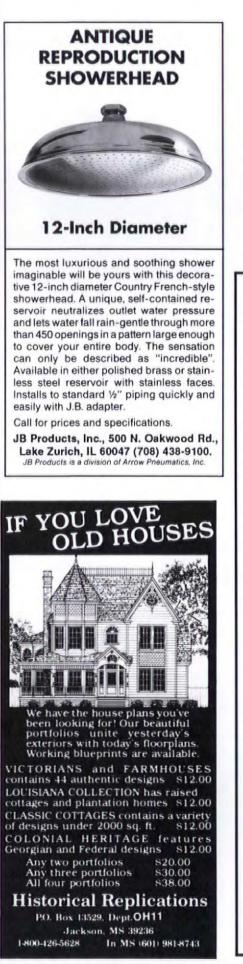
Olmsted and Vaux's winning plan for Central Park originally was titled "Greensward." Prior to its construction, informal public parks did not exist in America. Although naturalistic in theme, the design of Central Park involved moving over 4 million cubic feet of earth.

(although he eventually was made an honorary member of the class of 1847), and in 1843 he went to sea, sailing to China aboard a merchant ship. After satisfying his wanderlust, he returned to the U.S. and, with the support of his father, a successful dry-goods merchant, he acquired a farm on Staten Island, New York, which he named Tosomock. He grew very interested in new agricultural methods, and his attempts to make Tosomock a model farm provided the experience on which he would later base a number of essays. He was encouraged in his efforts by Andrew Jackson Downing, the famed nurseryman of Newburgh, New York.

k travel and write about and social

economic and social conditions in the South, eventually published in two volumes as *The Cotton Kingdom*. In 1857, *continued on* page 24

Olmsted (as be appeared c. 1860) coined the phrase "landscape architecture."





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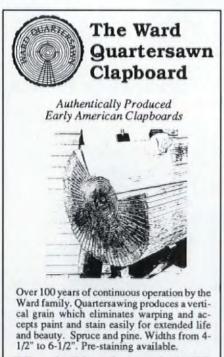


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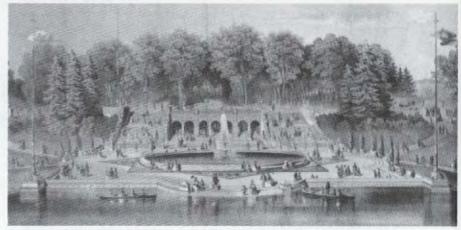
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continued from page 22



Here's how the Terrace and Fountain looked to visitors in 1863.

New York City was looking for someone to supervise the clearing of grounds for a new park to be "centrally located" in Manhattan. For several years, William Cullen Bryant and Andrew Jackson Downing had campaigned for such a park. Olmsted, who until then was mainly known as a writer and gentleman farmer, was appointed Superintendent of Central Park upon receiving recommendations from Bryant, Washington Irving, and Horace Greeley. While the initial site work proceeded, the city was still searching for a suitable design and in 1858 posted a competition. Calvert Vaux, an English architect whom Andrew Jackson Downing had brought to America, suggested to Olmsted that they collaborate on an entry. Their design, titled "Greensward," won because it preserved the greatest amount of open space and best solved the crosstown traffic problem with its innovative system of tunnels and bridges.

Imsted was appointed Architect-in-Chief, a title which has caused confusion to this day, because Vaux was at least an equal contributor to the design, as well as a talented architect. (The two were partners until 1872.) From 1858 to 1863, Olmsted oversaw the park's construction, during which time he also married his brother's widow, Mary Perkins, and started a family. Supervising the construction of Central Park involved considerable political balancing, and the politicians who held the pursestrings were so difficult for Olmsted to deal with that both he and Vaux resigned before completing the project. Olmsted found a break from the strains of park building during the Civil War, when he became the Executive Secretary of the Sanitary Commission, forerunner to the Red Cross.

After the war, Olmsted spent the next 30 years pursuing his newfound career of landscape design. Many public-parks commissions followed, on which he collaborated with top architects such as H.H. Richardson and McKim, Mead & White. He also designed many private grounds such as the Biltmore Estate for George Vanderbilt in Asheville, North Carolina. But it is for his public works that he is best remembered, including his influential redesign of the Capitol grounds of the White House and the grounds for the 1893 World's Fair in Chicago. Olmsted's last years were spent as a patient at McLean's Institute, for which he had designed the grounds (1875-1886). He died there on August 28, 1903. His legacy continued with his stepson John Charles and son Frederick Law Olmsted, Jr., whose firm Olmsted and Olmsted practiced well into the 20th century.



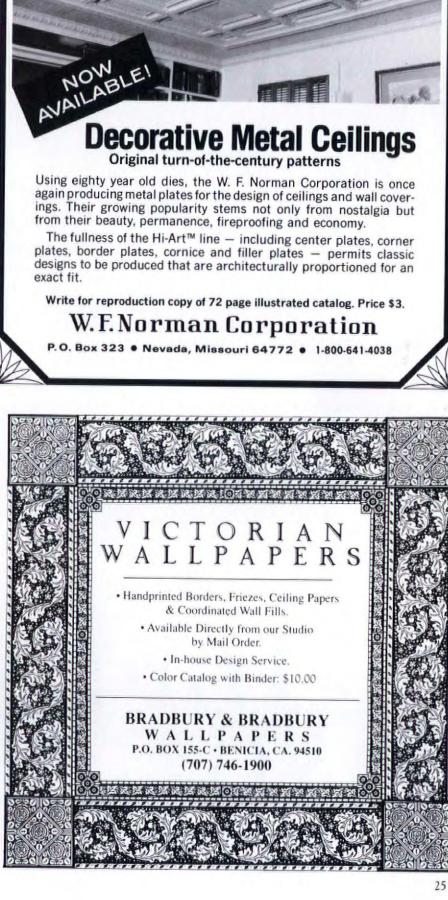
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More Than a **Change of Address**

by Stephen Del Sordo

or most people, a house is a solid, stationary structure. For some, however, any building, no matter how small or large, is simply a big box that can be moved wherever they get a notion to put it. Relocating complete build-

N DIEGO

ings from one site to another is not a new or far-fetched idea, but rather a long-standing technique for "recycling" the materials and labor invested in construction.

In the days when houses were built largely by hand, moving a house by roller, rail, or water made much more economic sense than razing it. For instance, the Delaware State Historic Preservation Office's recent survey of pre-1945 buildings in Broad Creek Hundred, Sussex County, revealed that 10 percent of the 600 houses

there had been moved, and that another 10 percent were suspected of having been moved. That state even has a famous 1790 incident in which an entire house was stolen and moved to an adjoining farm. In Lewes, a church that has been moved three times is known as the Raising with screw jacks, c, 18 "traveling church."



Today, buildings of all kinds are moved because they sit on land that is more valuable without them, or because they are in the path of highways, railroads, reservoirs, or urban renewal. In such cases, the building can often be



had for the cost of relocation. Old houses, however are frequently moved with the aim of rescuing the building itself from oblivion, or relocating it to an area

more

in

Once off the foundation, the building sits on a network of steel beams.

keeping with the architecture or where its value is increased.

Most historic preservationists feel house moving should be considered only when the alternative is losing the structure to demolition. This is especially true for historic buildings where, they argue, moving dislocates the building from its original site and destroys its relationship with the surrounding landscape — often as important as the building itself. Similarly, moving a building to become part of an over-restored architectural petting zoo is also inappropriate. Dismantling a house and moving the pieces is rarely a good idea either, because much of the original fabric (such as lath, plaster, and trim) is lost in the process, and putting the parts back together is a difficult and expensive task.

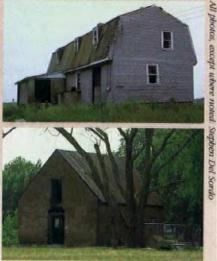
In theory, house moving is not difficult. An average job involves positioning steel beams under the frame of the building, then raising the building and beams off the foundation with jacks, and finally attaching wheels (called *dollies*) or a trailer. The house is then driven to its new

site just like a tractortrailer. Setbacks such as flat tires on the road, heavy equipment stuck in dried creek beds, and weather are what cause problems. Having moved two buildings in the past three years and consulted for several

other moves, I have found that the most important things to have are lots of experienced help, lots of money, and lots of patience.

Getting Help

There are two first steps to undertake once the decision is made to move a building: 1) hiring a reputable, competent mover and 2) hiring a reputable,



competent Cook House (top) and Goldsborough general Stable (above) before their moves. contrac-

> tor. The house mover (also known as a *structural* mover because the industry moves structures, not solely their contents) handles the work of actually moving the house. The general contractor takes care of the related construction such as preparing the new site and building the foun-

> > House moving by water from San Diego to Coronado, Calif., in the 1910s.

dation (although some movers may contract these jobs as well). Both crews must work closely together to coordinate schedules and ensure that the new site is ready and tailored for the building. An architect or engineer also can be hired to plan and oversee the project.

When shopping for a mover, find out 1) if the mover's experience and equipment match your project; 2) what the proposed schedule will be; 3) what parts of the job the mover will do; 4) what insurance coverage or bond surety the mover carries; 5) what guarantees the mover will make. All agreements should be set down on paper, preferably



Preparing the stable by blocking in wall voids and excavating the foundation. in a contract.

FOUSE MOVING

The cheapest price is not always the best way to travel. My first house move was a circa-1770, 11/2storey, plank dwelling known as the Cook House, which had to 125 travel miles from

Smyrna, Delaware, to the National Building Museum in Washington, D.C. When none of the movers from whom I requested bids appeared at the site meetings, I should have suspected trouble. The Museum accepted the low bid of \$5,000, but I spent a great deal of time working with these movers to keep the project near schedule. The second building I moved was the circa-1790 Goldsborough Stable in Cambridge, Maryland. It was brick, and so only one mover agreed to move the building, and he charged \$15,000. However, all I had to do with this mover was show him the new location, take him to the original site, and write a check for his fee.

Paperwork



enerally, it is the owner's responsibility to take care of the "red tape" needed for a move. This includes 1) securing all necessary building permits (for both locations) from municipal building departments; 2) securing

all moving permits from state and local highway departments; 3) arranging police escorts, if required (some localities furnish escorts, others request they be hired); 4) arranging for moving overhead utility wires; 5) arranging for moving highway obstructions such as signs, markers, or lights. Highway departments also need to know basic information for the moving permit, including the width, height, and length of the trailer and house, the number of tires or axles, and the weight of the entire vehicle with its load. The department also will require proof of insurance and a bond from the mover prior to issuing the permit.

Other paperwork is tied to construction at the old and new sites. The owner must be prepared to arrange for demolition of the old foundation, and pay water- and gasdisconnection fees, if any. In addition to plans and specifications similar to any other construction project, the new site may require a soil test and a survey.

The Cook House project required two moving permits because the roof had to be detached from the house to simplify the move, but the total fee for both trailers was only about \$100. Permits are good for just a few days and must be signed for in person. In addition, the house was $18' \times 25'$, which meant that some bridges along rural roads had to be carefully measured. (The narrowest was only one foot wider than the house.)

Height of the building on the trailer is also critical. The Goldsborough Stable stood almost 25 feet high on its trailer, and all of the utility wires along the travel route had to be dropped. Although this meant that homes were without services while the house moved along, the families did not complain; instead, they came out to watch and cheer. House moving always attracts a crowd.

Preparation

While the permits are being acquired and the new site is prepared, the building must be readied for its move. First on the list is disconnecting services such as plumbing, sewage, gas, and electrical connections. Because construction varies from building to building, any preparatory bracing must be individualized to the building according to the mover's experience. Sometimes this involves little more than closing in windows and doors (which are weak points in the wall) with sheets of heavy plywood. Diagonal or "X" braces made from planks and timbers may also be required inside rooms to prevent racking or distortion of the building. In the case of the Cook House, a supporting frame of 2×10 s had to be constructed to hold the gambrel roof together. Older masonry buildings are often tricky.



The Cook House had to be sectioned in order to make its 125mile journey practical. Left: removing the roof by crane. Right cutting away the added wing.

For the brick stable, the mover removed and saved all the windows and door frames. The masonry contractor the bricked in all the voids and repointed the exterior.

In addition to these preparations, the owner or inter ested preservation group should make a complete photographic record of the building and the grounds prior to the move, and then one of the move itself. For historically significant buildings, measured drawings of the entire



structure will be valuable records in the rare event that the building is damaged or lost during the move. Having a clear plan for the eventual restoration and use of a building is also an important part of moving

Even cut, a moving house can be a tight fit under utility lines or over bridges.

preparation: The Cook House may soon be demolished because the museum no longer has a use for it.

Once the interior of the building is secured, the mover can begin work on the exterior. Whole chimneys sometimes do not move well because the section above the roof is laterally unbraced and is usually in the weakest condition. If the chimney cannot be braced back temporarily, it may be easier to drop it to the roof line and haul the brick to the new site for reconstruction. (This procedure also lowers the highest point on the building.) Porches and wings do not move well either, and can be dismantled for later reconstruction or moved separately. A length of 60 feet is usually the outside limit for a safe move. The Cook House wing, an early-20th-century addition, was left behind. The house mover cut away enough of the wing to allow him access to the covered gable end of the main pody of the house.

The next common step in the preparations is excavation near the foundation so the house mover will have room to position equipment under the house. The Cook House sat on a slight knoll with a full basement underneath, so he mover dug away one end of the knoll, knocked out he basement wall, and then built a ramp with heavy timpers. The Goldsborough Stable was built at ground level with a two-foot-deep foundation, so that house mover had o dig under the building and foundation.

The Cook House roof was removed with a thirty-ton crane donated for this purpose by a local construction company. Unfortunately, the crane operator drove off the

arm lane to woid some nuddy spots and went into a dried creek bed. As the giant crane unk into the greek up to its exles — in ront of the local and naional media—



The solid-brick stable moving off the old foundation and onto the road.

I saw two weeks added to our moving schedule. Much later, after the damage to the crane was repaired, the roof was lifted off without difficulty and set upon its own trailer.

Taking Off



nce the building is supported by steel, it can be moved away from its original location. The Cook House mover gave me a few anxious minutes when he took the house into an adjoining field, pulled out the tractor

throttle, and hopped out of the cab. He then proceeded to run around the truck and house while it moved forward without a driver. After he was satisfied with the way the house sat on the trailer, he jumped back into the tractor and parked the house.

On moving day — three months late for the Cook House and one month late for the Goldsborough Stable — all of



Supported entirely by cribbing and steel, this seaside bouse awaits its new foundation.

the drivers and escort vehicles assembled one hour prior to the scheduled departure time. The actual timing of a move is usually controlled by the various police departments involved. Most request that oversized loads, such as houses, be moved at night or on Sundays. However, almost all house movers refuse to operate at night because they consider it too dangerous. The usual compromise is to start the move at daybreak or after rush-hour traffic.

The average speed of a moving house is five to fifteen miles per hour, with fifteen considered the upper limit. The first vehicle is an escort car with flashing lights and a large sign announcing the oversized load. The last vehicle in the caravan is another escort vehicle, usually an off-duty policeman and patrol car hired for the occasion. The Cook House roof was considered a separate load by the highway departments of Delaware, Maryland, and Washington, D.C., and so it required its own escort vehicles. The two trailers also were instructed to travel at least one mile apart. However, that requirement was never enforced; in fact, the State Police preferred that we travel close together. While not always required, two-way radio communication between all the vehicles is very helpful. Someone also has to be responsible for watching the building from ground level to make sure it clears roadside obstacles and overhead lines. As a warning device, some movers rig a piece of plastic pipe as the highest point on the building - which is much safer than perching a man on the roof.

The house mover has to be equipped for emergency repairs. The Cook House suffered three flat tires en route to the new site, but the mover was able to jack up the house and equipment on the spot and change the tires. The Goldsborough Stable mover had to stop his work halfway through the move to temporarily replace a sheared pin on the truck's clutch linkage. Any travel schedule must allow time for breakdowns or accidents.

At the New Site



nce the building has reached its new home, the mover will drive the house to its permanent location and support it on cribbing while the foundation is finished. There are two approaches to foundation work: pre-

building within two courses of the final height before the house arrives, and building the complete foundation "up to the house" after it has arrived. The choice of method depends upon the house, as well as the experience and preference of the house mover and masonry contractor. Grading is also important to allow for convenient delivery of the house. Unfortunately, this is not always possible. At the Goldsborough Stable site, the maneuvering space was tight due to a neighboring driveway and trees that had to be left in place. When the stable arrived, the mover decided to dig back the foundation pit on all sides to gain clearance.

Exact positioning of the building — both location on the site and height above ground — is critical. Once the mover's equipment is removed, there is no practical way

of repositioning the building short of rejacking,

which will cost almost as much as a move. The Goldsborough Stable mason was at the new site to assist the mover with the placement of the stable.



Time for delays — such as this broken clutch — should be built into schedules.

Even though the foundation was covered by fill scattered by the mover's bulldozer, the stable placement was perfect and the mason had no trouble building up the foundation. The Cook House's final location was not ready when it arrived. Accordingly, the house was set on cribbing in a corner of the back parking lot of the National Building Museum.

Once the building is in the proper location, it is supported by jacks and cribbing which are placed under the steel beams. After the mason has finished the foundation up to the bottom of the building, the jacks are released and removed and the steel is withdrawn. The new foundation should support the house at the same points as the original foundation — "ghost marks" on the undersides of existing girders, beams, and sills are all clues to proper foundation placement. Additional piers, pilasters, or basement steel beams and columns also may be needed, as well as a detail to anchor the house to the foundation. After the holes through which the steel passes are filled in, the foundation is complete.

Once tools and materials are removed, the job of the house mover also is finished, and he will expect the final check for his services. Some movers do not remove steel or will not set the house down until almost all of their fee is paid. Payment schedules vary from mover to mover, but many operate similar to other building contractors and ask a down payment of a third to half of the total cost of the



project up front. A partial payment may also be expected halfway through the project, particularly if it stands to take more than a short time. As with all construction jobs, it's best to keep the size of the payments in proportion with the progress of the work. Generally, a house mover can be expected to fulfill a performance contract: for example, "Move house from point A to point B by a set date for a set amount." While this means expenses to cover during the move, if for some reason the mover cannot finish and you have to hire another company, you do not want to have to pay twice for the same job.

One part of moving historic houses which is often overlooked is archaeology at the present and future sites. With the Goldsborough Stable, the Maryland Historical Trust sent a team of architectural historians and archaeologists who were able to make a quick survey of the interior of the stable, which established the original arrangement of stalls and work areas.

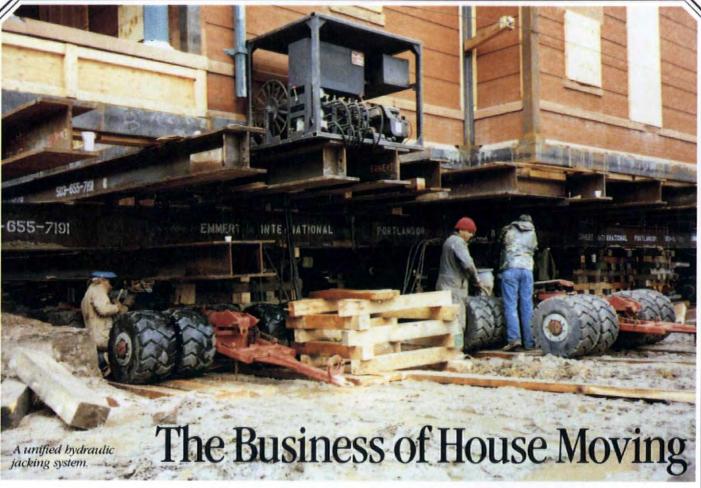
Both these buildings were significant to their respective states — one was the home of a former governor and the other a rare building type — and so these two moves received unusual attention from their state preservation offices. While not every building has the history of this house and stable, the level of care they received should be given to every relocated structure. Old buildings that are moved may

lose the integ- *The restored Goldsborough Stable, a balf-mile* rity of being on *from its original site.*

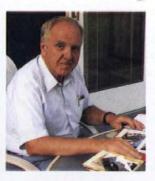
rity of being on their original site, but they still represent portions of our history.

Stephen Del Sordo is an bistorian with the Delaware Bureau of Archaeology and Historic Preservation.





To get a look at house moving through the eyes of someone who does the work, I spent a pleasant Indian Summer afternoon chatting with Carl Tuxill at his home in Elbridge, New York. In the course of 35 years in the business, Mr. Tuxill has moved structures ranging from cottages to airplane hangars, including a wide variety of historic buildings for the Genesee Country Museum in upstate Mumford, New York. Since retiring, he has embarked on a new career



as publisher of The Structural Mover, the magazine of the International Association of Structural Movers. It's a job that keeps him in close touch with state-ofthe-art moving projects across North America, and ever "on the move."

by Gordon Bock

Gordon Bock: If someone wants to move a house, what should they look for in a house mover, and where can they find one?

Carl Tuxill: It's always a good idea to get references and see where a prospective mover is working or has worked — you can't hide the quality of a moving job. Look at his equipment. Is it in good shape? See how the movers treat the house. Are they careful? Meticulous movers might go as far as holding back trees to avoid scratching the building

as it goes by. There are rough movers. Make sure the job you look over is similar to yours.

Matching the mover to the work is important. Some businesses just do concrete or brick buildings. Others don't like to do historic buildings. Matching equipment is important too. Just because you're a house mover doesn't mean you're geared for any project. A two-storey, brickveneered building is heavier than a plain wood-frame building, and a house with solid masonry walls is even heavier. You have to add extra dollies to carry the extra weight of masonry, and the mover has to have enough dollies to do these kinds of jobs.

The majority of house movers are small, family-run businesses with crews of up to five people. Most operate within a hundred-mile radius of where they're located, so wordof-mouth and The Yellow Pages are the likeliest sources for names. While there is no master index of all movers, some belong to state or regional associations that may have listings. Folks are also welcome to write us here at IASM for names of movers in their area. (Send an SASE to International Association of Structural Movers, P.O. Box 1213, Elbridge, NY 13060.)

GB: Is there any limit to the size of house that can be moved?

CT: People in this industry are often called on to move bridges, oil tanks, ships — structures much larger and heavier than a house. A three-storey masonry building is not out of the question for somebody with the equipment and experience.





Technically, no bouse is too big to move. The real constraints are often time and money.

GB: What kind of equipment does a house mover use? CT: The days of wooden beams and hand-operated screw jacks are gone. All-steel wheel dollies are pretty much outmoded too. Basically, house moving involves placing a network of steel beams under the building and then adding dollies to move it. The beams used most often today are wide-flange H beams rather than old-style I beams. With H beams, the flanges at top and bottom are roughly as wide as the web connecting them, so they're less likely to tip over. Dollies now have rubber, aircraft-type tires which roll with less friction than steel. Most movers also use unified hydraulic jacking systems to actually lift the building off its foundation. These systems are designed for equal travel regardless of the weight of the load. With this equipment, all points of the building can be lifted at the same rate. The tractors used to pull the house might be heavyduty, diesel construction trucks, big, off-road construction equipment, or even military trucks.

For most house moves, you have to "go three points" either mechanically or hydraulically. That is, while the building is off the foundation, it must be supported at only three locations so that it is not subject to any distortion. In geometry, three points determine a plane, which in this case is the most stable shape: a triangle. Stability is what is necessary when you move a house so you don't distort the building. The three points are usually three dollies or gangs of dollies under the steel. But the third point can also be the fifth wheel on the tractor if it's hitched to steel that extends out of the front of the building.





"Going three points": two dollies (at rear) and the tractor's fifth wheel.

For short distances on a level plane, such as moving back a few feet on the same lot, buildings are sometimes just rolled on a steel crawler or skate dollies. There

are also special versions of these dollies which swivel for manuevering a building out of a tight lot. **GB:** How do you disconnect a house from its old foundation, and how do you get it on the new one?

CT: If the building just sits on the foundation, as many older houses do, it simply lifts off. If there are anchor bolts set in the foundation masonry tying it to the building sill, it's often possible to wrench the nuts off from inside the basement (if you can find them) or to hacksaw them off. Otherwise, you can destroy a course of block in the foundation with an airhammer to cut the building loose — whatever it takes.

For simple houses, it may pay to prebuild the foundation. Most movers and masons, however, prefer to build the foundation after the house is on cribbing so there are no mistakes in wall locations. It is very hard to accurately premeasure the dimensions of an existing foundation, especially if there are any complicated angles. In addition, you cannot set a masonry building down on a foundation because of the irregularities left in the bottom after moving; you have to build up to it.



GB: How does a house mover price a job? How do you usually pay him?

CT: There is no standard formula for bidding a housemoving job everybody has their individ-

Utility lines — and even poles — are common, expensive obstacles.

ual method. Some go by square footage for wood-frame buildings; others price heavy masonry by estimated tonnage, which also determines the number of wheels and amount of steel that will be used on the job. Basically, the mover has to cover the hourly or daily expense of employing men and equipment, so time comes into play too. I used to figure that one-third of my costs were moving equipment in and out of the site. It depends upon the style of the job and where you are. Here in the East, we tend to carry more of the original building; in the West, where there is a lot of slab construction, they tend to not carry the slab.

Schemes for paying the bill vary from a single payment to several payments. Whatever the arrangement, it should be determined and set down in writing before the move. Some states require this. A typical schedule might be a down payment of so much when the contract is signed, so much when the building is ready to roll, and so much when it is delivered.

GB: What distances are buildings usually moved?

CT: Ideally, they can be moved 30 to 40 miles a day, but a lot depends upon the building and where you are. In relatively flat, open places like the American Southwest, 200 miles is not unheard of. The same might be true in Canadian provinces like Manitoba. Up here in the congested Northeast, most moves are only a few miles or fractions of a mile long. Wire costs cut down a lot of the



Footings may be pre-poured, but most foundations are built up to the house.

part of the country. **GB:** By "wire costs" you mean the expense of getting overhead utility lines out of the way?

moving in this

CT: Yes. Someone — the mover or the

customer — has to call each utility company and tell them you're scheduling a move. Then, they each send out an engineer who calculates the difficulty of moving or dropping the lines. The National Electrical Code recommends that utility lines be 18 feet above street level, so theoretically this is the limit. In many communities, you are required to place a deposit on this estimate — which is no guarantee of what the actual cost will be. Crews from each utility are on the route the day you move, and afterwards you receive the bill which may be more than the estimate.

Wire costs kill a lot of jobs. In my area, I've seen them go to \$15,000 or \$20,000 more than once. In the West, it isn't as much of a problem because there aren't that many lines. Sometimes, you take a longer route just to avoid wires. There have been cities, Los Angeles, for one, which have permanently relocated all wires to a higher minimum height (25 feet) along a set corridor to minimize their own wire costs.

GB: When do you consider sectioning the building to move it, say, when you remove the roof or a major wing?

CT: Basically, the decision to cut a building depends upon economics. You cut when it's cheaper or more economical to move a building in small pieces, particularly for long distances where the wire costs can add up. Of course, cutting also costs because it requires a lot of effort to put the house back together again. If the house is going to need extensive restoration work anyway, though, this ex-

pense becomes less of an issue.

GB: It sounds like house moving ties up a lot of cash.

CT: Moving a house requires a big cash outlay. You have to pay for wire costs, which



Skate dollies riding on steel may be used for sbort moves.

can be substantial. You have to pay the mover. Also, you have to buy the lot before you move if you don't already own property, and this can mean a big cash investment. Basically, banks mortgage the house, not the ground it sits on. In some areas it's more difficult to get a loan on unimproved land.

GB: What about insurance?

CT: Three basic insurances are needed. Workers Compensation covers the contractor's employees. Automobile insurance covers personal injury and property damage caused by the use of the vehicles. Then, general liability insurance is needed for personal injury and property-damage liability from the general operations. None of these cover the "cargo" or building being moved.

Insurance against damage to or loss of the building itself also can be obtained, but this is a matter of choice. The mover has to obtain this insurance because it is based on his experience and record. House-moving accidents do happen, just as new buildings occasionally fall down.

It is also a good idea to decide who either the owner or the mover - is responsible for the "care and custody" of the building while the job is underway. This means insurance against fire and theft or vandalism. The nature of this kind of insurance depends upon the insurance company and the environment of the job.



Top: preparing a cut bouse. Above: steel banding used for masonry.

GB: How much prep work is necessary before the move? **CT**: Again, it depends upon the house, the route, and judgement of the mover and other contractors. If the building is masonry and not in good condition, the mortar condition tells you what to do. Some movers use a technique for masonry buildings where the building is carried on the steel banding. Steel beams are positioned on each side of each wall. The steel banding is then placed over the beams and underneath the masonry wall. These straps, placed about every one or two feet, carry the building. Sometimes it is necessary to place steel cables horizontally around the building, to put the building under compression. Door and window openings in the wall are usually braced at this time. It also depends upon the grade you're talking about; slope puts a tremendous strain on a building.

For a wood-frame house, though, with a clear shot — that is, a move with no obstacles — you can probably ride in the house if you want to.

A lot depends on the job and the route, but in my experience, it's possible to put a glass of water on the kitchen table before you leave the old site and arrive at the new site without spilling a drop.



The Kettering House



We had given up looking for an unremuddled brick Victorian house to restore and had decided to build new when we found the 1884 Kettering

House. We were lucky that it could be moved through an open cornfield, as its sheer weight would have buckled the road and crushed underground utilities.

House Size: 12 rooms, 5,000 sq.ft. Construction: Brick Distance of Move: 4,000 ft.

Moving Time: About five weeks of work Cost of Move: \$45,000 Cost of House: Free

Other Significant Costs: Basement cost of \$15,000; no wire costs due to the open field

Most Difficult Part of Move: Convincing inspectors and county officials that the house could be moved and that we weren't crazy. Was the Move Worth It? Would You Do It Again? Yes, and Yes.

 Stephen and Christine Kelleher Massillon, Ohio

Colorado Colossus

The 1893 Milheim House (see photo at top of page) is the largest structure ever moved in Denver. The house, in pristine condition, was close to demolition for two years while the property owners looked for someone willing to move the building. My partner and I decided (literally at the last minute) to take the risk.

House Size: 5,000 sq.ft.; 583 tons Construction: Brick and stone Distance of Move: 16 blocks Moving Time: 4 days of move, 4 months of work Cost of Move: \$140,000 Cost of House: Free Other Significant Costs: Foundation, \$95,000; wire and other costs, over \$45,000

Most Difficult Part of Move: Finishing the new foundation. (The actual move went smoothly.)

Was the Move Worth It? Would You Do It Again? Financially, the move probably wasn't worth it. Historically, it definitely was and I would do it again.

> — Ralph Heronema and James Alleman Denver, Colo.

Endangered Species



This 1899 beauty became available because the U.S Fish and Wildlife Service purchased the land, and all buildings had to be moved or destroyed. To

move the house we had to brace the porch, remove two chimneys, and cut down several trees. House Size: 12 rooms Construction: Wood frame Distance of Move: 7 miles Moving Time: 3 days Cost of Move: \$7,000 Cost of House: \$1,200 Other Significant Costs: Basement, \$4,500; wire costs, \$460 Most Difficult Part of Move: Finding land and moving within HOUSE MOVING

two months after buying the house. **Was the Move Worth It? Would You Do It Again?** Yes. — Steve and Denise Raymond Funk, Nebr.

The Third is the Best

We live in a 94-year-old Queen Anne that has been forced to sit on three different sites. The house was moved out of the way of a highway by a steam-powered tractor in

1958. We moved it again in 1978 to save it from an expanding gas station.

House Size: 8 rooms, 5,050 sq.ft.



Construction: Wood frame

Distance of Move: 6 blocks Moving Time: 14 hours

Cost of Move: \$6,800

Cost of House: \$1

Other Significant Costs: \$13,623 for excavation, foundation, and wire costs

Most Difficult Part of Move: Delays by mover and village board. The town delayed the move until the ground was frozen; the mover was hard to get started (call after call after call....)

Was the Move Worth It? Would You Do It Again? Yes! Maybe again — but in another lifetime.

 Gregory C. and Carol T. Hargus St. Joseph, Ill.

Greek Revival Revival

Built almost completely of tulip wood, this 1830s farm home had been a privately owned residence until the 1950s. In 1988 the land was purchased by a John Deere



dealership and the house, not zoned for commercial use, was unwanted. House Size: 10 rooms Construction: Wood frame Distance of Move: 1 mile

Moving Time: 9 AM to 7 PM Cost of Move: \$15,000 Cost of House: \$1 Other Significant Costs: \$1,500 for wire costs Most Difficult Part of Move: Finding a parcel of land in the area. No one wanted to sell even an acre. Was the Move Worth It? Would You Do It Again? Yes — but not immediately.

- Victoria Romanoff and Sarah Adams Ithaca, N.Y.

Itinerant Italianate

Even though it was built in three sections at different times (circa 1845, 1870, and 1890), we moved this solid-brick



us to correct most of the settling in the structure, and the new basement is dry — all 2,500 square feet of it! House Size: 15 rooms, 4,600 sq.ft. Construction: Brick Distance of Move: 150 feet Moving Time: 6 months Cost of Move: \$97,000 Cost of House: \$1 Other Significant Costs: None Most Difficult Part of Move: House mover and general contractor did not stay with job. They were two days on, then off for a week

Was the Move Worth It? Would You Do It Again? Yes.

 David and Donna Russell Pewee Valley, Ky.

HOUSE MOVING CHECKLIST

Every job is different, but here are points to consider before planning to move any house:

Check the house for soundness. Have a structural engineer or architect review the existing framing system if the house is complicated.

Check zoning ordinances and deed restrictions at the new site to make sure they permit relocated houses and houses of the size you plan to move.

Check with local transportation and building departments to make sure they permit moving houses.

□ Confirm that the new site is accessible. While the mover will ultimately decide the route, avoid locations that mean moving the house over interstates, railroads, bridges, steep hills, narrow streets, or long distances. □ Take the time of year into account when planning a move. Many jobs, for instance, benefit from the frozen ground of winter, but masonry work may not be possible in cold weather.

Consider building a full basement on the new site, both for convenience and added house value.

□ Plan to protect the house from intruders while the work is in progress. Obviously unoccupied houses are prime targets for vandalism and arson.

□ Plan the move like any other large construction project. Prepare thorough architectural plans and account for the standard building details at the new site such as water, sewer, and utility hook ups; foundation waterproofing and insulation; and site grading. aint stripping is a messy and potentially dangerous process, and no single method works best for every project. Chemical paint strippers, however, probably see the widest use because they work on a wide variety of surfaces, offer a reduced health threat from fire or lead-paint dust, and are great for a final cleanup after other methods (such as heat tools or mechanical approaches) have done the bulk of the stripping. Not suprisingly, there's no one type of chemical paint stripper, or one that is completely safe.

The chemical strippers on the market today can be broken down into three basic groups: 1) methylene chloride-based (employing this organic solvent as the principal ingredient); 2) caustic-based (relying on the action of alkalies); 3) alternative systems (those that are neither methylene chloride- nor caustic-based). Each of these distinct types of strippers operates on its own chemical principle and loosens the paint film in a slightly different manner. They also require different handling, health precautions, and an understanding of what they can and cannot do to produce the best and safest job. It is these differences we're going to look at in this article.

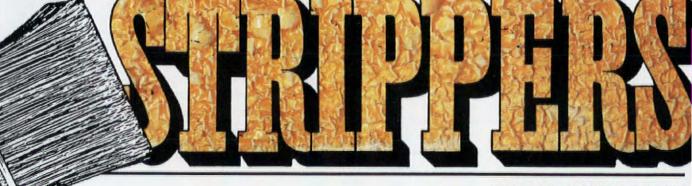
PART ONE

Methylene Chloride Paint Strippers

by Janet C. Hickman Because it is an aggressive solvent with low flammability, methylene chloride forms the basis for most of today's solvent-based chemical paint strippers. These strippers work by partially solubilizing the solids in the old finish. Once the solids are in solution, the methylene chloride molecule, which is very small, can slip between the gaps left by the other, larger molecules and reach the bare wood or other substrate. With the methylene chloride now trapped between the finish and the wood, the finish blisters and peels, leaving behind a softened residue that can be easily scraped away. Many expert refinishers prefer methylene chloride paint strippers because they're fast and effective and they run the least risk of harming delicate woods or water-based glues.

> Solvent-based strippers come in two forms: liquid and semi-paste. In general, the liquid form works fastest and is good for removing clear finishes; semi-paste works best on paint and vertical

surfaces. As a general rule, one gallon of stripper will remove about 75 to 100 square feet of paint, depending upon the number of coats. A chair or small end table, for example, will require about one quart of stripper. Complicated surfaces, such as deep mouldings or wainscotting, may require more. The amount of stripper needed also varies with the number of coats of finish to be lifted. Buy only as much product as you think you will need. Solventbased strippers do not store well (especially once opened) and, like all hazardous substances, can be dangerous if they should get into the hands of children.



JANUARY/FEBRUARY 1991



Swelling and bubbling of the paint film characterize solvent-based strippers containing methylene chloride. Covering the stripper with Saran Wrap or wax paper while it works will contain solvents and coax more effect from stripper.

When choosing a paint stripper, look for a product with a formulation along these lines:

Ingredients	Percent	Action
Methylene chloride	82%	Dissolves and swells paint
Wax	11/2%	Retards evaporation
Toluene	2%	Keeps wax in solution
Cellulose derivative	1%	Thickener
Methanol	71/2%	Keeps cellulose in solution
Mineral spirits	6%	Prevents sludge from redrying

Formulations that contain less than sixty percent methylene chloride are likely to be slower and less effective. If the piece you're working on has a lot of vertical surfaces, look for a formula with a slightly higher concentration of thickeners.

Using the Stripper

To begin stripping, first prepare a good work area and put on proper protective clothing. The single most important consideration when choosing a work site is the availability of fresh air. The best place to work is outdoors in an area that affords some over-

Strong twine belps remove softened paint sludge from baluster or furniture turnings. Chemicalresistant gloves should be worn.



head protection, such as a canopy or carport. If you are working indoors, open all the windows and doors in the room to permit a strong flow of fresh air through the work area. Use a fan, if necessary, to increase air circulation. Take frequent fresh air breaks and leave the work site whenever you are not actually applying or removing the stripper.

Always wear protective clothing when working with solvent-based paint strippers to prevent the chemical from coming in contact with skin or eyes. Clothing should consist of chemical-resistant gloves (neoprene or butyl, not the dishwashing kind) and chemical goggles, long pants, long-sleeve shirt, shoes and socks. The latest information indicates that the use of cartridge respirators is not recommended because methylene chloride tends to saturate

or "break-through" the carbon absorbers fairly quickly, thus rendering the mask an ineffective barrier against solvent vapors. By the same token, dustmasks do not offer a safe alternative to proper ventilation.

Next, carefully pour some remover into a large coffee can or other wide-mouth metal or glass container with a securely fitting lid. Dip a wide. natural-bristle brush into the can and bring out a generous helping of remover. Do not brush the remover on as you would paint. Rather "lay" it on, working and scrapings. in one direction.



Semi-paste strippers contain thickeners to keep them on vertical surfaces. Dropcloths and masking are still necessary to protect other areas and collect drips and scrapings.

When stripping wood, brush with the grain.

If you are working on vertical surfaces such as doors, walls, or trim, start at the top and work down. It is sometimes easier to remove doors and mouldings and strip them outdoors. For indoor work, an old metal dust pan with the rubber edge removed is useful for catching drips from overhead surfaces. When stripping floors, start at one end of the room, approximately four to five feet from the wall (to give yourself enough room to maneuver the scraper) and apply remover with a scrub brush.

In about five minutes the surface will begin to peel and blister — a sign that the stripper is working. Leave the work site and get some fresh air. Solvent strippers work faster on clear finishes, such as varnish, than they do on heavily pigmented coatings, such as oil-based paints. Pigmented coatings are typically made up of tightly crosslinked polymers, which leave fewer molecular gaps for the methylene chloride molecule to slip through. Thus, the same materials which make these coatings so tough are also what make them more difficult to penetrate.

Refer to the product label to determine the length of time required for the stripper to work. Usually, it takes anywhere from 5 to 45 minutes, depending on the product being used, and other factors such as weather conditions, type of surface, and the age and type of finish being removed. After the required time has elapsed, return to the work site and gently scrape away the remaining sludge with a dull putty knife or other suitable tool. Scrape away from you, going with the grain.

An old toothbrush or cotton swabs can be used to get into tiny crevices and grooves that the scraper can't reach. Strong twine, burlap, or coarse string will remove sludge from leg turnings (use a back-and-forth, shoe-shine motion). As you finish each section, wrap the sludge in a thick fold of newspaper and place outdoors where the liquid will evaporate more quickly.

To remove the last traces of residue or old finish, wipe the piece with a rag, stiff bristle scrub brush, or steel wool pad, rubbing with the grain. If the stripper leaves a wax film, neutralize it by washing the surface with alcohol, lacquer thinner, or a commercial wax remover. Allow the piece to dry for at least six hours before applying new stain or finish. Wait 24 hours to replace doors and drawers, leaving them open for several days after replacing.



Safety Considerations

afe use of methylene chloride includes minimizing exposure to this solvent. High levels of vapors from methylene chloride paint removers can cause irritation to the skin, eyes, mucous membranes, and respiratory tract. This should not occur, however, if there is adequate ventilation and proper safety procedures are followed. The warning signs of overexposure include eye irritation, dizziness, headache, nausea, light-headedness, and lack of coordination.

If any of these symptoms occur, leave the work area immediately and get some fresh air. Do not return until ventilation has been increased. Individuals experiencing severe symptoms, such as shortness of breath or chest pains, should obtain immediate medical care.

Inhalation of methylene chloride can result in the formation of carboxyhemoglobin, which can impair the blood's ability to transport oxygen. Individuals with cardiovascular or pulmonary health problems should check with their physician prior to use of the paint stripper.

If the remover comes in contact with your skin, it may, at first, have a slight cooling sensation. Rinsing the skin with cool water will neutralize the remover. A redness, similar to a minor rash, may appear at the point of contact. Clothing that becomes saturated with remover should be taken off immediately, rinsed in cold water several times, hung to dry, and then thoroughly machine washed by itself. If remover accidentally splashes into your eyes, rinse them immediately with cool flowing water for fifteen minutes, keeping the eyelids open to remove the solvent. Consult a physician. If any stripper is swallowed, do not induce vomiting. Instead, call a physician and/or immediately transport the victim to an emergency facility.

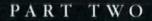


Caustic-based strippers are thickened into pastes when they are formulated for use on site. These strippers are applied by band for most projects but may be sprayed on in commercial work.

In 1985 the National Toxicology Program (NTP) issued a report which linked methylene chloride to cancer in certain animals. Based on the study, the Consumer Product Safety Commission (CPSC) now requires consumer products that contain more than one percent methylene chloride to carry a warning label that reads: "Methylene chloride has been shown to cause cancer in certain laboratory animals. Risk to your health depends on level and duration of exposure." There is no evidence of a corresponding risk of cancer in humans, but you should keep exposure levels as low as possible when using these products.

The health profile of methylene chloride is excellent as long as proper safety and handling procedures are followed. For humans, several studies of employees who have worked with methylene chloride (at Eastman Kodak Company, for example) confirm its safety. Adequate ventilation and use of protective clothing are primary safety points, as well as reading the label on the products — the most important guide to their proper use.

Janet C. Hickman is Development Leader of the chlorinated solvents Technical, Service & Development Group for The Dow Chemical Company.



Caustic Paint Strippers

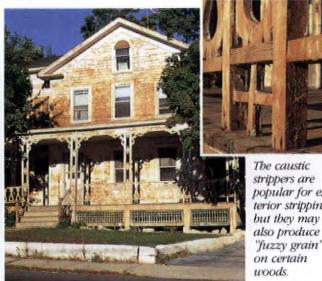
by the OHJ Technical Staff Caustic-based paint strippers are one of the oldest and simplest formulas for removing paints and varnishes. The active agents in these strippers — caustics — are principally sodium hydroxide (commonly known as caustic soda or lye) and often potassium hydroxide. Rather than softening and swelling the paint film as methylene chloride does, caustic strippers saponify (decompose) the binder in the coating, much as lye or soda ash breaks down fat in old-time soapmaking. Caustic strippers continue to be used because the ingredients are inexpensive and readily available, and because, given enough time, they will eat their way through many types of coatings - from oil-based paints to epoxy-ester finishes. They also do not rely on solvents to do their work.

These strippers probably see their widest use in commercial paint stripping, where they can be found in two forms. Dip-strip paint-removal businesses that specialize in immersion stripping of furniture, doors, and the like often use five to ten percent aqueous solutions of caustics in the "hot tank" portion of their process. Some large-scale lead-abatement and paint-removal contractors make use of caustic solutions thickened into a paste with cellulose compounds, which will stick to vertical or inverted surfaces. Paste-type caustic strippers also are sold on the consumer level, and uncomplicated versions have long been made by individual users. A typical recipe is 1 lb. lye (available at supermarkets, hardware stores, or chemical-supply houses) dissolved in 1 gallon of water, and thickened with cornstarch to a suitable consistency.

Using Caustics

aste-type caustic strippers should be applied in thick coats, with special care taken to cover depressions and moulded details where paint buildup is greatest. Tools that resist the effects of the stripper, such as spatulas or brushes made from polyethylene or rubber, are often used. Caustic strippers work relatively slowly compared to methylene chloride, and are left in place anywhere from two to several hours, depending upon the amount of paint being removed and type of product used. Like other strippers, however, they

should not be allowed to dry out (which makes them difficult to remove), and they may need repeated applications



popular for exterior stripping, "fuzzy grain"

to complete the job. Once the stripper has done its work, it is scraped off along with the lifted paint and the surface washed clean with water.

CHEMICAL-STRIPPER SUPPLIERS (contact for distribution details)

AFM Enterprises, Inc. 1140 Stacy Ct., Dept. OHJ, Riverside, CA 92507; (714) 781-6860. Water-based strippers

American Building Restoration Chemicals, Inc. 9720 South 60th St., Dept. OHJ, Franklin, WI 53132; (800) 346-7532. Caustic- and solvent-based strippers

D.E. Stanley Industries 2435 Wheeler Road, Dept. OHJ, Bay City, MI 48706; (800) 762-8184. Solvent-based stripper

Diedrich Chemicals-Restoration Technologies, Inc. 373 South 6th St., Dept. OHJ, Oak Creek, WI 53154; (800) 323-3565. Solvent-based stripper

W.M. Barr & Company, Inc. P.O. Box 1879, Dept. OHJ, Memphis, TN 38101; (901) 775-0100. Solvent- and waterbased strippers

On-Site Wood Restoration 138 Woolper Ave., Dept. OHJ, Cincinnati, OH 45220; (513) 541-4545. Solvent-based stripper

QRB Industries 3139 U.S. North, Dept. OHJ, Niles, MI 49120; (616) 683-7908. Solvent-based stripper

Savogran, Inc. P.O. Box 130, Dept. OHJ, Norwood, MA 02062; (800) 225-9872. Solvent- and water-based strippers

Sinan Company P.O. Box 857, Dept. OHJ, Davis, CA 95617-0857; (916) 753-3104. Caustic-based stripper

H.F. Staples and Co., Inc. P.O. Box 956, Dept. OHJ, Merrimack, NH 03054; (800) 682-0034 (outside of NH). Causticbased stripper

Star Bronze Company P.O. Box 2206, Dept. OHJ, Alliance, OH 44601; (800) 321-9870. Solvent-based stripper

Sterling Clark Lurton 184 Commercial St., Dept. OHJ, Malden, MA 02148; (800) 225-4444. Solvent-based stripper

3M DIY Division Customer Inquiry, Dept. OHJ, 3M Center 223-4S, St. Paul, MN 55144; (612) 736-1077. Water-based stripper

Thompson and Formby, Inc. 825 Crossover La., Dept. OHJ, Building C, Suite 240, Memphis, TN 38117; (800) FORMBYS. Solvent-based stripper

United Gilsonite Laboratories P.O. Box 70, Dept. OHJ, Scranton, PA 18501; (800) UGL-LABS. Solvent-based stripper

Van Dyke Supply Co. Box 278, Dept. OHJ, Woonsocket, SD 57385; (800) 843-3320. Solvent-based stripper

Wood Finishing Supply Co., Inc. 100 Throop St., Dept. OHJ, Palmyra, NY 14522; (315) 597-3743. Solvent-based stripper

The Woodworker's Store 21801 Industrial Blvd., Dept. OHJ, Rogers, MN 55374; (612) 428-4101. Solvent- and water-based strippers



The new alternative strippers require time to work and generally bave the easiest job on simple, clear finishes.

A very important final step with all caustic strippers is neutralization of the surface prior to refinishing. Caustic strippers employ strong alkalies to do their work and they leave the *p*H of most surfaces strongly basic (particularly porous ones such as wood) — a shift which can affect the performance of subsequent finishes. The remedy is to neutralize the surface with an acid wash. Dip-strip shops often use a tank with a two-percent solution of muriatic acid, but diluted vinegar also works and is handiest for most interior woodwork and small-scale jobs. For exterior stripping projects, some contractors allow acid rain to help with this step by letting the building weather for several weeks before proceeding with a new paint job.

Caustics are effective paint strippers but they are not ideal for every surface. The biggest problems are with hardwoods (for instance, oak, mahogany, and walnut), which tend to darken significantly or change color when exposed to alkalies. Caustics also attack the glues in veneers and plywoods, causing them to delaminate. Aluminum, tin, and zinc also corrode readily in the presence of these compounds. Caustic strippers that include water also will raise the grain on many woods — an asset or a drawback depending upon what the next finishing process is.

Although free of hazardous solvents in most cases, caustic strippers also require careful handling for health and safety reasons. Sodium hydroxide, in particular, is very corrosive to human tissue and will cause caustic burns to eyes, respiratory system, and skin with a minimum of ex-

Chemical paint strippers abound and formulations vary. Not all solvent-based strippers contain methylene chloride, for example; some water-based strippers contain solvents.



posure. Eye and skin protection in the form of goggles, rubber gloves, and protective clothing are a must, and all skin that comes in contact with the stripper should be flushed immediately with copious amounts of water.

Alternative Paint Strippers

he paint and coatings industry in general is moving away from traditional solvent-based products, and a new breed of chemical paint strippers recently has appeared which use neither methylene chloride nor caustics as their active agent. While the chemistry behind these products varies, what they do have in common is water-based formulations.

Several of these new strippers make use of dibasic acid esters to loosen paint and varnish

films. DBEs, as they are called, are a family of organic solvents that have been used for some time in printing inks, automotive finishes, and other industrial applications. Although not as active as methylene chloride, DBEs have been reemployed as the major solvents in these new strippers because they are non-flammable, biodegradable, and water-rinsing. Some manufacturers also are turning to surfactants (akin to detergents) to help with the stripping process for the same reasons. The trade-off for being friendlier to both the user and the environment is that these new strippers are not as aggressive as other chemical strippers. Generally, alternative strippers need to be applied as thickly as possible and given plenty of time in order to do their job - very often hours. Warm temperature is an important factor too, with some products not recommending use when the temperature is lower than 70 degrees fahrenheit. They tend to work best on spirit or evaporative finishes such as lacquer and shellac because these are relatively uncomplicated coatings (basically resin left after the solvent evaporates). They have a harder time with finishes that undergo chemical changes to make them durable - varnishes and enamels, for instance - because they have to break down the cross-linked polymers that give these coatings their strength. It is for this reason that some dibasic ester strippers also include small amounts of solvents made from petroleum distallates. Neutralization, though, is not an issue because these products do not contain wax or strong alkalies. Cleanup after stripping requires only washdown with water and allowing the project to dry thoroughly (at least 24 hours) before refinishing.

Despite their relatively benign nature, alternative strippers should still be used with care. DBEs are organic esters that can irritate eye tissue, and for this reason it is prudent to wear protective goggles. Extended contact can remove the oils from skin and cause drying, so gloves and protective clothing are a wise precaution as well. Skin contact may also cause more severe reactions in individuals allergic to these chemicals. Last, even though these products are water-based and produce a minimum of odor, ventilation while stripping is always a good idea. A large landscape serves as the centerpiece of this parlor wall arrangement, which uses a sofa as a base.

harles Eastlake's remark that "the art of picturehanging requires much nicety and no little patience" is probably as true today as it was when he wrote it. But as the anonymous author of *Our Homes; How to Beau*-

tify Them explained: "No other wall decoration ministers to a refined taste as much as plenty of <

good pictures." The year was 1887, and refined taste was indeed the concern of Victorians, who were interested in giving expression to their new-found wealth and social status. Even the middle and working classes began to decorate their walls with etchings and engravings, silhouettes and prints, all widely available. Lithographs and chromolithographs also were popular, with cityscapes and landscapes, historical scenes, and sentimental allegories hung up for view. Photographs, too, came into vogue shortly after the introduction of the Da-

The Art of Hanging Art in the 19th-Century Style

by Suzanne LaRosa

guerrotype in 1839, making it possible for many to commission the portrait they could never have afforded to have painted in oil. These items, along with mirrors and esoterica such as hairwork, Japanese fans, and peacock feathers, were hung on

walls with great enthusiasm by Victorians, who by mid-century had more leisure time to devote to en-

joying their homes as well as decorating them. Not sur prisingly given the wealth of options, there was no shortage of opinions about how to actually display art. Victorian tastemakers did, however, agree upon one thing: A picture should never be hung alone. One writer, upon spotting a single framed photograph in a long, narrow parlor, remarked: "Such a modest, shrinking, sweet young woman — she of the picture! It seemed unkind to

have placed her there, the only picture on all that bare expanse of wall; unkind not to have

given her some encouragement or support."

enerally speaking, Victorians preferred to hang pictures symmetrically, side by side. This is still an effective approach, which works well if the items are similar in size. People were advised, however, against "skying" the art — that is, hanging it too high — although it seems that many did. In rooms with high ceilings, symmetrically hung pictures also might be stacked in the European "salon style," from the top of the dado to the tip of the cornice. Art displayed close to the ceiling and all oil paintings were allowed to tilt forward to enhance examination and minimize glare.

Another alternative was to hang art in a pyramidal arrangement using furniture as a base (see page 43). A sofa

For Every Room the Right Picture

The question of what belonged where also occasioned some controversy. "Framed photographs and crayons of the family or of friends are out of place on the walls of a parlor," stated French, "unless at times a group of them is made in some one place... the fact of their being grouped suggesting in itself a well-defined purpose." The author was quick to add, however, that "that to which we pay the distinction of a place on our walls must have some merit of its own apart from its sentiment."

Other authorities similarly suggested that only the best prints or watercolours hang in the formal parlor, with oil paintings reserved for the dining room or hall. In fact, decorators were encouraged to give a great deal of thought to the hall. Family portraits and fine etchings were consid-

against a wall would serve this purpose, as would a large console table. In recreating this kind of arrangement, keep in mind that the centerpiece should be an important painting, either square or oblong in shape.

Some people insisted that this approach to picturehanging — creating a grouping around an important, centrally placed piece of art was "conventional and tiresome." They were recom-



ered appropriate in this public place only when they were few in number and decorative in composition and coloring. "No subject requiring thought and study is suitable in such a position," explained Edith Wharton and Ogden Codman in their influential book, The Decoration of Houses.

Important to consider, too, was the subject of the art. Good engravings and paintings of fruit and flowers were suit-

tional and tiresome." They Prints, litbographs, and personal mementos decorate the walls.

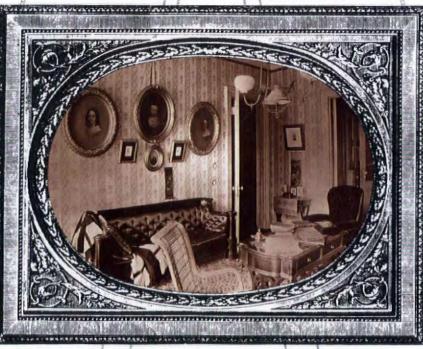
mended to arrange their pictures with deliberate irregularity, so that no one item was on a line with the other (see page 43). Although this type of arrangement usually takes a bit more finessing, it's possible to create a harmonious effect.

No one disagreed about the appropriateness of hanging a painting over a mantel — "the place of honor accorded to that which one values most." To achieve the same effect today, this picture should be executed in oil, elaborately framed, and of significant size.

These rules, however, can take one only so far, as Lillie French, author of *Homes and Their Decoration*, reminds us. "The acquisition of a new painting will necessitate the rehanging of all,"she said, adding that we tend to "outgrow the pictures that at one time we thought beautiful." able for a dining room, for instance, but representations of dead game were "not very agreeable overall." "Neither does one enjoy being stared out of countenance while eating, by one's ancestors or those of other people," commented Ella Rodman Church — a sentiment with which almost no other authority agreed. Eastlake, for instance, believed that since the dining room is devoted to hospitality and family gatherings, "it is pleasant on such occasions to be surrounded by mementos of those who once, perhaps, formed members of a social circle which they have long ceased to join."

Family portraits along with photographs, watercolours, prints, and engravings also belonged in a sitting room, rarely used to entertain guests. The intimate character of this room was reflected in the variety of other types of "artwork" typically on display: needlepoint samplers, crayon portraits, and *cartes de visite* wallet-size photographs that were handed out like business cards in the mid-19th century, when they were all the rage.

Other rooms in which the sentimental was preferred to the sublime included the back parlor, sometimes termed the library, and the bedroom. In many ways, the back parlor resembled



the sitting room; but with its strong intimations of culture and refinement, it was not surprising to find works of art scattered about in tasteful negligence," and not just hung on the walls. Pictures in the bedroom were smaller in scale

and shared wall space with one's most personal effects — silhouettes of beloved grandparents, for instance. Overall, however, the bedroom walls were less decorated than those in other rooms, if only because of the number of other sentimental souvenirs that would be strewn about.

A Few Words on Frames

raming a picture for your 19th-century interior requires that you keep in mind the nature and character of the picture — for the Victorian, this was axiomatic. Pictures should be taken to a dealer, suggested French, and "frames tried on with the same care — indeed, with even more care — than one expends in the choosing of a bonnet."

In general, oil paintings were framed in heavy plaster or intricately carved wood, gilding being preferred. Smaller, less



Two popular approaches to hanging art were illustrated in Homes and Their Decoration (1903).

embellished frames were a common choice for prints and engravings; a light, "inconspicuous" frame was believed to show off the subject better. Also popular for this purpose Silbouettes of family members form a typical wall arrangement in a circa-1880 sitting room. Note the use of triangulated wire.

from about mid-century on were rustic frames composed of a few branches, bark and all, tied together at the corners. Victorians who were "handy with tools" often fashioned their own frames. *Our Homes; How to Beautify Them* illustrates a few of the

more unusual ones — a Japanese fan frame, one in plush and satin, and a fungus frame — all suitable for small photographs, silhouettes, and engravings.

Mats rarely were used for oil paintings and almost always used with other kinds of art. Careful choice of a mat was recommended, since "a mat of one color may destroy some subtle tone of the painting, [while] another may serve its legitimate purpose."

On How to Hang Art

Throughout the 19th century, most but not all art was hung from picture mouldings that ran around a room; "blind hanging" a picture from a nail was not unknown, but then as now was recognized to cause cracks in the plaster and "the inconvenience of summoning a carpenter." Another option was to install a brass or iron picture rail, affixed to the top of the wall just under the cornice. This would be fitted with sliding rings from which art could be hung by wire or cord.

The rail, however, was more expensive and considered by many to be unattractive. As a result, mouldings (later also known as picture rails) were most popular. Mouldings gave the deco-

rator great flexibility in hanging a picture, enabling her to adjust its height, shift the frame along the wall, or experiment with different arrangements. In a home with high ceilings, the moulding might be positioned a few feet below the cornice or directly under a frieze, roughly two thirds of the height of the wall. In other homes, the moulding might run immediately below the cornice, so that it appeared to be a part of it.

S-shaped hooks, generally in brass or gilt over brass, were attached to the moulding; some featured round embossed



brass decoration. Wire usually was used to suspend art from the moulding, although silken cord, either braided or tasselled, and ribbons decorated with bows might be substituted; these were often gold or silver or sometimes bright red. If cord or ribbon was selected, the decorator had to be certain it could support the weight of the picture.

anging a painting was something of an art in itself, and a wide variety of wire or cord arrangements evolved. A single wire could descend straight from the moulding and

be attached to a small ring at the back of the picture. Frequently, the wire was triangulated for greater security, and connected to two rings affixed to the picture from an S-hook. The two-hook method also was common: Here, parallel wires would be attached to the picture and run up to two separate S-hooks. Victorians, ever in love with the unusual, also were known to string up paintings by doubling up the triangulated wire so that two wires, connected to a single S-hook, supported a painting on either side.

The Art Unit

No discussion about art in the 19th-century interior is complete without mentioning the importance of the art unit. This was a small grouping of *objets d'art* and furniture — perhaps a table, two chairs, and an easel or "whatnot" shelf — typically arranged in a corner of a parlor or sitting room. This little altar to fine art and the finer things in life was situated to take advantage of available natural light by day and the less available source of light by evening — a frequently stationary oil or, later, gas lamp. The art unit was an artistic composition, the very expression of Victorian sense and sensibility, which fell out of fashion only at the end of the century, after electricity had been introduced. With improved lighting, the dynamics of interior decorating — and hanging art — dramatically changed. Large oils — and lots of them — dominate the walls of this Gothic Revival dining room at Lyndhurst, designed in 1838 by A.J. Downing.

How high to hang a picture? To see art "with anything like comfort or attention," according to Eastlake, a picture should be hung at eye level, unless several were stacked. In this case, the highest pictures should be allowed to tilt forward; this could

be accomplished by lowering the position of the ring at the back of a picture. Caution should be used in doing this, however, and wire also attached to a second ring at the top to keep the art from tipping too far forward.

The real key to hanging pictures in the 19th-century style, however, is to understand that for the Victorian, pictures were an important part of the total domestic environment. As one writer aptly expressed it, "No picture by its setting wants to be made to stand out and claim recognition for itself.... pictures are like companions, — never so charming as when they lack insistence."

MAIL-ORDER SOURCES

Classic Accents P.O. Box 1181 Southgate, MI 48195 (313) 282-0545 Decorative moulding books and S-shaped picture books **Garrett Wade** 161 Avenue of the Americas, Dept. OHJ New York, NY 10013 (212) 807-1155 Brass moulding books, braided-brass picture wire, and pressed-brass plate rings United Mfrs. Supplies, Inc. 80 Gordon Drive Syosset, NY 11791 (516) 496-4430 S-shaped moulding books, decorative moulding books with picture cord, cast-brass books, brass-plated bangers, and braided picture wire The Woodworker's Store 21801 Industrial Blvd. Rogers, MN 55374 (612) 428-4101 Carved wood trim and embossed mouldings

Thanks to Lucy Eldridge, assistant curator of "Images and Image Makers: Portraiture in 19th-Century Brooklyn," currently on exbibit at The Brooklyn Historical Society.

n the 17th and early-18th centuries, European settlers in Cape Cod adapted familiar construction techniques to new functions in a new land, and an indigenous American architectural style emerged. Today, there are many houses on Cape Cod, and more are being built (as anyone who ventures off the mid-Cape highway can plainly see). But I pay attention when my friend, the old Wellfleeter, says, "Now there's a real Cape Cod house." A compact, south-facing structure, sheltered from the northwest wind by the shoulder of a hill, the front door is centered and flanked by two pairs of windows, each with nine panes in the top sash and six in the bottom (known as "nine over six"). At least one or two of the panes has the lovely purplish hue of old, hand-blown glass. Unlike so many contemporary Cape Cods, the door does not line up exactly with

Built in the 18th century, near the fishing port of Gloucester, Massachusetts, this small house has a big central chimney and traditional plan.

Real rape Cod House written and illustrated by Ganet Doub Erickson

her you

the large chimney, which thrusts through the center ridge of the steeply pitched, wood-shingled roof.

Lucky enough to be invited inside, I am astonished by the steepness of the ladder-like steps that waste little space



This three-quarter bouse is located in North Truro, Massachusetts.

in getting up to the second storey. In very old Cape Cods, this floor was divided into two bedrooms lit by windows in both gable ends. On the ground floor, to the right of the front door is the southeast parlor, snug on winter days with sunlight streaming through the windows. To the left is a bedroom. From each of these rooms a door leads to the kitchen, or "keeping room," where activity focused around the central fireplace with its great cooking hearth and beehive oven.

Designed for Living

ow count the doors in the kitchen," suggests the old Wellfleeter. "There should be seven." The first is the back door; the second, beside the fireplace, leads to the sunny parlor; and the third on the other side of the chimney leads to the bedroom. The fourth opens into a cold pantry on the north; the fifth to another storage pantry on the east; and the sixth to a small bedroom between the parlor and the pantry. And ves, there it is, the seventh door - with its small shuttered window high in the center of it - opening into the "birthing room." This was actually a small bedroom where anyone in need of special attention from the busy housewife could rest. Although extremely compact, the design described here is actually for a full cape (see sidebar, p. 47), sometimes called a "double house." Some families had to fit into a "three-quarter house" or even a "half house" until they could afford to add on to their homes.

Small or large, there was surely plenty of togetherness in old Cape Cods, even when the men and boys were away at sea fishing or on long whaling voyages. And an efficiently organized home was necessary to keep a family functioning well. Supplies were laid by in the round, brick-lined cellar accessed through a trap door in the floor of the cold pantry. A provident Cape Cod householder would store several

> burlap bags of ovsters and several more of quahogs, which staved sweet in their shells for months. Bags of potatoes and onions also would be stored, as well as a barrel of ripening sauerkraut and baskets of pumpkins, squash, and russet apples. In the garden, under a deep mulch of straw and seaweed, parsnips, turnips, and carrots would be waiting to be dug up as needed. One also could find some chickens, perhaps a few ducks or geese, and even a cow. In the cold pantry there would be rows of fruit preserves and beach plum jelly - a Cape Cod specialty — and jars of vegetables put up from summer garden surplus. Pungent salt cod would be stacked, ready to be combined with potatoes in that famous delicacy known as 'Cape Cod turkey."

> The furnishings of a Cape Cod house would be small in scale and sparse. These typically were made of pine or locust wood, often by the householder himself, who was of necessity

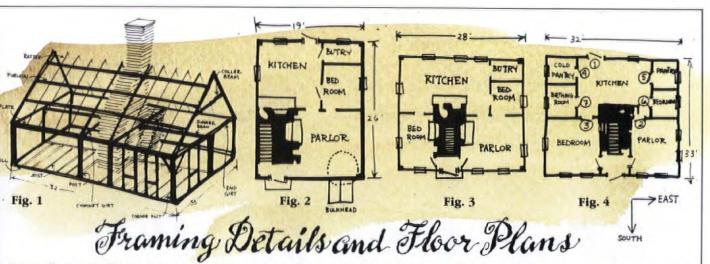
a part-time carpenter and cabinetmaker, as well as farmer, boat-builder, and fisherman. The floors of wide-plank pine boards were sometimes painted dark red-brown or pumpkin-orange, then spattered with paint in a variety of bright colors. Braided mats padded cold floors beside the ropestrung beds; more ambitious homemakers made hooked rugs. Later, adventurous family members sailing afar would bring back Persian carpets, as well as curios and fine china to display in the corner cupboard.

The kitchen was supplied with cast-iron skillets and pots, called "spiders," with long, tripod legs that supported them above the coals of the cooking fire, as well as large and



A fine example of a full bouse. Note fanlight over entry.

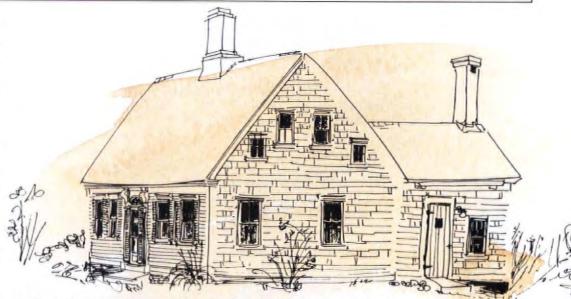
small tinned pans. Various pewter bowls and plates and cutlery were used for serving. According to Shebnah Rich, Truro, Massachusetts, historian, the kitchen beams, girders



Originally, post-and-beam Cape Cod bouse frames were mortised, tenoned, and pegged together. The lower ends of the rafters and outside ends of girts and joists were all fitted into the long, beavy front and rear plate beams, which rested on equally heavy eightfoot-bigh posts. Window and door frames fit into the bottom of the plates and into the sills. The roof and walls were then sheathed vertically with boards 16" to 18" wide and $1\frac{1}{4}$ " thick, which was sided with closely lapped wood shingles. Plaster made from sand and ground seasbells was applied to the interior walls and sometimes panelled over with pine, which provided an extra layer of insulation.

Variations in floor plans are not uncommon, but shown above are typical examples of a balf bouse (fig. 2), a three-quarter bouse (fig. 3), and a full bouse, also known as a double bouse (fig. 4).

and walls in an "old-fashioned double house" were festooned with flowering herbs, stock-bearing seeds, and various home products for ornament and use. which varied with the season. "From the roots, herbs, berries, wild flowers, and a little New England rum, the mothers could prepare remedies to cure all the ills of body and soul." Rich adds, "How altogether homelike and hospitable were these roomy unrestricted old kitchens; white-washed, floor-sanded and wide fireplaced. What a sense of long day comfort floated in the air. How a cool current drifting through the open north

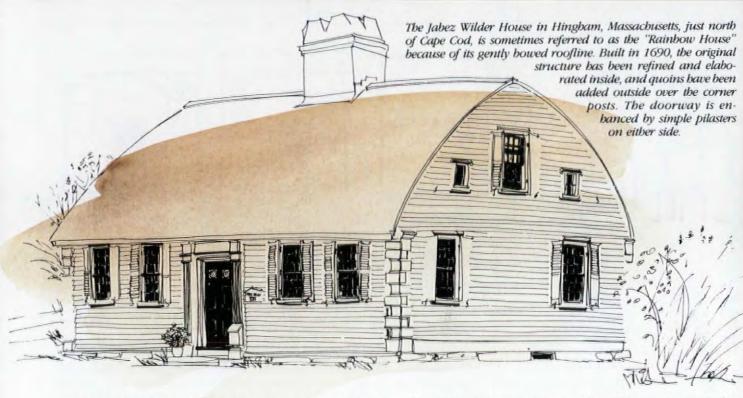


As Henry David Thoreau noted during bis walk from Eastbam to Provincetown in October of 1849, 'The great number of windows in the ends of the bouses, and their irregularity in size and position, here and elsewbere on the Cape, struck us agreeably." At some point in the 19th century, an ell was added to this bouse on Brier Lane in Wellfleet.

window invited a siesta on the old settle or red chest." Is it any wonder then that so many of the Cape Codders who later wandered far from Massachusetts took with them the ingenious plan for the comfortable houses in which they had grown up?

How They Were Built

The first Europeans who settled in Cape Cod framed their houses with heavy posts that had pegged mortise-andtenon joints. The sides were sheathed with wide planks. A surviving record specified that Thomas Paine II, "housewright of Truro," would build for a fee of four hundred and fifty dollars "in good and workmanlike manner ... according to the best of his art and skill ... one house of the dimensions and description of the following: Twentythree feet square on the ground floor, ten foot posts, hemlock timber and boarding boards, the roof and front side to be shingled with pine shingles the two ends and back side to be shingled with cedar shingles, finish the lower part of the house into one front room, one kitchen, two bedrooms, one butry, front and end entry, two flights of stairs if needed and plain [sic] the boards for a chamber floor, the front room and kitchen to be ceiled up to the



windows, glass closet door in the front room, iron latches for all the doors, seven by nine glass for all the windows, a common cellar under the house with a cellar door outside."

In colder areas, far from the Cape and its warming Gulf Stream current, early homesteaders modified this basic plan in various ways to provide comfortable shelters for themselves during long, bitter winters. Windows set in



This balf bouse, known as the Rowle House, is on Gull Pond Road in Wellfleet, Massachusetts.

dormers let in more light to the second-floor chamber, and the gable sometimes was bowed slightly to provide more headroom. Another technique that increased headroom was the use of a gambrel roof.

Today the Cape has become a ubiquitous house style

found all across America, an ode perhaps to its durability, yet a far cry from the organic originals. It has been adapted to mail-order houses, countless house plans, and has remained a popular builder house. The first documented use of the term "Cape Cod House" appears in 1800 by Timothy Dwight, then president of Yale College, who was visiting Cape Cod and remarked on the singularity of the houses. The style, though, already had long been developed: By 1740 the Cape had cropped up throughout most of New England, as well as Long Island. By 1790 the Cape had made its way into Southern New York. It continued to spread via homesteading farmers through the Mohawk corridor of central New York to the area around Lake Erie. And by 1830, Cape Cods could be found in Ohio and even southern Michigan. Stylistically these later houses featured Greek Revival details, which gave them a more formal look than their earlier counterparts had.

The cozy Cape Cod houses many of us see today have a Colonial Revival aspect, due mainly to the popularity of that style during the 1920s. (New England architect Royal Barry Wills made a career designing them.) The term "Cape Cod," however, still denotes almost any small, white, oneand-a-half storey house with a simple gable roof and center entrance. This authentic exterior is available with a variety of interior arrangements, in a thoroughly postmodern reversal of form following function. This appears to satisfy those house buyers who yearn to live in at least a semirural setting surrounded by a picket fence, even though this setting may be staked out in an unfinished subdivision aside a rapidly expanding industrial complex. Wherever placed, and however redesigned, this house style is still practical and livable. But even the most sophisticated and sensitive adaptations, however pleasant and tastefully appointed, pale in comparison to the charms of a real Cape Cod house.

wo types of visitors come to our 1858 Gothic Revival: Ones Who Know and Ones Who Don't Know. The first variety is a little like look-

ace.

ing in the mirror. They settle right in, demand a tour, and have an imme-

diate sense of the ghosts and seasons and years which furnish the house as much as the old furniture does. The others, the Ones Who Don't Know,

glance around, say hopefully, "It may be a nice place when the work is done," then conclude we must be a) loony, b) not overly bright, and c) an ob-

vious poverty case. Now, you could make an argument for loony based on our parrot alone, and not bright could have to do with our plan to replace the modern oak and tile kitchen with a smaller, histor ical one, while poverty

is just an unavoidable result of oldhouse restoration.

Readers of OHI are Ones Who Know. I will generously not extrapolate and apply a), b), and c) to you as well, because you probably do not have a parrot. But now that I have, to some degree, established that you and I are of one mind (or out of the same mind, as it were), I may,

without threatening you, ask certain questions.

Big Bird doesn't seem to mind the restoration work-in-progress in my stepdaughter Celia Olson's bedroom (left). That's Celia, right, taking tea in our parlor.

I will be direct. Why on earth do you have (or want) an old house? They are too cold, too big, and built with odd-dimension lumber. The windows are hard to wash, the ceilings too high to paint, and everything you do to them either costs a fortune or takes forever or both. Why bother? There *are* other choices, and

ilacs,

USES

most people make them. Why don't you? Or, as our parrot would say, "What's your problem?"

You will answer, "I like old houses better." Let us probe on. You consider further, then list the enduring and beautiful architectural features

of your home the mouldings, fireplace, stair bannister,

porch columns — as you attempt to articulate the something emotional that

touches you about old buildings. It is difficult for you to specify. You are not an unusual case.

I am acquainted with many old-house people, mostly by way of my husband's contracting business, which deals with only historic structures. The people

> we work with are always extraordinary,

maybe a little crazy in a charming fashion, and they truly love whatever home (or church or museum)

they are involved with. After spending several years in the company of such folk, as well as looking in the mirror a certain amount and cohabiting with a dyed-in-

the-wool professional restorationist who comes home and relaxes by replacing the siding on *our*

house, I have (almost) distilled the motivation behind it

all. It is this: romance. These people, people who live and

by Linda Whitehead



At our bouse — pictured, far right, with ladders and scaffolding during the paint-stripping process — everyone's part of the restoration job. Left to right: That's my son, Ben Purdy, our window-

breathe old houses, we are all driven by an overwhelming attraction for the romantic. That is the elusive "something emotional" that makes all the chaos, sweat, and paint chips worthwhile. Even an unrestored old structure beats a new one hands down when it comes to romance. Even an unrestored old structure with relocated interior walls, shag carpeting, and drop ceilings. We true romantics can sense what's there, waiting to be revealed.



) ow, defining "romance" is a little like defining "sexy" — everyone has his or her own idea about what it means. Here in my home office (it's the room where all the parts to the fireplace mantel stand in a corner where

the closet isn't finished, and where the rough-sawn boards on the walls are covered with chipped whitewash and rusty netting tacks, and there is no paint on the window mould-

This glimpse of our unrestored office, below left, features a sandstone fireplace and reproduction mantel, which awaits assembly in the corner. Below right: Today, the restored parlor — Gregg

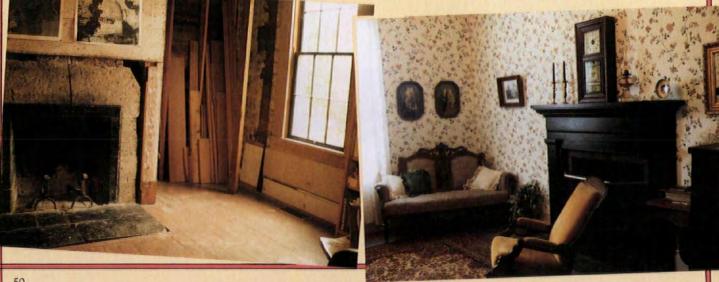
washer par excellence; me, doing woodwork in our shop; my bushand, Gregg Olson, fitting a trellis together with wooden pegs, in the manner of our window sash.

ing), my dictionaries include several definitions of it.

I will slip over the description of romantic as being "impractical in conception or plan, having no basis in fact, imaginary," because this particular definition may cause you to hesitate as you prepare to hand-carve your newel post. Besides, it's not close enough. This is closer: "dominated by thoughts, feelings, and attitudes characteristic of romance. Passionate, adventurous, idealistic, remote in time or place, heroic or mysterious." You must admit it, old houses embody — and bring out in their owners all of the above.

As I see it, though, it is nothing if not sheer romance the way these buildings go beyond basic needs for the sake of beauty, style, sensuality, or creativity. It's why you put a bouquet of lilacs on the table even though it is perfectly possible to dine without one. Old houses are like that.

and I were married in this room! — doubles as our family's music room. It's where we put up our Christmas tree and have celebrations of all our birthdays, too.



Everywhere you look there are bouquet of lilacs. They are delightful to discover, stimulating to live with, and worth every dime and effort to preserve.

There is an important romantic, rather insidious side effect of old-house living about which beginners should be warned. The old house reflects the lifestyle and values of people of another time: in the kind of spaces that they thought fit for themselves, in their ideas about design and ornament, and in their luxurious use of wood, brick, and stone. Given the romantic tendencies that brought you to this point in the first place, it's easy to be affected. I mean, when the dining room is the largest, most inviting room in the house, it's hard to just put out SpaghettiOs for dinner. And when you've finally gotten the parlor in shape, lace curtains and all, you can so easily get this sudden desire to drink tea out of little china cups. (I've never lived in a Craftsman-style house, but I know I would want to sit by the fire in one of those beautiful oak chairs and read Out of Africa by stained-glass lamp light all the time.)

Some people would find this influence from the past disturbing; most find it enriching. The romantic values and behaviors of the past which surface easily become family traditions. Our children have latched onto them like magnets. For example, "So Mom, when shall we make the cedar garland for the main stairway?," "Can I iron the linen napkins?," "Isn't it time to plant the sweet peas by the porch?"

As a parent, this sharing with your children of information, tradition, skills, and art feels wonderful. Hence, I

This is my favorite shot, below left, of our circa-1858 house with its dormers, added sometime in the early-20th century. Pictured below right are our children — (left to right) Ben Purdy, Celia went through what my 12-year-old son termed my "Victorian dining stage," which followed my "historical Christmas-traditions stage." Both interests involved enthusiastic

> reading and research on my part. As much as my youngsters enjoy teasing me about the latest "stage," they are more than happy to participate when it's time to light oil lamps for a birthday dinner, make pomander balls from cloves and oranges, or bake ginger cookies to thread with ribbon and hang on our Christmas tree.

> As you develop an interest in the lifestyles of the past, your appreciation of firsthand historical accounts grows. Fortunately for us, when working on other people's buildings, we occasionally uncover a carpenter's pencilled notes, for example, written on the wood under exterior siding at the time of the original construction. These kinds of communications across time are some of the best-distilled romance ever; the years seem to fall away in the face of them. From this easily evolves a sense of the future value of creating first-hand reports of *today*.

> What it boils down to, of course, is romance in real life. You live it and perpetuate it instead of just looking at it. It adds dimension to life. Unfortunately, romance is both a valuable and, perhaps for lack of time, dwindling commodity. But again, while *we* may enjoy it, children fairly revel in it. It is worth looking for, if only for them. One place where it is stored, like honey in

a beehive, is in historic buildings. Congratulations on being enough of a visionary to support its preservation and appreciation. Sugar in your tea?

Olson, Emmy Olson, and Seth Purdy — busy making their annual gingerbread bouses. Thanks to Gregg, they take interest in the architectural detail of these treats.



Then the dining room is the largest, most inviting room in the house, it's hard to just put out SpaghettiOs for dinner.

OLD-HOUSE MECHANIC

by Gordon Bock

o do vour level best in practically any building art, you've got to have a level. Levels are layout tools that create a reference in space perpendicular to the earth's force of gravity - in other words, they test for horizontal. One of the oldest and most important construction tools, levels in one form or another are essential for positioning the horizontal parts of a building accurately and uniformly. The Egyptians probably used plumb levels - devices employing a weight on a string as the sensitive element - to keep the steps of the pyramids nice and parallel. Since the mid-1800s spirit levels - which rely on an air bubble in a vial of frostproof liquid to find the "horizon" have been the preferred design. Most modern levels are built with second



and third vials positioned so they can test for vertical too. Levels

A plumb level in 18th-century France

Levels come in myriad sizes and

specialized shapes. Some noteworthy types:

• Mason's level: Generally long tools, mason's levels are made in lengths that dapt them well to specific kinds of york (say, 36 inches for the width of sidewalks, 42 to 48 inches for brick or

block masonry, 72 inches for doors or **C.**

specialty work). Though available in aluminum and lightweight alloys, mason's levels are traditionally made from wood, which lasts longer around cement and lime. Mahogany

is the favorite due to its dimensional stability under humid conditions, but laminates also are used.
Carpenter's level: An all-purpose

carpenter's level is commonly 24 or 28 inches long, but 36- and 48-inch lengths are also popular, especially for framing. In the past, these levels also were made from woods such as cherry, but today most often are seen in aluminum, magnesium, or plastic.

• **Torpedo level:** Used by a variety of trades, torpedo levels are pocketsized tools, typically nine inches long, which are handy for projects where space is tight (leveling cabinet shelves or electrical boxes, for instance). The "torpedo" shape of the tapered ends makes the tool convenient to maneuver and easy to slip into an apron or overalls.

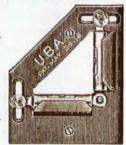
• Line level: Line levels are small, single-vial devices built with hooks that attach to a taut string line. They level the line, so it can be used for laying out footings, foundations, walls, tile pipe, or for determining grades.

• Utility Level: Like line levels, utility levels are just the "guts": two vials

a.

contained in a small housing. They are designed to be temporarily mounted to a straightedge of any length (such as a piece of true lumber) to make a custom-built level, or permanently attached to large objects (movable shop equipment, for example) for simplifying setup.

Levels also are incorporated into other layout tools (such as combination squares), or mounted in calibrated rings to make inclinometers for measuring de-



A utility level from 1929 $(3^{\psi_2''} \times 2'')$

viation from level. Job-specific adaptations like grooved bottoms (for balancing on pipes) or magnetic strips (for gripping steel or iron) are provided on some models.

Vials — the heart of a spirit level — are leveled by centering the bubble between two hash marks. Normally made of blown glass and filled with either alcohol, methanol, or ethylene glycol, they fall into two basic categories. Bent vials are formed in a gentle arc that provides a useful range of readings even when the tool is not close to level. These vials, however, do not function in all positions because of the curve of the vial. *continued on page 54*

> a. Wood torpedo level (9") b. Aluminum carpenter's level (24") c. Brass-bound mabogany mason's level (48")

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OLD-HOUSE MECHANIC

continued from page 52

Straight-tube vials, on the other hand, read in almost any position, but are so sensitive to an off-level condition that the bubble quickly travels to one end of the tube. The compromise for some level designs is to include two side-by-side but opposed bent vials. Customarily, the vials in better quality levels are replaceable (often by the manufacturer), and in some models they are also adjustable.

evels are designed to test for horizontal between their ends, so it is important to use a tool that is not oversized for the project. When a level is not long enough, though, it is standard practice to span the items being measured with a straightedge and level this instead. On critical work, doublecheck the accuracy of the measurement by turning the level end-forend and then rechecking the position of the bubble.

In addition, levels are very practical for layout work in more than one plane — for instance, planning the height of a wainscot around the perimeter of a room. Leveling a continuous line at a specified height takes nothing more than starting the level at the approved mark, then carefully extending the line along the wall and around corners by repeatedly repositioning the tool at the head of the line. If, say, parallel vertical lines are needed every two feet along this horizontal line, the distances would be





Leveling lines comes into play when laying out projects such as cabinetry, tilework, or even wallpaper.

stepped off with a ruler and the verticals plumbed to the floor using the level in the same way.

Levels are precision tools that have to be handled carefully to remain accurate and trustworthy. Striking or dropping a level can shock the vials or distort the body, so it pays to develop a habit of always placing them out of harm's way when they're not in use (hanging on a nail works well). Levels used for masonry should be rinsed daily to keep metals and vial windows clean of splashed mortar; wooden levels last longer if given an occasional wipedown with linseed oil. Large levels are fairly expensive tools (around \$50), and protective cases made of plastic or leatherette are available for storing and transporting them safely. Levels should also be checked for accuracy when they are new and periodically thereafter: Place the tool on a wall at dead level and draw a line under it, then rotate the level end-for-end and check the bubble; if it does not read the same as before, the level is out of true. Don't panic,

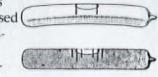
Top: An electronic level comes with a digital readout. Bottom: a line level attached to a mason's line.

though, if the bubble changes size from time to time. It's just responding to atmospheric changes, like a barometer does.

Recent innovations in the level industry have been the introduction of plastic vials

(for increased (shock resistance) and

"faster" liquids (for better bubble response). There is also



Top: bent vial. Above: straight-through or "360 degree" vial.

a new breed of electronic levels that aim to replace the "analog" spirit/ bubble system with a digital LCD display. Some of these tools are even engineered so that they can present level information such as roof pitch or degrees of deviation in numerical formats. Levels, it seems, are still evolving.

SUPPLIERS

Marshalltown Trowel Company

P.O. Box 738, Dept. OHJ Marshalltown, IA 50158 1-800-TROWELS Mabogany mason's levels

Port Austin Level and Tool Manufacturing Company

130 Arthur Street P.O. Box 365, Dept. OHJ Port Austin, MI 48467 (517) 738-5291 Full line of levels, 3" to 102" in length; call for nearest distributor

Stanley Tools

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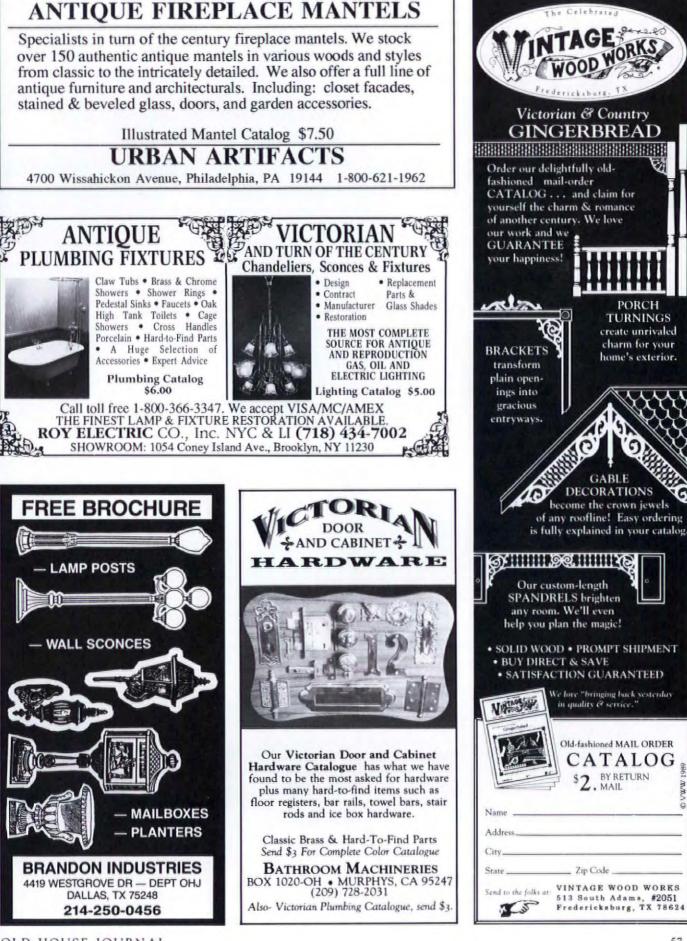
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Mail-order plans have a long history in shaping the residential architecture of the country. Of the thousands of house plans available today, few exhibit good design and a grasp of historical proportion and detail. So, in response to requests from OHJ readers, the editors have "done the homework": We've hand-picked plans. In each issue, we offer the most attractive, authentic, and buildable of the historical designs, from all periods of American architectural history. Let us know what plans you're looking for.

You can order actual blueprints for all the houses featured. Plans conform to national building-code standards — however, modifications are usually necessary for your site and local requirements, so you'll probably need the assistance of a professional designer (your builder may qualify) or an architect.

For the houses shown in this issue, blueprints include:

- Foundation plan for basement or crawlspace. (Crawlspace plans can easily be adapted for full basements by your builder.)
- Detailed floor plans showing all dimensions for framing, plus detailed layout and location of electrical and plumbing components.
- Interior elevations are included in some plans, showing interior views of kitchen, bath, fireplace, built-ins, and cabinet designs.
- A window and door schedule.
- Building cross sections: cornice, fireplace, and cabinet sections when needed to help your builder understand major interior details.

10

- Framing diagrams that show layouts of framing pieces and their locations for roof, first and second floors.
- Energy-saving specs, including vapor barriers, insulated sheathing, caulking and foam-sealant areas, batt insulation, and attic exhaust ventilators.

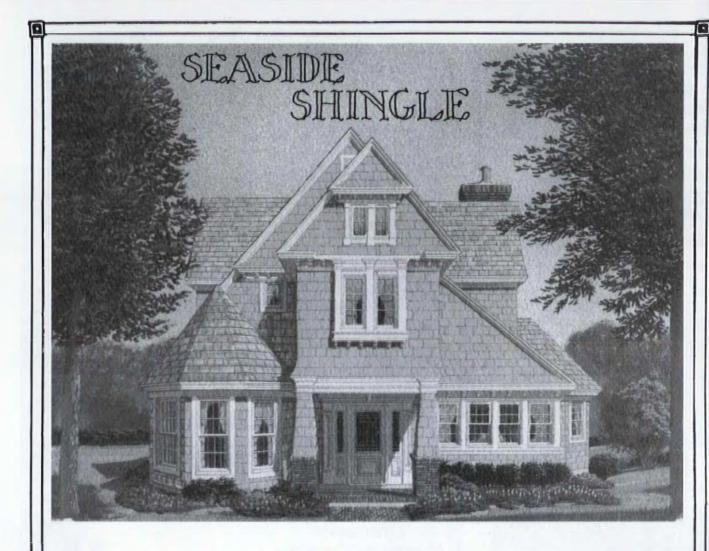
Why order multiple sets? If you're serious about building, you'll need a set each for the general contractor, mortgage lender, electrician, plumber, heating/ventilating contractor, building permit department, other township use or interior designer, and one for yourself. Ordering the 8-set plan saves money and additional shipping charges.

I I PLEASE SEND THE FOLLOWING.

Other notes: (1) Plans are copyrighted, and they are printed for you when you order. Therefore, they are not refundable. If you order additional sets of the same plan within 30 days of your original order, you can purchase them for \$15 each. (2) Mirror-reverse plans are useful when the house would fit the site better "flopped." For this you need one set of mirror-reverse plans for the contractor; but because the reverse plans have backwards lettering and dimensions, all other sets should be ordered right-reading. (3) Heating and air-conditioning layouts are not included. You need a local mechanical contractor to size and locate the proper unit for your specific conditions of climate and site.

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2-Car Garage Front View 11 • Deck Porch Litility Slop Bedroom 2 15 -8' x 12'-4 Dining 14 -4 Maste Balcony Bath Desk Living Room Master Bedroom Bedroom 4 15 x 19 11'-4" x 16'-4 10-8 × 11 First Floor Bath Porch 9' Ceilings Throughout • First And Second Floor

This Shingle-style house is reminiscent of ones built along the Eastern seaboard during the late-19th century. The rambling floorplan is designed to maximize views on all four sides and is very open. A two-way fireplace and half wall with built-in bookcases separate the living and dining rooms, which are adjacent to an alcove with window

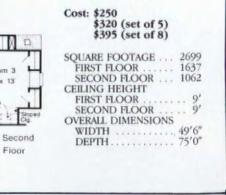
Bedroom 3

11'-4' x 13

Floor

seats. Other features include a first-floor master bedroom and bath, plus three large upstairs bedrooms.

Plan P-01A-LG



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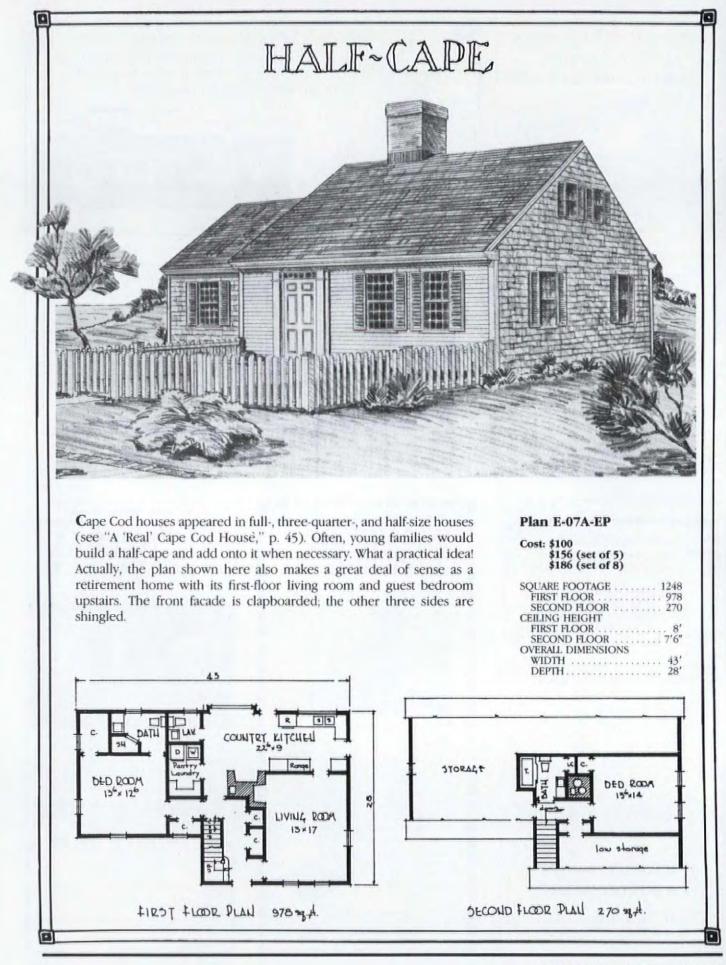
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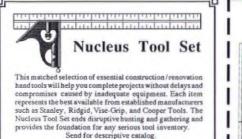
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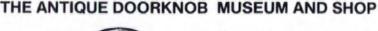
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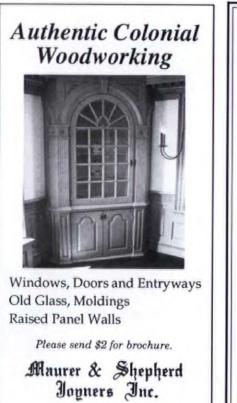
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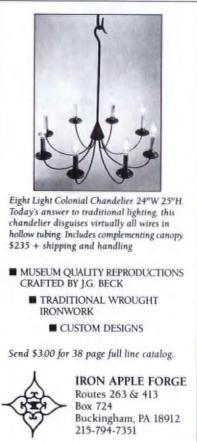
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RESTORATION PRODUCTS

by Lynn Elliott

New Life for Old Phones

If you own an antique telephone or would like to buy one, you probably know that finding replacement parts or an instrument that works with modern phone systems can be difficult. Talk to Bruce Patterson. The owner of the Phone Wizard carries an inventory of nearly 10,000 telephones,

ranging from

antique phones dating

Telephones, like this 1930s bandset, were built to be rented, so they are sturdier and more easily repaired.

from the late-19th century to Art Deco versions. He also offers repair services, which include making an old phone compatible with today's telephones or converting it to a component in an intercom system. Looking for replacement parts? Patterson can find them faster than you can dial his number. (Replacement parts such as subsets and nameplates can either be salvaged from one of the originals or custom-reproduced.) Patterson also stocks a selection of unusual phone items, including threeslot payphones, army field telephones, and British cast-iron phone booths. For information, contact Phone Wizard, 10 South King St., P.O. Box 70, Dept. OHJ, Leesburg, VA 22075; (703) 777-3349.



More Fair Repairs Here are two additional companies that offer specialized repair services for glass and metal:

TON

• Don't toss an heirloom crystal wineglass because the stem has broken off. Using turn-of-the-century grinding lathes, Augustine Jochec of Glass Restorations cuts, grinds, and repairs chipped or scratched glass. He also can repair most broken glass by bonding it with a special adhesive. All glass is then polished so the damage is no longer visible. He also keeps salvaged glass, such as stoppers for decanters, on hand for pieces in need of replacement parts. Grinding chipped glass costs approximately \$15; bonding broken glass ranges in price. For information, contact Glass Restorations, 308 East 78th St., Dept. OHJ, New York, NY 10021; (212) 517-3287.

• Paul Karner of Restoration and Design Studio can repair most types of non-ferrous metal items — silver, copper, bronze, brass, and pewter to name a few — in his one-man shop. As well as plating, soldering, and polishing metal, he can reproduce small pieces by hand or from casting. Prices range depending upon the restoration work. For information, contact Restoration and Design Studio, 249 East 77th St., Dept. OHJ, New York, NY 10021; (212) 517-9742.

Global News

Is that Victorian lamp lying in your attic in need of a top globe? If it is, dust it off and send it to the Lamp Lady. Lois Beckerdite will custom-reproduce the design from the lamp's base onto a replacement globe if the top one is broken. The reproduction work is created through an intricate process which requires firing the painted shade in a kiln to permanently bond the pigment to the glass surface. Globes are available in three different styles and various sizes: ball shades from 3" to 12"; 7" or 10" student shades: and a 14" dome for

The new top globes of these Victorian lamps are custom copies of the originals. hanging fixtures. Reproduction work ranges from \$85 to \$150; globes cost about \$15 to \$35. Beckerdite will also convert oil lamps to electric for \$30. For more information, contact the Lamp Lady, 623 Charwood Dr., Dept. OHJ, Cincinnati, OH 45244; (513) 528-5628.



RESTORATION PRODUCTS



Demolition Bars

Since our write-up on salvage tools last year (see "Old-House Mechanic," March/April 1990), we've run across two more items worth recommending: • The "Eagle Talon" (shown right, top) is a high-strength, two-handed

demolition bar. This is a heavy tool, but the leverage provided by the 48" bar makes it ideal for tasks such as prying timbers. The cast-hardened



steel head is also designed to straddle 2×4s for more efficient salvage work around house framing. The bar is available for \$130 from Eagle of America, P.O. Box 16457, Dept. OHJ, 10000 SE Pine St., Portland, OR 97216; (800) 221-5354.

• Made from tempered steel, the Renovator's Bar (shown above) is a light but strong salvage tool that is useful for overhead work. The angle of the curved hook also makes it equally handy for hanging doors. Depending upon the size (20", 25", 30", and 36" are available), the Renovator's Bar ranges in price from \$23.75 to \$47.95. For information, contact Garrett Wade Co., 161 Avenue of the Americas, Dept. OHJ, New York, NY 10013; (212) 807-1155.

Not Just Jardinieres Jardinieres — French for "flower stands" — are useful in gardens with

> How about cast iron in your garden?

limited space because they can accommodate a wide variety of plants and shrubs. The firm of Elizabeth Street carries authentic 19th-century French jardinieres, as well as antique garden statuary for small and large gardens alike. Their cast-iron jardinieres, like the one pictured above, show traces of the original paint, and have varied designs. They are 29" L \times 14" H \times 14" W, and cost \$1500 per pair plus \$35 for shipping. For information, contact Elizabeth Street, 210 Elizabeth St., Dept. OHJ, New York, NY 10012; (212) 941-4800.

In the Garden

If you've read our article on page 16, you know that urns, pedestals, and

birdbaths have a long history of use in gardens. The ornaments

that Garden Magic carries are new, but they are handsome, hand-made reproductions in terra cotta and cast iron. The terra-cotta urns, pedestal, and birdbath shown below are copied from antique Roman originals, although urns also come in a variety of other styles, including the

Terra Cotta for Your Terra Firma

ornate (with decorative figures and garland). The pedestal and the birdbath cost \$135 and \$175, respectively; the urns range in price from \$110 to \$175. For information, contact Garden Magic, 2001½ Fairview Rd., Dept. OHJ, Raleigh, NC 27608; (919) 833-7315.

Decorative ornaments in gardens date back to the ancient Egyptians.

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Roofing Services - Midland Engineering Company Inc., is a nationally recognized roofing and sheet metal contractor based in South Bend, Indiana. This firm applies all types of roofing systems for installation throughout the Midwest. Their specialities include custom slate, tile and copper roofing. Contact the Midland Engineering Company Inc., 52369 U.S. 33 North, South Bend, IN 46624. Call: (219) 272-0200.

Period Signmaking -Paul Musgrove, Period Signmaker, now offers scale drawings of original sign designs from your facade photos and specs. We provide "the plan" that any shop can build from- color schemes, etc. Free brochure. 209 High Street. Mount Holly, NJ 08060. FAX ideas to: (609) 267-3177. Ph: 609-267-3393.

Chimney Restoration - Chimney Savers, recently featured on "This Old House," restores and then relines your chimney with Solid/Flue pumped masonry chimney lining. They also offer and install the complete line of ornate Fourth Bay Victorian fireplaces to insure an accurate and complete restoration of your chimney. Contact: Chimney Savers, 9-14 Ilene Court, Belle Mead, NJ 08502. (201) 359-7798.

Floor Refinishing - Restoration of wood floors to their original lustre. All types of old and new wood can be sanded and refinished. Serving the North Shore of Massachusetts. Vincent Orlando, Fernald St., Gloucester, MA 01930. Free estimate: (508) 281-0491.



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Restoration Carpentry - Experienced specialist in interior details, wainscotting, cabinetry, moldings, etc... A meticulous and careful artisan who wishes to establish a customer-base in Princeton, Somerset & Hunterdon Counties, Philadelphia and Bucks County. Contact Jonathan Hancock, (908) 369-7218.

Paint Stripping, Wood Refinishing -High-quality company offering restoration services including architectural wood stripping and refinishing, plaster repair, paper hanging, exterior stripping, and interior and exterior painting. Willing to travel (201) 654-3878. Hone Painting & Restoration, 42 Cleveland Road, Caldwell, NJ 07006.

Woodworking Services - DHM Cabinetmakers Inc., is a full service, made-to-order woodworking company. Our products range from fine furniture to custom millwork such as moulding, T&G flooring, libraries, etc. All made in native and exotic woods to the individuals specifications. Color furniture catalog - \$4.00. Fur further information contact: DHM Cabinetmakers, Route 4 Box 173, Floyd, VA 24091. (703) 745-3825.

This special classified section is available to designers, consultants, contractors and craftspeople offering hard-to-find restoration services for the old-house owner. Rates are \$200 for the first 40 words, \$4.00 for each additional word. Logos, when supplied, will be printed on a space-available basis. Deadline for inclusion in Restoration Services is the 1st of the month, two months prior to publication. For example, January 1st for the March/April issue. Sorry, we cannot accept ads over the phone. All submissions must be in writing and accompanied by a check.



THE EMPORIUM

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MICHIGAN FARM HOUSE — Circa 1895. Restored including wiring and plumbing, and new roof in 1988. Must be moved to new site by October of 1991. Contact: Cathy Taylor, 13700 W. 12 Mile, S. Lyon MI 48178, (313) 437-2375.

BRICK FARM HOUSE — For sale to highest bidder. National Register eligible, Federal period. Located in Charles County, MD. Owner must move house and adhere to preservation covenant. Historic structure report, cost estimate, and information on tax incentives available. Contact: Clara Bennett, Adelphi Laboratory Center, 2800 Powder Mill Road, Adelphi MD 20783-1145, (301) 394-1030.

GREEK REVIVAL — Circa 1780. 16 rooms, clapboard exterior, post and beam construction with brick nogging, hand-hewn beams, slate roof, wide-plank floors, 6-panel doors, and original detailing throughout. \$125,000. Call Albany NY: (518) 753-7576.

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CRAFTSMAN STYLE — Near San Antonio, TX. Built in 1912. Sears mail-order, 2-storey bungalow, catalog design. Built-in buffet and unique fireplace. No previous renovations. Still owned by original builder family. Call (713) 530-1136.

FEDERAL STYLE — The Miles House, circa 1795. 99% original, post and beam, wainscot, 6-panel doors, and beautiful staircase. 4-5 bedrooms, 3-1/2 baths. Call Gary Goerss: (804) 598-4786.

SALTBOX STYLE — The Cottage, circa 1770. Post and beam, 95% original. Steep, nonsymetrical pitched roof line. 3-4 bedrooms, winder staircase, H-L hinges, arched mantels. Call Gary Goerss: (804) 598-4786.

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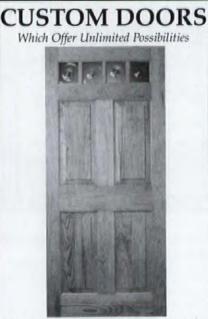
CRANFORD, NJ — Large 87-year-old Colonial. 4 bedrooms, 2-1/2 baths, living room, dining room, new kitchen, breakfast room. 900 sq. ft. attic. New electric, plumbing, interior paint, insulation. \$235,000 or B.O. Free piano with full price offer. Call: (201) 276-4995 after 6pm.

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PINE BUSH, NY — 1915 classical Victorian. Beautifully renovated 2,666 sq. ft. 4 bedrooms, octagon parlor, elegant dining room with builtin china, 1-1/2 baths, open staircase, pocket doors, wraparound porch. 2 garages/shop. 1/3 acre. \$182,000. Call: (914) 744-3154.

TRURO, MA — Three-quarter cape. 3 bedrooms. Extra building and garage suitable for studio/ office. Included: Hoosier antique kitchen cabinet, refrigerator, clothes washer, drier, and chest freezer. Optional: Hammond organ, electric chair lift on back stairs, pine-board table with 8 chairs, redwood lawn furniture, 2 kneehole desks, and antique pine desk. \$210,000. Call Charles H. Martin: (508) 887-6167.

LANSDOWNE, PA — Circa 1882. Over 4,000 sq. ft. of Victorian splendor. Sunken Roman bath, 68 stained glass windows, 5 fireplaces, oak and walnut inlaid floors, pocket doors, turret, extras. \$279,000. (215) 622-1174, 10am-8pm. WYNCOTE, PA — 1887 Queen Anne. Prime condition. Victorian color scheme, 6 bedrooms, 4-1/2 baths, 2-car garage, large porch, fireplace, landscaped. On quiet street, in historic district. \$245,000. Call Doreen Foust: (215) 659-1334.

ROCHESTER, NY — Distinquished Victorian. Magnificient dining room and living room, 4+ bedrooms, 1-1/2 baths. Completely updated and insulated. Close to public transport, schools, and churches. Lovely porches and yard. Huge garage with workshop. \$69,900. Call: (518) 494-4195.

HEMLOCK, OH — Famed 1800s, Morgan Raiders hide-out. 10 rooms, attached garage, large cellar, barn. 90 acres with 2 lakes and wooded areas. 3 fireplaces, 1 free-standing fireplace. Own water supply, smaller house, smoke house, chicken coop. \$500,000. Call: (614) 394) 2271.

HAMPTON, GA — 1830s 2-storey Greek Revival, triple brick exterior walls, completely renovated. All modern conveniences, 5 bedrooms, 2 baths, 8 fireplaces, 3 acres. Masonry dairy barn, carriage house, 2 large pole barns. Fruit, nut, and beautiful oak trees. \$225,000. (404) 946-3136.



SMITH MOUNTAIN LAKE, VA — 1840, solid brick I-house. Greek revival detailing, wainscotting, central hall, 6 working fireplaces. Eligible for Virginia Landmarks and National Registers. \$254,500. Margie Brigham Looney, Rt. 2 Box 511, Wirtz VA 24184, (703) 721-3327.

SAN DIEGO, CA — The Old Schoolhouse of 1885, restored and remodeled to become a large Victorian-style home in beautiful country area, surrounded by golf courses. 5 bedrooms, 4 baths, 2 master suites (one in separate wing), 2 staircases, hardwood floors, laundry, security system, over 2 acres with pool, spa, picket fence, and verandah. Absolutely gorgeous. Possible B&B. \$739,000. Jeanne Silver: (619) 497-3413.

WOODSTOCK, NY — "Esmore Lodge". 1906 Arts and Crafts style stone and stucco house at end of quiet lane. 3,800 sq. ft., 5 fireplaces, 4 bedrooms, great hall, aviary. Stone terraces, 2car garage with apartment above. 2 acres. \$277,000. Call: (413) 528-0996.

BELLEFONTE, PA — Realize your dreams of being the master of a grand house. This 1810 stone house is in an outstanding location for a Bed & Breakfast business. Five quality suites are possible. Call: (814) 355-8500.

RAYNHAM, MA — 1728 center chimney Georgian. 80-90% original. 12 rooms, 6 fireplaces, 2 beehive ovens. Excellent residential neighborhood. Partly restored, moved by owners of 17 years. \$250,000. Call: (508) 822-4996.

PORTSMOUTH, VA — 1880 Queen Anne. 12 rooms, 5 bedrooms, 3 baths, 4 fireplaces, stained glass windows, front and rear staircase, hardwood floors, pocket doors. Restored 1987-1990. \$199,500. Call: (804) 399-4404.



THE EMPORIUM



PATCHOGUE VILLAGE, NY — Queen Anne, circa 1888. Beautifully renovated. 3 bedrooms, 1 bath, eat-in kitchen with pantry, new appliances, "double" living room, formal dining room, cellar. New plumbing, wiring, insulation, timberline roof, fencing, oak and pine floors. \$155,000. Call: (516) 758-4284.

COXSACKIE, NY — "The Old Creamery". Cement building with vestiges of its 1937 Deco origin. 3,500 sq. ft. Large, open rooms. 1/2 acre, abutting railroad siding, just up the hill from the Hudson River. \$44,000. Call: (413) 528-0996.

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PRIVATE SALE — Elegant Adamesque/Federal wooden mantel, grand Victorian overmantel mirror, architectural prints, numerous antiques. Call for descriptive list: (315) 946-5049.

ARCHITECTURAL SALVAGE — 1905 house will be torn down in 1991. Lots of beautiful wainscotting, unpainted pine, French-style doors, a large porch. Make an offer. Call Tim Clement: (518) 589-5103.

DRESSERS & MORE — Oak/ash Hoosier cabinet (galvanized bins, 5 drawers, 2 doors, stripped), \$650. Eastlake walnut dresser, rose marble top, all original, \$300. Cherry over-mantel, 6'x3', bevelled mirror, \$150. Eastlake/Ren. Rev. dresser mirror frames, walnut, \$100; fake-grained, \$50. Ornate Eastlake walnut clock shelf, 43"x16"x10", \$250. Call: (313) 286-1599.

OLD-HOUSE JOURNALS — Volume 1, #1 (Oct. '73) through Volume 12, #4 (May '84). Including all indexes and OHJ 1978 Catalog of services and products. \$100. Kerry Rubin: (516) 358-6364.

VICTORIAN POCKET DOORS — 36"x83"x1-3/ 4". Original red varnish, vertical panels, ornate latches. \$100 for the pair. Ronald G. Morin, PO Box 1169, Sanford ME 04073, (207) 324-8284.

REFERENCE MATERIAL & SUPPLIES — For restoration. Many original Victorian and later design books, house plan books, catalogs, magazines, 1885-1950. Also builder's and cabinet maker's hardware and tools. Send SASE for lists: 6 Grants Lane, Ossining NY 10562.

ORNATE HOT WATER RADIATORS — American Radiator Company. Height 38"; 7, 2x8, 9, 12, 14 sections and one 25"x20" section with covers. \$100 each. Call: (815) 223-9364. FIREPLACE MANTEL — Circa 1890. Tiger oak, 64"wide x 87"high. 2-over-2 columns, mirrored. Excellent condition. \$1199. Negotiable. Call: (718) 596-4971.

DISMANTLED CAPE — Early 1800. 30'x40' Vermont post and beam. \$21,000 includes frame, blueprints for reconstruction and delivery. Call: (802) 886-8297.

OAK ICEBOX — 1915 McCray Refrigerator Co. 48"w x 66"h x 28"d. Ceramic tile floor with white glass lining. Rear door for the iceman. All original; excellent condition. Best offer. Contact: J.R. Miller, 17800 Parkland Dr., Shaker Heights OH 44122, (216) 751-9537.

FRENCH DOORS — 2 pair. 48"x84" solid oak. Complete with frames and original hardware. Arts and Crafts style. Excellent condition. \$700 per pair or \$1,200 for 2 pair. Call: (515) 324-1051 or 324-1114.

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BRONZE LIGHT FIXTURE — Has 4 columns and capitals. Measures 48" high by 24" wide. \$575. Contact: Thomas Thompson, 12623 Quercus Ln., West Palm Beach FL 33414, (407) 798-2152.

RAILROAD STATION — Circa 1850, wood structure, was Chapmans Quarries PA. Approximately 20 foot x40 foot with ticket window. \$2,000 or B.O. Must be removed by purchaser. Call: (215) 837-6122.

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HOME RENOVATION WORKSHOP — Classroom and hands-on workshops. An old house, used only for the course, provides on-site experience. Contact: Home Renovation Workshop, 315 E. Northview Ave., New Castle PA 16105, (412) 658-7002.

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Old-House Journal Attn: Emporium Editor 123 Main Street Gloucester, MA 01930

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OLD-HOUSE JOURNAL

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16. \$1.75	62. \$12.25	260. Free	365. Free	465. Free	536. \$1.25
18. \$5.25	73. Free	284. Free	397. \$3.50	469. \$3.25	537. Free
20. \$1.25	83. Free	294. \$15.25	400. Free	470. \$7.75	538. \$5.25
26. \$1.25	91. Free	303. \$4.00	408. Free	487. \$2.25	539. Free
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REMUDDLING

opinion . . .



Hill Street may bave to be renamed Remuddling Row, if the bouse in the middle doesn't spark a restoration trend.



These three houses (above), located on Hill Street in San Francisco, were reportedly all constructed by the same builder sometime around 1890. One hundred years later, they look like houses from three different cities, inexplicably lined up together on the same street.

The house on the right still bears a family resemblance, even after having been trimmed of its trim and (mis)treated to some substitute siding. But the stuccoed house (detail, right) has lost virtually everything: trim, siding, fenestration — and character. The beautifully maintained Victorian standing between them (detail, far right) is either a proud survivor or a desperate hold-out, depending on one's point of view. But however one regards it, that house has become a stranger on its own street, squeezed by the remuddlings of its neighbors.

Thanks to David Johnson for submitting the photos.

Slap on enough stucco, and the most bandsome of Victorian row bouses (far right) can look like an anonymous box (right).



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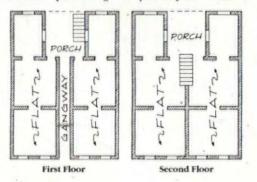
After all, just because it has to look old-fashioned doesn't mean it can't be state-of-the-art.



Vernacular Houses



Above: a later, mansard-roofed four-flat with the bottom floors used as shops. Below: a floor plan illustrating the typical four-flat layout. A rear porch with a staircase allows private access to the upper flats. Note that the back door to both upper and lower flats usually features a glass panel, which admits natural light into the middle room. Bottom: a row of four-flats in St. Louis's Soulard Historic District. The middle "pass-through" is often only 30" wide.



Old-House Journal

St. Louis Four-Flat

These solid and efficient row houses are common in St. Louis's 19th-century neighborhoods. Thousands were built by and for the mainly German immigrants that flooded the city between 1840 and 1920. As in most townhouse plans, not an inch of the 30- to 35-foot-wide lots is wasted. Four-flats consist of two apartments on the first storey and two on the second; a third storey served as attic space. A unique feature that distinguishes these houses is an independent, narrow passageway that is referred to locally as the "gangway," "pass-through," "mousetrap," or "dog-trot." This provides upper-flat residents with access to a private entrance in the rear.

Each flat consists of two or three connecting rooms, once considered adequate space for even large families. On the corner lots, one or both of the first-floor spaces served as storefronts for neighborhood shops. The earliest four-flats were built in brick in the Federal style with a gabled roof. Later, mansard-roofed Victorian buildings also went up.

> — Jay Gibbs St. Louis, Mo.