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From the Editor

Three vignettes from the Erstad house; doors, lighting, and fixtures purchased as salvage. See page 60.

Patina keeps it real

"Can you tell me who made/where I can buy that lamp/wallpaper/carpet/tassel?" is the most common sort of question readers ask us. However diligent we are (have you seen the small print on p. 79? lots of good info buried there), someone will zero in on a coveted item of unknown provenance in one of the photos. We ask homeowners and architects to supply source lists, but sometimes furnishings are antique, vintage, or passed-down.

In this issue, one visit is to a 1912 house in St. Paul. The hands-on owners, Rich and Shirley Erstad, sent along an illustrated spreadsheet of purchases made over the years as they restored the house and corrected previous remodeling. Quite impressive! They are indefatigable hunters of authenticity, and it shows in their beautiful home.

Among their vintage scores: a glass towel rod, mirrored switch-plates, a Bakelite doorknob, a satin-glass lampshade with painted pink flowers, a combination gas/electric sconce, and a ca. 1910 kitchen pendant lamp. The list of hardware bits runs into the dozens. But those are just the details. They also bought 19th-century doors (on craigslist); a huge, wall-hung, salvaged 1920s kitchen sink; and appliances dating to the late 1920s. Which still work! There's a 1906 Edison cylinder phonograph that plays old songs and recordings of Teddy Roosevelt. A 1920s Victrola in the dining room. Rich says, "really belts out the sound."

Here's something the Erstads wrote to me: "You have to like patina, with an old house. 'New' looks out of place. Salvaged doors have dings, light fixtures are tarnished. That's what makes it look like it's always been here."

That's such an important point. If most things are a bit worn, they begin to blend. And what a relief not to have to worry about the first scratch.

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Porch, Patio & Garden
Delight in the outdoors with these furnishings for your leisure space. By Mary Ellen Polson

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With front legs that resemble turned teak wood, the Java bench is actually made of weather-durable concrete on a wrought-iron frame. It measures 54” wide x 38” high x 26” deep. The bench weighs a hefty 325 pounds; $1,992 and up. Currey and Company, (877) 768-6428, curreyandcompany.com

2. WATER BIRDS
Graceful and petite, the pair of small cranes is made of solid brass with the Verdi finish. Use them as part of a water feature, in the garden, or even indoors. The tallest measures 16” high x 7” wide x 4” deep. Set, $245. Charleston Gardens, (800) 469-0118, charlestongardens.com

3. WRIGHT BASIN
The Dana vase is a cast-stone reproduction of a planter from the Frank Lloyd Wright-designed Dana-Thomas house. Shown in limestone but available in other colors, it comes in 22”, 33”, and 50” widths, for $431 to $1,728. Garden Artisans, (410) 672-0082, gardenartisans.com

4. THE SWING OF IT
Constructed with mortise-and-tenon joinery, the eco-friendly Durawood porch swing won’t absorb water and will not fade, rot, splinter, or crack. The swing is fastened with marine-grade stainless-steel hardware and comes in 11 colors; $699. Pawleys Island Hammocks, (877) 401-9017, pawleysislandhammocks.com
5. ALFRESCO DINING
With flared legs, the Jarrett Bay table is constructed of 1”-thick, pressure-treated solid pine. Order in Natural or painted in a choice of dozens of custom colors plus washed and distressed finishes. The table measures 69” long x 40” wide; $743 and up. Uwharrie Chair, (800) 934-9663, uwharriechair.com

6. WICKER ON THE SIDE
Built on a rattan frame and hand-woven, the Savannah wicker magazine table is for a covered porch. It’s 24” high x 17” wide x 20” deep. In Eggshell, $380. Cottage Home Furniture, (888) 223-2757, cottagehomefurniture.com

7. QUATREFOIL FLOURISHES
The look is classic rattan, but the Mimi chaise longue by Celerie Kimble is weather-resistant extruded aluminum. Drainable all-weather cushions come in many colors and patterns; $2,467.50 and up. Lane Venture, (888) 790-4025, laneventure.com

8. BIRDS OF LOVE
For a covered porch, the Passeria Tree pillow features a stenciled tree and hand-embroidered birds in shades of teal. The 20” square comes in natural Craftsman linen and three other colors. Finished pillow, $310; kit, $65. Arts & Crafts Period Textiles, (510) 654-1645, textilestudio.com

9. SOCIAL GATHERING
Attract hummingbirds to your porch or patio with the Happy Eight feeder. The bright-red color, eight feeding ports, and circular perch ring make for happy hummers. The leak-proof feeder holds a quart of nectar; $41.49. Droll Yankees, (800) 352-9164, drollyankees.com

10. STONE PAGODAS
Yukimi lanterns are also called “snow viewing” lanterns, as broad roofs tend to hold onto snow. Each 24” high x 18” wide lantern is carved from granite and predrilled for electric wiring: $425 to $585. Supports are extra. Stone Forest, (505) 986-8883, stoneforest.com
OUTDOOR LIGHTS
For the entry and landscape.

1. TRUE REPLICA
The Pagoda porch light is a replica of the Japanese-inspired, cast-iron lights installed in 1914 at Fort Defiance Park in Tacoma, Washington. Shown with a round opal glass shade, it's 26 1/2" high x 12" wide; $600. Vintage Hardware & Lighting, (360) 379-9030, vintagehardware.com

2. TIMELESS GASLIGHT
The French Quarter bracket lantern is the original design from this purveyor of gas-light fixtures. Constructed of hand-riveted copper, it's available fitted for natural gas, liquid propane, or electricity. Sizes range from 14" to 27" high; $275 to $1,000. Bevolo, (504) 522-9485, bevolo.com

3. ATMOSPHERIC DRUM
Pierced with leaf cutouts that produce sparkle and shadowy reflections, the Sweetbay drum chandelier is suitable for such damp locations as a covered porch. The powder-coated aluminum fixture is 20" wide and 9 1/2" deep; $451. Signature Hardware, (866) 855-2284, signaturehardware.com

4. GAMBLE GREETING
A wall-mount bracket and a chain-mount pendant from the Woodfield series are shown with the Gamble overlay. Fixtures are offered in a range of sizes, finishes, art glass, and overlays, costing $420 to $900 and up, depending on options. Old California Lighting, (800) 577-6679, oldcalifornia.com

5. PEAKED-ROOF LANTERN
Light a path or driveway entrance with the Lancaster column light. The pier-mount lantern is 14" x 14" at the base and 25 3/4" high. It's available in seven metal finishes, with or without an overlay, and a choice of art glass; $1,498.50. Brass Light Gallery, (800) 243-9595, brasslightgallery.com
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When Scott & Kathleen moved from the suburbs to their historic home in the city, they expected to adjust. But not to noisy neighbors! They worked with This Old House to find a solution that met the Architectural Review Board's guidelines AND stopped noise from coming straight through their single-pane windows.

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Getaway Houses
Whether compact or rambling, historic getaways come in a wide range of styles—from rustic camp to unique architectural statement.

TOYFORF, LITCHFIELD, CT / $835,000
Built in 1957 in a bucolic setting, this architect-designed composition of six intersecting A-frames retains most of its original, high-end interior details—including woodwork, mid-century lighting, two river-rock fireplaces—and kitchen and baths.

CATAUMET, MA / $599,000
On Cape Coad and enfolded on all sides by deep covered porches, this ca. 1900 hipped-roof Queen Anne with water views boasts a two-storey tower and a little colonnaded sleeping porch. Inside find the original staircase, mantel, five-panel doors, and hardwood floors.

WELCHES, OR / $425,000
This 1936 log cabin nestled in a mountain valley has a knotty-pine interior, stone fireplace, and vaulted ceilings supported by log cross timbers. There’s also a double-ended Roman bathtub.

CLAYTON, NY / $985,000
Perched over the water in New York’s Thousand Islands, Bluff Island is a 1900 Colonial Revival Great Camp with a pristine beadboard interior, massive brick fireplace, built-in kitchen hutch, and several clawfoot tubs.

N. FERRISBURGH, VT / $425,000
Built sometime in the early 20th century and later enlarged, this seasonal camp fronts directly on Lake Champlain. Exposed-rafter ceilings and walls clad with beadboard, reclaimed antique doors, and painted floors add charm.
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ARCHIVAL An early 1900s photo shows that what is now the conservatory room was originally an open porch.

BEFORE The room, a former porch, looked like a faceless bump-out when these owners bought the house. LEFT Storm windows protect new, custom-made windows.

ADDING A CONSERVATORY

Opening up a small, enclosed room with a bank of Queen Anne windows created a sunny retreat that's perfect for the 1888 house.  

By Deb Wood

When my husband, Duke Ellingson, and I set foot into the Victorian Queen Anne house, built in 1888, we knew this was the one for us. The house is solid and well built—and most of the woodwork had never been painted. The previous owner, a restorer of church antiquities, had stabilized the structure. Nevertheless, there was still plenty of work to do.

We read OHJ cover to cover, and we're not afraid of demolition, because it doesn't take any skill. As we removed dropped ceilings in rooms all over the house, we grew curious about a small, narrow bedroom on the south side. Although it faced south, it had only one window, an odd horizontal that looked like it was put in sometime in the 1950s.

We came into possession of some historic pictures of the house, taken around 1900. As it turned out, that room had been a side porch. The space retained the original, coffered porch ceiling. We wanted to open it up and have something really sunny. We thought: It used to be a porch, so why couldn't we make it into a sun porch or conservatory?

That got the ball rolling. I tend to create my ideas and then try to find people who can work with me on them, so I started by sketching the windows I wanted. They're in the Queen Anne style, where small, square panes of glass surround a large pane
A TILE FLOOR  A waterproof floor of geometric and encaustic tiles, popular in Victorian England, has three hand-decorated medallions and a decorative border. The medallions are from Original Style's Palmerston 36-tile set. The photo (bottom) shows the layout of the floor before installation. The tiler put in a new cement bed and used the customary narrow grout joints.

LOCATION: Janesville, Wisconsin  DATE: Built in 1888
SCOPE: Creation of a conservatory in an awkward room that turned out to be a poorly enclosed side porch, to include Queen Anne windows and a decorative tiled floor.
WINDOWS: Adams Architectural Millwork  adamsarch.com

ABOVE New Queen Anne-style windows flood the conservatory with light. Original to the house, the coffered ceiling was uncovered beneath a dropped ceiling. CONSTRUCTION PHOTOS AT RIGHT (from top) The addition of nearly floor-to-ceiling windows brings abundant light into the narrow room. • The windows are fitted and movement tested to make sure they’re square and they operate perfectly. • Laying out the tile floor pattern.
at the center in the top sash. (The bottom sash has a single light, or pane.) I also designed rounded-corner transoms to be set over the double-hung windows. I spoke to a local carpenter to double-check that the size and scale would work in the space, inside and on the exterior. Then we sat down with Chad Lueken of Adams Architectural Millwork to show him our plan.

Thanks to the people at Adams, we ended up with perfect windows, built exactly the way I'd designed them. The curve in the top corners of each transom was an important detail, as it occurs in original transoms in the house. Adams built the overlay trim with curved corners and moldings.

The windows have true divided lights, single pane but fitted with exterior storm sash. Instead of traditional weights and pulleys, Adams Architectural used a concealed balance system (springs with Kevlar roping) that's routed into the sides of the sash. The appearance is very historic.

Since this was going to be a conservatory with house plants, we needed a water-resistant floor. I designed that, too, using hand-decorated geometric tile from Original Style. That was a bit challenging because I kept changing patterns—there are so many options and color combinations, and I wanted to see which one I would like best!

We decided to name the house Ellingswood, which is a play on our last names.
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INTEGRATING A NEW DECK

IT'S A 20th-CENTURY CONCEPT that can be made to work on an old house, either through simplicity or embellishment.

Near ground level and without a railing, this new deck doesn't look like an afterthought. Classical columns and an open pergola roof tie it to historical precedent and the house.

CAN A DECK BE COMPATIBLE? HERE'S HOW TO THINK ABOUT ITS DESIGN.
Location, size, relationship to the existing house, materials, and especially its details are important considerations.
A DECK WITH A ROOF?

A low, wooden porch without railings, sometimes called a farmer’s porch, is essentially a roofed deck. This Victorian example is fully outfitted, but it’s also a model for what an open deck (on a secondary façade) could be.
Can a **Deck** Be Compatible?

We've seen the ones that aren't: too big, in the wrong place, speaking a language all their own. Here's how to think about designing an outdoor deck. | **BY PATRICIA POORE**

Porches are part of the architecture, patios disappear at grade. But decks are in-between, with a floor and often integrated with the exterior, yet without historic precedent before the mid-20th century. •

Whether an added deck is beautiful or ugly will be determined by its design and the materials used. Design encompasses its location, size, relationship to the house, and such details as the railing—plus practical considerations having to do with sight lines, drainage, and construction details that assure longevity. A deck doesn't have to look out of place, even on a period house, as long as proportions and details are done well.

The two examples on these pages are at opposite extremes of deck design. **ABOVE** Decking barely above grade, just big enough to accommodate chairs with a view and with a "live rail" of shrubbery, has an ephemeral quality and little impact on the house. **OPPOSITE** The low Victorian porch offers inspiration for deck design, from the rounded corner and painted risers to style suggestions for an optional balustrade.
THE INTEGRATED DECK

A new deck looks better if it makes some way with the house, rather than being an obvious appendage. It might be built around a bay, or fill in an ell. It should offer a graceful transition from the house to the yard or patio.

RAIL OR balustrade

This is where so many deck designs go terribly wrong. Flat, horizontal rails are a contemporary default and don’t belong on a traditional house.

The simplest deck is a platform at or just slightly above grade, and it won’t need railings to meet code. Still, a railing or balustrade may help integrate the deck with the style of the house. For rail and baluster or spindle designs, look at the existing details on the house or in the neighborhood: porch components, brackets, steps, even old fences. Any of these may be adapted, but in general they should be simplified—not direct copies or over-embellished. The deck is a secondary structure. Rather than copy a complex piece of fretwork, for example, choose one element as inspiration for a railing.

The enclosure doesn’t necessarily have to be made of wood; on a stone house, stone components may better integrate a new deck.

ABOVE This contemporary deck is well situated at the rear of the house; tucked around a window bay, it gains interest and its apparent size is reduced. The railing and skirt details mimic those of a traditional porch. LEFT Near the back door of an Italianate house, a new dining deck picks up details from the front porch; this exuberant embellishment works on the large, complex building.
ABOUT HALF of the single-family houses in the U.S. have a deck, so the idea is here to stay. For a design compatible with an old house, look to traditional concepts that are similar: porches, patios and courtyards, pergolas and gazebos. Borrow from existing elements of the house, whether that's a three-sided bay, a tower, or the porch railing. Learn from others' mistakes: As you walk around the neighborhood or look at decks online, gauge what went wrong when a new deck appears awkward or ugly.

Before you hire a contractor or begin to build, consider the larger scope. Do you really want a deck, or do you want the front porch to wrap around one side of the house? Would a patio with an awning cost less and be less intrusive?

Don't assume you know where the deck has to be, especially if the most likely location isn't ideal. Let's say your dining room has French doors that currently open to bare yard, and you'd like to add a deck for warm-weather dining. But a deck won't fit or won't look right at that location. Maybe the French doors could be relocated and a deck built to suit. Might the family room, with better access to the outdoors, swap places with the current dining room?

A session with an architect or designer is always a good idea when planning an addition, even one as apparently simple as a deck. From the start, pros pick up on the

The Invisible Deck The most foolproof approach to design has the deck disappearing from view. That may be accomplished by building the deck barely above grade and without railings; by keeping it small or narrow; or by disguising it as a walkway. A freestanding deck is another alternative: that is, a raised platform in the yard, not attached to the house at all.
AN EMBELLISHED DECK  If, owing to its location, size, or height, a new deck can't be made to disappear, consider going in the opposite direction. Details may be borrowed from porches of the period or from garden structures: the arbors, pergolas, and treillage that have been popular for 150 years. A pergola turns the raw, flat space of a contemporary deck into an extension of the old house. Its roof rafters provide some shade, especially covered with summer vines. If you use any composite materials, be sure to design with them in a way that looks authentic.

Porch flooring and wood decking have a lot in common, even though it's customary to use tongue-and-groove boards on a porch—rather than lumber laid with a slight gap to allow water to drain, as on a deck. **Weatherbeaten floors are vulnerable to a host of ills:** cracked, split, or waterlogged lumber; chipped, peeling, or faded paint or stain.  • Because a porch is part of the house proper, and also because it has a roof to mitigate its exposure to the elements, its floor should be wood. **But a new deck is more forgiving of modern materials.** If weather is wet or harsh, ultraviolet light a constant, and maintenance spotty, you might choose a composite, most of which don't require sealers. With a Class A fire rating, composites resist mildew, but will need scrubbing at least annually.
Outdoor Spaces

> DECK From shipbuilding: an open, outdoor area with a floor, often wood. A pergola-roof or awning may offer partial coverage. A deck is usually at or near grade (ground level) and thus does not require a railing. (Raised and second-level decks do.) A deck is most often connected to the house, although a raised, floored platform in the yard may be considered a deck. Also: porch flooring is called a deck or decking.

> PATIO From a Spanish word for courtyard, a paved area accessible from the house, at ground level and with neither railings nor roof. The paving may be flagstone, cobble, brick, concrete, tile, or packed gravel.

> PORCH A roofed shelter attached to the house, with a door to the interior. Near-grade porches don’t necessarily have railings, but most old-house porches do include a balustrade or shingled knee-wall as part of the enclosure. Porch variants include portico, piazza, loggia, arcade, gallery, and verandah.

> STOOP From the Dutch stoep (step), it comprises the stair-steps and landing in front of an entry door.

bigger picture; following through, they’ll design compatible details.

Construction should follow best practice: a deck is open to weather. Deck and railing elements must drain or shed water. Be sure to provide adequate joist support beneath the deck. Use pressure-treated or rot-resistant woods. High-quality cedar, redwood, mahogany, and ipe are attractive and will last if they are maintained regularly. For elements in contact with the ground, consider a rot-proof composite material. Paintable modern materials make it easy to blend real wood with composites to create a traditional design.

Details of the apron or skirt beneath the deck are critical to traditional design. Continuous steps and risers keep it simple. A raised deck needs lattice to provide ventilation while keeping out leaves and skunks. Design the skirt like lattice panels under a porch: with a fascia board to transition from the decking, and framed lattice panels between posts or concrete supports. Don’t use garden lattice, as the holes formed by the crossing wood laths are too big; aim for about an inch to an inch and a half for the holes.

Never paint wood decking that’s open to the elements; the finish simply will not last and is hard to renew. You can choose a clear sealer or one that’s tinted. Stain won’t wrinkle or peel and it’s much easier than paint to refresh. Color stains run from semi-transparent to opaque, the latter being close to the look of paint. When the deck needs renewing, pressure-wash it and let it dry before adding a renewal coat of sealer or stain.

LEFT With a built-in daybed, this unobtrusive deck, designed by Chicago architect John Eifler for his 1916 Frank Lloyd Wright house, extends living space outdoors. ABOVE Left to weather naturally, wood planks making up the balustrade blend in with the stone piers.
ARCHITECTURAL COLUMNS

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Revival Kitchen in a Queen Anne

With the look of a butler's pantry full of built-ins, it's family-friendly.

By Patricia Poore / Photos by Randy O'Rourke

Once tired and lacking character, this large, 19th-century Queen Anne house was extensively renovated, and its exterior beautifully restored and polychromed. Architect Frank Shirley, of Cambridge, Mass., also designed a new garage in Queen Anne style for the property. Interior renovations brought the family four new bathrooms, all with period inspiration; a new master suite; and a writer's studio.

A key design element is a "circulation spine" created down the center of the house, connecting with the previously isolated caboose of a kitchen to make it the family center. This area of the house got a 70-square-foot addition to provide space for a separate mudroom.

The character is that of late-19th-century pantries and kitchens. The Indian owners brought their passion for color, provided by painted cabinets, textiles for a lively complement to the blue trim, and a tile backsplash that adds pattern without overwhelming the room. Top cabinets have perforated metal fronts in unlacquered brass, adding interest and more pattern and yet concealing stored objects.
3. NODS TO THE PERIOD
Materials and details recalling an earlier time include the tin ceiling, adjustable pulley lights, a wood floor, and the center island imagined as an unplumbed work table. Bull’s-eye corner blocks and fluted casings match original trim.

4. MODERN SENSIBILITY
The room is nevertheless modern in design, function, and sensibility, with stainless-steel appliances, a cooktop instead of a freestanding range, and decorative tiles enhancing the backsplash.

BE INSPIRED...

The adjustable-height Cobb-series Rise & Fall Pendant light is made to order by Original BTC in Stoke-on-Trent, England. With a bone china coolie shade and braided cotton cable, it has a diameter of 13 ¼". In Natural White, it’s $465, through online retailers and at originalbtc.com

Circles, squares, and diamonds enliven Pattern #2, a popular Victorian-style tin-ceiling design. [Pattern #3 is the 6" version, for small rooms and backsplashes.] In 52 colors and specialty finishes, drop-in or nail-up; unfinished, it’s $1.75 per square foot. americantinceilings.com

Sold with or without a damper, round register covers made of cast iron are available from Vintage Hardware. For use in a floor, ceiling, or wall, grilles fit holes from 4" to 12"; $59.50–$265 each. vintagehardware.com

Design-forward and affordable, the ‘Arlene’ rug in Blue is from nuLOOM. The flatweave rug in 50/50 jute and polyester has a natural look but resists stains and is easy to clean. Sizes range from a 6’ runner to 7’6” x 9’6”; the 6’ x 9’ rug costs $249. nuloom.com
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PORCH REPAIRS
STARTING WITH THE ROOF, A LOT CAN GO WRONG with these exposed, outdoor rooms. + a visit to epoxy maker Abatron. page 32

KNOW-HOW: THE CASE FOR WOOD WINDOW REPAIR
The original windows are perfect for the house and, most of the time, infinitely repairable.

39 TOOLS + MATERIALS
41 DO THIS, NOT THAT
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46 SALVAGE IT
A porch without a roof is merely a deck. Besides, the porch roof is an important defense against the elements. *By Mary Ellen Polson*

*When it comes to porch repair,* the posts, decking, rails, and balusters tend to get all the attention. For some reason the porch roof—which protects those vital elements from rain, wind, and snow—gets scant coverage. That’s a shame, because neglecting the roof puts the entire structure at peril.

Telltale signs of a deteriorating porch roof include curled or missing shingles, moss growth, metal that’s rusty or in need of a good coat of paint, and roofing tar applied as a stop-gap measure. Peeling paint on the ceiling boards underneath may be a sign of moisture buildup or a roof leak.

Any roof that’s aged a century or more has likely been repeatedly patched or covered with new materials without the old having been removed, warns Andrew Curtis of Full Circa, a restoration specialist. “What you typically see on historic houses in Oregon is three layers of roofing material.” While a deteriorated soffit or broken piece of the entablature may have been replaced, “no one ever goes down to the bottom layer to make repairs.”
Porch Like a Temple Rebuilt

Reconstructing a historic porch roof—especially one supported by period columns, like this one—often requires shoring up with extensive scaffolding during repairs. Work underway on an 1899 Colonial Revival house included an authentic restoration of the entry porch, extending to both the Ionic porch columns and the historic balustrade atop the roof. The entablature was painstakingly rebuilt with all damaged or missing details, including a row of dentils and missing mouldings.

On historic wooden houses, rarely does the roof alone need work; porch roof repairs are usually part of a project that extends to deck and columns.
**The porch roof is more than shelter.** It is the first defense against the effects of water and ultraviolet light, protecting all the structural and decorative elements that can be expensive to replace.

When faced with crumbling layers of roofing over a suspect roof deck (substructure), Curtis and his team usually do a tear-off—that is, ripping the roof down to the old support system. This removes all accumulated layers of shingles, which trap moisture.

Inevitably, Curtis's team finds corroded terne metal and rotted deck sheathing, especially toward the edges of the roof; damage to rafters underneath the sheathing; and plugged or damaged gutters. Before starting repairs to the roof, the foundation for the entire porch and any supporting columns must be assessed for damage and structural integrity. Usually the entire porch structure temporarily must be supported, sometimes with an extensive shoring system held in place by scaffolding. This allows work on all parts of the porch to proceed at once.

After all of the roofing layers have been removed, the team has access to the structural framework beneath, which includes the rafters on which the roof proper rests, as well as ceiling joists that support the porch ceiling underneath. The roof structure as a whole rests on beams (the entablature), which are in turn supported by the foundation below. The ceiling joists are laid out turned on edge, usually 2x6 or 2x8 tall, creating a flat, level framework for the rest of the work. If there are integral gutters, the ceiling joists are extended out over the beam so that the profiles of the gutters can be cut in.

All of the weight of the porch roof rests on the rafters, which tie in to the plate (or bed moulding) on top of the beam. Repairs are made us-
**Dutchman Repairs**

> Rafter tails that present with extensive rot often can be patched with two-part wood epoxy, but sometimes the damage is too extensive. A time-honored technique to safely restore them—without taking the roof off—is called a Dutchman repair. If the rafter ends are structural, temporarily brace the roofline with 4x10 or 4x12 lumber. Remove any paint around the damaged area. Then chisel or saw away the decayed wood. Use the same type of wood for the repair, and make sure it's seasoned to avoid shrinkage.

Cut out a piece of wood—the Dutchman—that's slightly larger than the area of damage. Lay the Dutchman over the damaged area and scribe an outline into the original wood surface below. Next, follow the scribed line with a chisel or small handsaw to form an opening in the existing wood for the new lumber. Apply a fungicide to the old wood and allow it to dry. Then glue the Dutchman in place with a waterproof adhesive, such as an epoxy formulated for wood. Trim or sand the surface of the patch until it's flush to the surrounding surfaces. Prime and paint all exposed wood.

---

**Balustraded Porches**  
Balustraded porches appear on house styles from Queen Anne to Colonial Revival. A sort of early deck, these uncovered structures tend to deteriorate much faster than other parts of the porch. For that reason, Andy Curtis of Full Circa re-creates each element of the balustrade in solid PVC, a material that has been recognized for years by the National Park Service as an appropriate replacement for wood in such situations. First, Curtis does some detective work to identify the scale and shape of missing pedestals, balusters, and railings. Old photos are ideal, but when none exists, he can often interpret the right size and shape from a ghosted shadow found on the structure. He also looks for the original placement of pedestals at exposed corners. (To prep the roof, its deck must be flashed or counter-flashed at points where pedestals will rest.) The originals usually lined up directly over columns below—an extension of those essential supports. "The evidence shows that the old builders were doing things better than modern practice."
When Marsha Caporaso couldn't find anything but plastic wood filler to make repairs on a "three-flat" she owned in Chicago, she asked her late husband, the chemist John Caporaso, to come up with a solution.

Long story short, he invented WoodEpox and LiquidWood, still the signature items for Abatron, a company that specializes in the development and manufacture of epoxies and compounds that can work miracles in wood, concrete, and metal.

Anyone who's struggled to patch a rotten windowsill probably has heard of WoodEpox and its comrade in arms, LiquidWood. Both are epoxy systems. "Epoxy is a family of plastic chemicals," Caporaso says. "There are two parts, resin and hardener. You put them together and it creates a chemical reaction."

The resulting medium, whether liquid or a pliable solid, is used to fill voids in wood. As the name implies, LiquidWood is a viscous liquid that can drip into small voids in the substructure. WoodEpox is a more plastic medium (think Play-Doh) for filling larger voids. As long as it's properly mixed, WoodEpox is especially user-friendly. "If you make a mistake with it, you just sand it off and apply some more," explains Marsha Caporaso, who is president of Abatron.

One of the attributes of WoodEpox and LiquidWood is that they don't release volatile organic compounds, or VOCs. "They don't harden by evaporation, so they have virtually no VOCs," Caporaso says. That's one reason sales of these GreenGuard-certified products have been so successful, especially in California, which has stringent regulations on harmful chemicals in building products.

All of Abatron's epoxy and adhesive formulations are closely guarded secrets, so I wasn't invited inside the factory in Kenosha, Wisconsin. Rest assured, however, that there's an Abatron epoxy counterpart for just about anything (and any material) that breaks or deteriorates, along with primers, fillers, adhesives, and even colorants for every step of the repair. Of special interest are metal-filled epoxies that can repair or rebuild anything from the kitchen sink to an offshore oil rig, and concrete formulations that include Aboweld, useful for fill voids in concrete. "It resists sagging on a vertical surface, even without reinforcement," says Caporaso.

More Online (X) Using epoxies: oldhouseonline.com/repairs-and-how-to/epoxies-wood-repair
Once supporting beams were secured with anchors, the corbel ends were rebuilt using a combination of Dutchman repairs and wood fillers from Abatron.

The restored porch is seen from below.

The failing cantilevered porch on a Spanish Colonial Revival house in Los Angeles looked to be beyond repair. Critical elements like the supporting rafters and porch posts were so badly decayed they were pocked with voids. One decorative corbel was so eroded, only a single screw held it in place.

When Mark Sauer of Mark Sauer Construction took on the project, the goal was to preserve the most critical wood elements, especially the support rafters—which feature sculpted corbel ends. The team salvaged and reused as much of the original material as possible. Techniques included strengthening and filling old, punky wood with Abatron LiquidWood and Wood Epox, and making Dutchman repairs with and without supplemental use of those proprietary wood fillers. As a last option, any element beyond repair was replaced with in-kind wood (of the same species, shape, and dimension).

Before work began on the support rafters, Sauer and his team installed ¾” all-thread epoxy anchors for structural integrity. As a last touch after all the wood was stabilized and repaired, team members applied a texture to patched areas to re-create the appearance of wood grain.
Porches are designed to shed water and keep it moving away from the house. Water ponding on the roof will eventually saturate the wood—promoting fungal decay and intrusion by insects, and leading to leaks.

Elements structural and decorative on porches like this one on a Queen Anne Victorian survive because they typically were built with tight-grained, old-growth lumber, and regularly maintained with paint.

The pitch is calculated and adjusted for proper drainage, starting at the center of the porch roof. Since the pitch can be as little as 1/16" per foot, the Full Circa team often increases the slope of the gutters so that they'll drain more efficiently—especially when internal gutters are intended to direct water toward vertical downspouts on the façade.

Once rafters are in place, the roof is sheathed with wood that closely matches the original in quality and thickness, whether it was an old form of plywood, or tongue-and-groove or shiplap. If the roof will be capped with metal, in most situations 1/2" thick plywood goes on top of the sheathing.

Next, an ice and water shield goes down, extending into the (rebuilt) internal gutters. The shield is a bituminous, sticky-backed material that can be nailed without leaking. The metal—either copper or 18- to 22-gauge galvanized metal—goes directly over the ice and water shield. Although either material is superior to the tere-ne-plate of the past, galvanized metal must be primed before it goes down. Sheets are larger, creating fewer joints when riveted and soldered in place.

A less expensive reroofing method, called a torch-down, uses rolled asphalt roofing. The extra layer of plywood is omitted, and a granulated asphalt material goes down directly on top. "It has a presheet, also with a granulated asphalt base," Curtis says. "You melt one to the other using a torch. That's why it's called a torch-down."
WOOD WORKING
Useful items for building, cutting, sanding, or repairing.

1. SANDING PRO
Ideal on flat surfaces, the variable-speed belt sander comes with a dust bag that swivels 360 degrees to keep it out of the way. It measures 21" long x 3" wide. The motor is located over the platen for perfect balance; $169 and up. Porter-Cable, (888) 848-5175, portercable.com

2. PULL SAW
The Japanese-made Z saw cuts on the pull stroke for precise, straight cuts that make it easy to follow a cutting line. The 300-millimeter hand saw offers superb control and has a removable blade; $43.50. Hardwick & Sons, (866) 369-6525, hardwickandsons.com

3. ARCHITECTURAL FLOURISH
Add extra support to porch columns with solid Western red cedar knee braces. Available in smooth or rough finishes, the paint- or stain-ready 18" x 18" knee brace comes in a range of widths. The 5½"-wide smooth brace is $104.40. ProWood Market, (800) 915-5110, prowodmarket.com

4. CUT AND CARVE
Azek to Mill is a ready-to-cut, maintenance-free building material made from cellular polyvinyl chloride (PVC). Ideal for exterior trim elements, it’s suitable for ground contact and comes in planks and sheets. A 1 ½" x 3 ½" x 18" plank is $63.39. Azek Exteriors, (877) 275-2935, azekexteriors.com

5. INJECTION FIX
Six10 thickened epoxy adhesive combines the strength and reliability of a two-part epoxy with point-and-shoot convenience. The self-metering coaxial cartridge dispenses a gap-filling structural epoxy that bonds to wood and other materials, especially in tight places; $27.99. West System, (866) 937-8797, westsystem.com
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Installing Porch Steps

Restoring a porch? It's easy to find deck components at the home center, and it would seem that stair-steps can be constructed by simply nailing 2x lumber to pre-cut sawtooth supports called stringers. For a rear deck, that may be fine. But older houses are often graced with more formal stairs leading to the porch and to the main entry. Before you lay out and cut replacement stringers, call your local code official to get the current specs on tread widths (wide treads require a center carriage) and allowable riser heights. In many cases the original measurements will be fine, but be aware you may need some redesign to meet code. The assembly of treads and risers is critical for durability. Choose woods rated for outdoor exposure (i.e., rot-resistant), and pre-prime all of the components before assembly. By Ray Tschoepe

**Wrong Way**

**Moving to Open Riser**

Use proper joinery: just nailing risers onto, above, or behind the tread will allow water to collect in crevices, where it eventually will cause rotting. And avoid the modern urge to eliminate the solid riser. Risers are important to the aesthetic of the stairs. In addition, the risers provide strength and rigidity to the entire assembly.

**Right Way**

**Good Joinery**

The best technique for installing treads and risers is to cut them so that they interlock. If you're familiar with the use of a router, a table saw, or even a rabbet plane, you can make a good joint. The riser is made to fit into a groove on the underside of the tread, while the tread is made to fit into a groove cut into the lower edge of the riser. This interlock makes the assembly quite stiff and keeps rain out of the joints.
The Case for Repairing Wood Windows

Jimmy Carter was President the first time I wrote an article like this. I have no problem saying it all again. By Patricia Poore

My own house, once on the market as a tear-down, was completely renovated in 1998. The 1904 windows, rebuilt or repaired at the time, continue to serve. My new production windows, added when rear porches were converted to living space, have lost their double-glazing seals and are coming apart at the seams. Not long ago, I saw a trade memo that stated "new window life expectancy" to be 8–20 years.

There will always be good reasons to buy new windows for old houses, including major renovation and additions. Very high-quality windows are being made, with many options available for materials, energy efficiency, and customization. These premium windows are understandably very expensive—and prohibitively so, when considering replacement of most or all of the windows in an old house.

The replacement industry enjoys legislation that gives tax credits and certifications for replacement materials, based on short-term gains in energy efficiency. Maintenance and repair are not as immediate, or as sexy, but that option deserves a voice.

Repair is achieved through simple, traditional, commonsense (albeit time-consuming) methods. DIY repair costs mostly lime; putty and points and paint are cheap. Epoxies and weatherstripping cost a bit more, but nothing like the price of a new window. For those with no skills or no time, specialty window-restoration contractors have popped up all over the country. Depending on how much work needs to be done, the fee will be from about half to fully the cost of a new window, if the problems are extreme. But you'll have the originals that match the house, fit in existing openings, and can be repaired again in the future.

"It's easy to take a driving tour of bad replacement windows: shiny white vinyl, stuck-on muntin bars, and flat glass," says window restoration expert Alison Hardy. "The proportion, shapes, and wavy glass are part of the beauty and character that makes these homes so appealing."

Older windows can be just as energy efficient as new windows, once they are made weathertight. Look for broken glass, failed glazing, and missing weather-stripping. Comfort is a factor; single-glazed windows can feel cold due to convection currents. However, a storm window over single glazing adds efficiency and comfort at much lower cost than a replacement.

The Window Preservation Alliance claims that a 30 to 40% savings on heating costs is possible with old windows, and the benefit is immediate. According to the Field Study of Energy Impacts of Window Rehab Choices (conducted by the Vermont Energy Investment Corporation, the University of Vermont

Let the numbers convince you: This chart compares the upfront cost, annual savings, and simple payback for four tune-up strategies, from a storm window to a super-efficient replacement.

<table>
<thead>
<tr>
<th>TUNE-UP STRATEGIES</th>
<th>ANNUAL ENERGY SAVINGS</th>
<th>ANNUAL SAVINGS PER WINDOW</th>
<th>SIMPLE PAYBACK</th>
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<tr>
<td>Storm window over single-pane original window</td>
<td>722,218 Btu</td>
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<td>132,407 Btu</td>
<td>$2.29</td>
<td>34 Years</td>
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</table>

* Cost of 3' x 5' window installed
** Assuming gas heat at $1.06/therm

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School of Civil and Environmental Engineering, and the U.S. Army Cold Regions Research and Engineering laboratory), the estimated first-year energy savings, comparing a restored wood window with a good storm window to a replacement window, came to $0.60. Less than a dollar! In conclusion, they noted, "The decision to renovate or replace a window should not be based solely on energy considerations, as the difference in estimated first-year savings between the upgrade options are small."

If total energy expenditure to manufacture replacement windows is considered, the period to break even (on fuel savings over replacement cost) stretches to 40 years or more. And most new windows will not even last that long.

Finally, as National Trust president Richard Moe once said, "We can't build our way out of the global-warming crisis. We have to conserve our way out. ... we have to make better, wiser use of what we have already built."

Do the Math!

A colleague preparing a video asked for help finding a graphic he'd once seen in an energy lecture: the lecturer thought it had come from OHJ. It's a chart that compared payback periods for various window-upgrade options. We went hunting for it, and found the original in the October 2007 issue. We have not updated it, but prices haven't changed radically since then. The ratios are certainly the same. (Costs assume a 3' x 5' window, installed, and gas heat at $1.09/therm.) If ever there were a sharp stick in the eye for replacement-window salespeople, this has to be it. Even if new windows resulted in annual fuel-cost savings, it would take a very long time to pay back the initial investment cost of the new windows.

Weights and pulleys create a superior balance system—when it's renewed, you can open a sash with one hand. Any draft is more likely coming from a gap at the outside trim, or a poor seal at the floor joists.
WHY KEEP THE OLD WINDOWS?
Here's our summary of the Window Preservation Alliance's top reasons to repair rather than replace wood windows:

- **Because old windows fit the house**, aesthetically and literally. Replacement windows have a rigid structure and are inserted in the existing window openings. Old houses have shifted over time; the gaps that open up may result in draftier conditions than with the originals. Replacement sash is often smaller than the original, for less view and less light.

- **Because the craftsmanship was probably better.** The true mortise-and-tenon construction of antique windows is strong, and joints easily repaired. Unique shapes were made possible by the old techniques. Antique windows were built to last, to be repaired as needed, and to remain in use for as long as the house stand. Why send them to a landfill?

- **Because good materials have value.** Antique wood windows were made of of old-growth timber, denser and more weather-resistant than today's tree-farmed softwoods. Delicate muntin profiles are in fact possible only because of the wood density. The wood required no cladding for weather resistance.

- **Because antique glass lends character.** Bubbles and distortion are a record of changing technology. The variation of color and texture make the lights (panes) come alive when viewed from the street; the view through them is part of the old-house ambiance.

- **Because a warranty should run more than 20 years.** Chances are the old windows have done their job for 60 or more years already. It makes more sense to invest in a proven performer than to sink money into new windows that may have a warranty of eight to 20 years.

- **Because the greenest building is one that is already built.** Replacement windows are sold with promises of saving energy. But when evaluated from the perspective of the entire production, shipping, installation, removal, and disposal process, replacing windows consumes much more energy. That is, an older building has a great deal of embodied energy.
Intractable dirt on a pressed-glass transom... panes blacked out in paint on the Queen Anne window in a skylight: just two of the glass-cleaning dilemmas OHJ editors have faced in our own restorations. Etched glass may be filthy and yet delicate, windowpanes may be dirt-embedded to the point of pitting. Or maybe you've just waited too long to clean the lights in the garage door. Start with a proprietary glass cleaner, but know that other methods come in handy, too.

CLEANING SOLUTIONS

VINEGAR Mix 1 cup white distilled vinegar to one gallon of warm water.

DISH DETERGENT Squirt (not too much) degreasing dish soap (like Dawn) into a gallon of warm water.

REALLY FILTHY GLASS
Wash glass with the vinegar solution, applied with a soft cloth and squeegeed off. Spray on glass cleaner with a clean cloth and follow by rubbing with newspaper. (Try Windex with ammonia, or a commercial preparation.) If a stubborn haze from mineral deposits is left behind, apply a glass-cleaning compound such as CLR Sparkle; apply vigorously in a circular motion with a new clean cloth. Let dry. Buff with a clean cloth.

PRESSED GLASS
The textured surface of pressed glass collects grime that doesn't simply wipe off. Try a two-step process. 1. Using the vinegar solution, aggressively wash the window, or use a Mr. Clean Magic Eraser. 2. To get into the recesses and whorls, use a toothbrush or small, soft-bristled brush; dip into baking soda to add a gentle abrasive. Wipe and assess. If grime remains in the pattern, use the dish-detergent solution and repeat the toothbrush process. Rinse with a clean, damp cloth, and dry with a lint-free or microfiber cloth.

STAINED/PAINTED GLASS
Paint on glass is easy to scratch or even remove. Don't use ammonia or vinegar. For stained glass, mix a gallon of distilled water with a couple of squirts of pH-neutral, non-abrasive dish detergent (e.g., Seventh Generation Natural Dish Liquid). Microfiber cloths work well: Wearing rubber gloves, dip cloth in solution and wring out so it is damp, not wet. Work from the top of the window downward. Wipe a section and dry with another clean cloth. Use cotton swabs dipped in detergent mixture in corners. After working on leaded glass, toss gloves and rags away. For painted art glass, use de-ionized water to clean. Make a large swab of bamboo skewers wrapped in raw cotton. Gently roll the lightly dampened swab over a section of painted glass. Let dry. Further cleaning may require a professional conservator.

PAINTED-OVER GLASS
If it's just drips or smears, wipe the paint with a damp cloth to soften, and use a utility knife with a flat blade to scrape them off. For painted-over glass, first mask the frame and putty seal with painter's tape. Wearing rubber gloves and safety glasses, apply a solvent such as Oil-Flo or SoSafe (graffiti remover). Scrape off remaining paint. Stubborn areas of stuck paint and embedded grime may come off easily with an application of oven cleaner (lye) formulated for use on cold ovens. This is caustic stuff so take precautions and work in a ventilated space. Sponge and wipe until clean, then neutralize with the vinegar solution.

ETCHED/CARVED GLASS
Mix up the dish-detergent solution and apply with soft car-wash brush or sponge. Squeegee. Spray glass cleaner on any spots and wipe with soft cloth. Never use paper towels on etched glass as it leaves lint. For stains from mineral deposits, use the vinegar solution; wet a soft cloth and gently scrub. Dip cloth in baking soda if necessary for gentle abrasion. Rinse and squeegee dry.

Glass-Cleaning Solutions
How to deal with decades'-worth of grime on various types of glass you may encounter in an old house. By Lynn Elliott
## The Cost

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
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<tr>
<td>VINTAGE FURNITURE</td>
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<tr>
<td>BRUSHES</td>
<td>$25</td>
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<tr>
<td>PRIMER * (pint)</td>
<td>$35</td>
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<tr>
<td>TRANSFER GEL</td>
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<td>ART PRINT</td>
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<td>PAINT * (per pint)</td>
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<td>GLAZING LIQUID * (pint)</td>
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<tr>
<td>MATTE SEALER * (qt.)</td>
<td>$40</td>
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<tr>
<td>FURNITURE SEAL * (4 oz.)</td>
<td>$23</td>
</tr>
</tbody>
</table>

**TOTAL** $592-$642

* Wise Owl Paint products, wiseowlpaint.com  
† by Artisan Enhancements, shop.artisanenhancements.com

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## the process

1. **SELECTION**  
   Grover looks for vintage pieces past their prime, usually with good solid construction but damage to the finish. She avoids restoration, preferring to leave minor imperfections; if there’s a crack, she’s more likely to emphasize it than fill it.

2. **PREPARATION**  
   Cleaning begins with a 50/50 mix of white vinegar and water. Grover cautions that, when working with mahogany, a base coat of primer may be needed as tannins may bleed through the paint. With mahogany, she likes to apply a coat of Wise Owl clear primer.

3. **ART TRANSFER**  
   Transfer is different from decoupage. Here, you start with a copyright-free image, photocopied on a laser printer (not ink jet) and mirror image or flipped for transferring. Laser printers print up to 11"x17"; for bigger images, copy in 11"x11" sections, then piece together prior to transfer. (Office Depot will do this for you.) White paint is applied to the cleaned area where a print will be placed. When it’s dry, a thin layer of transfer gel is applied over the paint, and the print placed face down onto the gel. Any air bubbles are gently pressed out and the print allowed to dry overnight.

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**Furniture Rescues**

A self-taught artist transforms old furniture into unique, practical art.  
**By Brian D. Coleman**

Diane Llewellyn Grover wasn’t always a furniture artist. In fact, she’s a clinical social worker. Painting became a preferred form of relaxation. She began experimenting with tired old furniture, transferring pre-Raphaelite and Impressionist art prints onto drawers or door fronts, then painting the pieces. Shown here is a dull bonnet dresser she updated with a print of the nymph from “September Morn” by Paul Emile Chabas (1911) and glazed green paint. When friends starting asking for reclaimed furniture, her business The Paint Factory was born: thepaintfactorypdx.com
The paper backing is then removed by wetting with water, then gently and slowly rubbing away the pulp, with care not to disturb the transferred image underneath. Sometimes four applications of water may be needed to remove the backing.

4. PAINTING
Grover chooses paint colors to coordinate with the image. Her favorites, all chalk/mineral paints from Wise Owl Paint, include Spanish Olive, Fox-trot, Turmeric, and Golden Rod. She often blends colors together for more depth and interest. When paint is dry, Grover uses several thin coats of glaze to achieve her “watercolor effect.” Finally, the piece is coated with Wise Owl Matte Sealer, and the interior wiped with Furniture Salve to deodorize, condition, and seal the wood.
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INVESTING IN FOREVER
The kitchen is a highlight in the renovation of a 1912 Foursquare in St. Paul, Minnesota. page 60

The two “birdhouses” are Little Free Libraries, for sharing books. Their design is modeled on a house the owner’s ancestors built in Norway in the 1700s; these have green roofs planted with flowers.

50 A MYTHIC REVIVAL
Beloved retreat is shared anew. + PAINTED DECORATION

60 THE FOREVER HOUSE
DIY in a house embracing its age. + HOW TO HIDE THE MODERN

68 GARAGES ON TOUR
Recent period-inspired work. + CONTEMPORARY DOORS
A MYTHIC revival

THE SOLE SURVIVOR OF A ONCE-FABLED ENCLAVE, THE HOUSE NOW CALLED SPILLIAN INSPIRES A NEW GENERATION OF HAPPY REVELERS.

Having made a fortune in compressed yeast, brothers Charles L. and Max Fleischmann of Cincinnati were searching, in the 1880s, for a summer retreat for their families. They found it in a 160-acre spread above the tiny village of Griffin's Corners in the Catskill Mountains of New York. Soon the brothers and their three other siblings all had built summer cottages here, bringing their wives and as many as 20 children with them every summer.

BY MARY ELLEN POLSON / PHOTOS BY STEVE GROSS & SUSAN DALEY
IN THE CATSKILLS
Hotels sprang up in the valley below this retreat, around a man-made lake that had its own tiny steamboat meant for summer-night cruises.
EMBODYING JOY

“This is a house that was built for celebrations,” the owner says, noting that the big table in the dining room “is the heart of everything we do.”
Given the slow, sleepy nature of the town today, the Victorian-era boom seems surprising. From the 1880s through the 1910s, hundreds of hotels and boarding houses were built in this area.
LOVE AFFAIR BEAUTY & HARD WORK

Leigh recalls she had to cajole her husband into coming east to search for a house in which to create a new business venture. She wasn't sure he would like this one. "As we walked in, I saw him gradually fall in love with this woman—and [the house] is a woman. It's a 'she' in his mind, definitely."

They both knew they'd found the right place to build their dream. Mark threw himself into restoration projects—for instance, tung-oiling every square inch of the pine paneling by hand. "Which is why we have a running joke that she really is the woman in his life, and that I'm the 'other woman'," Leigh says, "because Mark and the house know each other so intimately, and they have a love affair going."

"If I never have to smell tung oil again in my life, I'll be a very happy person," Mark answers. He also took out, refurnished, and reinstalled all the radiators, which now work perfectly. He removed and replaced broken panes of glass from an estimated 75 windows, most with at least 10 lights per top sash: "I became a really good glazier."
Set on a knoll overlooking the valley, Max Fleischmann’s house is a gracious yet rambling blend of the Shingle and Stick Styles. “It was one of seven or eight houses on this hillside,” says Leigh Melander, who today co-owns the house with her husband, Mark Somerfield. “It’s the only one still standing.”

Civic-minded, adventurous, wildly enthusiastic about sports and the arts, the family’s influence created a boom for the little village, where hotels sprang up around a manmade lake. The people of Griffin’s Corners (eventually renamed Fleischmanns) welcomed not only the Fleischmanns, Jewish émigrés from Hungary via Vienna, but also Jewish and Eastern European families with enough money to escape the summer heat in New York City. “They came here and felt accepted,” Leigh says.

Given the nature of Fleischmanns today, the scale of that boom is surprising. “There would be 10,000 people on a Friday night on the streets of town,” Leigh says.

The Fleischmann families arrived for the summer by private railroad car, which dropped them off at their own personal depot at the foot of the mountain. Liveried carriages picked them up while the town band, in spanking-fresh uniforms supplied by the Fleischmanns, “played them up the hill.”

They brought their friends, too. Anton Seidl, artistic director of the Metropolitan Opera and later conductor of the New York Philharmonic, summered in his own Queen Anne cottage on the grounds. The Fleischmann family—who owned the Cincinnati Reds baseball team and, secretly, the Philadelphia Phillies—started a summer baseball league here, the Mountain Athletic
Architectural details in the eaves and gable are original or have been carefully repaired. The motif in the top gable, Leigh says, “kind of looks like a menorah, doesn’t it?”

Distant mountains are the view from a second-storey balcony. When the Fleishmanns arrived, the view would have been as wide as the horizon; trees have been encroaching for more than a century.

A rustic gazebo remains on the property.

Club, which still plays today. The compound was close enough to Saratoga Springs for Charles's son Julius to play the horses almost daily; the location was a short train ride from the Hudson River, where various family members built and kept yachts. The children were entertained by a heated swimming pool, a private deer park, and an enormous indoor riding rink. There are stories about how Julius and his brother, Max Jr., “would trick ride through the village for the amusement of the locals.”

The golden age lasted until World War I, after which family members, now well into the second generation, moved to Long Island's Gold Coast, to the coast of California, or on to near-continuous safaris in Africa. Max's house became a hotel in the 1920s, when it was owned by the family of Gertrude Edelstein, later famous on radio and TV as Molly of “The Goldbergs.” The hotel continued to attract creative people, notably musical and artistic guests from Broadway and Tin Pan Alley. After World War II, Max's house became the Lederer Park House, where for 18 years rabbinical scholars came from all over the world to have “philosophical discussions of what it meant to be Jewish after the Holocaust,” Leigh says. “I don't know if there were Hasidim in attendance or not, but it's one of the reasons there is a Hasidic CLUB, which still plays today. The compound was close enough to Saratoga Springs for Charles's son Julius to play the horses almost daily; the location was a short train ride from the Hudson River, where various family members built and kept yachts. The children were entertained by a heated swimming pool, a private deer park, and an enormous indoor riding rink. There are stories about how Julius and his brother, Max Jr., "would trick ride through the village for the amusement of the locals."

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The artistic talents of nameless artists of the late-19th century are in full flower at the top of the stairs, which lead to guest rooms.

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Visit another storied old family retreat: oldhouseonline.com/house-tours/restoring-adirondack-camp

ABOVE In a guest room decorated to commemorate The Secret Garden, a favorite book, climbing roses form a wreath over the working fireplace.

LEFT The Chinese-influenced Lotus Room is furnished with antique Chinese tables and trunks.

FAR LEFT (top) In homage to the idea of the Victorian traveler, the Jules Verne Room has its own balcony and long mountain views. (bottom) Many guest rooms at Spillian have fireplaces; this one also has a bow window.
A stained-glass transom, a tiled, antique washstand, and reproduction Pre-Raphaelite tapestries furnish the William Morris room. Below Most floors in the bathrooms are done in black and white hex tile, probably dating to the house's hotel era. "A friend of ours came over with an old toothbrush, days on end, to clean it," one owner says. Bottom Wherever possible, early clawfoot tubs and marble-topped basins are still in use.

"We wanted it to feel like a house that has been loved for generations, which it is. The first time we had an event, my father was here; he said to me, 'Leigh, listen. The house is singing.'"

The house passed through other owners, including a New York City woman who saved the structure, stabilizing the foundation and replacing the roof, before Californians Leigh and Mark arrived here on a January day in 2012. Filled with furniture and junk, the house had been unoccupied for at least 20 years.

Spillian is the name of Mark and Leigh's business venture; they see the house and its setting as a place for imaginative gatherings. The word Spillian is Old English for "to play, to jest, or to revel." This is not a full-time inn. Guests are invited only for events or for special gatherings designed to integrate play, imagination, spontaneity, impromptu performance, and of course good food and drink. Recent weekend events included Forage Your Feast; The Mighty Haggis, a "seriously silly" celebration of Scots poet Robert Burns; and Trout Tales, a chance to be coached in fly-fishing techniques in the mountain streams.

Leigh and Mark store dishes and silverware in the purpose-built china closet in the dining room, which is the heart of the house. Bins are marked "milk" and "meat" to keep silverware separate and kosher. Not long after they arrived, the couple got a visit from former owner Mrs. Lederer's 90-year-old daughter. She told them she had hand-lettered the bins as a child.
PAINT DECORATION AT SPILLIAN
THE MYSTERY OF FLORAL PAINTINGS ON WALLS OF THE HOUSE.  By Mary Ellen Polson

If, when entering the parlor at Spillian, guests somehow fail to notice the unusual murals on the mellowed headboard walls, they will likely stop and gape by the time they reach the open gallery at the top of the stairs. (See the previous story and photo, right.)

Here is a dazzling display of tea roses and hydrangea in full flower, shaded by palm fronds. Climbing and arching vines tended by butterflies adorn an enclosed flue. In guest rooms, wreaths of climbing roses or twining vines make backdrops for beds and fireplaces. Wisteria weaves its way over a door in the hall.

"The paintings are a little mysterious, because they're not signed," says Leigh Melander, co-owner of the house. She suspects the murals may be the work of artists who worked in New York theater and opera, brought in by Anton Seidl, the artistic director at the Metropolitan Opera in the 1880s. "He was a very close friend of the Fleischmanns, who built this house, which is one reason why we wonder if the murals were painted by scenic artists. They have a kind of scenic artists' feel, they're very romantic."

Leigh asked Jeff Greene, founder of Evergreene Architectural Arts, a mural and fresco restoration company, to come take a look. "He found them intriguing because they're painted directly on the natural, shellacked pine. He'd never seen that before."

Greene noticed that some murals are finer than others, and concluded that at least two artists, possibly more, contributed to the paintings. "We've not found any written evidence of who painted them or when," Leigh says. "We know they were done early because they predate the gas jets. It's a wonderful guessing game."

RIGHT Today's owners suspect the elaborate murals were painted by scenic artists, possibly workers from the Metropolitan Opera. They are painted directly on the shellacked wood.

A PAINT-ON-WOOD TRADITION  Lush, bright with primary and secondary colors, rosemaling is a style of folk painting on wood that originated in rural Norway. Floral polychrome designs are expressed with C and S strokes and feature scrolling and flowing lines, as well as script and scenic additions. Also common in rural Sweden, rosemaling came to the New World as Scandinavians settled here, often carrying their belongings in beautifully painted trunks. The craft was revived in the 20th century when a Norwegian immigrant, decorative artist Per Lysne, turned to rosemaling during the Great Depression of the 1930s.
A variant of the American Foursquare, with a large front-facing gable and Colonial Revival details, this 1912 house in St. Paul, Minnesota, became home for Rich and Shirley Erstad in 1998. "This was the only house we looked at with our agent," Rich says, "the only house we've ever owned. It's in a great location, just 15 minutes from downtown Minneapolis, downtown St. Paul, or the airport. "On the day we took possession, I installed a shower ring and piping in the clawfoot bathtub," he says. "The only water shutoff was the main line. I stripped the threads on the old fittings while installing the valves, so we had no water until I could get a plumber over. Ah, the joys of an old house," he chuckles.

A DIY couple help an already intact house embrace its age—and the new-old kitchen is an achievement!

THE FOREVER HOUSE

BY REGINA COLE
PHOTOGRAPHS BY TROY THIES
The Erstads did extensive research to learn about their 1912 house. They fly a 46-star American flag to commemorate that year.
That inauspicious beginning turned into 22 years of caring for and restoring the 2100-square-foot house. The work culminated in a 2017 kitchen remodel that proved so successful, it won a prestigious Contractor of the Year (CotY) award for the builder, APEX Construction Management.

"We lived here for almost 20 years before we built the addition, while raising three daughters, with only one bathroom," Shirley Erstad explains. "When we were ready to start, we knew exactly what we wanted." They rebuilt the rear of the house to make space for a first-floor bathroom and mudroom, accessible through a new sheltered porch with an entry from the yard, with a new laundry below.

Rich Erstad says that one of the benefits of owning an old house has been the chance to learn carpentry, beginning with the front porch steps. "I managed the project and made sure we executed our vision," says Shirley Erstad, who is the executive director of a local parks-and-trails non-profit. "But it was great to learn that Rich could do a lot himself!"

Erstad, who is a lawyer, designed and built the cabinet over the refrigerator, basing its design on a desk that was owned by Shirley Erstad.
Second owner Bessie McGuigan lived here from 1916 until 1969. "We view Bessie as the guardian angel of the house; she got it through the treacherous 1950s and '60s intact. No painted woodwork, etc."
RIGHT A brown checkerboard floor, antique appliances and lighting fixtures, painted cabinets, and a kitchen table create a convincing period kitchen.

OPPOSITE (right) The Reliable gas stove, lovingly rebuilt, has six burners, two warming burners, two ovens, a broiler, and a warming oven. The stovepipe, though original, is now purely decorative.

(bottom left) The new windows had to be sized to fit around the sink's high backsplash.

More Online

Restoration of a 1920 kitchen:
oldhouseonline.com/kitchens-and-baths-articles/a-bungalow-kitchen-comeback

The Cozy 1920s Kitchen

"We wanted a kitchen that looks like it was here in the 1920s," Shirley says. That's the genius of the Erstads' new kitchen: it's convincing yet functional, outfitted with its original oak millwork, leaded-glass windows, and built-ins. The transition from dining room to kitchen is seamless. The entire house looks like a lovingly maintained period piece.

In the new "period" kitchen, they used antique appliances, lighting, and plumbing fittings, but integrated them with top-of-the-line contemporary elements. The refrigerator is an original 1927 GE Monitor-top. Beside the 1924 sink, however, are two freezer drawers hidden behind wood cabinet doors.

"The freezer in the old refrigerator is miniscule, and needs to be defrosted periodically," Rich says. "But that fridge measures 17 cu.ft. and is quiet and efficient, using one-third the electricity of a modern unit. It has the original coolant and a motor that probably dates to 1938."

The kitchen floor posed a challenge. "We wanted 6"-sq. linoleum tiles in period-correct colors, but they no longer exist," says John Biancini, president of APEX Construction Management. "So, the owners found some 12" commercial vinyl tile, in the right color combination, and we had them laser cut to precise 6" squares for the checkerboard."
While the rest of the house was remarkably untouched and well maintained, the kitchen was a mashup of 20th-century remodelings. This room was the last project and crowning achievement.
To make the back of the house function better, the door was moved and an entry porch built (above). The new lower bank of four windows frames the kitchen sink. The yard ends in a sauna and a multi-purpose garage.

the Finnish composer Sibelius. Sonos Wi-Fi speakers are hidden in vintage radios on display in the cabinet.

Over the years, restoration was a learning process for the builders as well as the homeowners. "We had some challenges connecting the 100-year-old toilet and bath sink," APEX's John Biancini says. "The bank of kitchen windows had to be sized around the old farmhouse sink. Many of the switches and outlets required special, non-standard placements. And, to satisfy the building inspector, we made the natural-gas shutoff to the match-lit stove easily accessible. There were no electronic ignition systems back then!"

The Reliable gas stove dates to ca. 1929. "I bought it from a guy in New England, unrestored," Rich says. "The chrome surfaces were in bad shape, so I took it all apart and got it all replated. Because it was winter, I'd taken the pieces inside and reassembled the stove in the basement. Bad idea: it wouldn't fit up the stairs. Eventually, when we did the addition, they cut the downstairs door and carried the stove up that way."

"We live in a house that looks old," Shirley says. "But we couldn't have done it without modern technology."
Is your intention to go beyond a period-inspired yet contemporary kitchen? Do you want it to seem like it's always been there? It's not hard to create a kitchen that looks as if it survives from 1890 or 1930, provided you plan for some sleights of hand.

The Erstads' kitchen (see previous story) may look a hundred years old, but it has all modern necessities. The major appliances are indeed vintage and make this a credible period room. But the microwave oven lives behind a narrow cabinet door next to the big refrigerator. USB chargers were included inside cabinet drawers—handy, but invisible. Electrical outlets are minimized with the use of an inset Wiremold strip beneath upper cabinets. "The only visible new thing is the smoke detector," Rich Erstad says.

To the right of the salvaged 1924 sink, the dishwasher is faced to look like drawers. Modern freezer drawers are camouflaged to the left of the sink.

Other considerations keep the room authentic. For example, the Erstads skipped a center island in favor of a wooden kitchen table; double-duty and functional, it has drawers on one side, a cutting board on the other. While most of the room's base cabinets are painted white, blue-green paint on the pantry cabinets creates the look of a kitchen dresser. Countertops are both marble and black granite. Mixing finishes gives the unfitted look of a room that evolved over time.

The kitchen remains in scale with the house, and is in its original location. Materials used would have been common between 1912 and the 1930s. Cabinets have inset, not overlay, doors and drawers. Finally, the details all contribute to a seamless design. Lights are combination gaslight or early electric fixtures, flooring is a resilient checkerboard, hardware is of the period. Even the faucet is vintage.
Traditional design and materials make the renovated carriage house look original to the New England property, where the house is in turn-of-the-century Shingle Style.

THE GARAGE AS A CARRIAGE HOUSE

The original carriage house was dilapidated: Early on, horses had taken their toll, while, more recently, changes to accommodate an RV had destroyed the historical character. “The new homeowners saw a fun, quirky old building worth saving,” says Cambridge, Mass., architect Frank Shirley. His design adds vehicle storage, as there are four drivers in the family. A game-room getaway for teenagers and a private retreat for guests fill the loft area above the garage bays.
Here's a look at recent garages, inspired by period houses, which make the most of new space. By Patricia Poore

Like early electric lighting, most early garages were plain. (Having electricity, or an automobile, was status enough.) Today the garage is expected to do more, from storing grownup toys for four seasons to providing a workshop or plant room or home office. With the cost of new construction, it makes sense to hire a designer for your project and to make the most of it. No matter whether you have a vintage home or a new house designed along traditional lines, you don't want to end up with “a garage with house attached.”

The garage was at first a utilitarian building separate from the house. By the 1920s—when it might be built alongside the house rather than at the back of the lot—the garage was increasingly tied to the house proper by a loggia, pergola, or breezeway. A low wall between house and garage formed a courtyard (or, at least, a laundry yard). The “walled compound” look was particularly popular for English and French Revival houses. The attached garage became more popular after fear of gas fires subsided, although many codes continued to require fire walls.

Garages for 20th-century Colonial Revival houses emulated the connected buildings of New England farmhouses. On formal Georgian Revivals and symmetrical Dutch Colonials, a garage as one wing balanced a porch-on-slab, sleeping porch, or sunporch on the other side. Soon garages were tucked under the house or hidden in irregular massing. Not until the postwar split-level did double doors boldly appear on the primary façade.

If the garage itself has little precedent as a fully detailed, multi-function space, that’s not true of outbuildings in general. Surviving barns, already offering multiple areas and storage capacity, were remade by several generations as guest
ABOVE Carriage doors [by IDC Doors] are unobtrusive, recessed under a row of windows in a multi-purpose Tudor garage with a wood-shingle "thatch" roof. RIGHT Beautiful proportions mark a Colonial Revival three-bay garage with a hyphen connector to the house. Retractable overhead doors by Cambek appear to swing; their windows match the fenestration on the house.

LEFT In the Victorian tradition, a garage with an apartment above, designed by David Heide Design Studio, echoes the style and rooflines of the main house. OPPOSITE, TOP A garage tucks into the steep site beneath the living area of a new English Arts & Crafts house designed by TEA2 Architects. The echoing bank of casements and a windowbox on corbels keep the door in scale.

Adding Details Historical design makes use of architectural features to add style and dimension to a garage meant to blend with an old house. Corbels, brackets, siding and shingle details, pergola extensions, and window boxes are added to make the building more attractive. Period lighting is the finishing touch. • Until recently, the problem with stock and manufactured garage doors has been their flat, dimensionless appearance. That’s changed since the introduction of such elements as true divided-light windows, V-groove panels, cross braces, and better hardware. Bungalows often had a garage from the beginning; builders’ catalogs as early as 1909 include garages with new homes. Fancy garages are nothing new; they were built all along for wealthy. By the Twenties and certainly the Thirties, suburban owners could choose from garage designs that matched the house.
A recently built garage/office fits seamlessly in a neighborhood that retains some of its original carriage houses. Its cross gambrel roof and unusual fenestration match features of the old house it adjoins.

LEFT Simple, one-bay, and detached—yet handsome and fitting with its bungalow-era details and period-perfect doors by Real Carriage Door Co. RIGHT Built to resemble the connected outbuildings of New England, the new garage ell features fire-code doors of classic design from Garaga Inc.'s Eastman series.

Mediterranean, French, Colonial Revival, Dutch Colonial, or English. Craftsman-influenced styles were easy to adapt to garages, with their wood shingles, simple framework, and lattice or a pergola. A Japanese look was not uncommon. “Spanish” garages had tiled roofs. Garages have always had windows for ventilation and light, often mimicking those of the house.

DESIGN GUIDELINES First of all, if you have an old garage that’s usable, even if it doesn’t match the house, consider choosing paint color and trellising to make it attractive.

You’ll see garage doors painted to match the trim color of the house, or even left white from the factory. But painting an ugly or too-big door the body color will help hide it. (New premium doors made of hardwood are sometimes varnished for the natural-wood look, adding furniture quality and a lovely color to the doors.) If the doors are attractive, do paint them in the trim color, perhaps with panels reversed to body color (or a shade of the trim color).

If you are building a new garage, decide which of these categories you prefer: a simple, utilitarian garaging space, or a garage that stylistically matches the house. Will it be at the back of the lot, semi-detached, attached, or integrated into the house? If fitting in matters to you, walk or bicycle around town, peering down alleys and side streets. Note materials, garages’ relation to their lots and houses, roof types, door styles, and details. Remember that the new building will be close to the old, so match the basics and even try to incorporate some salvaged windows, millwork, or ornament.

An architect will take a sophisticated
Appropriate design goes beyond aesthetics to solve site problems. The garage can bridge a slope, hide an unfortunate view, or block road noise.

Approach to garage design. A designer may be able to integrate car parking into the existing house, as a modest rear extension—or under it, in space excavated from the basement or patio. A designer understands that the garage has to be subservient to the main building, by means of lower height, a setback, or locating it at the rear or side of the house. Details are designed to be related to the main house but simpler, not fancier.

However plain or fancy, the garage will be judged by its doors. If they out of proportion, obviously modern, and chunky rather than stylish, the building will look wrong. The inherent problems of swinging doors (they sag and get blocked by snow) led to invention of the segmented door that retracts into the garage above the vehicle. Today’s manufacturers go to great lengths to create the impression that their apparently old-fashioned doors look like they swing (or slide, or fold), even though they offer the convenience of an overhead sectional door—and respond to the remote-control opener.
THE GARAGE DOOR IS A KEY TO DESIGN

TRADITION COMES IN QUALITY MATERIALS, AND WITH CONTEMPORARY OPTIONS.

Plain or fancy, the doors have to look right, because they take up most of the wall. Many people thoughtlessly choose two-bay overhead doors in vinyl with a plastic sheen. Too often, the doors are painted in high-contrast white.

Wood requires maintenance, but it offers the most options when new and will age gracefully. Composite wood fiber/polymer material, steel, aluminum, and more are available now, too, in authentic styles and credible finishes. Circumstances and fire codes may suggest good reasons to opt for a wood alternative.

Several garage-door makers offer traditional doors that actually swing out, slide, or fold to open and close. Wicket doors—a person-size door within the large garage door—are also an option. Most of the modern garage doors, however, even one that looks like a cross-braced barn door or carriage door, have horizontal breaks that allow them to retract overhead. Some designs are nearly seamless.

Company websites explain options in material, style details, finish and color, insulation and soundproofing, glass, hardware, and opener mechanism, as well as customization.

CLINGERMAN provided the carriage-house doors—quite suitable for a residential conversion.

resources These companies specialize in period-appropriate garage doors. Some offer coordinating peripherals that may include windows and glazing, hardware, and driveway gates.

> Amarr Garage Doors (NC): amarr.com
  Wood, wood composite, steel
> Carriage House Door Co. (CA): carriagedoor.com Wood, steel
> Clingerman (PA): woodgaragedoor.com
  Choice of wood; AZEK/Versatex; Extira
> Cambek Designer Doors (WI): cambek.com
  (formerly Designer Doors) Wood; wicket doors; specialty claddings
> Clopay Building Products (OH): clopaydoor.com Wood, steel, aluminum
> Evergreen Carriage Doors (WA): evergreencarriagedoors.com Wood
> Everite (PA): everitedoor.com Wood
> Garaga Inc. (Quebec): garaga.com Steel, steel with wood composite, aluminum
> Gado, General American Door Co. (IL): gado.com Steel, wood
> Haas Door (OH): haasdoor.com Composite wood, steel, aluminum
> Hahn's woodworking co. (NJ): hahnswoodworking.com Wood
> Holmes Garage Door Co. (WA): holmesdoor.com Steel, aluminum, wood composite, wood
> IDC, Industrial Door Company (MN): idcdoors.com Wood, wood composite, steel
> Northwest Door (WA): nwdusa.com Wood, steel, aluminum
> Raynor (IL): raynor.com Wood, steel
> Real Carriage Door Co. (WA): realcarriagedoors.com Wood, with swinging, sliding, folding options
> Sunwood Doors (CA): sunwooddoors.com Wood
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SHAPE SHIFTING
Here are two Arts & Crafts Bungalows, neighbors in a small city in southern Wisconsin. Both were built in 1918. With its original rooflines, front-facing dormer, and brick porch, one house (at right) remains essentially as built, save for a panel of privacy lattice that’s easily removed.

The other has been expanded with a rear-side addition. It’s highly visible, as the house sits on a corner lot. “I call it French Third Empire,” says our correspondent, making tongue-in-cheek reference to the mansard-ish (aka Second Empire) roof.

Some would argue it’s not as bad as the pop-tops seen on Chicago Bungalows, which look as though alien houses have landed on top of the old ones. Here, the façade is preserved. But why choose a roof that obliterates the original lines of the house, and seems more suited to a late-20th-century medical office or fast-food franchise?

A back extension, a bump-out that follows the original roofline, or a wide dormer at the rear may have been good alternatives for adding space.

“History in front, misguided reno in the rear.”
—Paula Antonevich Myers
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