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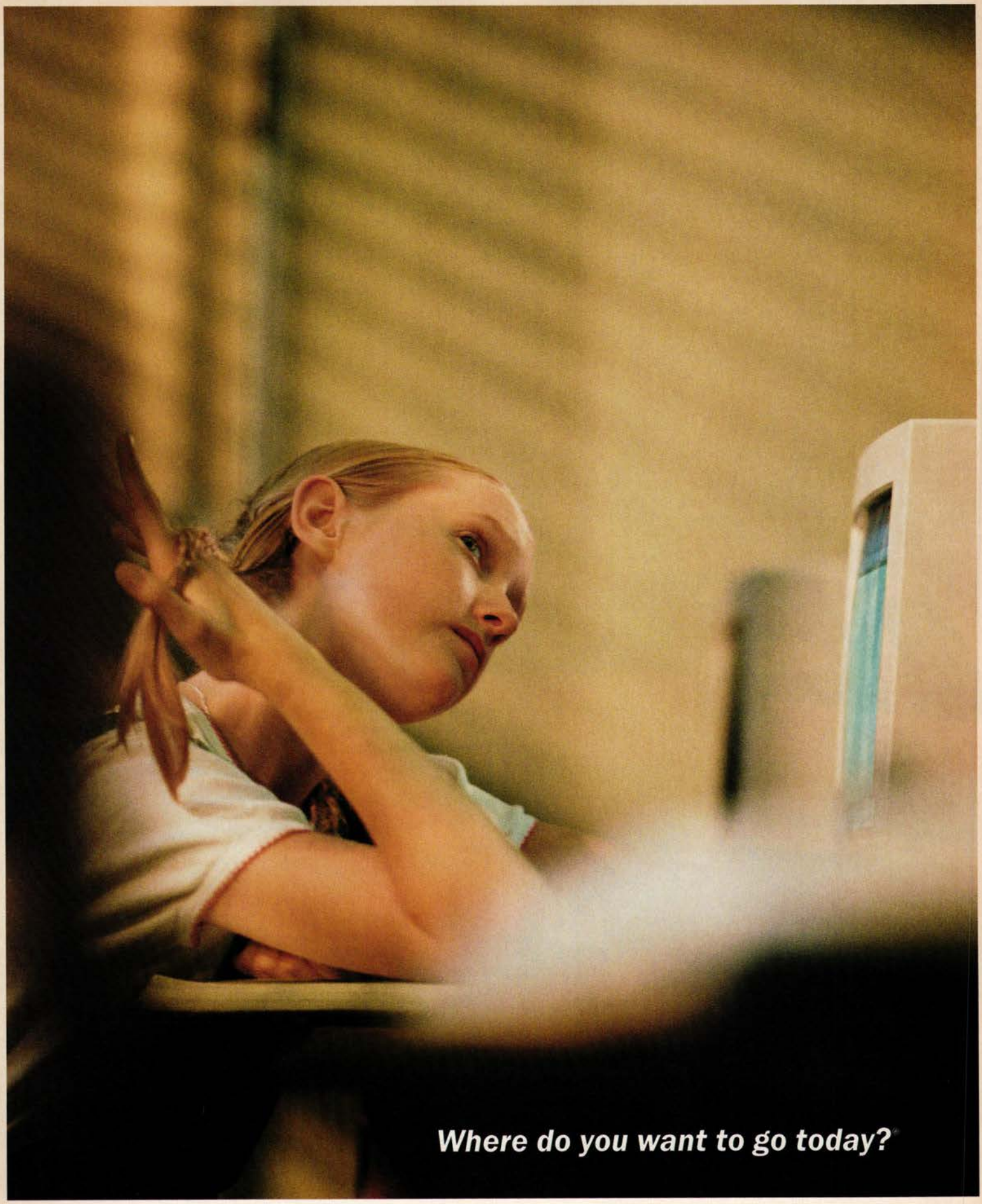
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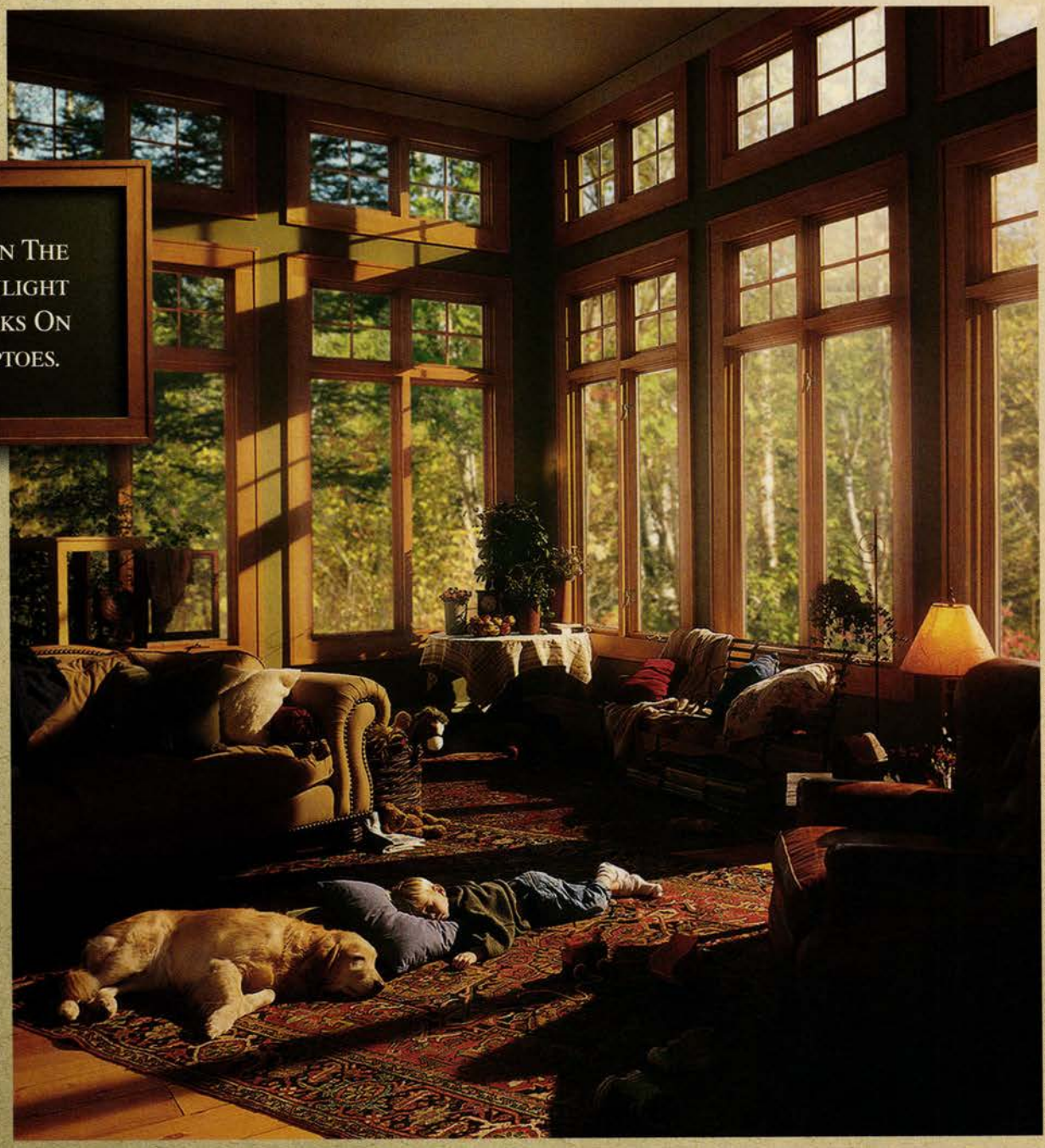

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Best Bath p. 38

A couple decides to simplify the Edwardian-style bathroom in their 1885 New Jersey house. Before they can say "Carrara marble," they've moved a load-bearing wall and rerouted the plumbing. The result is a master bath that's functional and elegant. BY CURTIS RIST

FEATURES

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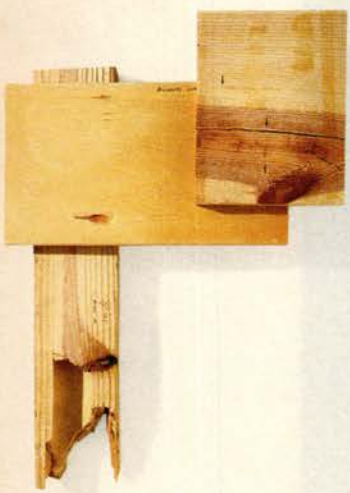

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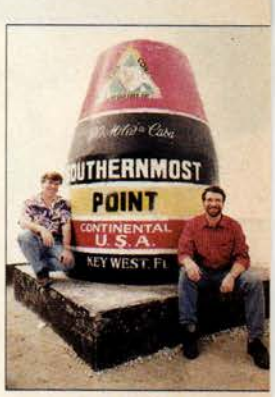


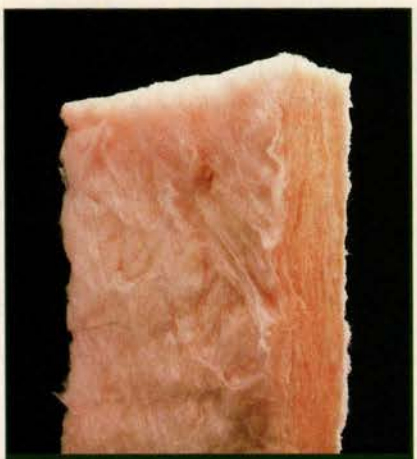
SOUTHERN CHARM, P. 58

COVER: CARRARA MARBLE AND A VICTORIAN-STYLE TUB REVIVE A BATHROOM IN A 19TH-CENTURY HOUSE. PHOTOGRAPH BY GRANT DELIN. SEE STORY, P. 38.

(Continued on page 8)

PHOTOS, CLOCKWISE FROM TOP: GRANT DELIN; ANDREW KAUFMAN; MICHAEL GRIMM; ANDREW KAUFMAN.

If the idea of installing insulation makes you think



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UP FRONT

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PHOTOS: CHAIR, DAVID PRINCE; BEAM, GRANT DEIN; LOG HOUSE, CHERYL UNGAR; FRAME, MICHAEL GRIMM.

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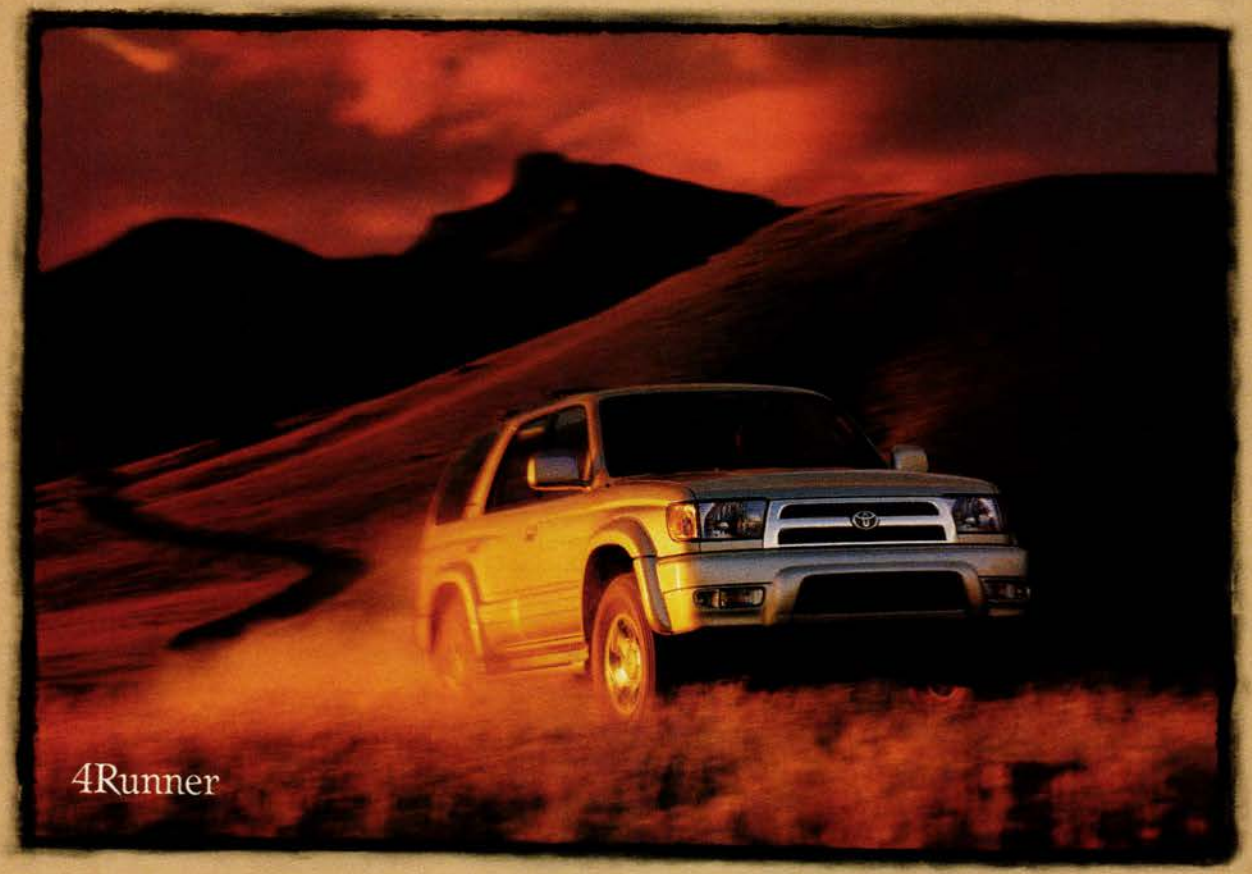

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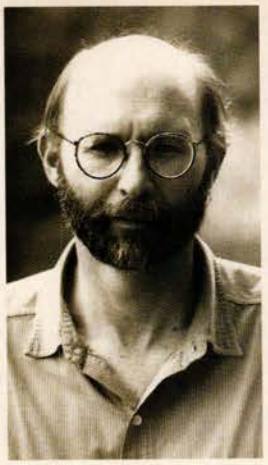

STEPHEN HARRIGAN grew up in semitropical Corpus Christi, Texas, where, he says, winter activities such as ice skating "seemed like things that take place on another planet." Before traveling to the arctic to research "Igloo" (page 94), Harrigan had seen snow only a half dozen times. After watching Jack Kabvitok, a native of Canada's Nunavut region, construct an igloo, Harrigan attempted to build his own, miniature version. "You have to have such a sure hand," he says. "The snow blocks have to be made precisely." On-site, even taking notes became complicated: "I forgot that ink freezes inside the pen at certain temperatures. I had to borrow a pencil from Jack." A contributor to *Texas Monthly* and *Audubon*, Harrigan also wrote the script for the CBS movie *Beyond the Prairie: The True Story of Laura Ingalls Wilder,* to be broadcast in early 1999.

"I like to feel like a teenager every day," says photographer **ANDREW KAUFMAN**. "I like to keep the innocence—the wide eyes—to see new things." He keeps his outlook fresh by shooting the far-flung and the esoteric: a monster-truck show in Ohio or political turmoil in Indonesia. For "The Great Cape" (page 80), he drove up and down the Eastern Seaboard of the United States, searching for interesting specimens. "Madison, Connecticut, was my favorite place," Kaufman says. "I liked the openness of its landscape, the beach-town, small-community feel." His work has appeared in *Sports Illustrated* and *Unlimited.*

Writer **JACK McCLINTOCK** has designed and built two houses and is keeping one more project simmering in his mind. "I'd like the perfect, final house for one person: myself," he says. He describes his architectural style as "single-handed idiosyncratic." Prospective hometowns include San Francisco and Seattle. "Circles of Life" (page 70) took him to California's Sonoma Valley, where he discovered craftsman Carl Jennings, a "fascinating anachronism who kept his iron-age trade alive into the computer age and now is turning that same brutish metal into graceful vases and busts." McClintock lives in Miami with his cat, Slim.

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Light Mouse-Cleaning

I once worked in an office that was invaded by field mice. We tried every gadget the pest-control company provided, including some of the ones mentioned in your article ["When There's a Mouse in the House," November 1998]. Then, at one point, when I mopped the tile floors, I added bleach to the wash water. Within a few days the mice were gone. I mentioned this to the pest-control person on his next visit, and he said, "Oh, mice don't like chlorine."

JEANNETTE DECHENNE, *Spokane, Wash.*

Beyond the Pail

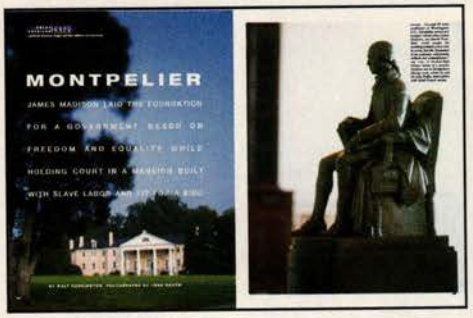
Another use for empty drywall buckets ["Life After Drywall," Extras, November 1998] is as part of a cheap, portable hand-and-face-washing system for construction sites (copied from a Grand Canyon raft expedition company's system). Buy a heavy-duty gasoline bulb siphon with a check valve, like those that come with outboard-motor tanks. Check and, if necessary, reverse hoses for length reasons. Bend a piece of ⅜-inch copper tubing into a J shape. With electrical clamps, fasten the long length of the hose to the inside bottom of the bucket. Affix the shorter hose to the straight end of the J tubing, and fasten the tubing to the exterior of the bucket on the opposite side. Be sure the arrow on the bulb points from the water toward the J bulb. Some of the hose should lie on the ground. Affix the hose to a plywood plate. Fill the bucket with Colorado River (or equal) water, and then step on the bulb until the water flows. Add soap and towels and maybe even another bucket, to catch dirty water. We use such a rig on Habitat for Humanity projects, where dirty hands at lunchtime used to be common and wash water scarce.

BUD BOOTHE, *Westfield, N.J.*

Contractor Quest

I loved the article "Finding a Good Contractor" [November 1998]. We are having our kitchen redone and have been frustrated with our search for reputable contractors. Many of your suggestions were very helpful and gave me a great resource at just the right time. Your suggestion to call the local building inspector's office, however, was a dead end for me. My local building inspector's office said they could not give out references. But thank you for all the other information. Keep up the great work!

GRANT DIXON, *Chicago*



Revisionism Run Amok?

Your grasp of the architectural significance of James Madison's estate ["Montpelier," November 1998] may be thorough, but your grasp of international history is a bit shaky. You suggest that, during his Presidency, James Madison presided over the "thumping of England in the War of 1812." In fact, England was not thumped. English soldiers, Canadians who were loyal to the crown, and more than 2,000 Iroquois aboriginal people rebuffed an invasion into sovereign English territory. Many historians consider that, at best, the war ended in a draw. For the rest of the century, Canadians had to cope with saber rattling and hot gusts of southern air blustering about the Monroe Doctrine's silly concept of manifest destiny before they finally got the international border sorted out.

MAUREEN PENDERGAST, *Winnipeg, Canada*

And Where Are They Now?

I am extremely fond of your section, in the back of every magazine, devoted to saving houses destined for destruction [Save This Old House]. The charm and beauty these houses potentially have is intriguing. Yet, after they are showcased, you never hear of them. If you could fill me in on the fate of any of these structures, it would be greatly appreciated. Possibly even an article on the houses and what's being done with them. You have a wonderful show and a publication to match.

BRIAN GUTH, *St. Louis*

Look for a Save This Old House *update—complete with "before" and "after" pictures—in a future issue.*

Tapped Out

As a subscriber, I enjoy your publication. I was pleased to see your article about frostproof spigots ["A Tap for All Seasons," September/October 1998]. I have a few concerns about your installation. Your article did not mention that there needs to be proper drainage pitch to ensure the frostproof spigot drains out all of the water; otherwise, it could freeze and burst, rendering the product useless.

NICK MANNING, NATIONAL SALES MANAGER, *Prier Products Inc., Grandview, Mo.*

Mailbox

I was looking through an old issue of *This Old House* and realized I may be able to explain the puzzling house-design abnormalities Jeanne Marie Laskas wrote about in "The Previous Owners Did *What*?" [Off the Wall, November/December 1997]. First, the "doors to nowhere": It was once common in some areas to have such doors installed, usually on the second floor, because this would classify the house as unfinished, resulting in a tax break until a "somewhere" was built. Second, as for the author's friend whose house lacked a chimney: The previous owners may have chosen this solution because removing and roofing over a chimney is much cheaper than replacing a chimney that has fallen into disrepair. It's also easier to justify when that particular fireplace has become a vent for heat rather than a regularly used source of it.

T. RAMEY, *Maggie Valley, N.C.*

punch list

definition: a list of items incorrectly done or remaining to be finished on a construction job

May 1998

- In the Directory listing for "The Poster: PVC Pipe and Fittings" (page 184), the contact information for NIBCO Inc. should have been 1516 Middlebury St., Elkhart, IN 46516; 800-343-5455; www.nibco.com.

November 1998

- In the Contributors column (page 10), the photo of Stephen M. Pollan should have been credited to Gregory Heisler.

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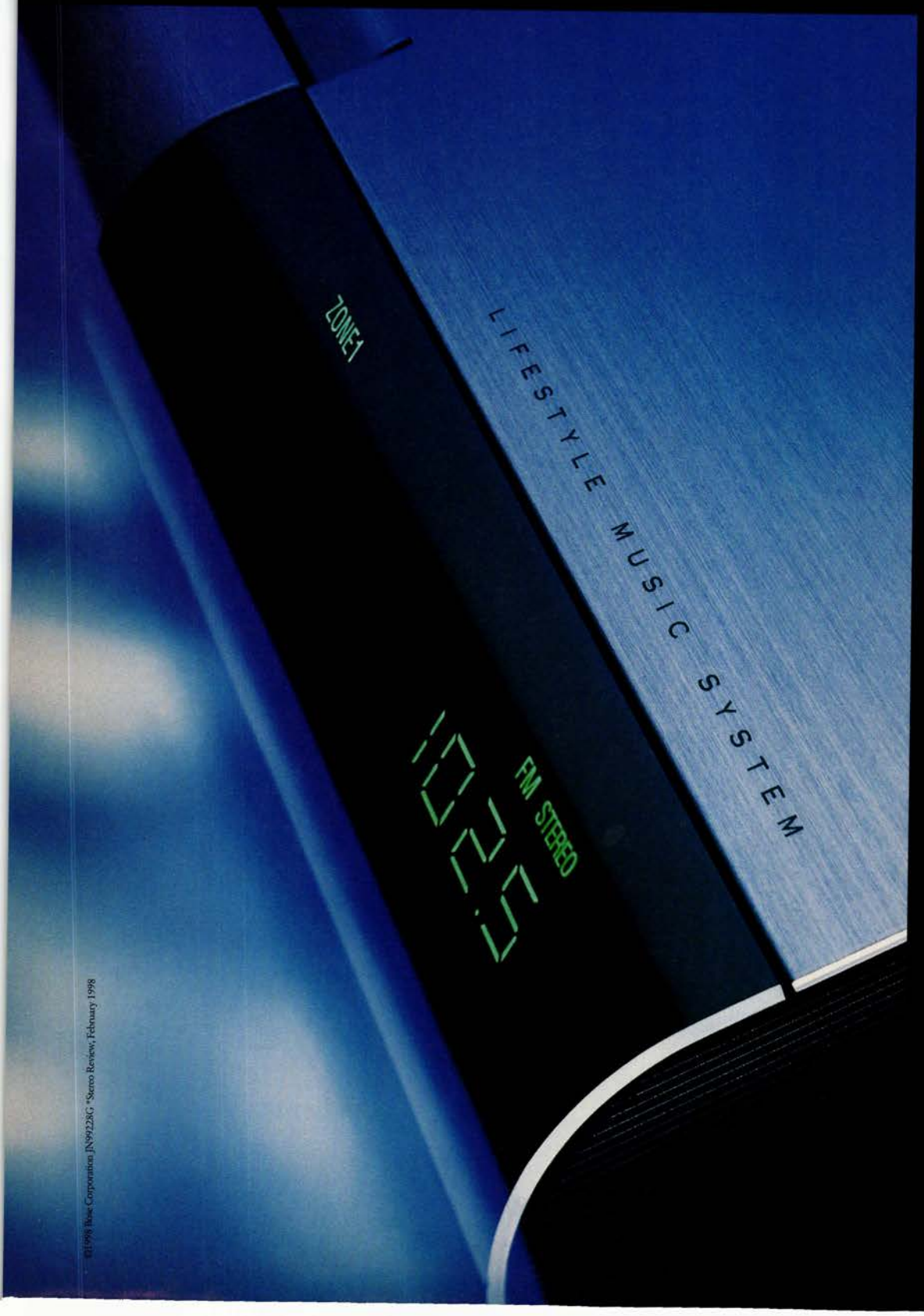

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HE SAYS

BY BROCK YATES

SHE SAYS

BY JEANNE MARIE LASKAS

WHAT A KITCHEN SHOULD BE

Let's see now: The kitchen is a place for food preparation, a cozy haunt where, amid heady aromas issuing from hot ovens, sizzling fry pans and steaming colanders, the pleasures of cooking are celebrated on a daily basis. When it comes to cooking, however, I'm reminded of an observation by the famed master of the malapropism, Samuel Goldwyn: "Gentlemen, include me out." Alas, my culinary skills are limited to making instant coffee, boiling water for pasta, cleaning and slicing vegetables and lighting the oven before dawn for various Thanksgiving and Christmas dishes prepared by my wife, Pamela. Still, the kitchen is a place where I inevitably spend many of my waking hours.

Our kitchen at Farmstead in upstate New York is a 15-by-30-foot room with a pine-beamed ceiling and a vast center island bordered

I have an ugly kitchen. I know this. As surely as I am standing here chopping onions on a circa 1950 powder-blue countertop trimmed in metal and rubber, I know this. So why do I love this kitchen? Not because of the floor. Some presumably well-intentioned remodeler covered the floor with royal blue indoor-outdoor carpeting long before I got here. And not because of the walls—tiny light-green tiles patched over, here and there, with beige wallpaper. Furthermore, it's safe to assume that my love for this kitchen has nothing to do with the wagon-wheel chandelier that people are constantly bonking their heads on because the ceiling is so low.

"Ouch! Aw! Jeez!" my husband, Alex, says many times a week. "We've got to do something about that stupid

ILLUSTRATIONS BY MARK MATCHO

by an old chopping block scavenged from a local meat market. A rare 18th-century corner cupboard holds Pamela's collection of Florentine pottery and enough cookbooks to supply a small library. An antique cherry table is the centerpiece of a breakfast area that commands a sensational view of the broad, wooded valley to the east. This warm and hospitable room is anything but tranquil, however. Pamela and I share the space with family members, friends, business associates, salespeople, passersby and anyone else willing to defy our English mastiff watchdog. This cast of thousands has transformed our cozy kitchen into a rural Grand Central Terminal.

For years, Pamela and I have engaged in a semantic dispute about what this room is really for. I refer to it as *our* kitchen, while she insists on calling it *her* kitchen. This is a reasonable disagreement, given that we employ the room for totally different purposes. She cooks there—with considerable skill and élan. To her dismay, though, I find the kitchen an ideal place for many non-cooking activities including the critical task of receiving, sorting and storing the mail. I'm addicted to magazines and subscribe to an absurd number of them. Add junk mail, bills, personal correspondence, three daily newspapers, and the result is a small forest of mashed, pulped wood that ends up on the kitchen table. Periodic cleanings only provide extra space for even larger accumulations of printed material.

I find the kitchen is also a terrific place to commune with our dogs. Guinness, the young mastiff male, and Amy, the West Highland white terrier, are marvelous animals, and I can't resist letting them in, usually when Pamela happens to be cooking. Guinness, who weighs 220 pounds, thinks it proper to lie at Pamela's feet—no matter that she may be hoisting a cauldron of roiling broth from burner to sink. She puzzles over what in my fevered brain triggers the need to permit entry to the dogs. I have no logical answer except that mealtime is an occasion for socializing, and I see no reason to leave the dogs out of the fun.

I'm not only irresponsibly gregarious by nature. Like most mildly desperate self-employed people, I live and die by the phone. Worse, so does Pamela. This requires three phone lines, and one of the main terminals is in the kitchen. The commencement of cooking in this household apparently sends out a telepathic signal to hundreds of friends and associates: "The Yateses are about to eat. Call them immediately!" I inevitably answer the phone out of dim-witted curiosity and the faint hope that Ed McMahon is on the line, offering riches. Invariably, I end up chatting with one of our friends or trying to fend off an obnoxious telemarketer just as Pamela is setting the main course on the table. I have yet to learn to let the phone ring. Indeed, I even accede to the temptation to make a few calls myself as the meal is being prepared.

Still, the kitchen at Farmstead remains a center of vitality and hope. Discount the madness, messes and confusion. Our kitchen—oops, *her* kitchen—remains a delightful component of country living, even if Pamela can only dream of what it might be like without the mail, the dogs, the crowds, the phone calls and, most of all, me. ■

light." I realize, as I throw onions into a big pot for chili, that in my lifetime I've had much, much nicer kitchens than this one. I once had a kitchen with skylights and gorgeous oak floors and a sleek island in the middle, with little halogen lights beaming down. I also had a kitchen with a cathedral ceiling and a huge old fireplace and a pantry large enough to swing a golf club in. Great kitchens, all. But I never felt for those fancy kitchens the warmth I feel for this pathetic one in desperate need of renovation.

"I'll make the brownies at halftime," my friend Nancy says. She's sitting in the family room watching the Miami Dolphins trounce the Pittsburgh Steelers. But at the same time, she's here—with me. Because the family room is part of the kitchen; it's all one large expanse separated by only a change in flooring. Mercifully, the blue carpet yields to polished hardwood floors as the kitchen turns into the family room. Nancy's daughter, Meghan, is on that floor, drawing a picture of my cat, which has sprung from the couch and is getting chased by my dog.The two of them circle my feet as I work the chili ingredients. Alex is on the phone at the kitchen table. Jack, Nancy's husband, is kneeling at the open refrigerator, organizing beer.

"I brought apple pie," says Ellen, who has walked in the back door—which opens directly into the family room. She lays her offering on the kitchen table, stepping over the phone cord, over Meghan, the dog and the cat to hand me a bottle of wine. Alex stands to give her a hello hug, knocking his head on the wagon wheel so the fixture swings crazily.

"Ouch! Aw! Jeez!"

My kitchen. This kitchen. For me, a great kitchen is only incidentally about appliances, high-tech gizmos and sleek design. The kitchen's defining characteristic is where it sits. How accessible it is, how integral it is to the people and other creatures we think of as family. A great kitchen is a place of nourishment where people gather. No matter how spiffy, a kitchen looks best when it has people in it, around it, through it.

My other kitchens, the beautiful ones, followed a different model. They were in renovated Victorian houses. When you think about it, those houses were conceived when kitchens were places for the help. And servants were not the same people who called the place home.

Although beautifully renovated and appointed, my former kitchens were separated from the main flow of the house. I can remember chopping onions on my fancy countertop, under the tiny halogen lights. I remember hearing laughter, far-away guffaws of friends down the hall, in the living room. While I stood there with my onions. Alone. I resented the onions, the kitchen, the skylights.

My current kitchen follows the farmhouse model. Farmhouse kitchens were conceived with families in mind. Places for cooking eggs just brought in from outside. For lunchtime stew with the neighbors. For homework. For a big table around which discipline is meted out, political stances taken and prayers said. Where a dog can chase a cat. And a kid can draw the cat. And a neighbor can drop by and make brownies. And where someone, to be sure, bonks his head on the wagon-wheel light. ■

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jan/feb 99 (extras)

Shovel and Shed

Suffering from cabin fever and holiday weight-gain blues? Here's some good news: You can burn 150 calories by tackling around-the-house maintenance projects—often in less than an hour. As the snow melts away, so will your waistline.

TO BURN 150 CALORIES

PROJECT	TIME
Shoveling snow	15 minutes
Pushing a powered lawn mower	29 minutes
Raking leaves	32 minutes
Gardening	30-45 minutes
Washing and waxing a car	45-60 minutes
Washing windows or floors	45-60 minutes

Greene Houses

Nothing embodies the natural aesthetic of the Arts and Crafts movement—which blossomed a century ago in response to the soullessness of mass production—like the super-bungalows built by brother architects Charles and Henry Greene in Pasadena, California. Greene & Greene houses, with their rich interior wood and leaded-glass doors, still provide the same kind of antidote in the information age, and Americans are falling in love all over again. Architecture buff Brad Pitt recently hosted a dinner to raise money for Pasadena's Gamble House, a 1908 Greene & Greene residence now open to the public. Nearby, new owners of the Blacker house, the Greenes' 1907 masterpiece, have just finished restoring it. Meanwhile, *Greene & Greene: The Passion and the Legacy* by Randell L. Makinson and *Greene & Greene Masterworks* by Bruce Smith have been published almost simultaneously. These gorgeously photographed books show the Greenes at their best. Douglas fir timbers are left to weather gently. Boulders from Pasadena's arroyo are incorporated into chimney masonry. Cedar and teak paneling gleams. "How do you do it?" Frank Lloyd Wright once asked Charles Greene. History hasn't recorded his answer, but the houses speak for themselves.

The palatial "bungalows" built by California architects Charles and Henry Greene blend the Shingle Style with Japanese temple architecture—but are still unpretentious and welcoming. At their Blacker house, a massive porte cochere, above, draws visitors into the teak and fir entry hall, top.

ILLUSTRATION: MARTIN MAYO. PHOTOS: ALEX VERTIKOFF, *GREENE & GREENE MASTERWORKS*, ARCHETYPE PRESS, CHRONICLE BOOKS, 1998; MOLDING AND TOOL, MICHAEL GRIMM.

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Best of Both Worlds

Tight angled cuts in trim molding are hallmarks of fine carpentry but, until now, trim carpenters have had only two kinds of tools with which to make them: slow handsaws trapped in miter boxes and heavy, expensive power-miter saws with intimidating, whirling blades. Enter a third option: a 3 ½-pound power tool that marries the stiff, flat blade of a gentleman's backsaw to a 3.5-amp motor for lightning-fast back-and-forth power. Snap in the blade, and secure the tool to its cast aluminum miter table: The saw is ready to make precise vertical cuts—both left and right—between 90 and 46 degrees. Cutting at 2,000 to 2,800 strokes per minute, the saw leaves a smooth surface in trim up to 2 ¾ inches thick and 3 ⅝ inches high. The blades can cut wood or plastic, but keep them away from plaster or drywall; the dust corrupts the saw's internal workings. As a bonus, this genteel cousin to a reciprocating saw is useful for tricky floor work. Freed from the miter table and fitted with an offset blade, the saw turns into a handheld tool for making tight-to-the-corner flush cuts.

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*Measurement based on widest distance between doors for half-ton pickups. †Leather on seating surfaces only. **Versus 1998 Chevy C/K. ††Dependability based on longevity: 1981-1997 full-line light-duty

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extras

CALENDAR

NORM ABRAM

- January 16—National Association of Home Builders International Builders' Show, Dallas Convention Center, Dallas, Texas; 800-368-5242; 800-284-5306 for details faxed on demand; www.BuildersShow.com.

TOM SILVA

- January 16—National Association of Home Builders International Builders' Show; details above.

STEVE THOMAS

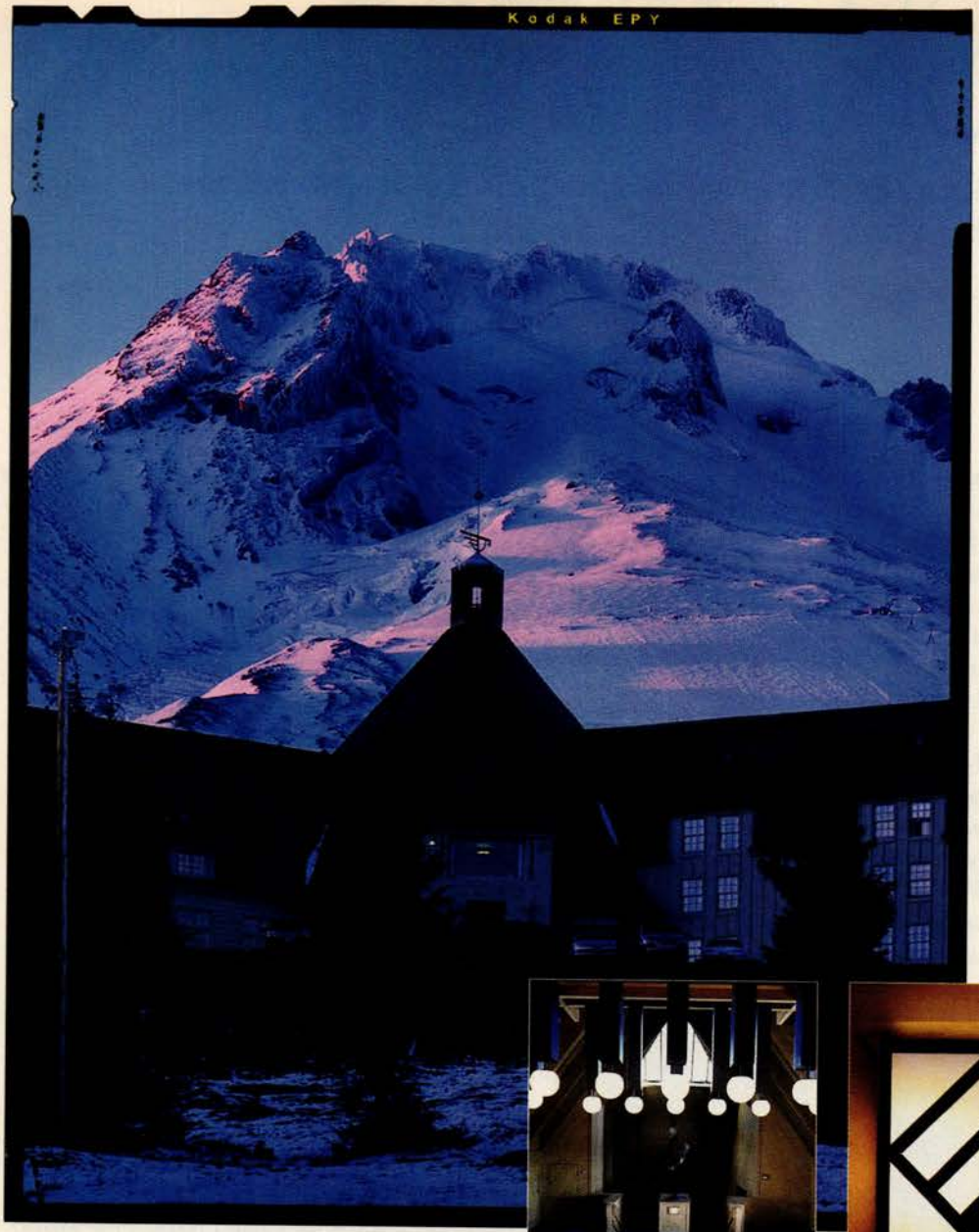
- January 15 to 17—National Association of Home Builders International Builders' Show; details above.
- February 5—Northeastern Retail Lumbermen's Association Show, World Trade Center, Boston, Massachusetts; 518-286-1010.
- February 13 to 14—Orchard Supply Hardware How-to Fair, San Mateo Expo Center, San Mateo, California; 408-365-2421.
- February 19 to 20—Akron/Canton Home and Flower Show, John S. Knight Center; Akron, Ohio; 800-865-8859.

RICHARD TRETHEWEY

- February 5 to 6—Spring Home & Garden Show, Novi Expo Center, Novi, Michigan; 248-737-4478.

Hook It

When an extension cord becomes a pest, wrapping around legs and ladders, it's time to give it the hook. Weave the cord through this inexpensive, low-tech plastic J, and hang it from your belt—the cord stays obediently behind and doesn't disconnect. Need more lead to reach the highest screw? Pull gently for additional slack.



At Timberline Lodge, above, disco-era chandeliers, near right, are getting mothballed as fixtures such as a wrought-iron sconce, far right, are going up again.

Lightening Up

Sitting 6,000 feet up Oregon's Mount Hood, Timberline Lodge is a legacy of the Works Progress Administration era, when hundreds of craftsmen and artisans created the massive wrought-iron fixtures and intricate wood carvings that grace the hand-hewn timber structure. "But beginning in the '50s, some people thought upgrading a building meant replacing the old with the contemporary," says Timberline curator Linny Adamson. "Luckily, many of the old artifacts were stored in the attic, so we've been pulling them out ever since." Now the 71-room lodge is putting its multi-globed 1970s lights in the attic and installing handmade fixtures more sympathetic to the building's "rustic-deco" roots. The lights will also be more efficient: Compact fluorescents will replace incandescent bulbs, preserving the lodge's softly lit ambience while using 40 to 50 percent less energy and lasting about 9,000 hours longer. The transformation will include historical replicas such as a hexagonal iron-and-white-glass chandelier in the conference wing and 54 square-shaped iron-banded ceiling fixtures in the guest-room hallways. The latter fixtures had been removed after repeated banging by flailing ski tips—now outlawed inside, along with any disco balls.

Point and Measure

Figuring the distance between A and B keeps getting easier—and more fun. New laser meters eliminate the need for a notepad, a ladder, a calculator and even a helper to hold the end of a tape. Stand up to 300 feet from a target (such as a wall or ceiling), aim a red dot and press a button. The tool gives a digital readout of the exact measurement, plus or minus 0.2 inch. The meter also stores dimensions and calculates square footage and cubic volume, making the tool "great for anyone who has to estimate demolition, landscaping, fire-damage-repair, carpeting or HVAC-system jobs," says *This Old House* contractor Tom Silva, who tried out the device at the Watertown project. "Outdoors, however, locating the red dot in the sun can be a bit tricky." At $900, the devices are priced for professionals but worth it for folks who feel more confident doing estimates when The Force is with them.

Matchmakers

Whether from the phone book or by word of mouth, picking a contractor requires a leap of faith—which can sometimes feel more like a free fall. Now, a Web-based service provides a parachute of sorts by screening contractors before referring them to home owners. Click on www.improvenet.com, and detail a project's budget, time frame and location. After contacting local contractors, Improve Net E-mails you a free list of professional recommendations for those interested, along with their legal history, financial status, liability insurance and licensing credentials. Contractors pay to be included but are recommended only if they meet Improve Net's criteria. If you're considering businesses that aren't among the 600,000 subscribers, Improve Net will check their legal and credit backgrounds for $29 and review contracts for $35. Improve Net isn't a substitute for commonsense homework or legal counsel, but it does tell you more about a prospective contractor than either an advertisement or someone's brother-in-law can.

PHOTOS: CORD HOOK AND LASER RULER, MICHAEL GRIMM; TIMBERLINE LODGE, SUSAN SEUBERT.

MANUFACTURERS · MATERIALS · PRODUCTS · RESOURCES – PAGE 103

ASK **NORM**

"Be wary of tongue-and-groove flooring for a porch or deck. The grooves are moisture traps."

PORCH FLOORING

My wife and I are building a new home, and we're having trouble finding flooring for the front porch. The usual material here is painted tongue-and-groove fir, which I've heard often fails almost as soon as it's laid down due to moisture damage. Local retailers tell me they can't get the square-edged fir I've seen you use on various projects. How do I find this flooring and install it for maximum durability?

ROBERT L. HARMON, *LINCOLN, ILL.*

You're wise to be wary of tongue-and-groove flooring for a porch or deck. The grooves are moisture traps. But I can't imagine why you can't find square-edged fir; it's one of the most common materials around. If your local home centers don't stock it, try a lumberyard. When you do find the lumber you need, make sure you space the planks so they can breathe; the gap should be approximately the diameter of a 2 1/2-inch nail. Using painted planks is a problem. For one thing, paint never sticks well to fir. Also, since you're dealing with a horizontal surface, any moisture will sit right on top of the planks and inevitably cause paint to fail. Instead, apply clear wood sealer in the fall and spring for the first couple of years, then annually in the fall. If you use a stain, the results could be blotchy. Fir stains unevenly because it's hard in some spots and soft in others.

HIDDEN TREASURE

My husband and I are in the process of moving to an 1836 farmhouse. After we bought the farmhouse, we discovered the original house—a log cabin—had been hidden deep within extensive later construction. Can you give us some advice on how we should go about restoring the log cabin, much of which was covered with hideous paneling? We want to expose the massive logs and show them off.

SUE TURLEY, *EVANSVILLE, IND.*

Pray for the best, but prepare for the worst as you open up the walls to see what's underneath. If you're lucky, you'll find the paneling was simply tacked to the walls, leaving nothing but lots of nail holes to patch. On the other hand, you might uncover something like the extensive damage I found recently when I helped the Forest Service renovate a log cabin in Montana. The cabin was 30 miles from the closest road but, apparently during the Paneling Plague of the 1950s and 1960s, nothing and no one was safe. Somebody had actually hacked notches into all the logs to make room for studs to put up paneling. All those slots—and there were many of them—had to be repaired with filler blocks. Known as dutchmen, these blocks have to be cut and shaped to fit each log, then stained to match.

STYLISTIC MUDDLE

We've bought a 1970s split-level town house and want to give it a more Victorian feel inside and out. Is it foolish to consider making the house resemble a style from another period? Do you think such changes will increase the property value? I've heard that people who renovate

PHOTO: KELLER & KELLER.

seldom get their money back when they sell. Can you recommend any surefire upgrades that will increase the value of a house when it goes on the block?

DAVE MARCOPUL, *BENSALEM, PENN.*

Short of a total transformation, such as we did on Brian and Jan Igoe's house in Lexington, Massachusetts, a few seasons back, restyling a house from one era to another is like using paint and muslin to make two kids look like a horse for the school play: It requires an indulgent audience. The kind of restyling you're considering probably won't be convincing and could even devalue your house, attracting only bargain hunters. When it comes time to sell, you'll get the most value from simple exterior upgrades that boost a house's curb appeal. Start with the basics. Make sure you clean the house as well as paint and touch up where necessary. And keep the lawn cut and the shrubs trimmed.

WET FIREPLACE

In the basement of my 1857 house, moisture is damaging an inlaid-stone fireplace my father built by hand about 45 years ago. I'm baffled because I'm confident I've done everything possible to keep the basement dry. That includes installing new gutters, making sure the ground is graded properly, patching and sealing cracks and running a dehumidifier on humid summer days. The basement can be damp at times, but it's never wet. Still, the mortar in the fireplace and on the walls is starting to crumble. Outside, the chimney is faring a bit better, but I am concerned about it also. Is there some kind of modern product, maybe a spray-on or brush-on solution, that can stabilize the old mortar?

ALLAN COTTER, *PRESCOTT, WIS.*

You may have moisture coming from the chimney, the one point of entry you haven't tended to. If so, the solution may be as simple as installing a chimney cap. Or the flashing may be failing. But I suspect moisture may not be your problem at all. It's possible that the mortar that is crumbling may not have been mixed properly to begin with. You'll probably have to chip all the loose mortar out of the joints and repoint the fireplace and chimney. As for a spray-on or brush-on solution, that's pretty much the Holy Grail of home repair. Lots of people are looking for it, and when one of them finds it, I hope he or she will tell me.

INSULATION PANELS

I'm having a new house built and want to make sure it's insulated properly. Temperatures here range from 30 degrees below zero up to 100 degrees (Fahrenheit), and we expect to run the heating-and-air-conditioning unit 10 months of the year. Plus, we have high humidity. My builder wants to install double-foil-faced foam insulation panels behind hardboard siding. But I'm concerned that the foil will act like a vapor barrier, causing sweating under the siding and subsequent rot. What do you suggest?

DARLENE FORHART, *KANSAS CITY, MO.*

I don't like double-foil-faced panels on the outside of a house, period, because they can cause moisture to condense inside and rot the frame. I'd rather see the panels put behind the drywall. That's what I did on my own house. Putting foil-faced insulation on the heated side of the wall creates a vapor barrier that should prevent most moisture from penetrating to the frame. All of the joints should be reinforced with aluminum tape so there is no break in the moisture seal, and the builder will have to use longer finish nails and drywall screws, bigger extension jambs on the windows and extendable electrical boxes.

"You don't want lumber in direct sunlight for long periods of time, because it will cook and turn to spaghetti."

GUTTER MYSTERY

I have a late-19th-century Queen Anne house. Photos taken before 1917 show no gutters hanging from the soffit. Instead, there is some sort of trough built onto the roof about a foot from the edge. At first I thought the trough might be built into the roof, but that would require notches in the rafters. I've already checked in the attic, and the rafters I can see show no sign of having been notched, patched or replaced. This, therefore, was a surface installation and, since I'm replacing part of the old slate roof anyway, I'd like to do a faithful restoration and bring back the trough. Any advice?

ROBIN C. HOVIS, *MILLERSBURG, OHIO*

The trough design could be a local variation on traditional gutters. If so, your public library or historical society might have more information about it. One thing to keep in mind is that this design might have disappeared because it didn't work well. In a location prone to icing, for example, it would probably cause trouble. On the other hand, maybe this trough gutter was just too expensive for ordinary folks, as trying to replicate it certainly would be today.

LUMBER SEASONING

I have some walnut lumber I'm planning to air-dry for a year before using it to make furniture. I stacked the boards in pairs on 1-inch spacers, and now I see that some of the wood has become moldy. How do I get rid of the mold?

WES CARNEY, *LAWRENCEBURG, KY.*

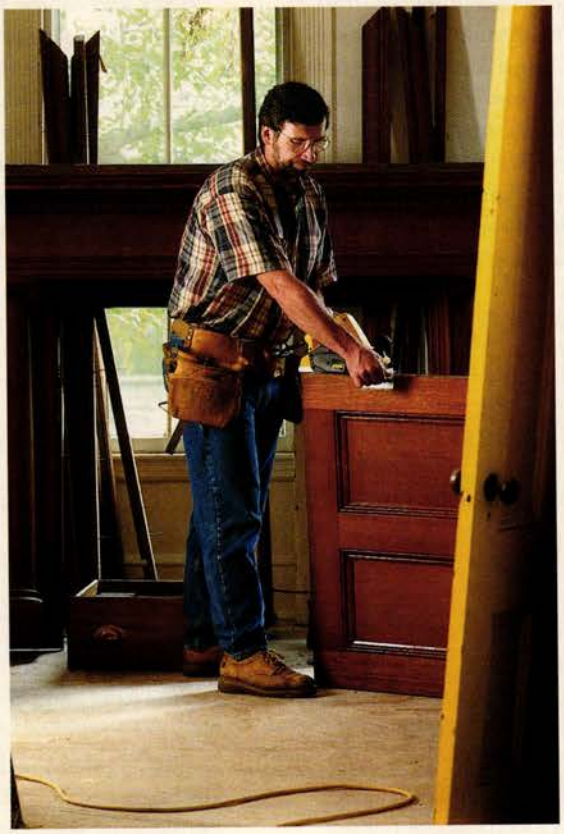
If you're seeing mold, the wood isn't air-drying. That means you're storing the wood in the wrong place or you've stacked it improperly. You shouldn't keep the stack on the shady side of the house or cover it so tightly that you don't get any air flow. On the other hand, you don't want lumber in direct sunlight for long periods of time, because it will cook and

turn into spaghetti. To properly air-dry, lumber should be stacked well off the ground as well as stickered (separated with spacers). Plus, there should be plenty of room on all sides for good air circulation. But how much mold is there? If you see only a little, that's nothing to worry about as long as the boards are all going to be surfaced later.

SIDING PLANER

My 50-year-old wooden garage is structurally sound, but the paint on the clapboard siding needs to be stripped. I think it might be better to remove the siding and then plane each board smooth before replacing and repainting. Got any tips?

BILL PARILLA, *PARK RIDGE, ILL.*



Which do you have more of: time or money? Taking down clapboards requires a lot of time and patience. There's almost always a lot of splitting at the nail holes. And you risk even more breakage when you strip the boards and put them up again. In the end, you might find you would've been better off simply replacing all of the siding. You can also strip the clapboards without removing them. Special siding planers are available with vacuum attachments to protect you and your neighbors from lead-paint dust. They're hardly fast, though. The manufacturers claim siding planers can clean 1 square foot every 15 seconds, but that would be on a perfect surface. In the real world, the work doesn't go nearly so fast because planers don't cope well with surface irregularities in the wood. They tend to eat their way through bumps and leave bits of paint behind in the hollows. When you're finished planing, you'll still have a lot of hand-scraping to do.

POINT-OF-USE HEATER

I'd like to replace my gas-fired 40-gallon water heater with a tankless point-of-use heater, which is supposed to supply unlimited hot water. Can you shed light on other pros and cons, such as energy efficiency, ease of installation and durability. How large a unit would a family of four require?

MARK A. SCHEPSIS, *DE WITT, N.Y.*

If your water heater is old and the tank is corroded, you may want to replace it with a modern, energy-efficient unit. But otherwise, a 40-gallon water heater should be sufficient to meet the needs of a family of four. Point-of-use heaters are great for situations where there is a limited demand for hot water. This Old House *executive producer Russ Morash and his wife, Marian, have one at their summer house on Nantucket, Massachusetts. You get continuous water for one person taking a shower, but if you have more than one shower going at once and try to run the dishwasher at the same time, the supply of hot water can slow to a trickle. At times of peak demand, you'll likely need more than one point-of-use heater if you switch from a more conventional system.*

LEAKY SHED

When we built a toolshed, we covered it with corrugated roofing because we'd used that material before successfully. This time, however, we're getting a lot of leakage. We've tried sealing the roofing with aluminum-fiber stickum, but no luck. We don't know what to do. Please help us.

MRS. DUANE BURGESS, *RIO DELL, CALIF.*

Ninety-nine percent of the time, leaks in new doors, skylights and roofs occur not because of material failures but because the installation wasn't done right in the first place. That's seldom the kind of error you can fix with tubes of goo. On the other hand, the leakage problems you're experiencing could be El Niño at work. A lot of people in my area have discovered leaks they never knew they had, because suddenly it's been raining inches at a time. In either case, you may have to start over in order to get a watertight roof.

SHIM SOLUTION

Can you recommend a simple, no-nonsense way to set door and window jambs? I'm looking for something that eliminates the usual—and endless—need for shimming.

DAVID A. DESCHAMP, *GRAND JUNCTION, COLO.*

Yes, there is an easy and effective solution: a jamb-adjustment screw. It consists of a long central screw that fastens to the frame. The screw rotates within a short threaded sleeve that connects to the jamb. Once the device is fully seated, the central screw can be backed out, pushing the jamb into position. Jamb-adjustment screws are a fairly recent innovation, and they are still sold primarily at lumberyards and specialty hardware stores rather than home centers.

Send questions to Ask Norm, *This Old House* magazine, 1185 Avenue of the Americas, 27th floor, New York, NY 10036.
Include a complete address and daytime phone number. Letters may be edited for clarity and brevity.

PHOTO: PASCAL BLANCON

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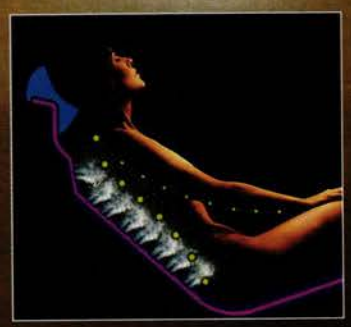

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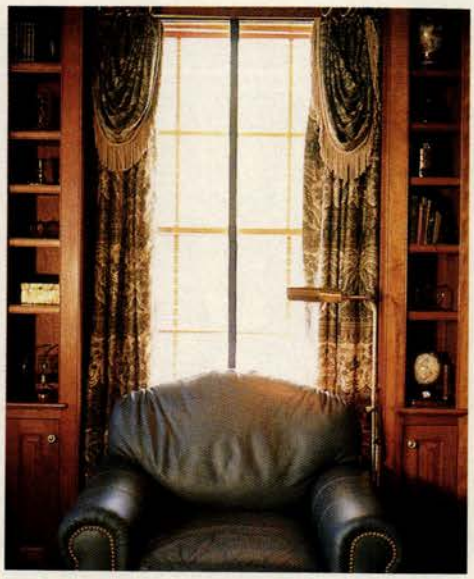
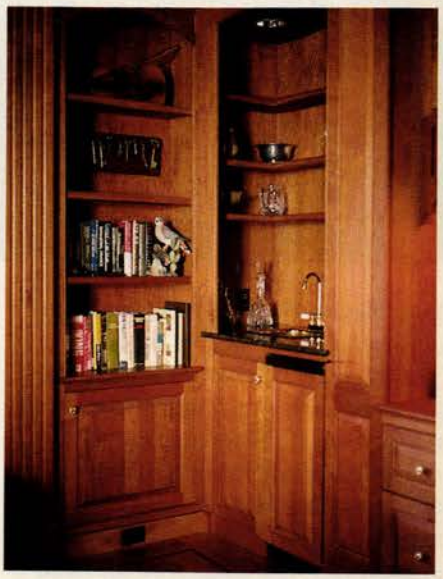
BY BRAD LEMLEY

CHERRY

Norm's Favorite Wood



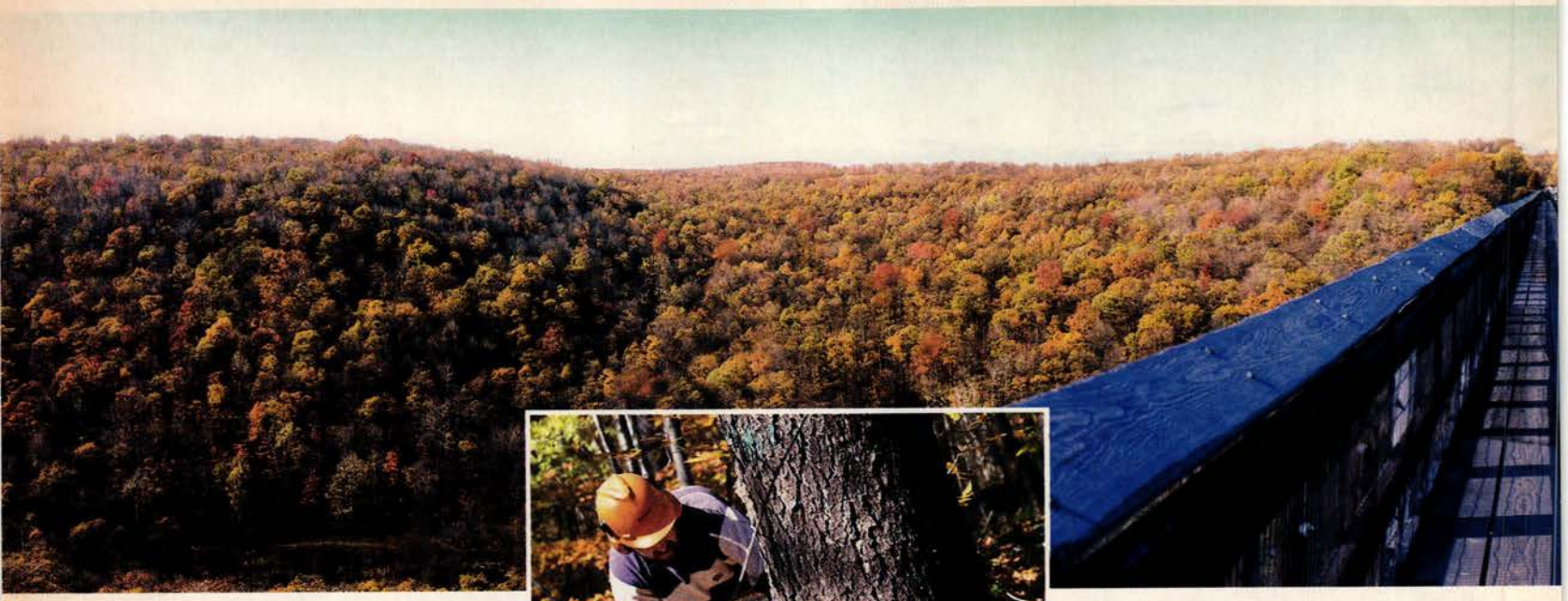


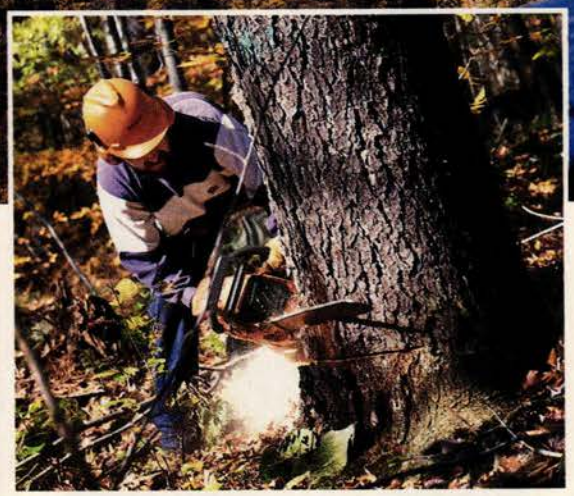
Cabinetmaker Ben Tamsky sawed, routed and planed his way through nearly 500 board feet of solid cherry and cherry plywood to create the intricate fireplace surround, raised panels and fluted moldings for this cozy library in Darien, Connecticut.

Strolling through the trendsetting International Furniture Fair in Milan, Italy, three years ago, Thomas Moser was amazed. President of the Maine-based furniture company that bears his name, Moser had expected to see tables, chairs and bureaus fashioned from traditional European hardwoods such as oak and maple. Instead, he got the uncanny sense he was visiting one of his own showrooms, which are filled with exquisitely crafted cherry pieces. "At least a third of the furniture there was American black cherry," he says. "Ten years ago, Europeans had no idea that this wood existed. Now they're buying it up like mad."

Hot as it has become in Europe, cherry is even more popular here. Last year, more than 197 million board feet of cherry were dragged out of the forest—enough to plank a two-lane road from Houston to New York City—and then sawed, dried, planed and assembled into furniture, cabinets, doors, flooring and trim, almost anything that can be made of wood. "Now, nobody wants oak," says *This Old House* contractor Tom Silva. "We're putting cherry everywhere." In just four years, the retail price for a board foot of kiln-dried cherry has doubled, from $3 in March 1994 to $6 in May 1998. (A select grade of red oak, by comparison, runs about $3 a board foot.) But high prices have done little to dent the demand. "It's amazing how it's taken off," says Gene Parker, editor of the news-

PHOTOGRAPHS BY GRANT DELIN





In the dense forests of Pennsylvania's Allegheny Plateau, top, one out of every five timber-sized trees is a cherry. As logger Ken Spaich of Kane Hardwoods takes down a rough-barked 90-year-old cherry, inset, he cuts close to the ground in order to get every inch of the valuable wood.

letter *Hardwood Market Report*. "People are just jumping onto this species."

A big part of cherry's appeal is its authentic character: It needs no stain or thick, plastic finish to bring out the rich, nearly translucent luster. "The other northern hardwoods—beech, ash, maple, birch—are fairly pale in color and not very interesting without stain," says Moser. "Cherry, black walnut and butternut are the only domestic hardwoods that feature intrinsic color to any degree. Butternut is rare—and too soft in any case. And walnut is seen as too dark, formal and masculine."

Cherry's deep auburn hue develops as the wood reacts to ultraviolet radiation and oxygen. Like a bather on a beach, a freshly cut board of cherry heartwood will change from light pink to tan after a single day in the sun. (The sapwood, which woodworkers do their best to trim off, stays a bland white.) After just a few weeks, the wood develops a patina that other hardwoods take decades to acquire. The result: instant heirlooms.

Cherry's sensitivity to sunlight also means that any piece near a window—say, a wainscot panel—will darken faster than a piece out of the sun's rays. Even so, wood consultant Jon Arno says, "In a decade, ambient light will even it out." An ultraviolet-inhibiting varnish slows the darkening, but Arno doesn't understand why anyone would want that: "To me, the patina is the appeal." For cherry purists like Arno and Moser, using stains and other chemical concoctions to try to shortcut the darkening process is tantamount to defacing a Rembrandt. "Cherry's patina is impossible to fake," Arno says.

Why Norm Chooses Cherry

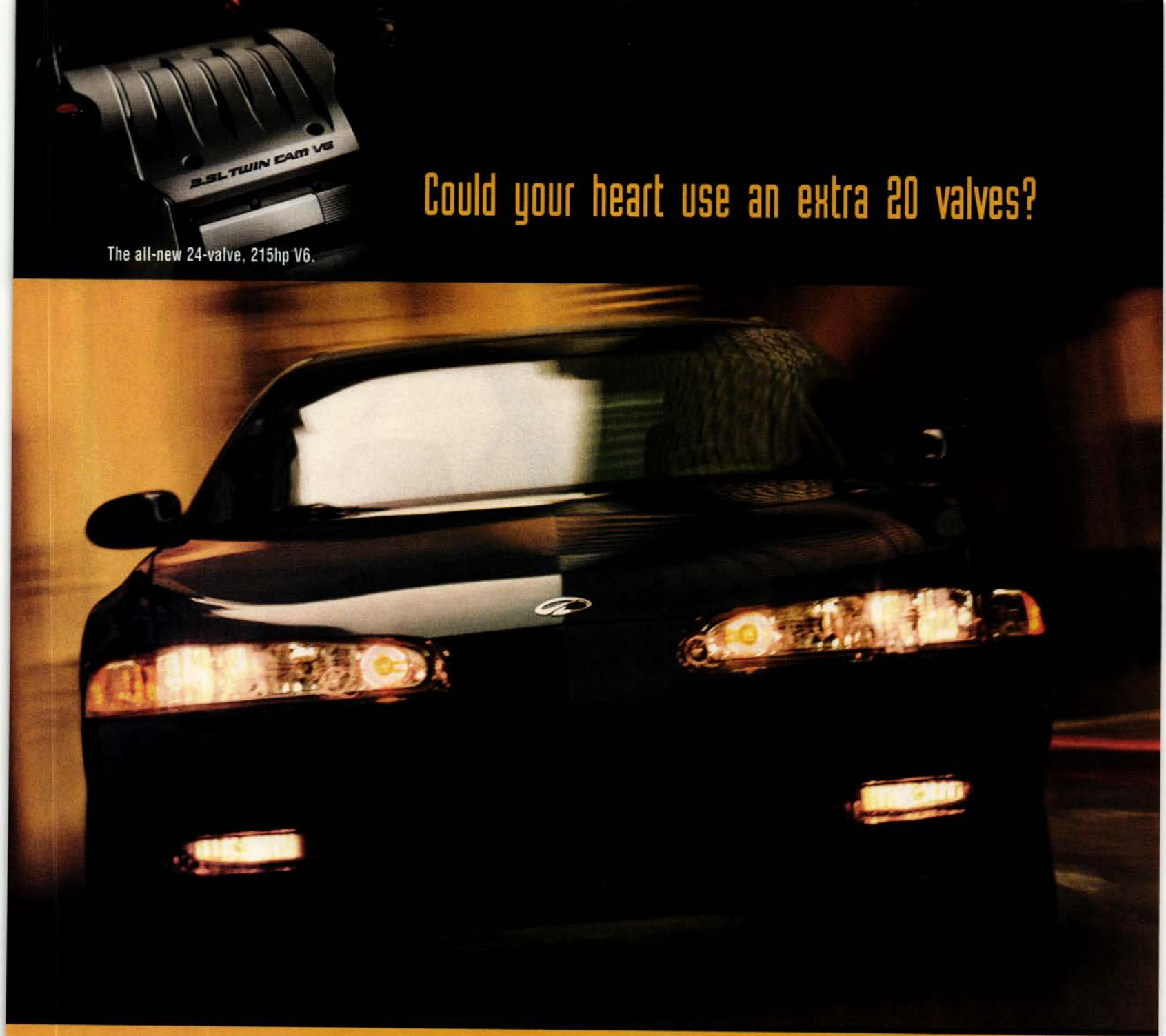
Cherry is T.O.H. *master carpenter Norm Abram's favorite hardwood. "It planes nicely. The piece sands very evenly and machines pretty well. But you have to use sharp tools and keep the stock—or tool—moving, or it will burn." Because the wood is only slightly harder than Douglas fir, Norm cautions against overusing cherry on floors: "It dings easily. I'd save it for a special place that's not going to get heavy traffic." A high concentration of prussic acid helps cherry resist rot, but few people choose to put this expensive wood outdoors. Norm finishes his cherry pieces with Danish oil. "To keep the piece looking great, just reapply the oil about once a year."*

Black cherry (*Prunus serotina*) is a member of the rose family and belongs to a genus that includes some 400 species of fruiting trees—almond, apricot, peach, plum and the agricultural cherries such as Bing and Royal Ann. Of the entire Rosacaea family, only black cherry grows large enough to make usable boards. Mature trees reach 70 feet high with trunk diameters of about 2 feet. The largest, a towering 93-footer in Allegan County, Michigan, has a trunk that measures 5 feet 10 inches across and 18½ feet in circumference. Growing in thickets scattered throughout the eastern United States from the Canadian border to the Mexican highlands, black cherry is known by at least 14 different common names including cabinet cherry, chisos wild cherry, Edwards Plateau cherry and gila chokecherry. But in English-speaking woodshops and furniture stores, the wood is most often known simply as cherry.

Colonial craftsmen prized cherry, ranking it behind only the legendary and now virtually extinct West Indian mahogany (*Swietenia mahagoni*). Once dried, cherry is even more stable than black walnut. Shaker woodworkers, with their reverence for unadorned grace, particularly coveted cherry. As did Daniel Boone. In a 1948 classic, *A Natural History of Trees,* author Donald Culross Peattie relates that "Boone made himself several cherry caskets, and used occasionally to sleep in them, in his old age, but gave up all but his last to needy corpses."

By the 1930s, however, "We had depleted our supplies of reasonable-quality cherry," says Richard Jagels, a forest biologist at the University of Maine. Coupled with the rise of

PHOTOS: MICHAEL GRIMM.



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Conserving Cherry

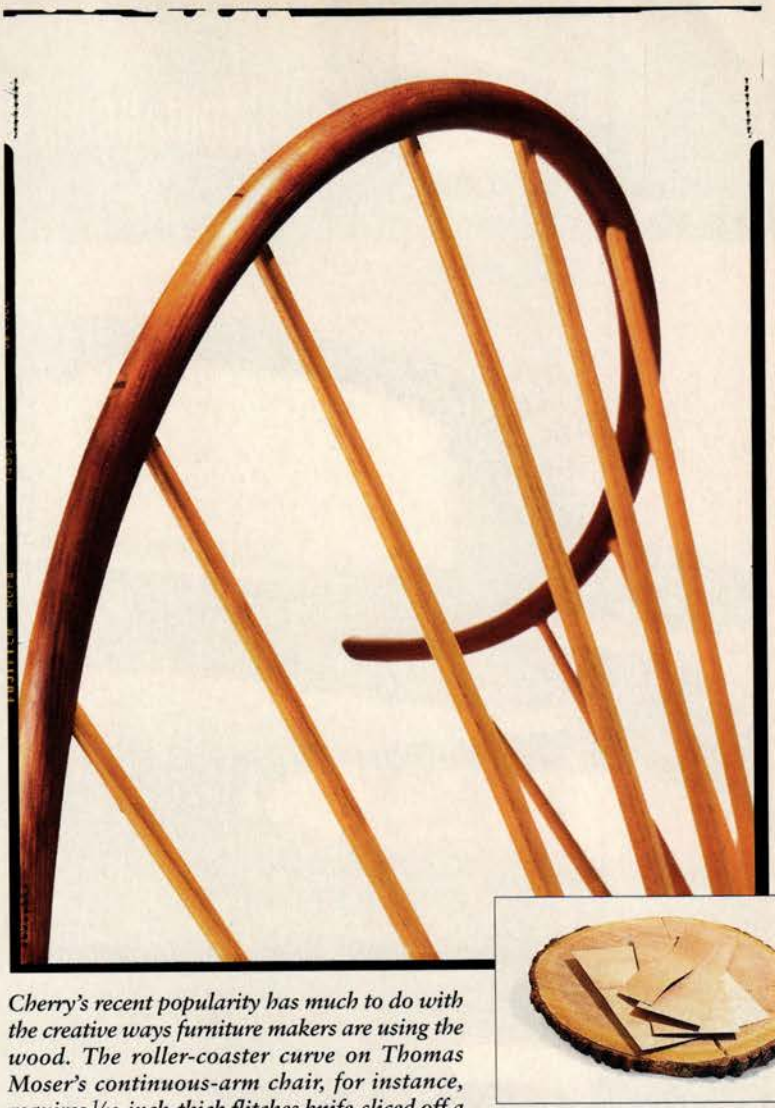
Furniture maker Thomas Moser worries that cherry's newfound popularity threatens the stock of large, 70-to-120-year-old logs, above, that his company requires. Forest biologist Richard Jagels shares that concern, saying a slow erosion of genetic vigor is a real threat. "If you keep removing only the best trees, then removing the best of what grows back, a species' genetic integrity can be lost forever," he says. Moser insists that all of the premium-grade cherry his company buys must come from sawmills that process certified wood. (For wood to be certified, an independent auditor verifies that the trees are harvested sustainably, without damage to their genetic quality or the ecosystem.) He concedes that not all the cherry he uses is certified, because those same mills also get trees from uncertified sources. Nevertheless, he says, "We strongly support certification. We have to protect this wood, or it will go away."

imported hardwoods in the early part of this century, cherry fell into semi-obscurity. In 1952, the book *Timbers of the World* identified cherry as "formerly prized for cabinetwork and fine furniture in the United States, but its principal use now is for making blocks for electrotypes."

Some 20 years ago, when Moser began fashioning furniture from the forgotten wood, it was a bold stroke, but he felt certain the public would respond if he emphasized cherry's inherent charms. He took design cues from Shaker minimalism and based his finishing procedure on Scandinavian techniques—three coats of hot, boiled linseed oil and either beeswax or carnauba wax over a surface sanded mirror-smooth with 60-micron paper. "This kind of finish never hardens. It's not a membrane," Moser says. "It just releases the natural beauty of the wood."

The cherry that Moser and many other woodworkers lust for comes primarily from the big trees growing in a 10,000-square-mile patch of the Allegheny Plateau in northwestern Pennsylvania, near where drillers sank the nation's first oil wells, in the 1860s. The oil boom sparked a logging frenzy, and virtually every tree in the region was sheared off to make charcoal to refine petroleum. Cherry rapidly colonizes open, newly cleared lands, thanks to the birds, raccoons and other animals that eat its small fruit, and cherry seedlings sprang up and flourished all over the plateau's sunny, denuded hillsides. Aided by a just-right mix of minerals, rain and temperature and a long period of neglect, many 19th-century saplings have matured into soaring, thick-trunked trees that yield what Moser calls "perfect logs," at least 16 inches in diameter with wide swaths of pure reddish heartwood. "Move north, through New York State, and you get green and brown hues. Go south into West Virginia, and you're contending with black pitch pockets."

At his Maine workshop—redolent of the lemon-camphor tang of freshly cut cherry—Moser emphasizes exacting craftsmanship, but he knows that the enduring appeal of his cherry furniture transcends tight dovetails. "At the end of the day, the great hidden truth of my business is that people admire our work so much, but they're really admiring the wood itself," he says. "The credit isn't ours. It goes to the material." ■



Cherry's recent popularity has much to do with the creative ways furniture makers are using the wood. The roller-coaster curve on Thomas Moser's continuous-arm chair, for instance, requires 1/10-inch-thick flitches knife-sliced off a cherry veneer log, inset. Moser's crew glues them together, then tortures them into shape on a 2,000-pounds-per-square-inch jig. After 1 1/2 hours of rasping and sanding, the arm is virtually indistinguishable from a piece of solid cherry.

Norm and the Cherry Table

"Freshly planed and sanded cherry is very light-sensitive. Once, I sanded a cherry tabletop absolutely smooth and left a cardboard sign on it that said, 'Do not place anything on this tabletop.' When I came back a week later, the rest of the table had tanned, except for the spot under my sign. To even out the color, I had no choice but to go back and re-sand the entire top."

PHOTOS: LOGS, MICHAEL GRIMM; CHAIR AND VENEER LOG, DAVID PRINCE

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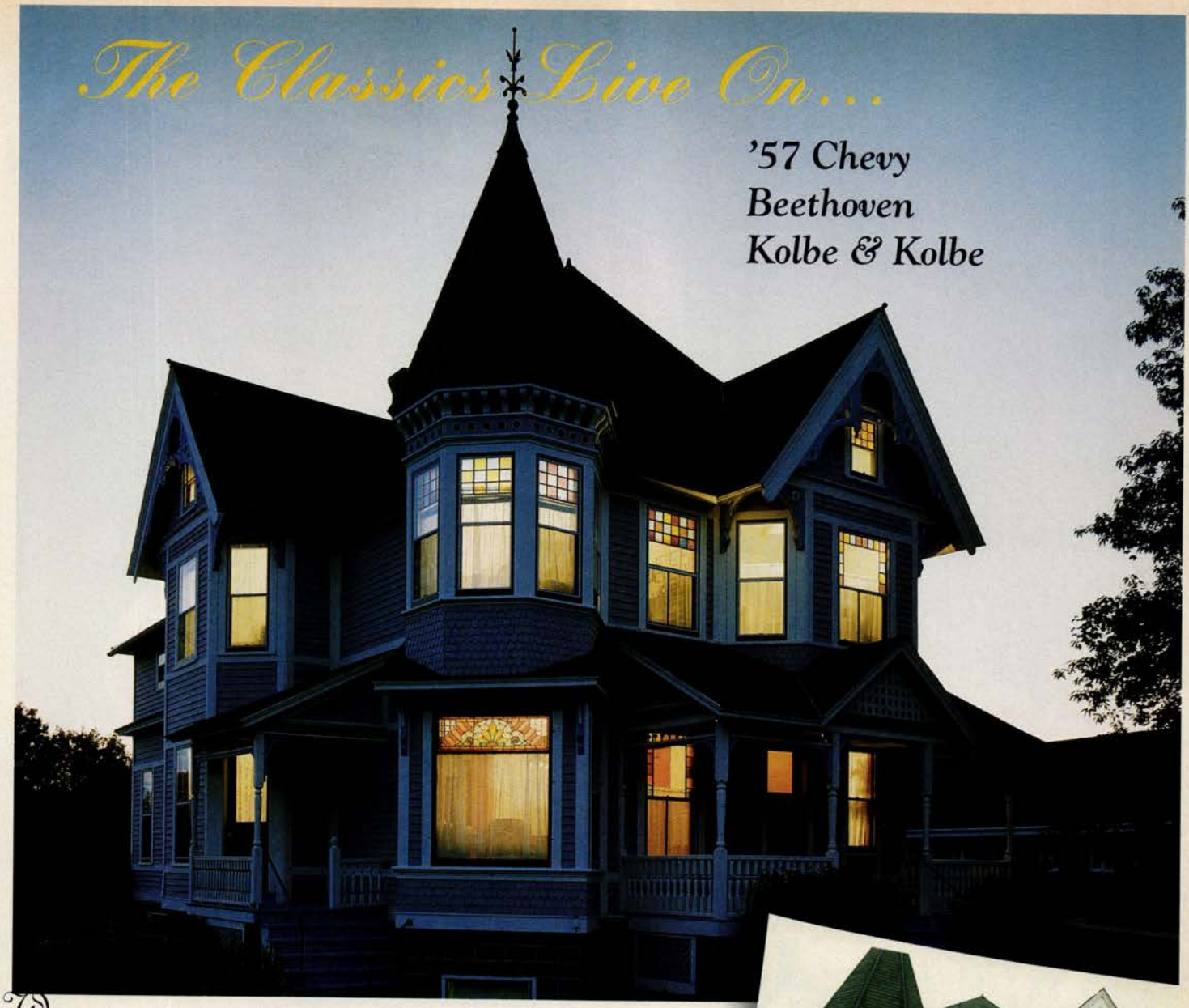

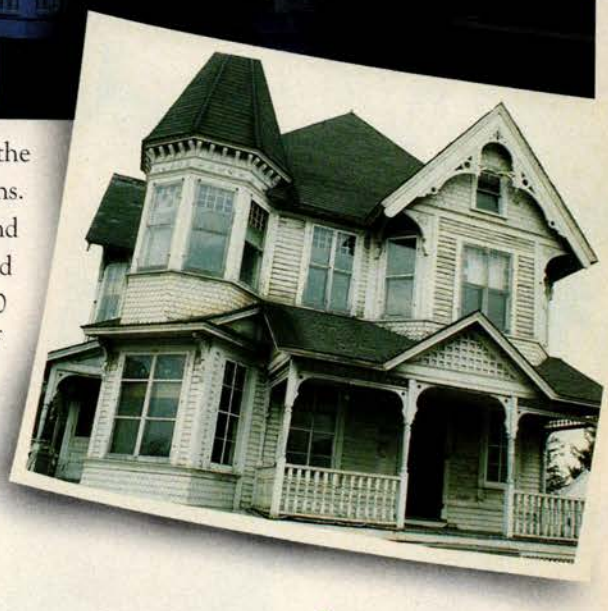

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BY CURTIS RIST

COFFERED CEILINGS

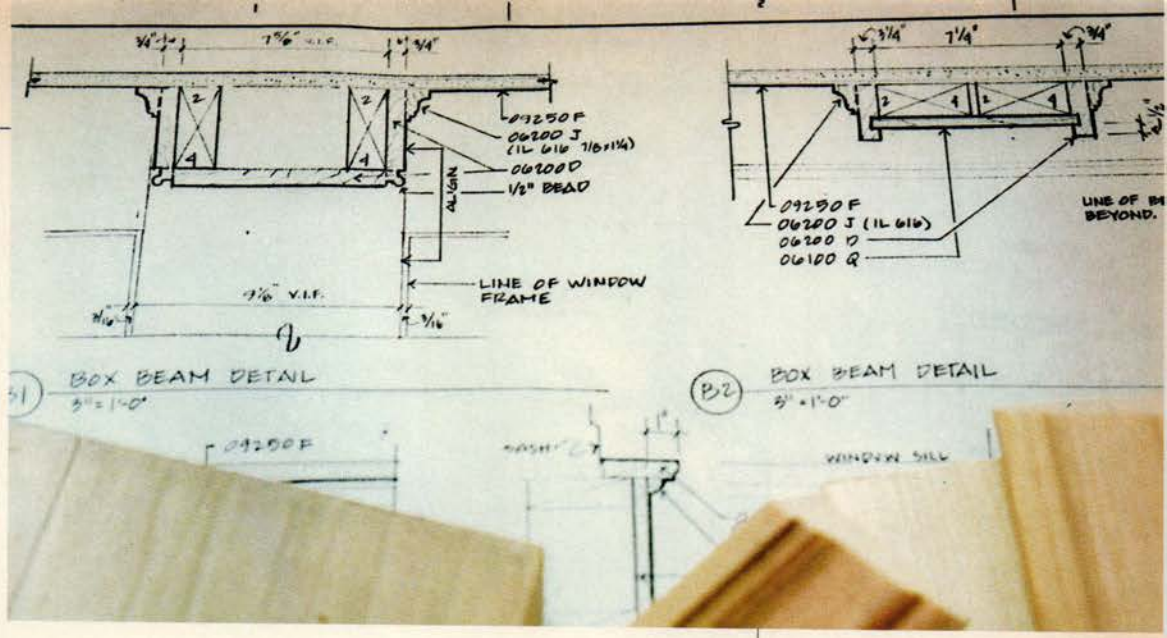
A cross-pattern of decorative timbers is something to beam about

PHOTOGRAPHS BY GRANT DELIN

On a tour of a 15th-century English manor house near Sherwood Forest, most visitors ogled the elaborate furnishings and artwork in the main rooms, but Mike and Cindy May found themselves staring in awe at the ceilings. Not the plain patches of white plaster familiar in American houses, they were covered with intersected beams that rivaled the furniture in beauty and created coziness in an otherwise cavernous room. "When we built our own house three years ago, we wanted to capture that same look," says May, who now has coffered ceilings in her Darien, Connecticut, living room, library and billiard room—her three favorite rooms, as it turns out. "The ceilings were expensive, but it's an architectural feature we just love," she says.

Elegant coffered ceilings—grids of decorative beams that create a series of recessed rectangles, squares or even octagons—are making a comeback. "They're especially wonderful in the public spaces inside a house—whether that means the living room, the dining room or a stair hall, says architect Gary Brewer of Robert A.M.

Coffered beams, such as the cherry ones that architect McKee Patterson designed for Cindy and Mike May's 14-by-14-foot library in Darien, Connecticut, can transform a ceiling from bland to beautiful. And in this room, where the walls are paneled in cherry as well, an unadorned plaster ceiling would have created "a room that resembles a box with the lid taken off," says Patterson.



Although their components look like solid beams, coffered ceilings are actually made from numerous planks and pieces of molding. This blueprint for a new kitchen ceiling in Riverside, Connecticut, designed by McKee Patterson shows nine separate components of paint-grade poplar needed to fashion the large beams, left, and seven for the smaller ones.

Stern Architects in New York City. "It's putting your best foot forward to greet your guests." They're equally appealing in other rooms: An oak coffered ceiling lends grandeur to a master bedroom. Poplar coffers painted white make for a luscious frosting above a renovated kitchen. "When done well, coffered ceilings create a wonderful kind of dialogue between the beams on the ceiling and the furniture below," says Duo Dickinson, an architect in Madison, Connecticut.

Coffered ceilings began as a structural necessity: Ancient builders needed a grid of beams to support upper-level floors. Over time, these were covered with increasingly ornate decorations and eventually earned their name because the recessed panels resembled coffers—boxes or chests used for storing valuables. "They're midway between furniture and the structure of the house itself," says Dickinson.

Although common throughout the Renaissance and especially in English manor houses, coffered ceilings all but disappeared in early American houses. "A 17th- or 18th-century ceiling might have one or two structural beams and possibly two crisscrosses—but this was hardly coffered," says Anne Grady, an architectural historian with the Society for the Preservation of New England Antiquities. "And by the Federal period, people didn't want any beams exposed at all." Tastes changed by the 1870s, with a Victorian revival of the Old English style, and coffered ceilings began to appear in large entrance halls as well as other rooms. They later became features of Shingle Style houses and are popular again "because our style now is so eclectic. Anything goes," Grady says.

The look of a coffered ceiling varies with the materials used to build it. A ceiling crisscrossed with stained hardwood, for instance, makes a suitable counterpoint to a paneled study. But, if done up in poplar or even plasterboard with wood trim, the beams can be painted—giving them a casual look complementing a family room or kitchen. "Coffered ceilings allow an almost infinite number of design possibilities," says architect McKee Patterson of Austin Patterson Disston Architects in Southport, Connecticut, who designed the ceilings in the Mays' house. The beams cost about $6 to $10 per lineal foot, "depending on the complexity of the design," says Peter Calzone, construction manager for the Wright Brothers Builders in Westport, Connecticut. He recently constructed one in the kitchen of a renovated 1910 Tudor house in Riverside. Coffers for a 20-by-20-foot room, he said, would cost about $2,000—probably less than the carpet below.

TOM SILVA SAYS:

"Building a coffered ceiling can definitely make a room. It finishes it off the same way wainscoting and beautiful floors do."

Decorated ceilings also help alter the perceived proportions of a room. For a dining room with a shallow ceiling height, McKee Patterson designed a coffered ceiling. Although it descended farther still into the room, it made the room look bigger. "Your eye reads the bottom of the beams and the ceiling, and together they give the illusion of a larger space," he says. For especially low ceilings—below 8 feet—he adds a faux coffered ceiling using planking 1 inch thick rather than the full beam treatment. "It adds some richness to the room and some texture"—without literally hitting people over the head with it.

Coffered ceilings aren't for everyone. In a simple house, they might look too fussy; in an old Colonial, they might seem out of place. "But where they do work, they work like magic," says Patterson. "They create a warmth and a comfort that no amount of drapery or carpeting can match." ■

When cut, the pieces of the boxed beams fit together like a puzzle, as Trevor Oltran, a carpenter with Wright Brothers Builders, demonstrates using a model of the Riverside ceiling. When the real job begins, workers nail the components of the larger beams into the joists across the length of the ceiling, then fit the smaller ones into place. "It can take days of cutting to make sure it fits," says Oltran's supervisor, Real Breton. "The material costs nothing compared to the labor."

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PHOTOGRAPH BY GRANT DELIN

BY CURTIS RIST

BATHING BEAUTY

A Victorian master bath suite in Short Hills that's long on livability

All alone on a house-hunting trip, Steven Goldstein, a business executive, found a dream: a mammoth 1885 Italianate Victorian complete with a piazza, a porte cochere and a grand winding staircase. "He bought it with no contingencies—without me even seeing it," says his wife, Varda Goldstein. Still, she was pleased, but her view of the Short Hills, New Jersey, landmark was more reserved. "It's got great details," she says of the six-bedroom behemoth, "as well as a few not-so-great ones." All the fixtures in the master bathroom, for instance—from sink and tub to toilet—were perched atop a strange tiled platform two steps off the floor. And there weren't any closets. "Well, there was something called a closet, but you couldn't hang anything in it. I told my husband it's going to take us three hours to get dressed in the morning, just to find our clothes. Something had to change."

The newly renovated 13-by-15-foot master bath looks serene now—with its marble floors, custom cherry vanities and freestanding tub—but a massive overhaul was required. Aside from radically changing the period style of the previous room, right, the owners wanted to eliminate the raised platform but discovered structural surprises beneath it.

Fortunately, when it comes to houses,

the Goldsteins are experts at making changes. Traveling around the world on business, they have lived in nine houses during their 23-year marriage and renovated five of them. "Some of them we did because we wanted to, and some because we had to," says Varda Goldstein. This house fell somewhere in the middle. Originally built as a finishing school for girls, the three-story structure had been renovated with great care by the previous owners, in the early 1990s. The Goldsteins, however, wanted to build a separate bathroom for their 15-year-old son, Billy, and add a closet for their 18-year-old daughter, Lauren, a college freshman. The bulk of the work would focus on their own master bedroom, bath and dressing room. "At first I thought we were just going to do a little bit here, a little bit there," says contractor Ernie Hofmann. "Of course, as things turned out, it got a lot more involved."

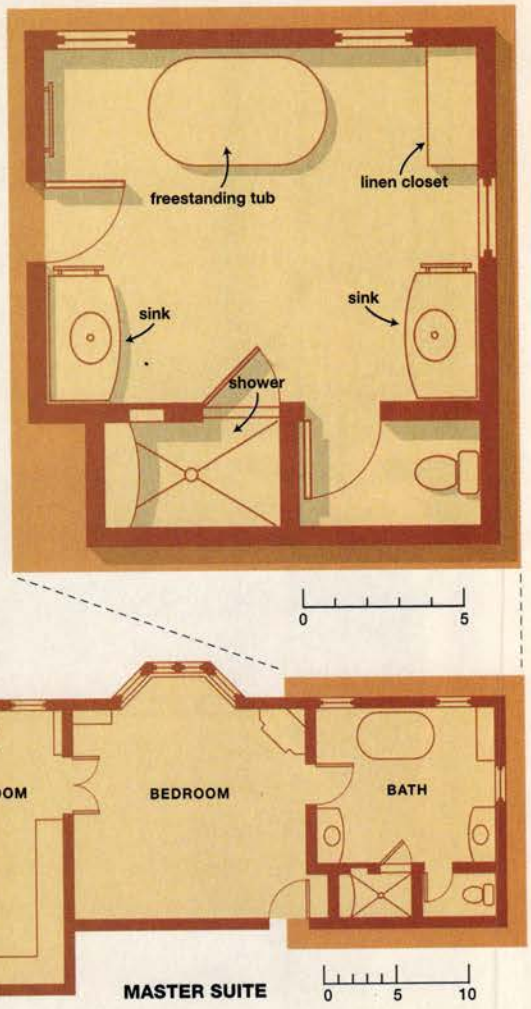
RICHARD TRETHEWEY SAYS:

"Adding radiant floor heat to a bathroom is probably the single best investment in comfort you could ever make—especially when you consider that you're going to be in there most of the time without any clothes on."

Just how involved quickly became evident. The couple loathed the raised platform in the bathroom. "It was bizarre. I wanted it out," says Varda Goldstein. Ripping up the floor, Hofmann discovered the reason for the platform: It covered up a 4-inch-diameter cast-iron waste pipe that had been laid atop the floor joists during a previous renovation early in this century. At that time, the pipe had not been tucked into the joists because it would have had to cross over a large wooden structural beam that could not be penetrated without the house falling down. After gutting the bathroom, Hofmann had to reroute a new waste line through a wall in the living room and dining room downstairs—at a cost of about $8,000.

The surprises didn't end there. For the Goldsteins, the whole point in renovating the bedroom and bathroom was to reconfigure them. The existing bedroom had a sitting room attached to it and tiny closets. "But, honestly, I never sit in my bedroom," says Goldstein. "I may collapse into bed

THE MASTER SUITE PLAN



In laying out the 13-by-15-foot master bathroom for Steven and Varda Goldstein's 1880s house, architect John James created a casual feel by arranging the tub and vanities like furniture in a room and consigning the shower and toilet to adjacent alcoves. "That way, they don't become dominant features. They almost seem as if they are outside of the room," he says. He reconfigured the master suite by enlarging the bedroom, making it 15 by 17 feet and creating a new door leading out into the hall. The suite had previously included a sitting room, but James turned that into a dressing room, which—at 14 by 19 feet—he calls "the mother of all dressing rooms." Because the room already contained a fireplace, "we went formal," he says. That included adding a 7-foot-long marble-topped island, useful for laying out clothes for business trips, "or just setting a cup of coffee on while getting dressed." The room (left) is "almost like a grand boudoir," James says. "People spend a lot of time getting themselves ready for the day and, with this, you feel like you're in a very nice space, as opposed to being stuck in a closet." One other advantage: Keeping all the clothes in a dressing room frees up the bedroom from a lot of clutter. "And that should make it a lot easier to get to sleep at night," he says.

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Custom-made rosettes for the window trim and Edwardian-style details, such as the sink faucets and the three-pendant light fixture, add to the room's period appeal.

dead tired at the end of the day to watch TV. But sit? Never." Working with architect John James to make use of what they considered wasted space, they came up with a plan to turn the sitting room into a dressing room and enlarge the cramped bedroom by moving the partition wall 3 feet into the too-large bathroom. The result would be a triumvirate of balanced, useful rooms.

The solution seemed perfect, until Hofmann, project manager Alex Szewczuk and the crew once again began poking around with sledgehammers and crowbars. The partition wall turned out to be a major load-bearing wall. "Removing it could have brought the third floor crashing down," he says. Rather than abandoning plans, Hofmann brought in a structural engineer who specializes in historic buildings. He quickly came up with a plan to install laminated beams, which allowed the wall to be moved and the third story supported—at a cost of $18,000. Then Hofmann discovered that the span of the floor joists—about 17 feet—exceeded what the building code now allows by several inches. Bringing them up to code (no code had

VANITY FAIR

Good-quality bathroom cabinetry can be ordered from a variety of manufacturers, but unusual items—such as the twin cherry vanities in the Goldsteins' bathroom—often require custom work. "We can do things like match details in bedroom furniture or existing trim, things you can't get anyplace else," says Angelo Santoro of Creative Woodcraft in Dover, New Jersey. In the Goldsteins' case, that hard-to-find detail included a curved-top drawer, which was difficult to find ready-made. To make the drawers, Rich Lusskin at the Creative Woodcraft factory cuts a wooden sandwich out of a layer of cherry veneer (top photo) glued atop several layers of straight-grained plywood known as wiggle wood because it bends so easily. The sandwich is pressed onto a sturdy wooden form built out of ¾-inch plywood. Rather than clamping the wood in place while waiting for the glue to set, Lusskin uses a process called vacuum-bagging. He slips the entire form into a tough 40-millimeter-thick polyurethane bag and seals it. Using a vacuum pump, he sucks out all the air in the bag until it draws tightly against the form—with a pressure of about 2,000 pounds per square foot (middle photo). When the vanities are completely built, Santoro covers the unstained cherry with three coats of catalyzed lacquer, and sands between each coat with 320-grit paper. He does not use a polyurethane finish coat because he thinks the final look tends to be artificial: "There's a fine line between making a cabinet as durable as possible and making it look like it's been dipped in plastic." When installed (bottom photo, Julio Belloso preps the vanity for a marble countertop), the finished pieces are stunning, the result of 160 hours of labor.

PHOTOS: ERIK RANK.

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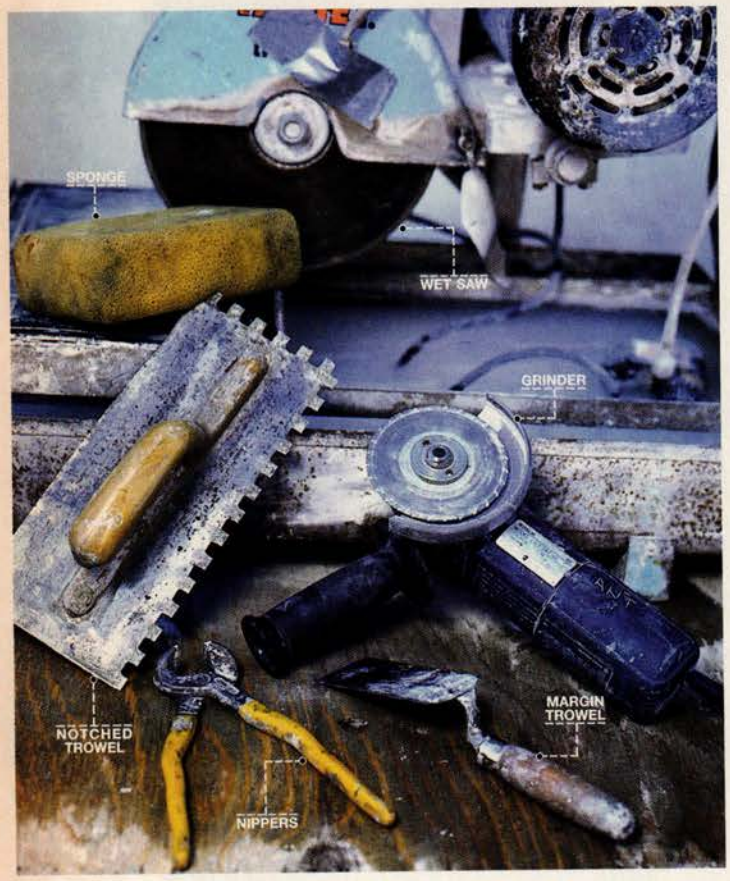

Marble and other natural stone tiles may look like they piece together without effort, "but believe me, you have to work at it," says Vincent Carramusa of BCG Marble & Granite Fabricators. "I'm telling you, it's an art."

While ordinary ceramic tiles can be cut by scoring their faces and snapping them in half, the brittle 3/8-inch-thick marble tiles for the Goldsteins' master bath required considerably more machinery. The most important is a wet saw, which spins a smooth-rimmed 6-millimeter-thick blade encrusted with 32 industrial diamonds per square inch. They slice quickly through the hard stone as a continuous stream of cool water keeps the smooth-rimmed blade from warping under the heat. Because the blade can't cut curves, Carramusa uses another method to fit tiles around bathroom fixtures: 1) He traces the curve onto the marble with a wax marker and makes a series of cuts 1/4 inch apart at right angles to the mark. 2) Then he carefully breaks off the narrow bits of marble with carbide-tipped nippers. 3) A 4-inch diamond-blade grinder smooths the rough edge left by the nippers. 4) Once the tile is cut, Carramusa smears thin-set mortar on the floor with a 3/8-inch notched trowel. Using the same trowel, he then butters more thin-set over the entire back side of the tile. "If you just use a flat trowel, the mortar will be thick in some spots, thin in others, and it could eventually fall off," he says. Two other crucial tools for tile work: a margin trowel, which cleans mortar off the edges, and a sponge, which mops up after the final grouting. "Nothing can ruin good work faster than a messy grout job," Carramusa says.

existed when the joists originally were installed) called for bolting a laminated beam to each one. That cost $8,000, but the structural ordeal wasn't over yet. A major dip in the flooring on the third floor—and a companion dip in the master bathroom ceiling below—proved to be more than a vague "settling" problem. "Two of the posts upstairs were resting on the floor joists instead of on beams that could carry the weight," says Hofmann. In came the engineer with more laminated beams as well as another bill—this one for $3,000. "Every time I hear someone call, 'Mrs. Goldstein!' I cringe," says the renovation-weary home owner. "I know it's going to be bad news."

TOM SILVA SAYS:

When adding a tiled shower, make sure to use cement backer board rather than ordinary plasterboard under the tile: "If you put the wrong stuff on, it will absorb moisture, and your tiles will fall away. Cement board, however, is indestructible."

For the bath itself, the Goldsteins went for a low-key yet elegant approach. The architect designed a 13-by-15-foot room with toilet and shower in alcoves, a freestanding tub positioned between two windows, and a pair of custom-built curved cherry vanities along opposite walls. The existing Edwardian-style tub faucets were reused, and the architect specified custom-made rosettes for the door and window surrounds to match the other rosettes already in the house. "The idea wasn't to go back to an exact period in time, but to give the room an older feel, like it's been there all along," says James.

Helping that ambience is an absence of radiators: The Goldsteins opted for radiant floor heating set into lightweight concrete, at a cost of about $5,000. It takes the chill

PHOTOS: ERIK RANK.

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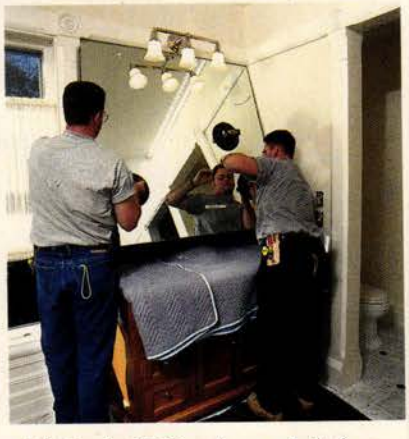
The porcelain tub is new but takes on a period look with the addition of vintage-style fittings. The chrome faucet set is mounted on stems leading to water pipes in the floor.

out of the white Carrara marble tiles covering the floor and shower.

When all was nearly done, there remained one more unforeseen bill brought about by the renovation. All that smashing of plaster from the demolition and what eventually turned into a whole-house makeover left the place swirling in dust. Getting rid of it turned out to be a full-time job for a separate work crew, which pored over every inch of the house. "You won't believe this, but my cleaning bill was $6,000," says Goldstein. "And the vacuum cleaner bag still gets filled up every time it's on."

Even so, she doesn't count this as the hardest of the five renovations. That honor goes to the first one, a 40-year-old Colonial just down the road in Short Hills. "Then, we didn't know what we were doing at all." But this ranks as the biggest. She manages to keep calm, as a workman bellows from up above: "Mrs. Goldstein!" ■

To prepare one of the cherry vanities for an undermounted sink, Julio Belloso, left, takes a "very, very careful" pass with a jigsaw to trim the frame inside so that the sink will fit. Coworker Jorge A. Cisnero, right, affixes the sink to the green marble countertop with bolts, then applies silicone caulk to the perimeter of the entire countertop underside. When the silicone sets, the whole unit will be caulked and bolted into place.



To install the frameless shower door, left, Jamie O'Brien bores a hole for a hinge screw. Made of 3/8-inch clear tempered glass, the door is held in place by two wall-to-glass hinges. The 1/4-inch-thick clear mirror above the vanity, right, is muscled into place by O'Brien, with an assist from Mike Granata, and affixed to the wall with three types of mirror mastic, adhesives formulated so they do not attack the mirror's silver coating.

PHOTOS: TOP, GRANT DELIN; BOTTOM, ERIK RANK.

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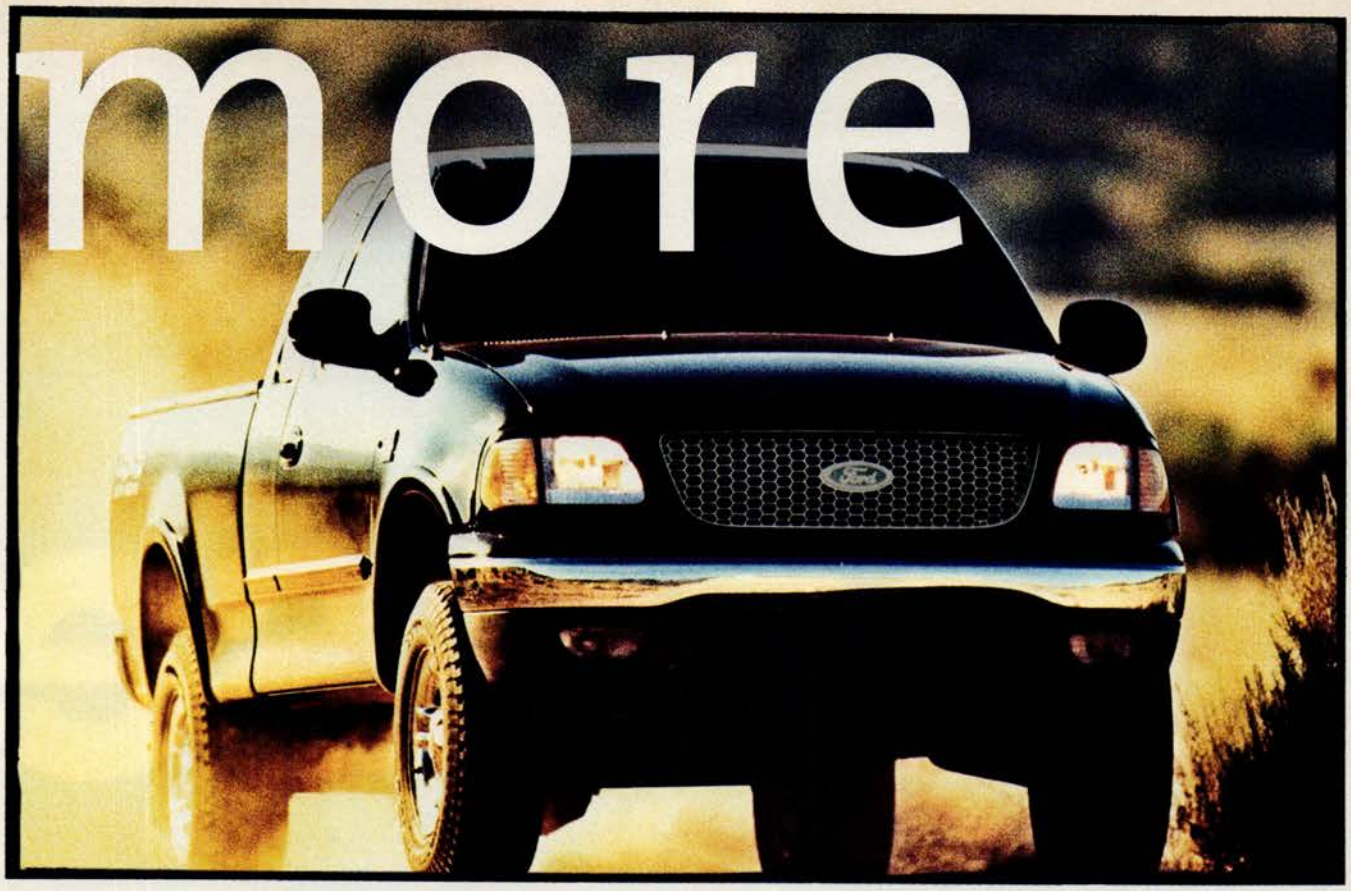

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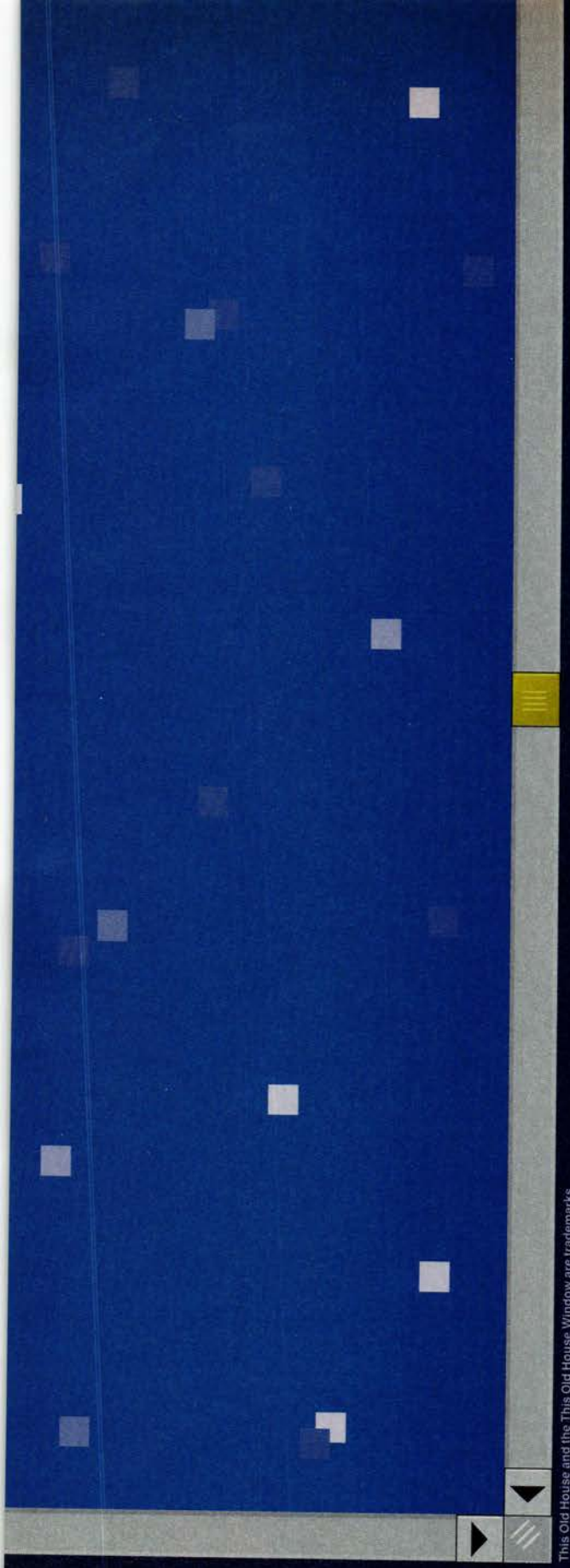

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BY PETER KEATING

THE INSURANCE GAP

Say good-bye to home owner's policies that cover everything

When Thomas Del Borello bought his town house in Glen Cove, New York, in 1988, getting home owner's insurance was no big deal. As he had done several times before, he simply shopped around and found a good policy at a decent price: $1,140 a year for a property worth about $400,000. But Del Borello's annual premium rose steadily—and steeply—to $2,600 last year. Then his insurer took an even more drastic step. Although Del Borello had never missed a payment and had filed only one major claim, the company canceled his coverage.

Most home owners haven't seen their rates double or faced an outright cancellation, but Del Borello's experience reflects fundamental changes sweeping through the insurance business. Hurt by a rise in natural disasters, underwriters have begun providing customers with less coverage and charging them more for it. Between 1992 and 1997, the average home owner's premium jumped 42 percent, according to data from Conning Insurance Research & Publications, a firm that studies policy prices and the cost of claims. Insurers are also phasing out guaranteed replacement provisions, which pay for completely rebuilding a house if it is destroyed. In regions deemed disaster-prone, some companies are going so far as to refuse certain types of coverage and, as Del Borello found out, to cancel it altogether.

Insurance companies haven't always been so risk-averse. Since WorldWar II, insurers have enjoyed mostly sunny days, with only an occasional earthquake, hurricane or nor'easter. During the same time, millions

ILLUSTRATION BY GARY HOVLAND

of Americans became home owners, and insurance companies vied for customers by offering increasingly generous products at low prices. By the late 1980s, the typical policy covered everything from partial damages to total destruction due to fire and natural catastrophes. Coverage also extended to furnishings and other contents and even the cost of temporary housing if an owner had to rebuild.

"The low incidence of disasters lulled insurers into a false sense of security," says Brian Sullivan, editor of the *Property Insurance Report,* an industry newsletter. But the recent string of storms and earthquakes that have struck heavily developed areas of California, Florida and the Atlantic and Gulf coasts has led to record losses. Before 1989, no catastrophe had ever caused more than $1 billion in property damage. Since then, nine disasters have racked up costs in the billions. The worst included Hurricane Andrew, which devastated Florida in 1992 ($16.5 billion), and the earthquake centered in Northridge, California, in 1994 ($12.5 billion).

"The disasters made insurers realize they were far more exposed than they thought," says David Schiff, editor of *Schiff's Insurance Observer*. By selling lots of policies in disaster-prone areas, he adds, "They concentrated their risk, which violates the cardinal rule of spreading the risk." In 1996, for example, the house insurance industry paid out $1.18 for every $1 it collected in premiums, according to Marshall & Swift, a Los Angeles building-cost consulting firm.

Besides raising rates, insurance companies are altering important features of standard policies, most notably the replacement-cost guarantee. "It's a trend," says Allstate spokesman Raleigh Floyd. "We used to offer unlimited replacement-cost coverage so, even if it cost $150,000 to rebuild a house that was insured for $100,000, we would pay. We were losing money." Allstate and State Farm, two of the country's largest insurers, have now capped replacement coverage at 120 percent of a house's insured value.

Insurers are also upping deductibles (the amount a policyholder pays before insurance kicks in) for particular kinds of damage. Before the recent disasters, State Farm's Florida policyholders generally had a $250 or $500 deductible for hurricane damage. Now hurricane deductibles are typically set at 2 to 5 percent of a house's insured value. (For example, a home owner with a $150,000 house and a 5 percent deductible pays the first $7,500 to repair hurricane damage.) Similarly, major insurers have increased deductibles for roof damage in hail zones (including Dallas, Denver and much of Kansas and Oklahoma) and seismic damage in California and along the New Madrid fault, which runs through Missouri and Tennessee, where America's worst earthquakes occurred in 1811 and 1812. "Home owner's insurance is like the candy bar that used to cost a nickel," says Martin Weiss, chairman of Weiss Ratings, an independent insurance-company analyst. "Now it's half the size and costs a quarter."

In some areas, companies have stopped providing certain kinds of coverage. Two years ago, State Farm started sending an announcement to its customers in Fort Lauderdale, Florida: "Our capacity to provide coverage for potential windstorm losses has been exceeded.... At the end of your current policy term, your windstorm and hail coverage will terminate." Says Del Borello's insurance agent, John Hoard, "I have companies telling me they won't insure anyone south of one highway or north of another. It's getting ridiculous."

State governments, which regulate insurance, often limit the number of policies that insurers are allowed to cancel. Nevertheless, states have approved rate increases and higher deductibles so the companies won't withdraw altogether. To help home owners who can't get coverage, some states have set up underwriting operations, although they sometimes set high prices to avoid competing with the private sector. Florida's Residential Joint Underwriting Association, for instance, has policies with 269,000 residents, who pay premiums that equal or exceed those of the most expensive insurers. Other states provide limited coverage: Del Borello now insures his town house—worth about $750,000—with a $500,000 policy from New York State. It costs $1,530 a year but has a $1,000 deductible and no replacement or loss-of-use coverage.

In the end, getting sufficient coverage from a shrinking, increasingly expensive menu of choices may be the best that many home owners can hope for. But an ominous question remains: If insurers responded to the last wave of catastrophes by raising rates and deductibles and reducing coverage, what happens when the next disaster strikes? Had Hurricane Andrew made landfall only 8 miles farther north and hit Miami, losses could have reached $50 billion to $70 billion, experts say. Rough as the ride is now for some home owners, the worst may be yet to come. ■

Get Smart About Shopping for a Better Policy

It may be tougher than ever to get a good deal on home owner's insurance, but it's not impossible. Start by determining how much coverage you need. You should insure for the cost of replacing your house and possessions, not including the value of your land. Insuring for less can leave you in the lurch in the event of a disaster, so ask an independent insurance agent to assess your house, or hire a professional appraiser. If necessary, add coverage for any particularly valuable possessions, such as collectibles, or for home office equipment. After establishing the amount of coverage, follow these tips for getting the lowest rate:

• Seize all available discounts. If you're a nonsmoker, your insurer may knock down the premium. Policyholders who become senior citizens, install fire sprinklers or a burglar alarm (as long as it's connected to the local fire or police department) or stay with the same insurer for three or more years may also be eligible for reductions. Getting auto and home coverage from the same insurer often results in a discount.

• Raise your deductible. Increasing the deductible from $250 to $1,000 can lower the premium by as much as 25 percent. Insurers are generous on this because the higher deductible eliminates small damage claims that policyholders frequently file.

• Comparison shop. Find out what deals are available from direct-response companies like A.I.G., Amica Mutual, Colonial Penn and Geico, which sell policies over the phone. You may save money because these insurers have lower overhead and pay smaller commissions, but remember that an independent agent will often fight for you over an inequitable insurance payout. Finally, check with your state insurance department to see what different companies are charging in your area. You can get information at the Web site of the Insurance News Network, www.insure.com.

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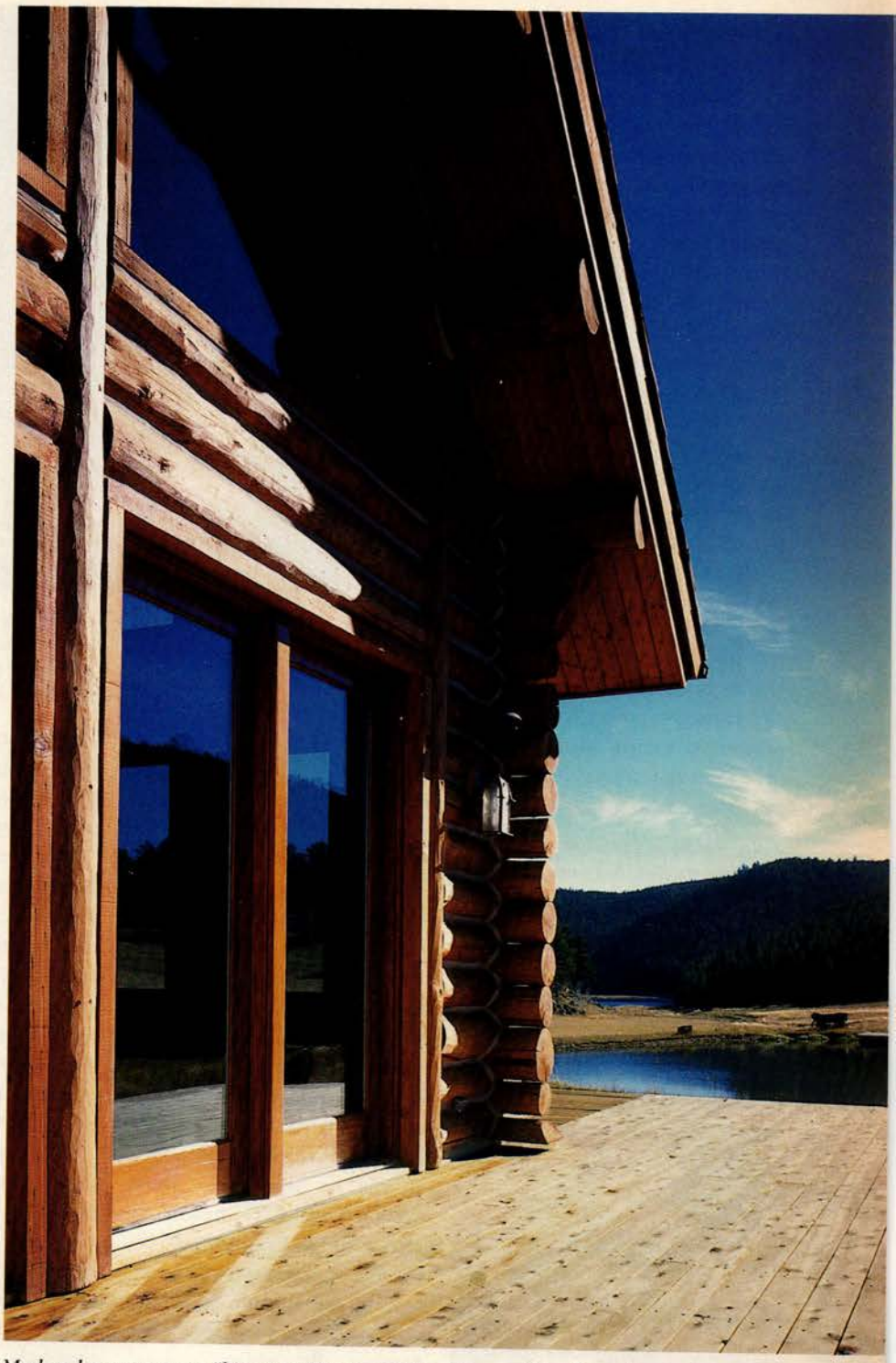
BY CURTIS RIST

CABIN FEVER

For the love of logs



Modern log manors are "bigger and more complex than anything Lincoln ever dreamed of," says architect Robert A.M. Stern. Nestled in the foothills of the Rockies, this 5,900-square-foot house near Evergreen, Colorado, has three bedrooms, plus guest quarters over the garage.

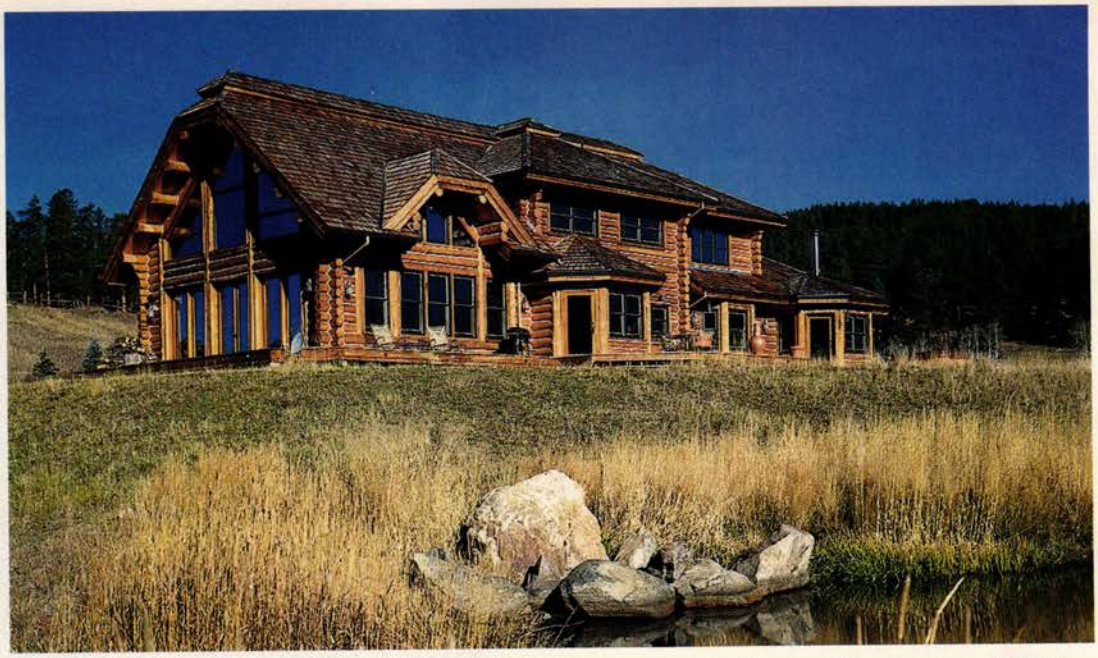
The American landscape is covered with houses built in unique and fanciful styles—from Victorian folk Gothic to Arts and Crafts—but nothing pledges allegiance to our national identity as sweetly as the humble log cabin. "It recalls pioneers in the wilderness, felling trees and turning them into honest, simple shelters—the kind of place Abe Lincoln was born in," says architect Robert A.M. Stern. "Its spirit is irresistible to all of us."

That spirit is so appealing that Barbara Martin of the National Association of Home Builders estimates that 25,000 new log houses went up last year. Our love of logs is as basic as our love of trees. Because logs are durable, there is no need to cover the exterior of a log house with shingles or clapboards or to smooth over the interior with plaster or wallboard. "The beauty of log construction is that it provides its own structural logic—and even its own insulation," says Stern. "What you see is what you get, and this is why everyone loves logs."

That wasn't always the case. The log cabin was not the first form of housing in colonial America. The Pilgrims came with a taste for late-medieval architecture: post-and-beam construction, sawn-plank siding and diamond-paned windows. Log houses did not become popular here until the westward expansion of the 18th century. And they were rarely intended to be permanent. Like sod houses, log cabins were temporary shelters built for use only until settlers could afford something more elaborate, often constructed

PHOTOGRAPHS BY CHERYL UNGAR

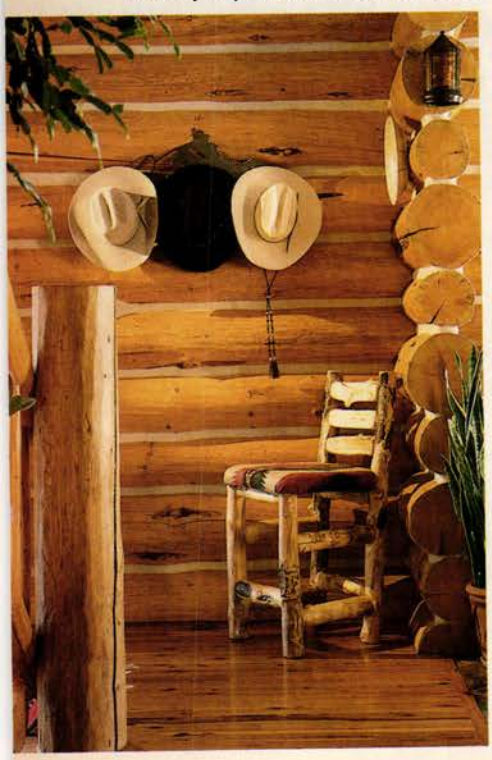
in a fashionable style of the day. When the frontier closed in 1890 and the industrial revolution shifted into gear, the yearning to recapture America's lost wilderness—a nostalgia promoted by both writers and painters—triggered a revival in log construction, although the structures were more like mansions, less like the Little House on the Prairie. The most interesting and grand examples were built in the Adirondacks of northern New York State. There, log-style summer "camps" for the rich rivaled the glorious "cottages" in Newport, Rhode Island.



To frame the Evergreen house, builder Ken Thuerbach used 280 logs cut from lodgepole pine trees that had died of disease or insect damage. "The wood from these so-called standing-dead trees doesn't shrink, twist or settle as much as green logs when it dries out," says Thuerbach.

To judge by the numbers being built, log houses have again become fashionable, many as vacation, retirement or weekend houses for urbanites. "They work best with the woods and the mountains surrounding them. You won't really find them in the suburbs," says Ken Thuerbach, the owner of Alpine Log Homes in Victor, Montana. Like the previous revival, this may also be a reaction to technology. "The more industrialized we become—or as today the more computerized we become—the more dissociated we are from real things," says Stern. "With a log house, we can return to living at least a part of our time in a more natural way."

Logs can be made from practically any tree species, but many builders favor lodgepole pine because it grows straight and tall. The smooth-grained wood gives a warm and sleek look to an entryway at the Evergreen house.



Today's log houses have little in common with Lincoln's fabled birthplace or even with the log toys that bear his name. Instead, architects use logs in creative ways that are more connected with the Adirondack camps of the past. Stern designed a 14,000-square-foot retreat in the Colorado Rockies that marries log construction to the Shingle Style, for which he is perhaps most famous. By adding a steel frame, he was able to build longer spans than logs alone would have allowed, and the cedar-shingled gables give variety to what could otherwise have been a monotonous exterior. To soften the boxy quality inherent in a log cabin, Stern changed the geometry by adding one wing on a diagonal.

"Architects have taken this style, which represented the first effort of a people in a new land to scratch together a shelter, and lifted it up to these huge houses built in the log manner," he says. "Yet no matter how big, the spirit of rusticity remains."

Not everyone adores the result. *This Old House* executive producer Russ Morash finds a great deal of charm in older log structures but seldom likes newer ones. "Log houses are visually active—perhaps too active. I don't like my eye dancing around from log to log, over their round ends, through crevices, then back out the other side," he says. "You run the risk of having a house look contrived if you try to impose a Ye Olde Frontier look on a modern landscape."

Stern agrees. Designing with logs demands an enormous amount of creativity. For example, in bathrooms and small bedrooms, where logs might make the space seem claustrophobic, Stern uses them sparingly. Yet he allows himself to go log-wild in larger rooms, bringing in sunlight through massive windows, an embellishment beyond the means of the average pioneer. "The rooms fill with wonderful golden colors, quite unlike anything else," he says. "When it's done correctly, it's easy to see why the romance with log houses endures." ■

Toying With Tradition

The simplicity and elegance of logs has fascinated many great architects. Frank Lloyd Wright used notched-log construction to build Tokyo's earthquake-resistant Imperial Hotel, which inspired his son, John, to invent Lincoln Logs, patented in 1920.

LINCOLN LOG HOUSE: MICHAEL GRIMM.

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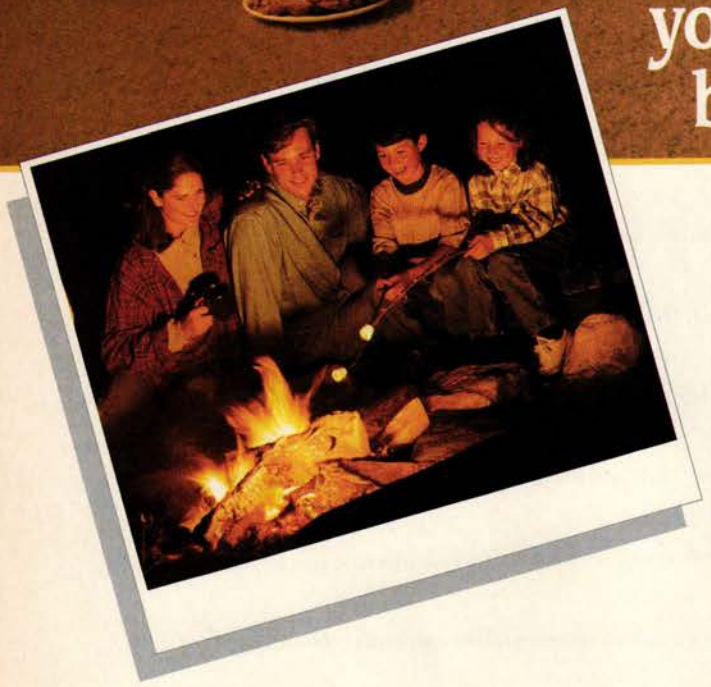

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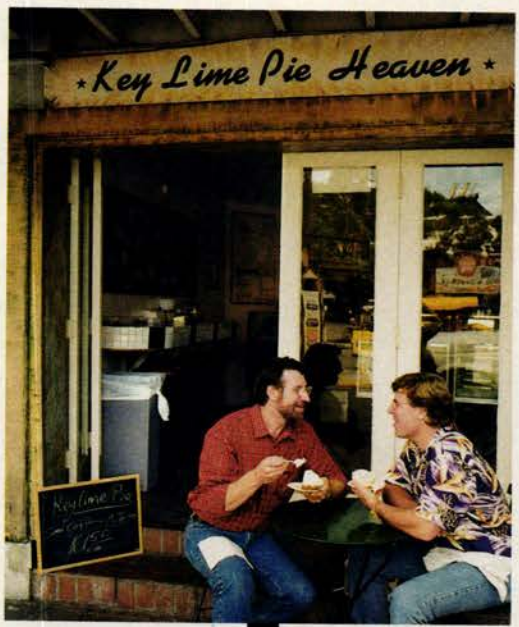
LETTER From *This Old House*

SEE YOU IN THE ISLANDS

The most frequently asked question we get at *This Old House* is: "How do you choose your projects?" That, I suspect, really means: "How do I get *my* house on TV?" Here's how. To be chosen as our main project, which lasts from about May to December, your house has to be within an hour's drive from WGBH headquarters in Boston. For our shorter project, in progress from January through March, you need to live in a climate that's moderate or warmer, a place where construction continues uninterrupted year-round. (Nevertheless, I've made a ritual of suggesting Jackson Hole, Wyoming, and Vail, Colorado. With equal predictability, executive producer Russ Morash responds: "I don't ski.") After we rule out a big, snowy chunk of the country, the selection process moves on to a lively discussion of other locations. The winter programs are as much a portrait of a place as the story of a project, so we don't like to repeat. We're still talking about Bermuda and Austin, Texas, as future possibilities. Key West, Florida, came out on top this time—although the memory of Hurricane Andrew, which blew into town right after we settled on Miami for the winter of 1993, continues to give us pause. Only slightly roughed up by Hurricane Georges, Key West has the most Caribbean of American climates and a town that is architecturally tied to New England through a seafaring past.



Sure beats Boston baked beans. Norm and I fork-test some of the local materials.

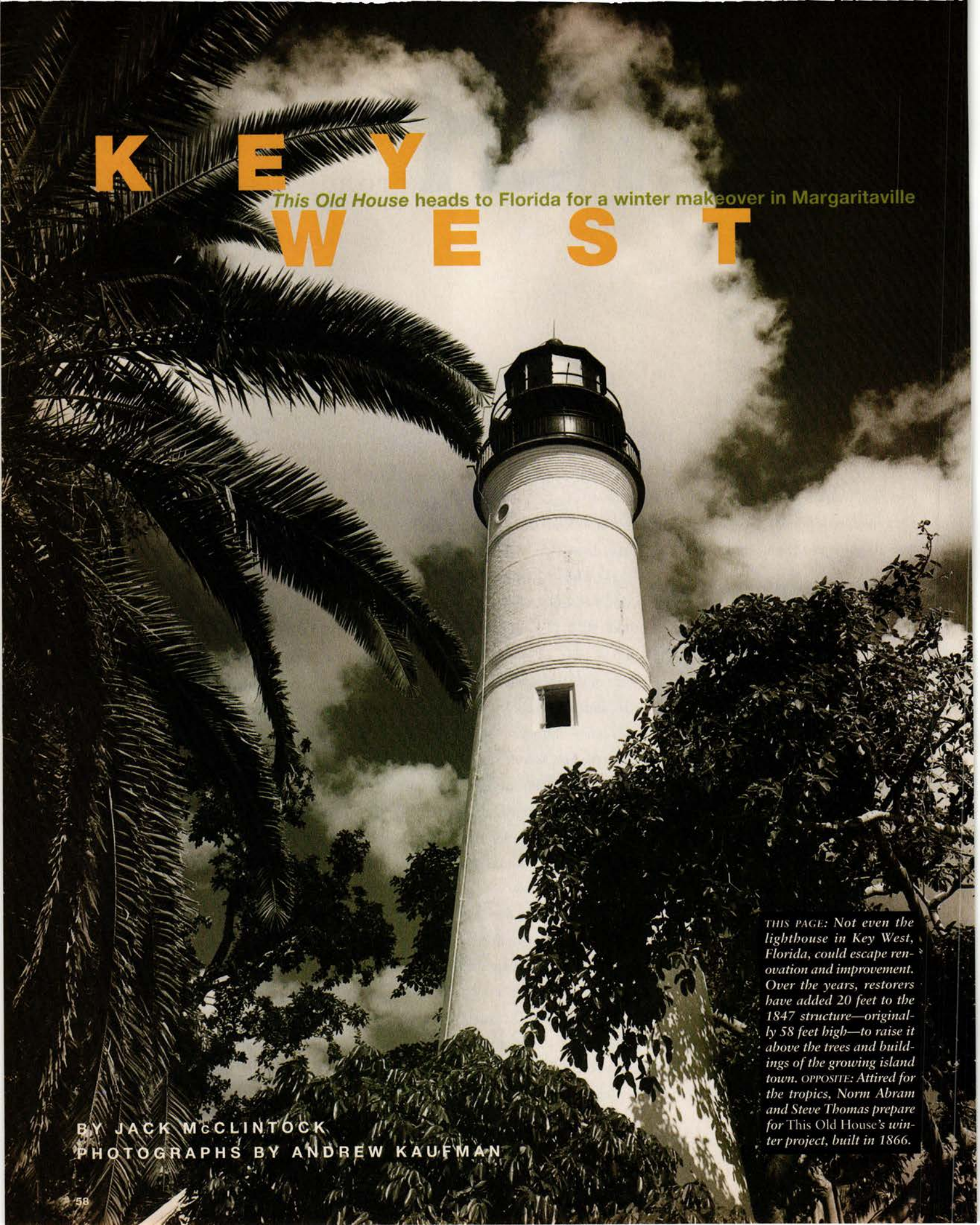
So, to be in the running for the winter of 1999, you needed to own a house in Key West. But which house? We don't typically put an ad in the paper, but we do canvass everybody we know who can put us in touch with architects in our target area. We've discovered that the Sun Belt isn't any easier than Massachusetts when it comes to finding a renovation that conforms to our shooting schedule and home owners who will let us invade their kitchens and attics. And we always need a project with a size and budget large enough to allow for scenes on construction, new technology, painting, wallpapering, decorating and landscaping. This year, we chose Michael Miller and Helen Colley's 1866 Classical Revival cottage, which needs a new kitchen, new bathrooms and maybe a few more dormers. Of course, the winter projects are never all work and no play, and we're looking forward to a little saltwater fly-fishing too. I have only one caution. If it looks like Norm is catching the most bonefish, just remember: Don't believe everything you see on television.

—Steve Thomas

PHOTOGRAPH BY ANDREW KAUFMAN

KEY WEST

This Old House heads to Florida for a winter makeover in Margaritaville



THIS PAGE: *Not even the lighthouse in Key West, Florida, could escape renovation and improvement. Over the years, restorers have added 20 feet to the 1847 structure—originally 58 feet high—to raise it above the trees and buildings of the growing island town.* OPPOSITE: *Attired for the tropics, Norm Abram and Steve Thomas prepare for* This Old House*'s winter project, built in 1866.*

BY JACK McCLINTOCK
PHOTOGRAPHS BY ANDREW KAUFMAN

In Key West, Florida, the air smells stingingly of salt, fish, beer, mangrove flats and coconut tanning oil. If you ignore the tourists loading up on T-shirts and margaritas along the Duval Street strip, the island feels like a Winslow Homer watercolor come to luminous life—a tropical idyll of wind-raked palms against cloudless blue skies, with brilliantly blooming bougainvillea spilling over picket fences. Jimmy Buffett is back in town, and *This Old House* is here, too, pursuing its traditional snow-evading tactic of fixing up a house someplace warm in the winter.

After a search fueled by fish dinners and shots of Cuban coffee, *T.O.H.* producer Bruce Irving and executive producer Russ Morash have chosen the handsome, double-dormered Fleming Street residence of Michael Miller and his wife, Helen Colley. Miller, an architect formerly based in Boston, first visited Key West in 1990 on business—converting an auto-body shop into a stylish art gallery—and decided to relocate.

Last June, he and his wife bought the McClintock-Graham house, which ship's carpenter Samuel Filer built in 1866. William McClintock, a Union navy captain from Philadelphia, purchased it 10 years later, before going on to become the island's mayor. Six generations of his descendants occupied the Classical Revival dwelling until 1989, when retired U.S. Navy flier David Adams and his wife, Lucie, bought it. Wanting less space, the Adamses sold to Miller and Colley and now lease a cottage at the rear of the property.

The house, with its wide, street-facing porch and paired dormers, is "one of Key West's most significant structures," according to a study by the Historic Florida Keys Foundation. "Well, maybe that's a bit grand," says the foundation's historic preservationist,

George Born. "It's a pretty vernacular house, with much of the original siding, interior trim and staircase. And it has a fair bit of the niceties. It's more than a cottage but not a mansion either."

Both couples love the island's architectural richness and the Keys' amalgam of English-American whites, Bahamian-American blacks, descendants of Cuban cigar makers, fishermen, gays, literati, retired military folk, ragtag tie-dyed leftover hippies, tourists and winter people. True, gentrification has driven out many of the "conchs," as native Key Westers call themselves (after a tough local mollusk good for making fritters that bounce and chowder that's tasty, if chewy). But enough conchs remain to add spice and savor. Most laundromats have espresso machines, where neighbors often meet to bolt a tiny hot sip of jarringly sweet Cuban coffee served in a paper cup. "You have a half-million-dollar house next to a simple cottage," Miller says, "and not only do the owners of the half-million-dollar house not care—they're also friends with the people in the cottage. It's the island ethic. Diversity breeds tolerance and cooperation."

Home owners Michael Miller and Helen Colley and their dog, Managua, consult with Norm and Steve on the porch of the historic McClintock-Graham house. An architect and transplanted Bostonian, Miller plans to give the Classical Revival house a picket fence, a paint job, fresh landscaping—and three more dormers along the top.

The McClintock-Graham house reflects that spirit. The building is actually two houses that were pushed together in the 19th century to form a 1,600-square-foot T. Once renovated, the house will suit the couple's needs perfectly. Working from Miller's plans, contractor Roger Townsend and his team will extend the kitchen-dining-living room clear across the rear of the house, enlarging it and absorbing some of an 880-square-foot porch that is too low, too dark and too hot. They will add a 12-by-32-foot rectangular pool between the house and the cottage at the fenced-off rear of the 60-by-146-foot lot. They'll transform one front parlor into an elegant library and the other, across the hall, into a master suite with a new bathroom behind it and an outdoor shower behind that. Upstairs will be a guest room and a studio for Colley, who is a painter. Then they'll renew the landscaping, bashed by Hurricane Georges in September, and plant a mango tree.

Georges—the fifth hurricane to strike Key West in 50 years—was kinder to the house itself. Storms aside, however, houses and residents still have to contend with the seasonal humidity, rain and searing sun of the Keys, which make it surprising that so much of Key West has survived the 20th century without air-conditioning. For seven months of the year, Miller says, island breezes, high ceilings, paddle fans and louvered doors and windows keep the place livable. But when Miller deployed thermometers in August, he measured interior temperatures of up to 93 degrees Fahrenheit and decided to install state-of-the-art insulation and central air.

Neither the weather nor the years have done much to alter the house's serene street visage. But Miller intends to. On the roof, a metal-framed skylight glitters between two dormers. He wants to remove the skylight and make a dramatic change: adding three more dormers. Ranked along the rooftop, the five will bring more light into the second story and bring a "richness to the street."

But Russ Morash, for one, isn't sure he likes the idea. "I would have thought three would be fine—but five?" *T.O.H.* host Steve Thomas, however, is all for it. "I can see the logic," he says. "The house has a five-bay porch: two windows on each side and a door in the middle. Michael's aesthetic principle is to locate a dormer over each bay. Without the dormers, you'd have a confined attic space—just a knee wall and a sloping ceiling. With the dormers, you get a little room."

Actually, a lot more room compared to the dinky house a couple of blocks away on Angela Street, where Miller and Colley lived for six years with half their furniture and most of their books in storage. "When this is finished, we'll be able to use all our things," Colley says. "We'll have more flexibility in entertaining and be able to have winter guests." Who no doubt will soon get accustomed to the scent of Cuban coffee and frying conch fritters. ■

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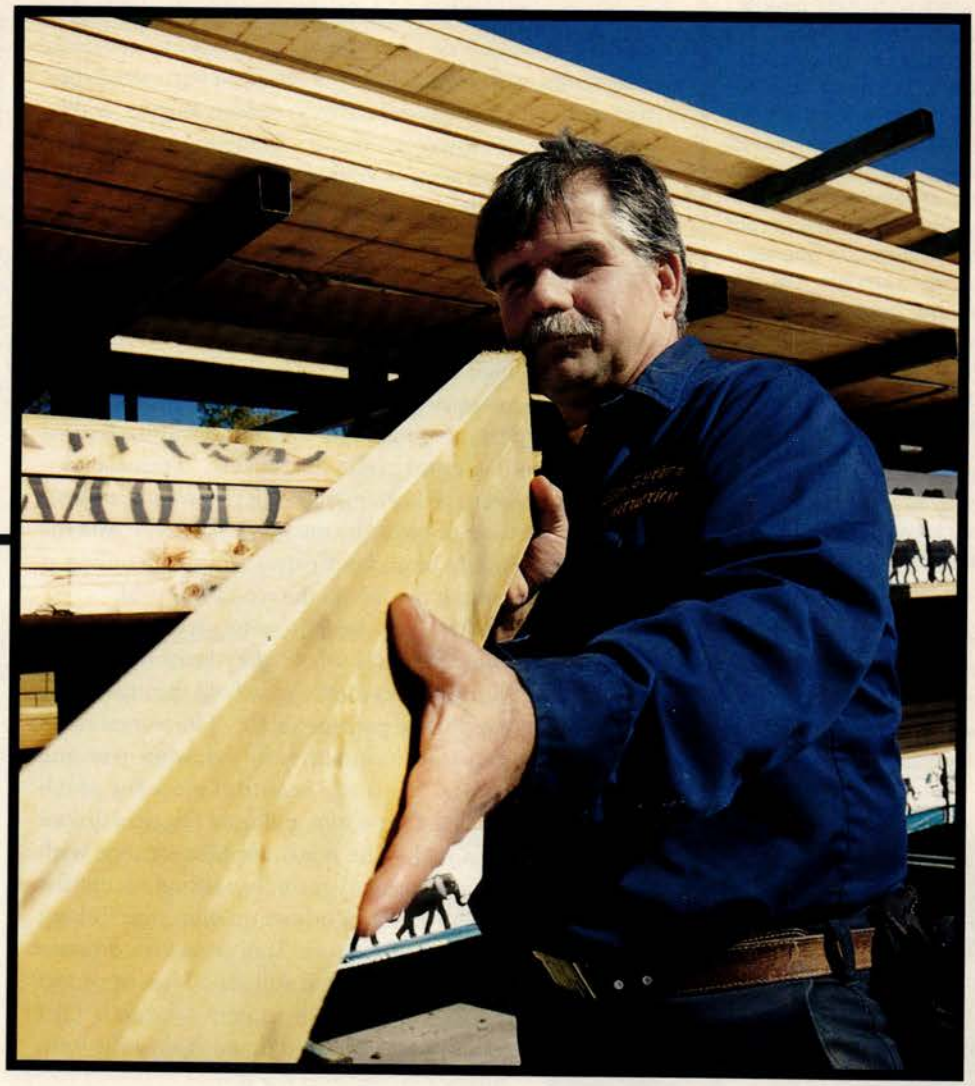
TOM SILVA'S SECRETS FOR PICKING THE BEST BOARDS

BY RICHARD STEPLER PHOTOGRAPHS BY JOE YUTKINS



"You need to have a good eye to recognize a problem piece of wood," says This Old House *contractor Tom Silva, sighting down a 2x8 to see if the board is warped. Steel strapping around the 2x4 stacks, left, helps keep the lumber straight. Paint on the board ends serves no practical purpose except to attract a buyer's attention.*

When he climbs out of his pickup at Arlington Coal and Lumber, about 6 miles northwest of downtown Boston, *This Old House* contractor Tom Silva pauses to breathe in the scent of freshly cut wood. The sprawling 3½-acre lumberyard is one of Tom's favorite haunts. As a kid, he loved to tag along when his father, Phil, who started the Silva family contracting business back in the early 1960s, bought building supplies here. Tom has remained a regular customer since his father retired in 1984. When asked what inspires such loyalty, he says simply, "They have good lumber."

From years of experience, Tom knows exactly what to look for when he buys wood. For many home owners,

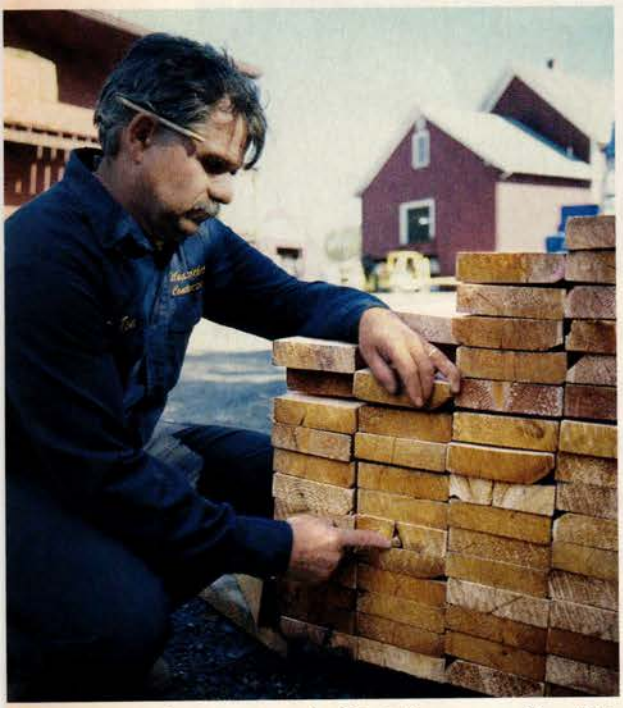
NORM'S YANKEE THRIFT

"A common mistake people make when buying lumber is to worry more about cosmetic appearance than finding the right material for a job. On the first This Old House *project 20 years ago, we had to replace rotted sheathing along the curved eave of a mansard roof. So I told the person who went out to buy materials: 'OK, we need No. 2 common pine boards or rough spruce.' Instead, he came back with a load of clear pine and said, 'It was a good price.' My reply: 'I don't care how much of a bargain it was. It's a waste of money to nail select pine boards on a roof that will get covered with asphalt shingles.'"*

however, buying lumber is a mysterious process. Even at a well-organized yard like Arlington, the multitude of choices can bewilder a novice. Outside, stacks of lumber stretch the length of a city block, and forklifts, beeping incessantly, rush from pile to pile. Inside a barn-sized shed two stories high, racks of boards in various lengths, widths and thicknesses tower overhead. "Knowing what to buy requires common sense, whether you're looking for studs to frame a partition, joists and decking for a porch, or shelves for a bookcase," says Tom. "And you need a trained eye to distinguish the good boards from the bad."

The challenge begins with finding a good lumberyard. A quick look around the premises at Arlington reveals why Tom likes doing business here. "The yard is neat, and the lumber is always stacked correctly," he says. Spruce for joists, studs and rafters is organized by length and width, elevated on blocks and wrapped in shipping covers. "Framing lumber doesn't need to be kept indoors, but you want it covered so it won't get wet or baked by the sun," Tom says. And the bundles are tightly bound with steel straps. "Banding is important because it doesn't let the wood run wild."

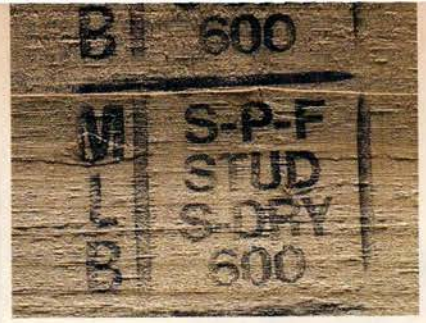
Entering the open 20-foot-wide doorway of one of the yard's sheds, Tom heads down an aisle big enough to accommodate a 40-foot flatbed truck. "This is where they keep wood that needs to be protected from the weather," Tom says. Vertical racks on the right hold spiring lengths of Douglas fir for decking, yellow pine for moldings and white pine for shelves. Horizontal racks on the left hold premium wood for interior and exterior trim, including redwood, white pine and poplar. "This is a beautiful piece for porch decking," says Tom, pulling a Douglas fir 2x4 off a rack. The board, golden-orange with straight vertical grain, is pristine except for a small black knothole on one edge. Taking out his tape measure, Tom checks the distance to the knot. "I could still get 10 feet of perfect wood out of this 14-footer," he says. "Or I could just lay the knot down against the joist. Nobody would ever see it."



Bending over a stack of 2x6s for use as ceiling joists or studs for outside walls, Tom looks for knots, checks, splits and other defects in the board ends.

Choosing good lumber inevitably involves the art of compromise. Tom loves Douglas fir, a Pacific Northwest wood valued for its strength. As a young carpenter, he almost always framed houses with it. But in recent years the relative scarcity and high price of good Douglas fir has caused him to switch to spruce for studs and rafters and engineered lumber for joists, headers and ridge beams. Likewise, he once made interior trim almost exclusively from white pine. "Now it's practically impossible to get clear stock," he says. As a result, he usually chooses poplar for trim. "It routs nicely, sands nicely and paints beautifully. But I never use it outside because it has low rot-resistance."

Over the years, Tom has seen a general decline in the quality of available lumber. "You have to have a good eye or you can easily get taken," he says. "When I scan a piece, I look closely for loose knots, big knots, checks and cracks. I want lumber that is good and straight and has as few knots as possible, especially near the edges." Tom's purchasing begins with what he calls "shopping the ends." Out in the yard at Arlington, he carefully eyeballs the painted ends on a stack of 2x4s. "Knots in the ends are going to give me problems *(continued on page 68)*



Making the Grade

Sawmills mark every piece of framing lumber with a grade stamp, above, which at first glance looks like a mysterious hieroglyph. Encoded in the stamp, however, is important information about a 2x's strength, moisture content and tree species.

Grade: The most prominent number or letters on the stamp primarily indicate strength and stiffness, ranging from the highest quality, Select Structural (SEL STR), to the lowest, No. 3 grade. Tom Silva typically orders No. 2 or better for most of his framing jobs.

Moisture content: Surfaced Green (S-GRN) indicates a moisture content of 20 percent or higher. Surfaced Dry (S-DRY) means the piece was air- or kiln-dried to a moisture content of 19 percent or less. MC 15 and KD 15 have moisture contents of 15 percent or less.

Species or species grouping: SPF=spruce, pine or fir. HEM-FIR= western hemlock and white fir, among others. SYP=southern yellow pine).

Grading agency: There are 25 certified groups in North America that ensure through surprise inspections that mill graders hew to standards.

Mill number or name: If there's a problem with a piece of lumber, it's possible to track down which mill it came from.

—Thomas Baker

Shopping the ends of 2x10 rafter stock reveals typical wood warp problems. Both the top board, twisted along the edge and length, and the middle board, cupped from edge to edge, are troublesome. Only the bottom piece would provide a straight enough edge to nail down roof sheathing.

WOULD YOU BUY THESE BOARDS?

All these 8-foot 2x10s are graded as No. 2 lumber and should be strong enough for use as joists despite being riddled with knots—weak points where the tree has grown around and encased branches—and other visible defects.

MICHAEL GRIMM

COSMETIC DEFECTS

1. **PITCH:** *Resin that has oozed to the surface.*
2. **BLUE STAIN:** *Discoloration caused by fungus.*
3. **CHECKING:** *Surface cracks commonly caused by drying stresses.*
4. **PIN KNOT:** *Less than ½ inch in diameter.*
5. **TORN GRAIN:** *Roughened surface where a planer or saw pulled wood out of the board instead of slicing it smooth.*
6. **BARK POCKET:** *Encapsulated tree skin; not a problem if small.*

STRUCTURAL DEFECTS

- **A. SPLIT:** *A cross-grain break all the way through a piece.*
- **B. ENCASED KNOT:** *Growth rings are separate from surrounding wood.*
- **C. KNOTHOLE:** *A void left by a dead branch.*
- **D. REACTION WOOD:** *Grain that turns toward the edge.*
- **E. INTERGROWN KNOT:** *Shares growth rings with surrounding wood.*
- **F. SHAKE:** *A separation between growth rings.*
- **G. SPIKE KNOT:** *An embedded branch, sawn lengthwise.*

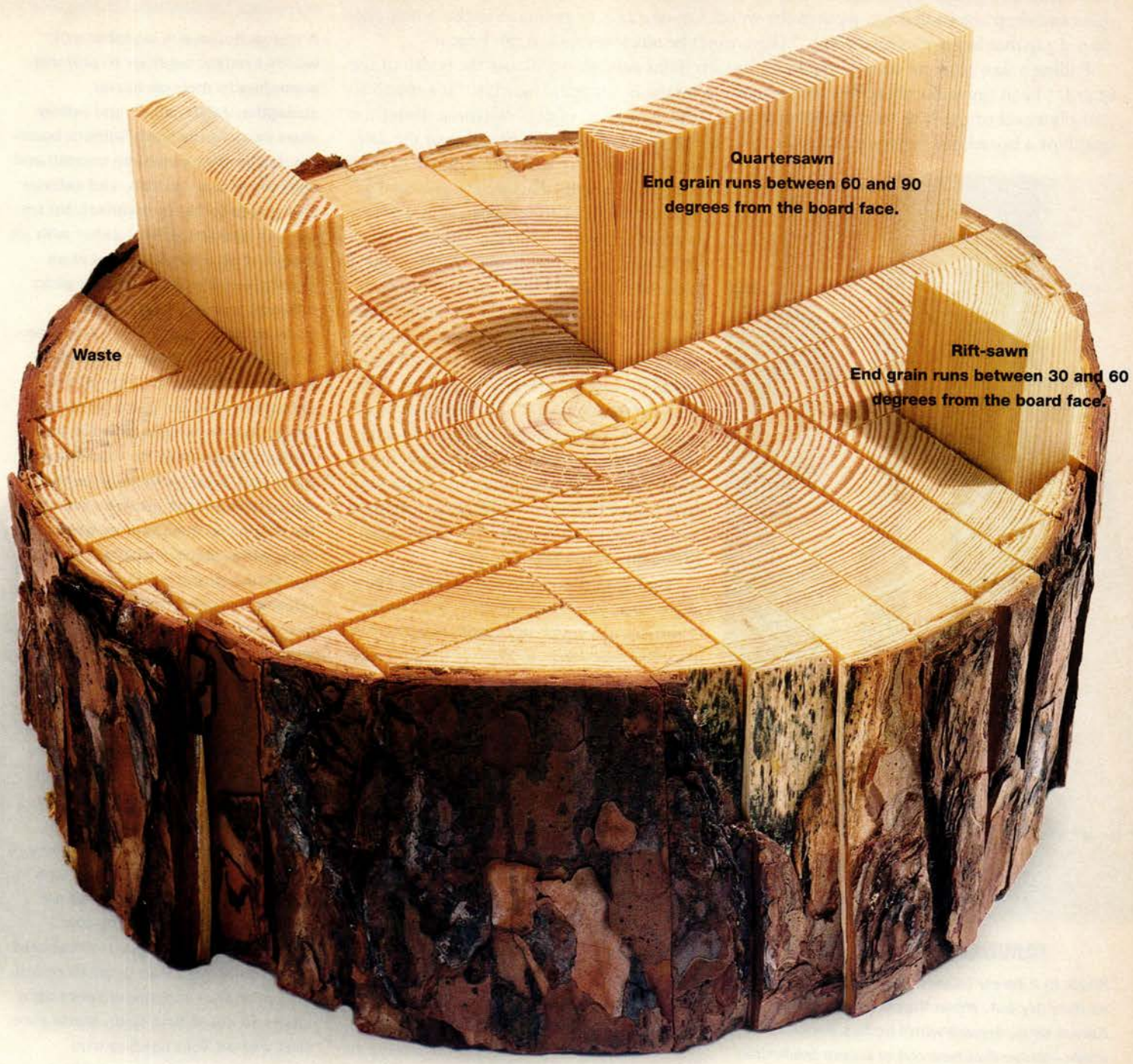
COMMON CUTS

Flat-Sawn Lumber

Most lumber comes from logs that have been flat-sawn, producing boards with end grain nearly parallel to the face. The milling process is fast and yields a wide range of products—posts, framing lumber, boards—with little waste. Compared with quartersawn lumber, however, flat-sawn pieces are more likely to warp as a board dries or to blister paint with changes in humidity. Lumber is referred to by nominal dimensions, which are larger than actual measurements. For example, a 2x4 is reduced by planing and drying from a nominal 2 inches by 4 inches to 1½ inches by 3½ inches. The discrepancy increases as lumber gets wider than 6 inches. Hence, a 2x8 becomes a 1½ by 7¼. Lengths are not subject to this perplexing nomenclature: An 8-footer is actually 8 feet long.

DAVID PRINCE

CHOICE CUTS



Quartersawn Lumber

Dividing a log lengthwise into quarters is a slow and expensive milling process that produces lumber prized for its stability and beautiful grain. A board is sliced off one face of a log quarter, which is then flipped for a cut off the other face. On each board, the tree rings run at nearly right angles to the face, so the wood is less likely to cup or twist. This premium-priced lumber, described as quartersawn or rift-sawn, depending on the exact angle of the end grain, is in short supply at most lumberyards but can be purchased by special order. "Anytime I want a board that won't expand and contract too much—on decking, flooring, trim—I look for that vertical grain," Tom Silva says. "The wood is easy to work and holds paint well. Or it looks great if you use a stain to show off the grain."

(continued from page 64) when it comes to cutting and nailing," he says. He also looks for splits and deep cracks that can weaken the wood. On one 2x4, he points to shake, a crescent-shaped gap that follows a growth ring. "There won't be much strength in this board."

Pulling a 2x6 from an opened stack, he lays his hand palm-down across the width of the board. "I can immediately tell by feel whether a board is cupped," he says. "It's tough to nail plywood or drywall to a stud that isn't flat from edge to edge." Warping along the length of a board can be troublesome as well. When Tom sights down the edge of the 2x6, he discovers the wood is slightly arched from end to end. "This piece has a crown," he says, "If I were to use it as a stud, I'd have a pregnant wall." On the other hand, a 2x10 with a modest crown would make a good floor joist. With the apex of the crown arched upward, the joist would eventually straighten out and help prevent sag in the floor. "You just have to make sure you install the crown correctly," says Tom. "One time my brothers and I had finished building a deck when my dad noticed a dip in the floorboards. Sure enough, we had put in one joist with its crown going the wrong way, so it sagged like a swayback horse. He made us rip it out and turn it over. After that, I never forgot to check crown."

TAMING UNRULY STUDS

Studs in a newly framed wall can bow or twist as they dry out. When that happens, Norm Abram says, drywall won't lie flat. Problem studs—those that bow out of plumb more than ¼ inch—should be replaced if they are in a load-bearing wall. But in a non-load-bearing wall they can easily be repaired. First, Norm takes a circular saw, holds it against the point of greatest bow and makes a steep, angled cut from the stud's concave edge to within 1½ inches of the convex edge. Into this kerf, he hammers a wood shingle—thin edge first—as he gently pulls the stud straight and checks it with a level. Then, on either side of the cut, he scabs on a 2-foot-long 2x4 or a strip of ¾-inch plywood using 2-inch or 2½-inch box nails. "It's not quite as strong as an uncut stud," Norm says, "but it will make life a lot easier for the drywall guys."

Tom says that, above all, lumber shoppers should avoid buying wet wood. "Houses are tight and don't breathe like they did years ago, so it takes longer to get rid of moisture," he says. "That makes it all the more important to build with lumber that is relatively dry." Inexpensive meters are available for checking moisture, but Tom doesn't need one to identify lumber that is green and unseasoned. "If I pick up an 8-foot 2x4 and it feels unusually heavy, I know it's soaked. That means it's going to shrink or warp when it dries out." For new construction, Tom frames with stock certified by lumber graders to have no more than a 19 percent moisture content. But when renovating an old house where the existing wood has already dried out, he buys kiln-dried lumber with a 15 percent moisture content or less. "I don't want to come back in a year to find lots of gaps in the trim and the baseboard ¼ inch off the floor because of shrinkage," he says.

Even good, dry lumber can go bad if not protected once a buyer takes delivery. "Don't keep it where water can get underneath it," Tom says. "You want the stack on blocking so the wood doesn't suck up moisture from the ground." And lumber should remain strapped until work begins. "When you take the steel bands off, there are always a couple of pieces that will warp and run wild," Tom says. "But a good lumberyard will let you return them." ■

Which Wood to Choose

A typical house is a symphony of woods brought together to perform according to their particular strengths. Joists, studs and rafters must carry heavy loads without bending. Inside trim should be smooth and easy to paint or varnish, and exterior trim needs to be rot resistant. No single tree species yields lumber with all these varied characteristics at an affordable price, so Tom Silva picks different woods based on their intended use. Framing lumber: Standard 2x lumber doesn't need to be pretty, just strong enough and dry enough to hold up floors, walls and roofs. Tom once framed walls exclusively with fir: 2x4s for load-bearing walls and 2x3s for interior nonbearing partition walls. Now he orders No. 2 spruce, a weaker wood, but he uses wider stock: 2x6s for the exterior load-bearing walls, 2x4s for interior nonbearing walls. For deck and porch framing and for mudsills, where resisting rot is paramount, he buys pressure-treated southern yellow pine. Exterior trim: For soffits, corner boards, window casings and the like, Tom usually orders white pine in nominal 1x or 5/4-inch thicknesses. And he makes sure to protect the wood from water before nailing it up. "The pine today doesn't have the tightness that it had years ago; you need to coat it on all six sides with paint." If the budget allows, he'll buy a more rot-resistant species like redwood or western red cedar. Interior moldings: Years ago, when he could find clear, white pine, that was all Tom used to trim houses. Now he favors poplar, a lightweight easy-to-paint hardwood readily available in wide, knot-free boards. Decking: Clear, vertical-grain Douglas fir is Tom's traditional choice for porch decking. For uncovered decks, he has used redwood and cedar ("very soft, very expensive") and pressure-treated yellow pine. Recently, Tom installed decking made of Philippine mahogany, a tropical hardwood so dense it has to be drilled before it can be fastened.

—Thomas Baker

PHOTO: KELLER & KELLER.

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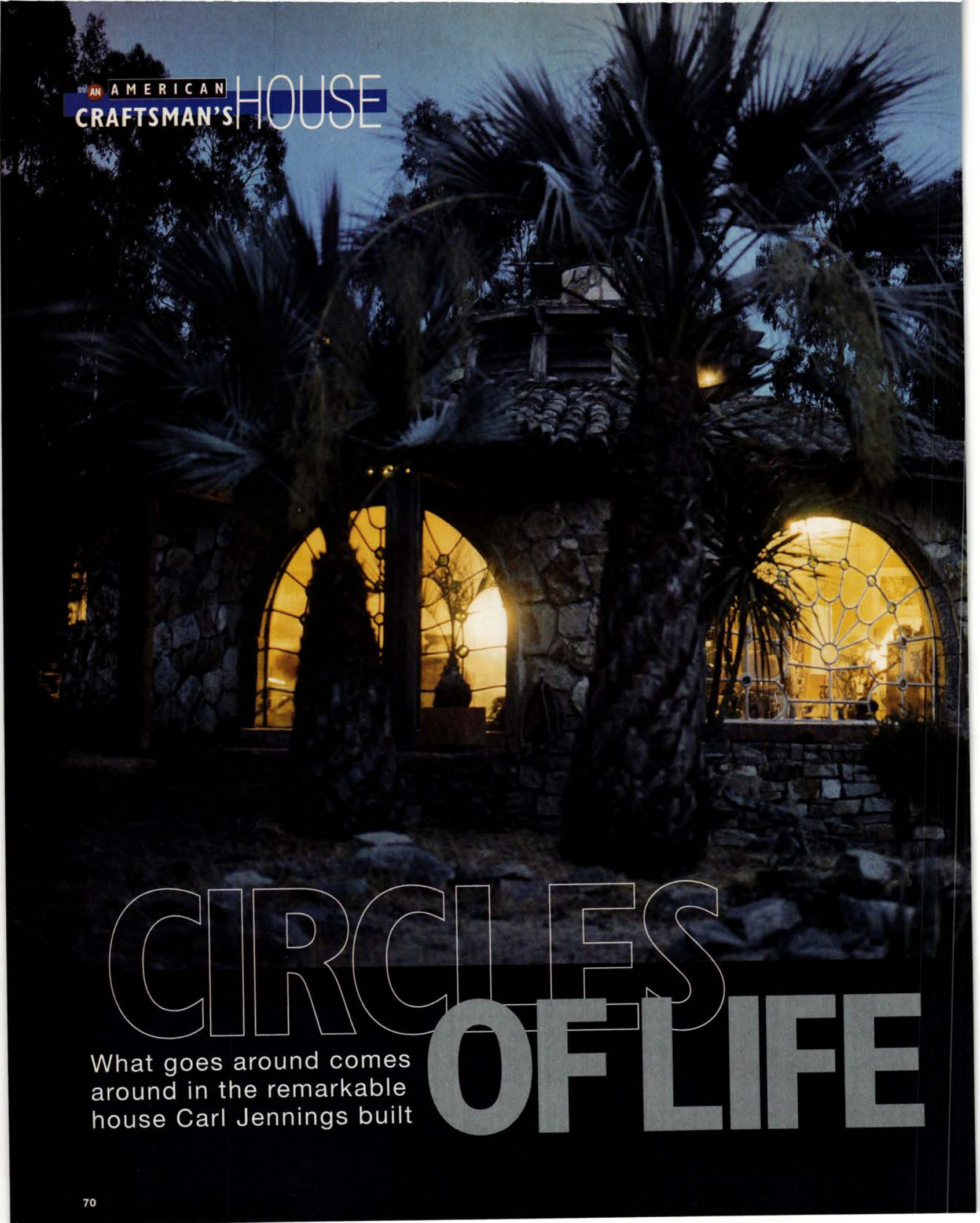
AN AMERICAN CRAFTSMAN'S HOUSE

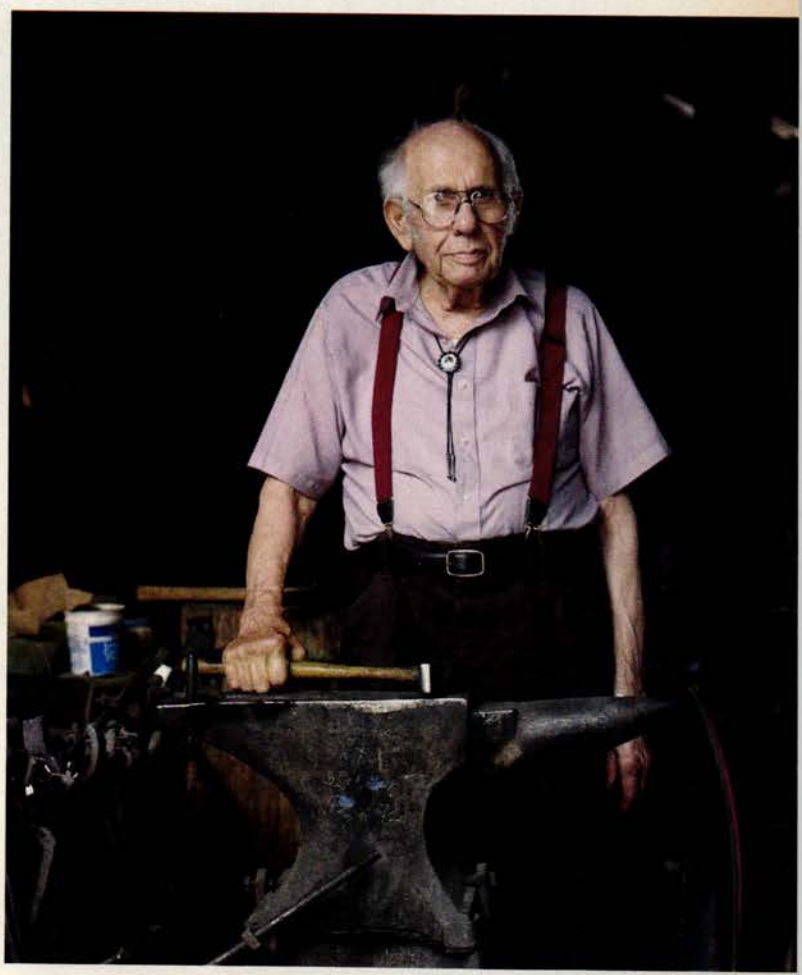


CIRCLES OF LIFE

What goes around comes around in the remarkable house Carl Jennings built

BY JACK McCLINTOCK
PHOTOGRAPHS BY DAVID PETERSON

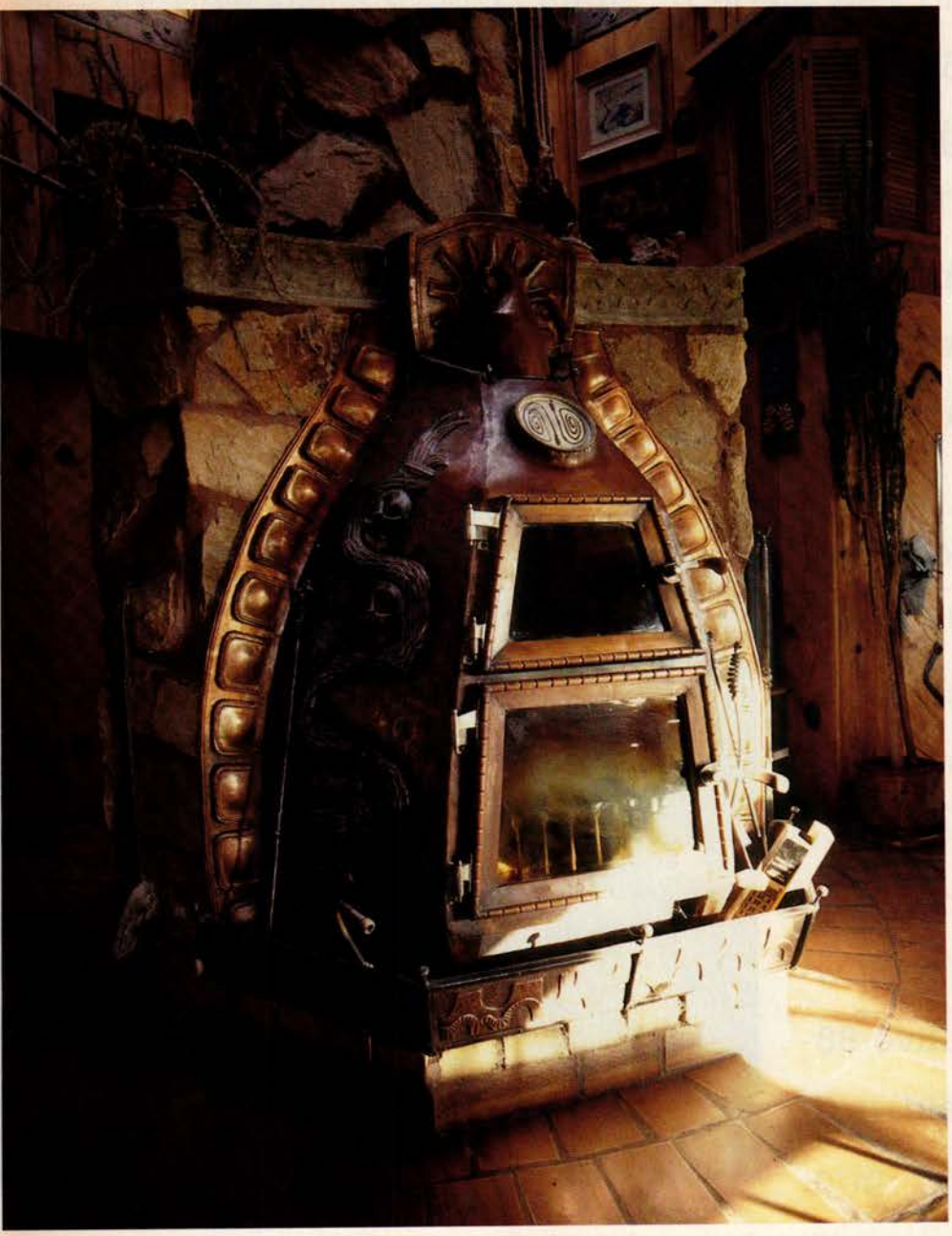
The house is round and made of stone. The Spanish tile roof stands out amid 5 acres of palms, yuccas and century plants at the end of a gravel lane just past a vineyard in Sonoma Valley, California. The half-round windows are curved, and the half-round doors are studded with the round green glass of champagne bottle bottoms. When the owner, Carl Jennings, opens the door, the glass casts shifting gleams on the curving walls inside, making the house seem a bit like an underwater grotto. Jennings, a slow-moving and diminutive 88-year-old with a bald pate and a wizard's grin, shuffles a bit unsteadily into the living room, where a fire flickers inside a handmade copper woodstove with a round stone chimney rising up and out through a wagon-wheel-



At dusk, Carl Jennings's house, opposite, casts a warm glow through the surrounding grove. Jennings designed and built the entire structure himself, forging many details, including the intricate window lattices, in a small blacksmith shop, above, adjacent to the house. "I don't believe in copying," he says. "Anything I tackle, I just can't do it like it's been done before."

shaped central skylight. From the windows, sunlight spills across the terra-cotta tile floor—the tiles are set in concentric circles—and into every spot that in a square house would be called a corner. "I probably should have round furniture too," Jennings says. "Once you make the primary decision—round house—then you have to think in terms of roundness."

Jennings and his late wife, Elizabeth, laid the foundation and began erecting the stone walls of their retirement place 28 years ago, and it remains a work in progress. "It'll never be finished," Jennings says, gesturing at a square, transomlike gap above the bedroom door. "I've got a stained-glass panel out in the shop that goes in that hole. I just haven't gotten around to it." Yet there is a remarkable sense of unity and wholeness about the house. Inside and out, the craftsmanship is so elaborate and complex, yet every detail has so clearly sprung from the same mind that the house seems like the product of an instantaneous, comprehensive vision.



The circular floor plan radiates from Jennings's handmade copper woodstove, a sculptural tour de force that is also the main source of heat for the house. Atop the stove, a handmade copper kettle serves as a humidifier.

Everywhere are chunks of black iron—door latches, fire tongs, sculpted heads and hollow vessels—each persuaded into a strong, graceful shape by Jennings. His ancient craft, blacksmithing, may be anachronistic in an age of computers and rockets, but his lifelong passion for the work still reigns. Officially retired as he approaches his ninth decade, Jennings still spends many of his waking hours in a home workshop, a grime-covered, hard-of-hearing Benvenuto Cellini of the forge. "He's one of the treasures of his trade—and this country," says Jim Wallace, director of the National Ornamental Metal Museum in Memphis, Tennessee, which owns some of Jennings's work.

One characteristic Jennings piece is at the heart of the house: a lighting fixture with stylized fish and curving spoon shapes bristling around a warmly glowing drum-shaped center. "It's just absolutely knockout," says his longtime friend Sam Maloof, the master woodworker (*This Old House*, March/April 1998). Jennings made the fixture 40 years ago, and it swings from a chain in the single bedroom. "I guess I think 'round' quite a bit in my work," Jennings says. "I got the idea for the house from this lamp." And from his wife, Elizabeth, a gardener who operated her own nursery for many years. "She was a genius with plants," says Doug Carmichael, who helped tile the roof in exchange for metalworking lessons from Jennings. "Maybe the absence of rectangles in nature is what encouraged her to suggest a round house."

The house is small—just 50 feet in diameter and 23 feet high at the top of the skylight—but every detail is the work of a craftsman obsessed with perfection. Jennings likes things solid, graceful, earthy and about 10,000 times stronger than they'd need to be to stand up. An owner-builder doesn't have to compromise, and he'll bring his own expertise—and sometimes biases—to a project. "Carl made everything there, every hinge and knob," says his friend Toby Hickman, a blacksmith in nearby Petaluma. "He may be the only person on the planet who could have done it. He even fabricated tools to do jobs for which no tools existed."

Jennings sinks onto a living room couch and shrugs. "It's a blacksmith's house," he says simply, waving a gnarled hand at the stone walls. A blacksmith's house—yet not overwrought. Despite all the heavy stone, cast concrete, stout beams and black metal fixtures and hardware, visitors' first impression is of a sunny lightness. How did he do it?

Like the lighting fixture, the house began life as a sketch in a 3-by-5-inch idea notebook. Jennings always keeps one in his shirt pocket and at his bedside. Used notebook pages are stacked in cigar boxes, hundreds of pages covered with the black grit that blankets a blacksmith's life—decades of thought.

Ideas would come to him early in the morning when his mind was uncluttered, and he'd write them down, go into the shop, pick up his hammer and refine them on the anvil. "Some smiths

do very beautiful, elaborate drawings and work from them," Maloof says. "Carl just designs it as he goes along."

To be properly, serenely round, Jennings figured, the house would have to be adobe or stone. He picked stone, which—like iron—has a straight-from-the-earth authority and strength. From a quarry in Glen Ellen, he ordered truckloads of a colorful limestone called Sonoma candy stick and, in 1970, he and Elizabeth settled into a little trailer on the property and started building. It was five years before they moved into the house, and it still wasn't finished. That didn't surprise Jennings. The light fixture that had inspired his house design had taken 200 hours to make.

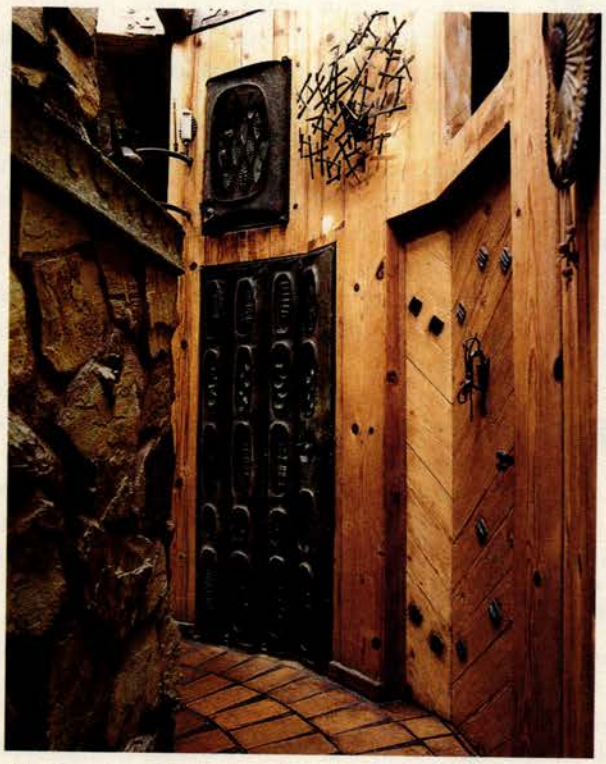
Jennings based the house's size on the length of available used timbers—22 feet—plus the diameter of the circular chimney. He hired a man with an auger truck to drill 5-foot-deep holes every 3 feet around the perimeter of the foundation trench—one of few jobs he and Elizabeth didn't do by hand. He deployed rebar and filled the trench and holes with concrete that the couple had mixed in a 3-cubic-foot mixer. He still keeps the mixer out behind the rusting Quonset hut he erected—and still uses—as a shop. He built the house walls with slip-form construction, piling rock into a portable form, cementing it solid, moving it up and repeating the process. Years passed. Finally, he had a wall 22 inches thick at the bottom and half that at the top. He built the central chimney in the same way. More years passed. One day, a visitor drove up and asked what Jennings was building. "I'm building a church," Jennings said.

The roof wasn't quite so easy as the walls, but at least it let Jennings work again in iron. Rigging an A-frame and a block and tackle, he and a helper hoisted the rafters' outer ends onto the wall top. But the inner ends, which would butt against the chimney wall, needed something to rest on. Jennings welded up an enormous "spider," as he calls it: a ring of heavy joist hangers to encircle the chimney near its top and support the rafters' inner ends. He put the spider together on the ground—a ring around the fireplace—and then, with the block and tackle, hauled up the 500-pound deadweight an inch at a time. "It was kind of frightening," he says. "I wasn't sure something wasn't going to break." When the rafters were up, Jennings nailed on 2x12 sheathing and laid the heavy Spanish barrel tiles. They weigh a ton per square (10 by 10 feet) and, to judge from the look on his face, he remembers every ounce.

He and Elizabeth finally moved in, and winter came. "There was no insulation, and it was so cold you could feel the heat leaving," Jennings says. So, the next spring, he removed all the tiles, added 1½ inches of rigid foam insulation and spent the summer replacing the tiles. "Made quite a difference," he says.

So did the sun. As the walls and the roof went up, the interior of the drum-shaped house had grown darker, but Jennings had anticipated that. "The skylight I had in mind from the start," he says. "I wanted sunshine—it's very heartwarming." The skylight is an astounding piece of articulated design and thought-out engineering, combining lightness and enormous strength. The 11-foot-diameter tower, capped with acrylic panels and louvered on the sides, rises 4 feet above the middle of the roof and encircles the chimney. Sunlight pours into the living room. After sundown, the skylight is the perfect night-light. "The moon and stars shine through," Jennings says. "It rarely gets so dark you can't find your way around."

In the winter, the abundant sunlight adds to the warmth from Jennings's copper woodstove. In summer, the skylight louvers help cool the house. "It's a wind tower," Jennings says. Warm air rises and escapes through the tower louvers, pulling in fresh, cool air through a ventilation port low on the laundry room wall. Even in summer—when temperatures hovered around 90 degrees Fahrenheit, and Jennings worked 12-hour stretches with all the lights on and a gas forge and electric trip-hammer running all day—his energy bill never topped $125 a month.



A hallway hugs the fireplace's rear curve, with doors opening into the bedroom and the bathroom. Abstract metal sculptures by Jennings and several of his friends ornament the wall.

"The house was built before I thought much about solar energy, but it's just what I'd have done if I'd been thinking solar," Jennings says. "I put the two big windows on the south side." There are six windows in all, as large as 6 by 8 feet. Their steel frames were hot-bent over a semicircular form Jennings built to duplicate the curve of the house's outer wall.

Embracing each opening is a cast-concrete frame ornamented with abstract symbols. Jennings, an admirer of strong, primitive art, created the concrete embrasures and invented the symbols. He had tried butting the raw stone and glass together, but that looked crude: "Too rough." So he made a transition and framing device with the cast concrete. "He has tremendous respect for materials," says his friend Hickman. "He never forces a material or asks it to do things it's not suited for."

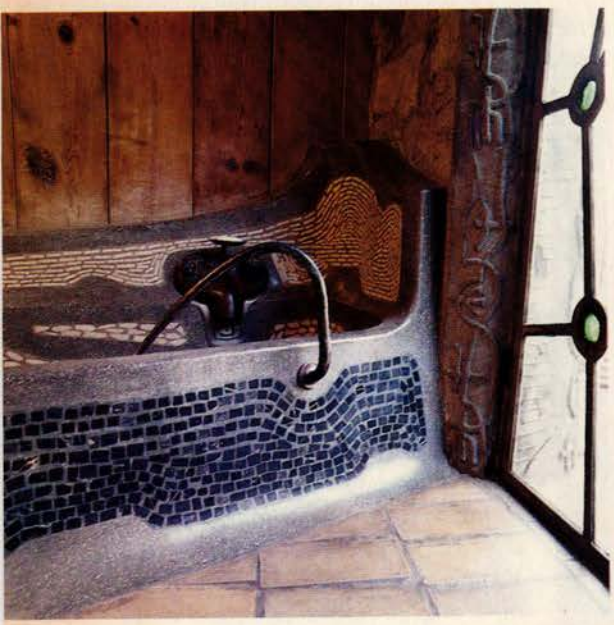
That's why copper combines with stainless steel and black walnut in the house's main sculpture: the central woodstove, a graceful bulge of metal that appears to grow from the rock of its chimney, like a swell of ore in transformation. A low flame flickers behind the stove's two doors, which swing out on perfectly machined hinges. Sculpted latches with handles of copper, stainless steel and black walnut hold them shut—the steel, a poor conductor, keeps the wooden handles cool. Stylized flames are beaten into the stove's sides, using a technique called repoussé in which the smith works both sides of the metal. He hammers a depression into one side, fills the depression with molten lead, turns the object over and, with chasing tools, applies a design to the convex side. The lead preserves the object's shape as he works.

Copper pipes emerge from the stove top, arc across the hallway and disappear into the wall. They connect up to a system of

copper pipes beneath the tile floor—Jennings's radiant heat system, which has never quite worked. The copper stove didn't warm the water sufficiently, so he uses a gas heater too.

The floor plan is simple: a circle divided in half, with kitchen, dining room and living room on one side, all facing the central fireplace. Behind the fireplace is a narrow hallway and, opening off it, a bedroom, bathroom and laundry room. Darkened with drawn drapes, the stone-walled bedroom has the drama of a medieval hall, if a small one. It's perfect for secure sleeping. But open the drapes to let the sun spill in, and the room is as cheery as a beachfront sleeping porch. Jennings and his gardening wife knew the value of light.

Once they had moved in, more ingenious details began to accumulate. Some were fortuitous. The tiny, handsome woodstove in the bathroom was a gift. "Nicest little stove I have ever seen, so simple in line," Jennings says. So was the wrought-metal toilet paper holder, a grotesque sculpted by one of his friends, blacksmith Dan Boone, a descendant of the frontiersman. But the rest of the room is eminently Jennings-esque. The toilet tank is mounted high, in the old-fashioned manner, and festooned with a pull chain and sculpted, vinelike copper pipes. No element is merely functional. Even the bathroom door latch—knob, cam, bar, catch, handmade screws—is far more elaborate than necessary for security and has a mystifying complexity that seems to please Jennings. "People do lock themselves in here," he says, smiling. What stuns the eye, however, is the terrazzo bathtub. Jennings has always been fascinated by terrazzo, so he slathered some—dark gray with white marble chips and larger pieces of marble mosaic—onto a cast-in-place concrete form. Then he started grinding it smooth. He winces at the memory. "It took a lot of grinding. But I couldn't stop then. I'd gone too far. It took months—I'm talking about eight hours a day for months. I know: It's crazy. Everything didn't have to be so hard. But I put a lot of myself into this house."



Jennings says that his sun-drenched terrazzo bathtub is one of his favorite original designs in the house: "My style? I don't have a name for it."

In the kitchen, he says, "See, I couldn't make a standard cabinet, just couldn't! I wanted this three-dimensional quality to them." He designed the cabinets, which have 2-inch-high borders of wood and handmade black-iron knobs, and hired a young carpenter to do the building. "He didn't finish. He got involved in making oak toilet seats and did a big business, so I finished them," Jennings says. That he did, including the black-iron knobs and the screws that attach them. "The knobs don't look like much, but they take maybe three hours each to finish. I had to make special tools to hold them. But I'll spend the time. I'm used to that. It's nothing to me to work 12 to 15 hours a day."

Unfortunately, devoting so much time to his craft has been difficult for Jennings of late. His wife died in August 1997. "The last three years have been a void," he says. "I did nothing but take care of Elizabeth—62 years with the same woman." He shakes his head, shutting the door of the woodstove and bending to replace the fire tongs he's been using. Then he brightens, holding up the tongs, whose gripping fingers curve to one side. "I dreamed this," he says. "It's the only time I ever dreamed a design." The simple but elegant design is one of Toby Hickman's favorites. Jennings's tongs are perfectly balanced and allow exact control of oversized logs as well as chips of kindling; a little sheepishly, Hickman admits he's made about 40 pairs for his own customers.

As Jennings turns away from the woodstove, he stumbles, pitching forward and nearly cracking his head against the stone chimney. It takes him a few seconds to get firmly on his feet. "That makes me mad," he says, breathing hard. "What if I do that, and I'm here alone?" He shakes his head impatiently.

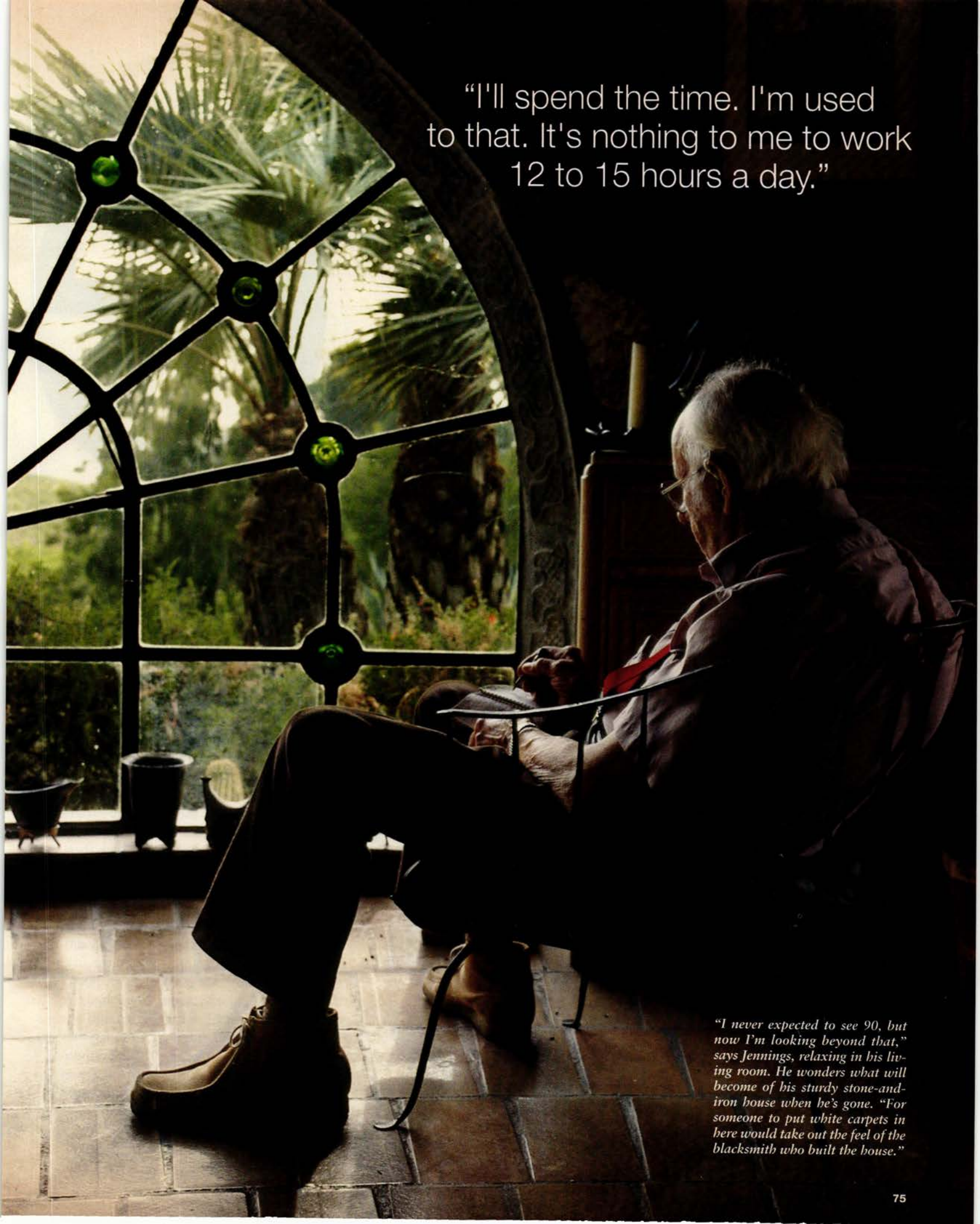
Then he hitches up his maroon suspenders and heads out to the shop, where he's working on a special project. Even with the lights on, the shop is gloomy, as if every surface and tool were painted matte black. In fact, everything—the iron-jumbled tables and shelves, the electric trip-hammer, the gas-fired forge and "at least a hundred" hammers—is covered with black iron grit. With one hand, Jennings picks up a "little hammer" (a long-handled 13-pound sledge) and smacks it on his anvil. The clang is deafening.

Resting on a sandbag is Jennings's current project, a vessel about 7 inches in diameter and height. Like most of his recent work, the vessel is angle-raised, made by heating, hammering and bending a sheet of steel over an anvil until the steel cups. "I like to see how far I can draw the metal, how far I can stretch it," Jennings says. The vessel began life the usual way, as a sketch in his notebook. "I had a concept of the shape: round," he says. "And I wanted to put a frieze around it." Hefting the piece in one hand, he tells where he found the frieze image and how he sketched it on paper and taped the paper onto the vessel's rim. How he shaped the vessel over his anvil and then filled the hollow with lead so he could chase the image into the outer surface using the repoussé method.

"It's enjoyment to me," he says quietly, turning the piece in his twisted fingers. "I like nothing better than to get out here and work on these vessels—the raw material, taking the concept from the brain to the hand. I've always loved building things."

But there's never enough time, and Jennings has always found it hard to say no to work. He's just accepted another commission—a neighbor wants a set of cabinet knobs like those in Jennings's own kitchen. Just yesterday, he had to crank up his tractor and grade the half mile of gravel road that leads to his house. This morning, he was out early weeding the stone walkways because his new lady friend, Virginia, promised she was coming to see him. Just thinking about her visit, his eyes light up inside the dusky workshop. And there was so much preparation to do over the next few days because he was throwing a party on Sunday.

The shop is big, and most of it has a disused, almost deserted feeling. But here on this bench, where Jennings is creating the vessel, there's a lively sense of work going on—a clutter of hand tools laid down but not abandoned. Handling the steel vessel like a piece of blown glass, he sets it back on the sandbag, gives a last fond look and, on the way back into the house, switches off the lights. ■



"I never expected to see 90, but now I'm looking beyond that," says Jennings, relaxing in his living room. He wonders what will become of his sturdy stone-and-iron house when he's gone. "For someone to put white carpets in here would take out the feel of the blacksmith who built the house."

WATERTOWN/THE TV PROJECT

fireplace insert

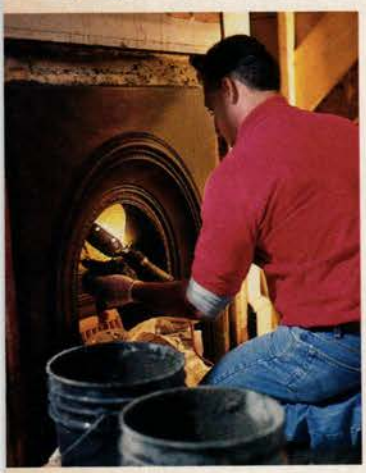
CLEARLY ENJOYING HIS ROLE AS A MODERN-day Prometheus in work boots, fireplace and chimney contractor Mark Schaub arrives at the fall television project house in Watertown, Massachusetts, ready to deliver fire. He unloads bags of mortar, buckets of tools, sheets of galvanized wire and, finally, a tiny box of artificial logs. "That's for later," he says, chuckling.

Schaub is here to solve a dilemma faced by many owners of Victorian houses: what to do with the inefficient fireplaces. A typical Victorian-era house contains fireplaces whose openings are large relative to the size of the flue—a design that makes it difficult to create the quintessential roaring fire, because there isn't the proper flow of air into the chimney. "Back then, people didn't use the fireplace the way we do," Schaub says. "Heating your home with wood was almost looked upon as something poor people did. They used coal-burning stoves in the fireplaces, with stovepipes snaked up the flues."

This particular Victorian house had five fireplaces when Christian Nolen and Sue Denny bought the property. Although they didn't need any for heat—*T.O.H.* plumbing and heating contractor Richard Trethewey outfitted the house with a new

BY JOSEPH D'AGNESE PHOTOGRAPHS BY PASCAL BLANCON

André Rizzon, left, and Mark Schaub remove the dining room mantel. Its opening is larger than necessary to fit the Victorian cast iron insert that will slide into this fireplace. T.O.H. *contractor Tom Silva will modify the mantel, while Rizzon and Schaub install the insert.*



TOP: Rizzon builds a smoke funnel by cutting galvanized mesh to size and nailing it to the existing flue. CENTER: *He attaches a ½-inch-thick ceramic wool blanket to the back of the cast iron insert; the blanket acts as a cushion when the insert expands or contracts with changes in temperature.* BOTTOM: *With the insert in place, Rizzon fills the back of the firebox with lightweight concrete rated to withstand heat up to 2,100 degrees Fahrenheit.*

central heating system as well as radiant floor heating—Nolen and Denny wanted the ambience that fires would create, so they decided to retrofit three fireplaces (all sharing the same chimney): one in the dining room, one directly above it in Denny's study and one in the front parlor.

When Nolen and Denny first contacted him, Schaub suspected that a dangerous combination of mismatched geometry lay inside the old hearths. It's standard practice in fireplace design for the flue opening to be at least 1/10 the size of the fireplace opening, a formula that ensures a fire will burn safely and efficiently. After Schaub visited the Watertown house, his suspicions proved correct. In the dining room, he found a fireplace opening of 900 square inches, which meant the flue opening should have been 90 square inches; it measured only 72. "That's only 80 percent of what you need," Schaub says. "So you can see you're already behind the eight ball." The fireplace in Denny's study was no better.

For these two fireplaces, Schaub suggested an option in keeping with the era of the house: Victorian-style reproduction cast iron inserts that slide into the fireplace opening. The 225-pound hunks are both functional and decorative. The face of the insert fits flush with the top and sides of the fireplace opening and frames a concave section that extends about 9 inches into the fireplace. This concave piece has slanted walls, attachments for a grate that holds wood or coal and a hinged damper to funnel smoke up the flue. With the insert in place, the geometry of the fireplace opening doesn't matter; the insert itself contains the fire.

During the 1800s, mass-produced cast iron inserts became increasingly popular in England and, by the mid-1800s, had crossed the ocean to American houses. Accented with foliage and braided rope patterns, elegant curves or neoclassical motifs, inserts were prized by Victorian home owners.

The reproductions Schaub suggested are manufactured in England. Nolen and Denny chose from a bewildering array of inserts—arched and horseshoe-shaped, studded with painted tiles depicting flower baskets, apple blossoms, sparrows, butterflies and languorous Alphonse Mucha grandes dames. Their low-key selections—$3,000 each—were an arch with a simple rope filigree for the dining room and an unadorned arch for Denny's study. Schaub applauded their restraint. "The house itself isn't overly decorative," he points out. "The styles they picked are from the 1850s and 1880s, roughly the time frame of the house."

On installation day, the work list calls for making a direct connection between the insert and the chimney, bolting the insert in place and filling the space behind the insert with a lightweight concrete formulated for chimney insulation. Work proceeds without a hitch. In the shell of the dining room, Schaub's coworker, André Rizzon, builds a funnel-shaped cage of galvanized wire and then nails it to the existing flue. Now, coated with the concrete, the flue will serve as a bridge between the chimney and the insert itself. When he mounts the unit to the wall, he taps it with his fingers. "That's sweet!" he says, relieved it fits so snugly. "Now comes the fun part, like playing in the mud." He grabs handfuls of wet concrete, balls them up and tucks them in the damper hole, letting them plop unseen, behind the insert. Bucket after bucket of goop disappears into the hole.

When hardened, the lightweight concrete will act as a protective barrier between the blisteringly hot iron and the rest of the structure, absorbing heat before it reaches combustible timber. Surrounded by this impermeable shell, heat produced in the fireplace is safely trapped within the insert, and the smoke is ushered out the chimney, which Schaub weeks earlier had lined with the same lightweight concrete.

After finishing the job, Schaub is eager for an audience. "Hey, Christian, Sue, come warm up!" he yells. The home owners, meeting with Tom Silva in the basement, tramp up the stairs and poke their heads into the dining room. Outside, the sky has grown gray and the afternoon light is fading. A small crowd of other workmen gathers around. Schaub snaps an artificial log into small chunks and lights a match. The reflection of orange flames dances in everyone's eyes. Crimson sparks fly in the grate. In moments the room feels toasty. Rizzon breaks the silence. "What do you know," he says. "It works." ■

A RUMFORD IN THE HOUSE

For the front parlor, Christian Nolen and Sue Denny wanted a traditional fireplace instead of a cast iron insert. But that meant rebuilding the fireplace so that the existing flue would work more efficiently. The home owners called on Dan McLaughlin of Solid Flue Chimney Savers in Cambridge, Massachusetts, above, to rebuild the fireplace in the Rumford style, a late-18th-century design that calls for angled sidewalls, a shallow firebox and a narrow throat up to the chimney. On the same day that Schaub and Rizzon were installing the cast iron inserts in the dining room and study, McLaughlin turned his attention to the front-parlor fireplace. He built a course of firebricks that partially filled the existing space to create a new firebox-opening with the right geometry. A final detail: McLaughlin installed Victorian-style glazed 3-by-6-inch tiles for the surround. "The front parlor is the perfect place for a traditional fireplace," Nolen says.

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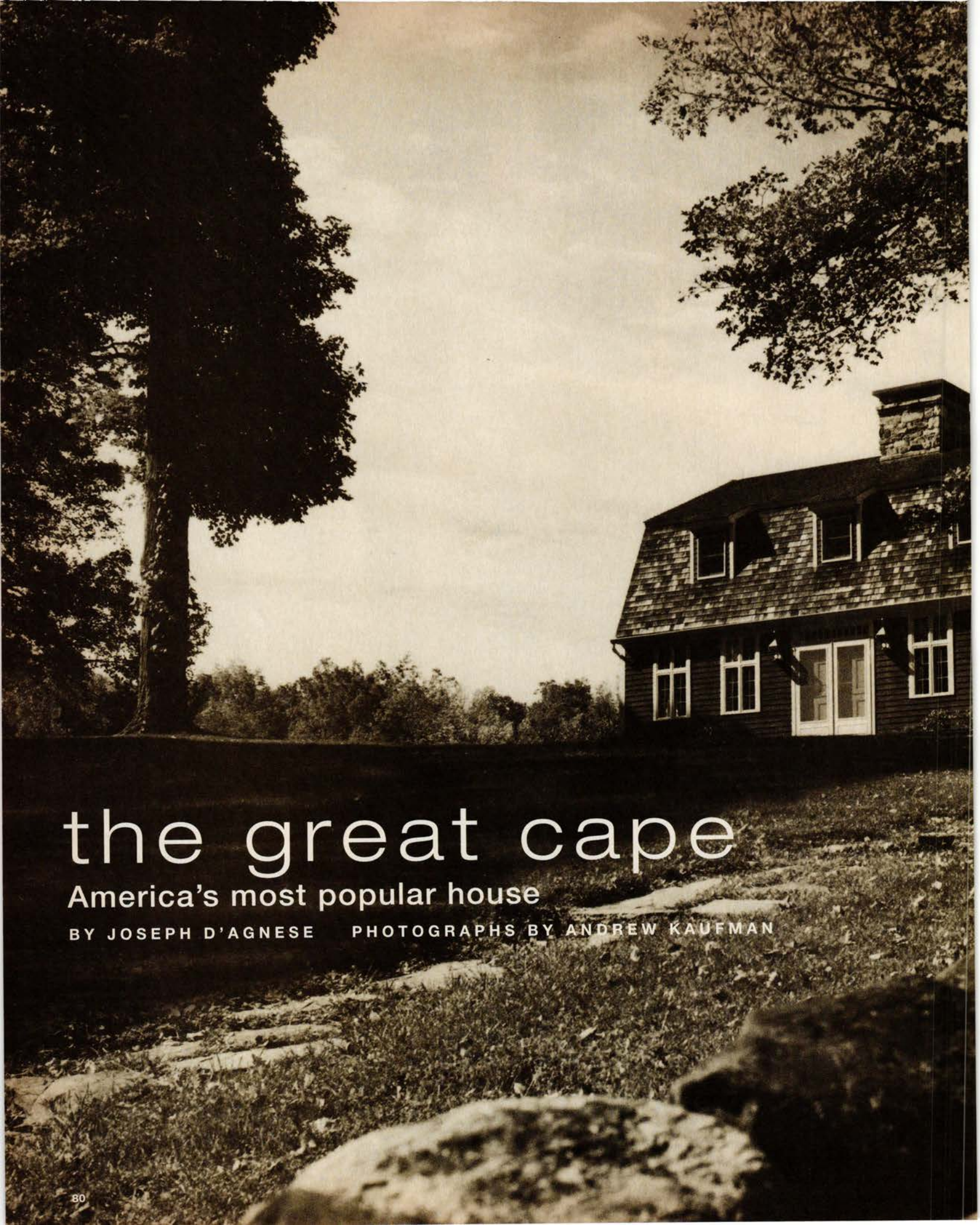
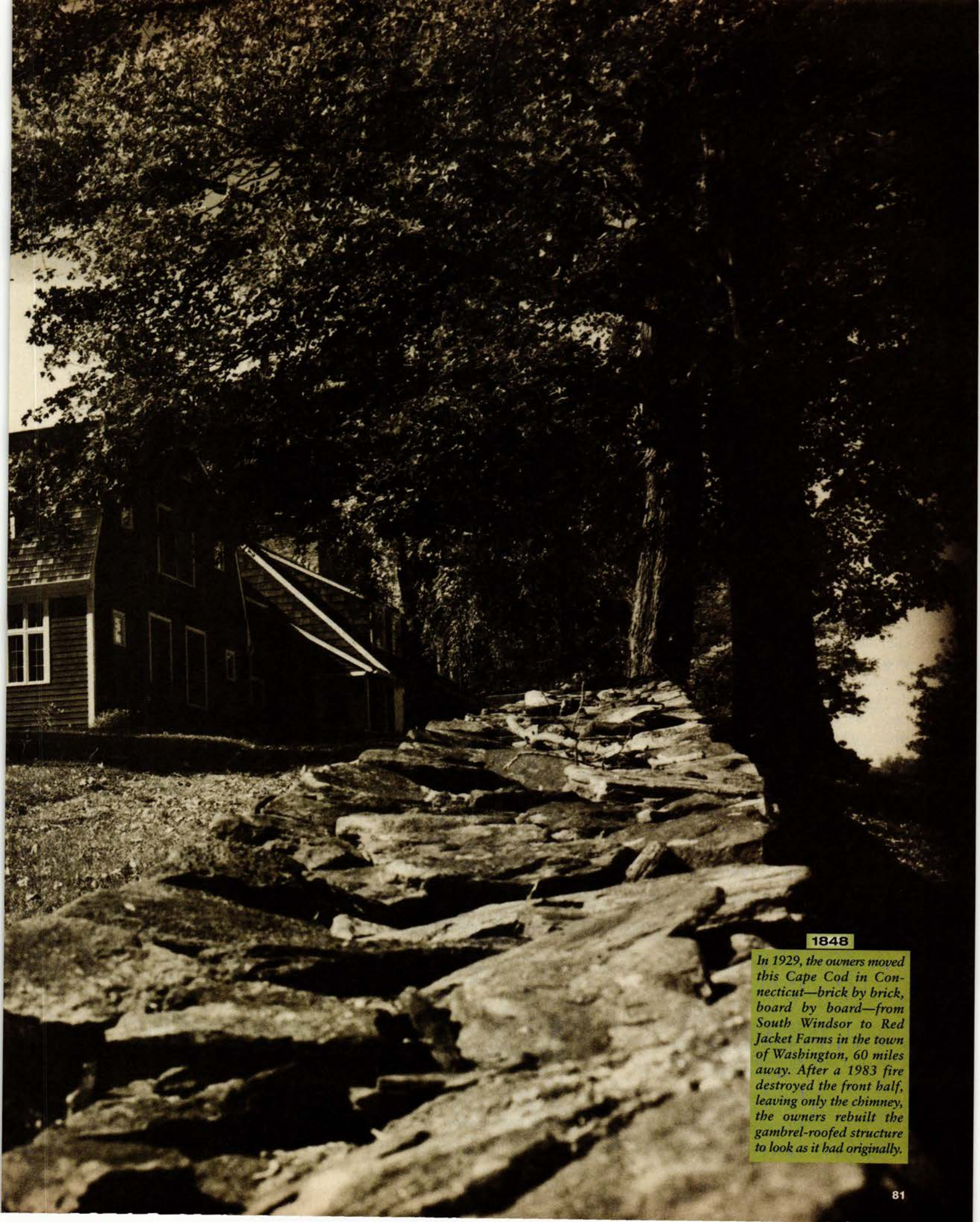
The modified mantel fits perfectly around the new cast iron insert. Because of the insert grate's small size, a regular log of firewood must be chopped into thirds to fit inside. Inset: The face of the insert is buffed with graphite polish.



the great cape

America's most popular house

BY JOSEPH D'AGNESE PHOTOGRAPHS BY ANDREW KAUFMAN



1848

In 1929, the owners moved this Cape Cod in Connecticut—brick by brick, board by board—from South Windsor to Red Jacket Farms in the town of Washington, 60 miles away. After a 1983 fire destroyed the front half, leaving only the chimney, the owners rebuilt the gambrel-roofed structure to look as it had originally.

Once I went to Massachusetts to see a man about a house. I wasn't buying, and he wasn't about to sell. He was Boston Irish, a professor and a born storyteller. We sat at his picnic table for hours as he told me how he was patiently restoring the 1678 Cape Cod house next door. His was a tale of fugitive Pilgrims, of sheep in high pasture, of manic farm auctions—and the house that stood through it all.

The ghost of a woman is said to appear on some mornings at the foot of the stairs of this Cape in Madison, Connecticut. She's believed to be lobsterman Talcott Bradley's wife, Eunice, who died in 1828 after only 1½ years of marriage.

At last we picked our way along a path littered with brambles and purple flowers to the "oldest Cape on the Cape." From the road, the house appeared small and unassuming. Its broad roof hung far down the facade, nearly touching the doorway and windows, like an impish man with his hat set at a rakish angle. Inside, we wandered through the rooms. Here was the fireplace, built of Massachusetts fieldstone. Here, the blackened rafters where the house's first mistress, a Quaker, had hung her pots. In the attic we found evidence of the old timber framer's art: snug mortise and tenon joints, ax marks in the wood, tree bark clinging to pegs that had held the Cape together for 320 years. Above us, the roof peaked at higher than 10½ feet. The Pilgrim carpenter had been clever, I thought. In an otherwise humble house, he built a cathedral in the attic.

But I shouldn't have been surprised. The first glance at a Cape Cod never tells the story. The little house with the big roof is the ancestor of millions more in suburbs across the country. From the mid-1600s until about 1850, Capes popped up all over New England, homes to fishermen and shipwrights and, later, inland farmers and city folk. Cape Cods might have disappeared permanently during the frilly Victorian era, but the Great Depression resurrected them, and it's easy to see why. The Cape's design was inexpensive, simple and durable. In 1938, *Life* magazine touted the modern Cape, designed by Boston architect Royal Barry Wills, as the answer to the nation's prayers. After World War II, the Little House That Could was again pressed into service. In the Levittown developments of New York and Pennsylvania, returning GIs and their families could plunk down $6,990 and move right into a 720-square-foot model with a purely ornamental chimney and an unfinished attic. By 1949, *Architectural Forum* was proclaiming the Cape "America's most popular house."

Stanley Schuler, author of *The Cape Cod House*, has found Capes all around the United States—even in Hawaii. Today we still build houses in the "Cape Cod" style, although the first Cape Codders probably wouldn't be able to pick them out of a lineup. Real-estate brokers will show hundreds of sloped-roof houses and palm them off as Capes. Purists bristle at this sloppiness, perhaps rightly so. But no other house has worked its way as deeply into the American psyche. In our mind's eye, we all know what a house looks like. When someone says "home," Americans picture a Cape Cod.

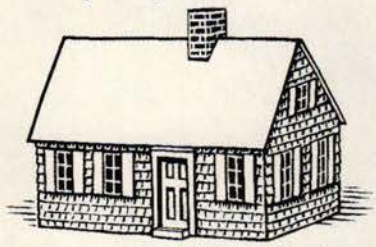
No one knows for sure if the Cape originated on Cape Cod in Massachusetts or on the coast of Connecticut or somewhere else. The earliest New England builders were surely thinking of the houses they had left back in England: simple, one-room cottages with sleeping lofts. But presented with abundant trees and a harsh environment, coast-dwelling carpenters quickly adapted. They felled timber, laid oak sills right in the sand—a stone foundation would have crumbled when the sand shifted—and built a low, wide house on top of them. At the center, they placed a chimney with as many as five fireplaces. Outside, the roof and 3-inch-thick walls were covered with shingles, preferably red or white cedar, which resisted rain, sea spray and rot. Impoverished fishermen might slice shingles from a broken ship's mast. The sides of the house seen from the road got covered in clapboards and occasionally painted white. Over time, the shingles would weather to a uniform gray, slightly darker than the beach sky on a cloudy day.

It's hard to imagine the wind ever toppling a Cape. Massive timbers and the chimney anchor the house from within. The aerodynamic silhouette shrugs off gales. Its low facade, devoid of

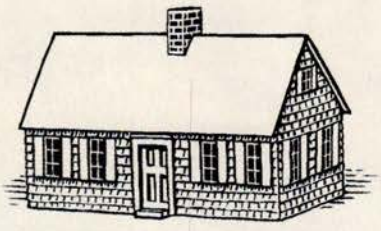
SIZING UP CAPES

Cape Cod houses are neither one-story nor two—they're one and a half. The angled ceilings upstairs create a space that is the definition of "cozy" and exactly why most people feel utterly comfortable in a Cape.

Half: Front door and chimney are placed to one side of the house and two windows are in front.



Three-quarter: Front door is off-center with two windows on one side, one window on the other.



Full: Chimney and front door are centered and four windows flank the door symmetrically.

ILLUSTRATIONS: GREGORY NEMEC

During the 1970s restoration of this half Cape in Clinton, Connecticut, a photograph from the 19th century helped the owner deduce that two bays and the picket fence were added during the 1800s but that the stoop overhang was a 20th-century adornment. While peeling away layers of wallpaper and fiberboard, he also uncovered a long-forgotten fireplace upstairs, making four total.

overhanging eaves and shutters, easily eludes gusts. And that glorious roof is pitched low enough to shunt the wind harmlessly off the top. To block sand sweeping up to the door, carpenters devised yet another quintessentially American invention: the white picket fence. Despite the house's weight, if the sand shifted, a home owner could hitch the whole building to oxen or horses and drag it to a more hospitable spot on the beach. When the tip of Provincetown eroded during the last century, residents hoisted their houses onto barges and floated them across the bay to the town's present site.

To call Cape Cods cottages, as we often do, does them an injustice. Henry David Thoreau called Capes "sober-looking houses," and he had a point. They are neither flimsy sea shanties nor fun getaway bungalows. They're mannered, proper houses whose appearance may be too plain—or too darn logical—for some folks. Like many colonial houses, Capes were built small and later added onto as a family grew. All that one needs to divine what's inside them is a pair of eyes and a grasp of elementary fractions. We distinguish Capes by the number of windows seen from the front. A half Cape? Two windows. A three-quarter? Three windows. A full Cape? Guess.

In full Capes, a visitor finds the parlor to the left, a bedroom to the right, a kitchen at the back. A few small rooms upstairs. Here, in this simple layout, all human needs are satisfied: a place to eat, a place to sleep and a place to live—with fireplaces in every main room. After a few Capes, déjà vu sets in. You think: I have stood in this kitchen, gazed at this fireplace, savored these door latches and windows before. (Or was that Baxter's house down the road?) You might encounter a period Cape whose rooms differ in size from those of another Cape, but the essential layout never changes. As Schuler writes, "An experienced burglar would not run into many surprises as he groped his way through a dark house."

Many times, the need for space and light forced symmetry out the door. Dormers and ells were the aesthetically preferred ways of adding on. But many owners simply tacked on another box. It was easy: Never fuss with a complicated roofline on a Cape.

This house in Chestertown, Maryland, is an unusual duplex Cape. Charles Davis built it to resemble neighboring houses from a century earlier. Each side has two rooms on the first floor and winder stairs to the second, where the south side has two bedrooms and the north side three. Davis lived in one half, a tenant in the other. When Davis died, the house was shared by his daughters Sally and Mary Anna.

Some diehards resist the temptation to mess with classic form. Richard Todd, owner of a 1790s Cape in Ashfield, Massachusetts, recently put his house on the market. The house sits on a rise above a pond and a stream, surrounded by 120 acres of woodland and pastures dotted with wildflowers. Now and then, Todd leaves this idyllic place to check on the new house he's bought and begun restoring: a 1790s Cape just up the hill—an exact duplicate of his current house's footprint, down to the inch. "I

In our mind's eye, we all know what a house looks like. When someone says "home," Americans picture a Cape Cod.

1789

When he built this house in Killingworth, Connecticut, for his newly married son, Lemuel, farmer Joseph Kelsey included what was then a common feature of Capes: a borning room (where babies were delivered and nurtured) near the warm hearth. That room is now the downstairs bathroom. In the 1960s, the interior was gutted and overhauled and an ell containing a master bedroom and a kitchen was built onto the back of the house.

know," he says. "It's crazy." He showed me the upstairs floor of the second house. The walls were stripped to the plaster, split laths showing in some spots. Todd opened a door, shaking his head. Will the tiny space around the central chimney be big enough for a bathroom? He doesn't know. Of course, he can always add a dormer to the rear roof. Todd's shoulders fairly shudder. "We're fighting it," he says. "The purists would say you just don't do that."

Clearly, for the Cape Cod design to survive into the 1900s, it needed a careful tweaking for modern life. The man for the job was Royal Barry Wills, the architect who doggedly designed Cape Cods into the 1960s.

On the Chesapeake, Capes such as this one in Chestertown, Maryland, typically have a Flemish-bond facade and are known as Tidewaters. Shipwright and planter Thomas Wilkins first built the left wing of this house, Clark's Conveniency, then added the current middle wing a few years later. The right wing was added in the mid-1900s.

In 1932, when Uncle Sam wanted cheap housing starts to pump up the economy, Wills walked away with a gold medal—presented by President Herbert Hoover—for the Better Homes in America Small House competition. "Wills was a great promoter," says Schuler, then a writer at *House Beautiful* magazine. "His blueprints and pictures would come in, and we couldn't turn them down. Even though we wanted to do other houses, they were so popular at the time that we ran them frequently."

Wills retooled the old Yankee design with a few modern conveniences. He tucked closets into foyers and bedrooms, divvied up the country kitchen to create dining rooms with built-in corner hutches. He lined living room walls with bookshelves and ran elegant moldings along halls and doorways. At least one fireplace stayed—in the liv-

GROWING BEYOND CUTE

A period Cape Cod looks charming—until you try to fit a 48-inch TV into the cubbyhole of a living room. Like his father, Royal Barry Wills, architect Richard Wills specializes in adapting the 17th-century design for 20th-century life. Most of his work is new construction, but occasionally he's called upon to update a historic house. "It's always hard to cut into the fabric of an old house," he says. "But you have to be practical. After all, we're not heating the house by fire or walking around in tricorn hats anymore." Fortunately, the simplicity of Capes makes them suited to expansion. Home owners have four flat sidewalls available for an addition. But to retain the house's proportions, ells or dormers that match the original structure in style, fenestration and workmanship make the most sense. Ells, for example, should follow the main Cape's lead on roof pitch, as much as 45 degrees on some structures. Wills also offers these tips:

SIDES: Preserve the original lines of the house by building slightly smaller ells to the left and right. On narrow lots, build a single ell in back.

ROOF: A shed dormer 18 inches in from the back wall and 2 or 3 feet from the sidewalls affords space and retains the rear roofline. For front dormers, which Wills tries to avoid, one A-shaped dormer at the roof's center or two evenly spaced dormers work best aesthetically.

INTERIOR: Exposing original ceiling beams gives a few inches of headroom. You can also add room by removing an interior wall and installing an LVL (laminated veneer lumber) beam—disguised in period casing—to distribute the load.

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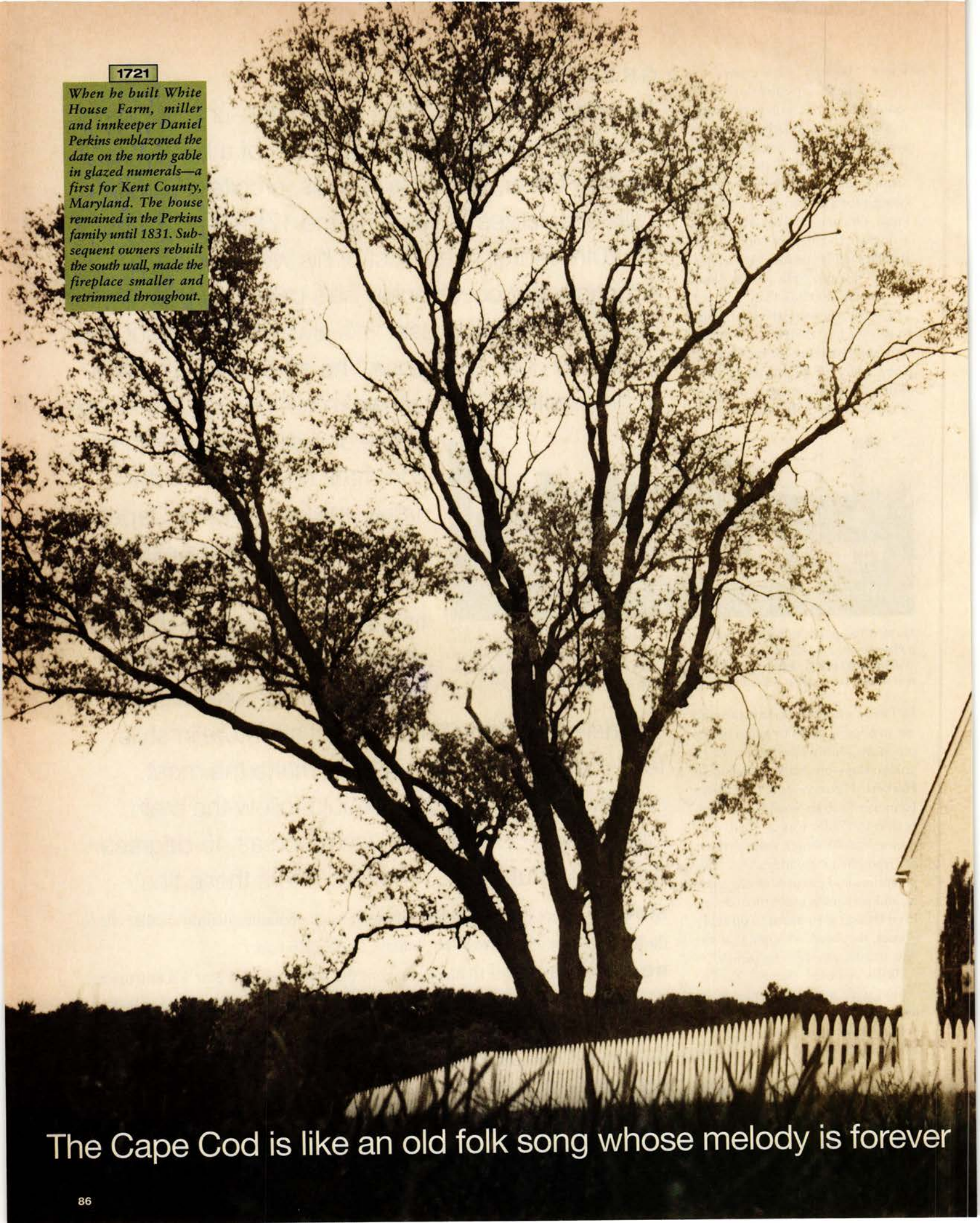

1721

When he built White House Farm, miller and innkeeper Daniel Perkins emblazoned the date on the north gable in glazed numerals—a first for Kent County, Maryland. The house remained in the Perkins family until 1831. Subsequent owners rebuilt the south wall, made the fireplace smaller and retrimmed throughout.

The Cape Cod is like an old folk song whose melody is forever

ing room—and an oversized chimney graced the roof. Some "improvements," however, seem cramped by today's standards. One set of blueprints called for a 9-by-10½-foot kitchen. Even so, a Wills Cape spoke to the masses of Americans flocking to the suburbs. A 1937 ad in *Better Homes and Gardens* showed a quaint Wills creation in Egypt, Massachusetts, and tempted readers to own the house that "They All Stop to Admire!"

After World War II, architects, designers and builders all over the country borrowed, adapted or just plain copied the Wills blueprints. Some of the finished products look startlingly authentic. Others are heartbreaking.

In a way, the Cape Cod is like an old folk song whose melody is forever part of the vernacular but whose lyrics are constantly changing. When we see a modern Cape that doesn't quite work, we can't help wondering how the design that came so naturally to the Yankee carpenter could give us such trouble today. Architects say the secret is proportion. They mumble about the golden section, principles for good design first plumbed by ancient mathematicians. Quite simply, human beings prefer symmetry. And the Cape may well be the most pleasant set of rectangles yet assembled for living. But only if designed correctly.

That was the mission of Evan Pollitt, a Connecticut architect whose designs have helped ensure the Cape's longevity. About 20 years ago, as therapy following a heart attack, he traveled the byroads of New England, searching out colonial houses that pleased him. He knocked on doors and politely asked if he could measure the exteriors. Often he was invited inside, but he always declined. Although a stickler for precision, Pollitt, like Wills before him, wanted the freedom to design the interiors as he saw fit for a modern occupant.

Pollitt's plans are still sold, and the houses built from them harmoniously marry past and present. Floor plans reveal spacious family rooms as well as bedrooms with linking baths, all tucked comfortably within the skin of a classic Cape.

I once happened upon one of his houses at dusk near the old whaling town of New Bedford, Massachusetts, and I could see that the measurements had served Pollitt well. A large chimney anchored the sprawling roof. Four compact windows threw off a golden glow, with the promise of warmth inside. The owners had added some nice touches: hand-forged latches on the front door and a granite hitching post on the lawn. Altogether, the house was snug and welcoming to pass on the road at night, and I was sorry I had to be on my way. ■

WIND BEATERS

Pounded by fierce ocean winds, Cape Codders' houses were built streamlined and close to the ground. The roofs were also pitched relatively low, giving the wind little to snag as it blew up and over. The poorly insulated, small-windowed houses usually faced south to take advantage of the sunlight.

part of the vernacular but whose lyrics are constantly changing.

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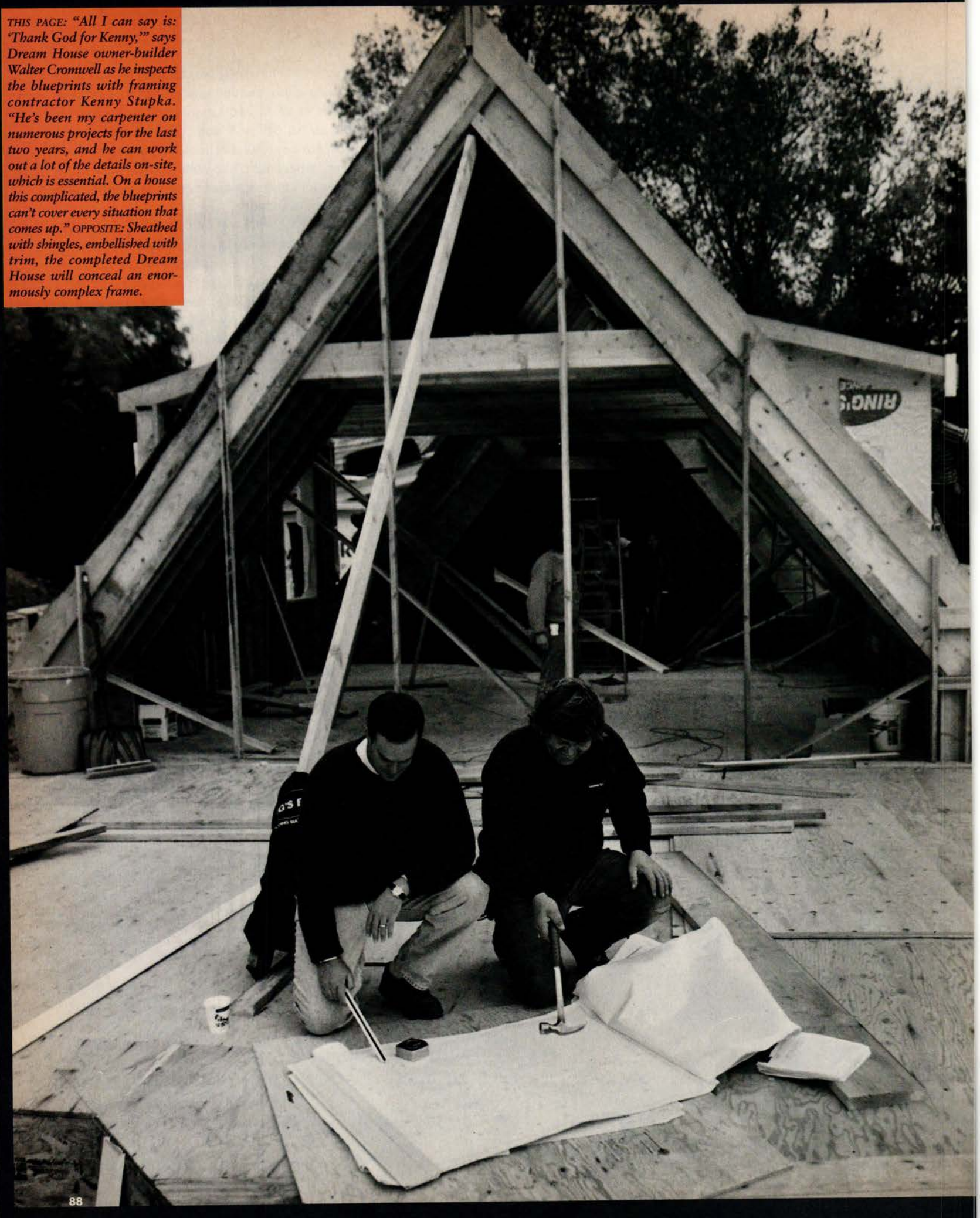
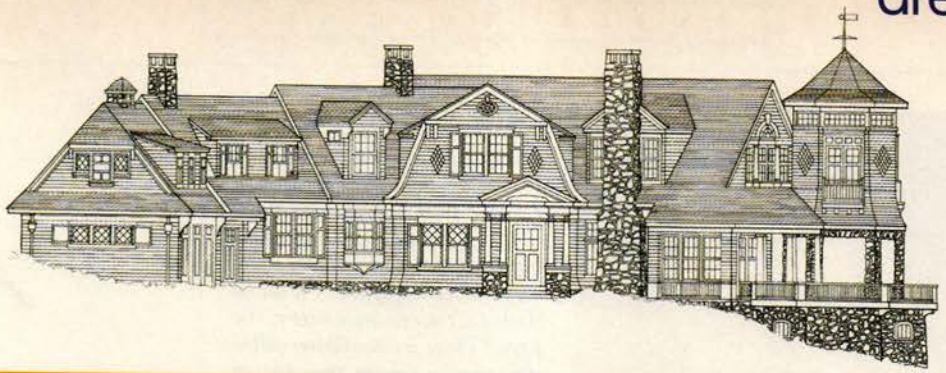


THIS PAGE: *"All I can say is: 'Thank God for Kenny,'" says Dream House owner-builder Walter Cromwell as he inspects the blueprints with framing contractor Kenny Stupka. "He's been my carpenter on numerous projects for the last two years, and he can work out a lot of the details on-site, which is essential. On a house this complicated, the blueprints can't cover every situation that comes up."* OPPOSITE: *Sheathed with shingles, embellished with trim, the completed Dream House will conceal an enormously complex frame.*



GOOD BONES

Framing lessons: How to make sure you get a house that never leans, sags or squeaks

Robert Reade runs his thumb along the seam where a dormer stud meets a rafter. The rafter slopes at an unusual angle, 48½ degrees to be exact, but the perfectly plumb stud plants a full kiss on the rafter's edge. Not even a razor blade could slide into this joint. "That's just how it should be," says Reade softly. "Wood on wood."

A properly built frame can keep a house or addition sturdy, dry and proud for more than a century. A sloppy job can produce sagging roofs, undulating walls and bouncy floors and can quickly lead to rotted wood, cracked plaster and stuck doors. More dramatic, in an earthquake or hurricane, the frame's integrity can make the difference between survival and disaster.

To illuminate the basics of a quality framing job, we brought master framer Robert Reade to the site of *This Old House* magazine's Dream House in Wilton, Connecticut. Reade, profiled in the July/August 1997 issue, in our American Craftsman series, has taught framing to aspiring carpenters in Columbus, Ohio, for the past eight years and has been hammering houses together since 1960. "Making a frame that is level, plumb, square and durable sounds simple. It is not," he says. "A skilled framing carpenter goes about his job with the same discipline as a cabinetmaker."

After crawling and climbing from cellar to ridge and scrutinizing every inch of the 5,900-square-foot Dream House, Reade gave the workmanship high marks. His inspection took only a few hours, but he worries that most home owners ignore this crucial construction phase when they should pay close attention to it.

"Don't be afraid to look over the job carefully, particularly with large building companies," he says. "They care mostly about getting it up fast, closing in the roof and selling it. If a problem develops, they'll just let the warranty department take care of it. That's wrong. People work hard for the money to buy their houses, and they have a right to expect something solid. You shouldn't even go through with a deal if you can't inspect the framing. If a framer is good, he'll be proud to show you his work."

BY BRAD LEMLEY PHOTOGRAPHS BY KOLIN SMITH

Nailing No-No

Although framer Robert Reade likes the way most of the Dream House frame has been built, he takes exception to the dozen or more nails used to fasten some attic joists to rafters. "A lot of nails isn't necessarily better," he says. "There is a condition called nail-weak, where you get so many nails in there that the wood splits and loses strength." The temptation to overdo it is particularly strong, Reade says, in this trigger-happy era of pneumatic nailers. For the joist-rafter connection shown here, Reade contends that a "pattern of four nails would have been plenty."

Crowns Up

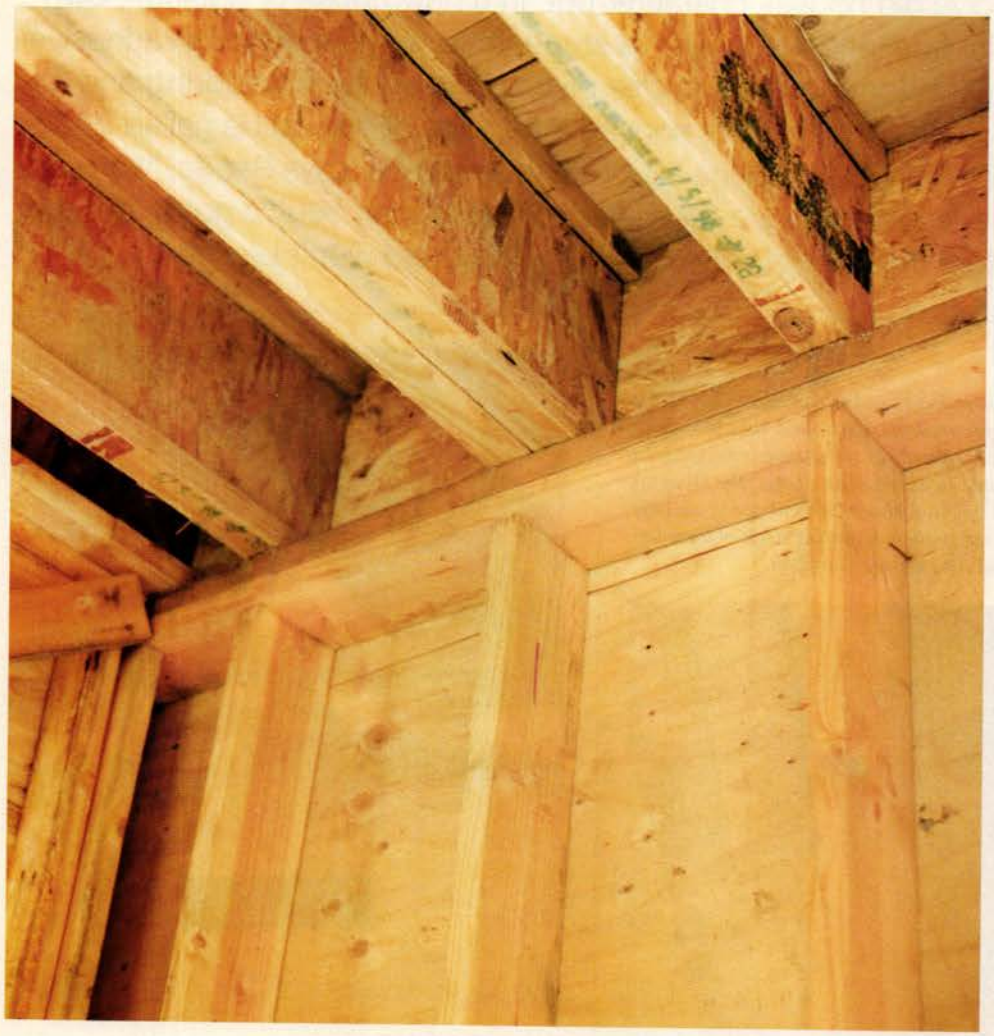
Carpenters typically install each joist, rafter and header so that the convex edge (the crown) faces up. This ensures that, over time, gravity will straighten the board. Installed the other way, it could sag. Reade also uses the technique on wall studs. After first setting aside any that are severely bent—cutting them into shorter pieces to use as cripples under windowsills and as blocking between studs—he orients the remaining boards so they all crown the same way. The result: no visible undulations in the finished wall and gap-free cabinet and countertop installations.

Tight Joints

Reade looks for well-executed carpentry in the angled joints that form the roof frame. The lower end of a rafter, for instance, typically has a notch, called a bird's-mouth, that sits on the top plate. When the notch is cut at the proper angle, there should be no gap between the bird's-mouth and the plate. Reade also likes to see a double top plate on stud walls. Some carpenters favor a single plate in the name of saving wood and increasing energy efficiency—less wood in a wall means more room for insulation—but Reade says that two plates are essential for proper stiffness and for making tight, overlapping unions.

Stacked Framing

Reade strongly endorses a framing practice called stacking, in which rafters and joists are aligned directly over studs, and studs on different floors line up with each other. By transferring all structural loads straight down to the foundation, these arrangements minimize settling-induced cracks in drywall or plaster. Stacking also simplifies the task of running plumbing and ductwork between floors. With a complex structure such as the Dream House, Reade concedes that stacking all the framing members is impossible, but he says framers should do it whenever they can.



Straight Walls

A crooked wall spreads misery. When a partition or exterior wall snakes or bows from one end to the other or rises out of plumb, installing doors, windows, trim, cabinets and countertops becomes an ordeal. But a wonky wall is easily corrected. Keeping the bottom plate straight merely requires nailing it down along a chalk line snapped onto the subfloor. Before straightening the top, Reade sets up a simple way of finding curves: nailing pieces of scrap lumber to the two top corners and stretching a mason's line between them. Then he slides a test block along the gap between the string and the top plates. "The string should just barely brush the block," he says. A gap between the block and string means the wall is bowed out. If the block doesn't fit in the gap, the wall is bowed in. Bends either way are straightened with one or more 2x4s nailed first to the top plate and then—after the wall is pushed in or pulled out—to the subfloor.

PLUMBING HELPER

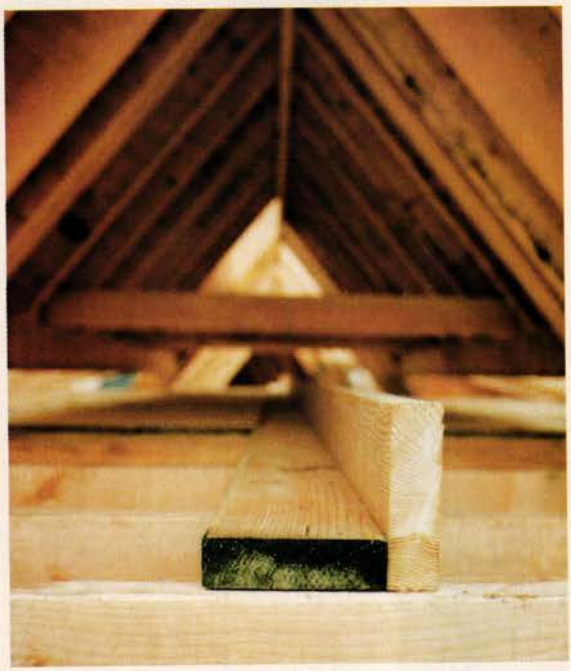
Carpenters grumble that plumbers weaken a frame by recklessly sawing avenues for pipes. Plumbers howl that carpenters forget an ineluctable fact: The pipes must go somewhere. But, as Reade nobly points out, the framing comes first, so carpenters should be aware of where the plumbing will go and position joists and studs accordingly. "It's particularly important to make room for toilet and bathtub drains," he says. "Sinks have an elbow that you can rotate, and that gives you some wiggle room." If a cutout for a toilet or tub drain happens to fall right over a joist location, Reade typically installs a joist on either side of the penetration and then returns to normal spacing.

CREAK-FREE FLOOR

Floors that creak and groan give old houses character but, in a new house or addition, owners should expect to stroll silently. Reade teaches his students to gun construction adhesive along the tongues of the ¾-inch tongue-and-groove plywood used for subflooring and on the top edges of floor joists. After each sheet is shoved into place, it should be nailed down wherever it sits on a joist. (See "Nail Power," page 93.) With this method, says Reade, "You can only work one sheet at a time, so sheathing a floor takes a little longer. You've got to get the whole sheet nailed down before the adhesive skins over, or the bond won't be strong."

Decay Prevention

One of the easiest places for rot to get started is where wood touches concrete. That's why most carpenters use pressure-treated 2x6s or 2x8s for mudsills, the boards that run along the top of a foundation. But there are other places where rot resistance is needed. In the narrow dividing wall between two garage doors, Reade is pleased that the Douglas fir jack studs don't go all the way to the concrete. They stop about 2 feet above it, and the run continues with pressure-treated 2x6s. Reade also recommends putting strips of pressure-treated wood between basement stair stringers and the slab they land on.

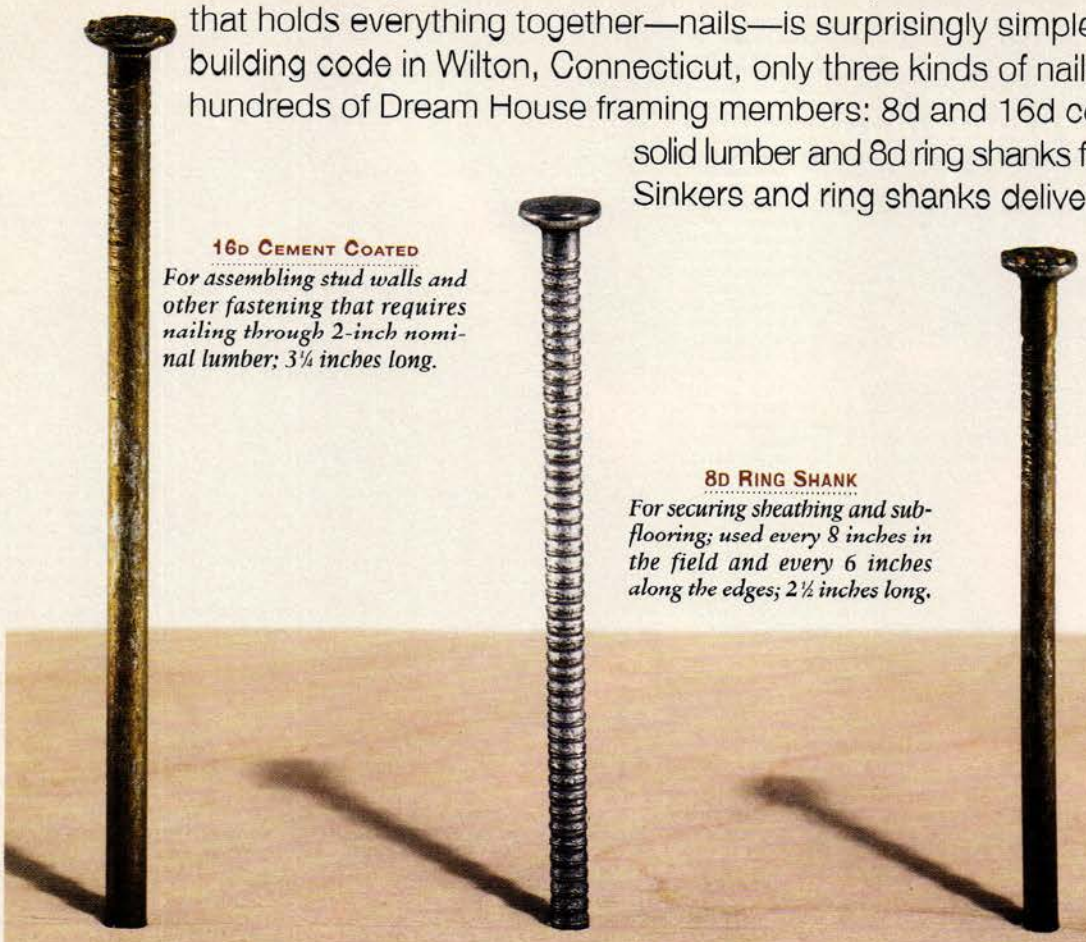


Twist Resister

The joists between the Dream House's second-story rooms and the unfinished attic have no blocking or sheathing to keep them from twisting, bending or bowing, ultimately ruining a once-flat ceiling. But the wide temperature swings that typically occur in attics can distort even the straightest lumber. To keep joists from getting out of line, a good builder secures them with a strongback: an L-shaped girder made from a pair of 2x6s to lock in the joist spacing and resist bows and bends that could pop out drywall nails or crack plaster.

Nail Power

For all the angles, connections and other complexities in a house frame, the hardware that holds everything together—nails—is surprisingly simple. In accordance with the building code in Wilton, Connecticut, only three kinds of nails are being pounded into hundreds of Dream House framing members: 8d and 16d cement-coated sinkers for solid lumber and 8d ring shanks for sheathing and subfloors. Sinkers and ring shanks deliver extra holding power differently. When a sinker punches into a stud, joist or rafter, friction heats up the cement coating, which forms a strong adhesive bond with the wood. The threads on ring shanks get a tenacious grip on wood fibers. They're nails you don't want to drive in the wrong place, because they're tough to take out.



16d Cement Coated
For assembling stud walls and other fastening that requires nailing through 2-inch nominal lumber; 3¼ inches long.

8d Ring Shank
For securing sheathing and subflooring; used every 8 inches in the field and every 6 inches along the edges; 2½ inches long.

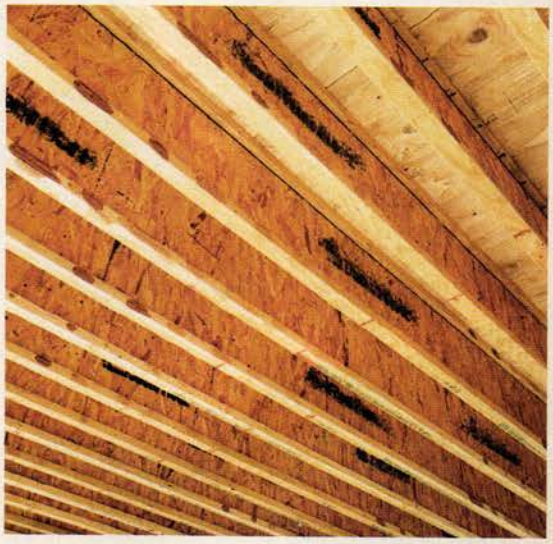
8d Cement Coated
Primarily for toenailing, such as to fasten joists and rafters to mudsills, plates, headers and ridges; 2½ inches long.

PHOTOS: NAILS, DAVID PRINCE.

Tom Silva's Full-Strength Framing

This Old House **contractor Tom Silva doesn't build by the book. "I refuse to follow the building code," he says. "It's good for safety, but it doesn't make rock-solid houses." Tom and other builders say that surpassing building-code requirements can make a house noticeably stiffer and stronger, particularly the floors. Built to code, they can bounce slightly when they're walked on. While a flexing floor isn't unsafe, it can be avoided by reducing the spacing between joists, by increasing the size of the joists or by installing thicker subflooring. For example, if Tom were building a 16-by-24-foot addition and the code called for 2x10 Douglas fir joists, 24 inches apart, he would reduce the spacing to 16 inches. And instead of using ⅝-inch plywood for the subfloor, he'd install ¾-inch tongue-and-groove plywood. Total additional materials cost: $150.**

In most new houses and additions, exterior walls have already been stiffened by the use of 2x6 studs, which codes require for compliance with higher insulation standards. Partition walls are still framed with 2x4s but in some cases should be upgraded to 2x6s. Dan Priest, a researcher at the National Association of Home Builders, recommends exceeding the code on a case-by-case basis: Kitchen walls with lots of cabinets or two-story rooms need more closely spaced or bigger studs for adequate stiffness. "The payback is great for framing a house right," Tom says. "It costs a little more but, in the long run, everyone's happier." —*Hope Reeves*



At the Dream House, 14-inch-deep wooden I beams undergird the 22-foot-wide kitchen. According to the local building code, they could be spaced as much as 19.2 inches apart—five every 8 feet—but for maximum stiffness they've been installed at 12-inch intervals.

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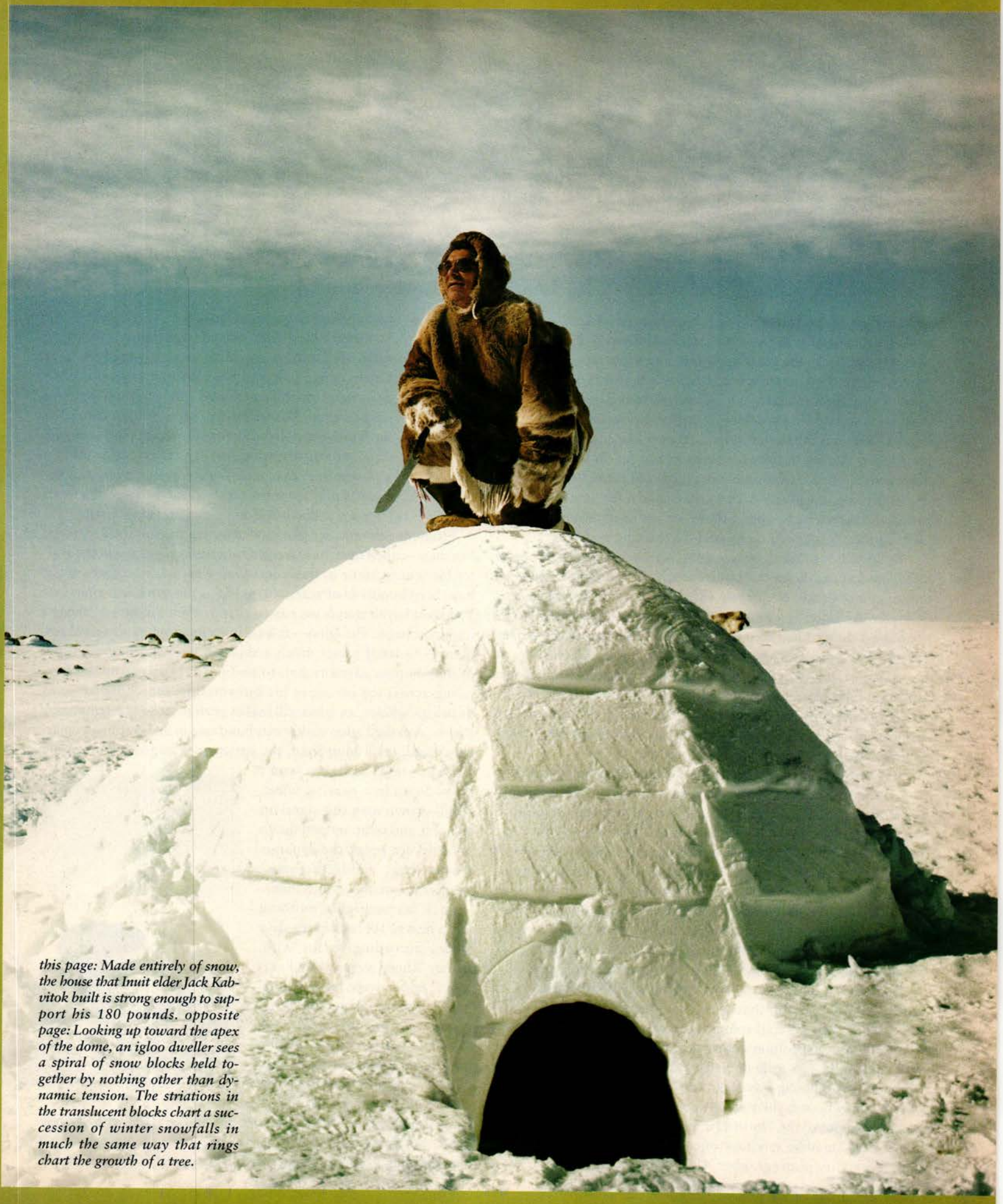
IGLOO

The purest building the human mind has ever conceived

To build a proper igloo, you need the proper material: a certain kind of snow the Inuit of the Central Canadian Arctic call *aputitsiarvaq.* This is dry, strong, surprisingly tensile snow forged by ceaseless wind and unthinkable cold. In the winter darkness, the surface of this snow can set almost as hard as concrete, so hard that the hooves

BY STEPHEN HARRIGAN PHOTOGRAPHS BY ALDO ROSSI



this page: Made entirely of snow, the house that Inuit elder Jack Kabvitok built is strong enough to support his 180 pounds. opposite page: Looking up toward the apex of the dome, an igloo dweller sees a spiral of snow blocks held together by nothing other than dynamic tension. The striations in the translucent blocks chart a succession of winter snowfalls in much the same way that rings chart the growth of a tree.

A tireless dogsled team bounds silently across a vast sea of ice toward the igloo-building site off the western shore of the Hudson Bay, more than 1,000 miles due north of the city of Duluth, Minnesota.

of a passing caribou leave only a faint, whispery track.

When I arrived at the frozen shores of Hudson Bay one day last April, the good igloo-building snow was almost gone. One more week, I was told, and the snow's structural integrity would have melted away. But it was still thrillingly cold—20 degrees below zero Fahrenheit—and the inlet on which we traveled by dogsled was a boundless highway of sea ice. In a few months, the ice would start to warm and break apart but, for the time being, it was still frozen fast, a solid 6 feet in depth except where the seals who live beneath the ice had used the claws on the ends of their flippers to scrabble out breathing pockets.

An igloo is a more elaborate construction project than one of these conical seal holes but not by much. To build one, you need only a pair of hands, one or two simple tools and a trace of genetic memory. An igloo is a dome, one of the most ancient templates for human shelter. I had been fascinated by domes ever since I walked into the Pantheon in Rome and found myself thunderstruck by its spaciousness and strength, by its mysterious perfection. Domes seem to have a kind of organic inevitability, like clouds. I wanted to see an igloo in the flesh, so to speak, because an igloo is the most organic dome of all, a shape-shifting expression of snow, the quietest, purest building the human mind has ever conceived.

A 59-year-old Inuit elder named Jack Kabvitok, who teaches shop and wilderness skills for the school system of the little town of Rankin Inlet, had agreed to show me how to build an igloo. It was his dogsled on which we were riding and his voice that occasionally broke the arctic silence, calling out the Inuktitut words for "right" or "left" or "faster" to the seven dogs padding along on the snow in front of us. Jack's English appeared limited to an occasional hearty outburst—"How you doing?" "Hungry yet?"—and my Inuktitut was nonexistent but, had we been able to carry on a running conversation, I doubt that we would have done so; any idle word felt like a violation of the landscape's presiding quiet.

Our destination was an icebound peninsula 20 miles away. Jack had a cabin there, and that was where he planned to build the igloo. There was no trail to mark the way, except for the tracks left by our little expedition's other sled, which with its lighter frame was habitually a ¼ mile or so ahead of us. This sled belonged to Dyan Gray, a young Canadian woman who worked as a tourism official for Nunavut, the vast self-governing Inuit region that had been carved out of the Northwest Territories and is due to become an official Canadian territory this year. On Dyan's sled rode the New York City photographer Aldo Rossi, and on his lap sat a malingering dog named Anaqti.

Beneath the ice, the tides in these narrow inlets were still active, and the shoreline was crowded with huge blocks of ice that had been pushed upward by the movement of the water and now shone with eerie translucence. Mysterious spangles of light danced in the ferocious sunlight. Across the top of the sea ice, the steady northwest wind had shaped the snow into an endless series of contours that resembled frozen waves, and the dogsled schussed gently from the crest of one wave to the next, exactly as if it were a sailboat rocking along on ocean swells.

From time to time, we glimpsed towering piles of rock—shaped like men—called *inukshuk*, erected to serve as signposts in the winter blankness. Some of these *inukshuk* were recent; others might have been hundreds of years old, as old as the stone tent rings and V-shaped kayak stands we passed that marked the sites of ancient hunting camps. The igloo—at least in its function as an actual residence—is itself pretty much a thing of the past. Nobody lives in snowhouses anymore but, to an Inuit subsistence hunter barreling across the sea ice in his snowmobile, searching for seals or beluga whales, an igloo still makes perfect sense as a temporary shelter. A skilled igloo maker can build one in an hour in an emergency and, once completed, the structure is impressively strong. Unlike a tent, an igloo won't blow down in a roaring wind. A full-grown man can stand on top of it and jump up and down and still not break the dynamic tension that melds the snow blocks into an impervious dome.

Jack learned igloo building when he was 10, back in the days when, according to his wife, Aline, "there were really Eskimos." Igloos were serious business to the native people of the arctic well into this century. A thousand years or so ago, during the Thule period, when the Inuit culture was at its zenith, people had lived in winter structures framed with stone, sod and whalebone and covered with caribou hides. But this period of prosperity ended when temperatures all over the arctic began to plunge, driving the whales to warmer waters

and diminishing the caribou herds. The settled life of the Thule became unsustainable, and the scarcity of bones and skins left snow itself as the only reliable material for winter housing.

In traditional times, igloos were warmed and lit by seal-oil lamps and were built large enough to support sizable families. Often, two or more igloos were joined together with passageways. The inhabitants slept on caribou hides spread on couches made of snow, sometimes sharing the space with pregnant sled dogs or their puppies. When first constructed, an igloo was a gleaming and pristine domicile but, over the course of an arctic winter, smoke from the seal-oil lamps darkened the walls until it resembled, in the eyes of one disappointed European observer, a "witch's cave."

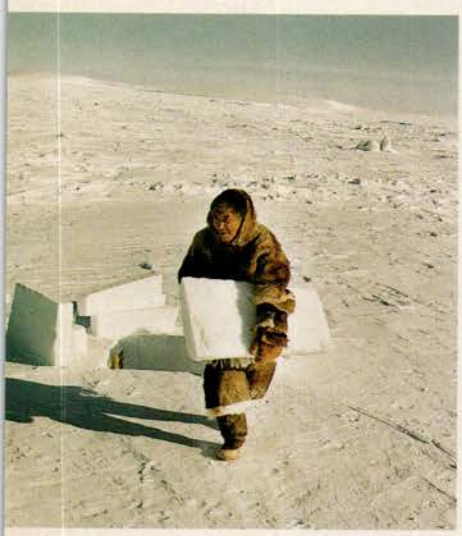
Early in the afternoon, we spotted Jack's cabin in the distance, a tiny dark square in this universe of white. The cabin sat on a subtle rise, a narrow snow-covered peninsula that to my eyes was almost indistinguishable from the frozen sea surrounding it. Aline had driven out ahead of us on a snowmobile, along with her and Jack's 14-year-old grandson, Wayne, and the two of them were waiting for us when we pulled up. After the dogs were unharnessed and staked out at intervals along a chain and fed dried whale meat, we retired to the one-room plywood cabin, wiping our snowy feet on a welcome mat made from the hide of a ringed seal. We sat there for a long time in the steamy heat of a portable stove, drinking tea and eating salami and coconut cream pie and Aline's superlative bannock as the circulation slowly crept back into our fingers.

"Well," Jack said after a time, as he chewed on a frozen shard of raw caribou, "let's go look around."

He slipped into the caribou parka that Aline's mother had made for him, took up an aluminum rod, and led us outside. It was already 4 in the afternoon, but the sun didn't appear to be going anywhere. It hovered like a white moth above the horizon.

The dogs lifted their muzzles out of the snow and watched curiously as Jack used the rod to probe around the base of the narrow peninsula, searching for snow of perfect thickness and consistency. He rejected two or three locations. Then, with the end of the rod, he drew a circle about 10 feet in diameter.

"Let's make igloo," he said.



LEFT: Jack lifts a wedge-shaped snow block he has cut from the surface of the frozen inlet, creating a hole that will later become the entrance to the igloo. CENTER: *After sawing a rectangular block from the snow, he prepares to position it.* RIGHT: *Jack uses a snow knife, also called a* pana, *to trim edges so the blocks lock tightly together.*

To construct an igloo, Jack needed only two tools: an ordinary crosscut saw and a machetelike implement called a *pana* or snow knife. He knelt down and began to saw into the snow at the circle's southeast edge, where the doorway of the igloo would be located. First he removed a deep wedge of snow and set it aside, then began to cut out a block about 1 ½ feet long by 3 inches wide. He undercut the block at a diagonal to a depth of about 1 foot and wrestled it free from the surrounding snow. It squeaked like Styrofoam as he withdrew it. He set the fresh-cut block in front of him and inspected it with a look of growing distaste, finally muttering something to Wayne in Inuktitut.

"Snow's no good," Wayne translated.

The top half of the block was solid, but the bottom half was made of inferior snow that crumbled to the touch. Jack pulled himself wearily to his feet, took up his aluminum rod again and began searching farther down the slope. Fifty yards from the cabin, he found a patch he liked better and once again drew the circle in the snow and pulled up the first block.

"That's better," he said. With the *pana*, he trimmed the bottom of the block and set it in place on the perimeter of the snow circle. Then he shaped the top of the block into a diagonal incline. With each succeeding block, this angle grew steeper, and the igloo's first layer spiraled lazily as it advanced along the circle he had drawn in the snow.

Working without commentary, he continued to saw out the blocks in orderly ranks, building a kind of igloo basement in the process. I sat down on the snow and watched him work. I had intended to lend a hand, but it seemed to be a one-man operation and, anyway, the process was more intricate than I had expected. Clearly, there was a science in trimming a block to the exact angle and slope, then shoving the block into place against a neighbor to stand without any adhesive other than severe cold and the laws of physics. When Jack finished the first layer and began the second—"OK," he said, "going up now"—it was easy to imagine the whole thing tumbling down at some point, like a house of cards.

Yet up it went. With each layer, the inward angle of the blocks grew steeper, but the spiraling wall never wavered. By the time Jack had erected the third layer of snow blocks, he was almost hidden from sight. His two hands, encased in furry caribou mittens, bustled about all by themselves at the top of the snow blocks, like characters in a puppet show.

Jack kept building the shell of the igloo, while Wayne filled the cracks between the blocks with snow, and Aline came out with a pan of water and started pouring it over the structure. The water quickly froze in the cold air, creating an even stronger seam.

When Jack had completed the fifth layer of blocks, he cut out a door with his snow knife and invited me inside. The door was about the size and shape of the opening to a doghouse and set beneath the top layer of snow. Entering the igloo was like wriggling into a badger's burrow. Inside, the igloo felt marvelously spacious. The flat arctic light seeping through the blocks of snow made the dome look like some sort of translucent curtain.

"Not much more now," Jack said, grinning, as he heaved another block into place. His hair and eyebrows were heavily flocked with snow. The dome grew higher, and the spiral of snow blocks grew tighter until finally he had to stand on his tiptoes to reach the apex. It struck

me, as I watched him, that the building of this shelter had taken place completely from the inside. At every step of construction, from the very first cut in the snow, from the setting of the first block, Jack was screening himself against the freezing wind. The way he was building this igloo around himself reminded me of a caterpillar spinning a cocoon.

Finally there was only a triangular gap at the top of the igloo. Jack bent down, selected an irregular block of snow from the scrap pile that had accumulated on the igloo floor, then lifted it with one hand above the opening and held it up there while he trimmed it into shape with the *pana*. Then, as if he were closing a manhole from the inside, he lowered his hands and set the block into place. All that remained was to cut a small ventilation hole into the keystone. When he had done this, he stepped back, smiled and announced: "You got igloo."

It had taken two and a half hours, and no doubt he could have accomplished the task in half the time if he had been in a hurry. But he was a methodical and finicky craftsman and, even now that the igloo was completed, he could not leave it alone. He kept walking around the outside, filling in the cracks with snow, smoothing the rough spots, shooing away Anaqti, Dyan's pampered dog, when she trotted up on the mistaken assumption that this edifice had been built for her.

"What do you want to sleep in that igloo for?" Aline asked Aldo and me a few hours later in the cabin, after we had eaten a dinner of beef steaks and were waiting for the persistent arctic daylight to subside. "It's cold in there. Are you crazy?"

Around 10 o'clock, we pulled on our parkas and mittens and went outside. Darkness was still hours away, but a heavy ground fog swirled across the narrow peninsula, and the sunlight was strangely obscured, hidden behind a penetrating grayness that resembled night. Down the slope, the igloo was glowing, lit from within by a kerosene lamp Jack had placed on the floor. From a distance, in this strange muzzy darkness, the igloo seemed to hang there all alone in the firmament, shining with the softest, whitest light I've ever seen.

When Aldo and I crawled inside, Jack was there spreading musk-ox and caribou skins on two sleeping platforms he had fashioned of snow on either side of the igloo. He had made a kind of end table for each of us as well, had done everything but put a mint on our pillows. He himself had no interest in sleeping in the igloo, though it could easily have accommodated him and perhaps three or four others.

I wouldn't say it was the most comfortable night I have ever spent. Two layers of thermal underwear and a subzero sleeping bag cushioned by the fur of arctic beasts didn't completely dispel the cold. But I felt reasonably safe and cozy in the igloo, and I experienced enough intermittent dozing to count as a night's sleep. Sometime during the night, Anaqti skulked inside to join me on the sleeping platform and, when I awoke the next morning, she was staring at me with her pale, eerie eyes.

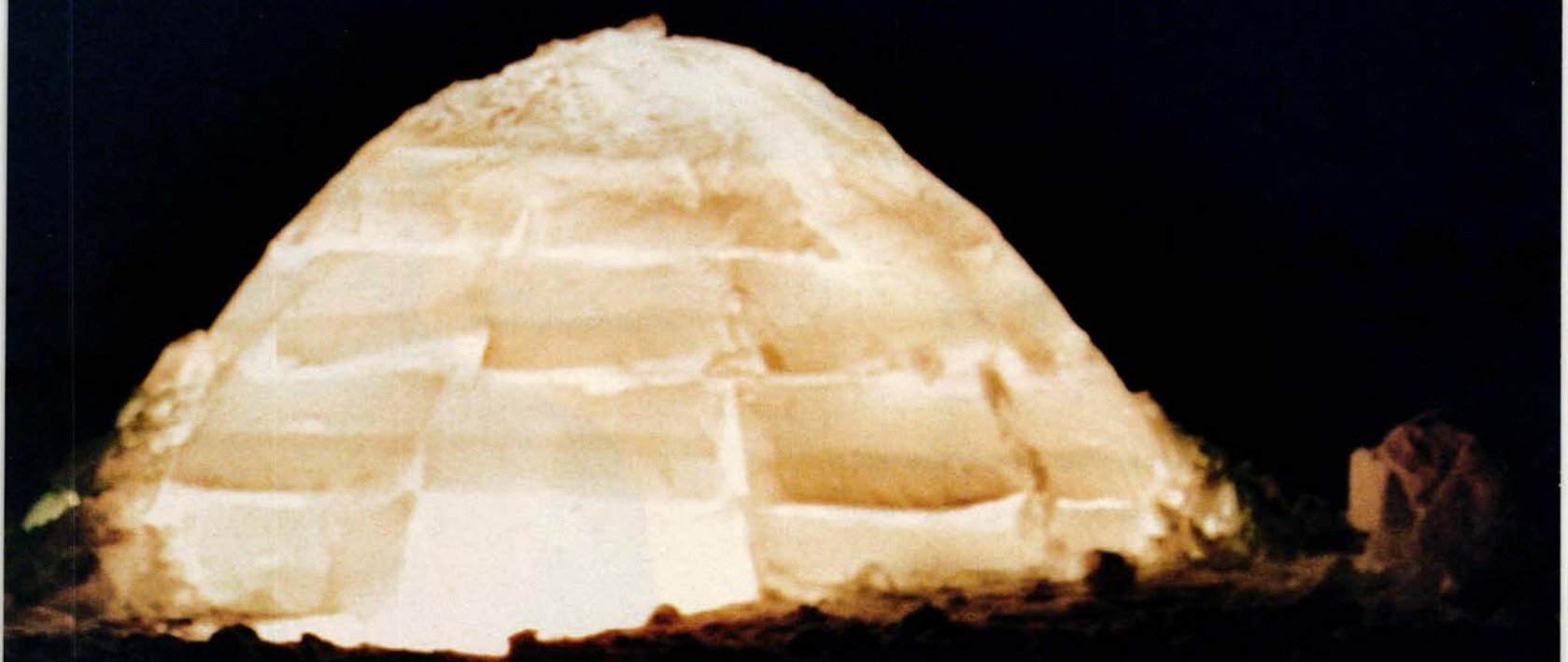
I lay there drowsily for a long time, scratching the dog's ears and staring at the interior of the igloo with a beguiled attention to detail. The sun had long since arisen from its brief dip below the horizon, and a sedate light shone through the concave wall. I counted 50 individual snow blocks, from the archway over the door to the keystone at the top. With the morning light illuminating the blocks from behind, I could clearly make out the pattern of the horizontal striations that marked the succeeding layers of the winter's snow.

I struggled into my snow boots and parka and crept outside. The air was utterly still, the light utterly flat. Thirty yards away, tethered beyond the tidal push-ups on the open sea ice, the sled dogs were still asleep, each one nestled in a perfect mound of snow. A single raven flew overhead, its black plumage slashing across the white sky, its voice piercing the muffled silence. Then the raven was gone, and the arctic peacefulness closed over me again: no color, no movement, no sound, a whole world with nothing in it.

I walked up the slope about 20 or 30 feet for a different view and, when I turned around, the igloo was gone. In the bluish, washed-out light, which cast no shadow and gave no contour to the land, it had simply disappeared. I peered hard and walked back, expecting the igloo to reappear with each step I took. But by the time my eyes finally found the dome against the background of snow, I was almost close enough to reach out and touch it.

As the morning progressed and the light grew stronger, the igloo became more conspicuous, but it still seemed like a secret place, a hummocky rise in the snow that gave no hint of the beautiful translucent chamber within. Had we dwelled in it for any length of time, of course, it would have become a drippy, smoke-darkened cave. But as we pulled away in the dogsleds that afternoon, I took some pleasure in the realization that this house would remain pristine until it melted away in the spring thaw, and would shine in my memory for long after that, a Pantheon of snow. ■

Sometime during the night, Anaqti skulked inside the igloo to join me on the sleeping platform and, when I awoke the next morning, she was staring at me with her pale, eerie eyes.



Illuminated from within by a kerosene lamp, the igloo displays its elegant form. Each snow block is part of a continuous spiral that grows smaller as it reaches the apex.

ACE

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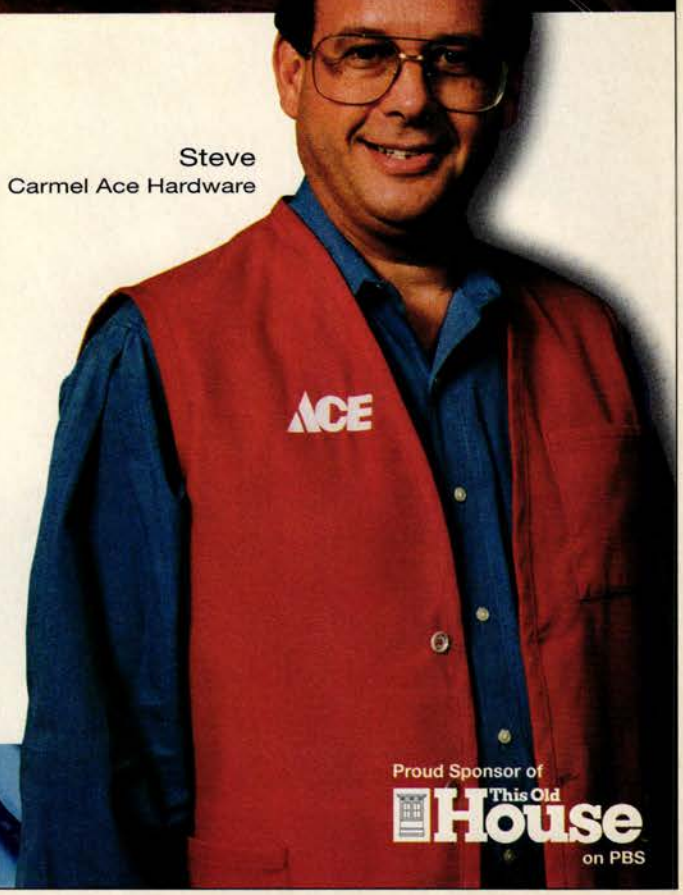

Steve
Carmel Ace Hardware

ACE Brand

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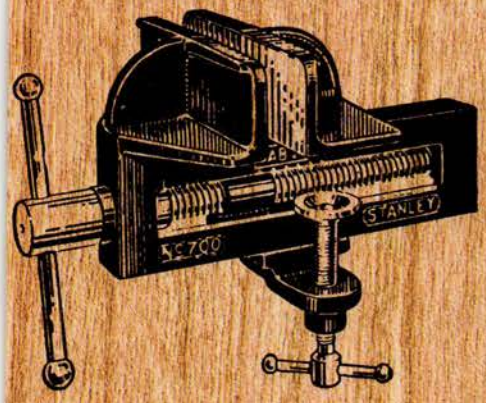
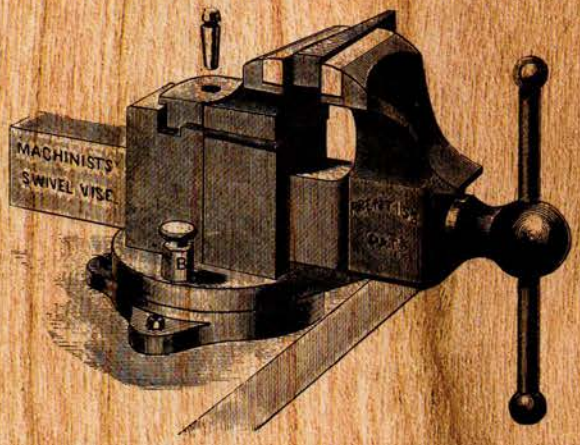
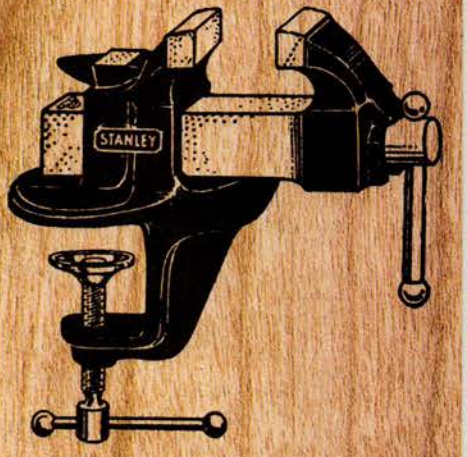
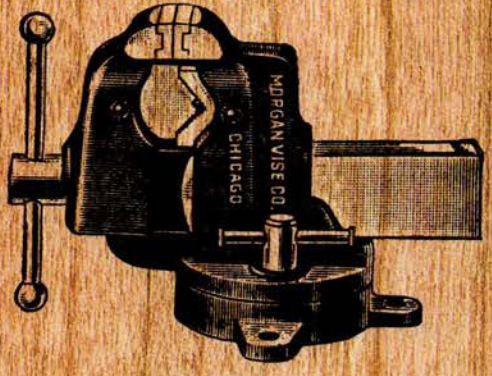
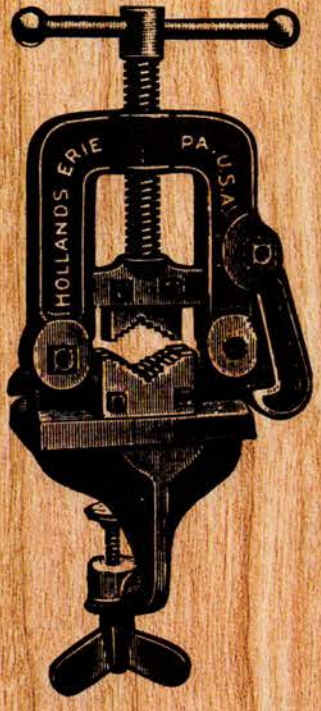
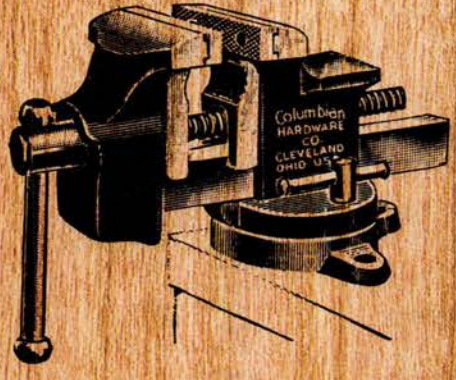


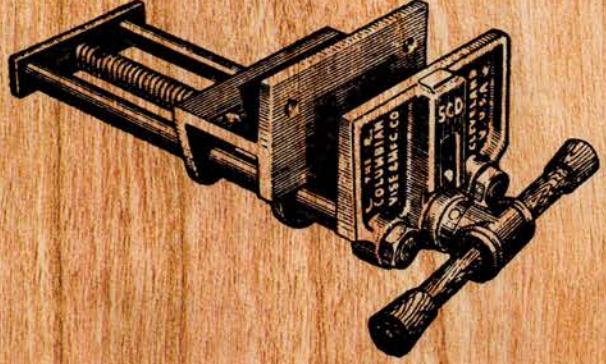


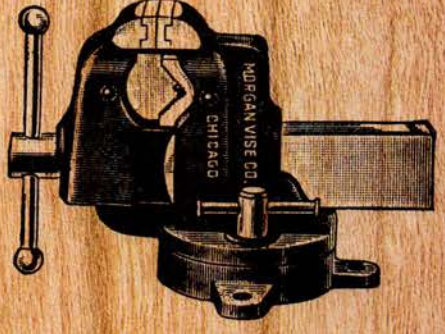


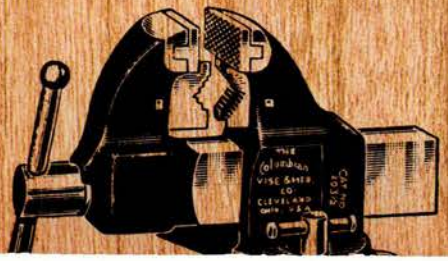


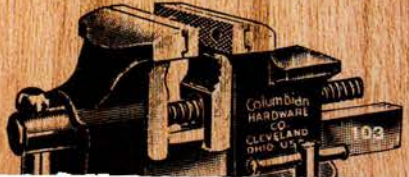












This Old House®

Where and when to watch This Old House *and* This Old House Classics

● Indicates ***This Old House Classics***, vintage episodes rebroadcast on commercial stations.

TV SCHEDULE

ALABAMA

BIRMINGHAM
WBIQ, Thu. 8:30 p.m., Sat. 8 p.m.
● WCFT, Sun. 6:30 a.m.
● WJSU, Sun. 6:30 a.m.

DEMOPOLIS
WIIQ, Thu. 8:30 p.m., Sat. 8 p.m.

DOZIER
WDIQ, Thu. 8:30 p.m., Sat. 8 p.m.

FLORENCE
WFIQ, Thu. 8:30 p.m., Sat. 8 p.m.

HUNTSVILLE
WHIQ, Thu. 8:30 p.m., Sat. 8 p.m.
● WYLE, Sat. 5 p.m.

LOUISVILLE
WGIQ, Thu. 8:30 p.m., Sat. 8:30 p.m.

MOBILE
● WALA, Sat. 5 a.m.
WEIQ, Thu. 8:30 p.m., Sat. 8 p.m.

MONTGOMERY
WAIQ, Thu. 8:30 p.m., Sat. 8 p.m.

MOUNT CHEAHA
WCIQ, Thu. 8:30 p.m., Sat. 8 p.m.

ALASKA

ANCHORAGE
KAKM, Mon. 6 p.m., Thu. 8:30 p.m., Sat. 8:30 a.m.
● KIMO, Sun. 3 p.m.

FAIRBANKS
KUAC, Fri. 8 p.m., Sat. 8 a.m.
● KATN, Sun. 3 p.m.

JUNEAU
KTOO, Fri. 8 p.m., Sat. 8 a.m.
● KJUD, Sun. 3 p.m.

ARIZONA

PHOENIX
KAET, Thu. 2 p.m. and 7:30 p.m., Sat. 10 a.m. and 5 p.m.
● KNXV, Sun. 10 a.m.

TUCSON
KUAS, Sat. 11 a.m. and 6:30 p.m.
KUAT, Sat. 11 a.m. and 6:30 p.m.
● KTTU, Sat. 9 a.m.

ARKANSAS

ARKADELPHIA
KETG, Sat. 12:30 p.m.

FAYETTEVILLE
KAFT, Sat. 12:30 p.m.

JONESBORO
KTEJ, Sat. 12:30 p.m.

LITTLE ROCK
KETS, Sat. 12:30 p.m.
● KTHV, Sun. 10:30 a.m.

MOUNTAIN VIEW
KEMV, Sat. 12:30 p.m.

CALIFORNIA

CHICO
● KRCR, Sun. 5 p.m.

BAKERSFIELD
● KUVI, Tues. 1:30 a.m., Sat. 7 a.m.

EUREKA
KEET, Wed. 7:30 p.m., Sat. 10:30 a.m.
● KAEF, Sun. 5 p.m.

FRESNO
● KFSN, Fri. 5 a.m.
KVPT, Sat. 9:30 a.m., Sun. 7 p.m.

HUNTINGTON BEACH
KOCE, Sat. 4:30 p.m., Tues. 8 p.m.

LOS ANGELES
KCET, Sat. 5:30 p.m.
● KABC, Sun. 6 a.m.

MONTEREY/SALINAS
● KCBA, Sun. 8:30 a.m.

PALM SPRINGS
● KPSP, Sun. 8 a.m.

REDDING
KIXE, Sat. 10:30 a.m.

ROHNERT PARK
KRCB, Sun. 7:30 p.m., Wed. noon

SACRAMENTO
KVIE, Thu. 8 p.m., Sat. 8:30 a.m.

SAN BERNARDINO
KVCR, Thu. 7 p.m.

SAN DIEGO
KPBS, Sat. 11:30 a.m.
● KGTV, Sun. 11:30 a.m.

SAN FRANCISCO
KQED, Sat. 5 p.m.
● KPIX, Sun. 4:30 p.m.

SAN JOSE
KTEH, Sat. 3 p.m., Sun. 4:30 p.m.

SAN MATEO
KCSM, Tues. 6:30 p.m., Sun. 10 a.m.

SANTA BARBARA
● KSBY, Sun. 6 a.m.

COLORADO

BOULDER
KBDI, Wed. 3:30 a.m. and 5:30 p.m., Sat. 5:30 p.m., Sun. 4 p.m.

COLORADO SPRINGS
● KRDO, Sun. 11:30 a.m.

DENVER
KRMA, Sat. 2 p.m., Sun. 5:30 p.m.
● KCNC, Sun. 1 a.m.

GRAND JUNCTION
● KJCT, Sat. 1 p.m.

PUEBLO
KTSC, Thu. 7:30 p.m., Sat. 2:30 p.m.

CONNECTICUT

FAIRFIELD
WEDW, Thu. 11:30 p.m., Fri. noon, Sat. 7 p.m., Sun. 10:30 a.m.

HARTFORD
WEDH, Thu. 11:30 p.m., Fri. noon, Sat. 7 p.m., Sun. 10:30 a.m.
● WFSB, Sat. 6:30 a.m.

NEW HAVEN
WEDY, Thu. 11:30 p.m., Fri. noon, Sat. 7 p.m., Sun. 10:30 a.m.

NORWICH
WEDN, Thu. 11:30 p.m., Fri. noon, Sat. 7 p.m., Sun. 10:30 a.m.

DISTRICT OF COLUMBIA

WETA, Sat. 9:30 a.m.
● WRC, Sun. 5:30 a.m. and 1:30 p.m.

FLORIDA

BONITA SPRINGS
● WGCU, Sat. 12 p.m., 12:30 p.m., Sat. 1:30 p.m., Sun. 5 p.m.

DAYTONA BEACH
WCEU, Tue. 8 p.m., Sat. 5:30 p.m.

FORT MYERS
● WTVK, Sat. 5:30 a.m.

GAINESVILLE
WUFT, Sat. 9:30 a.m., 1:30 p.m.
● WCJB, Sat. 2 p.m.

JACKSONVILLE
● WJXT, Sat. 4:30 a.m.
WJCT, Sat. noon

MIAMI
WLRN, Sun. 10 a.m.
WPBT, Sat. 11 a.m.
● WBZL, Sat. 4:30 a.m.

ORLANDO
● WKCF, Sat. 4 a.m.
WMFE, Sat. 9 a.m. and 1 p.m., Sun. 9 a.m.

PENSACOLA
WSRE, Sat. 12:30 p.m. and 6 p.m.

SARASOTA
● WWSB, Sun. 11:30 a.m.

TALLAHASSEE
WFSU, Sat. 1:30 p.m. and 6 p.m.

TAMPA
WEDU, Sat. 11:30 a.m.
WUSF, Wed. 9 p.m., Sun. 5:30 p.m.
● WTVT, Sat. 6 a.m.

WEST PALM BEACH
● WPTV, Sun. 6 a.m., 12:30 p.m.

GEORGIA

ALBANY
● WGVP, Sun. 9 a.m.

ATLANTA
WGTV, Thu. 8:30 p.m., Sat. 5:30 p.m., Sun. 7 p.m.
WPBA, Mon. 8 p.m., Wed. 2 p.m., Sat. 6 p.m.
● WXIA, Sat. 5 a.m. and 2:30 p.m.

CHATSWORTH
WCLP, Thu. 8:30 p.m., Sat. 5:30 p.m., Sun. 7 p.m.

COCHRAN
WDCO, Thu. 8:30 p.m., Sat. 5:30 p.m., Sun. 7 p.m.

COLUMBUS
WJSP, Thu. 8:30 p.m., Sat. 5:30 p.m., Sun. 7 p.m.

DAWSON
WACS, Thu. 8:30 p.m., Sat. 5:30 p.m., Sun. 7 p.m.

MACON
● WMAZ, Sat. 1 p.m.

PELHAM
WABW, Thu. 8:30 p.m., Sat. 5:30 p.m., Sun. 8 p.m.

SAVANNAH
WVAN, Thu. 8:30 p.m., Sat. 5:30 p.m., Sun. 7 p.m.
● WTOC, Sat. 2 a.m.

WAYCROSS
WXGA, Thu. 8:30 p.m., Sat. 5:30 p.m., Sun. 7 p.m.

WRENS
WCES, Thu. 8:30 p.m., Sat. 5:30 p.m., Sun. 7 p.m.

HAWAII

HONOLULU
KHET, Sat. 7:30 a.m.
● KHNL, Sat. 4:30 p.m.

WAILUKU
KMEB, Sat. 7:30 a.m.

IDAHO

BOISE
KAID, Sun. 4:30 p.m.
● KTRV, Sun. 6:30 a.m.

COEUR D'ALENE
KCDT, Sun. 3:30 p.m.

MOSCOW
KUID, Sun. 3:30 p.m.

POCATELLO
KISU, Sun. 4:30 p.m.

TWIN FALLS
KIPT, Sun. 4:30 p.m.

ILLINOIS

CARBONDALE
WSIU, Thu. 7 p.m., Fri. 12:30 p.m., Sat. 12:30 p.m.

CHAMPAIGN/URBANA
● WAND, Fri. 5:30 a.m.
WILL, Thu. 7:30 p.m., Sun. 3:30 p.m.

CHARLESTON
WEIU, Sat. 8:30 p.m.

CHICAGO
WTTW, Tue. 7:30 p.m., Thu. 1:30 a.m.
● WFLD, Sat. 6:30 a.m.

JACKSONVILLE
WSEC, Thu. 10 p.m., Sun. 1:30 p.m.

MACOMB
WMEC, Thu. 10 p.m., Sun. 1:30 p.m.

MOLINE
WQPT, Tue. 7 p.m., Sat. 5:30 p.m.

OLNEY
WUSI, Thu. 7 p.m., Fri. 12:30 p.m., Sat. 12:30 p.m.

PEORIA
● WTVP, Fri. 5:30 a.m., Sat. 12:30 p.m.,
● WHOI, Fri. 5:30 a.m.

QUINCY
WQEC, Thu. 10 p.m., Sun. 1:30 p.m.

ROCKFORD
● WTVO, Sat. 6:30 p.m.

SPRINGFIELD
● WICS, Sat. 7:30 a.m.

INDIANA

BLOOMINGTON
WTIU, Thu. 11 p.m., Sat. 12:30 p.m.

EVANSVILLE
WNIN, Sat. 12:30 p.m. and 6 p.m.
● WFIE, Sun. 6 a.m.

FORT WAYNE
WFWA, Sat. 10 a.m.
● WFIE, Sun. 6 a.m.

INDIANAPOLIS
WFYI, Sat. 10 a.m., Sun. 6 p.m.
● WALV, Sat. 9:30 a.m.
● WTHR, Sun. 6:30 a.m.

MERRILLVILLE
WYIN, Thu. 7 p.m., Sun. 3:30 p.m.

MUNCIE
WIPB, Sun. 4:30 p.m.

SOUTH BEND
● WBND, Sun. 7:30 a.m.
WNIT, Wed. 7 p.m., Sat. 2 p.m.

TERRE HAUTE
● WTWO, Sun. 6 a.m.

VINCENNES
WVUT, Sat. 12:30 p.m.

IOWA

CEDAR RAPIDS
● KWWL, Sun. 10 a.m.

COUNCIL BLUFFS
KBIN, Fri. 6:30 p.m., Sat. 1:30 p.m.

DAVENPORT
KQCT, Tue. 7 p.m., Sat. 5:30 p.m.
● WQAD, Sun. 11 a.m.

DES MOINES
KDIN, Fri. 6:30 p.m., Sat. 1:30 p.m.
● WHO, Sat. 5 a.m., Sun. noon

FORT DODGE
KTIN, Fri. 6:30 p.m., Sat. 1:30 p.m.

IOWA CITY
KIIN, Fri. 6:30 p.m., Sat. 1:30 p.m.

MASON CITY
KYIN, Fri. 6:30 p.m., Sat. 1:30 p.m.

RED OAK
KHIN, Fri. 6:30 p.m., Sat. 1:30 p.m.

SIOUX CITY
KSIN, Fri. 6:30 p.m., Sat. 1:30 p.m.

WATERLOO
KRIN, Fri. 6:30 p.m., Sat. 1:30 p.m.

KANSAS

BUNKER HILL
KOOD, Thu. 7 p.m., Sat. 12:30 p.m.

LAKIN
KSWK, Thu. 7 p.m., Sat. 12:30 p.m.

TOPEKA
● KSNT, Sat. 6 a.m.
KTWU, Sat. 9:30 a.m.

WICHITA
KPTS, Sat. 10 a.m., Sun. 10 a.m.
● KSNW, Sat. 8:30 a.m.

KENTUCKY

ASHLAND
WKAS, Sun. 5 p.m.

BOWLING GREEN
WKGB, Sun. 4 p.m.
WKYU, Tue. 1 p.m. and 6:30 p.m.
● WBKO, Sun. 6:30 a.m.

COVINGTON
WCVN, Sun. 5 p.m.

ELIZABETHTOWN
WKZT, Sun. 5 p.m.

HAZARD
WKHA, Sun. 5 p.m.

LEXINGTON
WKLE, Sun 5 p.m.
● WTVQ, Sat. 6 a.m.

LOUISVILLE
WKMJ, Fri. 7:30 p.m.
WKPC, Sun. 5 p.m.
● WAVE, Sat. 6:30 a.m.

MADISONVILLE
WKMA, Sun. 5 p.m.

MOREHEAD
WKMR, Sun. 5 p.m.

MURRAY
WKMU, Sun. 5 p.m.

OWENSBORO
WKOH, Sun. 4 p.m.

OWENTON
WKON, Sun. 5 p.m.

PADUCAH
WKPD, Sun. 5 p.m.
● WDKA, Sun. 11 a.m.

PIKEVILLE
WKPI, Sun. 5 p.m.

SOMERSET
WKSO, Sun. 5 p.m.

LOUISIANA

ALEXANDRIA
KLPA, Sun. 10 a.m.

BATON ROUGE
KLPB, Sun. 10 a.m.
● KWBJ, Sun. 3 p.m.

LAFAYETTE
KLPB, Sun. 10 a.m.

LAKE CHARLES
KLTL, Sun. 10 a.m.

MONROE
KLTM, Sun. 10 a.m.

NEW ORLEANS
WYES, Sat. 8:30 a.m.
● WVUE, Sat. 6 a.m.

SHREVEPORT
KLTS, Sun. 10 a.m.
● KTBS, Sun. 6:30 a.m.

MAINE

BANGOR
WMEB, Sat. 1:30 p.m.

CALAIS
WMED, Sat. 1:30 p.m.

LEWISTON
WCBB, Sat. 1:30 p.m.

PORTLAND
WMEA, Sat. 1:30 p.m.
● WPXT, Sun. 8:30 a.m.
● WXBL, Sun. 6 a.m.

PRESQUE ISLE
WMEM, Sat. 1:30 p.m.

MARYLAND

ANNAPOLIS
WMPT, Sat. 4:30 p.m., Sun. 6:30 p.m.

BALTIMORE
WMPB, Sat. 4:30 p.m., Sun. 6:30 p.m.
● WMAR, Sat. 11:30 a.m.

FREDERICK
WFPT, Sat. 4:30 p.m., Sun. 6:30 p.m.

HAGERSTOWN
WWPB, Sat. 4:30 p.m., Sun. 6:30 p.m.

OAKLAND
WGPT, Sat. 4:30 p.m., Sun. 6:30 p.m.

SALISBURY
WCPB, Sat. 4:30 p.m., Sun. 6:30 p.m.

MASSACHUSETTS

BOSTON
WGBH, Thu. 8 p.m., Sat. 5:30 p.m.
WGBX, Sun. 9 a.m.
● WFXT, Sun. 10 a.m.

SPRINGFIELD
WGBY, Thu. 8 p.m., Sat. 5:30 p.m.

MICHIGAN

ALPENA
WCML, Sat. 2:30 p.m.

BAD AXE
WUCX, Tue. 12:30 p.m., Sun. 5 p.m.

CADILLAC
WCMV, Sat. 2:30 p.m.
● WWTV/WWUP, Sun. 10:30 a.m.

DETROIT
WTVS, Thu. 8:30 p.m., Fri. 1 a.m., Sat. 10 a.m.
● WDIV, Sat. 6:30 a.m.

EAST LANSING
WKAR, Thu. 9 p.m., Sat. 1:30 p.m., Sun. 5 p.m.

FLINT
WFUM, Thu. 9:30 p.m., Sat. 1:30 p.m.
● WEYI, Sun. 10:30 a.m.

GRAND RAPIDS
WGVU, Thu. 8:30 p.m., Sat. 10 a.m.
● WLLA, Sat. 2:30 p.m.

KALAMAZOO
WGVK, Thu. 8:30 p.m., Sat. 10 a.m.

LANSING
● WILX, Sat. 6 a.m.

MANISTEE
WCMW, Sat. 2:30 p.m.

MARQUETTE
WNMU, Sat. 1:30 p.m.

MOUNT PLEASANT
WCMU, Sat. 2:30 p.m.

UNIVERSITY CENTER
WUCM, Tue. 12:30 p.m., Sun. 5 p.m.

MINNESOTA

APPLETON
KSMN, Sat. 12:30 p.m., Thu. 8 p.m.
KWCM, Sat. 12:30 p.m., Thu. 8 p.m.

AUSTIN
KSMQ, Thu. 7 p.m., Sat. 12:30 p.m.

BEMIDJI
KAWE, Thu. 7:30 p.m., Sat. 12:30 p.m.

BRAINERD
KAWB, Thu. 7:30 p.m., Sat. 12:30 p.m.

DULUTH
WDSE, Sat. 6:30 p.m., Sun. 9:30 a.m.

ROCHESTER
● KAAL, Sun. 7:30 a.m.

ST. PAUL/MINNEAPOLIS
KTCA, Wed. 7:30 p.m., Sat. 6:30 p.m.
● KSTP, Sat. 6:30 a.m.
● KSAX, Sat. 6:30 a.m.
● KRWF, Sat. 6:30 a.m.

MISSISSIPPI

BILOXI
WMAH, Sat. 6:30 p.m.

BOONEVILLE
WMAE, Sat. 6:30 p.m.

BUDE
WMAU, Sat. 6:30 p.m.

COLUMBUS/TUPELO
● WCBI, Fri. 5:30 a.m.

GREENWOOD
WMAO, Sat. 6:30 p.m.

JACKSON
WMPN, Sat. 6:30 p.m.

MERIDIAN
WMAW, Sat. 6:30 p.m.

MISSISSIPPI STATE
WMAB, Sat. 6:30 p.m.

OXFORD
WMAV, Sat. 6:30 p.m.

MISSOURI

COLUMBIA
● KRCG, Sun. 5 a.m.

JOPLIN
● KOAM, Sat. 5 a.m.
KOZJ, Sat. 12:30 p.m.

***CHECK YOUR LOCAL LISTINGS.**

KANSAS CITY
KCPT, Thu. 7 p.m., Sat. 12:30 p.m.
● KMBC, Sat. 6:30 a.m.

ST. LOUIS
KETC, Wed. 12:30 p.m., Sat. 6:30 p.m.
● KTVI, Sat. 12:30 p.m.

SEDALIA
KMOS, Sat. 12:30 p.m.

SPRINGFIELD
KOZK, Sat. 12:30 p.m.
● KSPR, Sat. 6 a.m.

MONTANA

BILLINGS
● KULR/KYUS, Sun. 9:30 a.m.

BOZEMAN
KUSM, Wed. 11:30 p.m., Sat. 11:30 a.m.

MISSOULA
KUFM, Wed. 11:30 p.m., Sat. 11:30 a.m.

NEBRASKA

ALLIANCE
NETV, Sat. 10 a.m. and 5:30 p.m.

BASSETT
NETV, Sat. 10 a.m. and 5:30 p.m.

HASTINGS
NETV, Sat. 10 a.m. and 5:30 p.m.

LEXINGTON
KLNE, Sat. 10 a.m. and 5:30 p.m.

LINCOLN
NETV, Sat. 10 a.m. and 5:30 p.m.
● KHAS, Sat. 5 p.m.

MERRIMAN
NETV, Sat. 10 a.m. and 5:30 p.m.

NORFOLK
NETV, Sat. 10 a.m. and 5:30 p.m.

NORTH PLATTE
NETV, Sat. 10 a.m. and 5:30 p.m.

OMAHA
● WOWT, Fri. 5 a.m., Sun. 6 a.m.
NETV, Sat. 10 a.m. and 5:30 p.m.

NEVADA

LAS VEGAS
KLVX, Sat. 9 a.m. and 12:30 p.m., Sun. 7 p.m.
● KTNV, Sun. 8:30 a.m.

RENO
KNPB, Sat. 10:30 a.m., Sun. 5 p.m.
● KAME, Sat. 10 a.m.

NEW HAMPSHIRE

DURHAM
WENH, Thu. 8:30 p.m., Sun. 10 a.m.

KEENE
WEKW, Thu. 8:30 p.m., Sun. 10 a.m.

LITTLETON
WLED, Thu. 8:30 p.m., Sun. 10 a.m.

MANCHESTER
● WMUR, Sat. 6 a.m.

NEW JERSEY

CAMDEN
WNJS, Thu. 8 p.m., Sat. 8 p.m., Sun. 5:30 p.m.

MONTCLAIR
WNJN, Thu. 8 p.m., Sat. 8 p.m., Sun. 5:30 p.m.

NEW BRUNSWICK
WNJB, Thu. 8 p.m., Sat. 8 p.m., Sun. 5:30 p.m.

TRENTON
WNJT, Thu. 8 p.m., Sat. 8 p.m., Sun. 5:30 p.m.

NEW MEXICO

ALBUQUERQUE
KNME, Sun. 7 a.m. and 10 a.m., Thu. 7 p.m.
● KOB, Sun. 6:30 a.m.

LAS CRUCES
KRWG, Sat. 11:30 a.m.

PORTALES
KENW, Wed. 10:30 p.m., Sat. 4 p.m.

NEW YORK

ALBANY
● WXXA, Fri. 1:30 a.m., Sun. 11:30 a.m.

BINGHAMTON
WSKG, Sat. 8 a.m., Sun. 7 p.m.
● WBNG, Sat. 6:30 a.m.

BUFFALO
WNED, Sat. 6:30 p.m.
WNEQ, Sun. 7 p.m.
● WIVB, Sat. 6 a.m.

ELMIRA
● WYDC*

LONG ISLAND
WLIW, Sat. 10:30 a.m., Sun. 8 p.m.

NEW YORK CITY
WNET, Sat. 5:30 p.m.
● WCBS, Sun. 7:30 a.m.

NORWOOD
WNPI, Sat. 10:30 a.m.

PLATTSBURGH
WCFE, Sun. 11:30 a.m.

ROCHESTER
WXXI, Sat. 10:30 a.m., Sun. 5:30 p.m.
● WHEC, Sun. 6 a.m.

SCHENECTADY
WMHT, Sat. 10:30 a.m.
WMHQ, Sun. 9:30 a.m.

SYRACUSE
WCNY, Sat. 10:30 a.m.
● WSTM, Sun. 8 a.m.

WATERTOWN
WNPE, Sat. 10:30 a.m.

NORTH CAROLINA

ASHEVILLE
WUNE, Sat. 5:30 p.m., Sun. 9 a.m.

CHAPEL HILL
WUNC, Sat. 5:30 p.m., Sun. 9 a.m.

CHARLOTTE
● WAXN, Sun. 12:30 p.m.
● WSOC, Sat. 6:30 a.m.
WTVI, Thu. 8 p.m., Sat. 5 p.m., Sun. 11 a.m.
WUNG, Sat. 5:30 p.m., Sun. 9 a.m.

COLUMBIA
WUND, Sat. 5:30 p.m., Thu. 8 p.m.

GREENSBORO
● WGHP, Sat. 6:30 a.m.

GREENVILLE
WUNK, Sat. 5:30 p.m., Sun. 9 a.m.
● WLOS, Sat. 7 a.m.

JACKSONVILLE
WUNM, Sat. 5:30 p.m., Sun. 9 a.m.

LINVILLE
WUNE, Sat. 5:30 p.m., Sun. 9 a.m.

LUMBERTON
WUNU, Sat. 5:30 p.m., Sun. 9 a.m.

RALEIGH
● WTVD, Sun. 6:30 a.m.

ROANOKE RAPIDS
WUNP, Sat. 5:30 p.m., Sun. 9 a.m.

WILMINGTON
WUNJ, Sat. 5:30 p.m., Sun. 9 a.m.

WINSTON-SALEM
WUNL, Sat. 5:30 p.m., Sun. 9 a.m.

NORTH DAKOTA

BISMARCK
KBME, Thu. 7 p.m., Sat. 6 p.m.

DICKINSON
KDSE, Thu. 7 p.m., Sat. 6 p.m.

ELLENDALE
KJRE, Thu. 7 p.m., Sat. 6 p.m.

FARGO
KFME, Thu. 7 p.m., Sat. 6 p.m.
● WDAY, Sun. 6:30 a.m.
● WDAZ, Sun. 6:30 a.m.

GRAND FORKS
KGFE, Thu. 7 p.m., Sat. 6 p.m.

MINOT
KSRE, Thu. 7 p.m., Sat. 6 p.m.

WILLISTON
KWSE, Thu. 7 p.m., Sat. 6 p.m.

OHIO

AKRON
WEAO, Sat. 10:30 a.m. and 5 p.m., Sun. 4 p.m.

ATHENS
WOUB, Sat. 5 p.m.

BOWLING GREEN
● WBKO, Sun. 6:30 a.m.
WBGU, Sat. 1:30 p.m., Mon. 3 p.m.

CAMBRIDGE
WOUC, Sat. 5 p.m.

CINCINNATI
WCET, Thu. 8 p.m., Sat. 9 a.m. and 6 p.m.
● WCPO, Sun. 9:30 a.m.

CLEVELAND
WVIZ, Sat. 1 p.m., Sun. 12:30 p.m.
● WEWS, Sun. 6 a.m.

COLUMBUS
WOSU, Thu. 8 p.m., Sat. 4:30 p.m.
● WSYX, Sun. 9:30 a.m.

DAYTON
WPTD, Thu. 8 p.m., Sat. 9:30 a.m.
● WHIO, Sat. 5:30 a.m.

OXFORD
WPTO, Mon. 7:30 p.m. Sun. 12:30 p.m.

PORTSMOUTH
WPBO, Thu. 8 p.m., Sat. 4:30 p.m.

TOLEDO
WGTE, Thu. 8 p.m., Sat. 1 p.m., Sun. 1 p.m.
● WTVG, Sun. 7 a.m.

WHEELING (W.V.)
● WTRF*

YOUNGSTOWN
WNEO, Sat. 10:30 a.m. and 5 p.m., Sun. 4 p.m.
● WFMJ, Sun. 10 a.m.

OKLAHOMA

CHEYENNE
KWET, Sat. 9:30 a.m. and 12:30 p.m.

EUFAULA
KOET, Sat. 9:30 a.m. and 12:30 p.m.

OKLAHOMA CITY
KETA, Sat. 9:30 a.m. and 12:30 p.m.
● KPSG, Sat. 9:30 a.m.

TULSA
KOED, Sat. 9:30 a.m. and 12:30 p.m.
● KTUL, Sun. 12:30 p.m.

OREGON

BEND
KOAB, Thu. 8 p.m., Sat. 5 p.m.

CORVALLIS
KOAC, Thu. 8 p.m., Sat. 5 p.m.

EUGENE
KEPB, Thu. 8 p.m., Sat. 5 p.m.
● KMTR, Sun. 9 a.m.

KLAMATH FALLS
KFTS, Thu. 8 p.m., Sat. 10:30 a.m.

LA GRANDE
KTVR, Thu. 8 p.m., Sat. 5 p.m.

MEDFORD
KSYS, Thu. 8 p.m., Sat. 10:30 a.m.
● KOBI/KOTI, Sun. 4 p.m.

PORTLAND
KOPB, Thu. 8 p.m., Sat. 5 p.m.
● KATU, Sat. 5:30 a.m., Sun. 12:30 p.m.

PENNSYLVANIA

ALLENTOWN
WLVT, Fri. 7:30 p.m., Sat. 12:30 p.m.

ERIE
WQLN, Sat. 6:30 p.m.
● WJET, Sat. 6:30 a.m.
● WFXP, Sun. 6:30 a.m.

HARRISBURG
WITF, Thu. 8 p.m., Sat. 9 a.m. and 6 p.m.
● WGAL, Sun. 11:30 a.m.

JOHNSTOWN
● WATM, Sun. 10:30 a.m.

PHILADELPHIA
WHYY, Sat. 11 a.m. and 6 p.m., Sun. 7 p.m.
● WTXF, Sat. 5 a.m.

PITTSBURGH
● KDKA, Fri. 5:30 a.m.
WQED, Sat. 5 p.m.
WQEX, Sat. 5 p.m.

PITTSTON
WVIA, Thu. 8 p.m., Sat. 5 p.m. and 5:30 p.m.

UNIVERSITY PARK
WPSX, Sat. 9 a.m. and 5:30 p.m., Sun. 4:30 p.m.

WILKES-BARRE
● WILF, Sun. 10 a.m.

RHODE ISLAND

PROVIDENCE
WSBE, Tue. 8:30 p.m., Sun. 6 p.m.
● WLNE, Thu. 1:30 a.m.

SOUTH CAROLINA

ALLENDALE
WEBA, Sat. 4 p.m.

BEAUFORT
WJWJ, Sat. 4 p.m.

CHARLESTON
● WCSC, Sat. 5:30 a.m.
WITV, Sat. 4 p.m.

COLUMBIA
● WLTX, Sat. 5:30 a.m.
WRLK, Sat. 4 p.m.

CONWAY
WHMC, Sat. 4 p.m.

FLORENCE/MYRTLE BEACH
WJPM, Sat. 4 p.m.
● WPDE, Sun. 7 a.m.

GREENVILLE
WNTV, Sat. 4 p.m.

GREENWOOD
WNEH, Sat. 4 p.m.

ROCK HILL
WNSC, Sat. 4 p.m.

SPARTANBURG
WRET, Sat. 4 p.m.

SUMTER
WRJA, Sat. 4 p.m.

SOUTH DAKOTA

ABERDEEN
KDSD, Sat. 4 p.m.

BROOKINGS
KESD, Sat. 4 p.m.

EAGLE BUTTE
KPSD, Sat. 4 p.m.

LOWRY
KQSD, Sat. 4 p.m.

MARTIN
KZSD, Sat. 4 p.m.

PIERRE
KTSD, Sat. 4 p.m.

RAPID CITY
KBHE, Sat. 4 p.m.
● KCLO, Sat. 4 p.m.

SIOUX FALLS
KCSD, Sat. 4 p.m.
● KELO, Sat. 5 p.m.

VERMILLION
KUSD, Sat. 4 p.m.

TENNESSEE

CHATTANOOGA
● WDNN, Sat. 11 a.m.
WTCI, Sat. 1:30 p.m.

COOKEVILLE
WCTE, Sat. 12:30 p.m.

KNOXVILLE
WKOP, Sat. 1:30 p.m.
WSJK, Sat. 1:30 p.m.
● WATE, Sat. 5:30 a.m.

LEXINGTON-MARTIN
WLJT, Thu. 9:30 p.m., Sat. 12:30 p.m.

MEMPHIS
WKNO, Thu. 7 p.m., Sat. 9:30 a.m.
● WPTY, Sat. 5 a.m.

NASHVILLE
WDCN, Sat. 4:30 p.m.
● WKRN, Sat. 5:30 a.m.
● WKAG, Sun. 10 a.m.

TRI-CITIES
● WKPT/WAPK, Sat. 10:30 a.m.

TEXAS

AMARILLO
KACV, Sat. 12:30 p.m.
● KCPN, Sat. 10 a.m.

AUSTIN
KLRU, Sat. 5 p.m.
● KTBC, Sat. 7:30 a.m.
● KVC, Sun. 5 a.m.

BEAUMONT
● KBMT, Sat. 5:30 a.m.

COLLEGE STATION
KAMU, Sat. 12:30 p.m., Mon. 10 p.m., Wed. 2 p.m.

CORPUS CHRISTI
KEDT, Sat. 12:30 p.m. and 10 p.m.
● KRIS, Sat. 11:30 a.m.

DALLAS/FORT WORTH
KERA, Sat. 9 a.m., 6:30 p.m.
● KDFI, Sun. 10:30 a.m.

EL PASO
KCOS, Sat. 5 p.m.

HARLINGEN
KMBH, Sat. 12:30 p.m.
● KVEO, Sun. 6 a.m.

HOUSTON
KUHT, Sun. 11:30 a.m.
● KTRK, Sun. 11 a.m.

KILLEEN
KNCT, Sat. 12:30 p.m., Sun. 9:30 a.m.

LUBBOCK
KTXT, Thu. noon, Sat. 12:30 p.m.
● KLBK, Sun. 5 p.m.

ODESSA
KOCV, Sun. 12:30 p.m.

SAN ANTONIO
KLRN, Sat. 1:30 p.m.

TYLER
● KLPN, Sat. 10 a.m.

WACO
KCTF, Mon. 12:30 p.m.
Sat. 6:30 p.m.
● KXXV, Sun. noon and 12:30 p.m.

UTAH

PROVO
KBYU, Sat. 9:30 a.m., Wed. 11 p.m.

SALT LAKE CITY
KUED, Sat. 8 a.m. and 5 p.m.
● KTVX, Sun. 11 a.m.

VERMONT

BURLINGTON
WETK, Thu. 8 p.m., Sat. 11 a.m.
● WCAX, Sun. 8:30 a.m.

RUTLAND
WVER, Thu. 8 p.m., Sat. 11 a.m.

ST. JOHNSBURY
WVTB, Thu. 8 p.m., Sat. 11 a.m.

WINDSOR
WVTA, Thu. 8 p.m., Sat. 11 a.m.

VIRGINIA

CHARLOTTESVILLE
WHTJ, Sat. 8:30 a.m.

FALLS CHURCH
WNVT, Sat. 2:30 p.m.

HARRISONBURG
WVPT, Sat. 1:30 p.m.
WVPY, Sat. 1:30 p.m.

MARION
WMSY, Fri. 11 p.m., Sat. 1:30 p.m.

NORFOLK
WHRO, Sat. 8:30 a.m. and 2 p.m.
● WVEC, Sat. 7:30 a.m.

NORTON
WSBN, Fri. 11 p.m., Sat. 1:30 p.m.

RICHMOND
WCVE, Sat. 8:30 a.m.
WCVW, Fri. 8:30 p.m.
● WTVR, Sat. 6 a.m.

ROANOKE
WBRA, Fri. 11 p.m., Sat. 1:30 p.m.
● WSLS, Sat. 6:30 a.m.

WASHINGTON

CENTRALIA
KCKA, Thu. 7 p.m., Sat. 12:30 p.m. and 5:30 p.m.

PULLMAN
KWSU, Mon. 7:30 p.m., Wed. 7:30 a.m., Sat. 2 p.m.

RICHLAND
KTNW, Thu. 7 p.m. Sat. 2 p.m., Sun. 4:30 p.m.

SEATTLE
KCTS, Sun. 5 p.m.
● KIRO, Sun. noon

SPOKANE
KSPS, Sat. 9:30 a.m., Sun. 5:30 p.m.
● KXLY, Sun. 9:30 a.m.

TACOMA
KBTC, Thu. 7 p.m., Sat. 12:30 p.m. and 5:30 p.m.

YAKIMA
KYVE, Sun. 5 p.m.

WEST VIRGINIA

BECKLEY
WSWP, Sat. 1:30 p.m.

BLUEFIELD
● WOAY*

CHARLESTON
● WCHS, Sun. 6 a.m.

HUNTINGTON
WPBY, Sat. 1:30 p.m.

MORGANTOWN
WNPB, Sat. 1:30 p.m.

WHEELING
● WTRF*

WISCONSIN

GREEN BAY
WPNE, Wed. 7:30 p.m., Sun. 4 p.m.
● WFRV, Sun. 5:30 a.m.

LA CROSSE
WHLA, Wed. 7:30 p.m., Sun. 4 p.m.
● WEAU, Sun. 9 a.m.

MADISON
WHA, Wed. 7:30 p.m., Sun. 4 p.m.
● WISC, Sat. 6:30 a.m.
● WKOW, Sun. 6 a.m.

MENOMONIE
WHWC, Wed. 7:30 p.m., Sun. 4 p.m.

MILWAUKEE
WMVS, Thu. 7:30 p.m., Sat. 8:30 a.m.
● WTMJ, Sun. 6 a.m.

PARK FALLS
WLEF, Wed. 7:30 p.m., Sun. 4 p.m.

WAUSAU
WHRM, Wed. 7:30 p.m., Sun. 4 p.m.
● WJFW, Sun. 10:30 a.m.

WYOMING

RIVERTON
KCWC, Sat. 5 p.m.

*CHECK YOUR LOCAL LISTINGS.

This Old House is a production of WGBH Boston

Good-Bye and Aloha

The crew finishes the Belmont house and heads west—way west

BY REBECCA REISNER

During the renovation, Lauren and Dean Gallant lived on the second floor of their house in Belmont, Massachusetts. The work finally completed, they still can't resist celebrating Christmas in work clothes.

Week 16 (January 2-3)

The crew continues to work on Lauren and Dean Gallant's 1907 Shingle Style house in Belmont, Massachusetts. Steve Thomas checks out the installation of storm panels custom-made for the house's rectangular leaded-glass windows. Next, Steve visits a studio that reproduces period wallpaper. Finally: the installation of a one-room combination of acanthus leaf, willow bough and rose wallpapers.
Watch and learn: Cutting wallpaper.
Resources: Awning contractor: L.F. Pease Co.; 401-438-2850. Acrylic awning fabric: Industrial Fabrics Association; 800-225-4324. Storm windows: Allied Window Inc.; 800-445-5411; installed by Anderson Installations; 781-899-2002. Wallpaper hanger: Sarai Stenquist, Paper Lady; 781-894-5656.

Week 17 (January 9-10)

On the penultimate day of the renovation, a phalanx of subcontractors descends on the house to finish the job. Among them: Chuck and Joe Ferrante, who install tile countertops, and Jeff Hosking, the floor refinisher.
Watch and learn: Installing cabinets in a kitchen.
Resources: Aluminum downspouts and copper flashing: Benjamin Obdyke Inc.; 800-523-5261. Kitchen cabinets: Plain 'n Fancy Kitchens Inc.; 717-949-6571. Floor refinisher: Hosking Floor Refinishing; 508-668-8315. Replacement wood flooring: Hoboken Wood Flooring Corp.; 973-694-2888. Tiling subcontractor: Ferrante Tile; 781-396-6327. Tile backer board: Dens-Shield by Georgia-Pacific; 800-284-5347. Tiles: 6-by-6-foot countertop by Fireclay Tile Co.; 408-275-1182; 3-by-6-foot backsplash by Candy Tiles Ltd., Devon, England, supplied by Shep Brown Associates; 781-935-8080. Linoleum: Forbo Industries Inc.; 800-842-7389. Underlay for linoleum: American Plywood Association; 253-565-6600.

Week 18 (January 16-17)

As the wrap party approaches, Norm Abram checks out a safety feature on the garage's new automatic doors, and Richard Trethewey visits plumber Maura Russel, who is overseeing the installation of a recycled steam-radiator in the kitchen. Steve travels to North Scituate, Massachusetts, to tour the showplace house of Arts and Crafts furniture maker David Berman.
Watch and learn: Cutting copper designs with a scroll saw.
Resources: Railing: DeAngelis Iron Work Inc.; 508-238-4310. Garage door and opener: Overhead Door Corp.; 972-233-6611. Bathroom china: American Standard; 732-980-3000. Stainless-steel sinks: Just Manufacturing Co.; 847-678-5150. Butcher-block countertop refinishing: Counterwerks; 508-528-8610. Amana refrigerator trim kit: Amana Appliances; 319-622-5511. Custom millwork: Anderson & McQuaid; 617-876-3250. Vent hood: DA model by Vent-a-Hood; 972-235-5201; supplied by D'Elia Associates; 800-356-3803. Appliances: Jenn-Air Co.; 800-536-6247. Kitchen cabinet hardware: Crown City Hardware Co.; 626-794-1188. Historic-interiors consultant: Historic Interiors Inc.; 978-371-1365. Period carpet: Poppy by J.R. Burrows & Co.; 781-982-1812.

Week 19 (January 23-24)

More than 2,000 miles from the mainland, Steve and Norm paddle to the Honolulu project: a classic 1930s Hawaiian bungalow that needs interior reconfiguring, a new roof and better plumbing. The owner, Christiane Bintliff, would like the renovation to preserve the house's Hawaiian charm.
Watch and learn: Conducting a house-blessing ceremony.
Resources: Architect: Daniel Moran, 560 N. Nimitz Hwy., Suite 125 D, Honolulu, HI 96817; 808-524-7004. Contractor: Ching Construction Co., 730-D Moowaa St., Honolulu, HI 96817; 808-842-1844.

Week 20 (January 30-31)

Close inspection of the house reveals two full-blown termite luaus that threaten the infrastructure. In a modern office building high above Honolulu, architect Norm Lavaco shows his model of the project to Steve. Back at the site, Bintliff discusses her plans for a new kitchen and garden. ***Watch and learn:*** Stripping a roof.
Resources: Lumber and other building materials: Pioneer Ace Hardware; 808-622-1641. Disposal service: B.F.I. Waste Systems; 808-833-9969. Electrician: Pierre Jaffuel, Techno Electrical Enterprises Inc.; 808-947-2726. Roofing contractor: Wilkinson Shake Roofing Inc., Kailua, HI; 808-235-1777.

The crew will widen the kitchen's entryway, which means sacrificing the decorative border, and carve out wall space for a window overlooking Maunalua Bay.

Week 21 (February 6-7)

Norm learns about the unusual sequence of tasks undertaken when building a house in the tropics. Steve finds out why replacing a bungalow roof costs $21,000.
Watch and learn: Laying shoe molding and baseboards.
Resources: Prefabricated trusses: Ariel Truss (Hawaii) Inc.; 808-682-5859. Structural engineers: J.A.I. Inc.; 808-536-2108. Power tools: Delta International Machinery; 412-963-2400. Airless pneumatic nail gun: I.T.W. Paslode; 847-634-1900.

Week 22 (February 13-14)

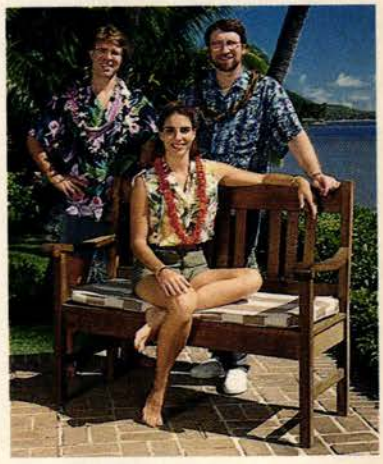
After snorkeling ashore, Norm and Steve continue their education in tropic-friendly building. The new windows arrive. Norm and Steve check out the prices at a local hardware store.
Watch and learn: Laying a rust- and termite-resistant roof.
Resources: Treated red cedar shingles: Anbrook Industries Ltd., Meeker Cedar Products, Wesco Cedar Inc., treated by Chemco Inc. under the auspices of the Cedar Shake & Shingle Bureau, Box 1178, Sumas, WA 98295; 604-462-8961. Fall-arrest roofing safety system: Skyhook anchorage system, Fall Protection Inc.; 253-854-5877. Windows and sliding doors: Marvin Windows & Doors; 800-328-0268.

Week 23 (February 20-21)

Carpenters start on the kitchen. Steve visits Iolani Palace in downtown Honolulu, then enjoys a beach picnic featuring a mainland food product that is surprisingly popular in Hawaii.
Watch and learn: Installing hidden speakers.
Resources: Invisible speakers: SA2 by Sound Advance Systems; 800-592-4644; installed by Design Systems Ltd.; 808-455-6611. Recessed halogen tilting light fixtures: U.S.A. Illumination; 914-565-8500. Verdigris Prairie Style exterior light fixtures: Fredrick Ramond Inc.; 562-926-1361. Non-tarnishing brass hardware: Baldwin Hardware Corp.; 610-777-7811.

Week 24 (February 27-28)

Steve receives a lesson in ground-level termite control, and Norm learns about a Hawaiian gem, the wood called koa.
Watch and learn: Cope-sawing molding.
Resources: Fumigation: Hauoli Fumigation Co. Inc.; 808-836-0272. Custom poplar moldings and trim: Sanders Trading Co. Inc.; 808-596-2303. Rack-and-pinion TV lifter: 1000.5 Pop-Up, Auton Motorized Systems; 805-257-9282. Security system: Interactive Technologies Inc.; 612-777-2690; designed and installed by Security One; 808-734-4374.



Christiane Bintliff (with Steve Thomas and Norm Abram) owns a house built on land King Kamehameha I gave to one of her ancestors in the early 1800s.

PHOTOS: COURTESY OF WGBH-TV AND LAUREN AND DEAN GALLANT.

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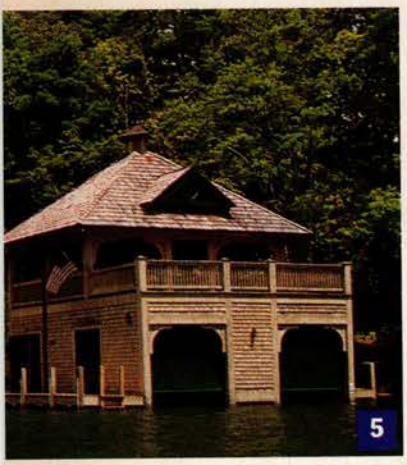

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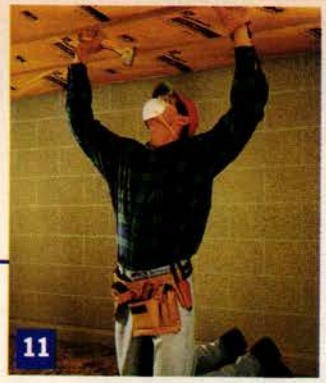

10 Jenn-Air offers kitchen appliances under four banners: the sleek Expressions® collection; the high-performance Pro-style™ line; the stylish Designer line and the stunning Blue Creek™ line. Call 800-JENN-AIR or visit www.jennair.com.

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EXTRAS
pp. 18-23

Shovel and Shed: "Clinical Guidelines on the Identification, Evaluation and Treatment of Overweight and Obesity in Adults," June 1998, National Heart, Lung and Blood Institute. *Reported by Meghan Anderson.*
Greene & Greene Houses: *Greene & Greene: The Passion and the Legacy* by Randell L. Makinson, $75, Gibbs Smith Publisher, Layton, Utah, 1998. *Greene & Greene Masterworks* by Bruce Smith, $40, Chronicle Books, San Francisco, 1998. The Gamble House museum, 4 Westmoreland Place, Pasadena, CA 91103; 626-793-3334. *Reported by Elena Kornbluth.*
Best of Both Worlds: 1640VSK fine-cut saw and miter table set, includes 3 blades, 3 clamps and storage case, $220, S-B Power Tool Co., 4300 W. Peterson, Chicago, IL 60646; 800-815-8665. *Reported by Tom Baker.*
Hook it: Carol Brand Plug-it Hook-it, 2 for $1.99, General Cable Corp., 4 Tesseneer Dr., Highland Heights, KY 41076; 606-572-8000; www.generalcable.com. *Reported by Kate Brauman.*
Lightening Up: Timberline Lodge, Box 49580, Portland, OR, 97240-0580; 800-547-1406. **Light fixtures:** Portland General Electric, 121 S.W. Salmon, 1 WTC 7, Portland, OR 9704; 503-464-8000. *Reported by Meghan Anderson.*
Point and Measure: Disto Basic Handheld laser meter, $895, Leica Geosystems Inc. USA, 3155 Medlock Bridge Road, Norcross, GA 30071; 800-367-9453; fax 770-447-0710; www.leica.com. Intellimeasure Laser Ultrasonic Estimator, measures up to 50 feet, $86, Stanley, 1000 Stanley Drive, New Britain, CT 06053; 800-782-6539; fax 860-827-3910. *Reported by Romy Pokorny.*
Matchmakers: 650-261-0661; www.improvenet.com. *Reported by John Banta.*

ASK NORM
p. 24-26

Jamb-adjustment screws: Top star brand, 2½ in., $1 each, GRK Canada Ltd., RR 1, 1499 Rosslyn Rd., Thunder Bay, Ont., Canada P7C 4T9; 807-474-4300.
Power stripper: Paint Shaver, $498, American International Tool Inc., 129-B Fletcher Ave., Cranston, RI 02920; 800-932-5872.

CHERRY
p. 29-32

Library woodwork: Ben Tamsky, Woodshop Services, 5 Edgemont St., Mystic, CT 03655; 860-536-3361. **Library design:** Austin Patterson Disston Architects, 376 Pequot Ave., Southport, CT 06490; 203-255-4031. Kane Hardwood, Box 807, Kane, PA 16735; 814-837-6941. Pequot Ave. Southport, CT. **Chair:** Thomas Moser, 149 Main Street, Freeport, ME, 04032; 800-708-9703; www.thosmoser.com. **Veneer:** Freeman Corp, Box 96, Winchester KY 40392; 606-744-4311. **Our thanks to:** John Arno, wood consultant, Durst Lumber Company, Troy, MI; Richard Jagels, Wood Science Department, University of Maine,

Orono; Gene Parker, Editor, *Hardwood Market Report*. **Wood:** For a directory of companies that sell certified wood products, including cherry, contact the Certified Forest Products Council, 14780 Southwest Osprey, #285, Beaverton, OR 97007; 503-590-6600; www.certifiedwood.org.

COFFERED CEILINGS
p. 36-37

Architect, library and kitchen: McKee Patterson, Austin Patterson Disston, 376 Pequot Ave., Southport, CT 06490; 203-255-4031. **Builder, kitchen:** Wright Brothers Builders Inc., 325 Post Road West, Westport, CT 06880; 203-227-8215. **Custom trim, kitchen:** J.C. Construction, Brookfield, CT; 203-775-5854.

BATHING BEAUTY
p. 38-46

Architect: John James Architect, AIA, 11 Inwood Place, Maplewood, NJ 07040; 973-378-3118. **Contractor:** Hofmann Design Build Inc., 160 Broad Street, Summit, NJ 07901; 908-273-1700. (Project manager, Alex Szewczuk.) **Structural engineer:** Joseph Bronner, West Caldwell, NJ, 201-226-6330. **Marble installation:** BCG Marble & Granite Fabricators Co. Inc.; 201-343-8487. **Cabinetry:** Creative Woodcraft Custom Woodworking, 264 E. Blackwell Street, Dover, NJ 07801; 973-366-6080. **Plumber:** A.J. Plumbing & Heating, Chatham, NJ, 973-635-5907. **Radiant Floor:** Stadler Corp., Bedford, MA, 781-275-3122. **Mirrors, shower door:** The Glassmith Shop, 348 Springfield Avenue, Summit, NJ 07901; 908-277-0411. **Marble:** White Carrera with verde alpi dots (floor, shower); verde elegante (counters), available from W.D. Virtue Tile, Summit, NJ, 908-273-6936. **Tub, sink, toilet:** Kohler, 800-456-4537. **Tub fittings:** Czech & Speake, Waterworks, 800-927-2120. **Sink fittings:** Jado, 800-227-2734. **Shower fittings:** Hansgrohe; 800-334-0455. **Light fixtures:** Brass Light Gallery, Milwaukee, WI, 800-243-9595. **Bath accessories:** Waterworks.

THE INSURANCE GAP
p. 51-52

AIG, 70 Pine Street, New York, NY 10270; 212-770-7000; www.aig.com. Amica Mutual, Amica Center, Amica Center Blvd., Lincoln, RI 02865; 800-242-6422; www.amica.com. Colonial Penn, Box 31030, Tampa, FL 33633; 800-523-2800; www.cpdirect.com. Geico: 800-841-3005; www.geico.com. Insurance News Network: www.insure.com.

CABIN FEVER
p. 53-54

Log home builder: Alpine Log Homes, Box 85, Victor, Montana 59875; 406-642-3451. **Log home resource:** Log Homes Council, National Association of Home Builders, 15th & M streets,Washington, D.C. 20005; 202-822-0576.

KEY WEST
p. 58-61

Architect: Michael Miller Architecture & Design, 305-294-7687. **Contractor:** Roger Townsend, 305-292-3697

BUYING GOOD LUMBER
p. 62-68

Arlington Coal and Lumber, 41 Park Ave., Arlington, MA 02476; 781-643-8100. **Our thanks to:** Bob and John McNamara, Arlington Coal and Lumber. Dave Kretschman, Forest Products Laboratory. Daniel Lassens, Purdue. Tom Searles, American Lumber Standards Committee.

FIREPLACE INSERT
p. 76-79

Contractor: Mark Schaub, Chimney Savers, 6-11 Ilene Court, Belle Mead, NJ 08502; 888-576-4574. **Inserts:** Stovax Ltd., Falcon Road, Sowton Industrial Estate, Exeter, Devon, England EX2 7LF, 011-44-1392-474000. Available from Mark Schaub. **Rumford fireplace:** Dan

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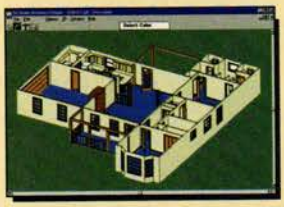

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THE GREAT CAPE
p. 80-87

Architects: Richard Wills, Royal Barry Wills Associates Inc., 8 Newbury St., Boston, MA 02116; 617-266-5225. **Todd house restoration:** Handmade window sash, doors, mantelpieces, paneling and moldings, Caroline Sly, Box 313, Ashfield, MA 01330; 413-628-0130. **Carpentry and woodwork:** Richard Potter, Plainfield, MA; 413-743-5430. Real-estate broker for the Shaw Homestead (Richard Todd's first house), Upton-Massamont Realty, Shelburne Falls, MA; 413-625 6366. **House plans:** Evan Pollitt's plans, Old Cape Cod Houses & Other Colonials (24 plans) and Old Colonial Houses (32 plans), Home Planners Bookline, 3275 W. Ina Rd., Suite 110, Tucson, AZ 85741; 800-322-6797. **Further reading:** *The Cape Cod House: America's Most Popular Home*, 1982, and *Saltbox and Cape Cod Houses,* 1988, by Stanley Schuler, both $29.95, both Schiffer Publishing Ltd., 1469 Morstein Rd., West Chester, PA 19380. *Cape Cod Architecture* by Clair Baisly, 1989, Parnassus Imprints Inc., Orleans, MA. *Cape Cod* by Henry David Thoreau, introduction by Paul Theroux, 1987, $10.95, Penguin Books U.S.A. *Historic Houses of Kent County* by Michael Owen Bourne, 1998, the Historical Society of Kent County, MD. **Our thanks to:** Stanley Schuler. Arnold Jones, restoration carpentry, Ashfield, MA; 413-628-4532. Lauren Richmond, Provincetown Historical Society, Provincetown, MA. Dr. Edward F.X. and Susan L. Hughes, Saconesset Homestead, W. Falmouth, MA. Claire McKillip, Madison Historical Society, Madison, CT. Town historian Frances Donnelly, Madison, CT. Eugene Johnstone, Chestertown, MD.

GOOD BONES
p. 88-93

Architect: Robert A.M. Stern Architects New York, NY; 212-967-5100. **Builder:** Walter Cromwell Jr., New Canaan, CT; 203-966-5550. **Framing Consultant:** Robert Reade, Eastland Vocational School, Groveport, OH; 614-836-3903. **Further reading:** *Graphic Guide to Frame Construction* by Rob Thallon, $29.99 1991, Taunton Press. *Framing Floors, Walls, Ceilings: The Best of Fine Homebuilding*, $14.95, 1996, Taunton Press.

THE POSTER: DOOR HANDLES
p. 101-102

p. 101–Top left, 2053 cylindrical lockset, $87.27, Mul-T-Lock; 800-562-3511. **Top right,** Titan Access One remote access lockset (keychain transmitter shown), $180, Kwikset, 800-327-5625. **Middle,** XM100-075 bit key mortise lock, $629.90 (with trim), Ball & Ball; 610-363-7330.
Bottom, 20200 brass rim lockset, $397.50, Virginia Metalcrafters; 540-949-9400.
Spread: (Note: "lockset" includes all trim and a mortise lock unless otherwise specified; "trim set" designates outside and inside decorative hardware without the lock.) **1.** French shank knob 241F, $42.50 per pair, and Craftsman plate 235A-BK, $89.50 per pair. **2.** Bungalow lockset 250A, $175. **3.** Century lockset 251A, $175. **4.** Athena lock set 4A, $299.50. **5.** Windsor knob 245G, $189.50 per pair, and Windsor plate, $59 each. All cast brass from Crown City Hardware; 800-950-1047. **6.** Plymouth 6572 cast brass lock set, $373.90, Baldwin Hardware; 800-437-7448. **7.** Blake 7-inch cast iron thumblatch trim set V19-047, $71.30, Ball & Ball; 800-257-3711; www.balland-ball-US.com. **8.** Greenwich IUBEI wrought iron lockset, $481, and **9.** Heart RT5BI cast iron lockset with rust finish, $326, both from Acorn Manufacturing Co.; 800-835-0121, www.acornmfg.com. **10.** Pacific C002 hammered copper trim set, $262.50, Craftsman Hardware; 660-376-2481; www.craftsmanhardware.com. **11.** Chestnut IUHED wrought iron lockset, $441, Acorn Manufacturing. **12.** FSB 1191/1491-1991 anodized aluminum trim set, $256 (to the trade), imported from Germany by Edward R. Butler Co. Inc.; 212-925-3565. **13.** LE1200 satin steel lockset, $510 ($260 for trim only), L.B. Brass; 888-644-1570. **14.** White bronze back plate and potato knob lockset, $763 (mortise lock) and $617 (bored lock), Rocky Mountain Rustic Hardware Collection, Box 5130, Ketchum, ID 83340; 888-788-2013. **15.** Forged stainless steel lockset KT1KI, $520, Acorn Manufacturing. **16.** Bird Cage 2006 steel trim set, $172, Bouvet U.S.A., 540 DeHaro St., San Francisco, CA 94107; 415-864-0273. Builders Hardware Manufacturers Association, 355 Lexington Ave., New York, NY 10017; 212-661-4261. Associated Locksmiths of America, 3003 Live Oak St., Dallas, TX 75204; 800-532-2562. **Our thanks to:** Henry Todaro Jr, locksmith, and Robert Grant, hardware consultant, Henry's Room, HT Sales Company, 726 10th Ave., New York, NY 10019; 212-265-0747. Allan Rich, the Keyless Lock Store, 43 Sherrard St., East Hills, NY 11577; 516-625-3184; www.nokey.com.

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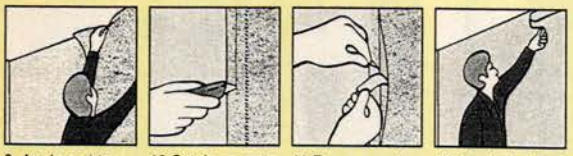
8. Apply 1st coat of saturant to adjacent area.



9. Apply mat to 2nd area, overlapping by 1".
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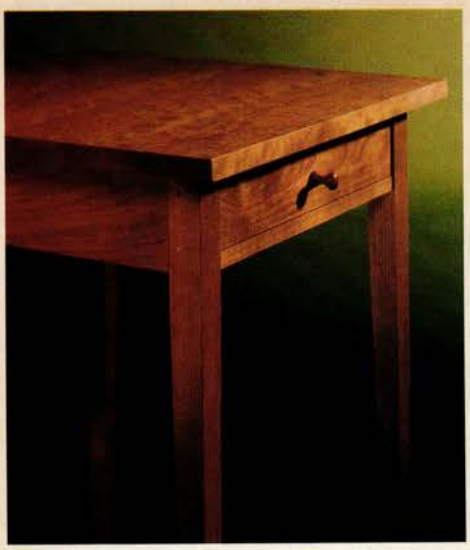

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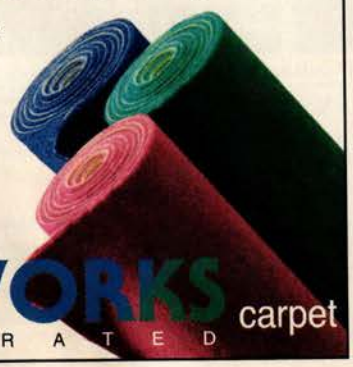

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BY BEN KALIN

PRICE

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LOCATION

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Alfred Husen, a renowned Detroit booster and tobacconist, spared no expense when he built his wife's dream house in 1867. He stuffed the house's 13 rooms with plenty of intricate details and decorative flair—much of which is still evident today. The first floor includes a foyer and a large ladies' parlor that has 10-foot ceilings and 6-foot windows framed in oak trim. Even though Husen lived in the Motor City, he refused to get a car so that he would continue to walk the 2½ miles downtown every day.

The seller, Randi Vivian, is only the third owner of the house in 131 years. She bought it in 1991 and began pumping her own money into the most pressing needs: patching the slate roof, rebuilding the front and back porches, updating the electrical system and installing a new boiler. But when a hoped-for renovation grant fell through, Vivian reluctantly decided to put the house on the market. If no buyer comes forward, she plans to strip off the architectural details and sell them for salvage. The house still needs replumbing and cosmetic work, including a replastering of the walls and ceilings and a refinishing of the oak floors.

CONTACT

Randi Vivian
1495 Hubbard Street
Detroit, MI 48209
313-640-4128

A forlorn 131-year-old Victorian in Detroit, Michigan, is still graced with a wealth of original interior details. Ornate cast iron radiators (left), an oak fireplace mantel and crystal chandeliers are a few of the surviving items. The current owner restored the stained-glass fanlight on the front parlor window (below) and overhauled the kitchen. Outside, the horse chestnut tree (top, at left of the house) that the first owner planted upon the birth of his daughter still stands in the backyard. And beneath a covering of cement shingles, faded clapboards await a new coat of paint.

PHOTOS: ROBERT VIGILETTI.

If you know of a house—threatened by development or severe deterioration—that should be saved, please write to us at: Save This Old House, 1185 Avenue of the Americas, 27th floor, New York, NY 10036.

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