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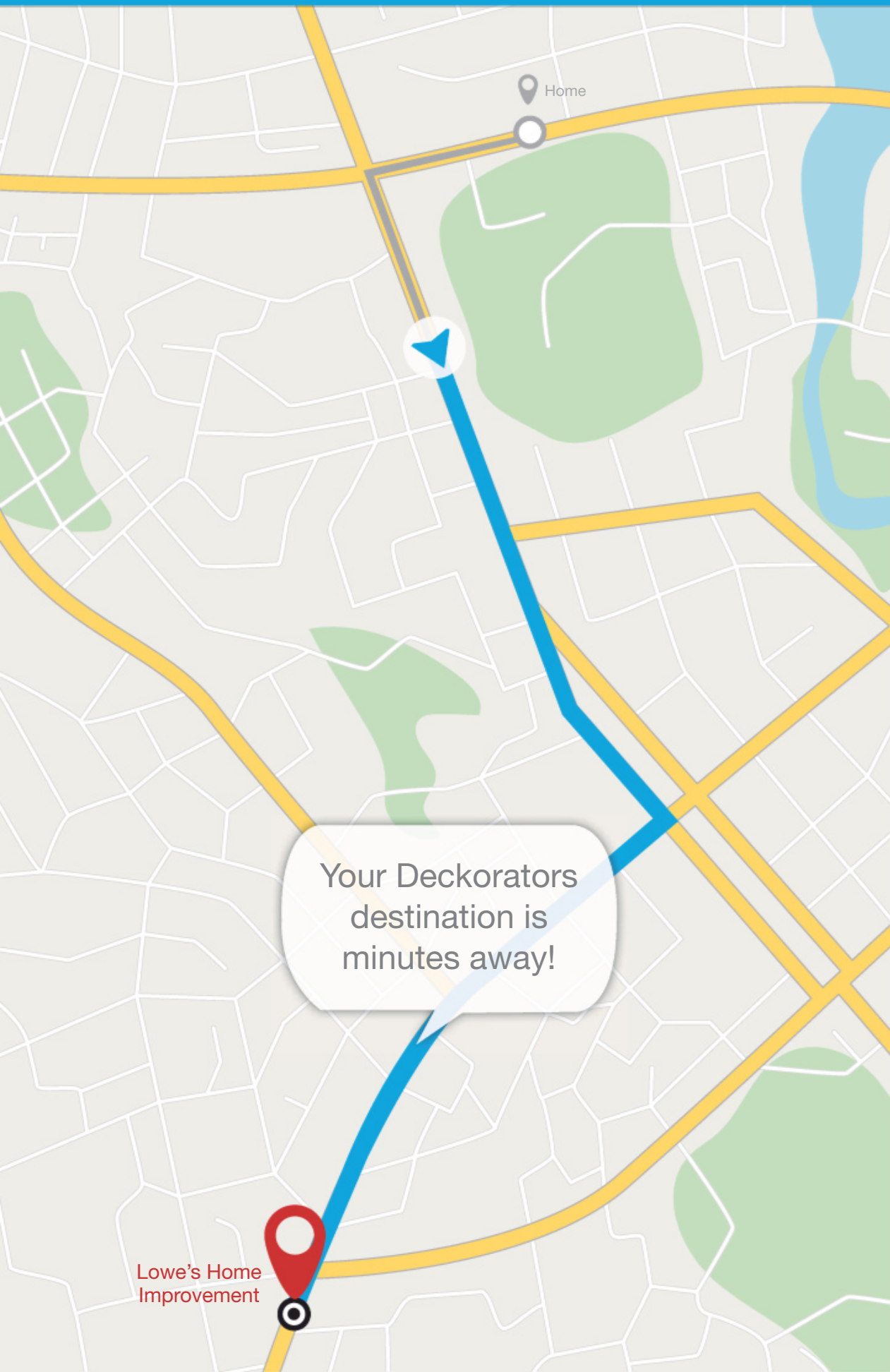
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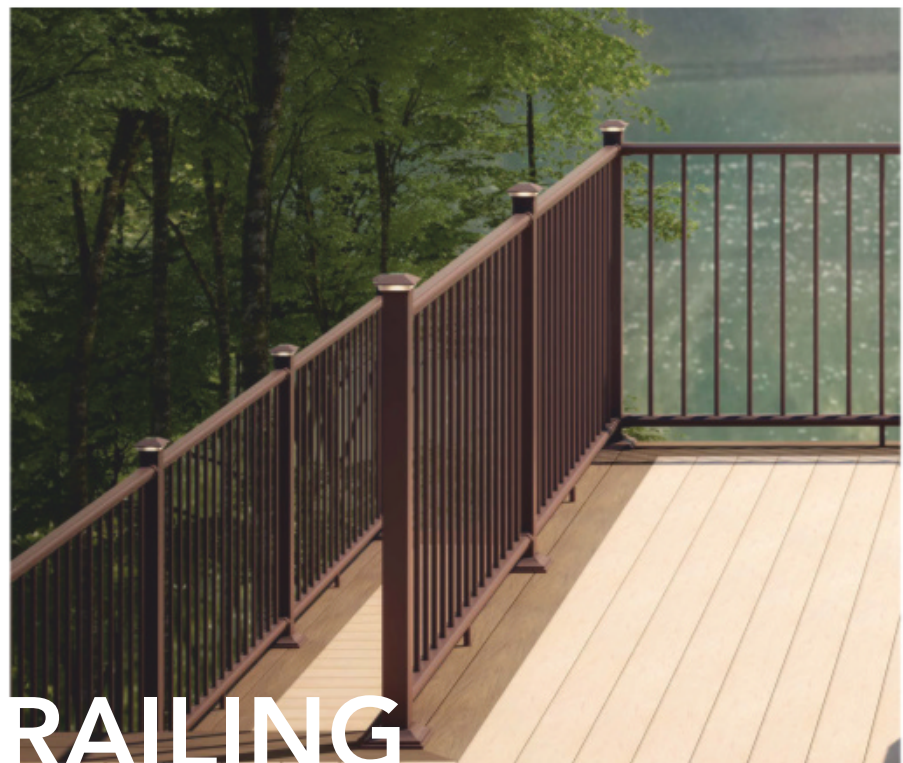
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Cover Photograph by
KEN GUTMAKER
Styling by SARAH ALBA



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Reader mail MAY/JUNE 2019



How to reach us

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RENOVATION SEASON *generally means summer, but if our in-box is any indication, This Old House readers keep busy even when temperatures dive. This past winter, each time a big snowstorm hit, we saw a jump in the number of DIY projects readers sent our way. Our January/February 2019 issue kindled plenty of ideas and plans, too.*

Problem-solving DIY project

Thank you to Kristine Franklin and her mini barn doors! This project (Home Solutions, January/February 2019) solves a problem for me, too. I have a bumpout in my laundry room with a door to get at the water pipes that run beneath it. I recently got a new, bigger washing machine, and it blocks that door. Small-scale barn doors are a perfect solution for me! —MIMI KALMAN, VIA E-MAIL

Renovation inspiration

Just when winter has worn out its welcome and homeowners like me are thinking their old houses are getting a bit tired-looking too, the latest issue of *This Old House* arrives to lift me out of my doldrums. The featured bathroom redo (Before + After: Bath, January/February 2019) sparked the inspiration to plan an overdue renovation for one of the bathrooms in my 1846 house. The Camerons did a great job showing how you can combine the new (the fab frameless glass-

enclosed shower) with the traditional, like that charming oak vanity. Thanks, *TOH*, for once again providing me with the impetus to get going. —JEAN MURRAY, MADISON, CT

Locally sourced lumber

I enjoyed reading about the kitchen renovation in “Vintage Charmer” (January/February 2019). I liked that the homeowners not only built the cabinets themselves, but also used wood from their own black walnut trees to make a dining table. It reminded me of when *This Old House* built a new house for Dickie Silva in Billerica, MA (Season 21), and they took down fire-damaged trees that were on the property and milled them for lumber. Urban trees can be an excellent source of lumber; you just have to keep the metal detector going in case of any forgotten nails.

—DEAN WILLARD, SARATOGA SPRINGS, NY

In praise of print

Just wanted to let you know that I’ll continue my subscription to *This Old House* for as long as you supply the magazine, and I’ll treasure every issue! I know I could read it on my tablet, but I enjoy so much more holding the magazine and looking at all the ideas and the jobs you do, and also learning from it. My husband laughs at how long it takes me to go through one of your magazines, because I read it from cover to cover. Keep up the good work! —KAREN L. GRAVES, VIA E-MAIL

Correction

→ The sconces in the powder room of the Jamestown Net-Zero House (“Small But Mighty,” March/April 2019, p. 52) are from Clarkson Lighting. We regret the error.

READER
PROJECT
OF THE
MONTH

Porch-pirate-proof bench

—DAVID ALLEN, EULESS, TX

To help combat package theft, I built a bench with a hinged seat that conceals a compartment with a magnetic, childproof lock. Leave it open for the delivery person; it locks when the lid is closed. Packages are safely stored until you get home!



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How Safe Is Your Home's Wiring?

Your home and family may be vulnerable to easily preventable dangers. Read on for ways to protect them.



An Ounce of Prevention

More than half of the 28,000 electrical home fires¹ and nearly 70% of the 400 electrocutions that occur in the U.S.² every year could have been prevented with two inexpensive, DIY-friendly safety devices. And while these devices may look similar, the ground-fault and arc-fault dangers they prevent—and functions they perform—are vastly different. Here's why you need the protection of both.

The Ground-Fault/Arc-Fault Difference

Ground-faults occur when electricity escapes bare, damaged, wet, or poorly insulated wires and takes a shortcut to the ground. If your body provides the path to that ground, you could be electrocuted. Arc-faults happen when electricity crosses a gap between damaged wiring such as loose, corroded, overloaded connections in walls, appliances, and cords. The resulting high-intensity heat can ignite surrounding materials, including framing and insulation. GFCI (Ground-Fault Circuit Interrupter) and AFCI (Arc-Fault Circuit Interrupter) outlets detect these faults and instantly break the connection, reducing the risk of electrical shock and fire.

Keeping Up with Codes

The National Electrical Code® (NEC®) has long mandated that GFCI outlets be installed in kitchens, bathrooms, garages, outdoors, and other damp locations. More recent code changes require AFCIs in living spaces such as bedrooms and living rooms. In 2014, the NEC introduced additional AFCI requirements for kitchens and laundry rooms; so if you are remodeling or building new, you'll need to have both in place. If you need to upgrade, Leviton's SmartlockPro® Dual Function AFCI/GFCI outlet offers shock and fire protection in one device and can be used to satisfy NEC requirements for modifications/extensions, replacement receptacles, and, in certain instances, new construction.

Why Choose an AFCI/GFCI Outlet?

The AFCI/GFCI dual function outlet is a cost-effective option that works with any type of wiring and can be reset by simply pressing a button on the face of the device.

¹ National Fire Protection Association; Electrical Safety Foundation International (ESFi) ² Electrical Safety Foundation International (ESFi)

What Goes Where?

Now that you know the difference between the devices, here's where they should be installed in your home.



AFCIs

Living areas such as bedrooms, hallways, and family rooms to help **protect your home from electrical fires.**



GFCIs

Near water sources, such as bathrooms, basements, garages, and near pools and spas to help **protect you from electrocution.**



Dual function AFCI/GFCIs

Kitchens and laundry rooms or as a replacement option for any ungrounded outlets to help **protect from electrical fire and electrocution.**



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Edited by Kate Wood

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Unique DIY stepping-stones

Create a one-of-a-kind garden path by making sand molds with oversize leaves—like the rhubarb here—and casting the shapes in concrete. Plan how many you'll need by pacing your yard, so the stones will more or less match your stride. To settle them into the soil, use a sharp blade to cut around each one, and excavate about 3 inches. To stabilize the roughly 2-inch-thick stones, backfill with a layer of pea gravel, then of sand. Though you can paint the stones, coating the porous concrete with a clear masonry sealer lets each leaf's veining be the star. *See the step-by-step, opposite.*

Leafstepping-stone how-to

You'll need a large work area to sand-cast the leaves in batches.



1. PREP THE LEAVES Place each leaf you're casting facedown. Using a paintbrush and some cooking oil, coat the underside, as shown. This will help you remove the leaf from the concrete casting later on.

2. BUILD THE BASE On a flat work surface, form a roughly 1-inch-thick bed of sand for each casting that is slightly larger than the leaf's perimeter. Spray the sand with water to help it keep its shape.



3. PACK WITH CONCRETE Lay each leaf facedown on the sand, and mix up the concrete. Using a flat trowel, cover the leaf with an even layer of concrete at least 2 inches thick, extending the mixture to its edges and pressing the leaf into the sand, as shown. Use the trowel to neaten the outline and flatten the surface. Let the concrete cure for at least 24 hours.

4. PEEL AND REVEAL Flip over each casting and peel off the leaf, starting at the thick stem end. Use a wire brush to smooth out any rough spots in the concrete and remove any stubborn bits of leaf left behind.

Safer ways to strip paint

Two nasty chemicals are gradually leaving store shelves. Here, a look at less hazardous ways to get rid of old paint. —THOMAS BAKER

Problem ingredients: Methylene chloride, a volatile solvent found in fast-acting paint strippers, is a known neurotoxin and possible carcinogen that has caused many fatalities over the years. Also called dichloromethane (DCM), its sale was set to be banned by the EPA at the end of 2017. When that regulation was put on hold, The Home Depot and Lowe's proactively purged methylene chloride strippers from their store shelves. Those retailers took the same steps against paint strippers with NMP (n-methyl-2-pyrrolidone), a less volatile, slow-acting solvent, because of its adverse effects on fetal development. But the strippers with these solvents remain widely available—and may be hanging around on a shelf in your home. If you're planning a paint-stripping project, use one of these less toxic options instead.



Smart Strip PRO (\$92 per gallon; amazon.com), which contains low-VOC benzyl alcohol, took about 90 minutes to soften this coat of paint.

Option A: SAFER CHEMICALS

Look for strippers with sodium hydroxide, dimethyl glutarate, dimethyl adipate, or benzyl alcohol, which are more benign than methylene chloride or NMP and have few or no VOCs. None of them work quickly, however; they can take anywhere from 1 to 24 hours to soften paint, and may call for reapplication—and more waiting—to penetrate thicker layers.

Option B: HEAT STRIPPING To strip paint as fast as (or faster than) methylene chloride, use a heat gun, infrared heater, or steamer. Infrared devices are particularly effective; they don't vaporize lead, as high-powered heat guns can—and you won't need to sand the wood grain that steam raises. But they can char or ignite wood if left in one place too long, and won't work on masonry or thick metal, which require chemicals or abrasive blasting.

Spring-clean your sofa

Couch seen some spills? Before you start scrubbing, know how to decode the care symbols on upholstery and fabric labels.

—SKYE McEOWEN

W

What it means: Wet! Use water or a water-based cleaner. **Where you'll see it:** Seats, cushions, and slipcovers made from synthetics like polyester, nylon, acetate, herculon, or olefin.

S

What it means: Solvent, as in a dry-cleaning solvent. Water could damage material with this symbol. **Where you'll see it:** Natural-fiber fabrics, including cotton, silk, rayon, linen, and wool.

X

What it means: No liquids! Use a vacuum or brush to whisk away surface debris. Water or solvents could damage or shrink these materials. **Where you'll see it:** Fabric blinds and shades.

WS

What it means: Spot clean only with water or solvent. Unless you know a stain is oil-based, try water first. **Where you'll see it:** Thicker, textured fabric that has a nap or pile, like velour.

TLC for wood patio furniture

Even though outdoor furniture is typically made of resilient hardwoods or naturally rot-resistant softwoods, it's not immune to the elements. Here's how to keep your deck or patio set in top form. —KATELIN HILL



START WITH CLEANING > Working in the shade, clean furniture using an oxygen bleach to remove any loose remnants of old finishes, dirt, and mildew (unless it's redwood; then opt for oxalic acid to help maintain its color). Mix the bleach in a garden sprayer following the manufacturer's instructions. Spray it evenly on each piece, let it foam up for 15 to 20 minutes, then gently scrub with a soft-bristle brush and rinse with water. When dry, you may need to lightly sand the wood surface.

SEAL OUT WATER > Water is wood's biggest enemy, and the most important line of defense is proper sealing. To that end, skip polys, varnishes, and paints, which form films that sit on the surface and eventually crack or peel, as well as some natural oils, like linseed, which can be food for mold and mildew. Instead, opt for a synthetic penetrating wood finish like Seal-Once Exotic Premium Wood Sealer (\$28 per quart; seal-once.com). Apply it following the manufacturer's instructions; expect to repeat every one to three years.

KEEP COLOR LOOKING NEW > Clear sealers don't offer protection against the fading and graying caused by UV rays. But you can maintain or restore wood color by following up the cleaning just described with a tinted wood stain like Messmer's UV Plus for Hardwood Decks (\$46 per gallon; opwdecks.com). The pigments in a stain act as a sort of sunscreen to keep gray away.

DO ROUTINE MAINTENANCE > Get in the habit of blowing or sweeping leaves, dirt, and debris off the furniture as frequently as possible. Each month, give furniture a thorough but gentle scrub with a solution of 1 tablespoon of dish soap per gallon of water, and clean with a soft-bristle brush.

COVER IT UP > At the end of the year, store your outdoor furniture in a covered area (if you get cold winters, indoors is best). Not an option? Use furniture covers or tarps, but make sure they're breathable. Don't tie the bottom of a tarp so tightly that it traps moisture and inhibits air circulation. Wood needs to be able to dry out.



Want to prevent a fire? Clean your dryer duct

Making sure your dryer's lint trap is clean is only half the battle: **Keeping the ductwork and vent clear is vital.** Dryer Vent Wizard founder Dave Lavalle has seen it all, including black spots that could be mold (yikes) or burnt lint, a signal that lint is igniting during drying. **To prevent a fire**—and other potential problems—be sure your ductwork is doing its job. An annual professional inspection is a smart move, but you can **clean the dryer duct and vent yourself**, too. To make the job easier, pick up a specialty tool kit like the Gardus LintEater Rotary Dryer Vent Cleaning System (\$30; homedepot.com). With the dryer unplugged, use the smaller brush to **clear the lint trap and its housing**. Then disconnect the duct from the wall, and affix the larger brush to a drill/driver to **extract lint inside the duct**. Attachments should extend the brush far enough to reach outside, but you should also head outdoors to **remove the vent** (and any lint on that end), too. —S.M.

Pair up to hide spent bulb foliage

Early-blooming bulbs are one of the first signs of spring, but as the flowers fade, so does their charm. Hide wilting leaves, which need to stay put in order for bulbs to return the next year, by adding perennial companions with perfect timing. —KATE WOOD



Tulips

Cranesbill

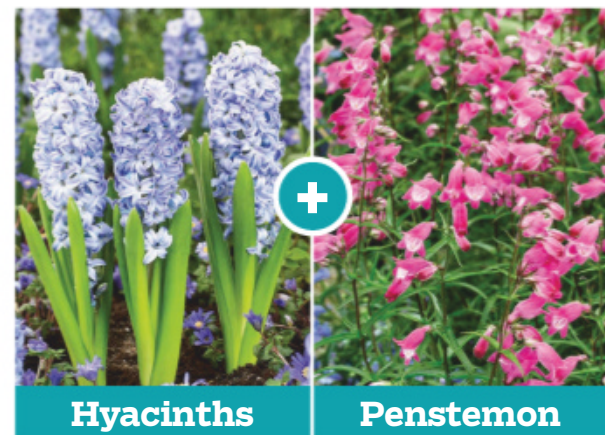
While tulips are flowering—March, April, or May, depending on the variety—cranesbill (alias hardy geranium) creates a base for the tall blossoms with its mounding foliage. Once the tulips' time is up, cranesbill's spreading habit and carpet of blooms, which appear midsummer through fall, take over.



Daffodils

Phlox

Both of these sun lovers can tolerate some shade, but spring-blooming daffs will be gone before phlox transforms from a mat of dense foliage to a bountiful spread of flowers. Expect the first phlox blossoms in mid-July; if the weather stays warm, phlox can provide color through September.



Hyacinths

Penstemon

Though some can grow to be 6 feet tall, penstemon (a.k.a. beardtongue) is a slow starter, so it won't overpower the much shorter (12 inches, tops) hyacinth. And while hyacinths are early bloomers (think March and April), penstemon's trumpet-shaped flowers don't appear until summer.



The 1½-inch opening is an easy fit for mice.

Tick prevention starts with...mice?

A single mouse can carry hundreds of disease-spreading ticks in the larval and nymph stages. Stick these Thermacell Tick Control Tubes (\$25 for six; thermacell.com) in crevices around your yard's perimeter—like stone walls—in late April, before the tick population booms (set out more in July). Mice grab the chemically treated stuffing for their nests, exposing the ticks to permethrin and killing them without harming their furry hosts.

Retrofit corded blinds for safety

As of December 2018, off-the-shelf window coverings sold in the U.S. and Canada must comply with safety standards requiring short or inaccessible cords (or none at all), as dangling cords can pose a strangulation risk to young children and pets. Here, add-ons that can make existing corded blinds pass the safety test.

FOR CONTINUOUS-LOOP CORDS >

Keep the cord taut by installing a tensioner (from \$3.99; fixmyblinds.com) on the wall or inside the window frame; just thread the cord through the device, which holds the loop tight at the bottom. Or upgrade with a motorized smart tensioner (like MOVE Blinds Motor, \$89; teptron.com), which can be operated remotely via smartphone.

FOR HANGING CORDS > Cord wind-ups (inset, right) pop apart, storing excess cord in their hollow interiors. Your blinds still work the same way, but the shortened cords are out of reach of small hands (Window Blind Cord Wind-ups, \$2.49 for two; safety1st.com).



The cord's unused length is hidden inside.

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Better together

Several separate rooms unite to create one comfortable food-prep and hangout space with style to spare BY NINA MALKIN • PHOTOGRAPHS BY KEN GUTMAKER

➔ **TO BUTCHER** a famous phrase, a house divided can be a drag. For Sarah Postyn and Carl Goldberg, the small, narrow kitchen in their 1926 Tudor in Oakland, CA, was hemmed in by a breakfast room, a laundry room, and an underused full bath. Dark, dated finishes didn't help. "We wanted more prep area and space to congregate when we entertain," Carl says. Designer Nicole Yee found an extra 123 square feet by annexing the spaces at either end of the room and removing the bath's tub. The former laundry now hosts baking and coffee stations, with a roomier pantry and a washer/dryer in the old tub alcove. A movable island in the breakfast area doubles as a bar for guests. White paint keeps the room light and airy, while patterned floor tile, a wall of blue cabinets, and an orange island jazz things up. "Better workspace, flow, and storage make cooking easier every day," says Sarah. "And parties now are much more fun!"

BEFORE Dark cabinets and counters made the narrow galley space—less than 9 feet wide—feel even tighter.

AFTER Extra prep space on either side of the cooktop, light-reflecting surfaces, and ample room annexed at either end make for an efficient, welcoming kitchen—just right for a pair of avid home cooks and their two teenage sons, as well as their guests. Sink: Julien. Faucet: Rohl



BEFORE

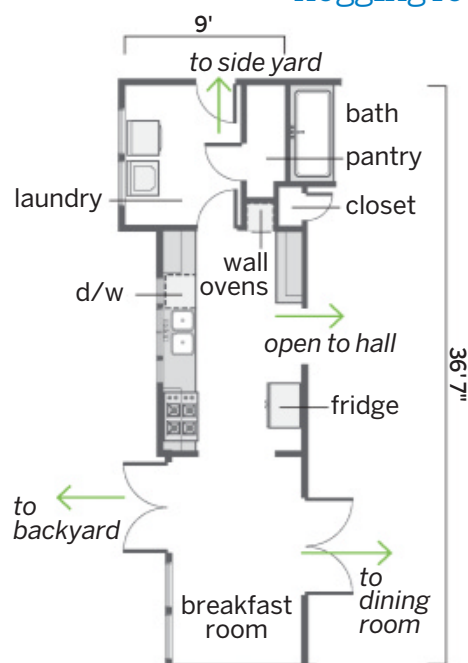
“We wanted something visually interesting but not too busy,” says Carl of the brass-trimmed-zinc vent hood with an antiqued finish. Landing space on either side of the six gas burners helps streamline meal prep. Vent hood cover: Mio Metals. Vent hood insert: Vent-A-Hood. Cooktop: Miele

The curves of the dramatically veined Calacatta marble backsplash subtly echo the arched doorway and the pattern on the floor tile. Quartz countertops: Caesarstone



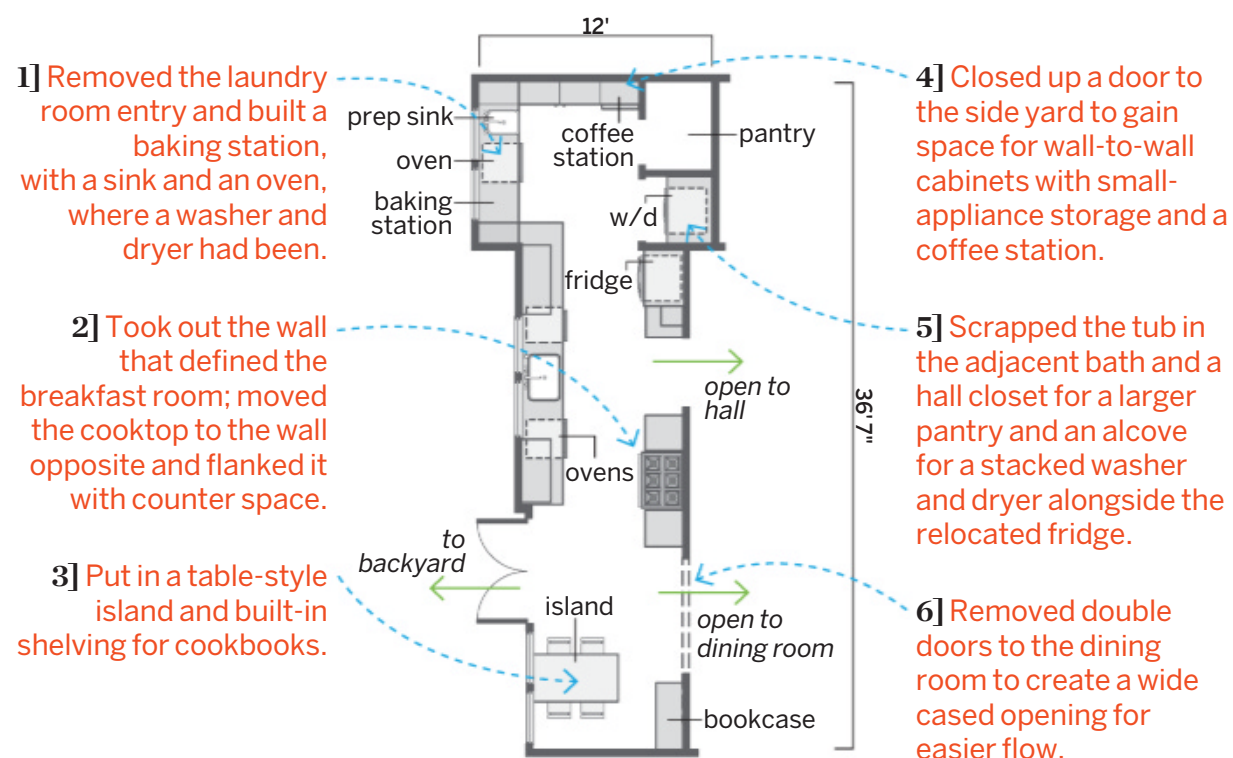
before

The minimal 230-square-foot kitchen was marooned between two space-hogging rooms



after

Annexing rooms at either end and a few feet from the adjacent bath allowed for a more functional, unimpeded 353-square-foot space



The baking station has a marble countertop for rolling out dough, a second oven, and a prep sink.

“Cleanup is so much easier having the sink right there,” says Sarah. “And when Carl is at the main sink, I have access to water for another cooking project.”

Sink: Franke. Faucet: Delta. Glass pendant: Metro Lighting



A barn-style sliding door hides the laundry machines when not in use without obstructing traffic the way a swinging door would. It holds a magnetic board that serves as a family message center. *Sliding-door hardware: MacMurray Pacific. Washer and dryer: LG*

In what had been the breakfast room, a new kitchen island functions as a home-office desk for daily use and a cocktail station when company comes over. “The black walnut top feels so warm and inviting, it’s ideal for people to gather around,” says Carl. *Island top: Craft-Art. Floor tile: Bedrosians Tile & Stone. Pendant: Shades of Light*



Homeowners Sarah Postyn and Carl Goldberg worked with their designer to allocate space for everything—glasses, dishes, small appliances, trays, flatware—on the floor plan. That way, once the work was done, they knew exactly where each item would go.

Bath makeover for \$189

To show just how far a little time and money can go, a homeowner gives her master bath its first new look in more than 20 years **BY KATELIN HILL**



BEFORE

BEFORE The basic builder-grade bath had not been touched since the house was built in 1996. The homeowners were waiting to make changes until they had the budget for a full gut redo.

AFTER A series of small fixes made a big enough impact that the couple can happily keep saving up for a large-scale renovation a few years down the road.

➔ **NO TIME AND NO MONEY** are often cited as reasons for putting off a remodel. Just ask Cynthia Harper, who lived in her Colonial-style home in Philadelphia with her family for five years before reaching the end of her rope with the depressing master bath. So she came up with a plan to make over the space in just two days with just \$200. First, she went to work repainting the walls, as well as the dingy vinyl flooring that was otherwise in good shape. To give the builder-grade oak vanity a more rustic look, she sanded off the shiny finish and protected the raw wood with a matte clear sealant. Since tiling was not in

the budget, a roll of subway-tile-print wallpaper went up to achieve a similar look. A can of matte black spray paint unified the existing hardware and light fixture with some new knobs, pulls, and a mirror. Cynthia shopped her house for the rest of the decor, and clocked in on time and under budget. Not only is she happy with the results, she is thrilled to have pulled off exactly what she set out to accomplish. “I want to show you can do budget-friendly projects without consuming every evening and every weekend of your life,” says Cynthia, who blogs at cynthiaharperliving.com. Mission accomplished! ■

THE PROJECT TALLY

Freshened up the walls and storage cabinet with leftover white and charcoal paint..... **\$0**

Hung subway-tile-patterned paper on the sink wall..... **\$35**

Cleaned the vinyl floor, prepped it with spare primer, and rolled on a quart of black porch paint..... **\$13**

Sanded the oak vanity and sealed it with a matte clear coat..... **\$18**

Installed new hardware on the cabinets..... **\$28**

Spray-painted the existing towel bar, toilet tissue holder, light fixture, and cabinet hinges..... **\$6**

Removed the light fixture’s glass shades, covered the outside of the sockets with copper tape already on hand, and swapped in Edison bulbs..... **\$24**

Replaced the toilet with one saved from a previous bath remodel..... **\$0**

Added a new mirror and accessories from other rooms..... **\$65**

TOTAL: \$189

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Deer-resistant beauty

A dozen garden stunners you'll love but those four-legged foragers won't

BY ANNE E. STRATTON



➔ **DEER ARE CREATURES** of habit. Once they've claimed your garden as their favorite lunch spot, it's difficult to persuade them otherwise. And while there are all manner of foul-smelling repellents and deterrent devices out there, perhaps the best solution is simply to landscape with plants that deer don't like to eat.

That's easier said than done, of course. Many garden stalwarts—including roses, daylilies, tulips, rhododendrons, and hostas—are favorites of deer, too. All produce the tender foliage and plump buds that deer salivate over. Plus, almost any plant can be enticing in spring as it's sprouting soft new growth. More challenging still, taste buds vary by herd, so a plant that gets sidestepped in Missouri might get eaten in Minnesota. And given a harsh winter or a summer drought, these adaptable eaters are notorious for indiscriminate feasting.

Yet, mercifully, deer do have food preferences. Trading damage-prone plants for ones with unpalatable tastes and textures is one sure way to make a yard less deer-friendly. Typically, they snub plants that are prickly, aromatic, fuzzy, or have natural poisons running through their veins. Spiky ornamental grasses and ferns, laden with such toxins, usually go unscathed, as do a number of evergreen garden staples, including boxwoods, plum yews, and most hollies. But there are also plenty of flowering perennials that don't draw deer near. The following are among the best, compromising nothing in ornamental beauty and performance.

With its arching habit and brilliant red blooms on stems up to 4 feet tall, masses of 'Lucifer' crocosmia make a spectacular display. Planted in spring, these bulbs bloom in late summer. Deer generally steer clear of their strappy, grass-like foliage.



'Green Halo' Peony

Paeonia lactiflora 'Green Halo'

Peonies are prized for their lavishly layered petals in signature shades of pink, red, and white. They're also extremely drought tolerant, cold hardy, and not loved by deer, which find the foliage and stems too fibrous.

OUR PICK: We love frilly 'Green Halo' for its apple-green skirt (though some gardeners complain it lacks vigor). Another stunner: striated hot-pink-and-white 'Candy Stripe.'

WHAT IT NEEDS: Full sun and nutrient-rich, slightly alkaline, well-drained soil

HARDINESS ZONES: 3 to 8



'Tomato Soup' Coneflower

Echinacea 'Tomato Soup'

This native prairie flower blooms all summer. Its hairy, aromatic foliage deters deer, as do the spiny seed heads beloved by birds.

OUR PICK: Hot-red 'Tomato Soup' is one of the newer varieties that are generally sterile and come in rainbow hues (purple-flowering *Echinacea purpurea* freely self-sows). Others worth noting are golden-to-white 'Mellow Yellows' and lime-to-pink 'Green Envy.'

WHAT IT NEEDS: Full to partial sun and dry to average, well-drained soils; will tolerate clay

HARDINESS ZONES: 3 to 8



'Patty's Plum' Oriental Poppy

Papaver orientale 'Patty's Plum'

Deer usually pass over poppies, thanks to their thistle-like foliage and toxic sap. But for the rest of us, their huge crinkly blooms with dark centers are impossible to ignore. Since both spring flowers and foliage die back, they are best interplanted with bushy summer bloomers like asters or Russian sage.

OUR PICK: 'Patty's Plum' adds extra drama, flowering in a rare reddish purple.

WHAT IT NEEDS: Full sun and fertile, well-drained soil

HARDINESS ZONES: 3 to 7



'Mango Popsicle' Torch Lily

Kniphofia Popsicle® 'Mango Popsicle'

It's surprising that long-blooming, fast-growing, undemanding torch lily isn't more common. Occasionally deer nibble on the flowers, but the unpalatable texture of its grassy foliage usually prevents browsing.

OUR PICK: 'Mango Popsicle' sports eye-catching, long-lasting, 30-inch-tall flower spikes from June until frost.

WHAT IT NEEDS: Full sun and average, well-drained soil

HARDINESS ZONES: 6 to 9



'Harlequin Gem' Hellebore

Helleborus x hybridus Winter Jewels®

'Harlequin Gem'

In late winter these dainty woodland flowers nod above tufts of evergreen foliage. But as hellebores are poisonous, they may not be a good choice where pets and children roam.

OUR PICK: Garnet-toned 'Harlequin Gem' is a standout in the Winter Jewels series, as are chartreuse 'Jade Tiger' and 'Black Diamond.'

WHAT IT NEEDS: Full to partial shade and well-drained soil

HARDINESS ZONES: 4 to 8



'Chuck Hayes' Gardenia

Gardenia jasminoides 'Chuck Hayes'

Summer-blooming evergreen shrubs, gardenias are perfect foundation plantings but are also compact enough for containers. And while their flowers' strong perfume captivates people, it repels deer.

OUR PICK: 'Chuck Hayes' is a cold-hardy cultivar that has stretched the boundaries of this southern classic; 'Frostproof' is another.

WHAT IT NEEDS: Full to partial sun and acidic, nutrient-rich, well-drained soil

HARDINESS ZONES: 7 to 11



'Robustissima' Japanese Anemone

Anemone x hybrida 'Robustissima'

This underused perennial, with its delicate flowers and berry-like mauve buds held on wiry stems above serrated foliage, is generally recognized as poisonous by deer.

OUR PICK: Pale pink 'Robustissima' is a vigorous grower and one of the most cold hardy. Given room to naturalize, it will flower freely and attract pollinators right until frost.

WHAT IT NEEDS: Full to partial sun and moist, nutrient-rich, well-drained soil

HARDINESS ZONES: 4 to 8



'Walker's Low' Catmint

Nepeta racemosa 'Walker's Low'

This mounding, fast-growing groundcover emits a distinctive minty fragrance from both foliage and flower that repels deer, as do its fuzzy-textured leaves.

OUR PICK: 'Walker's Low' is one of the best bloomers, with billows of tiny lavender-blue flowers from April through September. It grows up to 3 feet wide and almost as tall, but stays compact if soil isn't overly rich.

WHAT IT NEEDS: Full to partial sun and dry to average, well-drained soil

HARDINESS ZONES: 4 to 8



'Sir Winston Churchill' Daffodil

Narcissus 'Sir Winston Churchill'

In deer country, the daffodil is one of the most reliable spring-flowering bulbs; the animals shun all of its parts due to a natural toxin. For best effect, allow groupings to naturalize in garden beds and woodland borders.

OUR PICK: 'Sir Winston Churchill' is an intensely fragrant, double-petaled cultivar that flowers with a bouquet of three to five smaller blooms per stem.

WHAT IT NEEDS: Full sun and average, well-drained soil

HARDINESS ZONES: 3 to 9



'Lucifer' Sword Lily

Crocasmia x Curtonus 'Lucifer'

Native to South Africa, this late-summer-blooming bulb keeps gardens going with its bright color, graceful arching stems, and strappy foliage that deters deer. Thanks to its flowers' tubular shape and sweet nectar, hummingbirds are more frequent visitors.

OUR PICK: Reaching up to 4 feet, scarlet 'Lucifer' is one of the taller cultivars.

WHAT IT NEEDS: Full to partial sun and moist but well-drained soil

HARDINESS ZONES: 6 to 9



'Beverly Sills' Bearded Iris

Iris germanica 'Beverly Sills'

Low maintenance and reliable, showy bearded iris blooms in nearly every color. While unpalatable to deer, its sturdy, sword-like, semi-evergreen foliage remains attractive all season.

OUR PICK: 'Beverly Sills' is an award-winning, quick-spreading cultivar loaded with ruffled blooms in an unexpected pale-coral shade.

WHAT IT NEEDS: Full sun and average, well-drained soil

HARDINESS ZONES: 3 to 9



'Lemon Meringue' False Indigo

Baptisia 'Lemon Meringue'

This native, drought-tolerant wildflower has a compact vase shape with attractive foliage all season. All parts of the lovely false indigo are poisonous to deer (and other animals). But butterflies are drawn to its spring blooms.

OUR PICK: The 3-foot-tall spires of vigorous 'Lemon Meringue' are extra striking, with blue-gray buds that blossom yellow.

WHAT IT NEEDS: Full to partial sun and acidic, dry to average, well-drained soil

HARDINESS ZONES: 4 to 8 🌱

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—John & Kim, Staten Island, NY

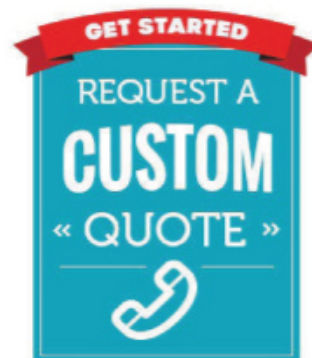


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Restoring & Beautifying Old Homes Across the Nation — *Inside and Out* — SINCE 1990

A fanciful flight

Take a plain run of stairs to the next level with a suite of stencil patterns and related shades **BY KATE WOOD**

➔ **LOOKING TO PLAY WITH** color and pattern on a manageable scale? Try stenciling your stair risers. “Stairs can take up significant real estate in a home, and a custom treatment like this brings a tailored, sophisticated finish to an otherwise utilitarian feature,” says Chelsea Conrad of One Kings Lane Interior Design. “Plus, because you’re dealing with small, discrete areas, even though this project looks ambitious, it’s easily digestible.”

Repeated shades of blue and coordinating stencil motifs—these are from the Indian Inlay Furniture Stencil Kit (\$35; cuttingedgestencils.com)—keep the look cohesive. Balancing the placement of the largest design elements, such as these flower panels, helps to maintain order, too.

If you’re having trouble visualizing the end result, stencil a few trial runs on paper and tape them in place to firm up your design plan. Once you’re ready to roll, start with the top riser and work your way down to avoid brushing against wet paint. Sand and clean the risers, tape off each one, then apply two coats of paint. To make working on a vertical surface easier, use spray mount to hold each stencil in place. Dab on paint with a flat-end stencil brush to slowly build up color and thwart drips. Then seal with a matte clear coat for added longevity, if desired. Step by step, a simple staircase becomes a personalized work of art. ■



PHOTO: COURTESY OF ONE KINGS LANE

TOP 20

★ **BEST NEW** ★
HOME PRODUCTS

LAWN & GARDEN

Go outside!

Whether you've got a tiny patch of green or all-out acreage, make the most of it with the next installment in our guide to the year's best new products.

BY KATE WOOD

→ **THE WEATHER'S WARMER**, the days are longer; 'tis the season to enjoy dinner alfresco (oh, and to mow the lawn). Fortunately, we've turned up everything from power tools to a supersize grill to help make less pleasant backyard tasks faster and easier—and the pleasurable ones even better. From gardening to grilling, cutting the grass to taking down tree limbs, irrigating your lawn to sipping lemonade, we've got you covered. Here, the 20 products that get a (green) thumbs-up from *TOH*.



1. INVINCIBELLE WEE WHITE HYDRANGEA **Proven Winners ColorChoice**

The first dwarf form of the popular 'Annabelle,' this compact hydrangea takes up little space (it tops out at 1 to 2½ feet tall) but adds plenty of visual appeal. Snip spent blossoms, and in zones 3–8 it'll produce lush, sturdy blooms from June through September. \$21 for a 1-quart pot; greatgardenplants.com

2. M18 FUEL 16" CHAINSAW KIT **Milwaukee Tool**

A battery-powered chainsaw that can outcut a 40cc gas engine? This saw rises to the challenge. The high-output battery pack provides up to 150 cuts per charge (and that's cutting through hardwood). The only thing you might miss is the noise—though we bet your neighbors won't. \$449; homedepot.com

3. EXTENDED REACH COMFORTGEL GARDEN TOOLS **Corona**

Designed for working in narrow spaces like raised beds, the trio of tools in this collection (including the seven-tine rake, shown) also earn high marks for accessibility. At 36 inches and up, these tools can be used from a seated position, such as a garden bench. From \$17; coronatoolsusa.com

4



6. THUMB CONTROL WATERING NOZZLE WITH SWIVEL CONNECT

Gilmour

This nozzle's ergonomic design makes it both strain-reducing and super-easy to use: A flick of the thumb controls the flow. The clever coupling lets the nozzle move without causing kinks. *From \$13; gilmour.com*

7. HSA 25 GARDEN SHEARS

STIHL

Famous for chainsaws, STIHL has rolled out its first detail-oriented trimming tool. With attachments for shearing grass or shrubs, plus a run time of up to almost 2 hours on a single charge, this set's a winner. *\$120; stihlusa.com*

8. GMS 210 21" BRUSHLESS SELF-PROPELLED MOWER

Greenworks Commercial

This professional-grade mower has a homeowner-friendly price tag. Running about 90 minutes per charge, this rear-wheel-drive model can power through a small lawn without a pause. *\$529; greenworkscommercial.com*

9. SMART HOSE FAUCET TIMER WITH WI-FI HUB

Orbit B-hyve

You don't need an irrigation system to take advantage of this water-wise, weather-predicting dynamo—a hose and sprinkler will benefit too. Program the timer and track usage from multiple devices; it'll hold off when it rains. *From \$69; bhyve.orbitonline.com*

10. TAPERED WAVE ARMORECOAT COPPER PLANTER

windowbox.com

With time, this planter will get a handsome patina—minus the weight of solid metal. Made from a fiberglass core coated in liquid copper, it's as practical as it is pretty. *From \$363; windowbox.com*

5



6



7



8



9



10



4. 115iPT4 POLE SAW

Husqvarna

The first Husqvarna pole saw made for homeowners has plenty a pro would admire. It's got a 14-foot reach but weighs under 10 pounds, and a 36V rechargeable battery (sold separately) provides enough juice for up to 400 cuts per charge. *\$170; husqvarna.com*

5. HAVSTEN SERIES

IKEA

This award-winning array of modular outdoor seating looks minimalist, but wait until you sink into those cushions! Too plush? Adjusting a strap will firm up the seating. The fabric repels liquid; you can also toss the slipcovers into the wash. *From \$260; ikea-usa.com*



11. SMARTCONTROL FUEL CONTAINERS

Scepter

Ditch your old gas can for this upgrade, which comes in 1-, 2-, and 5-gallon sizes (and three colors, so you can tell diesel from regular at a glance). Press a lever with your palm to unlock it, squeeze the button while the container's upright to vent it, then squeeze again to dispense—no fuss, no mess.

From \$15; scepter.com

12. 40V HYDROSHOT PORTABLE POWER CLEANER

WORX

The latest iteration of this popular pressure cleaner boasts a major jump in psi—from 290 to 450 (most garden hoses are around 60 psi). Just as impressive? Its portability. Even with two 20V batteries, the device weighs under 7 pounds, and you can connect it to any freshwater source (including a bucket of H₂O!). \$200; worx.com

13. SUNBELIEVABLE 'BROWN EYED GIRL' HELIANTHUS

Monrovia

This sun-loving annual is also a fan of containers. Unlike your standard sunflower, this one's got a bushy, multi-branching habit. While it grows to less than 3 feet tall, all those stems mean it can produce over a thousand blooms per season. \$16 for a 1-gallon pot; monrovia.com

14. BAHAMAS SWIVEL GLIDER LOUNGE CHAIR

Blue Oak Outdoor

Turn your backyard into a restful retreat with an outdoor glider that'll give your beloved indoor armchair a run for its money. This investment piece is built to last, with a rustproof, thick-walled aluminum frame, weather-resistant handwoven surfaces, and sturdy (and easy to clean) Sunbrella fabric cushions. \$899 (available May 2019); blueoakoutdoor.com



15. 56V 15" STRING TRIMMER WITH POWERLOAD TECHNOLOGY

EGO

No tangling, no wrangling—just start feeding the line into the head, push a button, and voilà! The trimmer automatically winds the line in seconds. Though it's got considerable reach, thanks to the strong but lightweight carbon-fiber shaft (which has a lifetime warranty), this trimmer weighs in at under 12 pounds. And since you can cut a 15-inch-wide swath with each pass, weeds don't stand a chance. \$229; egopowerplus.com



PHOTO: (NO. 14) COURTESY OF BLUE OAK. PHOTO BY BEN BALSER. CASUAL LIVING WORLDWIDE



raising the hood, plus track the temperature inside with its built-in thermometer. \$599 (available April 15, 2019); monumentgrills.com

18. HIGHBALLS, WINEGLASSES, AND TUMBLERS

NuGlass

Have drinks by the pool or on the patio without resorting to kiddie cups: These satisfyingly hefty pieces only look like glass. They're made from Tritan, an extremely durable, BPA-free polymer that resists odors, scratches, and clouding, and can withstand being tossed into the dishwasher.

From \$2.38 each; walmart.com

19. TB400 25CC 2-CYCLE BLOWER

Troy-Bilt

It may be small (under 10 pounds, sans gas), but this blower is mighty, clearing up to 400 cubic feet per minute at speeds of up to 180 mph. A variable-speed throttle lets you fine-tune to fit the job.

\$90 (available April 2019); troybilt.com

20. IN-GROUND IMPACT SPRINKLER WITH CLICK-N-GO HOSE CONNECT

Rain Bird

At last, a pop-up sprinkler without trenches or pipes. Dig a hole, pop it in, backfill, and you're good to go. Snap on the hose when it's time to water; when not in use, the sprinkler retracts—you can mow right over it.

\$40; amazon.com

16. 58V CORDLESS TILLER/CULTIVATOR

Mantis

Prep garden beds without waking the neighbors with this battery-powered mini tiller. It weighs less than 30 pounds and folds for storage, but its steel tines power through an 8-inch depth and 12-inch width to make short work of breaking new ground.

\$249; mantis.com

17. 6-BURNER GAS GRILL WITH CLEARVIEW LID IN STAINLESS STEEL

Monument Grills

This is a big grill with a small price tag: We're talking 96,000 Btus and 900 square inches of cooking space (thanks to a side burner and a ceramic sear burner, in addition to the six burners under the lid). And about that lid: It features an oven-grade glass panel, so you can watch your 'cue without

GO SHOP ONLINE

Look for the "buy" buttons on many of these items at thisoldhouse.com/top20

A handsome homestead

A revamped garage, a metal roof, fresh siding, and upgraded entries give this 1930s farmhouse more-coherent charm

BY KATHRYN O'SHEA-EVANS • ILLUSTRATION BY DRAWGATE INC.



BEFORE

→ **JOCELYN AND JEFF** Gordon love their 1936 farmhouse in Brownsville, OR. “But I’d like the garage, which was tacked on in 1956, to look more original to the house,” Jocelyn says. “And visitors aren’t sure which is the main entrance.”

So we asked architect Michael Soraci of Agate Architecture in nearby Eugene for some design solutions. First up, to marry the garage to the historical house, Soraci would give it a gabled roof, with dormers, that matches the main roofline, and he would replace all the moss-prone asphalt shingles with standing-seam metal. White board-and-batten siding serves as a backdrop for new divided-light-style windows outlined in black. A walled patio and Craftsman-style entry door upgrade the street-side facade, while a side door flanked by flowers ushers visitors in from the driveway. Says Jocelyn, “We especially like the way the garage balances out the house and makes it look more substantial.” ■

WANT A PHOTOSHOP REDO?

Send snapshots of your house, and its location, to redo@thisoldhouse.com



A cheery paint job and brightly colored flowers point visitors to the side entry door.

finishing touches

Striking accents and natural textures enhance the farmhouse's simple Craftsman style



stone

Limestone-look veneer—complete with embedded “fossils”—grounds the new patio walls. RoughCut in Moonlight, from \$7 per square foot; eldoradostone.com



wall light

A nautical-inspired lantern with a seeded-glass globe lights the way in just-right vintage style. Harwich Dualux 10" Outdoor Wall Light in Textured Black, \$160; houzz.com



house numbers

Cut from a single piece of steel and made to order by a father-daughter duo in Austin, TX, these digits amp up the cool factor. 2.0 Address Plaque, from \$140; urbanmettle.com



front door

A bracketed shelf gives this wood door a traditional Craftsman look. An engineered core boosts stability. 6201 Shelf Glass Panel door in Hemlock, from \$320; jeld-wen.com.

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PHOTO: ANTHONY TIEULI

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PHOTOS: COLLEEN MCQUAID



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Boost your home's curb appeal with a handsome stone veneer monument mailbox that you can build in just a weekend's time, with Sakrete.

SAKRETE Products Needed

Sakrete High-Strength Anchoring Epoxy | Sakrete Surface Bonding Cement | Sakrete Stone Veneer Mortar



1 | Pour a level, 6-inch concrete slab using a 2×4 form.* Secure each course of blocks with **High-Strength Anchoring Epoxy**, staggering the joints.



2 | Measure carefully to ensure you'll have enough room to set the finishing blocks atop the mailbox; you may need to notch a section to accommodate the mailbox height.



3 | Using a paddle mixer, blend your **Surface Bonding Cement** into water; add water as needed until consistency of peanut butter is achieved.

PRO TIP

Before you start, check with your local municipality to ensure your plan complies with code requirements for your area. And always be sure to call 811 before beginning any digging project to protect yourself and others from unintentionally hitting underground utility lines.



4 | Spray the blocks with water. Use the straight edge of a square-notched trowel to cover them with a thick, even coat of the cement. Before it dries, use the trowel's notches to comb ¼"-deep grooves into the cement's surface. This will assure a good mechanical bond when setting the stone. Let this scratch coat set overnight.



5 | Dampen the scratch coat, and mix the **Stone Veneer Mortar**. Apply it at least ½" thick to the back of each stone, ensuring 100% coverage. Starting at the bottom, press the mortared stone against the scratch coat, then work your way around the column and up, making sure to stagger all the end joints.



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Please note: The information provided here should be used in conjunction with *Installation Guidelines for Adhered Concrete Masonry Veneer* from the International Masonry Industry All-Weather Council (IMIAC). *Find full instructions for pouring a concrete slab at sakrete.com/projects/installing-a-concrete-slab

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ask This Old House ▶



Q I'm having a hard time digging planting holes through the tangle of roots in my garden. Is there any way to make this task easier?

—CYNTHIA BROWN, NEW CANAAN, CT

A You might want to give this long-handle Sneeboer stone spade a try (\$134; gardentoolcompany.com). Its sharp, serrated edge is meant for stony soils, but those knife-edged teeth will also neatly sever pesky roots. The blade is a single hunk of drop-forged stainless steel, with no voids or weak points where it connects to the solid-ash handle. As a result, this spade can withstand the kind of vigorous prying that might crack one made with a stamped blade. Another nice feature is the little steps at the top of the blade, on either side of the handle: They let you stomp down hard on stubborn roots.

—THE EDITORS

34
tips, tricks, and
answers to
your home-
improvement
questions

PHOTOGRAPH BY LEVI BROWN

Our team of veteran experts



TOM SILVA
General Contractor



NORM ABRAM
Master Carpenter



RICHARD TRETHEWEY
Plumbing and Heating Expert



ROGER COOK
Landscape Contractor



KEVIN O'CONNOR
Host

PHOTOS: (5 PORTRAITS) CARL TREMBLAY; (TOP) COLLEEN MCQUAID



I enjoyed watching Tom and Kevin build the storage bench on *Ask This Old House*. However, I couldn't help but notice the beat-up condition of Tom's hammer. Won't Kevin let him purchase a new one?

—GARY CAMP, CLEARWATER, FL

Tom Silva's old trim hammer is still a favorite of his after more than two decades of regular use.

TOM SILVA REPLIES: Just to be clear, Kevin knows better than to mess with my hammer. But seriously, of all the hammers I've tried—and keep trying—this is the one I keep coming back to, because it's perfect for 95 percent of the work I do. Sure, it's got lots of “character”—I've been swinging it for more than 20 years and even drilled a few shallow holes in the handle to improve its grip—but I still like the way it feels.

Mine is the 16-ounce Trimmer

made by the Hart Tool Company, part of its iconic “The Framer” series. That's probably why it has the straight claw typical of framing hammers, and not the curved claw found on most trim hammers. It really comes in handy when I need a prying tool.

Sad to say, I couldn't replace my Trimmer even if I wanted to, because it's no longer being made. But every now and then I'll see one for sale online at prices that are quite astounding!

DIY
SMARTS



Q Time for a new deck finish

My five-year-old mahogany deck was pressure-washed and now is streaked. What's the best way to prepare the wood, and what finish do you recommend? —RON CLINE, PALMYRA, PA

MAURO HENRIQUE REPLIES: Pressure-washing is not the best way to prep wood decks because of the damage it's likely to cause. For routine maintenance, oxygen bleach applied with a hand-pump sprayer and scrubbed with a bristle brush is an effective and much gentler option. But if the existing finish has failed, it will have to be removed, and that requires a different approach.

I avoid using chemical strippers on decks because they're messy, slow, and hard to clean up completely. With a tight-grained wood like mahogany, you'll get better results by sanding off the old finish, as I did on the mahogany deck above. First, I smoothed the perimeter of the deck with a random-orbit sander, using 40-, 60-, and 80-grit sandpapers. Then I went over the deck's field with an orbital floor sander, following the same grit sequence while always moving the sander in line with the decking. The nice thing about an orbital sander is that it uses a wide sanding pad, so you can't gouge wood the way you can with a belt floor sander.

As for the finish on your mahogany, I recommend a penetrating oil-based stain, like Timeless Transparent Penetrating Wood Oil (diy.ppg.com). Not only does it let the wood's beauty show through, it won't peel or need to be sanded off again. Make sure the wood is dry and there's no rain in the forecast, then apply a generous coat, using a brush along the edges and a lamb's-wool pad in the field. Take care not to leave lap marks or puddles.

Next year, wash the deck as needed with a brush and oxygen-bleach cleaner. The wood should be ready for its next maintenance coat the following year, when it absorbs splashes of water in 10 minutes or less. High-traffic areas may need touching-up more frequently.

BROUGHT TO YOU BY



TOH painter Mauro Henrique removes the old finish from this mahogany deck using an orbital floor sander. Its gray tank in front is filled with sand to keep the paper firmly in contact with the wood.

Q Expansion joint advice

We have expansion joints in the poured concrete of our driveway and sidewalks. Our builder's written instructions say to fill the joints with sand and cover it with joint compound. What type of sand and compound should we use?

—GEORGE EARHART, GALENA, OH

MARK McCULLOUGH REPLIES:

Neither one! Joint compound would start falling apart after the first rain, and all that sand would quickly become an ant farm.

Before I go into what you should do with these joints, let me clear up some confusing vocabulary. Expansion joints are the full-depth gaps that separate large concrete slabs from one another. They allow the slabs to move independently with changes in temperature and soil moisture, or due to uneven settling. Without these joints, a slab would end up with big, jagged, uneven cracks wherever the stress was greater than the strength of the concrete.

These joints do need to be filled in order to exclude dirt and debris that might restrict slab movement. I like to use ¾-inch-thick asphalt-impregnated fiberboard strips for that purpose. They remain resilient even when tightly crushed and do a good job of keeping out debris for many years.

Control joints also deal with cracks, but only the small ones that form as the slab shrinks. These joints are partial-depth cuts made in the surface of a slab when the concrete is still wet. They're only an inch or so deep—you can see their bottoms—and there are usually many more of them in a slab than expansion joints. Control joints provide a place for

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cracks to run so they won't be visible. There's no need to fill these joints with anything.

Q Asbestos in plaster?
The interior walls of our house, built in 1924, are covered in plaster and lath. We'd like to rip out a non-load-bearing wall, but are concerned that there might be asbestos in the plaster. Should we have it tested first?

—KELSEY McCLURE, BLOOMINGTON, IL

KEVIN O'CONNOR REPLIES: Rory Brennan, the owner of Preservation Plastering in Brattleboro, VT, is an expert on all things plaster, and has helped out a number of times on *This Old House* TV. Here's what he had to say about your concern.

What is it?

A
Drill guide for door latches

B
Support clip for water pipe

C
Funnel holder

D
Wire-pulling guide

FOR THE ANSWER, SEE PAGE 42



"It's not likely that your old plaster contains asbestos. Plaster is by its nature highly fire resistant, and I suspect that contractors would have been reluctant to pay more for an ingredient offering a minimal benefit in residential construction. The United States

Gypsum Company did begin selling a bagged plaster-asbestos mix in 1920, but it was targeted for commercial construction, where fire codes were—and still are—much stricter. Other manufacturers jumped on the asbestos bandwagon after World War II, and continued

PHOTOS: DENISE SFRAGA; (OPPOSITE PAGE) COURTESY OF UNITED STATES GYPSUM COMPANY

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adding it to plaster (and to drywall and joint compound) until as late as 1976, when it was banned from use in building products.

“During that time, this mix remained primarily a commercial product, so your original 1924 plaster probably is safe. However, it is possible that the wall was repaired at some later time with an unsafe product. You might even be able to see evidence of those repairs. All of which goes to say that the safest approach would be to send plaster samples to a lab for testing before demolishing your wall.

“If the test shows that there’s no asbestos, you can proceed with the work without taking special precautions. But if your plaster does have it, do the right thing and hire an abatement contractor to



handle the demolition and properly dispose of the waste. There’s no reason to risk your health or that of your family by ignoring this nasty carcinogen.”

The United States Gypsum Company was the first to start adding asbestos to plaster as a way to improve its fire resistance and workability, long before asbestos was recognized as a health hazard.

Q Why are my wood floors cupping?

A couple of winters ago, a contractor installed new solid-oak flooring over ¾-inch plywood with a vapor barrier. The following summer, the floorboards began cupping, which is quite noticeable when you walk on the floor with bare feet, or when the light hits it at a low angle. How can I correct this unsightly washboard effect?

—CHESTER FREDERICK,
CHARLOTTE HALL, MD

KEVIN O’CONNOR REPLIES: When it comes to technical questions about wood flooring, there’s no better resource than the National Wood Flooring Association. Brett Miller, the NWFA’s vice president for

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D Wire-pulling guide

When attached to a 4-inch-square metal outlet box, the Wire Vortex made by Rack-A-Tiers allows electricians to pull wires smoothly through long conduit runs without snagging on a box's sharp edges. \$20; homedepot.com

education and certification, explains what's causing this problem, and how to keep it under control.

"It's important to understand this key fact about wood behavior: When the relative humidity goes up, as it often does in the summer, all wood absorbs water vapor and gradually swells, mostly across its width. And when there's a roomful of wood strips in a humid environment all pressing *hard* against each others' edges, it creates enormous stress. At the same time, there's usually a moisture imbalance between the slightly moister bottom and slightly drier top face of each strip. As a result, the bottom swells more and those top edges inexorably curl up, despite the hundreds of nails holding the flooring down. (If wood strips ever get soaking wet, they can swell so much that they buckle and actually pull those nails out of the subfloor!)

"Cupping is not just an aesthetic problem. If the pressure gets high enough, it can crush the wood fibers along the strips' edges. And then the strips won't recover their original dimension when the humidity goes back down in the winter, and you'll have permanent gaps between the strips.

"The way the wood is cut also affects how it behaves during these seasonal cycles. Plainsawn (a.k.a. flatsawn) strips,

which have wood grain that runs parallel to the strip's face, show the greatest amount of movement. Strips that are quartersawn, with the grain running at right angles to the faces, remain more stable when the humidity fluctuates.

"I suspect that your floor, like most wood floors, is made up primarily of plainsawn strips. But it's a little too late for you to change the wood now. The only practical way for you to control cupping and gapping at this point is to keep the inside humidity level between 30 and 50 percent all year long by using air conditioners and dehumidifiers in the summer and humidifiers in the winter.

"But, please, don't try to sand off those cupped edges. That would be about the worst thing you could do, because then the strips would become crowned—high in the middle—when the swelling went down in the winter."

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Include a complete address and daytime phone number. Published questions will be edited for clarity and length and may be used in other media. We regret that, because of the volume of mail received, we're unable to reply to unpublished questions.



Norm's tricks of the trade

Q

We want to put an 8-by-10-foot shed in our sloped backyard, and set it on concrete piers. Any advice for pouring them?

—CHRIS LEONE, RICHMOND, VA

A Many projects come to grief because people don't follow basic pier-pouring rules.

- 1. Check for buried utilities before you dig.** It's as simple as calling 811.
- 2. Pour footings.** To prevent settling and uplift, set footings on flat, compacted soil at least 12 inches below the frost line. Tie each footing to its pier with two lengths of No. 4 rebar stuck vertically into the footing's center before it hardens.
- 3. Use tubular forms.** Set them on the footing and make sure they're plumb. You don't need bracing; just fill around them with soil from the hole, as shown.
- 4. Leave the forms long.** Then you can make their tops level with one another. Strike a line 4 inches above grade on the highest form on the slope. (That's a pier's minimum height above grade.) Using a line or laser level, transfer that line to the other forms, then cut them horizontally at those marks.
- 5. Fill the forms to the top.** Level the exposed concrete, and insert an anchor bolt into each one. When the piers cure, they'll be ready to support your new shed. ■

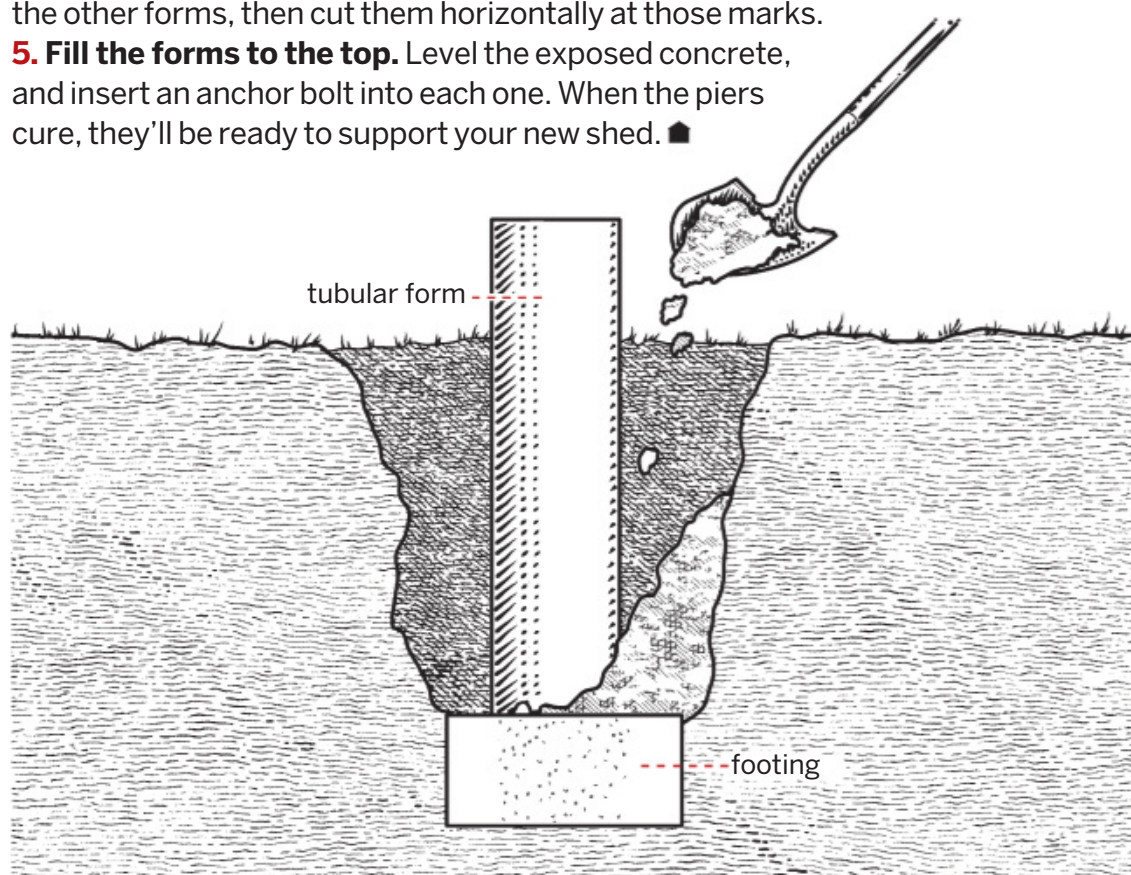


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FOR MORE INFORMATION, SEE DIRECTORY, PAGE 66

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Part of a 2002 addition, the family room displays homeowner Jeff Williams's flair for period-style millwork.

TOP RIGHT: Restoring the circa-1860 home's beautiful post-on-pedestal porch columns was among Jeff's most time-consuming projects.





HOUSE PROUD

The circa-1860 Italianate had seen better days—until a master carpenter lavished his skills on the place, turning it into a forever home for him and his wife

By **Debra Judge Silber** • Photographs by **Ellen McDermott**
Produced by **Nicole Esposito-Polly** • Styling by **Frances Bailey**

You might say that Jeff and Michele Williams's house is living its third—and perhaps its best—life.

From the sidewalk, the stately white-clapboard home with the hipped roof and wraparound porch doesn't look much different from the other antique houses that survive in the Nichols Farms Historic District in Trumbull, Connecticut. Its tall windows, post-on-pedestal columns, and rectangular cupola all confirm its identity as a mid-19th-century Italianate, the kind of fashionable home favored by merchants who profited from the town's pre-Civil War carriage and saddle trade. The Trumbull Historical Society traces



the circa-1860 home's origins to Sidney Nichols, a descendant of the very first farmer who arrived in the area in the 1690s.

But there's more to the story, as Jeff, a builder and cabinetmaker, found after buying the house in November 2001. As he stripped away old, rotted parts of the house, he discovered something: The home he had just bought wasn't originally a hipped-roof Victorian-era building. In the attic, marks in the framing indicated the house had once had a gabled roof and a center chimney. "There were notches on two sides, and you could see where the rafters were pegged," he says. Working with a local restoration architect, the late Robert Hatch, Jeff concluded his home was actually built around 1805 as a center-chimney Federal-style Colonial. His vintage home, it turned out, was more vintage than he'd thought.

Acknowledging his home's true past, Jeff went

ABOVE: Included in the addition, a breakfast room links the kitchen, in what was the original house, to the new family room. Jeff built the table, and he and wife Michele snatched up the vintage Windsor chairs that surround it from a local auction house.

to work bringing it into the present. He found the structural framing remarkably intact. "There wasn't a rotten piece—everything was amazingly straight, even after 200 years," he says. Still, the interior showed its age, so he dismantled, shored up, and rebuilt all the walls, floors, and ceilings, salvaging material for reuse as he went. Then he doubled the square footage with an addition so faithful in style that it's nearly indistinguishable from the old portion. When the insurance company ultimately asked what year it was built, Jeff recalls with a grin, "I said, 'The house was built in 2002.'"

It was a house Jeff had long admired. Decades before he and Michele came to live there, it belonged to the family of one of Jeff's high-school friends; he remembers well the pink wicker furniture the family set out on the porch each spring. Years later, after he had established himself as a

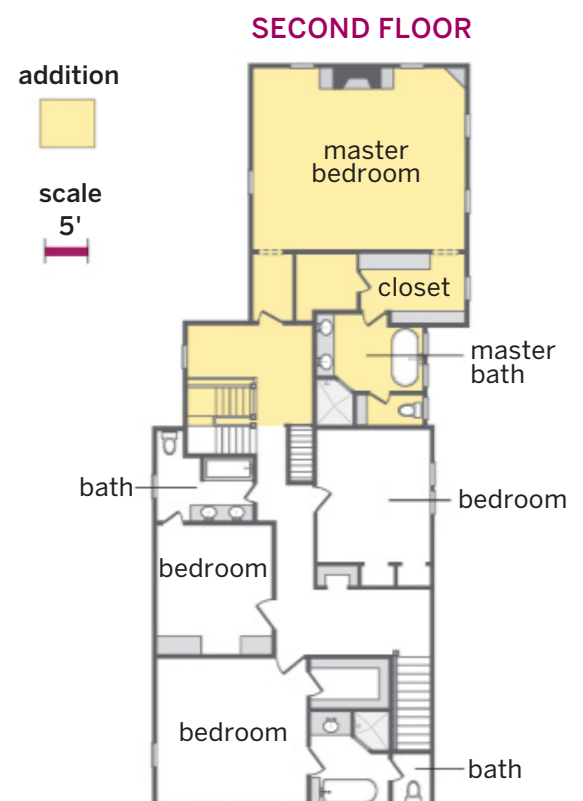
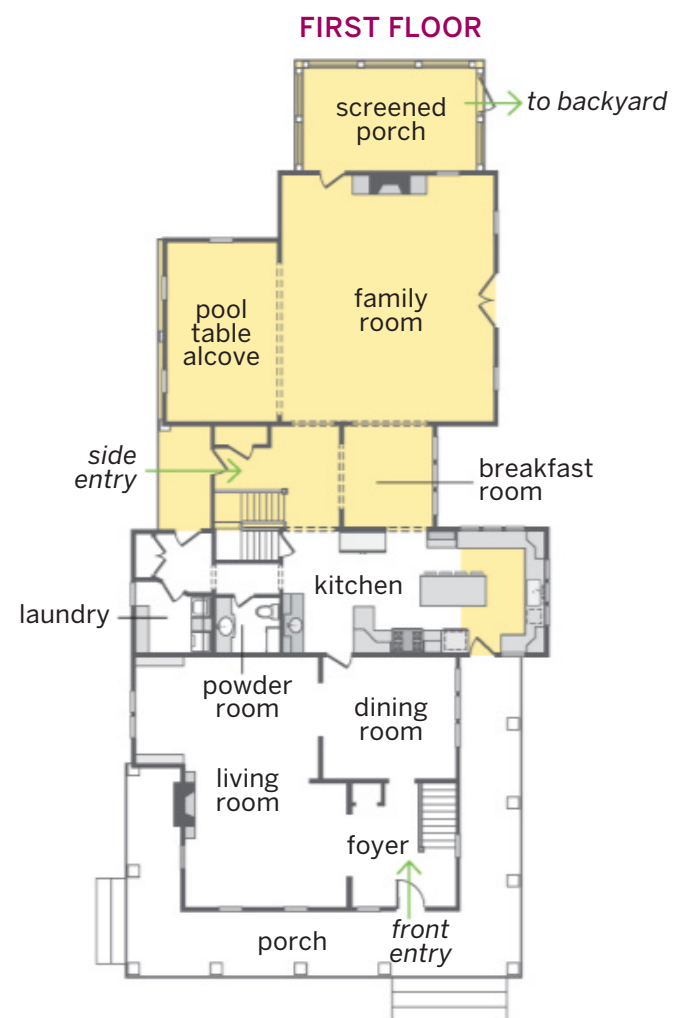


ABOVE: In 2012, the couple remodeled the kitchen a second time, bumping it out to gain a view of the backyard. They replaced glossy granite countertops with leathered granite and installed a heating element beneath the enlarged island's top. Displayed on the window sash are colorful bottles Jeff unearthed during excavation for a barn he built on the property.

LEFT: From the front, the restored home looks much as it might have circa 1860, with little hint of the rear addition. The house's Italianate flourishes include the post-on-pedestal porch columns and the cupola with arched windows. The 7-foot wood finial atop the cupola roof can just be glimpsed here.

Floor Plans

The layout in the original part of the house stayed largely the same; additions yielded 5,400 square feet of living space. The kitchen was bumped out, and a breakfast room, a family room with a pool table alcove, and a screened porch were added downstairs, with a master suite upstairs, for a total of four bedrooms and three and a half baths.



contractor, the family called him to patch a hole in the porch roof. They said they were selling the home, and in fact already had a buyer.

But within months, Jeff noticed that the pink furniture was back out on the porch. And then, in late 2001, his sister called to tell him she'd seen a FOR SALE sign on the lawn.

Jeff didn't waste any time. "I went and knocked on the door," he says. "I walked through, and in



twenty minutes I made them an offer.”

He went to work on the house just as the New England winter swept in. By now an experienced builder with his own cabinet shop, Jeff took on much of the project himself, working from breakfast till dinner and flopping at his sister’s home nearby. He stripped out the old lath-and-horsehair plaster walls, rebuilt the interior framing, and laid new floors. He installed insulation and sheathing—the old house had none—and replaced existing clapboards with new cedar. He removed and reglazed the original window sashes, using glass he salvaged from old windows he had collected. “I took a year off work and pretty much worked every day on it, and just kept going until I was finished,” he says. What he couldn’t handle—he draws the line at plumbing and electrical—he hired out to tradespeople he knew. With Hatch, he designed and built a rear extension that

ABOVE LEFT: The rebuilt dining room is adorned with hand-painted murals depicting the Williams house amid other historic structures in the Nichols Farms Historic District.

ABOVE RIGHT: A reproduction claw-foot tub and floor-mount tub filler look right at home in the light-filled master bath.

RIGHT: Homeowners Michele and Jeff Williams by the back stairway, a new feature that gains its vintage cred in part from a newel post salvaged from another circa-1860 home.





holds a second stairway, breakfast and family rooms on the first floor, and a master suite on the second. With details borrowed from the older parts of the house and slightly smaller in scale, the addition looks as if it has always been there.

Jeff used interior details to blend the two sections together as well. “I always liked the finish work in construction,” he says. As a builder, he has distinguished himself from competitors with well-crafted details—built-ins, coffered ceilings, and lots of trim. “I put crown molding in the closets,” he says.

Despite its elegant exterior, the home’s existing interior had been uninspired. “The trim was all original, but it wasn’t detailed,” Jeff says. So he added flourishes of his own, many inspired by the luxurious interiors of homes he’d worked on along Connecticut’s wealthy “Gold Coast” towns. He capped his living room windows with decorative pelmets like those he saw in one house, and modeled a new living room mantelpiece after one in another. “I took a picture, and a few weeks later I had it up,” he says. To faithfully restore the house’s exterior, he had to order custom molding knives so that he could

ABOVE: Upstairs in the 2002 rear addition sits the master bedroom, which showcases trim details similar to those Jeff added to the older part of the house.

RIGHT: Accessed through a door in its floor and ringed with arched windows and bench seating, the interior of the cupola remains largely unchanged after more than 150 years.





shape replacement parts for the porch's paneled post-on-pedestal columns. He worked on the 7-foot pine finial that peeks out from atop the cupola by hand. "I've labored for hours on stuff people wouldn't even think of," he admits.

Michele pokes good-natured fun at her husband's tendency to overbuild, but she admires his creativity and his ability to visualize a project from start to finish. "The great part is he has it all in his head, exactly what he wants to do," she says. While she's glad that the house was mostly complete by the time they married in 2003 ("I don't know if I could've lived through all that construction," she says), she's played a big role in furnishing the spaces her husband created. Not a stickler for any particular period, she gravitates toward quality and character. "I look for pieces that match the feel of the house," Michele says, mostly buying at antique fairs and a local auction gallery. "I don't think we've bought a new piece of furniture in years," she says.

Jeff, meanwhile, hasn't put down his hammer. In 2008, he added a three-season porch, building the walls in his shop and assembling it on-site. He added a barn with an in-law apartment, on the property where a derelict pond had been, and then turned his attention to the yard, building stone walls, laying a slate patio, and constructing a huge fieldstone fire-

ABOVE LEFT: After restoring the house, Jeff improved the yard bit by bit, clearing brush and using stones scattered about the property to build features such as this fireplace. The mantelpiece is a weathered oak timber from another house.

ABOVE RIGHT: Jeff bumped out the kitchen in 2012 for a better view of the garden. The pierced shutters are his own handiwork; a future project, he says, is to create a second set with tulip cutouts for summer.

place. "A couple of years ago I got bored and built a greenhouse," he says. "I like to stay busy."

In 2012, they remodeled the kitchen, bumping it out several feet and adding a bank of windows for a view of the lushly landscaped backyard. The space balances up-to-date amenities with wide-plank floors and a large storage hutch, both built from antique chestnut boards found in the attic. Jeff used the same wood—marked by wormholes and stained by centuries-old nails—to top off a nearby wet bar. In expanding the kitchen, Jeff lengthened the island by 2 feet and replaced the polished granite he had originally installed with seafoam-green granite given a soft, leathered finish. Beneath the stone, he installed an electric radiant-heat mat, making the island a favorite place to linger over coffee on chilly mornings, and a natural location to set up the buffet for the couple's legendary Christmas parties.

Such time-consuming details—the heated island, the faraway finial, the replicated porch posts—are all worth it to Jeff. "I did things that were overkill, but I'm thinking that this is my last stop," he says, reflecting on the 21st-century legacy he has created.

Michele is in full agreement. "I love this house," she says. "And when the day comes that someone else has it, I hope that they love this house like we do. It's a special place." ■



ABOVE: Jeff built the walls of the screened porch in his shop, then assembled it on-site. The paneled pilasters and arch details repeat Italianate features on the original house.

LEFT: Ringed by blooming hydrangeas, the new porch “looks like it’s been there forever,” Jeff says. He has put his touch on the backyard, too, building the stone walls by hand, as well as the greenhouse glimpsed in the distance.



MORE TO EXPLORE

See additional photographs of this lovely home at thisoldhouse.com/house-proud

ALL
ABOUT

Raised-Bed Gardens

With little more than a few boards, a shovel, and some soil, you can easily create an ideal habitat for growing vegetables BY THOMAS BAKER

OF COURSE, YOU DON'T NEED a raised bed to grow great-tasting produce—most any plot of flat ground that gets full sun will suffice for that. But gardening in a raised bed offers a number of advantages. For one thing, there's less bending over, so it's easier on your back. Build the sides high enough and you can even garden while sitting. Raised beds also allow you to start fresh with enriched, uncontaminated soil; on sloped property, they offer level, easy-to-tend planting areas. And because these beds warm up faster in the spring than those at ground level, you get a head start on the growing season.

But all those advantages won't help if you neglect the soil, and according to sustainable-living expert Greg Seaman, that's the mistake most beginners make. Seaman, who shares his gardening know-how online at Eartheasy.com, has been growing vegetables in raised beds for nearly 40 years. "When the soil is rich in organic matter and nutrients, plants are more robust and virtually take care of themselves," he says. "There's less weeding, less watering, and fewer pests."

On the following pages, we provide practical advice about the types of frame materials and mulches to use, ways to enhance soil fertility, and the various options for irrigating. Plus, we offer strategies for deterring insects (and other invaders). In short, we show you all you need to know to get started as a raised-bed gardener.

TOH landscape contractor Roger Cook helps a homeowner build a frame out of 2× western red cedar, a naturally rot-resistant wood well suited for this purpose. He advises against using preservative-treated boards or creosote-soaked railroad ties, which can leach chemicals that contaminate soil.





VITALS

HOW MUCH DOES A RAISED BED COST?

A simple 4-by-8-foot cedar frame built from scratch or a kit generally runs just over \$100. A 4-by-8-foot brick-sided bed built by a mason will cost about \$2,000. Plan on spending about \$3 per cubic foot for bagged garden soil.

DIY OR HIRE A PRO?

Wood-framed beds and kits are easy to build, even for a beginning DIYer. In most cases, the hardest part is preparing the soil under the bed and filling the frame. You'll probably need a pro to erect a bed made of mortared masonry.

WHERE TO PUT IT?

Choose a spot that gets at least 8 hours of sun a day, and orient each bed so its long side runs east to west. Keep beds at least 6 feet from pavement and south-facing walls, which intensify summer heat.

HOW LONG DO BEDS LAST?

That depends on what they're made of. Beds built with western red cedar can last 10 to 15 years; galvanized steel, 20 years; masonry or plastic composites, indefinitely.

To make optimal use of the space in these raised beds, use tall teepee trellises to provide sturdy supports for pole beans.

RAISED-BED HOW-TO

Find step-by-step instructions for building a raised bed out of cedar timbers at thisoldhouse.com/raised-bed

BUILD FROM SCRATCH—OR A KIT

Both are viable options, but if you're looking for out-of-the-ordinary materials, kits ease the process

Until fairly recently, about the only way to get a raised bed was to buy some boards, cut them to size, and screw them together yourself. Or you could hire a mason to build one for you out of brick or stone. The only limits were your imagination and budget.

But these days, you can find a growing assortment of all-inclusive raised-bed kits with precut parts that save time, eliminate guesswork, and offer a variety of looks. They may not have the one-of-a-kind uniqueness of scratch- or pro-built beds, but they come in a wide array of striking materials—including wood, steel, composite boards, and tumbled concrete blocks—that can add a handsome accent to any landscape.



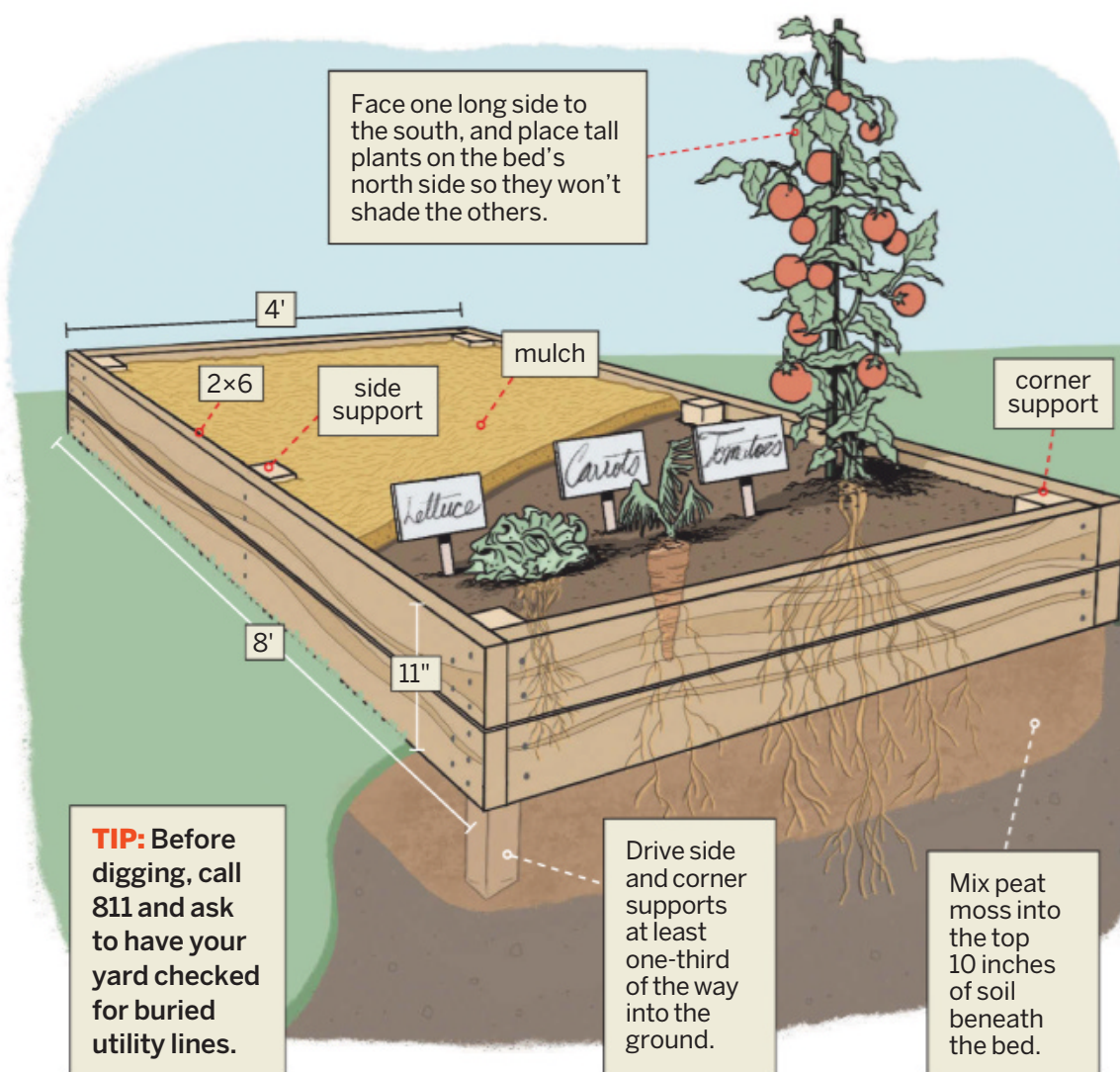
These kit-built beds have porous, rot-proof sides made of wood chips and cement. They're held in place by aluminum corners coated with a tough, baked-on finish and are capped with western red cedar. From \$298; durablegreenbed.com

How big should a raised bed be?

WIDTH: Four feet across is considered ideal, so you can comfortably reach the center from either of the long sides.

LENGTH: A bed can be any length, as long as the sides are supported every 3 to 4 feet to resist the soil's outward pressure. Either drive 2× stakes next to the sides or attach the ends of wood or metal strapping to opposite sides of the bed.

HEIGHT: Low beds are less work to construct and fill, but require double digging to prep soil beneath the bed. High beds mean less digging and less stooping, but need more soil and building materials. Eleven inches is a common height: that's two 2×6s stacked on edge.



How deep to make it?

Tender herbs can grow in 6 or 8 inches of soil, but many vegetable roots go much deeper. Make room for them by building a high-sided bed or double-digging below grade (or both). As you dig, amend the top 10 inches of under-bed soil with peat moss or coconut coir. This organic matter helps retain water in sandy soil and improve drainage in clay soils.

ROOT DEPTHS

12–18 inches
Lettuce, potatoes, radishes, strawberries

18–24 inches
Carrots, peas, beans, cucumbers, peppers

24–36 inches
Tomatoes, rhubarb, asparagus, artichokes

Choose your material

There's more than one way to build a bed frame

1 > WOOD Readily available and easy to cut, it's the most commonly used material for raised-bed frames. For maximum longevity, use thick boards cut from rot-resistant species, like this 1½-inch-thick Port Orford cedar. Shown: 48-by-96-by-11-inch Rectangle kit, \$295; naturallyards.com

2 > STEEL It's stiff and strong and usually given a galvanized or painted finish to stave off rust. This bed, made of lightweight corrugated steel, has a colorful powder coating. Shown: 34-by-68-by-12-inch Demeter kit, \$90; gardeners.com

3 > MORTARED MASONRY This type of bed will last nearly forever with minimal maintenance, but requires a concrete footing poured below the frost line and someone with bricklaying skills to build it. Weep holes every 2 feet or so in the base course let water drain out. Expect to pay about \$2,000 for a 4-by-8-by-2-foot brick bed similar to this one.

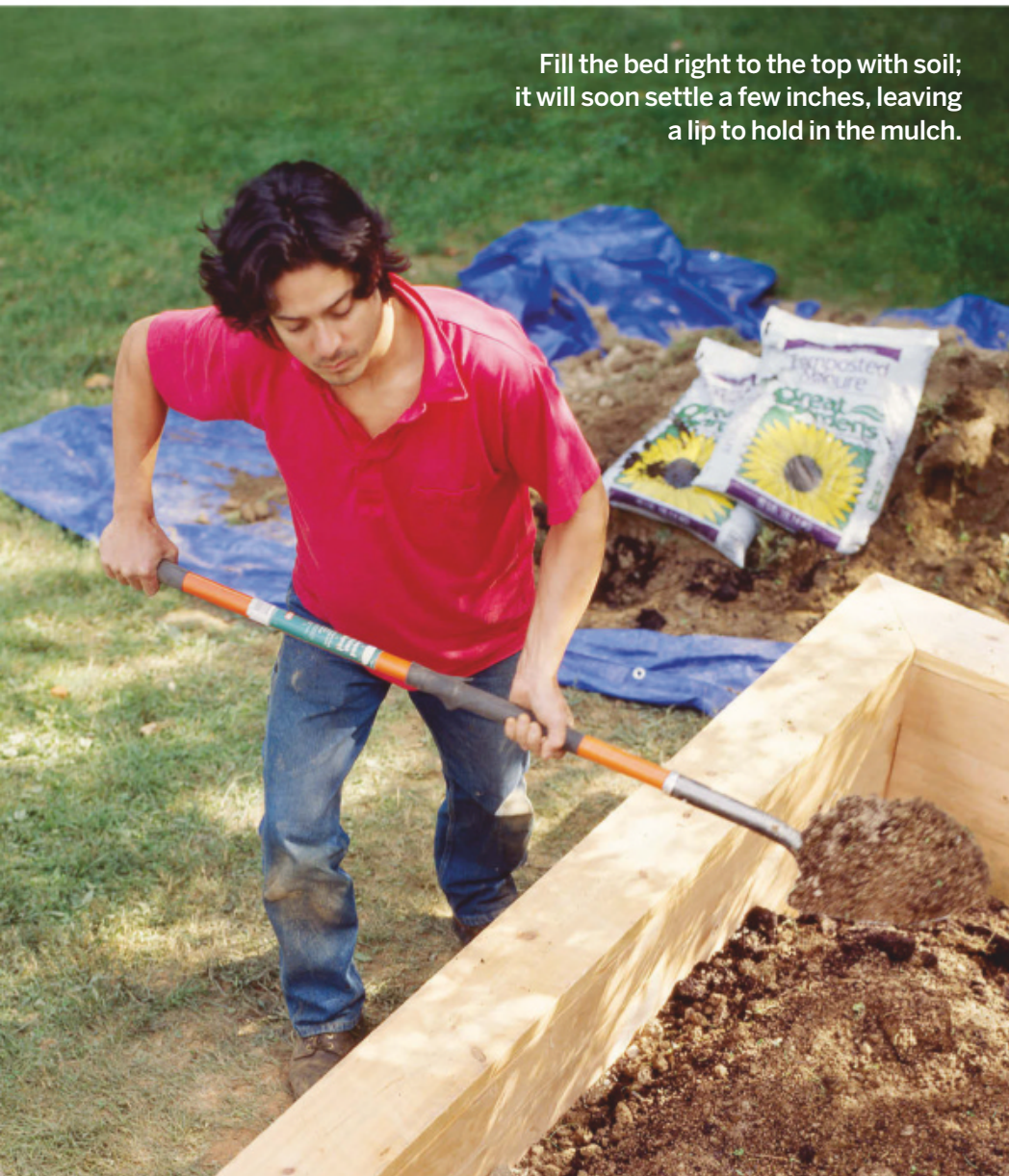
4 > STACKED STONE Fitted together and held in place with dabs of construction adhesive, natural stone or look-alike cast-concrete blocks don't need mortar or a footing, just a tamped crushed-stone base. Line the bed with landscape fabric so water can drain without carrying away soil. Shown: 49-by-49-by-10½-inch RumbleStone concrete-block raised-bed kit, \$273; homedepot.com

5 > PVC Hollow vinyl planks won't rot or rust, are lighter and more flexible than wood, and help insulate the bed from rapid temperature changes, but they do get brittle with age. If you want another color, you can apply a heat-reflective paint. These food-grade planks are BPA- and phthalate-free. Shown: 48-by-48-by-11-inch Raised Garden kit, \$90; vitagardens.com

6 > COMPOSITE LUMBER Usually a blend of plastic and wood fiber, these boards are more resilient than vinyl, and last longer than wood. Just make sure they're rated for ground contact. Shown: 48-by-96-by-11-inch Classic Sienna kit, \$200; frameitall.com



Fill the bed right to the top with soil; it will soon settle a few inches, leaving a lip to hold in the mulch.



THE SECRETS OF GREAT SOIL

TO START Mix equal parts compost with peat moss (or coconut coir) and vermiculite (or perlite). Or blend compost 50-50 with topsoil or bagged garden soil. If you want an organic bed from the start, buy bagged soils and compost that are OMRI-Listed; they've been certified by the Organic Materials Review Institute. Note: Soil that doesn't meet organic standards can be considered organic after three years if not treated with herbicides, pesticides, or synthetic fertilizers during that time.

IN THE FALL Pull up and compost any spent plant material, and cover the soil with a thick layer of **ground-up leaves** (just run over them with a mower). Hold them in place with netting so they don't blow away. Or plant seeds for a thick **cover crop** of alfalfa, buckwheat, white clover, or annual ryegrass. Do this 30 to 60 days before the first frost so the seeds have time to germinate.

IN THE SPRING About a month before planting, chop the leaf material or cover crop into bits with a spade or hoe and blend it gently into the soil. Before you plant rooted seedlings, fertilize each planting hole with a few trowelfuls of **compost**, a scoop of **composted manure**, and ½ cup of **rock phosphate** or **blood meal**.

Neat corners

With prefab connectors, you can quickly build beds with your choice of wood or composite planks. Just slide them into the connector grooves, and screw into place, as needed



LOW PROFILE

Rigid powder-coated aluminum brackets from 8 to 35 inches tall form sturdy corners for a range of bed heights. Matching in-line extrusions are available to connect side walls. Shown: Lifetime Corners, from \$25 per pair, screws included; gardeners.com



FOUR SIDED

This wood-plastic composite corner has grooves on all sides to join corners and side walls, and even to link up with other beds, no screws required. When stacked, they're held together with rebar driven through their center holes. Shown: Oldcastle Planter Wall Block, \$3.50; homedepot.com



HINGED

These ABS plastic brackets pivot 270 degrees, allowing you to build beds in interesting, non-rectangular shapes. To stack them, simply insert the built-in stake into the bracket below; slot in boards and secure with screws. Shown: Stacking Bracket, \$15; frameitall.com





Straw mulch keeps leaves and produce clean and dry.

Mulch matters

The right top layer—about 3 inches thick—discourages weeds, retains moisture, adds nutrients, and keeps the soil where it belongs

Use these to improve the soil

STRAW OR HAY Straw (harvested grain stalks) stays put, doesn't mat, and insulates the soil. Hay (alfalfa or a grass) breaks down faster, enriching the soil; but avoid the fresh stuff used for animal feed—it contains weed seeds. Instead, spread salt hay (a marsh grass) or old feed hay that has started to decay; their seeds won't sprout.

FALLEN LEAVES Another boon to soil fertility, if you can find enough of them in the spring. Grinding them up first makes them less likely to mat and helps them break down faster.

GRASS CLIPPINGS They're high in nitrogen and break down quickly, but apply them just 1 inch thick to prevent matting. In late summer, use only dried clippings—they won't stimulate unneeded growth, as fresh ones will. But don't use them at all if your lawn is being treated with herbicides or pesticides.

SEAWEED Rinsed of salt, this nutrient-rich material contains no weed seeds, acts as a natural fertilizer, and, once dry, stops slugs. Kelp isn't a good mulch, but does make a fine fertilizer tea.

Avoid these

WOOD CHIPS They're slow to degrade and, if mixed into soil, will acidify and starve it of nitrogen. Put them on paths between beds.

SAWDUST This fine waste forms a water-impenetrable mat and, as with wood chips, can have a negative effect on soil fertility.

Keep beds hydrated

Sprinklers can waste half the water they emit. These efficient systems deliver it right to the roots, where it's needed most

- **Soaker hose** At about 40 cents per foot, it's the least expensive, least complicated watering option. Just lay it in the bed, and hold it in place with landscape staples. Thread on a pressure regulator set to 15 psi for spray-free operation, and connect it to a hose bib with a backflow preventer. Most soakers are made from recycled tires; Water Right's food-grade, BPA-free polyurethane hose is a welcome exception (\$55 for 25 feet; waterrightinc.com).

- **Drip tape** Flat tubing made of polyethylene—a plastic similar to that in milk jugs—comes in various widths, wall thicknesses, and drip-hole spacing. A 15-mil-thick tape will last longest, about 7½ years; ⅝-inch-wide tapes with holes every 12 inches are suitable for most beds. These tapes only go in straight runs; a rigid manifold at one end of the bed feeds water to each tape. Use a pressure regulator set to 15 psi or less to prevent bursting. \$49 for 100-foot kit; dripdepot.com

- **Drip line** The most efficient and longest-lasting irrigation option, it's also the most expensive (\$76 for 50-foot kit; dripdepot.com). Plastic fittings allow the thick-walled polyethylene tubing to follow any path you choose without a manifold, and the tubes can be fitted with drip emitters to send water precisely where it's needed. Quarter-inch lines are limited to 30-foot runs; ½-inch lines can go up to 200 feet. Both work best at 25 psi.

- **Irrigation controller** A battery-powered timer like the Aquauno Logica (\$49; amazon.com) lets you set the timing, frequency, and duration of waterings. An add-on sensor suspends the schedule if it rains. More expensive electronic controllers, like the Rachio 3 (\$230; rachio.com), automatically regulate watering based on local forecasts, and enable you to use your smartphone to monitor water use and initiate watering.



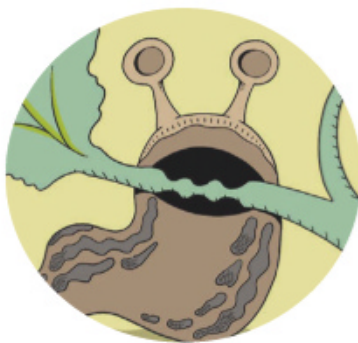
DAMAGE CONTROL

How to deal with creeping, crawly, and furry invaders that can decimate a garden



TREE ROOTS

Stop them from sucking up moisture and nutrients by digging a 2-foot-deep trench around the bed and lining it with corrugated plastic panels. Overlap panel edges by 6 inches and seal them with polyurethane adhesive and stainless sheet-metal screws. Leave the panels' top edge exposed so roots can't grow over it.



SLUGS

These garden pests won't touch copper—it gives their slimy bodies a shock. A strip of copper flashing wrapped around the outside of beds can keep slugs out. Crispy seaweed mulch or a sprinkling of coffee grounds also repel them. Or patrol beds an hour before sunrise or an hour after dark to pick them off plants by hand.



APHIDS

Add companion plants such as marigolds, nasturtiums, and petunias to vegetable beds to repel these little suckers. These plants emit compounds that discourage all kinds of damaging insects—including whiteflies, cabbage loopers, and squash bugs—from munching away in your garden.



RABBITS & WOODCHUCKS

Enclose your vegetable garden with a fence at least 3 feet tall and 3 feet from your beds. To stop critters from chewing through or digging under it, line it with 4-foot-wide, ½-inch galvanized hardware cloth buried 1 foot deep—even under the gate. Rig the gate to close automatically, and make sure it has no gaps wider than an inch.



DEER

They can't dig under or chew through a fence, but they can jump it. Plastic netting at least 8 feet high hung around the garden perimeter will keep deer from bounding over. A slanted 8-wire fence, like that sold by Gallagher (am.gallagher.com), is only 4½ feet high but 6 feet deep. It works because deer can jump high or far, but not both.



Extend the growing season

To protect tender plants from cold snaps in spring and fall, place a cloche, or small tent, over the bed. You can buy a kit or build your own out of ½-inch PVC pipe, 1× lumber, and UV-treated 6-mil plastic sheeting. Be sure to lift the plastic on sunny days, or provide a vent at the peak on each end so heat can escape. Remove the tent entirely when the danger of frost is past. For step-by-step cloche-building instructions, visit the Oregon State University Extension Service (extension.oregonstate.edu).



GIVE PEAS (AND BEANS) A CHANCE

A grid-style trellis attached to a raised bed provides the support that peas and beans need as they climb toward the sun. Mount the trellis on the bed's north side, so it doesn't shade the other plants, and leave enough space between the strings or wires—at least 5 inches—so you can reach in and harvest the ripe pods from the back side.

Raised-bed inspiration

Smart, stylish ideas for elevating your garden

1 > CANOE SHAPED Flat, smooth capstones offer a welcome place to sit when weeding and harvesting in this custom stone bed. Expect to pay upwards of \$8,000 for a 12-by-4-by-2-foot bed in a similar shape in quartzite.

2 > OCHRE ROUNDS These curved metal planters are made of weathering steel, an alloy that corrodes only on the surface for a warm rusty finish. Similar to shown: 30-by-10-inch Custom Corten Round Planter, \$800; scottavidondesign.com

3 > KEYHOLE BED The 20-inch-high walls of this U-shaped, western red cedar kit-built bed put plants within easy reach. An add-on fence raises the outside to a deer-discouraging 67 inches tall and doubles as a trellis support. Shown: 8-by-8-foot Raised Garden-Bed Kit with Deer Fence, \$1,663; outdoorlivingtoday.com

4 > FORMAL FINISH The solid stain on these custom frames makes a pleasing contrast with the pea-gravel pathways. To minimize upkeep, make the sides out of rot-proof $\frac{5}{4} \times 10$ cellular PVC trim, the rails from clear $\frac{5}{4} \times 4$ cedar decking, and use 4×4 cedar posts for the corners, topping them with ball finials cast from polyurethane foam. Materials cost for a 4-by-12-foot bed similar to shown: about \$375.

5 > EXPOSED JOINERY Just stick the side-board tenons through the mortises in the ends; black locust pegs hold the boards together. You can stack the finished frames as high as you like. Made of white cedar, these boards weather to a soft gray. Shown: two of The Farmstead's 24-by-72-by-8-inch raised garden bed kits, \$100 each; gardenraisedbeds.com

6 > BUILT-IN BENCHES Narrow edges don't make for comfortable seating. Here, wood benches are fastened to the bed's sides, offering a perch for tending vegetables or taking in the view. Each 2-foot-long seat can be built from an 8-foot length of 2×6 western red cedar for about \$20. ■



1



2



3



4



5



6

TIP

Before building or setting a raised bed in place, make sure—by excavating, if necessary—that it will be resting on level ground. Otherwise, the soil in the bed will shift to the bed's low end and may spill out over the top.



BROOKLINE MID-CENTURY MODERN HOUSE

WORKING THE ANGLES

This Old House's **40th television season** continues as the team tackles a boxy, shed-roofed mid-century modern house that presents plenty of challenges **BY JILL CONNORS**

A funny thing happened to Dr. Sunil Ghelani and his wife, Dr. Neha Kwatra, on their way home from a real estate open house two years ago: They fell for a house they'd had no intention of buying. The couple had just visited one disappointing house in the Boston suburb of Brookline, when they drove past another open for viewing. "From the outside it was a gray box, and we didn't think we'd be interested, but we had a little time so we stopped by," Sunil recalls. For this pair of physicians (he's a pediatric cardiologist, she's a pediatric radiologist) and parents of a toddler (Nisa, age 3), spare time is a rarity.

"We stepped inside, saw the 12-foot-high ceilings

BEFORE: The house's north side served as the main entry for the previous owners. The vertical siding and horizontal band of windows are typical of the mid-century modern style.

RIGHT: The crew sets the forms for the north addition's insulating concrete foundation walls; foam insulation panels will boost the walls' R-value even more. The addition will hold a garage beneath the new living room.

PHOTOS: KEVIN O'CONNOR







and the open space, and instantly thought if we could expand in the areas we wanted, it could be our dream house,” says Sunil. The location—a mile from Boston Children’s Hospital, where they both work, and on a bus line, near a park, in a good school district—added to the appeal. “We were aware the house was in a historic district, and that it would likely be a difficult renovation,” he says. “But we bought it anyway!”

While the house had some heritage—it was designed in the 1950s by noted architect Jan Reiner—the “gray box” had some shortcomings, too. At approximately 1,400 square feet, it was small, with a tiny kitchen, four split levels, four cramped bedrooms with windows that didn’t meet modern egress code, concrete floors with layers of linoleum in some areas, shoddy wood floors in others, and electric baseboard heat.

Working with local architect Linda Hamlin, Sunil and Neha decided on a plan that would more than double the home’s size to about 3,200 square feet by way of two hexagonal additions that echo the geometry of the original house. Avid cooks, they envisioned a large kitchen-dining area as the heart of the home, in the existing gray box. Embracing the open-plan, split-level style of architecture, they opted for a new living area in the 1,050-square-foot north addition adjacent to and up a few steps from the kitchen, with a soaring ceiling and a wall of glass doors leading to a balcony; underneath will be a one-car garage. To welcome family for extended visits, they allocated space for a private guest suite on the lower level of the 750-square-foot south addition, the upper story of which will hold their master suite, plus a bedroom and bath for Nisa.

ABOVE LEFT: Homeowners Dr. Neha Kwatra (left) and Dr. Sunil Ghelani.

ABOVE RIGHT: Standing at the garage-door end of the concrete foundation for the north addition, the team of (from left) Tom Silva, GenNEXT apprentice Erick Ellison, Charlie Silva, and *TOH* host Kevin O’Connor gets ready to slide a wood-packed I-beam into position inside the existing basement to support the kitchen floor.

RIGHT CENTER: Richard Trethewey installs the return air connection to the mini-duct system for cooling, positioning the ductwork to carry air straight up into living spaces above. *Mini-duct AC: The Unico System*

RIGHT BOTTOM: Kevin O’Connor jackhammers the existing basement floor to gain headroom for finished spaces on the lower level.



PHOTOS: (CLOCKWISE FROM TOP LEFT) JOHN TOMLIN; MIKE LAST (3); (OPPOSITE PAGE, TOP LEFT AND BOTTOM) KEVIN O’CONNOR; (RIGHT) MIKE LAST



“Sunil and Neha definitely wanted to emphasize openness, and we did that with ceiling height and glass,” says Hamlin, who is very familiar with the house, having lived on the street where it sits for almost 30 years. “Since it’s in a historic district, we had to be sensitive to the original structure—essentially a square box with a shed roof—and make sure the additions didn’t dwarf it,” says Hamlin. The terraced corner lot called for further creative problem-solving, with its odd shape, which Hamlin describes as “half a guitar,” and its location at the intersection of a private street and a busy thoroughfare. “There was complicated geometry in many ways,” she says.

They also had to respect the look of the original front of the house—the west facade—which featured vertical cedar siding and horizontal bands of windows. “To complement that look, we chose horizontal cedar siding and vertical windows for the two additions,” says Hamlin. While the west facade, which faces a busy street, is prominent in the eyes of the Brookline Preservation Commission, Sunil and Neha are turning the east facade—facing the quiet



TOP: Tom Silva checks the level of a new door frame in the basement; the space behind him will become a playroom.

LEFT: *TOH* master carpenter Norm Abram, GenNEXT apprentice Carly Comitino, and Tom Silva measure a post to jack up an existing beam in the kitchen-dining area in preparation for sistering the beam with two laminated-veneer-lumber (LVL) beams.

ABOVE: Tom Silva teaches GenNEXT apprentices Erick Ellison and Carly Comitino a different use for a tape measure—it will help them mark where to scribe the existing foundation wall.

private street—into their front entry, with a hallway leading to the kitchen-dining area.

The ambitious renovation plan presented some holdups for the *TOH* TV team right from the start—beginning with demolition to take the house down to the studs. Based on *This Old House* general contractor Tom Silva’s suspicions, they called in an expert who confirmed the presence of asbestos, which was common in 1950s building materials, requiring a hazardous-material crew to come in and remove it. Another delay cropped up after an inspector found deterioration in the main sewer and water lines, which meant they had to be replaced.

When building got under way, concrete foundations were poured for the additions, with the team adding insulated foam panels on the new and existing foundation walls as needed. They chose a one-step continuous panel system that goes in ready for drywall, with preformed channels to run conduit.

Throughout the project, they faced two sets of challenges: structural support and headroom adjustments. For example, the upper level of the north addition required special structural engineering. “With the plan calling for the big open living area above the garage, and a wall of glass doors from the living area to a balcony, we used a combination of structural lumber, LVLs, and steel,” says *TOH* home builder Charlie Silva. To gain headroom in the existing base-



TOP: The crew compacts gravel and adds green insulation panels to the driveway in preparation for a snow-melting radiant heat system. Insulated floor panels: Crete-Heat. Driveway snow-melting system: Viega

ABOVE: Norm Abram gives apprentices Erick Ellison and Carly Comitino a lesson in one of the first steps of the house-building process: adding sills to the concrete foundation.

LEFT: A rendering of the finished house shows the two additions, both clad in horizontal siding, flanking the original house. The natural-cedar north end holds the new front entrance to the home.

RIGHT: *TOH* landscape contractor Roger Cook gives the permeable patio paving outside the dining area a test stomp. *Pavers: Unilock*

BELOW: Both additions repeat the house's angular shape and shed roof; they are sheathed with engineered-wood panels faced with a factory-fused water and air barrier.

Sheathing: ZIP System. Windows: Marvin Windows and Doors. PVC fascia: AZEK

BOTTOM: A freshly planted row of arborvitae creates some privacy between the house and a busy street.



ment, they took a multifaceted approach, jackhammering to dig down, replacing a low-hanging beam with a steel beam installed between the joists, and cutting into the ceiling to create clearance.

Even greater hurdles came once the additions were framed and the team had to stare down some mid-century modern, split-level, flat-roof facts of life: “There’s no attic, no unfinished basement space, eight different levels, and nothing conventional about running ductwork. For mechanical systems, this was a huge challenge,” says *TOH* plumbing and heating expert Richard Trethewey. Radiant floor heat made sense given the split-level layout—and resulted in 11 different heating zones—but to run the ductwork for the cooling system, Charlie and Richard had to get creative. “We fit things in closets, made soffits and chases on the lower level to feed up to the kitchen, created specially built soffits, and chose the locations for the two air handlers based on where we could run the ductwork,” says Charlie.

They solved an extreme version of the where-to-place-the-ductwork puzzle in the kitchen, where the plan called for a bank of west-facing windows from counter height up, along the cooktop wall. For the vent hood, Charlie ran ductwork straight up into the ceiling, then turned it 90 degrees and ran it along the entire 25-foot width of the house in the roof framing, terminating through the back wall. “That’s the fun of it, making the house work right,” he says.

The house’s minimalist look requires a different approach for everyone working on it. “The big thing about this project is that it’s a mid-century modern with simple trim, but the simple is a little more difficult in that it hands off the final step to the plasterer,” says Tom. Instead of leaving rough window and door openings awaiting casing and trim after the walls are finished, the team had to precisely frame the openings, then step aside to let the plasterer create the flush look called for. “It changes the timing and the process.”

That modern simplicity is exactly what the homeowners are after. “We both grew up in Mumbai, where there are lots of concrete buildings and rarely a peaked roof,” says Sunil. “Even though we found this house almost by accident, we love that we have a modern house in the middle of Victorians.”

Hamlin sees some destiny at work as well. “This house is in Pill Hill, which got its name because doctors moved into the area in the early 1900s, attracted by the proximity to Boston’s hospitals,” she says. “We now have medical professionals in three of the seven houses on the street—it’s interesting to see.” ■



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COVER See the listing for *Before + After: Kitchen*.

HOME SOLUTIONS (pp. 12–15) **TLC for wood patio furniture** > *Thanks to* Tim Carter, founder, askthebuilder.com. **Want to prevent a fire? Clean your dryer duct** > *Thanks to* Dave Lavalle, founder, Dryer Vent Wizard; dryerventwizard.com.

BEFORE + AFTER: KITCHEN *Better together* (pp. 17–19) **Architect:** Jack Backus, Oakland, CA; jbackusarchitects.com. **Designer:** Nicole Yee, Oakland, CA; nicoleyee.com. **Contractor:** Tappan Builders, Berkeley, CA; tappanbuilders.com. **Paint:** Shoreline and Newburyport Blue (cabinets), Warm Comfort (island); benjaminmoore.com. **Cabinets:** bartlettcabinet.com. **Sink:** Julien; julien.ca. **Faucet:** Rohl; rohlhome.com. **Vent hood cover:** miometals.com. **Vent hood insert:** Vent-A-Hood; ventahood.com. **Perimeter countertops:** Caesarstone; caesarstoneus.com. **Baking station sink:** franke.com. **Baking station faucet:** Delta; deltafaucet.com. **Pendant lights:** metrolightingcenters.com. **Barn door hardware:** MacMurray Pacific Wholesale Hardware; macmurraypacific.com. **Flooring:** Bedrosians Tile & Stone; bedrosians.com. **Island countertop:** The Craft Art Company; craft-art.com. **Island lighting:** shadesoflight.com. **Backsplash tile:** walkerzanger.com. **Cooktop, wall oven, steam oven, warming oven, and dishwasher:** miele.com. **Fridge, washer, and dryer:** lg.com. **Cabinet hardware:** atlashomewares.com.

BUDGET REDO *Bath makeover for \$189* (p. 20) **Homeowner's blog:** cynthiaharperliving.com.

PAINT IDEAS *A fanciful flight* (p. 27) *Thanks to* Chelsea Conrad, interior designer, One Kings Lane Interior Design; onekingslane.com. **Stencils:** Indian Inlay Furniture Stencil Kit; cuttingedgestencils.com. **Paint:** Farrow & Ball Lulworth Blue, Pitch Blue, Cook's Blue (risers), us.farrow-ball.com; White Dove (stenciled designs), benjaminmoore.com.

PHOTOSHOP REDO *A handsome homestead* (p. 32) **Architect:** Michael Soraci, Agate Architecture, Eugene, OR; agatearchitecture.com.

ASK THIS OLD HOUSE (pp. 36–43) **Asbestos in plaster** > *Thanks to* Rory Brennan, Preservation Plastering, Brattleboro, VT; preservationplastering.com.

HOUSE PROUD (pp. 44–51) **Builder:** Jeff Williams, JW Millwork, Trumbull, CT, 203-258-9667; houzz.com/pro/jeffwilliams/jw-millwork. **Paint supplier:** Huntington Paint & Wallpaper, Shelton, CT; huntingtonpaint.com. **Family room** > **Paint:** Richmond Gray (walls) and Navajo White (trim);

benjaminmoore.com. **Front porch** > **Paint:** White (siding and trim), Hunter Green (shutters), and Marlboro Blue (porch ceiling); benjaminmoore.com. **Breakfast room** > **Rug:** The Carpet-Right Company; carpetrightco.com. **Chairs:** blackrockgalleries.com. **Light fixture:** Valley Lighting & Home Decor, Ansonia, CT; valleyhomelighting.com. **Kitchen** > **Paint:** Great Barrington Green (island); benjaminmoore.com. **Pendant lights:** restorationhardware.com. **Stools:** Monique Shay Antiques & Designs, Woodbury, CT; moniqueshay.com. **Wall ovens and cooktop:** thermador.com. **Vent hood:** Wolf; subzero-wolf.com. **Exterior** > **Paint:** White (siding and trim) and Hunter Green (shutters); benjaminmoore.com. **Windows (addition):** Marvin Windows and Doors; marvin.com. **Dining room** > **Rug:** homegoods.com. **Master bath** > **Paint:** Navajo White (walls and trim); benjaminmoore.com. **Master bedroom** > **Paint:** Buxton Blue (walls); benjaminmoore.com. **Patio** > **Furniture:** Thos. Baker; thosbaker.com.

ALL ABOUT RAISED-BED GARDENS (pp. 52–59) *Thanks to* Greg Seaman, founder, EarthEasy; eartheasy.com. **Raised-bed inspiration** > **Built-in benches:** Image courtesy of *Raised Bed Revolution: Build It, Fill It, Plant It... Garden Anywhere!* (Cool Springs Press, 2016) by Tara Nolan; savvygardening.com.

WORKING THE ANGLES (pp. 60–65) **Architect:** Linda Hamlin, Hamlin & Co. Inc., Brookline, MA; 617-566-2161. **Windows and patio doors:** Marvin Windows and Doors; marvin.com. **Mini-duct AC:** The Unico System; unicosystem.com. **Insulated floor panel system (driveway):** crete-heat.com. **Snow-melting system (driveway):** Viega; viega.us. **Pavers (driveway):** unilock.com. **Wall sheathing:** Huber Engineered Woods ZIP System; huberwood.com. **PVC fascia:** azek.com. **Continuous insulation panels:** insofast.com. **Floor tile underlayment:** USG Durock; usg.com.

SAVE THIS OLD HOUSE (p. 76) *Thanks to* David Mann, president and CEO, Lucas County Land Bank, Toledo, OH; co.lucas.oh.us. Judy Stone, Danberry Realtors, Oregon, OH; judystone.com. 🏠

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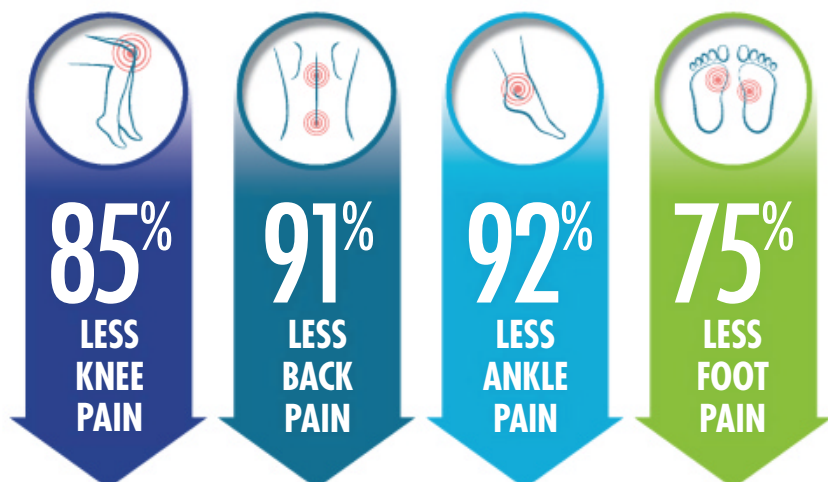
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Chicago Doctor Shakes Up Hearing Aid Industry

ADVANCED HEARING AID TECHNOLOGY... ***For Less Than \$200!***

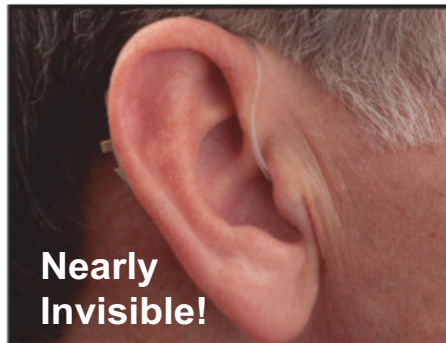
Chicago – A local board-certified physician has done it once again with his newest invention of a medical-grade, affordable hearing aid.

This new hearing aid is packed with all the features of traditional hearing aids found at clinics for a mere fraction of the cost. **Now most people with hearing loss are able to enjoy crystal clear, natural sound — in a crowd, on the phone, in the wind — without suffering through “whistling” and annoying background noise.**

FDA-Registered MDHearingAid® Outperforms Expensive Competitors

This sleek, fully programmed, light-weight, hearing aid is the outgrowth of the technology revolution that is changing our world. While demand for new technology caused most prices to plunge (consider DVD players and computers, which originally sold for thousands of dollars and today can be purchased for less), the cost of a medical-grade hearing aid remains out of reach.

The doctor knew that many of his patients would benefit but couldn't afford the expense for these new hearing aids. Generally they are *not* covered by Medicare and most private health insurance plans.



Nearly Invisible!

SAME FEATURES AS EXPENSIVE COMPETITORS

- ✓ **Behind-the-ear for a nearly invisible profile**
- ✓ **Accommodates Mild, Moderate, and Moderately-Severe hearing loss**
- ✓ **Amplifies the critical frequencies of the human voice, without amplifying background sounds**
- ✓ **Multiple sized ear domes allow for the perfect size**
- ✓ **2-Programs for customized hearing. Decrease background noise and choose the best program for your hearing loss.**

The doctor evaluated the high priced hearing aids on the market, broke them down to their base components, and then created his own affordable version, called the MDHearingAid, for less than \$200.

Affordable Hearing Aid Technology

Using advanced technology, the MDHearingAid adjusts to your listening environment — prioritizing speech and de-emphasizing background noise. Experience all of the sounds you've been missing at a price you can afford. This doctor designed and approved hearing aid comes with a full year's supply of long-life batteries. It delivers crisp, clear sound all day long and the soft flexible ear domes are so comfortable you won't realize you're wearing them.

Can a Hearing Aid Delay or Prevent Alzheimer's & Dementia?

A study by the National Institute on Aging suggests older individuals with hearing loss are significantly more likely to develop Alzheimer's and dementia over time than those who retain their hearing. They suggest that an intervention — such as a hearing aid — could delay or prevent this by improving hearing!

Try It Yourself at Home 45-Day Risk-Free Trial

Of course, hearing is believing and we invite you to try it for yourself with our RISK-FREE 45-day home trial. If you are not completely satisfied, simply return it within that time period for a full refund of your purchase price.

Compare MDHearingAid to High-Priced Store-Front Clinics

FEATURES	MDHearingAid®	Hearing Aid Clinic
FDA-Registered Hearing Aid	Yes	Yes
Feedback Cancellation	Yes	Yes
Speech Enhancement Noise Reduction	Yes	Yes
Appointments Needed	None	3-4
Phone Support and 24-7 Email Support	Yes	NO
45-Day Risk Free Trial	Yes	Rarely
100% Money Back Guarantee	Yes	Rarely
1-Year Supply of FREE Batteries	Yes	Rarely
Time to Receive Your Hearing Aids	Just 1-5 DAYS	3-5 WEEKS
Hearing Aid Price	Under \$200	\$2,400+

Buyers Agree, “MDHearingAid is the Best Value!”

“I am hearing things I didn't know I was missing. Really amazing. I'm wearing them all the time.”
— Linda I., Indiana

“Almost work too well. I am a teacher and hearing much better now.” — Lillian B., California

“I would definitely recommend them to my patients with hearing loss.”
— Amy S., Audiologist, Indiana



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ITEM 69470/98899/61988 shown

63220010

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GOOD

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12" DUAL-BEVEL SLIDING COMPOUND MITER SAW

Customer Rating ★★★★★

BLADE SOLD SEPARATELY

ITEM 59034 \$197.99

3-1/2" VERTICAL CROWN MOLDING CAPACITY

2-5/8" TALL SLIDING FENCES

LASER GUIDE LIGHT

\$139.99 ~~\$189.99~~

SAVE \$89

COMPARE TO PROFESSIONAL WOODWORKER \$229.80

21172002

LIMIT 1 - Coupon valid through 8/5/19*

BETTER

ADMIRAL

SUPER COUPON

12" DUAL-BEVEL SLIDING COMPOUND MITER SAW

Customer Rating ★★★★★

FREE BLADE INCLUDED

ITEM 64555 \$199.99

6-1/2" VERTICAL CROWN MOLDING CAPACITY

4-1/2" TALL SLIDING FENCES

LASER GUIDE LIGHT & LED WORK LIGHT

\$179 ~~\$189.99~~

SAVE \$90

COMPARE TO RYOBI \$269

63221459

LIMIT 1 - Coupon valid through 8/5/19*

BEST

HERCULES

SUPER COUPON

PROFESSIONAL 12" DUAL-BEVEL SLIDING COMPOUND MITER SAW

Customer Rating ★★★★★

FREE BLADE INCLUDED

ITEM 59078 \$449.99

7-1/2" VERTICAL CROWN MOLDING CAPACITY

4-3/4" TALL SLIDING FENCES

LED PRECISION SHADOW GUIDE LIGHT

\$299 ~~\$349.99~~

SAVE \$200

COMPARE TO DEWALT \$499

63221953

LIMIT 1 - Coupon valid through 8/5/19*

HARDY

POWDER-FREE NITRILE GLOVES

PACK OF 100

- 5 mil thickness

12¢ PER PAIR

SAVE 59%

COMPARE TO VENOM \$14.97

MODEL: VEN4145

ITEM 97581, 97582, 37051, 37052, 64417, 64418, 61363, 68497, 61360, 61359, 68498, 68496 shown

63222849

LIMIT 4 - Coupon valid through 8/5/19*

WINDSOR DESIGN

60" HARDWOOD WORKBENCH WITH 4 DRAWERS

Customer Rating ★★★★★

Tools sold separately.

COMPARE TO GRIZZLY \$399.95

MODEL: H7723

ITEM 63395/93454/69054/62603 shown

63223901

LIMIT 1 - Coupon valid through 8/5/19*

HaulMaster

18" WORKING PLATFORM STEP STOOL

Customer Rating ★★★★★

- 350 lb. capacity

COMPARE TO GPL \$51.45

MODEL: H-21

ITEM 62515/66911 shown

63224105

LIMIT 3 - Coupon valid through 8/5/19*

COVERPRO

10 FT. x 17 FT. PORTABLE GARAGE

Customer Rating ★★★★★

COMPARE TO SHELTER LOGIC \$290.75

MODEL: 76377

ITEM 62859/63055/62860 shown

63224415

LIMIT 1 - Coupon valid through 8/5/19*

CENTRAL MACHINERY

4" x 36" BELT/6" DISC SANDER

Customer Rating ★★★★★

COMPARE TO RYOBI \$149

MODEL: 804601G

ITEM 64778/97181 shown

63228126

LIMIT 1 - Coupon valid through 8/5/19*

HaulMaster

72" x 80" MOVING BLANKET

Customer Rating ★★★★★

COMPARE TO BLUE HAWK \$19.99

MODEL: 77290

ITEM 69505/62418/66537 shown

63228993

LIMIT 6 - Coupon valid through 8/5/19*

U.S. GENERAL

30" 5 DRAWER MECHANIC'S CARTS

15,000 cu. in. of storage

700 lb. capacity

Weighs 139 lbs.

BLUE ITEM 64031

BLACK ITEM 64032

RED ITEM 64033

GREEN ITEM 64034

ORANGE ITEM 64035

YELLOW ITEM 64036

NEW 6 FANTASTIC COLORS

COMPARE TO Snap-on BLUE-POINT \$830

MODEL: KRAC1070PES

ITEM 63230051

63230051

LIMIT 1 - Coupon valid through 8/5/19*

PITTSBURGH

12" RATCHET BAR CLAMP/SPREADER

LIFETIME WARRANTY

Customer Rating ★★★★★

COMPARE TO IRWIN \$19.98

MODEL: 1964718

ITEM 62123/63017/69222 shown

63230394

LIMIT 6 - Coupon valid through 8/5/19*

WINDSOR DESIGN

11 PIECE WOOD CARVING SET

Customer Rating ★★★★★

COMPARE TO \$8.99

ITEM 56186/62673 shown

63231165

LIMIT 4 - Coupon valid through 8/5/19*

CENTRAL MACHINERY

UNIVERSAL TOOL STAND

Customer Rating ★★★★★

500 lb. capacity

COMPARE TO POWERTEC \$51.27

MODEL: UT1002

ITEM 69805

63231961

LIMIT 3 - Coupon valid through 8/5/19*

SUPER COUPON

4 PIECE ANTI-FATIGUE FOAM MAT SET

Customer Rating ★★★★★

- Each pad measures 25" x 25"

COMPARE TO NORSK \$19.99

MODEL: 00119346

ITEM 40187/61607/62389/94635 shown

63231968

LIMIT 4 - Coupon valid through 8/5/19*

CHICAGO • ELECTRIC POWER TOOLS

2.5 HP. 10" INDUSTRIAL TILE/BRICK SAW

Customer Rating ★★★★★

Blade sold separately.

COMPARE TO KOBALT \$499

MODEL: KWS S10-06

ITEM 95385/62391/69275 shown

63232457

LIMIT 1 - Coupon valid through 8/5/19*

PREDATOR

2000 WATT SUPER QUIET INVERTER GENERATOR

12 hour run time

COMPARE TO HONDA \$1009.99

MODEL: EU2000I

ITEM 62523

63236561

LIMIT 1 - Coupon valid through 8/5/19*

HaulMaster

18" x 12" MOVER'S DOLLY

Customer Rating ★★★★★

- 1000 lb. capacity

COMPARE TO BUFFALO TOOLS \$22.99

MODEL: HDFOOLLY

ITEM 60497/61899/63095/63096/63097/63098 shown

63236816

LIMIT 6 - Coupon valid through 8/5/19*

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RAPID PUMP® 1.5 TON LIGHTWEIGHT ALUMINUM FLOOR JACK

Customer Rating ★★★★★

- 3-1/2 pumps lifts most vehicles
- Lifts from 3-1/2" to 14-1/8"
- Weighs 34 lbs.

COMPARE TO K TOOL \$151.42

MODEL: KT163094

ITEM 64545/64552/64832/64980/68053/62160/62496/62516/60569 shown

63237687

LIMIT 1 - Coupon valid through 8/5/19*

drill master

1/4" TRIM ROUTER

Customer Rating ★★★★★

COMPARE TO MAKITA \$99

MODEL: RT0701C

ITEM 44914/62659/61626/64314 shown

63238074

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save This Old House

PRICE \$2,777
LOCATION Toledo, OH
CONTACT Judy Stone, 419-241-1717

THE HISTORY By the turn of the 20th century, the Old West End section of Toledo was growing rapidly, as the city known as the Glass Capital of the World attracted a wave of newcomers. This sturdy hip-roofed house, just two blocks from the designated historic district, was built by fire department captain John Lotz and his wife, Minnie, in 1900. Like many of its neighbors, it reflects a mix of late-Victorian-era styles, with bay windows, fishscale shingles on the dormers, and classical porch columns. The house has been vacant for more than a year; the Lucas County Land Bank is looking for a new owner to take on its restoration.

WHY SAVE IT? The handsome millwork throughout, probably oak, is largely untouched and includes thick baseboards and window trim, paneled wainscoting, quartersawn flooring, and simple stair railings. All of the windows, doors, and hardware are original. Parks, shops, restaurants, and the esteemed Toledo Museum of Art are located within a mile's walk.

WHAT IT NEEDS To start, the house will require new systems and most likely a new roof. Temperature extremes have affected the interior plaster, which needs repair, but the foundation and structure appear to be sound. The estimated cost of a full rehab is \$50,000–\$75,000, and some cost-saving tax incentives are available. Interested buyers will have to present a detailed renovation plan to the Land Bank. A preservation-minded new owner will fit right in to the neighborhood, a mix of long-term residents, empty nesters, and urban pioneers, who kick off summer every year with a sizable party—complete with historic house tours. —KATELIN HILL

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in a walkable
urban area!



1. The spacious 2,592-square-foot, five-bedroom, one-and-a-half-bath home is described as a mix of Victorian-era architectural styles, typical of the area.
2. A parlor with an original bay window and pocket doors, just off the living room, offers flexible options for living space.
3. The front porch features fluted columns in a paired-posts-on-pedestal configuration and a simple square-baluster railing.
4. The new owner will want to restore the living room fireplace to its turn-of-the-20th-century roots; the floors, likely quartersawn oak, are original.



GOT A HOUSE?

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