Timber-Frame Resurrection

Uncovering and reconfiguring hand-hewn timbers results in a character-rich kitchen

BY LOU SALGE

Test of time. *Based on wood analysis, the original timber-frame portion of the house is thought to have been built in the 1860s.*

I spent the better part of two years working on this house, as well as a few other buildings on the five-acre property. The farm sits on the corner of a couple country roads outside Ashley, Indiana, and has been in the same family for over 100 years—my client is the fourth-generation owner. The goal of our work was to get it ready for another set of generations.

Like most old farmhouses, this one had been remodeled a few times over the last century. Built sometime in the 1860s, the original portion of the house is timber-framed, and now contains the kitchen and the dining room. My crew and I made our way over every square inch of the place, including a half-story added to the timber frame in the 1870s, a rear addition likely done in the 1920s, and some work by the homeowner's father, who tore off and rebuilt the back section in 1995. In 2018, we gutted everything down to the studs, reconfigured the interior partitions, stripped the exterior, and added a garage. Our vision for the kitchen was to transform the central timber-frame section of the house into a two-story open volume.

Peeling back the layers

We knew there was a timber frame in there because the homeowner had hired a specialist to do some exploring—enough to assure us that the timbers were structurally sound, albeit covered in lath, plaster, paint, and even wallpaper applied directly to the wood. When we opened everything up and removed the attic floor, as well as the interior walls that cut through the space, we discovered a few of the wall posts had been cut. To remedy that, we removed the logs that composed the first-floor framing—they were hewn only on the top and bottom—milled them down, and used them to replace the missing posts.

Back when the half-story was added, the frame was cut to create a doorway into the attic. We went back and forth about whether or not to scarf in new timber where the beam was cut. The homeowner, an engineer, decided on a different approach, and fabricated a steel angle that we bolted on to reinforce the compromised beam. He turned it into a fun design element by having it inscribed with a quote from Abraham Lincoln's Farewell Address: "To this place, and the kindness of these people, I owe everything." Lincoln delivered the speech on February 11, 1861; the homeowner figures it was within months, perhaps weeks, of the original home's completion.

Even after exposing the frame, it was hard to tell what we were working with until we had it blasted with dry ice, which removed 150 years' worth of layered paint, dirt, and debris. It was our first experience with dry-ice blasting, and we have used it a few times since. The technique is similar to sandblasting, but I prefer the dry-ice method because it's cleaner, it's faster—it took just one day to blast this entire frame—and it doesn't leave any abrasive pocking. Sandblasting is harder to control, and the sand tends to drive into the checks in the timber, only to fall out over time. Sand-

blasting also tends to result in a weathered, driftwoodlike texture, which was not the look we wanted.

Next, we applied three coats of sealer to the timbers, and covered up the whole frame with plastic and bubble wrap to protect it through the finish stages. The timber frame does not carry any loads—it's a freestanding structure inside the new walls, which we built outboard of the timber frame. We added a new ridge beam and set new rafters in an effort to get better insulation properties. All of the drywall was fit between the timbers.

An artfully eclectic kitchen

One of the objectives was to keep the kitchen from feeling brand new. The homeowner wanted to retain its historical qualities, and for visiting relatives to feel like they're in an iteration of the old family farmhouse. To accomplish that, we repurposed materials and wove them into the fabric of the house. We refurbished one of the original window sashes from the sunroom and installed it as a Juliet window at the stair landing. As you move upstairs, it affords an elevated view of the kitchen and dining room. Similarly, the return-air grille was fabricated from one of the original cast-iron floor registers—we used those throughout the house. We also built a generous pantry that incorporates one of the 1920s doors.

We discovered attic floor joists with a beaded detail the likes of which we don't usually see in our region—they had a nice green patina from decades of paint, so we used them to build a trellislike structure that spans the width of the kitchen. Because the ceilings are 16 ft. tall, the can lights are for ambiance only. We needed task lighting, and that trellis was the perfect solution. The electrician installed exposed boxes and ran black-painted conduit along the joists.

The homeowner liked the idea of mixing wood species and colors, so we installed Wellborn cabinets in a combination of two maple finishes, and used stained hickory for the island. On the inside corners, we opted for floating shelves rather than cabinets to leave as much of the framing exposed as possible. To add a little texture to the wood palette, we went with 1x tongue-and-groove beadboard pine on the ceiling, and we reused some of the original 2-in.-thick poplar exterior sheathing to create a one-of-a-kind wainscoting.

The layout of the island necessitated cutting the Cambria quartz top in two places to fit around the post. Luckily, it was possible to conceal the seams in the pattern of the material. Rimming out around the post was tricky. Of course, it wasn't square, so we ended up building mockups with wood blocks to get the angles dialed in before cutting into the quartz. We spent hours on those trim pieces so the stone would scribe right up to the post. It was worth it, and so were all of the other labor-intensive measures we took. The idea was to tell the story of what the house once was, and how it got to be what it is today. We view the kitchen as the latest chapter in a winding tale. □

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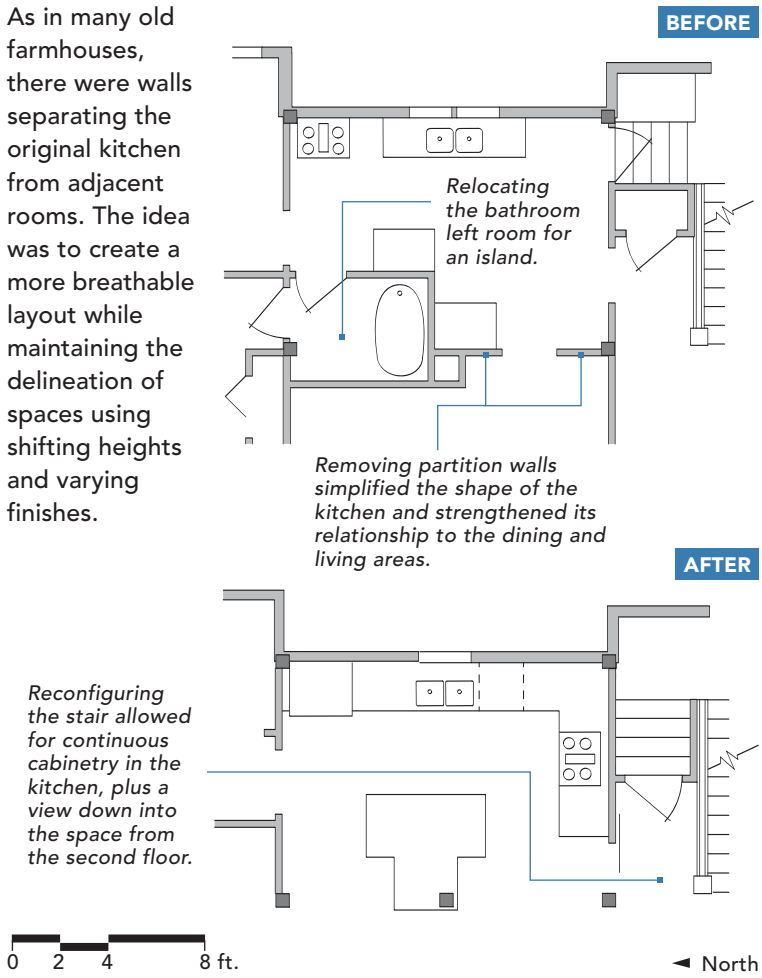
OPENING IT UP, LITERALLY

As in many old farmhouses, there were walls separating the original kitchen from adjacent rooms. The idea was to create a more breathable layout while maintaining the delineation of spaces using shifting heights and varying finishes.



Frame within a frame. *The entire structure was out of square, which was one of the reasons for rebuilding the gable-end walls. Originally, balloon-framed walls of native 2x4s, with studs spaced anywhere from 12 in. to 30 in. apart, capped the gable ends outboard of the timber frame. We removed those and replaced them with 2x6 walls for additional insulation and regular stud spacing.*

Floor-plan drawings: Patrick Welsh

Footprint and finishes. *To stay within the budget, the team value-engineered as much as possible, keeping materials at mid-grade level and the appliances modest.*

SOURCES

PENDANT LIGHTING Barn Light Electric Company, The Original Warehouse Pendant

COUNTERTOPS Cambria, Praa Sands with Summit Edge

CABINETRY Wellborn Cabinet, Chelsea (Island, Hickory with Tungsten finish; Bases, Maple with Mink Gray finish; Walls, Maple with Gray Mist finish)

FLOORING Kraus, Halton Hickory in Auburn

SINK Elkay, Quartz Classic 33-in. by 20-in. Double Bowl Undermount

Showcasing history. *The beaded detail on the attic joists was left exposed in order to help tell the story of the house's evolution.*

Puzzle pieces. *The Casabella Ceramic tiles for the backsplash feature nine different patterns. They came from the manufacturer in unequal quantities; the interior designer, Kristi Steffen, had to arrange them in a way that was random but cohesive. She began with a focal point over the range, and worked out in each direction.*

Dry-ice-blasting centuries-old timber

Dry ice is the solid form of CO_2, which freezes at around –109.3°F. When used as a blasting medium for cleaning, dry-ice pellets are propelled directly at a surface—in this case timber framing—in a pressurized air stream. Numerous benefits include its ease, speed, and cost compared to other methods. Unlike sand and plastic pellets used in similar applications, dry-ice pellets are soft, light, and nonabrasive. This means they don't damage the timber but rather preserve its natural character and historical markings. Dry-ice blasting is also less messy than other techniques—it doesn't leave any residue (other than the contaminants being removed) because the dry ice evaporates nearly instantaneously. Adequate ventilation is needed when using dry-ice blasting to keep CO_2 concentrations within safe levels.

Beams revived. *Unlike sand, dry ice changes from a solid to a gaseous state during the blasting process, producing microscopic shock waves that aid in cleaning the timber without damaging its character.*