Reassembling Historic Houses

by John Leeke

Prefabricated housing is not a new idea. In October of 1880, the Waterville Mail, a Maine newspaper, announced that it was "furnishing frames for houses, trusses, floors, roof...The lumber is planed, sized, cut and marked to place, enabling any practical workman to put it together without difficulty."

Old shipping records in Maine show there was an extensive trade in prefabricated buildings throughout the 18th and 19th centuries. Complete houses were shipped to the American South, Midwest, Far West, and the Caribbean and Mediterranean regions. If you lived back then you could buy a complete "historic" house. But what about now?

Even though modular and pre-cut manufacturers don't make new houses based on ``historic'' plans, you can find something even better: a truly antique house that can be shipped to your site and reassembled. Two contractors I recently interviewed specialize in this kind of work.

Restoration Resources

In northern New England Les Fossel "speculates" in historic houses. He takes down antique buildings and stores them until he finds a buyer. Then he rebuilds the house on a new site. Les ships his houses anywhere in New England, and has interested buyers as far away as Texas and Minnesota.

Figure 1. *Though this house in rural Maine looks a little ragged, contractor Les Fossel finds it well worth saving. As one of a handful of contractors who specializes in rebuilding historic houses, Fossel employs an intricate process to take the entire house apart and rebuild it elsewhere.*

He specializes in pre-1830s houses with good interior millwork (see Figure 1). If part of the interior millwork is missing, he draws from his inventory of architectural salvage.

Les prefers to keep whole buildings together rather than break them up into parts for other buildings. In fact, he won't take down a house if it's possible to restore it in its original location. But often, bulldozers or economics intervene, and the building would be lost otherwise. If a building is too rotten to save, he pulls it down and salvages the useful parts.

Most of his customers are contractors who have a client who wants an "antique" house. The demand for antique houses generally rises and falls with the housing market, he says. Ironically, Les finds these rebuilt houses most popular with those clients who are leaning toward new construction rather than existing houses. He says that making the leap from new house to ``old'' new house isn't that difficult.

For his clients, Les supplies the frame and restores the woodwork onsite for a fixed price, while the contractor handles site, foundation, and mechanical work. Depending on the budget, Les may also replaster the interior over wood lath. But cost is often a consideration, and many contractors find that drywall is the only realistic option.

Les' work requires that he be adept at recognizing structural and historic integrity in these old houses. A building might look like a bombed-out wreck, with junk all over, windows broken, and a back wall falling out, but taking a closer look, Les may notice that all the interior wood paneling is in fine shape with original painted surfaces. Or he may find that the frame is in good condition except for one section of decayed sill plate that let the back wall fall out.

Of course, it can go the other way. The house may look great, but it's in terrible condition, with structural flaws disguised or historic features stripped.

In pricing his work, Fossel divides costs into three parts. First is the cost to document the building, take it down, and store it. Second is the cost to restore the frame. Pricing both of these is straightforward. Third is the cost to restore the finish woodwork. Pricing this can be more complicated.

Here's why: If 30-inch-wide paneling is decayed, broken, or missing, you could take three approaches, depending on how much effort you think the project is worth. You could glue up two narrower boards (low cost). Or, you could consolidate or repair the existing paneling (moderate cost, plus you're saving the building's original fabric). Finally, you could search out early boards with all the original surfaces and the same dimensions (the most expensive option).

You have to be ``brutally practical when you make these choices, or everyone can go broke,'' advises Fossel. He adds that a house's woodwork is worth the extra attention: It's the prime feature that sells the house.

Once a building is taken down, however, it's hard for a buyer to take a look at it, so Les prepares a floor plan to show prospective clients. This marketing aid stresses the home's unique features, especially the woodwork (see Figure 2).

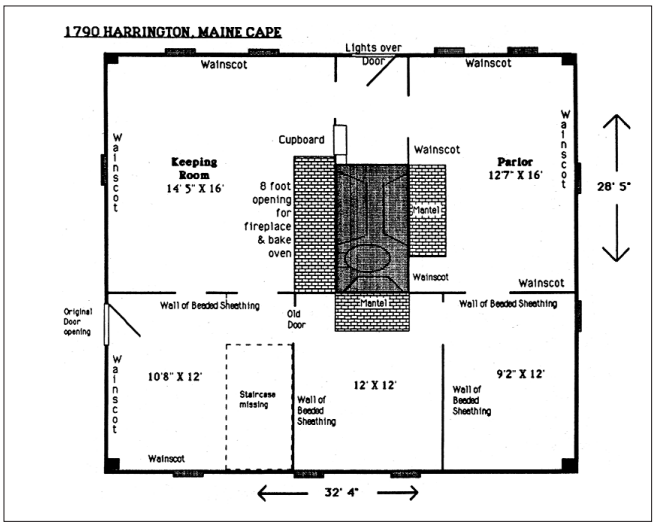

Figure 2. *Knowing that it's the irreplaceable details - most notably the woodwork - that sell these rebuilt historic homes, Fossel prepares a detailed floor plan to show prospective buyers.*

Two-thirds of Fossel's business is working with whole buildings. He averages two to four buildings per year, but the business volume varies widely from year to year. Now he's storing three houses and one barn in his building inventory.

Although his business is driven by his love of old houses rather than a desire to get rich, he says work is steady enough to allow working on speculation.

Panelize in Reverse

Another contractor who specializes in disassembling houses is Todd Dickenson from central North Carolina. He has developed a unique method of moving a house that looks a lot like the modern technique of pre-fabricating wall panels - only in reverse.

He initially became interested in dismantling historic buildings when an abandoned house was getting picked apart by its owner for scrap lumber. Dickenson had a client who thought some of the old lumber would look good in the renovation they were planning.

When Dickenson saw the flat-panel wainscoting and arched fireplaces, he knew this house was historically significant. He recognized it as a nicely styled 1801 Georgian cottage. His customer caught Dickenson's enthusiasm for the place and decided to buy the whole building and make a guest cottage out of it.

Dickenson's crew moved in and dismantled the 18x30-foot story-and-a-half house. As it came down, Dickenson sat in the middle of the house at a card table making measured drawings, trying to catch the details before they evaporated. He and his crew labeled everything and took photos so they could put all the parts back together.

Their basic approach was to remove the roof and cut the walls into eight large panel-like sections.

A boom truck is a real handy tool in this kind of work," says Dickenson. "First we removed the roofing and plucked the rafter trusses off the plates. Then we set them right into the truck." The second-floor and first-floor joists were removed next.

To dismantle the walls, they made a lap-joint cut in the plate of the long front wall right over the front door. They braced the post/plate joints with plywood gussets and added 2x6 braces along the bottom of the posts and studs. Then they drilled out the wood pins in selected mortise-and-tenon joints. After tying forks and chains from the boom to the plate, they just gave the wall a kick, and it popped right out. The boom loaded the entire wall, complete with exterior finish, onto the truck.

A year later they reassembled the cottage near the client's main house and finished it off with all the modern conveniences.

Dickenson gives a "ball park" estimate for his buildings, but only proceeds on a cost-plus basis. The project described here cost $100,000 including foundation and all mechanicals. That was 25 percent over the estimate and about the same as new construction for a house of the same size and quality.

"It's real expensive," says Dickenson. ``It's always amazing how much it really costs to do good work'' on old buildings.

For more information on dismantled houses contact: Les Fossel, Restoration Resources, P.O. Box 525, Alna, ME 04535, 207/586-5690; and Todd Dickenson, Dickenson Restorations, 4606 Hunt Road, Hillsborough, NC 27278, 919/732-5439. ■

John Leeke, of Sanford, Maine, restores and maintains historic buildings. He also consults with contractors, architects, and owners working on older buildings. If you have questions regarding preservation work, you can contact him c/o The Journal of Light Construction, RR#2, Box 146, Richmond, VT 05477.