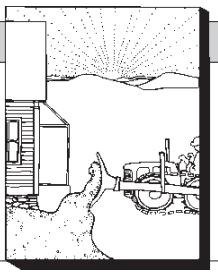
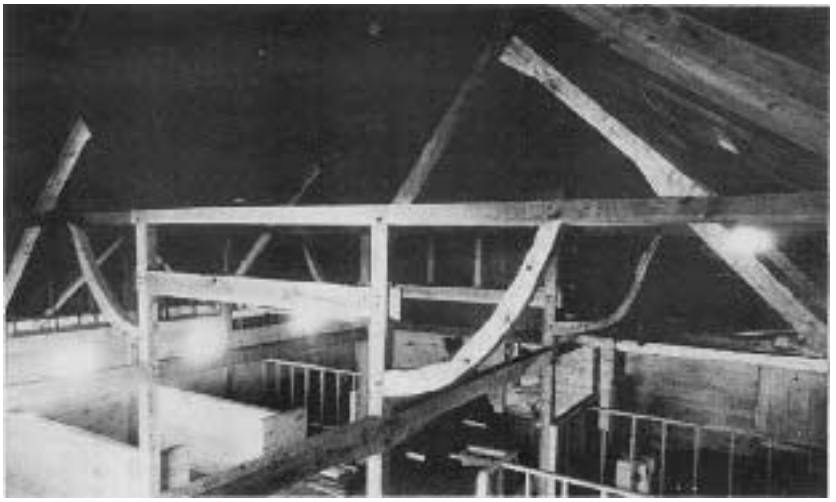


Saving Barns & Old Ways

Over the past 30 years, Richard Babcock has restored more than 75 barns, either on site or by moving them to his workshop in Hancock, Massachusetts, near the New York border. Most of the antique barns have been converted to homes or museums—and, in one case, a performing-arts center.

When this barn is done, however, it will be a barn once again. Located in Dedham, Massachusetts, the building is owned by the Animal Rescue League of Boston. After it has been completed, it will shelter rescued horses, sheep, pigs, cats, dogs, and other four-legged creatures as it has since the League purchased the barn in 1907.

Babcock found the English-framed building in tough shape, with decayed timbers, termites, and carpenter ants. Because the barn had been rebuilt in the 18th century, some of its original features had been lost. Babcock's goal in reconstruction was to remain faithful to the barn's original style—which dates to the late 1600s—but to add a few special touches both to honor the founder of the League and to show off the skill of the craftsmen.



Many major beams had to be replaced in this barn restoration. The trestle-like anchor beam in the center is joined at either end by a dovetail tenon—with a wedge driven at the top to lock it in place. Note also the beams over the fronts of the stalls with widened "gunstock" ends, which eliminate the need for bracing there. Gunstock posts and beams, and curved "signature braces," were used by the first American settlers, who brought the ideas over from England

The special touches are four curved "signature" braces, which replaced the straight braces found in the 18th-century version. Such curved braces, says Babcock, were traditionally used by prideful English barn builders as personal signatures. The curved beams were fashioned from maple, apple, cherry, and other hardwoods Babcock found in the local woods.

Another flourish Babcock added was "gunstock" posts and beams, which, he said, would have been used in the original barn. Gunstock posts and beams are flared at one or both ends, thus resembling a gunstock.

The gunstock posts on the outside wall are made from inverted oak trees, which takes advantage of the natural flare and strength of the base of the tree. The flared tops support the 30-foot-long cross beams (the originals) and the wall plates; both are mortised and tenoned to the top of the post.

The girts over the fronts of the stalls are also flared at each end where they are mortised and tenoned to the large central posts (anchor-beam posts). Here the gunstock ends eliminate the need for angle supports, which might get in the way of workers. These "gun girts" will support the second-floor beams when the barn is completed.

Another authentic and functional feature is the two-inch-thick elm flooring for the animal stalls. Elm was traditionally used because it resists the ravages of animals and their wastes so well. Babcock tracked down some of the now-rare wood, which had been cut on a Vermont campus to make way for expansion.

All in all, Babcock and his crew replaced 19 major timbers. Each was authentically hand-hewn with a scoring ax and smoothed with a broad ax and, finally, with an adze. One result was a 16x24-foot bed of wood chips a foot deep. The other result was a handsome working barn which, Babcock says with pride, is good for another 200 years. The curved beams, he hopes, will help recapture a piece of English and American barn history. "Some men are called to save souls," says Richard Babcock. "I am called to save barns."

Only butt logs from oak trees are suitable for gunstock posts. Here a restoration worker scores the log with a scoring ax—the first step in the hewing process.

From apple tree to signature brace. Master barn builder Richard Babcock smoothes a scored log with a hewing ax (above,) and finesses the final finish (right) with an adze