## Backfill

## Song of the Nightingale

In wood flooring, as in most of carpentry, the quality of the product is the measure of the installer. By today's standards, that means a floor should have tight joints and be smooth, level, and free of squeaks.

But it hasn't always been that way. In feudal Japan — where precision timber joinery was refined to a high



Careful craftsmanship and the right metal fittings are the secret to a long-lasting and loudly chirping floor, as in this example from Nijo Castle in Kyoto, Japan.

degree — a carpenter with a wealthy client might be called upon to install an *uguisubari*, or "nightingale floor," which was designed to emit a chorus of birdlike chirps under the slightest foot pressure anywhere on its surface.

These floors served as early security systems: Alerted by the squeaking floor to the presence of an intruder, the homeowner could spring out of bed and grab a sword. Judging by the examples that survive, most such floors were constructed in hallways, with stout floorboards running crosswise and supported by parallel beams at each end.

Len Brackett is a woodworker who completed a traditional five-year apprenticeship in Kyoto in the 1970s and now builds traditional Japanese structures from his workshop in Nevada City, Calif. He recalls examining an *uguisubari* that can still be seen (and heard) at Nijo Castle, a massive, heavily fortified complex built in the early 1600s as a sort of summer home for the ruling Tokugawa shoguns.

"The boards are planed to be slightly convex at the bottom," he explains, which allows them to rock almost imperceptibly from side to side when walked on. The hooked upper end of each fitting engages a mortise in the edge of the floorboard, while the lower end is nailed to the support beam. In addition to holding the boards in place, the fittings respond to the rocking action of the boards by flexing back and forth, squeaking against the nails as they do so.

Sadly, with the development of electronic security systems, construction of traditional nightingale flooring seems to be a lost art. Could its revival represent a business opportunity for a skilled and determined modern flooring contractor? Perhaps, but he or she had better be ready for a steep learning curve — and, no doubt, for the occasional callback from a dissatisfied customer annoyed by a floorboard that won't squeak. — *Jon Vara*