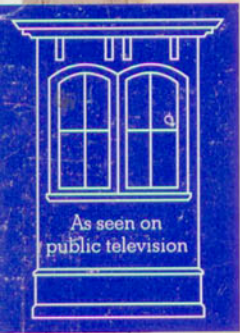


This Old House

Renovation

IN SAVANNAH



PLUS:

Air Conditioning

Gutters

Cordless Drills

Workbenches

Plasterwork



Norm Abram with Mills and Marianne Fleming inside their new house, site of this season's TV show

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ORNAMENTS PLA

With techniques from the Italian Renaissance, a ceiling becomes an eye-catching canvas for three-dimensional artistry.

BY THOMAS BAKER PHOTOGRAPHS BY SIMON WATSON

The rubber mold is peeled back to reveal a new plaster ceiling medallion, an exact replica of the one in the parlor of Mills and Marianne Fleming's Savannah home.

T A L T E R

S T E R

MILLS FLEMING ADMIRERED the ceiling medallion in the parlor of his new old house at 7 West Gordon Street in Savannah. Its deep Georgian-style relief, complete with doves and fruit, added an air of elegance and distinction to the room's high ceiling. "Wouldn't it be nice to have something like that in my upstairs bedroom?" he wondered. It so happened that restoration work at the nearby Lucas Theatre, an entertainment palace built in 1921 by Fleming's great-grandfather, had brought ornamental plaster craftsman Jean-François Furieri to town. Furieri agreed to create a replica of the parlor medallion and to mount it in the Flemings' bedroom, and he invited *This Old House* to follow every step of the process.

A third-generation artisan, Furieri is passionate about plaster. "You know, this is a very sensuous

material," he says as he works wrist-deep in the stuff. It's easy to see what he loves about it: its transition from slippery liquid to stonelike smoothness, its radi-

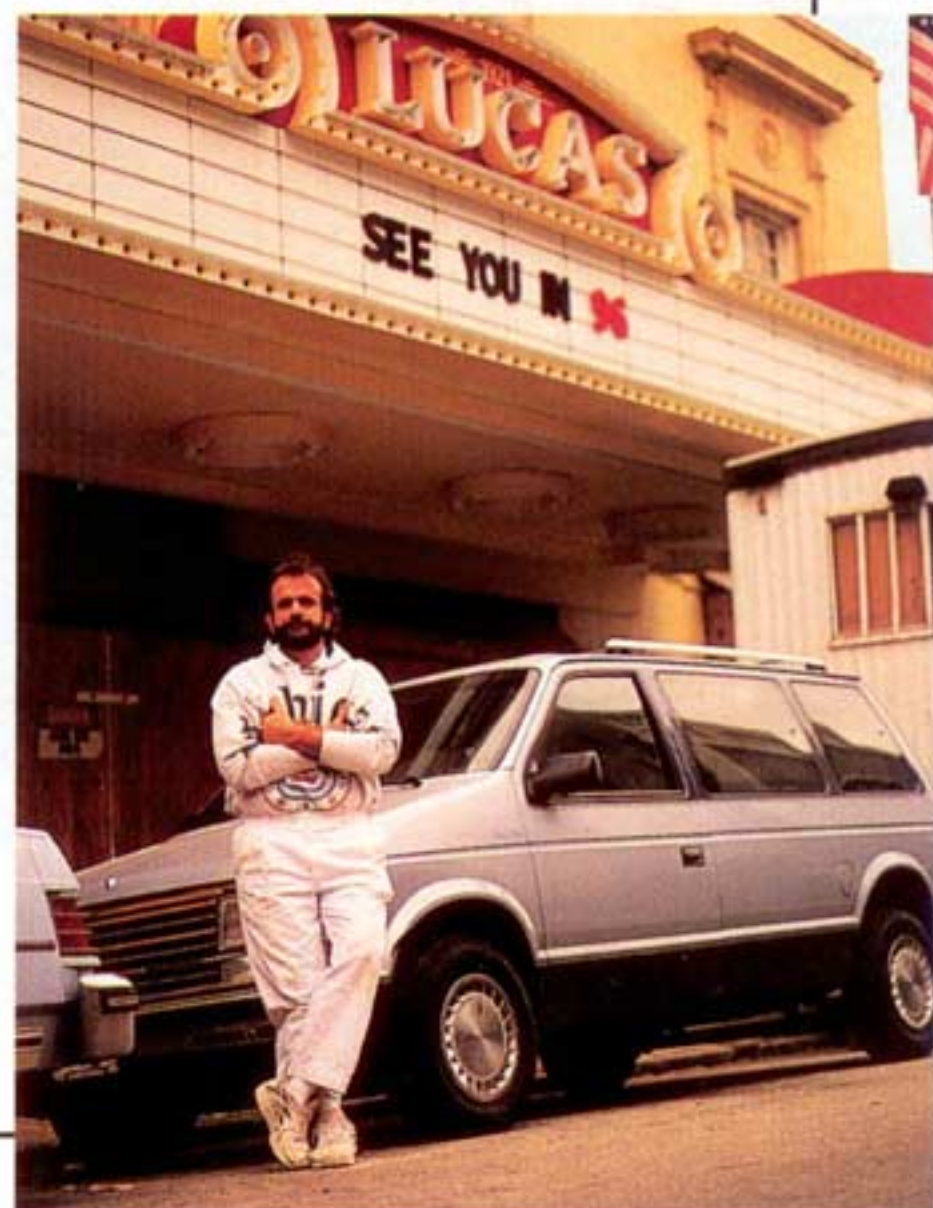


Eight pairs of griffins surround the 6½-foot-diameter ceiling medallion of Savannah's Lucas Theatre. All the plaster ornaments in the theater were restored by Jean-François Furieri.

ant warmth as it sets and the satisfaction that comes when a mold is lifted and its mirror image, still damp, lies exposed. Ask Furieri about similar ornaments made with polyurethane foam, and he sneers. "Look at the vapors the adhesives emit. Look at the toxic chemicals it releases when it burns. Look how soft its edges are compared with a crisp plaster profile. And how do you repair it if it's ever damaged?" By comparison, plaster is stable, repairable, nonflammable and nontoxic. "I eat the dust all the time," he says with a laugh. The only serious enemy of gypsum plaster is water. "Keep it dry," says Furieri, "and it will last forever."

MASTER OF PLASTER

Like the skilled *stuccotori* who fanned out from Renaissance Italy to decorate the palaces and manor houses of Europe, ornamental plasterer Jean-François Furieri is a guy who moves around. Born in Algeria, this son and grandson of Italian sculptors learned his trade the old-fashioned way: in his grandfather's studio. "Every day I hear the same thing—'Do it this way. Do it over again'—until my ears are full." He and his family joined the exodus of *pieds noirs* to France after the Algerian Revolution. He lived in Spain for a while, won laurels in national judo competitions and studied law, but ultimately the family trade lured him back. Then he followed his wife to her native Toronto, where he established Iconoplast Designs. So far, this multilingual 39-year-old has restored the plaster in 11 theaters in North America, often starting with nothing more than an old photo or plaster shards. With his work on the Lucas Theatre nearing completion, he's on the lookout for new jobs, perhaps in Charleston or New York City. Fortunately, his skills and studio are easily transported: "You could build a whole theater with the tools in two suitcases," Furieri says.



Making the **Mold**



1

To duplicate this ceiling medallion, Furieri first makes a rubber mold in situ by brushing layers of two-part polyurethane rubber into every crevice and three inches out onto the ceiling. Nine coats of rubber, each about 1/4-inch thick, were required to make the mold thick enough, an operation that took nearly eight hours.



2 After curing overnight, the mold is covered with a plaster "mother case," a stiff, 3/8-inch-thick shell built up with coats of brushed-on plaster reinforced with layers of plaster-soaked burlap. The case will cradle the rubber mold when the cast is made.

3

A wood rack makes it easier to take the mother case off the ceiling and supports the case during casting. Furieri steadies the rack with wires attached to the ceiling, then anchors the frame to the case with burlap ties sopped in plaster. Once the ties set, Furieri and his assistant, Tomás Silva, cut the wires and pop the case off the mold.



4

Furieri and Silva peel the mold from the medallion. A release agent, sprayed on the medallion before the rubber is applied, makes removal possible.

Casting the Medallion

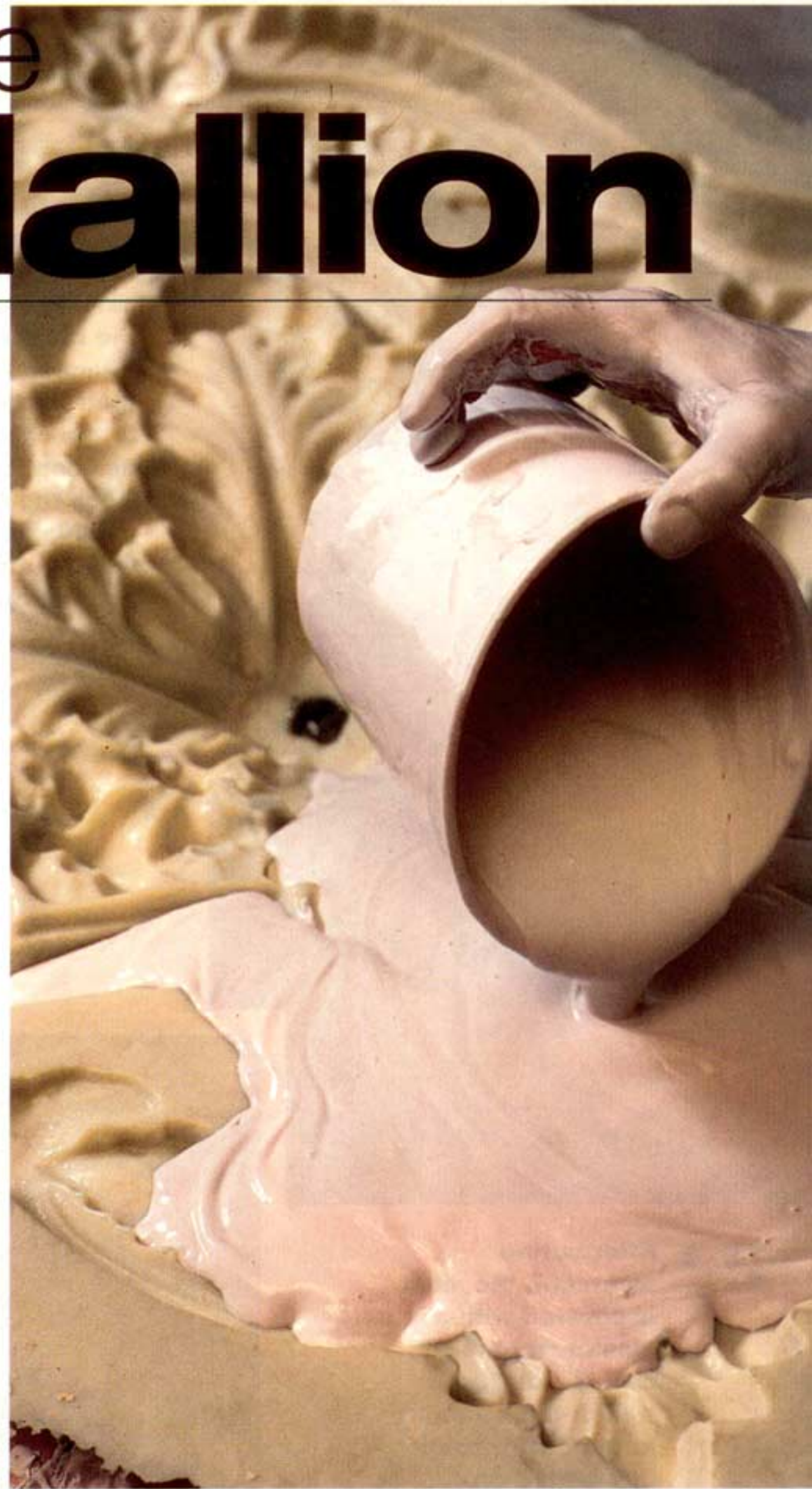


1

"The secret of plasterwork is in the gauging," Furieri says. He slowly sifts molding plaster into about six quarts of clean, lukewarm water, stopping only when a layer of dry plaster (called *fleur d'eau*) remains on top. After slaking (soaking) undisturbed for about five minutes, the plaster is ready to be mixed.

2

Furieri mixes small batches of the wet plaster, called the gauge, in a separate container by stirring it vigorously with his fingers. This keeps air out of the mix and makes it easy to find and break up any lumps. The longer he mixes, the shorter the setting time and the stronger the finished product.



3

Creamy plaster flows into the medallion's rubber mold, held upright by the mother case. To avoid trapping air between mold and plaster, Furieri first sprays water on the mold, then brushes a thin layer of plaster over its surface and thumps the case on the table. "You need a perfectly intimate mix," he says. There's no need for a release agent.





5 ↑ As the plaster's working time nears an end, Furieri quickly builds up thickness along the medallion edge. Before the plaster sets, he will level the edge with a metal joint rod (which resembles a cabinet scraper), then score or "key" the plaster for a better bond with the ceiling.



6 → The moment of truth: Once the plaster sets, the mother case is removed and the mold is peeled off to reveal a perfect replica of the Flemings' medallion, right down to surface irregularities caused by paint.

4 ←

Furieri presses a layer of burlap reinforcement into the wet plaster. For this medallion, he lays down two pieces of fabric, making sure to brush the back of each with a layer of plaster for greater adhesion and strength.



PLASTER HISTORY

While plaster has covered walls since the days of the pyramids, Greeks in the fifth century BC were the first to mold plaster for ornament. The Romans adopted the craft, but it died when the empire dissolved. Then, the story goes, a 13th-century Italian monk accidentally spilled plaster on a marble statue and rediscovered the material's marvelous molding properties. By the 15th century, at the height of the Italian Renaissance, plaster craftsmen known as *stuccatori* were busily filling orders for classical decoration. Little has changed since. Brushable rubber has replaced animal-hide gelatin for molds; fiberglass reinforcing mesh can substitute for burlap (hemp), sisal or goat hair; and polyvinyl acetate is added to improve adhesion. But the techniques, and the gypsum plaster itself, are no different from those used in Donatello's time.

Installing

Furieri and Silva hoist the 60-pound medallion into place on the bedroom ceiling. Chalk lines, which mark the center of the room from the breast of the fireplace, and nails align the points of the medallion's spandrels. The back of the medallion is bonded to the ceiling with a thick layer of plaster mixed with polyvinyl acetate (PVA) wallpaper adhesive. Galvanized deck screws also fasten the medallion to ceiling joists through predrilled, countersunk holes. The screw holes and ceiling-medallion joint will be disguised with plaster.