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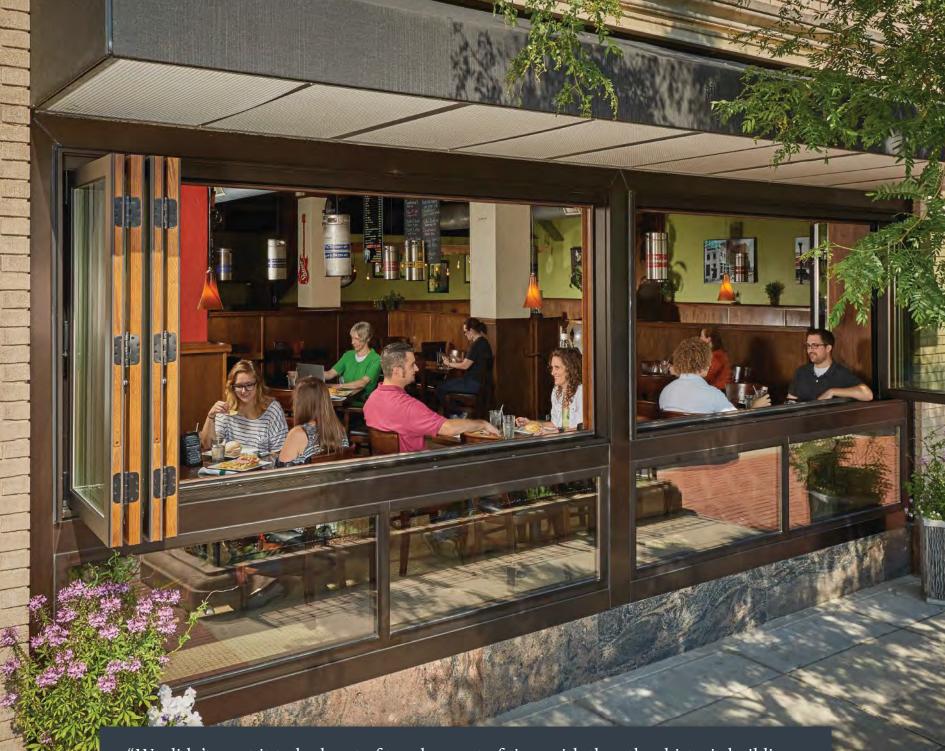


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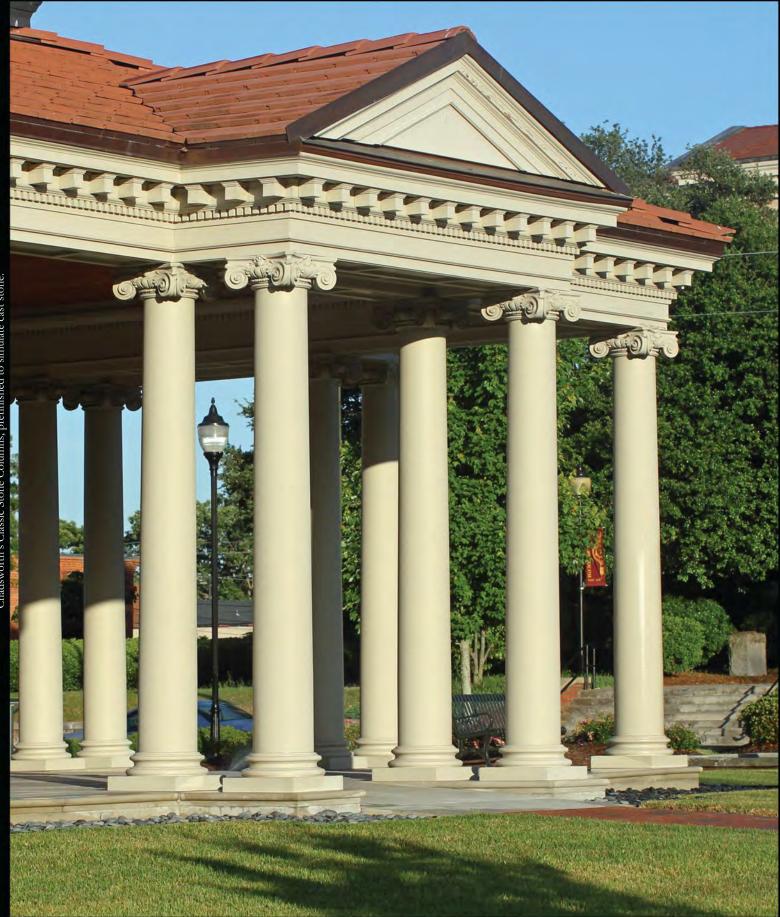
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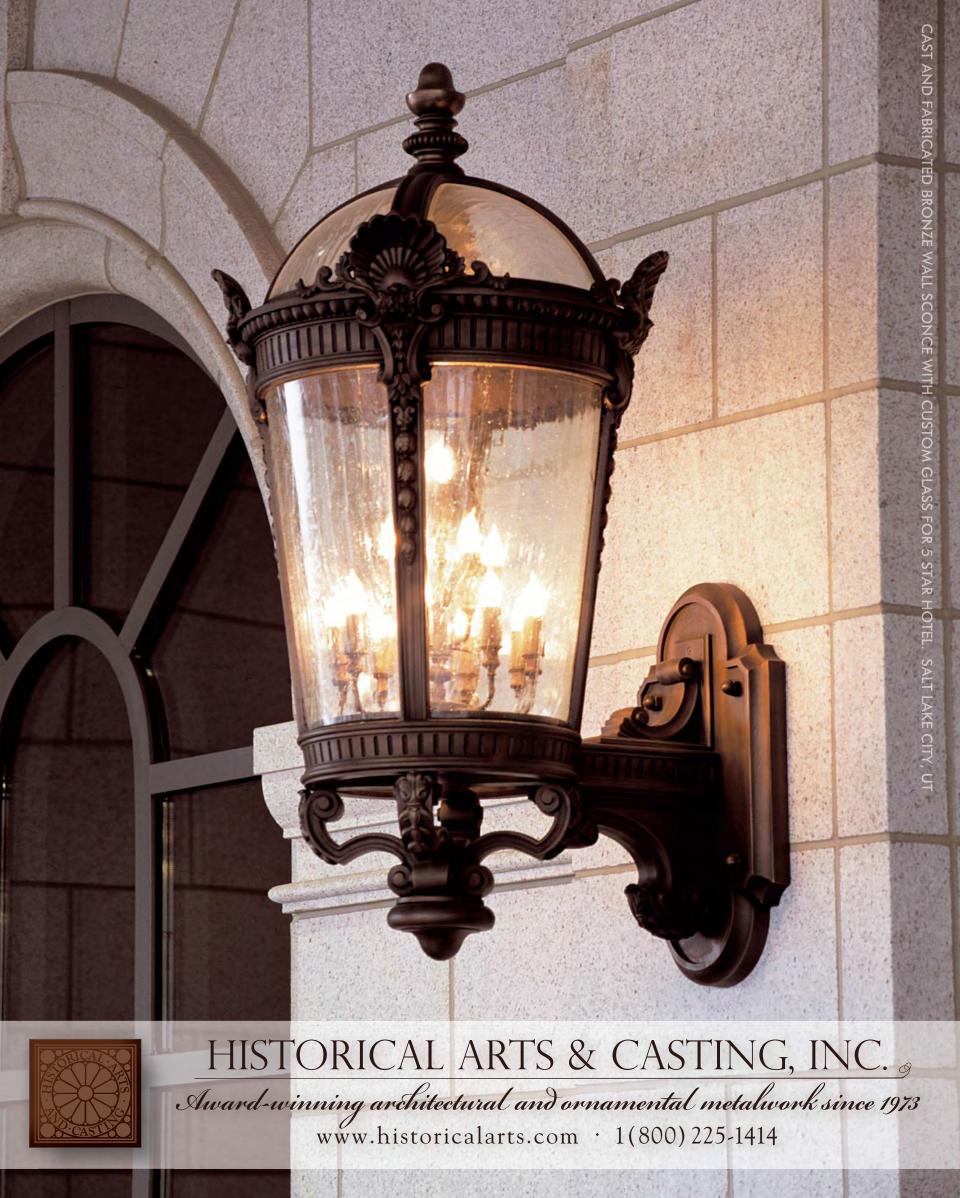


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ON THE COVER Patrick Ahearn Architect transforms a historic library on Martha's Vineyard into a vibrant heritage center. Photo by Greg Premru

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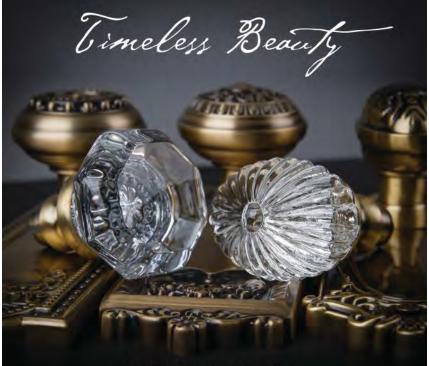
Shown: Inspired Collections / New England Kitchen

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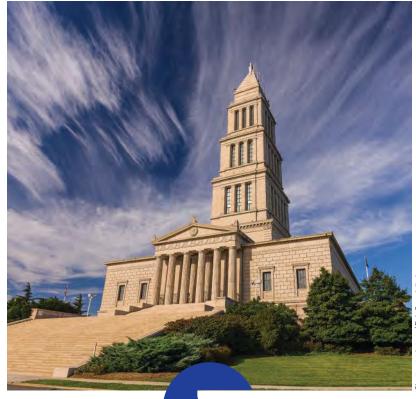




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INDUSTRY NEWS



TRADITIONAL BUILDING C O N F E R E N C E

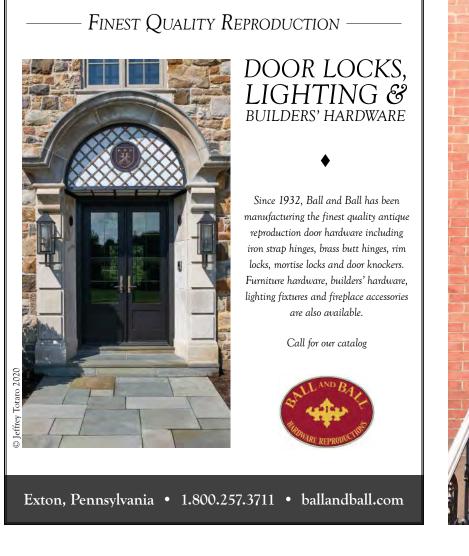
Alexandria, Virginia April 6-7, 2022

The Traditional Building Conference Series is back live and inperson again in 2022. The first stop is historic Alexandria, Virginia, April 6-7, at the George Washington Masonic National Memorial.

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INTERVIEWED BY KILEY JACQUES

Using a patented system of interlocking single-story courtyard homes, this 36-unit project provides a compact and accessible alternative for high-density affordable housing in Tavernier Key, Florida.





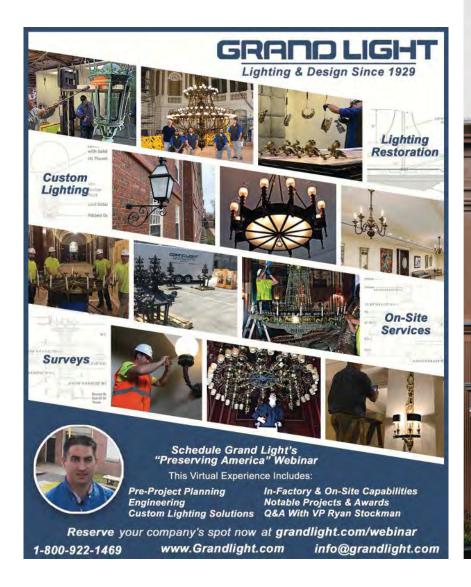


Andrés Duany on Affordable Housing and Classicism

The New Urbanist addresses one of the biggest hurdles to mixed-use projects.

Image: Shoppe Manufacturer of Fine Wrought Iron Image: Shoppe Image: Shoppe

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"WE DON'T HAVE A TECHNICAL PROBLEM WITH AFFORDABILITY, WE HAVE A CULTURAL PROBLEM....THE REAL POWER OF CLASSICISM IS ITS POWER TO OVERCOME RESISTANCE."

—Andrés Duany, Architect and New Urbanist

LEFT The master plan shows how the one-story cottages respect the surrounding single-family context, meeting setback and height requirements with no variances. The necessary 54 parking spaces occur along neighborhood-scaled streets, as opposed to one communal lot. Each unit's separate street address is reinforced with a distinct entryway framed by gabled parapets, a feature honoring the architecture of a beloved nearby restaurant and inn compound.

Andrés Duany, principal of Miamibased DPZ CoDesign and founder of the Congress for New Urbanism, shares his thoughts on how to make affordable housing more "acceptable." He views Classical architecture as the solution to one obstacle to getting multi-use projects built—namely, warring styles. Following a traditional architectural style, he argues, is the best way to weave affordable housing projects into the fabric of urban centers.

1 What are your key takeaways regarding affordable housing and Classical design?

I'm going to be controversial here. I think style is camouflage, which is effective when overcoming resistance; and there is resistance to mixed-use projects. If style is expressed differently, it is not accepted. For example, think of three side-by-side buildings of different styles and varying functions; they are jarring, and people don't like it. If everything is done in the same traditional style, on the other hand, people hardly notice there is a difference in usage.

As an Urbanist advocating for diversity and mixed-use development, style is useful—and the same thing goes for affordability. Take, for instance, 14-footwide townhouses next to a 70-foot-wide mansion in the same brick Federal style; there is no problem there. Affordable housing can be smaller, but if it doesn't look different, it will be accepted.

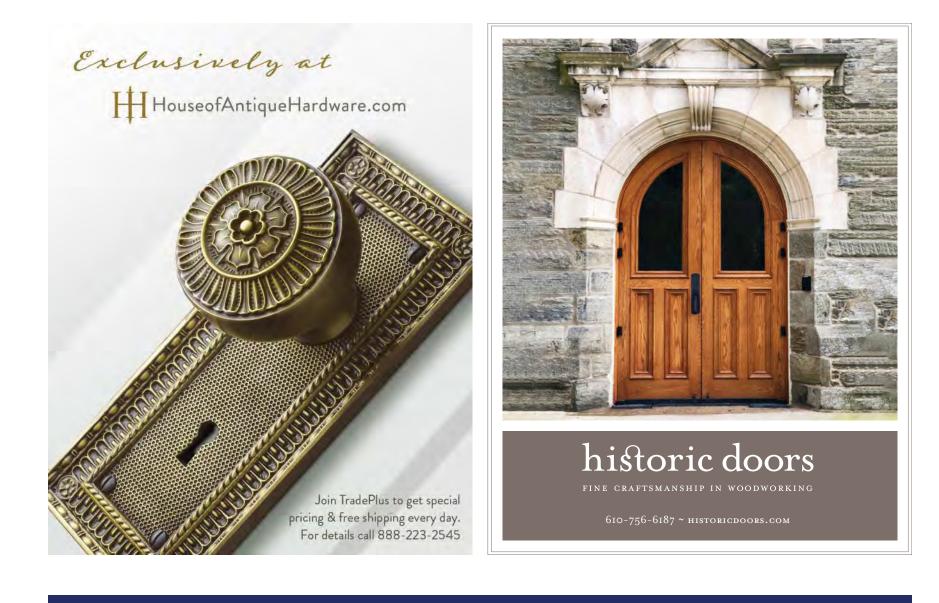
2 What does "affordability by design" look like to you?

First, construction methods are what they are because the building codes determine it. Even the lowest level of construction is pretty high because new code requires things like better insulation and higher-grade windows. There is less choice about the technologies used because the codes are gold-plated now. What remains is the cultural aspect.

Take the standard box, sometimes called "Five, Four and a Door," and give it a prefab Classical portico—two columns and a pediment—made from fiberglass. That's about \$10,000. That house will sell for \$30,000 or more. For me, that's magic. I spend \$10,000 and I profit \$20,000—Classicism is a magic potion. And I will use it to make acceptable affordable housing. Because the problem we have with affordable housing is not about cost, it's about culture. People don't want things that look like a mobile home or a ranch house. The best way to overcome that is to put a Classical overlay on it.

Don't get me wrong. I do not think that Classicism is sent down from God himself. I know many traditionalists think it is intrinsically beautiful and virtuous. I don't. I view it as the only mechanism for building culturally acceptable affordable housing.

Even in more progressive places like Seattle and San Francisco, affordable housing gets blocked—and that's the problem. Put Classicism on it and see what happens. Of course, the catch is: It doesn't remain affordable if people really like it, but that is a separate problem.





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THIS PAGE Located in Coral Gables, Florida, and consisting of two small city blocks, Bermuda Village is a grouping of 22 single-family courtyard residences and eight condo flats arranged as two duplex compounds. Rendered in a tropical Bermuda style, the village was created in the spirit of the city's original exotically themed residential "villages" built in the 1920s by developer George Merrick.

3 How do you incorporate ornamentation into affordability?

Classical ornamentation is prefabricated. It is the only open-shelf ornamentation system in the United States. If you don't specify, say, a door jamb or window or gutter, it automatically comes with a Classical profile. Often, the least expensive door, window, or molding is Classical. People think Classicism is expensive, but it doesn't have to be.

4 Can you talk about some of your related initiatives that are in development?

The mobile home industry, which pro-

vides much of the affordable housing in this country—for as little as \$40 to \$50 per square foot-is desperately in need of good design. I believe the Classicist crowd should work with the mobile home industry. It is profitable and the industry needs us. We are starting to pay attention to that. What's needed is decent profiles. We must help improve the look of the products being used. It's about taking materials that have an excellent performance rating but a dismal aesthetic presentation and applying our talent to it, like Steve Mouzon, a Classicist, did. He is the reason materials like HardiePlank fiberboard siding have

better, thicker profiles. We need to do more of that.

We don't need any more Classical mansions. Doing good traditional houses has been done. Let's challenge architects to take on the industry and improve everything for everybody. The thing about my initiatives is that they are not what anybody else is doing. That's why they are initiatives. I am not purporting the same old stuff. We've got to move forward. My generation's responsibility was to revive Classical architecture, and we did that. The mission of the younger generations can't be to simply follow us. They need a new mission.



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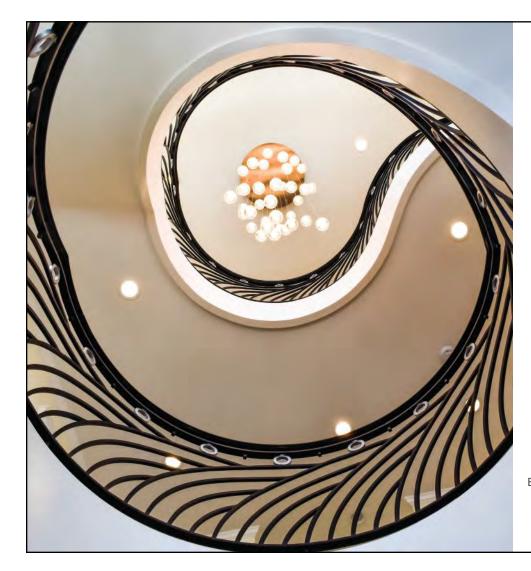


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THE TRADES

BY GORDON H. BOCK

Copper windows complement the jade green terra-cotta cladding of The Fitzroy, a 10-story luxury apartment building in New York City evocative of Art Deco architecture.

Fenestration goes non-ferrous in a neo-traditional high-rise.

Historic architecture abounds in the eclectic West Side New York City neighborhood of Chelsea, and rising among the mix of 1850s row houses, former factories, and trendy art galleries is a new, two-tone, Art Deco-inspired building right in step with local color.

"The front façade of The Fitzroy is big on copper," says Tim McFadden, director of sales and distribution at Cold Mountain Custom Window LLC, in Putnam Valley, New York. His firm works with architects and contractors across the United States to distribute the product line of Mixlegno Group, an Italian manufacturer known for high-level craftsmanship and unique window and door systems, such as those used at The Fitzroy. "It's all high-end," says McFadden, "so it works well with traditional building projects." In fact, Mixlegno has built an international reputation for combining wood and sought-after metals, such as bronze, and the windows at The Fitzroy, which are copper on the outside, white oak inside, are a prime example. Perhaps it should be no surprise coming from a company based near Venice, with its traditions of handwork and historic buildings.

What's more, in the hands of design team Roman and Williams and developer JDS/Largo, the pinkish-orange tones of natural copper and the intense verdigris of its aged patina comprise the striking central motifs of The Fitzroy. The exterior is covered in deep, jadegreen, glazed terra-cotta cladding that is accented by rich copper details in the windows and wide spandrels. Because of the way it's treated, the copper has a dynamic character, progressing from warm and even to variegated as it ages. Copper is an important theme in the interiors too, explains Andrea Zorzi, president of Mixlegno. "Bathroom plumbing fixtures and tubs are often all in copper," he notes, "a kind of twin with the windows." Kitchens, too, feature copper stove hoods and lighting fixtures, with elements repeated outside and inside throughout the project.

However, making copper windows for this project takes more than some surface sleight-of-hand. Explains Zorzi, "Because copper is very soft, forming sheet copper would not be precise and have any design in the final profile. So, we've found a way of fabricating an extruded base, 2mm to 2.3mm thick, in a very sophisticated design on the exterior." He says it's unique, not something standard in the market, "and we designed it right for the architects."

Nylon clips attach the extruded

profiles to the wood sash and frame, so the two materials will not be in direct contact, but separated by 3mm. "This allows air circulation between wood and metal, so the wood seasons naturally and prevents wood deterioration." Moreover, this technology allows the two materials to naturally react to environmental thermal changes without conflict between the differences in wood expansion and metal expansion.

When all the parts are welded together—"with joints basically invisible," says Zorzi, "because they're welded from behind, then ground"—everything is cleaned by hand. Then they apply wax to the copper outside as temporary protection to keep it natural. "This allows the copper to oxidize over time and, in years, change color. So it's a unique, very sophisticated aesthetic." No less sophisticated is the window **BELOW** A mock-up demonstrates the sophisticated sash profiles possible with copper. Though readily shaped, the metal in sheets is soft so Mixlegno Group has perfected methods for extruding it in 2mm-thick members for window construction that can be combined with desirable woods such as oak.





ABOVE Copper also follows the oak-clad windows indoors in the form of kitchen and lighting fixtures, plus bath faucets, showerheads, and tubs.

glazing. "It's double laminated glass," explains Zorzi, "laminated glass on the outside, then space bar, then low-e laminated glass on the inside." He points out that laminated glass is particularly well suited to urban projects because, being layers of dissimilar materials, it dampens sound transmission.

Notably, the glass is one window component specifically engineered not to include green. "Italy is known not only for their craftsmanship but also for their glass," explains McFadden. "The standard there is low-iron glass, which is ultra-clear—no greenish tint—and some-



ABOVE Indoors, The Fitzroy windows present the warmth of white oak, quarter-sawn to maximize grain and protected in a light finish.

thing you pay a premium for here in the United States."

The scores of unique windows are a defining part of the building facade. "There's a combination of operable and fixed units," says Zorzi. "Sometimes operables separated by fixed units, and both in-swing and out-swing casements." He recalls that for delivery they divided the project into three steps, starting with floors 10, 9, and 8 as the first shipment, followed by 7, 6, and 5, then down to the first floor as the last shipment.

Inside, all the windows are oak, as

specified by the architects for a variety of reasons. "It's a very high-quality wood," explains Zorzi, "mechanically, very strong and stable, and it's also a sustainable wood." He adds that the oak is also quarter-sawn, a cut that maximizes stability and beauty.

In fact, though the window interiors are protected by a finish, it's neither a clear varnish nor a conventional paint. "In Italy, we call it natural paint," he says, "not a very heavy, colored paint but a thin coating." The goal is to still see and feel the grain. "With such a beautiful wood, it's a shame to cover it over." ABOVE The brownish-orange cast of copper is a natural color companion to jade green, and together they make up The Fitzroy's striking appearance. What's more, the unprotected expanses of copper in windows and spandrels will change color and character over the years as it ages and takes on patina.

HISTORIC MATERIALS



Hinge History

Hinges were such an important building component, the Romans designated the goddess Cardea to watch over them.

Hings are part of every door, permitting the door leaf to open and close. They are used on entrances, cupboards, casement windows, pianos, and smaller objects, such as jewelry boxes. There are many types of hinges for these different purposes, each providing the required pivoting function.

HISTORY

The earliest known hinge is the vestige of a socket in stone that received the pivot for a heavy wood fortification door in Hattusa, Turkey, c. 1600 BC. *(Figure 1, pg. 26)* In 957 BC, chapter 1 of Kings 7, verse 50, describes Solomon's temple in Jerusalem as having gold doors with gold "sockets" for the innermost room. A bronze hinge found in Egyptian ruins dates to c. 760-650 BC and was inscribed with a subsequent king's name to mark the succession.

Similar pivot hinged doors were found in Mesopotamia from c. 5th-4th century BC. The Romans were serious about their hinges, designating the Roman goddess of the hinge, Cardea (*Figure* *2, above)*, to preside over both door and cabinet hinges. By the late 17th and 18th centuries, H- and L-strap hinges had become common.

In the North American context, hinges were obtained from England into the 17th century, until blacksmithing emerged as a trade and strap hinges were forged locally. One particular blacksmith famous for his hinges was Charles Hager. After emigrating from Germany in 1848, he took over the blacksmith shop in St. Louis, and the company began manufacturing wagon wheels and hinges for wagon doors. Hager evolved that design into the T-hinge (*Figure 3, above*), then the ball bearing hinge c. 1899. The butt hinge emerged in 1900 (*Figure 4, above*). Recessed into the frame and the door leaf, it took over as the hinge style of choice.

HINGE TYPES

Early hinges had two "knuckles." The "pintle" is a fixed pin attached to the frame, over which the "gudgeon" (attached to the door so it can be lifted off) is placed. Paumelle hinges are similar, but the pintle is attached to the door and fitted down into the gudgeon. A special configuration of the pintle, the gudgeon, and the paumelle is the olive hinge, where the pintle and gudgeon are enclosed and form an olive shape. As the hinge evolved, it came to have three parts: the flanges, the jamb, and the stile. The stile has gudgeons and a pin, which threads alternate gudgeons and connects the two flanges. The hinge can be "loose," as in removable, or "fast," as in fixed. The pin can have no detail, being flat on the ends, or it can have an array of decorations, such as ball, acorn, or finials on either or both ends.

The strap hinge evolved to have two knuckles, and more later on. The more knuckles, the less strain on each one. The T-hinge is differentiated from a strap hinge by a jamb flange that is taller than the stile flange. Both strap and T-hinges can have simple or elaborate stile flanges mounted exposed to the door. The later butt hinge, so named because it is mounted where the door abuts the jamb, is mortised into both the door and frame, with just the knuckles showing.

Originally, hinges were placed two to a door and were sold in pairs because doors never used just one. In the early 1950s it was understood that the more hinges on the door, the less strain on the hinge, and the practice of placing a third hinge at the midpoint between the other hinges became standard. This evolved into the industry of 'one and a half pair butts.'

With the understanding that more knuckles experienced less strain and that more hinges better supported heavy doors, eventually the continuous or "piano" hinge was developed to support a large leaf.

The knuckles began as plain bearing—metal on metal. Ball bearings evolved to make the door operate more smoothly. Spring hinges (*Figure 5, next page*) evolved as a way to automatically close the door but were suitable for only lighter screen doors. Rising butt hinges are a specialty type, where the door leaf is lifted about a half inch as it opens, to clear carpets or uneven floors.

Hinges can be highly decorative in their exposed parts. When the hinge moved to the butt style, the decorative nature continued through the 1800s and early 1900s, but has gradually been phased out and replaced by the utilitarian style used today.

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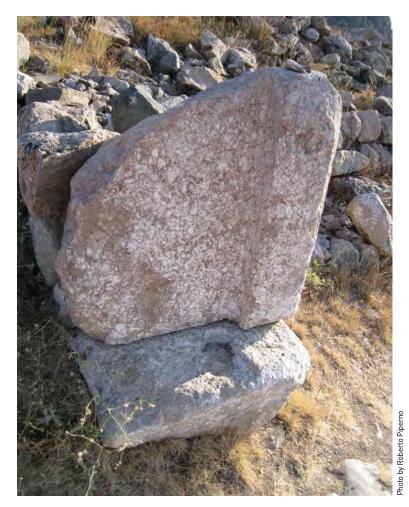


FIGURE 1 Stone with socket from fortification door in Hattusa, Turkey, c. 1600 BC

front



FIGURE 5 Screen Door Spring Hinge by Shelby Spring Hinge Co., c. 1880

BELOW Bronze five knuckle butt hinge, Holly pattern, by Yale & Towne Manufacturing Co., c. 1880s. The hinge was much wider than the door thickness, and the portion that was visible when the door was closed was decorated consistent with the faces visible when open.



back



front

FAILURES AND REPAIRS

The most prevalent problem with hinges is when the hinge is loose. This is typically caused by the loss of a screw, or failure of the wood to support the screw. Screws should be replaced immediately, since the loss of support of the flange can cause racking of the hinge and damage to the knuckles. Where the cause is wood failure, the screw hole can be filled with a mixture of permanent woodworking glue and sawdust. Once dry, new screws of a matching slot configuration can be placed.

Another common problem involves the pin that connects the knuckles. Pins that drift out of position can be tapped back down into the knuckles using a mallet.

If the knuckles have failed, determine the cause of the failure. The door may have been mishandled, such as being wedged open. Hinges can possibly be placed in a padded vice and manipulated back into position. However, if the pocket pivot hinge developed by the W. C. Vaughan Co. of Boston in the 1920s, now known as the Harmon Hinge. This particular hinge was manufactured by the Willamette Hardware Co. and was salvaged from New York City's Waldorf Astoria Hotel.

RIGHT Recessed



weight of the door is too great, additional hinges may be required, or they may need replacement with a heavier duty hinge.

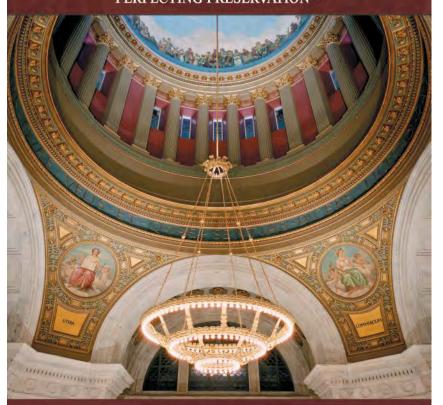
Where hinges are lost or damaged beyond repair, replacements may be found at antique stores and architectural salvage companies. In an extreme case of significant properties, hinges can be recast by making a mold of one of the existing. Forged hinges can be replicated by iron workers using traditional techniques.

The operation of the door very much depends on the hinge. Historic doors typically had all hardware matching in style and material, consistent with the period in which the doors were installed. Hardware should be repaired first, to maintain the historic fabric. If that is not possible, replacing hardware should always be done in kind, so that the appearance of the door, typically the first part of the structure that is encountered, is consistent with the whole of the building.

SUSAN D. TURNER, FAIA is a

Canadian architect specializing in historic preservation of national registered buildings. She is a senior technical architect at Johnson Lasky Kindelin, an architectural firm specializing in the repair and preservation of historic buildings. She can be reached at susan_rktect@hotmail.com

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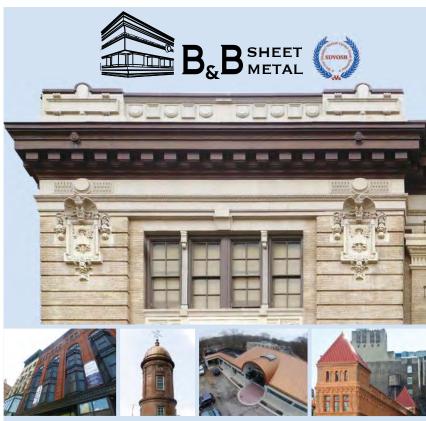
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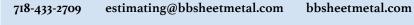
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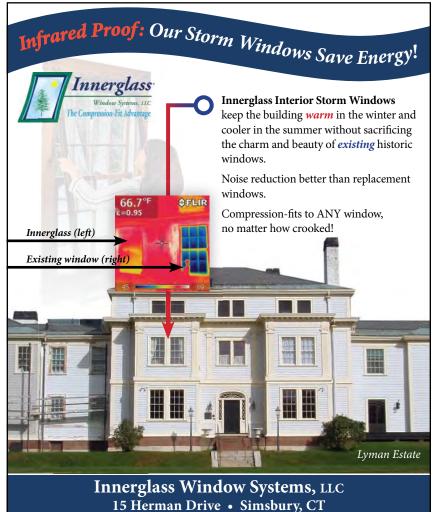
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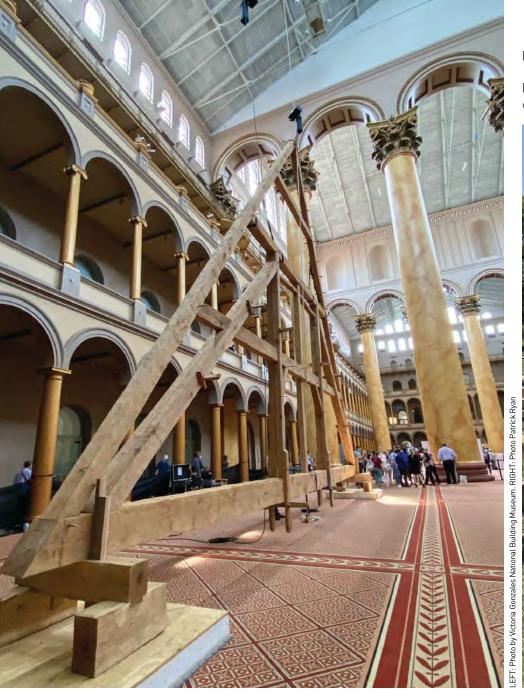


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TECHNIQUES

BY JUDY L. HAYWARD



LEFT Truss Number 6 in the Great Hall of the National Building Museum.

BELOW The truss was hewn, cut, and assembled over 10 days on the campus of The Catholic University of America.



Rising From the Ashes

Reconstructing Truss Number 6 from Notre-Dame Cathedral.

he world watched in horror in April 2019 when Notre-Dame cathedral caught fire. It was unthinkable that such a tragedy could threaten the complete destruction of one of the greatest churches built by humankind. In the days following the fire, the tenuous structure was stabilized, and the world sent millions of dollars in support of saving the beloved monument.

In 2020, against the background of the pandemic, when it became difficult to get people together, Rick and Laura Brown, co-founders of the nonprofit Handshouse Studio, conceived an idea to respond to the destruction at the church with a collaborative effort to build a truss based on documentation from Notre-Dame. They would use medieval timber framing practices and involve both architecture students at The Catholic University of America in Washington, D.C., and members of the Timber Framers Guild.

Brown approached Catholic University's Tonya Ohnstad, AIA, NCARB, associate dean of graduate studies and assistant professor of practice at the School of Architecture and Planning. Professor Ohnstad agreed to teach a six-week course in which students would study the architectural history of Notre-Dame; learn timber framing skills by creating models, then hewing, assembling, and raising a truss on the University Mall; and planning an exhibit at the National Building Museum. The frame was erected for one day on the National Mall, with help from the National Park Service Historic Preservation Training Center. It was then transported mostly



by truck—with the largest element carried by hand about three-quarters of a mile—to the National Building Museum, where the truss and the exhibit were installed on August 6, 2021, and remained for two months.

With the support of Charpentiers sans Frontières (Carpenters without Borders), Handshouse acquired official drawings created by Rémi Fromont and Cédric Trentesaux, lead architects on the Notre-Dame reconstruction process. The 2019 fire completely destroyed the medieval wooden roof structure known as La Forêt (the forest), made up of more than 1,300 oak trees.

Ohnstad's course was comprehensive, starting with the students investigating the architecture and building methods of the French Gothic church as well as general medieval timber framing techniques. They produced posters illustrating the complete story of the socio-cultural-tectonic history of Notre-Dame and its reconstruction, and built a 1:10 scale model of the trusses over the church's choir. In addition, the students focused on joinery techniques and produced a series of models exploring details of Notre-Dame's timber truss construction using historical French drawings and calling on experts in the field. Finally, the course looked at the French protocol passed down from the Middle Ages for timber harvesting, fabricating, assembly, tools, and raising techniques.

Over 10 days in mid-summer 2021, the architecture students worked alongside traditional carpenters on the University Mall to hew and cut 17 white oak logs, some more than 46 feet long, into the structural timbers. Alicia Spence of Spence Timber Works, an active Timber Framers Guild member, led this community building project—something she has done many times in the past 20 years with other guild volunteers. More than 30 professional timber framers assisted with training the students and raising the frame. Spence recounts some of the logistics, measurements, and processes for building Truss Number 6 in an authentic manner:

- The truss is 45 feet wide by 33 feet tall.
- Top chords measure 7"x 8"x 40'.
- It was hand hewn from white oak trees harvested from private forests in Lexington, Virginia, and donated to the project.
- Finding tall, slender trees with the correct diameter and taper

for hewing was the biggest sourcing challenge.

- The largest piece, the tie chord, measures 15"x 10"x45', with a green weight of 3,500 pounds.
- Hewing was a bit more than 50 percent of the work.
- The frame was lifted with block and tackle and required a minimum of 15 people per pull line to lift the truss.

Spence notes that the truss features medieval "clasping," a process that conjoins separate timbers in a wraparound fashion and which she hasn't had the opportunity to experience with American framing. Further, she says, the energy from the students and timber framers working together was embedded in the wood and gives new meaning to embodied energy. "To place architecture **RIGHT** The students developed interpretive panels and used their models to create an exhibit to accompany the full-size truss to the National Building Museum for an exhibit in 2021.

BELOW The students progressed from bookand lecture-learning to making models of the cathedral.









ABOVE The students practiced laying out the frame against their drawings with scale models.

ONLINE RESOURCES

TO VIEW VIDEOS OF THE PROJECT, VISIT

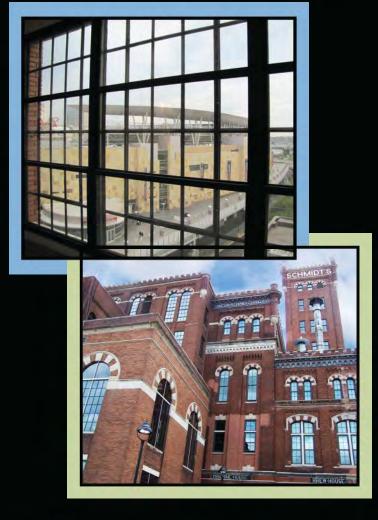
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The title of the series is "CONSTRUCTION: The Joinery and Craft of Notre-Dame." students side by side with timber framers was a great learning process, and it demonstrated the beauty and sustainability of traditional architecture," echoed Ohnstad, who, in addition to her other titles at CUA, is director of experiences in architecture. This course and reconstruction process certainly gave her architectural students the experience of a lifetime.

This model of education has huge potential for replication. Course study, building models, practice in hewing and hand-raising, raising the truss again on the National Mall and once more at the National Building Museum—all were powerful ways to instill the process in the students, grounding them in a thorough understanding of traditional building that will serve them well in their careers.

It is unlikely at press time whether Truss Number 6 will make its way to installation at Notre-Dame. The restoration process is in the hands of France's very capable preservationists and, thanks to the generosity of so many people, no expense will be spared. Nevertheless, it is under consideration and such a collaborative gift made with North America's finest white oak, passion, and skill just might carry a special blessing for Notre-Dame for years to come. JUDY L. HAYWARD is executive director of Historic Windsor, Inc., and the Preservation Education Institute, Windsor, VT. She serves as education director for the Traditional Building Conferences Series and Online Education Program. She blogs and writes this Techniques column regularly for Traditional Building. She specializes in the development of educational programs for builders, architects, and tradespeople. She can be reached at peihwi@gmail.com or 802.674.6752.

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PRODUCTS IN-DEPTH

BY NANCY A. RUHLING



Feathered Foes

When it comes to protecting buildings from birds, two companies have perfect solutions.

ABOVE There are a variety of measures that may be used to stop birds from harming residential and commercial properties.

B ird control at public and private buildings is a major issue, and today there are a variety of noninvasive, virtually invisible measures property owners can take without harming these avian adversaries.

The products are sold and manufactured by only a handful of U.S. specialty companies, including Nixalite of America and Bird-X, which are based in Illinois.

While the feathered creatures can be attractive assets—it's amazing to see

a flock of seagulls winging their way from the belfry of a church toward the water—they also are carriers of over 60 diseases, including the West Nile virus and encephalitis, and possess habits that can deteriorate and damage property.

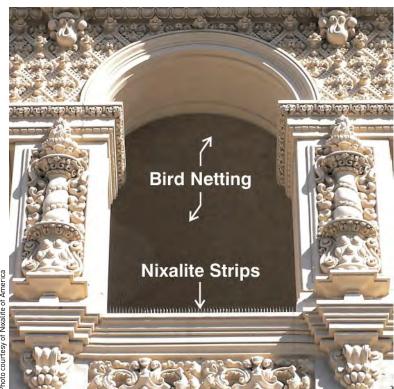
"There are different options with different degrees of effectiveness," says Cory Gellerstedt, co-president of Nixalite of America. "The continuous cleanup of bird droppings can be timeconsuming and very costly. By installing an effective bird-control system, it can save thousands of dollars in cleanup and keep your building clean and safe from bird-borne disease."

Tim Coughlin, national account manager for Bird-X, says that new building projects specify bird-control measures and that physical barriers, in most cases, are recommended because they are the "safest, most humane and effective, lowest-price solution."

Although the four main pest species—pigeons, starlings, sparrows, and gulls—are excluded, birds and their nests, eggs, and feathers are protected under the Migratory Bird Treaty Act of 1918.

Gellerstedt and Coughlin say that it's important to use products that are humane and don't intentionally injure or harm birds.

There are a number of short-term solutions, ranging from visual deterrents like fake owls and sticky gel repellents to chemical repellents. Coughlin and Gellerstedt advocate a variety of physical barriers and exclusion products.



ABOVE Combinations of products, such as this illustration from Nixalite of America shows, may be used to keep the birds at bay.

KEY SUPPLIERS NIXALITE OF AMERICA nixalite.com BIRD-X bird-x.com

BIRD SPIKES

These mechanical barriers feature spikes that point upward to repel birds and are designed to visually blend in with their surroundings. Versatile, they may be installed on building ledges, parapets, roof ridges, gutters, signs, awnings, air conditioners, rafters, shutters, and other bird-landing spots. The most durable versions are made of stainless steel. A spike that has many wire points that are strategically placed close together and that are pointing in all directions will deter most birds. "They are not a good solution for smaller birds like sparrows," Coughlin says. "They will nest in the spikes."

Gellerstadt adds that Nixalite's Premium Model S Bird Spike "can be effective for sparrows in the right situation and when installed properly."

NETTING

For access control in open spaces such

TOP RIGHT Spikes, such as these stainless steel ones from Bird-X, are one physical barrier used to control birds.

RIGHT Netting, which Nixalite of America sells, is one solution for controlling birds on ledges, beams, and roof ridges.

as warehouses and overhangs, rafters

best nets are strong, lightweight, and

ration and have openings that are .75

inch or smaller so tiny birds cannot fly

stedt says, "netting will blend into the

A short-term solution, these non-drying,

non-toxic sticky compounds irritate

birds' feet. Over time, the product will

will have to be removed and reapplied.

too much down," Gellerstedt says,

discolor, attract dirt, bugs, and debris and

"You have to be careful not to put

"because it may run in hot weather, and

small birds may get caught in it and get

injured. If you don't apply enough, it

may not repel the birds."

architecture and be hard to detect."

STICKY PASTE AND LIQUID

"When installed correctly," Geller-

through.

REPELLENTS

ultraviolet stabilized to reduce deterio-

and beams, netting is a good option. The



PIN AND WIRE

Mechanical barriers, pin and wire products are based on the premise that birds will not land on surfaces that are covered with tight strands of wire; they are most effective for repelling large birds in light-pressure areas. Like bird spikes, they do not affect the aesthetics of the architecture.

"In heavy infestation situations, birds can roost and build nests into the wire," Gellerstedt says. "These systems work best when covering very narrow surfaces such as railings along balconies and where there is moderate human activity."

INDOOR AND OUTDOOR LASERS

These devices, Coughlin says, chase away the birds via constantly changing patterns that prevent acclimation. "The beam seeks out their roosting spots, alarming and confusing them, causing them to flee," he says.

Noting that every bird problem is different, Coughlin says that "there are no one-size-fits-all solutions. We take into consideration several factors and ask a series of questions: How long have the birds been a concern? What type of birds are they? Are they nesting? What has been tried? When do you want to address the concerns? What is the budget?"

Nixalite of America and Bird-X work with a variety of clients, including architects, engineers, and contractors as well as homeowners. Their products are available online.

"We offer on-site consulting for a fee, but people can utilize our free in-house planning services," Gellerstedt says. "We can access bird problems by viewing photos, videos, architectural plans, and even use Google Earth to view facilities, landscapes, and crops."

The right solution, Gellerstedt and Coughlin agree, is the one that benefits humans as well as birds.

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PRODUCTS IN-DEPTH

BY NANCY A. RUHLING



Iron Works

Durable and decorative by design, ironwork defines—and defies—time.

raditional ironwork designs, in production for generations, are as fresh as the day they were forged by hammer and anvil by the village blacksmith. Here are some of the artisans and craftsmen who are making their mark on history by recreating old pieces and creating their own traditional and custom works for a variety of design professionals.

COMPASS IRONWORKS compassironworks.com

Established in 1998, Compass Iron-

works is a third-generation familyowned and -operated shop that collaborates with designers, architects, and other clients to create customcrafted ornamental works, notably gates, fences, railings, and stairs.

"We design and engineer from scratch, pulling from over a century of collective metal-working experience," says President Amos Glick. "We use the millennial method of fire, hammer, and anvil to hand-forge specifically crafted metal works of art to emulate vesteryear's masterpieces."

The 12-employee Pennsylvania-

based company is green: Off the grid, it creates its own power, and its powder-coated finish is eco-friendly. And it fabricates custom ornamentation in steel as well as solid-grade aluminum, stainless steel, bronze, brass, and other metals that typically are not handled by other iron shops.

"We have a library of books featuring the work of past masters," Glick says, adding that Compass Ironworks also refurbishes vintage pieces. "It inspires us to incorporate techniques to elevate each client's exceptional project from ordinary to extraordinary."

HISTORICAL ARTS & CASTING historicalarts.com

Since 1973, Historical Arts & Casting has been creating custom architectural and ornamental ironwork ranging from cast-iron storefronts and clock cases to intricate railings and roof crestings.

The 33-employee company, which is based in West Jordan, Utah, has worked on a number of high-profile architectural jewels around the country, including the dome of the United States Capitol, Manhattan's Central Park, and Columbia University.

"The variety of products we make,

LEFT Robinson Iron created this magnificent entrance for The Jefferson hotel in Washington, D.C.

RIGHT Compass Ironworks refurbished the iron scrollwork originally built by the American blacksmith Samuel Yellin.

BELOW Using vintage tools and modern fabrication methods, James DeMartis Metal Studio creates custom ironwork objects ranging frvom lighting fixtures, furniture, and stair handrails to sculptures. The shop also restores and repairs antiques.

our ability to do it all in house, and the level of detail and attention we add to it separate us from other producers of architectural iron," says Partner David Teague.

The designs, forged via a combination of older tools and techniques and modern ones, are inspired by historical examples and the ideas of the design professionals who commission them.

Historical Arts & Casting is proud to be one of the firms keeping the craft of ironwork alive, Teague says, because "it represents collective memory—a cultural heritage. What and who have come before us, what was done and how it was accomplished, the good and the bad, are the foundation for what we are today."

He notes that it's important to "allow tradition to evolve organically through the input of others along the way."

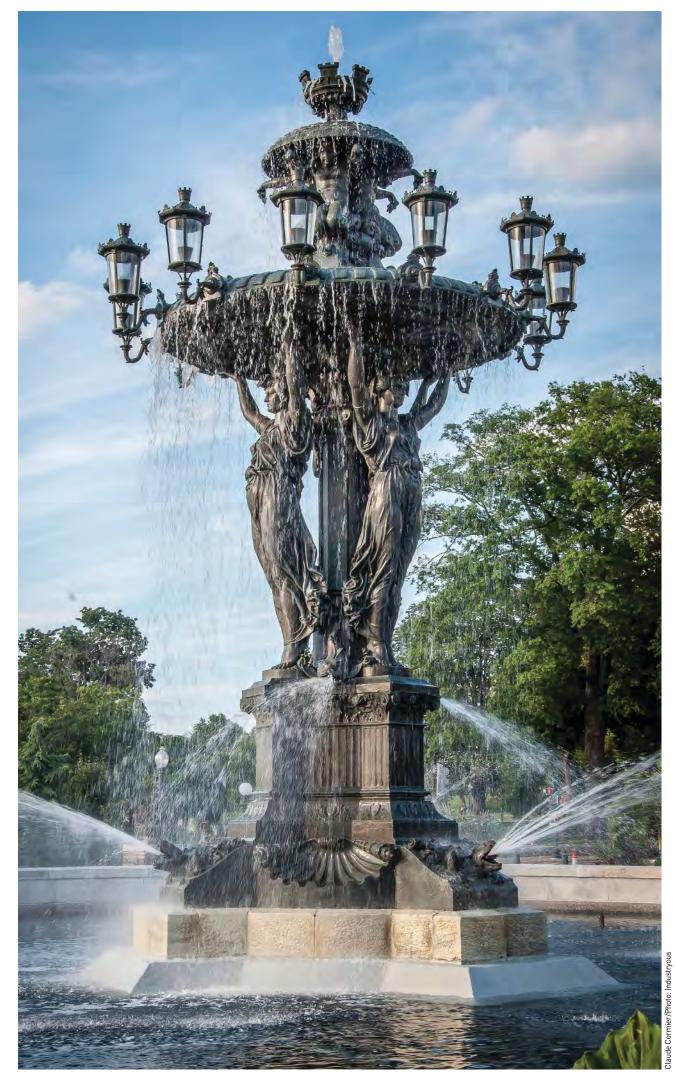
JAMES DEMARTIS METAL STUDIO jamesdemartis.com

Pairing traditional blacksmithing techniques with modern fabrication methods such as welding and machining, James DeMartis creates commissioned, site-specific custom pieces ranging from furniture and lighting to sculpture, and also restores and repairs antique ironwork.

Photo by







LEFT Robinson Iron's projects include restoration and replication work on the Bartholdi Fountain, the centerpiece of Bartholdi Park in Washington, D.C.

"My projects are widely varied and limited only by imagination," says DeMartis, who established his eponymous shop in 2001 on Long Island's East End. "My works are defined by hand-applied patina finishes, heightened attention to detail, personal artistry, fluid interaction with my clients, my love of collaborating, and a perfectionist's eye for the highest standard of craftsmanship."

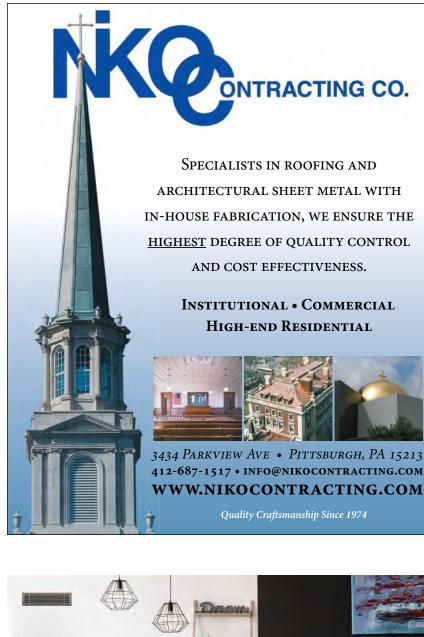
Although most of his work is for private residences, he has done projects for the New York Botanical Garden in the Bronx. He also restored the canon on the war memorial in the Village of East Hampton, New York, and the historic wrought-iron anchor from the shipwrecked schooner Nahum Chapin that stands in front of the Quogue Library in the New York village of the same name.

DeMartis, who crafts his pieces with vintage tools he has collected from antiques shops, yard sales, and tailgate vendors, loves taking on challenging projects and making beautiful, one-of-akind objects.

"Where better," he says, "to see the marvels of creation than in the hands of an artist or craftsman such as myself, who uses simple tools to satisfy a need with creativity, engineering, intellect, and expertise."

ROBINSON IRON CORP. robinsoniron.com

Specializing in the restoration and reproduction of vintage ironwork as well as the creation of custom products,



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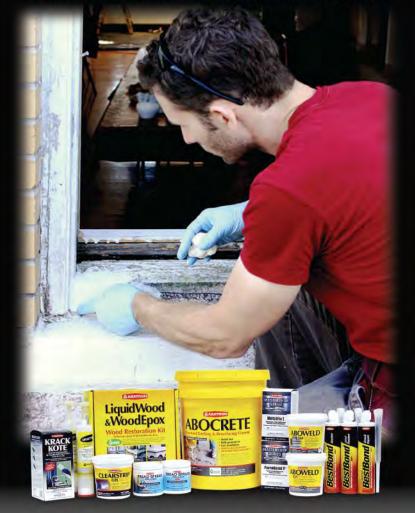
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LEFT At Berczy Park in Toronto, Robinson Iron did the custom casting for the whimsical dog fountain designed by architect Claude Cormier. ABOVE The Central Park Fountain, a replica of the original 1890 fountain in Henderson, Kentucky, was restored by Robinson Iron and returned to its original location. Robinson Iron, which has done projects all over the country, is best known for the new and restored fountains that define the town squares of a number of historic cities, notably Savannah, Georgia; Henderson, Kentucky; Toronto; Mobile, Alabama; and Chicago.

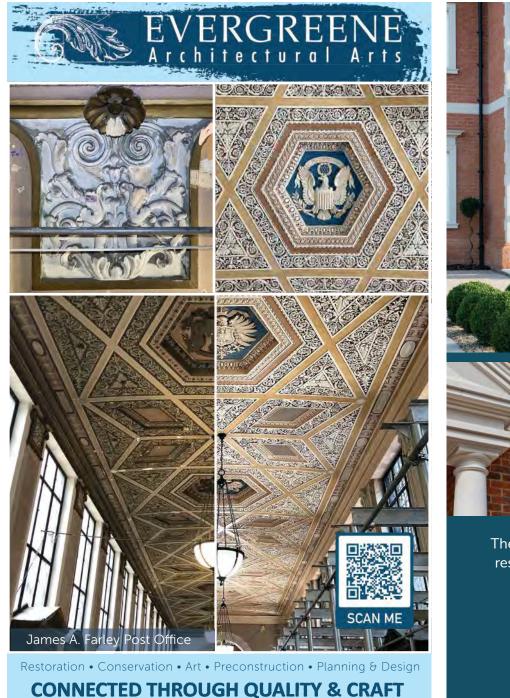
The family-owned and -operated company, based in Alexander City, Alabama, was established in 1973 as a spinoff of Robinson Foundry, which was started in 1946 by Joe Robinson Sr.

"He began acquiring patterns from historic foundries like J.L. Mott and J.W. Fiske almost as a hobby," says Luke Robinson, his grandson and the sales and marketing director of the company. "It's this vast pattern collection, along with our experience working with unique projects and clients, that set us apart."

The company, which has a pattern shop and CAD department, typically works with architects to create bespoke items but also draws from its catalogs of traditional and historic patterns. "Pieces can be recreated using an original casting in existence and sent to us by the client or scanned by our team," Robinson says. "Or, short of having an original, we can use old drawings, pictures, postcards, or other items to make a pattern from scratch."

Robinson says that he, his father, Ricky, his brother Austin, and the company's 30 employees are proud of the part they play in keeping history alive.

"Iron is a wonderful material to work with and has so much history and character," he says. "It's strong and resilient and a huge part of American and worldwide construction and art. It's wonderful to restore a fountain originally made in the early 1900s and watch the community become reinvigorated by its charm and beauty." OPPOSITE TOP In historic Dorchester Square in Downtown Montreal, architect Claude Cormier's new Victorian-style fountain that appears to have been cut in half was custom cast by Robinson Iron.



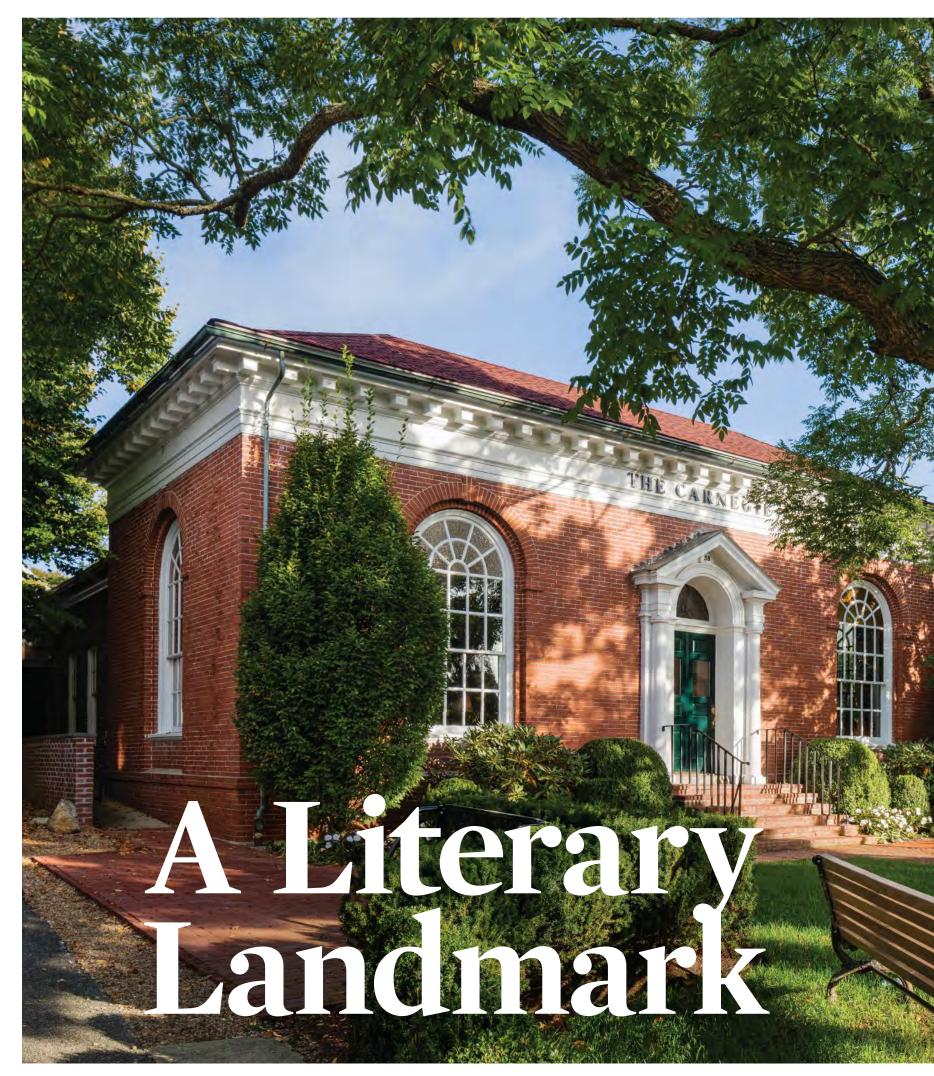
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Patrick Ahearn Architect transforms a historic library on Martha's Vineyard into a vibrant heritage center.

> BY JENNIFER SPERRY PHOTOS BY GREG PREMRU

LEFT Granted to Edgartown in 1904 for the enrichment of its citizens, The Carnegie has recently undergone significant but sensitive renovation to become a heritage center for the island of Martha's Vineyard.

TOP A visitor peruses the interactive *Living Landmarks* exhibit, part of the new permanent exhibition in The Carnegie's lower level.



ndrew Carnegie was an industrialist who led the expansion of the American steel industry in the late 19th century. He was also one of history's most prolific philanthropists, donating nearly 90 percent of his wealth in the latter decades of his life. Besides funding landmark buildings such as Carnegie Hall and laying the groundwork for institutions such as Carnegie Mellon University, he also established more than 2,500 public libraries throughout the U.S., Britain, and Canada.

One of these thousands of libraries was constructed in Edgartown, Massachusetts. (Since Carnegie summered on Martha's Vineyard, the small island did not escape his generosity.) Developed on a lot offered by Caroline Osborne Warren, the daughter of a famed local whaling captain, the 1904 library was a gift for the enrichment of Edgartown's citizens. It fulfilled this legacy for a century.

Over time, the building aged and, even with some additions, struggled to keep up with the town's growing needs. In response, a new library was built elsewhere in 2016, and Carnegie's brick structure was sold for \$1 to the nonprofit Vineyard Preservation Trust, which acquires, preserves, and manages endangered landmarks. To make the structure a community centerpiece once more, the trust turned to Patrick Ahearn Architect, a renowned New England archi-tecture firm with offices in Edgartown and Boston.

"Carnegie built libraries like this one all over the country," explains principal Patrick Ahearn, who, as chairman of the preservation trust's board, generously donated his firm's services to keep the project financially viable. "A library is one of a community's most important buildings," he continues. "The Georgian Revival façade—with Georgian dentils, Palladian windows, and a transom over the entry—communicates this sense of importance as well as permanence."

Ahearn's goal was twofold: preserve the structure as a significant piece of history, and rewrite its role as a heritage center. The trust wanted to include museum-like displays of its 24 historic island properties, telling their stories inside a bright, inspiring, and inviting space.

While a strict preservation returned the exterior to its Neoclassical roots, the transformation inside was not so straightforward. The interior was dark, cramped, and a bit dank from lack of upkeep. "They had abandoned the front original part of the building and were operating the library within the additions, with the children's section in the basement," recalls Ahearn. The update required a full gut. Millwork was salvaged when possible, and the Palladian windows were fully restored.

As a further challenge, to keep the structure from reverting to Carnegie Foundation ownership, Ahearn had to preserve its library functionality. In response, the architect maintained the front portion as a library with two furnished reading rooms flanking an entry gallery. Here, historical literature and the Ray Ellis maritime collection of original art mingle with cabinets of curiosities. These rooms are purposefully versatile, encouraging private reading, lectures, and intimate events.

Creating a "new spine"—a more cohesive entry sequence—was important

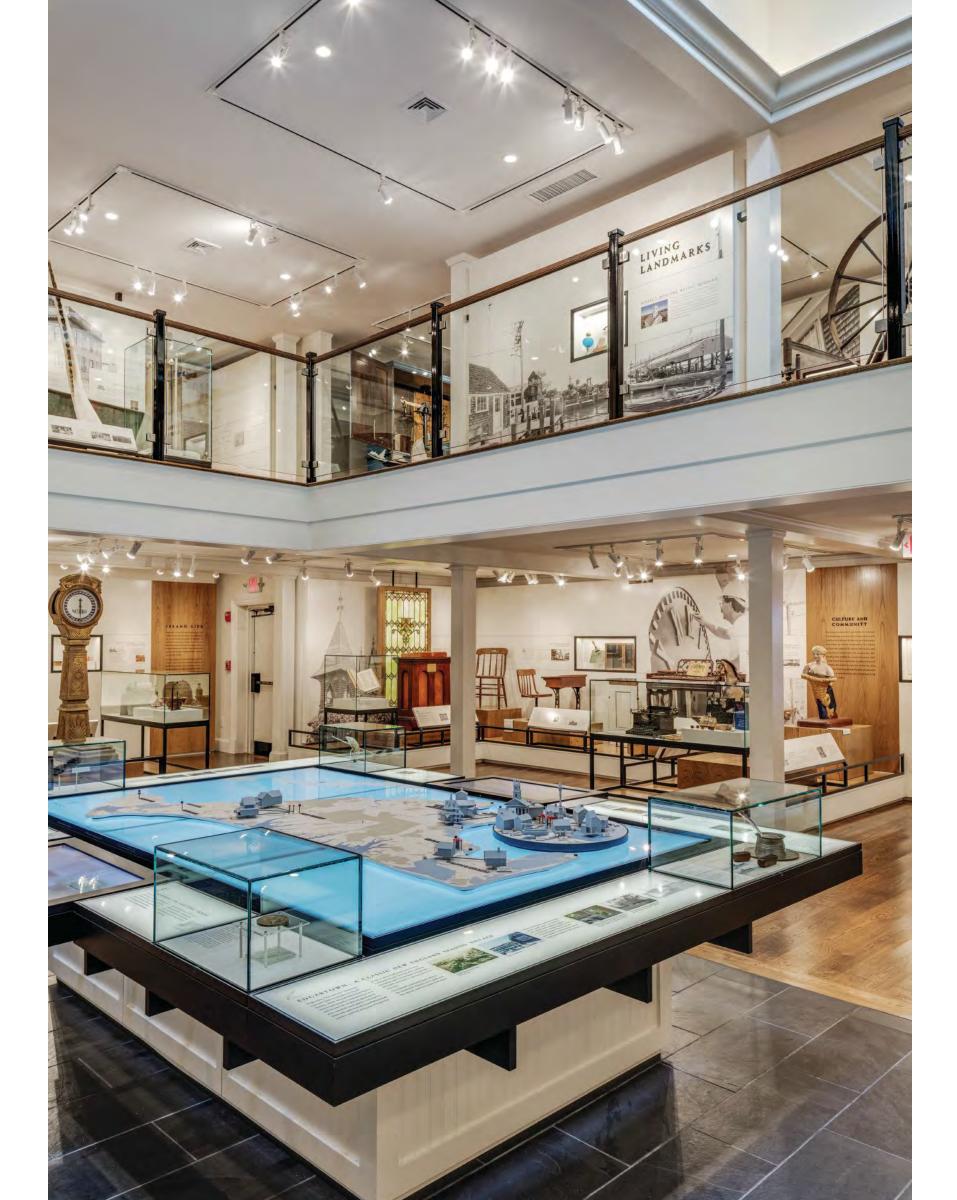


ABOVE Inside The Carnegie, visitors can learn about the historic properties under the watchful care of The Vineyard Preservation Trust in the comprehensive *Living Landmarks* exhibit.

RIGHT A new slate walkway resolves at The Carnegie's information desk, upon which the logo for The Trust is displayed.

OPPOSITE Great care was taken to respect the past and preserve the exterior, honoring the historic intent of the structure.







LEFT A hole inserted in the first floor exhibition now opens it to the lower level, flooding a once cramped, dark space with natural light and allowing the breadth of the exhibit to be viewed from above and below.

RIGHT In *Living* Landmarks, artifacts of early island life help tell the unique story of Martha's Vineyard and its inhabitants.





LEFT A more modern perspective in the rear of The Carnegie achieves a museum-like aesthetic, allowing exhibition elements to capture visitors' focus.

to Ahearn. "We wanted to reconnect the interior sections so that, once you enter the front door, you see through to the rear," notes the architect of his quest for enhanced sightlines. A trio of arched openings in the entry gallery emulate one that was there originally.

A slate path inset into oak flooring draws visitors from the entry to the new curvilinear reception desk, embellished with a V for Vineyard Preservation Trust on its paneling. Here, the entry sequence culminates with glimpses of the major exhibition to the rear.

Dubbed "Living Landmarks," the permanent exhibition space represents an impressive transformation. The architecture firm cut a hole in the floor, joining the ground level with the old children's library in the basement. This trick doubled the building's usable space without adding to the existing footprint. "Now the spaces are engaged and connected—it's basically one gallery arranged on two levels," says Ahearn.

An old Coast Guard rescue boat hull hangs above the rectangular opening, drawing the eye and capturing the imagination. The skylight introduces cascading natural light into the gallery spaces below. Architecturally, this portion of the restoration is more modern in approach to achieve a museum-like aesthetic. Clean lines, simple moldings, and glass railings let the displays shine.

"The center is an important tool to educate the public about the trust and everything they do for the island," says Ahearn, "but it can also host social functions: parties, lectures, talks on history, architecture, whaling, the harbor, etc. It is now part of the community as a whole."

Renamed The Carnegie, the completed project shares important stories of Martha's Vineyard's past in a forwardthinking space. Staying true to Andrew Carnegie's spirit of community enhancement, it is primed to serve the island for generations to come.

ADAPTIVE ADAPTIVE ADAPTIVE

1 IE

The Georgian, which has 74 apartment units that average 650 to 700 square feet each, is on the grounds of the historic City Hospital, which is about a five-minute drive from the St. Louis Gateway Arch.

-0



The Georgian in St. Louis undergoes a much needed restoration.

BY NANCY A. RUHLING PHOTOS BY SAM FENTRESS

five-minute drive from St. Louis's Gateway Arch, there's a new apartment development that pays tribute to the Missouri river city's history. The Georgian, named for its elegant architectural revival style, is part of what was once City Hospital. Built in 1845, the original complex was destroyed twice once by fire and once by tornado—and rebuilt in 1905. Albert Groves was the designer.

The Georgian's 74 units are housed in four red-brick buildings that were added between 1907 and 1940. Instead of razing and reconstructing the buildings for residential use, it was important that they be restored and adapted for a number of reasons, not the least of which is that the developer, Tegethoff Development, had been granted historic tax credits that helped offset the overall cost of the project considerably.

The six-floor main building in the complex, which dates to 1913 and still displays the words "City Hospital" in capital letters above its columns, had already been restored and converted to 104 condos. And the old powerhouse, defined by its towering smokestack, had been rehabbed and converted into a reception center and climbing gym that are open to the public.

It was crucial that this, the last phase of the project, fit in with the surrounding buildings. What's more, the complex is next door to the stately French-style Victorian mansions of Lafayette Square, one of the city's oldest historic districts as well as a designated National Historic District.



One of the aims of the project was to create homes at more affordable price points than those in the square and to attract the students at a new dental school nearby.

"Although the four buildings are connected by their exterior architecture, each was built with a different function in mind and had different interior layouts," says Joel M. Fuoss, AIA, LEED AP, a principal of St. Louis-based Trivers, the project architect whose Woodward Lofts apartment complex won the 2021 Palladio Award for Residential Adaptive Re-Use and/or Sympathetic Addition. "Our challenge was to make each feel distinct yet still feel connected."

The Trivers team restored the buildings, which had been vacant for four years and were in great disrepair, with minimal exterior alterations. The connectivity began with the Service Building and the Clinic Building, which already were linked by a one-story addition. My team and I "used all our tools and tricks to pull off the challenges surrounding each building," says Fuoss.

THE SERVICE BUILDING – 1940

Originally used as the hospital's cafeteria and kitchen, the Service Building was graced with large floorplates and generous banks of windows along the roof level that flooded the space with daylighting and allowed the architects to highlight the existing original materials, which included terrazzo flooring, golden-glazed blocks on the walls, and exposed concrete beams.

The only major change the Trivers team made was cutting a new access way between the basement and the first floors. The new stairway, in the center of the connector between the Service Building and the Clinic Building, leads to a seating area and a fitness center.

"There was an ancillary building on the exterior south façade that was removed in the 1970s," Fuoss says. "To honor the history of the past, we simply painted it to complement the old and the new as a nod to the former corridor that connected all structures."

A rooftop terrace, defined by large oval archways that are original and protected by new glass railings, has become the centerpiece of the building.

THE CLINIC BUILDING – 1921

Connected to the Service Building, the Clinic Building presented an unusual challenge for the architects: It has a dense column grid and only a single exit stair.

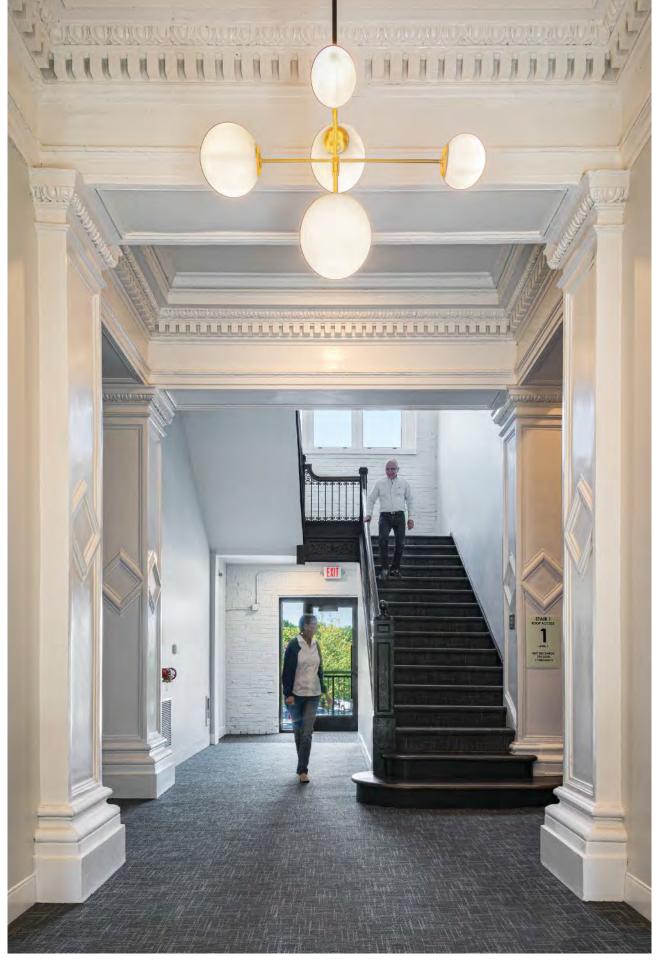


"We designed the units in such a manner that they worked around the structure to maximize views of the city," Fuoss says, adding that a city ordinance allows a single stair exit when existing buildings that meet specific criteria are repurposed for residential use.

THE GARAGE BUILDING – 1921

The Trivers team carved out two units in the Garage Building, the original repair shop for the hospital's ambulances.

"These units are much more loftlike than the others in the complex," Fuoss says. "We decided not to divide



the roof monitor and kept it together in one unit. The trusses carrying the roof allowed a clear-span opportunity."

The wide door opening for the ambulances was retained and now leads to a private patio. The units' red-brick walls hint at its past commercial use.

"Everything is open," says Fuoss. "You can get a sense of the original space when you're in the kitchen."

THE COMMISSIONER BUILDING - 1907

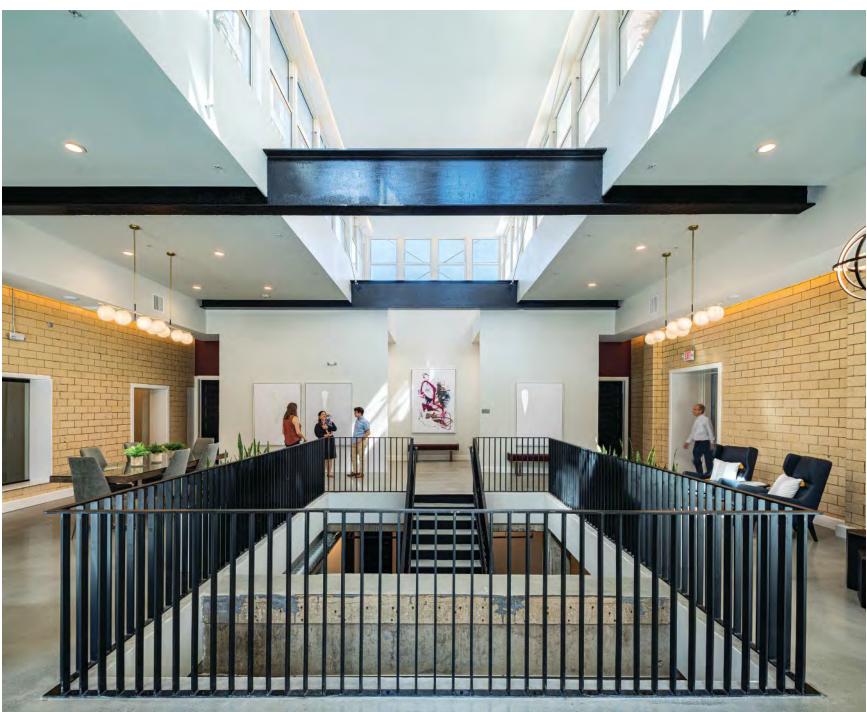
The oldest and grandest of the four structures, the Commissioner Building originally housed the hospital's administrative offices. Its elaborate classic woodwork, plasterwork, marble detailing, and cast-iron staircase were restored to create an elegant entrance inside. ABOVE The woodwork, plasterwork, marble detailing, and cast-iron staircase inside the Commissioner Building were restored.

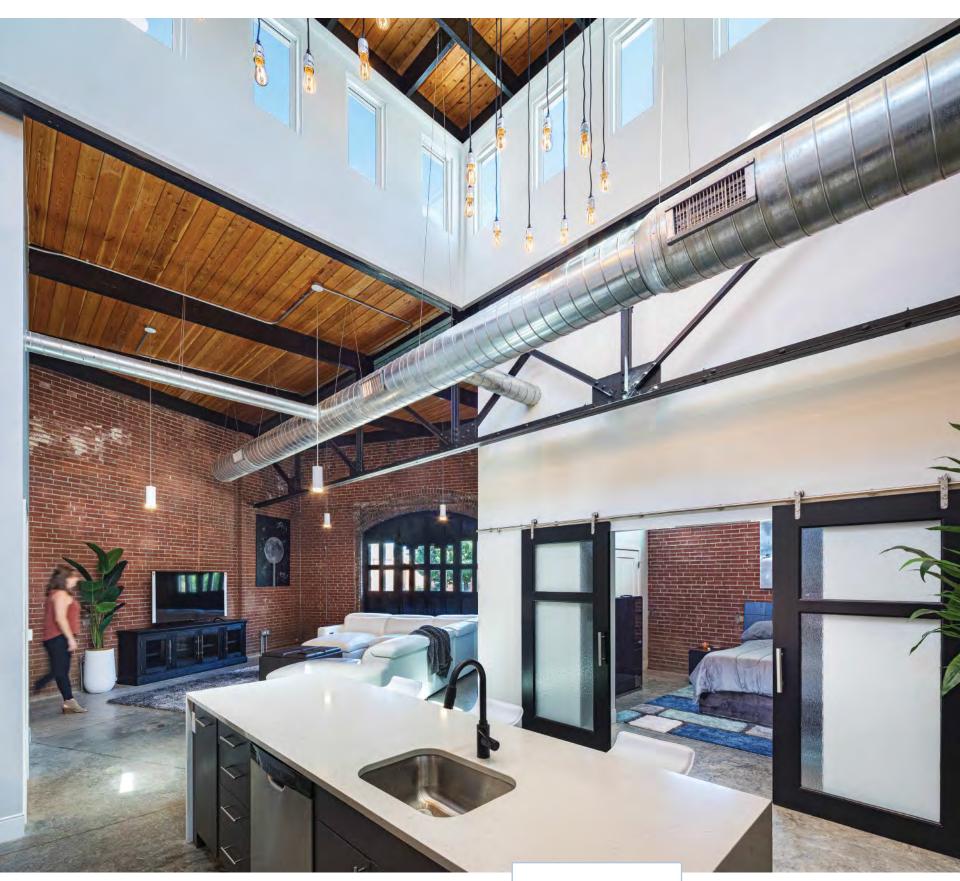
OPPOSITE A rooftop terrace is defined by the building's original large archways. The façade area painted gray pays homage to a building that had been previously razed.



LEFT There are no typical units in the four buildings, but the interiors are united by finishes, color schemes, and kitchen design.

BELOW The original connector links the Service and Clinic Buildings, and an entrance to the basement, which has a seating area and fitness center, opens up the space. The glazed wall tiles are original.





MAKING THE FOUR PART OF THE FAMILY

The interiors of the four buildings are united by color schemes, finishes, and kitchen design. "We wanted to create modern apartments that would be attractive to a younger generation," Fuoss says. "Yet we wanted to respect the history of each building, so we amped up the unique attributes of each to tell their distinct stories. We saw it as an opportunity to continue the history and culture of the property and to create a connectivity with the community that resonates with the residents."

The connection was immediate. As soon as The Georgian opened, the units were snapped up. "It was May 2020, two months into the pandemic," he says. "There were limited in-person showings; they were all mostly rented via virtual visits."

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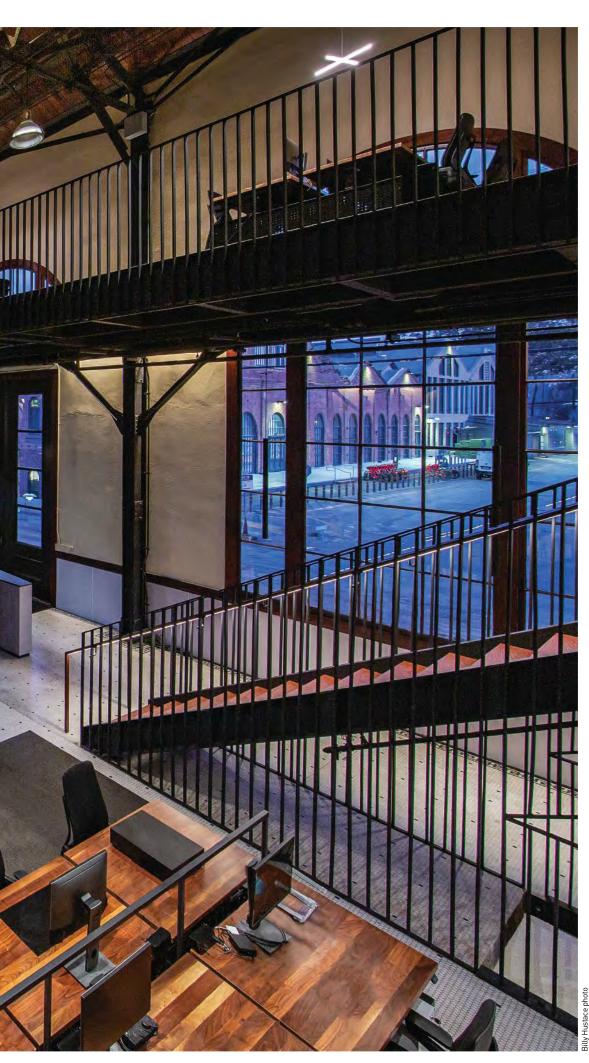
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ABOVE Two loft-like apartments were created in the Garage Building. The original over-wide door opening, where ambulances entered, leads to a private patio. A roof monitor in one unit provides natural light.

Re-Energizing a Powerhouse

Once filled with humming, heavy machinery, the 48-ft.high Powerhouse now shelters high-tech office workers among the overhead gantry crane and original compressor (center) of its industrial past. A new steel-and-wood mezzanine (right) adds lease-able space and seismic support. INSET The Powerhouse ca. 1920 and its surprising Spanish Renaissance architecture.

JAN SPOR





Adaptive re-use of a historic shipyard building offers insights for successful projects.

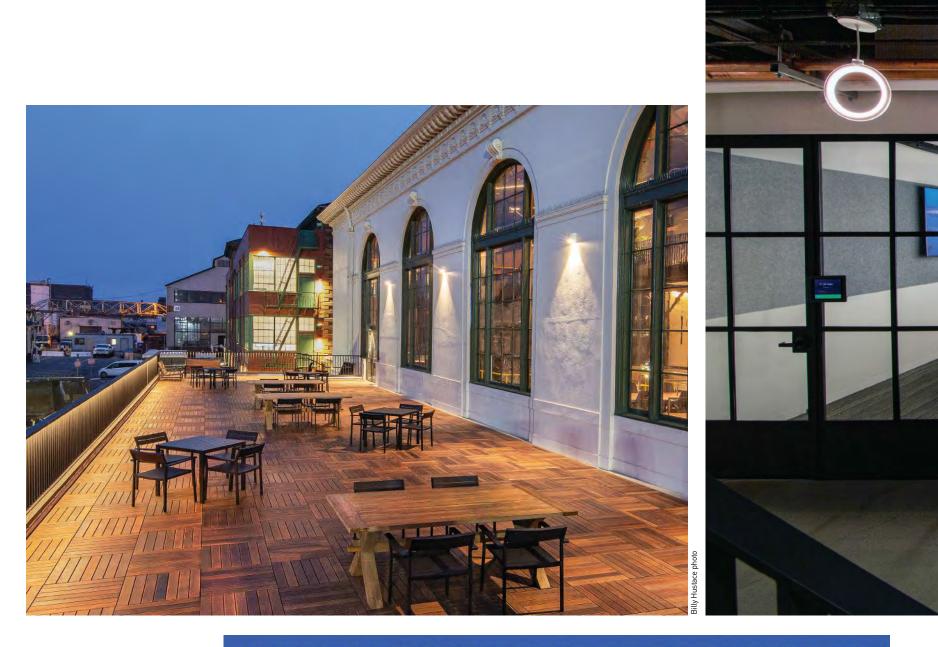
BY GORDON H. BOCK

ransforming a heavy electrical generating station into a current high-tech office demands dynamic designing. To also retain historic details and industrial ambiance involves a whole other phase of ingenuity.

When the Port of San Francisco engaged Orton Development, Inc. (ODI), in collaboration with Marcy Wong Donn Logan Architects to convert the seven-acre site of a former shipyard into what is now called the Pier 70 Historic Core, it became a multiyear, multibuilding project. Adapting the Powerhouse, however, was among the final stages. "It was such a stunning little building when we first saw it, but in pretty bad shape," explains Kent Royle, AIA, principal at the Berkeley, California, firm. "So, the client, Orton Development, Inc., decided to leave it for last because it was the most demanding in terms of obtaining usable floor area for the amount of investment."

Indeed, the Powerhouse has an exceptional pedigree. Built in 1912 and designed by Ecole des Beaux-Arts-trained architect Charles Peter Weeks as "Spanish Renaissance architecture," it features a hipped roof of mission tiles, five 18-foot-tall, arch-topped windows, plus hex tile floors and finishes in hardwood, marble, and brass. For nearly a century it supplied the shipyard's multiple power needs—principally compressed air for pneumatic tools and forges—through four massive, electrically operated air compressors.

As Royle explains, the challenges with adaptive re-use, historic preservation projects are severalfold. "First, it's often cheaper to simply knock the building down and start afresh. The key then is to figure out a way to preserve a really great old building, and the same beautiful experience, by getting the most value for every dollar you spend." The second challenge, he says, is to make upgrades that contribute to an attractive project



ABOVE The new addition roof is designed flush with the main floor level to create a walk-out deck and panoramic view of Mission Bay. Note the elegant, 18-ft.-high windows.

RIGHT The front entrance shows the Beaux Arts details, such as a terra-cotta shell frieze entablature and window header cartouches, that were retained and restored.

OPPOSITE Evicting three giant compressor footings opened up the low-light basement for income-producing meeting rooms. LED light rings fit the no-frills ambiance.





that pencils out. "In this case, the building was going to be leased, so we really needed to maximize the leasable square footage."

At first glance, the Powerhouse, with its single large, open space, seemed a reach. "It had a basement, but the majority of it was filled with four huge pylon foundations to hold up four massive compressors through cut-outs in the floor." In addition, there was an electrical substation built into part of the daylit basement that controlled, basically, the rest of the Pier 70 complex and adjacent properties under rehab. "So that had to remain operational the whole time."

With the basement almost completely occupied, ODI's development strategy included removing three of the four huge pylon foundations to reclaim it as usable space. "That would give us area for those kinds of functions that don't require extensive daylight, such as meeting rooms, bathrooms, janitorial space, storage, and a break room. This allowed us to keep the existing main floor as a big, open work area."

That 5,342-square-foot main floor is nearly 30 feet high to the top of the walls, and then another ten feet above that. To take advantage of this very tall space, the architects designed an L-shaped mezzanine, with stairs and elevator, to run around two sides of the building. "It stands on tube steel columns, painted black. The mezzanine itself is woodframed, in keeping with the wood ceiling, and we tried to match the coloring. We were able to add a lot of square feet on that mezzanine."

Royle says they were able to work with the tenant to design an open furniture layout. "We used distinctive features as room dividers, such as a nice screen wall to mark the entrance/public area from the work area. Then the remaining compressor-which is really stunningsort of divides off a meeting area." More informal breakout areas lie under the mezzanine.

For seismic upgrades to a project such as this, Royle says they seek to retrofit in ways that harmonize with the existing structure and don't stand out

noticeably. "We reinforced two of the diagonal corners with braced frames, one of which we were able to hide behind the new mezzanine elevator." There's also X bracing across the end wall, he notes, "but it blends in enough with the historic ironwork that it wouldn't necessarily jump out at a visitor."

The same goes for adding infrastructure. "The trick with these wide-open spaces is to not muck them up with a ton of new equipment, but rather do it in a way that isn't obviously invasive." For example, for HVAC a VRV (variable refrigeration volume) split system was installed that pumps refrigerant around for heating and cooling. "There's a mass of little lines to each unit, so we worked with the HVAC sub to route the lines on top of the gantry crane, then route them down behind the columns where we could paint them out black."

Lighting follows the same approach. Royle explains how they worked with lighting designer Darrell Hawthorne to hide as much lighting as possible within the existing structure, all the while

highlighting it. "Behind the crane rails we have LED strips that wash the walls to create this nice glow. Likewise, the ceiling: highlight the building structure as a way to light the building."

The way the Powerhouse sits on a downhill site enabled the architects to work with the National Park Service and California's State Historic Preservation Office to build a 2,600 sq. ft. addition off the back of the building behind the street. "We planned the addition in such a way that you can just walk out from that main, open work area onto a roof-top deck that looks back toward Mission Bay, the really lively part of San Francisco." He adds that Orton Development is extremely good at being strategic in how they invest in these properties. "If they're going to put on an addition, they want it to do double duty to help reinforce the project. The roof deck has a spectacular view of Giants Stadium, the huge UCSF Hospital, and the Bay Bridge, and is just the kind of amenity attractive to the high-tech workers leasing these projects."



DISCRIMINATE EXPECTATIONS

Solutions for how to commemorate our collective past.

BY C.J. HOWARD

oday, the sight of an elegant Roman Classical pedestal bearing a heroic figure on horseback, or a triumphal arch in full regalia, provokes in some a sense of suspicion rather than one of awe and admiration. Traditional monuments have suddenly and increasingly found themselves as foreigners in their homeland. This suggests a changing landscape for traditional monuments and the notion of commemorating.

In the past couple of years, the United States has experienced a crescendo of discourse and action related to past monuments and social justice. As the majority of these monuments are traditional, the narrative of discriminatory aesthetics has come to the doorstep of the traditional design community. While perhaps not invited, it is nonetheless here and offers an opportunity for several discussions: answering questions about the nature of traditional monument design; claims of being unjust; critical reflection; and ultimately, solutions for how best to proceed.

Traditional monuments are just useless antiquated attractive objects.

Monuments are valuable assets of our built environment, providing a mechanism to come together with others to capture and share values. Though designed in a set time and place, they are situated in the living fabric of the community that grows and evolves around them. They act reflectively over time to embed identity and to educate us about the world, and they can encourage us regularly to overcome mundanity and be better versions of ourselves for and with others. They are not merely statements of power or vessels of strict historicism but rather transcendent interpretations of memories that can speak rhetorically about "truths" that are liberated from reality.

Traditional monuments are particularly well equipped to deliver on this value, as commemoration is congruent with the idea of passing on from culture to culture through a shared timeless language. The aesthetics of traditional monuments are based on authentic principles that render humanistic, recognizable, ordered, beautiful, and meaningful works of civic art that bring delight to civic spaces. Further, traditional monuments lend themselves to universality, in that these same principles can occur in completely different places and times, yielding a rich resultant of connectivity and difference.

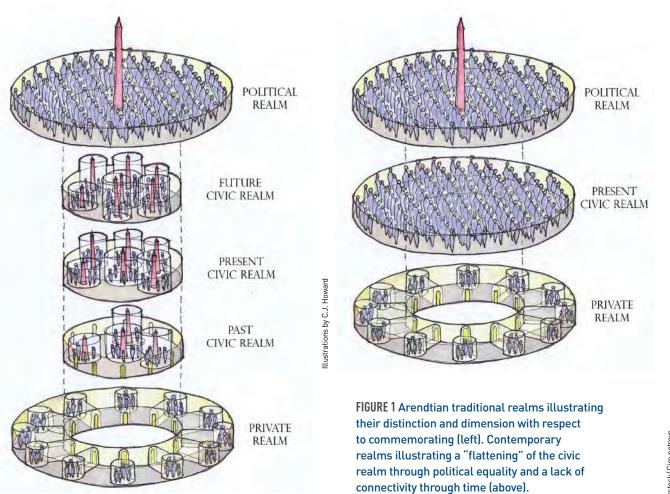
Traditional monuments are symbols of oppression and racism.

Accusations about traditional and Classical architecture inherently being oppressive and racist is denying the ontological reality of architecture, which is that inanimate creations cannot harbor these qualities, despite any intended allusions by the maker. In other words, the choice of architectural aesthetic is not bound by political or cultural ideology. The claim that Classical architecture, in particular, is morally bound by the Nazi or Fascist regimes because they used this language is false, given that democracies do the same. Further, in America, heroic Classical monuments are used both by and for subjects of the Confederacy and the Union alike. When assessing traditional monuments, it is critical to use both moral and aesthetic judgement.

Traditional monuments do not represent the values of contemporary society and its needs for commemorating.

On this count, one could concede that this claim is true, though one might ask whether that is actually a good thing. The purpose of monuments seems to be shifting to reflect society's current cultural ethos. Contemporary monuments tend toward autonomy, atomization, anti-heroic apologetics, equity, abstraction, and emotional release with a fixation on mourning and a provision of civic therapy. While these qualities may be needed to add to the idea of what monuments should be for us, this sweeping trajectory suggests an essence of counter-commemoration.

The contemporary ethos also participates in a conscious dismissal of the past with a discriminating and arrogant posture that emboldens hostility and espouses moralizing from a contemporary pulpit. "We would surely have done differently if we were in your shoes and certainly know better now." This stigmatization extends to the traditional languages employed by monuments and





explains recent overt reactions aimed at traditional monuments deemed offensive to our modern sensibilities, regardless of location or subject matter. It is healthy to understand that we are products of our own age and that it is unreasonable to expect different eras to reflect the morality of another. The continuity of traditional design inherently mediates these conflicts and differences through neutrality, timelessness, and appropriation.

Tolerance of intolerance should not be tolerated in our civic spaces.

Arguably, the greatest challenge traditional monuments face is having the cultural context within which they can exist. Calls for reimagining commemoration in civic spaces by exorcising past traditional monuments because they are thought of as being intolerant or incorrect espouse a principle of equity in attempting to purify and level the civic playing field. While correction and representation for underrepresented people is needed, this default mode causes an atomization of commemorative causes and a repudiation of the values of a traditional civic realm. Cautionary admonitions such as "the slippery slope" and "those who forget the past are destined to repeat it" come to mind.

Writing more than a half century ago, political philosopher and holocaust survivor Hannah Arendt foreshadowed our current state and offers a compelling approach to help navigate these complex and sensitive waters. In her estimation, it is necessary in a traditional democracy to have three different and overlapping spheres that accommodate human affairs. Those spheres or realms are the political, the private, and in-between the two, the civic or social. The essence of the political realm is equality under law for all people, without discrimination. The private realm is exclusively for individual expression. Finally, the civic or social realm allows for distinctions or discriminating actions such as association, engagement, expression, and commemorating (Fig. 1). It is an ambiguous paradoxical realm where all things are not equal, yet there are implicit expectations of civility, commonness, and charity.

The key lesson here is about properly

placed expectations and the provision for necessary human activity. When stepping out from the private to the social realm, the milieu of humanity is admitted with all its attendant complexities. This is important because it is precisely where, by free association, group diversity can happen. Further, it nurtures a habit of togetherness, past, present, and future. In this model, civil discourse is more easily achieved. Absent this expectation, one is predisposed to misreading the room.

Contemporary notions of the civic realm seem to be moving toward a blurring of the political and social realms, where the expectation of literal individual equality found in the political realm and distrust of the past replace discriminating acts, therefore compromising the healthy distinction between the essential realms. This manifestation of the social realm has a flattening effect that ironically creates resentment and intolerance and inhibits traditional commemoration (Fig. 1).

Atonement: at – one – ment.

Memory, identity, and aesthetics all have

key roles to play in the primary medium for monuments. The memories that happen through commemoration help us to make sense of the world in developing a comprehensive and truthful narrative. In order for this to happen, those memories necessarily need to be curated for relevance. That is to say, sometimes forgetting/removing or correcting a memory is necessary, sometimes it is prudent, and sometimes it is an overreaction based on misplaced expectation. Whatever the realm, we can set as a worthy goal for commemorating the tenets of our nation's founding documents. These principles would help monuments communicate the aspirational values of equality, or at least not contradict them. The cumulative effect ultimately helps us to remember the right things in the right ways to acquire a better sense of our identity and to potentially atone for wrongs in moving forward.

Traditional monuments are not just for powerful, rich white men.

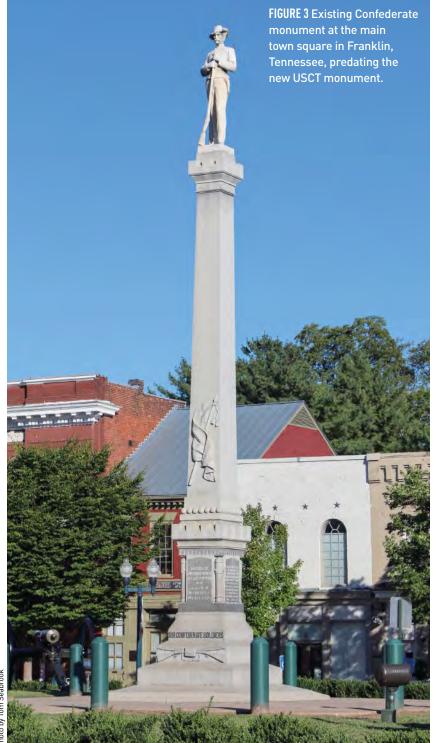
Traditional monuments and a traditional civic realm hold somewhat unexpected keys to successful resolution in address-



LEFT A statue of General Robert E. Lee in New Orleans before it was taken down.

FIGURE 2 (RIGHT) New, traditionally inspired USCT monument at the main town square in Franklin, Tennessee, designed by Joe Howard and set in juxtaposition to an existing Confederate monument.





ing commemorative injustice, with a particular capacity to attract and inspire with beauty and nobility. In Franklin, Tennessee, there is a new traditional statuary monument of a humble-noble United States Colored Troops soldier in juxtaposition with an overwroughtnoble Confederate monument (Fig. 2). The dynamic between the two is jarring, but what is important here is the deployment of the powerful dignified image of that heroic black figure fighting for a noble cause in the same capable language as the Confederate soldier. This inclusionary act of representation brings a particular group of people together to help form a more complete and hopeful narrative, elevating issues that still need resolving within the context of the civic realm, using an architectural language that is unparalleled in its ability to please and inspire through connectivity.

For this reason, current ideas of contextualizing monuments, whether by juxtaposition or increased representation, are very compelling. Other contemporary traditional examples contribute to the increasing presence of diverse and under-represented groups that enliven the commemorative landscape, one example being a new monument honoring Women's Rights Pioneers in New York City (Fig. 3). Contextualization allows us to remember and see the truth, and to potentially reconcile and forgive in a rich and dignified way.

How can we move forward?

The qualities of traditional monuments should not be jettisoned because of who uses them. Instead, this language, with its formal and poetic potential, should be encouraged and made more available to all people. And if differences are to be celebrated, they need to be in the same civic room with calibrated expectations. The hope, then, is to bolster broader group identity of sameness through charity and memory—a memory that resonates with the cultural depth and dimension of our nation, a nation that is young, gifted, and not flat.

C.J. HOWARD is an assistant professor at the School of Architecture and Planning, The Catholic University of America.

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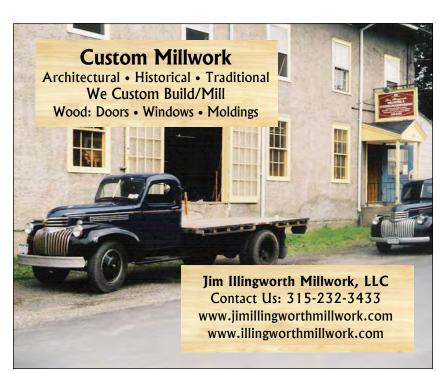
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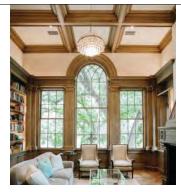


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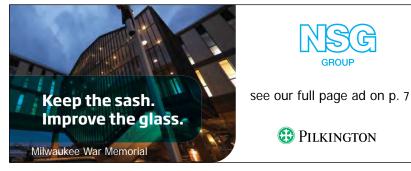
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> The Elements of Classic Architecture: The Doric Order in Design Part I, July 23, 2022 Part II, July 30, 2022

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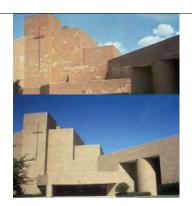
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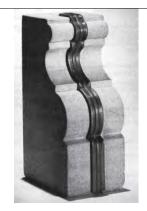
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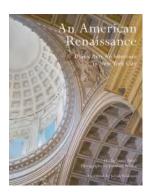


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BOOKS

REVIEWED BY GORDON H. BOCK



An American **Renaissance: Beaux-Arts Architecture in New York City**

BY PHILLIP JAMES DODD The Images Publishing Group 2021

412 pages; color

RIGHT American Victorian design meets Islamic ornament in the domed library ceiling of the Samuel Tilden House, updated by Calvert Vaux.



LEFT Architect Thomas Hastings proposed an Italian palazzo for Henry Clay Frick, but the steel magnate's ultimate mansion is French-inspired.

BELOW What else would the "Napoleon of Finance" build for his vast collection but The **Pierpont Morgan Library by** Charles Follen McKim?



ANYONE THINKING THAT "Beaux Arts" is simply a synonym for overwrought mansions and museums, or that king-size architecture books are a thing of the past, will be pleasantly surprised upon cracking the covers of An American Renaissance. The second volume in a series on Classical and traditional architecture, here architect and author Phillip James Dodd takes readers on an erudite and visually jaw-dropping tour of Beaux-Arts architecture through 20 examples in and around New York City, the wellspring of Gilded Age cash and egos that made it all possible.

As architectural historian Richard Guy Wilson explains in his preface, the phrase Beaux Arts— French for fine art—is less a codified style than an umbrella term cooked up in the mid-20th century to corral a wide range of classically inspired buildings. Drawing on historic European models and monuments of the Renaissance and Baroque eras, they trade in a melange of eclectic forms and ornaments once derided as merely derivative, but admired today for what we might even call a tasty gumbo.

Indeed, the buildings in this book are diverse in both type and design. However, what they do have in common is great—often immense—size, scope, and detail driven by even vaster wealth. If you like marble, there's plenty to love in these buildings, and this book is for you.

The American Renaissance of the title is another

broad heading, applied to architecture as early as 1904, and beyond just buildings. In graphic arts, for example, it embraces roughly the same time period-late 1880s up to the 1920s-when perfected lithographic printing ignited an explosion of color illustration. In much the same way, the flourishing of Beaux-Arts architecture was made possible by new building technologies-steam power, iron and steel frame construction, glass—when coupled with the abundant traditional crafts of plasterwork, stone carving, and brick masonry.

As befits a big subject on big buildings, this is a very big book. The moneyed names behind them-Morgan, Frick, Gould, Woolworth, and their ilk-not only built big, they thought big, creating the first trusts, mega corporations, and monopolies in an era unfettered by government regulation. These are buildings built to bowl you over-and not just the general public but their multimillionaire peers. These builders wanted to put America on the world cultural map, thereby fueling the City Beautiful movement and, perhaps, assuaging some guilt over amassing titanic fortunes.

Running from the illustrious to infamous, Dodd hits plenty of the major bases. Of course, there are the "usual suspects" like The Metropolitan Museum of Art, New York Public Library, and Grand Central Terminal. However, it's equally pleasing to see some often-overlooked architects, such as George B. Post, designer of the Williamsburgh

Savings Bank, and Calvert Vaux, Central Park's co-creator, who updated the eye-popping Samuel Tilden House on Grammercy Park (now the National Arts Club).

Also on the semi-obscure list is Gould Memorial Library, Stanford White's take on the Pantheon way uptown at Bronx Community College, as renowned today for its lofty Guastavino tile dome as the iconic Hall of Fame. An unlikely, but enticing, entrant is Woodlawn Cemetery, also in the Bronx, home to mausoleums by McKim, Mead & White, Carrère & Hastings, James Renwick, and John Russell Pope (and some of my relatives, who are permanent residents).

Dodd explores not just enlightening architectural details but also the social and economic milieu that engendered it. The backbone of the book, however, is the lavish photos by Jonathan Wallen, who clearly knows his way around historic buildings with a camera and enjoys a page format that does his work justice.

Ultimately, An American Renaissance is not merely about bygone extravagance, but an argument for its appreciation and preservation. We need to experience and value these buildings, not only because they are often so over-the-top but, a century later, still well done, still working, and irreplaceable. For anyone who has yet to travel to New York in our pandemic-curtailed world and see these buildings firsthand, this sumptuous book is the next best thing.

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