

**Intimate Stories** by Bryan Blundell

The variety of construction methods, techniques and materials that we run into during the physical work in the field of architectural preservation is part of the fun that this career offers. We get to see and touch many parts of a structure that others do not. The variations we see, the good, the bad, and sometimes the ugly, can give us glimpses of the skill, style and logic of those that have designed, built and cared for these structures. Sometimes we are impressed by what we find. We are amazed at how well the materials and elements of design have stood up to the changes and abuses of time. In other situations we are even more amazed by the amount of change that a building or part of a structure can experience at the hands of those who have been its creators or caregivers in the past.

Learning the intimate stories that buildings have to offer, along with the public stories of the people, events and form that are connected to the structure, deepens the personal experience for us. We become the hands, eyes, ears and

noses that feel, see, hear and sometimes smell some of the secrets that the building holds. Being privy to these secrets puts us in a position to inform others of the building's hidden story. Part of our job is to document the bits and pieces of the story we uncover, and create, while on the site. It is this documentation process that allows us to share the building's stories with our clients and others.

The main way in which trades and crafts people document their work is by the work itself. It is not very practical to take someone to past projects and dismantle finished work to show how a particular construction was configured or to carry a three-story oak stairway into a meeting to demonstrate the complexity of a past project. Engineers, architects and consultants generate information on paper. This paper trail is a natural part of their process and thus is easy for them to show examples of past work without lots of extra effort. For the contractor/trades/craft person, documentation in the form of pictures, drawings and description, is an extra effort

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**A Foot in the Door is the Easy Part** by Mark Clark and David Wells

A Dell Preservation Technician (right) works to restore the form of an original set of 19th century oak doors by removing years of paint and varnish.



The function of a set of modern metal framed doors (below) is being restored by replacing the pivots which have failed due to corrosion.



The old saying, "They don't make them like they used to" could not be more certain than when working on historic buildings. Sometimes an appropriate follow-up is "Now what?" For instance, in downtown Washington DC there are two historic buildings across the street from each other which used to be private residences and now house social clubs. While these two buildings were built during the same period, certain details are now quite different.

Dell Corporation was recently asked by the management of both clubs to repair and preserve their respective front doors. Each set of doors presented their own unique challenges. The three paneled, double doors at one building were original to its 1880's construction and were made of quarter-sawn white oak and each panel was adorned with a large carved

medallion. The doors had been painted and repaired numerous times and details were obscured.

Dell Corporation met with officials from the first club and a decision to strip, repair and refinish the historic doors was made. This set of doors was constructed using very traditional methods and material, and most of the new repairs used traditional techniques. The two most difficult parts of this project were

- 1) The sheer size and weight of the massive wooden doors.
- 2) The question of whether to mimic the original varnished finish or to paint in an effort to blend with the current paint scheme.

We satisfied both concerns of question two by first applying a finish of HydroColor (Ebony) to show the striking wood grain of the doors. This process not only

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## PAINT MAINTENANCE TIPS

*At some point during the execution of the "typical" preservation job, a client will often ask, "How long will this new paint job last?" The answer is...almost forever... if changes in humidity, temperature, pollution levels and UV exposure are minimal. Just look at tomb paintings from ancient Egypt, many that survive are in surprisingly good condition due in part to relatively stable environments.*

*Unfortunately, stable conditions are not the type of environments paints usually face in the rest of the world. Below are some steps you can take in an effort to extend the time between paint jobs.*

1. Keep gutters and downspouts clean and working properly to decrease moisture levels around your building.
2. Clean and touch up paint on horizontal surfaces such as window sills.
3. Touch up other small paint failures as they occur.
4. Look for the cause of specific paint failures and make appropriate repairs.
5. Clean painted surfaces as needed with a solution of a mild detergent and water. Often times a building that appears to be in need of painting is just plain dirty!

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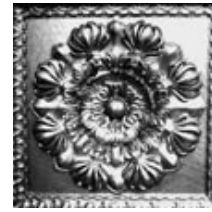
(FOOT continued from page 1)

mimiced the original finish but also provided a protective layer between the wood surface and final coats of paint. The doors were then painted to match the existing paint scheme of the building.

The doors at the second building offered a completely different challenge. The building had been partially renovated and then retrofitted approximately 15 years ago with a modern set of metal framed store front doors. At the time of installation, these doors were considered state of the art and had various features which were supposed to make installation and repair more efficient. Due to a continuous electrolytic reaction between the bronze threshold and aluminum pivot brackets, (which had been intensified by salt used to melt snow on the sidewalk around the threshold) and the related moisture, corrosion had severely deteriorated one of the lower pivots and it was failing to support the door in its function.

Dell Corporation began repair on both projects simultaneously. One would think that the set of doors requiring the time consuming and tedious work to remove paint from the small niches within the medallions would take longer to complete. This was not the case. It was the doors which were designed to be more "efficient" for installation and repair that actually took longer. After the metal framed doors were originally installed, the technology of modern doors contin-

ued to progress, ultimately making the door's hardware obsolete. The pivots were no longer in production by the original manufacturer.

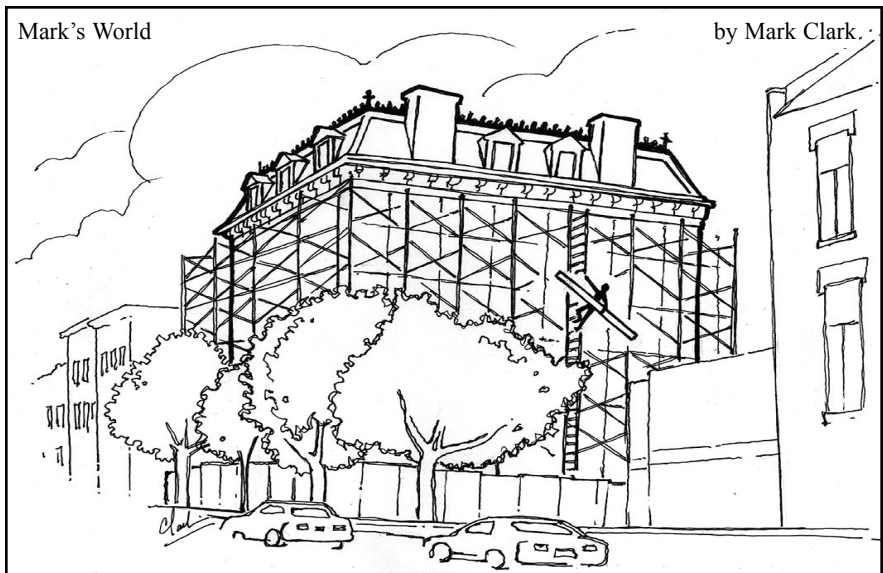


Tracking down replacement parts became the "pivotal" point in this project. Unless the pivots could be found, they would have to be fabricated. This would push the project beyond the client's budget and schedule.

Meanwhile, work on the first project was close to completion, revealing a beautiful set of doors constructed with a high level of craftsmanship representative of an earlier period.

Fortunately, as the Oak doors were being painted, a supplier was located who had a few of the discontinued pivots in stock allowing Dell Corporation to repair the metal doors within the originally anticipated budget and schedule.

While it might be a stretch to make this a metaphor for life, we found that old ways are not always as difficult as one might imagine and new ways aren't always as convenient and easy as originally designed. Whether it is restoring the form of 120-year-old material or the function of "modern" materials, Dell Corporation can be the "pivotal" factor in the success of your project.



Measure twice, cut once...Measure twice, cut once...Measure twice, cut once...

## A CLOSER LOOK... by Bryan Blundell

President of Dell Corporation

In this issue of Preservation Quarterly, we look at some of the challenges and enjoyment we get from our work. We get to go places and do things that keep us on our toes and learning all the time. In the process, we become the hands, eyes, ears and noses for our clients that feel, see, hear and sometimes smell some of the secrets that the structure holds.

It is this learning of the intimate stories the building has to offer, along with the public stories of the people, events and form that is connected to the structure, that deepens the personal experience for us. We are especially fortunate for the clients that invite us to be on their team and for their interesting projects.

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and expense. However, the time and cost is generally well worth that effort.

One of the ways that we use these types of documentation is to help us remember how different each project can be. It can be easy to assume that all window, door, roof or foundation projects are all alike. This is far from true unless you are dealing with a particular time period, building technique and source of the problem. Each project presents its own unique conditions and challenges. For us, there is really no such thing as an ordinary project. Each one shows a new twist of some sort because of all the different people, materials, methods and technologies that have been involved in the past. Each person and point in time brings its own influence to the project.

We can see how changes in technology and fashion can sometimes simplify and at other times complicate a project. Generally, the longer a technology, style or technique has been

## PRODUCT REVIEW: Bora-Care

by Mark Clark

At a recent planning meeting for this edition of the Preservation Quarterly we were tossing ideas around about what product to review. We showcase things we actually use and that work successfully. One of our staff, David, said, "How about Bora-Care? You can use it on just about anything, heck you can even spread it on your toast!" Well, I don't think I would go so far as eating it and that's probably what fungi and insects think before biting into wood after Bora-Care has been applied to it.



Bora-Care is a concentrated liquid solution of disodium octaborate tetrahydrate. It is mixed with water and can then be brushed, sprayed or injected into wood. Bora-Care will migrate throughout a piece of wood over time. This means that even the center of timbers and logs can be protected as well as their surfaces.

What's even better, it has a very low toxicity to mammals, but is extremely toxic and repellent to wood destroying pests and fungi. We use Bora-Care wherever there is a concern for moisture that could support fungi or insects. For instance when used in conjunction with epoxies in wood repair, the Bora-Care application can reduce the possibility of recurring fungal growth, thereby increasing the life of the repair. Bora-Care...Its safe, its effective, it works.

**For more information on this or any other featured products, contact  
Preservation Resource Group.**

**Phone: 800.774.7891 or visit them online at**

**[www.PRGinc.com](http://www.PRGinc.com)**

in use, the easier it is to repair and maintain. It is often the innovations that are specific to a particular time period that can provide some of the greatest challenges in the preservation field.

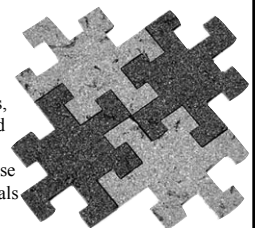
In dealing with these materials and technologies that existed only within a specific time period, sometimes you can mimic them and other times the situation requires that they be recreated. If the recreating requires the use of a technology that is no longer commercially available, then the effort, time and cost can increase significantly.

Sometimes, to mimic the product is a more realistic approach not only from the effort, time and cost aspects but also from the historic integrity point of view. Mimicing makes it possible for knowledgeable individuals to determine historic materials from replacement materials. To mimic something is to make it look like the real thing. It may be relatively easy to make something that will look and function appropriately by using modern and available methods.

The materials and techniques used on a project should be determined based on the philosophy of a project and not costs. A good, sound understanding of the project philosophy by the field crew on the project will make it possible for them to provide appropriate and cost effective options for meeting the goals of the project.

Whether using traditional materials and techniques or ones that are specific to a selective point in history, historic preservation requires an understanding of methods and an attention to details. This is how Dell Corporation addresses each project utilizing its attentive and talented staff, a good network of skilled trades people and knowledgeable suppliers.

Proto-type of  
Dreadnought Floor Tiles,  
a cork product replicated  
by Dell Corporation for  
the Thomas Edison House  
using traditional materials  
and techniques.



## HELPFUL HINTS : *Bora-Care Application*

Earlier, we discussed Bora-Care as a wood preservative. While it's easy to use, here are some hints you might consider when using it on your next wood project.

1. The concentrate has a honey-like consistency. To speed up mixing, use very warm water. A mixing paddle bit in an electric drill also helps.
2. Apply mixture by brush or hand pump sprayer to evenly coat the project area at a rate of one gallon of Bora-Care concentrate per 800 board feet of wood. Another way of looking at this is one ounce of concentrate per 6 board feet.
3. If you are applying with a pump sprayer, be sure that the wood surface is clean and free of finishes and/or paint. Wetting the surface can help. Remember, a dry dusty surface has a lot of surface tension to overcome and can act like a water repellent.
4. Existing damp conditions can also help diffuse Bora-Care quicker, so don't wait until wood is dry to apply, use these damp conditions to your advantage. Moisture helps Borates migrate through wood.
5. Protect plants from overspray. Borates are a micro nutrient and applying to plants can burn or kill them.
6. Remember to use appropriate safety precautions when using a wood preservative no matter how user friendly it is.

Good luck and be safe on your next wood project!

Mark Clark,  
*Preservation Specialist*, Dell Corporation

# The Preservation Quarterly

### **This issue featuring:**

*Intimate Stories*  
*A Foot in the Door is the Easy Part*  
*Product Review on Bora-Care*  
*Paint Maintenance Tips, Helpful Hints,*  
*A Closer Look... **and more!***

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