

# HISTORIC BURYING GROUNDS INITIATIVE NEWSLETTER

## Preserving Boston's 16 Historic Burying Grounds



BOSTON PARKS & RECREATION DEPARTMENT

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## ORGANIZING THE GRAVESTONE FRAGMENT COLLECTION

In a corner of the City of Boston archives building, at the very edge of town in West Roxbury overlooking the Charles River right before it meanders into Dedham, lies the Historic Burying Grounds Initiative's

gravestone fragment collection. Lying upon 86 wooden pallets and occupying 1,700 square feet of a huge storage room, it is a thought-provoking sight. How and why did they get there? Where are they from? What will happen to them? These are questions for which we are actively working to provide answers.



A typical fragment.

It is not unusual to see broken headstones in an old burying ground. The headstones are old and have been outside subject to the whims of Mother Nature for centuries. Many factors affect the stability of the headstones over time, including the inherent qualities of each individual piece of stone (bedding plane, cleavage plane, mineral composition), the manner in which it was quarried, climate, pollution and human activity (accidents and vandalism). In an ideal world, as soon as a headstone was broken, the pieces would be collected, a stone conservator would repair the marker and it would be returned to the site. But we live in the real world and solutions this perfect seldom occur.

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# Letter from the Director

A new resource is available for anyone who is interested in the history of the Granary Burying Ground. This spring I was contacted by C-SPAN 3-American History TV to do a documentary about the history of the Granary Burying Ground and those buried in the site. I was thrilled to be able to participate in this show. I met Russell Logan, a senior producer for the show, one damp Sunday morning in May. We were supposed to meet the day before but had to cancel because of heavy downpours. Luckily the weather held out for us that morning. We filmed for over three hours. Russell was able to make two, 30 minute documentaries about the Granary. The show is part of the *American Artifacts* series. I have never been involved in any television productions so this was a very exciting event. Before the filming I did a lot of research to check my facts and make sure I had the correct dates. In doing so I discovered new facts about some of the famous people buried there as well as interesting stories about some “regular” people.

The first show focuses on the history of some of the more famous people who are buried at the Granary. The second one examines the stories of some of the lesser-known people who are also buried there. It also touches on subjects such as funerals, attitudes towards death, the evolution of the physical site and grave-marker preservation. Although the shows have already aired, you can view them in C-SPAN’s video library:

<http://www.c-spanvideo.org/program/308891-1>

<http://www.c-spanvideo.org/program/309162-1>

The style of the documentary is like a guided tour through the site. I enjoyed being part of this project very much and I hope you enjoy viewing the results! For viewers who can’t get enough information on cemeteries there is also a similar two-part series on the Congressional Cemetery in Washington D.C. in the *American Artifacts* video library.



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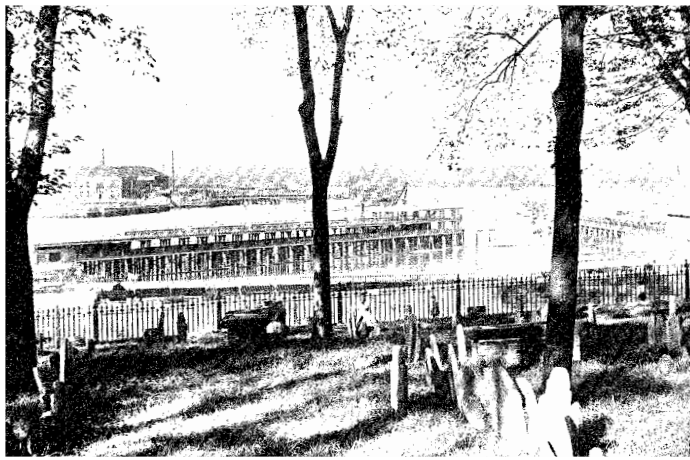
### *Historic Burying Grounds Initiative*

Our mission is the comprehensive restoration, on-going conservation and heritage interpretation of Boston’s historic burying grounds.

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## FIELD NOTES: COPP'S HILL BURYING GROUND DESIGN DILEMMA

The next large project that HBGI is pursuing is the restoration of historic fencing at Copp's Hill Burying Ground. The project plans and specifications are currently out for bid. In these construction documents, the exact scope of the work is laid out in detail so contractors can put together an accurate quote to bid on the work. Before those final documents can be created, decisions must be made as to exactly how much we believe we can accomplish within our budget and what materials and techniques will provide the best results for that specific project. Frequently specific design issues have several possible solutions.



A photograph from ca 1900 showing the Charter Street fence. If you look closely you can see that a few finials are missing.

The largest work item in this project is a run of 19<sup>th</sup>-century cast-iron fencing that extends along the edge of the site on Charter Street. The fence sits atop a brick retaining wall and a concrete capstone was poured around the base of the fence. This is an unusual configuration; we can see from old photos that it is not original but we are not sure what the circumstances were that led to this set up. Traditionally old cast-iron fences like this were set into pre-drilled holes in a granite capstone. The fence posts and pickets were placed in these holes and lead was packed around them. Old photos from before 1900 show metal straps wrapped around three sides of the granite capstone, indicating that the granite was splitting, most likely because of rust from the iron fence pickets. This would also indicate there was a problem with the origi-

nal construction since original granite capstones from the same period exist in other historic burying grounds.

In any case the original capstone was replaced by a concrete capstone. Instead of pouring the capstone and drilling holes in it for the fence posts and pickets, this capstone was poured over the bases of the posts and pickets, encasing them in concrete. The fence posts are hollow and the bottoms of the posts are open. Normally they are mounted on top of the capstone, which allows any water to drain out. But since they were encased in concrete, the drainage openings were closed and rust and debris built



The Charter Street fence in 2012. Almost all of the finials are missing on this fence now.

up inside the posts, causing some of them to crack and causing chunks of the capstone to spall off. In an attempt to prolong the life of the posts, concrete was poured into some of them which exacerbated the situation. Over the years the reinforcing bars in the concrete have also rusted causing more concrete spalling and creating unsafe conditions with rusty bars sticking out of the wall.

When deciding on the scope of work for the restoration project we were faced with three options regarding the capstone:

- 1) leave the current capstone in place, fence work done on site on the standing fence;
- 2) remove the capstone and replace with a new correctly configured concrete capstone, fence work is done off-site;
- and 3) remove the



## COPP'S HILL BURYING GROUND DESIGN DILEMMA

capstone and replace with a new granite capstone, fence work is done off site. Each option presents pros and cons.

From a historic perspective, the best option is to replace the concrete capstone with a granite one. This would replicate the original configuration and would also be the longest lasting. However, this would be the only section of fence in the entire site that had a granite capstone, so visually it would not match. It would also be a long time before the capstones on the other fence sections would need to be replaced since they were installed in 1992 and there is no guarantee that future site managers would choose to use granite instead of



The concrete capstone was poured over the bottom of the fence post causing rusting and spalling.

concrete. This option is also the most expensive and it is not sure we could find enough money to pay for it.

The first option to leave the old capstone in place would be the least expensive. Failed areas along the capstone could be repaired. But the fence would have to be cleaned on site for repainting; this mode of cleaning would not be as thorough as removing the fence to a shop to be sandblasted. This option would not address the issue of rusty picket ends and the build-up and drainage problem within the posts. Even if a solution could be found for the drainage issue, the fence pickets would continue to rust in their concrete encasement, eventually either cracking the capstone or else rusting completely through and dangling above the capstone. Also the existing capstone is unattractive and that issue would remain so even with a restored fence. Since we have already committed the funds to pay for a thorough fence restoration, it seems more cost effective to address all

the issues now instead of coming back and having to spend more money repairing the same section of fence.

The final option, which replaces the old concrete capstone with a new capstone, occupies the middle ground between the other options: It is more expensive than option one, but still affordable; it is not historically accurate like option three but would allow the fence to be reinstalled in a correct configuration which would prolong the life of the existing historic metal; it is more attractive than option one and would blend in with the rest of the existing fence. The perimeter fencing on the other sides of the site had the old concrete



A photo from the 1992 Hull Street fence restoration shows the old concrete capstone partially removed. Notice the rusty picket ends.

capstone replaced by a new, correctly configured capstone in 1992. Our goal would be to match this capstone.

After much deliberation we decided to bid out the project with option two, the new concrete capstone. Ultimately it came down to option two having fewer downsides than the other options. If the other sections of the perimeter fence had granite capstones then it would have been worthwhile to delay the project while exploring additional funding options. If the fence itself was in better condition and did not require a full-out, expensive restoration, than it might have been better to pursue a less expensive project with a reduced scope of work and simply patch the existing eroding capstone to extend the life of the current configuration. Choosing the least worst option does not sound like a recipe for a successful project, but I believe that when the newly restored fence is finally installed, its beauty will make us forget that capstone dilemma completely!

## GRAVESTONE FRAGMENT COLLECTION *(continued from first page)*

Cemetery caretakers have addressed this issue in various ways. It seems that four types of solutions have been used to address this continuous problem, although none have proved to be fully adequate: 1) resetting and repairing the headstones sporadically, 2) removing and storing the stones in another location, 3) leaving the stone pieces where they are in the site and 4) reusing the headstones and pieces for different purposes.

Published reports from the Boston Cemetery Department in the early 1900s indicate that some headstones had been reset and recarved in Dorchester North Burying Ground and Eliot Burying Ground as part of restoration and clean-up activities in the 19<sup>th</sup> century. This certainly occurred in the other historic burying grounds too. Many headstones have also been repaired in the 20<sup>th</sup> century, with some treatments holding up better than others. HBGI has engaged in numerous rounds of headstone conservation and resetting. Unfortunately there is never enough funding to address every broken or fallen headstone and we have also left fallen stones in the sites in anticipation of future gravestone work.

Another solution for broken headstones has been to reuse them to repair something else, such as a tomb monument or a masonry wall. The Bellingham-Sullivan tomb in the Granary Burying Ground illustrates this method. The monument was built in 1808 and its original configuration was a pair of stone slabs supported by six legs each. However these legs became unstable at some point and in the early 20<sup>th</sup> century stabilization work was carried out on the tombs, rebuilding the bases out of brick. During a second restoration effort in 1989, the conservators found that a number of headstones and pieces thereof had also been incorporated into the tomb structure by masons during its first repair. Another example of the re-use of old headstones is in the low wall between the upper and lower grounds in Copp's Hill Burying Ground. In 2006 we repaired that wall. Upon dismantling the crumbling wall, a second, older, wall was found behind the first wall. The masons found several old headstones in this wall, some of them in perfect condition except for the mortar that was stuck to them. Those headstones were cleaned off and reset in the burying ground. We do not know how many other headstones are currently in use in the historic burying grounds as "masonry units." Headstones have also been found in some very curious places: used as a manhole cover on a Boston street, as a table, used to bake bread on and in a landfill in Connecticut.

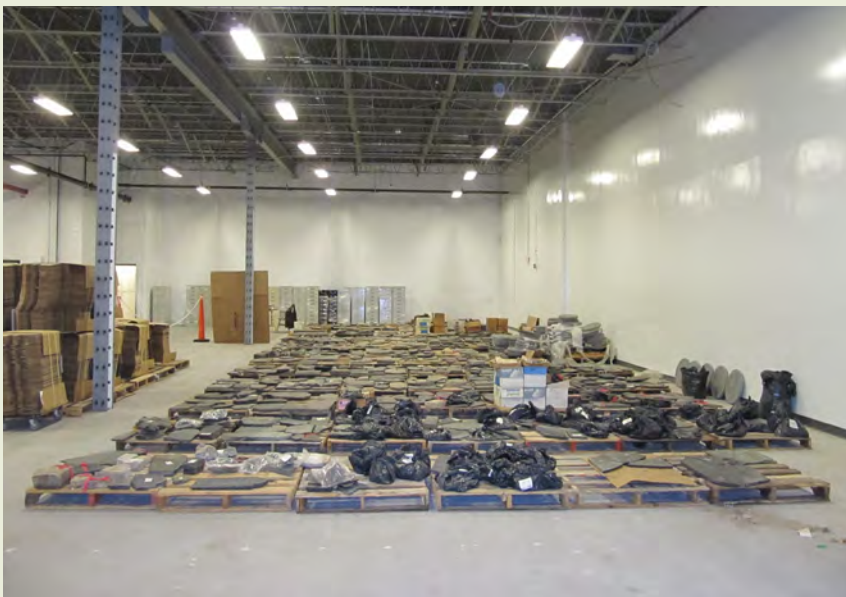


This headstone fragment was found in 1989, mortared into the Bellingham-Sullivan tomb in the Granary Burying Ground.

Headstones have also been placed in various storage situations. Whenever we do work on tombs, we usually find headstones stockpiled inside the tomb crypt. We do not know if those stones commemorated people who were subsequently buried in the tombs or else if the stones were just lying around the tomb area and put in there for whatever reason. Stones have been removed from the site for storage, both with and without documentation. Various places have been used to keep them: a maintenance facility near the Fenway area, another maintenance facility on Boston Common near Central Burying Ground, the chapel at Mount Hope Cemetery, the barn at the Dorchester Historical Society headquarters and the city archaeology lab.

## GRAVESTONE FRAGMENT COLLECTION *(continued from previous page)*

Numerous gravestone fragments were removed from the burying grounds during the grave marker inventories that took place beginning in 1985. Starting in 1987 HBGI was allowed to store gravestone fragments in the archaeology lab. At that time the lab was located in the North End of Boston, in the basement of the old Traffic Tunnel Administration building at 152 North Street near the entrance to the Callahan Tunnel. These grave markers and pieces were each documented on survey forms recording information about where the stone came from, its physical description and size. Collection of these fragments continued intermittently until the early 1990s. Many of the fragments have documentation but some do not. The fragment collection was sorted through by a graduate archaeology student in 1995. Identification numbers were assigned to the fragments and labels were attached to the stones. A group of stones from the Granary Burying Ground were identified as being able to be returned to the site and were subsequently reset.



The fragment collection currently occupies 86 pallets or about 1,700 square feet.

When I came to this position in 2000, I visited the gravestone fragment collection and was overwhelmed by the number of pieces and the difficulty in accessing the collection. The fragments were stored mostly on shelves, with some being stored in large wooden boxes. The fragments themselves were heavy and difficult to view or move around, particularly when they were high up on a shelf. Many, but not all, of the fragments were labeled and some of those labels were falling off the stones. There appeared to be several numbering systems in use and it was difficult to match any documentation with the corresponding fragment. During a couple of headstone conservation projects, I went through parts of the fragment collection I could access, hoping to locate any matching fragments, but I did not find any. Although the collection was not organized in an easily accessible way, the stone fragments were stored safely and it was easy to put off organizing the collection until a later date.

The fragment collection was suddenly thrust to the front burner at the start of 2012 when I was informed that the City of Boston was selling the building at 152 North Street and that the gravestones needed to be removed. The artifacts in the city's archaeology collection were being transferred to the city archives building in West Roxbury. After some discussion, it was decided that the gravestone fragment collection would be transferred to storage in the archives building too, but it was hoped that a different solution might eventually be found.

Enter Ian Stewart, a graduate student from Boston University's Preservation Studies program with a strong interest in historic burying grounds. Ian has undertaken the daunting project of organizing the fragment collection. The ultimate goal of this project is to return as many gravestones to



## GRAVESTONE FRAGMENT COLLECTION (continued from previous page)

their original site as possible. Some stones could be reset immediately whereas others require some conservation treatment. The first task is to figure out exactly what we have by matching fragment documentation sheets to stones in the collection. Documentation must be created for fragments that do not have any. This information will be entered in a database which includes photos. The fragments will also be put into six categories:

Category 1) Able to be reset in site as is

Category 2) Able to be reset in site with minor conservation work

Category 3) Able to be reset in site with more complicated conservation work

Category 4) Fragment with carving, unable to be reset

Category 5) Fragment without carving, site known, unable to be reset

Category 6) Fragment without carving, site unknown, unable to be reset.

Some fragments have been stored with matching fragments from the same headstone, but many have not. In sorting through the collection we are also identifying pieces of the same stone that have been separated. All of the fragments must be labeled using paraloid B-72 lacquer and printed labels, a technique which is used in museums, so the labeling will not fall off of fragments that remain in the lab. It is our hope to be able to reset all of the stones in categories one and two in 2013; we will include as many stones in category three as funding allows. We will not be able to use the fragments in categories five and six since they have no carving on them. Our intention is to bury fragments in category five in the site from which they originated, and bury all fragments in category six in one site, documenting the location for the records. Category four fragments will remain in storage. When future grave marker conservation projects are undertaken, the database and photos will allow for a search of any missing pieces for a specific gravestone without having to physically access the collection. If a possible match is found then the conservator can study just that fragment.

One issue that remains unresolved is the question of what to do with future fragments. We do not have a good space in which to store more fragments. The archives storage space is filling up and the gravestone fragments were housed there as a temporary solution. There are pros and cons to removing fragments from a site. Putting them in correct storage conditions preserves any pieces from harm. However once they are removed, they are more likely to be overlooked in a conservation program. If a headstone is visibly in pieces in a site, it becomes a top priority for conservation work whereas the broken stones that might have a match in the fragment collection are relegated to second priority. There is always a possibility that any fragments removed from the site will languish on shelving for many years or become lost in the giant archives collections. We will continue to investigate solutions to this dilemma to safeguard these fragile headstones.



Six pieces of this gravestone have been located and put together. Hopefully the other pieces will be found. This stone is a category 3.

# INTERVIEW

IAN STEWART

ORGANIZING THE GRAVESTONE FRAGMENT COLLECTION

HBGI: What is your professional background?

IAN: My undergraduate work was in technical theatre with a minor in medieval European history. So I went out and did the theatre world for a couple of years and then starting in 2005 I started working in historical restoration. I spent several years as the head of maintenance at Historic Huguenot Street in New Paltz, New York. After that I spent two years as a millwright doing masonry, blacksmithing and timber framing. Then I spent another two years working for Historic Hudson Valley as one of the restoration guys dealing with 17th and 18th century historic sites in the Sleepy Hollow region. I also have spent the last decade being a professional rigger. I'm currently in my second year at Boston University's Preservation Studies master's program.

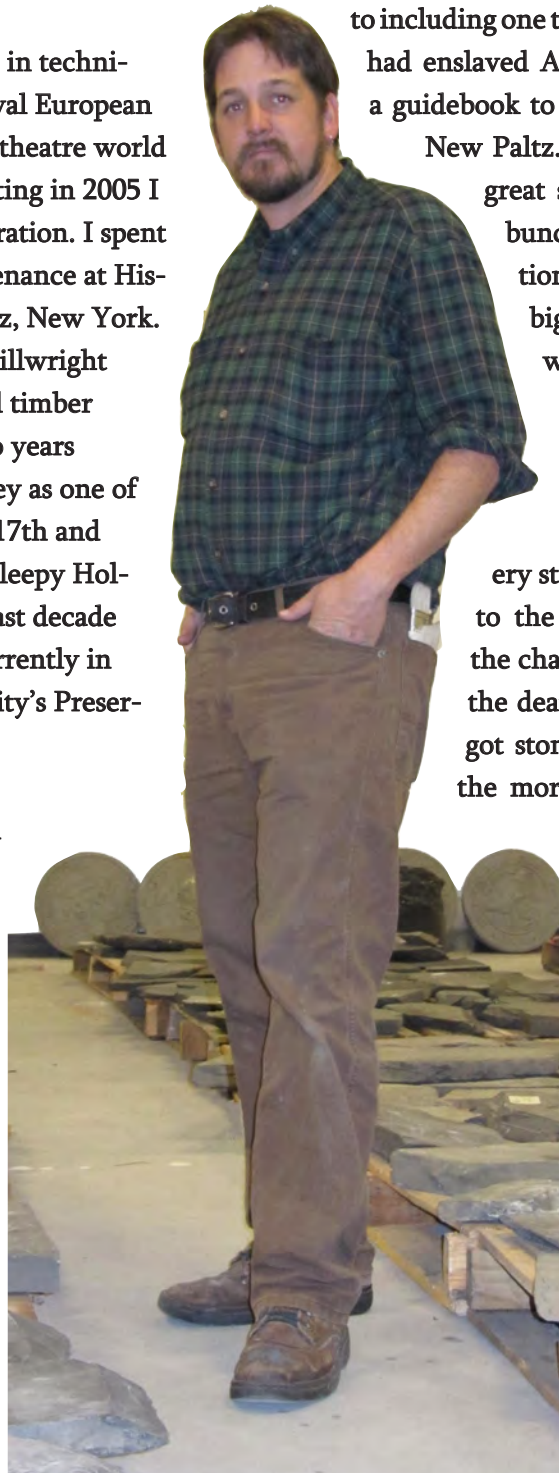
HBGI: Why did you want to work with gravestone fragments?

IAN: I grew up in a family where history was very important. As a child we were always taken to things like Sturbridge Village and Williamsburg. I'm not going to deny I had a bit of a dark side when I was a teenager and was fascinated with gravestone art. As I got older I started looking more at gravestones historically and how they represented the changing ideas of death in America. Then when I was

working at Huguenot Street I had burial grounds to tend to including one that was a mile back in the woods and had enslaved Africans' graves. I also helped write a guidebook to the historic burial grounds around New Paltz. To me this collection represents a great slice of Americana. It has a whole bunch of different preservation questions engaged with it and it's Boston's biggest stone jigsaw puzzle. To me working with my hands is important.

HBGI: Tell me about the collection.

IAN: This collection represents every style of gravestone art from the 1670s to the mid-19th century. You can trace the changes in Puritan gravestone art from the death heads to the soul effigies. We've got stones in this collection from some of the more famous carvers in Boston. Some of them are very simple. The 1680 Lydia Broun stone is very simple but it's one of the earliest stones we have. There are some very ornate stones. You start to be able to tell which stones were carved by the same carvers. It really is a representative collection. Even if some of these stones never get back in the ground they will be great study pieces for future generations. Currently the fragmentary gravestone collection takes up 86 pallets which is roughly 1,700 square feet of gravestones lying on their backs.





**HBGI:** Do you have a favorite stone and why?

**IAN:** It's the Pemberton stone. It had been stored in the Mount Hope Cemetery chapel in two pieces. It's in three pieces now. I found the third piece in a box from the Granary. The third corner piece had been removed during the cleaning of the Bellingham-Sullivan tomb which is in the Granary. Mind you, there is no paper record as to where this one came from. It is a large stone, roughly 3 feet across by about 4 feet tall by 4 inches thick. It's a massive piece of slate with very intricate carving on it and I just sort of fell in love with it. There are all sorts of parts of the carving that seem to fly in the face of the common conception of Puritans. The cinerary urn and the dragons, which are



Ian's favorite: the Pemberton headstone.

sort of merpeople—half man/half fish—that's a very pagan symbol to be putting on a gravestone. Also I discovered James Pemberton was one the founders of Old South Church. He purchased a section of the city which became Pemberton Square, which was right next to Scollay Square. But it's this beautiful burial marker and it's for him and his wife.

**HBGI:** What do you enjoy most about working with the collection?

**IAN:** For me it is twofold. I love the mental exercise of the giant stone jigsaw puzzle. I do perhaps even dream about these stones at night or think about the different patterns and you start to see things. I think about the fact that when this is done a great many of these stones will be back out.

These were not insignificant investments. Families in the 17th and 18th

centuries in Boston spent an inordinate amount of money on burials and on funerary ceremonies. These memorials commemorate a human life. Getting them back into the yards or getting the digital collection of photography that I'm doing up onto a website so that people can see it [is important to me]. We're standing next to a stone that is 300 years old. The compelling thing to me is that each stone here represents human life and getting it back out where it belongs is a huge task but it's something I believe in very strongly. These are sacred objects.

**HBGI:** Do people think it's strange that you spend all day with gravestones?

**IAN:** Some people, yeah, some people think I'm a little morbid. My world is a little skewed because I have a lot of friends who are into the same thing I am. I have a bunch of friends who want to come and see the collection. There are lots of people who think this is the coolest jigsaw puzzle ever. And there are other people who think that my fascination with mortuary art and gravestones is just beyond bizarre and they don't know what to make of it. I think in this day and age our views of death and memorial stones have changed. I think there is a very compelling argument as to why these are socially and culturally important and spiritually important if you are a spiritual person. If nothing else these represent the amount of care that the living had for the deceased and I think they're beautiful testimonies to the early colonists' care for each other. Do I think it's a little strange that I spend my day working days working with gravestones? No and if I could do this for the rest of my life I'd love to. Gravestone work is good physical work, these things aren't light, and at the same time, I feel like a broken record, I think they're compelling material culture artifacts.

# A GALLERY OF GRAVESTONE REPAIRS

Currently when we do grave marker conservation projects we use carefully specified adhesives to apply in different types of cracks, breaks and delamination. Although we realize the repairs will not last forever, we hope they will last several decades. But before the usage of two-part epoxies and latex-modified grouts, other methods were used. We see different types of old repairs remaining on gravestones. Varying strengths of mortars have been used, as have mechanical means to attach or protect a marker. Some methods have been successful and some have not and each have their pros and cons. Although I believe the repairs we are using now are the current best option, I remain open to other ideas.



This stone was repaired in 2004. There was one break across the front of the stone. It was re-adhered with a combination of epoxy to attach the pieces and a special mortar to fill any areas of lost stone along the break. This treatment was very successful and is in perfect condition. Clean breaks across the middle of a stone are usually easier to repair than those which run across the top edge or those which involve delamination of the slate.

Here is an example of a repair that was done many decades ago. This headstone dating from the 1690s is one of the oldest stones in Westerly Burying Ground. The edges of the stone were covered with a copper shield in order to keep the water out of the cracks in the top of the stone. Holes were drilled through the stone in order to attach the shield. This mechanical means of conservation kept the grave marker standing for many decades but eventually failed. The new break in the stone occurred along a line that included the hole drilled in the stone to incorporate the copper rivet. This type of repair often creates a new weak point in the stone.



This headstone was repaired in 1991. Here is the same headstone in 2005. What happened? The epoxy used in this repair was not resistant to ultra-violet light. Most of the grave markers conserved with this material did not hold up. Today we would use a different epoxy which would last longer.



The tomb on the right was repaired decades ago using a hard Portland cement. It was repaired again in 2011 using a different material. Water eventually works its way in between mortar and the stone, and it freezes and thaws repeatedly. When the water expands as it freezes, it cracks the softest material: if the mortar is too hard, it cracks the stone, not the mortar. This cycle repeats over and over again every winter. A softer mortar will give way first and not harm the original grave marker.





This headstone in Walter Street Burying Ground was encased in a new slate frame. This is an attractive setting but slate is expensive. Also when water manages to get between the gravestone and the frame, it can cause a lot of new damage.



At one point this stone was repaired with iron straps. To prevent future degradation of the stone from the rusty iron, the straps were removed, the holes were filled with mortar and the two pieces were reattached with epoxy.



This tomb plaque from the fragment collection used to be bolted to a wall. The large crack goes through the bolt hole. This is a typical failure point. Making a hole in the slate creates a weak point. The bolts can rust, causing additional problems.

This large headstone at Dorchester North Burying Ground was attached to the wall by using stainless steel brackets. It is broken in the middle and at ground level. No holes were drilled into the stone. It is nearly 5 feet tall. It commemorates Daniel Davenport, a sexton in Dorchester from 1806-1857. According to his epitaph he buried 1,837 persons.



## *SITES INCLUDED IN THE HISTORIC BURYING GROUNDS INITIATIVE*

*Bennington Street Cemetery (1838)*

*Hawes Burying Ground (1816)*

*Bunker Hill Burying Ground (1816)*

*King's Chapel Burying Ground (1630)*

*Central Burying Ground (1754)*

*Market Street Burying Ground (1764)*

*Copp's Hill Burying Ground (1659)*

*Phipps Street Burying Ground (1630)*

*Dorchester North Burying Ground (1633)*

*South End Burying Ground (1810)*

*Dorchester South Burying Ground (1810)*

*Union Cemetery (1841)*

*Eliot Burying Ground (1630)*

*Walter Street Burying Ground (1711)*

*Granary Burying Ground (1660)*

*Westerly Burying Ground (1683)*