



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
Northeast Region
United States Custom House
200 Chestnut Street
Philadelphia, PA 19106

May 20, 2010

Logan County Board
601 Broadway
Lincoln, Illinois 62656

Dear Members of the Logan County Board,

David Doolin contacted me and asked if I could provide information regarding the conservation, replication and long-term maintenance of Civil War era monuments. He explained to me that the soldier figure atop Logan County's civil war monument has suffered severe damage and is in need of replacement. He also provided me with some background information, as well as digitized historic photos of the monument. I am pleased to offer my comments on this project and hope that they are helpful as you move forward with your efforts.

I've been working as an historian and conservator for the National Park Service for nearly twenty-five years assisting National parks and other constituents with the care of the monuments and cemeteries that have been placed in their care by past generations. While we try to preserve and continue to use the original monument, sometimes, as is the case with your monument, we have no choice except to replicate a work that can no longer perform its intended memorial function. But how this is carried out will influence greatly the memorial's future quality and success.

Logan County possesses a very early memorial to Civil War dead. Built by 1869, it is among a handful of works that really established the tradition of using a figure of a single soldier to represent the loss of many lives during the war. The tradition, begun with monuments like yours, would spread throughout the nation over the decades to follow. But towns like Lincoln are where it happened first.

From the photographs that David provided, and others that I was able to find online, it is apparent that the figure has lost quite a lot of its surface definition during its 140 years. Unfortunately, it may not have been carved from the best piece of marble. This, coupled with so much time spent in the harsh industrial environment of twentieth-century America and the wind event that tossed the figure from its column, have helped to bring you all to the point of creating a replica that will continue to memorialize Logan's County's Civil War dead.

Let me begin by discussing the relative merits of materials that might be used to make a copy of the damaged figure. Fortunately, you possess very good documentation to allow you to move forward with this work. You have the pieces of the original figure that can be re-assembled and used as a model for the size and form of the new one. You also have very good historical photographs that depict the memorial when it still retained original surface details that are now lost.

As for what material should be used to make the new figure, I believe very strongly that a top quality marble would be your best choice. Happily, there are better quality marbles available than were used to create the original. In addition, the chemical environment of the air is far better today than it was during much of the late-nineteenth and twentieth century. For this reason, I see no reason why a new figure could not last far longer than has the original. I would note, however, that your original figure has survived for a very long time given the odds against it. Actually, the committee that oversees the US Capitol carried out a very similar effort in the early 1960s when it removed the three deteriorated marble figures that had stood above the main entrance of that building since the 1820s and cut the new copies that have now performed very well for nearly fifty years.

Marble was often used for these first Civil War memorials, and I would call your attention to the Soldiers National Monument [1869] at the Gettysburg National Cemetery as an example. As the central monument in the cemetery that Lincoln helped to dedicate in 1863, this memorial was well-known throughout the nation and helped establish a tradition for marble figures adorning early remembrances of Civil War dead. This memorial's base is granite but its marble figures are carved from high-quality Carrara marble. While these figures have weathered over the years, they have remained in generally good condition. Completed the same year as was your monument, it also remembers lives lost in war. These memorials are products of a cemetery monument tradition that used marble because it possessed a strong memorial pedigree that stretched from ancient times and was revived during the Neo-classicism of the late 18th and early 19th centuries. More importantly, it was the material selected by the Logan County families and former soldiers whose sons and friends were being remembered. While your memorial was not created for a cemetery setting, it still performs that same function but in a key civic space. Also, this memorial would have represented a significant financial commitment for a small community at this time, before cost-saving mass production methods would bring down the cost of memorials in later years.

Later memorials, made in the 1880s and 90s, tended to celebrate the Union Victory and they often did so in bronze. This is not to say that there were not bronze monuments being made in the late 1860s, but the creators of your memorial chose marble and they had reasons for doing so that likely grew from the traditional use of marble as the most appropriate material to remember the dead. In doing so, it also conveys the most immediate sense of the great toll that the Civil War exacted.

I also believe that shifting the material to bronze, while it might appear to be a more durable choice, would carry with it some significant down sides. First of all, this figure was conceived as a stone piece that would be carved and not as a bronze that would be modeled and cast. Its original surfaces were very smooth and even, which look great in stone, but not so great in bronze—a material that was prized

for its ability to replicate fine details and for its metallic surfaces that catch light and reflect it in interesting ways. This is not the case with a figure such as yours that is much quieter and somber in nature. This figure, put into a lively material like bronze, would appear decidedly lifeless. On the other hand, if you choose to make a bronze figure that has a more modern appearance, it will become an incongruous addition to an historic monument.

I know that the durability of bronze makes it an attractive choice, but be aware that bronze carries with it much more extensive maintenance requirements if it is to perform well. Bronze's well-being is dependent upon the protective coatings that guard its surface from environmental corrosion. New bronzes are typically protected by foundry-applied lacquers and wax coatings that need to be inspected frequently, and periodically removed and reapplied. In addition, removal and recoating using the most durable lacquer coatings require the use of solvents that can put workers at risk if they are not properly protected. When this work is done, the marble structure below the figure would need to be well-protected from the harm that chemical strippers used to remove lacquer could cause. In addition, some "patinas" used on bronzes these days are not really true chemical patinas that change the color of the metal surface. Instead they are really pigmented lacquers, so their failure results in the loss of the statues' color as well. Even true chemical patinas, especially those that are blue-green or golden in tone, require timely maintenance. This places added pressure on statue owners to religiously inspect the figure and carry out lacquer reapplications in a timely manner. While bronze may be a very durable material, its surface appearance—the place where the "art" resides—is pretty fragile.

Most manufacturers of these coatings, Incralac being the most widely used, suggest that a new coating be applied every five years, but if these coatings are well-applied on a new bronze surface they may last ten years before it fails. Failure typically shows itself first in the areas most exposed to the elements—the top of head, shoulders, and the side most exposed to prevailing weather patterns. First appearing as a blanching of the surface, the unprotected areas of bronze are soon exposed to corrosion that will produce a very noticeable contrast with more protected surfaces where lacquer remains more intact. Before a full removal and reapplication of lacquer coatings, they may require some spot repairs in intervening years. Failure to adequately maintain these coatings will result in the conversion of bronze surfaces to soluble copper salts that will run off the bronze and lead to a blue-green staining of the marble column below. While one might create a bronze with the intention to stay on top of its maintenance requirements, to do so is costly and it has been my experience over the years that this just doesn't happen. One generation may be committed to long-term care, subsequent ones may not and the bronze could be left to languish.

In contrast, marble requires little maintenance beyond a gentle water washing. Sometimes a mild biocide is used if damp conditions encourage the growth of biota, but I notice that this memorial is not shaded by trees, so moisture retention and attendant algae growth should not be a problem here. As for the original marble figure now in pieces, I understand that this will be reassembled and brought indoors for display. I would suggest that this work of stabilization be entrusted to a qualified objects conservator who will be able to work with you to properly carry out this work. Because it will essentially become a

museum object, the conservation methods available are wider than they would be if the figure were to remain outdoors.

While I've tried to address the specifics of the work ahead of you all, I would also note that there is longstanding precedent, both in the US and in Europe for replicating lost or damaged art and architectural elements by using like materials, especially when one can demonstrate that these materials can provide a long serviceable life, as I believe is the case here. We all know that materials placed outdoors will weather over time, but I feel certain that creation of a new marble soldier figure, coupled with the conservation of the original and its placement in a protected museum environment is the right step for you to take.

Sincerely,

A handwritten signature in cursive script that reads "Dennis Montagna". The signature is written in black ink and is positioned above the printed name.

Dennis Montagna, Ph.D

Director, Monument Research & Preservation
National Park Service—Northeast Region
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