

<b>Collection</b>	The Wilton House Collection	<b>Category</b>	5: T&E For Science & Technology
<b>Other#</b>		<b>Subcategory</b>	Timekeeping T&E
<b>Old#</b>		<b>Othername</b>	
<b>Accession#</b>	2012.0003	<b>Received date</b>	04/03/2012
<b>Received as</b>	Found in Collection	<b>Catalog date</b>	04/03/2012
<b>Cataloged by</b>	cbg		
<b>Source</b>	Unknown		
<b>Creditline</b>			

007\2012003.JPG



After Conservation

**Home loc** Storage

**Description** Sundial, Bronze.  
 A bronze sundial signed and dated 1765 by maker Thomas Hart.  
 Chapter Ring I :Roman Numerals and Signature Thomas Hart London 1765.  
 Chapter Ring II: Numerous scrolling leaf designs and Fleur-de-Leis.  
 Poem in all Caps:  
 SERENE I STAND AMONG THE FLOWERS  
 AND ONLY COUNT LIVES SUNNY HOURS  
 FOR ME DARK DAYS DO NOT EXISIT  
 I'M A BRAZEN -FACED OLD OPTIMIST  
 Chapter Ring III: small flower with feather like leaves on either side around the circle. Chapter RIng IV: NW W SW S SE  
 E NE N between each letter is a cloud  
 Chapter Ring V: Sun , possible mark on end of Gnomon proper right side degree mark possible 180.  
 Gnomon numerous chased designs.

<b>Date</b>	1765	<b>Status date</b>	
<b>Year Range</b>	0 - 0	<b>Status by</b>	
<b>Condition</b>	Good	<b>Status</b>	OK
<b>Height</b>	11.500 in	<b>Width</b>	0.000 in
<b>Length</b>	0.000 in	<b>Depth</b>	0.000 in
<b>Diameter</b>	21.000 in	<b>Circum</b>	0.000 in
<b>Weight</b>	0.000 oz	<b>Count</b>	
<b>Subjects</b>		<b>Classification</b>	
<b>Search terms</b>		<b>People</b>	
<b>Legal</b>		<b>Repatriation</b>	
<b>Publications</b>		<b>Related Notes</b>	
<b>Maint start</b>		<b>Maint notes</b>	
<b>Maint cycle</b>			
<b>Condition</b>	Good	<b>Cond date</b>	04/03/2012
<b>Condition by</b>	cbg	<b>Cond notes</b>	2012 Conserved after hurricane damage.
<b>Appraiser</b>		<b>Acq value</b>	
<b>App notes</b>		<b>Value date</b>	
		<b>Current value min</b>	
		<b>Current value max</b>	
<b>Notes</b>	Poem on face of sundial is late-19th or early-20th century		

# BRONZE et al, Ltd.

Fine Art Conservation

March 3, 2012

**CONSERVATION REPORT** for the Sundial, located at the Wilton House Museum. The Sundial is identified by the inscription Thomas Hart London 1765, which is engraved on the top surface. The Sundial was damaged during Hurricane Irene.

#### Condition prior to treatment:

The Sundial was struck by tree limbs and knocked from its stone pedestal onto the ground. Various sections of the top round surface were bent and distorted, with small abrasions evident. Some of the abrasions cut into the very fine engraving, but the damage was quite limited on the top surface. The central gnomon was also bent and was misaligned. The gnomon is secure to the circular supporting plate, and the original mechanical joinery is intact.

The overall blue/green patina was mainly intact prior to the hurricane incident. A series of visually disfiguring rust/ochre drip-like blemishes had developed on the surface. This discoloration was the result of contact with leaves and other organic material when the Sundial was resting on the ground.

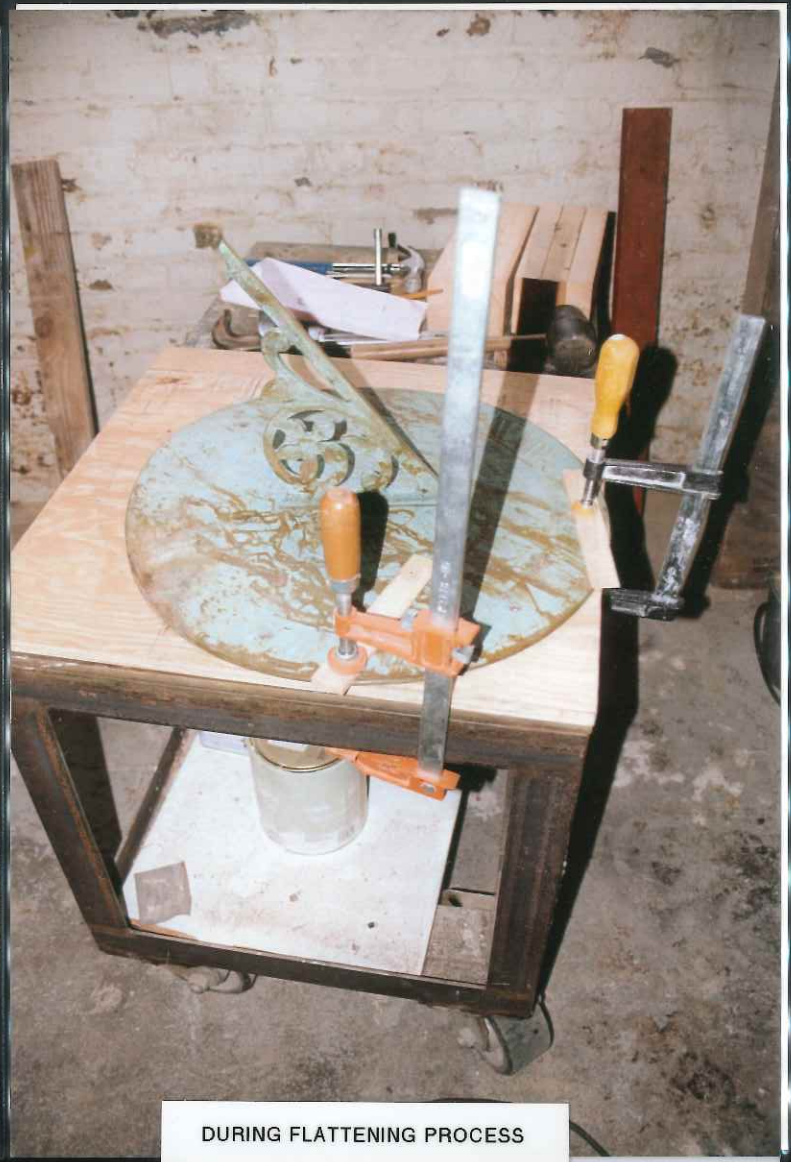
#### Method of treatment:

The bent and distorted areas around the outer rim of the sundial were flattened and reshaped with a rubber mallet and various wooden wedges and blocks. Rubber padded clamps were also used during the flattening process. The reshaping and flattening process went rather well, and the circular flat disc was restored close to pre-damage condition. Efforts were made to remove abrasions and other marks from the finely engraved surface. The gnomon was also straightened with clamps, wooden wedges, and the rubber mallet.

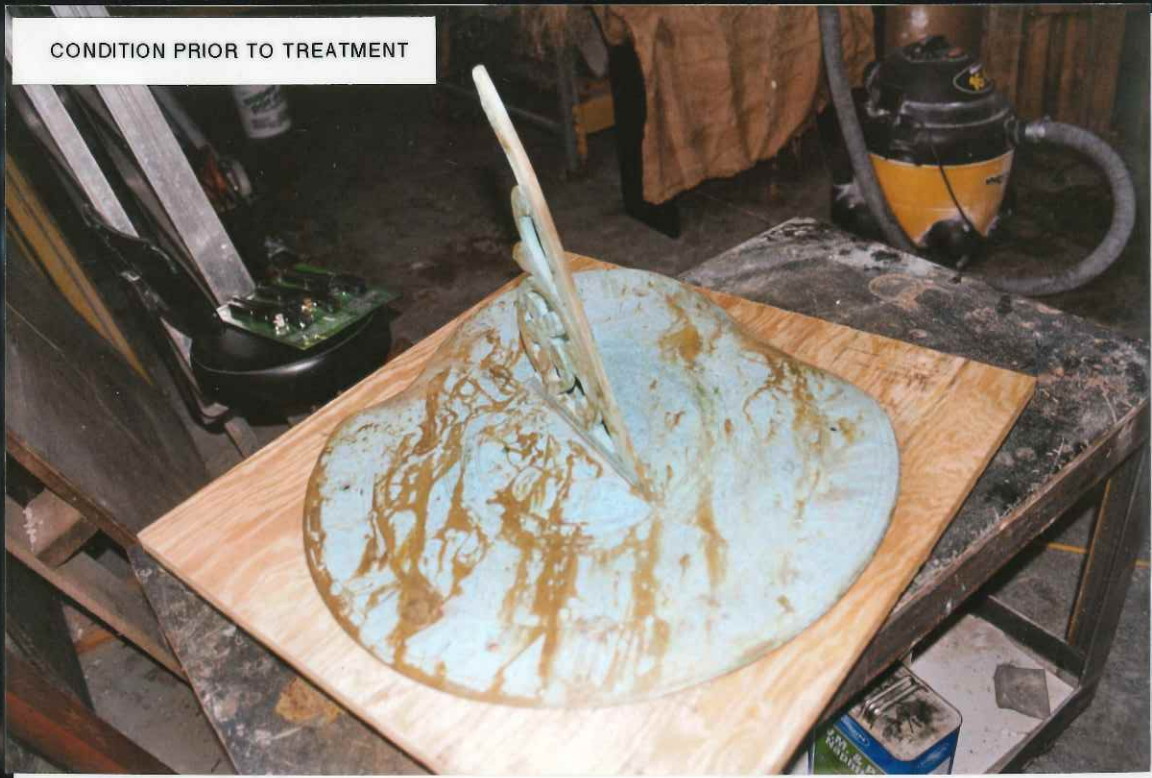
Initial tests indicated that the brownish stains could be partially removed with solvents such as acetone and naphtha. After removal of the stains, darker areas remained around the lighter blue/green overall patina. It was possible to remove the stains until the red copper oxide layer was revealed under the verdigris patina. The appearance of the residual stains was unacceptable with the soft dense blue/green patina. Further testing in the studio revealed that the darkened areas could be covered and blended with the application of cupric nitrate in solution with distilled water. Initially, the solution of cupric nitrate was tinted with a small amount of cobalt blue dry pigment. This formula proved to be too powdery blue and not the best match for the existing patina. Viridian green dry pigment was added to the cupric nitrate solution, and this proved to be a very good match to the extant patina. This chemical formulation was repeatedly applied to the heated metal until the desired color match was created. Many layers of the chemical patina were required to cover and mask the dark brown areas. This was far more desirable than full removal of the remaining patina, and complete repatination. It also eliminated the need for laser cleaning or air abrasive cleaning, and the possibility of altering the metal surface. Several layers of Trewax paste wax were applied by brush to protect the final patina. The hardened wax was buffed to a soft lustrous finish with cotton cloth.

#### Future considerations:

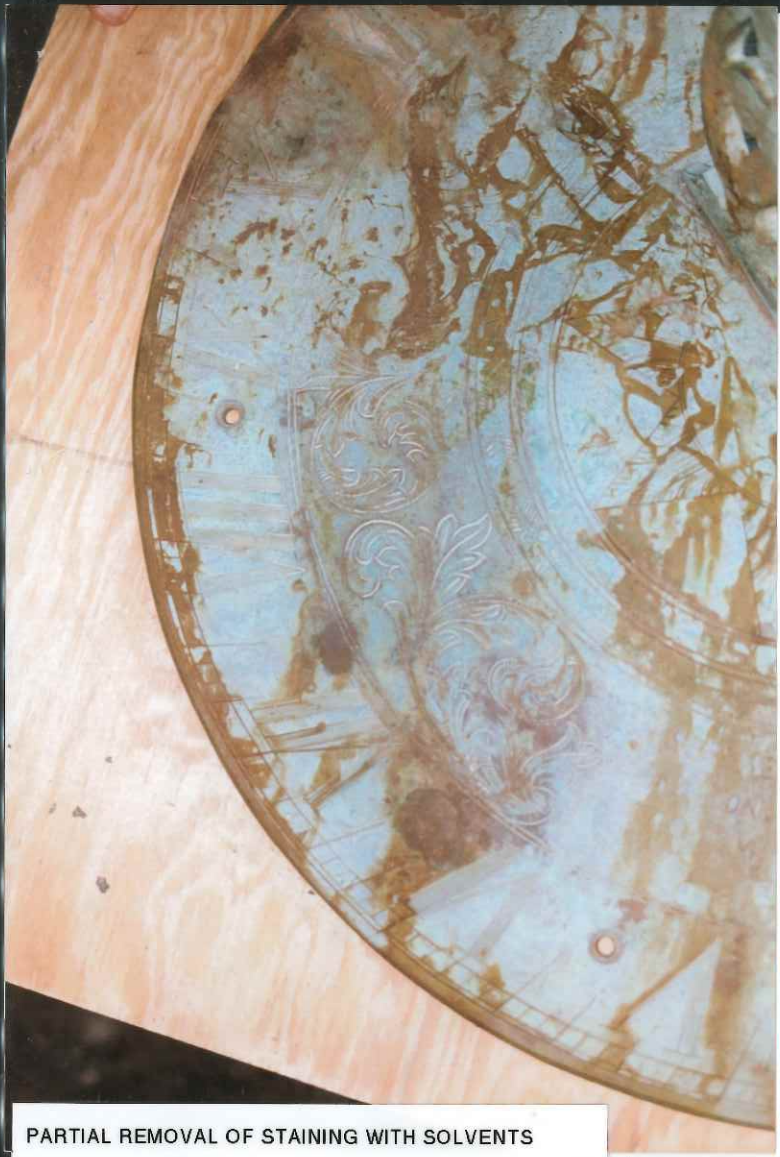
The Sundial will be exhibited in an indoor environment for the foreseeable future. It should only require light dusting with a soft cotton cloth, as the need arises.



DURING FLATTENING PROCESS



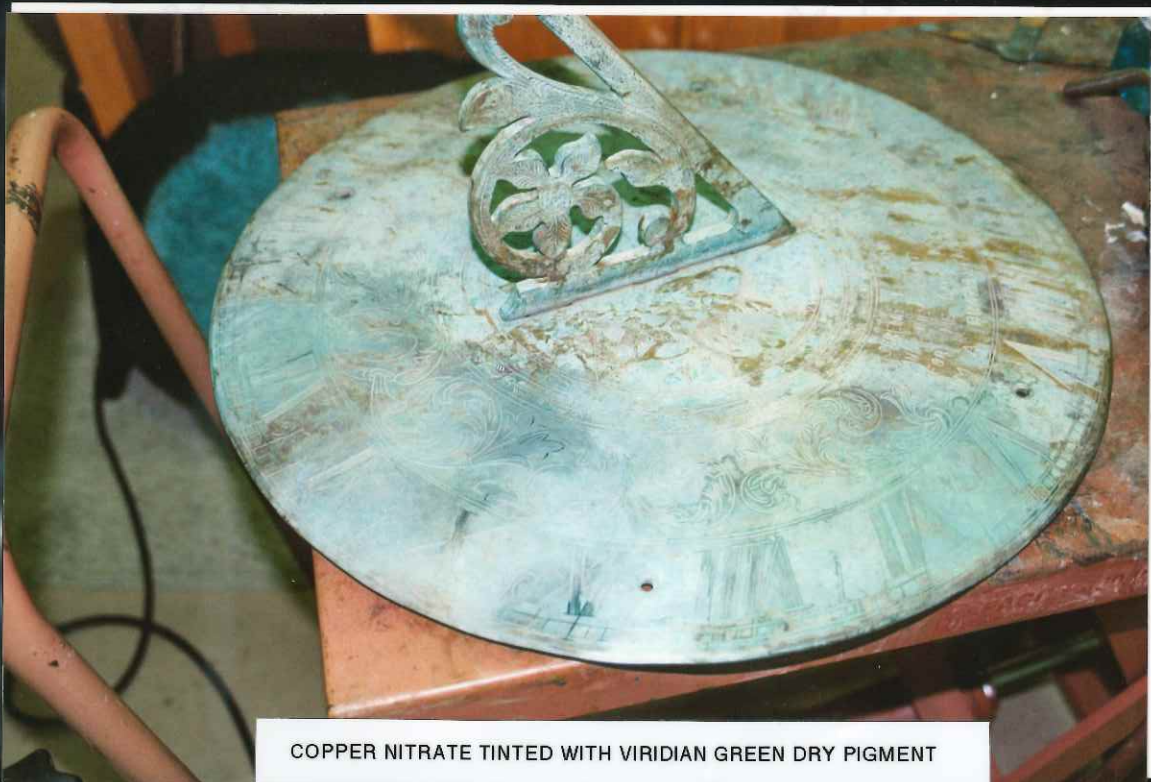
CONDITION PRIOR TO TREATMENT



PARTIAL REMOVAL OF STAINING WITH SOLVENTS



TEST AREA FOR PATINATION WITH COPPER NITRATE



COPPER NITRATE TINTED WITH VIRIDIAN GREEN DRY PIGMENT



CONDITION AFTER TREATMENT/INDOOR LIGHTING





CONDITION AFTER TREATMENT/OUTDOOR LIGHTING



# Research

Carol Givens

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**From:** Chuck Probst [barometerfix@gmail.com] on behalf of Charles Probst [info@barometerrestoration.com]  
**Sent:** Saturday, October 08, 2011 11:28 AM  
**To:** Carol Givens  
**Cc:** bronzeetal@comcast.net  
**Subject:** Further to your sundial

I had a further email from Jill Wilson of the BSS in England this morning. Here it is verbatim:

As for your query you'll be amused to learn that you've stirred up a great deal of interest and research. I'd had my doubts for some time over the attribution of certain dials and had pretty well proved that some Victorian firms were making 'antique dials' to order as useful garden ornaments. (One at least did it fairly openly but others it seems did not.) John Davis and John Foad both agreed that the dial you queried was very good indeed and, with the exception of the rhyme, appeared reasonably OK for the name & date. However with a look at the Oxford English Dictionary, I was able to suggest that the word 'optimist' seemed unlikely to be in use in a humorous rhyming context as early as this. Googling the first line of the rhyme showed that it is still listed for new sundials. John Foad had already found 4 other registered dials with the same rhyme, 2 of very different design of 20th century and 2 attributed to the C18; both of these being remarkably similar to the one you queried. So now I'm beginning a separate list of doubtful mottoes and rhymes. (One at Anglesey Abbey, Cambridgeshire, by B. Cox of Kew dated 1785, is now under suspicion!) However, the previously registered dial plate by Thomas Hart is so corroded that it can't be checked, so still may be of the date given, but is not of the same design as yours. So, I'll come back to you should anything further come up that might be relevant.

With thanks and very best wishes,  
Jill

Out of curiosity, what is the fate of your particular dial at the moment?

Chuck Probst

## Carol Givens

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**From:** Chuck Probst [barometerfix@gmail.com] on behalf of Charles Probst [info@barometerrestoration.com]  
**Sent:** Monday, October 03, 2011 11:36 AM  
**To:** Carol Givens  
**Cc:** bronzeetal@comcast.net  
**Subject:** Sundial info

Wanted to get back to you before your meeting.

I had some trouble contacting the person I needed to correspond with at the British Sundial Society, but finally managed to get the photos and my info through to her over the weekend. Had an email back from her this morning. My contact is Mrs. Jill Wilson, who is in charge of the Biographical Projects committee of the Society, and she authored the book *Biographical Index of British Sundial Makers, from the Seventeenth Century to 1920* for the British Sundial Society, taken largely from the Society's registry of dials. In her bibliography, she notes the sources that she cross-checked for the entries, and she takes in all the trades and occupations that one would associate with British clocks and instruments in general, and she was quite thorough. In spite of that, the book only has one reference to a Thomas Hart, and that is as follows (verbatim):

### **HART Thomas**

Maker of a registered horizontal dial at Iwade, Kent, SRN 5181, dated 1773 (Iwade is a very small village near Sittingbourne in Kent. SRN refers to the Sundial Registry serial number. No town of origin is noted for Hart, London or otherwise.)

I can find nothing more in my sources and I have a pretty extensive library. I did run across a London publisher named Thomas Hart in the mid 18th century, and engraving was an integral part of publishing, but that's not a very good connection.

When I wrote to Mrs. Wilson and sent the photos, I asked her especially to consider (1) the inclusion of a date on the dial, (2) the inclusion of the poem, and (3) the style and quality of the engraving on the "signature". I didn't want to influence her unduly, but I did have misgivings about those things. Dates and sentimental poems on sundials are red flags when authenticity comes into question, and unless the skill and style of the engraving in the maker's signature is up to the quality in the rest of the engraving, and it is hand engraving, done by a specialist engraver who was hired just to do the work on that particular object, then the authenticity of the signature itself is in question. Her answer is as follows:

On a quick examination of the pictures you sent, I think you could be right in feeling a little doubtful about the date inscribed. This is mainly because of the rhyme, I too associate it with a later era. I've checked the record single registered dial by Thomas Hart and, unfortunately that is very corroded and has lost its gnomon. It does not appear to have any rhyme. I shall consult those more expert than myself and come back to you on this as soon as I can.

So, while neither Mrs. Wilson nor I can state the total authenticity of your dial with absolute certainty, we have our doubts. Just that, doubts. As for the dial itself, I feel very comfortable in saying that it is a good and typical dial of the period it claims to be, and that is with the knowledge that they changed very little stylistically over a couple of centuries. The middle of the eighteenth century seems quite credible to me. My doubts arise after thirty years in the business of examining instruments and clocks for authenticity, a particular fixation of mine,

and finding that they are often enhanced for commercial gain. If I had to put a stake in the ground here, I'd be forced to say that your dial is perfectly honorable but the dressing was added later.

If I might suggest, you should seek a second or even third opinion on the dial. Dig a bit deeper. I can offer at least a couple of names that may be of some help, and you probably know some as well. My main questions are around the authenticity of the engraving, and I may get a bit more info from Mrs. Wilson when she has the chance to shop this around her contacts a little. I'll also do a little genealogical research on Hart when I get a chance.

Hope this has been of some help. I'm copying Andrew Baxter on this.

Charles Probst

Mrs. Philip Minor  
Marston Lane  
Richmond, Virginia 23221

December 3, 1975

Mrs. Thomas W. Murrell, Jr.  
Chairman, Restoration Committee  
Garden Club of Virginia

Kenmore Road  
Richmond, Virginia 23226

Re: Wilton, Richmond, Virginia  
Garden and Grounds

Dear Jane:

Mr. Lester Gayle of Virginia Beach has given to Wilton in memory of his wife, Catherine Gayle, an extremely imposing and striking English brass sundial bearing the date of 1765--15 years after the ground-breaking at Wilton, and considering the completion date of 1755, perhaps the exact date that a sun-dial would have been ordered for the original site. This is a circular dial of perhaps 24 inches in diameter and is of the same imposing but human scale of the mansion.

The Colonial Dames would like to request of the Restoration Committee permission, design, and funding of the installation of this sun dial at Wilton. Although the grounds are basically shaded, we feel that a location in the center of the lower terrace would provide maximum sun-rays plus a handsome view from the upper windows and upper terrace, and also attract visitors to the lower terrace where the best view of the mansion, planting, and James River is available.

The sun-dial is at present in the fire-place of the South-West, or Washington, bed room. Will you come down and see it, we will be happy to join you when you come.

Sincerely,

Mrs. Philip Minor, Mrs. Waller Harrison  
Co-chairman, Garden and Grounds  
Committee.