
Polycandelon with Three lamps

6th Century or later

Handblown Glass lamps

Lost wax Cast bronze plate

Worked Copper Chain

Lost Wax Cast Bronze hanger

About the Object:

The object is three oil lamps on a cast bronze plate hanging from single jack copper chain held together with a cast bronze hanger..

About the Original style:

The original item hangs in the Corning Museum of Glass (item 63.1.30) and is dated 6th Century or later. This style of lamp is called a polycandelon, and can either use cone shaped beakers or bell shaped like beakers. The wicking system was not found with original object.



Fig 1 Original Polycandelon

Construction: The Glass lamps took a few hours of trying different methods of creating the shape, in the fastest possible way. The process that I am fond of, is to make a sphere, jack down a large bulb on the end, and use that bulb to pull the lamp in to shape. After a cone shape is formed, go back and neck down the stem, and slightly suck in, to form the concave bottom of the lamp. The photographs of the Extant Object were invaluable in this process.

The plate and hanger were hand made wax positives, and cast with Phosphor Bronze. The chain was hand worked copper wire, into the single jack style that was used on this lamp.

Material: The formula of the glass is most assuredly different from the glass used in period. Glasshouses made their glass from the raw materials, and each house would have a favored formula, and a favored source of materials. Formulas might even change as styles (or gaffers) dictated. In current times, there are over 6 formulas of glass I've used in the last year, each with their own slightly different feel. It's my opinion that attempting to match glass formula would add nothing to the end result.

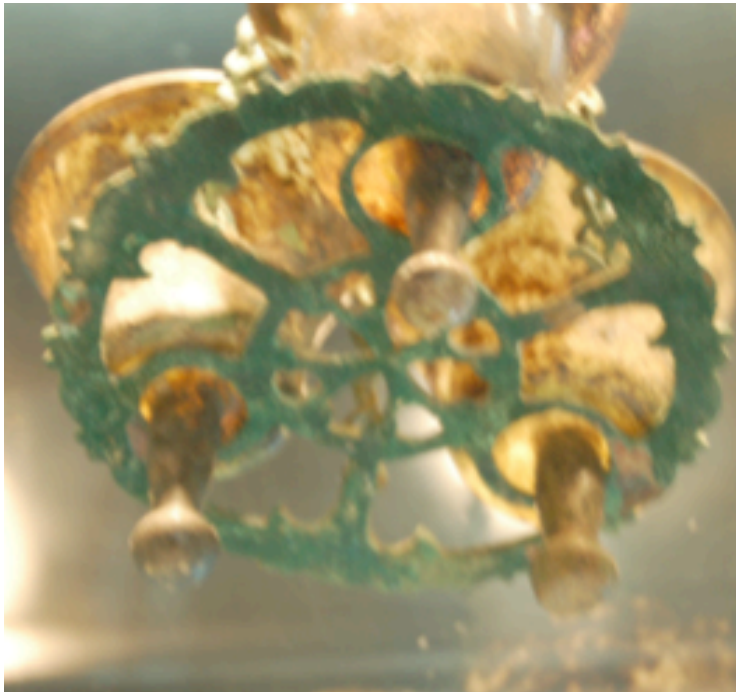
All that is stated as used in the construction of the bronze is "Copper Alloy". The Chain is guessed to be a different type of metal, due to the differences in corrosion. I used Copper for the Chain, and Phosphor Bronze for the Plate and Hanger. Besides the "Copper Alloy" I made no attempt that match the composition of the alloys to something that could be documented to the era. I feel that any difference in material would be make such a little impact as to be unnoticeable.

Other Differences: I've simplified the construction of the plate, by omitting the Maltese Cross in the center section of the plate. I've also added a wicking system to lamps, so the lamps can be used as a practical matter.

Workmanship: I'm pleased with the proportions and overall how close to the shape this piece looks to the original. I am able to make the wall thickness of the lamps to about half of what they are now, but I'm rather happy with the durability of the thicker glass while camping.

Notes: Using the book "Roman Glass in the Corning Museum of Glass: Volume One" By David Whitehouse (page 194,195) as my primary source of information about the Polycandelon, I went to the Corning Museum to take extra photographs.

The curator was very accommodating in giving better access to take photographs of the inside of the lamps. Selected photographs of the extant object are in this document.



Detail of the underside of the original



Detail of the hanger of the original



Detail of the inside of the lamps of the original

