

## „Plinius“ - an agate cameo is created

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Engraving gems from layered agates is an art form that is more than 3000 years old. Andreas Roth from Idar-Oberstein is considered to be one of the few still active “gem cutters” and the world's leading master of the “large cameo” (see the article on <http://www.agates.click/publikationen-publications.html> - 8/2023). During the production of a cameo depicting the Roman scholar Gaius Plinius Sekundus, he gave [www.agates.click](http://www.agates.click) exclusive insights into his magnificent craftsmanship.



Master craftsman Andreas Roth with the completed Plinius cameo. Photo Roth family.

## Gem – Intaglio - Cameo

A **gem** is generally a cut precious or decorative stone with “images”, but organic materials such as mussel or snail shells can also be processed into gems.

A further distinction is made between intaglios and cameos.

In the art of stone carving (glyptics), an **intaglio** is a recessed engraving, while a **cameo** shows a raised image in the form of a relief.

Agate gems are made from so-called layered agates, which do not refer to agates consisting of apparently plane-parallel layers with so-called gravitational or Uruguayan or onyx banding, but rather larger nodules with alternating banding around the wall and as many “layers” of bands as possible, some of which must have good colorability (the black coloring of agate bands by soaking them in a sugar solution and then burning the sugar in sulphuric acid was already known to the ancient Romans).

### An ancient art

Cameos and gems have been known from almost all historical civilizations for more than 3000 years. While the Babylonians, Egyptians, Greeks and Persians mostly engraved portraits of gods, animals and warriors as smaller ring stones or talismans, the Romans experienced a real heyday of the “large cameo”. The best-known works of art from this era that have survived to this day include the “**Gemma Claudia**” (ca. 28 AD, 15.2 cm; Kunsthistorisches Museum Vienna), the “**Tazza Farnese**” (1<sup>st</sup> century BC, 20 cm; National Museum Naples), the “**Gemma Augustea**” (ca. 10 AD, 23 cm;

Kunsthistorisches Museum Vienna), the “**Grand Cameo de France**” (ca. 24 AD, 31 cm; Cabinet des Médailles, Paris), the “**Ptolemaic Cameo**” (1<sup>st</sup> century AD, 11.5 cm; Kunsthistorisches Museum, Vienna) or “**The Great Cameo at Windsor Castle**” (1<sup>st</sup> century AD, 19.1 cm; The Royal Collection London).

They were all made from very large layered agates, the origin of which was unknown for a long time. More recent research traces the rough stones back to ancient sources on the eastern Balkan peninsula (Thrace) (SCHMIDT, 2019).

In fact, there are numerous agate deposits in Bulgaria today, most of which have only been collected more intensively since the turn of the last millennium. At some of these sites, quite large agate nodules are actually still found today, from which the production of larger gems could be possible. However, they very rarely show the fine layers that are so important for historical or modern gem cutters. The corresponding artificial colorability (black coloration) has also not yet been clearly demonstrated on Bulgarian agates.

Thrace was therefore presumably not the only source of agate rough stones in the Roman Empire.

The art of making larger cameos was continued in the 19<sup>th</sup> and 20<sup>th</sup> centuries in Idar-Oberstein, Germany. One of the best active masters in this field is **Andreas Roth** from Idar-Oberstein. His cycles of large cameos (e.g. The Bible in Stone, Gems and Cameos of Antiquity and Modern Times, William Shakespeare, Johann Wolfgang von Goethe etc.), which he initially produced together with his father, the unforgotten

**Hans-Dieter Roth**, are already regarded as legendary and unique works of art worldwide, which in no way need shy away from comparison with the large cameos of antiquity.

### Gaius Plinius Sekundus (23-79 AD)

“Pliny the Elder” was an officer, civil servant and above all a scholar and author, to whom mineralogy also owes numerous interesting historical contributions. When it came to agates, he followed the explanations of the first person to describe agates, Theophrastus of Eresos (approx. 371-287 BC), in many areas. In his famous “Natural History”, for example, he writes about agate:

*“The agate (achates) was once held in great esteem, now it has none; it was first found in Sicily next to the river of the same name, later in very many countries; it is characterized by its extraordinary size and shows numerous varieties, which are expressed in its epithets”* (ZENZ, 2005, p. 25).

He also names the agate varieties known and popular at the time in great detail, although these are sometimes given different names today, and some of the sites he mentions are still not scientifically documented. In Ralf Schmidt's work, which is extremely important for the history of the name agate, the actual river in Sicily that Pliny could have been referring to almost 2000 years ago was identified for the first time (SCHMIDT, 2024). Nevertheless, along with Theophrastus of Eresos, Gaius Plinius Sekundus is probably the most important scholar from classical antiquity who dealt intensively with agates and whose work is still preserved, at least in part.



**Gaius Plinius Sekundus. Unknown artist. Reprint of a work for „The Naturalist’s Library“. Johann Zenz archive.**

### A cameo is created

During a visit to the former owners of the well-known Weiherschleife in Idar-Oberstein, Germany, in 2008, the author of these lines was able to acquire a rather inconspicuous, black and white and almost square agate slab, which had only been roughly cut, in addition to some other old agate products. As with most similar agate source materials, the origin can be assumed to be the Brazilian state of Rio Grande do Sul with its traditionally rich agate deposits. The slab has probably been with the previous owner since at least the 1950s or 1960s, but was never worked on further. Over the next few years, the agate slab was used as an object for demonstrating the source material for cameos or intaglios. On the occasion of another visit to Idar-Oberstein in spring 2024, this agate slab was presented to Master Andreas Roth and it was agreed in the following conversation that it would be worked into a



Cameo. An old typically idealized illustration by Gaius Plinius Sekundus, whose source and creator is unfortunately unknown so far and which is in the author's collection as a reprint, was intended to serve as a model. The print was once produced for a "Naturalist's Library". Whether this is the famous series of books by William Jardine from 1835 (Edinburgh) or another work of the same name has not yet been verified beyond doubt. Thankfully, a further agreement was reached with Andreas Roth to meticulously document

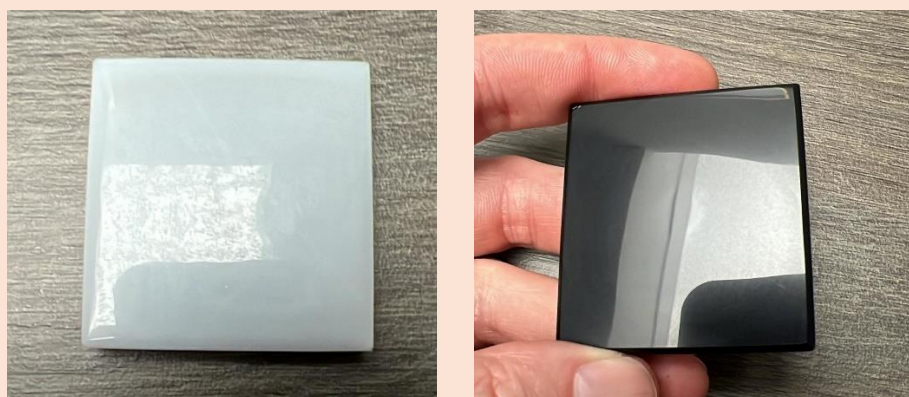
the entire process of creating this larger cameo using this "Plinius project" as an example, thus making the individual work steps visible to the general public for the first time.

Andreas Roth was finally able to complete the cameo in an unbelievable record time, just two months after the initial meeting. This unique "gem" by a master craftsman and with a historical agate reference now adorns the author's collection as another showpiece by the Idar-Oberstein artist.

**Photo documentation of the creation process of the "Plinius cameo"**  
(All photos courtesy of the Roth family)



**The roughly polished agate slab, colored black in the broad lower layer, as the starting material.  
The middle picture shows up to eight layers of chalcidony in slightly different colors.**



**The stone after preliminary grinding and polishing of the backside in the first preparation phase.**



**Second preparation phase:**  
**Transfer the portrait sketch to the upper, white agate side.**





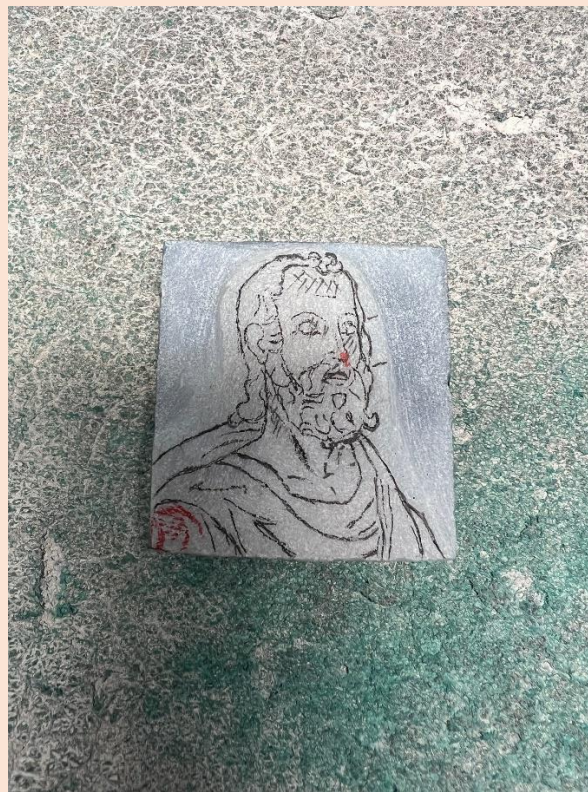
Removal of the white, surrounding chalcedony layer and rough shaping of the portrait.





Completion of the raised outline shape and comparison with the picture template.





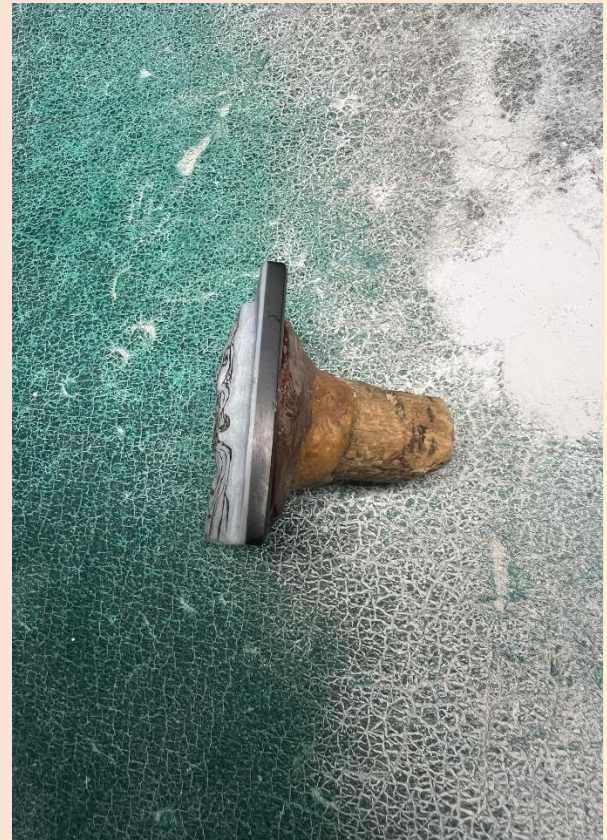
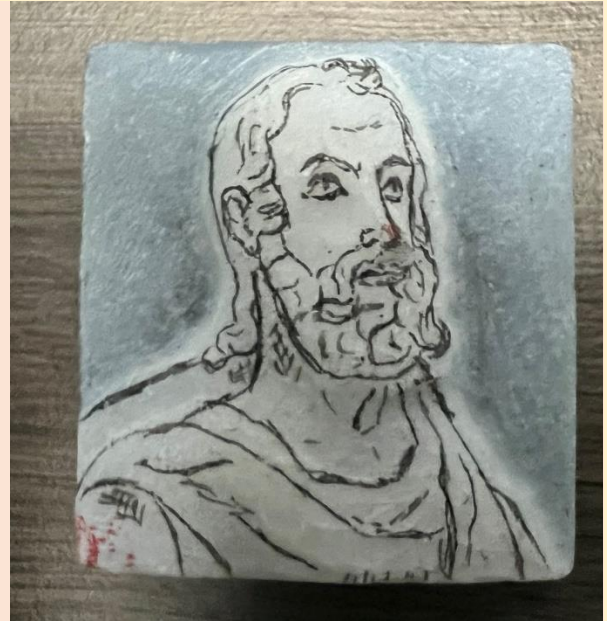
**Re-application of the portrait sketch and examination of the sublimity of the stone.**





Start of detailed work on the diamond grinding wheel.





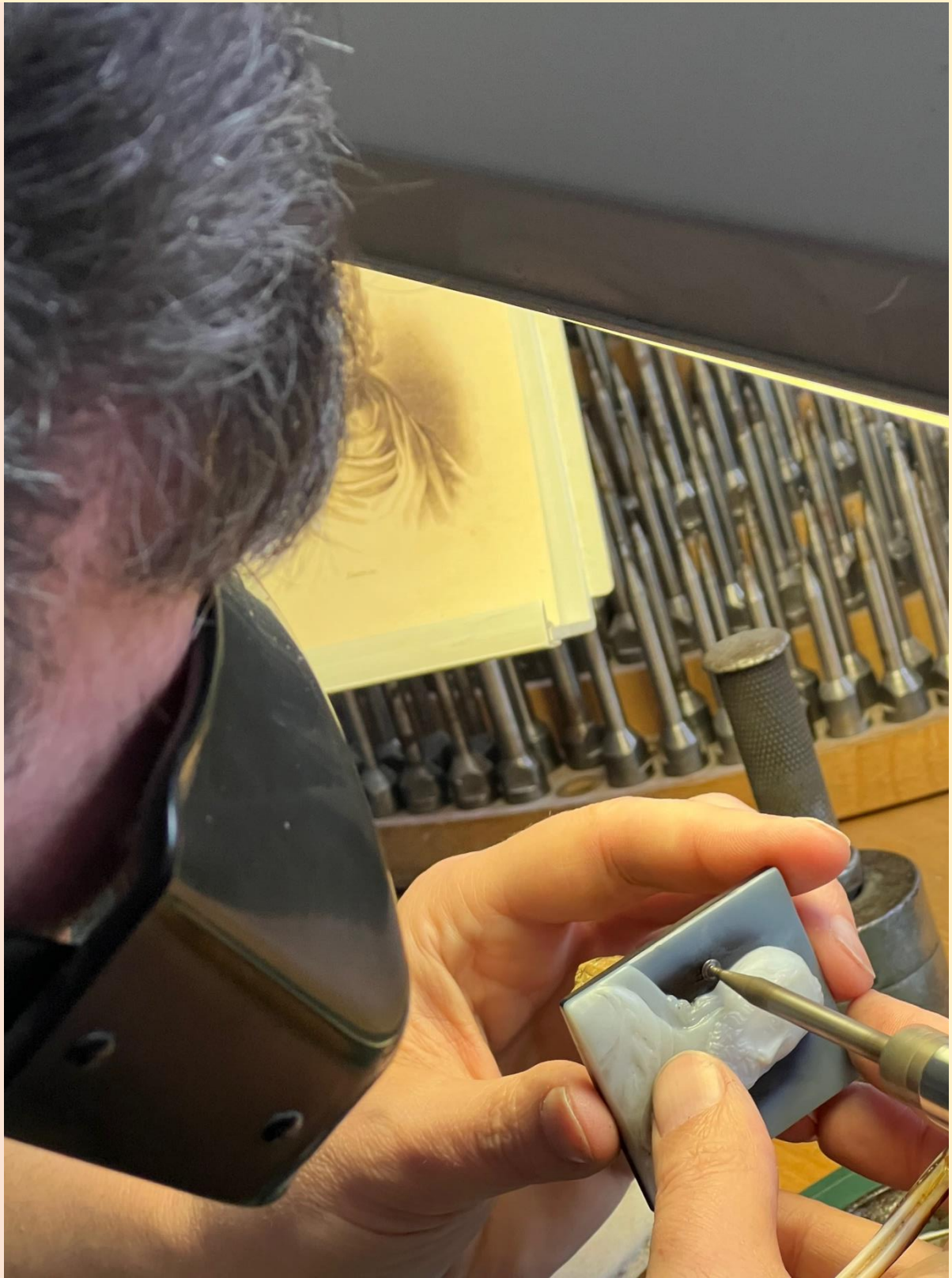
Further preparation and cementing of the stone with sealing wax on a fixing rod.





In further detailed processing steps, the portrait takes on more and more exact shapes and a glossy surface.





**The use of a magnifying glass is required for exact precision work.**





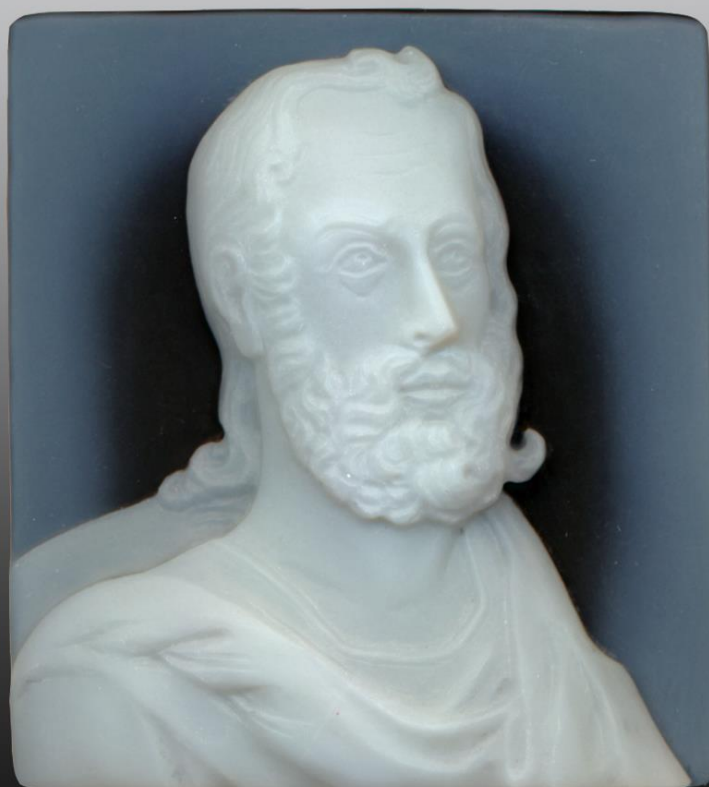
**The finest craftsmanship is required for the tiny details.**





**The final details are checked shortly before completion.**





**A unique work of art: the finished "Plinius cameo".  
4.7x4.4x0.7 cm.**

## References and literature

SCHMIDT, G. (2019): Politik in Edelstein – Das Geheimnis römischer Prunkkameen. Nünnerich-Asmus Verlag & Media, Oppenheim. 168 p.

SCHMIDT, R. (2023): Der Fluss "Achates" in Sizilien. Historie - Irrtümer - Neuordnung. In: Gemmologie. Zeitschrift der Deutschen Gemmologischen Gesellschaft. Jg. 72/1./2. 1-24.

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<https://roth-cameo.com/>