

Grinding Stone to Art Object:

The Mortar and Pestle from the Renaissance to the Present

Michael J. Brody

As the Director and Curator of the Marvin Samson Center for the History of Pharmacy at University of the Sciences in Philadelphia (USP), it gives me great pleasure to present a selection of some of the most interesting mortar and pestle sets from our collections. It is only fitting that USP, founded in 1821 as the College of Apothecaries (notably the western hemisphere's first school of pharmacy), should maintain important holdings of these vessels. With thirty-one examples from over a dozen countries, and in materials such as stone, metal, wood, glass, ceramic, and ivory, the current exhibition attests to the astounding diversity these objects have displayed over the past 450 years.

Of all the articles comprising the pharmacist's armamentarium, mortars and pestles hold a place of honor as the indispensable, and therefore most characteristic, tools of the profession. Since written history began, their association with pharmacy has been so intimate that they have become emblematic of the apothecary's art. They were probably the earliest implements used in the practice of pharmacy and

medicine as well as in the preparation of food by primitive man. The antiquity of these devices is well documented in early writings, such as the Egyptian "Papyrus Ebers" of c. 1550 B.C.E. (the oldest preserved medical manuscript) and the Old Testament (Numbers 11:8 and Proverbs 27:22).

Whether improvised from nature to be used primarily as grinding stones [no. 28] or designed, fabricated, and decorated to a degree that merits status as veritable art objects [nos. 7, 8, 12, 18], mortars are found in every corner of the earth. Their users include members of isolated tribes, professional and household cooks, students, scientists, and pharmacists. At least two mortars on display have specialized functions in food preparation: the Mexican example, formed from volcanic rock [no. 9], whose rough composition excels at cutting and grinding chili or red pepper; and the highly decorative Near Eastern wooden example [no. 3], with a tall and narrow inner cavity specifically designed for crushing coffee beans. The centerpiece of the exhibition, a large brass mortar dated 1767, bears the imperial monogram of Frederick the Great [no. 31], and was almost certainly used by the king's personal apothecary.

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Mortar ('mortə(r))

Seems to derive from the Old French *mortier*; the Latin *mortarium* is of obscure origin, though as early as the fourteenth century it referred to both crushed drugs and a vessel in which substances were mixed, ground, or pounded.

Pestle ('pɛs(ə)l, 'pɛst(ə)l)

Can be traced back to the thirteenth-century Old French *pestel*, from the Latin *pistillum*, for pounder, which derived from *pinsere*, to pound, bray, or crush.

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Checklist of the Exhibition

Dimensions are in centimeters (cm); height (h.) refers to mortars, and when given, length (l.) refer to pestles. All objects from the collections of the Marvin Samson Center for the History of Pharmacy, University of the Sciences in Philadelphia.

1. Brass mortar, probably Germany, 19th century

This cylinder-shaped example has a free-form foliate design on either side of its stylized dolphin handles.

h. 20.5 cm TL2004.3

2. Brass mortar and pestle, USA, c. 1939

This diminutive commemorative vessel is decorated with poppies and thistle in high relief and has an artificial "bronze" patina applied. Inscribed in capital letters on its underside is: Petty's / He puts up / prescriptions / 1883 - 1939 / in the fourth million, presumably a reference to the successful American drug store chain.

h. 7.6 cm; l. 16 cm 1995.11.15 A&B

3. Wooden mortar and pestle, probably Syria, mid 19th century

Carved from a single tree trunk, this household mortar is thought to have been used primarily for contusing coffee. Both components are heavily decorated with incised geometric patterns.

h. 22.2 cm; l. 55.5 cm 1995.9.72 A&B

4. Brass mortar, after a late-16th-century Dutch design

Although this example is inscribed at the rim Leeftje Verwint al Dinck Anno 1590, it is apparently a late-nineteenth or early-twentieth-century forgery, as it shows neither the quality nor the characteristic wear of a four hundred year-old object. Also, mortars by the Dutch manufacturer named in the inscription are more often cast in bronze.

h. 9.3 cm; l. 14 cm 1995.9.52 A&B

5. Ceramic ("biscuit porcelain") mortar and pestle, Wedgwood factory, England, late 18th century

In the 1934 article by C. H. and M. R. La Wall on USP's mortar collection, this vessel is said to have been used in Philadelphia, in the eighteenth-century store of Christopher Marshall. The old label accompanying the pestle (whose upper portion is wood) states sets of this size were among the largest made by Wedgwood during this period.

h. 13 cm; l. 35.5 cm 1995.5.1 A&B

6. Glass mortar and pestle, USA, 20th century.

The bottom of this mortar reads: 32 oz. / USA.

h. 12.7 cm; l. 19 cm TL2004.2 A&B

7. Bronze mortar, France or Italy, 16th century

This vessel displays eight sections of exquisitely-detailed renaissance decoration, such as masks and fleur-de-lis, separated by ribbing.

h. 10 cm 1995.9.621

8. Earthenware mortar and pestle, Henriot Quimper factory, France, c. 1900

This delicate and colorful mortar has, curiously, pour lips at each corner.

h. 4.7 cm ; l. 10.2 cm 1995.9.16 A&B

9. Igneous (volcanic) rock mortar and pestle, Mexico, 19th or 20th century

This unusual household mortar rests on three feet, and the design of its small, tear-shaped pestle allows the user to hold it comfortably in the palm.

h. 8.5 cm; 7 cm 1995.2.35 A&B

10. Bronze mortar, Near East, perhaps Turkey, dated 1724

The Arabic inscription around the upper portion of the vessel translates to: "Man of good deeds, charitable, and distinguished, Abbas Oda ['son of'] Sandan, 2nd, 3, in the year 1226 [i.e., 2 March 1724 in the Gregorian calendar]."

h. 13.5 cm 1994.6.97

11. Porcelain mortar and pestle, Morris L. Cooper Co., Baltimore, MD, c. 1955

Because the inside bottom of this mortar is flat rather than curved, its pestle has a corresponding cylinder-shaped base, which assists the user in reaching and incorporating substances near the wall of the vessel.

h. 7.9 cm; l. 18.6 cm TL2004.1 A&B

12. Bronze mortar, probably India, 16th century

The entire surface of this vessel is decorated with inscribed panels consisting of people, animals, and geometric designs; the eight scenes on the outer wall depict figures engaged in hunting and meditation.

h. 13.8 cm 1940.1.89

13. Hardstone (porphyry) mortar and pestle, probably China, 19th century (or earlier)

The inside bowl of this attractive and unusual, eye-shaped mortar shows signs of much use.

Porphyry, an igneous rock typically found in purple, green, or red (as seen here) varieties, has been used for millennia to make a wide variety of functional and decorative objects.

h. 8.5 cm; l. 15.8 cm 1940.1.J

14. Cast iron mortar and pestle, probably USA, late 19th century

This graceful, urn-shaped vessel has an unusually wide, splayed base, presumably to steady it during the forceful grinding of dense substances. It is recorded as having come from the Neergaard Pharmacy, founded in Brooklyn, NY in 1888 and still in operation today.

h. 14.8 cm; l. 21 cm

2001.3.217 and .218

15. Brass mortar, Austria or Germany, 18th or 19th century

The old paper label that accompanies the object states: "The Vienna Mortar / used at / Die Allgemeine Kronkenhaus [sic] / Vienna, Austria," i.e. at Vienna's (Old) General Hospital.

h. 12.5 cm; l. 20.5 cm 1994.6.96 A&B

16. Ceramic mortar and pestle, Hungary, early 20th century

The bottom of the mortar bears the incised name and insignia of the Hungarian factory in which it was made; the upper portion of the pestle is composed of wood.

h. 16.3 cm; l. 28.8 cm 1995.9.48 A&B

17. Metal mortar and pestle, USA, circa 1963

The Schering Corporation issued this commemorative vessel in the 1960s. Its rim is inscribed twice, at the rim, with *secundum artem*, "according to the rules of the art [or skill]", a Latin phrase frequently used in the medical and pharmaceutical professions; the "Rx" (prescription) insignia appears twice on the body. The pestle is labeled "coricidin," a prescription drug for cold symptom relief that became an over-the-counter brand in 1951.

h. 10.5 cm; l. 16.5 cm 1994.6.119

18. Bronze mortar, probably Italy, 17th century

A fine example of a richly-decorated mortar from this period, with dolphin handles, masks, swags, and foliate motifs in high relief.

h. 23 cm 1940.1.122

19. Brass mortar and pestle, perhaps India or Northern Africa, 20th century

This highly decorative mortar has four incised scenes depicting a king-like figure engaged with a variety of people and animals.

h. 9.1 cm; l. 16.7 cm 1995.11.3 A&B

20. Wooden mortar and pestle, probably England, 18th century

This set was machine-turned and polished from blocks of *lignum vitae*, a hardwood native to the West Indies and parts of Central and South America. Both components have an applied metal "W", likely the first initial of the owner's last name. The elegantly-shaped pestle handle makes for a comfortable grip when stirring contents.

h. 21.3 cm; l. 27 cm 1940.1.101 A&B

21. Stone mortar, United Kingdom, dated 1770

Inscribed on one face A E / 1770, this vessel is recorded as having been used at the Belfast Emergency Hospital.

h. 13.2 cm 1995.9.1

22. Glass mortar, probably USA, 20th century

The heavy molded glass of this example gives the mortar an attractive greenish tint.

h. 9 cm 1995.20.63

23. Wooden mortar, France, early 20th century

As this object shows no signs of wear it was almost certainly used for display purposes. Its underside is stamped "France."

h. 12.5 cm 1995.9.10

24. Bronze mortar, Spain, perhaps Granada, 16th or 17th century

Its ribbed body and applied decorative portrait medallions make this mortar perfectly characteristic of Spanish examples from this period.

h. 8 cm 1995.9.606

25. Cast iron mortar, Russia, 16th century

This crudely-cast mortar has a garland motif on the body and scalloped designs at the base.

h. 15 cm 1994.6.98

26. Brass mortar and bronze pestle, perhaps Germany, dated 1752

Along with the date, 1752, this vessel is inscribed "T. F. D", almost certainly the initials of the owner, who was likely a prominent apothecary. Dolphin handles were a regular design feature of European mortars starting from the sixteenth century.

h. 19.5 cm 1940.1.115

27. Wooden mortar and pestle, Taiwan, 20th century

This ebonized wood vessel bears the carved decoration of a male figure with open arms and legs repeated seven times around the outside wall.

h. 12.6 cm; l. 17.8 cm 1995.9.12 A&B

28. Natural rock mortar and pestle, North America, 19th century

The antithesis of some of the "high design" objects in this exhibition, these components were found in nature and only slightly, often crudely, re-shaped for their transformation into grinding and mixing tools.

h. 11 cm; l. 26 cm TL2004.4 A&B

29. Bronze mortar, by Henryck Ter Horst, The Netherlands, dated 1638

The decoration on this example is a virtual compendium of late-Renaissance/early-Baroque motifs, including stylized leaves, cornucopia, baskets, and winged putti.

h. 11 cm 1940.1.K

30. Ivory mortar and pestle, perhaps Spain, 17th century

The long, slender pestle is characteristic of ivory mortars of this period.

h. 12.7 cm; l. 22.8 cm 1940.1.S

31. Brass mortar with monogram of Frederick II, King of Prussia, probably Germany, dated 1767

h. 21.5 cm; l. 31.3 cm 1940.1.G

Frederick the Great, who ruled from 1740 until his death in 1786, remains one of the most famous German rulers of all time. Under Frederick's guidance, Prussia became one of the leading nations of eighteenth-century Europe, largely due to the monarch's military successes and his enlightened domestic reforms, which included universal religious tolerance, freedom of the press, and the abolishment of torture. Frederick was a despotic ruler, but he lived under the principle that he was the "first servant of the state;" consequently, he did not rule by personal whim, but rather under the guidance of what was most beneficial for Prussia, and he expected his citizens to possess the same devotion.

This splendid mortar with thick knob handles bears Frederick's imperial monogram ('F' intertwined with 'R', for "Frederick Rex", surmounted by a crown) on one face, and the date "1767" on the opposite. The small inscription "K No. 1" is probably an inventory number. Rather than being "commemorative" or a "show piece", the wear to both the mortar bowl and pestle evidences their use by the king's personal physician or apothecary. Further research is needed to uncover whether the mortar is a unique survivor, or one of a series of extant court apothecary vessels.



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Selections from
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