

Emilie Riha, *Römisches Toilettgerät und medizinische Instrumente aus Augst und Kaiseraugst*. Mit Beiträgen von M. Joos, J. Schibler und W. B. Stern. *Forschungen in Augst* 6. Römermuseum Augst, Augst 1986. 188 Seiten, 74 Tafeln.

According to the 'Vorwort' of this, the sixth volume in the *Forschungen in Augst* series, E. Riha originally intended to deal only with the toilet articles recovered from Augusta Rauricorum. Soon enough, however, she realized that a particularly close relationship exists between toilet articles and surgical instruments because many of the objects used by Greco-Roman physicians were virtually the same as items employed at home. As a result, she decided to treat both these classes of Minor Objects at the same time. The result is a fine volume incorporating 681 objects of the 1st–4th centuries A.D. excavated at (or in some cases believed to come from) Augst/Kaiseraugst. All of the objects catalogued were discovered before 1980; however, relevant finds since then are noted (e.g. Abb. 7 and 16).

E. Riha's study is a fine addition to the literature on Roman Minor Objects. Not only does it reflect her own considerable knowledge of the subject, but it also benefits from the expertise of scientists and technicians who have contributed as well. Those providing written reports include: M. JOOS (petrographic and morphometric analysis of the ointment slabs), J. SCHIBLER (material analysis of the combs), and W. B. Stern (material analysis of the mirrors and the 'blaue Pigmentkugeln'). The work is richly illustrated with maps, plans, graphs and photographs. Although the latter do not depict all of the items catalogued, fine sketches of the vast majority are provided by S. FÜNFSCHILLING. The catalogue numbers correspond precisely with the numbers of the drawings and photographs in Tafeln 1–72 making crossreferencing easy. In short, the approach employed is thorough and systematic. Actually, since many of the objects are common to other sites and/or in fragmentary condition, it might even be said that the material treated is of less interest than the treatment expended upon it.

E. Riha divides her material into three main sections: 'Toilettgerät', 'Instrumente für den Haus- und Arztgebrauch' and, finally, those objects which she views as exclusively employed by physicians ('Medizinisch-chirurgische Instrumente'). Each section features a general introduction on the use of the objects catalogued therein based on classical sources and modern scholarly treatments. Each general introduction is followed by detailed discussions of the individual categories in that section followed by a list of the individual objects in each category. The discussions include materials used and techniques of manufacture (where known), the chronological distribution of individual types or 'Varianten' within a category, and, often, 'Verbreitungskarten' to show their distribution over the site.

Among the 'Toilettgerät', the following categories occur:

A) Bronze mirrors. Altogether 47 fragments of mirror discs or handles are catalogued. Unfortunately, not one complete mirror survives intact. Even so, the author determines that both general Roman types (mirrors with handles extending from their edges and mirrors with rings or hanging devices [Aufhängevorrichtungen] attached to their reverse sides) are represented at Augst and, within these general types, the subtypes G, K, L, and X as distinguished by G. Lloyd-Morgan. Stern's analysis of the mirror discs gives precise figures for the tin-rich bronze employed on them and confirms earlier findings that the composition of the polished surface did not differ essentially from the unpolished.

B) Eleven fragmentary 'three layer' combs ('Dreilagenkämme'), more or less complete. Schibler's material analysis produces the surprising revelation that they were made up of sections of deer antler! The nine specimens with a single row of teeth conform to types 1–3 as distinguished by S. Thomas; there are also two specimens with two rows of teeth arranged back to back. All are relatively late (late 3rd century on) because, it is thought, earlier combs were largely made of perishable wood. Sixty percent of the Augst specimens were removed from graves.

C) Thirteen fragmentary strigils, eleven of bronze (two with lead reinforcement), two of iron. One, discovered in 1982 is figured (Abb. 7), but not included in the catalogue. All derive from the living quarter of the site, one (no. 65) from the womens' bathing complex. Most are two piece ensembles consisting of blade and handle; one features in addition a 'Zwischenglied' inserted between these elements. Numbers 59–61 are decorated with patterns in niello. No. 59 is also stamped with a cartouche containing the name of its manufacturer, URBANUS; no. 62 has a similar cartouche, but without a name.

D) Two hygiene sets ('Toilettbestecke'), one (no. 71) consisting of tweezers and ear spoon, the other (no. 78) of ear spoon, tweezers, and nailpick (?). Also listed are two ear spoons and four tweezers which are

regarded as having been components of hygiene sets. Most of the material is fragmentary and of bronze; no. 78 is entirely of iron. Those tweezers formed 'durch Einschnüren des die Greifer bildenden Bandes' (e.g. nos. 76 and 77) do not, as the author states, first appear in the later Empire. Close parallels from Pompeii in the Naples Museum (inv. nos. 77836, 77829, 122793, etc.) insure that this type was being produced by 79 A.D. In fact, similar specimens can be traced back at least as far as the fourth century B.C. at Olynthus (D. M. ROBINSON, Olynthus 10 [1941] nos. 1714–19).

E) A fragment of a silver toothpick.

F) Razors: These consist of seven small handles, six of bronze with slots for small iron blades and one (no. 86) of two bone plates fastened to a fragmentary iron blade with bronze nails. All are taken as razors based on their small size, although the author entertains the idea that nos. 82–85 ('balusterförmige Griffe') may be scalpel handles. She rejects this possibility because she knows of no parallels from surgical contexts. Her first inclination was correct. In fact, one similar handle has been recovered from a surgeon's grave (E. KÜNZL, Bonner Jahrb. 182, 1982, 70), and I can report that there are seven such pieces in the Naples Museum (nos. 77639 and 77701 alone preserve their inventory numbers). That the latter were scalpel handles is proved by an old Alinari photo of the surgical exhibit in Naples (no. 19087) which shows one of these pieces with its blade (now missing) intact (upper row, 5th from the right). It is of the usual 'bellied' shape associated exclusively with surgical scalpels.

G) Five pieces persuasively interpreted as being either the handles or iron blades of jack-knives ('Klappmesser'). Handles are of bronze or bone. One (no. 87) is shaped like a dog's head and foreparts. All are believed to have served as razors owing to their small size.

The greatest number of pieces catalogued and discussed by the author are included in the second section where she treats objects which might have been used domestically or by physicians. Here we find:

A) Twenty-four bronze tweezers ('Pinzetten'), all but one recovered from the living-quarter. As E. Riha notes, there is as yet no comprehensive study of the forceps-tweezer; thus, the Augst sample, with its division into 9 classes and with many of the pieces datable, will be useful to any such effort. The most interesting specimen is no. 92, a small 'hairpin' type with serrated jaws bearing the stamp of its manufacturer, the well-known AGATHANGELUS. Two close parallels can be produced for this piece, one from Pompeii. The author readily accepts it as a surgical forceps, specifically as an 'ovula (sic) forceps'. I am inclined to be more cautious: none of the AGATHANGELUS specimens can be traced to a surgical context; furthermore forceps of the 'ovula' type are generally larger in size than these pieces (ca. 15–13 cm vs. ca. 10 cm) and have their toothed jaws curved inward at a sharp angle (cf. the examples recovered at Bingen and those in the Naples Museum). In contrast the serrated jaws of the AGATHANGELUS pieces do not break the plane created by their straight legs, and the individual teeth on the specimen in Naples are not sharp (as for gripping flesh) but square or even round. Also interesting are a series of tweezers featuring what look like faint olivary enlargements at their apex (nos. 112–115).

B) Seventy-three 'Reibstäbe' or shafts with at least one thickened/flattened end to function as a pestle in mixing oil with various herbs or powders for cosmetic or medical purposes. Most were recovered from the living-quarter. Three of these pieces are of bronze, two (nos. 116–117) well preserved and featuring finials in the shape of a hen and a lion respectively. The majority are of glass (Isings, Form 79), unfortunately none complete. Most are twisted in a spiral; some are smooth. Some twenty of the pieces were found in a single deposit with other glass fragments in Insula 29 at what must have been a reprocessing center. Since this deposit can be dated to the third quarter of the first century A.D., we have a terminus ante quem for these glass types. A few pieces are of worked bone (bovine, possibly also equine). These differ from the other 'Reibstäbe' at Augst in coming to a point at one end. The author can produce no comparison pieces. Three somewhat similar (if smaller and more carefully worked) pieces are in the Robinson collection at the University of Mississippi. Though these had previously been interpreted as 'pestles', their small size and pointed tips suggested to me that they might instead be pins or awls (cf. my Roman Surgical Instruments and Minor Objects in the University of Mississippi [1988] nos. 68, 75–76). The same may be true of the pieces in Augst.

C) Thirty-six ointment slabs or 'Reibpaletten' (one uncatalogued, Abb. 16) complementing the 'Reibstäbe'. Although these stone slabs with bevelled edges used to be considered rare (J. ST. MILNE, Surgical Instruments in Greek and Roman Times [1907] 171), many have come to light in recent times. The number recovered at Augst shows that they must have been relatively common. The material analysis of Joos and Stern distinguishes three groups: limestone, vulcanite, and marble. Since these materials are not native to

Augst, it is suggested that these slabs were produced elsewhere. Examination of their surfaces shows that the smaller usually served as the base and the larger, with its signs of wear, as the actual mixing or work surface. The edges of these slabs were probably used to sharpen scalpels, etc.

Earspoons, spoon probes, and spatulas abound at most Roman sites. Augst is no exception, more than half of the items in the catalogue consisting of these categories. Since the Augstian sample is large and, since many of the pieces are datable on the basis of their archaeological contexts, the author's arrangement of the various types in chronological order is a very useful one. Catalogued are:

D) One hundred sixty-seven earspoons ('Ohrlöffelchen') of bronze, many well preserved. These vary but little in shape, consisting of a shaft which usually comes to a point at one end and always mounts a scoop (a small disc or spoon) at the other. The majority are undecorated, but some are nicely turned. Five types are distinguished; one (Variante B) is classified as exclusively 'spätromisch'. Because these objects are so common at Augst, the author sensibly concludes that the majority were simply toilet articles. However, she reserves those few (nos. 650–656) with olivary enlargements in place of the pointed tip for the surgical section (see below).

E) Eleven earspoons of bone, one bone and one ivory spoon, a crude bone spatula, and eight bone 'Ohrsonden'. These latter differ but little from the 'Ohrlöffelchen' save in the shape of their scoops. As no. 408 can be placed in the second century A.D., the author adjusts the chronology of Dular who confines the type to the first. Actually, allowance for the second century had already been made by G. R. DAVIDSON (Corinth XII [1952] nos. 1328–1330).

F) One hundred forty-three bronze spoon probes ('Löffelsonden'), many well preserved. Most consist of a spoon mounted on a shaft which comes to an olivary enlargement at the other end (no. 523 the sole exception). As usual, those with plain shafts are in the majority, but a substantial number are nicely turned; some, as in the Naples Museum, feature silver inlay (nos. 413, 414, 423), one silver droplets on the shaft (no. 417). Eight types are distinguished based on spoon shape and general decor. There seems to be some confusion as to the chronology of Variante D, a common type. It is stated that Variante D 'scheint auf das 1. Jahrhundert beschränkt zu sein' (p. 69). Yet in the 'Schichtdatierungen' in Tabelle 11a it is abundantly distributed over the first through third centuries. The 'beschränkt' type must be Variante C, which does indeed seem basically restricted to the first century.

G) Sixty-five spatula sounds ('Spatulasonden') of bronze, many well preserved. Most consist of a shaft mounting a spatula at one end and an olivary enlargement at the other. One (no. 589) bears an illegible manufacturer's stamp. Nine types are distinguished based on shape and decor. Most specimens are plain. Several types hardly seem spatulae at all, but small scoops; e.g. Variante F (one example, no. 596), Variante G (two examples, nos. 597–598, both in the shape of a tiny lancet), Variante J (a series of hollow shafts created by rolled bronze sheeting which terminate in round to oblong scoops, nos. 613–618). Many such pieces along with the 'Ohrsonden' might better be classified as miscellaneous scoops or ligulae (cf. the variety in MILNE, Surgical Instruments, pl. XVIII).

Whereas the surgical instruments extracted from graves over the Empire have been organized and studied systematically by Künzl and his collaborators, the finds taken from sites have fared less well. Therefore, E. Riha's effort in section three to identify and catalogue those objects from Augst which she believes are 'medizinisch-chirurgische Instrumente' is a welcome contribution. Altogether, she accepts sixty-two objects as having been used by physicians. Some, who take a more conservative line, will feel that she has been too generous in admitting certain pieces to the surgical section of her catalogue. As she herself realizes (p. 56), objects which served both as domestic and surgical instruments should not be classified as the latter unless found in a medical context, i.e., with other indisputably surgical tools. This is not always a rule she follows, and this reviewer is of the impression that she might well have included a number of the 'medizinisch-chirurgische Instrumente' among the 'Instrumente für Haus- und Arztgebrauch'. Her various classifications include:

A) Ten scalpel handles, three of them beautifully turned (nos. 619–621); of these one features silver inlay (no. 619). No. 628 is described both as 'sechskantig' and 'achtkantig'. The latter is the case in all examples known to me.

B) Five knives of diverse shape. Two are likely surgical: no. 634, a combination needle/scalpel (?) was found with scalpel no. 619, and no. 635, which features a long steel blade inserted in a round bronze handle, is closely paralleled by pieces recovered from physicians graves at Kallion and Aschersleben (E. KÜNZL, Bonner Jahrb. 182, 1982, 42, 101). The others are dubious, in my opinion.

C) Fourteen retractors ('Wundhaken') and surgical needles. There clearly are a number of sharp retractors here (nos. 636–638, 642). These parallel well attested types and are not known to have been used for other than surgical purposes. Others are dubious (e.g. no. 648, which hardly seems to me to feature a 'Doppelhaken'; contrast *Journal Hellenic Stud.* 34, 1914, 115, pl. X, 16, where there is no doubt). Classed as blunt retractors ('stumpfe Haken') is a series of objects (nos. 644–647) which other scholars have identified as spindle hooks (e.g. G. R. DAVIDSON, *Corinth XII* [1952] nos. 1223–1228; D. M. ROBINSON, *Olynthus X* [1941] nos. 1884–1892). As the author notes, these pieces occasionally surface in medical instrumentaria, but none of those presented here have such associations. Therefore, why classify them as surgical?

D) Twenty-seven 'verschiedene medizinisch-chirurgische Instrumente'. Among these there is at least one surgical needle (no. 659); but the other articles included in this section such as spoons (including the 'Ohrlöffelchen' with olivary enlargements) are basically multipurpose and therefore just as likely to be toilet articles as surgical instruments. The author's arguments that similar objects have been discovered in surgical contexts or that the features or the decor of some of these multipurpose items are the same as those found on acknowledged surgical tools are heroic, but ultimately unconvincing. Let us take one of the more persuasive examples. She holds that no. 652, one of the 'Ohrlöffelchen' with an olivary enlargement, is a surgical tool because it, like a sound recovered from a putatively surgical instrumentarium in Belgium, features two holes bored at right angles through the enlargement. An analogous piece is to be found in the Naples Museum (inv. no. 110619; cf. M. TABANELLI, *Chirurgia nell' antica Roma* [1956] Tav. XXXVII). It consists of a long rod (27,5 cm) with olivary enlargements at both ends, one of which has two holes bored at right angles, just as no. 652. While this rod is included in the surgical exhibit, it cannot be traced to a surgical provenience and seems too large and clumsy to have served any surgical purpose, least of all those detailed in the literature for sounds with bored holes (see MILNE, *Surgical Instruments* 57–58). I, therefore, doubt that the Naples piece was ever used by a physician and remain unconvinced that the Augstian spoon, which also was not recovered from a surgical find spot, was other than a toilet article.

E) Two splendid forceps or 'Zangen', both well preserved. One (no. 677) is a rare example of a castration forceps; the other (no. 678), well-known through Brunner's treatment of it in the last century, is a powerful plier-like forceps with spoon-shaped serrated jaws.

F) A fragment of the worm of a uterine speculum (no. 679).

G) Two oculist stamps (nos. 680–81).

Also treated but not given catalogue numbers are a fragmentary inscription (now lost) bewailing the perceived incompetence of a physician and numerous small balls of blue pigment, found singly and in groups. W. B. Stern's analysis shows them to be each of the same substance, 'Egyptian blue'. They occur at other Roman sites and are believed to have been used as an ingredient in the manufacture of paint and cosmetic eyeshadow.

In 1974 in Region 19A a number of surgical items were found in two adjoining 'Fundkomplexen'. These included two of the scalpel handles (nos. 628, 629) and one of the oculist stamps (no. 680). It is reasonable to suppose that a physician was active here. The author also suggests, albeit more cautiously, that *Insulae* 29–31 were a center of surgical activity. Here were recovered, along with numerous objects that could have been surgical, the worm of the speculum and a sizable number of the scalpels and retractors.

Also provided are a résumé in French, a register (which orders the objects first by findspots and then by the inventory numbers of the various museums in which they are preserved), and a bibliography with abbreviations. There are some startling omissions in the latter, e.g. G. R. DAVIDSON, *Corinth XII* (1952) and W. DEONNA, *Delos XVIII* (1938); D. M. ROBINSON, *Olynthus X* (1941) might also have been consulted with profit. There is no index.

Aside from disagreement with E. Riha on individual points, my major criticism is that she has occasionally been oversystematic, occasionally not systematic enough. However, these complaints do not seriously detract from the worth of this volume. As my introductory remarks make clear, I have very positive feelings overall about this well executed and splendidly produced work. Anyone seriously interested in the study of *Minor Objects* will profit from reading and consulting it.