

Lege artis – The Rules of the Art

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ABSTRACT

Although in antiquity did not exist a professional training supervised by law the Graeco-Roman doctor was expected to practice his profession according to fixed standards, the Rules of the Art. Those were acquired by instruction and reading of medical literature. Honorary decrees and tomb inscriptions therefore emphasize learning as an essential part of his profession. Moreover, the doctor was expected to use instruments of equally professional standards which were surprisingly similar throughout the Roman Empire. Scalpels, tweezers, tongs, probes were of highly professional craftsmanship. Technically most advanced instruments as gynecological specula, cataract needles and trepans existed, too. Beside of the general practitioner there existed specialized doctors – gynecologists, ophthalmologists and veterinaries – and female doctors as well. His earnings acquired by good practice permitted the doctor to act as benefactor by treating patients free of charge or by donating public buildings.

Keywords: Doctor – medical literature – medical instruments – surgery – gynecology – veterinary – scalpel – cataract needle

RESUMO

Embora não existisse na Antiguidade formação profissional regulamentada, o médico greco-romano devia exercer a sua profissão de acordo com critérios estabelecidos, As Regras da Arte. Estas adquiriam-se através do ensino e da leitura de literatura especializada (medicina). Decretos honorários e inscrições em

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túmulos salientam, pois, o estudo como parte essencial desta profissão. Além disso, o médico deveria utilizar instrumentos que obedecessem igualmente a parâmetros profissionais, que eram extraordinariamente semelhantes em todo o Império Romano. Bisturis, pinças, fórceps e sondas eram de fabrico altamente qualificado. Também já existiam instrumentos tecnicamente muito avançados como espéculos ginecológicos, agulhas de cataratas e trépanos. Além do clínico geral havia médicos especializados – ginecologistas, oftalmologistas e veterinários – bem como mulheres médicas. Os seus honorários, adquiridos através do correcto exercício da profissão, permitiam ao médico a prática da beneficência, quer tratando pacientes gratuitamente, quer doando edifícios públicos.

Palavras-chave: Médico – literatura médica – instrumentos médicos – cirurgia – ginecologia – veterinária – bisturi – agulha de cataratas

At the beginning of the 1st century AD the Roman scholarly author Aulus Cornelius Celsus wrote a multivolume work about the «*Artes*» – the Arts. The eight books on medicine alone – «*De medicina*» – have survived. «*Artes*» does not mean ‘fine arts’ in the modern sense of the word but sciences, skills and activities acquired to a high level of perfection and assessed according to rules. They were led by the *Artes liberales*, the Liberal Arts, which could be pursued by the free citizen without the purpose of making one’s living. Those are for instance rhetoric, arithmetic, theory of music, or astronomy. The artist craftsman, therefore, was an *artifex*, who makes jewelry, bronze vessels and furniture of wood according to the rules of his trade. The artist in this sense was an *artifex*, too, making statues and paintings instead. Medicine was placed between those forms of art since it was remunerated, and a certain range, the *cheirurgía*, was «worked with the hands». However, medicine should be exercised according «to the rules of the art», too – *katá tén téchnen – lege artis*. Therefore, in Hellenistic and Roman time the doctors themselves considered medicine and their profession as well as *Ars*, as *Téchne*. So it reads on the tombstone of Tib. Claudius Apollinaris in Tarraco/Tarragona, dedicated by his wife Iulia Rhodiane, that he was «highly learned in the art of medicine» (CIL II 4314).

Celsus begins his book *De Medicina* with a few fundamental remarks bringing the development of medicine to a point. He does not question that medical art has a long history going back into prehistory and myth. But, he deliberately sets the turning point into the middle of the 5th century BC and combines it with a name – Hippokrates. Not because Hippokrates has been the most famous or the best doctor of his time but, argues Celsus, because he had separated medicine from philosophy and religion, and turned it into a science, or art, with rules to be learned. Hippokrates is a tangible person with a biography: He was born around

460 BC on the island of Kos as son of a doctor, Herakleides, and offspring of a family of Asclepiads, and he died around 375 BC in Larissa, Thessaly. He worked as a doctor in Kos and in Northern Greece. He received a 'call' to practice at the court of the Persian Great King Artaxerxes, but he declined it. It is not purely by chance that a person like him emerges in the 5th century BC. It is the time when in Greece, in Southern Italy and Ionia densely populated city states flourished. Illness is no longer a personal fate but is turning into a municipal, a political problem. In the interest of public life and survival the health of the individual becomes the problem of the community. A rational and comprehensive medicine is a logical as well as a necessary conclusion.

In the history of medicine time and name of Hippokrates mark furthermore almost the turn of an era. From this time on, coherent writings by doctors, and not just hearsay and quotations, have survived, foremost in a voluminous collection of writings known as *Corpus Hippocraticum*. The collection comprises about seventy textbooks on theory and practice of medicine, many of them of later origin than Hippokrates' lifetime. The numerous copies, and translations, too, demonstrate how widely medical writings were used in the workday routine of the ancient doctors. The doctor, who was in full command of his *téchne*, his *ars*, was a reader of medical literature. The doctor is portrayed on tombstones, votive reliefs or sarcophagi (Fig. 1) with books, or scrolls. He owns books, and he reads them, too. Furthermore, in honorary or funeral inscriptions is stated that a doctor has been author of medical literature himself. Tib. Klaudios Menekrates in Rome (CIG 6607) wrote no less than 156 titles, and Herakleitos of Rhodos is praised as the «Homeros of the medical poem» (CIG 4315). The collected works of Soranos of Ephesos, of Galenos of Pergamon or the *Corpus Hippocraticum* fill a row of bookshelves, even in modern print. But, the archaeological finds as testimonies of their own quality shall here be placed into the center of discussion.

The ideal doctor had an observant mind, combined with an extensive practical knowledge, and knowledge of literature as well. That permitted him to recognize symptoms and to diagnose an illness, to treat it according to the rules of the art, to determine the critical days and to give a prognosis of the course of the disease. His scope included gynecology, ophthalmology and mental disturbances as well.



Fig. 1 – Doctor Studying Books. Roman Sarcophagus from Ostia, 4th century AD. New York, Metropolitan Museum. Photograph Hans Rupprecht Goette

He had a broad knowledge of the human body, its skeleton, the interior organs and their functions. The treatment of wounds (*traumata*) with blood and pain received during sports, battle action or by accident claimed his immediate attention. Since microbiology or analytical chemistry was still in their infancy the brain and the nerves escaped understanding so far. The term *neuron*, i.e. nerve, designates «sinew». The doctor was informed about the remedies, the *phármaka*, and was capable to produce them himself. A health orientated regulation of everyday life, the *diatetiké*, helped to balance and to maintain health. The drastic part of medicine, the surgery should be used moderately and only in case of necessity, and that for good reasons: The two greatest risks in surgery, infection and loss of blood, were only imperfectly understood. But their deadly consequences gave a serious warning. Of course, household remedies were used and tolerated ever since, magical practices as well. Spells and amulets, beneficial or malevolent, were elements of ancient life, but not part of medicine, performed to the rules of the art.

The more we regret that we have so few original, especially archaeological testimonies of the time of Hippokrates. Representations of doctors in the early time, the 6th to 4th centuries BC may be counted on one hand (Fig. 2). Pictures on



Fig. 2 – Grave Relief of a Doctor, early 5th century BC. Basle, Antikenmuseum BS 236. Photograph Claire Niggli

Painted vases of the classical period want to entertain the viewer in an educated way, not to instruct him in medicine. The birth of Dionysos out of the thigh of father Zeus is the picture of the miraculous deliverance of a divine child, and not the depiction of a caesarian section and postnatal care with an incubator. The picture of Achilles dressing Patroklos' wound does not describe a field hospital but the friendship and intimacy of the Homeric heroes. And a chair does not turn into a medical instrument by using it for the relocation of the shoulder joint. Inscriptions on tombstones of the time of Hippokrates are not very communicative. Tomb furnishings, the archaeologist's favorite source of information, include almost no instruments or implements. But the inventories of sanctuaries of the healing god Asklepios, and remarks in medical writings bear evidence that doctors of the classical period already owned a sophisticated *instrumentarium*.

A profound change occurs around 3rd century BC, when images and inscriptions on tombstones are getting more detailed. They name professions

and picture tools and implements. But most of the monuments and finds belong to Roman time that is the period between the 1st century BC and 4th century AD. Honorary and funerary monuments speak of names and biographical details, and they sketch the historical background. Also tomb furnishings are more complex than in the centuries before, especially in the West of the Roman Empire, and on the Iberian Peninsula as well. But the family of a deceased doctor buried only a fraction of his instruments with him, although the most typical ones. One could name the scalpel as the distinguishing feature of the Graeco-Roman doctor, the *iatrós* or *medicus*, notwithstanding if he had been a *medicus chirurgus* in his lifetime.

What may we expect as equipment of the ancient doctor? In the first place an equipment which is professional, sturdy, functional, clean and up-to-date with the *téchne*. Instruments were generally made of bronze. Cutting blades and cauteries, the *sídera* or *ferra*, were made of iron. If the doctor was a *medicus chirurgus* he owned several scalpels of a very characteristic shape: A solid middle section, sometimes with sharp profiles securing a tight grip inset a sharp blade in iron or steel quality. The blade was shaped according to the purpose. Standard was a rounded one, *stethoeidés* or *gastroeidés*, «breast-» or «belly-shaped» (Fig. 3). Furthermore a straight and peaked blade, the *kórax* or *corvus* – «raven beak» was standard, too. Not so frequent but used as well was a scalpel with a straight and pointed, double-edged blade. The middle section of the scalpel terminates on the rear end with a sturdy blunt spatula used for separating the tissue without cutting. For this purpose was also used a sharp hook, *hamus acutus*, likewise with a profiled grip (Fig. 4 a). Pincers, *forcipes*, with toothed tips were frequent, too. A pincer with long handles and toothed jaws, the *staphylágra*, was used for treating the uvula or the tonsils in the throat (Fig. 4 c); a double ended spatula helped in the operation as tongue depressor (Fig. 4 b). Broken bones have been accidents ever since. To adjust the broken parts, the doctor had a bone lever, an *elevatorium* (Fig. 4 d). A selection of three or four long and slender probes, *specilla*, completed the surgeon's equipment (Fig. 5 a). The probes came in various shapes but likewise in sturdy construction: a similar profiled grip in the middle, at one end a round «kernel», the other end was in the shape of a spoon for scraping, an oval spatula, was 'rudder'-shaped or else. Similar looking accessories for cosmetic purposes are more delicate and sometimes made of silver.



Fig. 3 – Scalpel, from the Burial of a Surgeon, 1st century AD. Bingen, Historisches Museum am Strom. Photographs Römisch-Germanisches Zentralmuseum Mainz



Fig. 4 – a) Sharp Hook; b) Double Spatula; c) Pincer, *Staphylagra*, Roman Imperial Time. Römisch-Germanisches Zentralmuseum Mainz. Photographs Museum; d) Bone Lever, from the Burial of a Surgeon, 1st century AD. Bingen, Historisches Museum am Strom.



Fig. 5 – a) Probes, b) Lidded Boxes, Roman Imperial Time. Mainz, Römisch-Germanisches Zentralmuseum. Photographs Museum; c) Tongs for Tooth Extraction, 1st/2nd century AD. From Belgium/Wederath. After Künzl 1982, p. 72 fig. 46,1

There are moments when pain will overcome the fear of surgery and the possible consequences, – toothache, to name one. Whatever medical theory recommended, eventually the tooth was extracted, and that with robust iron tongs (Fig. 5 c). The jaws of the tongs were slightly curved to prevent crushing the tooth. Similar painful are kidney and bladder stones. The *ultima ratio*, the surgical removal was judged controversially in antiquity. Those doctors who were followers of the so-called Oath of Hippokrates declined the operation but admitted others to perform it. To do it quickly and precisely the renowned surgeon Rousphos (Rufus) of Ephesos constructed in the 2nd century AD a special instrument combining tongs with a spoon, both with toothed insides for a firm grip in a wet and slippery field.

Such a selection of instruments, about eight or nine pieces, could very well be placed for transportation into a handy box (Fig. 6). In antiquity the doctor treated his patients only in some cases in a kind of practice of his own, a *kliniké* or *taberna*. In most cases he called on them at their homes and therefore had to take a suitable selection of instruments with him, conveniently in such a box. Those boxes were square, made of wood, sometimes covered with leather, or made of bronze sheet. Thin and slender instruments such as probes, pincers and hooks he put into cylindrical lidded boxes, *specillothecae* (Fig. 5 b). The *phármaka* the doctor carried with him were pressed into oblong bars, or rolls, the *kollýria*, and could be stored in either of these boxes. Thin «wheels», *tróchaia*, that is in Italian *droga* – «drug», were cut from the bar, dissolved in water, wine or oil and applied. These *kollýria* (Fig. 7 b) were commercially manufactured on the base of wax or grease and sold. The name of the disease, the producer or the doctor respectively who had created the *phármakon*, and instructions for use were stamped onto the matter. A great number of such stamps – square and made of stone – have been found. Since many of those medicaments were against eyesore, those stamps are dubbed 'oculist stamps'. Other *phármaka* as for instance Lykion from Asia Minor were transported and sold in very small bottles, made of clay or lead. In the Roman military camp at Haltern in Germany the lid of a leaden box was found. According to the incised inscription it contained a *phármakon* made of *radix Britan(n)ica* (Fig. 7 a). The stamp on a flask of



Fig. 6 – Votive Basis, with Box for Medical Instruments and Cupping Vessels, 1st century BC. Athens, National Museum. Photograph Hans Rupprecht Goette

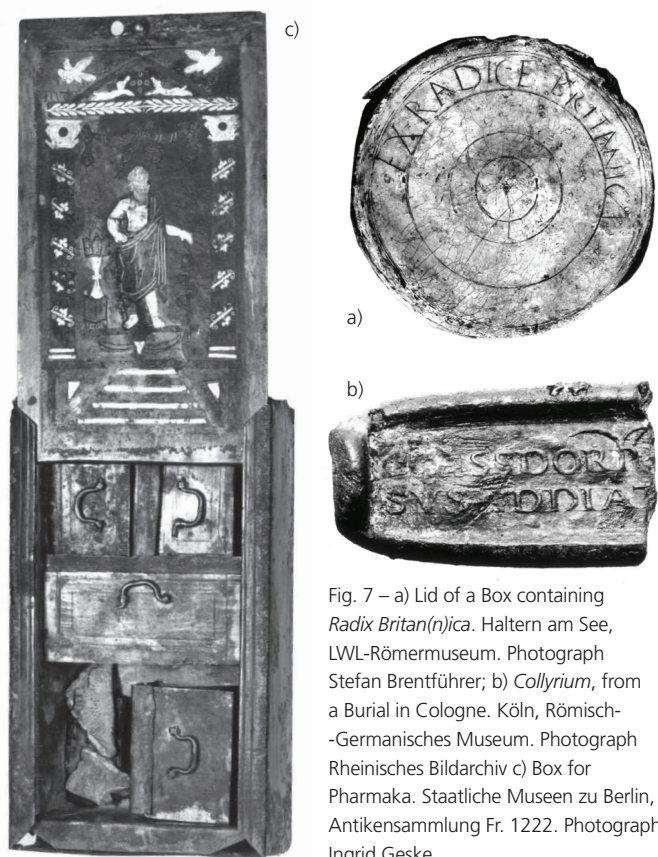


Fig. 7 – a) Lid of a Box containing *Radix Britan(n)ica*. Haltern am See, LWL-Römermuseum. Photograph Stefan Brentführer; b) *Collyrium*, from a Burial in Cologne. Köln, Römisch-Germanisches Museum. Photograph Rheinisches Bildarchiv c) Box for Pharmaka. Staatliche Museen zu Berlin, Antikensammlung Fr. 1222. Photograph Ingrid Geske

lead from Munigua is waiting for reading. The *materia medica* could also be stored in square boxes with removable lids on its interior compartments. They often are decorated with pictures of the healing gods Asklepios and Hygieia to mark their use in medicine (Fig. 7 c). But they were used for cosmetics or paint, too.

This package of three – box for instruments, round lidded boxes for probes and case for medicine – forms the basic equipment of a doctor, – in a sense his ‘ambulance kit’. Among the victims of the eruption of Mount Vesuvius in 79 AD were at least two doctors who in answer to the screams and panic rushed outside to help with their ambulance kit. Of course in Pompeii and Herculaneum there have been more than two doctors, but their houses have been cleared out early in the era of the Bourbon kings.

In Rimini in Italy the house of a doctor was destroyed when in late 3rd century AD the tribe of the Alemans captured the city. A wall collapsed over the practice and the instruments, and the doctor has found no chance to retrieve them. Noticeable is the great number of about two hundred instruments. Maybe the doctor had inherited part of them from his predecessor.

Of course the well organized Roman army had military physicians. The *medicus legionis* in the great garrisons with several thousand men had to treat daily numbers of accidents and cases of sickness. The hospitals, the *valetudinaria* were equipped with *materia medica* and instruments and could accommodate everyday casualties in chambers. In case of war, the large open area in the center of the *valetudinarium* was used for tents and cots. Especially in battle action a doctor or *capsarius*, a medical orderly was required, as pictured on the column of Trajan. In the year 9 AD the Roman general P. Quinctilius Varus and two complete legions perished in an infamous defeat, the *Clades Variana*. On the occasion of its millennium anniversary in 2009 the region around Kalkriese in Germany where the *Clades* had occurred was investigated and partly excavated. Among the finds were a bone lever and the handle of a scalpel from the kit of the *medicus legionis*.

Not every doctor had special instruments for special treatments among his equipment. For instance cupping vessels, *sikýai* or *cucurbitolae*, could not be fitted into the flat instrument boxes but they have been found among tomb furnishings. The best preserved ones were found in a doctor's tomb at Bingen on the Rhine (Fig. 8). This especially rich tomb with a well preserved instrumentarium also included a trephination drill, constructed to be folded and complete with the cylindrical drilling bit (Fig. 9 b). Since bladder stones and inflammation of the bladder occurred frequently, also catheters were used. They came in a gradation of sizes and were adapted to male and female physiology. But, due to their fragile construction of thin bronze sheet few have been preserved. Openings below the rounded tip and a small protrusion at the outside end of the slender and curved tube are characteristic for catheters (Fig. 9 c). The latter one helped to direct the tip into position inside the body. Soberly thinking doctors sensibly bought instruments which could be used in most cases.

Two highly sophisticated instruments presuppose certain technical inventions which were made no earlier than in Hellenism, – the piston pump and the screw spindle. In the 3rd century BC the mathematician and engineer Archimedes of Syracuse constructed the 'spiral (*kochlías*) of Archimedes'. The endless spiral afterwards was widely used as a water lifting device. Well preserved examples have been found in the mines of El Centenillo, Santa Barbara and Sotiel Coronada. In the same field, the moving of water, the piston pump with valves was developed. The mines of Sierra de Cartagena and again Sotiel Coronada have furnished well preserved examples. It took some more time and some technical shrewdness until the everyday metal screw eventually came into use. Eye problems were omnipresent in antiquity, and they were attended by the eye doctors. The *medici ocularii* Albanus Artemidorus in Gades/Cádiz (CIL II 1737) and M. Fulvius Icarus at Ipagrum/Procuna (CIL II 5055) – both towns are situated in the Baetica – have certainly not been the only ones on the Iberian Peninsula. Opposite, on the southern shore of the Mediterranean in Caesarea Mauretania C. Terentius Demosthenes practiced as *medicus ocularius* – *iatrós ophthalmikós*. His funerary inscription was written in Latin (CIL VIII 21105) and Greek as well. The frequent grey cataract of the eye was eventually treated by couching the lens with a cataract needle, as in modern times. That has been, and still is, a risky opera-



Fig. 8 – Cupping Vessels, from the Burial of a Surgeon, Bingen, 1st century AD. Bingen, Historisches Museum am Strom. Photograph Römisch-Germanisches Zentralmuseum Mainz

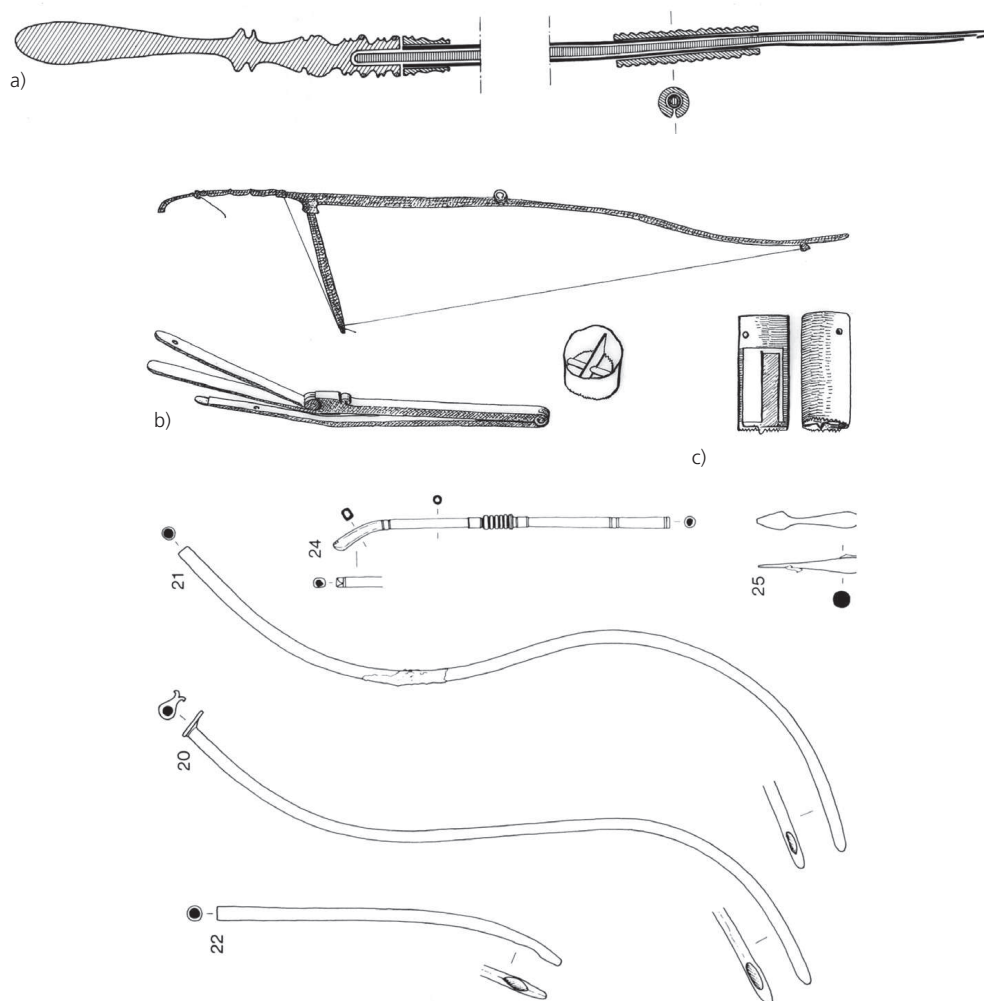


Fig. 9 – a) Cataract Needles for Glaucoma, 1st century AD. After Künzl, *Jahrbuch Römisch-Germanisches Zentralmuseum, Mainz*, 32, 1985, p. 444 fig. 4; b) Trepan, from the Burial of a Surgeon, Bingen, 1st century AD. Bingen, Historisches Museum am Strom. After Krug (1993) p. 99 fig. 39; c) Catheters, 1st century AD. London, British Museum. After Jackson (1986) p. 127 fig. 3

tion. The doctor has to take care that the tip of the cataract needle is inserted only so far, that the cloudy lens may be pressed down. The profile in the middle of the needle's shaft again provided a secure grip. Without his lens the patient was not sharp-sighted any more but his sight was brighter. More dangerous was the glaucoma caused by high pressure in the interior of the eyeball. The liquid was in a sense 'pumped' out by an intricate cannula, – a masterpiece of bronze manufacture. The cannula consisted of two needles, a hollow one and an exactly fitting needle inside (Fig. 9 a). When the interior needle was withdrawn, the liquid inside of the eye was pumped and drained through the hollow needle. No surprise that only a lucky incident has preserved a set of cataract needles, almost brand new. A *medicus ocularius* lost his instruments when crossing the river Saône in France, so they were preserved in the water in pristine condition.

An important field of medicine as well is gynecology. It concerns two human lives at the same time, that of the mother and of the child. For an intrauterine exploration and, in the worst case, surgery, there were gynecological specula. Their technical finesse and their looks are stunning, even nowadays. Other than the instruments discussed until now, the *specula* had movable parts and were conceived for a moving mechanism. The metal screw which set the parts in motion was a challenge for the bronze workers, and their methods of approach are still visible. The thread of the screw was made by filing, or by soldering bronze threads onto the axle, or chiseled. Nevertheless, several specula have been found, in Pompeii, in Augusta Emerita/ Mérida (Fig. 10) and elsewhere. With their locking screw they are technical masterpieces.

Until now no workshop for medical instruments has been located. For scalpels there had to be two different workshops working together. In Roman time arts and crafts were divided into different branches. Foremost metalworkers were organized according to the metal they worked in, as *aurifex*, or *argentarius* or *faber ferrarius* – gold, silver or iron. Therefore, a *faber aerarius* did cast the bronze handles, and a *faber ferrarius*, in particular the *cultrarius*, the cutler made the blades. The parts were assembled, the blades fitted into the socket and soldered and the scalpel eventually sold in one of these workshops or elsewhere. Considering the medical instruments in the Roman Empire between Lusitania and Syria, it surprises how similar they are, how equal in appearance and in technical standards. The scalpel handles from Munigua in the Baetica (Fig. 11 a) demonstrate the same professional standards as those from Bingen (Fig. 3), Pompeii or Greece. Workshops all over the Roman Empire were familiar with the demands of a doctor who worked according to «the rules of the art». But a tiny human weakness is shining through professionalism. Some of the instruments, foremost scalpel handles are decorated with inlaid ornaments in silver or copper (Fig. 11 b). This is more for show, and less for hygiene. After all, doctors are human, too.

To return once more to gynecology, – for the normal course of nature there were midwives, *maía* or *obstetrix*. Of course, these women had a vast experience in their field. But women were capable to acquire medical knowledge, too, and called themselves *iatrós*, «doctor» and midwife in one. Phanostrate from Acharnai in Attica (IG II-III² 6873) had achieved this title and writes it in its male version. The inscription on her grave relief praises her, because she never had inflicted pain. Mousa from Byzantion (Samama 310) on the other side calls herself *iatreíne*



Fig. 10 – Gynecological Speculum, Mérida, Museo Arqueológico Nacional 32.643. Photograph Ceferino López



Fig. 11 – Scalpel Handles from Munigua, 1st century AD. Sevilla, Museo Arqueológico Nacional. Photograph Author

– «female doctor». The scroll in her hand indicates that she has acquired her art by studying books as well. Scribonia Attice in Ostia is depicted in the modest relief on her tomb while practicing her profession, – she is delivering a baby. She was married to M. Ulpius Amerimnus, and they twosome worked together as *obstetrix* and *chirurgus*. The same connection by profession and marriage had Irene and Faustus in Thubursicum Numidarum/Khamissa in Algeria (CIL VIII 4896). The city of Tlos in Lycia permitted Antiochis, daughter of Diodotos, to erect herself – and on her own expenses – a statue «on behalf of her proven *téchne*» (Samama 280). Cassius Philippus in Augusta Emerita/Mérida erected a tomb monument for Iulia Saturnina, his «incomparable spouse and best *medica*» (CIL II 497). These and other documents show that women had made themselves at home in the medical profession, in fact with an academic background and – *lege artis*.

Among the doctors one should at least give a minute of attention to the veterinary. On a farm, a *villa rustica*, it was a matter of economy to have a *medicus veterinarius* taking care of the livestock. The armed forces had a cavalry, *Alae* or *Cohortes equitatae*, where the condition of the horses was decisive for warfare. In addition, there were horses and mules for transport in the train and a certain number of livestock for provisions. A *medicus pecuarius* belonged to the *immunes*, the non-fighting members of the army. Special care received the horses, preferably those for chariot race in the circus. For these valuable animals developed the branch of the *medicus equarius* or *hippiatrós*. These *medici* had at their disposal an extensive literature, too. Works on agriculture as *De re rustica* of L. Iunius Moderatus Columella, who was a native of Gades/Cádiz, contained chapters on veterinary medicine. By the way, Columella does mention «invisible little critters» – *animalia* – which rise out of swamps and cause sickness.

Part of the work of the veterinarian was the castration of male animals, partly for increasing the flesh, partly for having more docile animals like geldings and oxen for work. Castration of men was unlawful, but, of course, was practiced illegally. Castrates were sought after as singers, dancers or ‘object of desire’. Some of the oriental cults as that of Magna Mater/Kybele demanded of their followers self-

-castration, offered in ecstasy. A reminder of this ritual is a serrated bronze clamp amply decorated with busts of oriental deities and found in the river Thames within London (Fig. 12 a). That clamp was not meant for actual use, its weight is exactly one kilogram. The purpose of these clamps was to secure the bleeding wound after the cut. For everyday surgery a split reed or log of wood would do. In rare cases a wooden clamp is preserved among the rubbish of a *villa rustica*. The grave relief of a Gallo-Roman *medicus equarius* in Aix-en-Provence/France depicts a big serrated clamp between two horses. The «hippiatrós of the emperor» Eutychos from Rheneia in the Aegean is holding such a clamp in his right hand (Fig. 12 b).

In inscriptions occur frequently the Roman *tria nomina*, but with a Greek *cognomen*. That has sometimes led to the conclusion that all these doctors were freedmen, *liberti*. That is true but only to a degree. It was not necessary to have been at first slave, or prisoner-of-war, to become eventually a free citizen of non-roman birth. Roman citizenship with its precious advantages was granted on conditions, doctors were preferred. Therefore C. Iulius Caesar bestowed citizenship on all doctors mostly of Greek origin working in Rome. Doctors were also welcome as *peregrini* – non- citizens with permission to live and work in the cities. Nevertheless, there were actually freedmen among the doctors, but this did not affect their practice. At first as serf, as *servus*, and later as freedman, *libertus*, a doctor was mem-

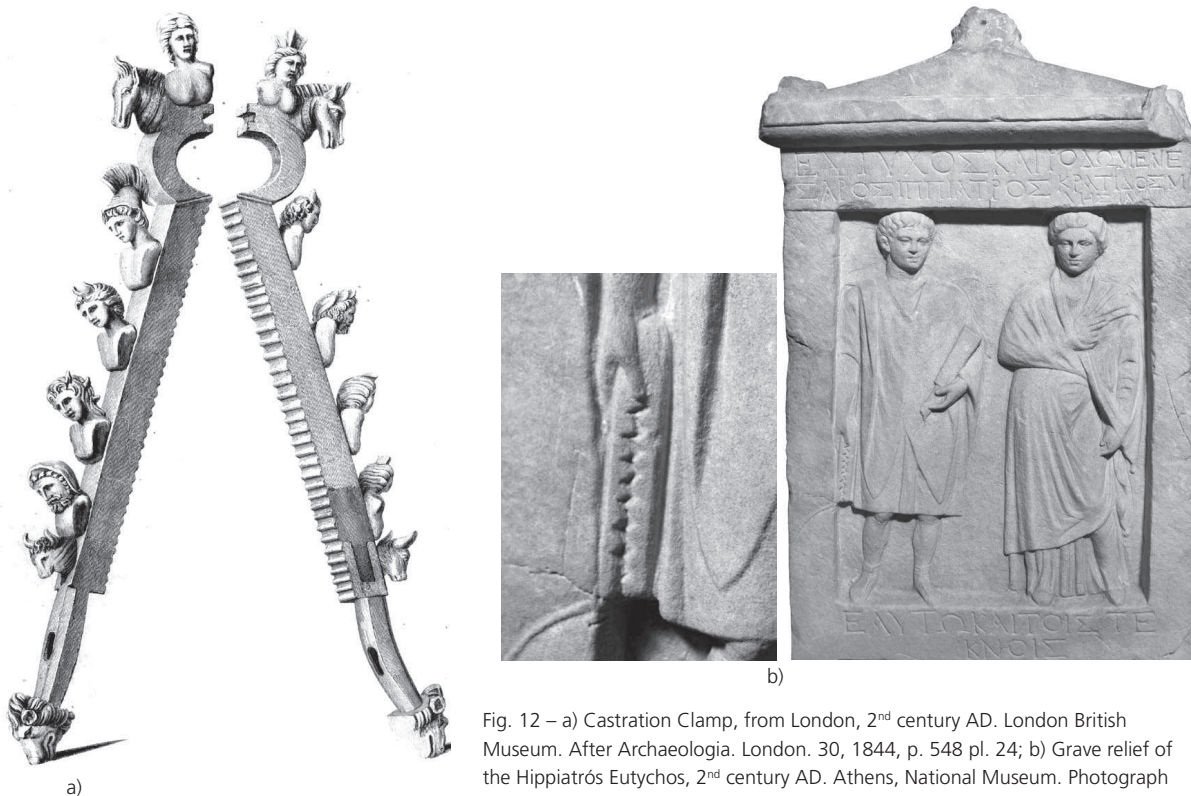


Fig. 12 – a) Castration Clamp, from London, 2nd century AD. London British Museum. After *Archaeologia*. London. 30, 1844, p. 548 pl. 24; b) Grave relief of the Hippiatrós Eutychos, 2nd century AD. Athens, National Museum. Photograph Hans Rupprecht Goette

ber of his patron's family. Sometimes the *patronus* had taken care of his education, too. The wealth of the *liberti* was proverbial, and in addition they received together with their manumission full Roman citizenship. Claudius Apollinaris of Tarraco/Tarragona, «most learned in the art of medicine» is called on his tombstone, erected by his wife Iulia Rhodiane, «freedman and heir» of T. Claudius Onitus (CIL II 4313). The *medicus* P. Sicinius Eutyclus from Dianium in the Tarraconensis (CIL II 3593) has been freedman of his patron presumably of the same name.

We also have the *medicus servus*, either the 'slave as doctor' or the 'doctor for slaves'. The discussion is flawed to a degree by modern ideologies and emotions. The freedman working as a doctor and *lege artis* has been unfree before. The *medicus* Eucratus in Carnuntum in Pannonia had died at the age of 25. In the memorial inscription of his tomb he is called *servus* of the doctor L. Iulius Euthemus, who being his *dominus* had made this modest commemoration «on behalf of Eucratus' merits» (CIL III 1929,215). Obviously Eucratus had died too young to be manumitted, but these few words show familiar bonds and a warm sympathy between master and slave, teacher and pupil. The «houseborn slave» Loukios in Lykia dedicated an inscription to Asklepios on behalf of the doctor Trophimos (Samama 274), who had treated him, the slave, free of charge. The commitment in the Oath of Hippocrates, to act only to the benefit of the sick and to abstain from the harmful, includes *expressis verbis* the free and the nonfree patients.

These laudable ethics do not exclude the question: what are the earnings of a doctor? Quite a lot, if he was a good doctor and worked to the rules of the art. The physician Som(b)rotidas, son of Mandrokles (Samama 511), erected at the beginning of the 6th century BC in Megara Hyblaia in Sicily the almost lifesize marble statue of a *kouros*, a standing youth. He certainly has not been a poor man. This type of statue had been in Greece in the archaic period the appropriate dedication of noble and wealthy families. Considering the importance of medical care for cities and smaller communities the question arose, where and how to get a good doctor? The frequent biting jokes and comments of comedians and satirical writers demonstrate that the opposite, the quack and the bad doctor existed, too. Since there was no state controlled study and approbation, a good reputation acquired with good teachers and successful practice was the best and only recommendation. Therefore, the city of Gortyn in Crete turned to the famous Asklepieion of Kos for advice and was most content with the physician Hermias who followed the bid. On principle, the doctor was paid a *misthós*, a *salarium* after a successful treatment. Wealthy patients in high positions, and especially the emperors of Rome, paid their doctors in addition large sums and gifts as *honorarium*. For C. Stertinius Xenophon, famous doctor from Kos, even this was too little. When asked to be the personal doctor of the emperor Tiberius, he complained the loss of money he otherwise earned with his private patients.

Large cities and places where wealthy people lived therefore attracted numbers of doctors. Small towns on the other side faced the problem how to make a doctor set up his residence within the community. Offering privileges as property or citizenship helped to attract a qualified doctor, and his *salarium* could be increased by a collection among the citizens.

But, on the other side, the demand '*Richesse oblige*' applied to doctors as well as to any wealthy citizen in the ancient world. Everybody wished to be free of onerous taxes. This was opposed by the tradition of *Euergesía* and *Philanthropía*. Rich people were often exempt from taxes but obliged to spend a considerable part of their fortune in public interest. The demands 'they couldn't possibly decline' included great buildings as temples, baths, theaters, as well as statues, lavish offerings or public games. The Curia of Sufetula/Sbeitla in Tunisia honors the physician Qu. Iulius Rogatianus (CIL VIII 11345) with a tomb monument for he had served the city in the office of an *aedilis* and as a doctor and had lavishly endowed the games. In Pax Iulia/Beja the *medicus* of the city dedicated an inscription to Asklepios (CIL II 21) on behalf of the *ordo decurionum*, to which he had belonged himself for a long time. But it was permitted to the donor to commemorate his *Euergesía* by erecting a statue of himself. In many Greek cities citizens tried to escape this oppressive 'voluntariness'. The more the cities honored those who stood up to their obligations. C. Stertinius Xenophon, already mentioned and otherwise a questionable, but extremely wealthy person, dedicated to the renowned Asklepieion of Kos a library, a small temple and waterworks. And, furthermore, he redeemed the right of asylum for the sanctuary and achieved tax exemption for the city of Kos as well. Similarly Herakleitos of Rhodos – we have already met him as the »Homerus of the medical poem« – had erected in his adopted home city Rhodiapolis a library, too, and statues for the healing gods (Samama 289). In return he received wreaths of gold, statues of himself and honorary decrees to make him immortal, at least for archaeologists. For other doctors it was satisfaction to do their work «*lege artis* – to the rules of the art» and in the ethics of the Oath of Hippokrates (Fig. 13).



Fig. 13 – Relief for a Heroized Doctor, 1st century BC. Staatliche Museen zu Berlin, Antikensammlung SK 804. Photograph Johannes Laurentius

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