

News, Notes and Queries

SURGICAL INSTRUMENTS ON A TOMB SLAB IN ROMAN MALTA

THE MALTESE ISLANDS fell under the rule of Rome in 216 B.C. With the division of the Roman Empire in A.D. 395, the Maltese archipelago is believed to have formed part of the Eastern or Byzantine Empire. Christianity was introduced into Malta in A.D. 60. As Roman law prohibited the interment of the dead inside the towns, the earliest Maltese Christian cemeteries were established outside the walls of the ancient capital Melita, now Mdina, at Rabat. These burial places consist of a series of catacombs or underground networks of galleries and vaults hewn out of the rock. The main ones are those named after St. Agatha and St. Paul.

In the absence of epigraphy (barring a few incomplete and uninformative Greek inscriptions) and of literary documentation, archaeologists have ascribed the origin of these catacombs to various epochs of the Christian era ranging from the second to the fifth centuries (Caruana 1898a, Ferrua 1949a). From the non-existence of a *polyandrum* or pit for the burial of common people, it is surmised that these catacombs represent the sepulchres of 'the distinguished classes' of the urban population of the island. It has been estimated that the total number of tombs in the St. Paul catacomb complex was about 1400, indicating the presence of a small Christian community at the beginning of the Christian era (Caruana 1898b, Ferrua 1949b). It is not known when these catacombs fell into disuse but those of Rome were being replaced by surface cemeteries towards the end of the fourth or at the beginning of the fifth century (Caruana 1898c), although Constantine had granted the Christians freedom of worship and equality of rights with the pagans in A.D. 312 (Bellanti 1924a).

In the neighbourhood of the catacomb of St. Paul is a cluster of small *hypogea* or underground burial chambers. They do not communicate with the main St. Paul catacomb but are independent of it and of adjacent ones. They are believed to have been burial-places of different corporations or associations representing various trades and crafts as was the case among pagan communities in Rome and other parts of the Roman world (Caruana 1898d, Ferrua 1949c, Bellanti 1924b). This has been deduced from the presence of tool carvings found in these *hypogea*. Four such representations have been discovered in four separate *hypogea*:

(a) A set of tools consisting of 'the hammer, the pincers, the axe, the pickaxe, and other implements' cut in the wall of the antechamber of Catacomb No. 23 in St. Agatha's field. They have been identified with the tools of the carpenter and of the mason (Caruana 1898e, Becker 1913a, Zammit 1966a).

(b) A slab in Catacomb No. 15 (Becker 1918b) showing carvings of 'hammers, a hatchet, two pairs of pincers, a pair of compasses, a gimlet, several nails' and other tools that have been variously attributed to the carpenter (Caruana [n.d.]) and to the tinsmith (Zammit 1966b).

(c) A slab used for plugging the doorway of a burial chamber at *Tac-Caghqi* Catacomb, Rabat. It bears carvings of two sickles and a pick (Annual Report, 1954).

(d) A stone slab with a series of tools shown in low relief and arranged in two rows (Becker 1913c) (Fig. 1).

News, Notes and Queries

This slab is found in Catacomb No. 3 which lies in the vicinity of that of St. Paul already mentioned (Zammit 1966c). One descends into it by a few steps cut in the rock and reaches a narrow corridor which communicates, on each side, with a small round chamber dug at a lower level. The centre of the floor of each of these chambers is occupied by a circular 'table' hewn out of the rock while the walls around contain horizontal cavities or *loculi* which from their small size must have been meant for the burial of babies.

The corridor ends in a sort of antechamber. Three of the walls of this antechamber have each a small squarish opening at ground level with an arched concavity on top. Each of these apertures leads down by a few steps into a square burial room. Along three walls of each burial room are ranged two tombs side by side or else two raised platforms (*cubicula*) on which the bodies were placed. The entrances to these three burial rooms were originally closed by rectangular slabs of stone presenting a squarish projecting hump at the back which fits the opening. The faces of two of these slabs are smooth and bare.

The entrance opening to the third burial room, which faces the visitor as he enters the antechamber, is about 55 cm. high and 60 cm. wide so that he has to crawl through it to gain access into the burial room. This room contains two empty tombs hewn out of the rock along the wall facing the entrance. The other two walls each have two raised platforms side by side instead of tombs. The slab that formed the 'door' for blocking the entrance is 110 cm. high, 70 cm. wide and 20 cm. thick. The hump which projects from the lower half of its posterior aspect is about 54 cm. high, 45 cm. wide and 29 cm. thick. Its anterior surface bears, on its upper part, the series of tools already alluded to and shown in Figure 1.

These implements have been identified as being 'shears, mallets, frames for holding yarns and threads, pincers and loom weights' connected with the spinning and weaving crafts (Zammit 1966d). In the opinion of the present writer, however, these tool carvings lend themselves to a more plausible and correct interpretation; indeed, in his view, they represent surgical instruments.

The difficulties attending the correct determination of the exact nature of instruments or tools from ancient sculptures have long been recognized. These difficulties arise from the fact that (a) the shapes of the implements are usually roughly hewn or else they are stylized representations which do not portray the detailed features of the article in question; (b) the tool may have gone out of use a long time ago and its function forgotten unless recorded or illustrated in some literary work; (c) certain tools, apart from being surgical instruments, may have also been employed in some other craft or as domestic appliances. This is the case of the *spathomele* or spatula-probe with which painters mixed their colours; the *stylus* which served for writing on wax tablets; the *ligula* type of *specillum* and the epilation forceps which women employed as toilet articles for extracting salves etc. from boxes and for plucking superfluous hairs from the face, respectively; the blacksmith's bellows for inflating the intestines before giving an enema and his tongs for replacing a protruding bone in cases of compound fractures; the butcher's block used by surgeons for amputating limbs by placing them on it and striking them with a chisel; and finally (d) articles of similar forms had a general non-specific function and it is impossible to distinguish



Figure 1.
Surgical instruments on a tomb slab in a Roman catacomb in Malta.
(Photograph by courtesy of the Director, National Museum, Valletta.)

them from surgical instruments such as forceps for raising and snuffing the wicks of oil lamps and the syringe employed for all flushing purposes (Milne 1970a).

Bearing these limitations in mind, the nature of the instruments appear to be as follows:

No. 1: Whetstone (Latin *cos*) for sharpening knives (Milne, 1970b); or ointment slab for mixing ointment ingredients. This object may have served both these purposes, as it is known that ointment slabs were also used as whetstones, as shown by the hollowing out of the edges of some specimens by the sharpening of scalpels on them (Milne, 1970c; Buckler & Caton, 1914a); or box (of wood or metal?) for holding the portable outfit of surgical instruments during a journey (Milne 1970d, Scarborough 1969a).

No. 2: Surgical shears or scissors (Latin *forfex*). They were made of steel or bronze. Some that have survived retain their spring perfectly. They were used for cutting the hair as a therapeutic procedure or for cutting tissues such as prolapsed omentum (Milne 1970e, Scarborough 1969b).

No. 3: Medicament box. This box, probably of wood, was divided into compartments by partitions to contain drugs in a semi-solid state and powders (Milne 1970f).

No. 4: Vaginal speculum or speculum magnum matricis. This instrument was made of different sizes according to the age of the patient. The lower middle vertical ridge denotes the screw mechanism which when turned separated the two blades of the *priapiscus* which thus expanded the vagina (Milne 1970g, Scarborough 1969c).

No. 5: Surgical tongs or forceps or pincers. (Milne 1970h, Scarborough 1969d, Garofano Venosta 1972).

No. 6: This instrument could be: a chisel with handle and flat blade for chopping of bones, division of ribs, etc. (Milne 1970i, Vulpes 1847, Higgins 1971); or sword-shaped cautery knife, made of iron, such as that mentioned by Paulus Aegineta (*fl.* sixth or seventh century A.D.) (Milne 1970j); or amputating knife (Pazzini 1971, Nicaise 1890).

No. 7: This semilunar object has been the most difficult item to identify. It is very likely a bleeding bowl, shown on its side, for receiving blood during venesection (Barber-Lomax 1972); or a mixing bowl, shown on its side, for mixing powders, ointments, etc.; or a razor (Pazzini 1971, Garofano Venosta 1972) recalling a specimen existing in the Archaeological Museum of Taranto, Italy,

No. 8. Bleeding cup or cupping vessel (Latin *cucurbitula*). They were made of bronze and carried a ring on their summit. Some of them were of glass or light earthenware. Burning lint or oil was placed inside them and heated. The mouth of the cup was then applied to the skin and pressed until it got stuck as the heated air within cooled and contracted. The skin was previously cut with a scalpel to permit the extraction of blood. They were made of different sizes depending upon the area of the body on which they were applied (Milne 1970k, *Dictionnaire* 1887, Scarborough 1969e; Buckler & Caton 1914b).

No. 9: Same as No. 1.

No. 10: Same as No. 2.

No. 11: Portable ointment box or unguentarium. It is not divided into compartments as the medicament box. It was probably made of wood (Milne 1970l).

News, Notes and Queries

No. 12: Etui or portable probe case. A cylindrical case of bronze for carrying spatulae, sounds, hooks and forceps (Milne 1970m, Pazzini 1971, Garofano Venosta 1972).

No. 13: Same as No. 5.

No. 14: Same as No. 8.

During the Roman period, 'the Maltese Islands as so much of the Roman Empire' have no written history. Although something is known, from archaeological remains, about their local government, trade and religion (Ashby 1915), hardly anything has come down to us about their medical state. This slab, therefore, assumes particular importance for the medical history of Malta as it has preserved the earliest evidence we possess of the practice of surgery in the Maltese Islands.

If—as the writer assumes—each of the two rows of instruments is a memorial to a surgeon, then we may reasonably infer that at least two surgeons died and were buried in Malta when the catacombs were in use (second to fifth centuries A.D.). Although no inscriptions record the names and other personal data of these practitioners, the slab indicates that they were held in such high regard in the social hierarchy of the island as to deserve burial among 'the distinguished classes' of Maltese society.

Apart from its local importance, this slab is also of special interest for the early medical history of Western Europe. This stems from the fact that funerary monuments and other sculptured tablets representing surgical instruments of the Greek and Roman world are sufficiently rare and the Malta slab, therefore, constitutes a valuable addition to this *corpus* especially in view of the variety of instruments appearing on it. As far as the writer is aware, the only tablets that bear comparison to the Malta slab regarding the number and variety of surgical tools are the ones at the Lateran Museum which include scalpels, a probe, surgical tongs, cupping vessels, a syringe and what appears to be an instrument box (Scarborough 1969f) and the sculptured tablet at the Temple of Kom-Ombos (Egypt) which represents a large assortment of gynaecological instruments (Wellcome 1914).

The other tablets known to the author show only scalpels in boxes and bleeding cups, i.e. (a) Acropolis, Athens, (b) Capitoline Museum (Milne 1970n), (c) Stele of Publius Aelius Pius Curtianus, (d) Ostia Museum, (e) British Museum and Ravenna (Scarborough 1969g).

ACKNOWLEDGEMENTS

I wish to express my thanks to Mr. F. Mallia, Director, Mr. T. Gouder and Mr. M. Buhagiar, staff members of the National Museum, Malta, for their interest and help with photographs; Mr. J. Barber-Lomax for his loan of literature and stimulating discussions; and to Mr. R. A. Higgins, Department of Greek and Roman Antiquities, The British Museum, London; Prof. A. Pazzini, Institute of the History of Medicine, University of Rome; Dr. F. N. L. Poynter and Mr. E. Gaskell of The Wellcome Institute of the History of Medicine, London; Dr. M. Di Gianni, Consul of Malta Naples; and Prof. F. Garofano Venosta, Director of Museo Provinciale Campano, Capua, for kindly responding to my inquiries.

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News, Notes and Queries

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