Styli

Copper alloy

Three copper alloy styli were the subject of a report by Bliss. **3531** consists of an eraser separated from the stem by a series of collars and grooves and a reel. The lowest collar is decorated with acute lines. The stem is decorated with longitudinal grooves and the conical point is separated from the shaft by a groove. It is bent but about 78mm long. Iron examples this type are assigned to Type 4 by Manning (1985, 85, fig. 24). **3532** consists of the eraser and shaft only. It is much simpler but the eraser is still separated from the shaft by a shoulder and is decorated with chip-carved grooves at each corner of the base. The shaft is plain and faceted. Bliss found no parallels for wither of these in copper alloy.

3533 was included as a stylus owing to its similarity to a stylus eraser from a cemetery at Sandy (Martin Henig *pers comm.* – still unpublished). It consists of a stylised (?) dolphin grasping the shaft in its mouth. There are hollow eye sockets. The shaft narrows to a ridge and becomes faceted. The Sandy example was reported to come from a fifth century phase.

Iron

The iron styli were catalogued according to Manning's typology (Manning 1985, 86) as follows:-

Manning Type 1 - slender and tapering to a point at one end, small flattened eraser which might have shoulders. **6452, 6490** and possibly **6480** were identified as this basic type. **6450, 6471** and **6477** were stated to Type 1A where the eraser is formed by an expanded blade without shoulders.

Manning Type 2 – as Type 1 but the point separated from the stem by a distinct shoulder. **6446, 6506** and **6520** were identified as definite examples of the type, and **6489, 6493** and **6519** as possible ones.

Manning Type 3 – the point and eraser are clearly separated from the stem, eraser takes various forms but often has slightly concave sides and a convex edge. **6455**, **6462**, **6469**, **6488**, **6491-2** and **6516** were identified as definite examples of the type, and **6460**, **6472**, **6483**, **6504** and **6514** as possible ones.

Manning Type 4 – these are decorated either by mouldings or with inlays of copper alloy or other metals. **6447, 6449, 6453-4, 6458, 6461, 6466, 6465-7, 6470, 6473-5, 6478-9, 6481-2, 6486-7, 6494, 6497, 6498, 6500. 6501, 6507-9, 6511-3, 6515, 6518** and **6252**.

It was suggested that **6445** was either a Type 1 or 3, **6495** was either a Type 2 or 3 and that **6503** and **6524** were either Type 3 or 4. The styli that could not be classified were **5003, 6448, 6451, 6456-7, 6464, 6468, 6484-5, 6496, 6505, 6510, 6517, 6521-3** and **6526**.

Seal Boxes

Ten copper alloy seal boxes were recovered including one complete example, four lids, and four bases, two of which were very fragmentary (**3512-21**). Bliss classified according to Bateson's (1981) typology. The report does not give the colour combinations of the enamels for individual pieces apart from **3514** which is stated to be ?yellow and red. The other colour combination is stated to be red and blue and the implication is that all of the other two coloured lids had this combination.

Group 1 – tear- petal- or pear-shaped.
There are four examples of this group. **3514-5** are lids with hinges and **3512-3** are bases with hinges. The bases are more square in shape than the lids and may be equated with the acorn variant (Crummy 1983, 103-4, Type 1) which falls within this Bateson Group. They measure 36 and 19mm in length and 21 and 14mm in width. The lids show a similar leaf design but differ in their enamel decoration. Both have an inner leaf or heart design, but **3514** also has a spot in the inner field. The original enamel colours were ?yellow and red for **3514** and presumably blue and red for **3515**. The lids are 37 and 41mm in length and 24 and 20mm in their maximum width.

It is possible that **3520** is also on example of this group, but insufficient remains to be certain of this.

Group 2 – circular-shaped.
There is one almost complete but heavily corroded example (**3516**). The lid and base are opened flat and the lid id decorated with concentric-shaped cells. It is about 18mm in diameter. The colours of the enamel in the cells are not separately noted.

Group 3 – lozenge-shaped.
One lid with a hinge is of this group (**3517**). It is decorated with expanded lyres on a blue decoration. There is a knob terminal at each apex. The sides measure 15.5mm.

Group 4 – Square-shaped.
There is one complete and closed example (**3518**). Bliss noted that it required cleaning but the lid may have been decorated with a flower shape of four leaves in bright blue enamel. At each corner of both the lid and base there is a knob terminal. It is 29.5mm x 25.5mm and 14mm thick.

Group 5 – Tear-shaped with an applied head.
There is one lid with a hinge from this group (**3519**). It consists of a tear-shaped plate with a rounded terminal with small lappets and with an applied horse head in the centre. No enamel was visible. On the reverse side there is a small stud at the terminal. It is 29mm long and 19.5mm wide.

Group uncertain.
In addition to the fragmentary **3520** which might be an example of Group 1 or possibly Group 3, there was one other fragmentary piece (**3521**) which consisted of the hinge and body only and so which could not be assigned to a group.

Inkwell

7879 was identified as a lead inkwell.

Weights and measures

Copper alloy

Scales
Steelyards are possibly represented by isolated hooks. In addition there were two beam fragments either from a steelyard or a balance. The hooks are widely splayed in order to take weights. **2344** is attached to two figure-of-eight chain links which can be paralleled with those from other sites described as being from steelyards.

2343 is rectangular-sectioned and tapers to a pointed hook and has a straight shaft. The end expands into a circular plate with a perforation with a ring still *in situ* which would have attached the hook to the beam. **2344** is sub-circular-sectioned and is flattened on the inner side. It tapers towards its point. The shaft is curved and flattens and expands into a flat circular terminal which has a large perforation through which a link is looped. The links are made by forming a single loop to each end of a length of rod with straight wire between. The free ends are then brought together parallel to a straight portion and their ends wrapped around the parallel rods for two or three turns forming a coil in the central region of the straight portion of the link. The central parts of the loops are worn. **2342** has a flat-sectioned hook and a round-sectioned rod. This would have continued to form a suspension loop with the free end wrapped around the shaft in a coil. Only the coil is extant.

Bliss identified **2341** as a scale beam with certainty. It consists of a length of oval-sectioned rod marked out on one side with a combination of transverse grooves and Roman numerals represented by an X and another X which might be followed by a further numeral which was obscured by erosion. For the same reason, the number of grooves between the numerals is not clear. She noted also that it was not entirely clear that both ends were broken. The transverse grooves were 7.5mm apart.

The other possible beam fragment (**2340**) consists of a square-sectioned rod with a rectangular section on one side at one of its broken ends. The surface is too corroded for any markings to be visible which would help to confirm the function.

Weights
Bliss noted that she could not identify any copper alloy objects as being weights with certainty but discussed the following in this section.

2345 is a sub-rectangular plate of base silver measuring approximately 12 x 10 x 1.75mm and weighing 1.4g. Centrally on one side margin VT is crudely grooved perhaps representing the numeral VI. She could find no parallel for the item and felt that the irregular shape and crudeness of the engraving raised questions as to whether it should be identified as a weight.

There were also two acorn-shaped terminals with broken round-sectioned shafts. **2346** is made of leaded bronze and weights 18.4mm and had a small knob terminal. On 2347 the broken shaft was curved. It weighed 10.2g. She noted that all items of this form recorded as 'weights' had suspension loops and the acorn terminal was a form used on drop-handles for caskets and helmets, though in the case of **2346** the lead content would probably argue against that identification.

Iron

4621-2 were identified as steelyard hooks.

Lead alloy

The small find appendix (Barker *et al* 1997, 252) assigns 25 lead items to this category but it is unlikely that all of these were weights for weighing. The database print-out identifies **7624, 7873, 7905, 7913, 7933, 8087** and **8238** as steelyard weights.

Eleven other items were also identified as weights **7654, 7681, 7866, 7909, 7981, 8008, 8078, 8219, 8223, 8225** and **8259**.