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*Reappraising Penn and Harker: a reassessment of the finds from excavations at Roman Springhead, published between 1957 and 1984, and interpretations made about their use in past activities*

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**Reappraising Penn and Harker:  
A reassessment of the finds from excavations at  
Roman Springhead, published between 1957  
and 1984, and interpretations made about their  
use in past activities.**

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(Archaeology), in 2008.**

**Volume 2 of 3.**

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**1 8 DEC 2008**

***Appendix 1: Details on figurines from the excavations directed by Penn, Harker and Wessex Archaeology.***

***Part 1: Detailed descriptions of objects identified as being figurines from written accounts compiled by Penn and Harker (page 264).***

***Part 2: Photographs of figurines from the Gravesend Historical Society collection (page 271).***

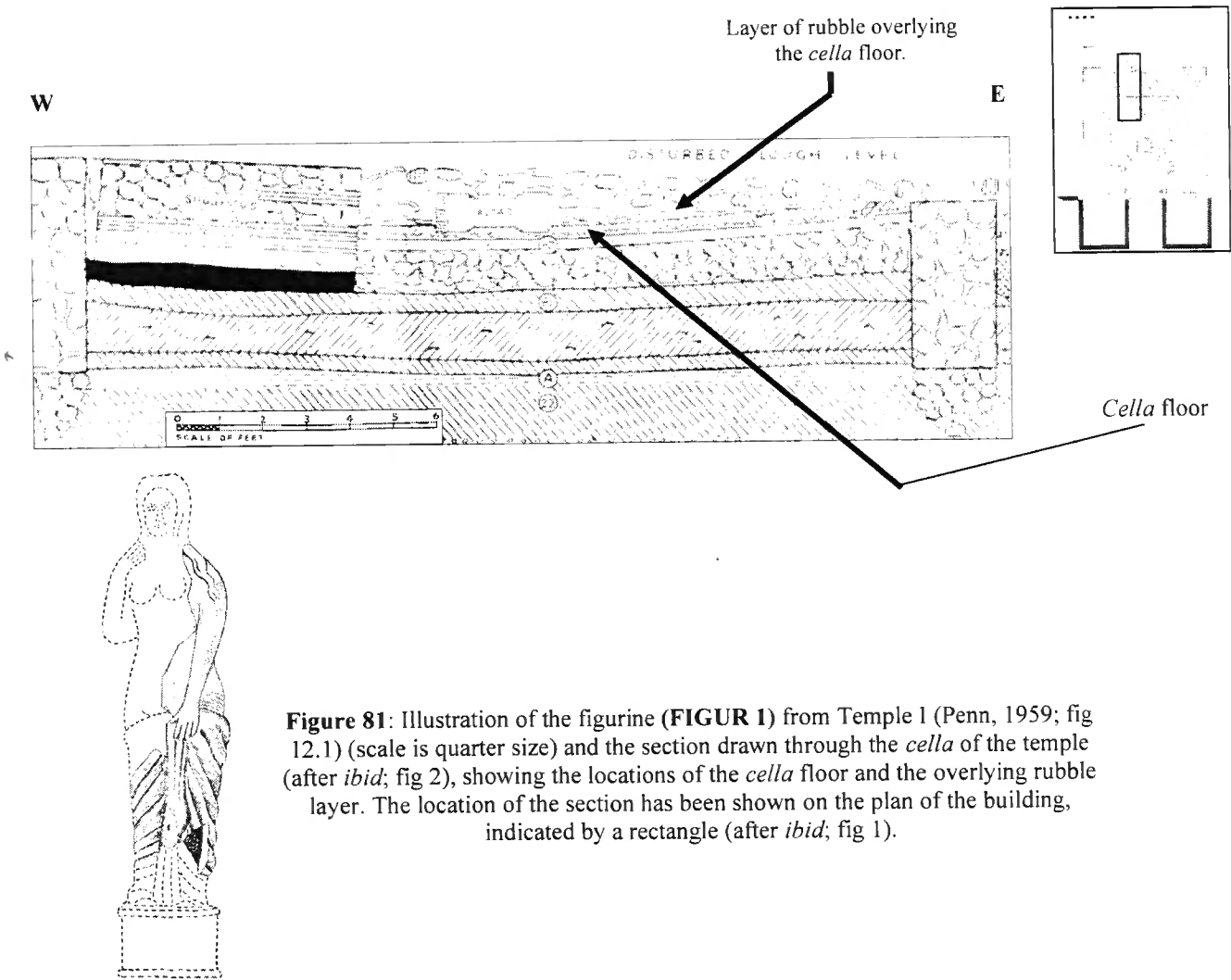
***Part 3: Detailed descriptions and photographs of figurines from the Wessex Archaeology excavations (page 279).***

***Part 4: Details on the fragmentation of figurines from Penn and Harker's excavations (page 280).***

**Part 1: Detailed descriptions of figurines from the written accounts compiled by Penn and Harker.**

**FIGUR 1**

Five conjoining fragments of a pipe clay ‘Pseudo-Venus’ figurine were found upon the *cella* floor of Temple I (Penn, 1959; 55, table 12.7). The find is known to come from the floor of the enclosed *cella* at the centre of Temple I. The fragments of the object were described as representing a standing female supporting a robe in the left hand. The robe had slipped down over the hips, leaving the upper part of the body nude (*ibid*; 55). A bracelet was identified on the left arm, worn just above the elbow (*ibid*; 55-56). The figurine was thought to be similar to a complete example found upon the site of a temple at Horperath, Germany (*ibid*; 56) and, because of this, it was suggested that the missing head and right side of the figurine might have comprised an arm bent upwards, holding a tress of hair in the right hand (*ibid*). The separate pieces of the figurine had been glued together before it had been placed in the Gravesend Historical Society Museum.



**Figure 81:** Illustration of the figurine (**FIGUR 1**) from Temple I (Penn, 1959; fig 12.1) (scale is quarter size) and the section drawn through the *cella* of the temple (after *ibid*; fig 2), showing the locations of the *cella* floor and the overlying rubble layer. The location of the section has been shown on the plan of the building, indicated by a rectangle (after *ibid*; fig 1).



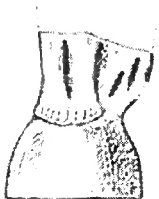
Much commentary was made on the significance of the figurine. Because the statuette was found upon the temple floor, it was considered to represent a goddess worshipped at the site and it was chosen above all other objects from the site to be 'the symbol of Springhead' (Penn, 1968c; 13). The item was considered to be a representation of a 'Pseudo-Venus' goddess on the basis of earlier studies (*cf* Jenkins, 1958). It was thought that the goddess depicted by the figurine was not the Classical Venus but was instead a native goddess of the earth and vegetation in a Roman guise equated with the Greek Aphrodite and the Roman Venus (Penn, 1959; 56), an argument was supported with references to descriptions of festivals and religious ceremonies found in the writings of Classical authors (*ibid*; 57). It was also suggested that the goddess might have been connected with healing. This was because a similar figurine had been found at a temple dedicated to Lenus-Mars at Trier thought to be associated with healing on the basis of epigraphic evidence (*ibid*; 58). The proximity of the temple precinct at Springhead to natural springs was also compared with the 'temple site' at Trier and the natural features were thought to be significant to the worship of the goddess as part of a healing 'cult', forming 'the source of life gushing forth from the earth' (*ibid*). It was thought that the object might once have stood within an apsidal structure situated on the west side of the *cella*, and termed the '*suggestus*' by the excavators (*ibid*; 26, 59). Parallels were drawn between this structure and the Lararium discovered at Pompeii, which housed a number of statuettes and a similar feature discovered within the shrine of the Xulsigiae, a group of mother-goddesses worshipped near the temple of Lenus-Mars at Trier, (*ibid*).

## FIGUR 2

A bronze casting of a clasped hand was recovered from a layer filling the remains of the 'oven building' described as 'stratum C', and was found close to the eastern end of the structure, although no more precise details are available on the accompanying stratigraphy (Penn, 1964b; table 5.14). It is likely that the hand was also once part of a larger statue as there were, as Penn asserts, three holes at the wrist. The hand probably once held something due to the circular hole around which the fingers are clasped.

## FIGUR 3-5

A hemispherical pipe clay base depicting feet from a 'Pseudo-Venus' figurine (**FIGUR 3**) is recorded as having been discovered from the fill of the 'temple ditch' adjacent to the 'oven building' (Penn 1964b; table 9.1). No detailed stratigraphic information is available for the horizontal or vertical positions of the finds within the fill of the feature.

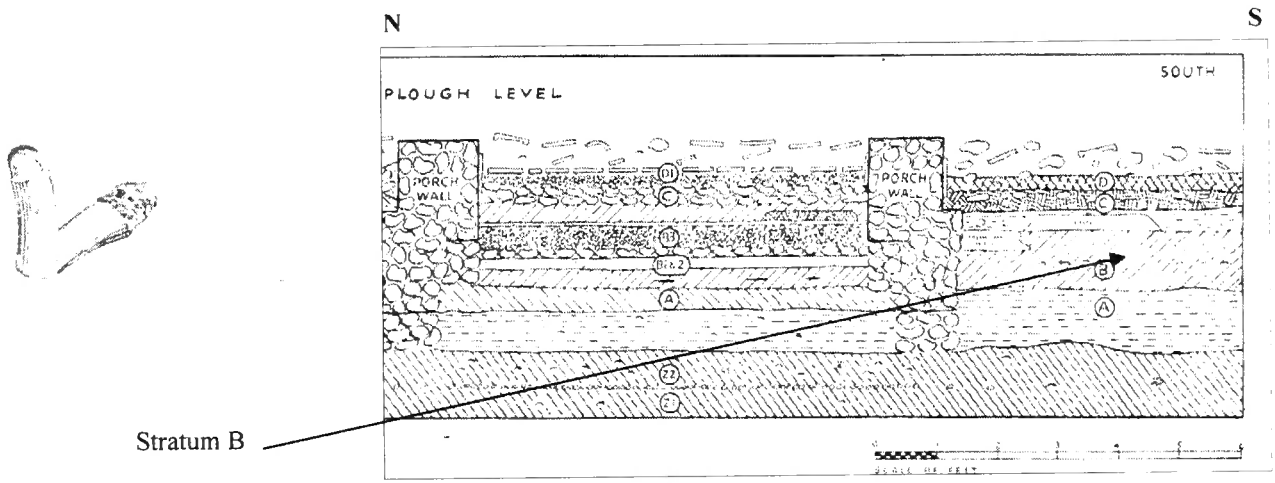


**Figure 82:** Illustration of the base of the pipe clay 'Pseudo-Venus' figurine (**FIGUR 3**) recovered from the 'temple ditch' (Penn, 1964b; fig 5.12). Scale is half size.

A moulded bronze arm and hand (**FIGUR 4**) were also recovered from the filling of the ‘temple ditch’ (Penn, 1964b; table 5.7). The end of the arm is described as being smooth (*ibid*; 173) and inspection of the object confirmed this. The object was photographed in the report (*ibid*; pl I B) but not illustrated, although a clearer image has been provided by the author for this study. A pipe clay fragment (**FIGUR 5**) thought to be from the foreleg of a horse was also found in the filling of the ditch (*ibid*; table 9.2).

**FIGUR 6**

A bronze thumb was recovered from stratum B, a layer underlying the southernmost ‘antae’ of Temple I (stratum B) (Penn, 1959; 58, table 9.12). Jenkins asserted that the thumb appeared to be a complete object in its own right and not part of a larger statue (*ibid*; 58), although a corroded mass of iron in the area of the thumb joint suggests an attachment to something much larger. It was also never commented upon that the thumb was life-size and it is the only object known from the site that could indicate the presence of a substantial statue there.



**Figure 83:** Illustration of the bronze thumb (**FIGUR 6**) recovered from stratum B, beneath the southernmost of the two ‘antae’ of Temple I (Penn, 1959; fig 10.5) (scale is half size) and the general location of this layer in the section drawing from this area (after *ibid*; fig 2).

**FIGUR 7**

The figurine is described as being the trunk of a bone statuette, dowelled for the attachment of limbs and is recorded as having been discovered from the remains of a building classified as B13 (Penn, 1964a, lvii). The find was later interpreted as being a hooded *Genius Cucullatus* figurine (Penn, 1965; 111; and *cf* Jenkins, 1953). The object is described as being carved in the round from a hollow animal bone and, when complete, was postulated as being 5.75 cm in height with a width of 4.1 cm across the shoulders, with decoration resembling a cloak onto which was attached a hood thrown back on the shoulders (Jenkins, 1969; 381). A medial line incised down the hood had two short lateral incisions

across it, thought perhaps to indicate stitching (*ibid*; 381-382). The hood was thought to be part of a long cloak hanging down in folds to just below the knees at the front and in deep V shaped folds down the back (*ibid*; 382). A small hole is described as having been drilled through the hood and another was drilled at the base of the neck and three, or possibly four, holes were described as having been drilled at intervals around the bottom of the cloak, and were drawn upon to suggest that pins may have kept the other parts of the statue in position (*ibid*). Two circular sockets, each 0.6 cm in diameter, were located at the position where the arms should have been and were also thought to accommodate pins for the arms (*ibid*). As the sockets were not chamfered internally to allow movement of the arms it was thought that they projected stiffly from the body and did not hang at the sides (*ibid*).

The object was interpreted as being either an *ex voto* used as part of worship of a deity, the worshipper depicting themselves physically as part of an offering or as being a hooded, dwarf-like deity, the *Genius Cucullatus* (*ibid*; 382). Jenkins likened the figurine to a Gallic version of Telesphorus, the dwarf attendant of Aesculapius and suggested that an open or closed scroll may have been held in one of its hands (*ibid*). The remains of building B13, from which the figurine originated, are depicted on the plan made of the remains of the settlement as being located beside the Watling Street in the north-west of the settlement, far outside the southern 'temple complex'. The figurine is said to have come from a pit associated with the structure (Penn; 1965, 111), although no further information is available about the stratigraphy from this part of the site. There is, however, some confusion over where the object was discovered. The figurine is mentioned by Green (1976; 228) but she does not refer to Jenkins' article and records that the object was found near 'Temple VII', a 'Romano Celtic shrine half a mile away from the main site' (*ibid*). Temple VII is always attributed to have been found within the southern 'temple complex' in all records compiled by Harker (John Shepherd *pers comm.*) and no other 'Romano-Celtic' temple is known to have been recorded outside of the 'temenos area'. Jenkins also mentions that the figurine was discovered 'in the Roman temple area' (Jenkins, 1969; 381) adding further to the uncertainty over where it was found.

## FIGUR 8-10

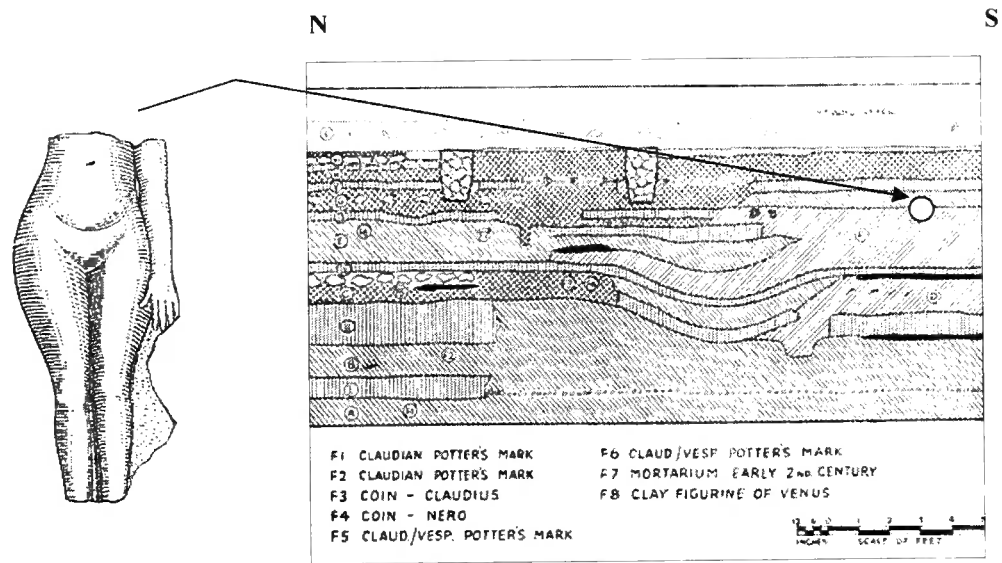
A pipe clay '*Dea Nutrix*' figurine with a missing head (**FIGUR 8**) is said to have been found amongst the remains of wooden buildings with floors of clay and crushed tile to the west of and slightly overlying Temple VII (Harker, 1971a; 236). An illustration of the object is held by the Council for Kentish Archaeology and has been viewed by the author. The drawing appears to be an accurate representation of the object described in the published literature, although no permission was given to reproduce it. Two other '*Dea Nutrix*' statuettes (**FIGUR 9-10**) were recorded from excavations on the remains of the wooden buildings with floors of clay and crushed tile to the west of and slightly overlying Temple VII (Penn, 1967a; lix; Harker, 1971; 236-237).

**FIGUR 11**

The bronze figurine of a small dog was discovered during excavations in the area occupied by Temple VII (Penn, 1967a; lix), although no detailed recording exists of the stratigraphy with which it was associated and the object was not illustrated.

**FIGUR 12**

A pipe clay ‘Pseudo Venus’ figurine missing its upper torso and feet was recovered from stratum F, a layer of dark soil beneath the structure interpreted as being a ‘shop’ on Site B (Penn, 1958; 107-108; table 14.5). The position of the object in the vertical and horizontal stratigraphy of the site can be determined precisely as it is shown in the section drawn through the area occupied by the ‘shop’ building. An object resembling the figurine illustrated in the report was identified from the Gravesend Historical Society collection. The find was cracked across its top half but in all other aspects was identical to the illustration. It is possible that the figurine is the find recorded by Penn and it may have been damaged after excavation.



**Figure 84:** Illustration of the ‘Pseudo-Venus’ figurine (**FIGUR 12**) found beneath the ‘shop’ (Penn, 1958; fig 10.4) (scale is half size) and its location in the archaeological deposits from this area (after *ibid*; fig 2).

**FIGUR 13**

A ‘Pseudo-Venus’ figurine lacking its head and feet was discovered either in the area of Temple VII or just outside, to the north west of the structure (Harker, 1974; 13).

## FIGUR 14

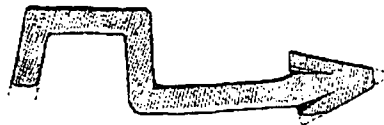
A vague reference was made to the discovery of another 'Pseudo-Venus' figurine from excavations on a strip of land described as being 'at right angles to the original site, adjacent to the old railway embankment' (Harker, 1984; 7).

## FIGUR 15

A lead bust interpreted as being a representation of either Minerva or Cybele was discovered during the 1967 excavations (Penn, 1968c; 3). The precise location where the find was discovered is unknown, although the excavations that year are recorded as having taken place somewhere close to Temple VII, Temple I and the 'agricultural building' (Penn, 1967a; lix).

## FIGUR 16

An arrow-shaped bronze object was discovered from stratum E, a layer of dark soil covering Site B, which was thought to be the tip of a 'gilt bronze thunderbolt' from a statue of Jupiter (Penn, 1958; table 11.7). The interpretation of the object as a 'thunderbolt' was made on the basis of other objects and structural remains discovered from the excavations of that year. Fragments of a Corinthian capital (**CARVST 1-4**) were also discovered from stratum E, where the layer filled a pit close to where the 'thunderbolt' was found, and these were interpreted as being parts of a column which might have held the statue of Jupiter (*ibid*; 87). A large brick base was discovered next to the pit and was thought to be the remains of a 'pedestal' that might have supported such a column (*ibid*; 87). A lead object (**MISC 11**) was also found in the pit filling and was interpreted as being a cement for supporting the iron foot of the statue (Penn, 1957; 74; *ibid*; 1958; 89). The location of the lead cement and three of the four column fragments are shown in the section through the area occupied by the pedestal. Later research by Blagg revealed that the column fragments were similar to late second and early third century 'Jupiter columns' from the Rhineland and north-eastern Gaul (Blagg, 1979; 229; *ibid*, 1984; 79) and the presence of the so-called 'thunderbolt', with these finds is interesting. It is, however, also clear that other fragments of architectural stonework were recorded in the published literature and identified in the Gravesend Historical Society store, and discussed in this section, raise the possibility that the capital fragments from Site B could have formed parts of other buildings.



**Figure 85:** Illustration of the bronze 'thunderbolt' (**FIGUR 16**) (Penn, 1958; fig 9.4). Scale is half size

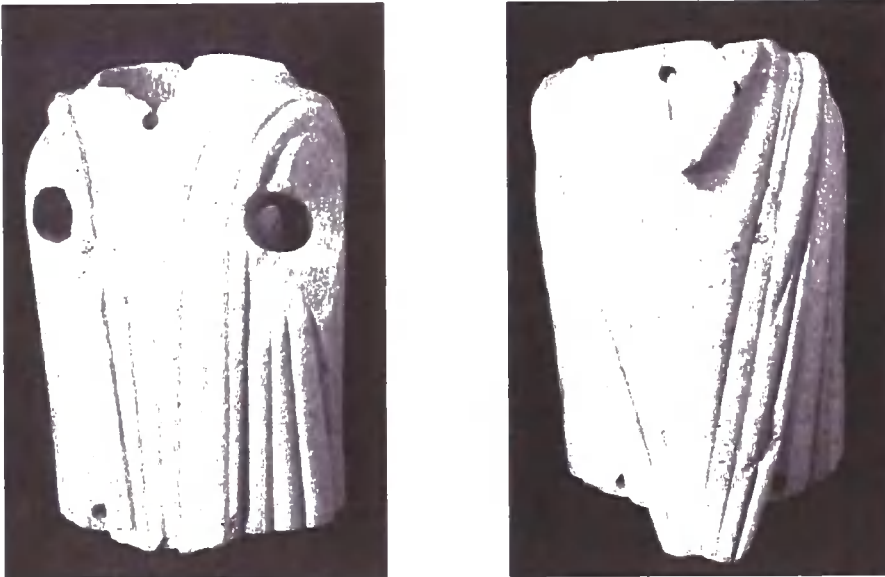
**FIGUR 17**

A pottery face discovered from the remains of Temple V (Penn, 1962; table 5.3; fig 4.5) was found beneath the layer of rubble thought to be from the collapsed walls of the temple, stratum D/H (*ibid*; table 5.3), although no further information is available about the exact position of its discovery. The object was originally thought to be part of a pot, although the symmetry of the fragment and the lack of parts of a vessel attached to it may support the suggestions raised by the excavators that the object could have been a free standing fragment of a pottery 'face' (*ibid*; 123).



**Figure 86:** Illustration of the pottery face (**FIGUR 17**) from Temple V (Penn, 1962; fig 4.5) (scale is half size).

***Part 2: Photographs of figurines from the Gravesend Historical Society collection.***

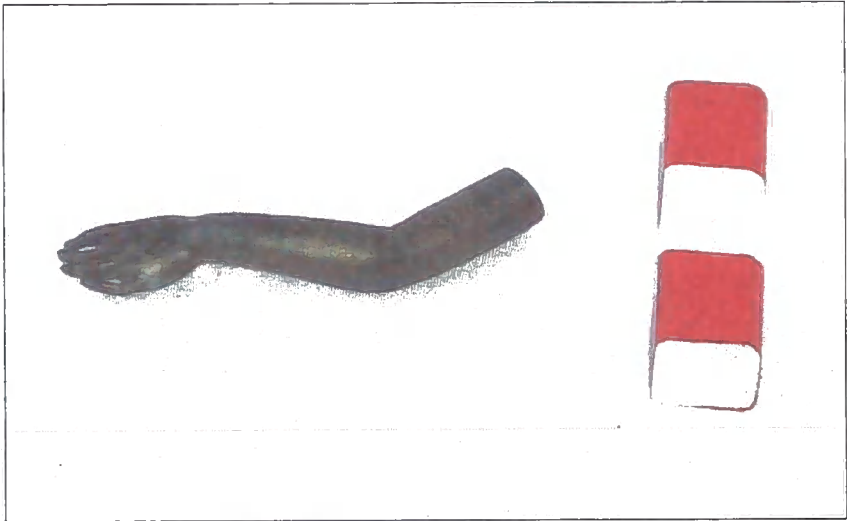


**Photograph 1**

Photographs taken of the *Genius Cucullatus* figurine showing left) the front (Jenkins, 1969; pl LXXXIX a) and right) rear sides of the object (*ibid*; pl LXXXIX). No scale accompanies the photographs, although the height of the object (5.7cm) given in the accompanying caption matches its size on the photograph and it can be assumed that the depiction is at full size.



**Photograph 2**



Photograph 3



Photograph 4





Photograph 5



Photograph 6



**Photograph 7**



**Photograph 8**



Photograph 9



Photograph 10



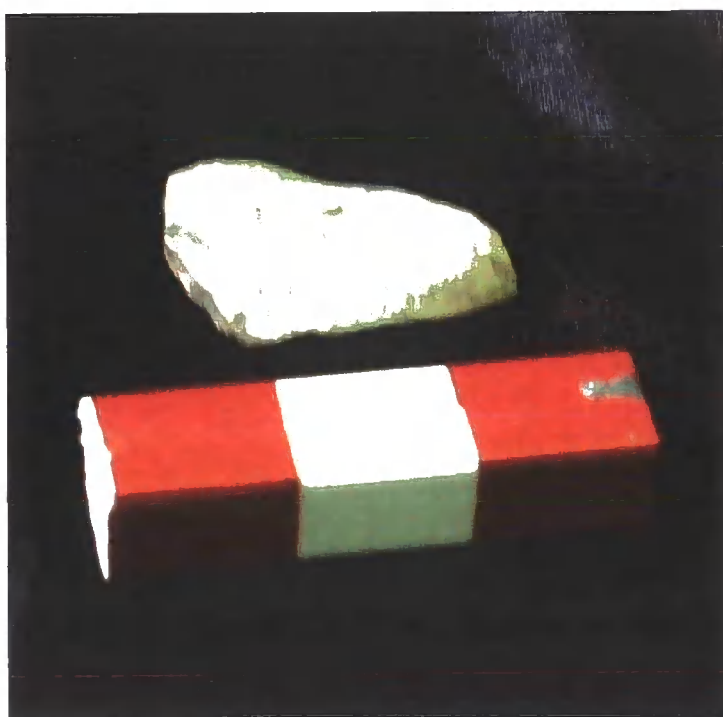
Photograph 11



Photograph 12



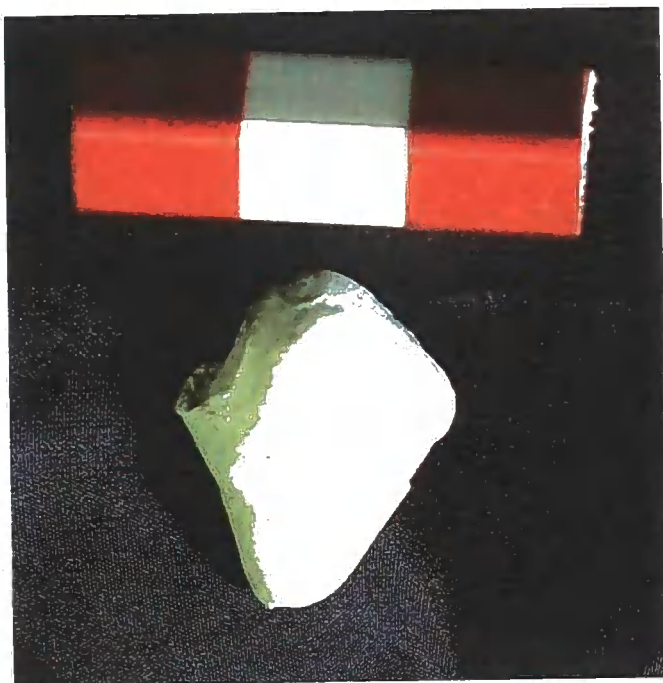
**Photograph 13**



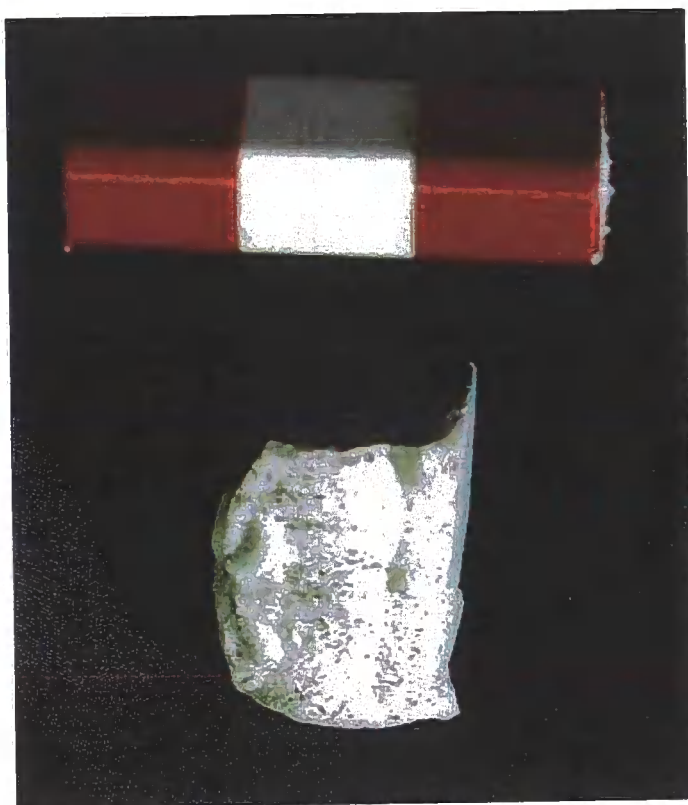
**Photograph 14**

(The image of the object had to be darkened, blurred and the edges sharpened to allow the relief of a hand depicted on it to be revealed on the photograph)





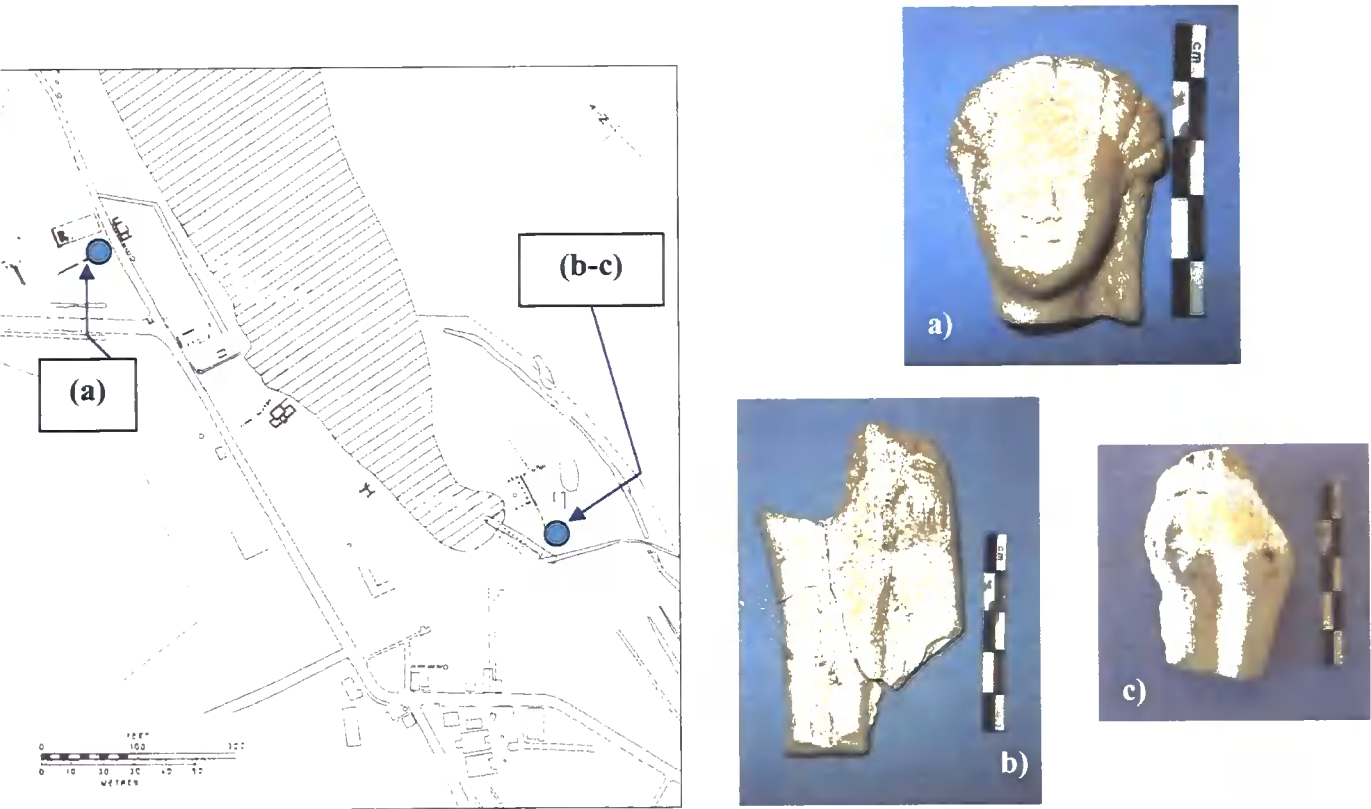
Photograph 15



Photograph 16

**Part 3: Detailed descriptions and photographs of figurines from the Wessex Archaeology excavations.**

The distribution of objects identified as being figurines from the Wessex Archaeology excavations can be seen in Figure 87. The first of these objects was a pipe clay head. This was decorated by a female face with hair swept back away from the forehead in a series of waves with curving horizontal grooves to represent the tresses (ARC SHN02: obj. 15171; see Figure 87 a) The object was found in the upper fill of the roadside ditch (10494), dated to the late first or early second century, beside the section of the Watling Street running north and south through the site. The second figurine was represented by two conjoining pipe clay fragments depicting the lower half of a nude female figure holding a robe or towel (ARC SPH00: obj. 898; see Figure 87 b-c). This object came from a black silty layer (6022), dated to the late first century, within a ditch (6021) on the eastern side of a building, demarcated by a series of large ditches (6021, 6177, 6261) and post holes (6144, 6146, 6148, 6150, 6152, 6202, 6204, 6229) on the eastern side of the natural springs.



**Figure 87:** Distribution map showing find spots of figurines discovered by Wessex Archaeology (after private, unpublished document submitted by Wessex Archaeology) and photographs of these objects (scale is in centimetres). The find spots were plotted from information given by the site director, Phil Andrews. The photographs of the figurines were taken by A. Britten of Wessex Archaeology.

**Part 4: Details upon the fragmentation of figurines from the Gravesend Historical Society collection and from the written accounts compiled by Penn and Harker.**

Area of site	Context description	Number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 9	Cu alloy figurine of a dog	Complete, but front legs are bent backwards in a way that might suggest the object to be a fastening or clip
		Photograph 11	Pipeclay figurine	Head only
		Photograph 12	Pipeclay figurine	Missing head. Object is a bust, so no legs.
		Photograph 13	Pipeclay figurine	Shoulder and possibly part of arm.
		Photograph 14	Pipeclay figurine	Fragment depicting hand
		Photograph 15	Pipeclay figurine	Possible leg fragment
		Photograph 16	Pipeclay figurine	Possible fragment of drapery
Temple I	Final floor of cella	1	Pipe clay 'Pseudo-Venus' figurine	Five separate conjoining fragments. Two separate pieces from upper legs and robe or towel covering them, one fragment of a hip, one piece showing left hand and upper legs and robe or towel covering them, one fragment portraying left hand side of upper torso, left arm and a piece of hair. Another hip fragment had been added later to the object in the GHS collection which was absent in the original documentation.
The oven building	Stratum C	2	Cu alloy figurine	Fragment -three holes in wrist, so may have been attached to larger object
The temple ditch	Ditch filling	3	Pipeclay 'Pseudo-Venus' figurine.	Only feet and base
		4	Moulded bronze arm and hand	Appears to be a single object in its own right but fragment of body depicted (arm and hand)
		5	Pipeclay horse	Fragment representing foreleg. Further details are unknown. Green mentions that the object was discovered from this location but states that two fragments were discovered (1976; 228).



Area of site	Context description	Number	Description	State of fragmentation
Temple I	Stratum B	6	Cu alloy thumb	Appears complete in own right, but may be a fixture to something larger
Building B13.	Pit	7	Bone statuette of a Genius Cucullatus	No arms, head or legs
Wooden buildings to the west of, and slightly overlying, Temple VII.	Unknown	8	Pipe clay Dea Nutrix figurine	Missing head
	Unknown	9	Pipe clay Dea Nutrix figurine	Unknown
	Unknown	10	Pipe clay Dea Nutrix figurine	
Excavations on and around Temple VII.	Unknown	11	Cu alloy figurine of a small dog	Unknown
Site B: the shop	Stratum F	12	Pipeclay 'Pseudo-Venus' figurine	Broken in half. Missing feet. Also missing body, head, right arm, and top of half of left arm. Robe or towel held in left hand appears to have been broken off just below the hand. Small portion of waste and left arm appears to have been a separate fragment, although this has been reattached to the rest of the statuette. This damage is not recorded by Penn and may be later, post excavation breakage. There are two references to the object by Green in her study (1976; 228), the first mentioning that a single fragment had been discovered and the second mentioning that the find was broken into more than one piece.
Either in area occupied by Temple VII, or just outside, to the north west	Unknown	13	Pseudo-Venus figurine	Lacking head and feet
Excavations undertaken in 1967; either close to Temple VII, Temple I, or the 'agricultural building'.	Unknown	15	Lead bust of Minerva or Cybele	Unknown
Site B; the pedestal	Stratum E	16	Bronze thunderbolt, interpreted as part of statue of Jupiter.	Perhaps missing part of bent end. Also, possibly missing tip.
Temple V	Below plaster/rubble stratum D/H	17	Pottery figurine	Head and face

**Appendix 2: Details on items of personal adornment from the excavations directed by Penn and Harker.**

***Part 1: Table providing information on items of personal adornment from the written accounts compiled by Penn and Harker, and detailed descriptions of these objects (page 283).***

***Part 2: Items of personal adornment from the Gravesend Historical Society collection.***

***Part i: Brooches. (page 318).***

***Part ii: Bracelets (page 331).***

***Part iii: Pins (page 342).***

***Part iv: Beads (page 365).***

***Part v: Rings (page 371).***

***Part vi: Tweezers (page 379).***

***Part vii: Nail files (page 382).***

***Part viii: Comb (page 384).***

***Part ix: Pendants (page 386).***

***Part x: Necklaces (page 388).***

***Part 3: Details on the fragmentation of items of personal adornment from Penn and Harker's excavations (page 390).***

**Table 91:** Items of personal adornment from the excavations directed by Penn and Harker: information on whether objects were illustrated in published reports and whether they could be identified from the Gravesend Historical Society collection.

<b>Find no (PER) and page reference for the section within Appendix 2 where it is described.</b>	<b>Illustrated</b>	<b>Single identical object identified</b>	<b>Similar objects identified</b>
<b>1 (Page 288)</b>	Yes (Figure 88 on page 288)	Yes (Photograph 24 on page 322)	No
<b>2 (Page 288)</b>	Yes (Figure 88 on page 288)	Yes (Photograph 135 on page 372)	No
<b>3 (Page 289)</b>	Yes (Figure 89 on page 289)	No	Yes (Photograph 125 on page 366 to Photograph 128 on page 368)
<b>4 (Page 289)</b>	No	No	No
<b>5 (Page 289)</b>	Yes (Figure 89 on page 289)	No	No
<b>6 (Page 290)</b>	Yes (Figure 90 on page 290)	No	No
<b>7 (Page 290)</b>	Yes (Figure 90 on page 290)	No	No
<b>8 (Page 290)</b>	Yes (Figure 90 on page 290)	No	No
<b>9 (Page 291)</b>	Yes (Figure 91 on page 291)	Yes (Photograph 22 on page 321)	No
<b>10 (Page 292)</b>	Yes (Figure 92 on page 292)	No	No
<b>11 (Page 292)</b>	Yes (Figure 92 on page 292)	Yes (Photograph 23 on page 322)	No
<b>12 (Page 292)</b>	No	No	Yes (Photograph 74 on page 348, Photograph 89 on page 353, Photograph 93 on page 354 Photograph 95 on page 355 and Photograph 96 on page 355)
<b>13 (Page 293)</b>	No	No	No
<b>14 (Page 293)</b>	Yes (Figure 93 on page 293)	Yes (Photograph 29 on page 325)	No
<b>15 (Page 293)</b>	No	No	No
<b>16 (Page 293)</b>	Yes (Figure 93 on page 293)	No	No
<b>17-18 (Page 294)</b>	No	No	No
<b>19-20 (Page 295)</b>	Yes (Figure 95 on page 295)	No	No
<b>21-22 (Page 295)</b>	Yes (Figure 95 on page 295)	No	No
<b>23 (Page 295)</b>	No	No	No

<b>Find no (PER) and page reference for the section within Appendix 2 where it is described.</b>	<b>Illustrated</b>	<b>Single identical object identified</b>	<b>Similar objects identified</b>
<b>24 (Page 296)</b>	Yes (Figure 96 on page 296)	No	No
<b>25 (Page 296)</b>	No	No	No
<b>26-28 (Page 297)</b>	No	No	No
<b>29 (Page 297)</b>	Yes (Figure 97 on page 297)	No	Yes (Photograph 132 on page 370)
<b>30-31 (Page 297)</b>	Yes (Figure 97 on page 297)	No	No
<b>32-34 (Page 297)</b>	No	No	No
<b>35 (Page 297)</b>	Yes (Figure 97 on page 297)	No	No
<b>36 (Page 297)</b>	Yes (Figure 97 on page 297)	Yes (Photograph 98 on page 356).	No
<b>37-39 (Page 298)</b>	No	No	No
<b>40 (Page 298)</b>	Yes (Figure 98 on page 298)	Yes (Photograph 71 on page 347)	No
<b>41 (Page 298)</b>	No	No	No
<b>42 (Page 298)</b>	No	No	Yes (Photograph 132 on page 370)
<b>43 (Page 299)</b>	No	No	Yes (Photograph 49 on page 336 and Photograph 52 on page 338)
<b>44 (Page 299)</b>	No	No	No
<b>45 (Page 299)</b>	Yes (Figure 99 on page 299)	Yes (Photograph 139 on page 374)	No
<b>46 (Page 299)</b>	No	No	No
<b>47 (Page 299)</b>	Yes (Figure 99 on page 299)	Yes (Photograph 77 on page 349)	No
<b>48-50 (Page 299)</b>	No	No	No
<b>51 (Page 300)</b>	Yes (Figure 100 on page 301)	Yes (Photograph 153 on page 387)	No
<b>52 (Page 300)</b>	Yes (Figure 100 on page 301)	Yes (Photograph 155 on page 389)	No
<b>53 (Page 300)</b>	No	No	No
<b>54-55 (Page 301)</b>	Yes (Figure 101 on page 302)	No	No
<b>56 (Page 301)</b>	Yes (Figure 101 on page 302)	Yes (Photograph 40 on page 332).	No
<b>57 (Page 301)</b>	Yes (Figure 101 on page 302)	Yes (Photograph 44 on page 334).	No
<b>58 (Page 301)</b>	Yes (Figure 101 on page 302)	Yes (Photograph 43 on page 333)	No

<b>Find no (PER) and page reference for the section within Appendix 2 where it is described.</b>	<b>Illustrated</b>	<b>Single identical object identified</b>	<b>Similar objects identified</b>
<b>59 (Page 301)</b>	Yes (Figure 101 on page 302)	No	Yes (Photograph 48 on page 336)
<b>60-61 (Page 302)</b>	No	No	No
<b>62 (Page 302)</b>	No	No	Yes (Photograph 132 on page 370)
<b>63 (Page 302)</b>	No	No	No
<b>64 (Page 302)</b>	No	No	Yes (Photograph 132 on page 370)
<b>65 (Page 303)</b>	No	No	No
<b>66-67 (Page 303)</b>	Yes (Figure 102 on page 303)	No	No
<b>68 (Page 303)</b>	Yes (Figure 102 on page 303)	Yes (Photograph 141 on page 375)	No
<b>69 (Page 303)</b>	No	No	No
<b>70 (Page 303)</b>	Yes (Figure 102 on page 303)	Yes (Photograph 108 on page 359)	No
<b>71-74 (Page 303)</b>	No	No	No
<b>75 (Page 304)</b>	Yes (Figure 103 on page 304)	No	No
<b>76 (Page 304)</b>	Yes (Figure 103 on page 304)	Yes (Photograph 42 on page 333)	No
<b>77 (Page 304)</b>	Yes (Figure 103 on page 304)	No	No
<b>78 (Page 304)</b>	Yes (Figure 103 on page 304)	Yes (Photograph 65 on page 345)	No
<b>79 (Page 304)</b>	Yes (Figure 103 on page 304)	Yes (Photograph 122 on page 364)	No
<b>80 (Page 305)</b>	Yes (Figure 104 on page 306)	Yes (Photograph 134 on page 372)	No
<b>81-83 (Page 305)</b>	No	No	No
<b>84 (Page 305)</b>	Yes (Figure 104 on page 306)	Yes (Photograph 124 on page 366)	No
<b>85-91 (Page 305)</b>	No	Yes (Photograph 124 on page 366)	No
<b>92 (Page 305)</b>	Yes (Figure 104 on page 306)	Yes (Photograph 72 on page 347)	No
<b>93 (Page 305)</b>	Yes (Figure 104 on page 306)	No	No
<b>94 (Page 305)</b>	Yes (Figure 104 on page 306)	Yes (Photograph 59 on page 343)	No
<b>95-97 (Page 305)</b>	Yes (Figure 104 on page 306)	No	No
<b>98 (Page 305)</b>	Yes (Figure 104 on page 306)	Yes (Photograph 100 on page 357)	No
<b>99 (Page 305)</b>	Yes (Figure 104 on page 306)	No	No

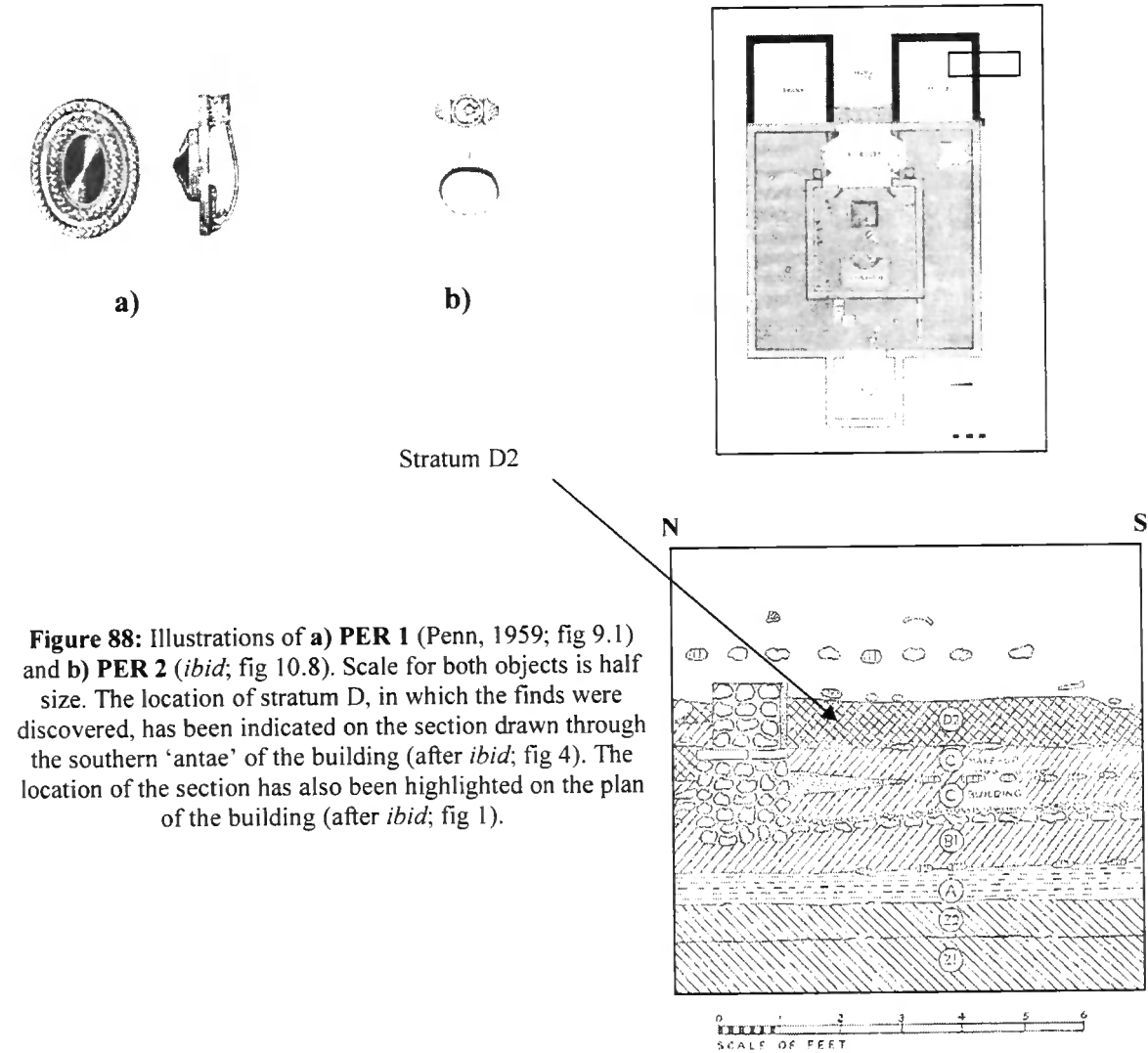
<b>Find no (PER) and page reference for the section within Appendix 2 where it is described.</b>	<b>Illustrated</b>	<b>Single identical object identified</b>	<b>Similar objects identified</b>
<b>100 (Page 305)</b>	No	No	No
<b>101 (Page 306)</b>	Yes (Figure 105 on page 307)	No	No
<b>102-103 (Page 306)</b>	Yes (Figure 105 on page 307)	No	No
<b>104 (Page 306)</b>	Yes (Figure 105 on page 307)	Yes (Photograph 60 on page 343)	No
<b>105-106 (Page 306)</b>	No	No	No
<b>107 (Page 306)</b>	Yes (Figure 105 on page 307)	No	No
<b>108 (Page 306)</b>	Yes (Figure 105 on page 307)	No	Yes (Photograph 105 on page 358)
<b>109 (Page 306)</b>	Yes (Figure 105 on page 307)	No	No
<b>110-116 (Page 306)</b>	No	No	No
<b>117 (Page 308)</b>	Yes (Figure 106 on page 308)	No	No
<b>118 (Page 308)</b>	Yes (Figure 106 on page 308)	Yes (Photograph 135 on page 372)	No
<b>119 (Page 308)</b>	Yes (Figure 106 on page 308)	No	No
<b>120-121 (Page 309)</b>	Yes (Figure 107 on page 309)	No	No
<b>122 (Page 309)</b>	Yes (Figure 107 on page 309)	Yes (Photograph 120 on page 363)	No
<b>123 (Page 309)</b>	Yes (Figure 107 on page 309)	Yes (Photograph 19 on page 320)	No
<b>124 (Page 309)</b>	Yes (Figure 107 on page 309)	No	No
<b>125 (Page 309)</b>	Yes (Figure 107 on page 309)	Yes (Photograph 21 on page 321)	No
<b>126 (Page 310)</b>	Yes (Figure 108 on page 310)	Yes (Photograph 17 on page 319)	No
<b>127 (Page 310)</b>	Yes (Figure 108 on page 310)	Yes (Photograph 28 on page 324)	No
<b>128 (Page 310)</b>	Yes (Figure 108 on page 310)	Yes (Photograph 150 on page 381)	No
<b>129 (Page 310)</b>	No	No	No
<b>130 (Page 310)</b>	No	No	Yes (Photograph 53- Photograph 57, on pages 338-340)
<b>131 (Page 311)</b>	Yes (Figure 109 on page 311)	Yes (Photograph 152 on page 385)	No
<b>132 (Page 311)</b>	Yes (Figure 110 on page 311)	No	No
<b>133-135 (Page 312)</b>	No	No	No

<b>Find no (PER) and page reference for the section within Appendix 2 where it is described.</b>	<b>Illustrated</b>	<b>Single identical object identified</b>	<b>Similar objects identified</b>
<b>136 (Page 312)</b>	Yes (Figure 111 on page 312)	Yes (Photograph 64 on page 344)	No
<b>137 (Page 312)</b>	No	No	No
<b>138 (Page 312)</b>	Yes (Figure 111 on page 312)	Yes (Photograph 121 on page 364)	No
<b>139-144 (Page 312)</b>	No	No	No
<b>145 (Page 312)</b>	Yes (Figure 112 on page 313)	No	Yes (Photograph 83- Photograph 90 on pages 351-353)
<b>146 (Page 312)</b>	Yes (Figure 112 on page 313)	No	Yes (Photograph 67- Photograph 70 on pages 345-346)
<b>147 (Page 312)</b>	No	No	No
<b>148 (Page 312)</b>	Yes (Figure 112 on page 313)	Yes (Photograph 78 on page 349)	No
<b>149 (Page 312)</b>	Yes (Figure 112 on page 313)	No	No
<b>150 (Page 314)</b>	Yes (Figure 113 on page 314)	Yes (Photograph 25 on page 323)	No
<b>151 (Page 314)</b>	Yes (Figure 113 on page 314)	No	Yes (Photograph 26 on page 323)
<b>152-155 (Page 314)</b>	No	No	No
<b>156 (Page 315)</b>	Yes (Figure 114 on page 315)	Yes (Photograph 84 on page 351)	No
<b>157 (Page 315)</b>	Yes (Figure 114 on page 315)	No	No
<b>158 (Page 315)</b>	No	No	No
<b>159-160 (Page 315)</b>	Yes (Figure 115 on page 316)	No	No
<b>161 (Page 315)</b>	No	No	No
<b>162 (Page 315)</b>	No	No	Yes (Photograph 53- Photograph 57, on pages 338-340)
<b>163-164 (Page 315)</b>	No	No	No
<b>165-192 (Page 316)</b>	No	No	No
<b>193-199 (Page 317)</b>	No	No	No

**Part 1: Detailed descriptions of items of personal adornment from the written accounts compiled by Penn and Harker.**

**PER 1-2**

An oval gilt brooch (**PER 1**) with a glass stone mounted in its centre is recorded as having been discovered in a layer classified as stratum D2, a layer of dark soil filling the area outside the southern 'antae' of Temple I (Penn, 1959; table 8.1). A small bronze finger ring, described as being decorated with incised diagonal lines, containing a circular bezel inlaid with a small piece of mother of pearl and surrounded by white enamel (**PER 2**) was also discovered from the same layer, found outside the south east corner of the building (*ibid*; table 9.16).

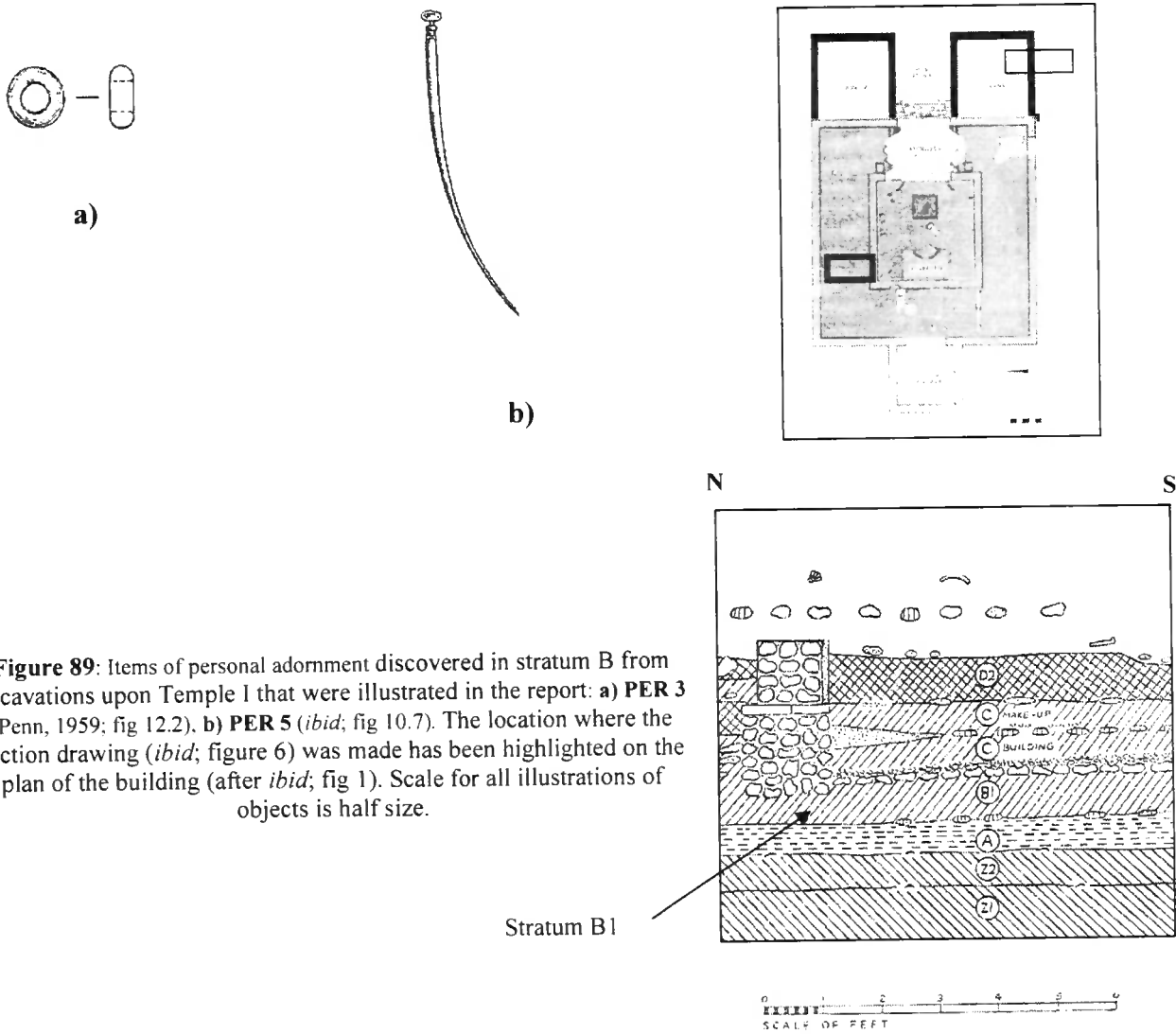


**Figure 88:** Illustrations of **a) PER 1** (Penn, 1959; fig 9.1) and **b) PER 2** (*ibid*; fig 10.8). Scale for both objects is half size. The location of stratum D, in which the finds were discovered, has been indicated on the section drawn through the southern 'antae' of the building (after *ibid*; fig 4). The location of the section has also been highlighted on the plan of the building (after *ibid*; fig 1).



PER 3-5

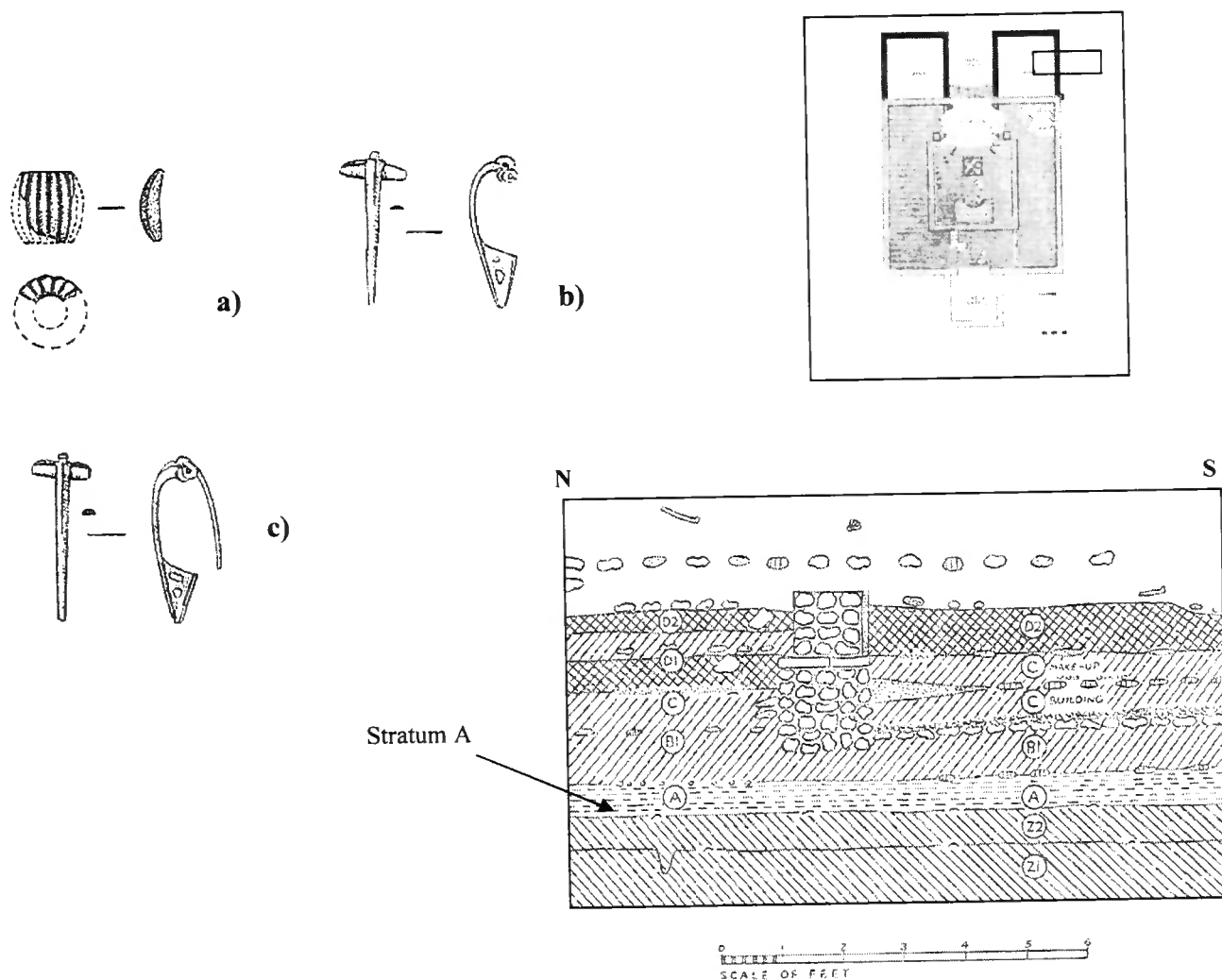
At least two, and possibly three, items of personal adornment were discovered in the deposit classified as stratum B1, a layer through which the foundations of Temple I were cut, in the area occupied by the southern ‘antae’ of the structure. The finds include an oblate, blue glass bead (**PER 3**) (Penn, 1959; table 11.2) and an object described as being a ‘fluted bronze ring’ (**PER 4**) (*ibid*; table 9.17) vaguely recorded as having been discovered outside of ‘two antae’ (*ibid*). The description of the location of the latter find is, presumably, a referencing error as the section showing the strata only covers the southern ‘antae’ of the building. One pin (**PER 5**) is recorded as having been discovered in stratum B1 (*ibid*; table 9.15), although the provenance of the object is not entirely certain as it is also recorded as being from close to a section drawn through the northern corridor of the building (*ibid*; fig 6). The object is described as being a long bronze pin with a plain, flat, circular head and three grooves below the neck (*ibid*; table 9.15) although the illustration shows it to have a flattened spherical head, resting on a thin square support, overlying one thick and two thin reels respectively. There may be a fourth reel before the shaft of the pin begins, although whether this is a distinct feature or an incised line is unclear.



**Figure 89:** Items of personal adornment discovered in stratum B from excavations upon Temple I that were illustrated in the report: **a) PER 3** (Penn, 1959; fig 12.2), **b) PER 5** (*ibid*; fig 10.7). The location where the section drawing (*ibid*; figure 6) was made has been highlighted on the plan of the building (after *ibid*; fig 1). Scale for all illustrations of objects is half size.

## PER 6-8

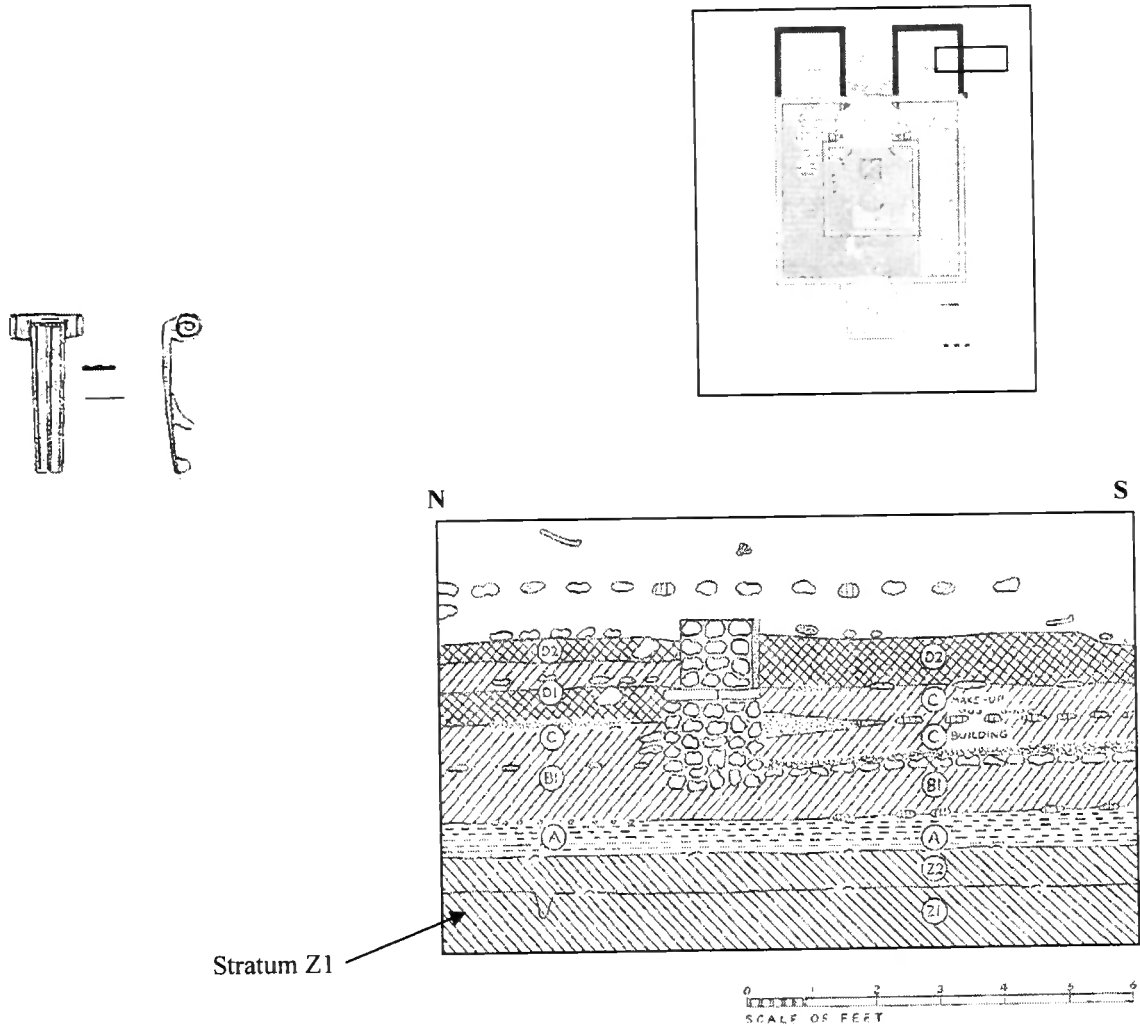
Three items of personal ornament were discovered from the deposit classified as stratum A, a layer of dark, silty clay, on top of which the foundations of Temple I were dug. The objects included a blue, ribbed melon-shaped glass paste bead (**PER 6**), which was found in an area described as being 'just to the south of the temple' (Penn, 1959; table 11.4). Stratum A also contained two brooches thought to have been derivatives of Colchester types, the first of which (**PER 7**) is described as having been discovered outside the southern 'antae' of the building (*ibid*; table 8.6). The second brooch (**PER 8**), is recorded only as having been discovered from the stratum itself (*ibid*; table 8.8).



**Figure 90:** Items of personal adornment discovered in stratum A from excavations upon Temple I that were illustrated in the report: **a)** **PER 6** (Penn, 1959; fig 12.3), **b)** **PER 7** (*ibid*; fig 9.5), **c)** **PER 8** (*ibid*; fig 9.7). The location of stratum A has been indicated on the section drawn through the southern 'antae' of the building (after *ibid*; fig 4). The location of the section has also been indicated on the plan made of the building (after *ibid*; fig 1). Scale of all objects illustrated is half size.

**PER 9**

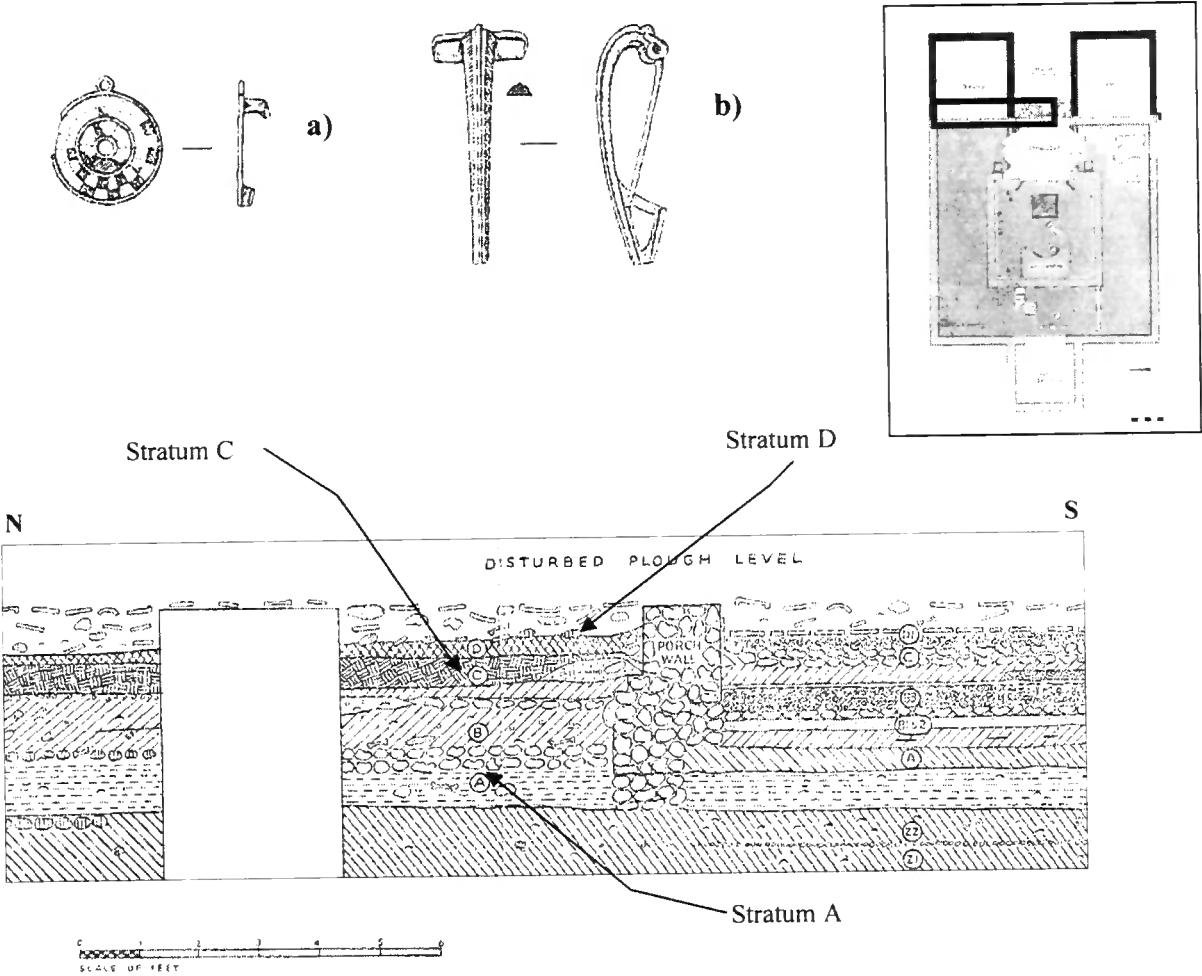
A Langton Down, type B brooch is recorded as having been discovered in the area later occupied by the southern ‘antae’ in stratum Z1, a layer of clay predating the construction of the temple (Penn, 1959; table 8.5).



**Figure 91:** Illustration of **PER 9** discovered in stratum Z1 from excavations upon Temple I (Penn, 1959; fig 9.4). Scale is half size. The location of stratum Z1 has been indicated on the section drawn through the southern ‘antae’ of the building (after *ibid*; fig 4). The location of the section has also been indicated on the plan made of the building (after *ibid*; fig 1).

PER 10-12

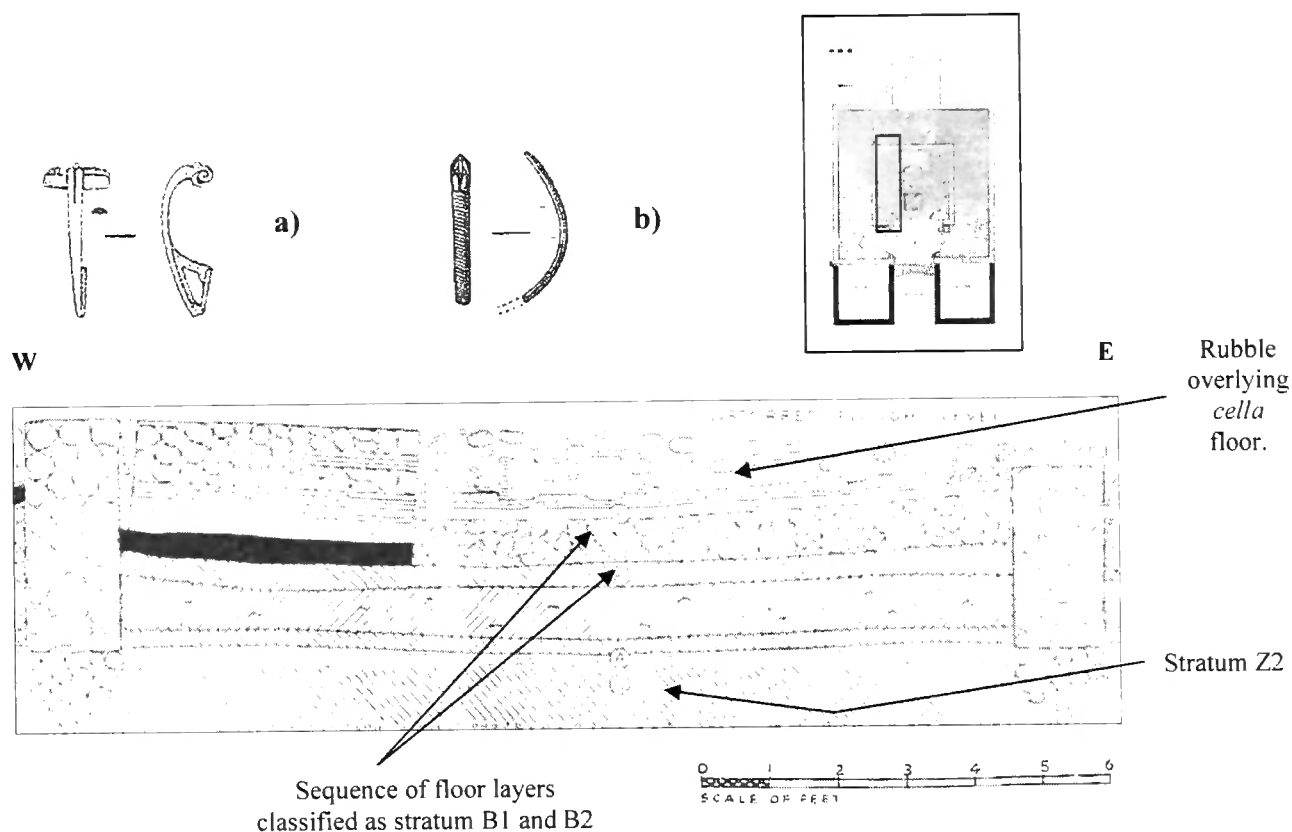
Three items of personal adornment were found from the area occupied by the northern ‘antae’ of Temple I and included (**PER 10**), a flat enamelled disc brooch found in stratum C, a layer described as being plastery soil, deposited within it (Penn, 1959; table 8.2). A derivative of a Colchester type brooch (**PER 11**) was discovered from stratum A, the layer of dark silty clay through which the foundations of Temple I were dug (*ibid*; table 8.4). A single bone pin (**PER 12**) is described as having been discovered from a layer of dark soil filling the ‘antae’, classified as stratum D, (*ibid*; table 12.1). The object is described as having a ‘biconical (*sic*) head’ (*ibid*).



**Figure 92:** Items of personal adornment from the northern ‘antae’ of Temple I that were illustrated and details of the strata from which they recovered: **a) PER 10** (Penn, 1959; fig 9.2) **b) PER 11** (*ibid*; fig 9.3). Scale for both objects is half size. (Plan after *ibid*; fig 1; and section after *ibid*; fig 2). The white area on the section was not recorded by the excavators, although no reason was given for this.

## PER 13-16

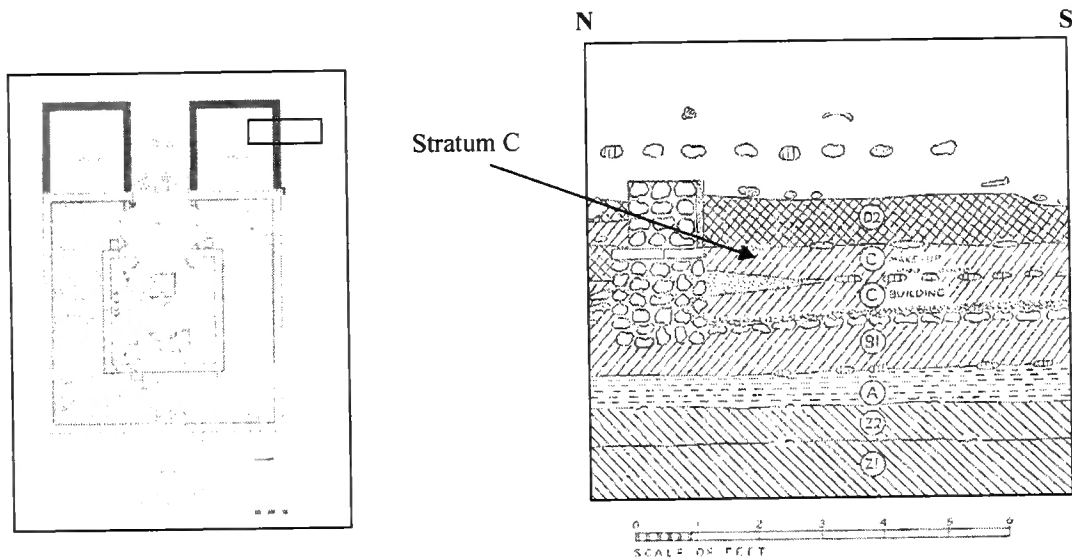
The objects from the area occupied by the *cella* of Temple I included a fragment of a bronze penannular brooch (**PER 13**), recovered from stratum Z2, a layer of clay predating the temple and underlying the *cella* (Penn, 1959; table 8.3). All items mentioned in this paragraph that possess an illustration can be seen in figure 36, together with details upon the stratigraphy associated with all finds discussed in it. A derivative of a Colchester type brooch (**PER 14**) was also recorded, and is mentioned as having been associated with either stratum B1 or B2, thought respectively to be the first and second floor layers of the building (*ibid*; table 8.9). The spherical head of a bronze pin, decorated with incised crossed lines made in the head with three lines made round the neck (**PER 15**) is recorded as having been discovered in the *cella*, in stratum B1, the layer interpreted as being the first floor of the building (*ibid*; table 9.7). A fragment of a bronze snake's head bracelet, decorated with incised diagonal lines (**PER 16**) was discovered amongst the rubble overlying the *cella* floor (*ibid*; table 9.11).



**Figure 93:** Items of personal adornment from the *cella* of Temple I that were illustrated and details of the strata from which they were recovered: **a)** **PER 14** (Penn, 1959; fig 9.8), **b)** **PER 16** (*ibid*; fig 10.4). Scale for illustrated objects is half size (The plan is after *ibid*; fig 1; and the section is after *ibid*; fig 3). The location of the section has also been indicated on the plan made of the building

PER 17-18

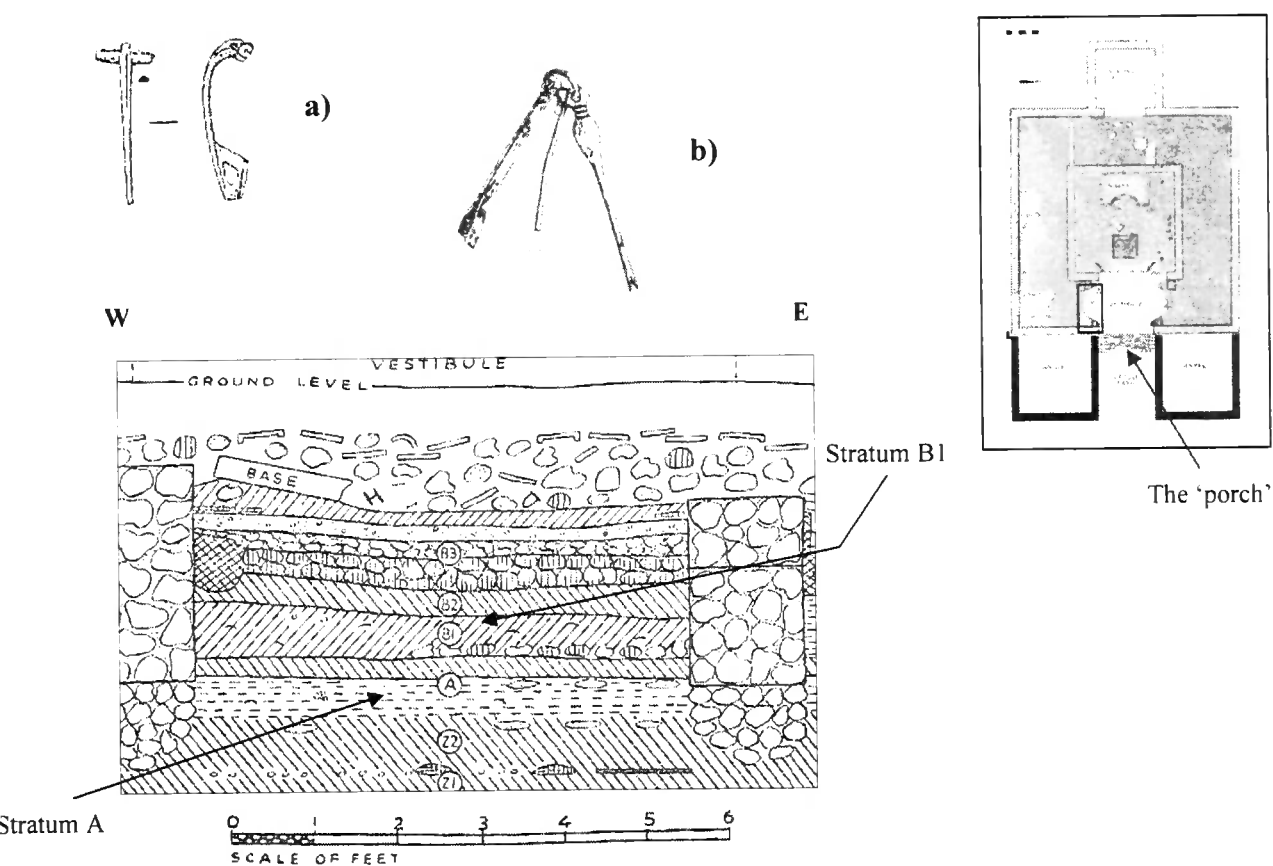
A ‘floor’ layer of light soil deposited in the southern ‘antae’ of Temple I, classified as stratum C, contained two items of personal adornment including a ‘small bronze ring’ (PER 17) described as having been found ‘outside’ the ‘antae’ (Penn, 1959; table 9.3) and an object described as being a ‘bronze ring, diameter 7/8 inches’ (PER 18), described as having been found from the same location (*ibid*; table 9.5). Although neither of the objects was illustrated, details on the accompanying stratigraphy were supplied in the report and can be seen below.



**Figure 94:** The location of stratum C, in the section drawn through the southern ‘antae’ of Temple I (after Penn, 1959; fig 4). The location of the section has also been highlighted in blue on the plan of the building (after *ibid*; fig 1).

## PER 19-23

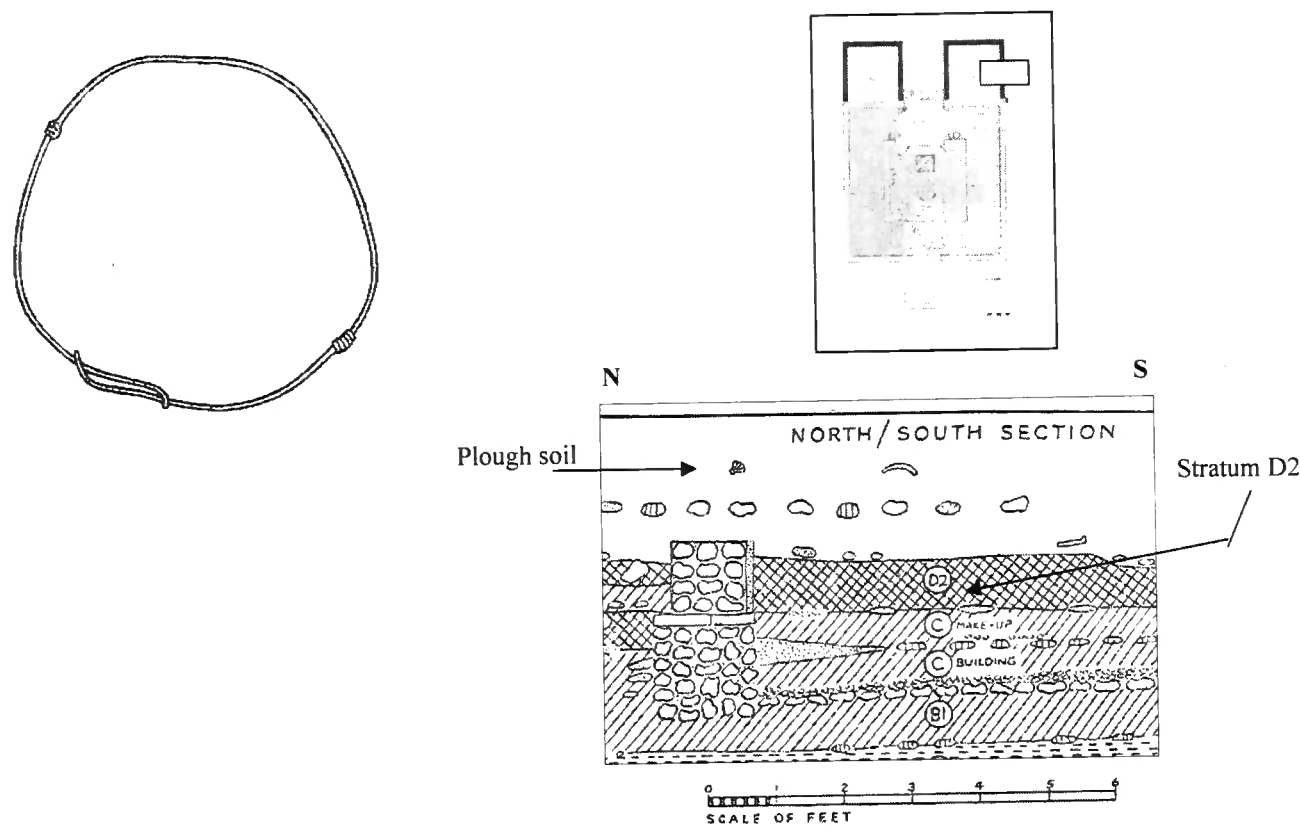
The objects found in the area occupied by the entrance to Temple I, termed the 'vestibule', included a derivative of a Colchester type brooch (**PER 19**) from stratum A, the layer of dark silty clay through which the foundations of the structure were dug (Penn, 1959; table 8.7). Some tweezers, a nail cleaner and part of an ear scoop attached to a ring (**PER 20-22**) were recovered from stratum B1, a layer of light soil interpreted as being an early floor layer (*ibid*; table 9.8). An object described as being a 'bezel, laid in an iron ring and set with glass' (**PER 23**) is recorded as having been associated with stratum C, the floor of the 'porch' to the building (*ibid*; table 9.14; the general location of the area defined as being a 'porch' is indicated on the plan of the building in the figure below).



**Figure 95:** Items of personal adornment a) **PER 19** (Penn, 1959; fig 9.6) and b) **PER 20, 21-22** (*ibid*; fig 10.2) from the 'vestibule' of Temple I that were illustrated and details on the strata from which they were recovered (plan after *ibid*; fig 1 and section after *ibid*; fig 3),

PER 24-25

A bronze wire armlet (**PER 24**) is described as having been found close to the south wall of Temple I, at the 'latest ground level' (Penn, 1959; table 9.13), although it is unclear whether this description refers to the latest Roman stratum in this area (D2) or the layer of overlying plough soil. A roughly made bronze pin with a square shank and spherical head (**PER 25**) is recorded as having been discovered in the rubble above the south corridor of the temple (*ibid*; table 9.20).

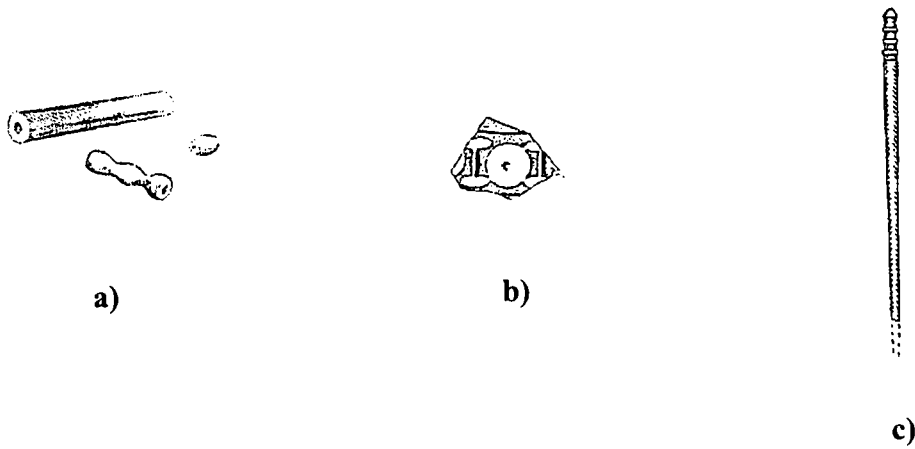


**Figure 96:** The bronze wire armlet discovered outside the southern wall of Temple I: **PER 24** (Penn, 1959; fig 10.6; Scale is half size) and the location of the strata discussed in the text. The area covered by the section drawing (after *ibid*; fig 4) has been highlighted on the plan (after *ibid*; fig 1).



**PER 26-36**

An 'expanding ring of square bronze wire with an average diameter of  $\frac{7}{8}$  of an inch' (**PER 26**) was found amongst the 'hoard' of items placed amongst the rubble filling the northern 'antae' of Temple II. (Penn, 1962; table 6.3) as was a ring of 'heavy/thick bronze wire' (**PER 27**) with a diameter of 1 and 3 sixths of an inch (*ibid*; table 6.4), and a small finger ring made from thin bronze wire (**PER 28**) (*ibid*; table 6.13). Six very small, oblate, blue-green glass beads (**PER 29-34**) were also found amongst the 'hoard' of items placed amongst the rubble filling the northern 'antae' of Temple II (Penn, 1962; table 9.2), although only three of these (**PER 29-31**) were illustrated in the report. A fragment of thin bronze strip (**PER 35**), decorated with a single line of punched dot-and-circle design, interpreted as being part of a bronze bracelet, was also found in the 'hoard' (*ibid*; table 6.10), as was a 'bone pin with ornamental head' (**PER 36**), the illustration in the report showing that this object was decorated with three reels beneath a conical head (*ibid*; table 8.1).



**Figure 97:** a) Illustrations of **PER 29-31** (Penn, 1962; fig 6.6), b) **PER 35** (*ibid*; fig 5.8) and c) **PER 36** (*ibid*; fig 6.3). Scale for all finds is half size.

**PER 37-39**

An object described as being a 'bronze bracelet with transverse cuts, giving the appearance of beading' and possessing a fastening of a 'hook and eye' type (**PER 37**) was found in the plough soil in front of the northern 'antae' of Temple II (Penn, 1962; table 6.8), as was an object described as being part of a thin wire 'ring' with a terminal in the form of a snake's head (**PER 38**) (*ibid*; table 6.9) and a pair of bronze tweezers (**PER 39**) (*ibid*; table 6.6).

**PER 40**

A 'bone pin with ornamental head' is recorded as having been found from an unidentified location in the 'plough level' west of Temple II (Penn, 1962; table 8.2). The object appears to be a short, thick pin decorated with a two reels, divided by a tear-shaped bead.



**Figure 98:** The pin (**PER 40**) from the 'plough level' west of Temple II (Penn, 1962; fig 6.5).

**PER 41**

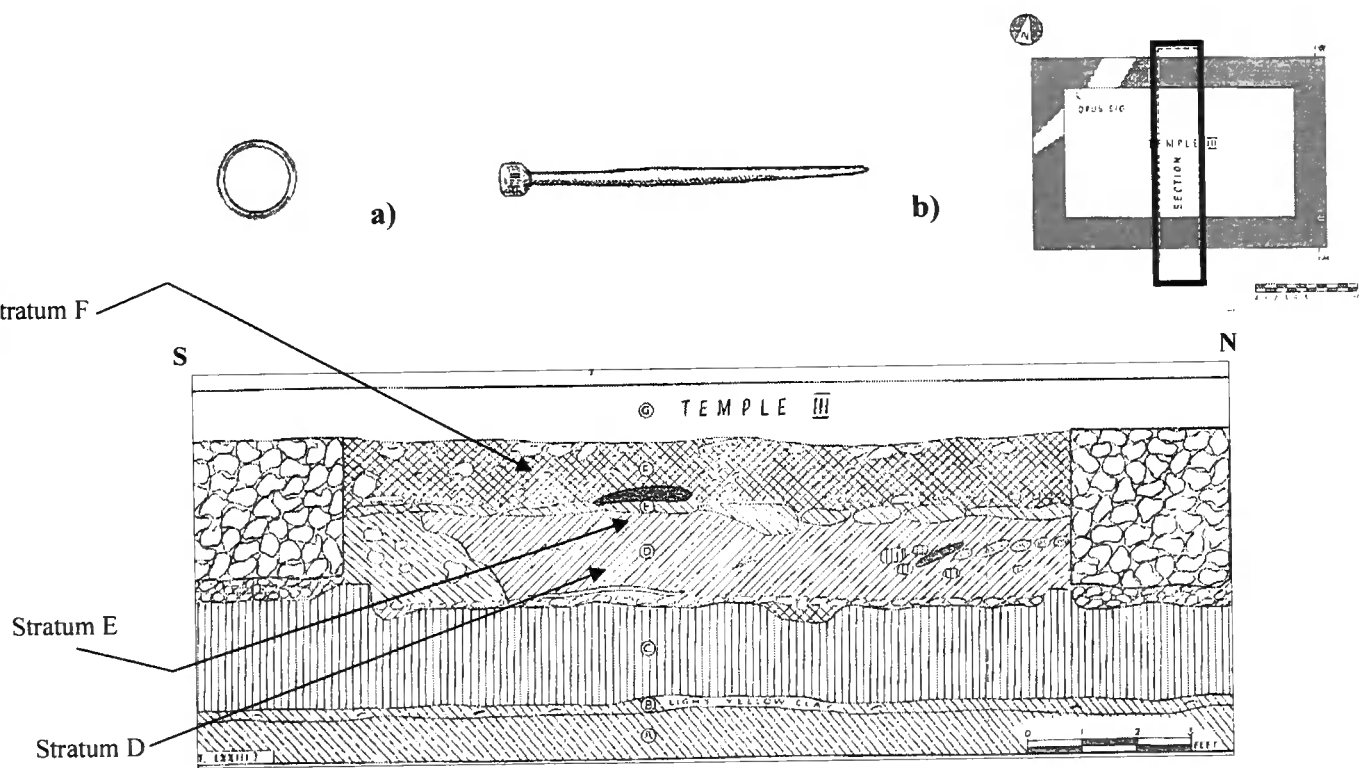
An oblate, opaque, green glass bead was discovered under the layer of plough soil, to the east of the northern 'antae' of Temple II (Penn, 1962; table 9.3).

**PER 42**

An oblate, opaque, greenish glass bead was discovered from a layer beneath the *cella* floor of Temple II which was classified as stratum E (Penn, 1962; table 9.4), although no detailed records exist of the stratigraphy associated with it.

PER 43-50

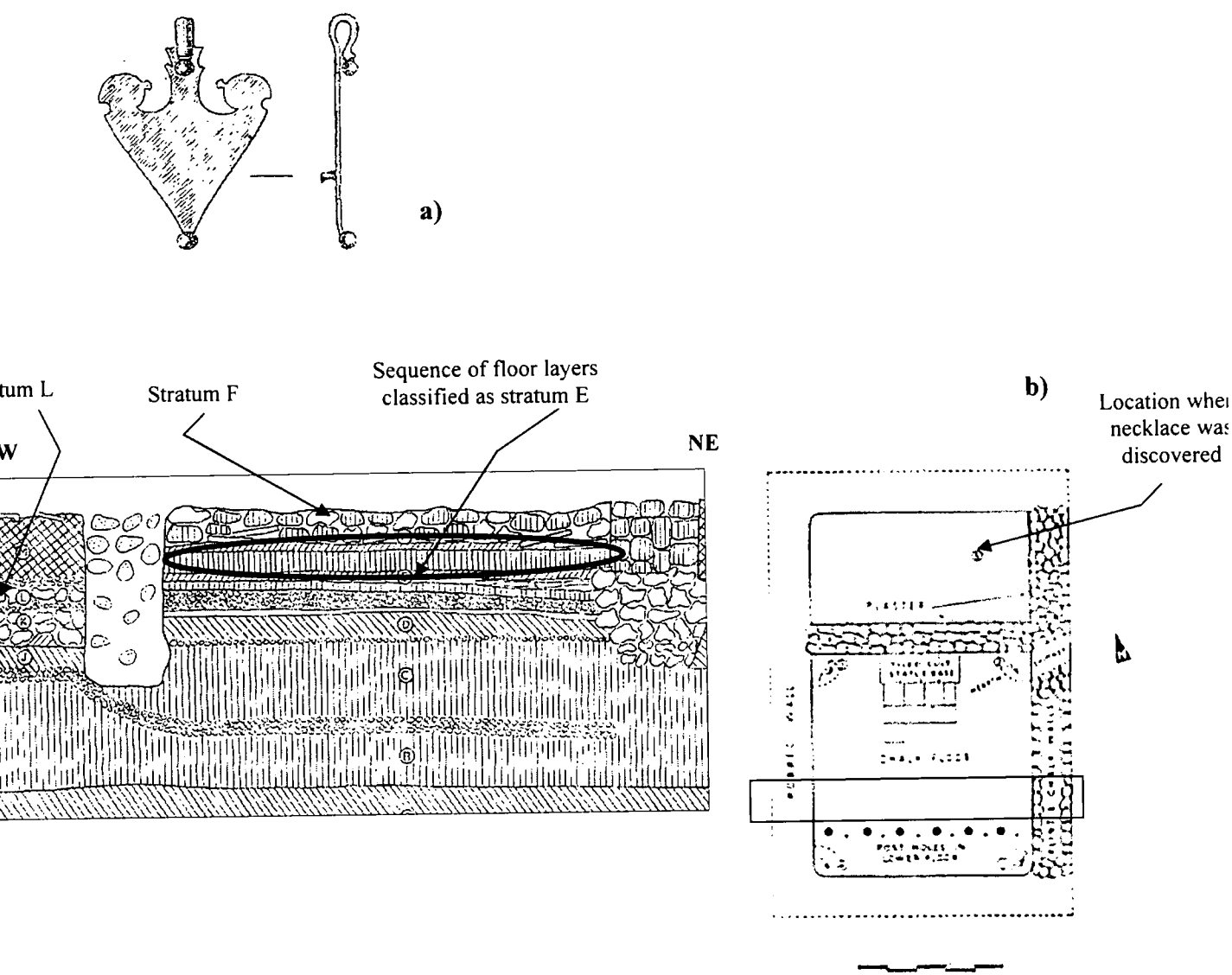
A fragment of twisted bronze wire bracelet (**PER 43**) was recovered from stratum F, a layer comprising the uppermost fill of Temple III (Penn, 1960; table 11.6). A brass bracelet (**PER 44**) with terminals decorated with incised horizontal lines and the rest with groups of ‘three and four’ dashes, an object (**PER 45**) described as being a plain silver finger ring (*ibid*; table 14.3) and a fragment of a bronze pin with a plain spherical knob (**PER 46**) are recorded as having been found within *either* stratum E, another layer filling the structure, or stratum F (*ibid*; table 11.7). The remains of four bone pins (**PER 47-50**) are also recorded as having been found ‘in or just outside’ the temple (*ibid*; table 14.5) although no detailed record was provided about their position in the vertical stratigraphy. The objects are described as being fragmentary (*ibid*), although the single illustration made to represent them depicts a complete pin with a spherical head which is slightly flattened at the top. The report states that the drawing was included as a complete representation of all the pins discovered (*ibid*; table 14.5).



**Figure 99:** Items of personal adornment discovered during excavations on Temple III that were illustrated in the report and details on the strata which finds were associated: **a)** **PER 34** (Penn, 1960; fig 6.6). **b)** **PER 129** (*ibid*; fig 6.4). Scale of illustrated objects is half size. The section drawing (after *ibid*; fig 2) shows the positions of strata mentioned in the text and its location has been outlined on the plan of the building (after *ibid*; fig 1).

**PER 51-53**

Items of personal adornment discovered during excavations on Temple IV include an item described as being a bronze, heart-shaped pendant or 'phalera' (**PER 51**) with a terminal knob, a loop for suspension, and with a small hook on the reverse side (Penn, 1960; table 11.5). The object is recorded as being associated with stratum L, a layer of stones topped with pebbles, just outside the walls of the temple. The item is claimed not to have been illustrated in the report although this is clearly a typing error as an object fitting all descriptions made in the text was illustrated in the finds report. The drawing of the find had been incorrectly referenced to (**PER 52**), a long brass chain with a square section, made of overlapping, compressed links, 28 inches long, interpreted as being a necklace. The object is described as having a cylindrical mount and hook at one end and a plain 'C' hook at the other. A breakage to the object is said to have been repaired at some time in the past, using a twist of thin brass wire (*ibid*; table 11.9). The 'plain' hook is described as having been attached to a shorter, heavier and singularly made bronze chain, 10 inches in length, with a large 'S' hook at the end (*ibid*). The item is described as having been found in stratum F, the layer of rubble overlying the building (*ibid*) and its find spot was marked directly on the plan of the site, within the small northern room of the building. Stratum F also contained a brass finger ring (**PER 53**) with eight facets decorated with incised diagonals (*ibid*; table 11.8) although its find spot is unknown.

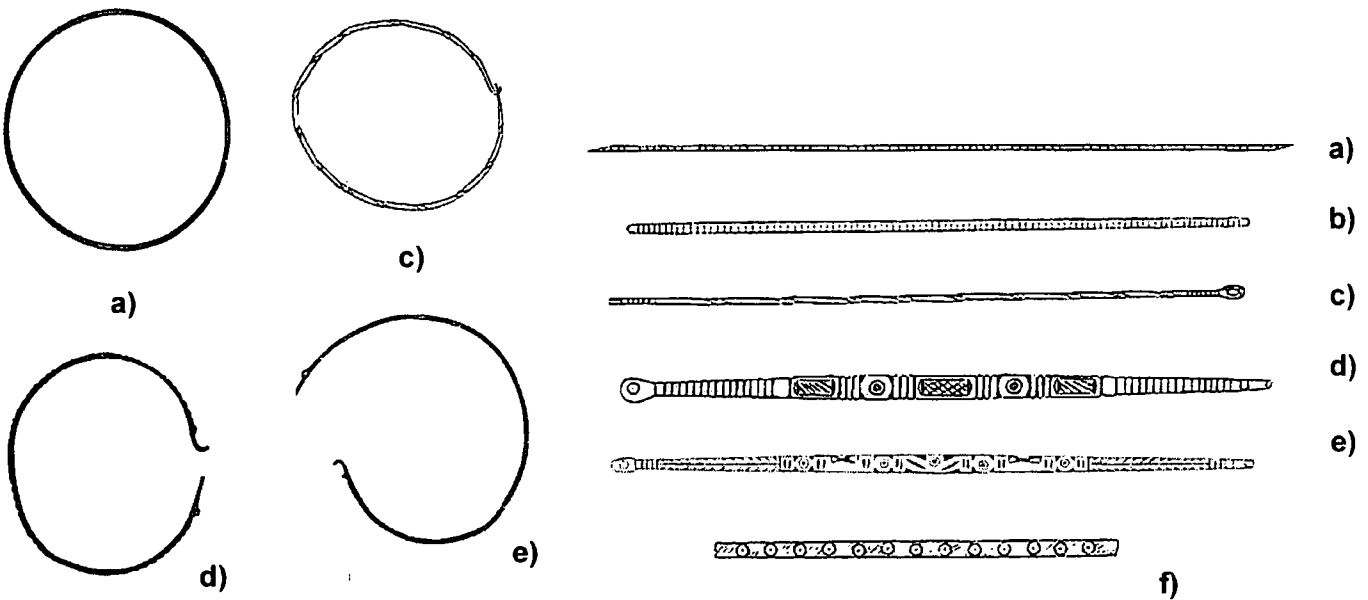


**Figure 100:** a) The pendant **PER 51** (Penn, 1960; fig 6.2) discovered from Temple IV. Scale for both finds is half size. The location of strata mentioned in the text is also indicated. The location of the section (after *ibid*; fig 3) on the plan of the building (after *ibid*; fig 4) is delineated by a rectangle.

### PER 54-59

Six bronze bracelets (**PER 54-64**) are described as having been discovered placed beside the western wall of Temple V. All the objects are described as having been found under and in a layer of plaster rubble that had accumulated inside the remains of the structure, described as stratum D/H. The first of the objects was a bronze striated bracelet of flattened section and rounded terminals (**PER 54**) (Penn, 1962; table 6.16 (a)). The second item (**PER 55**) was a bronze striated bracelet with an overlapping joint which had been chamfered to provide an equal thickness throughout the object (*ibid*; table 6.16 (b)). The third (**PER 56**) was a twisted bronze bracelet, described as being of the 'hook and eye' type, decorated with incised transverse lines at the terminals (*ibid*; table 6.16 (c)). The fourth (**PER 57**) was

made of bronze and described as being of the 'hook and eye' type. The object was decorated with transverse lines, concentric circles and oblong panels (*ibid*; table 6.16 (d)). The fifth object (**PER 58**) was of brass, described as being of the 'hook and eye' type and was decorated with circular punch marks and incised lines (*ibid*; table 6.16 (e)). The sixth object (**PER 59**) was a bronze bracelet decorated with a punched dot and circle design (*ibid*; table 6.16 (f)). A similar object was located in the collection which could be the discovery, although it cannot be proven with any certainty that this is the find described in the report as no illustration is provided of its curvature and it is unclear in the drawing if the circles were in relief or incised.



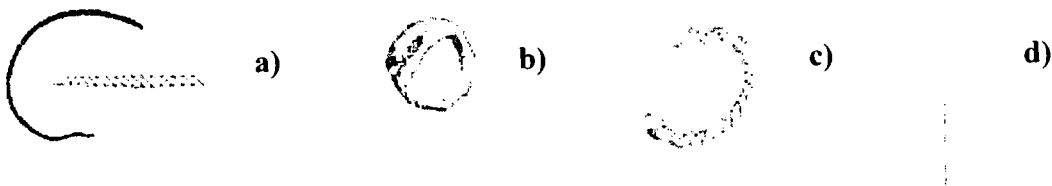
**Figure 101:** Illustrations of bracelets discovered close to the western wall of Temple V: Not all of the bracelets were illustrated in plan. Those with both plans and cross sections share the same letters in this illustration. **a)** **PER 54** (after Penn, 1962; fig 5.6), **b)** **PER 55** (*ibid*; fig 5.5), **c)** **PER 56** (after *ibid*; fig 5.2), **d)** **PER 57** (after *ibid*; fig 5.3), **e)** **PER 58** (after *ibid*; fig 5.4), **f)** **PER 59** (*ibid*; fig 5.1). Scale: all half size.

## PER 60-64

A thin open ring made of silver, interpreted as being an ear ring (**PER 60**) (Penn, 1962; table 7.6), a cylindrical bead of pale green glass, 0.8 inches long (**PER 61**) (*ibid*; table 9.5), a double or segmental bead of pale green glass (**PER 62**) (*ibid*; table 9.5), A triple or segmental bead of pale green glass (**PER 63**) (*ibid*; table 9.5) and a minute, annular bead of pale green glass (**PER 64**) (*ibid*; table 9.5) were all found below the layer of plaster and rubble inside Temple V (stratum D/H).

## PER 65-70

A bronze pin, thought to be from a penannular type brooch (**PER 65**) was found in the rubble overlying the area occupied by Temple VI (Penn, 1967c; table 4.3). A fragment of bronze bracelet, described as being of the 'hook and eye' type, semi circular in section and decorated with diagonal grooving (**PER 66**) was recovered from the same layer (*ibid*; table 4.4). An iron finger ring with an oval bezel (**PER 67**) was found on the north side of the fill of the 'votive pit' at the centre of the building. A bronze finger ring made from four wires twisted together (**PER 68**) (*ibid*; table 4.9) was recorded as having been discovered from the rubble at the top of the pit (*ibid*; table 4.8). A single bone pin with a pointed head (**PER 69**) is recorded as having been found under the first floor inserted within the temple (*ibid*; table 4.11). An object (**PER 70**), described as being a bronze pin with a small, collared spherical head (*ibid*; table 4.10) was also discovered under 'road 3', a layer of gravel resting on chalk, predating the temple (*ibid*; 109). It would be more accurate to describe the 'collar' on the pin as being a thin spool. The illustrations in the report are extremely small and it was impossible to produce large versions in this thesis and they appear slightly hazy.



**Figure 102:** Items of personal adornment from excavations on Temple VI that were illustrated in the report: **a) PER 66** (Penn, 1967c; fig 4.11), **b) PER 67**, (*ibid*; fig 4.13), **c) PER 68** (*ibid*; fig 4.14), **d) PER 70** (*ibid*; fig 4.15). Scale of **a)**, **b)** and **c)** is half size. Scale for **d)** is quarter size.

## PER 71-72

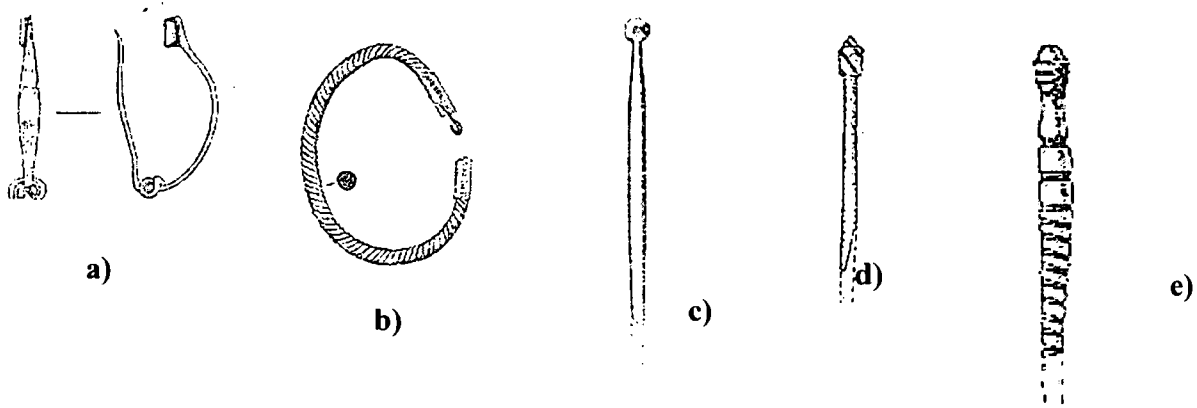
At least two iron brooches (**PER 71-72**) are recorded as having been discovered in deposits over the area occupied by Temple VII (Harker, 1972; 7). The lack of detailed records surviving from this excavation makes it impossible to examine the significance of the contexts from which the finds were recovered and to verify if any other items of personal adornment were discovered.

## PER 73-74

Only two items of personal adornment were discovered during excavations upon the 'pedestal' and the area surrounding it. The first of these items was a fragment of a bronze bracelet (**PER 73**) made from three strands of wire twisted together (Penn, 1958; table 11.5), found in a layer of dark soil filling the pit next to the 'pedestal' base. A bone pin with a 'bi-conical head' (**PER 74**) was described as having been found lying upon the filling of this pit (*ibid*; table 12.2).

## PER 75-79

A bronze brooch of Camulodunum type VII (**PER 75**) was recovered from stratum B, a layer of light gravely soil through which the foundations of the 'oven building' were cut (Penn, 1964b; 172; table 5.3). A brass bracelet made of five strands of wire twisted together, with sheathed ends finished off in the form of hooks (**PER 76**) is recorded as having been discovered from stratum C, a layer of light gravely soil deposited within the structure. The object recorded as having been found close to oven 4 at the centre of the building (*ibid*; table 5.11). Two bone pins are recorded as having been recovered from the remains of the structure and both came from stratum E, a 'clay bank' deposited within the building (*ibid*; table 7.1, 7.2). The first of the pins (**PER 77**) is described as being a 'bone pin with spherical head', 2.6 inches in length (*ibid*; table 7.1). The second pin (**PER 78**) is described as being a 'bone pin with head decorated with incised diagonals' (*ibid*; table 7.2). One metal pin (**PER 79**) is mentioned in the excavation report but no details about its significance were provided in the finds catalogue. While it is possible that the find could have been discovered from the 'oven building', it could also have been recovered from the adjacent section of 'temple ditch' excavated in the same year.



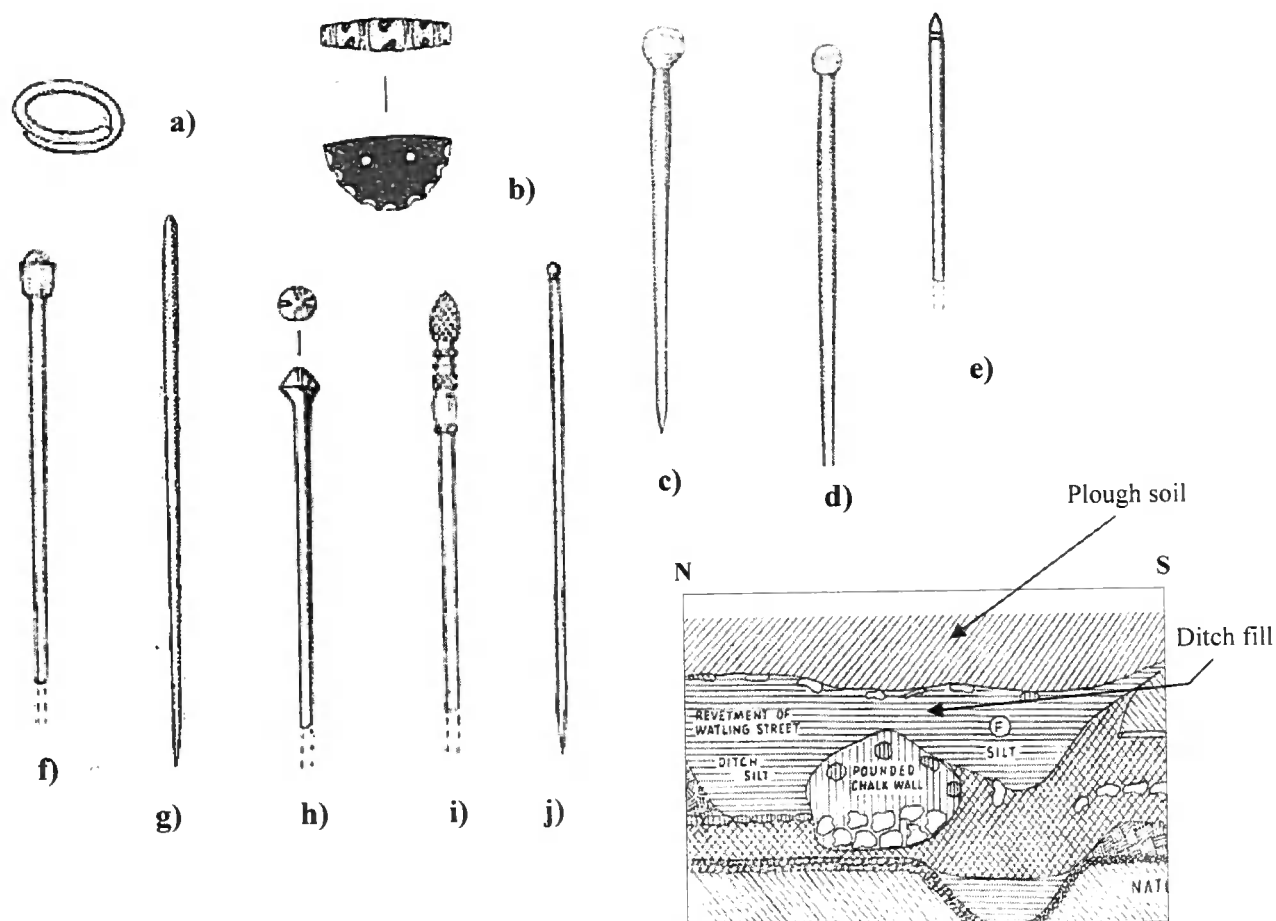
**Figure 103:** Items of personal adornment found during excavations in and around the 'oven building' that were illustrated in the report: **a)** **PER 75** (Penn, 1964b; fig 4.17), **b)** **PER 76** (*ibid*; fig 4.15), **c)** **PER 77** (*ibid*; fig 5.2), **d)** **PER 78** (*ibid*; fig 5.5), **e)** **PER 79** (*ibid*; fig 4.12). Scale for **a)**, **c)** and **d)** is half size. Scale for **c)** and **e)** is full size.



## PER 80-100

Twenty one items of personal adornment were discovered within the fill of the section of 'temple ditch' on the northern edge of the southern 'temenos' area, close to the 'oven building'. The objects discovered included (**PER 80**), a small brass finger ring of one and a half turns (Penn, 1964b; table 5.2), (**PER 81**) a small bronze brooch of Camulodunum type VII (*ibid*; table 5.6) and (**PER 82**), a fragment of a green paste melon bead (*ibid*; table 7.9), (**PER 83**) a fragment of a shale bracelet (*ibid*; table 7.10) and (**PER 84, 85-91**) was also found, as were eight, broadly semi-circular, segmental jet beads, pierced with two holes and decorated with a zig-zag pattern on their outer edges (*ibid*; table 7.11). The beads were interpreted as being from a bracelet (*ibid*), although it is also conceivable that such objects could have come from a necklace. A 'long bone pin with spherical head', 4 1/8 inches in length (**PER 92**) (*ibid*; table 7.5), 'a bone pin with spherical head', 5 inches in length (**PER 93 I**) (*ibid*; table 7.6) were also discovered in the ditch filling. A 'bone pin with a pointed head', 2.5 inches in length (**PER 94**) (*ibid*; table 7.7) was also found, although the illustration of the object shows a pin with two transverse grooves beneath a conical head.

Six metal pins were also discovered and include (**PER 95**), part of a bronze square-headed pin with a blue glass bead set in the top and (**PER 96**), a bronze pin with a pointed head (*ibid*; table 5.4). The third pin (**PER 97**) is described as being a 'bronze pin with bi-conical head, incised cross on top' (*ibid*; table 5.5), although the object illustrated in the report is more detailed. The body of the pin tapers to an inverted cone before reaching the conical head and the cross appears to be formed by four arms of two radiating lines each. A bronze pin (**PER 98**) with a head decorated in a style that was interpreted as being a 'stylised fir cone' (*ibid*; table 5.15) was also discovered. The object (described looking upwards from point to head) is more detailed, possessing an upper shaft decorated with a reel displaying *either* diagonal incised lines *or* cross hatching. This reel would appear to be capped by an elongated ovoid bead, beneath a thicker reel decorated with cross hatching. These decorative features lay beneath a plain reel, capped by a plain inverted cone which, in turn, lay beneath a reel displaying traces of cross hatching. A final plain reel is present before the head, which was decorated using cross hatching and interpreted as being a 'stylised fir cone'. The fill of the ditch also contained a bronze pin (**PER 99**) with a small spherical head (*ibid*; table 5.16), although the illustration shows that there may be *either* two small reels *or* a small bead and reel underlying the head. A fragment of a silver pin (**PER 100**) was also discovered, with a head decorated with concentric grooves and its shank decorated with a continuous spiral (*ibid*; table 7.8).

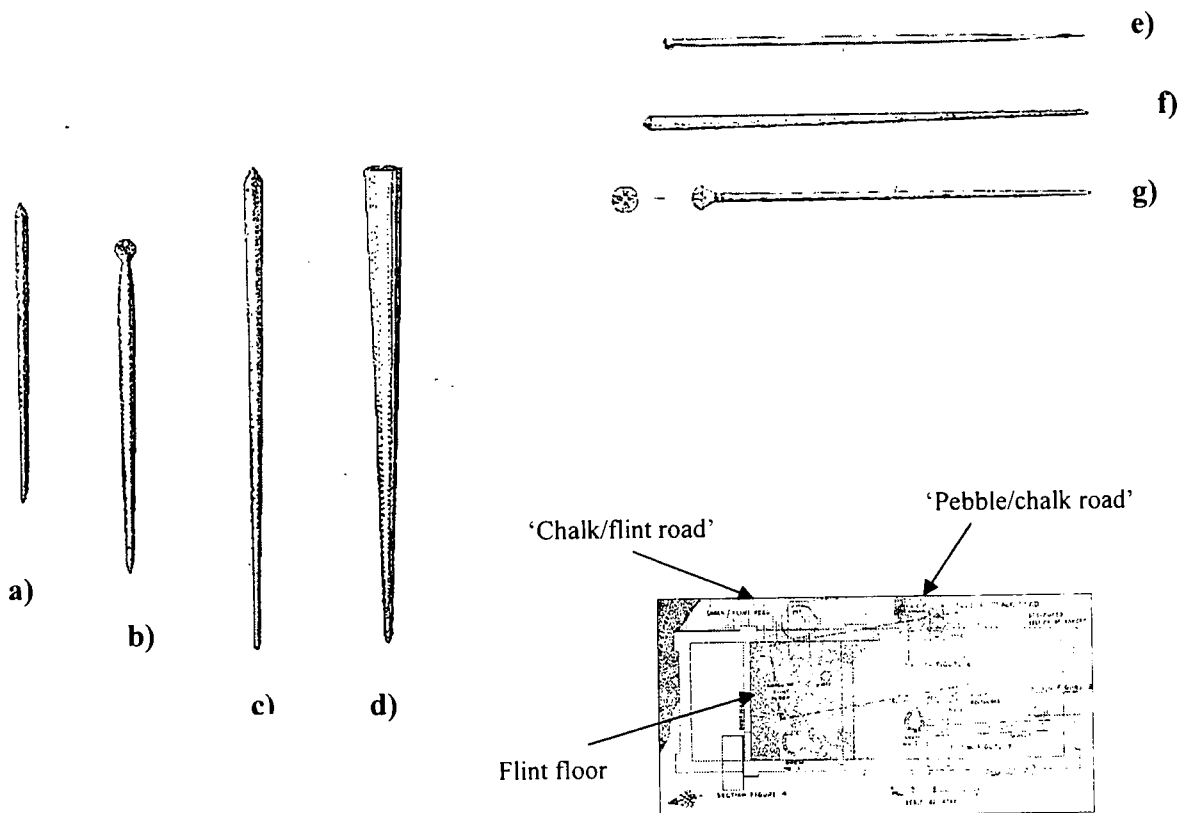


**Figure 104:** Items of personal adornment recovered from the fill of the 'temple ditch' that were illustrated in the report and details on the stratigraphy associated with them: **a)** PER 80 (Penn, 1964b; fig 4.16), **b)** PER 84 (*ibid*; fig 5.16). Bone pins: **c)** PER 92 (*ibid*; fig 5.6), **d)** PER 93 (*ibid*; fig 5.1) **e)** PER 94 (*ibid*; fig 5.3). Metal pins: **f)** PER 95 (*ibid*; fig 4.11), **g)** PER 96 (*ibid*; fig 4.14), **h)** PER 97 (*ibid*; fig 4.13), **i)** PER 98 (*ibid*; fig 4.7), **j)** PER 99 (*ibid*; fig 4.8). **a)**, **f)**, **g)**, **h)**, **i)** and **j)** are represented at full size. Scale for all other illustrations is half size. Section is after *ibid*; fig 2.

## PER 101-116

A minimum of six bone pins can be postulated as having been found during excavations upon Site A, but the descriptions made in the report may indicate that many more of these objects could have been discovered. Reference is made to the discovery of 'many' pins from over the flint floor inserted into the centre of the 'granary' structure (Penn, 1957; appendix VIII, no 4) and also over the 'pebble/chalk road' (*ibid*) and 'chalk/flint road' (*ibid*) adjacent to this. No records were made of the specific deposits from which the objects were recovered, although they are all recorded as having been found in strata sealing the 'granary' structure, 'key deposits' II, III, IV and V (*ibid*; appendix VIII, no 4). Four complete plain bone pins were illustrated in the excavation report (**PER 101-104**) and two of the objects (**PER 101, 103**) are described as possessing 'plain pointed' and 'bi-conical' heads (*ibid*;

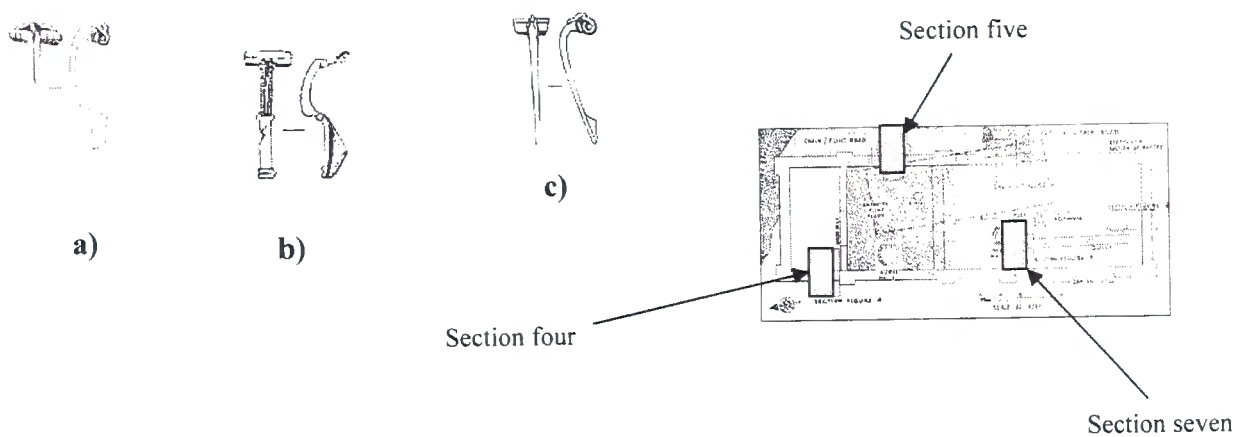
appendix VIII, no 4). One of the pins illustrated (**PER 102**) would also appear to possess a spherical head, which is described by Penn as being a 'circular knob' (*ibid*; appendix VIII, no 4). The final pin discovered (**PER 104**) is described as having a 'plain, flat' head and was decorated with 'incised lines' (*ibid*; appendix VIII, no 4). Fragments of pins (**PER 105-106**) are also recorded as having been discovered (*ibid*; appendix VIII, no 4) and a minimum number of two can be postulated. Ten metal pins (**107-116**) (*ibid*; appendix VI, 11) were recorded as having been discovered from deposits relating to the final use and abandonment of the 'granary' structure. All pins illustrated in the report are all drawn as complete objects, despite the claims that some of them were fragmented (*ibid*; appendix VI, 11). Only three of the pin forms were drawn and they were not described in detail. The drawings appear to show a pin with a head decorated with two reels beneath a flattened sphere (**PER 107**), one (**PER 108**) that appears to possess either a plain or bi-conical head, and another (**PER 109**) decorated with two incised lines or grooves beneath a wide, inverted cone rising to a hemispherical head. This latter object was also decorated with a cross, formed by four sets of two radiating grooves. The pins are said to have originated from 'key deposit' II (*ibid*; appendix VI, 11) and 'key deposit' IV (*ibid*), both layers sealing the 'granary' structure, and 'key deposit VI' (*ibid*), a layer that had built up amongst the remains of the building. The lack of detailed recording of the provenance of all pins discovered makes it impossible to comment further on their distribution as numbers of objects discovered from each 'key deposit' were not given.



**Figure 105:** Illustrations of pins discovered from Site A: a) **PER 101** (Penn, 1957; fig 18.2), b) **PER 102** (*ibid*), c) **PER 103** (*ibid*), d) **PER 104** (*ibid*), e) **PER 107** (*ibid*; fig 15.2), f) **PER 108** (*ibid*) and g) **PER 109** (*ibid*). All illustrations are half size. Plan is after *ibid*: fig 2).

PER 117-119

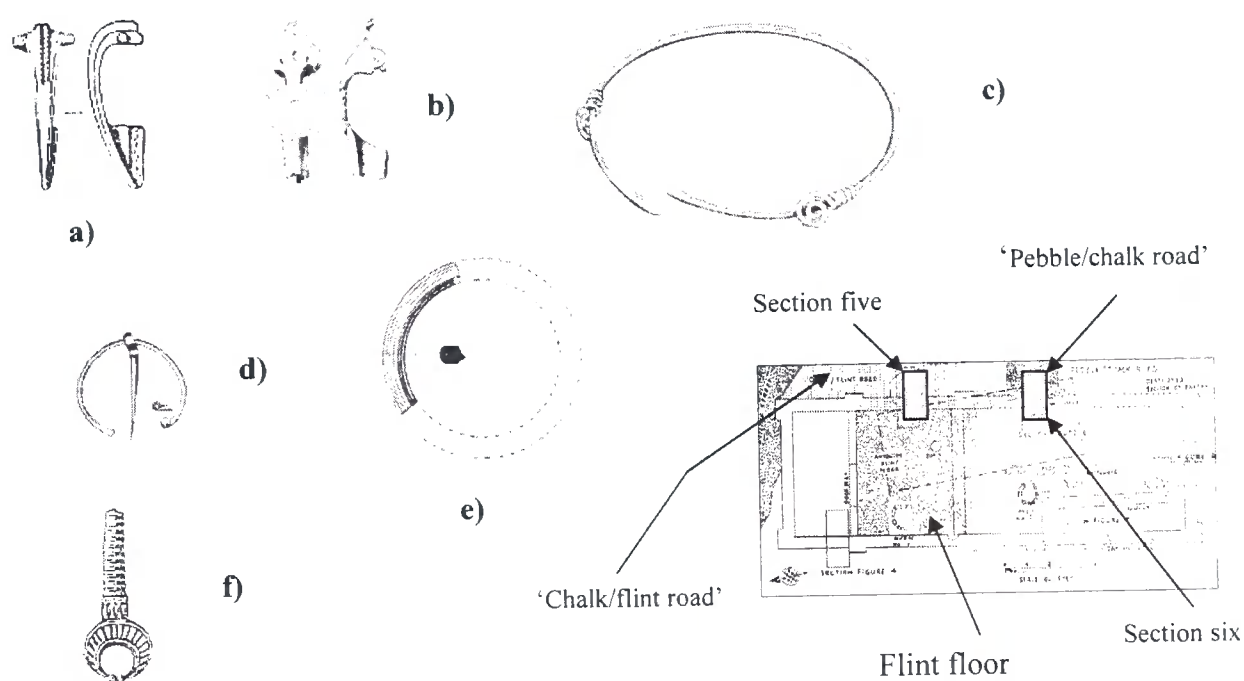
A brooch of Camulodunum type III with a catch plate pierced by two holes (**PER 117**) (Penn, 1957; appendix V, no 8) was discovered upon Site A from key deposit X, a layer predating the ‘granary’ structure (*ibid*; 56). The object was discovered from the fill of a pit underlying the eastern wall of the ‘granary’ and the ‘chalk/flint road’ at the north eastern corner of Site A, close to where a section, numbered ‘five’ was drawn. Only two items of personal adornment were discovered from ‘key deposit’ IX, another layer of clay through which the foundations of the ‘granary’ were dug. These included a brooch of Hod Hill type but with a stouter head (**PER 118**) and a bow containing a deep rounded furrow with two oblique cuts. The object possessed a minutely beaded ridge with a slight swelling on each side near the head (*ibid*; appendix V, no 2) and was discovered in the north western corner of the site close to where a section, numbered ‘four’ was drawn. The layer also contained a brooch of Colchester type with thin, plain wings (**PER 119**) (*ibid*; appendix V, no 3), although this item was found in the south western corner of the site where a section, numbered ‘seven’ was drawn.



**Figure 106:** Items of personal adornment from ‘key deposits’ X and IX on Site A that were illustrated: **a) PER 117** (Penn, 1957; fig 14.8), **b) PER 118** (*ibid*; fig 14.2), and **c) PER 119** (*ibid*; fig 14.3). The location of sections mentioned in the text has been indicated on the plan of the building (*ibid*; fig 2). Scale for **a)**, **b)** and **c)** is full size.

## PER 120-125

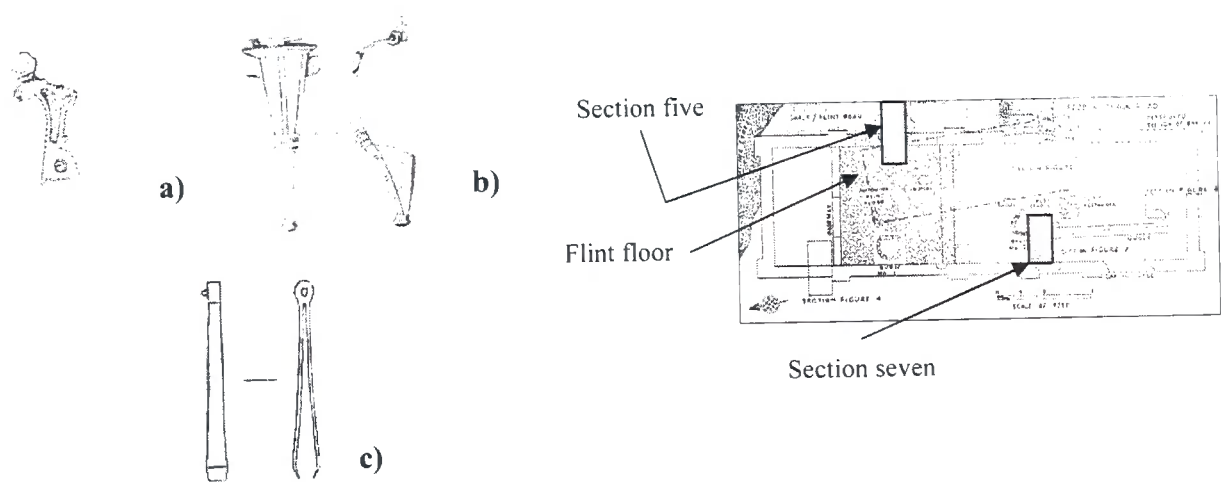
Six items of personal adornment were recovered from 'key deposit' VI, a layer which accumulated amongst the remains of the 'granary' structure on Site A. A small brooch (**PER 120**) thought to be a derivative of either Colchester type A or B (Penn, 1957; 70; appendix V, no 1) was found in the area overlying the 'pebble/chalk road' close to where a section drawing, numbered 'six', was made. Part of a shale bracelet, circular in section with flattened outside edges and a ridge around the inner surface (**PER 121**) was discovered over the flint floor inserted into the middle of the 'granary' structure (*ibid*; appendix XII, no 4), as was the head of a pin (**PER 122**), (*cf* Cool, 1990; figs 10.4, 10.5, 10.10), misidentified by the excavators as being a 'lever key' (Penn, 1957; appendix VI, no 16). The layer also contained a trumpet headed brooch with a central disc, enamelled white in the centre and red outside, with three recesses on the head filled with remains of whitish enamel (**PER 123**) (*ibid*; appendix V, no 5). The item was discovered where the deposit overlay the 'chalk/flint road' to the east of the 'granary', close to the area where a section, numbered five' was drawn. A large bronze bracelet or armlet made of two single lengths of wire coiled into spirals close to the ends and then turned about each other before sliding onto themselves (**PER 124**) was discovered from the same location (*ibid*; appendix VI, no 5). A penannular brooch of very thin, rounded section, with very small flattened and rolled back ends and a pin ornamented by a small roll (**PER 125**) was discovered from where the deposit overlay the 'chalk/flint road' (*ibid*; appendix V, no 6), although its precise location is unknown.



**Figure 107:** Items of personal adornment from 'key deposit VI' on Site A that were illustrated: **a)** **PER 120** (Penn, 1957; fig 14.1), **b)** **PER 121** (*ibid*; fig 18.3), **c)** **PER 122** (*ibid*; fig 15.7), **d)** **PER 123** (*ibid*; fig 14.5), **e)** **PER 124** (*ibid*; fig 15.8), **f)** **PER 125** (*ibid*; fig 14.6). The location of sections five (*ibid*; fig 5) and six (*ibid*; fig 6) has been indicated on the plan of the building (after *ibid*; fig 2). Scale for **a)**, **d)** and **f)** is full size. Scale for **e)** and **b)** is half size.

PER 126-130

‘Key deposit’ IV, one of the layers sealing the ‘granary’ structure on Site A, contained five items of personal adornment. A flat brooch (**PER 126**) in the form of a stag with a recessed body, possibly to hold enamel, was recovered from the layer (Penn, 1957; appendix V, no 4), close where a section, numbered ‘seven’, was drawn in the south eastern corner of the site. A large brooch of Hod Hill type with small iron rods placed transversely through the bow, containing a small knob or ball on each end (**PER 127**) was discovered from the same area (*ibid*; appendix V, no 9), as was a pair of bronze tweezers (**PER 128**) (*ibid*; appendix VI, no 3). A small, undecorated bronze ring, 0.7 inches in diameter (**PER 129**) (*ibid*; appendix VI, no 5) was discovered in the north east corner of the site, close to where a section, numbered ‘five’, was drawn through an early Roman pit. Part of a stone bangle, (**PER 130**), thought ‘probably (to be made of) shale’, was identified over the flint floor inserted in the middle of the ‘granary’ structure (*ibid*; appendix XII, no 1 a).



**Figure 108:** Finds from ‘key deposit’ IV on Site A: Objects that were illustrated in the report: **a) PER 126** (Penn, 1957; fig 14.4), **b) PER 127** (*ibid*; fig 14.9) and **c) PER 128** (*ibid*; fig 14.12). The location of sections seven (*ibid*; fig 7) and five (*ibid*; fig 5) has also been indicated on the plan of the building (after *ibid*; fig 2). Scale for **a)** and **b)** is full size and, for **c)**, half size.

PER 131

A bone comb with two rows of teeth cut from a single piece of this material and held between rectangular bone strips by four iron rivets was discovered from ‘key deposit’ III, a layer overlying the remains of the ‘granary’ structure. The bone strips that comprised the body of the comb are described as being bevelled on each edge and at the surviving end. The strips were decorated with groups of four cuts between the iron rivets and vertical cuts along the bevelled edges (Penn, 1957; appendix VIII, no 1). The object was found in the southern part of the site, close to where a section, numbered ‘eight’, was drawn in the area once occupied by the southern wall of the ‘granary’.



**Figure 109:** The comb (PER 131) from ‘key deposit’ III on Site A: (Penn, 1957; fig 18.1), The location of the section eight (*ibid*; fig 8) also been indicated on the plan of the building (after *ibid*; fig 2). Scale for illustration of find is full size.

PER 132

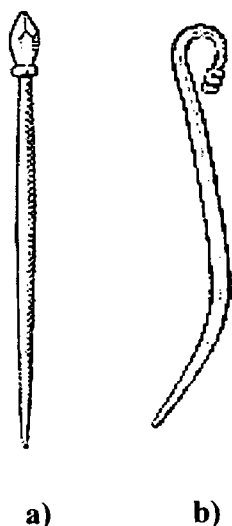
Key deposit’ II, a layer of soil accumulating over the ‘granary’ structure on Site A, contained a single brooch of Camulodunum type III, with wings containing two sharp grooves and with a faceted or chamfered bow (Penn, 1957; appendix V, no 7) although further details about its location in the stratigraphy were not provided.



**Figure 110:** The brooch (PER 132) from ‘key deposit’ II on Site A (Penn, 1957; fig 14.7). Scale is half size.

## PER 133-138

Five items of personal adornment are recorded as having been discovered during excavations in and around building B8. The fill of the hypocaust to the building contained a bronze nail cleaner and tweezers on a split ring (**PER 133, 134**) (Penn, 1968a; table 6.15), a 'bone pin with a spherical head' (**PER 135**) (*ibid*; table 6.20) and a 'bone pin with large pointed head and collar below' (**PER 136**) (*ibid*; table 6.21). The illustration of the latter is more complex than its description suggests, showing the object to be decorated with a single reel, capped with an ovoid bead which tapers towards a cone at the top of the head. A bronze pin with a pointed head (**PER 137**) is also recorded as having been discovered from the layer of debris filling the hypocaust (*ibid*; table 6.17). An object described as being a heavy bronze pin with a rolled over and squared off head (**PER 138**) was found by the side of a chalk path, classified as R7, to the south west of the building (*ibid*; table 6.18).



**Figure 111:** Items of personal adornment from building B8 that were illustrated in the report: a) **PER 136** (Penn, 1968a; fig 4.17). Scale is full size. b) **PER 138** (*ibid*; fig 3.12). Scale is half size.

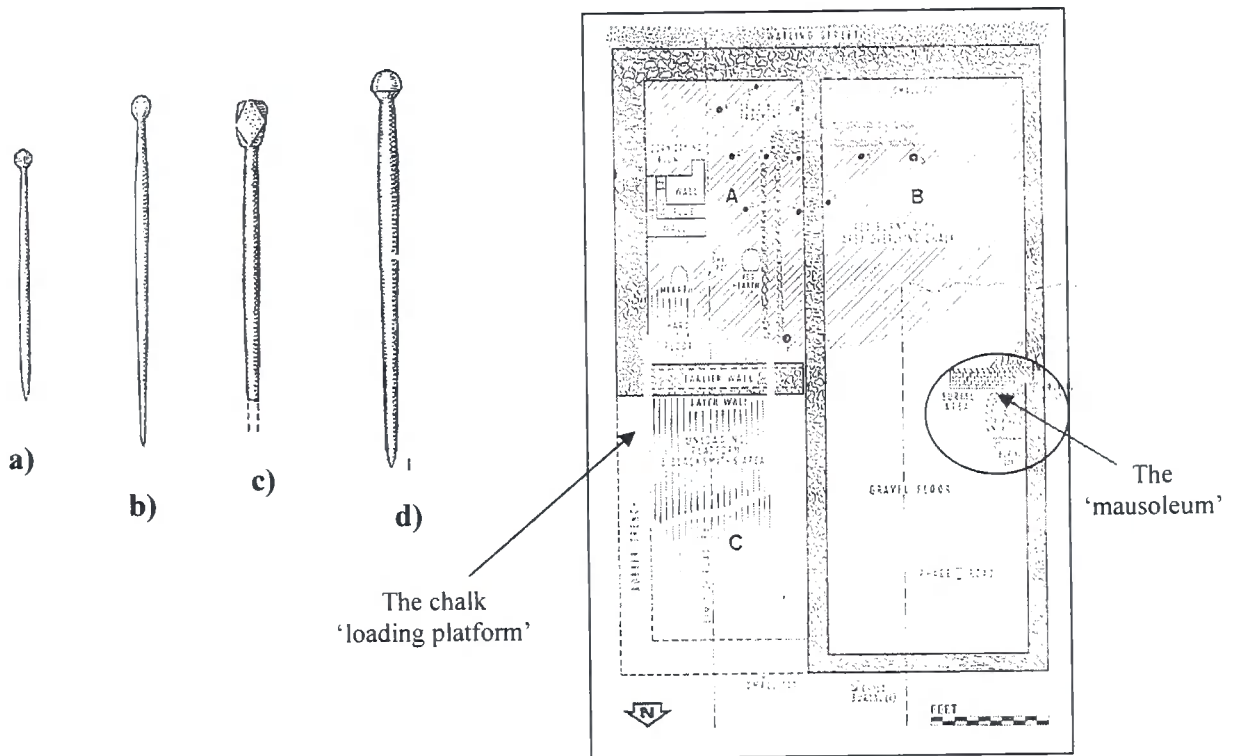
## PER 139-149

Eleven items of personal adornment were recovered from excavations in and around building B10. Part of a finger ring, made from three silver wires twisted together (**PER 139**) was recovered from the top soil overlying the remains of the structure (Penn, 1968a; table 6.13). A brass, lozenge-shaped, enamelled plate-brooch (**PER 140**) was discovered from the chalk floor of room B (*ibid*; table 3.1). This object was not illustrated in the report but was photographed (*ibid*; pl II A), although this has not been included in this study as a clearer image was provided by the author. A second brooch, made of brass and moulded in the form of a sitting duck (**PER 141**), is described as having been discovered under the chalk floor of room B (*ibid*; table 3.2). This object was also not illustrated in the report but was photographed (*ibid*; pl II B) although, again, the image has not been used in this study as a clearer image was provided. A bronze brooch of Camulodunum type VII (**PER 142**) is recorded as having been discovered from stratum 3, a thick layer of dark soil through which the foundations of the structure were cut. The object was found in an area later to be occupied by a chalk feature interpreted



as being a 'massive loading platform' overlying room C of the building (*ibid*; table 3.4). A brass brooch of Camulodunum type XVIII (**PER 143**) was discovered from stratum 1C, a layer of yellow gravel predating the building (*ibid*; table 3.3).

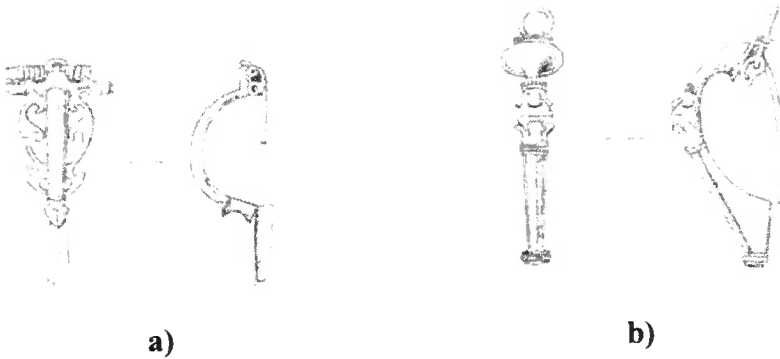
The majority of items of personal adornment discovered are recorded as having been deposited around the 'mausoleum' constructed within room B of the building (Penn, 1968a; 170) and six bone pins were recorded from this area (*ibid*; table 6.3-6.8). The objects include (**PER 144**), described as being a 'short bone pin with pointed head', 2.6 inches in length (*ibid*; table 6.3), and a 'bone pin with spherical head' (**PER 145**), 3.1 inches in length (*ibid*; table 6.4). The illustration of the latter is more detailed than suggested in the report, showing a slight point at the top of the head. The other objects include a 'bone pin with spherical head', 4.1 inches in length (*ibid*; table 6.5) (**PER 146**), a 'fragment of bone pin with spherical head' (*ibid*; table 6.6) (**PER 147**), a 'bone pin with head roughly shaped into thirteen flat surfaces' (*ibid*; table 6.7) (**PER 148**) and a 'large bone pin with spherical head', 3.9 inches in length (*ibid*; table 6.8) (**PER 149**).



**Figure 112:** Bone pins recovered from the 'mausoleum' area in the remains of building B10 that were illustrated in the report: **a)** **PER 145** (Penn, 1968a; fig 4.12), **b)** **PER 146** (*ibid*; fig 4.13), **c)** **PER 148** (*ibid*; fig 4.14), **d)** **PER 149** (*ibid*; fig 4.15). The scale of **a)**, **b)**, **c)** and **d)** is half size. (Plan of the building is after *ibid*; fig 1).

### PER 150-153

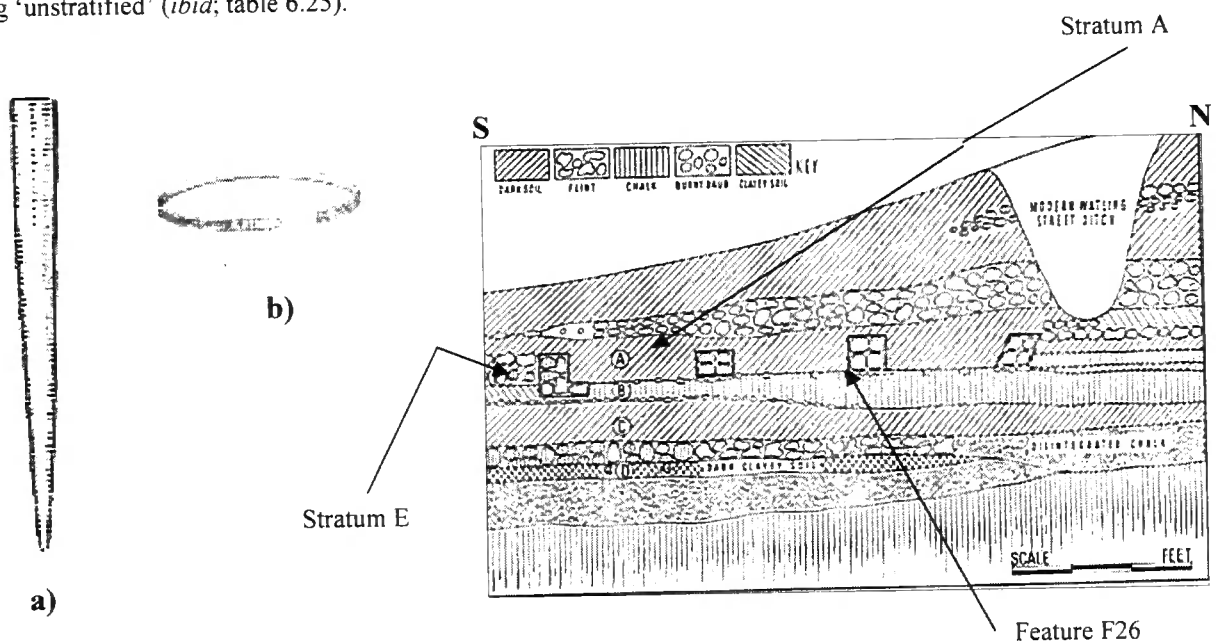
Four items of personal adornment were discovered from excavations in and around well F19. No detailed plans have survived of this part of the site and the surface area covered by the excavations cannot be determined. Records of the vertical stratigraphy appear to indicate, however, that some items of personal adornment may have been deliberately deposited in ways that could be interpreted as being 'offerings'. A brooch with a double spring and a bow ornamented with an open work trumpet scroll decoration of Collingwood type P (**PER 150**) was discovered in the fill of the well, 8 feet and 4 inches from the top of the shaft (Harker, 1970a; table 2, b). The object is described as being made of 'orichalc' (*ibid*), although it is unclear what this means. A bronze brooch with a single spring, a trumpet shaped head and a central acanthus moulding of either Collingwood type R (ii) or R (iv) (**PER 151**) was discovered placed amongst the flints at the top of the shaft (*ibid*; table 2 a). It is possible that the object could have been deliberately placed amongst the structure of the well, although no detailed recording was made of the stratigraphy associated with it and it is impossible to comment upon its deposition in any more detail. At least two 'bone pins' (**PER 152, 153**) are recorded as having been discovered during the excavations in and around the well (*ibid*; 142), although the precise location of where these objects were found is unknown.



**Figure 113:** Items of personal adornment recovered from excavations in and around Well F19 that were illustrated in the report: **a)** **PER 150** (Harker, 1970a; fig 2 b) and **PER 151** (*ibid*; fig 2 a), Scale of **a)** and **b)** is half size.

## PER 154-158

Five items of personal adornment are recorded as having been discovered from excavations in the north east of the settlement, all of which were found during excavations upon and around a feature classified as F26 and interpreted as being the remains of a corn-dryer. Stratum A, a layer of dark soil and clayey soil sealing feature F26, contained a pair of bronze tweezers (**PER 154**) (Penn, 1968a; table 6.22), an object interpreted as being a bronze nail cleaner (**PER 155**) (*ibid*; table 6.23) and a 'short, thick, bone pin with flat head', 2.3 inches in length (**PER 156**) (*ibid*; table 6.29). A bronze snake's head bracelet (**PER 157**) (*ibid*; table 6.28) was recovered from stratum E, a layer of chalk blocks comprising a platform or floor to the south of feature F26. A bronze pin with a sharp pointed head, 3.5 inches in length, (**PER 158**), is recorded from the excavations although the object is mentioned as being 'unstratified' (*ibid*; table 6.25).

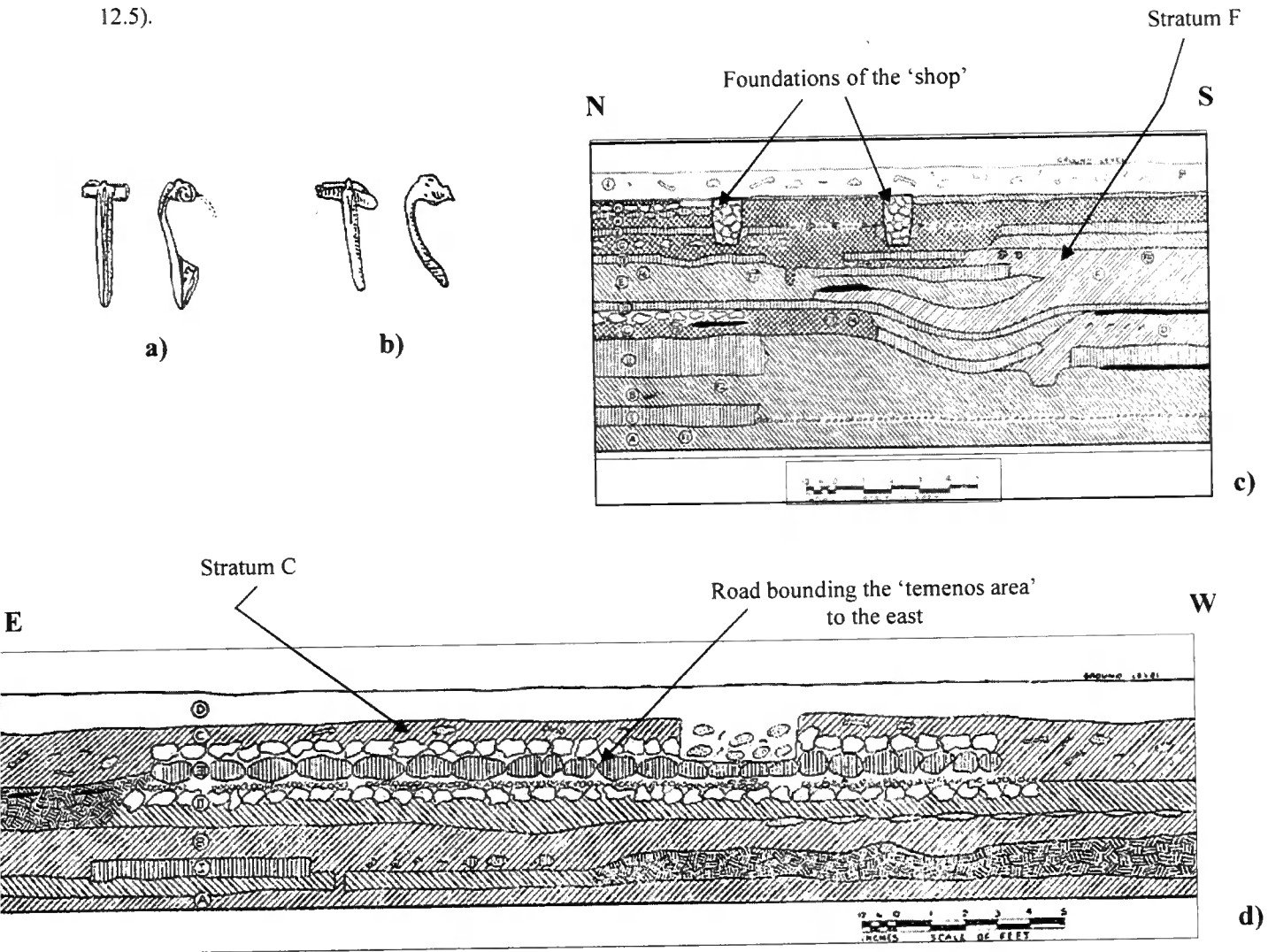


**Figure 114:** Items of personal adornment recovered from excavations in and around feature F26 that were illustrated in the report **a) PER 156** (Penn, 1968a; fig 4.18), **b) PER 157** (*ibid*; fig 3.14), which was represented by a very small, hazy drawing. The location of strata mentioned in the text has been indicated in the section drawn through the excavated area (after *ibid*; fig 7). Scale for **a)** is full size. Scale for **b)** is half size.

## PER 159-164

Only six items of personal adornment were recorded as having been discovered during excavations on site B from the areas occupied by the 'shop' and roads just outside the southern 'temple complex'. A corroded bronze brooch of Camulodunum type IV (**PER 159**) (Penn, 1958; table 11.1) and a bronze brooch of Camulodunum type III a (**PER 160**) (*ibid*; table 11.2) were found in stratum F, a layer of dark soil underlying the 'shop'. A fragment of a bronze brooch (**PER 161**) described as being similar to Camulodunum type III, with the exception of the lower part of its bow which was flat and splayed

(*ibid*; table 11.3) was also discovered. The object was found in stratum C, a layer of dark soil overlying the road at the eastern side of the southern 'temple complex'. No details are available on the stratigraphy associated with other finds from Site B, which include an undecorated shale bracelet, semicircular in section with a sharp inner ridge (**PER 162**) is recorded as having been discovered over the Watling Street (Penn, 1958; table 14.3). A bone pin with a 'plain flat head' (*ibid*; table 12.4) (**PER 163**) was recorded as having been found 'by the side of the Watling Street' (*ibid*; table 12.4) and a bone pin with a 'bi-conical head' (**PER 164**) was discovered 'over the Watling Street' (*ibid*; table 12.5).



**Figure 115:** Items of personal adornment discovered on Site B that were illustrated in the report: **a)** **PER 159** (Penn, 1958; fig 9.1), **b)** **PER 160** (*ibid*; fig 9.2). The locations of strata mentioned in the text have been indicated on the sections drawn through the area: **c)** (*ibid*; fig 2) and **d)** (*ibid*; fig 3). Scale for **a)** and **b)** is half size.

### PER 165-172

The other items of personal adornment recovered from the site are too poorly recorded to allow detailed discussion of their significance. At least eight items of personal adornment were discovered from Site D. The objects discovered include at least two 'fibulae' (**PER 165-166**) (Harker, 1970c; 10),

two 'glass beads' (**PER 167-168**) (*ibid*), a bronze finger ring with a paste intaglio (**PER 169**) (*ibid*), a bronze finger ring (**PER 170**) (*ibid*), and two 'bone pins' (**171-172**) (*ibid*).

### **PER 173-178**

At least six items of personal adornment are recorded as having been discovered during excavations upon an area between Site A and the Watling Street and include at least two 'brooches' (Harker, 1979; 8), (**PER 173-174**), 'bracelets' (*ibid*) (**PER 174-176**) and 'pins' of unidentified material (**PER 177-178**) (*ibid*).

### **PER 179-186**

At least eight items of personal adornment are recorded as having been discovered during excavations opposite the southern 'temple complex' on the far side of the road bounding the 'temenos' to the west (Harker, 1978; 9). 'Brooches' (*ibid*; 6) (**PER 179-180**), 'bracelets' (*ibid*) (**PER 181-182**), 'bone pins' (*ibid*) (**PER 183-184**) and 'pins' (*ibid*) (**PER 185-186**) are all recorded as having been discovered.

### **PER 187-188**

Items of personal adornment are recorded from excavations of uncertain location. The work from which they recovered is described as having taken place *either* in an area to the south of the junction between the road bounding the southern 'temenos' to the west and the Watling Street *or* to the far east of the site, in front of the Central Electric Gas Board switching station by the northern edge of the A2 motorway. Decorated and undecorated bone pins are recorded as being discovered (Harker, 1977; 6-9) and, from the description made, the existence of at least two objects (**PER 187-188**) can be postulated.

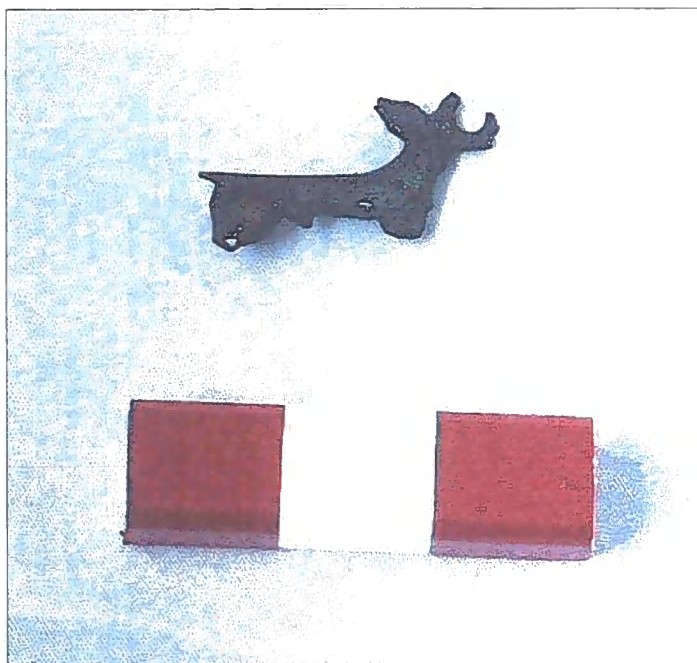
### **PER 189-192**

At least four items of personal adornment are recorded as having been discovered during excavations undertaken upon a strip of land 'at right angles to the original site, adjacent to the old railway embankment' (Harker, 1984). The precise location of the area excavated is unclear and the objects cannot be shown on the distribution map. 'Pins' are recorded as having been discovered (*ibid*; 7) (**PER 189-190**), together with 'brooches' (*ibid*) (**PER 191-192**).

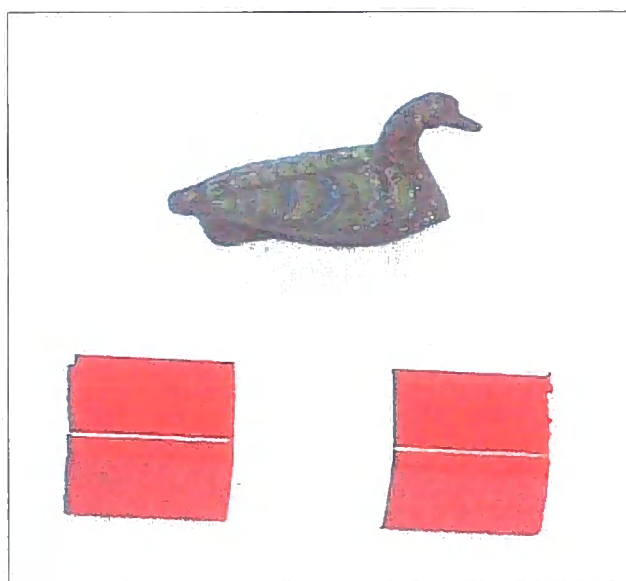
### **PER 193-202**

A small quantity of, poorly recorded items of personal adornment were discovered that could have come from excavations upon the southern 'temple complex' but could also have been found during excavations outside the 'temenos'. At least eight items of personal adornment are recorded as having been discovered from excavations that took place either in an area 'north of the Watling Street' *or* in the vicinity of Temple VII. Bronze brooches (Harker, 1971b; 8) (**PER 193-194**), pins (*ibid*) (**PER 195-196**), finger rings (*ibid*) (**PER 197-198**) and glass beads (*ibid*) (**PER 199-200**) are all recorded.

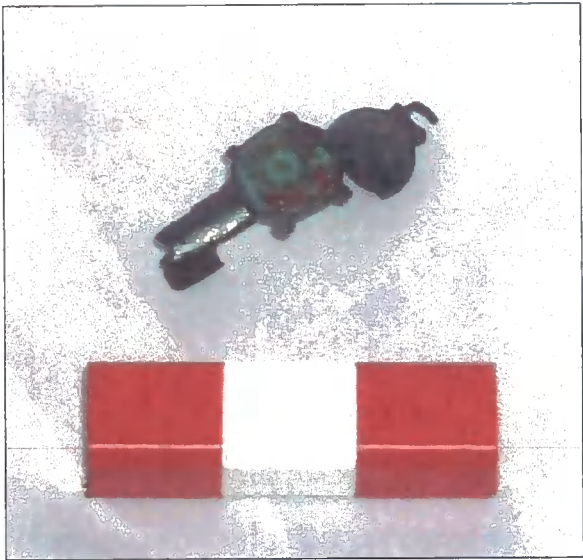
## **Part i: Brooches.**



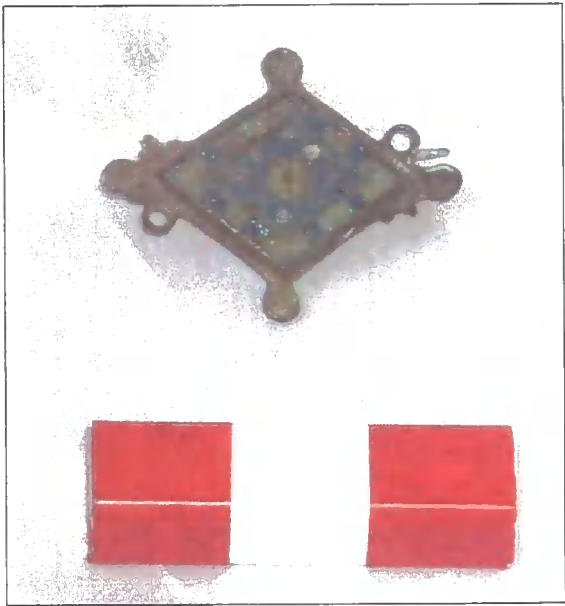
**Photograph 17**



**Photograph 18**

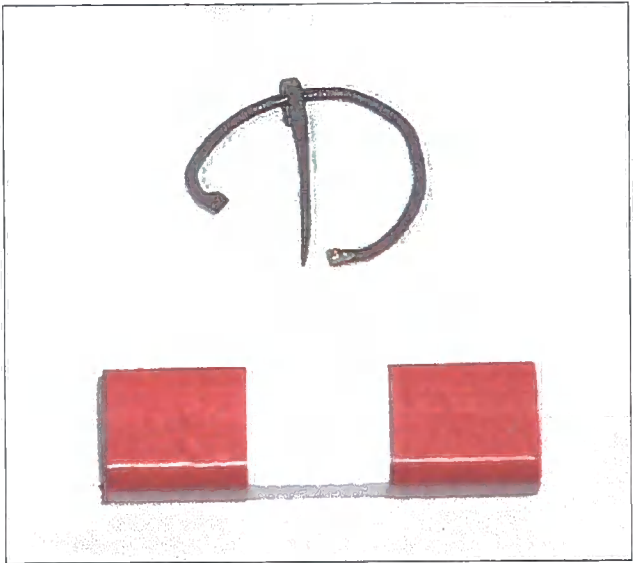


Photograph 19

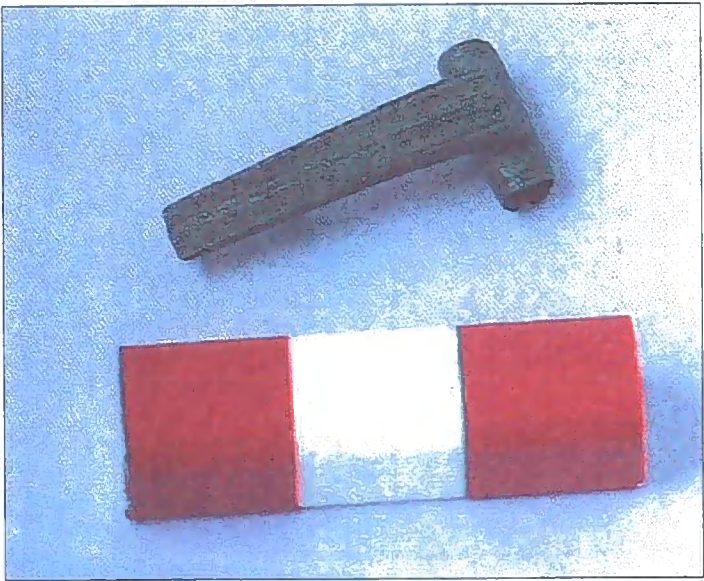


Photograph 20





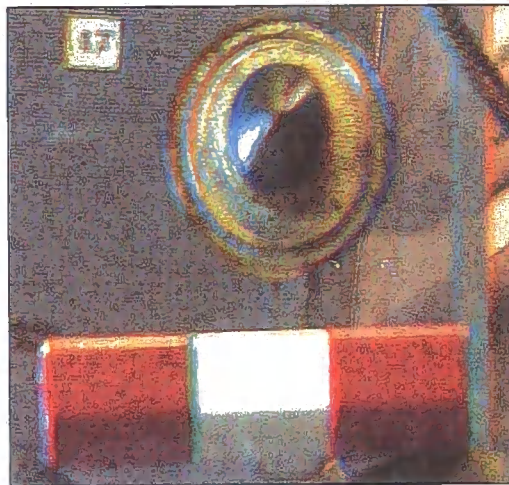
Photograph 21



Photograph 22



**Photograph 23**



**Photograph 24**

The quality of the photograph of the object is poor as it had been fastened to its display case by moulded plastic. It was, therefore, impossible to remove the find without damaging it in the process. The object was placed directly under a sloping pane of glass. The reflection from the glass is caused by light entering an adjacent window, which was too large and high up to be covered and, after many attempts struggling with the reflection, this picture was the best that could be obtained.



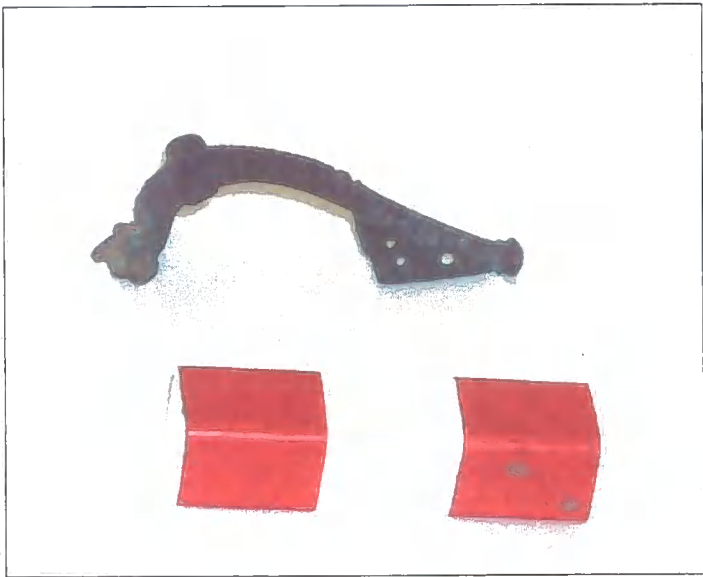
**Photograph 25**



**Photograph 26**

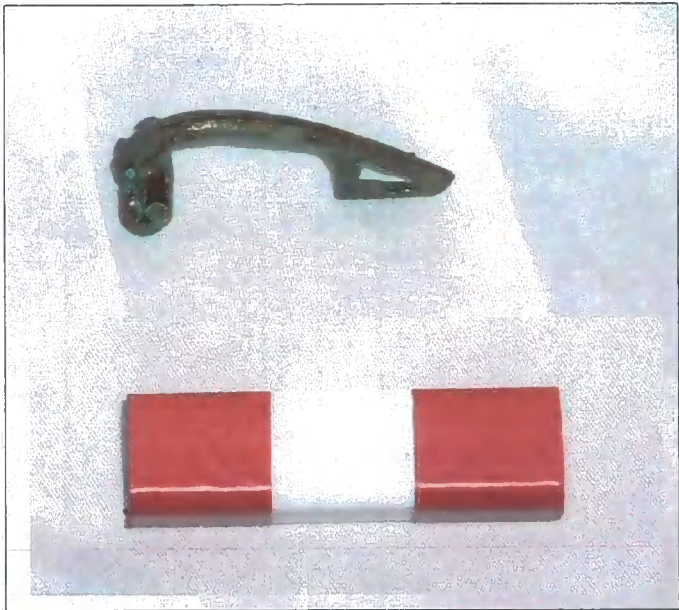


Photograph 27

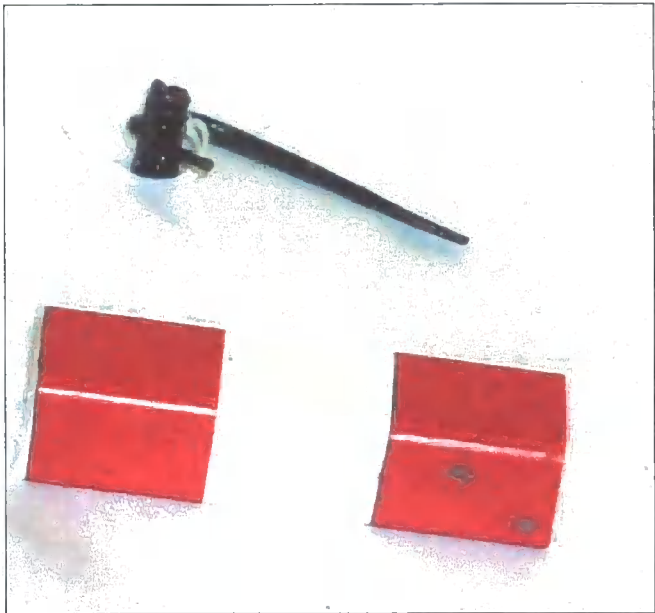


Photograph 28



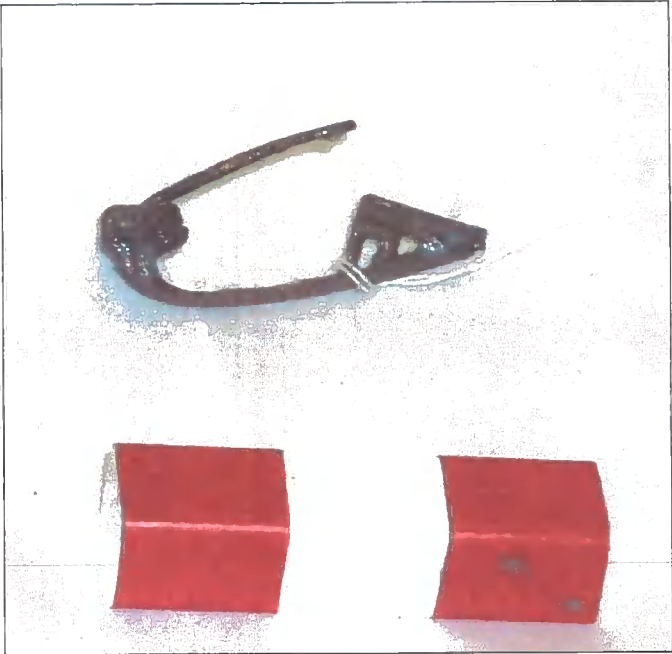


Photograph 29

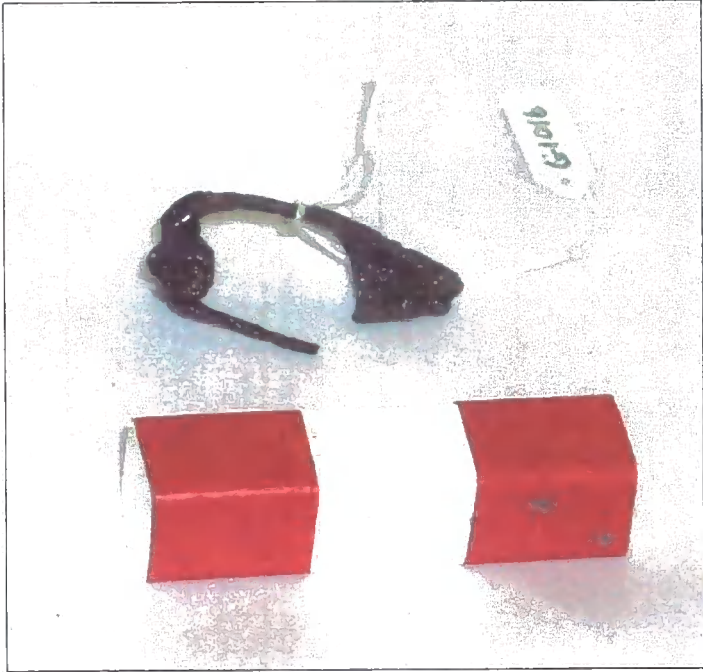


This object would not balance on its front and had to be photographed side on.

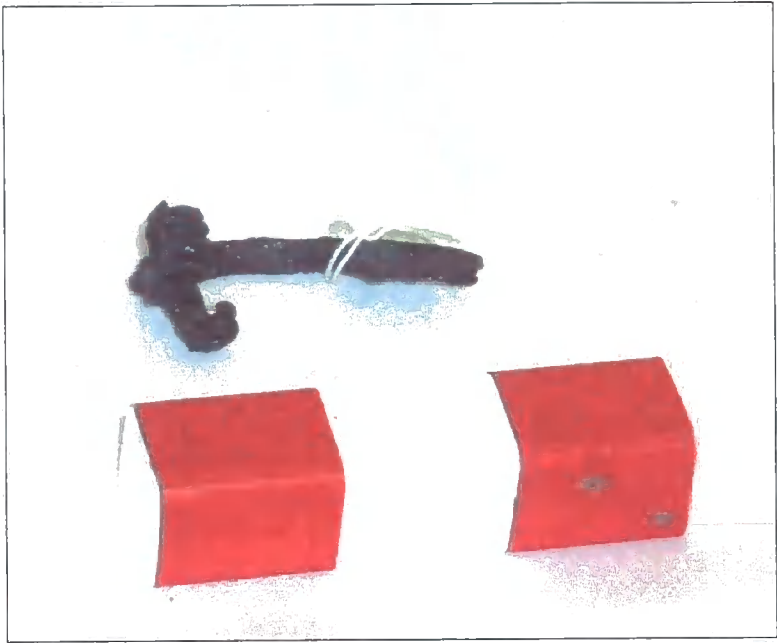
Photograph 30



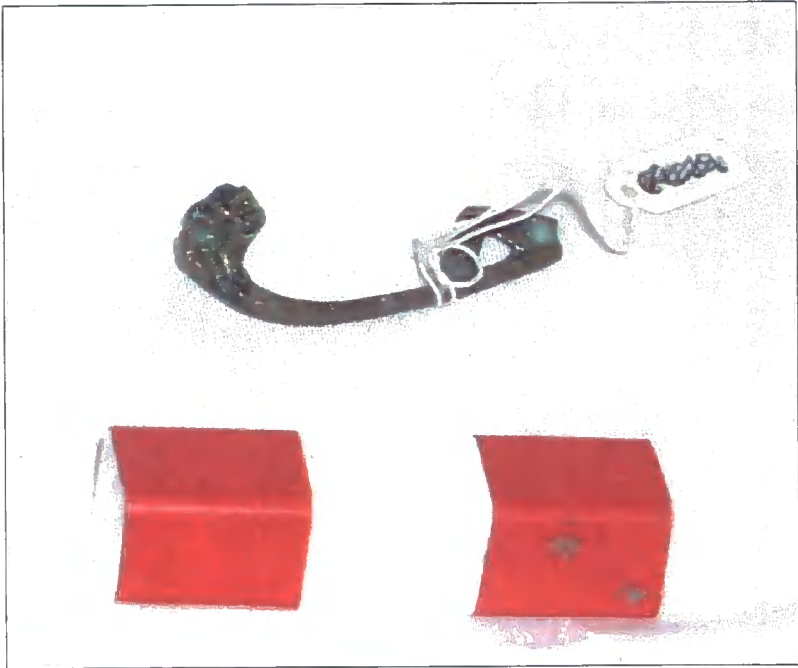
Photograph 31



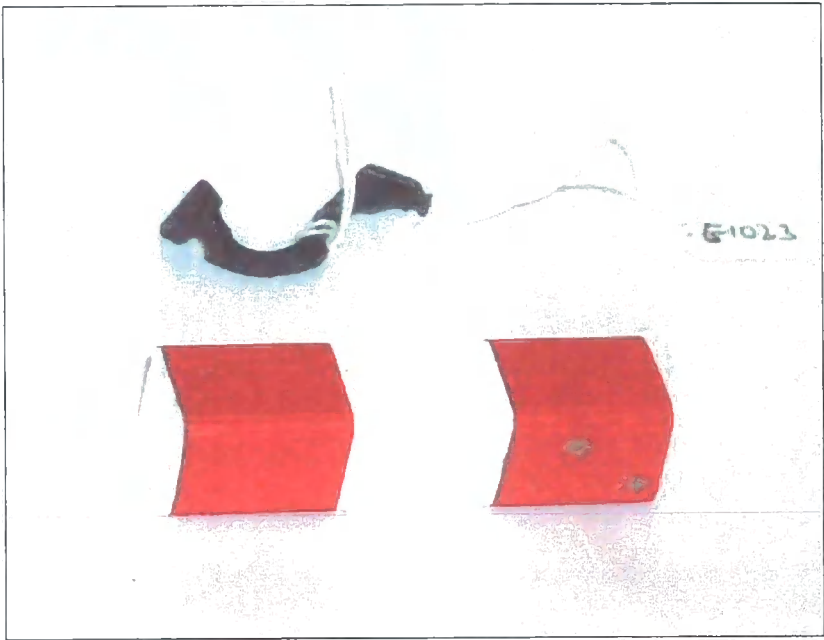
Photograph 32



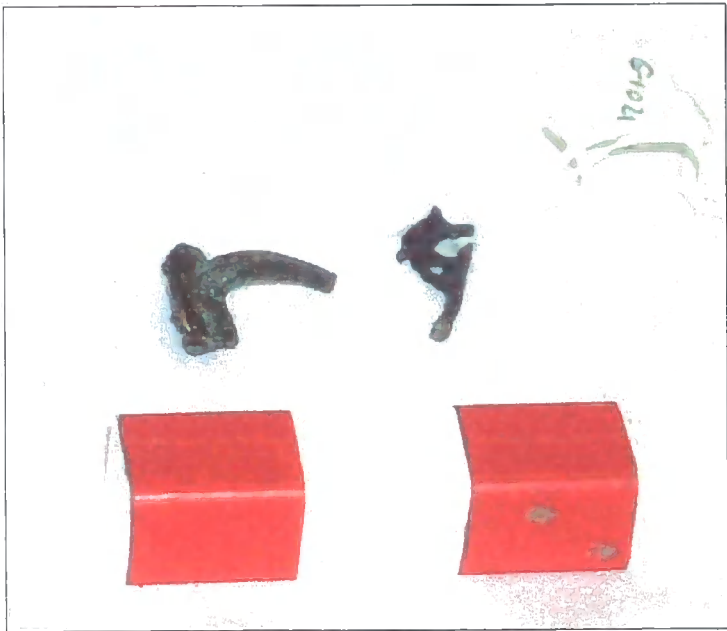
Photograph 33



Photograph 34

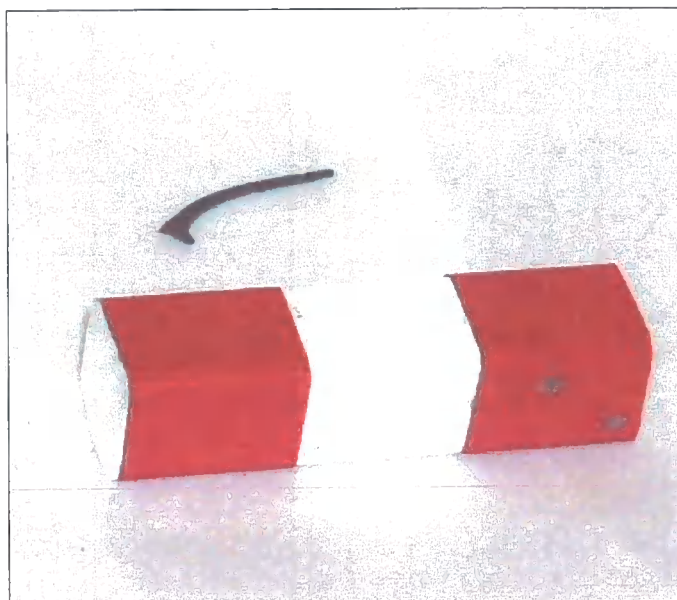


Photograph 35

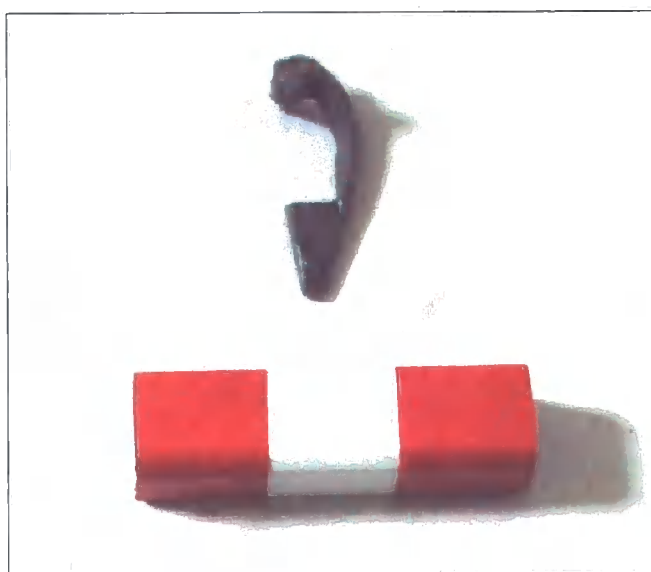


Photograph 36

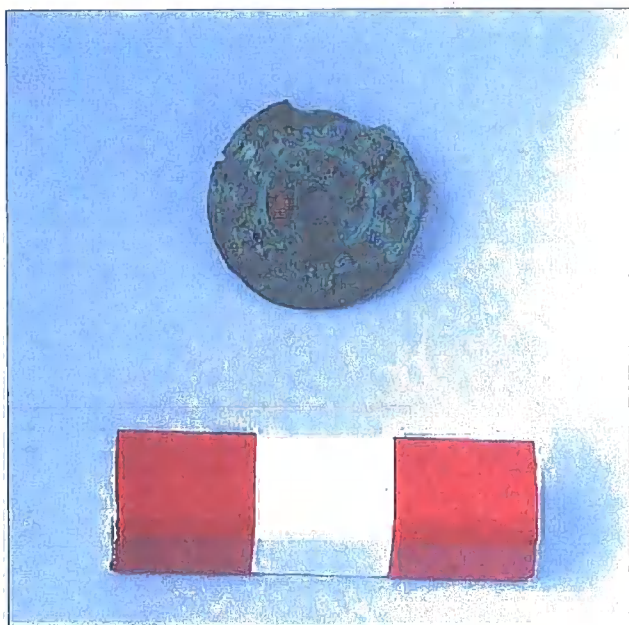




**Photograph 37**

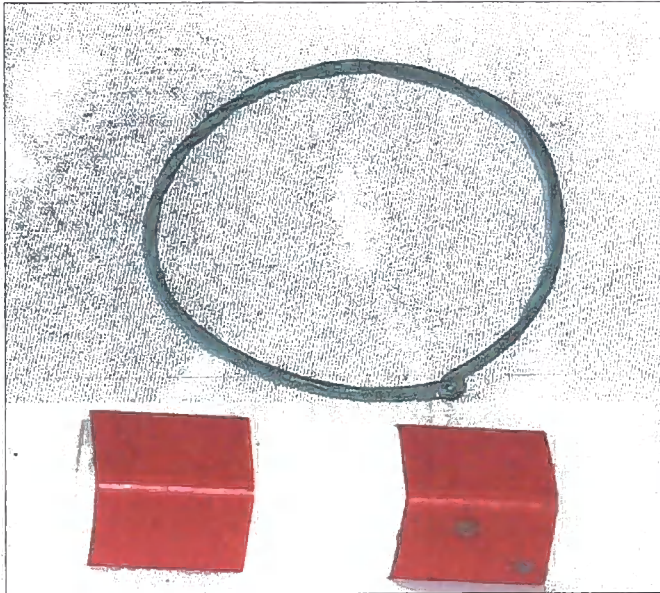


**Photograph 38**

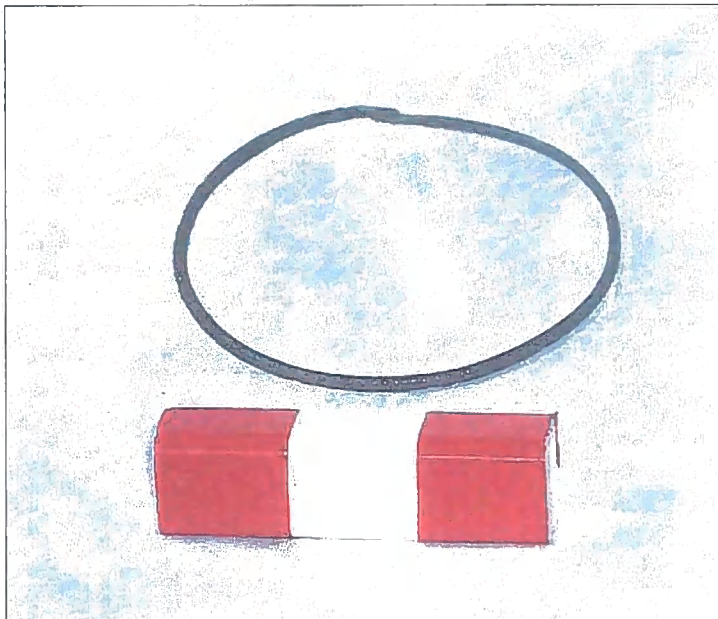


Photograph 39

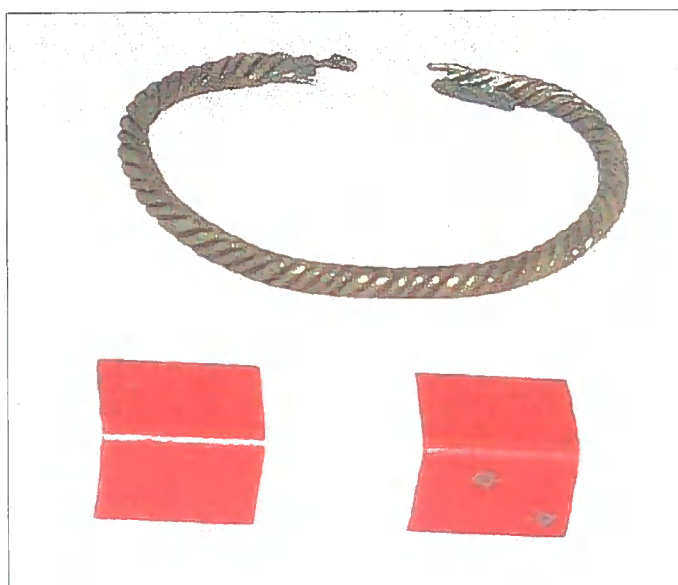
**Part ii: Bracelets.**



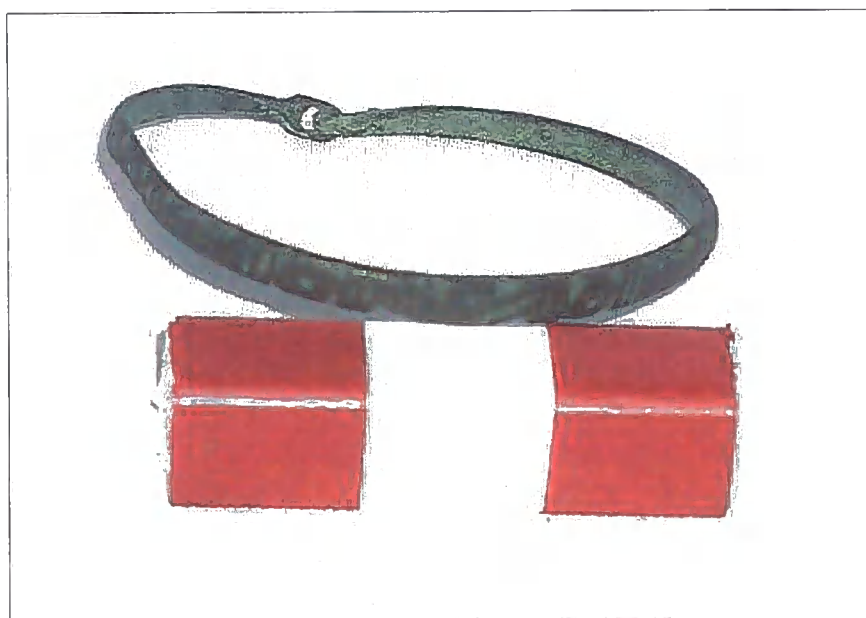
**Photograph 40**



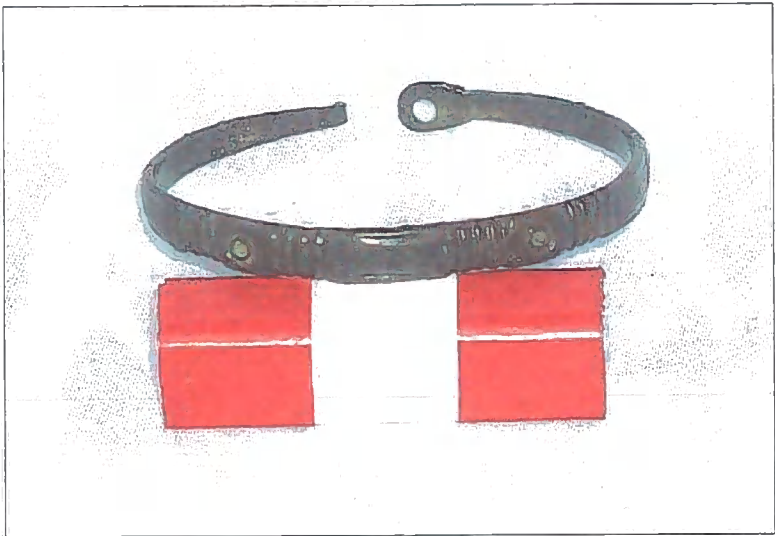
**Photograph 41**



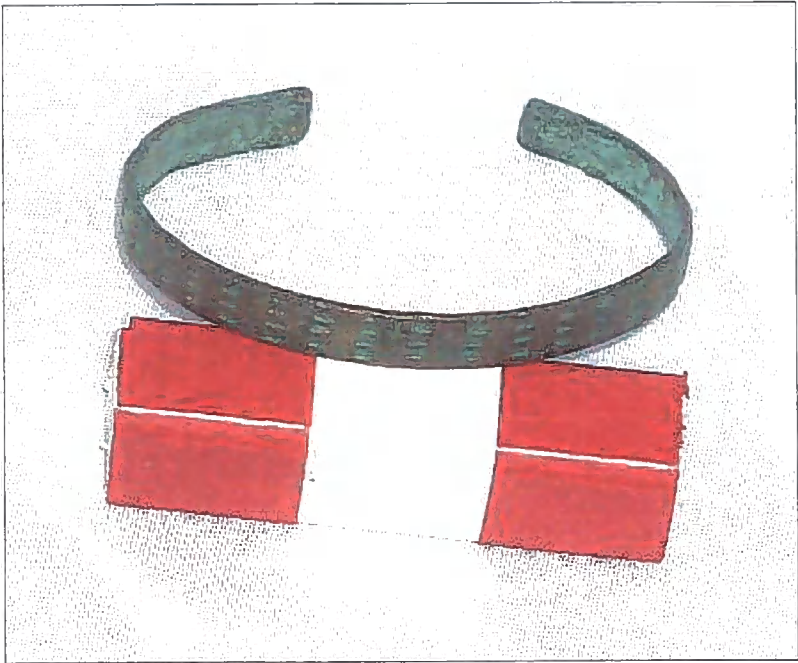
Photograph 42



Photograph 43



Photograph 44

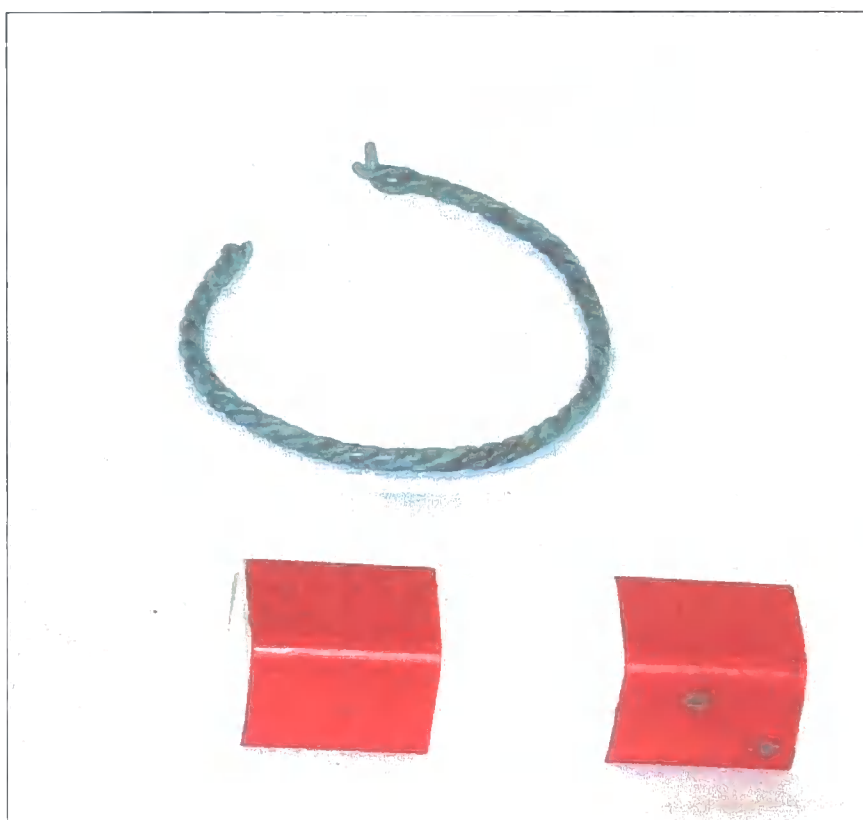


Photograph 45





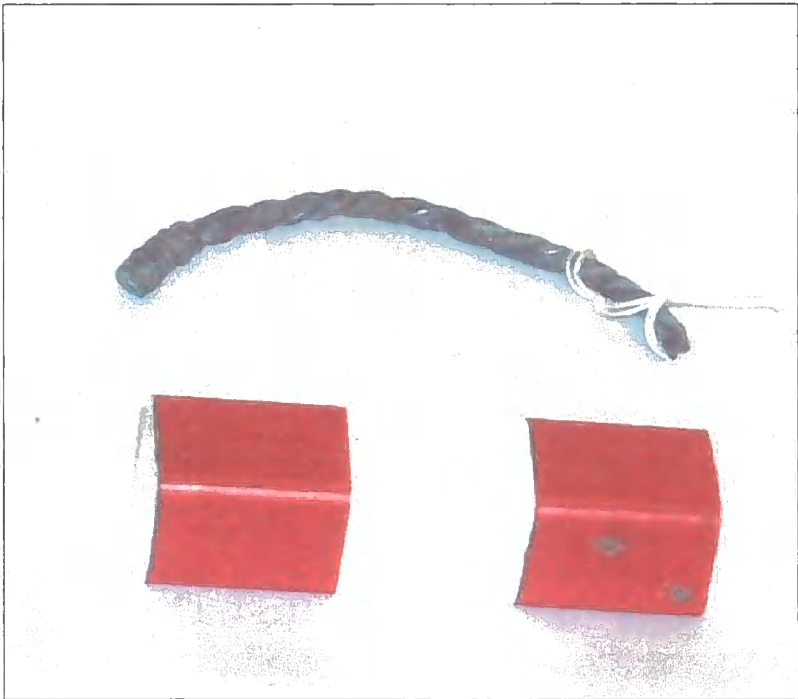
Photograph 46



Photograph 47

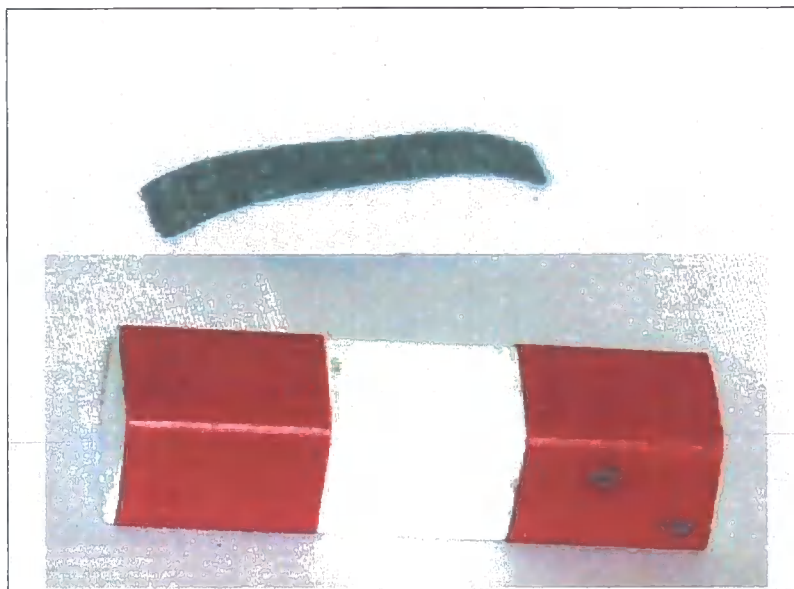


Photograph 48

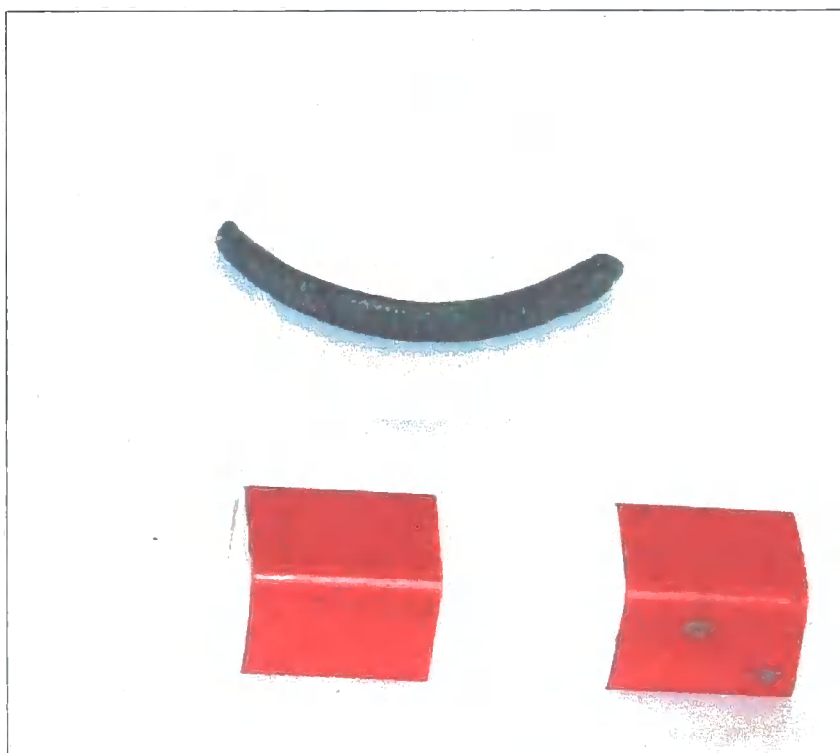


Photograph 49

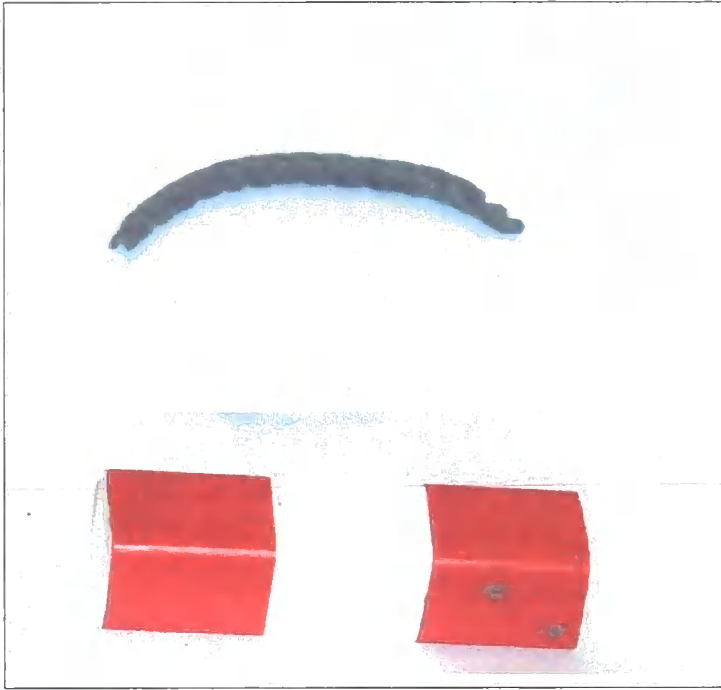




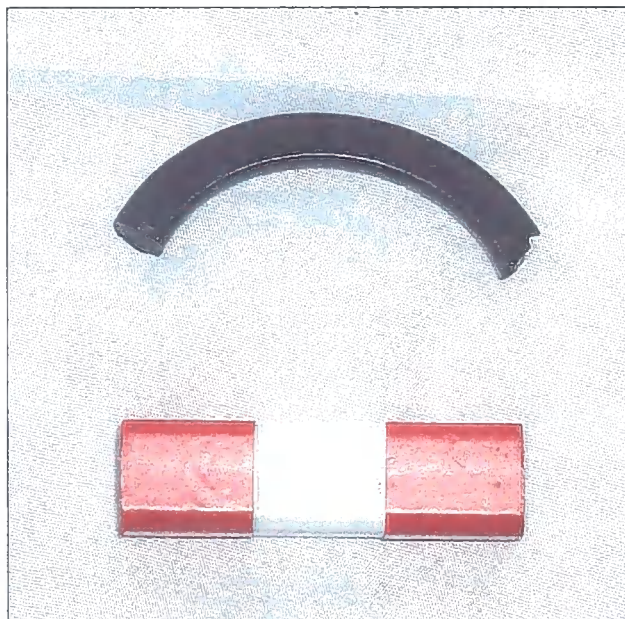
**Photograph 50**



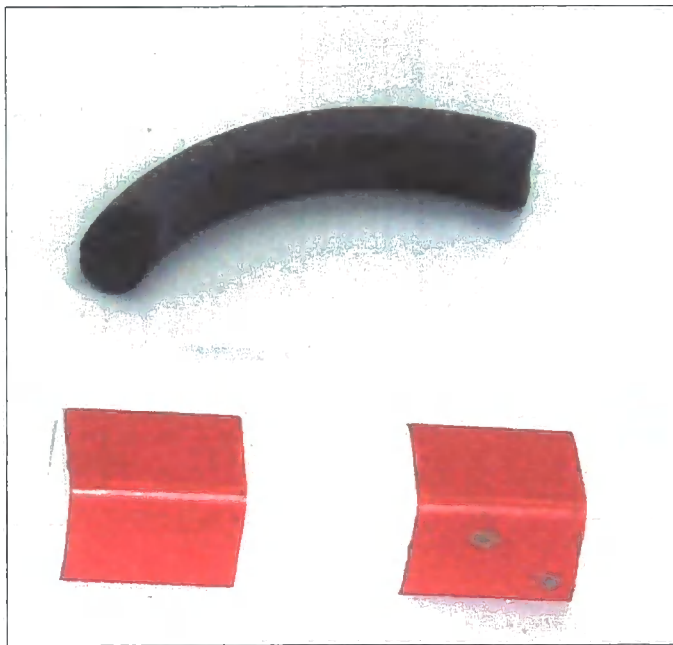
**Photograph 51**



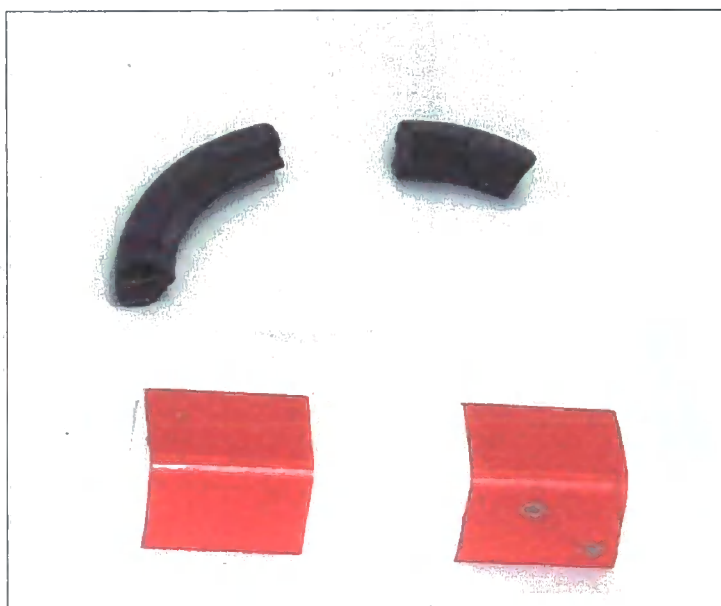
**Photograph 52**



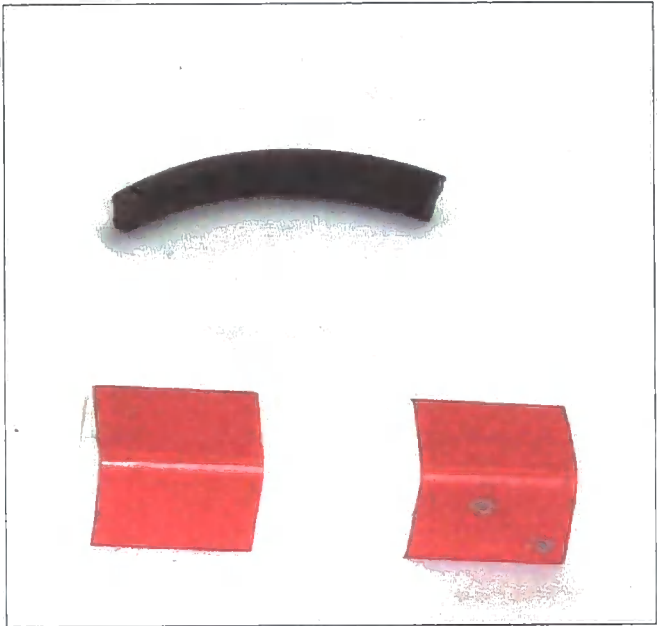
**Photograph 53**



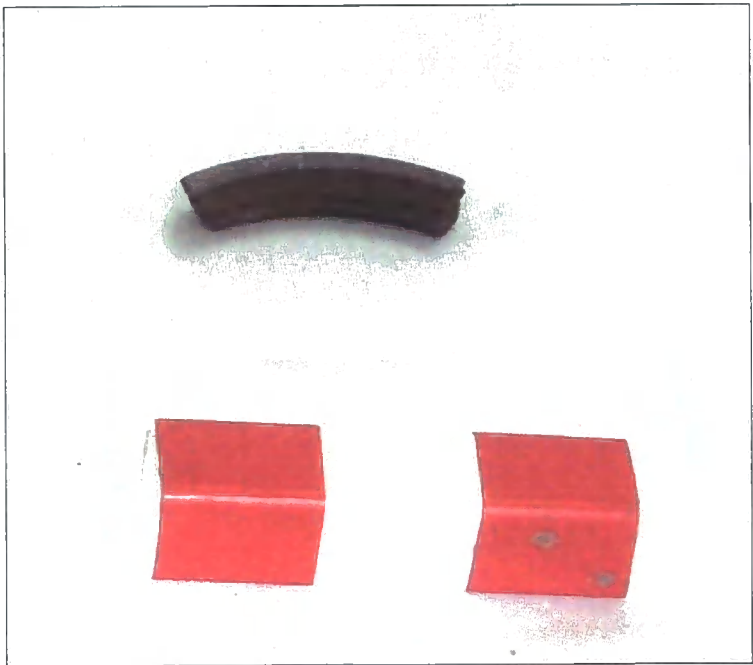
**Photograph 54**



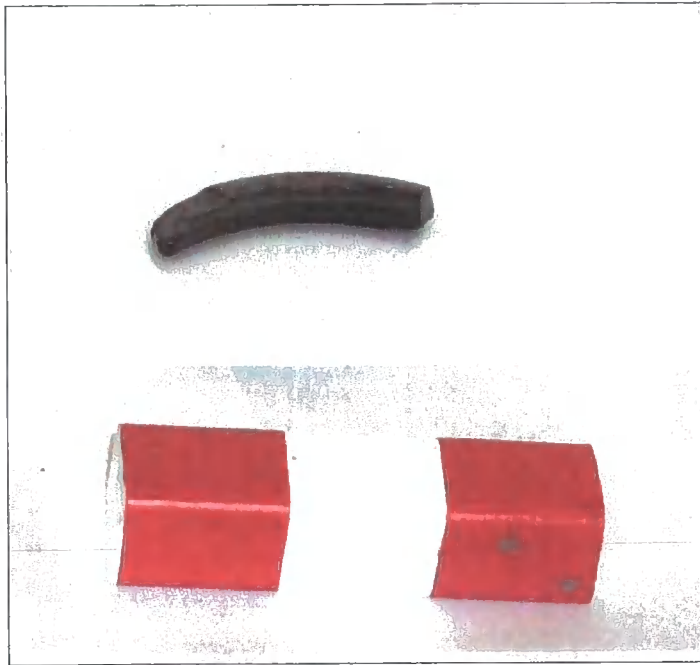
**Photograph 55**



Photograph 56



Photograph 57



**Photograph 58**

**Part iii: Pins.**



Photograph 59

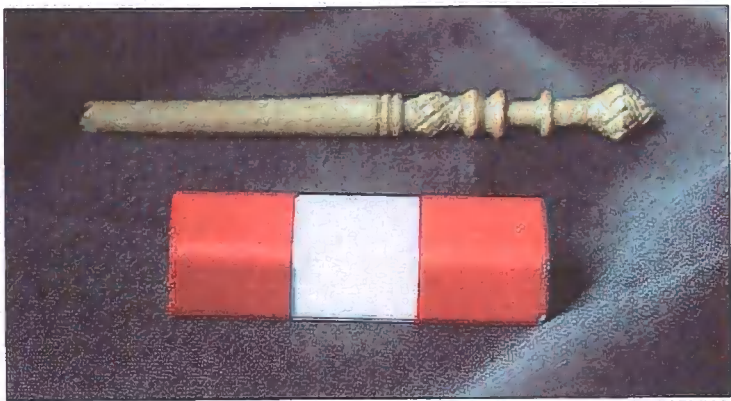


Photograph 60

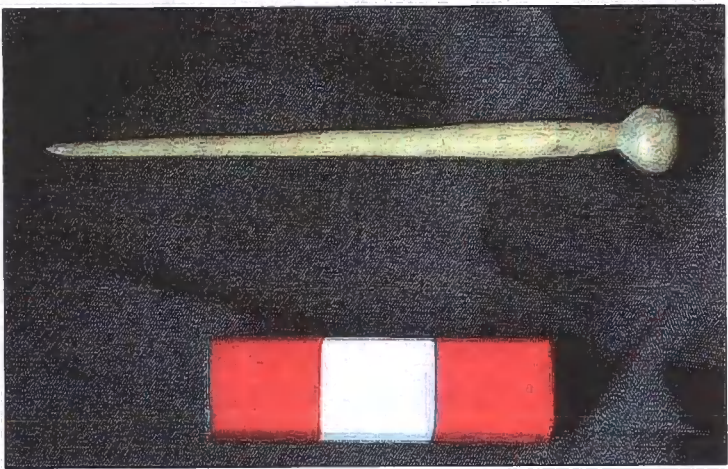


Photograph 61





Photograph 62



Photograph 63

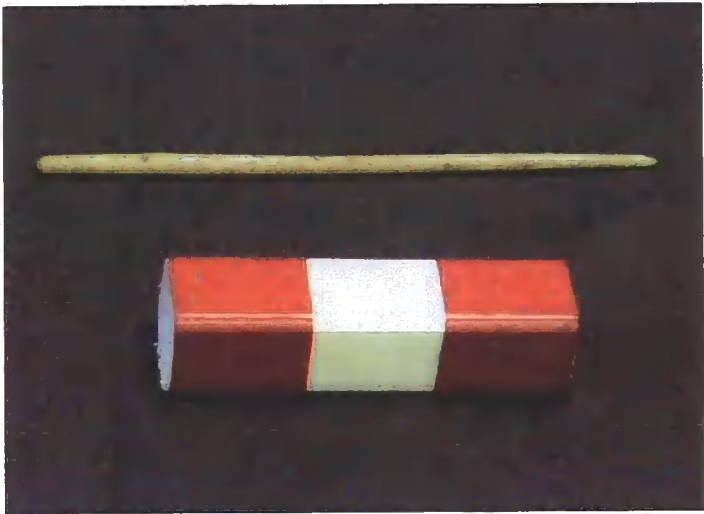


Photograph 64





Photograph 65



Photograph 66



Photograph 67



Photograph 68



Photograph 69



Photograph 70



Photograph 71



Photograph 72



Photograph 73



**Photograph 74**



**Photograph 75**



**Photograph 76**



Photograph 77



Photograph 78



Photograph 79





Photograph 80



Photograph 81



Photograph 82



Photograph 83



Photograph 84



Photograph 85



Photograph 86



Photograph 87



Photograph 88





Photograph 89



Photograph 90



Photograph 91



Photograph 92



Photograph 93



Photograph 94



Photograph 95



Photograph 96



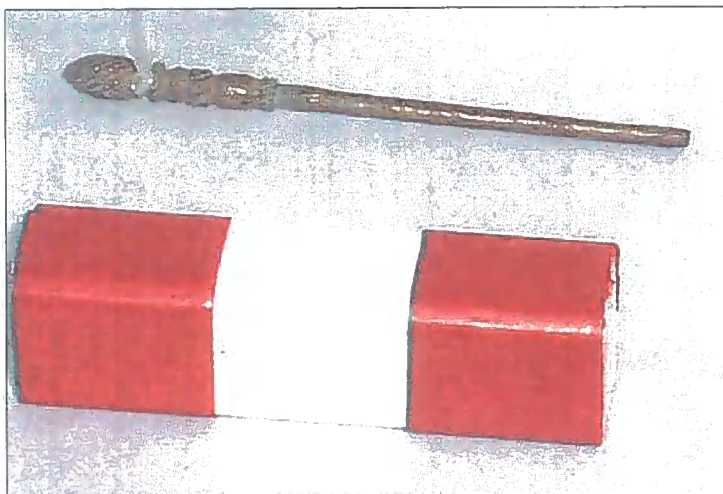
Photograph 97



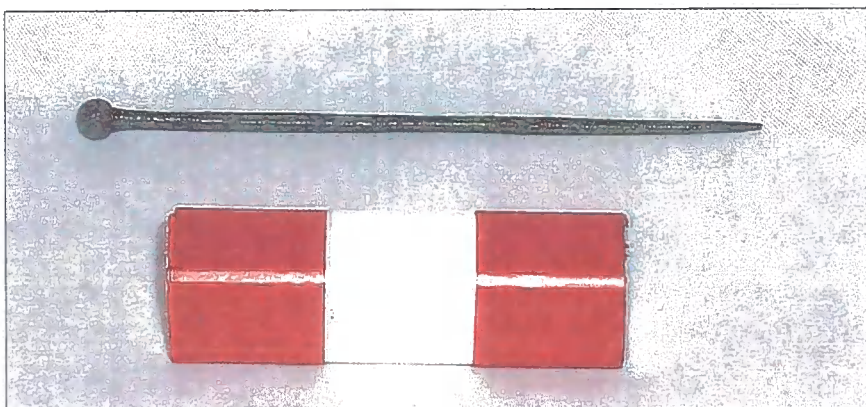
Photograph 98



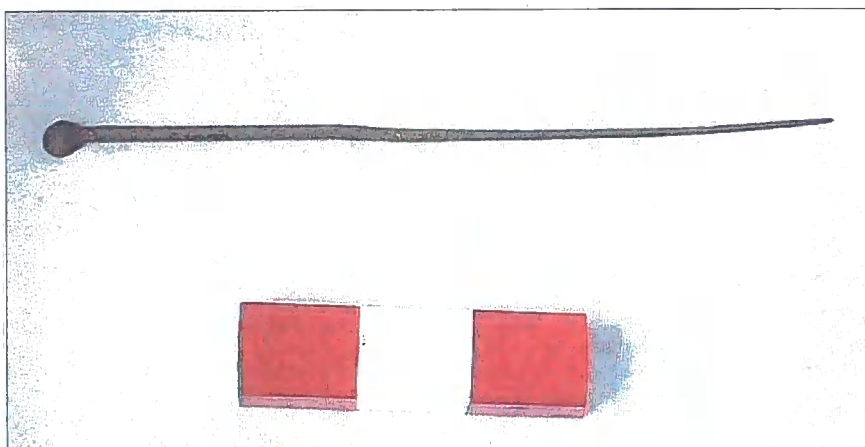
Photograph 99



**Photograph 100**

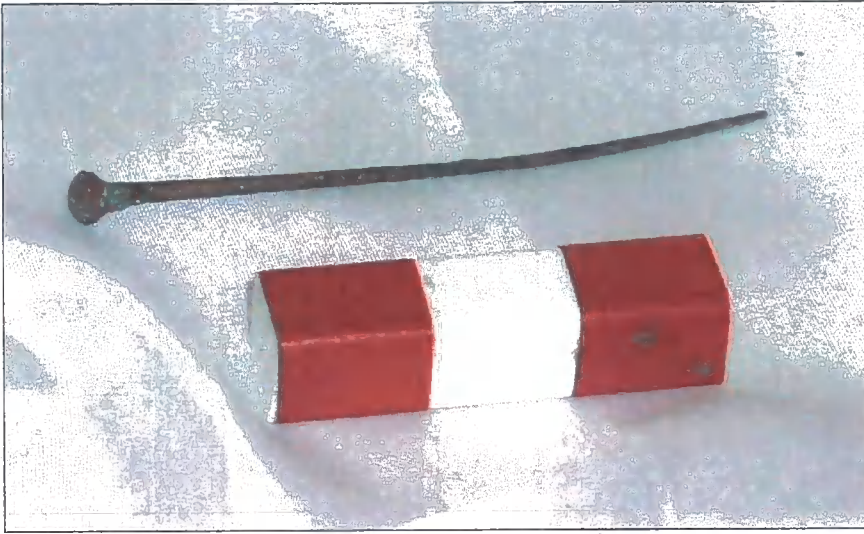


**Photograph 101**

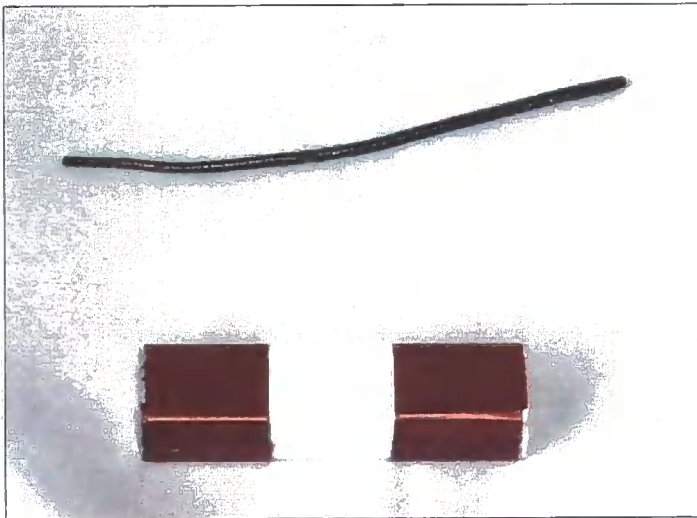


**Photograph 102**

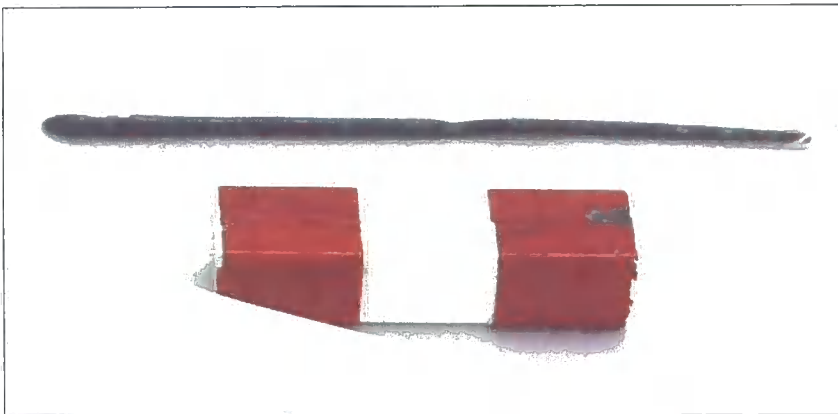




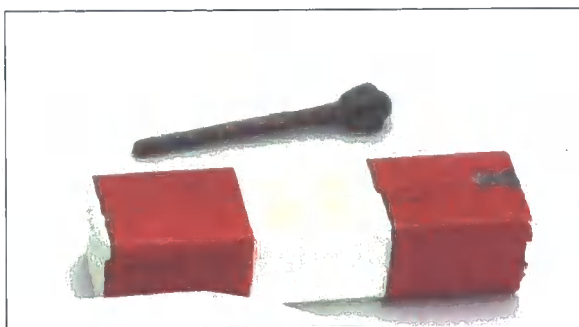
**Photograph 103**



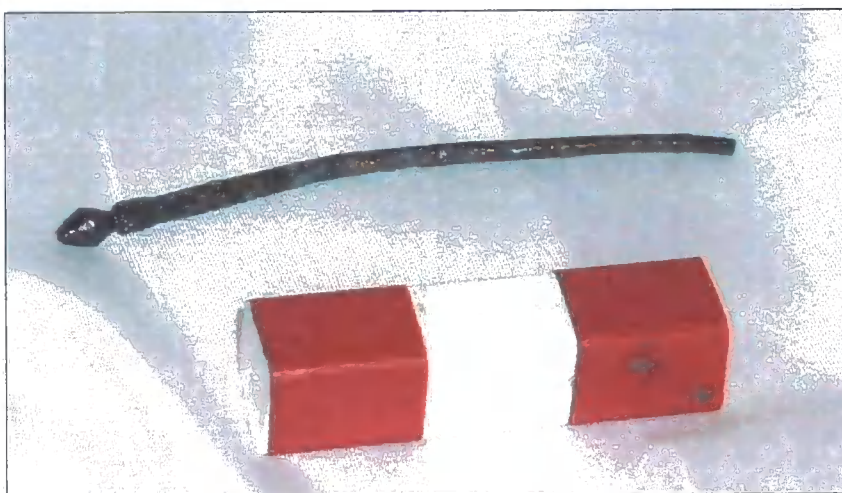
**Photograph 104**



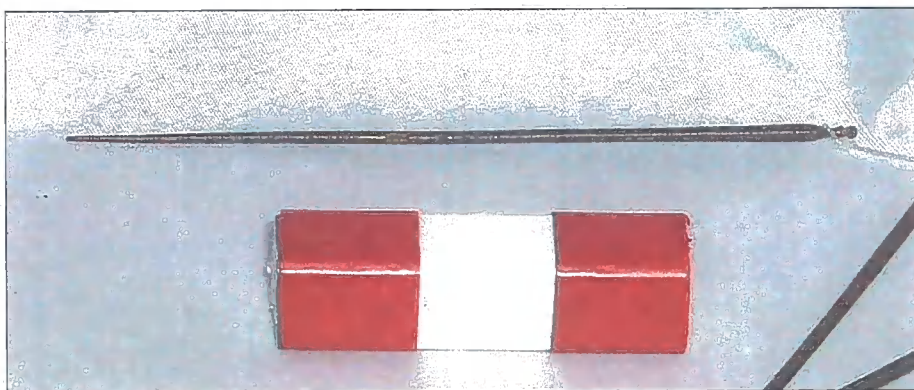
**Photograph 105**



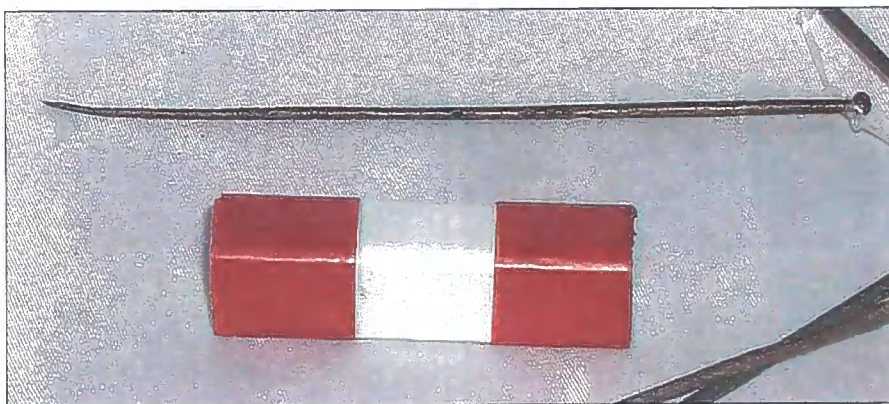
**Photograph 106**



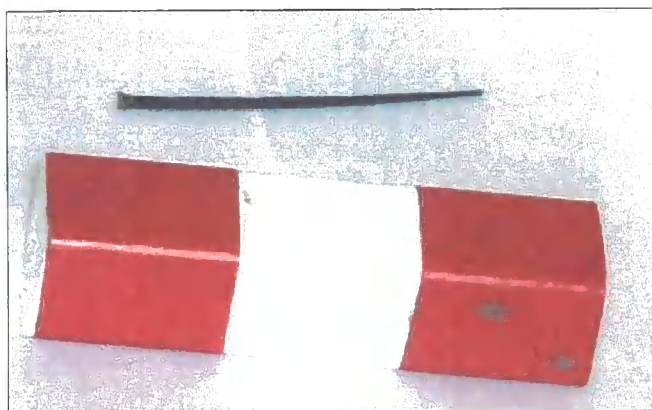
**Photograph 107**



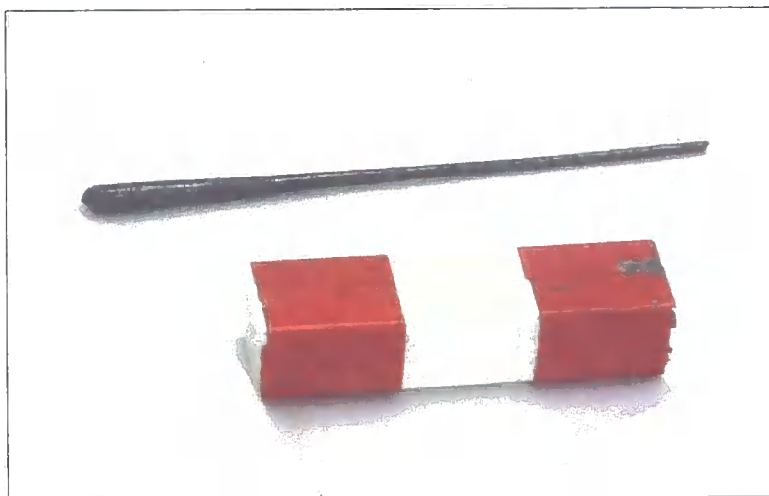
**Photograph 108**



**Photograph 109**

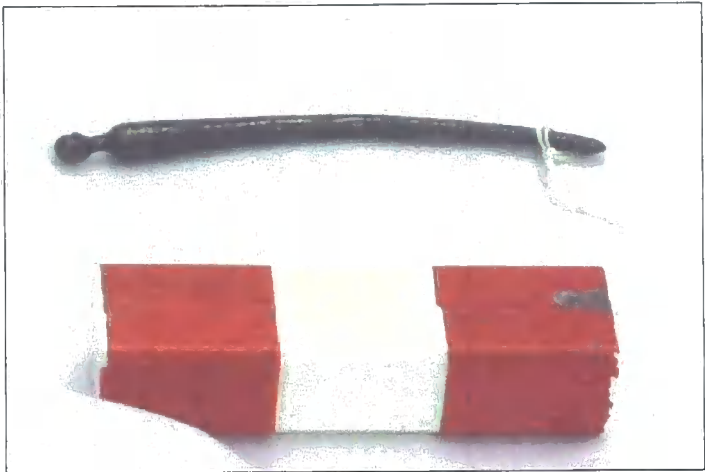


**Photograph 110**

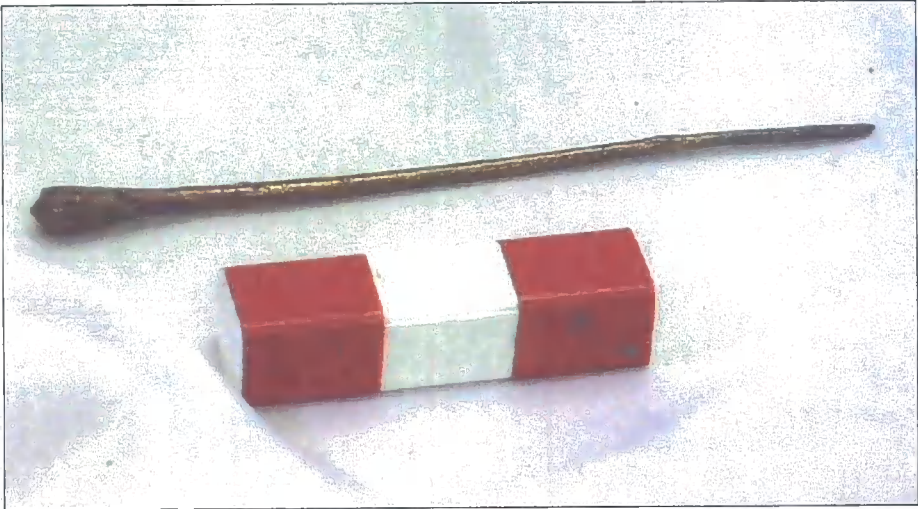


**Photograph 111**

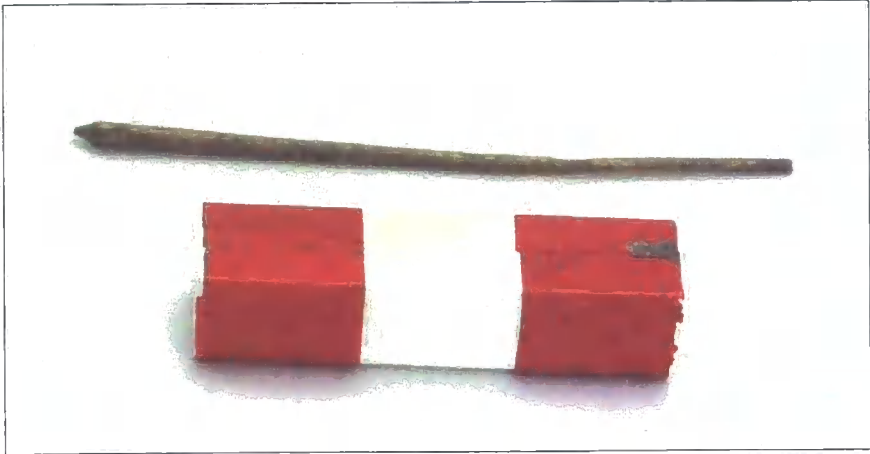




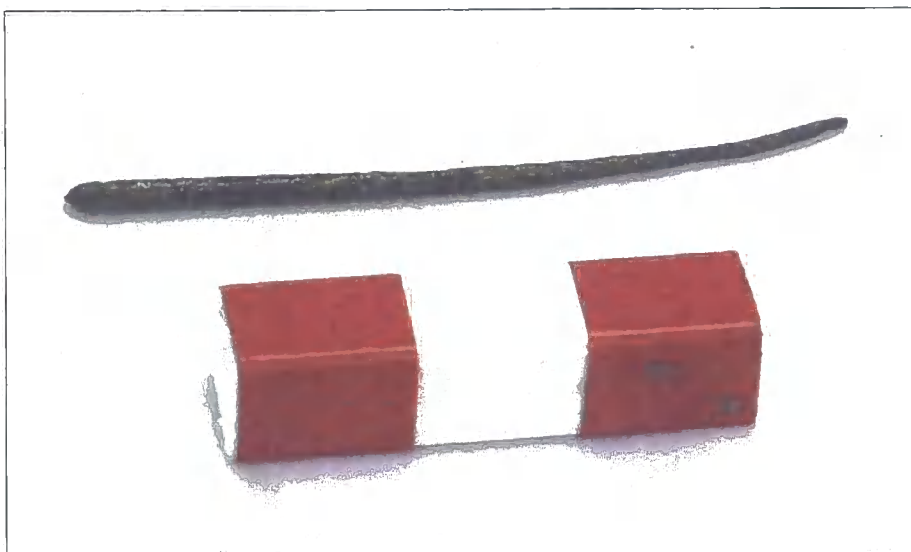
Photograph 112



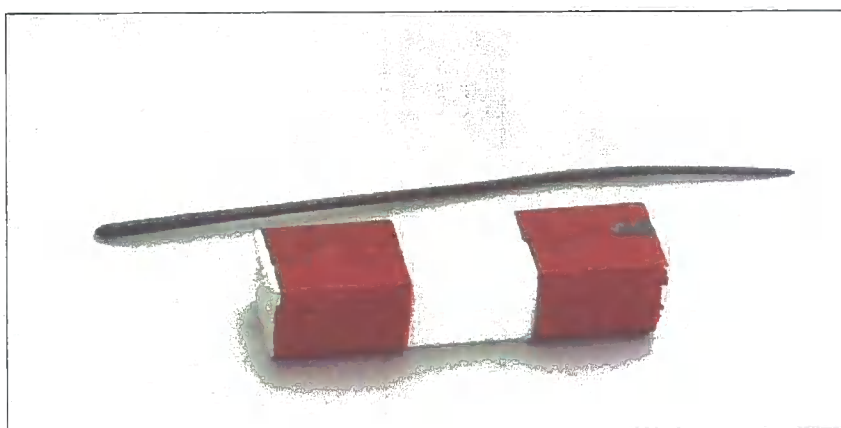
Photograph 113



Photograph 114



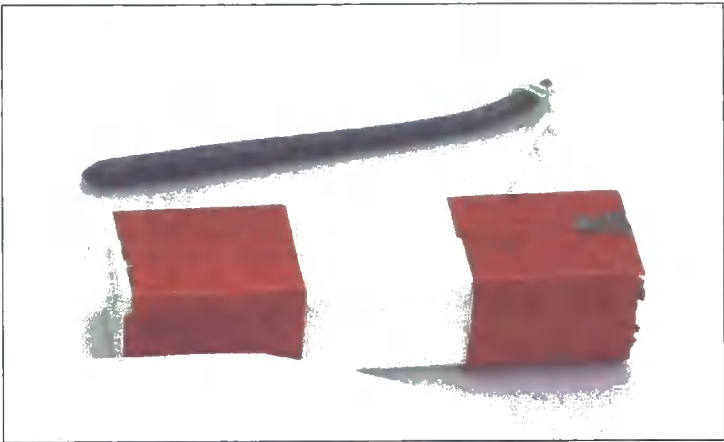
Photograph 115



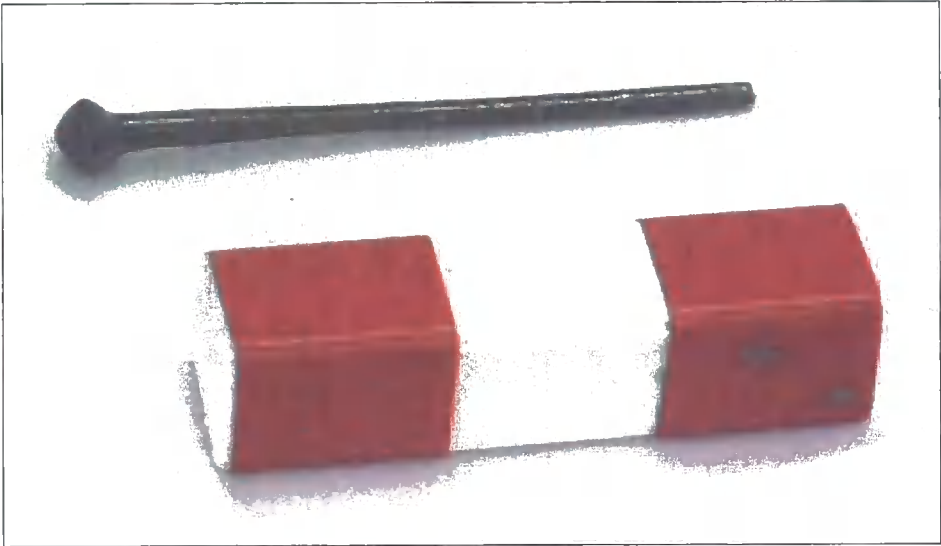
Photograph 116



Photograph 117



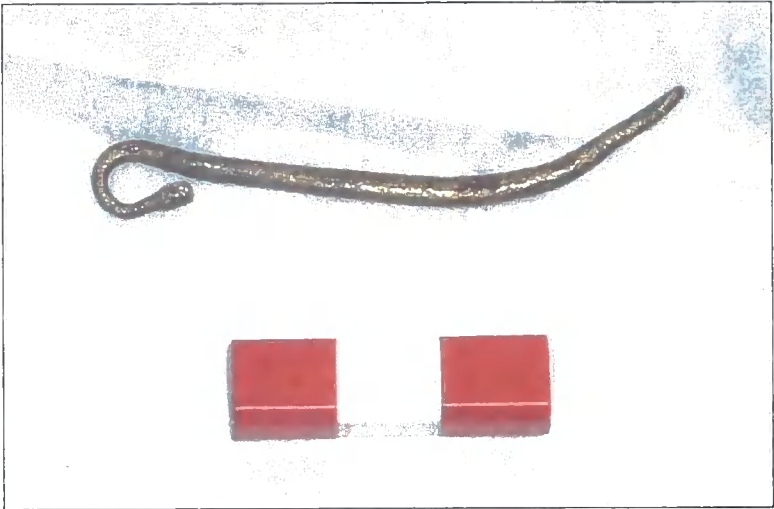
Photograph 118



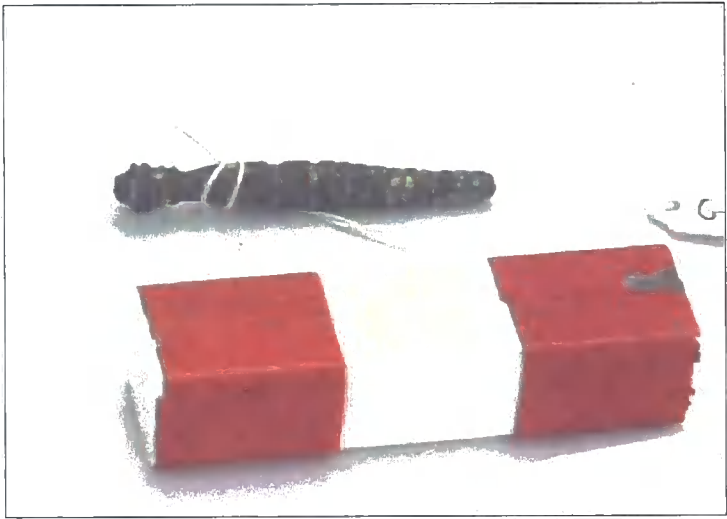
Photograph 119



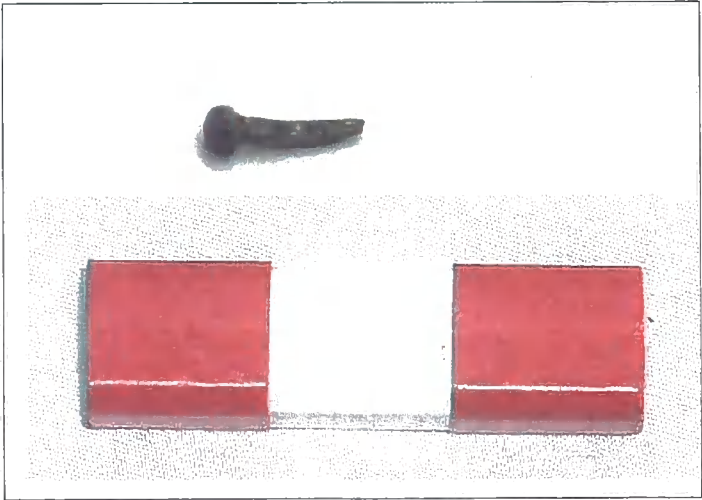
Photograph 120



Photograph 121



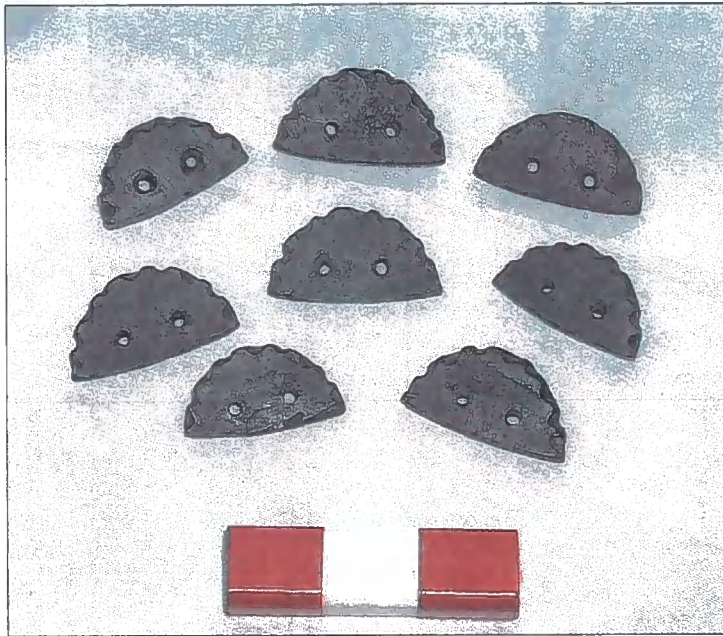
Photograph 122



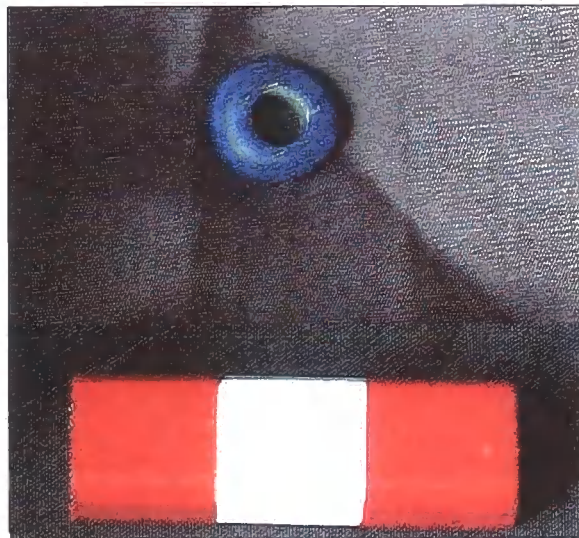
Photograph 123

**Part iv: Beads.**

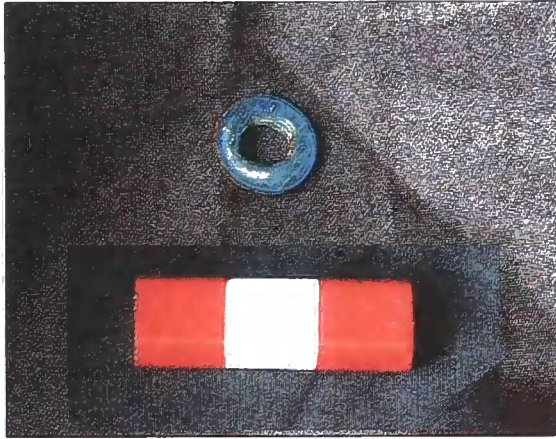




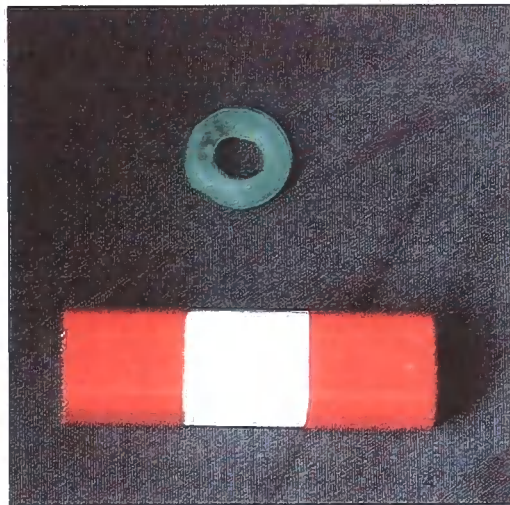
Photograph 124



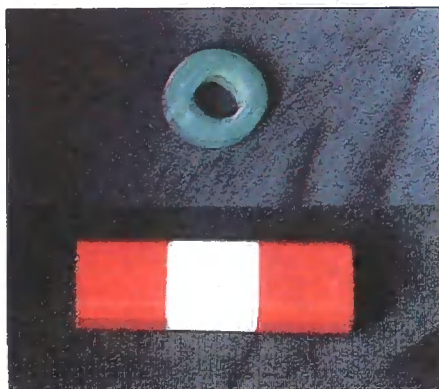
Photograph 125



**Photograph 126**

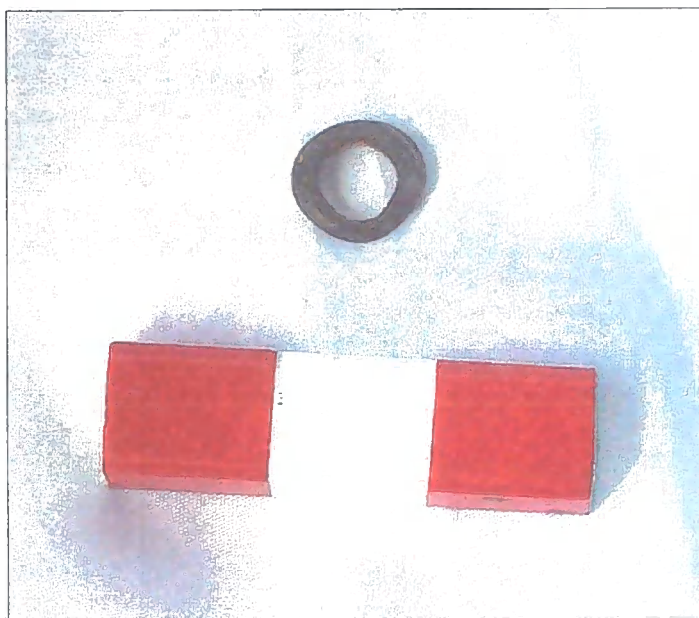


**Photograph 127**



**Photograph 128**

The object appears blurred because the glass is translucent and the colours within it are reflected back in the flash from the camera.



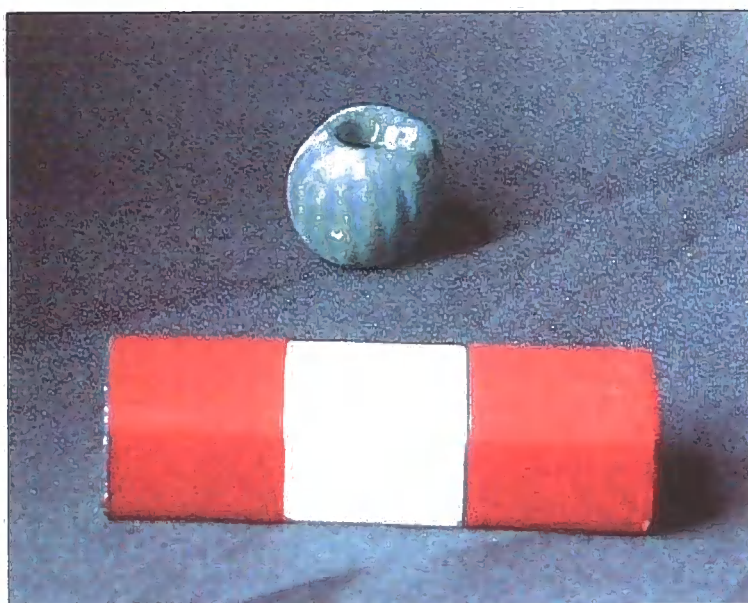
**Photograph 129**





**Photograph 130**

This object could not be removed from the display case, as it had been attached to it by a piece of moulded plastic.



**Photograph 131**



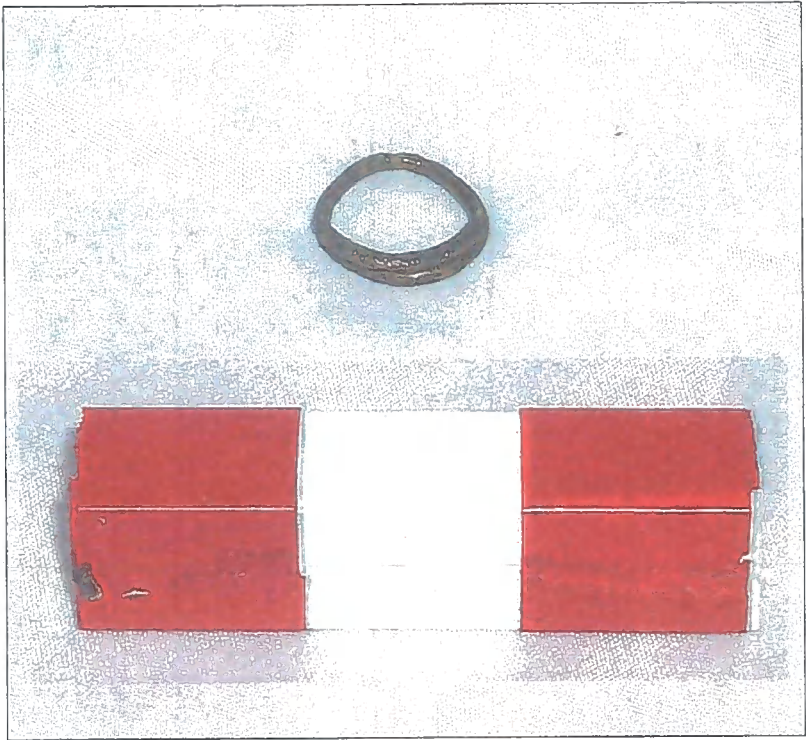
**Photograph 132**

These beads had been fastened together using a piece of wire and could not be separated.

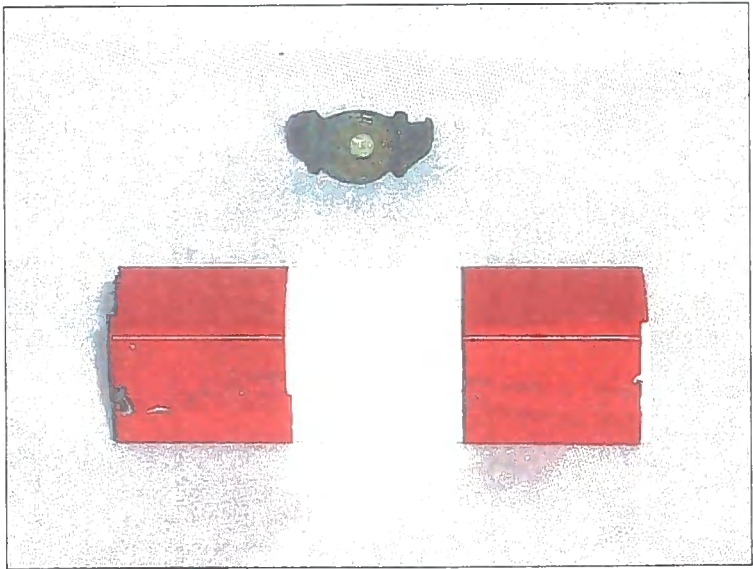


**Photograph 133**

**Part v: Rings.**

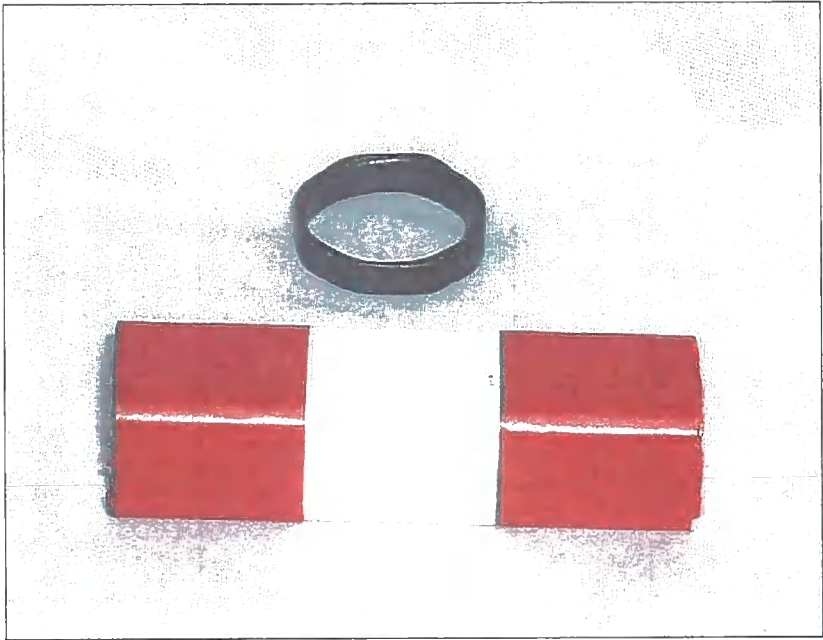


Photograph 134

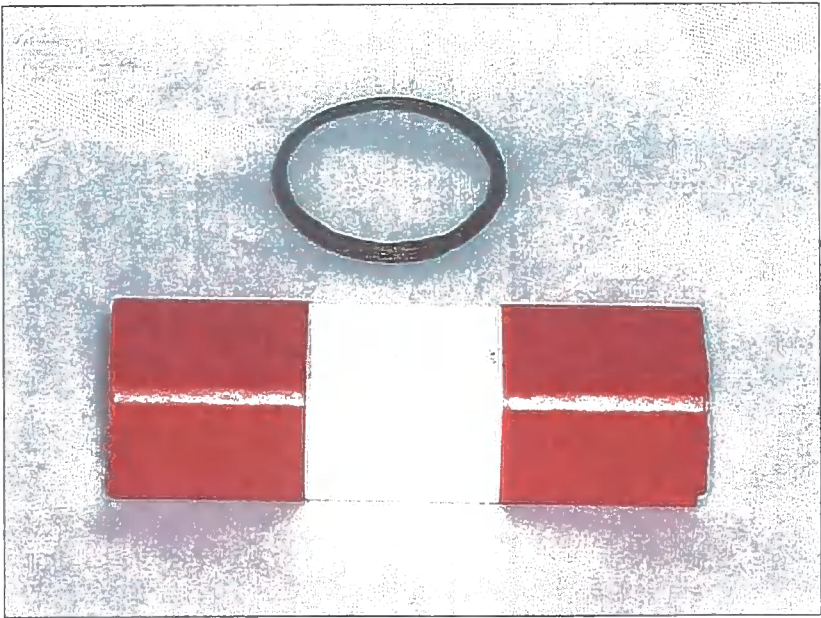


Photograph 135

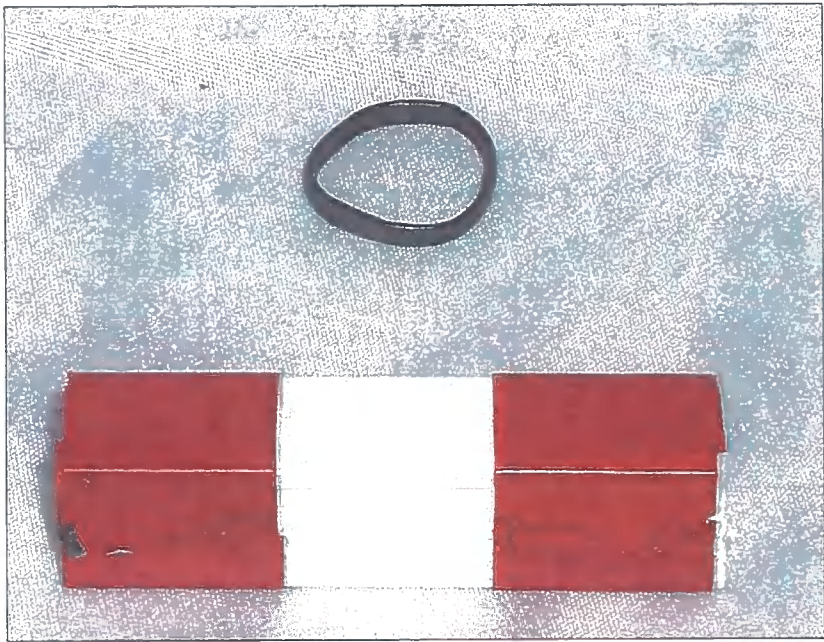




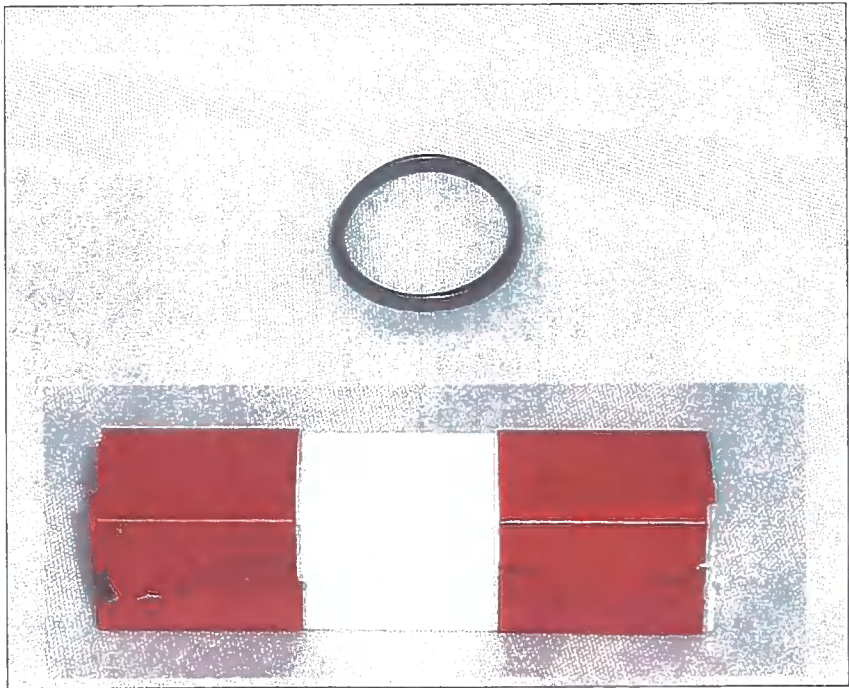
Photograph 136



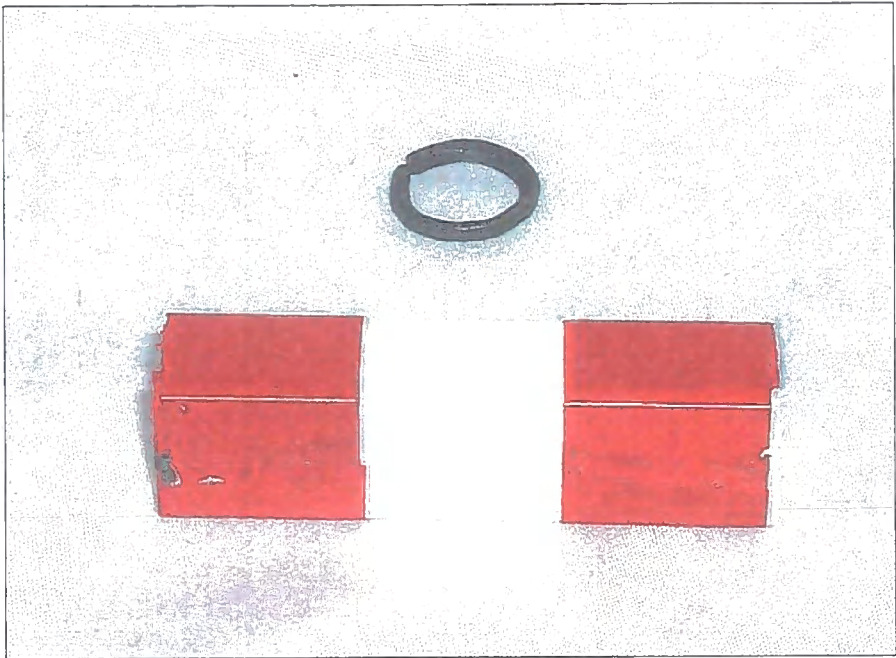
Photograph 137



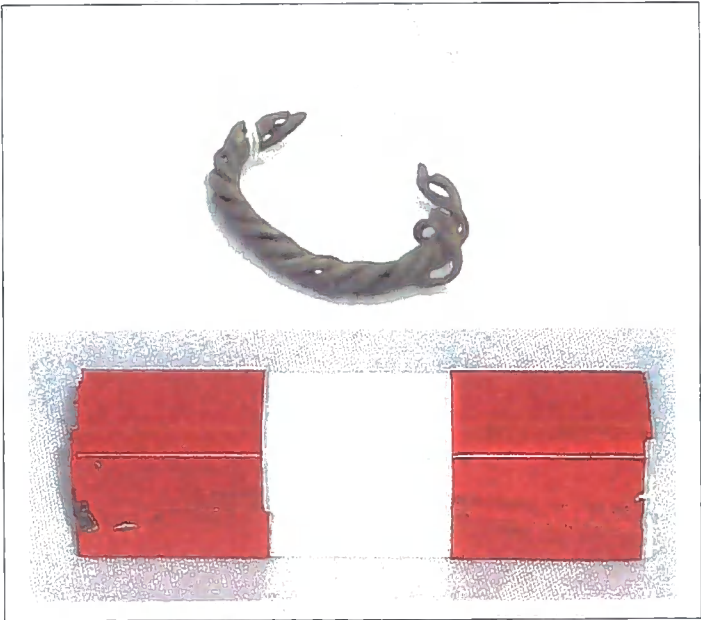
Photograph 138



Photograph 139

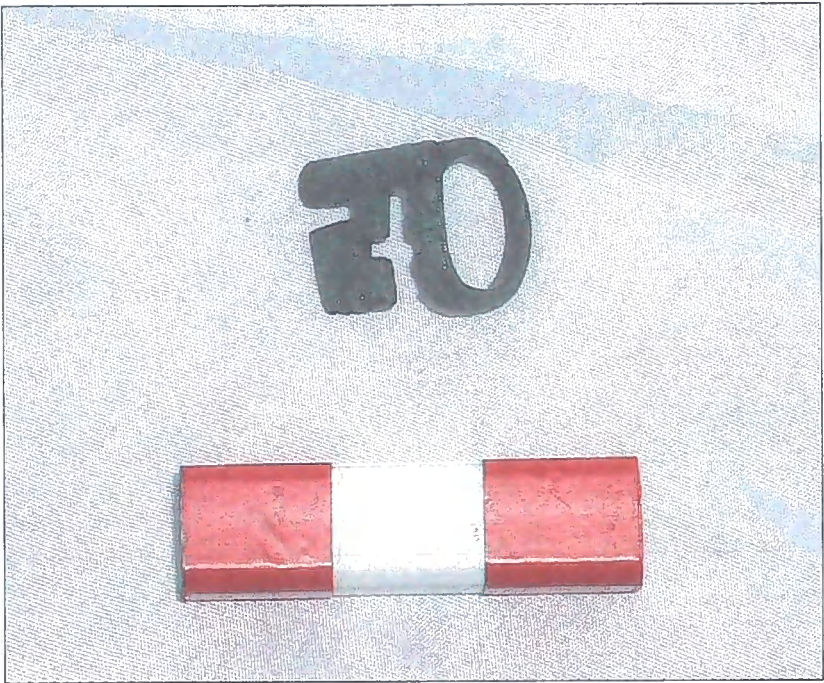


Photograph 140

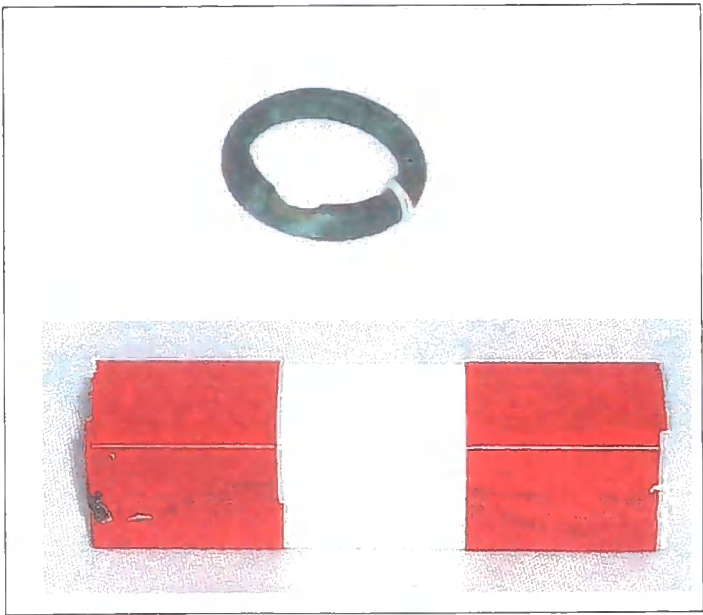


Photograph 141



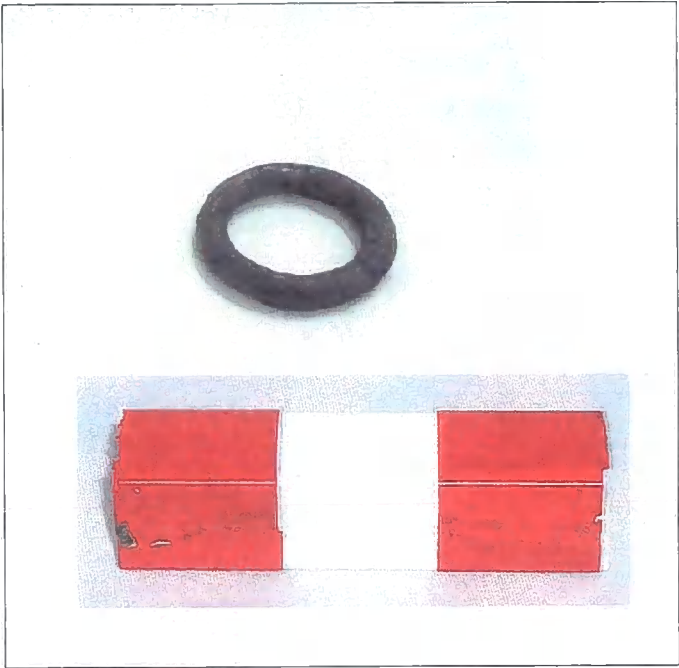


Photograph 142

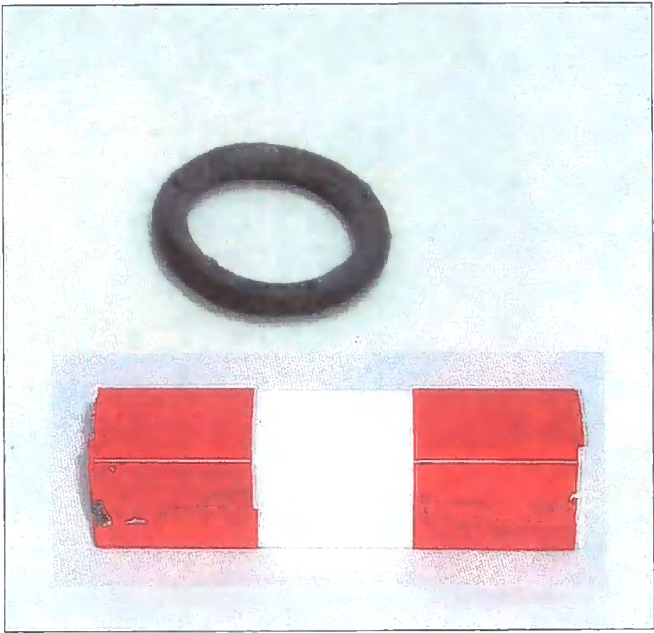


Photograph 143

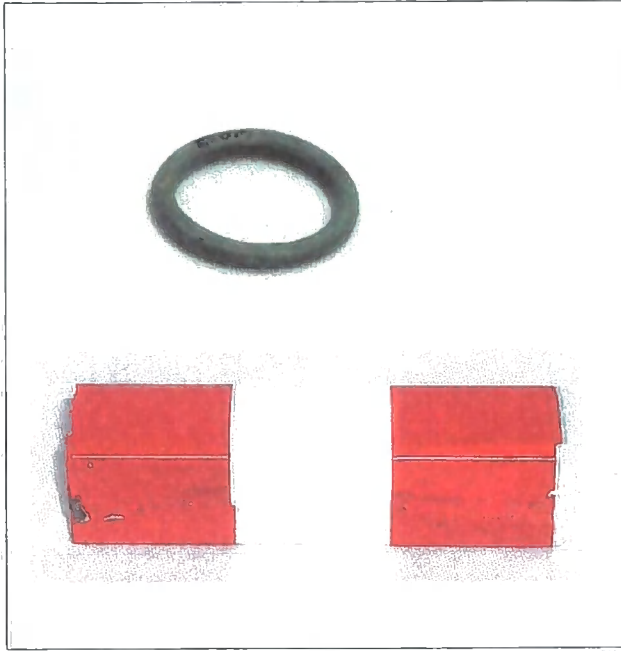




Photograph 144

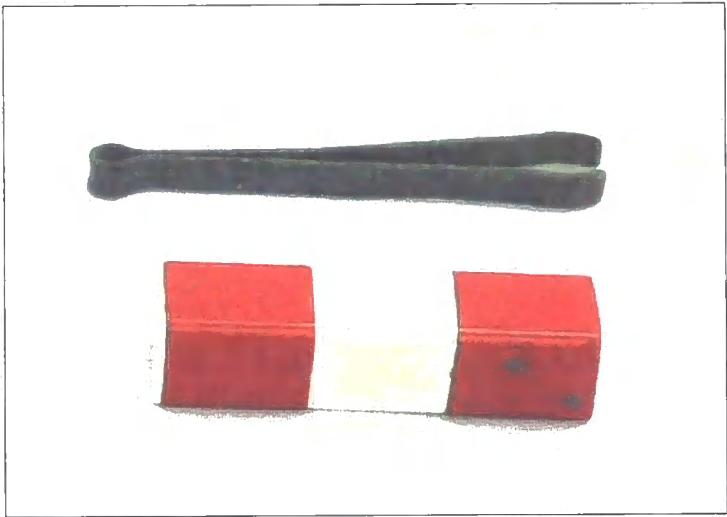


Photograph 145

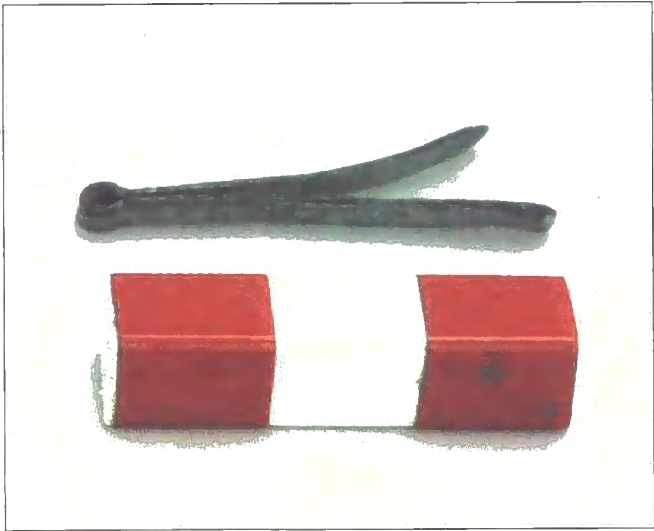


**Photograph 146**

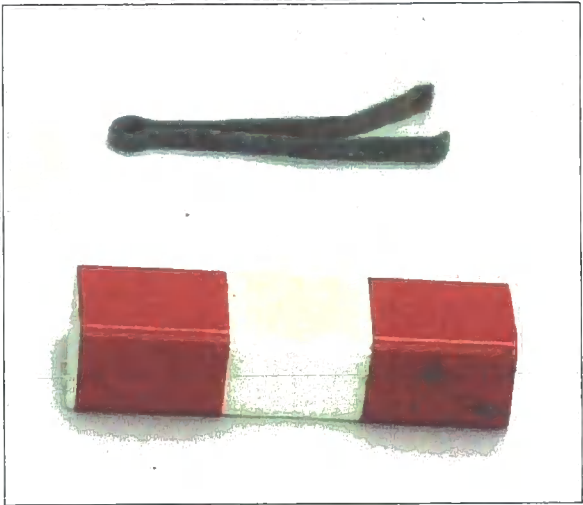
**Part vi: Tweezers.**



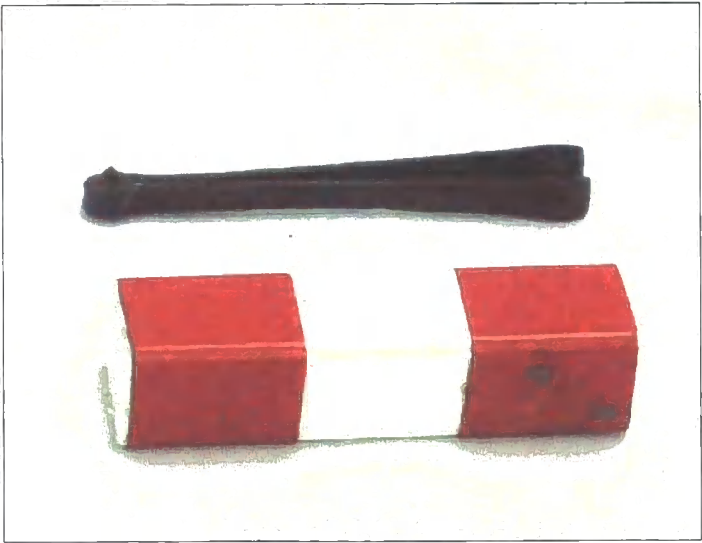
Photograph 147



Photograph 148

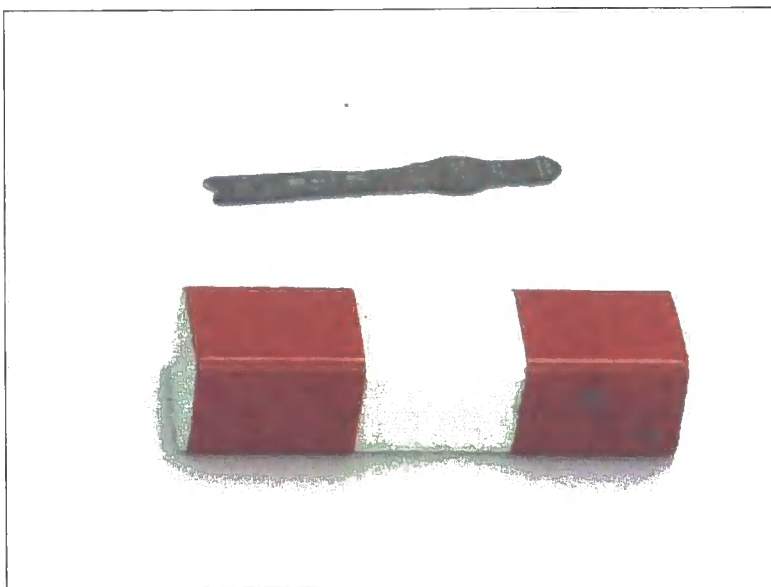


Photograph 149



Photograph 150

**Part vii: Nail cleaners.**



**Photograph 151**

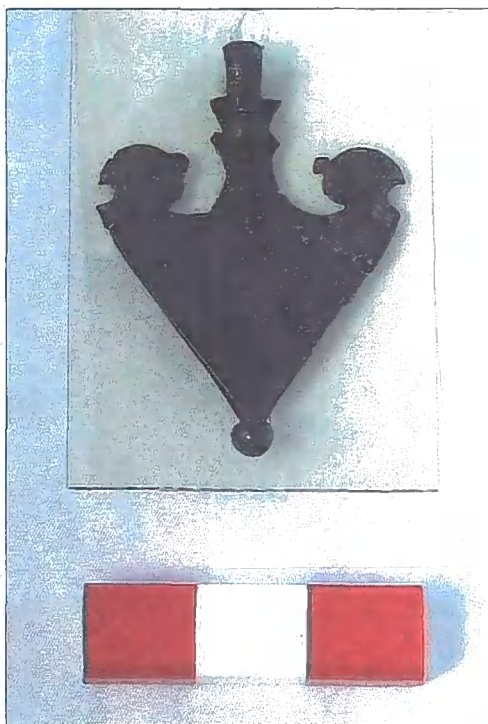
**Part viii: Comb.**





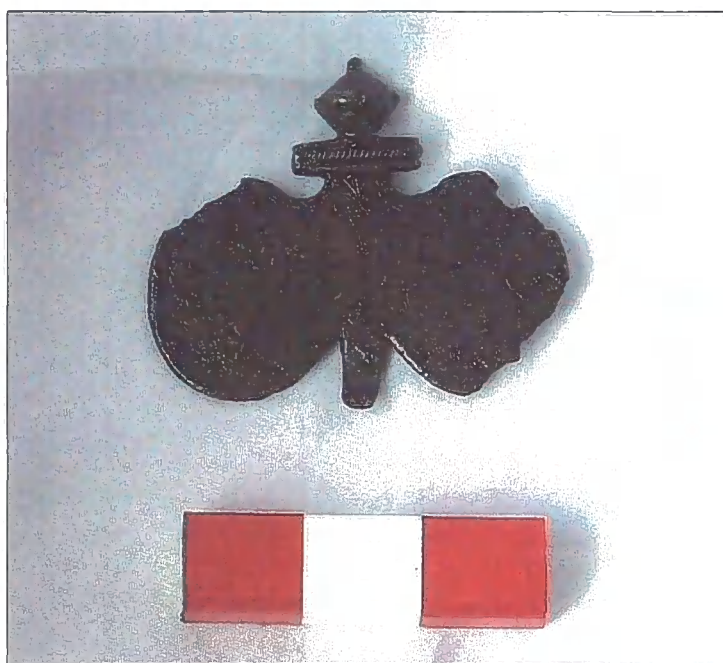
**Photograph 152**

**Part ix: Pendants.**



**Photograph 153**

The object was sealed in plastic and this was tightly wrapped around it and could not be removed.



**Photograph 154**

**Part x: Necklaces**



**Photograph 155**

A single object that was identical to this image (Penn, 1960; pl III B) was identified from the Gravesend Historical Society Museum, but it was impossible to photograph as it had been glued to the plastic backing of a display case and was obscured by plastic fastenings designed to hold other objects in place. It was, therefore, impossible to move the find into a position where a picture could be taken without damaging it.

**Details upon the fragmentation of items of personal adornment from Penn and Harker's excavations.**

Condition	Cu alloy brooch	Iron brooch	Brooch of Unspecified material
Complete	10	0	0
Pin broken at tip	1	0	0
Pin bent	1	0	0
Pin missing	18	0	0
No tip on body	1	0	0
Broken in half, part of stem missing	1	0	0
Pin surviving, brooch body missing	2	0	0
Disc brooch missing section from upper right hand side	1	0	0
Disc brooch missing section from upper left hand side	1	0	0
Fragmented, although further details are unknown	1	0	0
Unknown	10	2	9

Condition	Cu alloy bracelet	Shale bracelet	Bracelet of unspecified material	Cu alloy armlet
Complete	9	0	0	2
Fixing hook missing on one terminal	5	0	0	0
Approximately half of object remaining	5	1	0	0
Approximately quarter of object remaining	0	5	0	0
Approximately an eighth of object remaining	0	1	0	0
Fragment survives, but impossible to tell what percentage left as object had been straightened out	1	0	0	0
Small fragment of body, with jagged edges	1	0	0	0
Fragment, but further details unknown	2	2	0	0
Unknown	2	0	4	0

Condition	Bone pin	Cu alloy pin	Silver pin	Pin of unspecified material
Complete	31	19	0	0
Missing tip and portion of shaft leading to it	11	4	0	0
Missing head and portion of shaft leading to it	1	0	0	0
Missing half of shaft and tip	0	1	0	0
Missing half of shaft and head	0	1	0	0
Missing most of shaft and tip	0	2	0	0
Missing head and tip	2	0	0	0
Missing head	1	0	0	0
Missing tip	7	3	0	0
Broken in two	3	0	0	0
Broken, but further details unknown	2	1	1	0
Unknown	16	9	0	10

Condition	Cu alloy finger ring	Iron finger ring	Silver finger ring	Finger ring of Unspecified material
Complete	8	1	0	0
Slightly twisted	1	0	0	0
Small piece absent on front side	1	0	0	0
Back of object missing	1	0	0	0
Fragmented, but further details unknown	1	0	1	0
Unknown	10	2	1	2

Condition	Cu alloy tweezers	Cu alloy nail cleaners	Cu alloy ear scoops
Complete	5	2	0
Worn at tip	0	1	0
Missing tip	0	0	1
Unknown	3	2	0

Condition	Cu alloy pendants	Bone combs	Silver ear rings	Cu alloy necklaces
Complete	1	0	0	1
Corroded edges	1	0	0	0
Missing end and teeth, many teeth also broken	0	1	0	0
Unknown	0	0	1	0

Condition	Glass bead	Pottery bead	Jet bead
Complete	12	1	8
Third of front face surviving	1	0	0
Fragment, although further details are unknown	1	0	0
Unknown	13	0	0



List of items of personal adornment featured in the summary table, above.

Area of site	Context description	Sub number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 26	Cu alloy brooch	Complete. Small section towards top of pin seems worn
		Photograph 27	Cu alloy brooch	Complete
		Photograph 31	Cu alloy brooch	Complete
		Photograph 32	Cu alloy brooch	Pin broken at tip
		Photograph 33	Cu alloy brooch	No pin or tip to body
		Photograph 34	Cu alloy brooch	Pin broken off
		Photograph 36	Cu alloy brooch	Broken in half. Pin and half of stem missing
		Photograph 37	Cu alloy brooch	Pin surviving. Brooch body missing
		Photograph 38	Cu alloy brooch	Missing pin
		Photograph 39	Cu alloy brooch	Missing section from top right of disc
		Photograph 41	Cu alloy bracelet	Complete
		Photograph 45	Cu alloy bracelet	Complete
		Photograph 46	Cu alloy bracelet	Complete (may be armlet)
		Photograph 47	Cu alloy bracelet	Fixing loop missing on one terminal
		Photograph 48	Cu alloy bracelet	Fixing loop missing on one terminal
		Photograph 49	Cu alloy bracelet	Terminal missing fastening. Just under half remains
		Photograph 50	Cu alloy bracelet	Part of bracelet. Straight fractures. Impossible to tell what percentage of original object is represented as fragment appears to have been straightened out
		Photograph 51	Cu alloy bracelet	Just under half
		Photograph 52	Cu alloy bracelet	Just under half

Area of site	Context description	Sub number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 53	Shale bracelet	Just under half
		Photograph 54	Shale bracelet	Just over a quarter
		Photograph 55	Shale bracelet	Two fragments. Not necessarily from the same object. One small - about an eighth - The other is just under a quarter
		Photograph 56	Shale bracelet	Just over a quarter
		Photograph 57	Shale bracelet	Just under a quarter
		Photograph 58	Shale bracelet	Just under a quarter
		Photograph 61	Bone pin	Complete
		Photograph 62	Bone pin	Missing tip and portion of shaft
		Photograph 63	Bone pin	Complete
		Photograph 66	Bone pin	Complete
		Photograph 67	Bone pin	Complete
		Photograph 68	Bone pin	Complete
		Photograph 69	Bone pin	Complete
		Photograph 70	Bone pin	Complete
		Photograph 71	Bone pin	Missing tip and portion of shaft leading to it
		Photograph 72	Bone pin	Complete
		Photograph 73	Bone pin	Missing tip and portion of shaft leading to it
		Photograph 79	Bone pin	Complete
		Photograph 80	Bone pin	Complete
		Photograph 81	Bone pin	Complete
		Photograph 82	Bone pin	Complete
		Photograph 83	Bone pin	Complete
		Photograph 85	Bone pin	Missing tip and portion of shaft leading to it
		Photograph 86	Bone pin	Complete
		Photograph 87	Bone pin	Missing head and tip
		Photograph 88	Bone pin	Missing tip and portion of shaft leading to it
		Photograph 89	Bone pin	Missing tip. Object is broken into two fragments
		Photograph 90	Bone pin	Complete
		Photograph 91	Bone pin	Missing tip and lower portion of shaft

Area of site	Context description	Sub number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 92	Bone pin	Missing tip
		Photograph 93	Bone pin	Missing tip and lower portion of shaft
		Photograph 94	Bone pin	Missing tip and head, broken in half
		Photograph 95	Bone pin	Missing tip and lower end of shaft leading towards it
		Photograph 96	Bone pin	Missing tip
		Photograph 97	Bone pin	Broken in half, missing tip. Head could be fractured and missing; although it could also be complete, yet roughly shaped
		Photograph 99	Bone pin	Missing tip, but could have been recut
		Photograph 101	Cu alloy pin	Complete
		Photograph 106	Cu alloy pin	Missing half of shaft
		Photograph 107	Cu alloy pin	Missing tip and lower end of shaft leading towards it
		Photograph 108	Cu alloy pin	Complete
		Photograph 109	Cu alloy pin	Complete
		Photograph 110	Cu alloy pin	Missing upper shaft, leading to where head would have been
		Photograph 111	Cu alloy pin	Complete (tip may have been fractured slightly and then recut)
		Photograph 112	Cu alloy pin	Complete
		Photograph 113	Cu alloy pin	Complete
		Photograph 114	Cu alloy pin	Tip missing
		Photograph 115	Cu alloy pin	Complete
		Photograph 116	Cu alloy pin	Complete
		Photograph 117	Cu alloy pin	Complete
		Photograph 118	Cu alloy pin	Complete
		Photograph 119	Cu alloy pin	Complete
		Photograph 123	Cu alloy pin	Missing most of shaft and tip, only head and small part of top portion of shaft remaining
		Photograph 125	Glass bead	Complete
		Photograph 126	Glass bead	Complete

Area of site	Context description	Sub number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 127	Glass bead	Complete
		Photograph 128	Glass bead	Complete
		Photograph 129	Glass bead	Complete
		Photograph 130	Glass bead	Complete
		Photograph 131	Glass bead	Complete
		Photograph 132	Glass bead	Complete
		Photograph 133	Pottery bead	Complete
		Photograph 136	Cu alloy ring	Complete
		Photograph 137	Cu alloy ring	Complete
		Photograph 138	Cu alloy ring	Complete (a slight twist in the object can be seen on the lower left hand side shown on the photograph)
		Photograph 139	Cu alloy ring	Complete
		Photograph 142	Iron ring with key	Complete
		Photograph 143	Cu alloy ring	Possibly complete (although small piece may be absent on the front side shown on the photograph)
		Photograph 144	Cu alloy ring	Complete
		Photograph 145	Cu alloy ring	Complete
		Photograph 146	Cu alloy ring	Complete
Temple I	Stratum D2	Photograph 147	Cu alloy tweezers	Complete
		Photograph 148	Cu alloy tweezers	Complete
		Photograph 149	Cu alloy tweezers	Complete, one tweezer bent at end.
		Photograph 151	Cu alloy nail file	Complete, but very worn near tip
		Photograph 154	Cu alloy pendant	Some fragmentation of protruding edges, which are slightly jagged. Jagged fractures on all but lower left edge of object in the photograph
		1	Cu alloy brooch	Complete
		2	Cu alloy ring	Back of object is missing

Area of site	Context description	Sub number	Description	State of fragmentation
Temple I	Stratum B1 (layer through which foundations of Temple I were cut)	3	Glass bead	Complete
		4	Cu alloy ring	Unknown
		5	Cu alloy pin	Complete
	Stratum A	6	Glass paste bead	Missing pin
		7	Cu alloy brooch	Complete
		8	Cu alloy brooch	Complete
	Stratum Z1	9	Cu alloy brooch	Missing pin
	Stratum C (layer through which foundations of Temple I were cut)	10	Cu alloy brooch	Chipped on upper left hand side and missing approximately one eighth of rim, enamel worn, missing pin
	Stratum A	11	Cu alloy brooch	Complete
	Stratum D	12	Bone pin	Unknown
	Stratum Z2	13	Cu alloy brooch	Fragmented, although precisely how is unknown
	Either stratum B1 or B2, both floor layers of cella	14	Cu alloy brooch	Missing pin
	Stratum B1, first floor of cella	15	Cu alloy pin	Head
	Rubble layer filling remains of building	16	Cu alloy bracelet	Just under half preserved
	Stratum C (layer through which foundations of Temple I were cut)	17	Cu alloy ring	Unknown
		18	Cu alloy ring	Unknown

Area of site	Context description	Sub number	Description	State of fragmentation
Temple I	Stratum A	19	Cu alloy brooch	Missing pin
	Stratum B1, early floor layer of vestibule	20	Cu alloy tweezers	Complete, found on ring with 21-22
		21	Cu alloy nail cleaner	Complete, found on ring with 20 and 22
		22	Cu alloy ear scoop	Missing tip, found on ring with 20-21
	Stratum C (floor of porch to Temple I)	23	Iron ring	Unknown
	Latest ground level (either stratum D2 or ploughsoil)	24	Cu alloy armlet	Complete
	Rubble layer filling remains of building	25	Cu alloy pin	Unknown
Temple II	Hoard' of objects placed in a crevice between a group of tiles deposited within the northern 'antae' of the building	26	Cu alloy ring	Unknown
		27	Cu alloy ring	Unknown
		28	Cu alloy ring	Unknown
		29	Glass bead	Complete
		30	Glass bead	Complete
		31	Glass bead	Complete
		32	Glass bead	Unknown
		33	Glass bead	Unknown
		34	Glass bead	Unknown

Area of site	Context description	Sub number	Description	State of fragmentation
Temple II	Hoard' of objects placed in a crevice between a group of tiles deposited within the northern 'antae' of the building	35	Cu alloy bracelet	Small fragment with jagged edges
		36	Bone pin	Missing tip
	Ploughsoil	37	Cu alloy bracelet	Unknown
		38	Cu alloy ring	Incomplete, but no further information other than that 'part' of the object was discovered
		39	Cu alloy tweezers	Unknown
		40	Bone pin	Complete
	Under layer of ploughsoil	41	Glass bead	Unknown
	Stratum E	42	Glass bead	Unknown
Temple III	Stratum F	43	Cu alloy bracelet	Fragment. Further details are unknown
	Stratum E or F	44	Cu alloy bracelet	Unknown
		45	Silver ring	Unknown
		46	Cu alloy pin	Fragmented. Precisely how is unknown, but must be broken towards the tip because object is described as possessing a plain, spherical knob
	In or just outside temple	47	Bone pin	Unknown
		48	Bone pin	Unknown
		49	Bone pin	Unknown



Area of site	Context description	Sub number	Description	State of fragmentation
Temple III	In or just outside temple	50	Bone pin	Unknown
Temple IV	Stratum L	51	Cu alloy pendant	Complete, but not attached to anything
	Stratum F	52	Cu alloy necklace	Complete
		53	Cu alloy ring	Unknown
Temple V	Under and in layer of plaster/rubble - stratum D/H	54	Cu alloy bracelet	Complete
		55	Cu alloy bracelet	Complete
		56	Cu alloy bracelet	Complete
		57	Cu alloy bracelet	Complete
		58	Cu alloy bracelet	Complete
		59	Cu alloy bracelet	Complete
		60	Silver ear ring	Unknown
		61	Glass bead	Unknown
		62	Glass bead	Unknown
		63	Glass bead	Unknown
		64	Glass bead	Unknown
Temple VI	Rubble layer overlying site of building	65	Cu alloy brooch	Pin

Area of site	Context description	Sub number	Description	State of fragmentation
Temple VI	Rubble layer overlying site of building	66	Cu alloy bracelet	Approximately half of object survives
	Filling of 'votive pit'	67	Iron ring	Unsure if bezel is missing, otherwise, appears complete
	In rubble overlying 'votive pit'	68	Cu alloy ring	Complete
	Under first floor inserted within temple	69	Bone pin	Unknown
	Under Road 3	70	Cu alloy pin	Complete
Excavations on and around Temple VII.	Unknown	71	Iron brooch	Unknown
		72	Iron brooch	Unknown
Site B; the pedestal	Stratum E - filling of pit in front of pedestal	73	Cu alloy bracelet	Fragment made from three strands of wire twisted together. No further details known
		74	Bone pin	Unknown
The oven building	Stratum B	75	Cu alloy brooch	Complete but pin may be slightly bent
	Stratum C	76	Cu alloy bracelet	Appears complete but may be missing hook
	Stratum E	77	Bone pin	Broken towards tip
		78	Bone pin	Broken in half. Sharp fracture on at least one side.
Oven building or temple ditch	Unknown	79	Cu alloy pin	Broken in thick body part of pin

Temple ditch	Ditch filling	80	Cu alloy ring	Complete
		81	Cu alloy brooch	Unknown
		82	Paste bead	Fragment, further details are unknown
		83	Shale bracelet	Fragment, further details are unknown
		84	Jet bead	Complete
		85	Jet bead	Complete
		86	Jet bead	Complete
		87	Jet bead	Complete
		88	Jet bead	Complete
		89	Jet bead	Complete
		90	Jet bead	Complete
		91	Jet bead	Complete
		92	Bone pin	Complete
		93	Bone pin	Complete
		94	Bone pin	Missing lower body and tip
		95	Cu alloy pin	Missing tip
		96	Cu alloy pin	Complete
		97	Cu alloy pin	Missing lower body and tip
		98	Cu alloy pin	Missing lower body and tip
		99	Cu alloy pin	Complete
		100	Silver pin	Fragment. Further details unknown, although head and shank recorded
Site A	Either key deposit V, IV, III or II	101	Bone pin	Complete
		102	Bone pin	Complete
		103	Bone pin	Complete
		104	Bone pin	Complete
		105	Bone pin	Broken, but how is unknown

Area of site	Context description	Sub number	Description	State of fragmentation
Site A	Either key deposit V, IV, III or II	106	Bone pin	Broken, but how is unknown
Site A	Either key deposit VI, IV or II	107	Cu alloy pin	Complete
		108	Cu alloy pin	Complete
		109	Cu alloy pin	Complete
		110	Cu alloy pin	Unknown
		111	Cu alloy pin	Unknown
		112	Cu alloy pin	Unknown
		113	Cu alloy pin	Unknown
		114	Cu alloy pin	Unknown
		115	Cu alloy pin	Unknown
		116	Cu alloy pin	Unknown
	Key deposit X	117	Cu alloy brooch	Missing pin
	Key deposit IX	118	Cu alloy brooch	Missing pin
		119	Cu alloy brooch	Missing pin
	Key deposit VI	120	Cu alloy brooch	Missing pin
		121	Shale bracelet	Just under a quarter of object. Front is complete but the back is unknown
		122	Cu alloy pin	Only head
		123	Cu alloy brooch	Missing pin
		124	Cu alloy armlet	Complete
		125	Cu alloy brooch	Complete
	Key deposit IV	126	Cu alloy brooch	Missing pins, which should run through the right hand side of object, but possible that the pin is obscured in the illustration
Site A	Key deposit IV	127	Cu alloy brooch	Missing pin
		128	Cu alloy tweezers	Complete
		129	Cu alloy ring	Unknown

Area of site	Context description	Sub number	Description	State of fragmentation
Site A	Key deposit IV	130	Stone bracelet	Fragment, but further details are unknown
	Key deposit III	131	Bone comb	Missing end and teeth. Many teeth broken, a few complete teeth on upper and lower ends of comb on left hand side of illustration
	Key deposit II	132	Cu alloy brooch	Missing pin
Building B8	Debris filling hypocaust	133	Cu alloy nail cleaner, on a split ring with PER 134	Unknown - unclear if the term 'split ring' refers to a broken ring or a ring that could be intentionally broken open.
		134	Cu alloy tweezers, on a split ring with PER 133	Unknown - unclear if the term 'split ring' refers to a broken ring or a ring that could be intentionally broken open.
		135	Bone pin	Unknown
		136	Bone pin	Complete
		137	Cu alloy pin	Unknown
		138	Cu alloy pin	Complete
	By side of path R7	138	Cu alloy pin	Complete
Building B10	Topsoil	139	Silver finger ring	Part of object discovered, further details are unknown
	Either stratum 7 or stratum 5	140	Cu alloy brooch	Unknown
	Under chalk floor of Room B	141	Cu alloy brooch	Unknown
	Stratum 3	142	Cu alloy brooch	Unknown
	Stratum 1c	143	Cu alloy brooch	Unknown
	Stratum 5	144	Bone pin	Unknown
		145	Bone pin	Complete
		146	Bone pin	Complete
		147	Bone pin	Broken. How this was done is unknown but the head is preserved
		148	Bone pin	Missing tip and lower end
		149	Bone pin	Complete
Excavations on and around Well F19	From well shaft, eight feet and four inches from the top	150	Cu alloy brooch	Unknown
	In flints at the top of shaft	151	Cu alloy brooch	Complete

Area of site	Context description	Sub number	Description	State of fragmentation
Excavations on and around Well F19	Unknown	152	Bone pin	Unknown
		153	Bone pin	Unknown
Excavations on and around Feature F26	Stratum A	154	Cu alloy tweezers	Unknown
		155	Cu alloy nail file	Unknown
		156	Bone pin	Complete
	Stratum E	157	Cu alloy bracelet	Complete
	Unstratified	158	Bone pin	Unknown
Site B: the shop	Stratum F	159	Cu alloy brooch	Missing pin
		160	Cu alloy brooch	Missing pin
	Stratum C	161	Cu alloy brooch	Fragment, further details are unknown
	Unstratified, over Watling Street	162	Shale bracelet	Unknown
	Unstratified, by the side of Watling Street	163	Bone pin	Unknown
	Unstratified, over Watling Street	164	Bone pin	Unknown
Site D	Unknown	165	Brooch	Unknown
		166	Brooch	Unknown
		167	Glass bead	Unknown
		168	Glass bead	Unknown
		169	Cu alloy ring with paste intaglio	Unknown
		170	Cu alloy ring	Unknown
		171	Bone pin	Unknown
		172	Bone pin	Unknown
Excavations between the 'bakery' (Site A) and the Watling Street	Unknown	173	Brooch of unspecified material	Unknown
		174	Brooch of unspecified material	Unknown
		175	Bracelet of unspecified material	Unknown
		176	Bracelet of unspecified material	Unknown
		177	Pin of unspecified material	Unknown
		178	Pin of unspecified material	Unknown

Area of site	Context description	Sub number	Description	State of fragmentation
Area excavated to the west of the southern 'temple complex', on the far side of the road bounding the 'temenos area'.	Unknown	179	Brooch of unspecified material	Unknown
		180	Brooch of unspecified material	Unknown
		181	Bracelet of unspecified material	Unknown
		182	Bracelet of unspecified material	Unknown
		183	Bone pin	Unknown
		184	Bone pin	Unknown
		185	Pin of unspecified material	Unknown
		186	Pin of unspecified material	Unknown
Either area excavated to the south of the junction between the Watling Street and the road bounding the southern 'temenos' to the west, or from an area in the north east of the settlement, in front of the CEGB station.	Unknown	187	Pin of unspecified material	Unknown
		188	Pin of unspecified material	Unknown
Strip of land at right angles to the original site	Unknown	189	Pin of unspecified material	Unknown
		190	Pin of unspecified material	Unknown
		191	Brooch of unspecified material	Unknown
		192	Brooch of unspecified material	Unknown
Area north of the Watling Street, or in the vicinity of Temple VII	Unknown	193	Cu alloy brooch	Unknown
		194	Cu alloy brooch	Unknown
		195	Pin of unspecified material	Unknown
		196	Pin of unspecified material	Unknown
		197	Finger ring of unspecified material	Unknown



Area of site	Context description	Sub number	Description	State of fragmentation
Area north of the Watling Street, or in the vicinity of Temple VII	Unknown	198	Finger ring of unspecified material	Unknown
		199	Glass bead	Unknown
		200	Glass bead	Unknown

***Appendix 3: Details on miniature objects from the excavations directed by Penn and Harker.***

***Part 1: Detailed descriptions of miniature objects from accounts compiled by Penn and Harker (page 408).***

***Part 2: Photographs of miniature objects from the Gravesend Historical Society collection (page 409).***

***Part 3: Details on the fragmentation of miniature objects from Penn and Harker's excavations (page 411).***

**Part 1: Detailed descriptions of miniature objects from the written accounts compiled by Penn and Harker.**

**MINI 1**

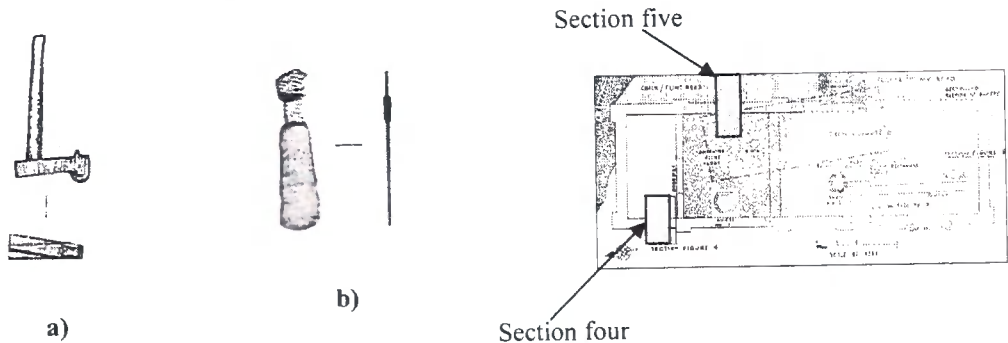
An object interpreted as being a ‘lead axe head’ was found on the *cella* floor of Temple I (Penn, 1959; table 12.3).



**Figure 116:** Illustration of **MINI 1** (Penn, 1959; fig 12.4). Scale is half size.

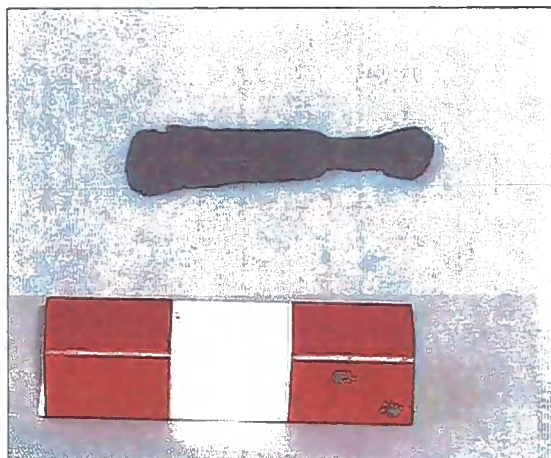
**MINI 2-3**

A small, bronze, ‘L-shaped object’ (**MINI 2**) (Penn, 1957; appendix VI, no 18) was found during excavations on Site A. The object was discovered in ‘key deposit VIII’, a layer that had accumulated amongst the remains of the ‘granary structure’, close to where a section, numbered four, was drawn through the north western wall of the building. The object was compared to model axes found at Woodeaton, although the blade of the find was not as pronounced as these examples (*cf* Green, 1976; pl XXVIII j-l). A flat, bronze, ‘axe-shaped object’ (**MINI 3**) was also recovered during excavations upon Site A. The object was interpreted as being a ‘votive miniature axe-head’, although it was also suggested that the find might be the head of a spatula (Penn, 1957; appendix VI, no 12) and, given the form of the object, this would appear to be a strong possibility. The find was discovered in ‘key deposit VI’, a layer overlying the ‘granary’ structure, close to where a section, numbered five, was drawn through the eastern wall of the building.

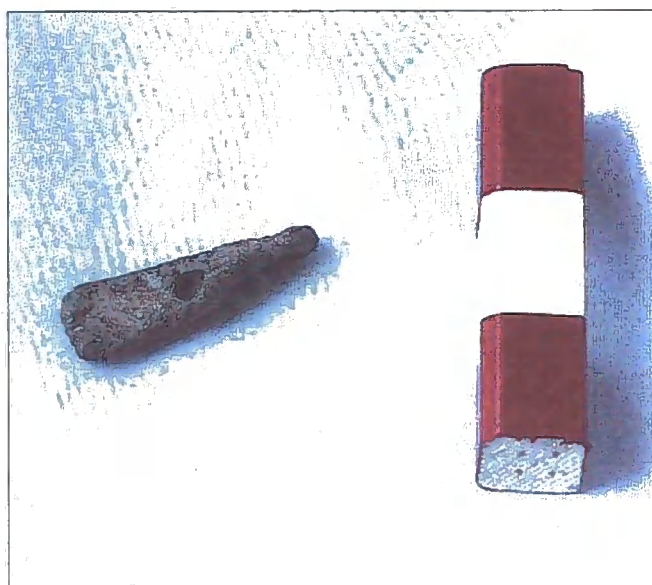


**Figure 117:** Objects interpreted as being miniature tools mentioned in the published accounts compiled by Penn and Harker: **a) MINI 2** (Penn, 1957; fig 15.9); **b) MINI 3** (*ibid*; fig 15.3). Scale of all illustrations is half size. The location of section drawings mentioned in the text has also been provided on the plan of Site A (after *ibid*; fig 2).

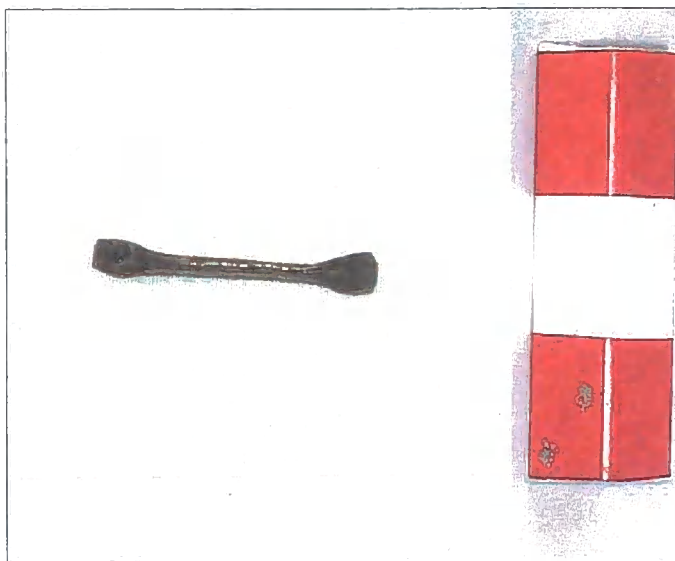
*Part 2: Photographs of miniature objects from the Gravesend Historical Society collection.*



**Photograph 156**



**Photograph 157**



**Photograph 158**



**Photograph 159**

**Part 3: Details upon the fragmentation of miniature objects from the Gravesend Historical Society collection and from the written accounts compiled by Penn and Harker.**

Area of site	Context description	Sub number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 157	Miniature stone axe or hammer head	Missing handle
		Photograph 158	Miniature Cu alloy pick or shovel	Could be missing handle if miniature pick, but complete if a shovel.
		Photograph 159	Miniature pottery wheel	Chipped around edge on lower left and right hand sides
Temple I	Final floor of cella	1	Miniature lead axe	Missing handle.
Site A	Key deposit VIII	2	Model Cu alloy axe	Complete
Site A	Key deposit VI	3	Model Cu alloy axe	Missing handle.

***Appendix 4: Details on altars from the excavations directed by Penn and Harker.***

***Part 1: Detailed descriptions of altars from the written accounts compiled by Penn and Harker (page 413).***

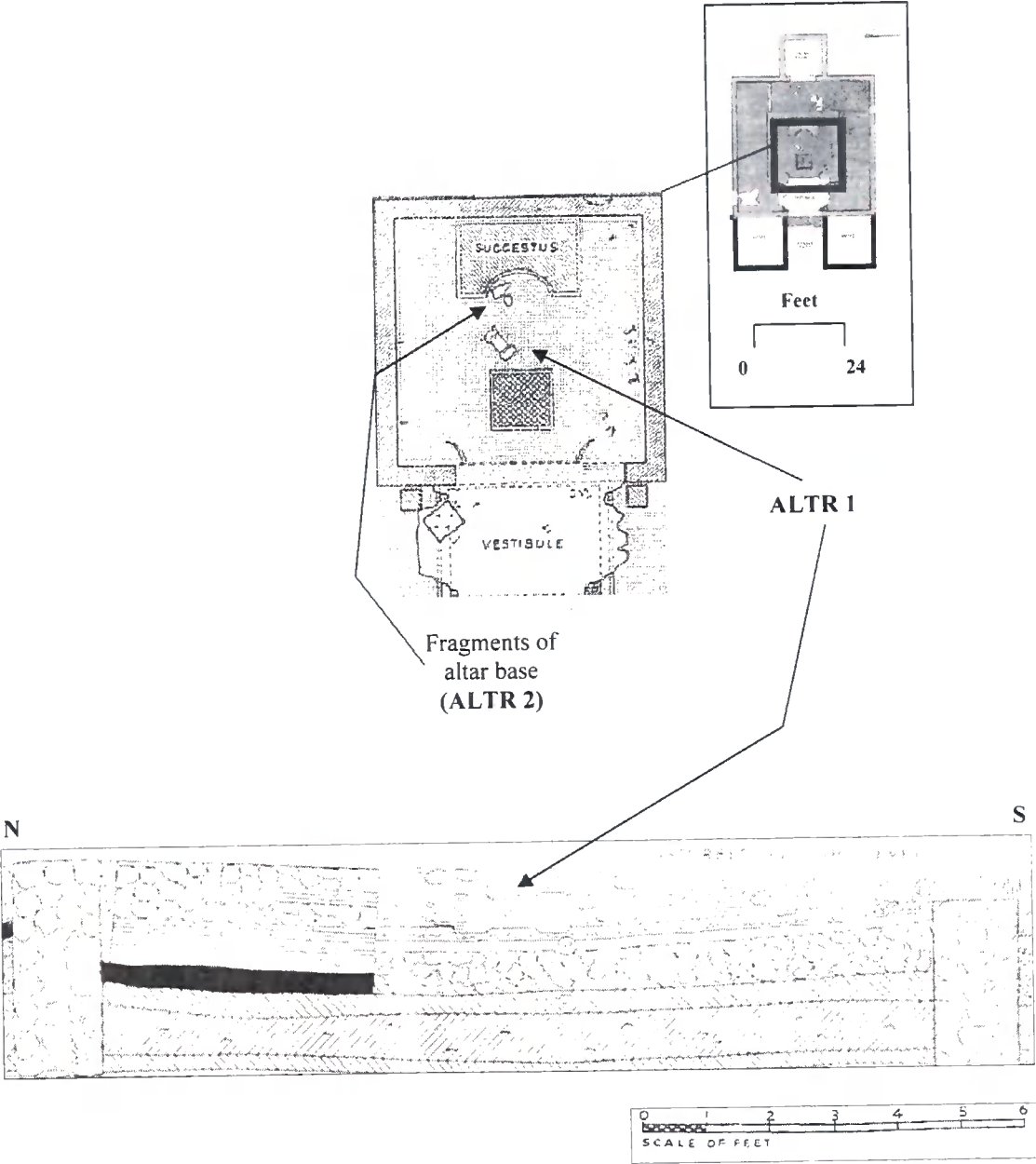
***Part 2: Photographs of altars published in the reports compiled by Penn and Harker (page 415).***

***Part 3: Details on the fragmentation of altars from Penn and Harker's excavations (page 416).***

*Part 1: Detailed descriptions of altars from the written accounts compiled by Penn and Harker.*

**ALTR 1-2**

**ALTR 1** was discovered upon the *cella* floor of Temple I (Penn, 1959; table 12.8). The object was identified from the Gravesend Historical Society Museum, although it was difficult to photograph as it was fastened with clamps against a wall. Two detailed photographs already exist and have been included in this study.



**Figure 118:** The altar (**ALTR 1**) and altar base (**ALTR 2**), together with records of their location (image of object on left, Penn, 1959; Pl V c. image of object on right, *ibid*; Pl V d, plan after *ibid*; fig 1; section after *ibid*; fig 3).

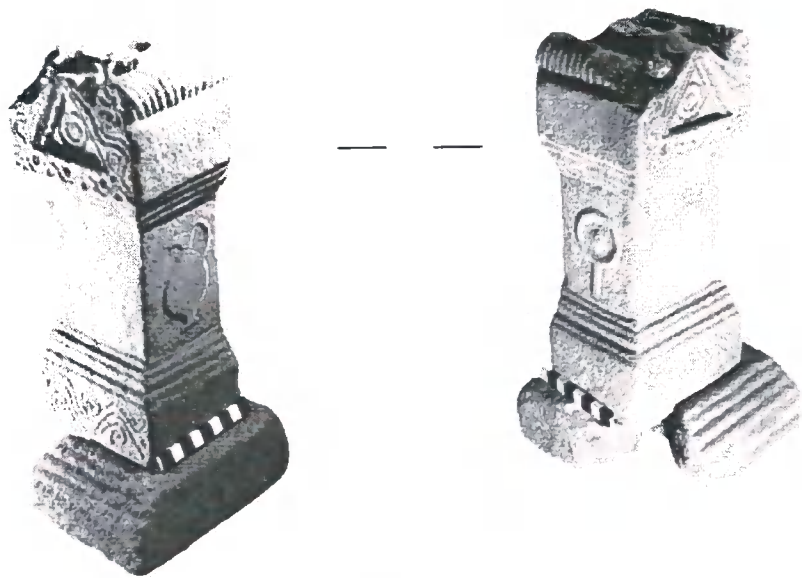


No trace of an inscription was apparent on **ALTR 1**, although the front was decorated with undulating lines at the base, running around two concentric circles. Similar patterning is evident at the top of the object, around the sides of a triangular depression which also contained two concentric circles at its centre. It is tempting to suggest that the design just above the base represents flowing water, especially given the potential significance of the natural springs at the site. The repeated occurrence of the concentric circles at the top and base of the object may also suggest that the design might not be simply a meaningless decorative pattern and could have possessed some further symbolic significance. One side of the altar was decorated with a flagon and the other with a design resembling a patera. Three equidistant iron rods were described as having been cemented into the altar with lead. These were said to have been attached through it by three holes in the form of a tripod over a hollowed, bowl like depression on top of the object (*ibid*). The rods were interpreted as being parts of a brazier where a 'sacred fire' would have once been kindled, which offerings would have been made into (*ibid*). No trace of the iron comprising the tripod or holes in which this was fastened could be ascertained from examination of the object, although the find appeared to be identical to that from the report in all other respects. The base of the object was not originally attached to it and is recorded as having been found close by on the *cella* floor (*ibid*; 24) it has, therefore, been classed as a separate find (**ALTR 2**) as, although it appears to fit the altar, it cannot be proven with certainty that it is the remains of the same object.

### **ALTR 3**

A possible altar base, similar to that from Temple I, was discovered in front of the steps of Temple II (Penn, 1962; 113, 115).

***Part 2: Photographs of altars published in the reports compiled by Penn and Harker (scale is in inches).***



**Photograph 160**

(Image of object on left, Penn, 1959; Pl V c. image of object on right, *ibid*; Pl V d).



**Photograph 161**

(After Penn, 1962; pl III A).

**Part 3: Details upon the fragmentation of altars from the Gravesend Historical Society collection and from the written accounts compiled by Penn and Harker.**

Area of site	Context description	Sub number	Description	State of fragmentation
Temple I	Final floor of cella	1	Stone altar	Appears mostly complete, but may be missing an inscription. Slightly worn on upper left hand side of Photograph 160 on page 415.
		2	Stone altar base	Missing corner and possibly part of back.
Temple II	In front of steps to building	3	Stone altar base	Missing corner and possibly part of back

***Appendix 5: Details on tools from the excavations directed by Penn and Harker.***

***Part 1: Detailed descriptions of objects identified as being tools from written accounts compiled by Penn and Harker (page 418).***

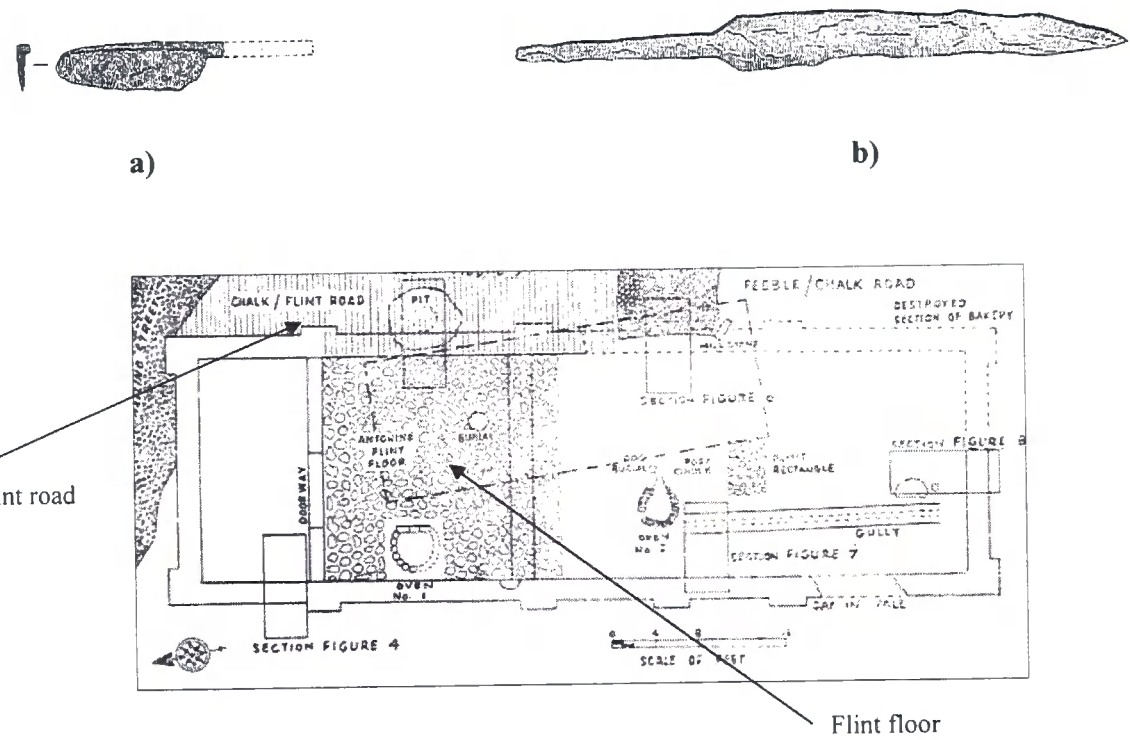
***Part 2: Photographs of tools from the Gravesend Historical Society collection (page 426).***

***Part 3: Details on the fragmentation of tools from Penn and Harker's excavations (page 432).***

*Part 1: Detailed descriptions of tools from the written accounts compiled by Penn and Harker.*

**TOOL 1-3**

A knife fragment (**TOOL 1**) (Penn, 1957; appendix VII, 5) and a complete iron knife blade (**TOOL 2**) were discovered from ‘key deposit VI’, a layer which had accumulated amongst the remains of the granary structure on Site A, and also over the area surrounding it. The finds were made over the flint floor inserted into part of the building (*ibid*; appendix VII, 6). An iron knife (**TOOL 3**) was also found in the deposit, overlying the ‘chalk-flint road’ adjacent to the ‘granary’ structure (*ibid*; appendix VII, 7).



**Figure 119: a) TOOL 1** (Penn, 1957; fig 16.5). Scale is quarter size and **b) TOOL 2** (Penn 1957; figure 17.1). Scale is half size. The plan, showing the areas with which these finds were associated, is after *ibid*; fig 2).

TOOL 4

An object identified as being an iron awl or bit with a pointed butt of quadrangular section was discovered in ‘key deposit III’, a deposit described as being a late Roman ‘occupation layer’ overlying Site A. The object was found where the deposit overlay the southern wall of the ‘bakery’ building, close to where a section (Penn, 1957; fig 8) was drawn through the middle of this area (*ibid*; appendix VII, 9).

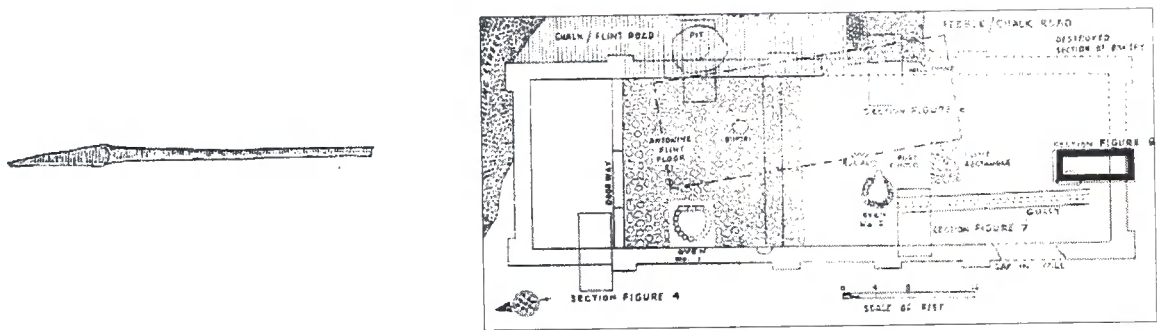
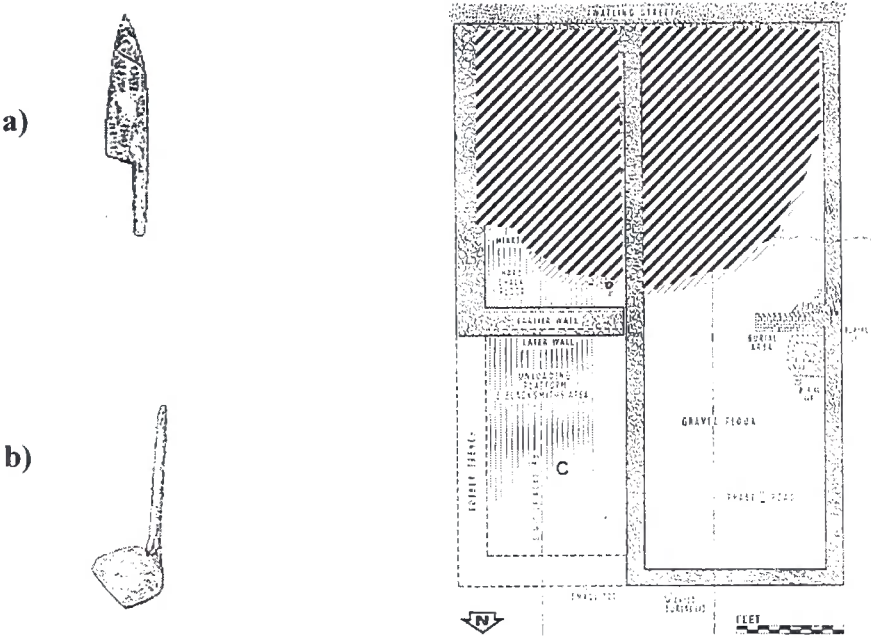


Figure 120: The iron awl or bit (**TOOL 4**) (Penn, 1957; fig 17.3) and plan of Site A (after Penn, 1957; fig 2), showing the location of section 8, close to where it was discovered.

TOOL 5-9

An iron knife **TOOL 5** (Penn, 1968a; table 5.9), described as being ‘of the usual common type’, another ‘small iron knife’ (**TOOL 6**) (*ibid*; table 5.4), were found amongst the layer of burnt clay deposited on the final floor of rooms A and B of building B10. Also found from this deposit were a staple shaped tool with its head set at right angles to the shank (**TOOL 7**), identified as being a ‘small draw hoe’ (*ibid*; table 5.7) and fragments of at least two iron sickles (**TOOL 8-9**) (*ibid*; 169), although the latter two objects do not feature in the finds listings (*ibid*; table 5)



**Figure 121: a) TOOL 5** (Penn, 1968a; fig 3.3). Scale is half size. **b) TOOL 7** (*ibid*; fig 3.5). Scale is quarter size. The extent of the layer of baked clay, from which all the tools mentioned in this section were found, is indicated by shading on the plan made of the building (after *ibid*; fig 1).

TOOL 10

A small iron knife with an undecorated bone handle was recovered from excavations upon building B10. The object is recorded as having from the southern part of room B of the structure, although its position in the stratigraphic sequence is unknown (Penn, 1968a; table 5.14).

TOOL 11

An object interpreted as being an iron spade shoe was discovered under the floor of building B9 (Penn 1968a; table 5.19).



Figure 122: TOOL 11 (Penn, 1968a; fig 3.9). Scale is quarter size.

TOOL 12-15

A badly corroded, curved fragment of iron interpreted as being the blade of a sickle (TOOL 12) (Penn, 1959; table 10.15) and an iron knife with a tang, recorded as being 5.2 inches in length (TOOL 13) (*ibid*; table 10.3) were found on the tessellated floor of the western corridor of Temple I. A bronze chisel (TOOL 14) was described as having been found in the rubble over the south corridor (*ibid*; table 9.23) and the blade and part of a handle from a pair of shears (TOOL 15) were found in the latest Roman level filling the southern ‘antae’ of the building (*ibid*; table 10.13).

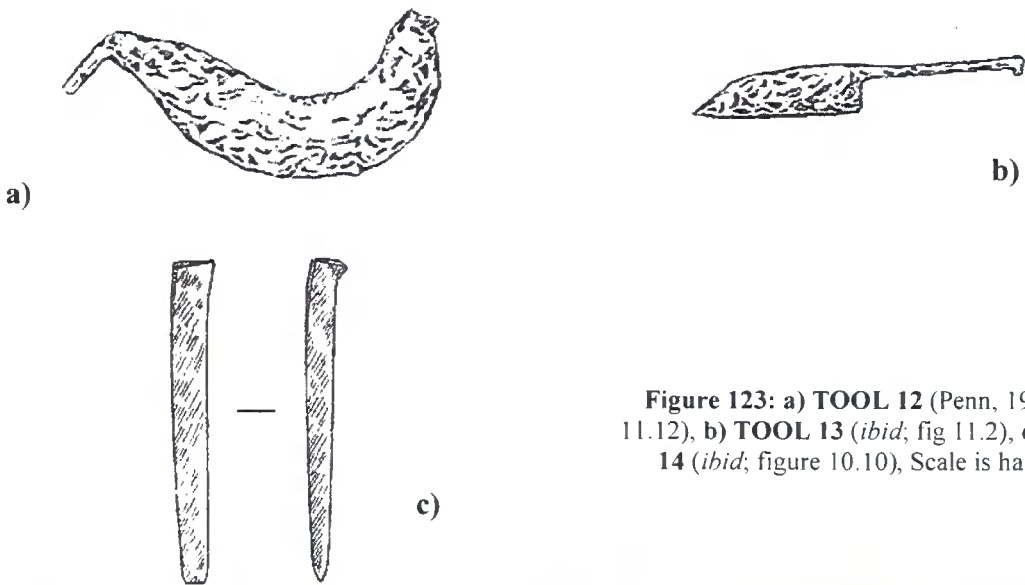
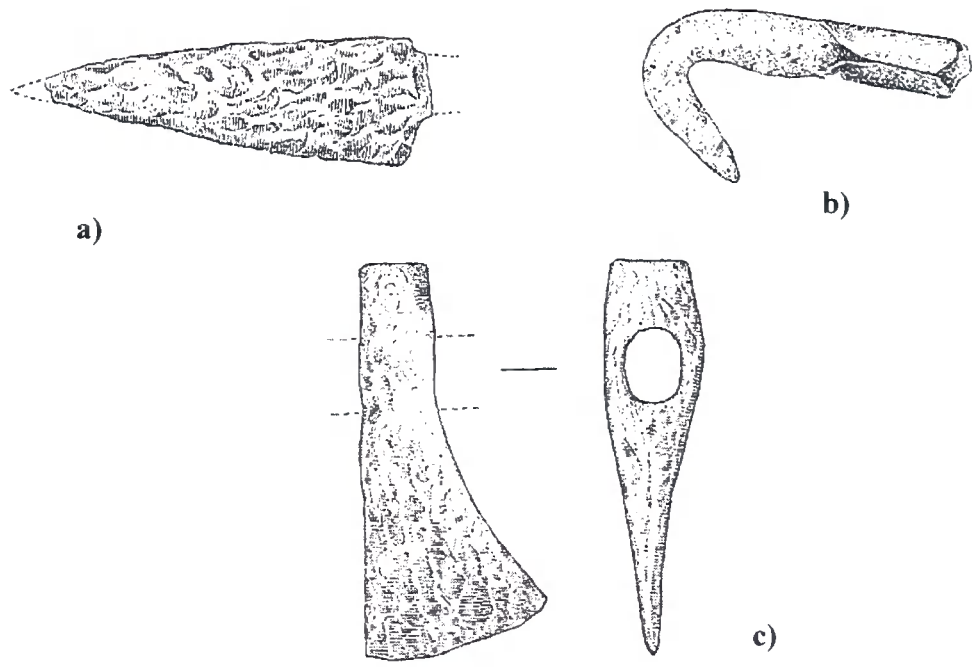


Figure 123: a) TOOL 12 (Penn, 1959; fig 11.12), b) TOOL 13 (*ibid*; fig 11.2), c) TOOL 14 (*ibid*; figure 10.10), Scale is half size



TOOL 16-19

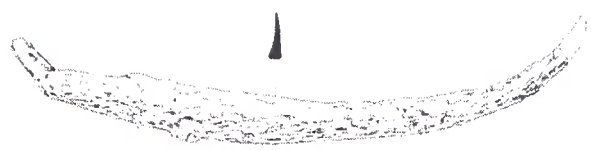
A fragment of an iron knife blade missing its handle and tip (**TOOL 16**) (Penn, 1964b; table 6.2), a small iron, socketed sickle or bill hook (**TOOL 17**) (*ibid*; table 6.6), the head of an iron axe hammer (**TOOL 18**) (*ibid*; table 6.7) and an iron knife (**TOOL 19**) with its handle bent into the form of a ring (*ibid*; table 6.4) were discovered in the filling of the ‘temple ditch’



**Figure 124:** a) **TOOL 16** (after Penn, 1964b; fig 4.6). b) **TOOL 17** (*ibid*; fig 4.4) and c) **TOOL 18** (*ibid*; fig 4.1). Scale is half size

TOOL 20

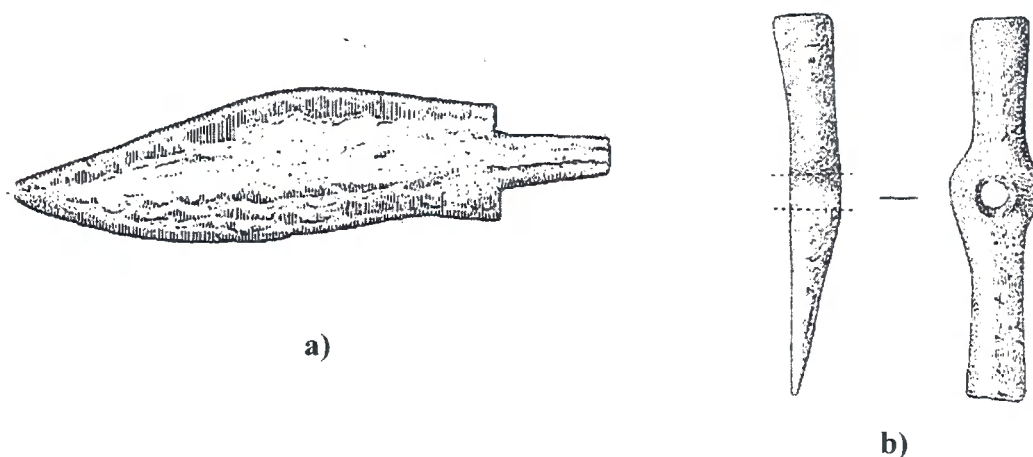
A curved, single edged iron blade, with the remains of a tang at one end, 14.25 inches in length, was recovered from stratum A, a layer sealing Kiln F.26 (Penn 1968a; table 5.18).



**Figure 125:** **TOOL 20** (Penn, 1968a; fig 3.8). Scale is quarter size.

## TOOL 21-22

A large knife (**TOOL 21**) was discovered during excavations upon the remains of the 'oven building', from Stratum C, in the vicinity where a later oven (OVEN 11) would be built (Penn, 1964b; table 6.3). A small iron hammer head (**TOOL 22**) (*ibid*; table 6.1) was also found from the same layer, close to where **OVEN 14** would be later built.



**Figure 126: a) TOOL 21** (Penn, 1964b; fig 4.3). Scale is half size, **b) TOOL 22** (*ibid*; fig 4.2). Scale is full size.

## TOOL 23

An object described as being a bronze, spear-shaped 'surgical instrument' (**TOOL 23**) which appears to resemble a scalpel, was recorded as having been discovered in a layer of clay beneath Temple VI. The illustration made of the object appears to show a blade with a tang, yet the description in the finds report (Penn, 1967c; table 4.5) mentions that only the handle was found and records that the 'iron blade' to the object had not survived. The illustration was quite faint and was difficult to reproduce.

**Figure 127: TOOL 23** (Penn, 1967c; fig 4.12). Scale is quarter size.

**TOOL 24**

An iron blade from a pair of shears is recorded by Penn as having been discovered beneath the site of Temple VI, under a layer of chalk, classified as 'road 1' (Penn, 1967c; table 4.12).



**Figure 128: TOOL 24** (Penn, 1967c; fig 4.16). Scale is half size.

**TOOL 25**

A small, broken, double-edged flint blade was found in the 'hoard' of objects from the rubble layer filling of the north wing of Temple II (Penn, 1962; table 11.1)



**Figure 129: TOOL 25** (Penn, 1962; fig 6.8). Scale is half size.

### **TOOL 26-28**

A reference was made to shears (**TOOL 26**) being discovered in the area adjacent to the 'corn-dryer' from the 'agricultural building' discovered in 1967 (Harker, 1978; 9). A number of unidentifiable 'tools', a minimum of two of which (**TOOL 27-28**) can be postulated, are recorded as having been discovered in the area adjacent to the corn-dryers from the 'agricultural building' (*ibid*; 9).

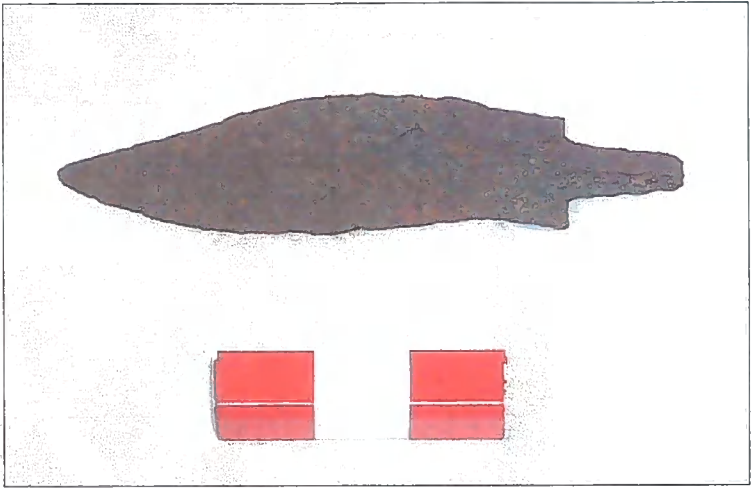
### **TOOL 29**

An object interpreted as being an axe head (**TOOL 29**) is recorded as having been discovered during excavations on the junction between the Watling Street and the road bounding the southern 'temenos area' to the west (Harker, 1975; 8) and, beyond the brief description made of it, no further information is available about the object.

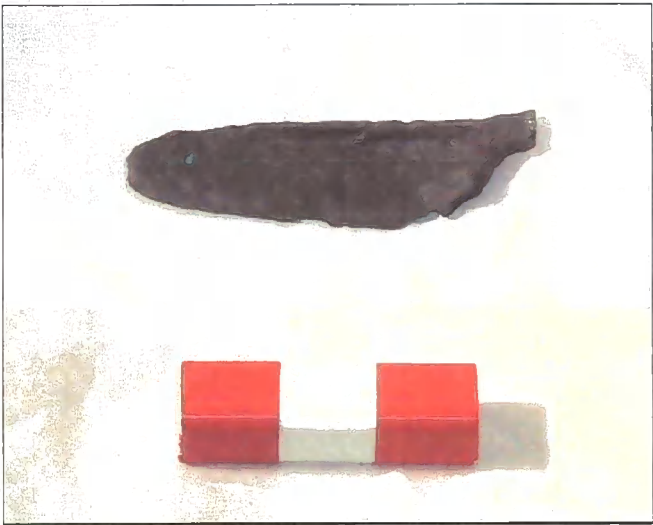
### **TOOL 30-33**

Harker mentions that 'unmistakable' chisels (**TOOL 30-31**) and punches (**TOOL 32-33**) were discovered during excavations upon the remains of wooden buildings to the west of and slightly overlying Temple VII (Harker, 1971a; 236), although an absence of detailed records means that this description is the only information that can currently be attained about the finds from this part of the site.

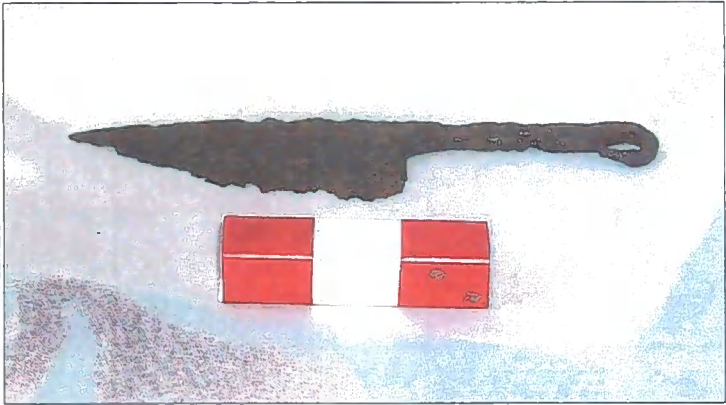
*Part 2: Photographs of tools from the Gravesend Historical Society collection.*



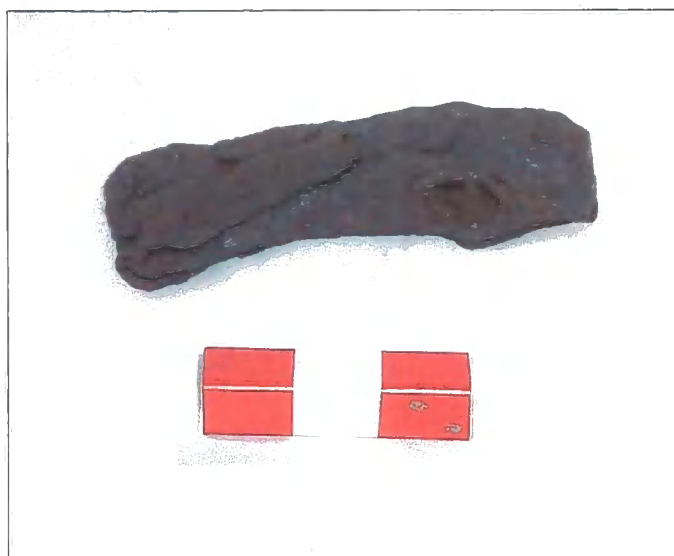
**Photograph 162**



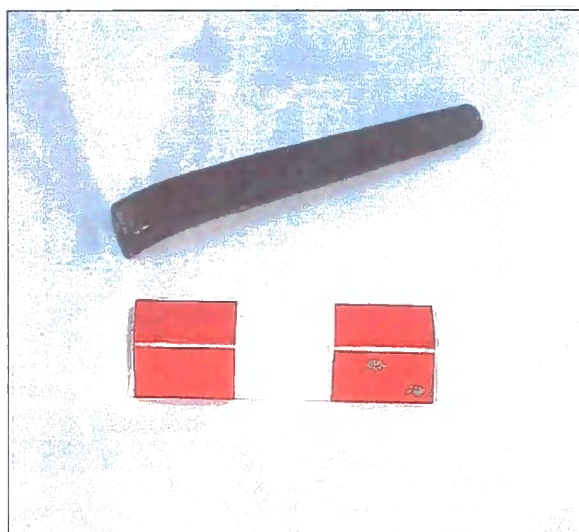
**Photograph 163**



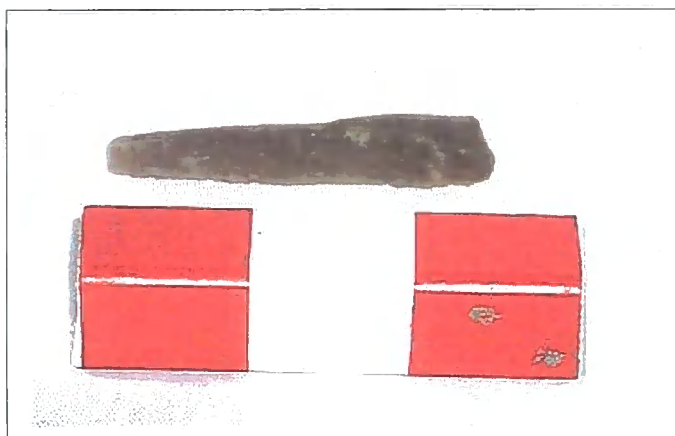
**Photograph 164**



**Photograph 165**



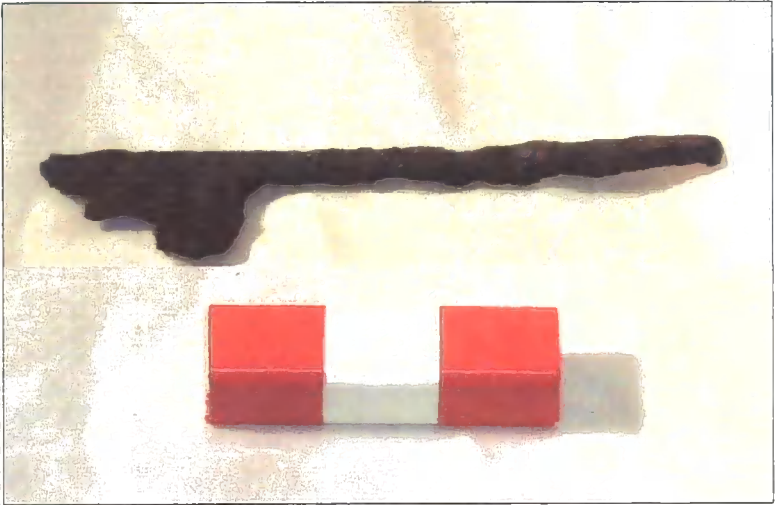
**Photograph 166**



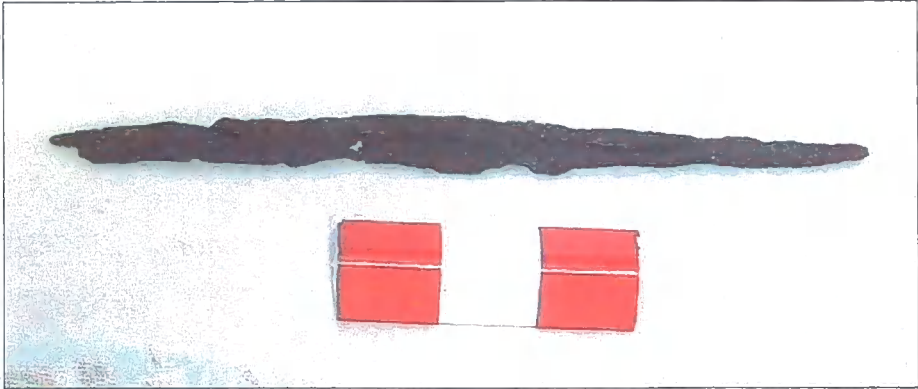
**Photograph 167**



Photograph 168

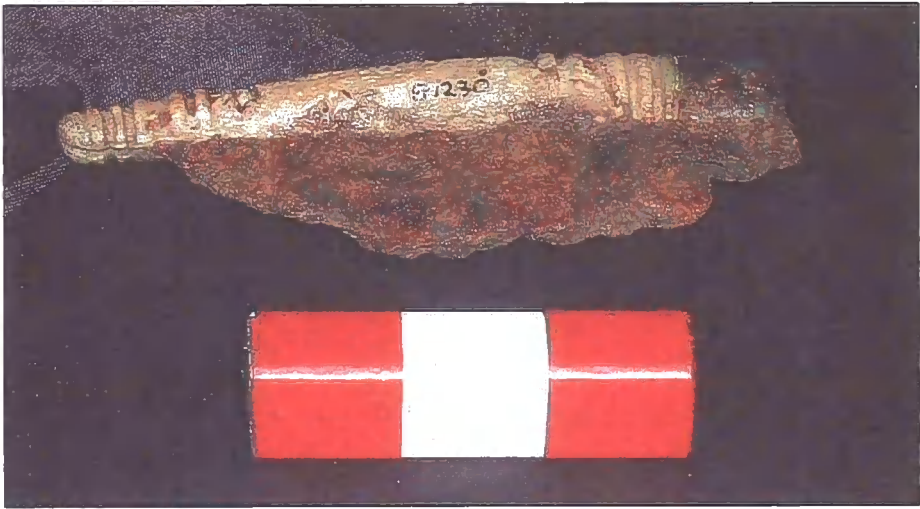


Photograph 169

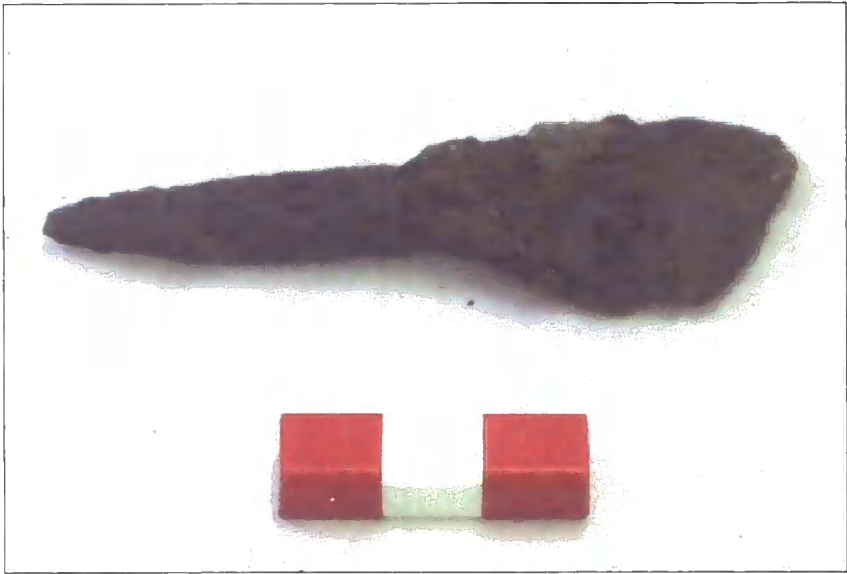


Photograph 170





Photograph 171

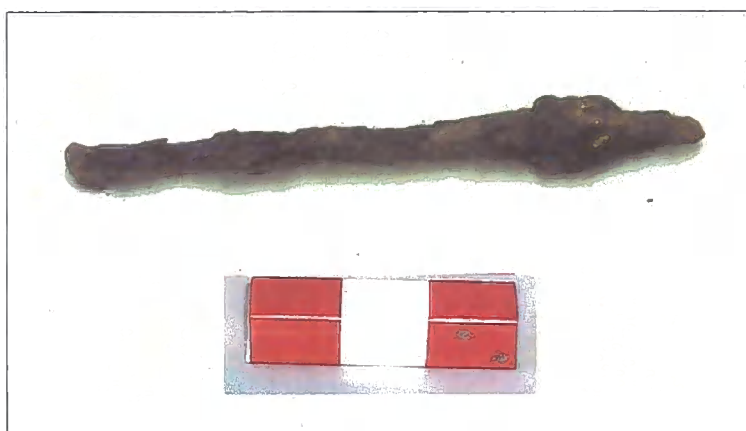


Photograph 172





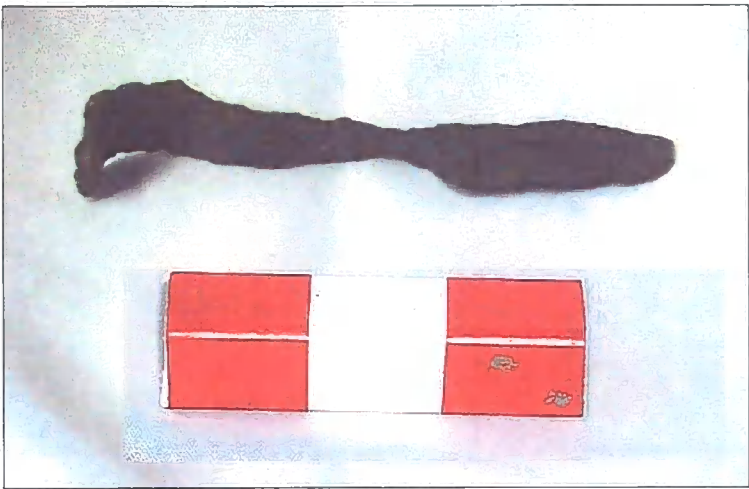
Photograph 173



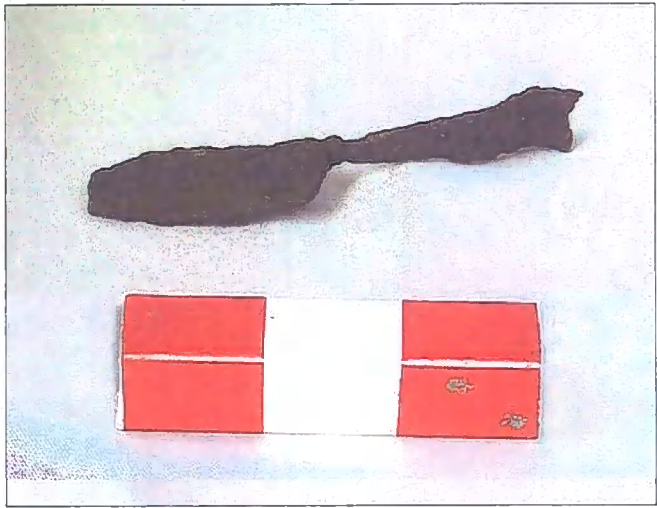
Photograph 174



Photograph 175



Photograph 176



Photograph 177

**Part 3: Details upon the fragmentation of tools from the Gravesend Historical Society collection and from the written accounts compiled by Penn and Harker.**

Condition	Quantity		
	Iron knives	Flint blades	Iron shears
Complete, but missing handle	4	0	0
Tang and initial part of blade	2	0	0
Edges of blade are missing	1	0	0
Fragment from centre of blade	1	0	0
Missing tip	5	1	0
Missing most of handle	1	0	0
Missing handle	1	0	0
Half of object survives	0	0	2
Unknown	4	0	1

Condition	Quantity				
	Iron punch /drift	Punch/drift of unspecified material	Iron tongs (but see comments on their interpretation in this section)	Iron hammer	Iron axe
Complete blade	2	0	1	0	0
Complete head	0	0	0	1	0
Missing tip	0	0	1	0	0
Unknown	0	2	0	0	1

Condition	Quantity				
	Iron axe hammer	Iron awl or bit	Iron draw hoe	Iron sickle	Iron sickle or bill hook
Complete blade	0	1	0	0	0
Complete head	1	0	0	0	1
Complete head and tang	0	0	1	0	0
Missing tip	0		0	1	0
Fragmented, but further details are unknown	0	0	0	2	0
Unknown	0	0	0	0	0

Condition	Quantity			
	Cu alloy chisel	Chisel of unspecified material	Iron spade shoe	Unidentifiable tools
Complete blade	1	0	0	1
Complete head	0	0	0	0
Complete handle	0	0	0	2
Fragment of base from handle	0	0	0	1
Approximately one side of handle	0	0	0	2
Missing tip	0	0	0	1
Shoe, with small fragment missing from U-shaped cavity	0	0	1	0
Unknown	0	2	0	0

List of tools featured in the summary table, above, and their location.

Area of site	Context description	Sub number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 164	Iron knife blade	Complete blade
		Photograph 168	Iron shears	Complete blade
		Photograph 169	Iron knife blade	Large part of blade missing
		Photograph 170	Iron knife blade	Blade edges missing
		Photograph 171	Iron knife with bone handle	Complete
		Photograph 172	Iron knife blade	Missing large part of blade
		Photograph 173	Iron knife blade	Missing blades and handle
		Photograph 174	Iron punch/drift blade	Complete
		Photograph 175	Iron punch/drift blade	Complete
		Photograph 176	Iron shears	Missing blade and part of handle, also missing half of other blade
		Photograph 177	Iron tongs	Missing blade, handle, part of other blade and tip.
Site A	Key deposit VI	1	Iron knife blade	Blade missing tip and most of handle
		2	Iron knife blade	Complete
		3	Iron knife blade	Unknown
	Key deposit III	4	Iron awl or bit	Unknown
Building B10	Stratum 7	5	Iron knife blade	Missing tip
		6	Iron knife blade	Unknown
		7	Iron draw hoe head	Complete
		8	Iron sickle	Unknown but definitely fragmented
		9	Iron sickle	Unknown but definitely fragmented
	Unknown	10	Iron knife with bone handle	Unknown
Building B9	Under floor of building	11	Iron spade shoe	Small fragment missing from U-shaped cavity where shoe fits to spade.
Temple I	Final floor of western corridor	12	Iron sickle blade	Missing tip
		13	Iron knife blade	Complete

Area of site	Context description	Sub number	Description	State of fragmentation
Temple I	Rubble layer filling remains of building	14	Cu alloy chisel blade	Complete
		15	Iron shears	Fragmented. Precise details are unknown but, judging from the description made, one blade appears to have been missing
The temple ditch	Ditch filling	16	Iron knife blade	Missing handle and tip
		17	Iron sickle or bill hook head	Complete
		18	Iron axe hammer head	Complete
		19	Iron knife blade	Unknown
Excavations on and around Feature F26	Stratum A	20	Iron blade	Missing tip
The oven building	Stratum C	21	Iron knife blade	Missing tip
		22	Iron hammer head	Complete
Temple VI	Layer of clay beneath temple	23	Cu alloy, spear shaped object head, interpreted as being a surgical instrument	Only head survives. Unsure whether the object possessed a handle, as accounts say that this was found.
	Under 'road I'	24	Iron shears	Blade
Temple II	Hoard' of objects placed in a crevice between a group of tiles deposited within the northern 'antae' of the building	25	Flint blade	Missing tip
The agricultural building	Area adjacent to corn-dryers	26	Unidentifiable tool	Unknown
	Area adjacent to corn-dryer discovered in 1967	27	Shears	Unknown
	Area adjacent to corn-dryers	28	Unidentifiable tool	Unknown
Excavations on the junction between the Watling Street and road bounding the southern temenos to the west	Unknown	29	Axe head of unspecified material	Unknown
Wooden buildings to the west of, and slightly overlying, Temple VII.	Unknown	30	Chisel of unspecified material	Unknown
		31	Chisel of unspecified material	Unknown
		32	Punch of unspecified material	Unknown
		33	Punch of unspecified material	Unknown

***Appendix 6: Details on items of culinary and dining equipment from the excavations directed by Penn and Harker.***

***Part 1: Detailed descriptions of items of culinary and dining equipment from written accounts compiled by Penn and Harker (page 436).***

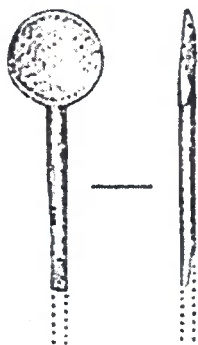
***Part 2: Photographs of items of culinary and dining equipment from the Gravesend Historical Society collection (page 440).***

***Part 3: Details on the fragmentation of items of culinary and dining equipment from Penn and Harker's excavations (page 443).***

**Part 1: Detailed descriptions of items of culinary and dining equipment from the written accounts compiled by Penn and Harker.**

**CU 1**

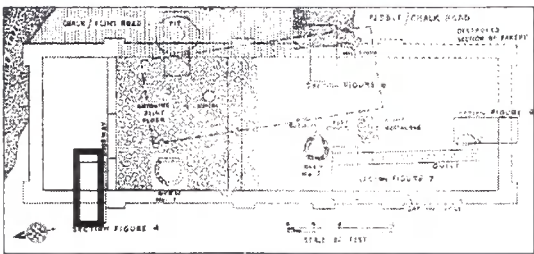
An object described as being a ‘bone spoon of a rat tailed type’ (CU 1) was discovered during excavations upon the remains of the ‘oven building’, in the vicinity of oven four, from Stratum C, a deposit of light, gravelly soil into which the feature had been built (Penn, 1964b; table 7.4).



**Figure 130: CU 1** (Penn, 1964b; fig 5.4) Scale is full size.

**CU 2**

A bronze spoon, described as being a ‘cochlear’ or ‘egg spoon’ (CU 2), was recorded as having been found in ‘key deposit VI’, a layer which had built up amongst the remains of the granary on Site A, and also over the surrounding areas (Penn, 1957; appendix VI, 1). The object is recorded as having been found inside the building, where a section (*ibid*; fig 4) was drawn through the north western part of the structure.



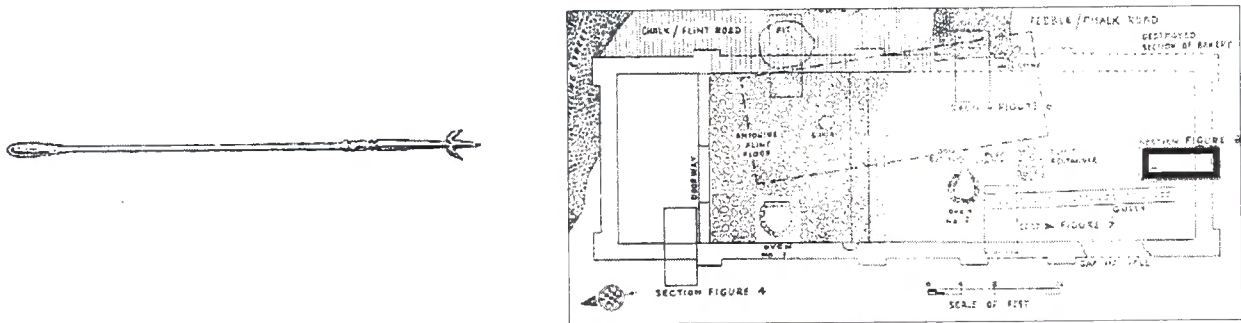
**Figure 131: CU 2, bronze ‘cochlear’ or ‘egg spoon’** and the approximate location from where it was discovered (Penn, 1957; fig 14.10). Scale is half size. Plan, showing the area with which the find was associated, is after *ibid*, 1957; fig 2).

CU 3

A bronze spoon (CU3) is recorded as having been discovered from an area to the west of Temple 1, between the ‘bakery’ and the Watling Street (Harker, 1979; 8).

CU 4

A bronze object with three prongs (CU 4), described as being the ‘handle of a ligula or probe’ (Penn, 1957; appendix VI, 14) was discovered in ‘key deposit III’, a stratum described as being a late Roman ‘occupation layer’ overlying the site occupied by the granary building. The object was found where the deposit overlay the southern wall of this structure, close to where a section (*ibid*; fig 8) was drawn. The illustration of the object shows that it could also be interpreted as some kind of small fork, with the prongs used to pick up pieces of food and may represent an item of culinary equipment. It is also noticeable that the scoop at the end of the object could also have functioned as a spoon.

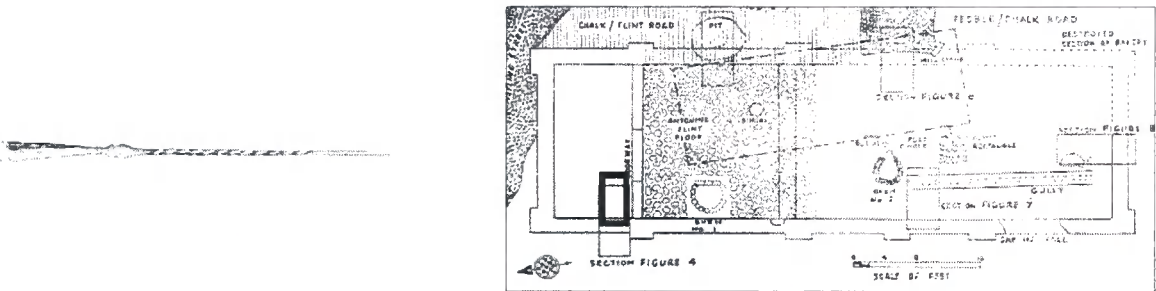


**Figure 132:** The fork-like object, CU 4 (Penn, 1957; fig 15.5). Scale is half size. Its general location is shown on the plan of Site A (after *ibid*; fig 2).



CU 5

A layer described as ‘key deposit VII’, filling the granary structure on Site A and covering the surrounding areas, contained an object described as being a bronze ligula (CU 5) (Penn, 1957, appendix VI, no 2), recovered from inside the ‘shop’ area of the building, where a section (*ibid*; fig 4) was drawn through the north western part of the structure.



**Figure 133:** The cu alloy ligula CU 5 (Penn, 1957; fig 14.11). Scale is half size. The location where the object was discovered is demarcated on the plan of Site A by a blue rectangle. (Plan after *ibid*; fig 2)

CU 6

A bronze ligula (CU 6) (Penn, 1962; table 6.14) was found in the ‘hoard’ of objects from the rubble layer filling of the north wing of Temple II.



**Figure 134:** CU 6 (Penn, 1962; fig 5.9). Scale is half size.

CU 7

An object described as being a bone ligula (CU 7) is recorded as having been discovered during excavations upon Site B, in the area of the ‘pedestal’ (Penn, 1958; table 12.3) from stratum E, a deposit of dark soil overlying part of the feature, an adjacent pit and a pebbled floor layer surrounding it.

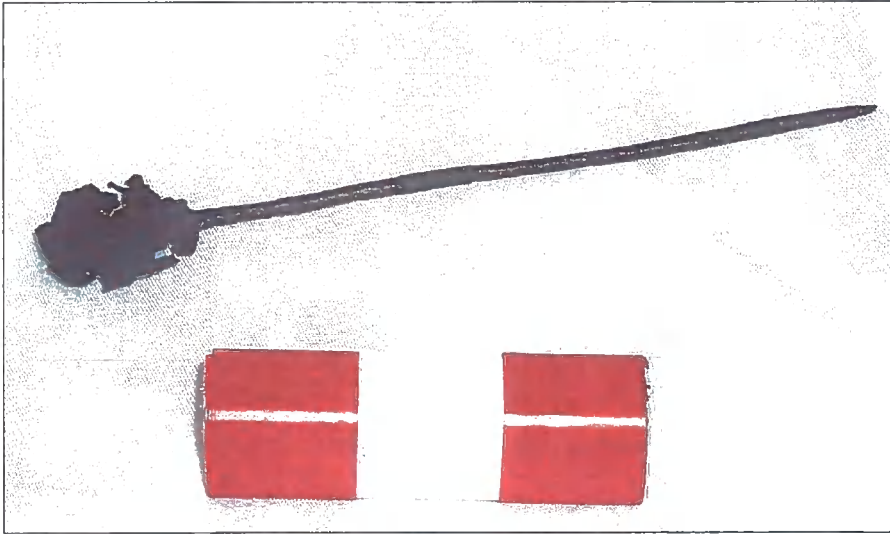


**Figure 135:** CU 7 (Penn, 1958; fig 9.5). Scale is half size.

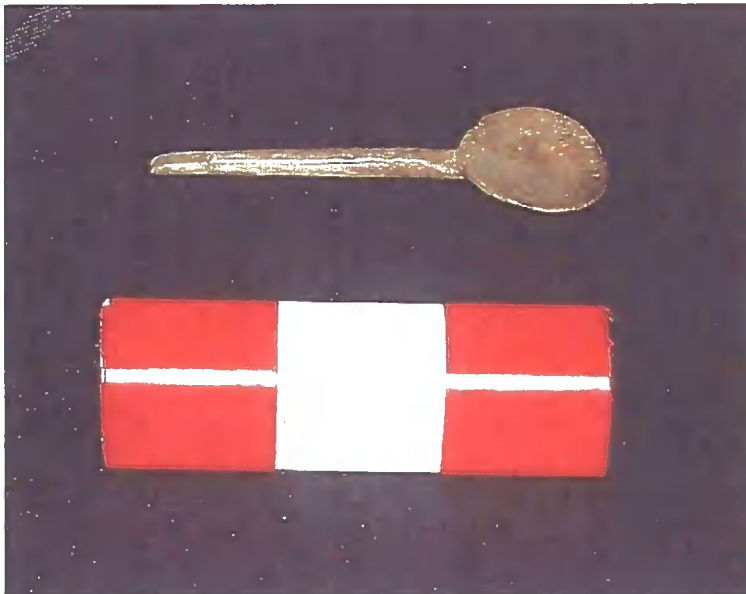
**CU 8**

A bronze spoon from the Gravesend Historical Society collection with a small, flat, oblong copper alloy head (**CU 8**) was found in a bag marked 'Site D' and 'bronze spoon, stratum below furnace 5-4-70'.

***Part 2: Photographs of items of culinary and dining equipment from the Gravesend Historical Society collection.***



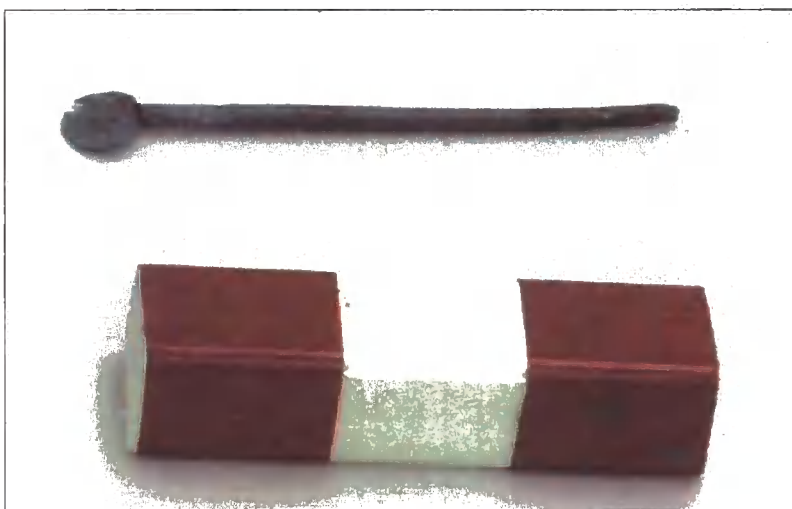
**Photograph 178**



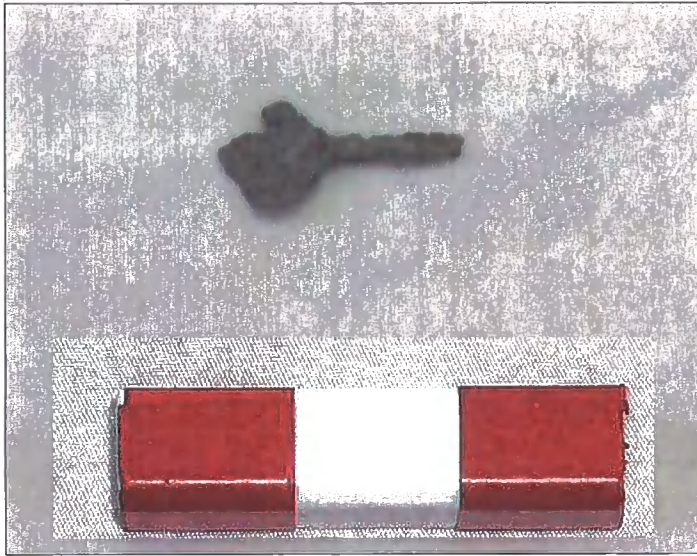
**Photograph 179**



**Photograph 180**



**Photograph 181**



**Photograph 182**

**Part 3: Details upon the fragmentation of culinary and dining equipment from the Gravesend Historical Society collection and from the written accounts compiled by Penn and Harker.**

Condition	Quantity			
	Cu alloy spoon	Bone spoon	Iron spoon	Cu alloy fork/spoon
Complete	3	0	0	1
Chipped edges to bowl	1	0	0	0
Missing large section from front of bowl	1	0	1	0
Missing handle	1	1	0	0
Missing tip	0	1	0	0
Missing a quarter of bowl	0	0	0	0
Unknown	1	0	0	0

**List of items of culinary and dining equipment featured in the summary table, above, and their location.**

Area of site	Context description	Sub number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 178	Cu alloy spoon	Head has edges chipped away
		Photograph 180	Iron spoon	Missing large section from front of spoon bowl
		Photograph 181	Cu alloy spoon	Complete
The oven building	Stratum C	1	Bone spoon	Missing handle - sharp fracture
Site A	Key deposit VI	2	Cu alloy spoon	Complete
Excavations between the 'bakery' (Site A) and the Watling Street	Unknown	3	Cu alloy spoon	Unknown
Site A	Key deposit III	4	Cu alloy fork-like object	Complete
	Key deposit VII	5	Bronze ligula	Head broken off at tip of spoon
Temple II	Hoard' of objects placed in a crevice between a group of tiles deposited within the northern 'antae' of the building	6	Cu alloy ligula	Complete
Site B; the pedestal	Stratum E - filling of pit in front of pedestal	7	Bone ligula	Missing non-spatulate end
Site D	Unknown	8	Cu alloy spoon	Missing handle and just under a quarter of bowl,

***Appendix 7: Details on quern and mill stones from the excavations directed by Penn and Harker.***

***Part 1: Detailed descriptions of objects identified as being quern and mill stones from written accounts compiled by Penn and Harker (page 445).***

***Part 2: Photographs and analysis of quern and mill stones from the Gravesend Historical Society collection (page 448).***

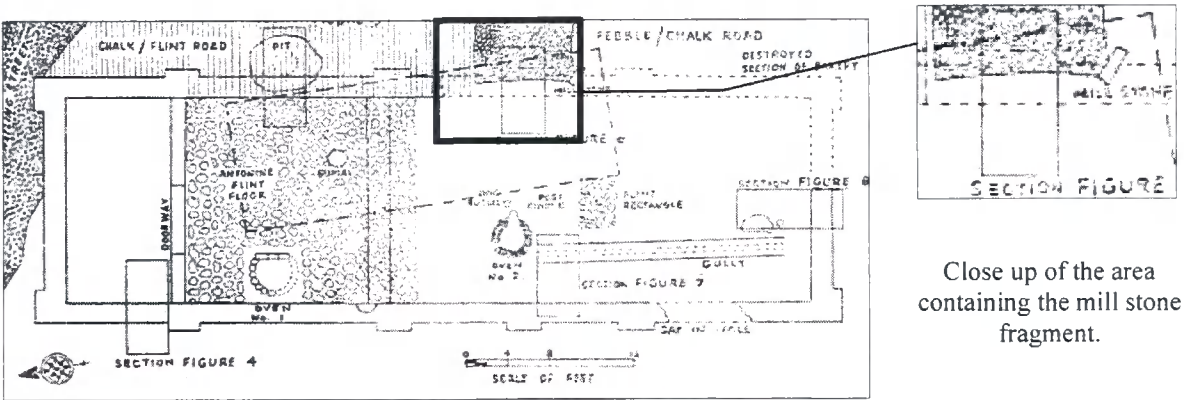
***Part 3: Details on the condition of quern and mill stones from Penn and Harker's excavations (page 459).***



**Part 1: Detailed descriptions of quern and mill stone fragments from the written accounts compiled by Penn and Harker.**

**QUML 1**

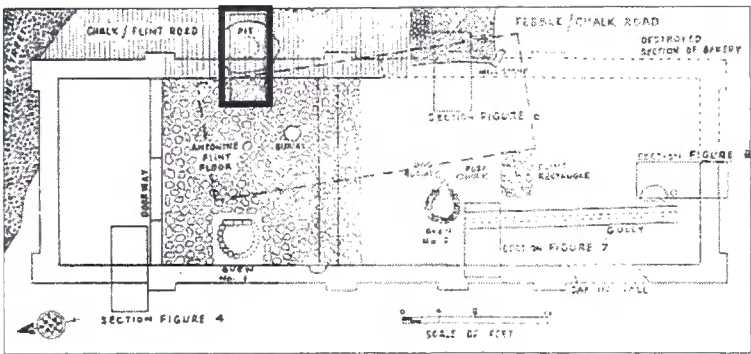
A ‘large fragment’ of a ‘mill stone’ (**QUML 1**) was found sealed in the robber trench which formed part of the east wall of the ‘granary’ building (Penn, 1957; 61). The object is described in the text (*ibid*) but is not mentioned in any of the finds listings for the report. The location of the stone is illustrated in the plan made of the remains of the building and its position can be clearly seen. It is, however, unclear which layer filling the robber trench the mill-stone belongs to one of two layers, ‘key deposit VIII’, or ‘key deposit VII’.



**Figure 136:** Details on the location of **QUML 1** (Plan is after Penn, 1957; fig 2).

**QUML 2**

A segment of a Niedermendig lava quern (**QUML 2**) is described as having been found from ‘key deposit VI, a layer filling the remains of the granary structure on Site A, and also covering the areas surrounding it. The object was found close to the east wall of the ‘bakery’ building, near to the location where a section (Penn, 1957 fig 5) was drawn through this area (*ibid*; appendix XII, 3).



**Figure 137:** Location of section (indicated by a rectangle) from which find **QUML 2** was recovered. The plan is after Penn, 1957; fig 2).



QUML 3-5

Three pieces of Mayen lava quern (QUML 3-5) were also identified from the area of the ‘agricultural building’ (Penn, 1968c; 12), although their position in the vertical stratigraphy of the site was not recorded and no further detail was provided.

QUML 6-11

Three quern stone fragments (QUML 6-8) were depicted close to the remains of oven six on the plan of the ‘oven building’. The stones are portrayed on the plan of the structure as being placed together in a semi-circular shape, perhaps indicating that they form the broken remains of half a stone resting on the floor of the structure. Pieces of lower quern stones were also described as having been found in a shallow circular hole ‘in the vicinity’ of oven six (Penn, 1964b; 174). The fragments were photographed and at least three can be seen in the picture (QUML 9-11) all displaying rounded edges, indicating they could have been fragments of stones. It is not entirely certain where the fragments came from. A feature located close to oven six is marked on the plan as being a ‘recessed hole for quern’ although this is not entirely certain, as no further information is available about the objects.

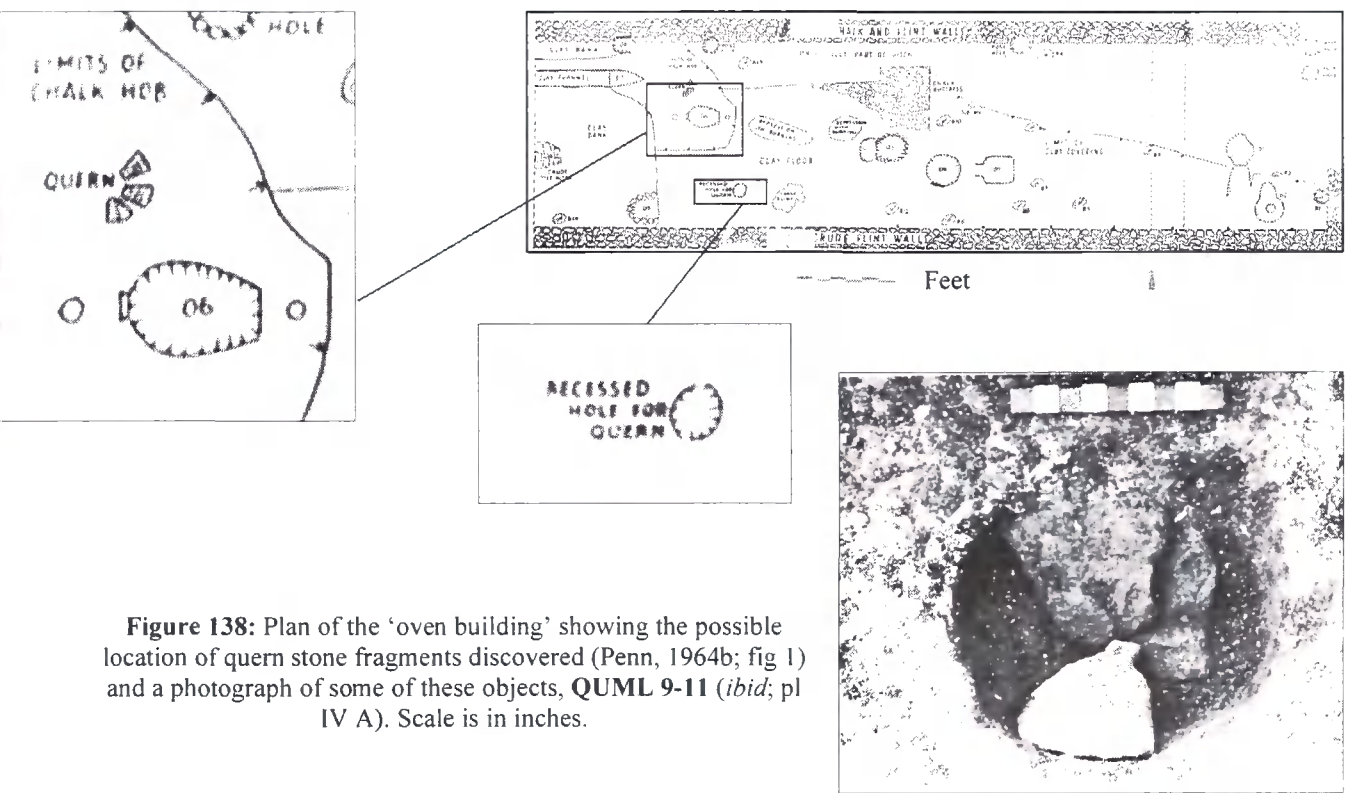


Figure 138: Plan of the ‘oven building’ showing the possible location of quern stone fragments discovered (Penn, 1964b; fig 1) and a photograph of some of these objects, QUML 9-11 (*ibid*; pl IV A). Scale is in inches.

**QUML 12**

The remains of a millstone were found during excavations upon the 'agricultural building', although their relationship to the vertical stratigraphy of this part of the site was not document. Pieces of the object were analysed at the National Geological Survey and Museum and described as being nearly thirty two inches in diameter and represented by 'several' pieces of red sandstone (Penn, 1968c; 12), and the existence of at least three fragments can be postulated.

## ***Part 2: Quern and mill stone fragments from the Gravesend Historical Society collection.***

A number of possible quern and mill stone fragments were identified from the Gravesend Historical Society collection that could not be reconciled with examples mentioned in the published accounts compiled by Penn and Harker. These objects have been discussed in some depth, as some of them are highly fragmentary and eroded, and it is necessary to explain why they could be interpreted as performing such a function.

A large fragment of a mill stone was discovered (Photograph 183 on page 450). Tool marks were identified on two other large pieces of stone from (Photograph 184 on page 450 and Photograph 185 on page 451) and the edges of these fragments displayed clear indications of deliberate curving which was too distinct to be of natural origin. Another fragment (Photograph 186 on page 451) possessed curving edges on its outer rim, together with a faint curving edge at the point where the centre of the quern stone would have been, suggesting the presence of a socket hole. The fragment also displayed curving grooves on one side, which may have been caused by turning. Another fragment (Photograph 187 on page 452) displayed a series of tool marks along a curving edge, although there was no evidence for a central socket hole. One fragment (Photograph 188 on page 452) possessed curving edges but displayed no evidence for a central socket hole. Another fragment (Photograph 189 on page 453), displayed curving edges and a number of horizontal striations which appeared to be tool marks, but possessed no evidence for a central socket hole. One fragment (Photograph 190 on page 453) displayed traces of an extensive curving edge, suggesting deliberate manufacture, although no evidence for tool marks or a central socket could be identified.

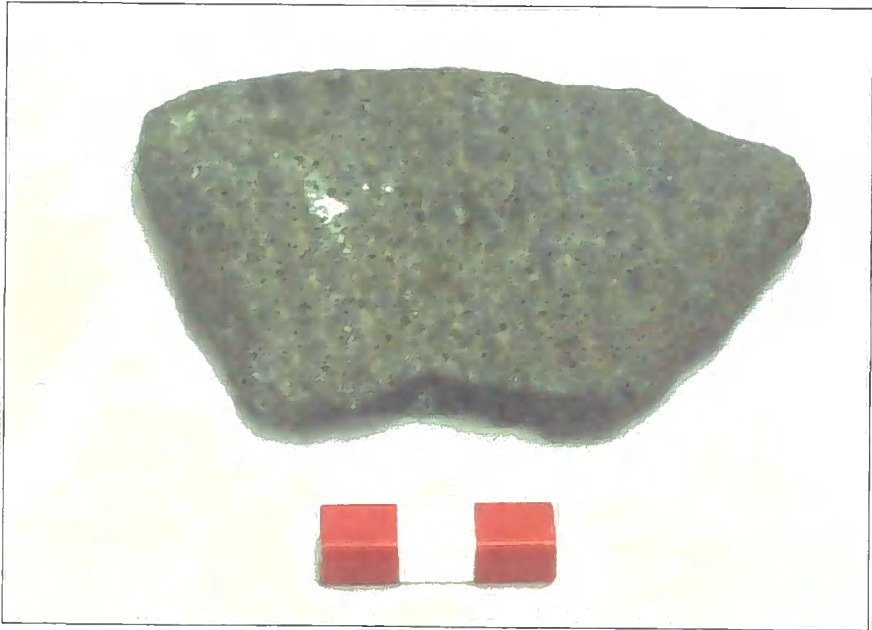
A curving edge was identified on another fragment (Photograph 191 on page 454) and it is possible that this could reflect a deliberately manufactured rim of a quern, although this is the only evidence for the object having once served such a purpose. Another fragment (Photograph 192 on page 454) possessed a regular outer side that was not particularly curved. A gentle curvature did, however, exist on the inner edge which might suggest the presence of a socket hole, although this is quite faint. One fragment (Photograph 193 on page 455) was curved enough to suggest that the object might be part of a gently rounded, large stone. The find possessed a distinct curving edge at the point where a socket hole might be expected. Another fragment (Photograph 194 on page 455) possessed an extensive curving edge which might have been the result of deliberate manufacture. The inner edge of the object was, however, very wide and there was no sign of a socket hole. Two fragments of stone had been glued together (Photograph 195 on page 456). A curving inner edge to the larger of the two fragments may suggest a large socket hole. There are traces of a curving outer edge on the larger stone, although this is not paralleled by the smaller 'matching' fragment. Given that the larger stone looks extremely like a quern fragment. The width of the crack, particularly at the base of the photographed objects, might suggest that the two fragments were fitted together incorrectly. The final fragment (Photograph 196 on

page 456) possessed a regular, but slightly curving edge which may have been deliberately shaped, although there is no evidence for a socket hole.

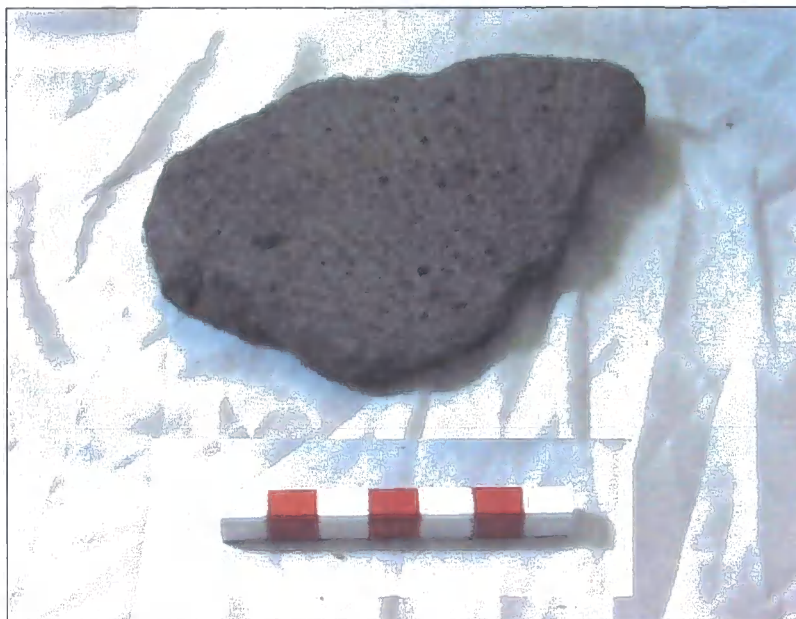
Two other fragments of stone possessed traces of possible socket holes. The first (Photograph 197 on page 457) was very convincing, with traces of a curving hole on the side of the stone facing the camera, traces of which can be seen clearly on both the upper and lower sides of the object. There was also a curving depression in the stone between these two points, providing strong evidence for a central hole. The second fragment (Photograph 198 on page 457) also possessed traces of a curving hole, which can be seen upon the side of the object facing the camera. Two fragments which had been glued together (Photograph 199 on page 458) possess traces of curving edges on the side facing the camera, although this is more pronounced on the stone towards the right of the photograph.



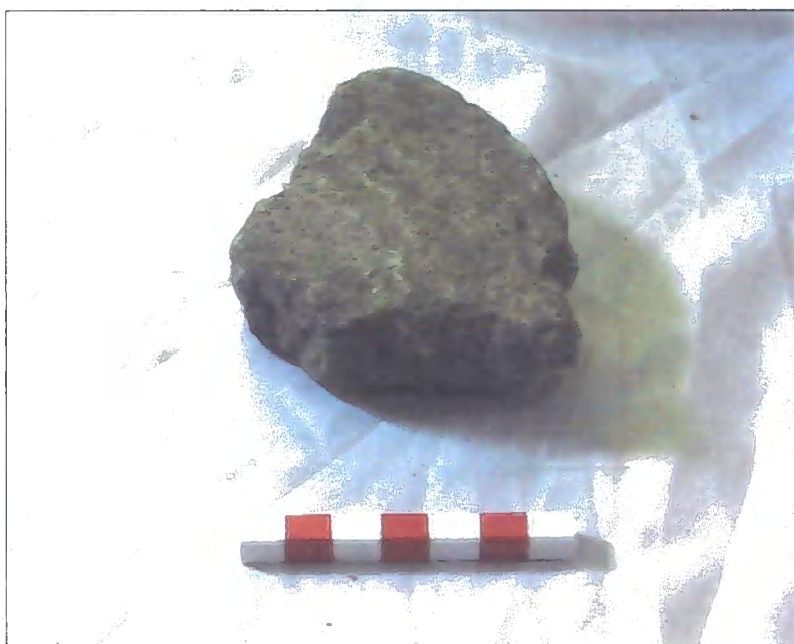
Photograph 183



Photograph 184



**Photograph 185**



**Photograph 186**



**Photograph 187**



**Photograph 188**





**Photograph 189**



**Photograph 190**

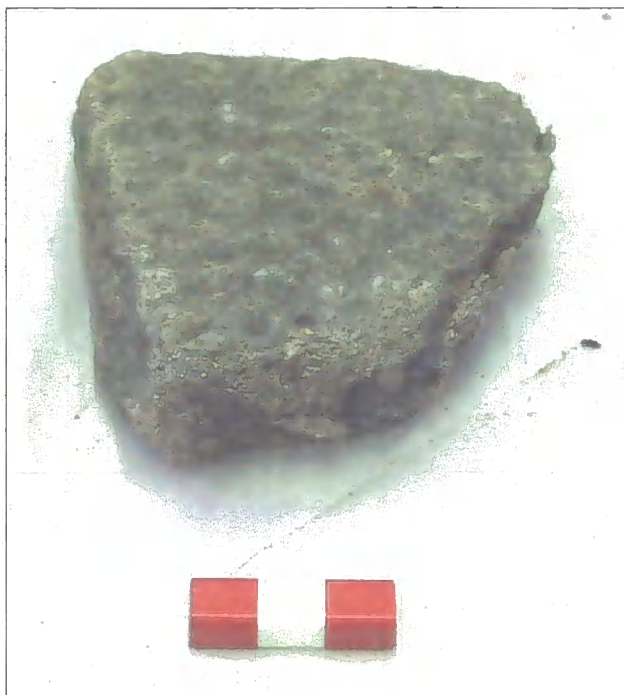




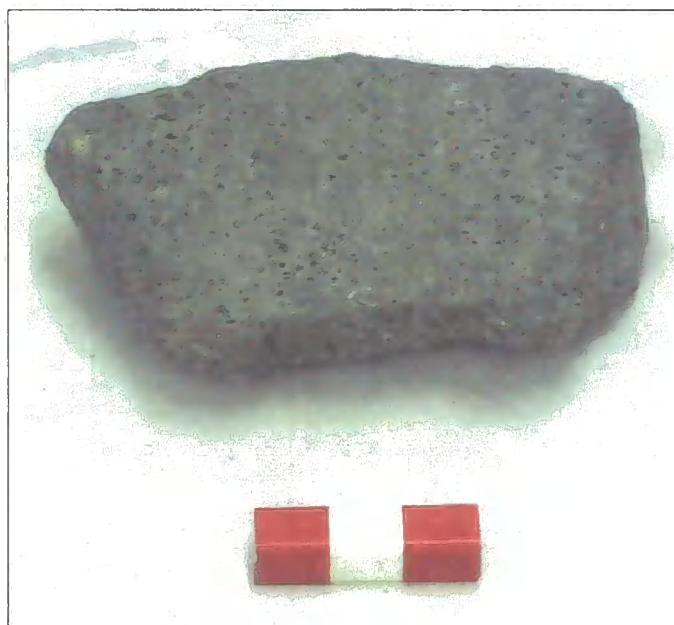
Photograph 191



Photograph 192



**Photograph 193**



**Photograph 194**



**Photograph 195**



**Photograph 196**



**Photograph 197**



**Photograph 198**



**Photograph 199**

Part 3: Details upon the fragmentation of quern and mill stones from the Gravesend Historical Society collection and from the written accounts compiled by Penn and Harker.

Condition	Quantity		
	Quern stones	Mill stones	Quern or mill stone
Two thirds of stone, including central hole, preserved	0	1	0
Approximately one sixteenth of stone preserved	7	2	0
Approximately one eighth of stone preserved	0	1	1
Approximately one quarter of stone preserved	1	0	0
Edge fragment with a roughly symmetrical shape	11	3	0
Edge fragment with asymmetrical shape	6	0	4
Edge of socket hole preserved	2	0	0
Fragment, but further details are unknown	4	4	0

List of quern and mill stones featured in the summary table, above, and their location.

Area of site	Context description	Sub number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 183	Mill stone	Approximately half of stone, two thirds represented
		Photograph 184	Quern stone	Fragment of stone with curved edge, one eighth represented
		Photograph 185	Quern stone	Fragment, one eighth represented
		Photograph 186	Quern stone	Fragment, one quarter represented
		Photograph 187	Quern stone	Fragment of stone with curved edge, one sixteenth represented.
		Photograph 188	Quern stone	Fragment of stone with curved edge, one sixteenth represented.
		Photograph 189	Quern stone	Fragment of stone with curved edge, one sixteenth represented.
		Photograph 190	Quern stone	Fragment of stone with curved edge. Very symmetrical, with flat edges, one sixteenth represented.
		Photograph 191	Quern stone	Fragment of stone with curved edge - regular shape - small chip at one end, one sixteenth represented.
		Photograph 192	Quern stone	Fragment of stone with curved edge - regular shape, one sixteenth represented.
		Photograph 193	Quern stone	Fragment of stone with curved edge, one sixteenth represented.
		Photograph 194	Quern stone	Fragment of stone with curved edge - regular shape, one sixteenth represented.

Area of site	Context description	Sub number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 195	Quern stone	Two fragments - longer one with a curving edge may have been joined to the other fragment during reconstruction - not sure if they are parts of the same object, one sixteenth represented.
		Photograph 196	Quern stone	Fragment of stone with curving edge - regular shape, one sixteenth represented.
		Photograph 197	Quern stone	Irregular fragment with no straight or sharp fractures, one sixteenth represented.
		Photograph 198	Quern stone	Irregular fragment with no straight or sharp fractures, one sixteenth represented.
		Photograph 199	Quern stone	Two irregular fragments joined together with no straight or sharp fractures, one sixteenth represented.
Site A	Key deposit VII or VIII	1	Mill stone	Large fragment. Further details are unknown
	Key deposit III	2	Quern stone	Precise details unknown, but a segment was found
The agricultural building	From area of building	3	Mayen Lava quern	Fragment, further details unknown
		4	Mayen Lava quern	Fragment, further details unknown
		5	Mayen Lava quern	Fragment, further details unknown
The oven building	Stratum C	6	Fragment of quern stone	Rim and centre fragments, tapering to possibly circular edge, possibly divided part of same stone with QUML 7 and 8, one eighth.
		7	Fragment of quern stone	Rim and centre fragments, tapering to possibly circular edge, possibly divided part of same stone with QUML 6 and 8, one eighth.
		8	Fragment of quern stone	Rim and centre fragments, tapering to possibly circular edge, possibly divided part of same stone with QUML 6 and 7, one eighth.
		9	Fragment of quern stone	Some trace of rounded edges.
		10	Fragment of quern stone	Some trace of rounded edges.
		11	Fragment of quern stone	Some trace of rounded edges.
The agricultural building	Unknown	12	Mill stone	At least three fragments, further details unknown

***Appendix 8: Details on needles from the excavations directed by Penn and Harker.***

***Part 1: Detailed descriptions of needles from written accounts compiled by Penn and Harker (page 462).***

***Part 2: Photographs of needles from the Gravesend Historical Society collection (page 464).***

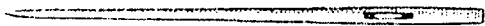
***Part 3: Details on the condition of needles from Penn and Harker's excavations (page 468).***



**Part 1: Detailed descriptions of needles from written accounts compiled by Penn and Harker.**

**NEED 1**

A long bone needle with a spatulate end and a long eye, 4.6 inches in length is recorded as having been discovered during excavations on building B10, in the western room (B) of the building, close to the ‘mausoleum’ (Penn, 1968a; table 6.9).



**Figure 139: NEED 1** (after Penn, 1968a; fig 4.16). Scale is half size.

**NEED 2-6**

A bronze needle of ‘common type’ with the ‘eye formed by splitting the shank and re-joining’ (**NEED 2**) is recorded as having been discovered from Site A in ‘key deposit IV’, a layer overlying the flint floor inserted into the ‘granary’ structure (Penn, 1957; appendix VI, no 15). A minimum of four bone needles (**NEED 3-6**) are mentioned as being discovered from Site A, in ‘key deposits’ II, III, IV and V, all layers accumulating over the ‘granary’ structure (*ibid*; appendix VIII, no 5), although only one of these is illustrated. The objects are said to have been found over the flint floor inserted into the centre of the building and the features to the east of it described as being a ‘pebble/chalk’ road and ‘chalk/flint’ road (*ibid*). The precise number of objects discovered from each of these strata is not given in the report.



**Figure 140: a) NEED 2** (Penn, 1957; fig 15.6), **b) one of the needles, NEED 3-6**, although it is uncertain which one (after *ibid*; fig 18.2). Scale for both illustrations is full size.

**NEED 7-9**

A bronze needle of 'common type', with an eye formed by splitting the shank and then joining it up again (**NEED 7**), was recorded as having been discovered from Temple II, unstratified in the plough soil over the steps of the building (Penn, 1962; table 6.2). A bronze needle of 'common type' (**NEED 8**) is also recorded as having been discovered from the same location (*ibid*; table 6.5), as was part of an iron 'netting needle' (**NEED 9**) (*ibid*; table 7.4).

**NEED 10**

A bronze needle (**NEED 10**) is recorded as having been discovered during excavations in and around kiln F.26, from stratum A, a layer of dark soil sealing the feature (Penn, 1968a; table 6.24).

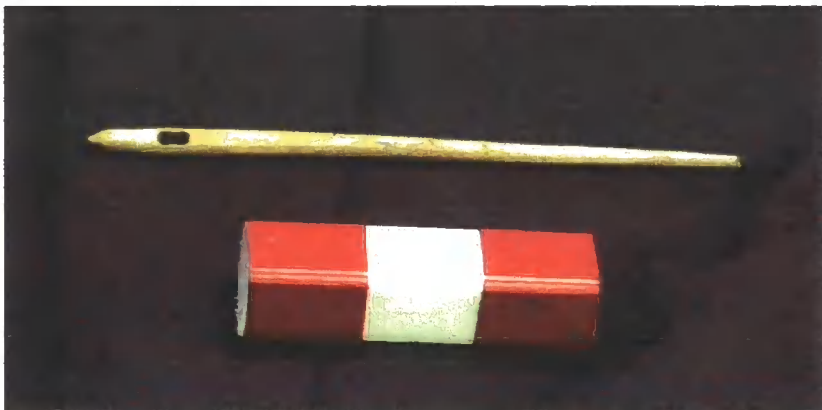
**NEED 11-12**

At least two 'needles' (**NEED 11-12**) are described as having been discovered *either* from Site D, or from excavations upon Temple VII (Harker, 1971b; 8).

**Part 2: Photographs of needles from the Gravesend Historical Society collection.**



**Photograph 200**



**Photograph 201**



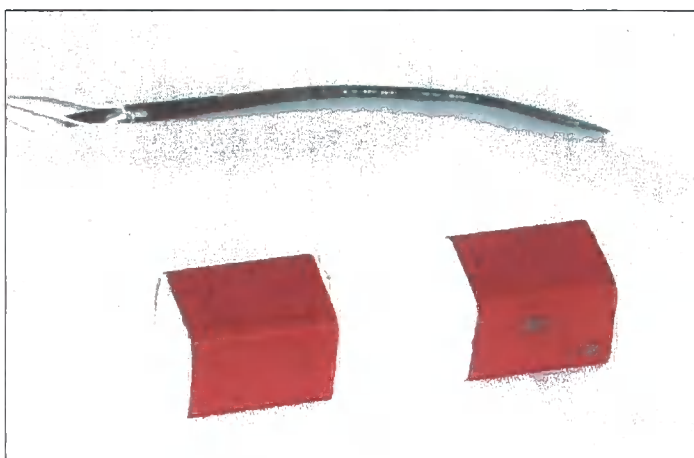
**Photograph 202**



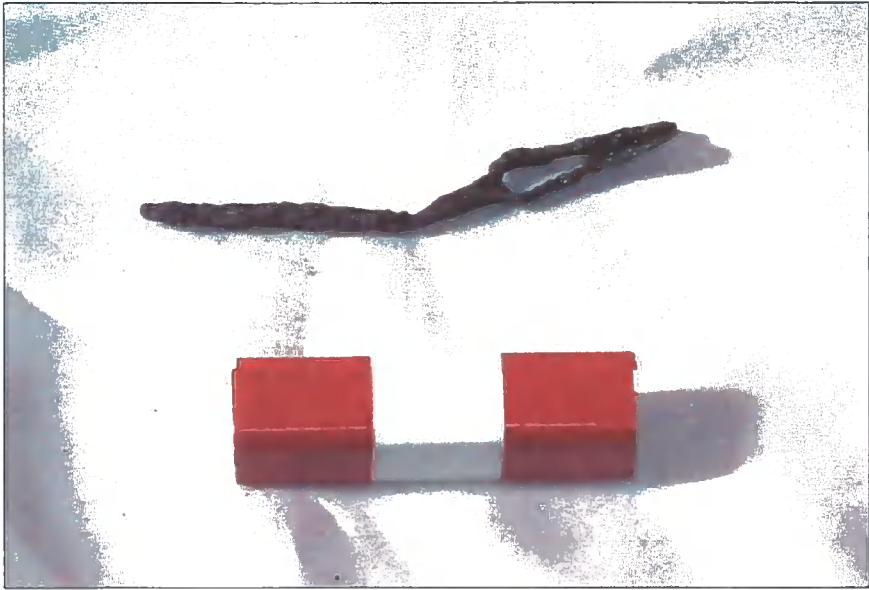
**Photograph 203**



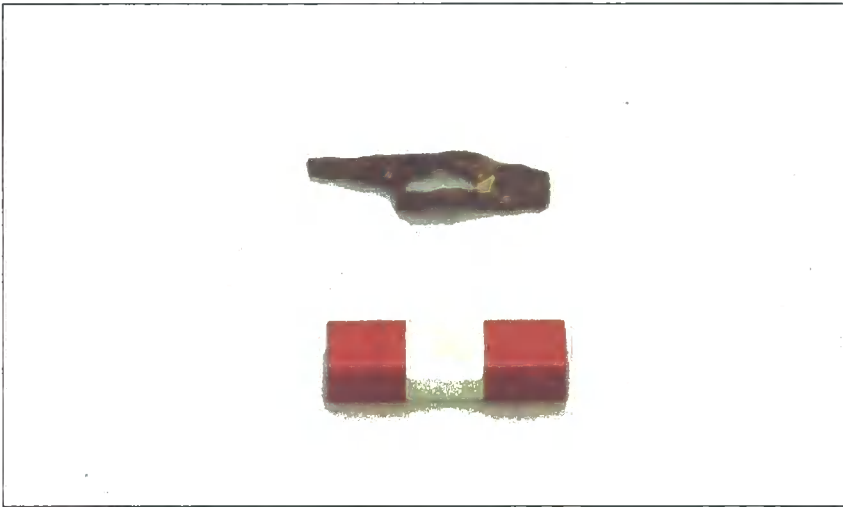
**Photograph 204**



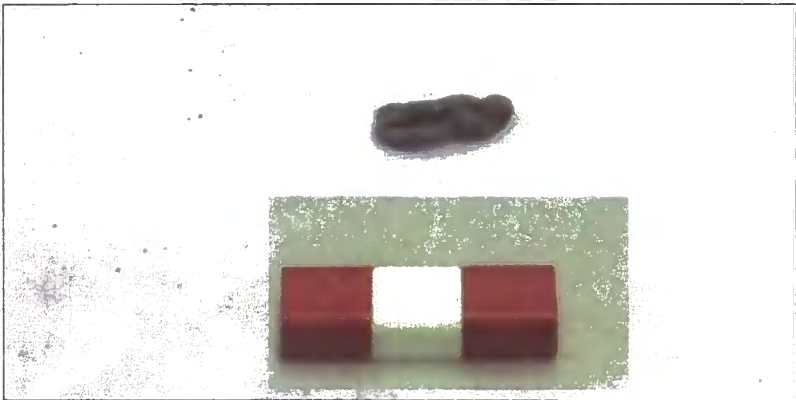
**Photograph 205**



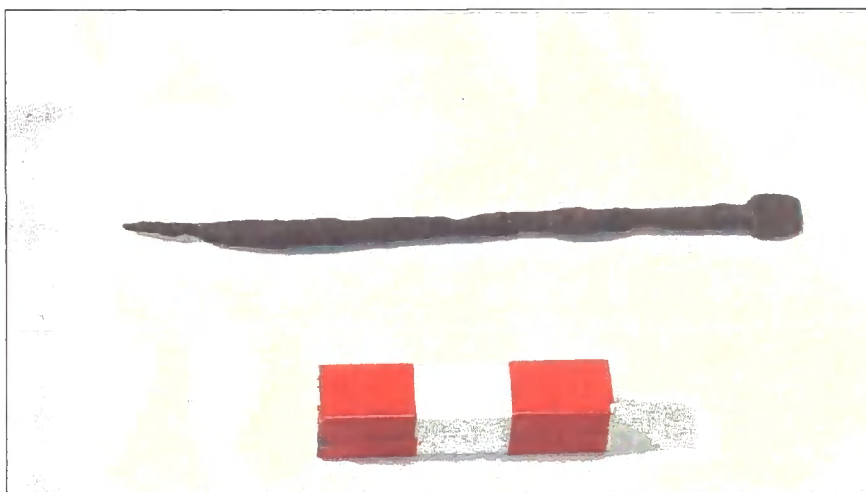
Photograph 206



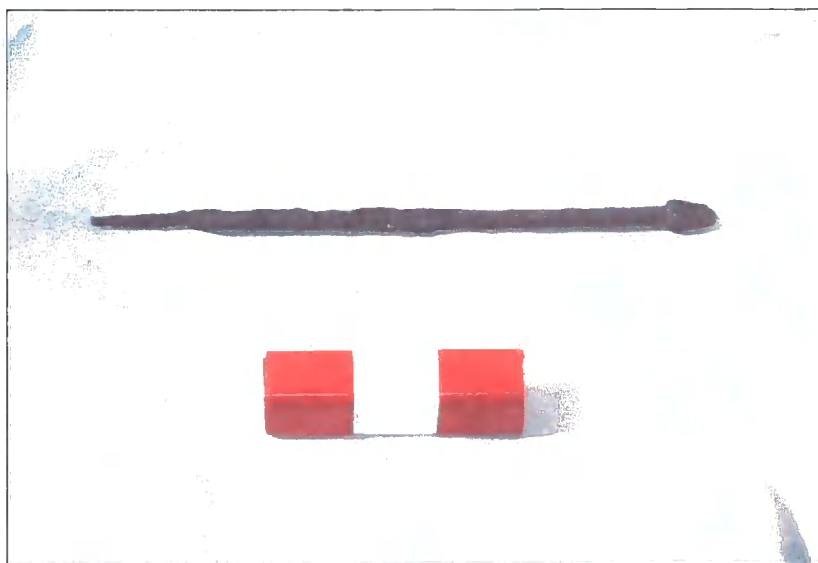
Photograph 207



Photograph 208



**Photograph 209**



**Photograph 210**

**Part 3: Details upon the fragmentation of needles from the Gravesend Historical Society collection and from the written accounts compiled by Penn and Harker.**

Condition	Quantity		
	Cu alloy needle	Bone needle	Iron needle
Complete	2	3	0
Missing tip	1	3	2
Missing shaft	1	0	1
Half of shaft broken off, towards end with tip	0	0	2
Bent	0	0	1
Fragmented, but further details unknown	0	0	1
Unknown	3	3	2

**List of needles featured in the summary table, above, and their location.**

Area of site	Context description	Sub number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 201	Bone needle	Missing tip
		Photograph 202	Bone needle	Missing tip
		Photograph 203	Bone needle	Complete
		Photograph 204	Bone needle	Missing tip
		Photograph 205	Cu alloy needle	Complete
		Photograph 206	Iron needle	Missing part of shaft and tip, bent
		Photograph 207	Iron needle	Missing shaft and tip
		Photograph 208	Cu alloy needle	Missing shaft and tip
		Photograph 209	Iron needle	Half of shaft broken off, at tip end
		Photograph 210	Iron needle	Half of shaft broken off, at tip end
Building B10	Stratum 5	1	Bone needle	Complete
Site A	Key deposit IV	2	Cu alloy needle	Complete
	Either key deposit V, IV, III or II	3	Bone needle	Unknown
		4	Bone needle	Unknown
		5	Bone needle	Unknown
		6	Bone needle	Complete

Area of site	Context description	Sub number	Description	State of fragmentation
Temple II	Ploughsoil	7	Cu alloy needle	Unknown
		8	Cu alloy needle	Unknown
		9	Iron netting needle	Incomplete, but no further information other than that 'part' of the object was discovered
Excavations on and around Feature F26	Stratum A	10	Cu alloy needle	Unknown
Either from Site D or from excavations upon and around Temple VII.	Unknown	11	Iron needle	Unknown
		12	Iron needle	Unknown



***Appendix 9: Details on spindle whorls and loomweights from the excavations directed by Penn and Harker.***

***Part 1: Detailed descriptions of spindle whorls and loom weights from written accounts compiled by Penn and Harker (page 471).***

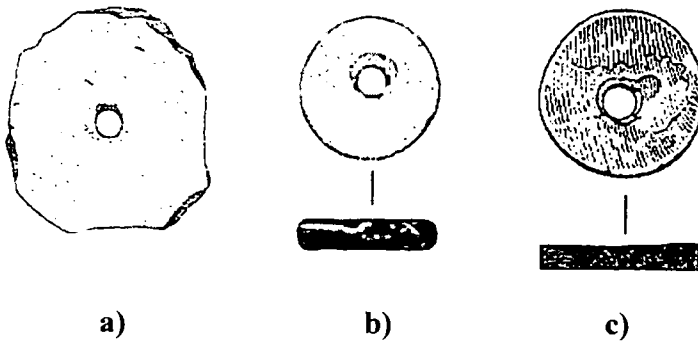
***Part 2: Photographs of spindle whorls and loom weights from the Gravesend Historical Society collection (page 473).***

***Part 3: Details on the condition of spindle whorls and loom weights from the Gravesend Historical Society collection and the written accounts compiled by Penn and Harker (page 475).***

**Part 1: Detailed descriptions of spindle-whorls and loom weights from written accounts compiled by Penn and Harker.**

**SPIN 1-3**

A 'large spindle-whorl cut from the base of a coarse pot of hard greyish ware with a pink surface' (**SPIN 1**) was discovered within the filling of the temple ditch (Penn, 1964b; table 9.3), as was another object (**SPIN 2**), described as being a 'spindle-whorl cut from a grey coarse ware pot' (*ibid*; table 9.4). A worn Antonine *sestertius* was also discovered (**SPIN 3**) with a 0.3 inch hole punched through its centre and interpreted as performing a similar function (*ibid*; table 5.17). An almost identical object was found in the Gravesend Historical Society collection but this possessed no trace of any inscription that would allow its identification as a coin.



**Figure 141:** Objects illustrated in the published reports from Springhead that were interpreted as being spindle-whorls: **a) SPIN 1** (Penn, 1964b; fig 5.11), **b) SPIN 2** (*ibid*; figure 5.13), **c) SPIN 3** (*ibid*; fig 4.5). Scale for all illustrations is half size

**SPIN 4**

A thick, roughly made chalk object, 1.75 inches in diameter, with a central perforation described as being 0.4 inches in diameter, was discovered on Site B, beneath the 'shop' in a layer of sand classified as 'stratum G' (Penn, 1958; table 14.2).



**Figure 142:** **SPIN 4** (Penn, 1958; fig 10.3). Scale is half size.

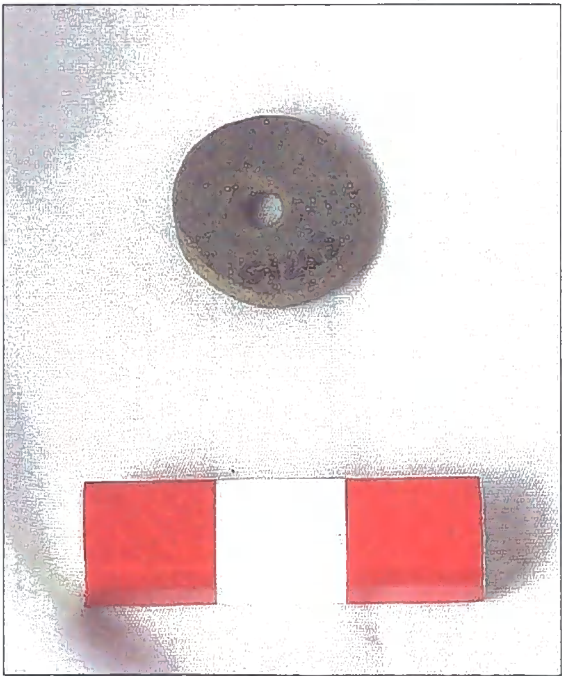
**LOOM 1**

An object interpreted as being a 'lead-tin alloy loom weight' (Harker, 1977; 9) (**LOOM 1**) was identified from *either* an area excavated to the south of the junction between the Watling Street and the road bounding the southern 'temenos' to the west' Street *or* to an area excavated in the north east of the settlement, in front of the Central Electric and Gas Board switching station.

**Part 2: Photographs of spindle-whorls from the Gravesend Historical Society collection.**



**Photograph 211**



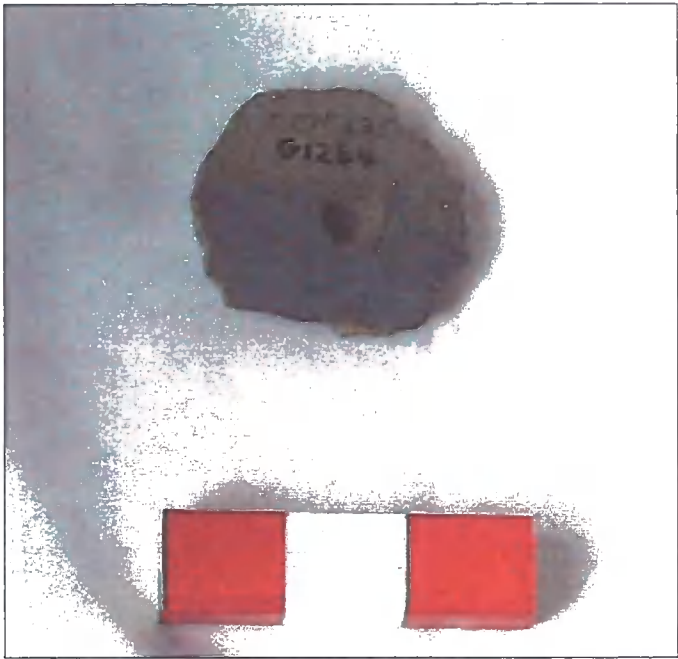
**Photograph 212**



Photograph 213



Photograph 214



Photograph 215

**Part 3: Details on the condition of spindlewhorls and loom weights from the Gravesend Historical Society collection and from the written accounts compiled by Penn and Harker.**

Area of site	Context description	Sub number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 215	Ceramic spindle whorl	Complete (but seems to have been originally broken from pottery vessel)
The temple ditch	Ditch filling	1	Pottery spindle whorl	Complete (although, obviously, from a fragmented pot)
		2	Pottery spindle whorl	Complete (although, obviously, from a fragmented pot)
		3	Spindle whorl made from coin	Worn coin - Denarius
Site B: the shop	Stratum G	4	Chalk spindle whorl	Complete
Either area excavated to the south of the junction between the Watling Street and the road bounding the southern 'temenos' to the west, or from an area in the north east of the settlement, in front of the CEGB switching station.	Unknown	1	Lead-tin alloy loom weight	Unknown

***Appendix 10: Details on hones from the excavations directed by Penn and Harker.***

***Part 1: Detailed descriptions of objects identified as being hones from the written accounts compiled by Penn and Harker (page 477).***

***Part 2: Photographs of hones from the Gravesend Historical Society collection (page 479).***

***Part 3: Details on the condition of hones from Penn and Harker's excavations (page 483).***

**Part 1: Detailed descriptions of hones from the written accounts compiled by Penn and Harker.**

**HONE 1-2**

A fragment of an object identified as being a hone (**HONE 1**) was described as having been made from a fine grained, compact, grey-brown siltstone composed of grains of quartz, limonite, micaceous materials, feldspar, cherty silica, accessory apatite and zircon was identified from site A. The object was found in ‘key deposit VI’, a layer that had accumulated amongst the remains of the ‘granary’ structure, over the flint floor inserted into the middle of the building (Penn, 1957; appendix XII, no 2). Part of an identical object (**HONE 2**) was discovered from the same deposit and in the same location (*ibid*).

**HONE 3**

‘Part of a large hone’ (**HONE 3**) is recorded as having been discovered, covering two small pots during excavations on building B10 in the large western room (B) of the structure, just south of the ‘mausoleum’ area. The object is mentioned in the text of the report (Penn, 1968a; 170) but is not mentioned in the specialist finds analysis (*ibid*; 188-190).

**HONE 4-5**

An object described as being a hone, 3.125 inches in length (**HONE 4**) is recorded as having been discovered during excavations on the ‘oven building’ (Penn, 1964b; table 9.11) from stratum C, a layer filling oven six (*ibid*). A fragment of a stone hone, 3.7 inches in length (**HONE 5**), was also discovered from the same strata and location (*ibid*; table 9.12).



**Figure 143: HONE 4** (Penn, 1964b; fig 5.14). Scale is half size



## HONE 6

An object identified as a being a 'small hone' was identified from excavations on Temple III, in either stratum E or F, the layers filling the remains of the structure (Penn, 1960; table 14.4).



**Figure 144: HONE 6** (Penn, 1960; fig 6.9). Scale is half size

## HONE 7

An object identified as being part of a hone was discovered during excavations on Temple IV, in an unspecified layer mentioned simply as 'stratum' (Penn, 1960; table 14.6).

## HONE 8

An object identified as being an incomplete hone, 2.25 inches in length and 1.1 inches in width was identified from excavations on Site B from stratum I, the layer of plough soil, overlying an area close to the 'shop' (Penn, 1958; table 14.1). The object is described as possessing two small notches at the end, thought to have been caused by the sharpening of pins (*ibid*).

*Part 2: Photographs of hones from the Gravesend Historical Society collection.*



Photograph 216



Photograph 217



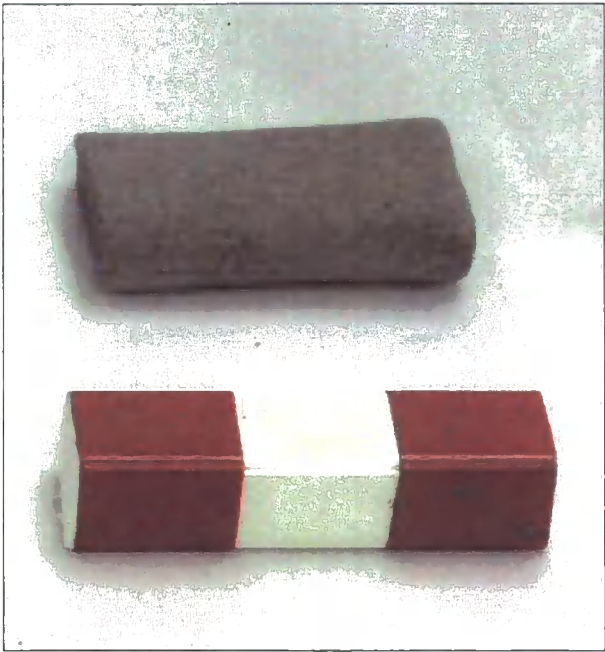
Photograph 218



Photograph 219



Photograph 220



Photograph 221



Photograph 222



Photograph 223

**Part 3: Details upon the fragmentation of hones from the Gravesend Historical Society collection and from the written accounts compiled by Penn and Harker.**

Condition	Quantity
	Stone hone
Complete	3
Possibly eroded fracture through body but, if not, then complete	3
Small, square piece removed from body of stone <sup>8</sup>	1
Broken through body	1
Both ends broken off	1
Fragment discovered, 3.7 inches in length, but further details are unknown	1
Fragment discovered, but further details are unknown	4
Unknown	2

**List of hones featured in the summary table, above, and their location.**

Area of site	Context description	Sub number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 216	Stone hone	Complete (small piece appears to be a removable fragment)
		Photograph 217	Stone hone	Probably complete (possibility that end removed)
		Photograph 218	Stone hone	Broken on one side (jagged fracture)
		Photograph 219	Stone hone	Broken on one side (jagged fracture)
		Photograph 220	Stone hone	Probably complete (possibly eroded fracture on one side)
		Photograph 221	Stone hone	Complete
		Photograph 222	Stone hone	Complete
		Photograph 223	Stone hone	Probably complete (possibly eroded fracture on one side)

<sup>8</sup> One hone from the Gravesend Historical Society collection had a small, rectangular fragment of stone broken off, and this had been reattached to the object at a later date. The edges of this fragment were very straight and could probably only have been produced by a cut from a machine. It is possible that the chemical composition of the stone was being examined; geologists are known to have subjected some of the material for specialist analysis, as is evident from the report on the hones from Site A (*cf* Penn, 1957; appendix XII, no 2), and also on the mill stone fragments from the ‘agricultural building’ (Penn, 1968c; 12).

Area of site	Context description	Sub number	Description	State of fragmentation
Site A	Key deposit VI	1	Stone hone	Fragment
		2	Stone hone	Unknown
Building B10	Stratum 5	3	Stone hone	Fragmented but further details are unknown
The oven building	Stratum C	4	Stone hone	Illustration would appear to indicate that both ends had been knocked off
		5	Stone hone	Fragment of hone, 3.7 inches in length
Temple III	Stratum E or F	6	Stone hone	Unknown
Temple IV	Unidentified layer, marked simply as 'stratum'	7	Stone hone	Fragment, specifically mentioned as being part of a hone. Further details were not provided
Site B: the shop	Stratum I	8	Stone hone	Recorded as being incomplete

***Appendix 11: Details on carved ornamental stone from the excavations directed by Penn and Harker.***

***Part 1: Detailed descriptions of carved ornamental stone from written accounts compiled by Penn and Harker (page 486).***

***Part 2: Photographs of carved ornamental stone from the Gravesend Historical Society collection (page 488).***

***Part 3: Details on the condition of carved ornamental stone from Penn and Harker's excavations (page 493).***



*Part 1: Detailed descriptions of carved ornamental stone from written accounts compiled by Penn and Harker.*

CARVST 1-6

Fragments of a Corinthian capital (CARVST 1-4) were discovered during excavations upon Site B, where this area incorporated the southern ‘temple complex’. The fragments were discovered from a layer classified as ‘stratum E’, where this layer filled a pit next to the ‘pedestal’ (Penn, 1958; 87). The locations of three of the four column fragments are shown in the section through the area occupied by this feature. A number of much smaller pieces of capital are also recorded as having been discovered during these excavations from an unknown location (*ibid*; 87; 108) and the existence of a minimum of two fragments can be postulated (CARVST 5-6).

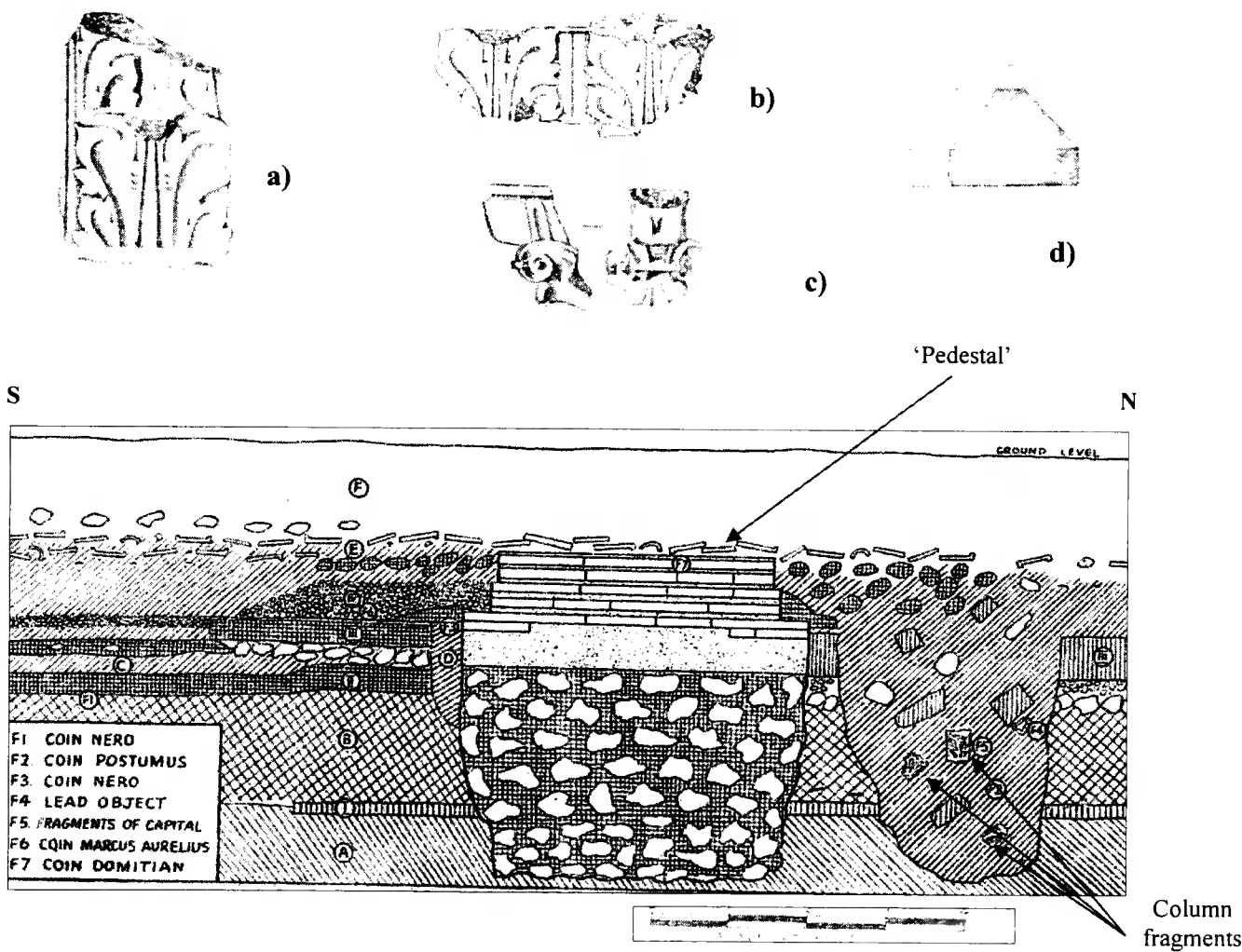
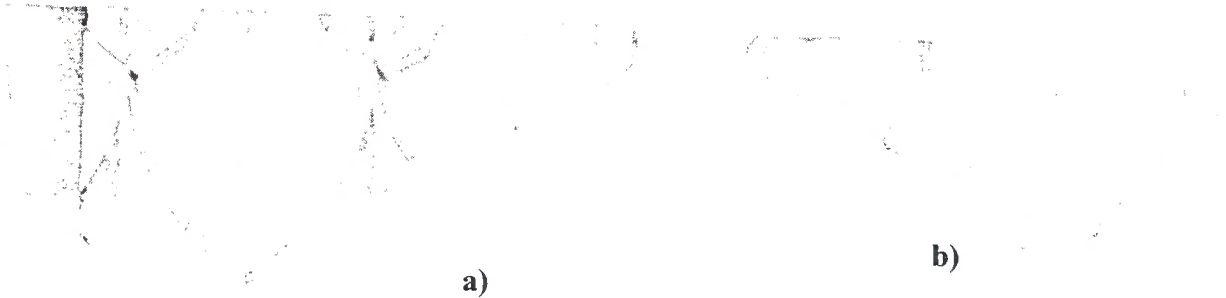


Figure 145: a) CARVST 1 (Penn, 1958; fig 11.2 a), b) CARVST 2 (*ibid*; fig 11.2 b), c) CARVST 3 (*ibid*; fig 11.2 c), d) CARVST 4 (*ibid*; fig 11.2 d). Scale is eighth of original size. The section drawing is after *ibid*; fig 4.

## CARVST 7-10

Four fragments of pilaster capitals of Corinthian style and made of Millstone Grit (**CARVST 7-10**) were recorded as having been discovered during excavations upon Temple VI. The fragments are described as having been decorated with a series of 'medieval-shaped' shields and were thought to be half capitals used for facing a wall (Penn, 1967c; table 4.13). **CARVST 7** is claimed to have been discovered in the filling of the 'votive pit' at the centre of the building and **CARVST 8** beside the steps built into the eastern wall of the temple (*ibid*; table 4.14). The other fragments (**CARVST 9-10**) are not recorded in the finds listings but are described in the text, and were recorded as having been found immediately outside the temple (*ibid*; 111). Some of the stone fragments from the excavations were claimed to present evidence for dressing on site (*ibid*; table 4.14), although further information was not provided. The drawings were very faint and difficult to reproduce.



**Figure 146:** a) **CARVST 7** (Penn, 1967c; fig 4.17), b) **CARVST 8** (*ibid*; fig 4.18). Scale is quarter size.

## CARVST 11-12

At least two fragments of carved stone depicting overlapping leaves (**CARVST 11-12**) are mentioned by Harker as having been discovered within the southern 'temple complex' (Harker, 1980; 288), although no more details are provided on the precise locations of their discovery.

## CARVST 13

Fragments of a sculpture discovered in excavations on Site B (Penn, 1964a; lvii) were later reassembled to form the remains of a stone lion, which was thought to have been roughly 5 feet long when complete (Penn, 1966a; lxiii).

*Part 2: Photographs of carved ornamental stone from the Gravesend  
Historical Society collection.*



**Photograph 224**



**Photograph 225**



**Photograph 226**



**Photograph 227**



**Photograph 228**



**Photograph 229**





**Photograph 230**



**Photograph 231**



**Photograph 232**

This object was too heavy to be conveniently placed against a large enough background.

**Part 3: Details upon the fragmentation of carved ornamental stone from the Gravesend Historical Society collection and from the written accounts compiled by Penn and Harker.**

Area of site	Context description	Number	Description	State of fragmentation
GHS Collection	Unknown	Photograph 224	Piece of carved ornamental stone work	Thin sliver of thick stone, tapering to a point on the left of the photograph
		Photograph 225	Piece of carved ornamental stone work	Fragmented on three sides, except base
		Photograph 226	Piece of carved ornamental stone work	Fragmented on all sides
		Photograph 227	Piece of carved ornamental stone work	Fragmented on all sides
		Photograph 228	Piece of carved ornamental stone work	Fragmented on all sides, tapering to a point on the left of the photograph
		Photograph 229	Piece of carved ornamental stone work	Fragmented on all but left hand side of the photograph
		Photograph 230	Piece of carved ornamental stone work	Fragmented on all but left hand side shown in photograph, where there is a curving edge and base which tapers to a regular fracture across the bottom of the piece
		Photograph 231	Piece of carved ornamental stone work	Fragmented on top and bottom edges
		Photograph 232	Piece of carved ornamental stone work	Half of column with two fragments stuck together. Traces of a capital, eroded on its right hand side
Site B; the pedestal	Stratum E - filling of pit in front of pedestal	1	Fragment of Corinthian capital	Squared fragment. Jagged break along top. No more known as other sides not illustrated
		2	Fragment of Corinthian capital	Irregular fragment. No more known as other sides not illustrated
		3	Fragment of Corinthian capital	Individual cornice. Appears to have been intentionally separated along left hand side. No more known as only two sides illustrated
		4	Fragment of Corinthian capital	Part of corner of base. Further details unknown as only one side was illustrated
	Unknown	5	Fragment of Corinthian capital	Unknown
		6	Fragment of Corinthian capital	Unknown



Area of site	Context description	Number	Description	State of fragmentation
Temple VI	Filling of 'votive pit'	7	Stone, Corinthian style pilaster capital	Broken on three sides from larger object
	Besides steps built into eastern wall of temple	8	Stone, Corinthian style pilaster capital	Broken on three sides from larger object
	Unknown	9	Stone, Corinthian style pilaster capital	Fragment. Further details were not provided
		10	Stone, Corinthian style pilaster capital	Fragment. Further details were not provided
Within 'southern temple complex'	Unknown	11	Carved stone depicting overlapping leaves	Fragment, although further details are unknown
		12	Carved stone depicting overlapping leaves	Fragment, although further details are unknown
Site B: the shop	Unknown	13	Stone lion	Fragments of sculpture recorded as having been discovered. No further details are available.