

THE MIDDLE/LATE IRON AGE AND ROMAN FINDS
MADE BY ANTOINETTE POWELL-COTTON
ON THE FORESHORE AND CLIFF TOP
AT MINNIS BAY, BIRCHINGTON

VERA AND TREVOR GIBBONS

This is the third (of four) reports on Antoinette Powell-Cotton's findings at Minnis Bay. The first (Gibbons 2017) provided a general overview of her lifetime's work there; the second focused on the Late Bronze Age and Early Iron Age finds (Gibbons 2019). This paper covers discoveries of the Middle Iron Age to Late Roman period (400 BC to AD 400) made in the 30 foreshore (intertidal) pits and 23 cliff edge excavations.

Analysis of Antoinette's field books, photographs and card index information allows a clearer understanding of the historic rate of cliff erosion at Minnis Bay and the occupation of the east headland above Goresend Creek 2,000 years ago. In prehistoric times the cliffs at Minnis Bay and Grenham Bay extended at least a quarter of a mile further out to sea. The pits discussed in this paper were found in three areas, of which two are now intertidal, located on the eroded chalk foreshore.

The first intertidal group of 18 pits on the foreshore, 250m to the north east of the Bronze Age site and 100m from today's promenade, covers an area about 125m by 100m (**Fig. 1**). The second intertidal group, pits 20-30, is 250m further to the east along the foreshore by the headland between Minnis Bay and Grenham Bay (**Fig. 2**). There is no doubt from their contents that these pits were situated inland during their period of use. However, 8 of these seabed pits contained relatively modern animal remains. In an entry in her 1954 field book Antoinette recounts how a fellow beachcomber told her that coastguards used to bury cattle lost from ships. For convenience of referencing the pits on the foreshore all were all given a 'Well' prefix (be they shaft bases or modern animal pits), given in sequence as found.

The third group lay at the cliff edge opposite Sea View Avenue and Hereward Avenue, about 9m above the second group. Antoinette's excavation of these pits was largely a rescue operation prior to the Borough engineers cutting back and reinforcing the cliff face and the construction of a new promenade at beach level to prevent further erosion. Of the recorded 23 pits or pit groups on the cliff top only six remained after this work was completed.

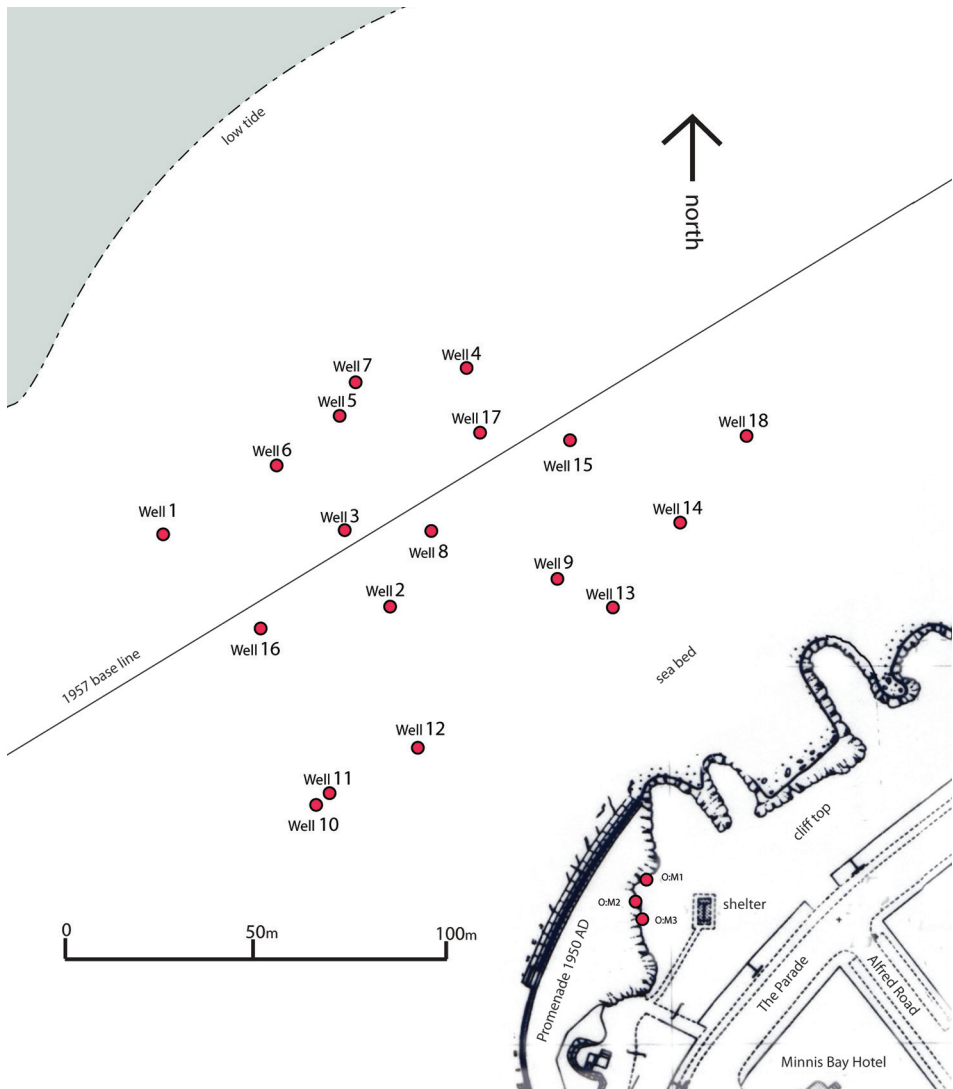


Fig. 1 Plan of the First Group Wells 1-18.

The First Group of 18 pits

Eight of this group (*Wells 1-8*) were originally discovered by young Jimmy Beck in 1938. Antoinette revisited these in 1957 to fully excavate them and to gain further measurements. Of these 8 pits, all bar *Well 6*, the first of the modern animal burial pits to be found, contained Mid-Late Iron Age to Roman sherds. In *Well 2* a Mid Roman North Kent Thameside ‘Olla’ with rim, upper body and near complete profile was found, dated AD 175/200-250 (Monaghan 1987 Type 3J9 3-4). From *Well 3* Antoinette excavated a two-handled flagon of New Forest ware in perfect condition with a brown colour-coat and white slip decoration (**Fig. 3a**). The pot

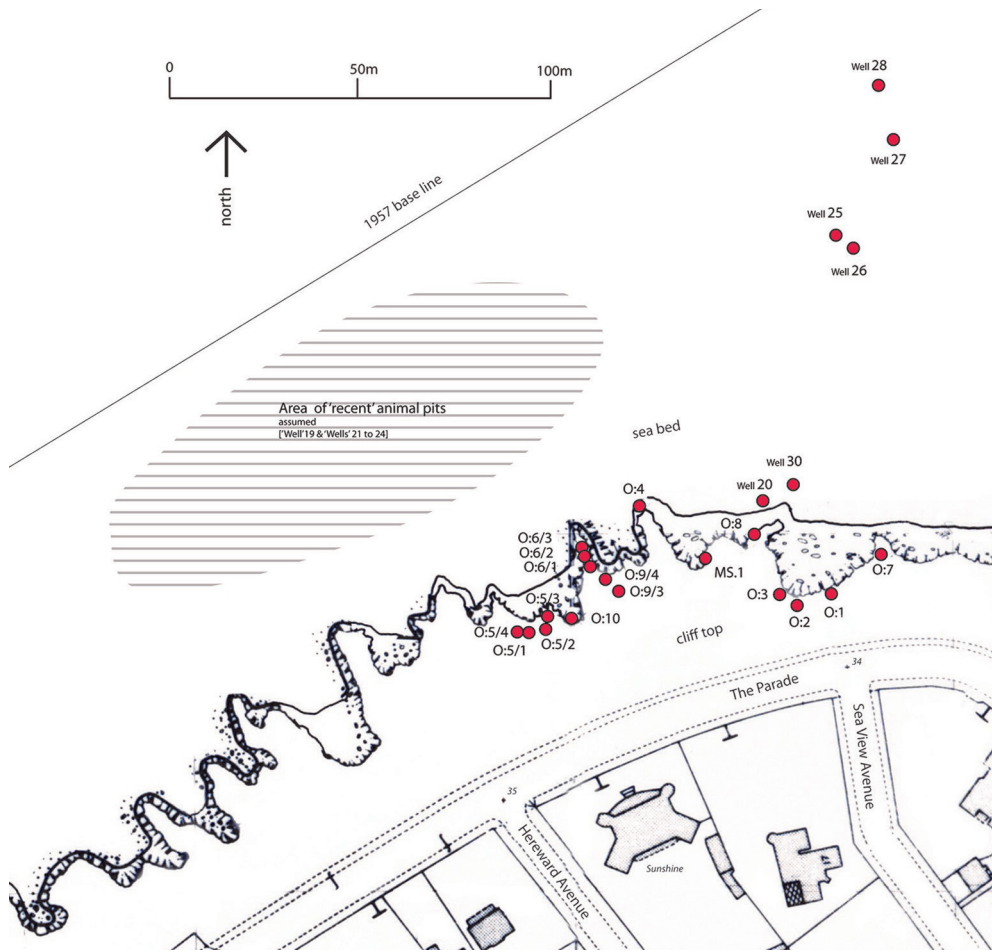


Fig. 2 Plan of the Second Group on sea bed and Third Group on cliff top.

stands 27.3cm high with a diameter of 18.8cm. This was the only whole pot to be found on Minnis Bay.

Besides sherds, *Wells 2 and 3* yielded wood fragments of withy and parts of bucket staves. Other finds included a metal ring and a bone antler tool in *Well 4* (Fig. 3b) and a small 'V'-shaped whorl carved from chalk with an orange stain in *Well 7* (Fig. 3c).

Between 1954-1959 Antoinette found a further ten pits in this first group (of which 3 were 'modern' animal burial pits). Excavation of *Well 9* started in September 1954. It contained a Mid/Late Iron Age group of sherds consisting mainly of flint-tempered coarseware and fine silty ware, dated to 150-50 BC (**Fig. 4**).

The two adjacent pits, *Wells 10 and 11*, contained much grog-tempered 'Belgic' ware (Thompson 1982). *Well 11* was of particular note; besides containing the many sherds and wood pieces of a tusk-tenon joint, the upper part of a 3cm bronze brooch was amongst the fill. It has a 2-coil spring but the pin is missing. In 1958



Fig. 3 (a) Well 3 two-handled flagon. (b) Well 4 antler tool. (c) Well 7 chalk whorl.

Professor Hawkes dated it as pre-Roman, *c.*50-0 BC. It has recently been identified as a Nauheim Derivative type brooch.

Typically, Antoinette spotted *Well 12* in a rock pool when she was beachcombing. Once the surface water had drained away it was possible to excavate the well base. On this occasion it was 107cm in diameter with straight sides 61cm deep.



Fig. 4 Sherds from Well 9.



Fig. 5 Antoinette locating Well 12 and *right* the excavated pit.

It contained a small collection of pottery sherds, bone fragments, small pieces of wood, eggshells and stone (**Fig. 5**).

The artifact contents of *Well 13* were studied by Nigel Macpherson-Grant in 2016 who felt that the initial excavation of this well was unlikely to have been any earlier than *c.*150 BC. Its main use appears to have been between *c.*150-75 BC, or slightly later. The dating of the LIA ‘Belgic’ grog-tempered component (25 BC-AD 50) may be conservative and therefore earlier, from *c.*75 or 50 BC. If so, and no other material was lost during erosion of the upper well levels, this final infill is possibly no later than *c.*50 or 25 BC.



Fig. 6 Large timber plank with hole from Well 13.

Fashioned timber items

Timber remains are a feature of *Well 13* with the largest piece being a plank measuring 35.5cm in length by 12.2cm wide with an average thickness of 6cm. It has a 15.8cm diameter hole in the centre. The function of this plank, has never been established although one suggestion was made that it may have been the mast tabernacle of a small boat (**Fig. 6**).

Other wooden finds in this well base included stake tips and two pieces of a wooden channel (**Fig. 7**), the section of which is incomplete with cross cuts from



Fig. 7 Stake tips and wooden channel from Well 13.



Fig. 8 Roman brick and tile from Well 14.

pith removal at the broad end. The resultant slot narrows to a 'v' section at one end. One third of the tree section was used with two outward facing facets.

Indications are that *Wells 14 and 15* (approximately 30m apart) were in use at the same time. Both were dug and in use from AD 150/200 until closure and infill c.AD 400. *Well 14* contained Roman building materials of brick and tile, both *tegula* and roof, dated to 2nd/3rd centuries (**Fig. 8**).

Leather footwear

Well 15 also contained Roman building material and a large amount of pot sherds, but more significant are the leather footwear and weaving tools found, measured, drawn and preserved at the Powell Cotton Museum. The remains of leather sandals/slippers, a probable hobnailed boot and a shoe were found. These were of great interest to Antoinette as she had spent two years studying under Henry Balfour at the Pitt Rivers Museum, Oxford, at the end of her formal education. One of her tasks was to catalogue part of its shoe collection. She was therefore able to assess and describe the important features of the leather remains. Two small pieces of a sandal, 11.2cm long by 2.5cm wide, of similar shape were found in good condition. One piece is plain apart from having serrated edges, the other has serrated/rouletted edges, with a central panel of incised decoration in a cable pattern, inside an incised line coming to point at one end (**Fig. 9**).



Fig. 9 Two small pieces of tooled leather.

One slipper of Roman date has the toe and cap area complete with the majority of the sole but the heel area is detached from the sole. It is edge flesh-stitched around the toe area where some reinforcement to the sole may have occurred. It has a wide V-shaped throat with serrated edges. This appears to be clumsily designed but well executed. Along the sole there are two medial tie thong holes 1cm and 1.5cm left and right respectively. The separated back heel area has a thong hole. The stitch holes are spaced at an average of 3cm intervals. The slipper's fullest extant is 13cm long and 11cm wide.

The 'hobnailed' boot/shoe is in a very fragile condition. The toe area of the sole is made up of two pieces of leather about 1mm thick with a lump of much corroded iron attached on the left side; 2cm down on the same side there is some iron staining. In the sole area there are 2 definite cut holes, 0.7cm in diameter and 2.3cm apart, possibly for hobnails. The rest of the footwear discovered is very fragmentary.

The photograph and associated composite drawing (Fig. 10) show the right sole of a slipper/sandal. Width 7cm tapering to 3.5cm at heel, a single piece of leather probably originally 2mm thick now about 1mm. No apparent stitch holes around extant sole. However apparent notches, two per side, approximately opposite and roughly central may indicate sandal straps. Reinforced central leather strip 2mm thick, 1.5cm in width at heel expanding to 3.7cm has been attached to the wider sole. At heel end, three definite and 1 or 2 presumed stitch holes; these do not however go

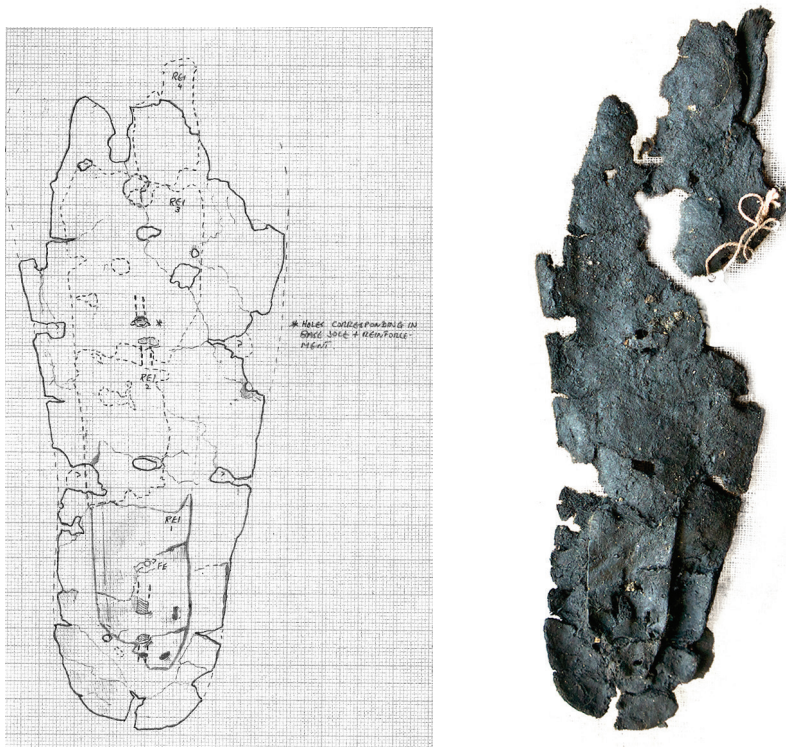


Fig. 10 Right sole of Roman slipper/sandal.

through to lower sole which suggests possible use of leather off-cuts. Central row of stitches in pairs about 3cm to 4cm apart. One surviving piece of thong at heel end is 3mm wide. Left hand side reinforcing leather has knife cut 3mm in from edge.

Weaving implements

In the last 15cm of the fill of *Well 15* two bone shuttles were found. Both are polished from use with two holes at the knuckle end. One shuttle is decorated with dot & ring cut/punched circles to top and sides (**Fig. 11**).



Fig. 11 Bone shuttles.

The Second Group of 12 pits [*Wells 19-30*]

The second area of pits at seabed level were identified and excavated between 1954 and 1967. Of these *Wells 20 and 25-30* are shaft bases (see Fig. 2). ‘Wells’ 19 and 21-24 were more animal burial pits. *Well 29* is at some distance to the north of the group and appeared to have been excavated by others (unknown).

In August 1954 Antoinette began work on *Well 20* close in to the cliff face. This pit was 2.45m deep with a roughly circular base 86.5cm by 76cm. This was the deepest surviving section of the wells to be found and had an unusual channel running into the pit (**Fig. 12**). This led Antoinette to think that she may have come across the remains of the shaft excavated by Roy Carr and Major Burchell in 1947. It was after a very heavy storm in 1947 a cliff fall revealed a shaft in the cliff face. Roy Carr, a local amateur archaeologist, thought it of great interest and he, together with his wife and Major Burchell of the British Museum excavated the shaft (Gibbons 2017, 262). Severe storm damage along the east coast in the winter of 1953-54 eroded the cliff face even further destroying this shaft. The presence of the unusual channel running into *Well 20* could be explained by the breaking through from one shaft into an adjacent shaft by the Borough engineers during the excavation of the cliff face shaft in 1947. Several oyster shells were found by Antoinette in the pit which had been a feature of the 1947 excavation. Due to the further erosion of the cliff face it was impossible for Mr Carr and the Borough engineer, Mr. Sewell, to definitely confirm that *Well 20* was the base of the 1947 shaft, but agreed that it was in the same locality.

Amongst the grog-tempered ‘Belgic’ pottery and pieces of quernstone in *Well 25*, was an interesting small piece of worked wood (**Fig. 13**). It is 16.2cm in length



Fig. 12 Base of Well 20 as excavated 1954.

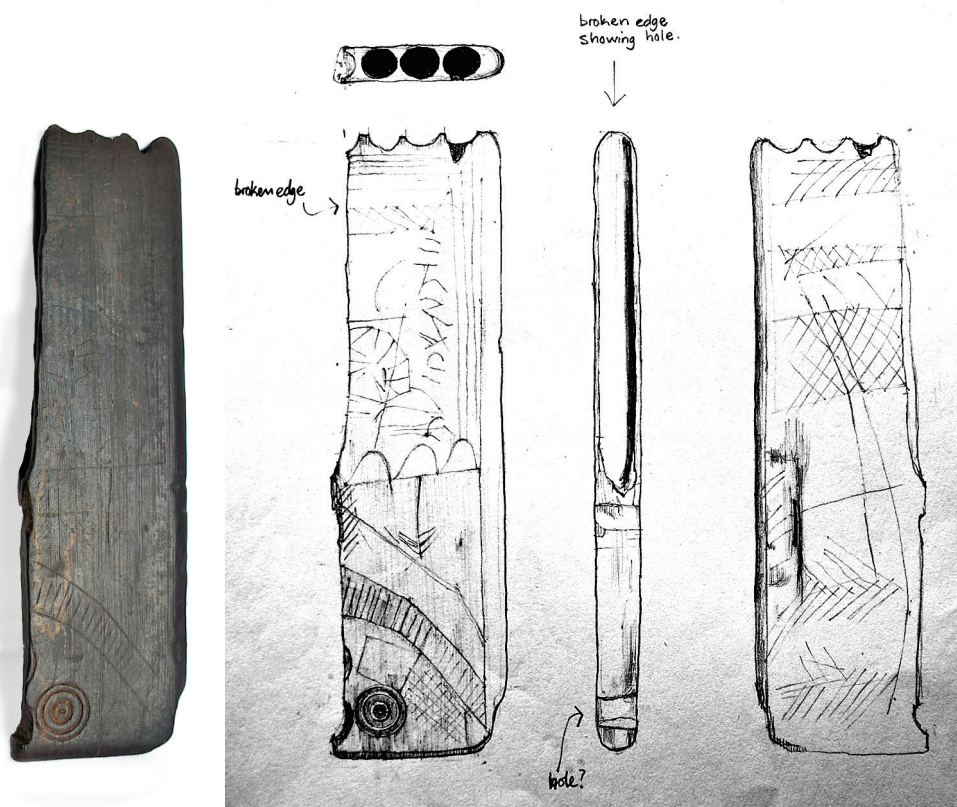


Fig. 13 Photo and drawing of piece of worked wood from Well 25.

with an extant width of 4.5cm and an average thickness of 1.1cm. It has rounded edges with four graded holes 0.8cm in diameter in the thickness. These holes measure from the broken side 9.3cm, 10.2cm, 11.6cm and 9.2cm in depth. The wood is decorated on both faces with dot and ring punch in one complete circle plus the outer ring of another. Just over halfway along the length there are three incised semi-circles based on a straight line, which coincides with the actual cut shape at the hole end. X-rays show traces of iron impregnation.

Another large plank of timber was found in *Well 27*. It was thought that this could be part of the wellhead worn by 'rope' action. It is 62cm long with a maximum width of 25cm and is 5cm thick (**Fig. 14**). The back is flat with a convex surface on the other side giving a cambered section. The plank showed signs of wear which

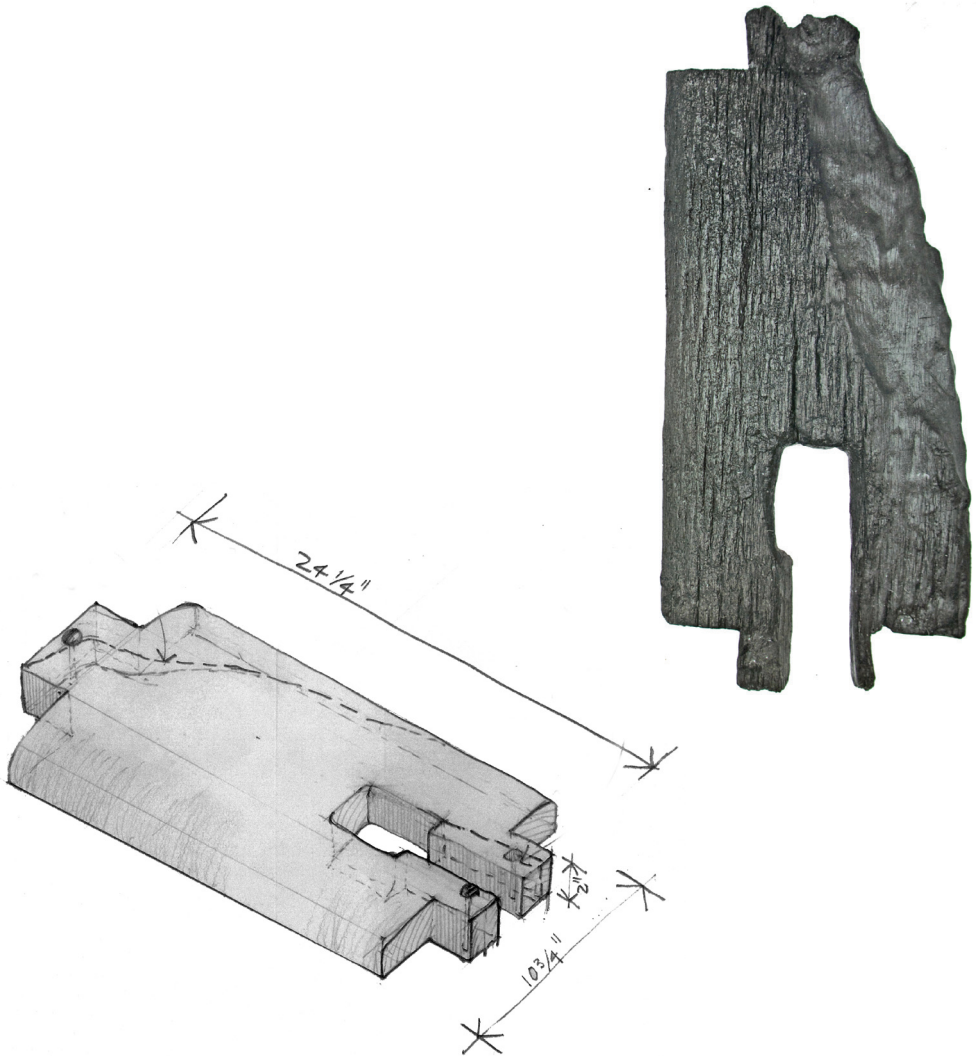


Fig. 14 Photograph and isometric reconstruction of assumed wellhead timber.

was lost when a wax preservative coating was applied. In one end of the plank is a slot, maximum width 7.5cm, with one thick and one thin tongue framing the slot and projecting beyond the squared end cut of the plank. A dome headed nail is on the thicker tongue. There is a similar cut one side at the other end of the plank. The tongue this end is broader with a dome headed nail. The other edge of the plank was broken away.

Quernstones

Well 27 confirmed Roman grain processing in the Minnis Bay settlements. At the base was a large Sussex Lodsholm stone quern (**Fig. 15**). This is only the fourth example so far to be found in Kent and is the largest, according to Ruth Shaffrey (who visited the PCM in 2018). *Well 25* also had a substantial piece of a smaller quern with central hole and a recess in the scored surface. In addition to Beck's first pit millstone (Gibbons 2017, 259), small pieces of broken quern or millstone were in *Wells 10 and 15*.

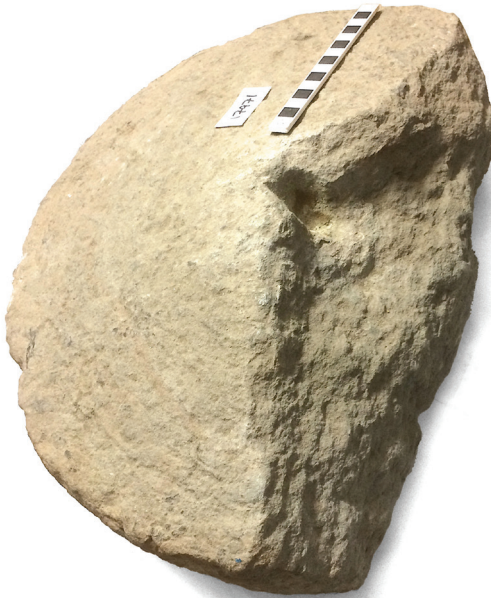


Fig. 15 Sussex Lodsholm stone quern from Well 27.

The Sealed 'Time Capsule' Well 30

The last of the foreshore pits was *Well 30* excavated in 1966 (Gibbons 2017, figs 10 and 11), considered by Antoinette to be the representative example of this group. The shaft base was topped with a 10cm crust of very dry and compacted material, which required careful action with a pick to break open the shaft (Gibbons 2017, 268). The shaft base was 'D' shaped, cut alongside a natural crack in the chalk seabed giving a straight side to the well running from the land out to sea.

This fissure may have facilitated the original construction of the shaft, although presumably incidental, and aided the ingress of water into the well. The shaft base was (in 1966) 1.1m deep and approximately 1m in diameter. The flat side of the shaft base had a marked yellow-coloured rust stain just below the 1966 surface which corresponded with a mostly predominately rusty layer in the top filling. Below the hard crust was a 25.5cm layer of mainly dark, moist, smelly mud with rusty chalk and sandy patches. There was little or no primary silting to the base but there was a silt lining adhering to the walls and the surfaces of larger objects. The silt was grey, pale to black and varied in consistency from tenacious to sticky to watery. It appeared that the water flowing down the side of the natural crack in the chalk caused a thicker deposit of silt especially in the corners.

From 36cm down from the top of the compacted crust of the well large pottery sherds were found. Eight pots were partially reconstructed, six of which had a complete profile making this the most productive shaft of grog-tempered 'Belgic' pottery. Amongst the last to be excavated were the three pots illustrated (Figs 16-18).

The Powell Cotton Museum display in Gallery 4, depicts Well 30 with the pots in sequence of excavation in 1966. The pit diameter is full size. The pot location is as found, but double height for ease of display (Fig. 19).

Excluded from the above display was a piece of knotted withy 'rope' that lay in Well 30 on a piece of wood with a larger piece of wood beneath it. One end had been frayed into two strands the other end doubled back onto the larger piece of wood (Fig. 20).



Fig. 16 Pot ref. PCM274/1966 [Thompson 1982, ref. 1319]



Fig. 17 Pot ref. PCM277/1966 [Thompson 1982, ref. 1313]



Fig. 18 Pot ref. PCM278/1966 [Thompson 1982, ref. 1321]



Fig. 19 Well 30 display PCM 2017.

Bronze/Gilt Brooches in Well 30 and cliff top 'O' pits

At a depth of 70cm a gilded bronze brooch was found. The 4.2cm long brooch is of Langton Down form and is complete apart from a broken tip to the pin (**Fig. 21**). The bar is rectangular with a straight wedge section tapering to the foot with two longitudinal bands of zigzag and dotted lines decoration bounded on either side by a ridge. This is attached to a cylinder, which wraps the spring with a centre cut to allow for the movement of the pin. The brooch is believed to date from the late first century BC to the first century AD.

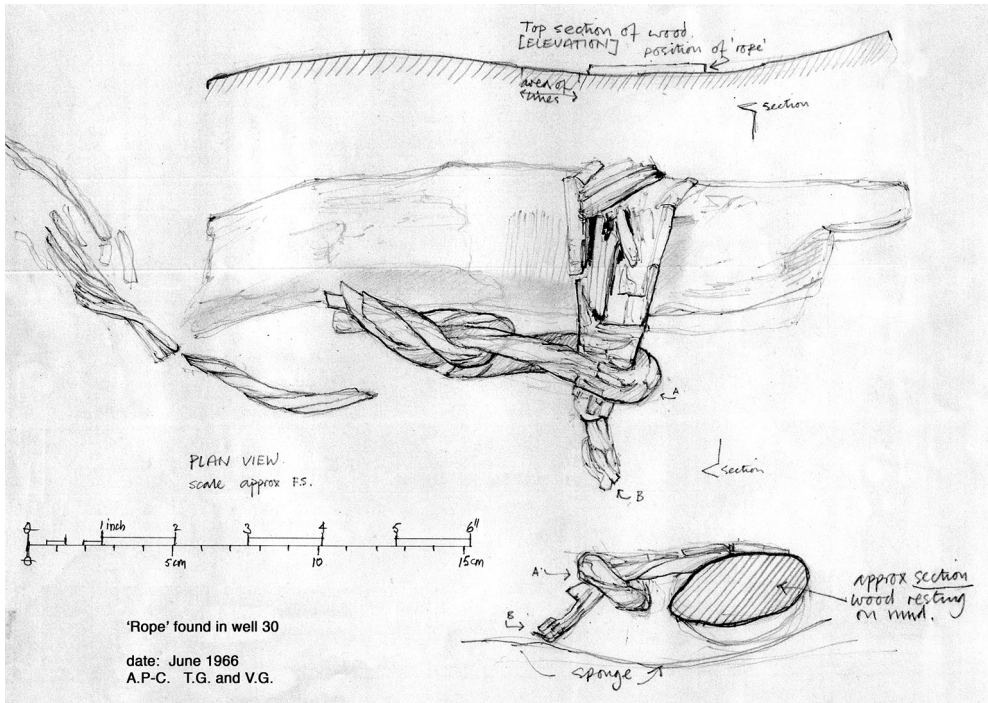


Fig. 20 Withy rope in Well 30.

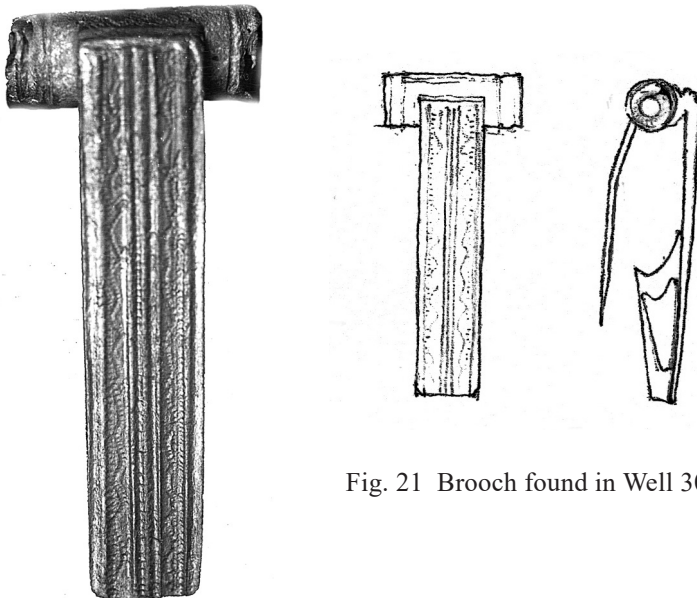


Fig. 21 Brooch found in Well 30.

A further five brooches were found in the cliff top ‘O’ pits. Two were of the Nauheim Derivative type generally dated to the first century AD. These were found in Pits O:1. and Pit O:5 (**Fig. 22**). Two brooches, one each in Pit O:9 and O:10 (**Fig. 23**) belong to Colchester (Kent Group), a subtype primarily found in Kent. These are also dated as being from the first century AD. A Nertomarus- type brooch, a distinctive sub-type of the Langton Down brooches, lay in Pit O:9 (**Fig. 24**).



Fig. 22 Nauheim Derivative type brooches from pits O:1 and O:5.



Fig. 23 Colchester subtype brooch finds from pits O:9 and O:10.



Fig. 24 Nertomarus-type brooch from pit O:9.



Fig. 25 Antoinette cleaning out ‘oven’ in 1959. The sea, to left, 9m below.

The Third Group, the Cliff Top pits

Cliff-top pit M.S.1 was identified in 1957 and work finished on it in 1959. The prefix M.S. probably refers to ‘Mill Stone Bay’, a name given by Antoinette to one of the many inlets in the cliff face at that time where many pieces of millstone had been found on the beach below. This pit was literally on the cliff edge (**Fig. 25**). A small pit, about 1m in diameter and 30cm deep, was found at the end of a ditch with a larger similar pit inland. The small pit became known as the oven as it was lined with burnt clay except on the entrance to the larger pit and was sooty beneath. The sherds in this pit have been dated to between 50 BC and AD 175. Amongst the finds were a near complete Early Roman pot of Thanet silty ware, 11 tile fragments and some grog-tempered sherds.

The subsequent cliff-top pits became prefixed with an ‘O’, starting at ‘Oyster Bay’, named by Antoinette who had noted oyster shell dumps. During the five years of keeping ahead of the promenade project Antoinette excavated, cleaned and stored thousands of sherds. Amongst the collection of Late Iron Age to Mid Roman sherds in Pit O:2 was an unusual cluster of 16 extremely thin-walled rim and body sherds of Middle Bronze Age pottery (**Fig. 26**). They are very crude, slightly finger fluted with a row of pierced holes beneath the rim.

Pit O:6 was on the top of a narrow jutting out section of the cliff. This pit was excavated in 1960 as a series of small pits working their way out to the tip (**Fig. 27**). Of interest, amongst the many sherds were two pottery spindle whorls, a pot or stone loom weight and a small Iron Age square-shaped mould or container (**Fig. 28**). Antoinette noted that this was ‘possibly a salt mould, may have had a lid.



Fig. 26 Middle Bronze Age sherds found in Pit O:2.



Fig. 27 Cliff-top pit O:6.



Fig. 28 Square-shaped (salt?)
mould.

See W.J. Varley excavation report 1939, Castle Hill, Almondbury ... quadrangular vessel with lid 56 BC to AD 43, Bricantean'.

Two Iron Age pots could be reconstructed from the sherds. One was a 30cm high urn of coarse gritty red brown clay. The other was a much smaller pot, 11.4cm high with a diameter of 14.6cm with holes in the base to form a strainer (**Fig. 29**).



Fig. 29 Small Iron Age pot
with base holes (strainer).

Inhumations Exposed on Cliff Edge

Amongst the cliff-top pits one grave and the surviving half of another were excavated. The first burial, Pit O:10, discovered in 1960, was in a ditch, about 3.65m in length, 45.72cm wide at base (**Fig. 30**). The ditch was on the edge of the cliff face above Minnis Bay. The overall depth was 1.37m to turf with about 60cm dug into the chalk. It appeared that the skeleton was of an old male (Gibbons 2017, 265). A 5.5cm long bronze brooch (Fig. 23) in this ditch lay in the RB layer above the skeleton about 60cm away.

Whilst beachcombing after stormy weather and more cliff falls in 1961 Antoinette spotted the existence of a possible second grave in the cliff face to the east of the central steps in Grenham Bay. She noticed a piece of a platter or dish with part of a long bone beside it protruding out of the topsoil layer of the cliff. Excavating a trench on the cliff top (Pit O:12), 76cm southwards back from the cliff face Antoinette found a cranium in poor condition, upright and facing east at the south end of the grave. The skull had collapsed with no lower jaw or face, although a few teeth remained. Of the long bone that had stuck out of the top of the cliff only a fragment remained on the east side of the grave with the nearly complete dish of Thanet Silty ware, dated AD 25-75 (**Fig. 31**). The dish was plain and handmade but interestingly crude. Its diameter at the rim is 17cm with a height of 4.5cm. Above and behind the skull and resting on the end wall of the grave was a little jar. At the



Fig. 30 Skeleton in burial pit O:10.



Fig. 31 Burial bowl pit O:12

back of the head and below the jar was a large iron nail; two more nails, pointing diagonally forward, were positioned one on the south side and the other to the west.

There was another pit, O:13, east of pit O:12. This contained a few sherds including a small piece of samian ware and some grog-tempered Belgic ware.

It has not been possible to comment fully on every pit in this report. However, a full listing illustrated with drawings, photographs and notes giving the contents and context of these pits can be found on the website pcmresearch.org/archaeology.

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The authors again wish to put on record their gratitude to (sadly now late) Nigel Macpherson-Grant and Paul Hart for the reappraisal, in 2017, of the Late Iron Age and Roman period pottery. The fourth and final article on Minnis Bay 'The Mediaeval Pits', will also be greatly enhanced by Nigel's research (carried out in 1969-1971 under Antoinette Powell-Cotton's guidance).

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