Saxon Southampton; a New Review

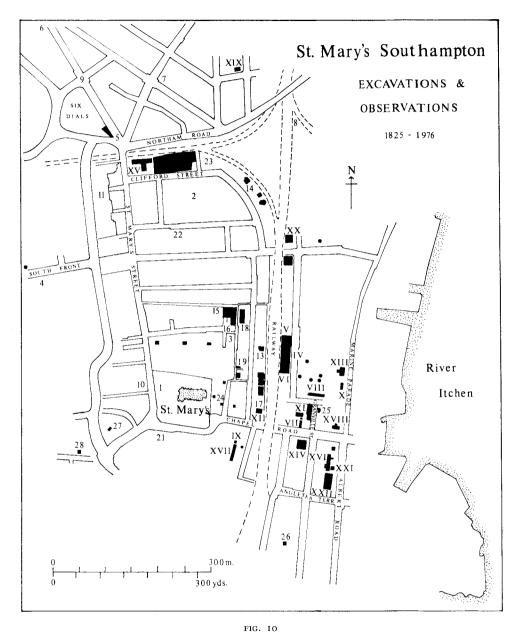
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THE LATE SEVENTH to early 10th-century town and international port of Saxon Southampton is reconsidered in the light of recent archaeological excavations. A lagoon, previously believed to have been a primary reason for the siting of the port, is shown not to have been a topographical feature of the town. A number of timber buildings was found which included oblong structures with the wall posts set in continuous trenches, one of which had an additional room erected on ground sills. Two bow-sided buildings are described and discussed. Some of the possible functions of a shallow wood-lined pit with corner posts are suggested, and a keyhole-shaped iron-smelting furnace and bowl hearth are described. The areas of trading contact and the town's status are considered.

'N THE YEARS which have elapsed since the publication of 'Saxon Southampton: a review of the evidence', a large number of excavations has taken place in the Saxon town and port beneath the modern city suburbs of Chapel and St Mary's (FIG. 10). In 1971 the Southampton Archaeological Research Committee was formed, supported largely by Department of the Environment and Local Authority grants, to co-ordinate archaeological research on sites of all periods within the city boundary. Since 1974 only the Saxon town, regarded as a site of national importance by the Department of the Environment, has been excavated by the Committee. The accumulated evidence has provided a wealth of information about the domestic accommodation, local industries and trade links with the continent of a town which was pre-eminent in southern England during the 8th century. The overall assessment of the town's local and international status as described by Addyman and Hill2 has not been altered, but a large increase in the body of data available for study has allowed the framework of that assessment to be expanded. Saxon Southampton is exceptional in the extent to which the archaeological evidence has escaped destruction. After the shift in occupation in the 10th century to the site of the later medieval walled town there was no intensive reoccupation of the Saxon settlement area until the industrial expansion of Southampton in the 19th century.

¹ P. V. Addyman and D. H. Hill, 'Saxon Southampton: a review of the evidence', *Proc. Hampshire Field Club*, xxv (1968), 61–93; xxv1 (1969), 61–96.



EXCAVATIONS IN HAMWIH, SOUTHAMPTON

Sites with Arabic numerals excavated before 1972; those with Roman numerals are S.A.R.C. sites. On sites without numbers no archaeological excavations took place, although observations were made during building work

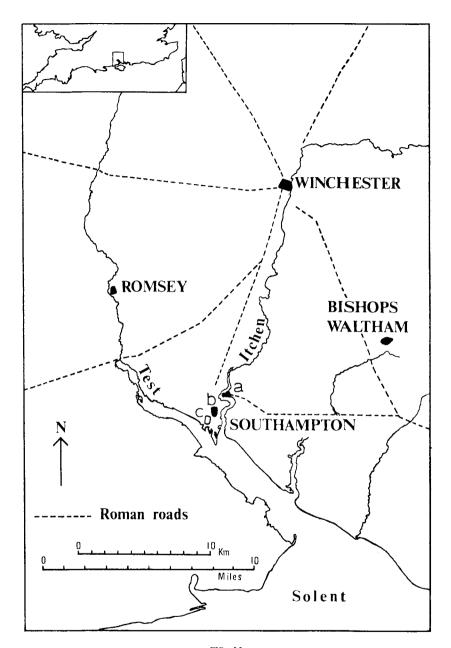


FIG. 11
LOCATION MAP OF SOUTHAMPTON

Showing Roman fort (a) on E. bank of R. Itchen; Saxon port (b) S. of it on W. bank; medieval town (c) S. again, on E. bank of R. Test. River frontages shown are those of modern port

LOCATION (FIG. 11)

The Saxon town is sited on the W. bank of the R. Itchen, on a promontory between the R. Itchen and R. Test (FIG. 11), bounded to the S. by marshland and to the N. and W. by a gravel ridge. The reason for the founding of the settlement on the low lying flats of brickearth, rather than on higher, more defensible ground to the W., has been explained in the past by the presence of a lagoon in the Saxon period. This lagoon was first postulated by O. G. S. Crawford,3 and he believed it to have been formed by the extension of the Itchen mouth shingle spit. It would have formed "a small natural harbour protected from the open sea". Later Addyman and Hill4 described sediments located at Sites 25 and 26 (FIG. 10) as "presumably lagoonal silts" and "fine apparently waterlain silts above gravel". A recent analysis of the sediments has shown the brickearth to be a redeposited loess, none of the samples remotely resembling lagoonal deposits. The samples taken for analysis came from widely spaced areas, three of them from locations within the supposed lagoon which also produced evidence of occupation. Interestingly, samples collected immediately E. of Site 25 were markedly different from the other sediments analysed. These have been interpreted as indicating conditions similar to those of a tidal creek, but not an open beach or strongly tidal estuary. A small creek was recorded in this vicinity by a detachment of the Royal Sappers in 1845-6 when examining the area with a view to land reclamation.

It would seem, therefore, that a lagoon did not exist in the area suggested by Crawford. However, an indented shore-line would still have received some protection from the open sea by the Itchen shingle spit and have afforded an attractive natural harbour.

Land reclamation and the canalization of the river have always precluded excavation along the Saxon shore-line. However, the redevelopment of an area close by the Itchen shingle spit in 1976–7 may afford the opportunity for such investigation.

HAMWIH AND HAMTUN

The name of the settlement has been a subject of much debate amongst archaeologists, philologists and local historians. It is recorded separately as *Hamwih* and *Hamtun* (and their variants) in documents and on coins from the 8th to the 11th century. Burgess⁶ has proposed two distinct sites, a fortified centre, *Hamtun*, and a mercantile settlement, *Hamwih*. His argument, based on place-name evidence, is that the element wih, or wic, always refers to the suburb of an earlier defended site, the tun. The evidence is not, however, consistent, for a number of commercial centres in England possess the element wic, such as Norwich and Sandwich. Furthermore, despite extensive excavation and careful

³ O. G. S. Crawford, 'Trinity Chapel and Fair', Proc. Hampshire Field Club, XVII (1949), 45.

⁴ Op. cit. in note 1, xxv, 75.

⁵ See M. Shackley in D. A. Hinton (ed.), Saxon Southampton: Excavations in Melbourne Street 1971-4 (forthcoming).

⁶ L. A. Burgess, The Origins of Southampton (Leicester, 1964).

observations during development in Southampton, no signs of defences earlier than the 10th century have been discovered. If there were two separate settlements in Southampton it is somewhat surprising that only one has been located. Hamtun, if it existed as an entity, must have been of considerable size, for by 755 it had given its name to the shire, and was used as the mint name on coins well into the 11th century.8

More recently, Miss J. Jenkyns and A. Rumble have suggested that the two names may refer to the same locale, and that alternative spellings may be accounted for by the context in which Saxon Southampton was being referred to.9 A mid 9th-century royal charter signed in the "villa regalis quae appellatur Hamptone"10 clearly indicates there was a royal residence at Hamtun. An area known today as Kingsland, on the NW. edge of Hamwih, was certainly in possession of the king by the 12th century; 11 if the villa regalis given in the charter was on the same site, then Hamtun and Hamwih may have been physically part of the same general area whilst retaining their separate identities.

Whatever the uncertainties may be about the two sites, excavations in the Chapel and St Mary's areas have firmly established the location of an undefended merchants' settlement. For this reason the site will continue to be referred to as Hamwih. Evidence of occupation, of trade and of industry has been found over an area of more than 32 hectares. Although not all this area would necessarily have been occupied at the same time, Hamwih was probably the largest denselypopulated town in 8th-century England. Furthermore, unlike the contemporary sites of York, Canterbury and London, Hamwih did not develop from an earlier Roman settlement. Whether it developed from a nucleation of scattered riverside communities, or as the direct result of a deliberate policy in the late 7th century is unknown; but by 721, when the first documentary reference to Hamwih occurs. 12 it was clearly an established and flourishing international port, a 'mercimonia' ranking with Dorestad and Quentovic.

LIFE AND LIVELIHOOD

The elucidation of the archaeology of Hamwih has always been beset with problems. These have been mainly the recognition and isolation of coherent structural plans and the establishment of an internal chronological sequence on sites devoid of stratification. Improved excavation and meticulous recording techniques have largely solved the former, although no complete structural plans have yet been recovered like those at Chalton¹³ or Catholme.¹⁴ Recent researches

⁷ G. N. Garmonsway (trans.), Anglo-Saxon Chronicle (London, 1953).

⁸ Op. cit. in note 1, xxv, 78. 9 I am grateful to Joy Jenkyns and Alex Rumble for permission to include their findings in advance of publication.

¹⁰ P. H. Sawyer, Anglo-Saxon Charters: An Annotated List and Bibliography (London, 1968), no. 288. ¹¹ J. S. Davies, History of Southampton (Southampton, 1883) 32, 41.

¹² O. Golder-Egger (ed.), 'Vita Willibaldi Episcopi Eichstentetensis', Mon. Germ. Hist. Scriptorum, xv, pt. i (Hanover, 1887), 91.

13 P. V. Addyman, 'Anglo-Saxon houses at Chalton, Hampshire', Medieval Archaeol., xvi (1972), 13-31.

¹⁴ Current Archaeology, v, ii (no. 49) (March, 1975), 53.

into the pottery and glass, combined with the coin evidence and an increasing number of radio-carbon dates, are promising a solution to the latter.

BUILDINGS (FIGS. 12-17)

Building 1 (FIG. 12). The partial ground plan of this structure, which lay S. of a gravel-surfaced road running E. and W., had been extensively destroyed by later disturbance. Only a part of the N. wall, aligned parallel with the road, and a number of internal partitions had survived. The outer wall had closely set stakeholes within a continuous bedding trench, which was interrupted by an entrance flanked by substantial post-holes. This doorway gave direct access on to the road. The internal dividing walls showed a variation of constructional techniques, in which wattle panels were set between groups of stake-holes in both continuous and irregularly spaced trenches, and possibly even on sill beams. The structure was of at least two main phases. In the first, the entrance was 2.38 m. wide with a dividing wall set roughly at right angles to the eastern doorpost. In the second phase the outer wall was completely replaced, and the entrance was narrowed to 1.60 m. by the insertion of post-hole F101, with a new dividing wall aligned on it. This second-phase dividing wall had been strengthened by an additional wattle

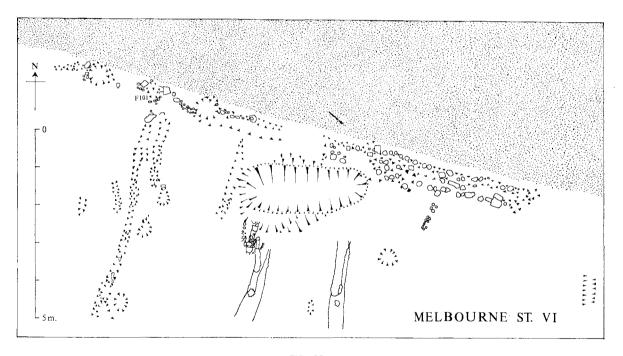


FIG. 12

HAMWIH, SOUTHAMPTON, BUILDING 1

Large structure with internal subdivisions fronting on to gravel-surfaced road. Features earlier than road have been omitted

panel, 2 m. in length, on the E. side, just inside the entrance. The need for such a strengthening might have arisen if an inward opening door had been hinged on a post in hole Fioi. The length of the building is difficult to estimate, but, if the entrance was placed centrally in the long side, then the length would have been about 20 m.

Building 2 (FIG. 13). Building 2, a roughly rectangular structure, lay N. of the road and opposite Building 1. The surviving lengths of the S. and E. wall-lines were of closely spaced stake-holes, in this instance not always within a bedding trench. The N. wall-line was destroyed by later disturbance. The evidence for the W. wall consisted of a number of deeply set post-holes within a continuous trench. This bedding trench stopped 1.50 m. short of the S. wall-line, which extended beyond the building for 1.60 m. until it was covered by the baulk. The extension of the S. wall-line is clearly an additional element of the ground plan, but the absence of a corner post at the angle of the S. and W. walls suggests that the deeply set post-holes may run across the centre of the building, and may not have formed an external wall. An internal partition was indicated by irregularly but closely spaced stake-holes running W. from the line of the E. wall. There was no evidence of an entrance to Building 2, but one may have been located in the line of the S. wall and been destroyed by a pit.

Building 3 (FIG. 13). Between Building 2 and the road were traces of what may have been an earlier structure. Two short lengths of wall trenches and two large post-holes, perhaps related to the entrance, had survived. It is interesting that the possible doorway of this building was almost exactly opposite both that of Building 1 and also the pit in the line of the S. wall of Building 2. Alternatively, this line of features may represent an enclosure surrounding Building 2.

Building 4 (FIG. 14). This structure, largely covered by the S. baulk, was probably of two main phases represented by two distinct methods of construction. The side walls of the first phase were of stake-holes and post-holes set within a continuous bedding trench. The W. wall had been largely cut away by a pit and a well, but sufficient remained to establish that originally the building had been 5 m. wide. The E. wall trench had a corner post at its NE. angle and the N. wall trench terminated with twin post-holes, one of which was slightly inside the wall-line. Within the building was a line of stake-holes, interpretable as either for roof supports or for an internal screen.

An additional room, 4.25 m. wide, had been added on to the E. wall by setting the wall posts on sill beams laid on the ground. At the NE. corner was a deep post-hole, indicating the position of a free-standing post not mortised into the beam. There were no internal features and the technique of construction made the recognition of any entrance impossible.

Building 5 (FIG. 15). Building 5 lay 18 m. E. of Building 4, on approximately the same alignment. The evidence for this structure consisted of two opposed L-shaped trenches with no appreciable depths and of varying lengths. It measured only 1.65 m. wide internally and may have been a small outbuilding.

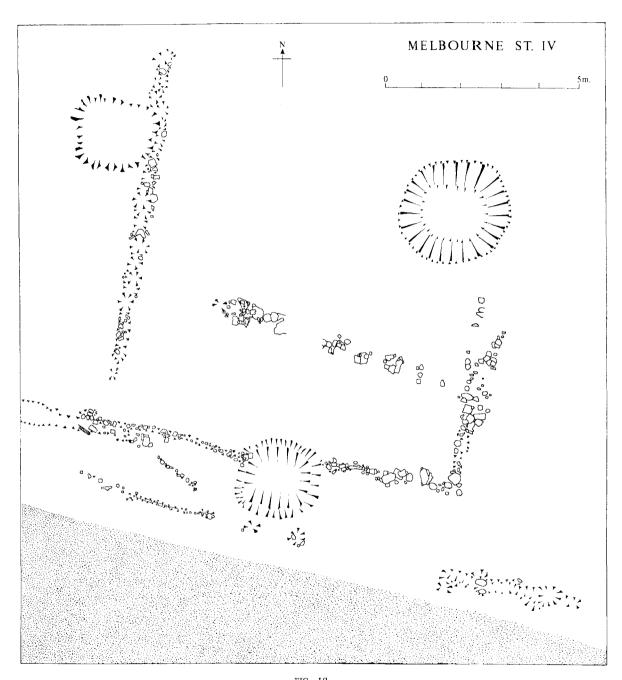
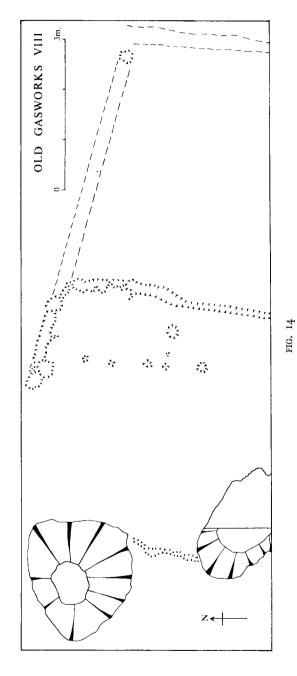


FIG. 13
HAMWIH, SOUTHAMPTON, BUILDINGS 2 AND 3
Pit in line of S. wall may have destroyed entrance to Building 2



HAMWIH, SOUTHAMPTON, BUILDING 4
Western half built of posts set within continuous trench; eastern half on ground sills

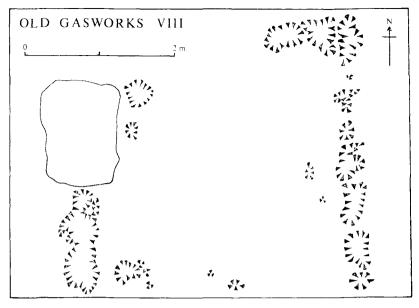


FIG. 15
HAMWIH, SOUTHAMPTON, BUILDING 5
Possibly small outbuilding

Building 6 (FIG. 16). Eight square post-holes, set at 0.60 m. and 0.90 m. centres, outlined part of the W. and S. walls of this building. In each of the excavated post-holes the ghost outline of an upright timber was clearly visible. Several shallow linear features parallel to the S. wall are interpreted as eaves-drip gullies. Four of the wall posts had been replaced, presumably because rain water from the roof had rotted the timbers below. A modern building precluded immediate excavation on the S. and E., where further evidence of this structure was reasonably expected. Subsequent investigation during property development revealed that most of the archaeological levels had been destroyed. Despite the obvious drawback in interpreting a building from only eight post-holes, the evidence is likely to indicate a substantial timber-framed building.

Building 7 (FIG. 17). This was a structure of paired post-hole construction which had been completely replaced by Building 8, a larger structure on a slightly different alignment but of the same building tradition.¹⁵

The side-wall post-holes of Building 7 were regularly spaced at 1.20 m. intervals, and at half this interval in the middle of the building and by the entrance in the line of the S. wall. The additional post-holes in the middle of the building were slightly inside the wall-lines and may indicate the position of a cross wall. However, as no internal features were discovered to be associated with

¹⁵ For detailed descriptions of Buildings 7 and 8 and associated features see P. E. Holdsworth, 'Two new buildings from Saxon Southampton', Archaeologia Atlantica, 1, pt. ii (1975), 199–206.

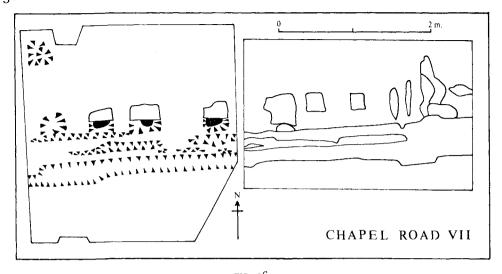


FIG. 16

HAMWIH, SOUTHAMPTON, BUILDING 6

Ghost outline of upright timbers shown in plan on post-holes, as sectioned.

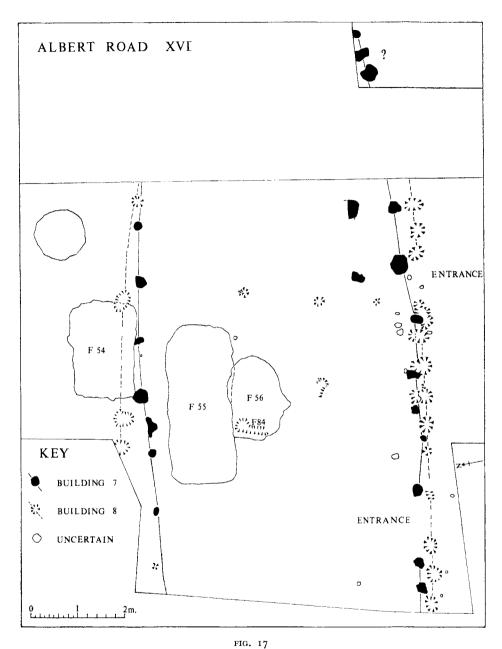
Unhatched features not excavated

such a dividing wall, they may equally represent support for a roof structure, such as a covered smoke-hole or louvre. The entrance, 1.50 m. wide, was flanked to the W. by two closely spaced post-holes which may have held a pivot post and roof support. The corresponding point in the N. wall was badly disturbed by pipe trenches, making recognition of a cross doorway impossible. As the distance between the opposite pairs of post-holes was greatest in the centre of the excavated area and decreased to either side, there can be no doubt that this was a bow-sided structure.

The only other internal features which may be associated with Building 7 were two post-holes in the SE. of the excavated part of the structure. A line drawn between these two features would be parallel with the building's centre line.

Building 8 (FIG. 17). This structure was represented by twelve post-holes along its S. wall-line and only four along its N. side, where modern disturbance was greater. Nevertheless, the surviving post-holes were seen to be paired across the building and, except at the entrance, had a gap between them of 0.60 m. to 0.65 m. The doorway, in the line of the S. wall, was 1.10 m. wide and was flanked by two closely spaced post-holes to the W. as in Building 7. The distance between the opposed post-holes increased from E. to W., except for the westernmost pair, which were slightly closer to the established centre line of the building. It is possible that this was also a bow-sided building.

Against the N. wall of the building was a long keyhole-shaped furnace (F_{55}) containing large amounts of charcoal, burnt clay and slag. It was cut to the S. by a shallow bowl hearth (F_{56}) which overlay the shallow footings of what was possibly an earlier partition (F_{84}) .



HAMWIH, SOUTHAMPTON, BUILDINGS 7 AND 8

Bow-sided buildings of paired post-hole construction and with internal subdivisions. F_{54} , rectangular pit with corner posts. Iron-smelting furnace and bowl hearth $(F_{55}$ and $F_{56})$ contemporary with Building 8

A number of other features are to be associated with the building. Of these, a cross wall is indicated by a line of post-holes at right angles to the western doorpost.

DISCUSSION OF THE BUILDINGS

With the exception of Buildings 7 and 8, the structures are of types well described from Anglo-Saxon studies and add little to existing knowledge. Only Building 4, with its use of two different constructional techniques, is of particular interest, inasmuch as it confirms the hypothesis that buildings of ground-sill construction tend to be later than those with their wall posts set in trenches. 16 However, Buildings 7 and 8 are worthy of detailed consideration. Both were buildings of paired post-hole construction; Building 7 was certainly bow-sided and Building 8 probably so. The pottery suggests that the destruction of Building 8 took place early in the 9th century.

Although only a portion of the middle of each building was excavated, the overall dimensions of both can be estimated by comparing their mid-widths with the ratios of length to mid-width and of mid-width to end-width of other bowsided buildings (TABLE I). Both continental and British examples have been used, although the numbers are limited as preliminary reports and summaries rarely give measurements.

TABLE I DIMENSIONS OF HAMWIH BUILDINGS 7 AND 8 COMPARED WITH OTHER BOW-SIDED BUILDINGS

	Length: mid-width	Mid-	-width: end-width	
Dorestad ¹⁷	4.1 : 1	1.25:1		
Buckden ¹⁸	2.7:I		1.13:1	
Chalton ¹⁹	2.2 : I	1.18:1		
Cheddar ²⁰	3.9:1	1.33:1		
Average ratio	3.22:1		1.22:1	
	Mid-width	Estimated length	Estimated end-width	
Building 7	5.70 m.	18.35 m.	4.67 m.	
Building 8	6.8o m.	21.89 m.	5.57 m.	

Assuming that between a third and a half of the length of each building was excavated, it is probable that these estimated dimensions are correct to within a 5% error.

P. V. Addyman, 'The Anglo-Saxon house: a new review', Anglo-Saxon England, 1 (1972), 306.
 W. A. van Es, 'Excavations at Dorestad: a pre-preliminary report', Berichten Rijkdienst v.h. Oudheid-

kundig Bodemonderzoek, XIX (1969), 183–207.

18 C. F. Tebbutt, 'An 11th century "boat-shaped" building at Buckden, Huntingdonshire', Proc. Camb.

Antiq. Soc., Lv (1962), 13-15.

19 P. V. Addyman and D. Leigh, 'The Anglo-Saxon village at Chalton, Hampshire: a second interim report', Medieval Archaeol., XVII (1973), fig. 6.

²⁰ P. Rahtz, 'The Saxon and medieval palaces at Cheddar, Somerset: an interim report of excavations in 1960-62', Medieval Archaeol., VI-VII (1962-3), 3-66.

Most of the British parallels for this shape of building are later in date than that suggested for the Hamwih structures and many also differ in constructional techniques. Those at St Neots (Cambs.), 21 Buckden (Hunts.) and Sulgrave (Northants)²² all belong to the 11th century and are typologically more advanced, being constructed on ground sills. The large late Saxon buildings at Thetford (Norfolk),²³ however, did use individual post-holes in their construction but the wall-lines show a tendency to curve rather than to be truly 'bowed'. The long bow-sided hall at Cheddar (Somerset) has been dated oth century and is also slightly later in date than the Hamwih buildings. It is certainly later in constructional technique, having its wall posts set in trenches. There are, however, two recorded sites which may have bow-sided buildings of an earlier date. Excavations of the 6th to 7th-century settlement at Chalton (Hants) have produced the ground plans of a large number of buildings and Addyman believes that a few of these exhibit a tendency towards bowed sides. Only one of the published plans reveals this tendency, Building A8, a "medium-sized structure with opposed doors set off-centre in the long sides and an addition or annex at the E. end".24

Air-photographs of a site near Dorchester-on-Thames (Oxon.) have revealed several oval-shaped crop-marks, interpreted by Rowley as bow-shaped structures.²⁵ There also appears to be a number of sunken floored huts or *Grubenhäuser*.

In contrast to this rather meagre British list, continental examples of bow-sided buildings are well established.²⁶ They occur in Denmark at Hodde, at least as early as the Roman iron age; and at Traelborg such buildings have been associated with occupation c. 400–600 A.D. Others of 8th-century date have been found at Lindholme Høje and beneath the Viking period buildings at Aggersborg.

At Helgö, Sweden, and at a site S. of Bergen, Norway, bow-sided buildings were found with outside revetment banks of earth and rubble. Also in Norway, near Telemark, a building with curved walls was found with objects of the second half of the 6th century; and at Warendorf, Germany, bow-sided buildings of the 8th to 9th century were replaced by rectangular buildings.

The bow-sided buildings at Dorestad, ²⁷ however, provide the best parallels for the Hamwih structures. Both sites were important market centres in the 8th and 9th centuries, supporting large urban populations. The Dorestad buildings were also of paired post-hole construction, although the intervals between the posts were considerably wider, some 2 to 3 m. compared with 1.20 m. in Building 7 at Hamwih. The Dorestad structures also had slanting roof supports outside the walls, which provided an interior unobstructed by roof-supporting timbers; van Es considers the bow-sided building as a development from the external roof-support technique.

²¹ Op. cit. in note 16, 298.

²² Op. cit. in note 16, 288.

²³ B. K. Davison, 'The late Saxon town of Thetford: an interim report on the 1964-66 excavations', Medieval Archaeol., x1 (1967), 189-208.

²⁴ Loc. cit. in note 19.

²⁵ J. K. St. Joseph (ed.), *The Uses of Air Photography* (1966), 123; T. Rowley, 'An early Saxon settlement of Dorchester-on-Thames', in idem (ed.), *Anglo Saxon Settlement and Landscape* (British Archaeol. Rep., vt), 45.

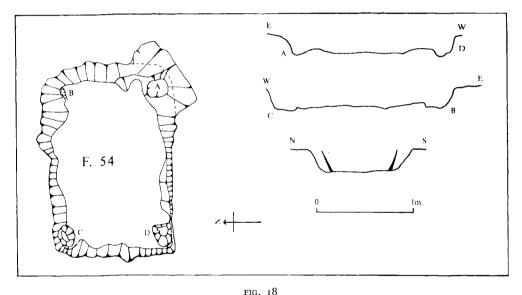
²⁶ B. Hope-Taylor, 'The boat-shaped house in northern Europe', *Proc. Camb. Antiq. Soc.*, v (1962), 20; H. Schmidt, 'The Trelleborg house reconsidered', *Medieval Archaeol.*, xvII (1973), 52-77.

²⁷ Op. cit. in note 17.

Though individual parallels for the Hamwih buildings are not difficult to find, it is clear that there are many factors contributing to building forms in the 8th and 9th centuries. The possibility of bow-sided buildings in 6th-century contexts at Chalton suggests that this shape may, to some extent, be a traditional building form in southern England. However, an equally acceptable hypothesis from the evidence presently available would have the Hamwih buildings a result of trading contacts with the North Sea littoral, where bow-sided buildings are frequently found at an early date.

PITS (FIG. 18)

The dominant archaeological features on all the Hamwih sites are pits. Often it is impossible to interpret their primary functions with certainty as, almost without exception, they contain little but domestic refuse and to a lesser extent industrial waste.



HAMWIH, SOUTHAMPTON, PIT F54
Plan and profiles of rectangular pit with corner posts and traces of wooden lining

The pits cannot be grouped on the basis of ground plans and profile-shapes as could those at Maxey (Northants).²⁸ Of ninety-five pits examined, twenty-nine were rectangular, thirty-eight circular, twenty-five oval and three amorphous; no one ground plan showed a tendency towards any particular profile. It is hoped that future work on the pits involving use of a computer will prove more successful.

²⁸ P. V. Addyman, 'A dark-age settlement at Maxey, Northants.', Medieval Archaeol., VIII (1964), 32-7.

In the meantime specialized pits, such as F54 on Site XVI (FIG. 18), will continue to stimulate discussion as to possible function. This was a rectangular flat-bottomed pit with a substantial post-hole at each corner and the vestigial traces of a wooden lining around the sides. Three of the corner post-holes were inclined inwards, though it is possible that this inclination was created by the removal of the posts which may have been vertical when in position. In the pit filling, of homogeneous grey soil, were over thirty flint pebbles — mostly fist sized — and a small amount of domestic refuse.

Pits of this type have been found both in England and on the continent. At Maxey²⁹ some pits (type II) are described as sub-rectangular or oval with postholes around them or wicker structures within. Addyman suggests that they were small covered cellars. In the central area of the settlement at West Stow (Suffolk)³⁰ twenty-two rectangular pits with near vertical sides and flat bottoms were found. These were later interpreted by West as retting pits.³¹ At Portchester (Hants)³² Cunliffe located two rectangular pits, both lined with horizontal timbers, one with six post-holes and the other with four post-holes inside. Both were interpreted as storage pits.

Similar pits have also been found at Dorestad.³³ Two were located in doorways, where van Es considers them to be cattle grids. Three more lay inside the building and have been interpreted as cellars.

Of the many functions which could be attributed to F54, that of storage would be the least demanding but also the least satisfying for such a specially constructed pit. Attractive alternatives would be its use as a scudding trough, fulling trough or weaver's pit, although there is no archaeological evidence for any of these activities having taken place on the site.

METAL-WORKING (FIG. 19)

Metal-working is an industry frequently represented in pit assemblages. As yet, however, there is no evidence of precious metal objects or of a mint site.³⁴ Lead waste is occasionally recovered and a lead plumb-bob was found on Site XV.

On Site VIII two pits produced evidence of large scale bronze-working. Two limestone ingot moulds, a fragmentary brick ingot mould and two complete crucibles were recovered along with a quantity of metal-working debris. The crucibles conform with the description provided by L. Biek of others discovered at Hamwih.³⁵ The associated objects tended to be fragmentary and perhaps unfinished, although pins, a small length of linked chain and a curved 'fish hook' have been identified.

 ²⁹ Ibid., 36.
 ³⁰ S. E. West, 'The Anglo-Saxon village of West Stow: an interim report of the excavations 1965–68', Medieval Archaeol., XIII (1969), 1–20.

 ³¹ Current Archaeology, IV, v (no. 40) (Sept. 1973), 154.
 32 B. Cunliffe, 'Excavations at Portchester Castle, Hants, 1969-71', Antiq. Inl., LII (1972), 77.

³³ Op. cit. in note 17, 196.
34 D. M. Metcalfe, 'The "bird and branch" sceattas', Oxoniensia, xxxvii (1972), 51–65; L. J. Keen (ed.), Anglo-Saxon Coin Finds, and the Southampton Sceatta Mint (forthcoming).
35 Op. cit. in note 1, xxvi, 66–8.

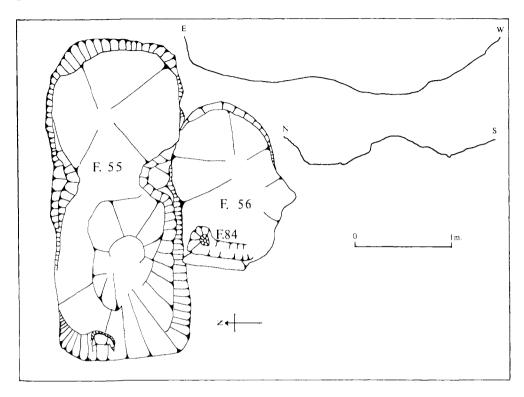


FIG. 19
HAMWIH, SOUTHAMPTON, FURNACE F₅₅ AND HEARTH F₅₆
Plan and profiles of iron-smelting furnace and bowl hearth

A large variety of bronzes, testifying to the skill of the craftsmen, have been recovered from other sites in the Saxon town. Site XIII produced a D-shaped buckle (PL. VI, A) and fragments of a girdle-hanger, whilst from Site XI came the badly corroded fragments of another girdle-hanger.

The most important recent discovery has been a forge and furnace associated with Building 8 at Site XVI. The keyhole-shaped smelting furnace and subsidiary bowl hearth (F55 and F56) (FIG. 19) were found inside the building against the N. wall-line. A preliminary interpretation indicates that the building originally contained only the furnace, and that the hearth was added after the removal of an internal partition. The features were seen to be contemporary with the occupation of the building, as a dense charcoal spread surrounding them faded gradually towards the centre of the building but came to an abrupt halt at the N. wall-line. Furthermore, the side of the furnace closest to the wall-line was undercut, whilst the opposite side remained slightly less than vertical. This may be attributed to the fact that the standing wall would have prevented cleaning out operations taking place equally from both sides. The furnace had been well

cleaned out after its last firing and no trace of lining was discovered, although a large lump of heavily scorched clay, found in situ high up at one end of the furnace, may represent part of the tuyère.

A large quantity of metal-working debris and badly oxidized iron objects were recovered from the fillings of the forge and furnace and also from the occupation level of the building and a pit to the N. Amongst these were tap slag, a draw plate, a pair of tweezers and a badly fragmented iron rod, which x-radiography showed to have an attached ring at one end with the other end pointed. Several pieces of ironstone, probably ore, and large pieces of dressed sandstone, perhaps part of an anvil, were also found.

Although today Hampshire is far removed from iron and steel producing industrial areas, there are numerous deposits of iron ore in the area, albeit of variable quality. The Tertiary strata of Hampshire were worked in the pre-Roman iron age, 36 and the New Forest had a flourishing iron industry in the middle ages.³⁷ These same deposits were undoubtedly worked in the Saxon period to satisfy both the local market and the needs of the surrounding area.

CARPENTRY (FIG. 20)

At Site XI two wooden vessels were recovered from anacrobic layers within pits. It is impossible to be certain if the wooden objects were manufactured locally, but there seems little reason to doubt this as the buildings — and surely the maintenance, if not the construction of ships and boats — required sound carpentry techniques. The first vessel was an oak cask, 0.53 m. high, of stave construction with a hazel-wood binding (FIG. 20, no. 1). The nine staves had collapsed inwards over a circular base with a chamfered edge. Each stave had a groove 4 cm. from each end to receive the base and lid, although the latter was missing. The second vessel was a small bucket hollowed from a single piece of oak (Fig. 20, no. 2). This, too, had a hazel-wood binding.

Staved vessels are known from Saxon contexts elsewhere in England, but the bindings of these are always of metal. Excavations at Lübeck, 38 however, have produced a large number of staved vessels with wooden bindings and these provide the closest parallels to the Hamwih cask and bucket.

The wells in the Saxon town normally have a woven wicker lining to stabilize the surrounding gravels but at Site VII a barrel had been utilized instead. It consisted of seventeen staves which survived only as a dark stain towards the top of the well but which were completely preserved towards the bottom because of permanent waterlogging. Whilst timber-lined wells and pits are not uncommon in the Saxon period, the only other occurrence of a barrel having been used for revetment is at North Elmham (Norfolk). 39 The upper shoring of the well consisted

³⁶ R. F. Tylccote, Metallurgy in Archaeology (London, 1962), 179.
³⁷ T. W. Shore, Hampshire Papers (Hampshire Field Club Memorial Volume, 1908), 151–71.
³⁸ W. Neugebauer, 'Die Ausgraben in der Altstadt Lübeck', Rotterdam Papers; a Contribution to Medieval W. Nedgebauer, Die Ausgrabeit in der Austauf Lubeck, Robertaum rapers, & Sont Robertaum an Archaeology, 1 (1968), 107; W. Neugebauer, 'Arbeiten der Böttcher und Dreschsler aus den mittelalterlichen Bodenfunden der Hansestadt Lübeck', ibid., 11 (1973), 117–37.

39 P. Wade-Martins, 'Excavations at North Elmham, 1969: an interim report', Norfolk Archaeology, xxxv,

pt. i (1970), 57-65.

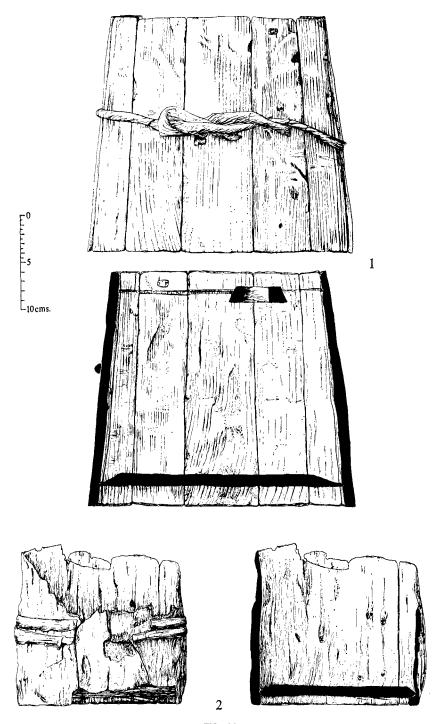


FIG. 20
WOODEN OBJECTS FROM HAMWIH, SOUTHAMPTON
1. Staved cask; 2. Bucket

of horizontal timbers on a frame of four corner posts, but a 0.60 m. high barrel had been inserted into the bottom of the well shaft. An early 9th-century date has been suggested for this feature on the basis of associated sherds of Ipswich and Thetford wares.

TEXTILES

Until recently the evidence for the textile industry was represented only by associated artifacts such as loom-weights, spindle-whorls and thread-pickers. However, the conditions which allowed the preservation of the small bucket also allowed a small length of tightly folded textile to survive.⁴⁰

The cloth was in an advanced state of decay and heavily stained from overlying organic deposits. Because of the poor state of preservation only a few fragments could be examined in detail; this is unfortunate as it represents one of the few pieces of middle Saxon textile yet discovered.

The fibres have been identified as fine wool and the cloth as plain woven with yarns spun on the worsted principle. No finishing processes such as raising or fulling appear to have been employed. The warp and west could not be isolated but one system was s-spun and well spaced (12 yarns to the centimetre), while the other was z-spun and compacted (20 yarns to the centimetre).

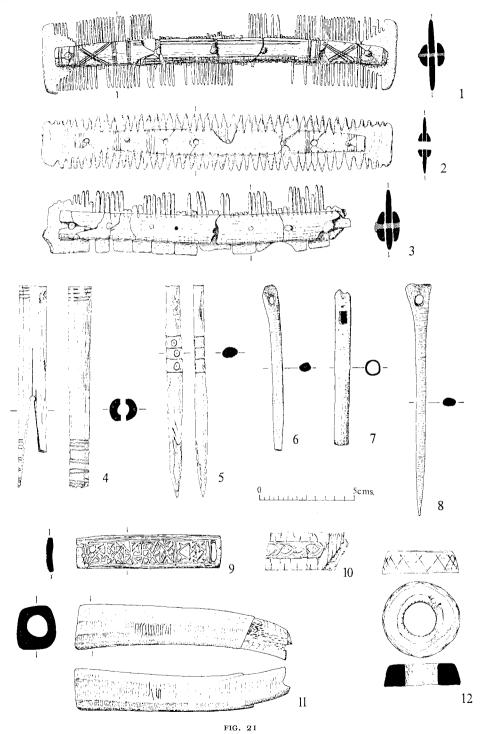
BONE OBJECTS (FIG. 21)

The industry most frequently represented amongst the surviving fragment of the artifactual evidence is bone-working. One area has been recognized where a particular stage in the bone-working process was carried on. At Site XIV seven of the eight pits examined contained little but sawn off distal and proximal ends of long bones of animals. The natural tubes resulting from the removal of the articulations could be used for handles, whistles and perhaps hinges. There was no evidence for the manufacture of such artifacts on the site, which implies that the shafts of the long bones were transported elsewhere in the settlement for the next manufacturing stage. One of the pits produced a vertebra of the Little Piked Whale (Balaenoptera acutorostrata). From the numerous incisions on the flat facets of the vertebra it seems that it had been used as a chopping block.

The large range of objects manufactured from animal bone and antler testify to the importance of this industry. Weaving tools, spindle-whorls, handles, gaming pieces, combs, comb cases, and pins are all found both complete and incomplete.

The types of combs and techniques of construction have been well described by Addyman and Hill;⁴¹ they are single and double-sided as well as handled (FIG. 21, nos. 1–3). A curious effect of wear on the teeth is that many show transverse marks, which give them a beaded aspect (FIG. 21, no. 2). After further use the beads drop off, resulting in a shortening of the teeth. Combs with handles

⁴⁰ The remarks on the textile are based on information kindly supplied by John Hedges, formerly of the Department of Archaeology, University of Southampton.
⁴¹ Op. cit. in note 1, xxv1, 75–7.



BONE OBJECTS FROM HAMWIH, SOUTHAMPTON 1–3. Combs; 4, 11. Handles; 5. Thread-picker; 6, δ . Pins; 7. Flute; 9, 10. Plaques; 12. Spindle-whorl

are not found very frequently in Hamwih, and the number of English parallels is quite small.⁴² They are most commonly found in Frisia,⁴³ an area with which Hamwih had significant trading contacts in the 8th and 9th centuries. A study of the distribution of this unusual type of comb may prove rewarding.

Amongst the more exceptional decorated bone objects are two 'plaques' and a small handle. A strip, cut from an antler, was recovered from Site V (Fig. 21, no. 9). It has a flat back and slightly rounded upper surface decorated with a crude and deeply incised, jumbled, geometric ornament. The holes at each end suggest it had been sewn on to textile or leather. A second strip (Fig. 21, no. 10) which also bears a runic inscription, has more regular ornament in the form of interlace decoration.⁴⁴ Closely similar decoration occurs on a fragment of a runic cross from the Isle of Man⁴⁵ and also on a comb rib from Birka.⁴⁶

At Site XI a small, decorated handle was found (PL. VI, B). It measures 33 mm. in height with an upper surface diameter of 33 mm. and a base diameter of 12 mm. An iron rivet pierces the top centre and there are cross pins of both iron and bone. The upper surface is decorated with incised lines, radiating from the central rivet, which join two concentric incised lines around the circumference on the upper surface. A similar object found at Dorestad⁴⁷ has been interpreted as the handle from a short apple-wood cane, such as the more elderly among the Franks are reputed to have carried.

A large variety of bone pins has been discovered, some pierced (Fig. 21, nos. 6, 8), others not (Fig. 21, no. 5). The unpierced pins are generally regarded as pin-beaters or thread-pickers for use in textile manufacture and the points of these are frequently polished from contact with the yarn. Some of the pierced pins have large, flat triangular heads (Fig. 21, no. 8) and may have been used as sacking needles. Spindle-whorls usually have the form of a low truncated cone (Fig. 21, no. 12), sometimes crudely decorated with incised lines and occasionally showing signs of being turned on a lathe.

A broken flute (FIG. 21, no. 7) was found on Site V. Although this is the first discovered in Hamwih, they occur frequently in Frisia.⁴⁸ One finger-hole survives and it is broken across the next. It was made from a goose ulna, and the blow holes were probably cut to respect and remove the foramen.

A clear preference is shown for the manufacture of certain artifacts from sclected animal bones: fused cattle femur for spindle-whorls; cattle or horse metapodia for comb segments; and antler for knife handles (FIG. 21, nos. 4, 11).

The animal bone, however, did not provide simply the raw material for interesting artifacts: the animals formed part of a crucial two-way process between

⁴² D. M. Waterman, 'Late Saxon, Viking and early medieval finds from York', *Archaeologia*, xcvπ (1959), 87-00.

<sup>87-90.

43</sup> A. Roes, Bone and Antler Objects from the Frisian Terp Mounds (Haarlem, 1963), 22-3.

L. Keen and R. Page (forthcoming).
 H. Shetelig (ed.), Viking Antiquities in Great Britain and Ireland, IV (1954), fig. 70.

⁴⁶ Holger Arbman, Birka, 1, Die Grabe (1940), pl. 166, no. 1.

⁴⁷ Op. cit. in note 43, 76–7. ⁴⁸ Ibid., 59–62.

man and his environment.⁴⁹ Detailed study of the faunal remains, therefore, as well as providing valuable dietary data, will provide the answers to a number of more fundamental problems, and allow Hamwih to be related to the agricultural capacity of its surrounding region. It is clear from the dearth of wild pig, and meagre signs of hunted deer, that Hamwih was well past a frontier economy. But was the husbandry narrowly localized with the consistent patterns of an homogeneous group? or were many of the animals brought in from far afield? What of their health and nutrition? and with what margins of ease were they reared? Sex and age groups for the different species show the uses for which they were kept, and variations between the different sites may suggest the social organization within the town itself.

Most archaeological reports on faunal remains contain only lists of identifications and measurements almost totally unrelated to the excavation; some idea of the potential of a more enlightened approach to bone assemblages has been provided by Chaplin.⁵⁰ The large quantity of exceptionally well preserved animal bone from Hamwih (over 45,000 fragments have been identified from the four Melbourne Street sites) has required established methods of study and quantification to be reappraised. A system of close analysis and meticulous recording has been devised, from which the greatest volume of information can be retrieved later.

The primary identification, with weighing, is carried out with reference to individual excavated layers and the information recorded in two modes: as a raw score, or identified-fragment tally; and where necessary as a special record—noting cuts, burns, gnawing, fine sawing and pathological details. All the fragments deemed worthy of further attention are then marked individually, which, although time consuming, allows for the bones to be removed from their archaeological context and laid out for visual comparison in their biological groups. The remaining fragments can then be returned to store.

Patterns of ageing are calculated on tooth eruption and also on epiphysial fusion, and the two results are compared. Ratios for the main domestic species are worked out by fragment count, by weight and by minimum numbers; again the results are compared. Both sexing and the relating of sex to age are extremely difficult for all species but the pig, whose mandibles are particularly diagnostic.

When all the measurements have been collated and tables of means and ranges prepared, overall patterns can be established and comparisons made. Internal comparisons involve the setting of the groups from each layer into the framework of the whole, to spot discrepancies and deviations. Since there is little stratification relating the separate sites in Hamwih, it is essential to compare all relevant information between the different features, grouped or singly, and between the different sites.

⁵⁰ R. E. Chaplin, The Study of Animal Bones from Archaeological Sites (London, 1971).

⁴⁹ Mrs Jennifer Bourdillon has responsibility for the Hamwih animal bone studies and also for the preparation of specialist reports. The Committee is most grateful for the assistance and close co-operation Mrs Bourdillon has received from Miss J. Coy and her assistant, Mrs J. Winder, of the Department of the Environment's Faunal Remains Project, University of Southampton.

The full results of the Melbourne Street study have not yet been completed but some points of interest that have been established already are given in TABLES II and III.

TABLE II
SPECIFIC RATIOS FOR THE MAIN DOMESTIC ANIMALS¹

	% of identified fragments	% by weight	% by minimum numbers	% by meat weight
Cattle	52.6	72.3	31.2	79.3
Sheep ²	32.0	14.7	36.5	9.3 o.8
Goat	0.3	0.9	3.3	
Pig Horse³	15.0	11.5	27.9	10.6
Horse ³	0.1	$0.\overline{6}$	1.1	

NOTES

- 1. Domestic animals account for 99.9%, wild animals for 0.1% of the total bone recovered.
- The figures for sheep may be somewhat over-estimated at the expense of goat, but the combined totals for the two species are correct.
- There is no reason to think that horse was not normally part of the human diet.

TABLE III

AGE GROUPS FOR THE MAIN DOMESTIC ANIMALS determined by tooth eruption and wear

Stage	Definition	Cattle	Sheep and goat ¹	Pig	Horse ²
Young	2nd MOLAR not yet coming into wear	18,8	21.0	19.9	-
Juvenile	and MOLAR in wear; 3rd MOLAR not yet coming into wear	23.0	16.8	39.7	-
Adult	3rd MOLAR coming into wear	14.7	27.0	12.9	
Mature	3rd MOLAR fully in wear	26.7	25.8	14.0	60.0
Old	3rd MOLAR wearing flat	16.8	9.4	13.5	40.0

NOTES

- 1. Combined figures are given for sheep and goat.
- 2. Horse figures are based on a very small sample of teeth, but the evidence of bone fusion (100%) confirms the complete absence of young or juvenile animals.

SEED AND INSECT REMAINS

Waterlogged deposits or other anaerobic conditions are surprisingly infrequent on the Hamwih sites; consequently the amount of data available for study is rather limited. When four pits containing identical organic sediments were found at Granville Street (Site XI), each was heavily sampled and one studied in detail as being representative of the group.⁵¹

The primary filling had the form of an inverted cone, truncated, 0.5 m. in height and 0.6 m. in diameter. It consisted of a moderate brown (Munsell, no. 5YR 3/4) fibrous 'peaty' material, which appeared to be herbivore dung. The deposit was thinly layered and had a slightly dished upper surface. Its shape suggested it had been collected together in a large bucket and dumped into the pit. The material had been sufficiently cohesive when deposited to retain the approximate shape of the container. The pit seems to have been dug solely for the purpose of disposing of the organic waste, or to store it, for it had been immediately filled with the soil produced from the digging of the pit.

The insect assemblage recovered is fairly typical of fresh herbivore dung, although specifically dung-feeding species are restricted to the two scarabaeids, *Goeotrupes* sp. and *Aphodius* sp. The parasite evidence was more conclusive; a small sub-sample contained large numbers of eggs of the internal nematode parasites, *Trichuris* spp. and *Ascaris* (*lumbricoides* group); the latter are restricted to pigs and men. Although most of the seeds recovered are of edible plants and could have been introduced in human faeces, the insect evidence is sufficiently strong to suggest that the deposit was largely of herbivore dung.

Careful consideration was given to the possibility that the dung had been collected for use as manure or for some industrial process but no single definitive interpretation was possible. The presence amongst the animal bone assemblage of a large number of complete skulls and an almost complete absence of rib fragments suggest that the material largely represents waste from a butcher's yard, if perhaps an unusually tidy butcher for the period.

GLASS

Considerable quantities of glass have been recovered from the Hamwih excavations. Despite its fragmentary condition, the material provides the only large collection of glass from this period in the British Isles.⁵² Although no complete vessels have survived there are sufficient rim fragments with particular decorative characteristics to allow comparison with vessels known from the continent, Scandinavia and elsewhere in Britain. Such common forms as the claw beaker, conical beaker and palm cup are all represented. Other fragments, however, have no parallels either in form or decoration. These are of great interest as they reveal the variety of wares which was available at Hamwih. Furthermore,

⁵² The glass is being examined by John Hunter, Department of Physics, University of Bradford, on whose preliminary report this statement is based.

⁵¹ P. C. Buckland, P. Holdsworth and M. Monk, 'The interpretation of a group of Saxon pits in Southampton', Journal of Archaeol. Science, III (1976), 61-9.

they should provide new information about early medieval developments in glass style and decoration.

Amongst the remains of ninety-eight vessels so far examined from the Melbourne Street excavations are a number of fragments with particularly interesting features. Of the numerous rim fragments, twelve are noteworthy in that they are formed by folding the top of the vessel to produce a rim with a sealed cavity and others have decorated coloured glass spirals applied to the top of the rim. The colours of the fragments, which include red, dark yellow, blue and purple, and the considerable variation of quality indicate the mixed nature of the material. Several fragments exhibit opaque yellow marvered decorations and filigree rods, both of which are known from Scandinavian rather than British contexts. One of the more exotic remains is of a vessel decorated with opaque white marvering combed into festoons, possibly imported from the East. Perhaps the most important single find is a rod of 'raw' twisted glass probably used as material for making beads and mounts.

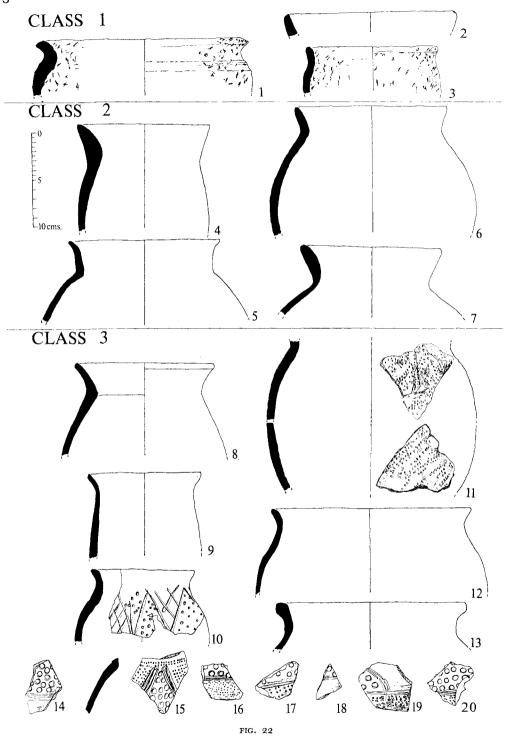
It is conceivable that some of the fragments may have been imported specifically for melting down for remanufacture. Several of them show indications of destruction by cracking due to heat. It is hoped that analytical work currently being undertaken will provide a solution to this problem.

POTTERY (FIGS. 22-5)

The origins and development of the local and imported wares found at Hamwih are of immense importance when attempting to locate the town's trading areas in this country and on the continent. Consequently they have been the subject of detailed research. There are two major groups: the first is locally produced, hand-made or thrown on a slow wheel, and contains five classes; the second is imported, thrown on a fast wheel, and contains over thirty classes.

The earliest local ware is 'grass-tempered', of which only a few sherds have been found (Fig. 22, nos. 1–3). This is entirely in keeping with the evidence from elsewhere in southern Hampshire, which suggests a late 7th to early 8th-century end for the ware. The three main classes are: fabrics with chalk inclusions (Fig. 22, nos. 4–7); sandy fabrics, sometimes with stamped decoration (Fig. 22, nos. 8–20; Fig. 23, nos. 21–6); and fabrics with flint inclusions (Fig. 23, nos. 27–34). A small quantity of apparently late vessels with shell inclusions has also been found (Fig. 23, nos. 35–9).

The fine collection of imported pottery from Hamwih is largely unparalleled in Britain and its sources have long been uncertain. However, recent petrological analyses, though not yet complete, have indicated the sources of several classes. The major classes, that is those most frequently found during excavation, appear to have been manufactured in the Meuse region, the Pas-de-Calais and the Ardennes. Of the smaller groups, particular attention has centred around the red painted wares and the Tating wares, both of which show remarkable variations of fabric. A major problem of the latter is to isolate it from the large ill-defined group of black wares when it occurs without its characteristic decoration.



POTTERY FROM HAMWIH, SOUTHAMPTON 1-3. Assemblages of Class 1; 4-7. Class 2; 8-20. Class 3

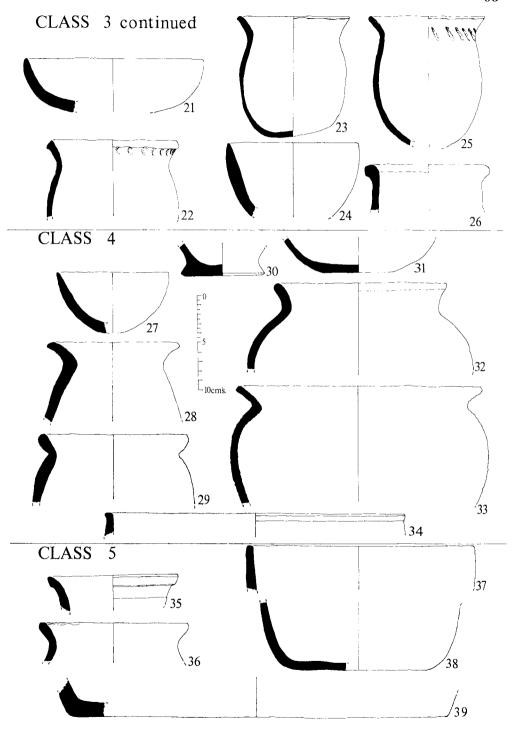


FIG. 23
POTTERY FROM HAMWIH, SOUTHAMPTON
21–6. Assemblages of Class 3; 27–34. Class 4; 35–9. Class 5

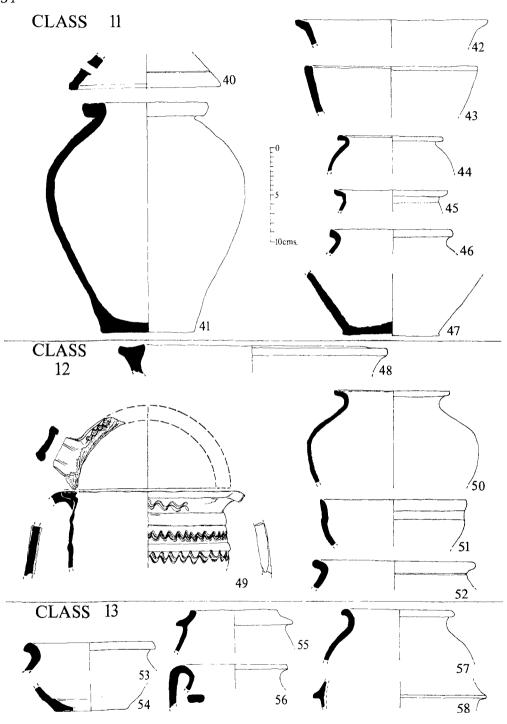


FIG. 24
POTTERY FROM HAMWIH, SOUTHAMPTON
40-7. Assemblages of Class 11; 48-52. Class 12; 53-8. Class 13

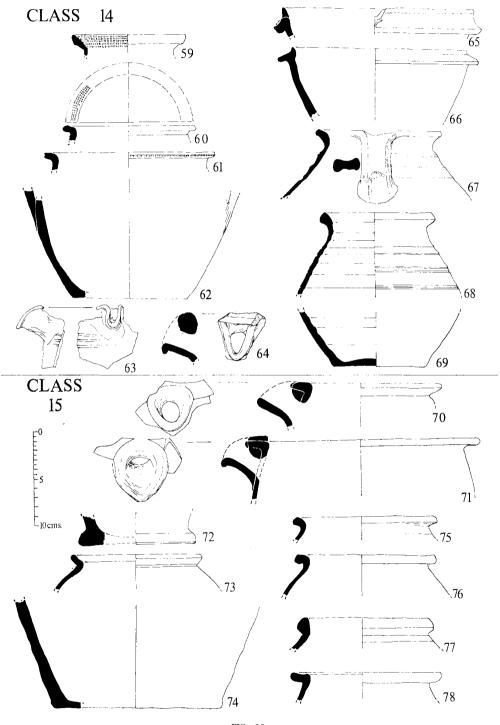


FIG. 25 POTTERY FROM HAMWIH, SOUTHAMPTON 59-69. Assemblages of Class 14; 70-8. Class 15

A detailed analysis and discussion of the ceramic evidence may be found in R. Hodges's forthcoming publications;⁵³ only a brief description of the five major classes is given below. The possible sources for these wares have been established from both a petrological study of the Hamwih fabrics and three continental tours in search of parallels for them.

Class II (FIG. 24, nos. 40-7). This ware has been found on almost every excavation in the Saxon town. The fabric is very hard with a fine sandy texture and small rounded quartz-sand inclusions. The colour is white to grey and many sherds have been secondarily burnt black. Vessels have usually been used for cooking-pots and the wire cutting of the flat bases is a prominent characteristic of this ware. The rim profile varies from a simple flattened rim to an elaborately squared rim. One unusual form in this fabric is a pierced lid (FIG. 24, no. 40). It is probable that a production centre near Rouen is the source of many of the wares in this class.

Class 12 (Fig. 24, nos. 48-52). Surfaces vary from white to light grey and some sherds are secondarily burnt black. The texture is generally coarse except for the few vessels which have been burnished. It occurs in many forms, flat-rimmed and roll-rimmed cooking-pots with flat bases, pitchers, bowls and flanged vessels. Some sherds are painted red and others are decorated with diamond roll-stamping or incised wavy lines. The discovery of sherds of this ware with a hoard of mid 8th-century sceattas,⁵⁴ and their occurrence in a pit (SAR V, F 16), yielding a ¹⁴C determination of 1140 ± 60 b.p. (HAR 328) (radiocarbon years), gives an indication of the date range within which the class was being imported. The wide range of forms paralleled at Trier suggests a source in that region.

Class 13 (Fig. 24, nos. 53-8). The outer surfaces are grey with red inner surfaces and a grey core, an appearance produced by firing the kiln in two stages. The fabric is very hard and smooth with prominent limestone inclusions. Pitchers and bowls are the most common forms represented and parallels for this class suggest a source in northern France.

Class 14 (FIG. 25, nos. 59-69). This class contains the black wares, and six provisional groups have been identified petrologically. These are some of the finest wares from Hamwih and are composed of small jars, bowls and pitchers usually with beak spouts; they are flat based and often finely decorated with rollstamping. With the exception of sherds from one group, which have a coarse texture, the fabrics are hard and smooth. Likely sources are production centres in the Meuse valley.

Class 15 (Fig. 25, nos. 70-8). This is the largest class in the Hamwih assemblage and is composed of grey wares provisionally assigned to four groups. As with the

logical Research Committee.
54 M. R. Maitland Muller, 'The Southampton excavations: second interim report', Proc. Hampshire Field Club, XVII (1950), 125-8.

⁵³ Op. cit. in note 5; R. Hodges's forthcoming thesis to be published through Southampton Archaeo-

black wares a wide variety of fabrics is included in this class. The fabrics are always hard, mostly sandy, and occasionally with a coarse texture. The forms represented in each of the four groups are pitchers, bowls, cooking-pots and storage jars. Several geologically distinct regions are indicated as sources for these wares: the Pas-de-Calais, the Rhineland and other northern French regions.

This great variety of pottery is interesting as it suggests trade with several continental ports. It is noteworthy that pottery types found at Hamwih which originated from the Meuse region are not found at Dorestad. This suggests that the wares were transported to the Channel ports by a network of road and river systems rather than by the less complex route to the mouth of the Meuse and thence from Dorestad to Hamwih. The identification of a production centre near Rouen for Class 11 is of particular interest for, other than coins, this is the only indication of mercantile activity along the middle Seine in the Carolingian period.

CEMETERIES (FIGS. 26, 27)

Three small cemeteries and a number of isolated inhumations have been discovered in the Saxon town. A larger cemetery, containing at least seventy-six burials, was located at Site XIII (FIG. 26). It is perhaps significant that all but five of these inhumations were adults. The scientific examination of these human remains should be of great importance to the study of early medieval urban populations.

A test trench, measuring only 4 m. by 5 m., produced the fully or partly articulated remains of forty-three individuals as well as a large number of disarticulated bones. Most of the skeletons were badly disturbed, the graves for later inhumations having been dug through earlier ones, which made the recognition of discrete graves extremely difficult. The reason for the intensive utilization of this area was made clear when the excavation was extended southwards. A large structure had limited the growth of the cemetery on this side until it had been destroyed, presumably by fire. Beneath the lowest level of inhumations four large post-holes and a pit containing large amounts of daub and charcoal were discovered. At right angles to the N. wall foundation trench was a discrete area of charcoal-stained clay, presumably from a collapsed timber.

The contemporaneity of the building with the first phase of the cemetery makes it highly probable that it was a small church or chapel. One sceatta (Rigold AIV) and the absence of later pottery types combine to suggest that the cemetery was abandoned long before the end of the 8th century.

All the skeletons were orientated and, except for one knife blade, none of the burials had grave goods. Only one of the inhumations was certainly in a plank-lined grave and, although the wood had totally decayed, the ghost outline survived in the soil (Fig. 27).

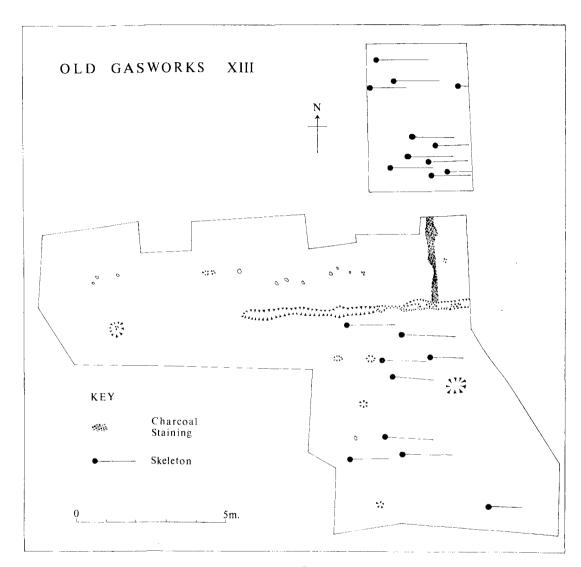


FIG. 26
CEMETERY AT HAMWIH, SOUTHAMPTON

Plan showing one level of inhumations. Structural evidence may indicate small chapel, abandoned before cemetery went out of use

At Site XX two graves were discovered, both orientated and each containing grave goods. In Grave 1, 3 m. W. of Grave 2, there were no skeletal remains but a small bronze plate and a heavily oxidized iron object, which x-radiography showed to be a seax, were recovered.

The seax (PL. VI, C) was lying length-ways in the centre of the grave. It is of considerable size, being 62 cm. long, including the tang of 14.5 cm., and 3.5 cm. wide. The cutting edge curves upwards to meet the straight back in a point.

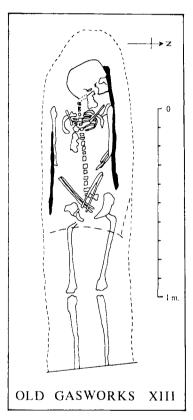


FIG. 27
CEMETERY AT HAMWIH, SOUTHAMPTON
Inhumation in plank-lined grave

Slight traces of wood are visible on the tang and the blade appears to be undecorated. Miss V. I. Evison has kindly examined the object and suggests it to be northern French in origin, and belonging to the first half of the 8th century.

Grave 2, which was partly covered by the baulk, produced two iron objects as yet unidentified, a lower mandible and one other fragment of bone. The ghost outline of a wooden lining survived around the edges and on the bottom of the grave.

DISCUSSION

It is quite apparent from the diverse body of evidence that Hamwih was an important European trading centre in the middle Saxon period. It developed towards the end of the 7th century, during a period of growing economic and political stability in central southern England. The layout of the excavated structures and the network of roads discovered indicate that the town possessed the elements of a regular plan. It had a good communications system by road and river to its hinterland, a vital prerequisite for a trading community.

The relationship which Hamwih had with its neighbouring town of Winchester was undoubtedly of great importance to the port's development. However, the role which Winchester played was probably that of an administrative centre rather than one involving direct commercial links.⁵⁵ This view is substantiated by the almost complete absence at Winchester of the imported goods found at Hamwih. Trading was not just with Wessex but also with the powerful kingdom of Mercia and this is borne out by the coin evidence. 56 The large number of stones at Hamwih of midlands origin has been commented on by Addyman and Hill,⁵⁷ and it is surely only a matter of time before corroborative evidence is discovered from the growing number of excavations in middle Saxon Mercian towns.

The reasons for the transfer of settlement to the site of the later medieval walled town are uncertain. However, the longstanding view that a combination of an increase in the draught of trading vessels leading to the requirement of new wharves and the general policy of renewing or establishing defences of towns in the 10th century may well be correct. The relative paucity of red painted wares and the complete absence of glazed wares suggest that the economic decline of Hamwih was well advanced by the end of the 9th century, perhaps brought about by the reversal of fortunes in Wessex in 877 after the waves of Danish raids. The numismatic evidence has been used by Addyman and Hill⁵⁸ to suggest that the shift in settlement site took place c. 940 but the very few late 9th-century coins at Hamwih indicate that this event was taking place from the late 9th century onwards.

Just as it was the Vikings who destroyed Quentovic and Dorestad, so also was it they who destroyed Hamwih. Not only was this destruction physical such damage can be repaired - but, more important, it involved also the disruption of the trading network that the Frisians and other merchants had laboured to establish. The revival of commercial life in the 10th century perhaps relied more on native merchants, with less opportunities for foreigners to exploit. The new Southampton was a smaller, less important place than the old Hamwih: the economic system which had produced this 'mercimonia' had come to an end.

⁵⁵ M. Biddle in H. Jankuhn et al. (ed.), 'Winchester: The development of an early capital', *Vor- und Frühformen der europäischen Stadt im Mittelalter*, Abh. d. Akademic der Wissenschaften: phil.-hist. Klasse, 3 Folge, LXXXIII (Göttingen, 1972), 229–61; M. Biddle, 'The development of the Anglo-Saxon town', *Topografia Urbana e Vita Cittadina sull'alto Medioevo in Occidente* (Settimane di studio del centro italiano di studi sull'alto medioevo, xxI) (Spoleto, 1973).

⁵⁶ Op. cit. in note 34.

⁵⁷ Op. cit. in note 1, xxv1, 81. ⁵⁸ Op. cit. in note 1, xxv, 76–7.

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