KING'S HEAD YARD

The site available for excavation was an area approximately 50 ft. by 60 ft. Of this, a strip along the edge of the road approximately 20 ft. wide had been cut into by a basement to below the level of the natural soil, so that an effective area remained of 50 ft. by 40 ft. Here, the mortar-floor forming the base of the air-space beneath the modern floor was at an average level of 8·50 ft. O.D.[1] The make-up of this floor varied from 6 in. to 1 ft. 3 in., and in most cases rested directly on the medieval level. The highest intact Roman level was at an average height of 6·50 ft. O.D., being thus approximately 10 ft. below the level of the pavement in Borough High Street.

The natural soil of the site was found to be sand, at a level varying from 3·65 ft. to 4·15 ft. O.D., where undisturbed, though pits went to a lower level. River gravel was reached in a sounding at a level of 2·18 ft.

A flint arrow head (fig. 37) and a very few small sherds of Iron Age pottery, including one rim of debased Iron Age A2, indicated some sporadic use of the area in the Bronze and Iron Ages.

Period I (Plan, fig. 3)

The first occupation was found directly upon the natural sand, and consisted of a rather dirtier layer of similar sand, being in fact only its trampled surface. Associated with this layer was a well-defined ditch and a palisade (Pl. I, 2). The ditch was 1 ft. 3 in. wide at base, with sides vertical to a height of 1 ft. 3 in. and sloping for a further 9 in. To the south of the ditch, parallel to it, and set back approximately 2 ft. 6 in. from the vertical edge, was a sleeper beam, 6 in. wide, with substantial post-holes going down at least 2 ft. from the surface. The ditch was traced for a distance of only 8 ft., as time at the end of the season did not permit of further investigation on its line, which in any case would mostly have impinged on a modern trench. The sleeper beam was however traced for 25 ft.

This ditch must clearly have been wood lined. The soft sand in any case would not have stood vertically through one shower of rain without such lining, and discoloration of the sand confirms an original lining. The evidence that it was accompanied by a palisade suggests it formed some sort of boundary. It does in fact align almost exactly on another length of ditch of similar character (though its wood-lined sides splayed at the bottom instead of being vertical) and date, 390 ft. to the N.W. on the 20 Southwark Street site. The lengths of both ditches are of course extremely short for certainty that at that distance apart the alignment is exact, and there are no intervening sites on which it could be checked; but the correspondence is sufficiently close to suggest that the ditch and palisade may possibly represent a riverside boundary of the settlement at an early date.

North of the ditch was an irregular drainage ditch widening into a shallow depression filled with dirty water-laid sand, containing hardly any finds. A few irregularly placed and shaped post-holes adjoining this may also belong to this period. South of the palisade, on the north-west limits of the area excavated, was

[1] All levels are related to the Newlyn Datum.

a deep pit (Pit I) with the usual rubbish filling, which from the stratification (being cut into by Pit III. 4) and filling should belong to this period.

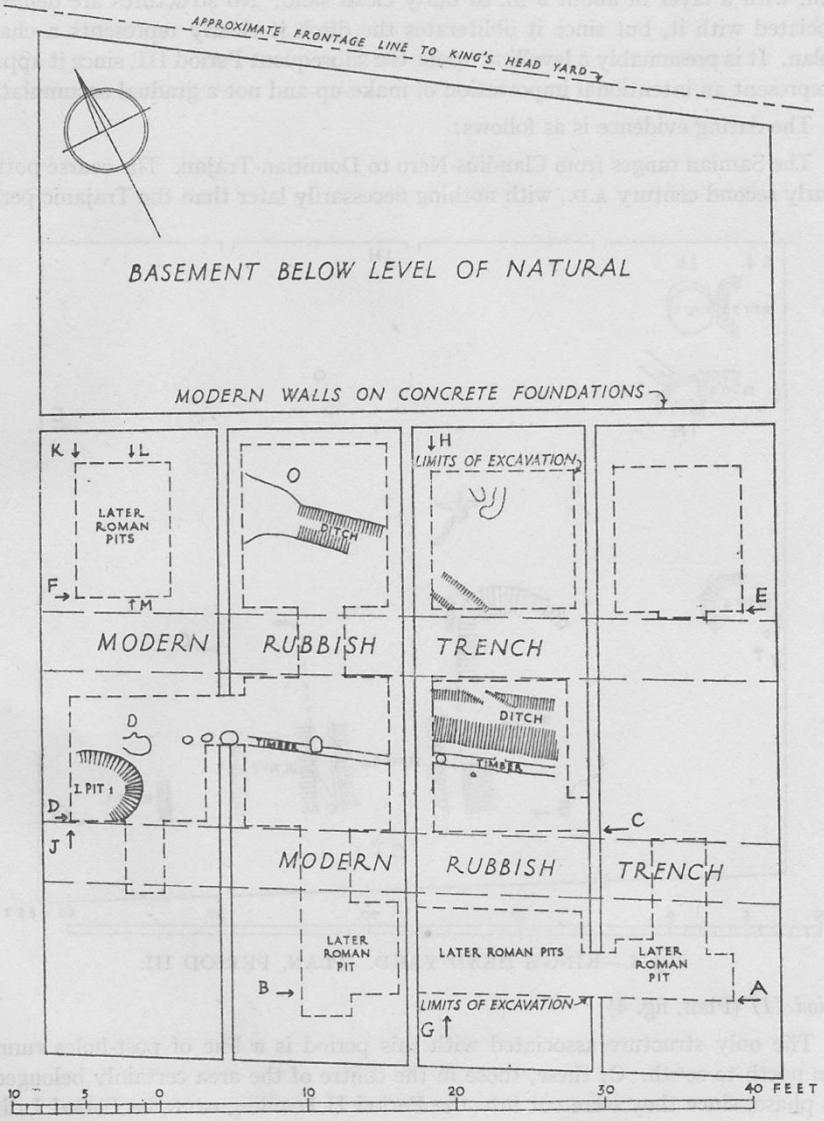

Fig. 3.—KING'S HEAD YARD. SITE PLAN AND PERIOD I.

The dating evidence from the filling of the ditch (Period Ia) is as follows:

The Samian is mainly Flavian, with one Claudian and one Claudian-Neronian sherd. The coarse pottery goes down to the Trajanic period.[1]

[1] For report on Samian see p. 36 ff., and for coarse pottery p. 62 ff.

Period II

This period is represented by a levelling over of the site, including the Period I ditch, with a layer of about 9 in. of fairly clean sand. No structures are definitely associated with it, but since it obliterates the ditch it clearly represents a change of plan. It is presumably a levelling up for the subsequent Period III, since it appears to represent an intentional importation of make-up and not a gradual accumulation.

The dating evidence is as follows:

The Samian ranges from Claudius-Nero to Domitian-Trajan. The coarse pottery is early second century A.D., with nothing necessarily later than the Trajanic period.

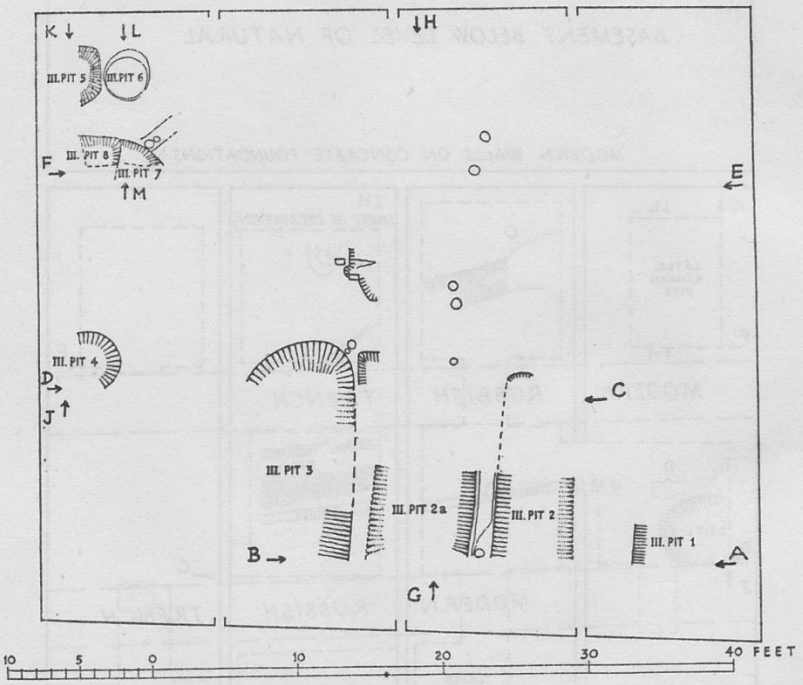

Fig. 4.—KING'S HEAD YARD. PLAN, PERIOD III.

Period III (Plan, fig. 4)

The only structure associated with this period is a line of post-holes running from north to south. Of these, those in the centre of the area certainly belonged to this phase, since they were cut into the Period II levelling over the Period I ditch. The attribution of the northern ones is less certain.

The main deposits of this period came from eight pits cut into the Period II levelling. Of these, four in the southern half of the area formed one group. They were flat-bottomed, with an average depth of 2 ft. below the surface of the Period II filling. Pit 3 was traced for a distance of 15 ft. and was 7 ft. 6 in. wide. The others were apparently similar elongated troughs, probably slightly narrower, but in no case could both lips be excavated. What is probably the northern lip of Pit 2 was touched

in the next area to the north, which would suggest that it and probably the others were of a similar length to Pit 3. The filling was of typical rubbish pit material, with very great quantities of animal bones and oyster shells, a good deal of brick, including some roofing tiles (no tesserae), charcoal, and a considerable number of nails.

Pit 4 was an isolated pit on the west edge of the area. It was cut into Pit I, 1,[1] but whether it coincided in shape and size was uncertain owing to the proximity of the edge of the area on one side and the modern rubbish trench on the other.

Pits 5, 6 and 7 formed a group in the north-west angle. Pit 5 was probably roughly circular, to judge from the edge as cleared and the slope of the strata, with sloping sides and flattish bottom (Section J-K, fig. 7), about 4 ft. across and 2 ft. 6 in. deep. Pit 7 may have been similar, but was cut into by the later Pit 8, and both may have resembled Pit 4 in character.

Pit 6 (Pls. II, 2; III, 1) was of an entirely different character. It was circular, 5 ft. 3 in. deep, 3 ft. in diameter with vertical sides and flat bottom. The absolute level of the bottom was 6 in. O.D. A wood lining was in position to the height of 1 ft. 9 in. from the bottom. The bottom 6 in. was filled with dirty sand and gravel, and was not lined; it appeared not to have been originally dug as part of the pit, but to have been eroded by water. The lining consisted of vertical planks from 1 ft. to 1 ft. 3 in. in width, and apparently eighteen in number (they were not sufficiently preserved for the whole circumference to make this certain). The vertical planks were secured to hoops about 4 in. wide at the back, presumably by wooden pegs, since there was no trace of nails. The end of the hoops overlapped, and the sand at the back was cut back to take the extra width. This pit has thus every appearance of being a wood-lined well. It is difficult to see, however, how it can have served as such, since water level was not reached, and as it is well-established that water-level on the banks of the Thames was lower in Roman times than today, presumably it did not reach the water level of that period either. It is possible that it served as a water-butt or cistern.

Pit 7 is cut into by Pit 8. The latter is however sealed by the same level, the Period IV make-up.

The dating evidence is as follows:

The material from all the pits is consistent. The latest Samian is dated as Trajanic, with the exception of one unusual form 33, dated "probably late second century"; this, from the other evidence, must be intrusive, or else the tentative dating must be wrong. The dating of the coarse pottery is consistently Hadrianic, perhaps down to the very beginning of the Antonine period.

Period IV

Like those of Period II, the Period IV deposits represent a levelling over of the site. All the pits were levelled over with a layer 9 in. to 1 ft. of sand. The fact that this has not sagged over the southern group of pits, but has over the north-western, may indicate that the former were more consolidated and possibly earlier. The make-up may be preparatory to the building of the Period V house, but it is quite distinct from the actual make-up of the floor. It is not, however, much earlier in date.

[1] The Roman numeral indicates the level.

The dating evidence is as follows:

The bulk of the Samian is Flavian to Trajanic, with one early Antonine sherd. The coarse pottery also contains a considerable amount of earlier material, but clearly goes down to the early Antonine period. The terminal date is probably *c.* A.D. 160.

Period V (Plan, fig. 5)

To this period belongs the remains of the only substantial building found on the site. Above the Period IV make-up was a layer of about 1 ft. of clean yellow sand, on which were laid the floors of the house. The portion cleared consisted of a corridor on the east side, off which opened a courtyard; to the south of the courtyard were two and probably more long narrow rooms.

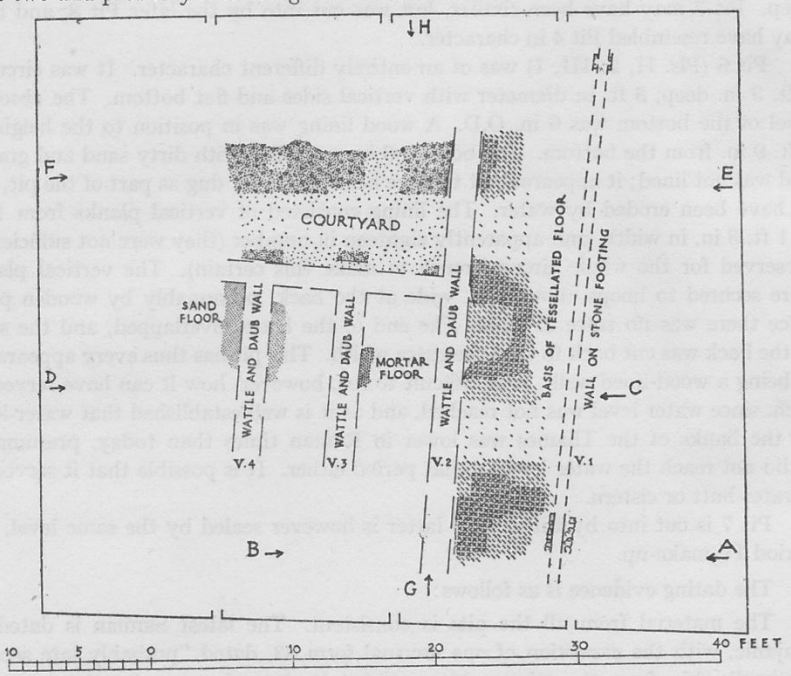

Fig. 5.—KING'S HEAD YARD. PLAN, PERIOD V.

The outer wall of the courtyard had rough unmortared stone footings 1 ft. 6 in. wide. No part of the superstructure survived. It was touched at two points only, as it lay immediately beneath a modern wall based on an extremely hard concrete raft. Not sufficient was therefore cleared for it to be possible to say whether timber uprights were bedded in it and a timber and plaster wall carried up, or whether the lower part at least was stone-built.

The other walls were all of wattle and daub, of rather unusual construction (Pl. IV, 1 and 2). They appeared to consist of a complex arrangement of wattling, surviving as a number of small dark pits of varying sizes, set in yellow clay. No traces were found of holes indicating substantial timbers. The clay did not survive to floor level, and the edges of the floors were irregularly broken away, so there were

no remains of the plaster rendering with which the walls were presumably faced. On the north, the floor of the courtyard (Pl. III. 2) was broken away on a line approximately parallel to the south wall, but the overlying black soil here dropped down to a depth of 1 ft. 3 in. below the floor of the courtyard (Section G-H, fig. 7). This suggests that the courtyard was bordered here by a room at a lower level, or possibly one with a hypocaust; but this cannot be proved.

The floor of the corridor had been tessellated. No tesserae were found in position, but there were very many loose ones, of the plain red-brick type, and the opus signinum basis was found in a number of places. The room immediately adjoining the corridor had a mortar floor based on a layer of flints, but no trace survived of the floors of the other rooms. The surface of the courtyard was of gravel set in mortar, which appeared to have been reddened by fire.

On the west side of the area, all the levels had sagged considerably over the Period III pits, and neither floors nor walls could be traced with any certainty. A series of levellings-up made good most of the sinkage (Section E-F, fig. 7).

In the corridor, cutting into the make-up, was inserted a pot (fig. 23. 17) with an *As* of Antoninus Pius of A.D. 140–44 (M. & S. 703) at the bottom of it.

The portions excavated appeared to have been part of a building of some size. It may well have lain beside Stane Street, which is only about 80 ft. to the west. As to its purpose, too little was exposed for any certainty. Its position, so near to the main road and to the bridge-head, makes it possible that it was an inn, with which use its character, as far as it is visible, would not be at variance. If this is the case, the use of the area as such would have a long history, for the medieval King's Head had an earlier medieval predecessor, the Pope's Head. But this of course is only a pleasant hypothesis.

The dating evidence is as follows:

The Samian again included a great quantity of earlier material, from Claudius-Nero to Trajan. There was also a little Hadrianic to end of second century. The coarse ware included a few sherds of early Castor ware, and it may therefore be dated to *c.* A.D. 180. The Samian form 33 for which a probable third-century date is suggested is, on this evidence, more likely to be late second century.

Period VI

This period represents the destruction or decay of the Period V building. The only evidence for destruction was the surface of the courtyard, which appeared to be reddened by fire, and a layer of building debris with some burning in the south-east corner. But since all the superstructure of the walls and most of the surface of the floors had disappeared, there was no conclusive evidence. The building, including its vanished walls, was overlaid by a layer of brown to black soil, which in its lower layers contained only Roman pottery and coins.

The dating evidence is as follows:

Coins. Salonina, wife of Gallienus (M. & S. (sole reign) 16); probably Claudius II *consecratio* A.D. 270 (M. & S. 89); Tetricus I (*cf.* M. & S. 86 ff.); Carausius, A.D. 287—93; Constantine I (Cohen 536); Valens A.D. 364-78 (Cohen 47); probably House of Theodosius; indeterminate minim.

Pottery. Both Samian and coarse pottery include a large amount of first- and

second-century sherds. The coarse pottery does not go far into the fourth century. This would probably indicate that though on the coin evidence the layers were laid down in the second half of the fourth century, there was in this area at that time only early fourth-century debris lying about.

Period VII

The Period VI filling merges with little appreciable distinction into a similar layer, slightly darker in colour, which includes a majority of Roman sherds, but also includes some medieval material.

Dating evidence

Coins. Two indeterminate *Asses* of the first and second century; Severus Alexander (M. & S. 202); three Claudius II (M. & S. 89, 2 M. & S. 261–2); indeterminate third-century radiate; Urbs Roma; Crispus; possible House of Constantine (FEL. TEMP. REP., legionary type); indeterminate minim cut from larger coin; three other indeterminate minims.

Pottery. The Roman pottery includes an appreciable number of fourth-century sherds.

Period VIII (Plan, fig. 6)

Into the Period VII filling were cut a number of ditches filled with curious peaty chocolate-coloured soil. The majority of them were flat-bottomed and shallow, 1 ft. to 1 ft. 6 in. deep. Ditch 1 was however 5 ft. deep.

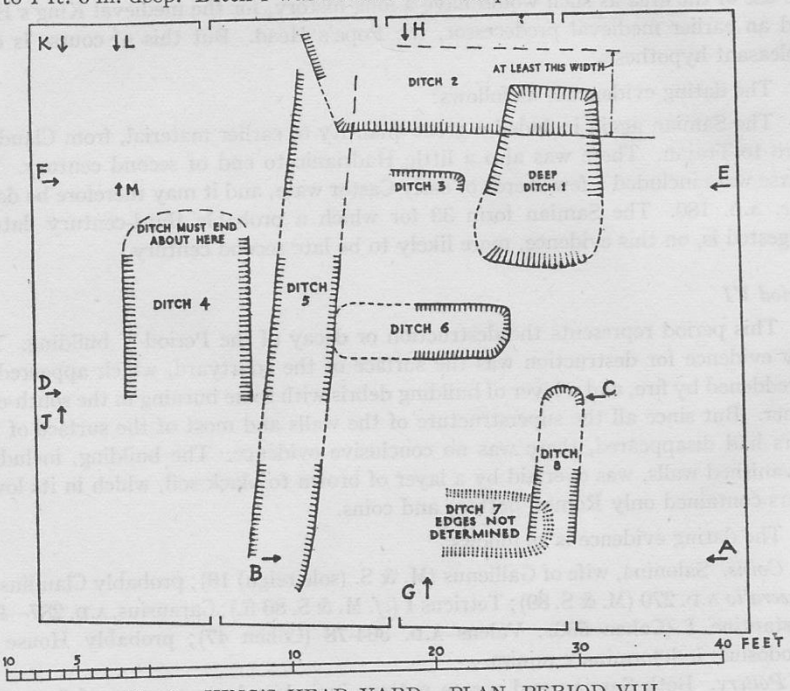

Fig. 6.—KING'S HEAD YARD. PLAN, PERIOD VIII.

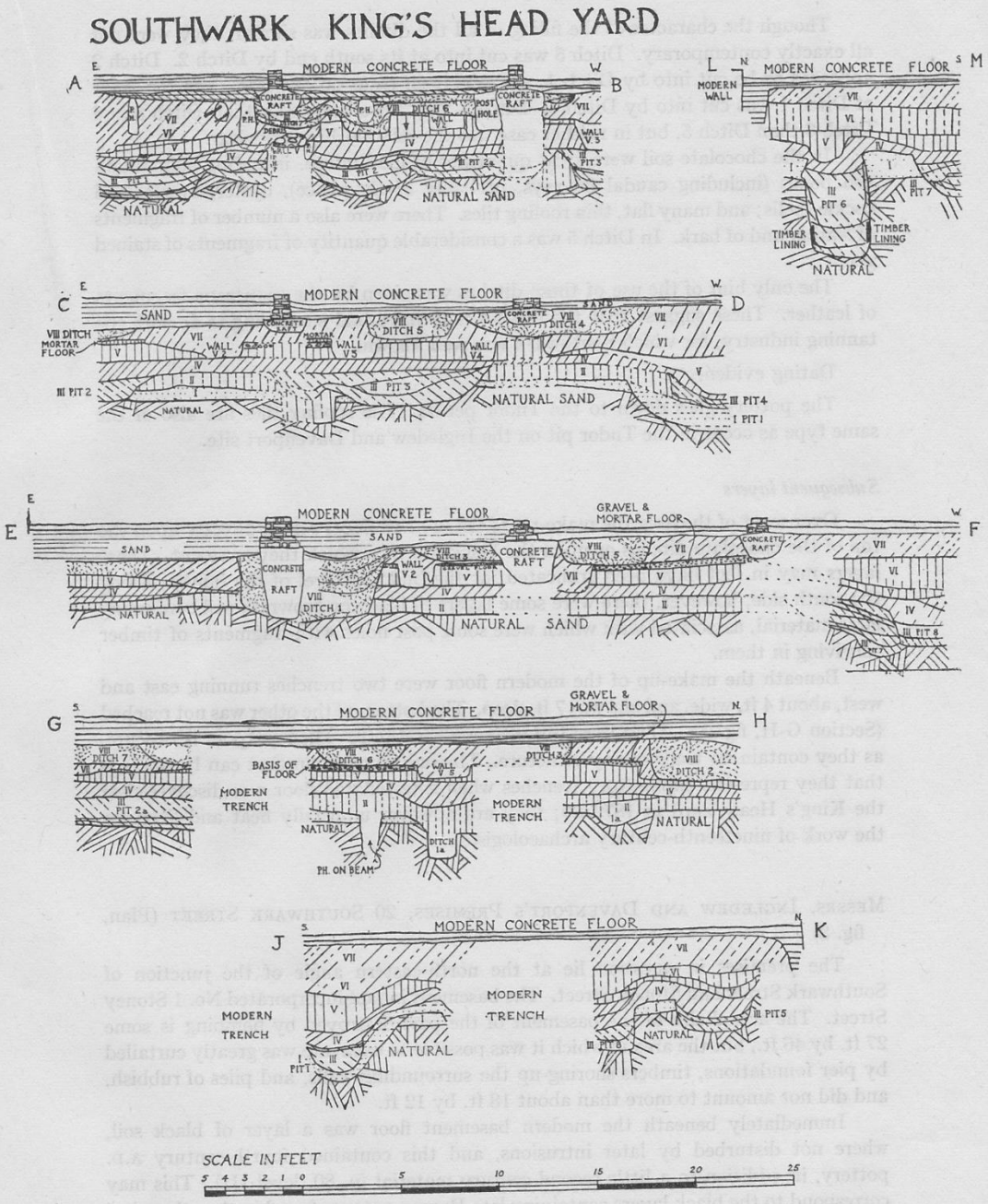

Fig. 7.—KING'S HEAD YARD SECTIONS.

Though the character of the filling of all the ditches was similar, they were not all exactly contemporary. Ditch 5 was cut into at its south end by Ditch 2. Ditch 2 appeared to be cut into by Ditch 1, and was itself recut on one side. The top layer of Ditch 1 was cut into by Ditch 3. Ditch 7 may have been later than Ditch 8 and Ditch 6 than Ditch 5, but in neither case was the relationship very clear.

In the chocolate soil were great quantities of food refuse, including animal and fish bones (including caudal fin rays, probably of the plaice), oyster, mussel and cockle shells; and many flat, thin roofing tiles. There were also a number of fragments of leather and of bark. In Ditch 5 was a considerable quantity of fragments of stained glass.

The only hint of the use of these ditches was given by the numerous fragments of leather. These suggest that the ditches may have had something to do with the tanning industry, for which Southwark was well known.

Dating evidence:

The pottery goes down to the Tudor period. The roofing tiles are also of the same type as occur in the Tudor pit on the Ingledew and Davenport site.

Subsequent layers

Over most of the area the make-up of the modern floors rested directly upon the top of the chocolate ditches or upon the black soil into which they were cut. These layers may in fact have been truncated for the building level of the house. Along the south side, however, there were some layers of black or brownish soil containing later material, associated with which were some post holes with fragments of timber surviving in them.

Beneath the make-up of the modern floor were two trenches running east and west, about 4 ft. wide, and one was 7 ft. deep. The bottom of the other was not reached (Section G-H, fig. 7). They were full of modern rubbish. Their purpose is obscure, as they contain no trace of any structure. The only suggestion that can be made is that they represent exploratory trenches when a tessellated floor was discovered in the King's Head Yard in 1879–80; they are however unusually neat and deep for the work of nineteenth-century archaeologists.

MESSRS. INGLEDEW AND DAVENPORT'S PREMISES, 20 SOUTHWARK STREET (Plan, fig. 8)

The premises in question lie at the north-eastern angle of the junction of Southwark Street and Stoney Street. The basement in fact incorporated No. 1 Stoney Street. The actual size of the basement of the part destroyed by bombing is some 27 ft. by 46 ft., but the area in which it was possible to excavate was greatly curtailed by pier foundations, timbers shoring-up the surrounding walls, and piles of rubbish, and did not amount to more than about 18 ft. by 12 ft.

Immediately beneath the modern basement floor was a layer of black soil, where not disturbed by later intrusions, and this contained fourth-century A.D. pottery, in addition to a little second-century material (p. 80, level III). This may correspond to the black layers containing late Roman pottery found in the other sites excavated. However, it here directly overlay first-century levels. It is somewhat

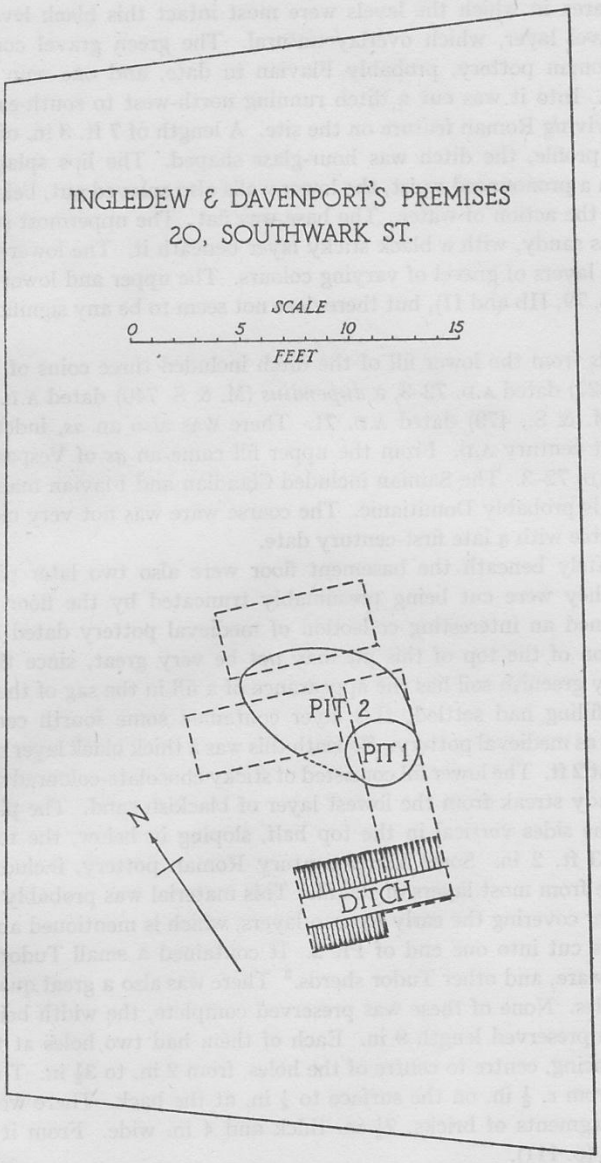

Fig. 8.—INGLEDEW AND DAVENPORT'S PREMISES: PLAN.

unlikely that, on a site near the bridgehead, and in an area which other evidence suggests was comparatively built up (see p. 10), there should have been no occupation in the second and third centuries. It must therefore be presumed that the silting process which formed this level (see p. 14) had here actually washed away some early levels.

In the area in which the levels were most intact this black level rested on a greenish gravel layer, which overlay natural. The green gravel contained a few sherds of Roman pottery, probably Flavian in date, and one coin of Vespasian, M. & S. 527. Into it was cut a ditch running north-west to south-east, which was the only surviving Roman feature on the site. A length of 7 ft. 3 in. of the ditch was cleared. In profile, the ditch was hour-glass shaped. The lips splayed outwards, and, beneath a pronounced waist, the lower walls also splayed out, being presumably undercut by the action of water. The base was flat. The uppermost surviving layer of the fill was sandy, with a black sticky layer beneath it. The lower part consisted of successive layers of gravel of varying colours. The upper and lower fills are listed separately (p. 79, IIb and II), but there does not seem to be any significant difference in period.

The finds from the lower fill of the ditch included three coins of Vespasian, an *as* (M. & S. 527) dated A.D. 72–3, a *dupondius* (M. & S. 740) dated A.D. 72–81, and a *dupondius* (M. & S., 479) dated A.D. 71. There was also an *as*, indeterminate but probably first century A.D. From the upper fill came an *as* of Vespasian (M. & S., 527) dated A.D. 72–3. The Samian included Claudian and Flavian material, and one vessel which is probably Domitianic. The coarse ware was not very closely datable, but would agree with a late first-century date.

Immediately beneath the basement floor were also two later pits, the levels into which they were cut being presumably truncated by the floor. The earlier, Pit 2, contained an interesting collection of medieval pottery dated *c.* A.D. 1300.[1] The truncation of the top of this pit may not be very great, since the uppermost layer of sandy greenish soil has the appearance of a fill in the sag of the surface after the original filling had settled; this layer contained some fourth century Roman sherds as well as medieval pottery. Beneath this was a thick black layer of a maximum depth of about 2 ft. The lower fill consisted of sticky chocolate-coloured soil, separated by a thin sandy streak from the lowest layer of blackish sand. The pit was oval in shape, and the sides vertical in the top half, sloping in below, the total surviving depth being 3 ft. 2 in. Some fourth-century Roman pottery, including imitation Samian, came from most layers of the fill. This material was probably derived from the black layer covering the early Roman layers, which is mentioned above.

Pit 1 was cut into one end of Pit 2. It contained a small Tudor bowl of fine green-glazed ware, and other Tudor sherds.[2] There was also a great quantity of thin, flat roofing tiles. None of these was preserved complete, the width being 6 in., and the maximum preserved length 9 in. Each of them had two holes at the top edge, varying in spacing, centre to centre of the holes, from 2 in. to $3\frac{1}{2}$ in. The holes taper in diameter from *c.* $\frac{1}{2}$ in. on the surface to $\frac{1}{4}$ in. at the back. There were also a few incomplete fragments of bricks, $2\frac{1}{8}$ in. thick and 4 in. wide. From it also came a French jetton (p. 111).

The pit was a regular circle in plan, with upright walls, preserved to a height of 2 ft. 10 in., and flat base. The walls of the pit seem to have been revetted by a kind of wattling (Pl. VIII, 2), which shows in the side of the pit as horizontal grooves on two planes, 1–$1\frac{1}{2}$ in. apart. No uprights were visible, but a few short nails were preserved. The pit must have served as some form of container, but there was no clear evidence as to its purpose.

[1] See report by G. C. Dunning, p. 88.

[2] See p. 92.

In the pit were found two caudal vertebrae which match favourably with those of the plaice, *Pleuronectes platessa*, L., and a number of caudal fin rays, probably also of the plaice.[1] There were also some fragments of a bird's skull, probably of a duck, but the pieces were too small to identify the species.[2]

199 Borough High Street (Plan, fig. 9)

The site was the basement of premises fronting onto Borough High Street, and running along the north side of the alley known as Layton's Buildings, a little north of St. George's Church. The part of the bombed premises which was free of dumped rubble was a long, narrow strip, 88 ft. by 15 ft., with the narrow end towards Borough High Street. Much of the area was, however, disturbed by modern cuttings. In the eastern half, though small patches of Roman levels survived, they were so fragmentary and unrelated, that no coherent picture could emerge, except that there had been first century A.D. occupation in the area, probably including wattle-and-daub buildings. The western part of the area was more profitable, though here too an old brick-built sewer, various drain pipes belonging to the latest modern building, a well, and a cess-pit very much restricted the intact levels.

In this area, excavation revealed a complex succession of Roman levels. The lowest-level, O, consisted of sticky grey clay, suggestive of the marshy nature of the original site. It contained some indeterminate early Roman sherds.[3] Above it were some occupation layers, I, Ia, Ib, with some material which may be Claudian. This was succeeded by two hard sand and clay surfaces, II and III, with first-century material, not closely datable. Above this came two very hard levels of gravel metalling, IV and VI, separated by the thick red burnt level V, which contained much burnt daub. Down to V, the pottery is not abundant, but would all appear to be first century. From VI it would seem to go down to about A.D. 100.

All these levels were cut by an almost vertical face 3 ft. 3 in. high, running east and west across the site. The line of the face of this cut is visible in Pl. V, 1, and its length is shown clearly in Pl. V, 2. An upper gravel surface, VIIa, which to the south rested on VI, sloped very steeply down over this cut, and overlay a mass of burnt material, VII, in it.[4] In the trough formed by the base of the cut were four gulleys, one running along the base of the vertical face (visible in Pl. V, 1) and three others, truncated by the modern disturbance on the northern edge of the excavated area, at right angles to it. These gulleys clearly represented decayed timbers. The burnt material at the base of the trough contained pottery going down to A.D. 180. The gravel surface VIIa was the highest surviving beneath the modern basement floor.

The gravel surfaces described in the last paragraph have every appearance of being Roman road surfaces. The site in fact lies exactly on the line drawn on a 25 in. O.S. map between the last point to the south at which Stane Street has been certainly identified and the presumed position of the Roman London Bridge, the line shown in fig. 2. The cut across the early levels, certainly of Roman date, appeared to represent a difficulty in interpreting the gravel surfaces as part of Stane Street. However, the timbers and the general layout could not be interpreted satisfactorily

[1] Kindly identified by Miss A. J. Barfield of the British Museum (Natural History).
[2] Kindly identified by Miss F. A. Lawford of the British Museum (Natural History).
[3] For pottery, see p. 81 ff.
[4] Section, fig. 11.

as part of any building, and the most probable explanation is that they formed part of the abutment of a timber bridge crossing a stream or tidal creek on the line of the road. The marshy nature of the area in early times is discussed on p. 14.

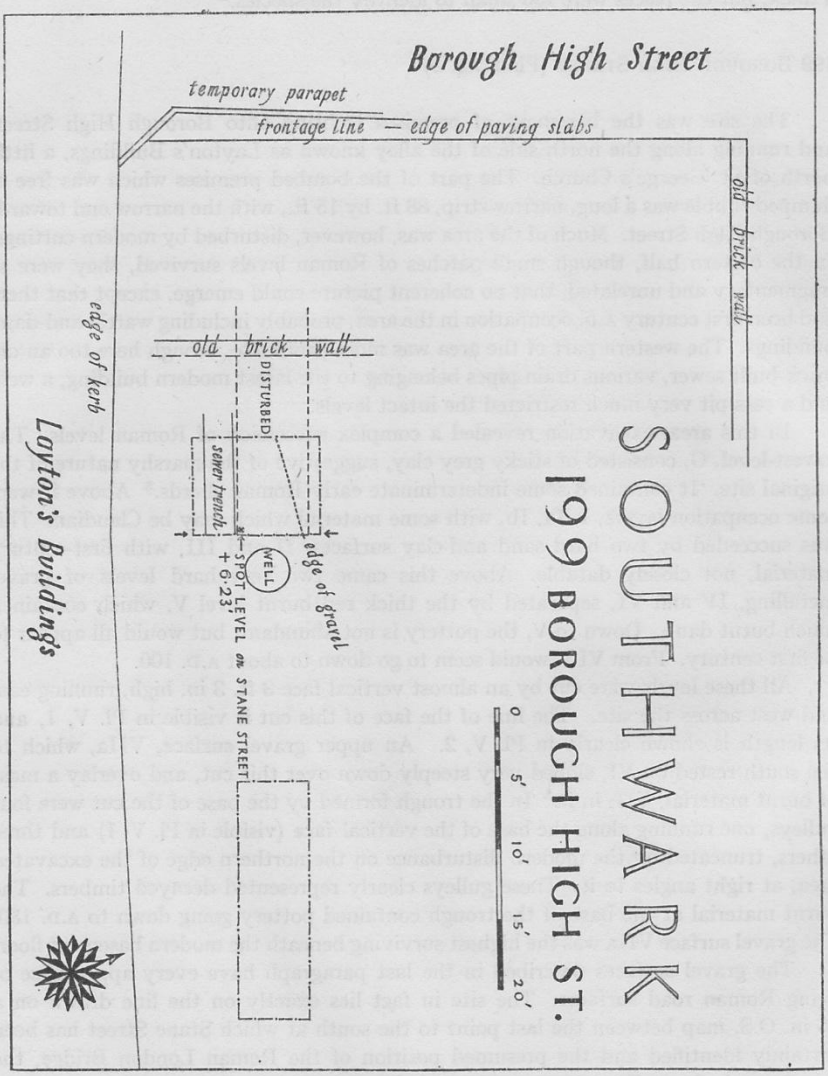

Fig. 9.—199 BOROUGH HIGH STREET: PLAN.

This interpretation seems to provide a satisfactory explanation of all the facts observed, and can be accepted with some confidence. This being so, levels IV and VI provide evidence of a first-century date for Stane Street, and it is not impossible that levels II and III are also road surfaces prior to the proper metalling of the stretch,

for there was no evidence of building associated with them. The bridge was apparently destroyed by fire *c.* A.D. 180. What is not quite clear is whether level VIIa is a metalling which crossed the bridge, and collapsed when it was burnt, or whether it was laid over the debris, with a new bridge possibly to the north, and subsequently sagged as the debris settled. The truncation of the levels by the modern floor, and a disturbance over the line of the presumed bridge, has unfortunately destroyed the subsequent history of the road.

In connection with Stane Street, it is convenient to refer here to some investigations on the site of the South-Eastern District Post Office, south of St. George's Church, between Borough High Street and Swan Street. Investigations were made on the site in 1947 at the request of the Ministry of Works. The floors of the frontage of the basements on Borough High Street (No. 253) proved to be below the Roman level. On the Swan Street side, the depth of comparatively modern deposits proved to be too great for our resources, a depth of 9 ft. 1½ in. being reached in material of eighteenth-century date. It was therefore only possible to observe this area during the mechanical clearance of soil for the construction of the new Post Office building. Fortunately, it was possible to observe, in the face of one of the cuttings so made, two superimposed layers of gravel metalling on the same line as that suggested by the excavations at 199 Borough High Street, and additional confirmation of the line of Stane Street was thus obtained.

Newcomen Street Site (Plan, fig. 10)

The area excavated lies in the block bounded on the north by Newcomen Street, on the other sides by alleys, to the west Tennis Court, to the south The Ride, to the east Bowling Green Lane, romantic names which find no echo in the industrialized surroundings which preceded the wholesale destruction of the modern buildings by bombing. The site where a large, medium deep basement provided suitable conditions for excavation adjoined the line of The Ride (then obliterated) in about the middle of the block, immediately beneath the words "Ward Bdg" in the 25 in. O.S. map, London Sheet V. 15, 1916 Edition. The block lies immediately to the east of the site marked on the map as that of the old Marshalsea Prison.

The area was almost completely free of modern disturbances, the only modern structures within the boundary wall of the basement being a line of stanchion bases down the centre. The basement measured approximately 125 ft. north-west to south-east, by 55 ft. north-east to south-west.[1] The area was investigated by a continuous trench (fig. 11, section A-B) down the long axis on approximately the centre line, with five trenches at right-angles to it to the north and two to the south, where excavation was restricted by dumped rubbish.

The Roman levels here had suffered no modern truncation. They were reached at an average depth of 5 ft. below the basement floor, which was at 9·85 ft. O.D. at the east end and 9·80 at the west end. The level of the natural sand, where not cut by ditches, was 4·13 ft. O.D. at the east end and 4·62 ft. at the west end. This is of course well below the present Trinity High Water level, which is 13 ft. 9 in. O.D.

[1] The orientation is not quite true, and in the drawn sections and the following description, for the sake of simplicity, the long axis is referred to as east and west, and that at right-angles to it north and south.

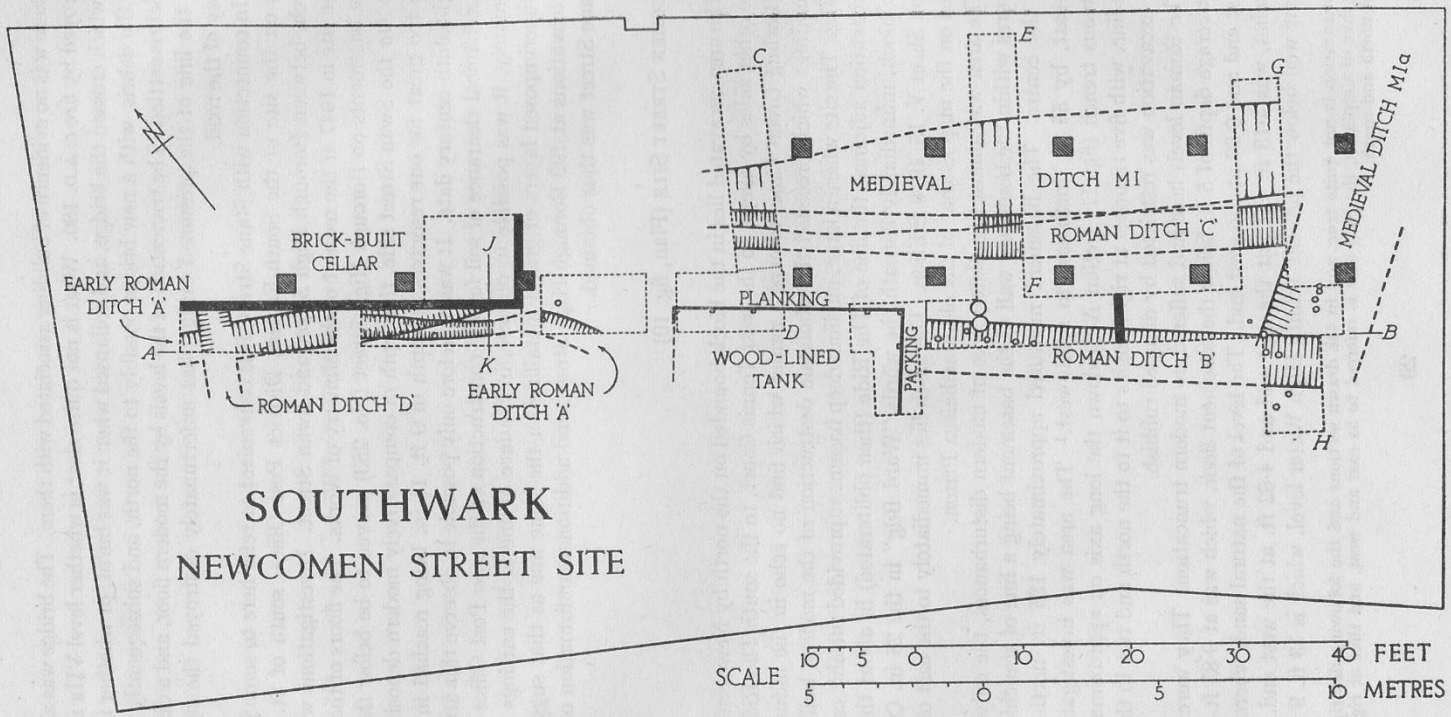

Fig. 10.—NEWCOMEN STREET SITE: PLAN.

It is usually estimated that the level of the Thames was some 15 ft. lower in Roman times, and the tidal limit may have barely reached the position of London Bridge. The area was thus low lying, but safely above tidal waters.

There proved to be no Roman structure within the whole site, except the late tank referred to below. Roman buildings may not be far distant, for there was an appreciable quantity of building material, brick, roofing tile, flue tile and wall-plaster, in the filling of the ditches and in the overlying black level. It seems probable that the built-up area may have been along the line of Stane Street, which lies some 40 ft. to the west.

The evidence of Roman occupation came almost entirely from ditches. Two lines of ditches ran east and west, approximately parallel to the long axis of the site, separated only by a distance of about 7 ft. The southernmost coincided almost exactly with the line of the main east-west trench, and a considerable part of its length was therefore cleared (fig. 11, Section A-B). This ditch showed clear evidence of re-cutting (fig. 11, section J-K and G-H, ditches A and B). The northern one, ditch C, was cut in three of the cross trenches (sections C–D, E–F, G–H). The end of a north-south ditch, D, was found at the extreme west end of the main trench (Section A–B), joining ditch B.

Along the northern side of Ditch B (which was only cleared in the eastern part of the site) ran a line of substantial timbers (Pl. VI, 1 and 2), in diameter averaging about 7 in. at the surface of the slope of the ditch. The post holes are at the junction of the slope of the sides of the ditch and its flat base. They do not appear to be revetting timbers, as the side of the ditch is not vertical (unless there was a packing behind the timbering which was subsequently washed out), and they seem to be more substantial than would be required to support the modest height of the ditch wall. It is possible that the ditch served as a boundary between fields, which was reinforced by a timber fence.

The pottery evidence would suggest that Ditch C is the earliest. There is nothing in the filling which need be later than the first century A.D. The filling of Ditch A certainly goes into the second half of the second century, though probably not to the end of it. Ditch B and Ditch D are probably contemporary, with filling datable to the third century. Presumably the material in the filling only gives the date when the ditches in turn begin to go out of use, for it might be expected that they would be kept cleaned out while in use. It therefore seems probable that the ditch system covers most of the period of the Roman occupation, down to the second half of the third century.

Ditch B certainly was out of use by the end of the third century A.D., for by that date a tank was constructed across its line, cut into its filling of silt, and completely blocking its flow (Pl. VI, 2, and fig. 11, section A–B). The east-west length of the tank was 19 ft. Its full dimension in the other direction was not cleared, but it was more than 10 ft. Its depth below the contemporary surface was 4 ft. 3 in. The sides of the tank were revetted by horizontal planks (Pl. VII, 1), which at the base of the tank were 1 in. thick, but at the top only $\frac{1}{4}$ in.; this was possibly due to greater decay and resultant compression. The width of the planks varied from $4\frac{1}{2}$ in. to 6 in. The planks were supported by a series of uprights along the inside; these were oblong, $5\frac{1}{2}$ in. by $2\frac{3}{8}$ in., 6 in. by $2\frac{3}{4}$ in., and in the corner 8 in. by 6 in., placed with the long side parallel to the wall. The natural sand and the overlying levels had been excavated

to a width of about 1 ft. 6 in. behind the line of the planking (fig. 11, sections A–B and C–D), and the gap filled with a packing of clay. On the east side this outer excavation was also revetted by timber uprights; not enough clearance was carried out on other sides to establish whether this was done all round. The base of the tank was flat, and was not apparently lined. Along the edge of the tank on the north side was a cobbled surface; this did not exist to the east and the other sides were not cleared.

The purpose of the tank is not clear. It has been called a tank since it was a sunk enclosure in an area where water was obviously abundant, and since it looks as though care was taken to make the sides water-tight. The filling certainly gave the impression of being at least in part water-laid, the lowest level being a black silt; but this is of course not evidence for the period in which it was in use. The lower filling contained great quantities of oyster-shells. It is a conceivable hypothesis that the structure was intended as a tank to store oysters or fresh fish.

The fill of the tank consisted at the base of the black silt already mentioned, with above it mixed silt and lumps of sand, presumably derived from the walls of the cutting after the timbering had decayed. In it were a considerable number of stones and brick and tile fragments. Above again was a black greasy silt. When this part of the fill was deposited, the revetting timbers had certainly decayed (see section A–B). There was abundant pottery in the fill, going down to the second half of the fourth century. This upper fill contained a large number of coins, all in bad condition. Besides a number of indeterminate late ones, there were four of the House of Constantine, one probably Constantius II, one indeterminate *antoninianus*, and two others probably Claudius II *consecratio* and Tetricus II. It is noticeable that none could be identified as of the House of Valentinian.

The layer overlying the filling of the tank was one which was found with great consistency all over the whole area; it is marked in the sections as Lower Black. It was fairly sticky in consistency, though not as strikingly so as the overlying medieval levels, and contained a noticeable number of pebbles. The pottery in it was exclusively Roman, in considerable quantities. A rough analysis of the Samian and imitation Samian gives a proportion of 29 per cent. second century, 47 per cent. third century, 24 per cent. fourth century. The coarse pottery would agree with this analysis. The appearance of the level suggests that it was water-laid. It was clearly deposited at a time when only Roman pottery was lying about. From the evidence of the underlying stratification and the contents this might be at any time from the second half of the fourth century onwards, but would not preclude a later date, before there was any Saxon or medieval occupation in the neighbourhood.

The Lower Black level was cut by a shallow ditch M.I, with curved profile running east-west across the northern half of the site (fig. 11, sections C–D, E–F), and also by a north-south ditch, M.Ia, along the east end of the site (Section A–B). The actual junction of the two ditches was not excavated, but from their relation to the underlying and overlying levels, they should be contemporary. The filling included fragments of green-glazed medieval pottery, probably of the thirteenth century.

These ditches are sealed by level M.II, which was consistent all over the site, and which was deep black in colour and of a very sticky consistency. This contained material to be dated between A.D. 1600 and 1680, and a French jetton, *c.* sixteenth

century.[1] This layer presumably represents a period in which the drainage system, of which Ditch M.I and M.Ia are evidence, was allowed to fall into disrepair, and probably also breaches existed in the river embankment (see p. 14), and the whole area therefore became once more marshy. The period was probably a short one, for the line of the earlier ditch was not forgotten, and a later ditch, M.III, was cut into level M.II, on the line of the earlier ditch M.I (fig. 11, Sections C–D, E–F, G–H). The finds from this ditch were mainly earlier than the date suggested by the stratification; they included fourteenth-century material, and the latest goes down to the end of the sixteenth century. Presumably contemporary with this ditch, from its relation to the overlying strata, was another east-west ditch, of which the greater part lay somewhat to the south of the main east-west trench, and was only cut obliquely by the trench towards the west end. The lower part of this ditch had a sloping wooden revetment. The finds from this, again, do not go later than A.D. 1600.

The filling of these ditches, and level M.II, into which they are cut, is overlaid by another black layer M.IV, distinctly less sticky than M.II, and more speckled in appearance. It would suggest that there was a further deposit of silt, but that conditions did not remain so marshy, and that the area was used for agricultural purposes. It is contemporary with the first modern structure on the site, a cellar in the north-west section of the area. The walls of this cellar show two periods of building, and all except the lowest footings belong to the second period, which is described in a following paragraph. The level included a considerable quantity of seventeenth-century material, with the emphasis probably on the third quarter of the century.

Above M.IV was another distinct black level, M.V, which was the highest general level over the area, with the nineteenth-century concrete basement floor laid immediately over it. It was rather more mixed in consistency than M.IV, and in places contained a considerable number of brick fragments. The finds show the same dating range, down to *c.* A.D. 1680, as do those from M.IV, and it therefore presumably follows fairly quickly upon it. From it came a Nuremberg jetton (p. 111). A *terminus ante quem* is provided by some pits cut into its surface, of which the contents go down to *c.* A.D. 1740. The main layer M.V presumably represents a similar sequence of events to M.IV, a renewed silting and then agricultural use.

This layer, M.V, is contemporary with most of the build of the cellar as it survives (Pls. VII, 2 and VIII, 1, and fig. 11, section J–K). Only a limited portion of the cellar was cleared, and its dimensions were not established. It was completely brick built, with the walls in English bond, which agrees with the later seventeenth-century dating given by the pottery in the associated level. The foundation level of the wall, which belongs to the first period, was a packing of brick-dust, filling the base of the foundation trench. Above this, probably also belonging to period I, for it was not everywhere present, was a timber course. The original wall was built with a foundation trench about 6 in. wide at the back. The rebuild had a foundation trench which seems to have been rather irregular, in places as wide as the original one, or wider, in places very narrow. The floor was also of brick. Beneath it, parallel to the south wall, was a brick-built drain (section J–K). The floor is at a depth of 3 ft. 9 in. below the surviving outside level, but this is not evidence of its original depth, as the external level may have been truncated by the nineteenth-century basement

[1] For report on finds, see pp. 46, 83 ff., 93 ff., 108 ff.

floor. It is not likely, however, to have been much deeper, since the highest existing level is contemporary with its build. The ceiling of the cellar was apparently supported on rows of piers. Judging from the three located, these seem to have been somewhat irregularly placed; the ceiling was probably therefore not vaulted but flat.

Probably contemporary with the second period of the cellar was a single brick-built wall, which was cut towards the east end of the main trench (Section A–B). This wall was of comparatively slight build, and there were apparently no walls directly associated with it in the area. It was therefore presumably a garden or yard wall.

The layers described in the last paragraphs represent the history of the area between the late Roman period and the eighteenth century. They suggest that at the end of the Roman period the area became increasingly marshy. It certainly required drainage in the Roman period, but the soil into which the Roman ditches were cut was sandy and not silty. In the last half of the fourth century the position may have started to deteriorate. This was probably due to the higher level of the Thames owing to encroachments upon it during the Roman period. From the levels cited above (p. 29) an increase in height of the river of about 5 ft. would have brought the area beneath high-tide mark, and it seems clear that this must have happened at some time between the mid-fourth century and the thirteenth century, the latest date for the M.I ditches which cut into the Lower Black level. The embanking of the Thames was certainly the cause of the raising of its level, and it is clear, from the evidence of the commissions to inspect embankments and have them repaired, that this had been done by the thirteenth century.[1] The embankments were clearly frequently breached, and the M.I ditches may have been part of the system introduced at that time to keep the area drained. It seems probably that they were kept cleaned out until the seventeenth century, for when they were obliterated by the silting-up represented by M.II, the line of the east-west ditch was faithfully followed in the M.III recutting. The seventeenth century would appear to have been a period of intermittent silting, though with decreasing permanent marshiness, on the evidence of the successive layers M.II–M.V which fall within that period. Presumably each silting represents a breaking of the embankment and a flooding of an area which in that time would have been some 6 ft. below high-water mark, if that were as high as the present-day level. The construction of the building represented by the cellar indicates that by that time the area was considered fit for occupation, though it is possible that the rebuilding of the cellar walls almost from the foundations up means that the first building collapsed in a serious flood. The rich soil provided by the siltings was probably used for gardens and fields in the periods between the floodings.

The picture provided by the excavations therefore accords well with that shown on seventeenth- and eighteenth-century maps. These show built-up areas along the embanked line of the river, with long fingers stretching back along the lines of the principal roads. One of these fingers runs along the line of the present Borough High Street (from which the present site was separated only by the area of the Marshalsea Prison), for a distance of some 400 yards beyond St. George's Church. Behind the houses were areas of gardens, intersected by innumerable watercourses.

[1] The whole question is discussed in T. Codrington, "London South of the Thames," *Surrey Arch. Colls.*, XXVIII. It should be noted that Codrington's view that the Thames was embanked in Roman times is not now generally accepted. See *R.C.H.M.* London III, pp. 12–13.

These drained into a stream which ran from Lambeth across almost the complete width of the promontory formed by the great bend of the Thames, to empty into Limehouse Reach.

The cellar was found filled with a mass of loose debris, including an enormous quantity of household china. The great bulk of this is eighteenth century in date, and the latest material seems to fall early in the last quarter of the century, which should be the date when the cellar went out of use. There is no evidence for the history of the site between that date and *c.* A.D. 1850, which is the date when modern industrial development started in Southwark.

MERMAID COURT SITE (Section on fig. 11)

The site lies a little to the south of the Newcomen Street site, between Mermaid Court and Chapel Court, its east end being bounded by a pathway joining the blind end of Chapel Court to Mermaid Court. The modern basement floor was at a level of 8·55 feet above O.D., and natural was reached at 2·22 feet O.D., being thus somewhat lower than in the nearby site. Natural here consisted of a layer of peat, not found on any of the other sites. The peat presumably formed in one of the natural hollows found in this area which are referred to by Codrington.[1]

An area only of 7 ft. 9 in. by 3 ft. 6 in., approximately in the centre of the site, was investigated, the east end of the trench being at a distance of 16 ft. from the eastern boundary path. The finds in this trench did not seem to be of enough interest to justify the extension of the excavation, particularly since the modern concrete floor was very hard.

The lowest levels consisted of dark yellow clayey layers. The lowest yielded no finds, and the upper two seem to cover the first century and first half of the second century A.D.[2] Above is a greeny-black layer, presumably marshy in origin. The finds probably fall about the middle of the second century. As the area is lower than most of the Newcomen St. site, the top of this layer only reached slightly above the natural level in that area; the layer may represent silty accumulation in a hollow, at a date earlier than the general silting formed there. Above this layer are two more black levels of increasing stickiness in texture. The Middle Black layer contained pottery down to the second half of the third century A.D. This would be contemporary with the period during which the ditches in the Newcomen Street site were silting up. The level of its base, at 3·30 ft. O.D., was still below the level into which the ditches there were cut, 4·25 ft., and the formation of the layer is therefore an indication of the increased marshiness of low-lying areas in the second half of the third century. The upper black level, which probably corresponds to the Lower Black of the other site, did not produce any pottery later than the third century, but only a very small portion of this level was undisturbed, so this may be accidental.

The upper black level was cut into by a pit filled with mortar debris. This contained, together with earlier material, stoneware and glass going down to *c.* A.D. 1800. Above was a black layer containing sixteenth-century material, with some of the fourteenth and fifteenth. It must therefore represent derived material, laid down after some late eighteenth-century building operation. From it came an *as* of Hadrian (M. & S. 797?) and an Æ 3 of Gratian (Cohen 113).

[1] *Op. cit.*, pp. 136–8.

[2] For pottery see p. 36 ff.

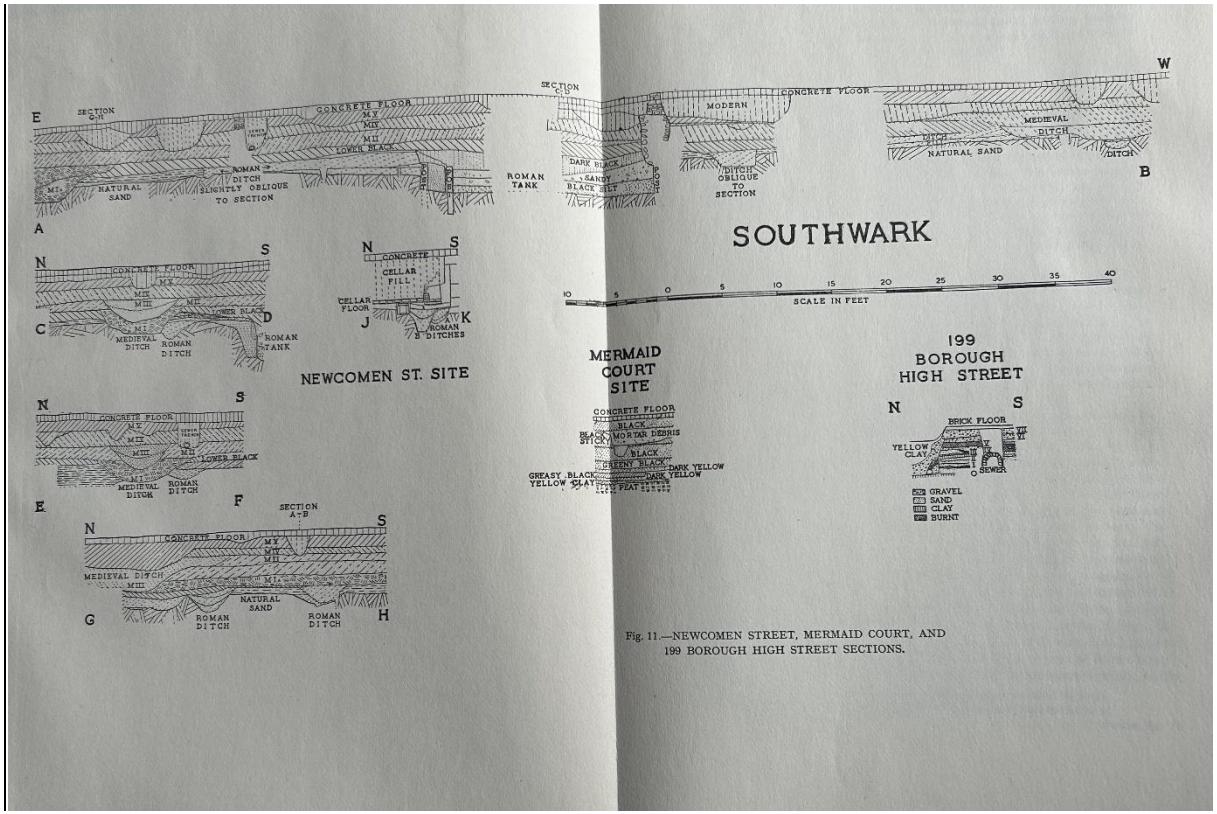

Fig. 11.—NEWCOMEN STREET, MERMAID COURT, AND 199 BOROUGH HIGH STREET SECTIONS.