

### III.—THE ROMAN FORT AT SOUTH SHIELDS.

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The Roman fort at South Shields was excavated in 1875, when the Lawe meadows in which it stood were sold by the Ecclesiastical Commissioners for the erection of cottage-property and a national school. The excavators defined the limits of the fort and located its gates, but concentrated their attention upon the *principia* and central buildings. These buildings were saved from irretrievable burial largely through the efforts of alderman John Broughton, then mayor of South Shields and representative, through the Chapter of Durham, of the Ecclesiastical Commissioners; and he was eloquently seconded by R. E. Hooppell. The remains now lie in Roman Remains Park, treated harder by bad weather than by man, and calling for attention from the competent authority to ensure their future preservation.

Three contemporary accounts of the excavations were written, the first<sup>1</sup> in order and quality by Hooppell, the two others<sup>2</sup> by Bruce. The first work was illustrated by lithographs made from photographic prints by William Haggitt, of South Shields: and from the rare original prints<sup>3</sup> four of the present illustrations have been made

<sup>1</sup> R. E. Hooppell, in *Nat. Hist. Trans. of Northumberland, Durham and Newcastle on Tyne*, VII.

<sup>2</sup> *Archæologia* (London), XLVI, 163-70; AA<sup>2</sup> X, 223-318.

<sup>3</sup> The negatives to which these prints belonged are not now to be traced, but formed the basis of photolithographs in Hooppell's account, cited above. The negatives from which the blocks are made were put at my disposal by the kindness of Miss Flagg, who made them. Enlargements from her negatives were also presented by Miss Flagg to our society, at the instance of colonel Spain.

(plates XII-XIII), copies having been generously presented to the society by Miss A. C. Flagg, of Westoe, a granddaughter of alderman Broughton. Bruce's accounts included an excellent actual-state plan of the remains, done by R. H. Morton, of South Shields, from which the plan now exhibited in Roman Remains Park was made by his son, Mr. J. H. Morton. These works, whether photographic or architectural, are the essential basis of an archæological study of the site. Very rarely do early excavations boast such careful records: and the present study may be regarded as an epilogue, interpreting them in the light of knowledge acquired elsewhere since they were made.

A word may be added on the position of the fort. The Lawe promontory, upon which it lies, is now the east half of South Shields, separated from the rest of the town by Ocean Road. On the site of this road, the promontory was almost cut off from the mainland by a salt-water creek, known to medieval folk as the Gut. On the north, it was bounded by Tyne, whose mouth, until the last century, was choked by a great bar and dangerous to shipping until the breakwaters were built and regular dredging instituted. Tidal action sufficed to block the river-mouth and to scour the mouth of the Ocean road creek. Hence the value of the Gut to the Romans as a safe haven, where the contents of sea-going vessels could be landed and transferred to river-craft in Jarrow Slake. Facing this haven and crowning the promontory lay the Roman fort, linked with the mainland by a road whose continuation south-westwards is well known to-day as the Wrekendyke. The scope of the place was to garrison the harbour and to provide convoy-service: in the age when it was built sea-borne invaders were not in evidence.

## I. THE FORTIFICATIONS.

(a) *The rampart and its towers.* The rampart of the fort enclosed an oblong of just over five acres. Its long axis measured over-all 622 feet, its short one 361 feet and it had rounded angles set out with a radius of 30 feet (plan, plate XIV). The fort thus compares in size with the milliary-cohort forts of the Wall.<sup>4</sup> The front of the rampart was formed by a wall 6 feet thick, standing upon a base-course with an elegant chamfered plinth (plate XII, fig. 1). Behind it there was an earth bank, unwittingly removed by the excavators, but deducible from the perfect freshness of the pointing upon the inner face of the wall when discovered.<sup>5</sup> The rearward projection of the gate-towers gives this bank a thickness of 7 feet: but this is insufficient, and a more reliable criterion is the position of the *intravallum* road, which allows a bank 16 feet thick; comparing closely with the bank behind the rampart of the Wall-forts. Remains of walls discovered behind the south rampart suggest that, as in the Wall-forts<sup>6</sup> also, the bank was later cleared away or crowned by buildings.

There were towers at the angles of the fort, set centrally inside the angle and bonded in with the fort-wall. The excavators noted one at the south-east angle, without realizing its true nature. From inside it came<sup>7</sup> five swords and beautiful enamelled belt-mountings. The exact dimensions of this tower are unknown.

(b) *The gates.* The north and south gates were located, centrally placed in their respective sides. Their plan, though unintelligible in detail, suggests that they had double portals. Part of the south tower of the west gate,

<sup>4</sup> e.g. Birdoswald and Housesteads.

<sup>5</sup> This will appear by comparing Hooppell's photograph no. 13 and plate XII, fig. 1, on which the outer face of the rampart shows clear traces of weathering.

<sup>6</sup> e.g. Housesteads and Great Chesters.

<sup>7</sup> Text to Hooppell's plate VIII, *op. cit.*

with an impost of magnesian limestone,<sup>8</sup> is still visible. It projects 6 feet in front of the rampart and has 6-foot walls, enclosing a chamber  $6\frac{1}{2}$  by 7 feet. The east gate had towers with 3-foot walls, enclosing chambers 15 by 9 feet, projecting 4 feet from the fort wall. These guarded a double portal, with central *spina* (perhaps robbed and certainly unrecognized by the excavators). The south portal had been finally converted into a room heated by a hypocaust,<sup>9</sup> while the south tower was coated inside with plaster. Outside the north portal was a flagged road. The towers of the two intelligible gates thus differ widely in plan, and only the west gate appears to go with the 6-foot fort wall. This suggests that the east gate may be rebuilt.

As Mr. R. C. Bosanquet has noted,<sup>10</sup> the position of these gateways is peculiar. They are *portæ principales*, but lie on the road behind the *principia*: while, in the normal position for the *via principalis*, in front of that building, no through road and no gates have been found. In short, when the 6-foot wall was built, the *via principalis* was put behind the *principia*, which was retained in service, without being turned round, throughout the fort's existence. This suggests that the known 6-foot wall, with at least the west gate belonging to it, is a secondary structure: and, typologically, this is a highly welcome conclusion. For, while the plan of the *principia*, as will be seen, is definitely assignable to the early second century, neither chamfered base-moulds<sup>11</sup> for fort walls nor projecting gate-towers<sup>12</sup> have appeared at that date in the north, where

<sup>8</sup> I am indebted to the rev. T. Romans for some instructive remarks about the difficulty of this hard and brittle material. Yet the Roman masons carved out of it the arcuate window-heads of which a fine example is visible in Roman Remains Park. Much of the stone was also employed as ordinary blocks, but always in the later periods.

<sup>9</sup> Hooppell, *op. cit.*, p. 11.

<sup>10</sup> AA<sup>2</sup> XXV, 245.

<sup>11</sup> Readers will call to mind the fine examples at York and Chester, associated with the late second century, and contrast their complete absence in the forts of Hadrian's Wall.

<sup>12</sup> Compare the additional gate-towers at Risingham, which seem to belong to Severus. The exception is the reducing-wall at Newstead, which may be compared with Brecon Gaer.

they are introductions of the Severan age. If, however, the wall and west gate as now known go to the third century, the east gate will be later still: and this also suits its type, for its long projecting towers very closely resemble those of Chesterholm<sup>13</sup> or the Saxon Shore forts,<sup>14</sup> which belong to the Constantian age.

(c) *The ditch.* Almost nothing is known of the fort ditches. A short length of the west ditch remains open in the park: it is a wide fosse, about twenty feet broad.

## II. THE INTERNAL BUILDINGS.

(a) *The principia.* The function and disposition of this building was misinterpreted by the excavators, who were misled by analogous civil buildings. It consists of a forecourt, a cross-hall and administrative offices (fig. 1).

The forecourt began as an open flagged yard, bordered on the front and sides by a portico. On the fourth side lay the cross-hall, with a central arched entrance, opposite the entry through the front portico. The outer wall of the portico was a plain high wall: the inner, evidently low, carried monolithic column-shafts, 5 feet high, of which three,<sup>15</sup> heavily burnt, were found lying near the stone gutter that took the eaves-drips. The scale of the columns shows that they were carried upon a low sleeper-wall, so that the front of the portico was not fully open. Twelve feet will be a fair estimate of the height to the eaves, including the wall, column-shafts, bases, caps and architrave. The gutter lies 3 feet away from the inner wall, showing that there were wide overhanging eaves. It also returns on each side of the entrance through the front wall, showing that this entry was uncovered. These simple courts occur in the *principia*<sup>16</sup> of Caerhun, Hardknott,

<sup>13</sup> AA<sup>4</sup> VIII, 197, 201.

<sup>14</sup> Cf. Collingwood, *Archæology of Roman Britain*, fig. 12A.

<sup>15</sup> Hooppell, *op. cit.*, p. 6: the columns are still in the park.

<sup>16</sup> *Arch. Camb.* LXXXIV, p. 74, fig. 11. CW<sup>2</sup> XXVIII, p. 314; *ibid.*, vol. XV, p. 19. *Melandra Castle*, p. 42, plan; and further details appearing in the rare *Excavations at Toothill and Melandra*, Manchester branch of the Classical Association, 1909, Report 2, p. 28, plate VIII.

Ambleside and Melandra, of which the first two are Trajanic, the third assigned to Hadrian and the fourth perhaps earlier than all. Thus, the South Shields forecourt ranks as an early second-century building, though its Hadrianic date is attested by a mason's record of the sixth legion<sup>17</sup> on the fine original masonry of the front wall in the cross-hall. Later, the flagging of the court was patched here and there,<sup>18</sup> and a little stone table,<sup>19</sup> now removed, was placed upon them and protected by a small open-ended shed. The east wing of the portico was also subdivided into rooms,<sup>20</sup> while its west wall at least was completely rebuilt.

The cross-hall, 72 by 20 feet, was entered by an archway 10 feet in span, decorated with a *bucranium* on the key-stone, now in South Shields museum. The wall to the north of the archway had been rebuilt, as its existing foundations show: but its whole mass was found lying fallen in one piece bestrewing the forecourt. Before it fell, the forecourt had become covered with earth, and this implies that it must have stood for years after the building was ruined, as Hooppell saw.<sup>21</sup> The fallen masonry represented a wall at least 30 feet high, showing that the cross-hall towered above every other structure in the *principia*, being, like a civil *basilica* in a *forum*, its most striking feature. Realizing this, it is possible to see how the plans of civil *basilicæ* and *fora*, like those of Silchester and Caerwent, go back to military prototypes.<sup>22</sup> Every credit is due to

<sup>17</sup> Visible *in situ* upon one of Haggitt's views, now in South Shields museum; *EE* VII, 1005.

<sup>18</sup> Anyone who looks about the court will note re-used stones with cramp- or lewis-holes.

<sup>19</sup> Hooppell, *op. cit.*, pp. 14-15, devotes considerable attention to this curious but vanished feature, which I am unable to explain.

<sup>20</sup> Compare the store-rooms in the late *principia* at Chesterholm. The present state of the remains does not encourage conjecture as to purpose at South Shields, and though Mr. Morton's plan shows some additional walling, this has now been removed and is not sufficiently self-explanatory to be included on the accompanying plan.

<sup>21</sup> Hooppell, *op. cit.*, p. 6: the amount of soil varied from a few inches to a foot.

<sup>22</sup> e.g. the great halls of Vetera and Novaesium, *Germania Romana*<sup>2</sup> I, plate VI.

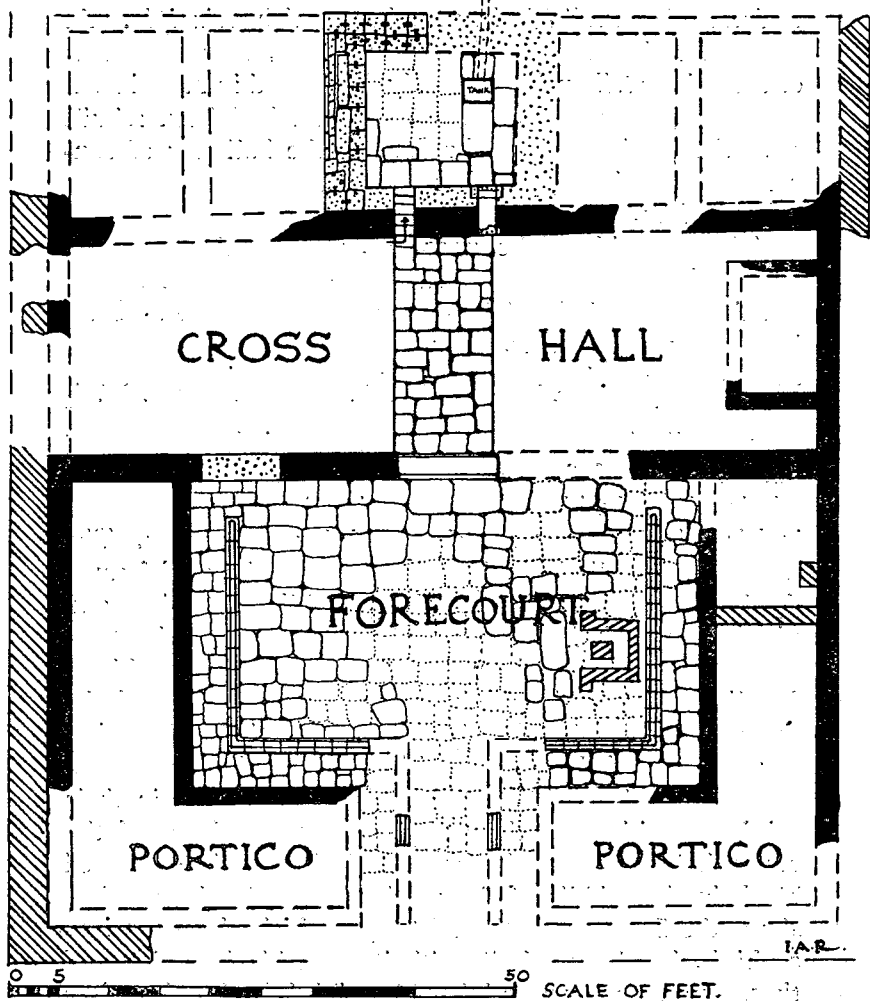


FIG. 1. The *principia*, South Shields.

Hooppell for his acute observation, which has preserved for us unique evidence, whose interpretation he perfectly understood,<sup>23</sup> available in no other British *principia*. At the east end of the building are remains, now indistinct, of the dais or *tribunal*, as recently discovered in magnificent order at Chesterholm. The west wall had been rebuilt with the portico wall. The floor of the hall was of concrete,<sup>24</sup> excepting a paved strip between the entrance and the *sacellum*.

The long side of the cross-hall, opposite the forecourt, was flanked by a central *sacellum* and two pairs of offices, opening off the hall. The offices had red concrete-floors, heated by hypocausts, now covered in grass. In the *sacellum* the underground strong-room remains (plate XII, 1), its east wall and the east end of the north wall having been rebuilt since the excavation. Access is by a steep and narrow stair, of five steps, placed symmetrically with a window barred with three bars, which the excavators found in fair order (plate XII, 2A), though little remains now. The room was thus lit from the cross-hall, and its roof formed the base of the *sacellum*, sticking up like a *podium* and pierced by a window and door looking superficially alike. The floor was paved in flags and kept dry by an oblong flag-lined sump with drain attached. The walls of the chamber were built of a double row of grit blocks 2 feet square, once tied together with swallow-tail cramps and swung into place with a lewis. These stones are in their original position, as the complete correspondence of the cramp-holes, cut on the spot, and the specially shaped block in the middle of the north-west angle show. But, above the first course, the west wall, which alone survives so high, has been rebuilt with its own blocks. Some of these are very long and have a slightly splayed surface

<sup>23</sup> The military information being absent, and the civil works then little known, Hooppell and his contemporaries fell back upon Vitruvius V, 1-2, which is the ultimate source for their statements. The fortunate fact that there was a rough connexion enabled them to guess at a development whose stages are now better known.

<sup>24</sup> Hooppell, *op. cit.*, p. 9.



terminating in a prominent check. They have served, it would seem, as the springers for a barrel-vault, formed in rings of massive masonry, sitting on the splayed surface and kept in position by the checked edge, which would also form a seating for the centering. In the rebuilding, which apparently dispensed with the barrel-vault, these blocks were filled up flush and made to serve as normal walling-stones. Ultimately, the chamber was filled with debris, including pilaster-caps, a skeleton and a stepped stone base, still to be seen among the architectural fragments in the park: but it is uncertain whether this filling was purposive, implying disuse of the strong-room, as at Carnarvon,<sup>25</sup> or the casual debris of a final destruction. This chamber is thought to have been inserted in the original *principia*, because its walls contain re-used stones. But, since it is probable that these re-used blocks belong to the chamber itself, they can be taken to prove no more than a rebuilding. Nevertheless, while the *principia* is of early type, as shown by the planning of its forecourt, the underground strong-room is a developed example in a series which only begins<sup>26</sup> in the Antonine age. The Chesters example,<sup>27</sup> which closely resembles it, was inserted in that fort under the Severi. Thus, for a new but none the less cogent reason, the opinion that the strong-room is additional may be accepted: typologically, the chamber belongs to the third century, the same age as the known fort wall. It is a particularly fine example of its kind. No other British strong-room is built in masonry of this order, and the arrangement of the window and door is of great interest. A window in the rear of such a room is known at Benwell:<sup>28</sup> but the closest parallel is from Markoebel,<sup>29</sup> on the German *limes*. The large

<sup>25</sup> *Segontium*, p. 80.

<sup>26</sup> See S. N. Miller, *Old Kilpatrick*, p. 27. The Benwell pit (AA<sup>4</sup> VII, pp. 126-30) may be an 'exception,' but this is uncertain on the evidence available.

<sup>27</sup> Bruce, *Handbook to the Roman Wall*, 9th ed., p. 83: PSAN<sup>3</sup> IV, 134.

<sup>28</sup> AA<sup>4</sup> VII, p. 127-8.

<sup>29</sup> ORL III, plate II, fig. 3; I owe this reference to Mr. John Charlton.

size of the room is also worth note : in a port like South Shields it was perhaps destined to contain temporarily bullion in transit, as well as the normal military chest.

(b) *The storehouses.* The function of these distinctive buttressed buildings, now known to be storehouses, was unrecognized when they were discovered. They form, very unusually, much the most numerous class of building now visible on the site (plan, plate xiv) : indeed, so large a group is unknown elsewhere. Including some fragmentary but undoubted remains drawn by Mr. R. H. Morton, there are at least twelve<sup>30</sup> of these buildings on the site. Portions of no. I and large fragments of III to VIII can still be seen. I and III flanked the *principia*, while II lay behind it, followed by IV and V next to the rampart. In order to accommodate the loading-platforms at the ends of II, I and III were pushed farther forward than IV and V, leaving room to equip the latter pair with a front portico. VI-IX lay in front of the *principia*, between the west rampart and the *via prætoria* : in the corresponding block only X, XI and XII are known, but symmetry would allow, if it does not demand, the addition of one more. At all events, the known total of twelve storehouses is six times the allowance for a normal fort of this size, and brings South Shields into singular importance as a store-base at the time when these buildings existed.

The solid walls, much and unintelligently robbed, are of re-used blocks of grit mingled with magnesian limestone. All are buttressed. The floors are flagged, with ventilation-channels of two patterns : those of I, II, VI-IX and XI (fig. 2) lie on six long sleeper-walls, divided by four air-shafts, cut in turn by transverse air-shafts running from opposite pairs of ventilators placed between the buttresses in the outer walls ; those of building IV-V rest on piers, which give more air-space in a scheme where cross-

<sup>30</sup> The two sleeper walls, with ventilator, behind a main wall, which were cut in the long trench behind the *principia* cannot be explained otherwise.

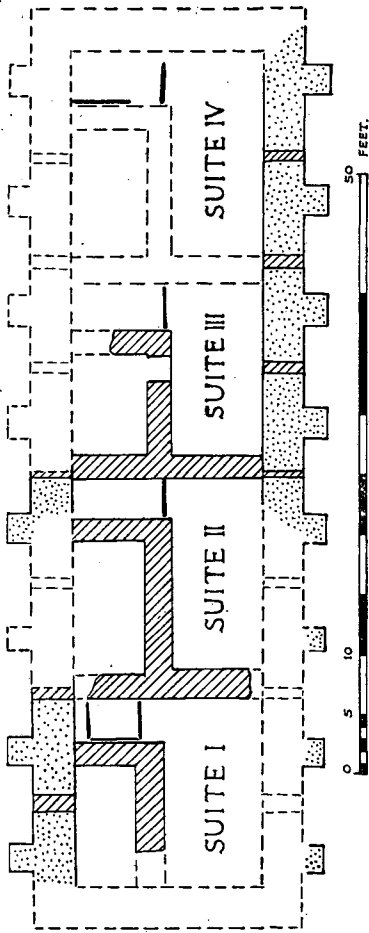
currents are lacking. The front portico of this building has already been mentioned. Three of its chamfered bases remain (plate XIII, 1): they carried square blocks, countersunk at the bottom and having raised panels at the top, so as to fit block upon block without the danger of side-slip. If a wagon bumped into them, there would be no danger of collapse. The front walls of VI and VII are very wide, as if thickened into a loading-platform.

The interest of this remarkable group of buildings is enhanced by the fact that they were neither the last nor the first erected on the site. Plentiful remains belonging to a later transformation of the fort can be disentangled from among their walls and floors, largely accounting for the irregular appearance of the actual-state plan. The remains of a previous occupation are slighter. Their existence might be inferred from the fact that buildings VI to XI block the *via principalis* implied by the original *principia*: but it can be verified below building V, at whose south entrance two levels appear in a pair of contemporary photographs. The upper stratum is the granary floor, on a level with the portico. The lower, separated from the upper by over a foot of debris, contains the four walls, arched flue and pillars of a hypocaust. The hypocaust was found<sup>31</sup> "full of clay and stones from the shore"; in other words, it had been definitely packed with filling when the building above it was erected, and this point puzzled the excavators, who did not realize its import. There is, however, no doubt as to the interpretation of the remains, which are visible to-day, though the upper levels have been in part removed. It may also be remarked that the hypocaust was not itself a primary structure, since its pillars are partly built of small-scale re-used blocks. But it is presumably contemporary with the Hadrianic *principia*, while the small blocks will go to a pre-Hadrianic occupation, attested by no existing structural remains, but by south-Gallic samian ware from the site in the museum of South Shields.

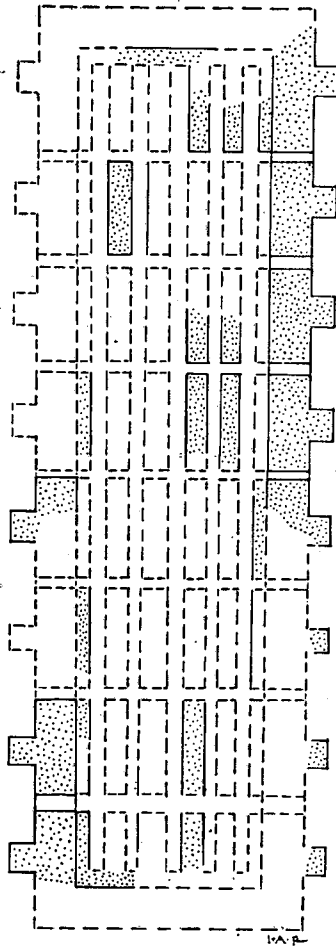
<sup>31</sup> Hooppell, *op. cit.*, explanatory note to his plate xi.

The same building, V, as has yielded this interesting evidence of its late date, also contains evidence of a later re-modelling. At the back of the building, and on top of its floor instead of below it, lies yet another hypocaust, rudely built in tiles and now wisely covered in turf to protect it from inclement weather. The purpose of this structure has never been in doubt, but only when the building in which it stands is recognized as a storehouse does its import become clear. Since it rests on a storehouse floor, it attests the transformation of that building into a dwelling-house. To such a phase will also belong the apsidal wall added to the north-west angle of building III, in which it also has no original function.

Much more completely preserved, however, are the alterations in building VIII, where rooms were deliberately inserted inside the main walls, never over-riding them (fig. 2). The flagged floor was also removed, the ventilation-shafts between the sleeper-walls below it were filled with earth and the ventilators were blocked with masonry. To-day, the tops of the sleeper-walls peep out and border the earth-filled cavities between them: over them and among them ride the later walls and floors. These later structures are most clearly to be recognized at the north end, where they form two sets of three rooms apiece, opening from the street west of the building. The front room is as large as the two others, which consist of a long narrow room, floored in stone and lined with flags, and an oblong room, entered by a doorway next to that of the flagged room. Two sets of this kind are in fair order. The existence of two more is attested by fragments of walling and of the flag-lining in corresponding positions. A cross-wall at the level of the sleeper-walls then seems to indicate that the original building ended at this point. Thus, it looks as if this is a complete example of a storehouse converted into four sets of uniform apartments. Nor was it in fact the only example of its kind. The presence of flag-linings at the same points in building IX is evidence for a similar conversion there, with rooms facing in the



IV<sup>TH</sup>-CENTURY STATE.



III<sup>RD</sup>-CENTURY STATE

FIG. 2. Building VIII, South Shields.

opposite direction, on to the *via prætoris*. In building VII, cross-walls later than the sleeper-walls cut up the space into rooms of similar size but indeterminate purpose. The west ventilators of building VI have been systematically blocked with masonry. Finally, a photograph<sup>32</sup> of building XII (plate XIII, 2) shows walls inserted there: but only the north end of the building was excavated, and, while the excavators did not understand it at all, the photograph only enables the existence of modifications to be established.

It is now clear that every storehouse whose interior was at all thoroughly investigated in 1875 still yields striking evidence of a later occupation, during which the buildings were converted into dwelling-houses or parcelled into rooms whose use was equally and totally different from the original function of storage. These remains are mostly fragmentary. But the well-defined sets of rooms in building VIII have at least two parallels from Hadrian's Wall. In 1929, the Constantian barrack at Birdoswald<sup>33</sup> was found to contain two such sets of rooms, opening off a central passage. In 1932, as Mr. Birley allows us to state, the *principia* at Chesterholm yielded another pair, also dated to the early fourth century, on each side of the *sacellum*. In each fort the triple division of the little suite, including the narrow wash-house with flagged floor, was a constant feature. In 1929, when the first pair was discovered, it was suggested that it resembled "self-contained N.C.O. quarters." The appearance of others in the *principia* at Chesterholm, where private soldiers had no place except on duty, now strengthens that hypothesis. Their occurrence in numbers at South Shields, in a position corresponding to that at Birdoswald, seems finally to confirm the view that they may be accepted as something like the standard N.C.O. accommodation of the Constantian period in northern Britain. Thus, the dated analogies would seem to show that at South Shields storehouses were no

<sup>32</sup> Now in the possession of the society.

<sup>33</sup> *CW*<sup>2</sup> XXX, p. 171, and plate IV, 1.

longer required<sup>34</sup> in the fourth century, and were converted into quarters for lower-grade officers, or turned to other uses not now to be defined. The storehouses themselves go to the third century, being placed, stratigraphically and chronologically, between the typically Hadrianic *principia* and these fourth-century buildings.

It remains to point out that this was not the final period of occupation. High above the remains here described, Hooppell saw<sup>35</sup> a continuous sheet of ashes, associated with structures of less permanent construction. Though he thought it to be post-Roman, he noted that it contained no post-Roman relics: and, sixty years later, it is possible to compare it with the remains of the last period on the Wall, opening in A.D. 369, which give exactly the same impression.<sup>36</sup> Hooppell's observation is to be admired.

(c) *Other buildings.* Details about other buildings are lacking. The presence of a hypocaust east of the *principia* may point to the existence there of a commandant's house contemporary with the storehouses. As has been seen, there is a similar reason for thinking that the earlier house may have lain west of that building, below storehouse IV. The barracks are no doubt represented by the buildings touched in the cross-trench between the *principia* and the north gate. The buildings to the south of the *principia*, beyond the storehouses, are too fragmentary to explain. But in this part of the fort, when the Baring Street schools were extended, the fine inscription<sup>37</sup> of Severus Alexander, recording the bringing of a water-supply for the soldiers of *cohors quinta Gallorum*, was discovered. This was evidently the Severan garrison of the fort, whose abundant stamped roof-tiles<sup>38</sup> and *imbrices* were found in the main level uncovered.

<sup>34</sup> This is an important point in connexion with their purpose, see p. 99.

<sup>35</sup> Hooppell, *op. cit.*, p. 14.

<sup>36</sup> Cf. *CW*<sup>2</sup> XXX, p. 171.

<sup>37</sup> *EE* IX, 1140.

<sup>38</sup> *EE* III, p. 142; IV, p. 207.

## III. HISTORICAL OBSERVATIONS.

From the relation of the various buildings and from their individual vicissitudes some general conclusions may now be drawn about the history of the site.

The level to which most of the visible remains belong is not the first structural level to be discerned, as is proved by their lay-out. Only the forecourt of the *principia* goes with the first period: all other buildings on the site belong to at least one phase later, as is proved by their arrangement. The forecourt is of late-Trajanic or early-Hadrianic type, and is dated to Hadrian by a mason's record of the sixth legion in the wall of the cross-hall which bounds it. Thus, the history of the visible remains starts from Hadrian, with the *principia* of that date: and the hypocaust covered by storehouse V may well be a relic of the contemporary commandant's house. An earlier occupation than this is attested by pottery from the site, but only appears structurally as re-used material in the hypocaust just mentioned, being small-scale blocks which would go well with pre-Hadrianic work. Nothing certain is known about the dimensions of the Hadrianic fort. Its *portæ principales* must have lain near storehouses VI and XII; and its *prætentura* (the space in front of the *principia*) would not have extended far beyond their southern limits, if the fort was a normal one.

In the next period, the fort was laid out anew and received a fine new wall, with chamfered plinth (plate XII, fig. i). The *principia*, while oddly treated in relation to the new plan, was given a magnificent strong-room, while the whole central area was packed tight with storehouses. The type of wall and strong-room both suggest the Severan age as the epoch of this exceptional activity. But the museums of South Shields and of this society contain between them some curious and rare proofs of heavy traffic at this moment. These are thirty examples of leaden seals, as attached to the fastenings of official stores. They are



described in an appendix : but it may be noted here that fifty per cent. of them bear the heads of Severus, Caracalla and Geta, and the superscription **AVGG**, being thus dated to the years A.D. 198-209. The others, apart from one diverse imperial seal and some private signets, belong to *cohors quinta Gallorum*, the Severan garrison of the fort. This quantity of these rare seals attests the arrival of stores in bulk at the port of South Shields under the Severi; and in the storehouses of the post-Hadrianic level we are entitled to recognize the buildings which received them. But a further point follows from the high proportion of imperial seals. The bulk of the traffic was arriving no later than A.D. 209, and there is only one further seal of the kind. Thus, the activity is to be specially connected with the Severan work in the north which culminated in the great expedition of 209-11. The appearance of storehouses, at this epoch of the fort's existence only, points in the same direction. The storehouses of Corbridge form an exact parallel: and it becomes reasonable to recognize them as part of the intensive preparation for the Scottish campaigns, during which the Roman army and navy ransacked Scotland for three successive summers.<sup>39</sup> A little later, when the bustle was over and there was time to attend to amenities, the garrison received a new water-supply, under Severus Alexander.<sup>40</sup> This is matched by not dissimilar improvements in other forts of county Durham and Hadrian's Wall. But it is clear that the fort became an exceptionally important supply-depot under Severus, and the remains of this period form a unique historical group.

The port doubtless was of unchanging importance as a valued refuge along an inhospitable coast. No site is more likely for the Hadrianic war-memorial, whose narrative inscription<sup>41</sup> went into Bede's monastery at Jarrow. Only Carlisle in the north has yielded such fine civilian tombstones,<sup>42</sup> showing that the place was a prosperous

<sup>39</sup> Cf. Cass. Dio, LXXVII, 11-15; Herodian, III, 14, 15.

<sup>40</sup> Cf. *EE* IX, 1140.

<sup>41</sup> *CIL* VII, 498.

<sup>42</sup> For example, *CW*<sup>1</sup>, IV, 325; *Tullie House Catalogue*, 54.

centre where monuments of above the average quality could be commanded. It was the port which must have attracted thither the Palmyrene merchant Barates,<sup>43</sup> whose wife received one of these fine memorials, a better stone than Barates himself was to earn later at Corbridge whither he had drifted. Here, too, would be the natural landing-place of the fine enamels from Belgica described elsewhere in this volume.

The next age of reconstruction in northern Britain was that of Constantius I, who died at York as had Severus. To this epoch (A.D. 296-305) belong the analogies for the reconstruction in storehouse VIII, and this is where the stratigraphical position of the remains would place them. It is evident that the fort now became a normal structure. The third-century storehouses were converted into dwellings, one at least furnished with a hypocaust (V), while another possessed an apsidal room (III). The style of building in the west wall of the *principia*, and in a large wall at the same level in the centre of the street to the west, is later than the third-century work, and may belong to this restoration. Of the rampart in this epoch there is no record, but the east gate is in rather different case. Its plan differs markedly from that of the third-century west gate, and has striking analogies<sup>44</sup> in the Constantian work at Chesterholm and in the contemporary forts on the Saxon shore. Thus, there is some reason for suspecting that this gate was rebuilt in the early fourth century, when coast defences were beginning to be required.

Later still, there was another reconstruction. This was of less permanent character, and Hooppell, thinking of one Roman period only, assigned it to the Saxons, while noting the absence of post-Roman relics. If the east gate is Constantian, the conversion of its south portal into a heated room and the coating of wall-plaster in its south tower go to this period also, and attest its Roman date.

<sup>43</sup> *EE IX*, 1153a.

<sup>44</sup> Chesterholm, AA<sup>4</sup> VIII, 199; Saxon Shore, Collingwood, *Archæology of Roman Britain*, fig. 12A.

But, in fact, fifth-century coins and the "signal-station" pottery from the site place the Roman date of the final period beyond reasonable doubt. It may be equated with the re-occupation of A.D. 369, following the wholesale devastation of the north. The coins show that the site continued in use after the withdrawal of troops from the Wall, under Magnus Maximus, until the final burning in the fifth century. As long as there was Roman activity in the north at all the place must have continued to be the port of access to the forts of county Durham. Indeed, deteriorating roads must have rendered sea-going more necessary than ever. Sea-power also governed the Roman offensive tactics until the last. If Claudian's poetic account<sup>45</sup> of Count Theodosius' work in Britain contains any truth, it announces the fact that the final offensive actions were punitive expeditions by the navy in the far north and west.

#### APPENDIX. LEAD SEALS FROM SOUTH SHIELDS.

The thirty lead seals described below are in the museums of this society (1-6, 16-21, 24) and of South Shields corporation (7-15, 22, 23, 25-30). They registered imperial and military stores or baggage.<sup>46</sup> Nos. 1-15 bear an oval stamp, with three heads, of Severus (central, bearded, looking left), Caracalla (right, looking left) and Geta (left, looking right), superscribed **AVGG**. All but no. 7 enclosed a cord. Since the border, normally plain, is once cabled (no. 15) the same die was not always used: and the heads vary in roughness, due either to this fact or to bad manipulation.

The examples are:—1, very clear; **AVGG**: 2, ditto: 3, clear; **AuGG**: 4, ditto; only the feet of **A** and **GG** remain: 5, very clear; **AVGG**: 6, a fragment; legend and left head gone: 7, very clear; **AVGG**: 8, a fragment; **AuGg**: 9, a fragment; legend gone: 10, clear; **AuGG**:

<sup>45</sup> *De iv. cons. Hon.*, 30-33, *Maduerunt Saxone fuso, Orcades; incaluit Pictorum sanguine Thule; Scotorum cumulos flevit glacialis Ierne.*

<sup>46</sup> This was Haverfield's final opinion, AA<sup>3</sup> V, 399.

11, clear; **AugC**: 12, clear; legend gone: 13, as no. 12: 14, clear; **Aug**: 15, as no. 14, with cabled border.

Nos. 16 to 22 are of *cohors quinta Gallorum*, abbreviated as **CVG** or **CVG**. There is normally a reverse legend, usually clear but often incomprehensible. They read:— 16, ob. retrograde, **CVG** over a bird looking right; rev. **CAL|VEN** and a centurion's stick: 17, ob. **CVG**, over star; rev. **NEM|\*FJ**: 18, ob. **CVg**; rev. **FL\*|—V**: 19, ob. **cVG**; rev. **ASA**, (? *A(la) Sa(biniana)*): 20, ob. **CVG**; rev. **—V|—D**: 21, ob. **CVG**; reverse gone: 22, ob. **CVg**, retrograde; rev. **L'**; this seal is two roundels linked by a tag, bent back to back and clipped through the middle.

No. 23 is two seals conjoined; one, oblong, reads **L(egio) VI**; the other, oval, **OVA** (? *A(la) Vo(contiorum)* retrograde).

No. 24 is an imperial seal, uninscribed, bearing a young male head (left, looking right) and a female head (right, looking left). The female hairdressing, not later than A.D. 218, suits Iulia Domna, the Dowager *mater castrorum*, in which case the young prince would be Caracalla; this would date the seal to A.D. 212-218.

No. 25, oblong, reads **PAV**.

Nos. 26-29 are private signets, such as occur singly and attached to cohort-seals, on the similar seals from Brough-under-Stainmore (cf. *CIL*, vii, 1269, 7-9); they no doubt registered officers' baggage, probably that of tribunes or prefects.

No. 30 resembles no. 22, but is blank.

There may be added to this list no. 31, in the British Museum, of the imperial type, reading **AVGg**; also no. 32, from Chesters, described in *Arch. Ael.*, ser. 2, XIII, 362, as bearing the heads of Severus and his two sons. It is to be expected that more exist in private possession, but these are all at present known to the writer.



FIG. 1.—EAST ANGLE OF ROMAN FORT, SOUTH SHIELDS.



FIG. 2. STRONG ROOM OF *PRINCIPIA*, SOUTH SHIELDS.





FIG. 1.—BUILDING V, SOUTH SHIELDS.

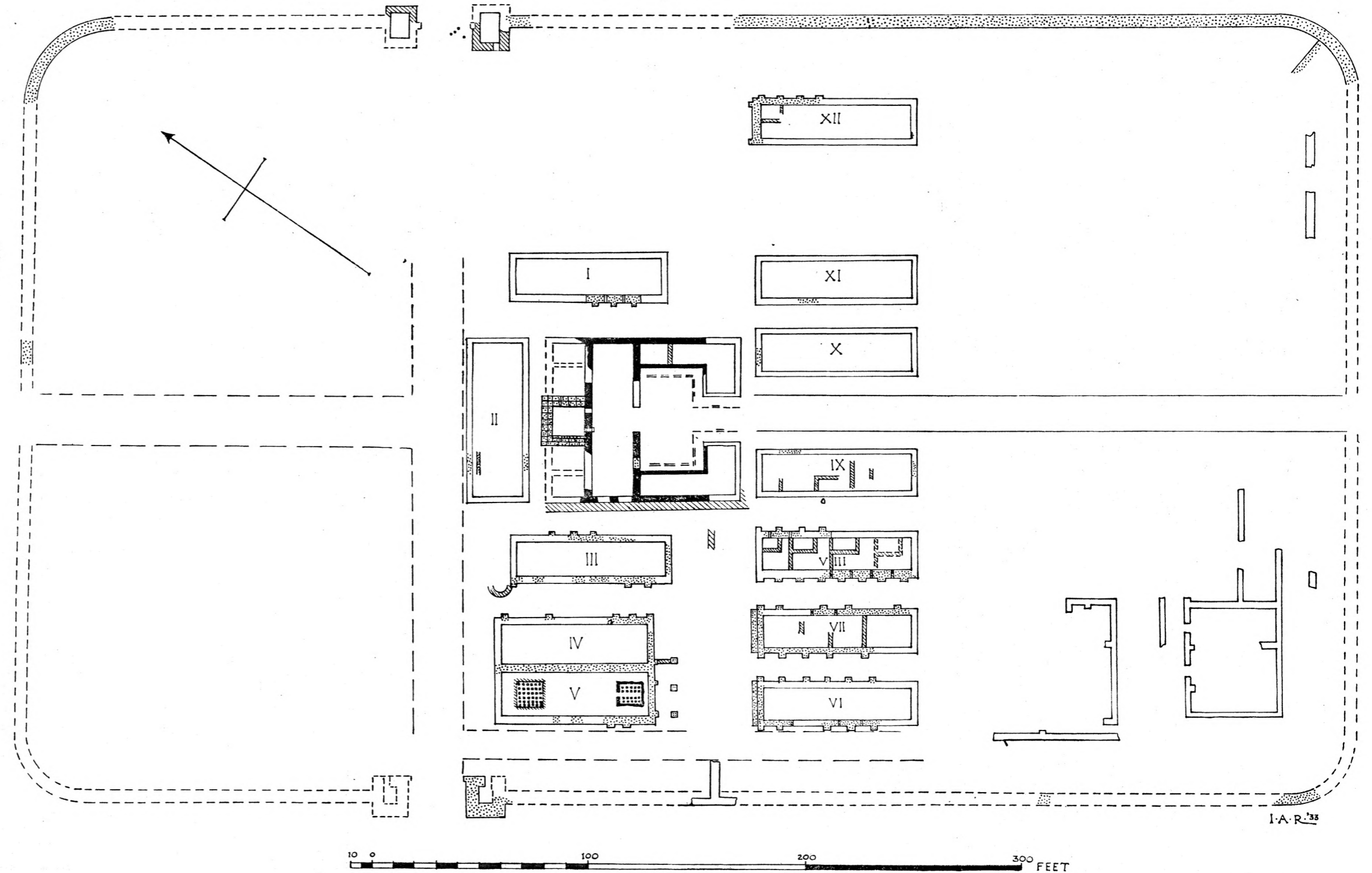


FIG. 2.—BUILDING XII, SOUTH SHIELDS.

A MARKS THE STORE-HOUSE WALLS; B DENOTES LATER PARTITIONS.







PLAN OF ROMAN FORT AT SOUTH SHIELDS.

