

## Some Features of Roman Forts in Britain.

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THE excavation, during the years 1894—8, of several forts on the Wall of Hadrian (one result of which has been Mr. Bosanquet's admirable plan of Borcovicium), the completion in 1901 of the work at Gellygaer, and the interesting investigations now in progress on the Wall of Antonine under the auspices of the Society of Antiquaries of Scotland, have turned the attention of archæologists during the last few years to the subject of the particular form of defence known as the *castellum*, which seems to have been used by the Romans for the purpose of watching the tribes of the hill country, or holding the lines of fortifications that marked for the time being the limits of the empire.

Manchester, as it happens, is not unfavourably situated for this particular study. There may still be seen in the neighbourhood of Knott Mill<sup>1</sup> the remains of the fort which has given its name to the city, and which a writer who visited Manchester about 1540 described<sup>2</sup> as "almost ii. flyte shottes without the towne." The plan of Mancunium is now lost beyond recovery, but about twelve miles to the east lay the sister fort now known as Melandra, which is shown by the inscriptions<sup>3</sup> on four

1. Roeder: *Roman Manchester*, p. 11. Watkin: *Roman Lancashire*, p. 104. An excellent specimen of the core of one of the walls is preserved *in situ* under one of the Railway arches.

2. *Hearne's Leland*, vol. v., p. 94 (edit. 1769-70).

3. *C.I.L.*, vii., Nos. 178, 213, 214. A fourth is figured in *Mem. Lit. Phil. Soc. Manch.*, vol. v., plate vii., opp. p. 534, which does not appear in the *Corp. Ins. Lat.*, vol. vii. The explanation seems to be that the Editor of the *Corpus*, as he states on p. 56, only consulted these memoirs as far back as 1805. Vol. v. is dated several years earlier. The pattern of the border on this stone is similar to that of the Melandra stone.

centurial stones to have been garrisoned by the same cohort that assisted in building the fort at Manchester. Twelve or fourteen miles south-east of Melandra, we have a smaller fort at Brough, the treasures of which are in the safe keeping of the Derbyshire Archæological Society, and further to the west, on the Cheshire hills just above Macclesfield, is the little earthwork known as the Toot Hill Camp, which may yet have a story to tell. Finally, some nine miles to the north of Melandra, on the main road<sup>4</sup> that ran from Chester to York by way of Manchester, lies the rather unique station of Castleshaw, sometimes referred to as an example of the *castra unius diei*, whose secrets have certainly not yet been fully unearthed.

As Mr. Haverfield has written:<sup>5</sup> "A peculiar and additional interest attaches to Melandra, in consequence of its connection with the Roman fort which constituted the earliest beginnings of Manchester. . . . At Melandra we can win some picture of what Manchester was in the dim days of its birth under Roman rule." How far is it possible already to recover this picture? Not to mention a number of forts the excavation of which is still in progress, we now have more or less complete plans of Borcovicium,<sup>6</sup> Cilurnum,<sup>7</sup> Aesica,<sup>8</sup> Bremenium,<sup>9</sup> Ardoch,<sup>10</sup> Birrens,<sup>11</sup> Camelon,<sup>12</sup> Lyne,<sup>13</sup> and Gellygaer;<sup>14</sup> and to come nearer

4. The second *Iter* of Antonine.

5. Unpublished note on Melandra.

6. *Arch. Ælian.*, xxv., p. 193.

7. *Ib.* x., etc.

8. *Ib.* xxiv., p. 19.

9. *Jour. Roy. Arch. Inst.*, i.

10. *Proc. Soc. Ant. Scot.*, xxxii.

11. *Ib.* xxx.

12. *Ib.* xxxv.

13. *Ib.* xxxix.

14. Ward: *The Roman Fort of Gellygaer.*

home we have the results of the excavations at Hard Knott,<sup>15</sup> and of Mr. Garstang's work at Brough<sup>16</sup> and Ribchester.<sup>17</sup> As illustrations of later work we may mention the Roman Coast Fortresses of Kent.<sup>18</sup> A comparison of these plans with one another, and with the plans of the continental examples of similar works, shows that while certain features are common to all, it would be rash to predict in the case of any fort not fully excavated, what would be the lie of the buildings and the character of the interior arrangements.

Let us consider for a moment the points in which the plans are almost invariably similar. It is not uninteresting to reflect that, roughly speaking, these forts were laid out, as far as their general features are concerned, mainly on the same lines and by the same methods as were the camps of the younger Scipio Africanus in his campaign against Carthage. Of course, that is not meant to imply for a moment that the names applied to the various parts were identical in the two cases. We should perhaps be nearer the truth if we said that in their general features the forts resembled the temporary legionary camps occupied by Agricola in his campaigns in Britain. Whether excavation will ever throw light on these temporary camps remains to be seen. General Roy devoted a whole chapter<sup>19</sup> in his famous work to an account of Agricola's camps in Scotland, but his theories were not verified by excavation. Perhaps a fuller examination of the large camp at Inchtuthill, in Perthshire, partly excavated in 1901,<sup>20</sup> may

15. *Trans. Ant. Soc. Cumb. and West.*, xii.

16. *Proc. Derb. Arch. Soc.*, 1904.

17. Garstang: *Roman Ribchester* (Preston: Toulmin).

18. *Arch. Cant.* and Fox in *Arch. Jour.*, 1896.

19. *Milit. Antiq. of Brit.*, ch. ii.

20. *Proc. Soc. Ant. Scot.*, xxxvi., p. 182, seq.

give information on this interesting point, though this camp (which is about 500 yards square, covered some 55 acres, and may have accommodated as many as 11,000 men) would seem to afford evidence of more than temporary occupation.

The very fact that at least three plans recently obtained by careful survey (Melandra, Gellygaer and Newstead)<sup>21</sup> have come out askew, can be fully explained if we assume (as no doubt was the case) that the foundations were set out and measured off in precisely the way described by Polybius,<sup>22</sup> who was himself present at the destruction of Carthage. We may perhaps stand at Melandra on the very spot where the *metator*—acting possibly under the eye of Agricola—placed the standard or the *groma* and proceeded to make the necessary measurements. An error of two degrees in setting off the right angle with the *groma* would account for the skew appearance of the Melandra survey. When once the *cardo maximus* and the *decumanus maximus* were laid down, the method followed in completing the plan would ensure that the error would be repeated throughout.

The other points in which the plan of a fort like Melandra would seem to resemble that of the consular camp are the rectangular shape, the existence of four gates at points dividing the sides similarly, the lie of the roads connecting them, and the shape of what we may call for the moment the headquarters building; for the shape of this building in practically all the forts more nearly resembles the *prætorium* of the Polybian than of the Hyginian camp. The rounding of the corners is of course a feature of the camps of the early empire, while the

21. Perhaps Cardiff should be added. The plan of Brough is also out of truth, but with less regularity.

22. Polyb. *Hist.*, vi. 27.

position of the angle turrets within the line of the rampart points at any rate to the earlier period of the Roman occupation of Britain: the towers of the forts on the Saxon shore are nearly always external.<sup>23</sup>

The existence in all cases of at least four gates leads to the interesting question as to why these should have been considered necessary. Josephus<sup>24</sup> expressly states that the gates were "wide enough for making excursions should occasion require." There are just three passages in Livy which throw light on this matter, two of which are worth referring to here. In the first of these two legions are represented as receiving the command to march out by the two principal gates;<sup>25</sup> in the other the signal is given to make a sally from all four gates at once.<sup>26</sup> The fact that the gates are invariably present, even when they face a steep descent, would seem to show that the construction of them was looked upon as an important point.

The selection of the site of the camp is a point of special interest in the case of Melandra, because it is within the bounds of possibility that this particular site may have been chosen by Agricola himself. The importance of the matter is shown by the fact that the duty was not unfrequently performed by the commander. Thus, to take only two instances out of many, we read that Vespasian went in person to mark out the ground of his camp,<sup>27</sup> and in two striking passages in the life of Agricola it is stated that that general would himself choose the position of the

23. It is remarkable that Vitruvius, who is supposed to have served under Julius Cæsar, B.C. 46, recommends *external* towers (Vitruv *de Architect.*, i. 5).

24. *Bell. Jud.* III., v.

25. Liv. xxxiv., 46. Cf. also *Caes. B.G.* v., 58.

26. Liv. xl., 27.

27. Tac. *Hist.* ii., 5.

camp,<sup>28</sup> and further, that "it was noted by experienced officers that no general had ever shown more judgment in choosing suitable positions, and that not a single fort established by Agricola was either stormed by the enemy or abandoned by capitulation or flight."<sup>29</sup> The position of Melandra (a good idea of its strategical position may be obtained by viewing it from Mottram churchyard) would not seem to be wanting in any of the points named as essential by Vegetius, viz., "abundance of wood, food and water;"<sup>30</sup> nor will those who have spent many hours at Melandra deny that the other condition laid down by Vegetius is fulfilled: "*Et si diutius commorandum sit, loci salubritas eligetur.*"

Of the main streets that crossed the forts at right angles, we have only so far found the roads that always connected the gates, but these are in an excellent state of preservation. The central position of the street known as the *Via Principalis* is a feature in which Melandra resembles Gellygaer, and possibly Brough; in the Hyginian camp, and in most of the other British forts (so far as I have been able to discover), this main street is pushed further forward; in the Polybian camp it lay, of course, much farther back.

Turning now to the buildings within the enclosure, the one structure which unfaillingly appears in all the forts is fortunately well shown at Melandra. Its plan is, moreover, of a fairly normal, though simple, type. The corresponding structure at Brough presents some unusual features; and its further excavation by the Derbyshire Archæological Society will be awaited with interest. It is just possible that part of the Headquarters Building at

28. Tac. *Agric.*, xx.

29. *Ib.* xxii.

30. Veget. *De re milit.* i., 22.

Manchester is still standing,<sup>31</sup> and it would be safe to say that no fort was without this structure. Even at the little camp at Toot Hill, which may have been only an earth-work (though that is a point yet to be decided), a careful examination of the central area will show the outline of the central structure.<sup>32</sup> The name by which this building has hitherto been known, will, however, probably have to go. "Prætorian here, Prætorian there, I mind the bigging o't"<sup>33</sup> might perhaps be repeated to-day with a different meaning from that which the words have hitherto conveyed. It is well known that the Prætorium of the legionary camps fulfilled a somewhat different purpose from that for which the central building of the forts was constructed. "Possibly it reproduces in some way the altars, *auguratorium*, and tribunal, which formed (as it were) an official *annexe* to the Hyginian prætorium, but in that case the *annexe* has usurped the site of the proper prætorium. What it was called we do not know for certain. . . . No direct evidence exists to prove that the term Prætorium was applied to any edifice in the small forts.<sup>34</sup> *Porta Praetoria* appears to have been found once, but it seems impossible to decide which gate was intended.

Only last year an inscription was published which may throw light on the nomenclature of the buildings of the forts. In the excavation in 1903 of the headquarters building of the fort called Rough Castle on the Antonine

31. Røeder. *Roman Manchester*, p. 22. The piece of walling already referred to in a previous note may have been part of this building.

32. Curiously this does not appear to have been noticed by Watkin, who makes no reference to it, and does not show it in his plan. Mr. T. C. Horsfall and I measured it in 1905, and found it to be about 54 feet square.

33. Scott, *Antiq.* ch. 4.

34. Mr. Haverfield in Appendix to *The Roman Fort of Gellygaer*. I have to thank Mr. Haverfield for kindly giving me permission to use his notes on this and other forts.

Vallum an inscription was found, the last five words of which read: *Cohors sexta Nerviorum principia fecit*.<sup>35</sup> This is the first time the word *principia* has been found in Scotland as apparently describing the headquarters buildings. We have two examples of it in inscriptions found in England. One discovered near Bath reads: *Naevius . . . principia ruina oppressa a solo restituit*.<sup>36</sup> Another found at Lanchester runs: *Imperator Caesar . . . principia et armamentaria conlapsa restituit per Maecilium Fuscum . . .*<sup>37</sup> This is important evidence, but I am not able to say if more than one building was indicated by the word *principia*.

Whatever may have been the special uses to which the various divisions of the central building were put, there seems little doubt that the centre room of the three or five that face the court served the purpose of a *sacellum*, or sanctuary, in which the standards<sup>38</sup>—not flags, but clusters of emblems—were deposited and worshipped. The occurrence of what appears to be a strong room in connection with the *sacellum* in several forts (*e.g.*, at Bremenium, Cilurnum and South Shields) has confirmed the theory that this part of the building also served the purpose of a treasure house or bank. This is a point of special interest for us, because one of the most interesting of these chambers has been unearthed at Brough. Concerning this Mr. Haverfield writes: <sup>39</sup> "In its details—size, shape, steps, position and date—the Brough pit agrees

35. *Proc. Soc. Antiq. Scot.*, May, 1905, p. 30.

36. *C.I.L.*, vii., No. 62.

37. *C.I.L.*, vii., No. 446.

38. Is it not at least possible that the small figure of a horse (?) found at Melandra may have formed part of these symbols? A horse was one of the figures mentioned by Pliny: *H.N.* x. 4, s. 5. A small bronze figure of a horse found at the Saalburg is shown in Jacobi's account of that fort. *Cf.* also object 1905 [No. 1348] in Chesters museum.

39. *Vict. Hist. Derb.*, p. 205.



well with other specimens of these vaults, and we may fairly consider that it was built as a strong room."

So far we are on safe ground. If now, by a comparative study of the plans of forts already excavated, we attempt to reconstruct the interior of the fort at Melandra, we shall find the task quite impossible. Even the order of the important buildings that faced the principal street would not seem to be the same in any two cases. A careful examination of a number of plans will, however, enable us to make certain predictions with a tolerable degree of safety. The existence of a strongly buttressed building with a raised floor, which there is good reason to suppose was used as a storehouse or granary is very common. The position varies so much that it is quite impossible to say where this building stood at Melandra. At Borcovicium, Camelon and Castlecary, it stands on one side of the so-called Prætorium, at Lyne such buildings stand on both sides of it, at Cilurnum it is behind, and at Gellygaer it is separated from it by other buildings. At Birrens again there are three such buildings, unsymmetrically placed on both sides of the *Via Principalis*. The importance of the building is clearly shown by the references to it in the classical writers. In the *Agricola* there is an exceedingly graphic passage, which may well apply to a fort situated as Melandra was. The Britons are represented as being "compelled to endure the farce of waiting by the closed granary and of purchasing corn unnecessarily and raising it to a fictitious price."<sup>40</sup> Agricola not only removed this abuse, but also put a stop to the practice of compelling those Britons who had a winter camp close to them to carry their tribute by

40. *Tac. Agric.*, 19. The meaning seems to be that if they had no corn they had first to buy the corn at an exorbitant price, and then pay it as tribute; the corn never leaving the granary at all. The passage, however, is one that has given considerable trouble to the commentators.

“difficult by-roads” to “remote and inaccessible parts of the country.”<sup>41</sup>

Two other classes of buildings, the use of which it would be comparatively safe to conjecture, are the commandant's or officers' quarters, generally containing hypocausts, which in most forts appear to have faced the *Via Principalis*; and the long rows of double buildings, either placed back to back, as at Birrens and (in some cases) at Borcovicium, or facing a common street, as at Gellygaer; sometimes opening towards the rampart, sometimes away from it. There seems little reason to doubt that these take the place in the forts of the *strigae* or double rows of tents of the Hyginian camp, in which the centuries were quartered. It is possible that the fragments of red floors and the oak posts already discovered at Melandra give a clue to the position of these barrack-like buildings, the foundations of which are found so clearly marked in other forts, though there is so far little to indicate whether the buildings themselves, in any of the forts, were of stone or of wood.<sup>42</sup> In some cases, as at Birrens, Lyne, and Gellygaer, they run parallel to the *Via Principalis*; in others, as at Borcovicium and Camelon, they are at right angles to it.

The question of the rampart is so fully dealt with elsewhere that we will pass it over here, only referring to a remarkable feature which is shown by the outer defences of the Scottish forts now and recently under examination. Even a cursory glance at the plans of these forts will show how enormously strong were the earthworks that sur-

41. *Ib.* This again seems to have been done in order to compel the Britons to pay a heavy money tribute in lieu of corn; [and to enrich the providers of transport who would of course pay over part of their gains to the sub-officials who had framed the oppressive requisitions. This I take to be implied in *paucis lucrosum fiet.*—ED.]

42. At Ardoch the outlines of the principal buildings are defined mainly by lines of post holes.

rounded them and defended the approaches to them. It is stated on good authority that there are perhaps no such defences in any other part of the Roman empire. The explanation suggested by Mr. Haverfield<sup>43</sup> is of great interest. "We may be tempted," he says, "to think that even in Roman days the Highland charge was uniquely fierce and irresistible."

If we turn from the defences and the buildings to the life of the fort, whether military or social, there is much that is suggested by merely reading over the list of finds that appears on another page, and which need not be entered into here. There is one graphic detail of the military life of a Roman camp, given by Polybius, which it will be quite safe to assume had its place in the life of the garrison at Melandra. In the little museum of antiquities at Caerleon-upon-Usk there is an inscribed stone bearing two words only: *Primus Tesera*.<sup>44</sup> *Tesera* here (as explained in the *Corpus*) probably stands for *Tesserarius*. In a fort situated as Melandra was, with the special function of watching the hill tribes, it may be safely said that sentry duty was rigorously carried out. According to the account given by Polybius,<sup>45</sup> a new watchword was given out every night. To avoid detection the word was never said aloud, but written on a wooden tablet (*tessera*), and handed by the commander-in-chief to a tribune. The tribune in his turn handed the *tessera* to the *tesserarius*, who returned with it to his maniple, in order that it might be passed along the whole line.

While spearheads have been found at Melandra, no evidence exists of the use of military engines, as is the case in the forts on the Wall of Hadrian, where heaps of *ballista*

43. *Vict. Hist. Derb.*, p. 197.

44. *C.I.L.*, vii., No. 117.

45. *Polyb. Hist.* vi., 36.

stones are sometimes met with. These catapult stones have also been found at Brough.<sup>46</sup> The clay on which the fort is built, however, abounds in small boulders, which may easily have been used as missiles. Professor Boyd Dawkins writes that if these were found in numbers together, they must have been collected. They have not, however, been so found.

Some idea of the position of the fort, and the way in which it was protected by the natural features of the site, may be obtained from the attempted restoration which is appended, and which is here reproduced by permission of the proprietors of the *Manchester Guardian*. The view is taken in the direction in which the visitor of to-day approaches Melandra, that is, looking across the river Etherow (which protects two sides of the fort), just below the point where that stream is joined by the Glossop Brook. Cown Edge and Coombs Rocks rise in the background to the south-east.

As only the central building has so far been discovered, no other is inserted. The restoration of the gateway,<sup>47</sup> (in which, however, the arches should probably be equal), is made possible by the completeness of the foundations recently uncovered, and the finding of the actual voussoirs, and chamfered and mortised imposts, as well as perfect specimens of the *imbrices* and rimmed *tegulae*, and the nails that fixed them. The second inset is an attempted restoration of the colonnade which almost certainly surrounded the courtyard of the central building, as evidenced by the column bases recently found, and the remains of foundations. It is based upon a restoration of the

46. *Jour. Derb. Arch. Soc.*, 1904, p. 20. "Balls of gritstone, of diameters  $1\frac{1}{2}$ ,  $3\frac{1}{2}$ , 4, and 6 inches respectively."

47. As all doorsills and jambs have been stripped from the Melandra gates, no attempt has been made to restore the doors themselves, indications of which, of course, exist at other forts.

colonnade at Borcovicium, made by Mr. Bosanquet with much more ample materials.

In attempting to form a picture of the fort as it was under Roman occupation, it is well to remember how different were the surroundings at that time. Melandra lay in an amphitheatre of hills, from which the river Ethërow, that flowed at its foot (and was certainly not then confined within such narrow bounds) seems with difficulty to find an exit. To the south-east stretched the wilds of the outliers of the Peak, while to the north-east opened the jaws of Longdendale, concerning which it was reported a thousand years later in Domesday book: "The whole of Langedenedale<sup>48</sup> is waste. Wood(land) is there, not for pannage (but) suitable for hunting."

"The work of reclaiming the wilderness began in the days of Agricola. The Romans felled the woods along the lines of their military roads; they embanked the rivers and threw causeways across the morasses."<sup>49</sup> A graphic picture of these labours is presented to us in the impassioned words which Tacitus puts into the mouth of the Caledonian chief, Calgacus: *corpora ipsa ac manus silvis ac paludibus emuniendis inter verbera ac contumelias conteruntur.*<sup>50</sup>

F. A. BRUTON.

48. [Cf. also p. 2. ED.]

49. Elton: *Origins of English History*, 2nd ed., p. 218.

50. Tac. *Agric.* xxxi., 2.