

XII.—BUILDING-RECORDS FROM HADRIAN'S WALL.

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The following abbreviations are employed :

- AA²⁻⁴ *Archæologia Aeliana*, 2nd-4th series.
CIL *Corpus Inscriptionum Latinarum*.
C CIL VII.
CW² Cumberland and Westmorland *Transactions*, new series.
EE *Ephemeris Epigraphica*.
JRS *Journal of Roman Studies*.
LE W. Schulze, *Zur Geschichte lateinischer Eigennamen*.
LS *Lapidarium Septentrionale*.
Proceedings The *Proceedings* of this society.

The numerical references to the milecastles and turrets on Hadrian's Wall are taken from R. G. Collingwood's ninth edition of Bruce's *Handbook to the Roman Wall*, 1933, pp. 205-211 and map.

Hitherto the building-records which have been found along the line of Hadrian's Wall have suggested that its erection was the work of detachments observing some scheme of rotation, without being sufficient to show what that scheme may have been. In the present paper, I put forward an essay towards the interpretation of this class of evidence, prompted by some recent discoveries at Cawfields, which seem to supply an important link in the chain whose existence we cannot but presume; I desire to express my

obligations to an unpublished thesis by a former pupil of mine, Miss Marjorie Coates, in which the material available up to 1935 is arranged, as far as possible, in consonance with professor Collingwood's system of numerical references, and the significance of the duplicate and triplicate records of individual centuries is discussed with particular effect.

(1) *Recent discoveries*: In 1937, four building-stones, inscribed by units responsible for the construction of sections of the Wall, turned up; the first was communicated to me by Mr. W. Percy Hedley, who has since presented the stone to the Black Gate museum, and for knowledge of the other three I have to thank Mr. Thomas Hepple.¹

1. Found during the lowering of the modern road at Halton Shields; that is to say, between milecastle 20 and turret 20 b: the exact position of turret 20 a is not known, but the stone must have come from close to that turret; it



FIG. 1. (½)

is wider in proportion to its height than the normal Wall facing-stone (fig. 1): *coh(ors) IX*—"Ninth cohort." This is the most easterly record of a ninth cohort to turn

up; further west we have ninth-cohort centurions at turret 26 b (EE VII 1022), close to milecastle 29 (C 601), close to milecastle 42 (JRS XIX, p. 215), and perhaps between milecastles 50 and 51 (C 853), while a stone from between turret 53 b and milecastle 54, like the present example, merely gives the cohort number (C 852). The evidence is obviously insufficient to show which legion or legions may be represented in any of the six instances.

¹ The texts of all four have already been published, with brief notes, in JRS XXVIII, pp. 199-200.

2. Found by Mr. J. Oliver, farmer, of Cawfields; it was built into the wall of a sheep pen near Cawfields quarry, from which no doubt the stone had been obtained; the letters have been punched with a pick (fig. 2): *coh(ors) V 7 | Ostoria | ni* — “Fifth cohort, century of Ostorianus.” Ostorianus occurs here for the first time; but the same length of Wall has produced a stone of the century of Valerius Maximus (C 737, first recorded at Haltwhistle Burnhead), who is known by an inscription first seen at Carvoran in 1807 (C 778) to have belonged to a *cohors V*: both centurions are to be assigned to the length between milecastle 42 and turret 42 a, and presumably belonged to the same legion. Other fifth-cohort centurions attested are Sentius Priscus at Wallsend (C 490), Caecilius Proculus with two stones from near Chesters and one from Sewing-shields, perhaps therefore between milecastles 34 and 35 (C 598 a and b, 625), Pr— [M]ax(imus) from Sewing-shields (C 626 with AA⁴ II, p. 89, no. 121), Sextius Proculus from close to milecastle 44 (EE IX 1202 with AA³ v, p. 168) and Julius Vale(ns) from near turret 45 b (EE VII 1059); it does not yet seem possible to connect any of these men with the same legion as Valerius Maximus and Ostorianus, while Sextius Proculus, as will be seen presently, fairly certainly belonged to a different legion.



FIG. 2. (½.)

3. Found by Mr. R. Elliott, quarryman, of East Cawfields; it was brought down by blasting in Cawfields quarry; on this stone, too, the letters have been made with the point of a pick (fig. 3): *c(o)ho(rs) VI | 7 Libera[lis]* — “Sixth cohort, century of Liberalis.” Liberalis was already known, from a centurial stone (on which the number of the cohort had been mentioned,

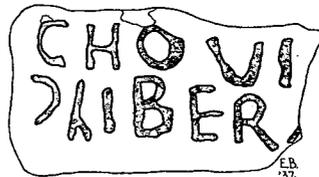


FIG. 3. (½.)

but was missing) seen near Tower Tye in the eighteenth century (C 605). Two other centurions of a sixth cohort attested at Cawfields are Caledonius Secundus (AA⁴ XII, p. 196, found a few yards further west than the present stone) and Lousius Suavis (C 680, first seen built into the wall of an outhouse at Haltwhistle Burnhead),² who presumably belonged to the same legion as Liberalis. Of these two, Caledonius Secundus is also attested between milecastle 47 and turret 47 b (EE VII 1077, cf. AA² XI, p. 121), while stones of Lousius Suavis are recorded from Tower Tye (C 600, built up in a wall of the cottage in Horsley's time), presumably from between turret 28 b and milecastle 29, and from 260 yards west of turret 48 a (CW² XXVIII, p. 387). From Tower Tye comes the record of another sixth-cohort centurion also, namely Delivius (C 599),³ coming from the same third of a mile length of Wall as stones of Lousius Suavis and Liberalis, this stone can hardly represent the work of a different legion, so that we get four of the six centurions in the sixth cohort of one of the three British legions from our study of find-spots. The other centurions known to have belonged to cohorts of that number are Aprilis at Rudchester (C 550), Statilius Solon from near milecastle 24 (C 568), Cassius Priscus from between milecastle 49 and Birdoswald, and Julius Tertullianus of the second legion, known from two inscriptions found west of Birdoswald (C 850, 899); in none of these cases does it seem possible to establish a connection with the group of four which we have been able to form.

4. Found in the same circumstances as no. 3; the letters, in this case, have been cut with a chisel (fig. 4): 7 *Iuli | Florentini*—"Century of Julius Florentinus." This centurion belonged to the tenth cohort of the twentieth legion,

² AA² VI, p. 54, cf. LS 225. Huebner records two identical stones from here, but the evidence only admits the discovery of one; cf. R. G. Collingwood in CW² XXVIII, p. 387.

³ The form of the name is discussed below, p. 235.

as we learn from a stone found in the excavation of Mucklebank turret, 44 b, in 1892 (EE IX 1387); the century of the *prin(ceps prior)* in the same cohort is attested near milecastle 12 (EE IX 1167), whence we also have a record of the tenth cohort of the sixth

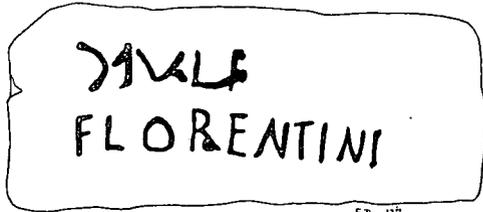


FIG. 4. (8.)

E.B. '37.

legion (EE IX 1165), while the tenth cohort of the second legion is known to have worked at Benwell (C 522); other centurions of a tenth cohort are Justinus and Secundus at Wallsend (C 489), Sempronius — between milecastles 15 and 16 (C 525), Maecilius⁴(?) Ursus and Junius Rufus from the neighbourhood of Chesters (C 602, 603), Julius Co — from close to turret 29 a (EE III 200), Flavius Noricus from Carvoran (C 779⁵) and Vesuvius Rufus close to milecastle 48, probably between there and turret 47 b (EE IX 1208 with *Proceedings*, third series, p. 54):⁶ none of these men seems certainly assignable to the same legion as Julius Florentinus. Lastly, a stone from Lanercost (C 854) is inscribed by a tenth cohort, without mention of legion or century.

Before we attempt to consider the bearing of the centurions from fifth, sixth and tenth cohorts on the sectional building of the Wall, it is necessary to add a note on records of a *cohors III*. From between milecastle 14 and milecastle 16 comes a stone with only the cohort number (C 547), and another is recorded from close to turret 45 b (EE VII

⁴ This seems the likeliest *nomen* (cf. LE, pp. 185, 204) to underlie the corrupt MAEFLLI of C 602.

⁵ But cf. JRS XIX, p. 215, a stone from Cawfields where the number of the cohort is given as IX, and there is no doubt of the reading; we must assume either that there is a stone-cutter's mistake at Cawfields or Carvoran, or that there were two centurions of those names, serving in different cohorts—not necessarily in the same legion.

⁶ EE IX 1208 merely reads 7 *Vesui Rufi*, but JRS xv, p. 249, gives us a stone (whose find-spot is unknown) *coh. X 7 Vesuvi Rufi*.

1058); the known centurions are Volusius from between milecastles 25 and 26 (C 567, presumably to be identified with the centurion of *leg. II Aug.* of C 841, at Naworth), Claudius Cleonicus from between Housesteads and Cawfields (C 670), Socellius, attested at Cawfields itself (EE IX 1190, cf. *Proceedings*, second series, x, p. 82 : it is not clear whether the stone was found east or west of milecastle 42) and about two miles further west (EE VII 1070⁷), Senilis between milecastle 44 and turret 44 a (EE IX 1204 with JRS xv, p. 249), and Claudius Augustanus near Carvoran (EE VII 1069). Of these, Socellius can hardly belong to any other legion but the twentieth, since he occurs in close association with both appearances of Julius Florentinus; the others cannot be shown to have worked in the same lengths as any of the centurions attested between milecastle 42 and turret 42 a. Lastly, there is a centurion whose cohort is not yet known, Gellius Philippus, known by two stones : one of them comes "from Cawfields crags north of Haltwhistle" (EE IX 1187, cf. *Proceedings*, third series, II, p. 240) which almost certainly means between 42 and 42 a; the other was first noticed in the wall of a gig-house at Sewingshields, and should probably be assigned to the length 34-35.

It seems worth while to examine whether the centurial records, most of them introducing cohort-numbers as well, that have been found between 42 and 42 a, or record the work of centurions also attested in that length, will throw any light on the way in which the building of the Wall was assigned to different gangs; but it will be necessary to begin with a consideration of general principles.

(2) *Working-parties and their records*: When the Roman army undertook the erection of camps or forts, buildings or running barriers such as the Wall, it was customary to assign portions of the work to subdivisions

⁷ According to Peile, who saw and noted the stone in 1757, it was at a *turris per vallum* north-west from Walltown: turret 44 b is about due north, milecastle 45 north-west and turret 45 a due west; it must be left open whether the stone comes from 44 b or 45.

of the total force : within the army, to the legions and, on occasion, auxiliary regiments or detachments from the fleet ; within the legion, to its ten cohorts ; within the cohort, to its six centuries. To enable the commanding officer to apportion praise or blame for work done well or ill, each length (*pedatura*) was marked, often at each end, by a record of the unit responsible for constructing it.⁸ Sub-division was not always carried to an extreme ; for example, on the Antonine Wall the only unit smaller than a legion attested on the distance-slabs is a vexillation of a legion⁹—that is to say, a detachment of indeterminate size, probably the equivalent of two or more cohorts ; but where subdivision was most complete, the number of records was necessarily greatest.

Where the work of one legion joined that of another, each legion would need to place its name ; where two cohorts met, both would leave their records ; similarly, adjacent centuries would distinguish their respective lengths by centurial stones. But it must not be forgotten that where the work of two cohorts met, there would have to be a record, not only of the cohorts themselves, but also of the end century of each of them ; and where one legion's length ended and that of another began, we should expect to find legion, cohort and century recorded at each side of the point of juncture. Sometimes all three would be re-

⁸ For *pedatura* in this sense, cf. Vegetius *Epit. rei mil.* 3, 8 ; C 864, C 970 and AA⁴ x, p. 105 (*pedatura classis Britannicae*, the last from close to turret 12 b, the first two probably both from near Birdoswald), and C 948 (*pedatura Vindomoruci*, from Drumburgh : from the ligatures AT and VR, certainly Severan at earliest). On the transient purpose of records of this kind I cannot do better than quote R. G. Collingwood's commentary on those found in the amphitheatre at Caerleon (*Archæologia*, LXXVIII, p. 156) : " The fact that these centurial stones were inserted in a building which was plastered all over shows that they were not meant to be a permanent record of work done. They were meant to show what the various centuries had done only so long as the work was still in progress. Evidently, an officer was to inspect the mason's work before the plasterers came in, and these inscriptions are plainly meant for the eye of this officer. This differentiates such inscriptions from things like the ornate distance-slabs of the Antonine Wall"—and, we may add, from the building-records in forts and milecastles.

⁹ Cf. Macdonald, *The Roman Wall in Scotland*, 2nd ed., pp. 359-400.

corded on the same stone—compare the case of Julius Florentinus at Mucklebank; sometimes the name of the century was on a different stone to that which recorded legion and cohort (cf. EE IX 1165 and C 522, already referred to); sometimes three different stones may have been inscribed; but it seems justifiable to suggest that where all three records occur on the same stone, that stone comes from the end of a legionary length; and when the same stone records a cohort as well as a century, that century must have been working at one end of its cohort's *pedatura*. It may be added that the same order need not necessarily have been observed throughout the building of the Wall; if work in one place progressed more rapidly than in another, the party concerned would presumably be moved on at once to the next unallotted length, and in this way centuries might change their place within a cohort, or cohorts within a legion, and a legion might be allotted two consecutive lengths. That seems the best explanation of a case such as that of Lousius Suavis, whose record from Cawfields lacks a mention of the cohort—for the two end centuries at Cawfields were those of Caledonius Secundus and Liberalis; that may be the explanation for Julius Florentinus being mentioned without cohort or legion on the stone from the same length, whereas all three are recorded on the stone from Mucklebank turret; and that may explain a problem that we shall have to face presently, in connection with the spacing of the records of Lousius Suavis in relation to those of Caledonius Secundus. But before we turn to that question, it seems desirable to recapitulate the evidence of structures for the allocation of work to different gangs when the building of the Wall was put in hand.

(3) *The allocation of work on Hadrian's frontier*: First of all, excavation has made abundantly clear—as the analogy of the Antonine Wall might have led us to expect—that the building of the running barrier of the Wall formed only one part of the whole scheme of building

operations. The forts were constructed by special detachments, some of which had completed their work before the Wall builders arrived (as at Housesteads¹⁰), while others only began work concurrently with the building of the Wall itself (as at Greatchesters¹¹) or even after the builders of the Wall had passed by (perhaps at Carrawburgh¹²). The milecastles and turrets, too, were constructed by special detachments; it has already been possible to indicate a connection between the three principal types of milecastle gateway and the three legions, since type I occurs in association with building-records of *legio II Augusta* at milecastles 37, 38 and 42, and there is an inscription of *legio XX Valeria Victrix* from milecastle 47, which has a gateway of type II;¹³ and there is evidence for the turrets falling into distinct types, presumably to be connected with the three legions, though we still lack evidence to assign a particular type to one legion or another;¹⁴ while in the central sector of the Wall, between North Tyne and Irthing, milecastle gateways and turrets have in most cases been built before the arrival of the Wall builders, as is shown by their construction to the original broad gauge, while the Wall abutting on them is narrow. But it has also been possible to show that the building of the Wall itself may be assigned to successive gangs, as well as to parties working concurrently.

The first gang was responsible for digging the ditch. It can be proved to have been the first, for at Chesters the ditch was dug before the existing fort, which projects north of it, was built;¹⁵ when the fort was built, the ditch was

¹⁰ AA⁴ x, pp. 84-85.

¹¹ AA⁴ II, p. 201; *Handbook to the Roman Wall*⁹, p. 153.

¹² Cf. *Durham University Journal* xxix, p. 96.

¹³ AA⁴ XIII, p. 272.

¹⁴ Cf. (i) the group of turrets with four-foot side walls, 12 a and b, 13 a (AA⁴ VIII, p. 323) and (ii) the turrets from 17 a to 19 b inclusive, whose doors are at the west end of the south wall (AA⁴ IX, pp. 257-258 and x, pp. 98-99).

¹⁵ AA² xxiii, pp. 11-18; Haverfield's results, described there, were confirmed by some trial excavations at Chesters in 1938 (*Durham University Journal* xxxi, pp. 160-161).

necessarily filled in; and the Wall foundation was laid after the erection of the main side gateways of the fort, as has been shown by excavation.¹⁶ It may be taken as certain that the sequence was the same at Haltonchesters: there, the relation of the fort to the Wall ditch is the same,¹⁷ but it has not yet been possible to examine the relation of fort to Wall foundation. In places the ditch-diggers had no work to do—for much of the way between milecastle 34 and milecastle 46 the crags make a ditch unnecessary; but they may well have been entrusted, in some places, with the extra task of digging ditches for the forts: not at Housesteads, for there the Wall ditch, like the Wall itself, comes up to the fort at a point that the fort-builders had not envisaged;¹⁸ very probably at Greatchesters, whose ditches belong to an earlier stage in the whole scheme than the fort itself, for it is the broad foundation short of which they stop, the narrow Wall is carried over their filled-in ends, and the fort is of one build with the narrow Wall;¹⁹ possibly as far as the southward ditches at Chesters are concerned, though those may equally well have been dug by the fort-builders themselves.

Next came the layers of the foundation; along the line of the crags they, too, had little work to do, though the recent excavations at Housesteads milecastle (no. 37) show that, where a foundation was needed—in other words, where the rock does not come right up to the surface—it was provided even on the crags.²⁰ It is obvious that the detachments assigned to the building of turrets and milecastle gateways could not start work until the foundation party had passed by, but they could set to as soon as the foundation was laid; and the difference in gauge in the central sector, already referred to, shows that their work was in fact put in hand quickly—no doubt because it was thought desir-

¹⁶ *Proceedings*, third series, x, pp. 216-217.

¹⁷ AA⁴ XIV, p. 160.

¹⁸ AA⁴ x, p. 84.

¹⁹ *Handbook*⁹, p. 153.

²⁰ AA⁴ XI, p. 106.

able to complete the chain of signal-stations as soon as possible.

Work on the superstructure followed more slowly; partly, perhaps, because there was no such need for haste, but largely because there was more work involved. That explains why the gangs concerned in this task had not crossed North Tyne, in their advance westwards from Newcastle, when the decision was arrived at to complete the job, more economically, to the narrow gauge.²¹ It follows that work on the superstructure of the stone Wall fell into two halves: first, Broad Wall—from Newcastle approximately to North Tyne; second, Narrow Wall, from North Tyne to Irthing, with the proviso that at certain points in the second half advance parties had begun work at turrets, milecastles and, we must add, the Irthing bridgehead.

As far as the western third of the Wall was concerned, only the turrets were built of stone, and they are therefore the only structures in that sector likely to produce building-records on facing-stones; we know that the milecastles, of turf and timber, were provided with building-records on wooden tablets,²² and as far as the Turf Wall was concerned we still lack evidence for the way in which its builders recorded their work, though they may be supposed to have left records similar to those recently found in the Vallum mounds at Denton.²³ But for Vallum and Turf Wall alike we must be content to await the discovery of further inscriptions, before attempting to work out the allocation of lengths to different detachments.

Confining our attention to the eastern and central sectors, we find that the milecastles have only produced legionary records: at 37, 38, and 42 mentioning Hadrian and his governor Platorius Nepos as well as the second legion, and at 47 mentioning Hadrian as well as the twentieth legion;²⁴

²¹ Cf. AA⁴ VIII, p. 312.

²² JRS xxv, pp. 17-18.

²³ AA⁴ XIV, pp. 227-237.

²⁴ From 37, C 662; from 38, probably both 660 and 661 (cf. AA⁴ XIII, p. 268); from 42, 663; from 47, 835.

elsewhere the legion only;²⁵ from this it seems justifiable to infer that there was only one milecastle detachment from each legion—otherwise a reference to cohort or century as well would have been needed. It seems possible that each detachment worked on several milecastles at the same time, or at least that the milecastles were assigned in groups to the three detachments: for the second legion is attested at nos. 36, 37 and 38—the latter pair having gates of type I and a short axis:²⁶ 36 has not been excavated, so that its gateway type is unknown, but it, too, has a short axis,²⁷ a feature that has not been noted in association with any other gateway type—while 39 and 40 have gates of type II, associated with the twentieth legion;²⁸ 41 remains to be examined, but may be expected to belong to the same group as 39 and 40; and at 42 we meet the second legion once more. At the turrets, however, no legionary record seems to have been met with, unless indeed the stone of Julius Florentinus from Mucklebank belongs to that turret itself, and not to an adjacent length of Wall; so that it seems justifiable to infer either that the turrets were all assigned to one legion (but in that case the variations in type, already referred to, would be difficult to explain), or that the turrets, while erected by special gangs, were included in the lengths assigned to the builders of the superstructure, so that the legion concerned could be ascertained, without there being any need to place a legionary stone on the turret itself.

As far as the superstructure of the Wall is concerned, the records from the eastern sector are not yet sufficient to enable us to work out the way in which lengths were allotted to legions, cohorts or centuries; and it seems wisest not to speculate whether the same principles were applied as we

²⁵ From 16, C 545 (*II Aug.*); from 36, C 622 (*II Aug.*); perhaps C 666 (*XX V.V.*) may come from 41.

²⁶ For the short axis, cf. AA⁴ VIII, p. 310; for no. 37, AA⁴ XI, pp. 103-119; for no. 38, AA⁴ XIII, p. 263.

²⁷ This is clear from the visible remains.

²⁸ Cf. AA⁴ XIII, p. 268 for no. 39 and the association with *XX V.V.*; AA⁴ VIII, p. 315 for no. 40.

may be able to recover by consideration of the more plentiful records from the central sector.

(4) *The rotation of working-parties in the central sector:* Here the principal evidence is that provided by the centurial stones already quoted in section (1) above. We will start by assuming that the stones assignable to the length mile-castle 42-turret 42 a are all records of a single legion's work: partly, because no legionary inscription has come from this length, and partly because of the way in which they interlock with one another in their occurrences elsewhere; and it will be simplest to build up our chain by examining the links eastwards and westwards from Cawfields:

(a) Julius Florentinus (*coh. X, leg. XX*) and Socellius (*coh. III*)—42-42 a and 44 b-45—in other words, these two centurions recur two and two-thirds Wall miles to the west of Cawfields.

(b) Caledonius Secundus (*coh. VI*)—42-42 a and 47-47 b; the two stones have been found about five and one-third Wall miles apart: that is to say, the interval in this case is $2\frac{2}{3} \times 2$.

(c) Gellius Philippus (*coh. unknown*)—34-35 and 42-42 a; the interval is about eight Wall miles, which gives us $2\frac{2}{3} \times 3$.

(d) Lousius Suavis (*coh. VI*)—(i) 28 b-29 and 42-42 a, an interval of thirteen and one-third Wall miles, or $2\frac{2}{3} \times 5$; (ii) 42-42 a and 48 a-48 b; here the interval is six and one-third Wall miles, and the centurion who has turned up in the same third of a mile as Caledonius Secundus at Cawfields is now about a mile further west than him (cf. (b) above).

This last instance seems at first sight to introduce a difficulty. But for it, the remaining cases of recurrence point unmistakably to two and two-thirds Wall miles as the interval separating lengths assigned to the same century, and therefore as the length assigned to a single legion multiplied by the number of legions employed (for we must leave

pen, at present, the question whether there were two or three legions working on the superstructure of the Wall in this sector). But if we recollect a point made above, that a legion might be allotted two consecutive lengths, if it happened to make more rapid progress than its neighbour or neighbours, the difficulty disappears; and we will assume that Lousius Suavis, occurring between 48 a and 48 b, denotes that the sixth cohort had been moved on, this time, only about one mile from 47-47 b (where Caledonius Secundus attests its presence) to finish off the remaining length of Wall: in other words, that their legion was entrusted with two consecutive lengths, or a complete length and the balance of less than one length, whichever it was.

The next question which we have to consider is whether the length of two and two-thirds miles was divided between all three legions, or only two of them. (i) If all three shared in the work, each legionary length will have been eight-ninths of a mile, and the change from one legion to another will in a majority of cases have come between two turrets or a turret and a milecastle: for even if we deduct the lengths accounted for by the prior construction of turrets and milecastles, in no Wall mile will they have amounted to anything like 180 yards—that is to say, one-ninth of the mile, though Housesteads fort's construction accounts for the balance in the Wall mile 36-37. (ii) It is possible, however, to suppose that, in this sector, only two legions, namely the second and the twentieth, were employed: in that case, we should get one mile and one-third as the legionary length, the change from one legion to the other may have come, on each occasion, at a milecastle or turret, and centurions attested in the same third of a mile may be assignable without further question to the same legion. This interpretation seems supported by the fact that, in this sector, only two of the three milecastle gateway types have been noted, namely those connected by inscriptions with the second and twentieth legions; and while building-records of the sixth legion are attested from Chesters fort (EE VII 1024 and prob-

ably C 595 a), Housesteads fort (C 665) and the quarry by Haltwhistle Burn (C 733, EE III 109), none have been recorded from the line of the Wall itself : but both the second and the twentieth legions occur from the line of the Wall.²⁹

But if only two legions were employed, each taking a length of one mile and one-third, we meet with a difficulty : for, assuming the length to have been divided equally among the cohorts, the first cohort, being double the strength of any of the others, should have taken four hundred yards, and each of the others two hundred yards; yet between 42 and 42 a we have at least four cohorts, III, V, VI and X, attested. It is true that with two cohorts taking four hundred yards between them, there is room for the balance to have been divided between the remaining two at either end; but it might seem easier to assume that all three legions were engaged on the work, each cohort but the first taking just over one hundred and thirty yards, and each century (except in the case of the first cohort) building something like twenty-two yards at one time; in that way there would be room for at least five cohorts (or four if *coh. I* was included) to work in the same third of a mile.

A further point seems worth mentioning, in connection with the length of some twenty-two yards that arises from a three-legion basis of allocation : the gaps in the Vallum occur usually at intervals of about forty-five yards; since the Vallum is now demonstrated to be coeval with the Wall,³⁰ the gaps (which mark its slighting) can have had no connection with the building of the Wall, as was argued in past years, notably by professor Collingwood in the note in CW² xxviii, pp. 387-388, which deserves honourable mention as the first attempt to work out the incidence of building-parties. But it may well have been that, when instructions were issued for the Vallum to be slighted, the gaps were marked off opposite points on the Wall marked by centurial stones—that would mean, that a gap was made

²⁹ *II Aug.*: C 622, 660-663; *XX V.V.*: C 666 and EE IX 1387.

³⁰ *JRS* xxvii, p. 228.

in the Vallum mounds opposite every other junction of centurial lengths on the Wall; unless the Vallum was built in equal lengths; and the centurial stones in the Vallum were taken as guides by the slighters. In either case, the interval usual between gaps in the Vallum becomes more intelligible; and in either case, it should be easier to search for fresh centurial records, without which the elucidation of the way in which work was apportioned to the different units can hardly be carried any further.

(5) *Centurions assignable to the twentieth legion*: The evidence discussed in sections (1) and (4) above seems to make it clear that a number of the centurions whose names have been mentioned may be assigned to the same legion, namely XX *Valeria Victrix*; it will be convenient to give a list of them in alphabetical order:

1. Caledonius Secundus, *coh. VI.* 42-42 a; 47-47 b.
2. Delivius —, *coh. VI.* 28 b-29.
3. Gellius Philippus, *coh. —.* 34-35; 42-42 a.
4. Julius Florentinus, *coh. X.* 42-42 a; 44 b (-45?).
5. Lousius Suavis, *coh. VI.* 28 b-29; 42-42 a; 48 a-48 b.
6. Socellius —, *coh. III.* 42-42 a; 44 b-45.
7. Valerius Maximus, *coh. V.* 42-42 a.
8. Vesuvius Rufus, *coh. X.* 47 b-48.
9. — Liberalis, *coh. VI.* 28 b-29; 42-42 a.
10. — Ostorianus, *coh. V.* 42-42 a.

There are some unusual names included in this list, and it seems worth while to examine their significance. (a) *Caledonius Secundus* might seem at first sight to be a *Lagerkind*, illegitimate son of a Roman soldier and a Caledonian woman, granted the citizenship on presenting himself as a recruit for legionary service, and promoted to centurion later; but that attractive suggestion is untenable. Wilhelm Schulze³¹ gives *Caledius* and *Caldonius* as good Umbrian names, probably derived from an obsolete *praenomen* represented on inscriptions by the *cognomen* *Caledus*: the Umbrian original means "white-face." It

³¹ LE, pp. 437, 139, 516.

is true that he assigns to *Caletius* and *Caletonius* a Celtic origin;³² but it seems simpler to suppose that those are merely variants of the Umbrian *Caledius* and *Caledonius*: at least, the example of *Caletonius* which he cites is a veteran from Carnuntum in Pannonia, *Caletonius Secundus*,³³ who must surely be a connection of our centurion *Caledonius Secundus*. (b) *Delivius* does not seem to be attested anywhere else, and as the stone is now lost, doubts might be raised as to the accuracy of the recorded reading; but Horsley's drawing (*Northumberland XXX*) inspires confidence: the only possibility of emendation which has occurred to me is that we should read 7 *Delluiana* in place of 7 *Deliviana*; *Delluius* seems easier to accept than *Delivius*.³⁴ (c) *Lousius Suavis* has a Gallic name: true, professor Collingwood has assumed its identity with the Spanish *Lovesius*,³⁵ but the name *Lousios* occurs on graffiti at La Graufesenque, where its linguistic origin is not in doubt;³⁶ Schulze records no instance of *Lousius*. (d) *Socellius* is a rare Etruscan name;³⁷ this seems to be the only instance of its occurrence outside Italy, and the man who bore it must certainly have been an Italian. (e) *Vesuvius Rufus*, too, must be an Italian; the name has no connection with Mount Vesuvius, for Schulze shows that it, too, is Etruscan.³⁸

Gellius Philippus, Julius Florentinus, Valerius Maximus, Liberalis and Ostorianus have names which need not indicate Italian origin any more than provincial; but it

³² LE, p. 22.

³³ CIL III 4411: *Marti Caletonius Secundus veter(anus) ex duplihar(io) v. s. l. l. m.*

³⁴ LE gives no example of either form; but cf. Sallius: Salluvius, which seems to justify Dellius (LE, p. 423): Delluvius. For the variation between -uius and -uvius, cf. Vesuius or Vesuvius Rufus.

³⁵ CW² xxviii, p. 387; JRS xvii, p. 213.

³⁶ Hermet, *La Graufesenque*, 1934, vol. I, p. 314; in one case it is given the Latin termination -us.

³⁷ LE, pp. 233, 444.

³⁸ LE, pp. 256, 405. It seems worth mentioning that the centurion may have been serving, nearly thirty years later, in *leg. X Fretensis* in Palestine: among the centuries named in CIL xvi App. 13, of A.D. 150, we find 7 *Vervi Rufi*: a mistake or a misreading seems possible.

seems worth noting that Delluius (if that is the correct form of the name), Socellius and Vesuvius Rufus are certainly Italians, and so in all probability is Caledonius Secundus, while Lousius Suavis is the only member of the group for whom a provincial origin is certain.

The attribution of Valerius Maximus to the twentieth legion might be questioned, because a centurion of those names is attested at Caerleon (JRS xvii, p. 213), where he must have been serving with the second legion. But the objection is not a cogent one: in the first place, the *nomen* is an extremely common one (in my index of over three thousand officers, it comes fifth in frequency after Julius, Aurelius, Flavius and Claudius), and the *cognomen* Maximus is equally colourless, so that there is no need to assume identity. But even if we do assume identity, that need not mean that the man was still serving with the second legion when he helped to build the Wall; for it happened often enough that centurions were transferred from one legion to another, sometimes from one province to another at the same time, sometimes within one province; and there are several instances of this practice applying to the army of Britain.³⁹

³⁹ The following are the instances known to me of transfers from one legion to another in Britain:

1. Audac(ilius) Romanus, C 749: vi, xx, ii.
2. Blandius Latinus, CIL xii 2601: ii, viii, xx.
3. Ti. Claudius Fatalis, *Quarterly of the Palestine Department of Antiquities*, vii, p. 54: ii, xx, ii.
4. Ti. Claudius Vitalis, CIL vi 3584: xx, xx, ix.
5. T. Flavius Virilis, CIL viii 2877: ii, xx, vi, xx.
6. C. Julius Maritimus, CIL viii 2907: vi, xx, ii.
7. Petronius Fortunatus, CIL viii 217: ii, vi (not consecutively).
8. L. Valerius Proclus, Dessau ILS 2666^b: xx, viii.
9. —, EE vii 903: ii, xx.

Another instance is probably that of M. Liburnius Fronto, who dedicated for the health of Antoninus Pius at Benwell (C 506), to be equated with *Lib. Fro., 7 leg. XX V.V., coh. IIII*, on a building-record found at Newburn (EE vii 1010); but in this case it is obvious that the transfer need not have been direct, since there may have been twenty years' interval separating the two inscriptions.