HADRIAN'S WALL: A HISTORY OF THE PROBLEM.

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The theories that have been advanced concerning the Roman Wall in England and its attendant works have been so many, so divergent, and at times so rapid in their succession as almost to justify the favourite taunt of irresponsible criticism, that their sequence is a matter of fashion or caprice rather than of rational development. Such a criticism, whether directed against historical, scientific or philosophical thought, hardly merits refutation. The object of this essay is rather to tell a plain tale, the story of the process by which, in the three centuries that have elapsed since Camden took it up, the problem of the Wall has been attacked first in one way and then in another till finally, within the last generation, a complete solution seems to have come within the range of possibility.

I have made no attempt at an exhaustive review of the Wall literature. On the contrary, I have tried, so far as possible, to mention nothing except works which seem to have made original and permanent contribution to the advancement of the problem. A history is not a bibliography. I have, however, thought it best to begin with a very short account of the chief structural remains, to serve as a kind of glossary; and to follow it with a review of the most important references to the subject in ancient writers.

§ I. THE REMAINS.

- I. The Wall. The Wall itself is a concrete structure faced with ashlar, the facing-stones being frequently cut so as to taper inwards and thus to be gripped by the concrete which was poured into them. It is laid sometimes on clay foundations, often on no foundation at all, trusting for stability to its own weight. Its length is a trifle over 73 miles from Wallsend to Bowness-on-Solway; it is in general about 8 feet thick and its original height, exclusive of the parapet which crowned it, must have been over 12 feet, but was probably not more than 16 or 18 feet. The walk along the top can hardly have been more than 4 or 5 feet broad.
- 2. The Fosse. North of the Wall, and separated from it by a flat berm about 22 feet in width, was a fosse or ditch of the normal defensive type, V-shaped, with the bottom cut out into a square-section channel. The fosse was in normal cases about 35 feet wide and 10 feet deep: where the Wall runs along the edge of precipitous rocks it is absent.

- 3. The Forts. There are seventeen of these, counting three which are not actually in contact with the Wall. They are spaced at very irregular intervals varying from 2 to 8 miles: 5 miles may be taken as a normal distance. Of those in contact with the Wall, seven are built astride of the Wall, six are attached to the southern side of its line: but of the latter, one (Birdoswald) was originally intended to lie astride of it. In size the forts run in two types: a smaller type at about $2\frac{1}{2}$ acres and a larger type at 4 or 5 acres. These two sizes no doubt correspond to the division of cohorts into cohortes quingenariae and cohortes milliariae. 1
- 4. The Milecastles. At comparatively regular intervals of about a mile small forts 70–60 feet by 60–50 feet are attached to the south side of the Wall and bonded into it. Their internal buildings seem capable of housing about 100 men; they have gates to south and north.
- 5. The Turrets. Each mile of Wall is cut into three lengths by two intermediate turrets, about 13 feet square internally and serving the combined purposes of a staircase to the rampart-walk, a signal-station and a shelter for the members of a sentry-group. There is no evidence of the existence of stairs to the top of the Wall except at forts, milecastles and turrets.
- 6. The Military Way. This runs close behind the Wall and linked up the forts in turn, passing in general through their east and west gates. A branch seems to have led off to each milecastle, and a path to each turret.
- 7. The Vallum. At varying distances behind the Wall is a 'travelling earthwork' consisting of a ditch 30 feet wide and 7 deep, flat-bottomed and therefore wholly unlike any Roman defensive ditch, the upcast from which is arranged in two mounds, each 6 feet high and 20 feet across, separated from the lips of the ditch by berms 24 feet or more in width. The whole is thus a symmetrical arrangement of mound, berm, ditch, berm, mound, in all about 100 to 150 feet across. But the symmetry is interrupted by a third mound which appears from place to place, but not everywhere, on the south lip of the ditch and is known as the 'marginal mound.' The Vallum does not reach to the ends of the Wall: it stops on the east at Newcastle, on the west at Dykesfield, just west of Burgh-by-Sands. It is thus $7\frac{1}{2}$ miles shorter than the Wall.
- 8. The Stanegate. In the rear of all the foregoing works runs a Roman road called the Stanegate, which actually touches two of the forts (Chesterholm = Vindolanda and Carvoran = Magnae) which we

I assume that Newcastle really does lie astride of the wall and Stanwix south of it, as authorities agree to be probable. That Burgh lies astride of it was proved by excavation in April, 1922.

¹ In a temporary marching-camp Hyginus allows 21,600 square feet to a cobors quingenaria, which is about 1,000 men per acre (De Munit. Castr. § 2): in permanent forts the accommodation seems to have been 200-250 men per acre. In the text

have reckoned as members of the Wall system, though they are both out of contact with the Wall itself. Elsewhere the Stanegate diverges to as much as 2 miles south of the Wall. It is known over a length of 25 miles, from Corbridge to Over Denton, and probably extended another 15 miles westward to Carlisle. On this line a number of fortified sites existed: Corbridge, Chesterholm, Haltwhistle Burn, Carvoran, Throp, Nether Denton, perhaps Watchcross, and Carlisle.

§ 2. THE ANCIENT AUTHORITIES.

This complex of works is several times mentioned by ancient writers, and their chief references to it must be briefly reviewed.

1. The Antonine Itineraries. This famous and valuable roadbook gives a great deal of information, for the most part accurate and reliable, about the topography of Roman Britain: but it tells us little about the Wall. Iter I of the British section is headed A limite, id est a Vallo, Praetorio, and runs thus: Bremenium, 20 miles—Corstopitum, 9—Vindomora, 19—Vinovia, 22—Cataracto, 24—Isurium, 17—Eboracum, etc. This list of places works out easily, from Eboracum = York, as Aldborough, Catterick, Binchester, Ebchester, Corbridge, High Rochester; from which it appears that a vallo is loosely used for the frontier system generally, since Dere Street crosses the actual Wall two miles north of Corbridge.

Iter II begins A vallo ad Portum Ritupis: Blatobulgium, 12—Castra Exploratorum, 12—Luguvallum, 14—Voreda, 13—Brovonacae, 13—Verterae, etc., which may be identified as the line Birrens—Netherby—Carlisle—Old Penrith—Kirkby Thore and thence to York. Here again the line crosses the Wall some time after its commencement.

Iter V is headed A Londinio Luguvalio (sic) ad Vallum, and takes the York-Carlisle road in the opposite direction. Here again the end of the Iter is not actually on the Wall; in this case it is a mile or so south of it.

From the Itineraries we thus get the information that when they were compiled, whether in the second or early third century, ² the Wall was in existence and was known as the *Vallum*; further, that at this time Carlisle and Corbridge and forts north of the Wall were inhabited, but that the Forth-Clyde Wall was not.

2. The Notitia Dignitatum. It may be convenient to reproduce the British army-list given in this 'Who's Who' of the later Empire.

portion of the *Itineraries*; and since the Forth-Clyde wall was built about 143, and lasted till 180, the compilation would seem to be placed in the years c. 125-c. 143. This inference was pointed out to me by Dr. Macdonald.

¹ Itinerarium Antonini Augusti, ed. Parthey and Pinder, 1848, pp. 222, 223, 227.

² The abandonment of Birrens about 180 gives a terminus ante quem for the compilation of this

SUB DISPOSITIONE VIRI SPECTABILIS COMITIS LITORIS SAXONICI PER BRITANNIAM.

Praepositus numeri Fortensium, Othonae. Praep. militum Tungrecanorum, Dubris. Praep. num. Turnacensium, Lemannis. Praep. equitum Dalmatarum Branodunensium, Branoduno. Praep. equit. Stablesianorum Gariannonensium, Gariannono. Tribunus Cohortis I Vetasiorum, Regulbio. Praep. Legionis II Augustae, Rutupis. Praep. num. Abulcorum, Anderidae. Praep. num. Exploratorum, Portu Adurni. 1

SUB DISPOSITIONE VIRI SPECTABILIS DUCIS BRITANNIARUM.

Praefectus Legionis VI. Praef. eqq. Dalmatarum, Praesidio. Praef. eqq. Crispianorum, Dano. Praef. eqq. Catafractariorum, Morbio. Praef. num. Barcariorum Tigrisiensium, Arbeia. Praef. num. Nerviorum Dictensium, Dicti. Praef. num. Vigilum, Concangios. Praef. num. Exploratorum, Lavatres. Praef. num. Directorum, Veteris. Praef. num. Defensorum, Braboniaco. Praef. num. Solensium, Maglone. Praef. num. Pacensium, Magis. Praef. num. Longovicanorum, Longovico. Praef. num. supervenientium Petueriensium, Derventione.

ITEM PER LINEAM VALLI.

Trib. coh. IV Lergorum [read Lingonum], Segeduno. Trib. coh. I Cornoviorum, Ponte Aelii. Praef. alae I Astorum [read Asturum], Conderco. Trib. coh. I Frixagorum, Vindobala. Praef. alae Sabinianae, Hunno. Praef. alae II Astorum [read Asturum] Cilurno. Trib. coh. I Batavorum, Procolitia. Trib. coh. I Tungrorum, Borcovicio. Trib. coh. IIII Gallorum, Vindolana [read Vindolanda]. Trib. coh. I Astorum [read Asturum] Aesica. Trib. coh. II Dalmatarum, Magnis. Trib. coh. I Aeliae Dacorum, Amboglanna [read Camboglanna?]. Praef. alae Petrianae, Petrianis. Praef. num. Maurorum Aurelianorum, Aballaba. Trib. coh. II Lergorum [read Lingonum] Congavata. Trib. coh. I Hispanorum, Axeloduno. Trib. coh. II Thracum, Gabrosenti. Trib. coh. I Aeliae Classicae, Tunnocelo. Trib. coh. I Morinorum, Glannibanta. Trib. coh III Nerviorum, Alione. Cuneus Armaturarum [read

¹ Notitia Dignitatum, ed. Seeck, 1876; Occid. xxviii, pp. 180-181. A list of civil officials follows.

Sarmatarum] Bremetenraco. Praef. Alae I Herculeae, Olenaco. Trib. coh. VI Nerviorum, Virosido.¹

Here we have a list of troops under the command of 'The Hon. the Count of the Saxon Shore': a second list under 'The Hon. the Duke of the Britains': and a third headed 'also along the line of the Wall.' There are many reasons for regarding this third list with suspicion. The whole British section is suspicious, because when the Notitia was compiled, about 428, the connexion between Britain and the rest of the Empire was already severed, 2 and even the first two lists cannot accurately describe a state of things then existing. The per lineam Valli list is doubly suspicious, because the troops mentioned in it bear names more reminiscent of the earlier than of the later phase of the Roman occupation of Britain; and it is possible, as certain scholars have argued (see Dr. Craster's article The Last Days of the Roman Wall, Archaeol. Journ. 1xxi, 25-44, and Haverfield's observations, Roman Britain in 1914, pp. 38-40), that this list is a survival from a yet earlier date. In any case, it gives us the names of the Wall forts from Wallsend to Birdoswald (Segedunum -Amboglanna), after which the names of the western forts have fallen out, and the list goes on in West Cumberland at Old Carlisle, Papcastle, Mawbray (?), Maryport, and so on: and it confirms what we learn from the Itineraries, that both the Wall and its supporting stations on both sides were grouped, as a district, under the general term Vallum.

The first historian to mention the Wall is Cassius Dio (flor. c. 230). Under the year 181 Dio says that 'the tribes in the island had crossed the wall which divides them and the Roman stations, and were doing much damage; they had destroyed a certain general³ and his forces, whereupon Commodus in terror sent Ulpius Marcellus against them ' (των γαρ εν τη νήσω εθνων ύπερβεβηκότων το τείχος τὸ διορίζον αὐτούς τε καὶ τὰ τῶν Ῥωμαίων στρατόπεδα, καὶ πολλὰ κακουργούντων, στρατηγόν τέ τινα μετά τῶν στρατιωτῶν οθς εἶχε κατακοψάντων, φοβηθείς ὁ Κόμμοδος Μάρκελλον Οὔλπιον ἐπ' αὐτοὺς ἔπεμψεν, lxxii, 8, Xiphiline's abridgment). This is an early and good authority for the fact that a Wall existed by the year 181: but where exactly this wall was, Dio does not say. Later he tells us that 'the Maeatae live close to the Wall which bisects the island, and the Caledonians beyond them ' (οἰκοῦσι δὲ οἱ μὲν Μαιάται πρὸς αὐτῷ τῷ διατειχίσματι ὁ τὴν νῆσον διχῆ τέμνει, Καληδόνιοι δὲ μετ' ἐκείνους, lxxvi, 12, Xiphiline). This second reference is in connexion with the year 208 and the Caledonian campaigns of Severus.

article in J.R.S. x appeared, and I have thought it best to let the above passage stand.

¹ Ibid. Occid. xl, pp. 209-212. Some emendations derived from inscriptions have been added in square brackets. A few of these are already adopted in Seeck's text.

² This paper was in type before Prof. Bury's

 $^{^3}$ I suppose $\sigma\tau\rho\alpha\tau\eta\gamma\dot{\sigma}s$ to mean Praetor, in which case the Governor of Britain is meant.

Dio thus knows of one wall existing before 181 but says nothing of its builder or of any other wall.

- 4. Herodian, a little later than Dio, gives a long description of the campaigns of Severus but says nothing explicitly about any wall: the ' $\chi \acute{\omega} \mu \alpha \tau \alpha$ of the Roman Empire' of which he speaks (Bk. III, under A.D. 211) may refer to continuous fortifications, but need mean no more than camps or forts.
- 5. Towards the end of the same century Aelius Spartianus, one of the writers commissioned to compile the biographies known as the Historia Augusta, says of Hadrian that he visited Britain and put many things straight there: he also was the first to build a Wall, eighty miles long, to divide the barbarians from the Romans (Britanniam petiit: in qua multa correxit, murumque per LXXX M.P. primus duxit qui barbaros Romanosque divideret. Vita Hadriani, § 11). Here the following points deserve notice: (a) Hadrian's work is a murus, which ought to mean a stone wall. Unqualified by the adjective cespiticius, it can hardly mean a turf wall: and in no case can it possibly mean an earthwork. (b) The length ascribed to this Wall locates it past doubt on the Tyne-Solway line. (c) The word primus implies one or more other builders of frontierwalls in Britain. (d) The word divideret suggests that the Wall was a work rather of demarcation than of defence.

Later, in his life of Severus, the same writer ascribes a Wall in Britain to the latter Emperor. The greatest glory of his reign, says Spartian, was the fortification of Britain by a wall drawn across the island to the edge of the ocean on either side: whence he also acquired the title of Britannicus (Britanniam, quod maximum eius imperii decus est, muro per transversam insulam ducto, utrimque ad finem oceani munivit: unde etiam Britannici nomen accepit. Vita Severi, § 18). Here again the work is a murus: no length is given, and stress is laid more on defence than on delimitation. A second passage in the Vita Severi refers to an incident which took place after the close of the Emperor's last campaign as 'post murum' apud vallum missum in Britannia' (§ 22). This has been translated 'after the completion of the Wall at the Vallum in Britain,' and taken to imply that Severus built (misit) a Wall where previously there had been a Vallum. This is by no means a safe inference from the passage. Casaubon, struck by the fact that certain later writers call Severus's work a vallum, proposed the emendation murum aut vallum, which has received more attention than it deserves, for such an expression is highly unnatural unless aut vallum is to be explained

commissum would be an easy and satisfactory emendation; the writer of Vit. Aurelian., 21, 2, borrows aperto Marte from Ov. Met. 13, 27; so Spartian may have borrowed committee Martem from Sil. Ital. 13, 155.

¹ The MSS. have post Maurum; it is generally assumed that murum is a safe emendation, the corruption being perhaps due to the presence of an Aethiops in the context. Professor Stuart Jones suggests to me that post Martem apud vallum

as a gloss. It is surely best to retain the manuscript reading and to interpret it in the light of the observation, made above, that *vallum* is used in the *Itineraries* and the *Notitia* to mean not the actual work but the frontier system generally: we can then translate 'after building the Wall on the frontier.'

6. Another of the same group of biographers, Julius Capitolinus, tells us that Antoninus Pius conquered the Britons by the hand of his lieutenant Lollius Urbicus, under whom the barbarians were dislodged and another wall of turf was built (Britannos per Lollium Urbicum legatum vicit, alio muro cespiticio summotis barbaris ducto. Vita Antonini, § 5). We now know with certainty that this is an accurate account of the Forth-Clyde Wall, which was built of coursed sods by Lollius Urbicus in or about the year 143. The passage contains only one difficulty: does also muro cespiticio imply that the earlier wall was of turf ('another turf wall') or not ('another wall, a turf one')? Strong opinions have been maintained both ways: but it appears safest to regard the Latin as, intentionally or unintentionally, ambiguous. To assert that Capitolinus by these words means to convey the information that the murus mentioned in Spartian's Hadrian was a murus cespiticius, would be putting a very severe strain on the language. 1

Hadrian, Pius, and Severus are thus each credited with a Wall by the writers of the *Historia Augusta*. Hadrian's Wall is probably intended by the historian to be of stone, and is certainly located on the Tyne-Solway line: Pius's is of turf and, though nothing is said about its position, we now know that it is the Forth-Clyde Wall: that of Severus is again probably of stone, and nothing is said of its position. None of the three can be a travelling earthwork.

7. About the middle of the fourth century Aurelius Victor, or the writer to whom his name is attached, ascribes a British Wall to Severus. His words are 'Britanniam, quae ad ea utilis erat, pulsis hostibus muro munivit per transversam insulam ducto utrimque ad finem oceani' (De Viris Illustribus, § 20). This passage is simply 'lifted,' with very slight verbal changes, from Spartian. It is not independent evidence but mere quotation. In Victor's Epitome (§ 20) it is somewhat altered. It now runs 'Severus in Britannia vallum per XXXII P.M. a mari ad mare deduxit.' Here a mari ad mare deduxit is recognisably ducto utrimque ad finem oceani: there is, however, one new element, the numeral 32 miles. This is in

¹ Professor A. C. Clark kindly tells me that whereas the phrase *alio muro cespiticio* would most naturally imply a previous turf wall, in a late and inartistic writer it might possibly be intended to convey the other meaning given in the text. He further points out that an easy palaeographical correction would be *alto*. This suggestion is very attractive: for Capitolinus has mentioned

no previous Wall, and it is unlikely that he would here allude to Spartian's Hadrian when Spartian himself, speaking of Severus's Wall, does not refer back to his own mention of Hadrian's; and alto might easily be altered to alio either accidentally, or purposely by any copyist who thought it clever to introduce into Capitolinus's text the allusion to Spartian.

Victor's Epitome but not in his text, not is there any sign of it having fallen out of his text. Why then is it in the Epitome? explanations suggest themselves: (a) It may represent new information, and indicate that Victor is doing more than merely excerpting Spartian. But if this is so, the additional source must have been a very bad one, for Severus certainly never built a wall 32 miles long in Britain. Even if some fourth-century writer shared with Mommsen the opinion that Severus built or repaired the Forth-Clyde Wall, the numeral is too low; we should have expected 40. (b) It seems safer to suggest the explanation that the epitomiser confused the passage of Spartian of which Victor's text was a quotation with the other, rather similar, passage from the Vita Hadriani: and that the numeral XXXII is a corrupt version of Spartian's numeral LXXX in the latter passage, to which the epitomiser had mistakenly referred. The presence of the word vallum in the Epitome is also a new element; but knowing as we do that vallum was the official name for the Wall, and indeed for the frontier as a whole, that need cause no surprise. The epitomiser substitutes the more for the less familiar word.

8. Eutropius, about 360, copies Victor, simply combining text and Epitome. 'Novissimum bellum,' he says of Severus, 'in Britannia habuit; utque receptas provincias omni securitate muniret, vallum per XXXII M.P. a mari ad mare deduxit.' Here again it is even more obvious that no independent material has found its way into the tradition. (Historiae Romanae, viii, 19).

9. Orosius, early in the fifth century, embroiders Eutropius. Severus 'receptam partem insulae a ceteris indomitis gentibus vallo distinguendam putavit. Itaque magnam fossam firmissimumque vallum, crebris insuper turribus communitum, per centum triginta et duo M.P. a mari ad mare duxit' (Hist. § 17). The italics indicate matter 'lifted' from Eutropius; the rest is not drawn from other sources, but is obviously imaginative addition, except the centum, which may be a fault in copying or an attempt to emend a numeral which seemed too low.

10. The Chronicle of Eusebius-Jerome also copies Eutropius nearly word for word, but emends the numeral as Orosius does. In 207 'Severus in Britannos bellum transfert, ubi ut receptas provincias ab incursione barbarica faceret securiores vallum per CXXXII P.M. a mari ad mare duxit.' The only alteration is that for omni securitate muniret we have the phrase ab incursione barbarica faceret securiores.

11. Cassiodorus in the early sixth century only troubles to alter one word of Eusebius. Under Aper and Maximus (A.D. 207) he has: 'His consulibus Severus in Britannos bellum movit, ubi ut receptas,' etc.

English antiquaries in general have been greatly impressed by

the cloud of authorities for the story that Severus built a Wall in Britain. 'Here,' they argue, 'are no less than six ancient writers all unanimous in ascribing a Wall—or may we not say the Wall?—to Severus. Such a mass of testimony greatly outweighs the one unsupported statement of Spartian that a Wall was built by Hadrian: and consequently it must be accepted as the first fixed point in any treatment of the problem that, whoever did not build a Wall in Britain, Severus did.'

This argument ought to be finally disposed of by the mere chronological quotation of the authorities. It must by now be clear to the reader that there are not six mutually corroborative stories such as might be cited with the preface 'The testimony of Orosius is to the same effect . . . a similar view is held by Cassiodorus' (I quote from an actual and recent book), but one story due to one author, namely Spartian, and repeated by a number of compilers whose repetition adds nothing to its credibility. The testimony of six authors for the Wall of Severus, when valued by weighing instead of counting heads, is precisely equivalent to the single testimony of Spartian for the Wall of Hadrian.

§ 3. THE NATIVE HISTORIANS.

We pass to the group of three Welsh and English writers. These are no longer primary authorities standing in the tradition of ancient historians, but belong in a sense to the modern period in that they combine a certain archaeological knowledge of the remains with a certain literary knowledge of the ancient writers, and thus produce what can only be called *theories* of the Mural Problem, precisely as Camden and his successors produced theories by a combination of elements in principle the same.

I. Gildas (517-570 according to the traditional dating) includes in his De Excidio Britanniae (xi seqq.) an account of the Roman evacuation, which runs as follows. After Magnus Maximus removed the Roman troops from Britain, the country was overrun by Picts and Scots; whereupon the Britons sent to Rome with tearful entreaties for help. Rome sent a legion which cleared the country and advised the Britons to build a Wall (murus) 'across the island between the two seas.' But the irrational mob, left without an instructor, built it not so much with stones as with sods, so it was no use. The legion went home and held a triumph, and the Picts and Scots came on again with whetted appetites. Again the Britons applied tearfully to Rome, and again an army came over, whose campaigns are rhetorically described but not easy to reconstruct from the narrative. It would appear, however, that naval warfare played an important part in them. The Romans once more went home

to a triumph, explaining that they could not undertake to repeat these expeditions indefinitely; but before they went they built a proper wall, solito structurae more, from sea to sea between cities which had already been built there for defence, and also a series of forts along the south coast. However, the Britons were quite incapable of manning these fortifications: when they tried to keep watch on the top of the Wall they got frightened and were easily pulled off it by the grappling-irons of the enemy. Thus Britain was finally overrun and ruined by the Picts and Scots.

There is much of interest in this narrative, which space forbids us to analyse in detail. It represents an indigenous Welsh tradition, and not a further development of the narratives of ancient historians; for in spite of some verbal resemblances (e.g. the phrase a mari usque ad mare) which may well be accidental, it seems to owe nothing to the Latin literary tradition. Gildas knows of two Walls, a turf Wall and a stone, in the north, and of the Saxon Shore forts in the south. It is highly probable that his turf Wall is the Forth-Clyde work and not the Vallum, which in the absence of excavation could hardly be distinguished from a turf work: at any rate, that is how Bede interpreted him. He knows of the adventure of Maximus, and of the alternate desertion and reoccupation of Britain by the Roman armies that marked the years 383-407. But it is wholly impossible to reconcile his account of the origin of these Walls with the testimony of the ancient historians. If Spartian and Capitolinus already before 300 knew of three British Walls, Gildas's ascription of their building to the fourth and fifth centuries can only mean that the Welsh tradition on which he was relying had utterly forgotten the events of the second and third centuries.

2. With Bede (flor. 700–750) we move to a much higher plane of thought. Bede was a scholar and a scientist, an educated and trained mind such as we should expect in the leading intellect of the Anglian kingdom at the time of its most brilliant blossoming. Bede's Chronicon sive de Sex Aetatibus Saeculi is a compilation, and merely repeats Eusebius: but his Historia Ecclesiastica Gentis Anglicae is history. Here he propounds a theory of the Wall or Walls based on three sources: Latin historians, Gildas, and archaeological knowledge of the remains. The crucial passage is a quotation from Orosius (not by name). Severus, says Bede, 'in Britannias defectu pene omnium sociorum trahitur, ubi magnis gravibusque proeliis saepe gestis receptam partem insulae a ceteris indomitis gentibus non muro ut quidam aestimant (italics mark Bede's own addition) sed vallo distinguendam putavit. Murus etenim lapidibus, vallum vero, quo ad repellendam vim hostium castra muniuntur, fit de cespitibus; quibus circumcisis e terra velut murus exstruitur altus supra terram ita ut in ante sit fossa de qua levati sunt cespites, supra quam sudes de lignis fortissimis praefiguntur.

etc., continuing the quotation from Orosius (Hist. Eccl. G. Angl., Here, then, Severus is described as drawing a turf wall across Britain, which is equated on the one hand with the vallum ascribed to him by Orosius and on the other with the earthwork which we still call the Vallum. This Bede thought was the relic of a turf wall: and without skilled excavation he could not be proved wrong. Under the year 410 (sack of Rome) he tells us that henceforth Roman rule in Britain ceased. Now the Romans, he goes on, lived within the vallum which we have said that Severus made across the island, as far as the south coast: which is testified by the cities, lighthouses, bridges and roads which are there to-day. Here one observes how, living as he did at Jarrow, Bede was fully alive to the archaeological meaning of the remains in the neighbourhood. (What lighthouses has he in mind? Was there a Roman lighthouse at Tynemouth?) He then goes on by quoting Gildas. The first British appeal he dates to 414, and the resulting turf wall he places on a line 'beginning two miles west of the monastery of Abercurnig (Abercorn on the Forth) in a place called by the Picts Peanfahel (Kinneil), by the Angles Penneltun, going westward to terminate near the city of Alcluith' (Dumbarton). The second embassy is dated 416, and the stone wall was built 'of strong stone' where Severus had of old built his vallum.' Which wall, Bede adds-putting a comment of his own into the excerpt from Gildas as he had done before into that from Orosius—is to this day famous and conspicuous, being eight feet thick and twelve feet high (Hist. Eccl. G. Angl., I, xi-xii).

Here we have the first complete Mural theory, with a reasoned account of the Vallum, the Stone Wall and the Scottish Turf Wall. It is a fine piece of historical work, and worthy to stand alongside of the artistic and literary achievements of the Anglian kingdom—a kingdom cut off, not long after Bede wrote, by a scourge no less terrible than the Pictish and Scottish invasions as Gildas describes them. Such a level of historical thought was not reached again, in connexion with our problem, for eight and a half centuries.

3. Nennius, if that is the best name by which to refer to the author of the Historia Brittonum, left a wild compilation of legend and myth, dating from the ninth century, which contains reminiscences of historians. Severus, he says (§ 19), built 'murum et aggerem, ut receptas provincias ab incursione barbarica faceret tutiores,' and so on from Eusebius: characteristically hedging as to whether Severus built a stone wall or a turf one, by stating that he built both. It ran, says the author, from Pengaaul, anglice Penneltun, to the mouth of the Clyde and Cairpentaloch (Kirkintilloch, which is an alteration of Bede for the worse). It was rebuilt by Carausius and fortified with seven castles. The last sentence may possibly refer to a fact: Carausius does seem to have reorganised the defences of the frontier, though not on the

Forth-Clyde line. 1 Otherwise Nennius is merely garbling Eusebius and Bede.

§ 4. THE PERIOD OF SURFACE INSPECTION.

Antiquarian study in England reawoke with some suddenness in the reign of Queen Elizabeth, and centred round the figure of William Camden. Camden, like Shakespeare, had his forerunners, and one or two people described the Wall before he went there. An interesting description of about 1572, by Sir Christopher Ridley, is extant (Hodgson's History of Northumberland, vol. iii, pt. ii, p. 273). Sir Christopher² describes the existing remains as three yards thick and seven yards high in places, which is certainly an exaggeration; he gives a rather obscure description of the great forts, which he says occur at intervals of a mile, with 'towers' at the half-miles, and records the legend, repeated by Camden and still current in the district, of a concealed brass speaking-tube inside the Wall. He notes 'four great ditches' parallel to the Wall (the Vallum) and a 'fair paved way all along the wall' (the Military Way).

Camden, in the course of his archaeological survey of Britain, reached the Wall in 1599.3 He travelled along its course from Bowness-on-Solway eastward, trying as he went to identify the sites mentioned in the Notitia and the Itineraries. These attempts were not successful, because the principle he adopted was that of looking for resemblances between modern names and Romano-British names (Bowness = Blatobulgium: Brampton = Bremetenracum: Corbridge = Ptolemy's Curia: Prudhoe = Procolitia: Ponteland = Pons Aelii: Borwick = Borcovicus: Winchester = Vindolana: Tynemouth = Tunnocelum, etc.); in one case, Birdoswald, he hit upon the right method, for seeing here inscriptions of the First Cohort of Dacians he remembered the Notitia entry and identified the site as Amboglanna. From Thirlwall to the North Tyne he did not follow the Wall, for this region was infested by mosstroopers and unsafe for travellers: he heard of a great fort in this section called Chester in the Wall, but could not visit it. It has been thought that Chester in the Wall was Housesteads; but the only evidence for this in Camden's text is that he says the station was a large one, 4 and it is quite certain that the name Chester

¹ See for example the unworn brass of Carausius, dating before 289, dropped at Castlesteads (C. & W. Trans. N.S. xxii, pp. 204, 229).
² 'Sir' of course indicates the status not of a

^{2&#}x27; Sir' of course indicates the status not of a knight but of a Bachelor of Arts. Ridley was a local clergyman.

³ Camden, Britannia: The early editions, e.g. ed. 2 (1587), pp. 532-543, give his views before visiting the remains; ed. 5 (1600), pp. 710-724, gives the fruits of his visit. There is some conflict of evidence as to whether Camden visited the Wall

in 1599 or 1600. But (a) there is no doubt whatever that Camden was in Cumberland in 1599, (b) if the journey was in 1600, it was late in 1600 (so Wood, followed by Gibson and Gough), which makes it difficult to see how the results could have appeared in the 1600 Britannia.

⁴ Camden heard of forts at 'Iverton, Forsten, and Chester in the Wall': the addition 'near Busy Gap' is not in his original text of 1600, and even if it were, it would be too slender a foundation for identifying that site with Housesteads in face

in the Wall was attached to the station we now call Great Chesters (= Aesica): that therefore is doubtless the site of which Camden was told.

Camden distinguished the Wall from the Vallum, and regarded the former as superseding the latter. This he combined with the evidence of the ancient authors already quoted into the following theory.

- (a) Hadrian constructed the Vallum, an earthwork eighty miles long reinforced by palisades (a type of work ascribed to Hadrian in another passage of Spartian: 'in plurimis locis in quibus barbari non fluminibus sed limitibus dividuntur, stipitibus magnis, in modum muralis sepis funditus jactis atque connexis, barbaros separavit.' Vita Hadr. § 12).
 - (b) Pius later built the Scottish turf Wall.
- (c) Severus built the existing stone Wall on the line of Hadrian's earthwork.

This theory, admirable in its simplicity at first sight, ingeniously interpreting one passage of Spartian by another and identifying the three visible works with the three Walls of Spartian and Capitolinus, gave a firm starting-point for all later work. Little by little it was undermined, as every new discovery revealed further difficulties in it, till now it is finally dead. But its death was an unconscionably slow one and took over two and a half centuries.

The seventeenth century, the century of mathematicians, physicists, and astronomers, did little or nothing to follow up the great outburst of historical energy which had immediately preceded it. No one really went on with Camden's work for a hundred The eighteenth century, which was to produce Hume and Gibbon, Macpherson's Ossian and Percy's Reliques, Lessing and Herder, and to lay the foundations of modern scientific history, was heralded by the new edition of Camden's Britannia by Gibson, a north-country bishop of London. In 1708 and 1709 Gibson travelled the whole length of the Wall except the part west of Carlisle, and brought to bear on the remains a new accuracy which produced valuable results. His errors are hardly ever mistakes of observation; though at times he misquotes the Notitia or misunderstands what local people tell him, his field work is good. a theorist he is far behind Camden. The Vallum he decomposed into two parts, which he calls the mud or earthen walls of Adrian

of the certain use of the name for Aesica. No commentator, so far as I know, has identified Iverton and Forsten: but Everton is the ruined farm half a mile west of Chesterholm, and Forsten is obviously Fourstones. 'Iverton and Forsten' are therefore Chesterholm and the prehistoric camp on Warden Hill: unless there was a Stanegate fort, which has now disappeared, near Newbrough. Mr. F. G. Simpson tells me that a fort is marked

there on an early map. Camden's informant knew the line of the Stanegate, not that of the Wall; this is, of course, what we should expect.

¹ Gibson's Camden, ed. 3 (1753), vol. ii, 1051–1060. Bruce (*Handbook to the Roman Wall*, p. 2) seems to imply that the writer of this article is not Gibson himself: I do not know on what grounds. Gibson's ed. i is 1695.

and Severus: for the stone wall he seems to accept the story of Gildas and Bede. The two parts of the Vallum which he seems to distinguish are probably the southern and marginal mounds, because he says that it has a deep trench everywhere to the north, which indicates that the fosse is the northernmost member of the Vallum recognised by him. Hence one infers that Gibson failed to observe the northern mound, and this failure was perhaps due in part to the preconceived opinion that the Vallum was intended as a defence against the north. For, if that was its design, the northern mound could only be a source of weakness.

Gibson's detailed description is a great advance on anything that preceded it. From Carlisle to Benwell he sees, and describes with fair accuracy, every fort except Halton Chesters: he is the first antiquary to describe Aesica ('Chesters'), Borcovicium (which by a misquotation of the Notitia he identifies as Bremeturacum), Vindolanda ('Little Chesters') and Procolitia, as well as Sewingshields, which he took for a Roman site. He also describes the fosse of the Wall and the milecastles; and his measurements are throughout valuable. Camden says that he saw pieces of the Wall 15 feet high, which may be an exaggeration, for he ascribes the same height to the monolith of Long Meg, which is really 12 feet: Gibson gives the maximum as 'near three yards high,' in the neighbourhood of Carvoran. It is more than possible that during the seventeenth century the highest parts of the Wall really were much reduced, very likely from 12 feet or more to 9 feet or less.

In 1725 Gibson was followed by Stukeley, an antiquary of a different type: enthusiastic, prone to hyperbole and conjecture, fanciful, and yet not devoid of imaginative insight. His *Itinerarium Curiosum*, published in 1776, contains the first sketches of Wall sites; and crude as these are, they have a certain value. His plate of Aesica, or as he calls it Chester on the Wall, clearly shows the rounded north-west corner of the fort with the Wall abutting against it as if a later addition to a previously existing fort: and that of Housesteads, in spite of the childish presentation of the wild land-scape, has an impressive foreground of altars and sculptures half-buried in the soft soil of the valley.

Stukeley adopts Camden's theory of the works; but it is a curious fact that no one with any claim to authority has ever found himself able to take over Camden's theory just as it stands. Camden did not think out the structure of the Vallum in detail; and no one who does so can identify it, in its entirety, with Hadrian's or anybody else's defence against the north. The presence of the northern mound, supplying cover for an enemy advancing from that side, and the position of the Vallum, which runs, over large sections of its

¹ Itincrarium Curiosum, Centuria ii, pp. 55-68.

course, at the foot of a south-facing slope, combine to make such an explanation impossible. Stukeley appears to have noticed only the ditch and north mound, 1 and this suggested to him that the work was a defence against the south. 'It might possibly,' he says, 'be Hadrian's work, but must be called the line of contravallation; for in my judgment the true intent both of Hadrian's vallum and of Severus's wall was in effect to make a camp extending across the kingdom; consequently it was fortified both ways, north and south. At present the wall is the north side of it, that called Hadrian's work' (called, that is, by Camden) 'the south side of it: hence we may well suppose all the ground of this long camp comprehended between the wall and the southern rampire was the property of the soldiery that guarded the wall.' The idea of a single camp extending from sea to sea is a bold flight of imagination, which deserved all the popularity it was later to achieve. It became—a good deal softened down, it is true—a cardinal feature in the 'Hadrianic Theory' of the nineteenth century, and is still repeated by one or two writers with whom picturesqueness perhaps outweighs historical accuracy. Bold as it was, Stukeley's conception rested on a mistake: he failed to see the southern members of the Vallum. Moreover, his easygoing mind never even attempted to reconcile his new suggestion with the view, which he accepted from Camden, that the Vallum was Hadrian's and the Wall Severus's. It would be a strange thing if the southern edge of the great camp was made eighty years before the northern.

In other ways Stukeley is fantastic. He holds that the Wall was 90 miles long, and was divided into 10-mile lengths by ten great forts, each linked to the next by six minor forts (milecastles). This scheme is, of course, quite imaginary. But his imagination is sometimes better employed. Why, he asks, was the Wall built on the north side of the Tyne valley? 'To afford sustentation,' he replies, 'for the troops, that they might cultivate it and build towns near, and live easy and think themselves at home.' That shows insight into the life and mind of the Roman Imperial army.

Alexander Gordon, whose *Itinerarium Septentrionale* was published in 1726, adds little or nothing to the description of the remains; but he achieved one great feat. By collating the names of regiments mentioned in inscriptions found at the various Wall forts with the *Notitia* list, he established the fact that this list begins at the east coast, and gives the names of stations down to Birdoswald.³ In

^{1&#}x27;There is a vallum and ditch . . . studiously chusing the southern declivity of rising ground. I observe, too, that the vallum is always to the north.' This evidently implies that the vallum in question is the north mound, and that the other two escaped Stukeley's attention (op. cit. p. 59).

² Ibid. p. 67. ³ Op. cit. ch. viii-x; the sites which Gordon can claim as proved by inscriptions are Carrawburgh = Procolitia, Housesteads=Borcovicium, Chesterholm=Vindolanda, and Birdoswald=Amboglanna (p. 83). Benwell is the easternmost fort which he actually saw.

these identifications, Gordon made only one error. The fort at Halton Chesters had not yet been discovered. Gordon therefore evidently argued thus: we have the six sites Wallsend, Newcastle, Benwell, Rutchester, Chesters, Carrawburgh: and the seven names Segedunum, Pons Aelii, Condercum, Vindobala, Hunnum, Cilurnum, Procolitia. Procolitia, by inscriptions, is Carrawburgh. There is therefore an undiscovered fort east of Carrawburgh. Where is it? Gordon placed it between Carrawburgh and Chesters, giving the unknown fort the name of Cilurnum, and Chesters the name of Hunnum. Here he showed himself a bad field antiquary. The intervals between his six known stations are $3\frac{1}{2}$, 2, $6\frac{1}{2}$, 12 $\frac{1}{2}$, and $3\frac{1}{2}$ miles, so that even in the absence of highly accurate maps he ought to have noticed that there was an enormous gap between Rutchester and Chesters, and that therefore the missing station must be first sought somewhere between Harlow Hill and Portgate. By failing to see this, Gordon missed the glory of a find which would have been as creditable, in a small way, as the discovery of Neptune.

The whole period from Camden to (say) 1800 culminates in the work of Horsley. To John Horsley, Congregational minister at Morpeth, still belongs the glory of having written the one exhaustive work on Roman Britain. For his period Horsley is as indispensable as Gibbon for his; and, bearing in mind the difference between the extent of their fields, Horsley is Gibbon's equal. With him we feel that we have emerged from a tentative and amateurish, a prescientific, study of the subject, in which grave oversights and fundamental errors are expected and pardoned, into an age of clear thinking, where problems are faced and evidence mustered in a scientific spirit. The eighteenth century in him, as in his contemporary and neighbour David Hume, reaches maturity. It is impossible here to give any idea of the wealth of detail and richness of thought contained in the *Britannia Romana*; we must be content to outline Horsley's theory of the Wall. 1

This is a modification of Camden's. From Tacitus Horsley accepts the story that Agricola surrounded the districts which he conquered with chains of forts: such a chain, he thinks, must have traversed the Tyne gap, and its members are the forts of the Wall. From Spartian he learns that Hadrian built a barrier, which he identifies with the Vallum: from Spartian and the rest, that Severus built another, namely the Wall. But Horsley, studying the remains in detail, saw that the Vallum as it stands cannot ever have been planned as a defence against the north. Take away its north mound, and it at once becomes a defensible earthwork; therefore, says Horsley, the north mound is not part of the Vallum. What is it? It is Agricola's original military way, linking up the stations.

¹ Britannia Romana, 1732: pp. 98-158.

This theory is a triumph of ingenuity, and the further ingenuity with which it is defended against obvious objections is no less remarkable. But the objections are not really removed: and not all Horsley's skill convinces us that Hadrian, for whatever reason, would have built his defences in rear of the road which they were to defend. Even before modern excavation proved that no member of the Vallum was ever a road, Horsley's theory was condemned by its own impossibility. And yet it was the best available, granted his presuppositions. A less clear-headed man would not have been driven to invent so absurd a theory, because he would have ascribed the whole Vallum to Hadrian without realising that no sane engineer could possibly have constructed it for the purpose in question. It was only Horsley's grasp of the military uselessness of the complete Vallum that drove him to the disastrous course of decomposing it into an earthwork and a road. Thus with Horsley the original theory of Camden reached breaking-point. It became clear that the method of surface inspection, combined with uncritical acceptance of the literary authorities, could be pushed no further. The method had reached a point where it only produced absurdities, and further thinking along the same line was useless. So far from removing difficulties, it was multiplying them. If the problem of the Wall was to be solved an absolute break was necessary: a new method must be devised and the problem approached with a fresh eye from a different point of view.

Horsley's immediate successors did not see this: they only saw that he had exhausted the subject. Accordingly they hardly attempted to do anything except quote him. Gibbon mentions him with admiration in a footnote, and shows his judgment by suggesting that even Horsley has not got to the bottom of his problem: others simply quote him, with or without acknowledgment. latter kind is Warburton, who produced a quarto entitled Vallum Romanum in 1753. Warburton was a surveyor who had worked in the field with Horsley, and enjoys an immortality like that of the person who burnt down the temple at Ephesus: for he was the man by whose advice the Wall was destroyed, in order to build General Wade's Military Road along its foundations. Happily, the lie of the land westward from Sewingshields made it necessary for the road to diverge from the Wall, and to that we owe the preservation of what is left. Warburton was not only a vandal but a plagiarist. The work to which he signed his name consists of a number of chapters copied verbally out of Horsley, a number of plates which are Horsley's redrawn on a smaller scale, and a preface which mentions Horsley as a cross-grained and egotistical person. But it also contains Warburton's own map of the Wall, which is in many ways superior to that contained in Horsley's work.

In 1789 appeared Gough's new edition of Camden in three folio

volumes. Here again everything is Horsley: he is simply transcribed, with proper acknowledgment, and without any alteration except a few copyist's errors and a few emendations not always for the better: for instance, the mistaken guess that Camden meant Housesteads when he spoke of Chester in the Wall. And the epigoni of Horsley may be brought to a fitting close with the lovable though rather ridiculous figure of John Hutton; lovable and indeed worthv of all veneration for the enthusiasm which led him, at the age of 78, to walk 601 miles in thirty-four consecutive days in the summer of 1801 for the sake of seeing the Wall from end to end, ridiculous in his wildly amateurish archaeology and the sententiously philosophical reflexions on life with which his notes of travel are garnished. His journey itself is in more than one way remarkable. From his own front door at Birmingham, with no luggage but a wallet of maps and a green umbrella, he walked solemnly, observing as he went, to Warrington, Liverpool, Preston, Lancaster, Hest Bank, across the sands of Morecambe Bay, Cartmel, Newby Bridge, Bowness, Ambleside, Kirkstone Pass, Úllswater, Penrith, Carlisle; down to Bowness-on-Solway and thence straight along the Wall to Wallsend and back to Carlisle, and so home over Shap Fell: and we have the signed testimony of his daughter Catherine that when he got home his shoes were as good as when he set out, and he had scarcely made a hole in his stockings. He prides himself on being the first, and, he expects, the last, to travel the line of the Wall from end to end.

Like every one else, Hutton was defeated by the Vallum: but he was not the man to confess defeat. He assumed that the south mound was the work of Agricola and the other two of Hadrian: and he got over the difficulty of the relative position of mounds and ditches by simply imagining a ditch wherever there ought to be one, namely on the north of each mound. His sunny temperament was unclouded by the torments of doubt and self-criticism, and he remains a perfect type of the amateur antiquary.²

§ 5. THE BEGINNINGS OF EXCAVATION.

The attempt to construct a theory from the literary evidence supplemented by surface inspection had, as we have seen, broken down. Horsley, its greatest exponent, had failed, and failed so brilliantly that his successors could do nothing but jump blindly into the slough where he had foundered. It remained for another Northumberland man, a local and clerical antiquary like Horsley, to open up a new path.

In 1840 the Reverend John Hodgson published the part of his

¹ Second edition, 1806, in four volumes: see ² The History of the Roman Wall: ed. i, 1802: of this ed. vol. iii, pp. 467 seqq. ed. 2, 1813.

History of Northumberland which, under the parish of Haltwhistle, contains an incidental account of the Roman Wall. I call it incidental, because such is its relation to the structure of Hodgson's splendid work: but in itself it contains matter enough for a complete book on the Wall, or rather on its Northumbrian portion. Indeed, its inclusion in volume iii of part ii of the general History buried it so effectively that with the public its author got little or no credit for the novelty of his views.

Hodgson not only gives an excellent description of the remains in detail, based on personal inspection and excavation, but puts forward in a complete and henceforth final form a new theory, known to posterity as the Hadrianic Theory. It starts as Gordon had started, from the study of inscriptions. In certain milecastles slabs had been found bearing the name of Hadrian and recording the erection of buildings under his legate Aulus Platorius Nepos. These prove, says Hodgson, that Hadrian built the milecastles and therefore the Wall. For the milecastles have nothing to do with the Vallum: they are of a piece with the structure of the Wall. The Vallum must therefore be explained, and Hodgson explained it as a defence against the south, much as Stukeley had done: but it was meant to defend, he thought, not a great continuous campa palpable absurdity—but simply the communications from fort to fort. As for the forts themselves, Hodgson saw, in cases where examination was possible, that they had been built before the Wall: for their own ramparts are complete in themselves, and the Wall, with its different style of building, merely abuts against them. But this he explained by suggesting that the forts were built by skilled labour, the Wall at the same time by unskilled, the priority of the one to the other being thus accidental. Agricola, he thinks, may have built earth forts on some of the Wall fort-sites, but not the existing stone forts. His road Hodgson identifies as the Stanegate.

This theory was warmly taken up by an able and energetic group of local antiquaries, of whom the leaders were John Clayton and John Collingwood Bruce. Clayton, the owner of Chesters, devoted both his wealth and his scholarship to the study of the Wall, which indeed he 'collected' by systematically buying up the land on which it stood, as opportunity offered, and excavating what he bought. It was, of course, not what we call scientific digging. That had not yet been invented. It was pioneer work, and inevitably destroyed much evidence which to-day would be valuable: for Clayton's main object was only to clear the chief walls and to collect inscribed stones. As this work proceeded, the Hadrianic Theory solidified. More records of Hadrian and Platorius Nepos were found, and the absence of any lapidary record of Severus became

¹ Op. cit. Part ii, Parishes: vol. iii, pp. 149-322. This essay was also, however, printed separately.

more and more striking. The plans of forts and of their gateways and main buildings began to be laid down, and the same attention was bestowed upon milecastles. Bruce devoted himself to the description, in a more elaborate way than had been hitherto attempted, of the entire Wall and to the popularising of Hodgson's theory. His book on The Roman Wall, in its successive editions, and the even more numerous editions of his Handbook (originally Wallet-book) to the Roman Wall² have scored a popular success: but it is only just to remember what Bruce himself often insists upon, that the views expounded in these works are due not to Bruce but to Hodgson, and that Bruce never in any considerable way modified Hodgson's original theory.

Another man of the same school was Anthony Hedley, who owned and excavated the fort of Chesterholm (Vindolanda). His sudden death, of a chill caught while digging, put an end to his work, and all his results perished with him.

The Hadrianic Theory was faced with two great difficulties. It threw over the testimony of those ancient writers who ascribe a Wall to Severus (for the most it could allow was that Severus repaired Hadrian's Wall) and it had to make good its explanation of the Vallum as a defence against the south. The first difficulty was, in point of fact, an index of the strength of the theory: the real advance made by Hodgson was precisely the abandonment of an uncritical faith in a string of bad historians, and the attempt to check written history by archaeological evidence. But antiquaries were not very quick to see this, and a crowd of pamphleteers 3 raised their voices in horror at the disrespect shown by Hodgson (or rather, Bruce: for it was Bruce's work that came to their notice) to a whole galaxy of real literary historians. A controversy of the usual kind, in which personalities gradually superseded arguments, followed: we need not burden ourselves with its details. The second difficulty, less zealously exploited by the controversialists, was the rock on which the Hadrianic Theory finally split. Horsley had already shown that the Vallum could not be regarded as a satisfactory defence against the south, and that was a matter of which more was soon to be heard.

During this same period, the middle of the nineteenth century, a few other works call for remark.

Henry Maclauchlan, employed by the fourth Duke of Northumberland to make a large-scale survey of the entire Wall, published his maps and a 'memoir' in 1857–58.⁴ The work is one which it is impossible to praise too highly. As a description

¹ Ed. i, 1851: ed. 2, 1853: ed. 3, 1867 (greatly enlarged).

² Ed. 1, 1863. Ten editions have appeared.

³ As a specimen we may mention the Rev. J.

Maughan of Bewcastle: Mural Controversy, by A Cumbrian: 1857.

⁴ The Roman Wall (atlas) 1857: Memoir, 1858 (both privately printed).

of the visible remains it is unrivalled, and no one can study the Wall without constant reference both to the maps and to the volume of text. Maclauchlan made certain observations which he thought told against the Hadrianic theory. In three places he noticed that the Wall almost impinges on the Vallum, in such a way as to suggest that the Vallum was there first, because otherwise it would have bent parallel to the Wall so as to keep its normal distance: in two places he thought that the Wall turned so as to avoid the Vallum. All these five cases seemed to him only explicable if the Vallum existed before the Wall. But Maclauchlan makes no parade of putting forward a theory; he simply states facts, observed with incomparable shrewdness, for theorists to explain.

In Mommsen's Provinces of the Roman Empire (Römische Geschichte, v., 1885) a historian of world-wide fame for the first time attacks our problem. Mommsen, with his gigantic historical knowledge and passion for facts, seems to move among local antiquaries like a whale among minnows; and one looks at his discussion of the matter somewhat eagerly, to see how far his superior critical faculty improved on the work of the local antiquaries hitherto discussed.

He adopts the Hadrianic theory without reservation, and never even hints at any inadequacy on the part of the Vallum to act as a southward defence. But that may be due to his idea of its proportions: for, by an extraordinary error never corrected in either the German or the English edition, he gives its total width as 24 feet (we have seen that it is 100-150 feet) while giving the height and depth of its chief members correctly: which, of course, implies that the sides of the earthworks are perpendicular and therefore, however ill-planned, impassable. In one other way he departs from Bruce. Remembering that Aurelius Victor's Epitome describes the Wall of Severus as 32 miles long, Mommsen identifies this work as a reorganisation not of Hadrian's Wall but of the Turf Wall of Pius. This conjecture, which no British student has ever felt able to adopt, has nothing in its favour except Victor's numeral, and even that does not really fit: but when Mommsen wrote, the archaeological evidence which definitely proved it false was not yet available. His detailed argument on behalf of his theory can hardly be passed over in silence. Beside the numeral in Victor, he makes the following points. (1) The remains on the Turf Wall, he says, are too bulky to be accounted for by a short second-century occupation. That is a merely a priori argument, and turns out wrong; and it ought in any case to have been combined with the observation that every single datable relic, of which even in 1885 there were plenty, belonged to the Antonine age. (2) A restoration of Hadrian's Wall could not be

¹ German ed. pp. 169-171: Eng. tr. vol. i, p. 186-188.

spoken of as a new building, whereas a restoration of the Antonine Wall could, because this was a turf wall. He doubtless means that a turf wall would in a given time be more completely obliterated than one of stone; but the argument is quite inconclusive. (3) Dio, he says, places the Maeatae 'in front,' i.e. south of the Wall, therefore the Wall of which he is speaking is the Turf Wall, therefore the Turf Wall was still in commission in Dio's time and therefore it was reorganised by Severus. But the phrase in Dio (lxxvi, 12) is $\pi \rho \delta s$ $a\dot{v}\tau\hat{\omega}$ $\tau\hat{\omega}$ $\delta\iota\alpha\tau\epsilon\iota\chi\iota\sigma\mu\alpha\tau\iota$, where $\pi\rho\delta$ s has its ordinary meaning of 'near,' and it is hard to see the point of Mommsen's translation unless he is momentarily confusing $\pi\rho\delta$ s with, or silently emending it to, $\pi\rho\delta$. (4) Finally he asserts that the Antonine Itineraries, by vallum, mean the Antonine Wall; which is an error of fact even more astounding than that concerning the width of the Vallum (Germ.

p. 170, Engl. p. 187). 1

Lastly we must mention a small but valuable pamphlet by Dr. George Neilson, entitled Per Lineam Valli (1891). The author sees that the Hadrianists have proved their point so far as the Wall goes, but that they have failed over the Vallum. He therefore undertakes a close and accurate study of the Vallum, stating the difficulties which it presents to the current interpretation. He lays stress on the fact, which since he wrote no competent authority has attempted to deny, that the Vallum as it stands cannot possibly be a defence against anything whatever, because from whichever side you defend it, it is more of a hindrance than a help. Another explanation is necessary: and Dr. Neilson suggests that the Vallum is composite, that in fact it is two works facing opposite ways but incomplete. First, the fosse and south mound were made and reinforced by palisades for defence against the north while the Wall was in building. Then, when the Wall was finished, the idea was conceived of turning the Vallum round as a defence against the To that end the north mound was thrown up, the palisades were moved across the ditch, and it was intended to raze the south mound, but this design, for some reason, was never carried

It is a cautious, sane and scholarly little work, packed with good observation and good thinking: but its method is inadequate to the solution of its problem. Nothing but scientific excavation could show whether the two mounds were really of different dates, and whether the palisades which had to be postulated had ever existed. On both these points Dr. Neilson's conjectures were soon to be disproved.

neueste Limesforschung (Klio, vii, 1907, pp. 73-121), seems to rely entirely on Krüger for his knowledge of the British Limes.

¹ A later and almost equally unsuccessful German attempt to review the subject is that of Kruger in Bonner Jahrbücher, cx. It is to be regretted that Kornemann, in a comprehensive paper on Die

§ 6. THE PERIOD OF SCIENTIFIC EXCAVATION.

The upshot of the fifty years from 1840 to 1890 was that Hadrian built the Wall, but that the Vallum remained an unsolved riddle. From Dr. Neilson's work at the end of the period this conclusion emerged with perfect clearness, and it became obvious that new methods were necessary before further progress could be made. The problem now before the investigator was the problem of the Vallum, and this is the central problem of the next ten years.

But there was another problem. Clayton's excavations had already shown that the forts along the Wall had been, in certain fairly uniform ways, repaired, rebuilt or remodelled. In particular, gateways had been partially or entirely blocked up, or the roadways through them relaid at a level above that of the original thresholds. This problem, the problem of reconstructions, was taken up in a special sense by John Pattison Gibson of Hexham. In 1891 Gibson discovered and dug the turret on Mucklebank, a basalt crag near Carvoran. In it he found three floors, one above another, with a foot or so of burnt matter and rubbish between them. This he took to indicate that the turret had been thrice built and thrice destroyed: and henceforth the crucial problem in connexion with the wall was, not simply to date its original construction, but to date a whole series of destructions and reconstructions. As usual, the problem seemed to be getting more and more desperate when in fact an approach was being made to its solution. 1

In 1894, 1895 and 1897 Gibson continued his diggings at Great Chesters, where again he found three main occupations and was able to connect them with remodellings of the gateways such as Clayton had already discovered. The problem of reconstructions was thus well under way.

The problem of the Vallum was seriously attacked by the same method—scientific excavation—about the same time. In 1894 the late Professor Haverfield, our first President, began the long series of diggings³ in which this problem was for the first time attacked with adequate weapons. At first the object was merely to trace the course of the Vallum in places where it was not revealed by surface indications; but in 1895 startling results began to emerge. At Birdoswald it had long been known that there was an extra fosse between the Vallum and the Wall: and Cadwallader John Bates, in his short *History of Northumberland*⁴ published in May of that year, suggested that this fosse might belong to an earlier wall 'of turves or palisades,' stretching from sea to sea, which elsewhere

¹ Archaeol. Aeliana, ser. ii, xxiv, pp. 13-18.

² Ibid. pp. 19-62. ³ Reports in C. & W. Trans., O. S. xiii-xvi, N. S. i-iv, (1895-1904). The brilliant results

of these explorations owe much of their value to the skilled surveying and draughtsmanship of Mr. and Mrs. T. Hesketh Hodgson.

⁴ Op. cit., pp. 28-29.

had been eclipsed by the later stone Wall built exactly upon its site, but here, and here alone, diverging from it. This turf wall, he suggested, may have been Agricola's work (for, like Hutton, he seems to have fancied on no authority at all that Agricola threw up continuous lines) and the stone Wall Hadrian's, or else the turf Wall was Hadrian's and the stone Wall later.

Two months after the publication of this book the turf Wall was actually found by Haverfield's excavations in the place where Bates had imagined it. 1 It was 12 to 15 feet thick, and its fosse was exactly like that of the stone Wall and wholly unlike that of the Vallum. Bates hereupon declared that the Mural Problem was solved in the following sense: the Vallum was a pre-Roman tribal frontier: the turf Wall was Hadrian's: and the stone Wall was a fifth-century work of whose construction Gildas' account was 'absolutely true in every particular.' This fantasy was not welcomed by Haverfield as a final solution of all difficulties.

In 1896, working eastward from the same point, Haverfield discovered that the Vallum deviated from its straight line to pass round the south end of Birdoswald fort: and in this and subsequent years the same deviation was proved at four other forts.3 discovery finally wrecked the theory that the Vallum was pre-Roman: Bates accordingly declared his belief that Haverfield had made a bogus discovery. During the same series of diggings it was found that an early ditch underlay both Birdoswald and Chesters forts in such a way as to suggest that in both cases an early fort of less than three acres, with its north face in line with the Wall (the stone Wall at Chesters, the turf Wall at Birdoswald), had been later extended northwards through the Wall: after which at Birdoswald the stone Wall had been built in line with the new north face of the fort.⁵

Apart from this the conclusions reached in ten years' digging may be summarised as follows. (a) The Vallum was not a road, and never bore palisades: it was all made at once except for the marginal mound, which was later: it is not pre-Roman, and its form absolutely forbids the belief that it was meant for a military defensive work. It deviates to avoid the forts, and at these places it has been purposely levelled by the Romans themselves. Haverfield suggested, to meet these facts, that it was a legal boundary whose purpose had been before very long forgotten or neglected by the (b) The forts had been in some cases enlarged and reconstructed after the building of the Wall—or rather, of a Wall.

¹ C. & W. Trans. O. S. xiv, pp. 185, 188. ² Letter to T. McK. Hughes, Sept. 15, 1895, in Bates' Letters, p. 34.

⁸ C. & W. Trans. O. S. xv, p. 340 (summary):

N. S. iii, p. 339.

⁴ Letter in op. cit. p. 58, to Prof. Hughes.

⁵ Chesters: C. & W. Trans. N. S. i, pp. 84-89; Arch. Acl. ser. ii, xxiii, pp. 9-22. Birdoswald : C. & W. Trans. O.S. xv, 180-182.

(c) The Wall had been built, for at least a part of its length, in place of an earlier wall of turf.

These conclusions were summed up into a new theory of the Wall, which became known as the Turf Wall theory. On this theory the turf Wall ran from sea to sea, and was Hadrian's: the stone Wall was that of Severus. The forts were Hadrian's, but had been in many cases enlarged by Severus, or possibly before. The mile-castles, whether originally stone or turf structures, were Hadrian's, and were built or repaired in stone by Severus. The Vallum was Hadrian's, but served a legal and not a military purpose.

This theory was expressed by Haverfield at first as one among a number of possible hypotheses: but by degrees he was drawn towards it as the most reasonable and attractive, though with characteristic caution he lost no opportunity of insisting that the turf Wall had never yet been found except at Birdoswald. None the less, by about 1909 he had come to accept it as at any rate the best working theory, and it was rapidly becoming the orthodox view. ¹

By an ironical coincidence, the year in which he first committed himself to the Turf Wall theory was the year in which the first evidence came to hand which shook it. Gibson, now assisted by Mr. F. G. Simpson, in 1909–10 explored the milecastle at the Poltross Burn, and there made some remarkable discoveries. The familiar three floors were not only identified once more, but it now became possible to date them. The lowest represented an occupation beginning in the first half of the second century and ending disastrously about 180: a disaster obviously to be connected with Dio's story of the British war of 181. The second floor ended in another disaster probably soon after 270: and the third lasted down to about 330. These dates were established on quite satisfactory coin-evidence, and proved that the milecastle went back to Hadrian. But the Hadrianic floor-level was found to overlie perpendicularly the foundations of the stone Wall: which showed that the stone Wall forming the north wall of the milecastle could not be the work of Severus—for in that case its foundation-trench would have cut off the edges of the Hadrianic floors—but must itself be Hadrianic. This suggested that the whole stone Wall was Hadrianic too: but it might still be argued that Hadrian's Wall was of turf between the milecastles, and the milecastles themselves of stone.²

There was obviously one way of settling this question. For two miles at Birdoswald the turf and stone walls lie apart. If the stone Wall is Severan, and if, of the well-known three floors, the lowest

¹ First formulations, C. & W. Trans. O.S. xiv, 190-191, xv, 342-3 (1897-9): accepted in appendix to Eng. tr. of Mommsen's *Provinces* (vol. ii, p. 351, 1909) and *Encycl. Brit.* art. Roman Britain (1910).

² C. & W. Trans. N.S. xi, pp. 390-461: esp. pp. 459-60.

is Hadrianic and the second Severan, there will be buildings on the stone Wall in this sector in which the first or Hadrianic floor is absent and the two later floors alone present. If all three floors are present, that proves that the stone Wall is the work of Hadrian and not of Severus.

In 1911 Gibson and Simpson examined this section of stone Wall and, on digging the three turrets and one milecastle which it contains, found in every one the complete series of three floors, together with a sufficiency of dated material to make it absolutely certain, quite apart from analogy with other sites, that the lowest floor and therefore the stone Wall dates from the first half of the second century. ¹

The Turf Wall theory was thus exploded. It could no longer be maintained that Hadrian had built a turf wall, replaced in the time of Severus by one of stone. So far, the Hadrianic theory triumphed over its newer rival. But its triumph was only partial: its thesis with regard to the Vallum was definitely disproved, and it was now necessary to frame a new theory explaining both Vallum and Wall as Hadrianic but accepting in principle Haverfield's now indisputable view of the Vallum as a non-military work.

Such a theory has at last seen the light. Haverfield never returned to his excavations on the Wall after 1903, and Gibson died in 1912: the task of prosecuting their work has thus fallen on the shoulders of Mr F. G. Simpson, who was joined in 1920 by Dr. R. C. Shaw. The problem, as it took shape about 1912, may be easily stated. Setting aside the turf Wall, 2 there are three terms: the stone Wall, the Vallum and the forts. What is their relative chronology?

The Wall is Hadrian's. The forts, excluding possible Agricolan remains below them, are also Hadrian's. The Vallum is not earlier than the forts: when it was made, the forts were in existence or at least marked out on the ground. The same is true of the Wall. The Wall abuts against the forts in such a way that it cannot be earlier and is almost certainly later than they. When they were built, was it planned at the same time, as Hodgson supposed, or was it an afterthought?

This question could be answered by digging. If the forts were designed as separate works, they would have ditches round them, which would have to be filled up when the Wall was carried across them. This, Mr. Simpson finds by excavation, is really the case: filled-up ditches underlie the Wall in such a way as to show that the forts were at first isolated works and that the building of the

wall is in fact, as Mr. Simpson says to me, 'the skeleton at the feast,' and his projected excavations at Birdoswald, to begin in 1923, will either break up the feast or turn the skeleton into a flesh and blood convive.

¹ C. & W. Trans. N.S. xiii, pp. 297-397.

²At present no explanation of this structure has been proved by excavation, and whatever may be offered is a mere hypothesis. The turf

Wall necessitated altering their plan to the extent of filling in their ditches. Then arises the further question: granted that some of the forts were enlarged, as Haverfield has shown they were, was this enlargement done before or after the Wall was built?

Excavation again answers the question. Both at Birdoswald and at Chesters it is perfectly clear that the forts were enlarged first and the stone Wall built up to them later. We have therefore the sequence (a) small fort (b) enlarged fort (c) building of Wall: each new phase being not a new stage in the working-out of a plan, but

a revision of the plan itself, an alteration of the design.²

Now for the Vallum. It has lately been noticed that both north and south mounds of the Vallum have been systematically breached at regular intervals of about 45 yards, as if to make it easier to walk across them. In several places it has also been observed that opposite a number of consecutive gaps soil has been thrown down into the Vallum ditch, making a kind of causeway across it, so that gap, causeway and gap together form a gangway right across the Vallum. When were these gangways or crossings made? Excavation shows that it was in the Roman period, not very long after the original throwing-up of the earthworks: and the marginal mound represents the product of a cleaning-out (by Romans, of course) of the Vallum ditch in which the causeways were destroyed, so that where the marginal mound is present the causeways are absent. The crossings therefore served some temporary purpose. What was it?

Before giving an answer, another fact must be observed. At a point where the Military Way impinges upon the north mound of the Vallum it was evidently possible to find by digging whether the gaps in the mound had or had not been made before the road was built. Here again the excavation was successful, and the gaps were found under the road, having been filled up to allow of the road being carried over them. Here then we get another time-sequence: (a) the Vallum (b) crossings made in the Vallum (c) Military Way built. But the Military Way must be contemporary with the Wall, for without it the milecastles and turrets were inaccessible except by steps from the top of the Wall: therefore we may substitute (c) the Wall. And now, since it is clear that the crossings were made before the Wall was built and seem to have been no longer required when the Wall was complete, as evidenced by their obliteration beneath the Military Way, the suggestion

I write, summarises the whole of the last ten years' advance, and is the next landmark in the study of the Wall after the report in C. & W. Trans. N.S. xiii (diggings of 1911). The 'crossings,' as stated by Messrs. Simpson and Shaw, were noticed in certain cases by Horsley, but his observations were incomplete and were not followed up.

¹ Proc. Soc. Ant. Newcastle, ser. iii, vol. ix, 1920,

p. 295. ² Proc. Soc. Ant. Newcastle, Ser. iii, vol. x, 1922, pp. 216–218.

³ Simpson and Shaw, The Purpose and date of the Vallum and its Crossings, C. & W. Trans. N.S. xxii. This paper, which is in the press as

may be made that their purpose was to serve as gangways for men carrying stone from the well-known Roman quarries, which are all behind the Vallum, to the Wall in front of it. Some such access was certainly needed, and there are no regular roads across the Vallum: if therefore the stone was not brought in this way the question how it was brought is unanswerable. The Vallum is not, and never was, an obstacle in the military sense: but without these crossings it would be a serious impediment to the quick and smooth transport of man-handled stone.

We have now two sequences: small forts—larger forts—Wall, and Vallum—crossings—Wall. Further, it is probable that the Vallum preceded the larger forts: because the south-west corner of the large fort at Birdoswald seems to encroach upon it. It thus seems as if the Vallum were roughly contemporary with the small forts. The two sequences may therefore be put together in some such way as the following.

1. Small forts, with Vallum: possibly planned and executed as a single design.

2. Enlargement of certain forts.

3. Building of the Wall, entailing the breaching of the Vallum as a preparatory measure.

The whole sequence, it must be remembered, falls within a quite short period of time, in all probability not more than six or seven years.

We may now venture on a reconstruction of the events leading to the completion of the whole work.

When Agricola left Britain, a number of forts established by him were still occupied.² Among these were some defending the line of the Stanegate: certainly Corbridge,³ and conceivably Carlisle: and perhaps other sites like Nether Denton⁴ and other forts not yet properly explored. About the end of Trajan's reign a new concentration was effected on the Stanegate line: new forts were built upon it at Haltwhistle Burn and Throp,⁵ and possibly elsewhere. The occasion of this concentration may well have been the rising which finally overthrew Agricola's forts at Newstead, Camelon, Ardoch and Inchtuthil in Scotland, and involved the destruction of the Ninth Legion. Shortly afterwards Hadrian came out to organise a scientific frontier. Hitherto such a thing

³ Haverfield in *Hist. of Northumberland*, x, p. 478: for evidence, cf. *Arch. Ael.* ser. iii, vol. viii, pp. 22, 24, 32, etc.

⁵ C. & W. Trans. N.S. xiii, pp. 379-381.

¹ The only other theory not now disproved by excavation has not, I think, been stated in print. It is, that the crossings were intended as a 'formal obliteration' of the Vallum frontier-line carried out not when the Antonine Wall was built (that has been publicly suggested and definitely disproved) but when Hadrian's Wall was built. But this theory leaves unanswered the question asked in the text.

² Macdonald. The Agricolan Occupation of North Britain, J.R.S. ix, 111-138.

pp. 22, 24, 32, etc.

¹ Bushe-Fox, *Archaeologia*, lxiv, p. 303, considers Nether Denton to have been founded a few years later than Agricola's time, but in any case it was held during Trajan's reign.

had not been attempted: Agricola's network of forts flung over a half-conquered country belongs to a totally different conception. Hadrian found the Stanegate in a fortified condition, and he worked from that as a starting-point. From Burgh-by-Sands to Newcastle he built a chain of forts, two of which (Carvoran and Chesterholm) lay on the Stanegate itself and very likely occupied Agricolan sites, while twelve others were pushed forward from the Stanegate, and connected with it by branch roads—some of these, e.g. that from Housesteads to the Stanegate, are still visible 1—and with each other by an earthwork whose purpose was to act not as an obstacle but as a permanent and unmistakable mark showing where the sphere of civil government left off and that of military occupation of enemy ground began. Hence all Hadrian's new forts were planted on its northern edge.

These forts were small structures, 2½ to 3 acres in extent, each designed to house a cohors quingenaria. The best surviving example is Great Chesters (Aesica). They were surrounded by ditches in the usual way, and at Aesica the remains of a quadruple ditch are still plainly visible, curving round the north-western corner of the fort. The Vallum was generally deflected from its course so as to pass to the south of them: in some cases no deflexion was necessary: in others the shape of the deflexion suggests that some at least of these forts had entrenched annexes.

The total garrison of this original Hadrianic frontier must have been about 7,000 irregular troops. Its task was to patrol the line of the Vallum and keep raiding and smuggling parties from slipping across it: also, on occasion, to repel armed attacks, but the former duty was undoubtedly the more prominent in the regular life of the garrison. It soon became clear that the force was insufficient for its work. The forts were generally five or six miles apart, and it is significant that on the Antonine Wall, which embodies a number of improvements due to experience gained on Hadrian's frontier, two miles is thought a sufficient distance. The step was therefore taken of enlarging a number of the forts so as to hold a cohors milliaria. Of these enlargements we have clear traces on more than one site.

But even this proved inadequate. Unprotected sentry-groups, miles from the nearest fort and—so far as we yet know—provided not even with the smallest defensible shelters, must have suffered continuously and heavily from sniping: and the drain on the frontier garrison became so great that the Governor decided upon the building of a great Wall, linking fort to fort, and extended right to the sea at either end, which should provide an elevated and secure sentry-walk and at the same time ease the work of patrolling by forming

¹ Maclauchlan, *Memoir* etc., p. 40: cf. pp. 28, 53. It runs ESE; Horsley thought he could trace a south-westerly branch from the same fort.

a real obstacle to raiders.¹ For this purpose quarries were opened in rear of the Vallum, which was systematically breached for the passage of gangs carrying stone: the three legions were set to work, and the Wall was built, complete with its fosse, milecastles and turrets.²

Such has been, if I have followed it correctly, the argument which has worked itself out during recent years in the mind of Mr. Simpson. The purpose of this essay is to record, not to criticise: and when the new theory has been given a detailed exposition it will be soon enough to look for its weak points. At present it is only taking shape, and many more links will probably be added to Mr. Simpson's long chain of excavations before he feels the theory to be at all complete. But enough has been said to show that these excavations are in the direct line of descent from those which opened the age of scientific digging in the 'nineties, and that the new theory which is being gradually pieced together will, when it is complete, stand on a somewhat different footing from any which preceded it. No earlier theory has been tested throughout by the spade. Bede to Bruce, the theories turned on mere inspection of the visible remains, reinforced to a greater or less extent by dependence upon the ancient historians. As knowledge of the remains increased, the balance between these two sources shifted. It became clear that the ancient authorities were neither sufficient nor wholly reliable; and the possibility gradually came in sight of reconstructing the history from an intensive study of the remains, carried out by digging. This is the only method which has not broken down in the hands of the user, and by this method the results of Haverfield, Gibson and Mr. Simpson have been reached.

The Hadrianic theory of Hodgson, by abandoning written sources and trusting to archaeology, explained the Wall but broke down over the Vallum. Haverfield's Turf Wall theory, by the same method, explained the Vallum correctly but broke down over the Wall. The new theory appears to combine the merits of its two predecessors and promises to satisfy, for the first time, all the terms of the problem.

¹ In The Purpose of the Roman Wall (Vasculum, vol. viii, Oct. 1921) I have given reasons for thinking that the Wall was not, as one is apt at first sight to suppose, a military work intended to give tactical advantage to troops on the defensive, but a police work, intended to facilitate the

patrolling of the frontier-line against unauthorised crossing.

² There is some evidence for the employment of large working-parties composed not of legionaries but of pressed men under the command of legionary officers; but this is a very obscure subject.