

### III

## The Original Eastern Terminus of Hadrian's Wall

*Paul Bidwell*

#### INTRODUCTION

In 1928 a sub-committee of the North of England Excavation Committee was appointed to investigate the eastern sector of Hadrian's Wall. Its operations, which lasted until 1930, took place largely within the boundaries of the Corporations of Newcastle upon Tyne and Wallsend, the two local authorities supplying labour for the excavations. The principal account of the work, written by G. R. B. Spain and F. Gerald Simpson, was published in volume 13 of the *Northumberland County History*, with a contribution on the Roman bridge at Newcastle by R. C. Bosanquet who also collaborated with Spain on a catalogue of inscriptions and inscribed stones. Accounts of the work also appeared in the *Annual Reports* of the North of England Excavation Committee; important additional details of F. G. Simpson's excavations were published by G. Simpson (1976).

One of the most important discoveries made by the sub-committee was a difference in the Wall construction to the east and west of Newcastle. Not only was the 'finished thickness' (that is, the width of the Wall above its basal offsets) 9' 6" (2.9m) to the west and only 7' 6" (2.29m) to the east, but the foundations also varied, those associated with the wider wall to the west consisting of a single layer of flags, while to the east the foundations were of 'rough stones bedded in clay' and set in a trench (Spain and Simpson 1930, 529). This is the earliest clear statement of the difference in construction between the Broad and Narrow Wall foundations, although it was already known from excavations and observations elsewhere that the Narrow Wall was later than the Broad Wall

(Simpson 1928, 384–6). The Wall east of Newcastle was judged to be 'among the last portions to be constructed'. Further, 'the short mile-castle spacing and the probably simultaneous erection of Wall and Wallsend fort' appeared 'to make inevitable the conclusion that the Wall east of Newcastle was an addition to the original scheme' (Spain and Simpson 1930, 538). The original terminus of the Wall was at Newcastle, where it probably ran down the line of the Side and Dean Street to the river bank, 'covering the bridge abutment . . . [and] protected by the Lort Burn' (*ibid.*, 515).

Later discoveries supported the conclusions reached in 1930, and it is only recently that the idea of a later Narrow-Wall extension to Wallsend has been questioned. In 1989 it was noted that the footings of the Wall at St Francis' Church (now the Ray Gray Centre), 750m west of the fort at Wallsend, were of Broad gauge (10' 2" or 3.1m in width), although their construction, of clay and cobbles, was typical of the Narrow Wall (Bidwell and Watson 1989, 26; excavations published in Bennett 1998, 23–4, where the Imperial measurement is given incorrectly as 10' 9"). In fact, the width of the footings is a few inches wider than is usual for the Broad Wall, where the average width is about 9' 6"–9' 8" (2.87–2.95m). However, the excavation report states that 'both faces of the Wall had subsided and tilted away from the Wall. . . fissures up to 250mm (10") opening up parallel to the facing stones. . .' (Bennett 1998, 24). Reference is also made to the similar evidence for subsidence of the Wall which was seen at Buddle Street in 1929 (Spain and Simpson 1930, 493–4, fig. 8). The dramatic effects of this sort of displacement can now be seen in a recently-excavated length of the Wall at Buddle

Street, starting 85m west of the fort at Wallsend and continuing as far west as the 1929 trench, where at one point not only have the two faces of the Narrow Wall moved 4m apart but the whole structure has subsided southwards (Bidwell 1999, 96–7). The unusually large width of the footings at St Francis' Church is thus almost certainly the result of lateral slippage of the subsoil.

A more considerable challenge to the views that have prevailed since 1930 was published by Hill (2001). He reviewed what is known of the Wall as far west as milecastle 9 and argued that it had been planned from the earliest stage to run to or from Wallsend. Its line had been set out and the positions of the milecastles and turrets fixed, although the Wall was not built until after the decision was taken to reduce the width to Narrow gauge. A second, much shorter article in the same volume contained observations on the overall history of the Wall based, at least in part, on Hill's conclusions about the Wall on Tyneside (Breeze and Hill 2001). Hill's thesis simplifies the building programme and is certainly attractive on that count. It relies mainly on two contentions: that the Broad Wall has not been found in central Newcastle and that the spacing of milecastles and turrets east of milecastle 9 is consistent with an original terminus at Wallsend rather than Newcastle. Much of Hill's article consists of careful arguments about the positions of the turrets and milecastles, distilled into a very useful table of the distances between these installations. Unnecessary doubts are expressed about the position of milecastle 3; these are dealt with in a postscript as they are not relevant to the main argument. The sole purpose of what follows is to see whether Hill's two main contentions can be accepted.

#### THE SPACING OF MILECASTLES AND TURRETS

*Note: the original numbering of milecastles and turrets has been retained here. The Westgate Road milecastle is referred to by its name, because it cannot be automatically assumed that*

*it is no. 4; the evidence for a milecastle at Painterheugh cannot be rejected out of hand.*

The discovery in 1985 of the Westgate Road milecastle (Harbottle *et al.* 1988) cast doubt on the identification of milecastle 5, its reputed site lying only about half a mile to the west. Hill (2001, 9) deals with the problem by doubting Horsley's hesitant identification of the milecastle: 'I thought there were some visible signs of a *castellum* just behind the *quarry house*' (Horsley 1732, 137). Less compelling is his assertion that, because the Westgate Road milecastle is less than a mile from the bridge at Newcastle, the original starting point of the Wall is called into question. As we will see later, there are no grounds for assuming that the Wall would necessarily have terminated at a milecastle. In addition, the original terminus of the Wall and the bridge might have been controlled by a fort at Gateshead established before the building of the Wall, which might have affected the spacing of milecastles and turrets in the length running down to the Tyne. It must be emphasised that there is no clear evidence for the existence of this fort, but if the Roman road from the south to Gateshead eventually proves to be of pre-Hadrianic date, then an early crossing of the Tyne protected by a fort might be expected (Bidwell and Snape 2002).

No matter whether Hill has attached the wrong significance to the position of the Westgate Road milecastle, the further development of his hypothesis raises other points that require attention. At the core of his subsequent argument is the distance between milecastles 1 and 9, which measured along the line of the Wall is 11,843m (12,948 yds), giving an average Wall-mile of 1,479m (1,619 yds) according to his table of distances. Only a metre short of a full Roman mile, this measurement suggested that 'the Wall was surveyed in one operation from (or to) Wallsend', although it is also acknowledged that there might be some small degree of error in the measurement (Hill 2001, 11). Hill's argument needs some explanation: had the Wall originally ended at Newcastle, it is most unlikely that a milecastle towards the end of a later extension would be positioned an exact

number of Roman miles from a milecastle that belonged to the original planning of the Wall. According to Hill, the uneven spacing of the intervening milecastles and turrets is explained by topographical reasons, but these variations were compensated for over the larger distances.

This sector of the Wall contains another distance almost exactly in Roman miles which was not noticed by Hill. Using his table of distances, the west wall of the Roman fort at Wallsend is 5,910m (6,466 yards) or 10m (11 yds) short of 4 Roman miles from the Westgate Road milecastle; the positions of the fort and milecastle are of course fixed exactly. What are we to make of this? No-one has suggested that the fort was part of the original scheme for the Wall, so it is puzzling that its distance can be measured more or less exactly in Roman miles from the Westgate Road milecastle, which certainly was part of that scheme, no matter whether its original terminus was at Newcastle or Wallsend. But if we dismiss this measurement as a mere coincidence with a distance in Roman miles, the same could be claimed for the distance between milecastles 1 and 9. A counter-argument might be to assert that the reason for this distance is clear: this length of eight Roman miles was one of the divisions of the Wall into units of full Roman miles within which variations in the spacings of milecastles and turrets were evened out. This is to go beyond Hill's arguments and propose a scheme for which there is no clear evidence elsewhere along the line of the Wall. There is also the question why this hypothetical survey-unit was so long. From the Ouseburn to the top of Westgate Hill, several natural obstacles would have prevented the regular spacing of milecastles and turrets (discussed further below), but the necessary variations could have been compensated for by adjustments in the length of the immediately adjacent Wall-miles.

The real question is whether any arguments can be safely based on what is known of the spacing of milecastles in this sector. East of milecastle 9, only one turret (7b) and one milecastle (at Westgate Road) have yielded structural remains that have been investigated in modern times. The other observations are less

satisfactory: some are very old (although not to be doubted solely for that reason), others were little more than fleeting glimpses (for example, the turret at Stott's House), and some rely on the recording of occupation material on the line of the Wall (which is the sole evidence for a milecastle at Painterheugh). Nothing that has been written about these observations is unreasonable, but they all lack certainty and some might be wrong.

A second problem involves the supposedly regular spacing of milecastles elsewhere on the line of the Wall, one of the points on which in 1930 the arguments for the Wallsend extension were based. Collingwood's (1931) schedule of distances shows that in some areas there were in fact marked variations. Birley noted that, while in the central sector these variations could sometimes be accounted for by the need to select the best site for a turret or milecastle, there were 'other cases which call for explanation still' (1961, 102). From milecastle 3 to the top of Westgate Hill, the Wall had to negotiate steep hill-sides and cross the three deep valleys of the Ouseburn, the Pandon and Erick Burns, and the Lort Burn, all of which would have required bridges. From an engineering point of view, this was the most difficult sector of the Wall east of the Whin Sill ridge and would not have lent itself to a regular spacing of milecastles and turrets. The irregularities, of course, would have been compounded if the length east of Newcastle was a later extension with its own new series of milecastles and turrets.

Finally, to help make sense of the spacing, Hill anchors his system on a hypothetical milecastle '0' on the riverside at Wallsend. Although it is assumed that the position of the milecastle was fixed in the initial survey of the Wall, by the time this final stretch of the Wall came to be built it had been decided instead to add a fort at the end of the Wall. There is no reason why there should have been a milecastle at the terminus on the river bank. This is clearly not the case at the other end of the Wall, which seems to have continued for quite some distance beyond the assumed position of milecastle 80 beneath the later fort at Bowness (Daniels 1978, 260).

In conclusion, arguments about the building history of the Wall based on the spacing of milecastles and turrets on Tyneside are perilous. Glimpses of the scheme might possibly be provided by the two full distances in Roman miles noted above, but their meaning cannot yet be grasped.

### THE BROAD WALL IN NEWCASTLE

In 1930 Broad Wall had not been seen east of milecastle 7, while Narrow Wall had been recorded at seven points east of central Newcastle. Discoveries since then have entirely supported the idea of an extension to Wallsend. One fragment of Broad Wall has been identified in central Newcastle, and the Westgate Road milecastle is of Broad-Wall type, as will be shown; further to the east four more lengths of Narrow Wall have been seen (for all the observations of Narrow Wall east of Newcastle, see Table 1).

However, Hill has doubted the observations of Broad Wall in central Newcastle. Its absence there is relevant to a modification proposed for Hooley and Breeze's model for the building programme of the Wall (1968). Instead of work starting on the Broad Wall at Newcastle and being completed in a short preliminary season as far east as milecastle 7, the legions started working eastwards from Portgate and on the three five-mile lengths between milecastles 22 and 7. Construction of the remainder of the Wall to the east, as far as Wallsend, was deferred until after the Narrow-Wall and fort decisions (Breeze and Hill 2001).

Hill noted that at the Westgate Road milecastle, where only the south-west corner has been exposed, 'what has been seen . . . is not built to broad specification', although he does not mention the width of its side walls or indeed actually assert that it was built to Narrow gauge (2001, 13). The lowest and only surviving course of the south wall is in fact 2.7m (9') in width, and the foundations of the west and

*Table 1 Observations of the Narrow Wall east of central Newcastle; positions measured off from the actual or estimated positions of milecastles and turrets as shown on the larger-scale Ordnance Survey maps. Information on the westernmost observation at Garth Heads is only available in archive reports: Archaeological Evaluation on the Supposed Line of Hadrian's Wall at Garth Heads. . . , Archive Report, Newcastle City Archaeology Unit, 1994. Part of the core of the Wall, of clay and sandstone, was seen about a metre to the east of the 1994 observation: Garth Heads, Newcastle upon Watching Brief, Archive Report, Tyne and Wear Museums Archaeology Department, 1995.*

Wall-mile	Comments	Refs
W gate of Wallsend fort	Of one build with main west gate of fort. Traced for a distance of 17m to E.	<i>NCH</i> , 13, 488
Wallsend, 50 m W	Much of this length affected by subsidence; intact portion 7' 9" in width at a height of 8 courses.	<i>NCH</i> , 13, 493; in progress
0b, 65m, 105m W	Trench E of Ray Gray Centre, foundations of clay, cobbles and flagstones, 10' 2" wide but lateral slippage. Trench to W, foundations of same width, slippage.	<i>AA</i> <sup>5</sup> 26, 23
0b, 345m W	Foundation 'about 8' 2" wide'.	<i>NCH</i> , 13, 494
1a, 208m W	Foundation 'about 8' wide'.	<i>NCH</i> , 13, 495
2b, 170m W	Foundations 7' 10" — 8' 2" in width.	Unpublished
3, 540m, 553m W	Lowest course 7' 3" wide on foundations 7' 6" — 8' 3" wide.	<i>AA</i> <sup>5</sup> 26, 22
3, 585m W	Foundation 'about 8' wide'.	<i>NCH</i> , 13, 496
3, 710m W	Foundation 'about 8' wide'.	<i>NCH</i> , 13, 497
3, 889m W	Foundation '8' 5" wide'.	<i>NCH</i> , 13, 497
3, 964m W	Foundations of 'tightly packed angular rubble'; incomplete, max. preserved width: 5' 11".	See caption

Table 2 *Broad-Wall milecastles with side walls of reduced width.*

Milecastle	Width of side walls	Width of N wall	Refs
9, Chapel House	E wall: lowest course 10', 2nd course, 9' S wall: lowest course 8' 6"	(Broad Wall sector)	AA <sup>4</sup> 7, 152-8
13, Rudchester Burn	E wall: 7' 8" above offsets	Broad Wall	AA <sup>4</sup> 8, 320
17, Whittledene	E and W walls: 7' 11" above offsets	Broad Wall	AA <sup>4</sup> 9, 256-7
18, East Wallhouses	E wall: 7' 9" above offsets	Broad Wall	AA <sup>4</sup> 9, 256-7
22 Errington Arms	E and W walls: 8'-8' 2" above offsets	Broad Wall	AA <sup>4</sup> 8, 319
38, Hotbank	E and W walls: 8' 2" above offsets	Broad Wall	AA <sup>4</sup> 13, 264
43, Great Chesters	E and W walls: c. 8' 3"	Broad Wall	JRS 30, 161

south walls are 2.9m (9' 6") in width. The foundations were of flags, which is almost invariably the case with Broad Wall construction (Harbottle *et al.* 1988, 153). Allowing for offsets above the lowest course, the width of the milecastle walls would have been about 2.6m (8' 6"). This is certainly less than the standard Broad Wall width (2.9m or 9' 6") but also a great deal more than the Narrow measurement (2.29m or 7' 6"). In fact, there are seven milecastles either known to be directly associated with the Broad Wall or in sectors where Narrow Wall is probably entirely absent, with side walls between 2.33m (7' 8") and 2.49m (8' 2") in width above the basal offsets (Table 2). When the narrower width of these milecastle side-walls was first noted, it was thought to reflect reduction in the width of the curtain to Narrow gauge (Simpson and Birley 1931, 317), an idea elaborated in a valuable paper by Hunneysett (1980). There are complications, however, and Hill has suggested that 'it is not impossible that two of the three legions may have always built milecastles with side walls to a gauge of about 8 Roman feet' (2001, 13). This is an interesting idea which needs to be examined in detail, but the fact remains that when side walls of milecastles are of this reduced width, they are certainly or plausibly associated with the Broad Wall. They do not belong to a milecastle which is of one build with the Narrow Wall. Three of the four examples of this type of milecastle (nos 33, 39 and 40) have side walls between 2.06m (6' 9") and 2.21m (7' 3") in width (Hunneysett 1980, figs 3-4); the fourth example is described merely as 'Narrow' (JRS 37 (1947), 168).

The most easterly section of the Broad Wall yet to have been seen is at the Mining Institute, but its identification has been questioned by Hill (2001, 13). The full width of the Wall at this point could not be established, and the very clear photograph published by G. Simpson (1976, Plate B) is said by Hill to show a footing of 'roughly squared stones'. However, the text that accompanies the photograph states that these stones represented 'a flagged footing course', typical of Broad-Wall construction, and indeed that is what is shown, at least to the present writer's eye. Further, identification of the Broad Wall was F. G. Simpson's, responsible more than anyone else, some twenty years earlier, for first establishing its essential characteristics, and a student of the Wall with more than forty years' experience when he excavated at the Mining Institute in 1952.

## CONCLUSIONS

Arguments about the location of the original terminus of the Wall cannot be safely based on the spacing of milecastles and turrets in the eastern sector. Our knowledge is too flimsy to bear the weight of the hypotheses about the significance of their spacing, which have become increasingly elaborate since 1930. The simple fact remains that west of the assumed original terminus at Newcastle only Broad Wall, and to the east only Narrow Wall, have been seen. The most likely explanation for this is that the Wall east of Newcastle was an extension of the original scheme.

It has not seemed necessary to discuss other matters raised by Breeze and Hill, such as the evidence for the date of the bridge (*Pons Aelius*) at Newcastle (for which, now see Bidwell and Snape 2002) or whether Portgate on Dere Street was the starting point for work on the Wall in the east. Even though the idea of an original terminus for the Wall at Wallsend must be rejected, there is much in their two papers which will prove to be of enduring value.

### POSTSCRIPT: THE POSITION OF MILECASTLE 3 AT BYKER

The antiquarian records of milecastle 3 were collected by E. Birley (1960, 42–44). Its outline was seen by Stukeley and Horsley in the 1720s, and towards the end of the eighteenth century Brand witnessed its partial destruction. Bruce records the discovery of two stones which he thought had come from one of the gates. The final discovery was an altar found in 1884 at or near the site of the milecastle (*RIB* 1314). A number of trenches dug in recent years have failed to establish its exact site. Of all the milecastle or turret sites on Tyneside which were apparently recognised before the twentieth century, this seems the least doubtful. Hill has argued otherwise (2001, 5–7).

Stukeley's account of his visit in 1725 states that:

The Wall passes a very deep valley at Euxburn, so ascends the opposite western hill, very steep, a rivulet now running in the ditch. Having mounted the hill, a coal-shaft is sunk in the very ditch, and here is a square fort left upon the Wall (1776, 66).

Hill accepts that 'western' might possibly have been a mistake for 'eastern' in describing the hill above which the 'square fort' stood: Stukeley's description runs from west to east, and the Wall, having passed the 'Euxburn' (Ouseburn), will have ascended the eastern side of the valley. Hill does not comment on the description of the hill as 'very steep'; this is confirmation that Stukeley was referring to the

eastern side, for the western side has a comparatively gentle slope up which, then as now, a road runs.

Although Hill accepted the possibility of a mistake in Stukeley's description, he was unsettled enough to introduce equivocations about the drawing that accompanied the description. Its general accuracy is borne out by recent excavations on Shields Road which revealed Hadrian's Wall in exactly the position shown by Stukeley. Doubts raised by Hill as to whether the milecastle is shown east or west of the Ouseburn valley are resolved by examining William Donkin's map of 1767 which makes it clear that the feature immediately east of the milecastle is Byker Bank, a southern turn at the western end of Shields Road which avoided the 'very steep' eastern slope of the Ouseburn.

Donkin's map also dispels the doubts Hill raises about Horsley's brief account, which is as follows:

At the head of Ewesburn bank, that is the bank on the east side of the village, is the visible foundation of another castellum... (1732, 136).

Horsley's map shows the milecastle (marked 'Cast.') east of the Ouseburn (fig. 1). In spite of this, Hill speculates that the village might have been west of the Ouseburn valley, and 'the head ... of the bank on the east side of the village' referred to as the milecastle site was thus above the west side of the valley. The reason for this was the placing on Horsley's map of the symbol for a village immediately west of the Ouseburn. But, well to the west of the village symbol, the map shows Red Barns, an extensive farm or house with orchards, which stood on the western brow of the valley; Red Barns is shown in greater detail on James Corbridge's map of 1723. Donkin's map resolves the problem. Houses are shown on both sides of the Ouseburn which is bridged at this point; the village spreads along the bottom of the valley and straggles up the western slope along the road. The symbol on Horsley's map was intended to show that the village was by the Ouseburn, and the 'bank on the east side of the village', above

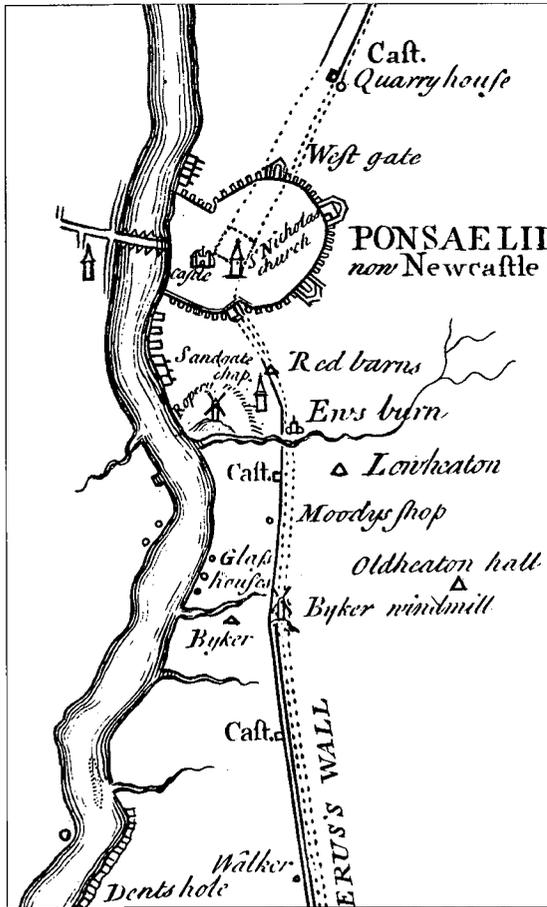


Fig. 1 Portion of "A map of the Roman walls in the north of England from SEGEDUNUM to CONDERCUM", showing the line from Walker to the top of Westgate Road (Horsley 1732, following p. 158); north is to the right.

which the milecastle stood, is the eastern bank of the Ouseburn.

We can thus accept that there are two independent accounts from the early eighteenth century of the visible remains of a 'square fort' or 'castellum' on the line of the Wall between the western end of Shields Road and the eastern side of the Ouseburn valley. Other matters discussed by Hill, discrepancies in Horsley's measurement of distances to neighbouring milecastles or the questioning of Bruce's identification of stones from one of the milecastle

gateways, are not grounds for doubting these two accounts.

## ACKNOWLEDGEMENTS

I am grateful to Dr David Breeze, Mr Peter Hill and Dr Nick Hodson for the benefit of their comments on the text.

## BIBLIOGRAPHY

- BENNETT, J. 1998 'The Roman frontier from Wallsend to Rudchester Burn reviewed', *AA*<sup>5</sup>, 26, 17–37.
- BIDWELL, P. T. 1999 (ed.) *Hadrian's Wall 1989–1999*, Carlisle.
- BIDWELL, P. T. and SNAPE, M. E. 2002 'The history and setting of the Roman fort at Newcastle upon Tyne', *AA*<sup>5</sup>, 31, 251–83.
- BIDWELL, P. T. and WATSON, M., 1989 'A trial excavation on Hadrian's Wall at Buddle Street, Wallsend', *AA*<sup>5</sup>, 17, 21–8.
- BIRLEY, E. 1960 'Hadrian's Wall: some structural problems', *AA*<sup>4</sup>, 38, 39–60.
- BIRLEY, E. 1961 *Research on Hadrian's Wall*, Kendal.
- BREEZE, D. J. and HILL, P. R. 2001 'Hadrian's Wall began here', *AA*<sup>5</sup>, 29, 1–2.
- COLLINGWOOD, R. G. 1931 'Hadrian's Wall: a system of numerical references', *PSAN*<sup>4</sup>, 4, 179–87.
- DANIELS, C. M. 1978 *Handbook to the Roman Wall*, 13th edn, Newcastle upon Tyne.
- HARBOTTLE, B., FRASER, R., and BURTON, F. C. 1988 'The Westgate Road milecastle, Newcastle upon Tyne', *Britannia*, 19, 153–62.
- HILL, P. R. 2001 'Hadrian's Wall from MC0 to MC9', *AA*<sup>5</sup>, 29, 3–18.
- HOOLEY, J. and BREEZE, D. J. 1968 'The building of Hadrian's Wall: a reconsideration', *AA*<sup>4</sup>, 46, 97–114.
- HORSLEY, J. 1732 *Britannia Romana*, London.
- HUNNEYSETT, R. 1980 'The milecastles of Hadrian's Wall – an alternative identification', *AA*<sup>5</sup>, 8, 95–107.
- SIMPSON, F. G. 1928 'Excavations on Hadrian's Wall in the Gilsland-Birdoswald-Pike Hill sector', *CW*<sup>2</sup>, 28, 384–6.
- SIMPSON, F. G. and BIRLEY, E. 1931 'Excavations on Hadrian's Wall between Heddon-on-the-Wall and North Tyne in 1930', *AA*<sup>4</sup>, 8, 305–27.
- SIMPSON, F. G. 1976 (ed. G. Simpson) *Watermills and Military Works on Hadrian's Wall*, Kendal.

- SPAIN, G. R. B. and SIMPSON, F. G. 1930 'The Roman Frontier from Wallsend to Rudchester Burn: The Frontier Works', *NCH*, 13, 484–507, 515–40.
- STUKELEY, W. 1776 *Itinerarium Curiosum*, London.