

THE PLAN OF THE LEGIONARY FORTRESS AT CHESTER : FURTHER COMPARISONS

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INTRODUCTION

In a recent article (Carrington, 1986), an attempt was made to analyse the plan of the Roman legionary fortress at Chester and compare it with those of other excavated fortresses, in the hope of isolating the features responsible for its apparently unusually large size. In the course of this study, two main types of fortress plan were recognised. One, comprising at that time six excavated examples, was termed there the 'Caerleon type'. These fortresses invariably had six *scamna* — three in the *praetentura*, two in the *latera praetorii* and one in the *retentura* — and exhibited a high degree of uniformity in general: for example, all the barracks were situated in the first, fourth and sixth *scamna*, counting from the *porta praetoria*, and were aligned on the long axis of the fortress (*per strigas*); the hospital and baths, with one known exception (the hospital at *Bonna* (Bonn) in *Germania Inferior*), were situated in the second, and the stores and workshops in the second and fifth. The other type, comprising to date only three excavated examples, had five, or occasionally six, *scamna*, but invariably had a short *praetentura* in comparison with the first type, and was generally less standardised. For example, two of these fortresses, Inchtuthil in Scotland and *Lambaesis* (Tazoult, Algeria) in *Africa Proconsularis*, had barracks aligned transversely (*per scamna*) as well as longitudinally, while *Lambaesis* also had barracks in the *scamnum* behind the *principia*; some of the stores and workshops had accordingly to be situated in the first *scamnum*.

Two fortresses, Chester and *Novaesium* (Neuss) in *Germania Inferior*, fell outside these types in having very long *latera praetorii* or *retenturae*: on the other hand, they had short *praetenturae* very similar to that at Inchtuthil; they also resembled *Lambaesis* and, to a lesser extent, Inchtuthil in the orientation and disposition of their barracks and major buildings, *Novaesium* being particularly irregular. *Novaesium* had a total of seven *scamna*, and seven or eight is likely to have been the number at Chester, depending on whether the area between the barracks in the *praetentura* and the *via principalis* was subdivided, and whether the poorly-understood area in the *retentura* containing a possible granary constituted a *scamnum* in its own right (Carrington, 1986, 29, 38).

Regardless of type, all these fortresses appear to have had *scamna* conforming to a small number of standard depths. With one exception — the sixth at *Novaesium* — the *scamna* mostly occupied by barracks measured 300 p.M. (*pedes Monetales*, c. 0.295 m.) inclusive of an adjoining road. The second or third *scamnum*, accommodating the *scamnum tribunorum* and the *via principalis*, usually measured 200 p.M. Most of the remaining *scamna* were occupied by granaries and other stores, workshops and usually the *praetorium*, the *valetudinarium* and *thermae*; the most common depths for these were 250 p.M. (or really 240 p.M., i.e. 2 *actus*?) and 300 p.M., although 200 p.M. is also found. However, in some of the fortresses with a short *praetentura* there was a particularly narrow second *scamnum*. At *Novaesium* it held auxiliary barracks and was only 150 p.M. deep. That at Inchtuthil was 100 p.M. deep; the excavated portion was devoted to workshops, stores and a few houses, but it has been conjectured that the rest may have been intended to accommodate auxiliaries (Pitts and St. Joseph, 1985, 123-8 and 143-6). Finally, as mentioned above, there was room for a *scamnum* of the same size at Chester; again, the accommodation of auxiliaries is a possibility.

Most of the fortresses used in this comparison are situated in western Europe and some were excavated many years ago. However, the publication of the proceedings of the Thirteenth International Congress of Frontier Studies, held at Aalen in 1983, has shown how much work on Roman military antiquities has recently been done in eastern Europe. Of particular relevance to the present topic are the plans of the Danubian fortresses of *Novae* (Stuklen, near Svishtov, northern Bulgaria) in Moesia Inferior, published by Prof. Ludwika Press (Press, 1986a, 529, fig. 1) and of *Aquincum* (Budapest) in Pannonia Inferior, published by Dr. Klara Poczy (Poczy *et al.*, 1986, 399, Abb. 1). It is not the purpose of this note to attempt a full analysis of these fortresses — indeed, this is not yet possible — but merely to highlight their potential importance. *Novae* is of particular interest, since it could turn out to have close similarities to Chester and *Novaesium*. *Aquincum* is not immediately relevant to Chester, but is discussed here briefly in an appendix in order to correct an error in the 1986 volume of this journal. Only *Novae*, *Aquincum* and the fortresses most closely comparable to them are illustrated here: plans of other fortresses referred to are easily accessible at a consistent scale in Carrington, 1986, 30-5 and 39-43, figs. 1.1-6 and 2.1-5.

It is worth repeating at this point the cautions that must be borne in mind when making comparisons between fortresses on the basis of very small-scale plans culled from a variety of secondary sources and re-copied numerous times: the slightest errors in draughtsmanship and in photographic reproduction can give rise to inaccuracies which, because of the scale, are significant; they may also create impressions of detailed similarities or differences between fortresses which are wholly artificial. For instance, it appears that the modular *scamnum* depths have to be applied in slightly different ways in each fortress (Carrington, 1986,

29); this seems inherently probable, but needs verifying. The source drawings can, of course, also contain errors arising, for example, from mistakes in archaeological surveying on site. Precise analyses and comparisons must, therefore, only be attempted with large-scale plans which are as little removed from the original excavation surveys as possible and which have been checked for accuracy. Nevertheless, initial use of small-scale plans may allow us to appreciate the general principles of fortress planning more easily and reduce the danger of 'not seeing the wood for the trees'.

NOVAE

This fortress was founded between A.D. 46 and 49 by Legion VIII Augusta, which formed the garrison until A.D. 69; thereafter it was held by Legion I Italica. In the late third and early fourth centuries the defences were extended to encompass the civilian settlement that had grown up to the east, the original eastern fortress wall being demolished, and the projecting gateway and towers were built. Ultimately, some, at least, of the military buildings were overlaid by civilian ones. Occupation of the site continued until the seventh century. (For a summary, inevitably now somewhat out of date, see Hoddinott, 1975, 128-30 and 243-5). Excavation, by Bulgarian and Polish teams, only began in 1960: inevitably, therefore, much remains to be learnt about the plan and structural history of the fortress. Nevertheless, enough has already been found to permit some interesting conjectures.

General Arrangement

The outline of the fortress defences and the positions of three of the gates have been firmly established: these reveal immediately that it had a short *praetentura* and was of generally similar size to Chester. In addition, parts of the hospital and other buildings have been excavated, and elements of the street-grid are starting to emerge. (On the hospital, see most recently Press, 1986b). These discoveries show clearly that the 300 p.M. module, at least, was used. Moreover, it seems quite probable that the as yet unexcavated areas were laid out in precisely the same sequence of 300, 250, and possibly 100 + 200, p.M. *scamna* as Chester and that the general disposition of the barracks and major buildings was similar to that found at Chester, as well as at *Novaesium* and *Lambaesis*. On the other hand, no equivalent to the poorly-understood area containing a possible granary in the *retentura* at Chester can be accommodated at *Novae* (Figs. 1.1-3). Should the suggested general similarity of the street-grid of *Novae* to that of Chester be confirmed by excavation, it will be interesting to see whether other, more detailed, similarities emerge, for example in the use of the area behind the *principia*, and whether, as at *Novaesium* and possibly at Chester, auxiliaries were accommodated in the *praetentura*.

An attempt to restore the street-plan immediately highlights the fact that the enclosure is a slight parallelogram. To maintain *scamna* at an equal depth across the full width of the fortress, the streets have been shown running parallel to the north and south walls, rather than at right-angles to the east and west walls. The same phenomenon can be seen at *Lauriacum* and *Carnuntum*. If the *via principalis* really followed the alignment proposed by the excavators, the dextral side of the *praetentura* would have been very cramped.

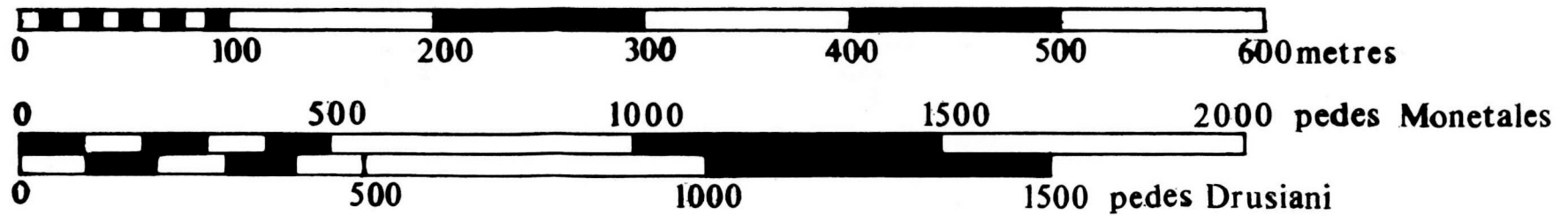
Hospital and Baths

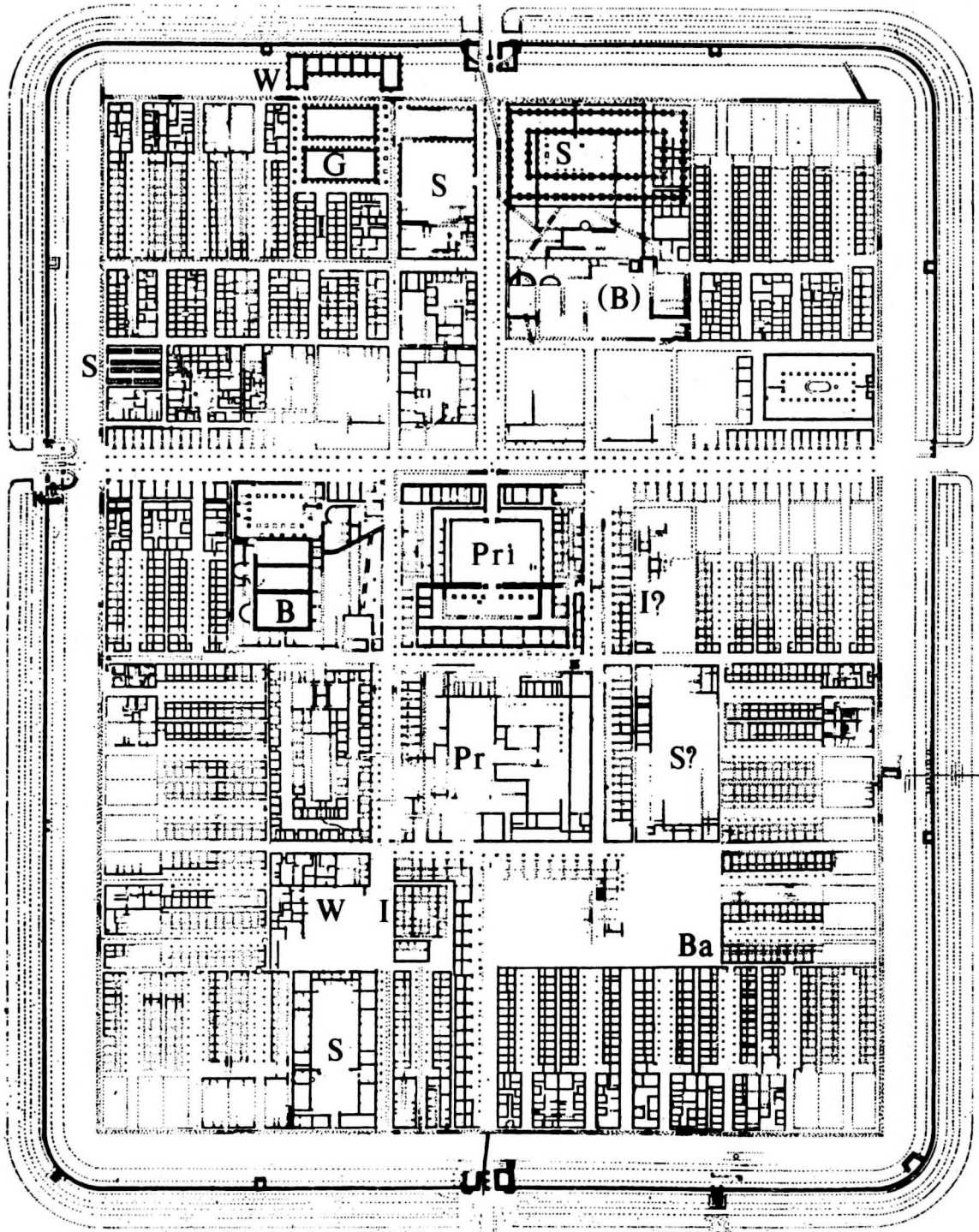
The position of the hospital at *Novae*, in the first *scamnum* of the *praetentura*, should attract particular interest. Although, as noted above, several major buildings are frequently found in this *scamnum* in fortresses with a short *praetentura*, it is otherwise unknown for the hospital to be sited there: in the other excavated fortresses of this type it was accommodated in the *scamnum* behind the *principia* (e.g., at *Novaesium*, Inchtuthil, *Carnuntum* and possibly *Lambaesis*), and on present, epigraphic, evidence this remains the most likely position for it at Chester (Carrington, 1986, 47-8).

Nevertheless, wherever they were situated and regardless of fortress type, it also appears to have been common for hospitals to be near the intra-mural baths, where the latter were provided: firm examples are provided by Caerleon, *Lauriacum* and, in its later phases, *Novaesium*. *Aquincum* is a probable example, but further excavation is required to confirm the matter. There were no intra-mural baths at *Carnuntum*, and it is not certain that any were intended at Inchtuthil (*pro*: Pitts and St. Joseph, 1985, 187-8; *contra*: Carrington, 1986, 36, 44). If it had been intended to construct any at the latter fortress, they would have been on the sinistral side of the *principia*, in exactly the same relationship to the hospital as they were at *Novaesium*. At *Novae*, Prof. St. Parnicki-Pudetko believed that the baths were again situated in this position, on the sinistral side of the *principia* beneath the Early Christian basilica which he excavated (L. Press, pers. comm.). In this case they would have been widely separated from the hospital. On the other hand, remains of a bath-suite found in this position at Chester seem most likely to have formed part of the *praetorium* (Carrington, 1986, 38, 44), and inevitably one wonders whether the same may not have been the case at *Novae*. Here it is relevant to note that, because of the considerable length of the *principia* at *Novae*, it would not have been possible to construct a *praetorium* of reasonable size in the normal position, to the rear of the former building, without interrupting the proposed street-grid. It might, therefore, be useful to investigate the possibility that the baths at *Novae* lay in the unexplored area on the opposite side of the *via praetoria* from the hospital. Likewise, we should recall the existence of a possible major building of as-yet unexplained function at Chester on the opposite side of the *via praetoria* from the baths. It might agree better with the evidence from parallels if this were to be the hospital. Unfortunately, Dr. D. Mason's

KEY AND SCALE FOR DIAGRAMS 1.1 - 2.2

B	Baths	Pr	Praetorium
Ba	Barracks	Pri	Principia
G	Granaries	S	Stores
H	Hospital	W	Workshops
I	Immunes		

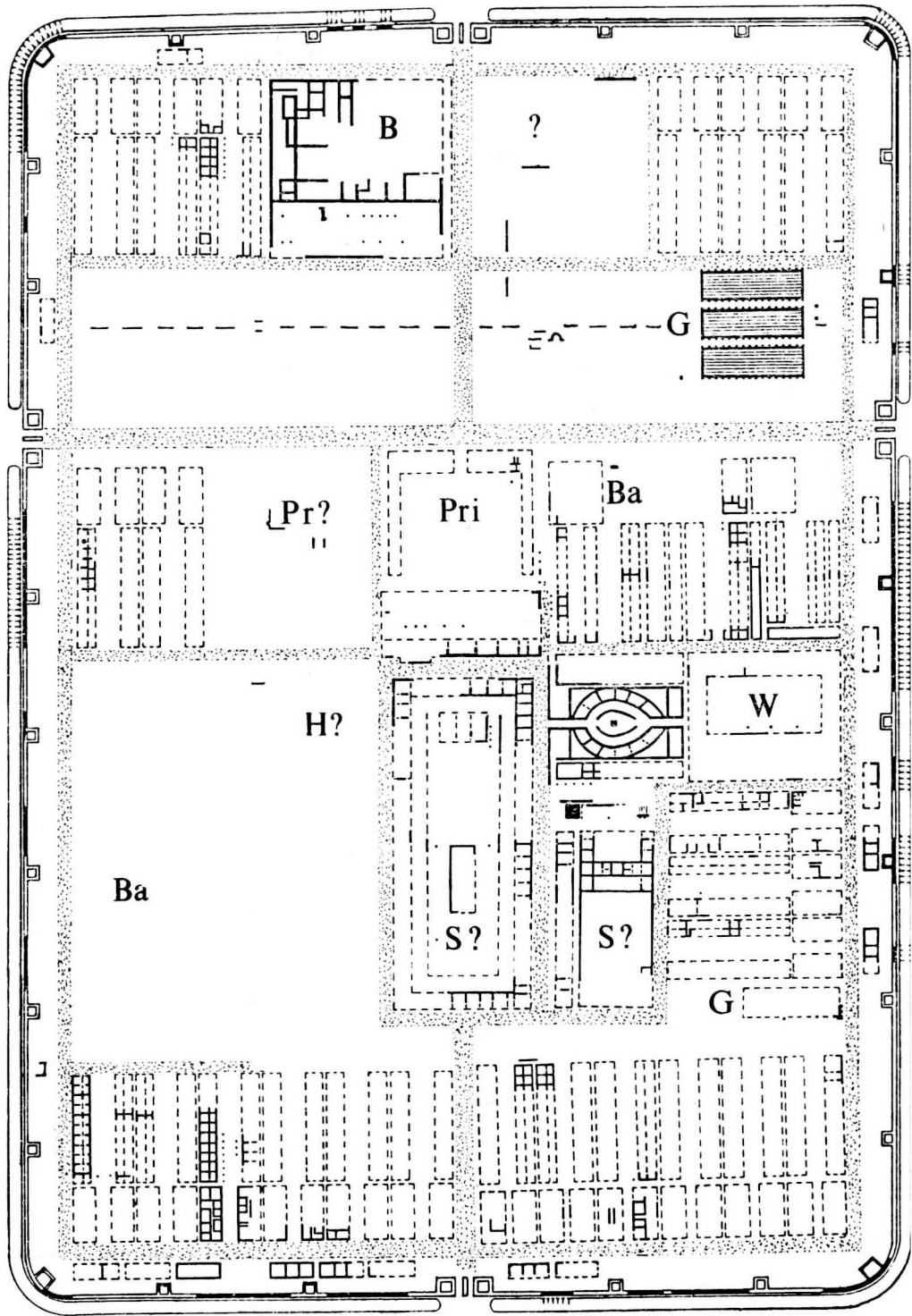




NOVAESIUM

v. Patrikovičs

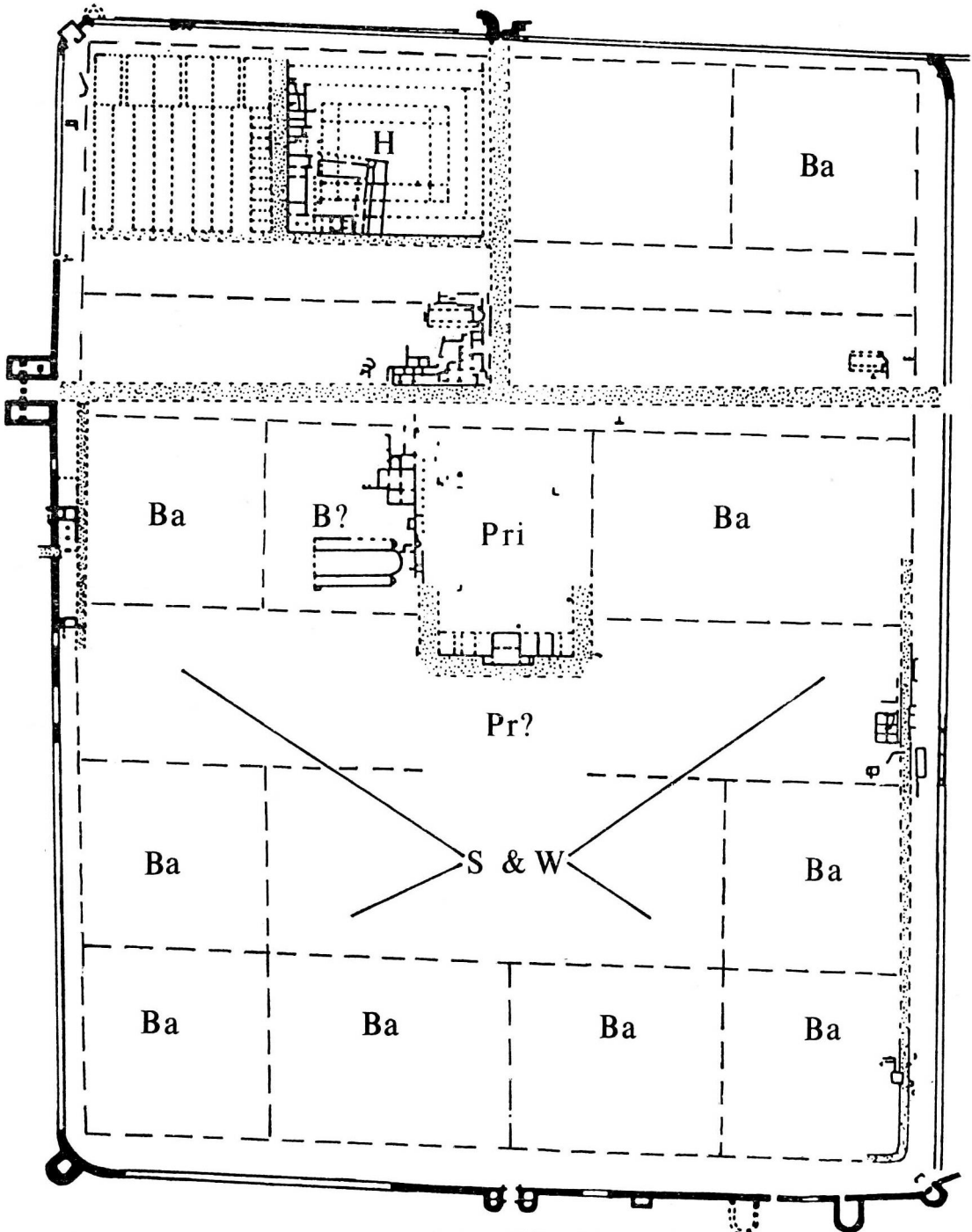
Fig. 1.1



CHESTER

Mason,
modified

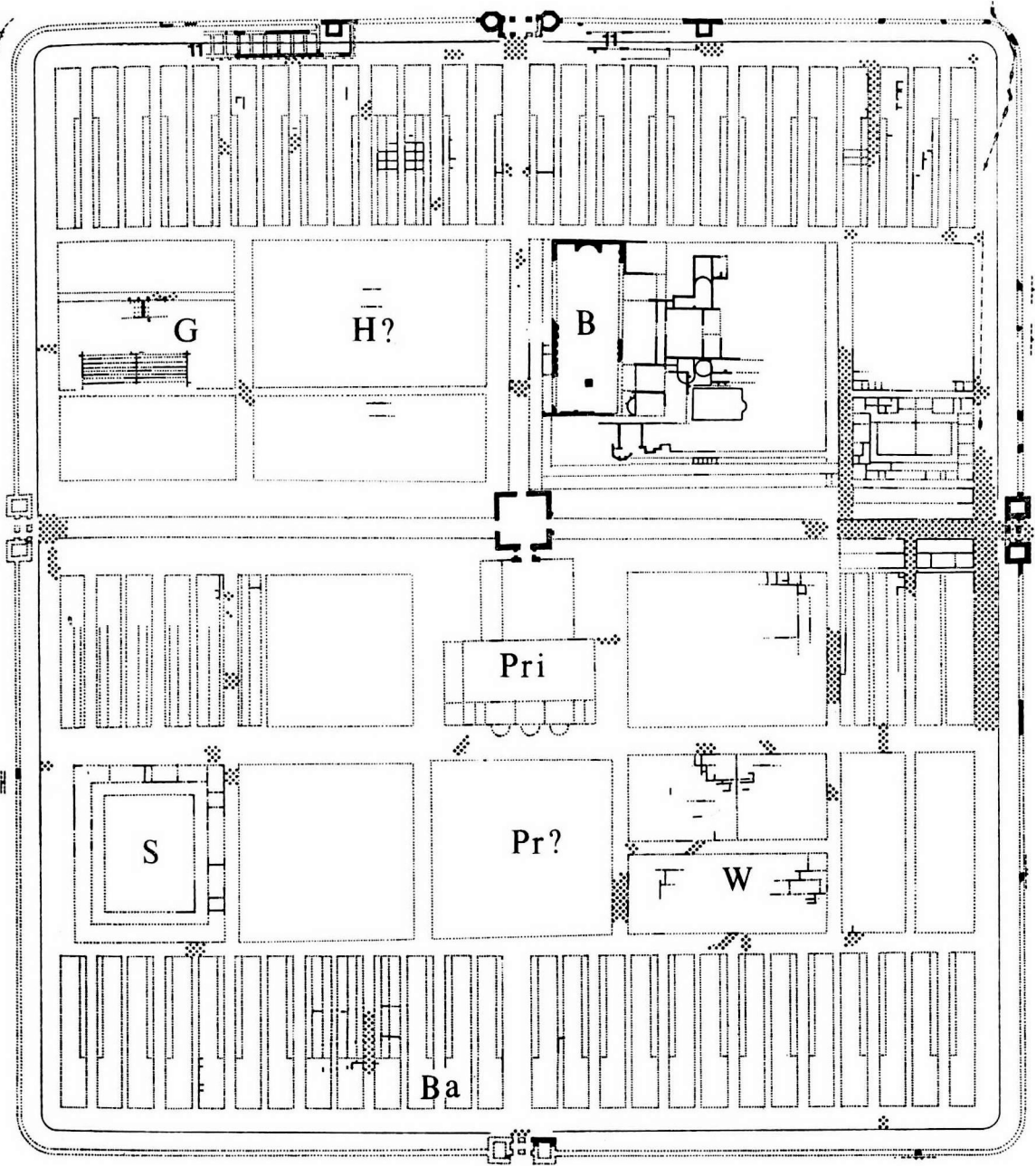
Fig. 1.2



NOVAE

Press, modified

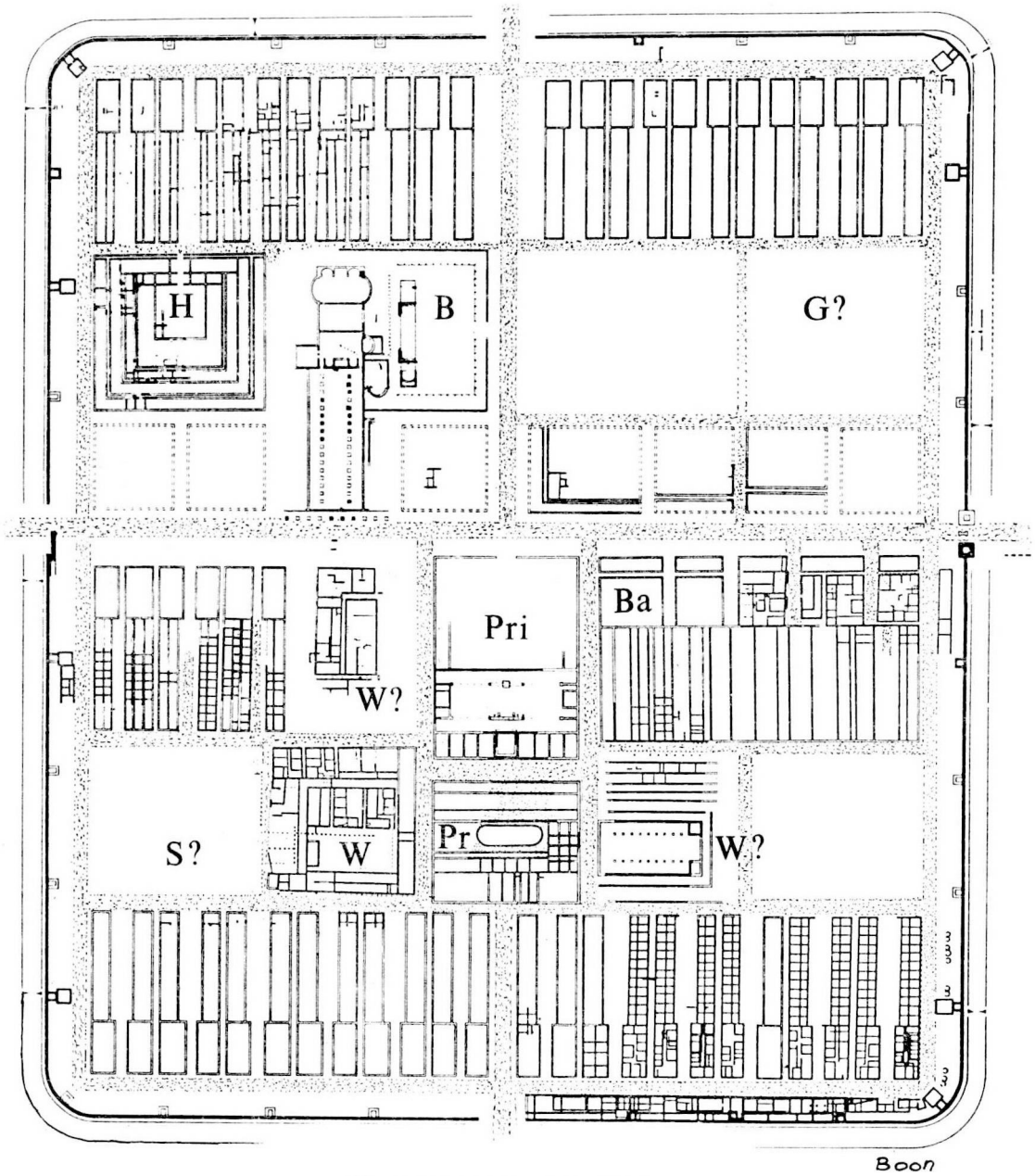
Fig. 13



AQUINCUM

Poczy

Fig. 2.1



CAERLEON

Fig. 2.2

recent rescue work behind 30 Bridge Street, precisely on the site in question, could not be extensive enough to answer this question, and it is to be hoped that further opportunities will arise for excavation in this area. Nevertheless, the possibility remains that, both at Chester and at *Novae*, just as in the early phases of *Novaesium*, the hospital and baths were indeed widely separated.

This note has raised a number of possibilities and, as usual, only further excavation offers any hope of deciding between them. Nevertheless, perhaps one is already safe in no longer regarding the layout of Chester as an oddity, but as exemplifying, together with *Novae* and *Novaesium*, a third type of fortress plan. However, we have not even begun to investigate the varying functional requirements that presumably lie behind these plans. Here, surely, is the justification for continuing fundamental research on what may appear to be an already-overworked aspect of Roman military antiquities.

APPENDIX : AQUINCUM

Two distinct fortresses are known at *Aquincum* (Mocsy, 1974, 128, fig. 23). On the basis of Mocsy's rough outline sketch, the later, second-third century, fortress occupied by Legion II Adiutrix was previously assigned very tentatively to the second type of plan, with short *praetentura* (Carrington, 1986, 29). However, numerous excavations, many of them of a 'rescue' character, carried out since the time of Mocsy's publication allow a convincing plan of the main features of the fortress to be reconstructed. This shows that it was a typical example of the 'Caerleon type' in its street layout, proportions and the disposition of its buildings, for example the baths, hospital, stores and workshops (Figs. 2.1 and 2.2). The recent excavations have, in fact, been particularly informative about some of the major buildings — a topic about which we need to know more in this type of fortress (cf. Carrington, 1986, 36). They have, for example, allowed Boon (1987, 14) to conjecture that at Caerleon the granaries were situated in the second *scamnum*, as at *Aquincum*, and that there may have been a courtyard-type store in the fifth, as at *Aquincum* and *Bonna*. Nevertheless, *Aquincum* was slightly wider than the type example, permitting, or resulting from, slightly wider barracks. However, the restoration of twenty six barracks across the first and sixth *scamna* in Poczy's plan, rather than the twenty four to be expected, seems unlikely to be correct. Assuming that the spacing of these buildings was really completely regular and that there was therefore room to spare adjacent to the *viae praetoria* and *decumana*, then this space is more likely to have been occupied by small store-buildings ('*tabernae*'). Such buildings have been found lining these streets at, for example, *Novaesium* and Inchtuthil, and there is room for them alongside the *via decumana* at Caerleon. As one might by now expect, *Aquincum* also clearly made use of the 300 and 250 p.M. modules widely used in fortresses of all types, although the 300 p.M. depth of the *scamnum tribunorum* and *via principalis*, instead of 200 p.M., is unusual.

GLOSSARY

<i>Latera praetorii</i>	Central area of a fortress containing the <i>principia</i> and <i>praetorium</i>
<i>Praetentura</i>	Area of a fortress in front of the <i>principia</i> (to the top in figs. 1 and 2)
<i>Praetorium</i>	Commander's residence
<i>Principia</i>	Headquarters building
<i>Retentura</i>	Rear part of a fortress
<i>Scamnum</i>	Transverse building strip
<i>Scamnum</i>	Strip in the <i>praetentura</i> adjacent to the <i>via principalis</i> containing the tribunes' houses
<i>Tribunorum</i>	Bath-house
<i>Thermae</i>	Hospital
<i>Valetudinarium</i>	Longitudinal road bisecting the <i>retentura</i>
<i>Via decumana</i>	Longitudinal road bisecting the <i>praetentura</i>
<i>Via praetoria</i>	Longitudinal road bisecting the <i>praetentura</i>
<i>Via principalis</i>	Transverse road running across the front of the <i>principia</i>

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