

## Bath as a Roman Camp—Rectangular, not Pentagonal.

BY GEORGE ESDAILE, C.E.

AS introductory to the following argument, it may be well to mention that the Roman camp in "Cæsar"—with which we were familiar at an earlier stage of our existence, and as given in Polybius (206—124 B.C.)—was 1,620 feet square; whilst that which was adopted on the increase of the legion to 15,000 men of all arms was a parallelogram, one-half larger than that of "Cæsar," and was called "tertiata"—literally of three halves. The latter form, presumably, was chosen as "the camp" of the legions of the army sent by the Emperor Claudius into Britain, and such an hypothesis is reduced to a certainty when we find an area in Chester, clearly defined by two sides of a parallelogram (respectively 2,320 feet by 1,620 feet), being the length and breadth as given by Hyginus Gromaticus (1st century).

The method adopted in the formation of the square camp was in the manner following:—The site having been chosen, the proper officer planted the "groma" or "boning stick" into the ground, and at a distance of about 810 feet on either side there would be the lines of the counterscarps of the ditches. In forming the larger camp, the parallelogram, this distance of 810 feet remained on two sides and one end, whilst the remaining end, inclusive of the counterscarp of the fosse, would be at a distance of 1,510 feet from the "groma." As the rule in the formation of the camp was invariable, also the position or places of the soldiers, the *Valetudinarium*, etc., every branch of the service comprised in the legion would be cognizant of the number of paces that its special quarters would be from

the "groma," and so at once could take up its accustomed position.

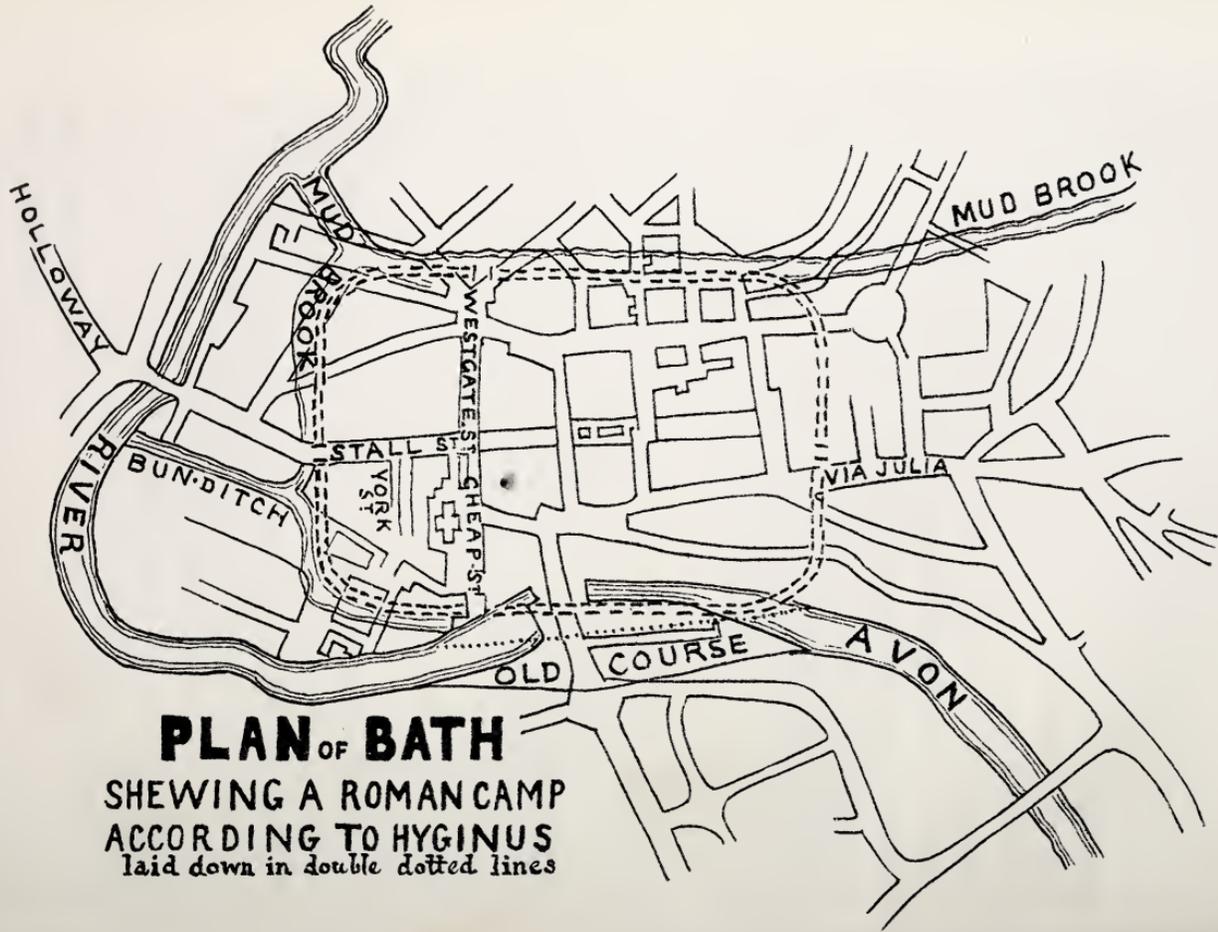
It is said that the Julian way—the Via Julia—which passes by Bath, was so called after its constructor, Julius Frontinus, who had the command in Britain immediately before Agricola, A.U.C. 826—831. This Frontinus was by profession a surveyor before he took to a military life; and if he were not the personal friend of Hyginus he certainly was familiar with his writings, as *vide*. his work, *Strategematica*, etc. See also, *The Strategems Sleyghtes and Policies of Warre*, gathered together by S. Julius Frontinus, and translated into English by Rycharde Morysine, 1539, and other editions; also, *Aquaeductibus*, by Frontinus, published in 1490. I choose to ignore Vegetius, a writer of the fourth century, as an authority on Roman camps of the first century, when the works of Hyginus and Frontinus are exhaustive of the subject.

Before adducing the argument in support of my title statement, I should like to give some evidence of the superiority of the site of Bath for the purposes of a camp, and to show that the area could not be swampy, as has generally been held.

Sir H. de la Beche, in his report on the sanitary condition of Bath, states, "With the exception of the alluvial flat at the bottom of the valley, the ground upon which Bath stands affords great natural facilities for drainage."<sup>1</sup>

Mr. Telford, C.E., in his report to the Corporation of Bath, 1823 (embodied in Sir H. de la Beche's report), conclusively shows that the flooding of the alluvial lands of the flat is "in a great measure produced by artificial obstructions in the river, by encroachments on the banks of the river, and by mill dams or weirs, all of which retard the natural discharge of river waters. Mr. Bristow, C.E., F.G.S. (in the same report), adds evidence to prove the dryness of the lias and clay formation at Holloway.

(1). *Health of Towns Commission*, 1845, vol. i. p. 267. *Vide*. Geological Map accompanying the Report.



**PLAN OF BATH**  
SHEWING A ROMAN CAMP  
ACCORDING TO HYGINUS  
*laid down in double dotted lines*

On this area, as included in the De la Beche report, the whole of a consular camp, as laid down by Hyginus, would be high and dry on the lias; bounded on the east by the Avon; on the west, by Avon Street and the west side of Queen's Square; on the north, by a line a few yards to the north of George Street; and on the south, by a line parallel with the last mentioned line, and drawn at right angles to Stall Street, at the junction with the lower borough walls.

Such is a rough outline of the boundaries of the camp, containing about 86 acres, which I argue was the original form and position of Roman Bath, as shown in the accompanying plan.

I assume that on the occupation of Britain, in the first century all consular camps were made in pairs, for summer and winter use, and that we must look for a summer camp in the immediate locality. This we find on "Combe Down."

In proof of the above assertion, on turning to any old plan of Bath, it will be seen that the south, east, and west gates occupied the same relative positions as in the camp according to Hyginus: and that the range of baths at the corner of Stall Street and York Street also occupied the same relative position with the *Valetudinarium* in such camp of Hyginus. It is further seen that the hypocaust at the easterly end of the range is on the identical spot occupied by the hypocaust under the precentor's house in Lincoln, close to the Exchequer Gate; in the same position as that found in Chester, at the corner of Bridge Street and Feathers' Lane; on the same site as that found in Leicester, at the corner of High Cross Street and Black Friars' Lane; and in the same position as that found within the last few years in the Abbey grounds at Malmesbury.

Again, the hypocaust at the westerly end of the range of baths in Bath is relatively in the same position as the remains found at Manchester, which the Rev. John Haygarth considered to be undoubtedly a hypocaust.

Seeing also that in the places or cities above cited, all un-

doubted full-sized Roman camps, the "gates" correspond in distance with those of the south, east, and west gates of Bath, it is reasonably clear that there is a very great similarity in the plotting and construction of the several parts spoken of.

Some have assumed that the Roman city of Bath was a vast range of baths,—purely a great sanatorium,—and that the ruins of baths should be found everywhere within its limits; but proof to the contrary exists in the discoveries made when the Grand Hotel was built on the west side of Stall Street, as on excavating the foundations nothing at all approaching the character of such remains was found; a few massive foundations, and nothing else.

On the question as to the shape of Bath "city," considerable evidence has been adduced to prove that such "city" was always of a pentagonal form. From the above argument and comparison with other Roman cities I claim the contrary.

A camp of the size and character described by Hyginus would be a necessity for the conquering legions introduced in the reign of Claudius,—whose freedman Hyginus was, and who may possibly have superintended the choosing of the site and the laying out of the camp.

Thus much I am quite willing to concede, that the "city" became pentagonal, but was, as such, the natural outcome of circumstances following the subjugation of the Britons. The Romans, when they had subdued the Britons, had no necessity for the full-sized camp, a parallelogram of such a capacity as that of Hyginus; they simply, therefore, reduced it, preserved the south, east, and west gates, drawing a diagonal line from the two latter to the former, and having rebuilt the north end on the line known to us as the upper borough walls, closed in the remaining portions of the east and west gates and so constructed a pentagon of practically one-fourth the area of the camp of Hyginus and therefore easier of defence, and preserving the range of baths which had existed in the old *Valetudinarium* for use in the new "city."

That such a reduction of the area of the "camp" was made from the lines I have laid down, is to a considerable extent corroborated by a passage in Leland. "From the south-west angle," says he, "has been an additional wall and a ditch, carried out to the river, by which short work the approach of an enemy on two sides is cut off, unless they pass the river."

Taking the actual statement of fact by Leland, as far as "the river," and omitting his commentary, we have a line of wall and ditch exactly corresponding with the wall and ditch I have assumed to exist when the "camp" occupied the site of that portion of the high ground upon which I have placed it.

I argue, then, that Bath was not originally pentagonal, and that on research being made, by measurement from the given fixed spots bearing Roman remains, the foundations or remains of a full-sized consular camp will be found.

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