

I.

MISCELLANEA ROMANO-CALEDONICA. I.

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Under this general heading I propose, with the permission of the Society, to bring together from time to time a series of notes which are too disconnected to combine into a single paper, but which nevertheless all deal with Roman Scotland.

1. ROMAN REMAINS IN ABERDEENSHIRE.

In a well-known letter addressed to Captain Shand on 12th May, 1788, and reprinted in vol. vii. of the *Proceedings*,¹ General Melville refers in complimentary terms to a "vigorous paper" which Shand had communicated to the Literary and Antiquarian Society of Perth earlier in the year. The paper was never published, and after fruitless endeavours to discover its whereabouts I made up my mind that it was hopelessly lost.² Dr Callander, however, when he was resident in Perth during the War, succeeded in disinterring it from the archives of the Museum there, and kindly sent me a copy. Last year I had an opportunity of examining the original for myself. The courtesy of Mr John Ritchie, the Keeper, enables me to reproduce it here.

The full title is "Some observations on the great Roman road, and adjacent Camps, and Stations to the north of Graemes dyke. By CAPTAIN ALEXANDER SHAND of the ROYAL ARTILLERY," and place and date are given as "PERTH, 26th February 1788." The text, reproduced with its prodigality of commas and its occasional eccentricities of spelling, runs as follows:—

Authors who have written upon the antiquities of our country, observe, that the Roman highways, enter Scotland in three different places, by the east, midland, and western borders; and uniting together at Graeme's dyke in the neighbourhood of Carron water, the great road passes on towards Stirling, then passing the Forth, advancing up Strathallan, and crossing the rivers of Erne, and Tay, in its progress to

¹ Pp. 29 ff. The description of the paper as "vigorous" is due to a mistake which has crept in at some stage not now ascertainable. Melville's draft (which I have seen) reads "ingenious."

² *Proceedings*, vol. i. (1915-16) p. 349.

the north-east, it ceases to be discoverable not far from Kerrymuir, in the County of Angus. From the last mentioned place, however, there is the greatest reason to believe, that it had been formerly continued, at least, as far as Stonehaven, and this opinion is generally held, among the country people in the neighbourhood of Perth, who distinguish this ancient work, on account of its great length, by the name of the "lang Causey."

In tracing the road thro' those countries where it has been best preserved, we may observe it, marked out into spaces, nearly equidistant, not unlike our modern stages, or rather, resembling, the several days marches, of a considerable Army, penetrating with caution, into an Enemy's country, and forming entrenched posts every night, according to the well-known and established practice, peculiar to the Roman troops. Those Camps being afterwards found convenient halting places, for the Army, in advancing to, or retiring from, the Enemy, would of consequence be strengthened, with additional, more substantial, and permanent Works. Accordingly we find upon the road, the vestiges at Camelon, Ardoch, Strathgeth, Bertha, and Coupar of Angus, to have belonged to Works of a superior kind to the more common, and ordinary Summer Camps, which were only intended for a temporary defence. Further evidences of the consequence of those posts, appear from the great number of coins, arms, and other Roman monuments, which curious observers have discovered in, or near them—and if we add to this, that great pains had been taken to cover them on the side of the highlands, by occupying with other military works, all the avenues, passes & defiles leading into the Enemy's country, we may justly infer, that the above mentioned posts are no other, than the stations of the Roman Itineraries. And here it may not seem unworthy of observation that the most considerable passes were always secured by the most considerable Works. At Calendar of Monteith, for instance, the camp has been very extensive and the ramparts of great height, and Strength. At Dialgen-Ross on the Erne, and Fian-te-ach in the opening of the Defile of Glen-Almond, they are only summer Camps, and the former of very small extent. But the ancient fortifications on the Tay, some of which are still in great preservation, and have been traced as high as Fortingall in the bottom of Glen-lyon, are the strongest of all the Camps, and posts, which cover the great and principal road, that, being the most remarkable pass of any thro' the mountains, and might have been, perhaps, the tract of the western Itinerary to Inverness.

The appearance of the Roman road near Kerrymuir (as already mentioned) pointing to the northeast; the number of Camps between Coupar and Stonehaven, supposed by Antiquarians, to be of Roman construction, and the posts covering the passes thro' the mountains, at Fettercairn and Fordun lately described by a gentleman of the first mentioned place, are all proofs that the Stations of the Itinerary, tho' now effaced by time and modern improvements, must have had situations in the eastern part of the great Strath, similar to those, in the countries watered by the Allan, the Erne and the Tay, and some of which, the

Vestiges may one time or other be discovered, by industrious and careful observation. But hitherto it seems that writers, have either not thought it of sufficient importance, to trace the Camps, or did not imagine that they extended further than the celebrated Roman Work, called the Ré Dykes in the eastern part of the county of Mearns, on the head of the small river of Cowie.

Nevertheless many distinct remains are to be seen farther to the north, tho' they have not as yet become objects of much attention to the observers of Antiquity, which are not only in as high preservation, but appear as much in the stile, and character of Roman Works, as any to the south of the Grampian mountains. Upon the top of the Hill of Barra a short mile from Old-Meldrum, and about three from Inverurie-upon-Don, are antique entrenchments executed exactly in the same manner as the prætorium at Ardoch, only the profils, are not so lofty, tho' everywhere as distinct, and the parts as well defined. The figure is a square, only rounded off at the angles, and the circumference of the interior Agger measures upwards of four hundred common paces. The four gates ly two and two opposite to one another pointing vy accurately to the cardinal points of the Compass, and their breadth and other dimensions as exact as if the work had been built but a few years ago.

The hill of Barra rises no higher above the level of the adjacent country, than two hundred feet perpendicularly, and it would appear, that formerly on the north west side, there had been a very long range of swamps, and bogs, extending along a considerable part of the northern boundary of the Country of Garioch. But both upon that, and opposite side, several Entrenchments and ditches differing widely from Farmers works, have been discovered, and a gentleman in Old-Meldrum is in possession of a Weapon, or instrument resembling a small ax, which is made of a metal not unlike Roman brass dug out of those works a few years ago. The work at the south west foot of the hill of Bethelnie in the parish of Fyvie, and three miles northwest from Old-Meldrum, has every appearance of being a military one. It is also a square, of about sixty or seventy paces to a side, very entire, and the Ditch and rampart of the dimensions usually given to the temporary Camps of the Romans. Proceeding across the Country in the same north west direction, towards the head of the Ythan, there appears upon, and close to the, southern bank of that stream, about a short mile below its two well known sources, one of the most beautiful remains of an ancient Encampment, that perhaps exists any where in the northern parts of the kingdom: but it will be needless to enter into any particular description of it, as it appeared, when last inspected to be of the same, figure capacity, and properties, as that of Battles dykes, in the parish of Oath-law, a good account of which has already been given by the reverend Mr Jamieson of Forfar. It lies about fifteen miles from the Castellum of Barra, and the old people of the Country call it the Ré-dykes the same apellation as is given to the famous camp on Cowie water. Those who are critics in the English, Teutonick, and Gaelick tongues, seem to think that War dykes, Heer faulds, and Ré-dykes have nearly the same meaning. Ré

or Rūi having the comprehensive signification of King, the people assembled in Rendezvous, and the host, which last is the literal English for the modern Saxon word Heer. As the Ré-dykes therefore is a general appellation, the Camp upon Ythan may be distinguished by the name of the Ré-dykes of Glen-mailen; a farm in the parish of Forg adjacent to the north side of it, and from which it is separated by the above mentioned stream, and its steep banks. To give some idea of the extent of this Camp, tho the farm opposite to it maintains a good many families, it is thought not to comprehend so many Acres of ground. About a short mile from the camp, and north from Glen-mailen are several chains of pits on a parallel to the Camp, (on an East and West line), very much like those little places which are sometimes dug and thrown up for Centries posts, in the modern practice of War, when it is necessary to push them forward within the range of the Enemy's small-arms. Also on the south west part of the camp at the distance of about two miles, on the skirts of the hill of Culsalmond, or Tilly murgn is a very large, and deep entrenchment. And in many other parts of the north Country there are said to be Works of the same nature particularly on the Doavern and the Spey, which however, tis believed, have never been properly inspected much less described.

With regard to Roman Geography in general in the North, the historians of that people, inform us that the Emperor Severus penetrated to the extremity of the Island: and as he cut down the Woods, and drained the swamps, with immense labour during the course of that progress, we cannot imagine that so accomplished an Officer in such difficult, and dangerous situations, could possibly omit fortifying his Camp every night, after the Roman manner. Hence we have a right to conclude, that there must at this day be some remains of the operations of so considerable an army, and if they were well explored, perhaps the camps of Severus would appear as remarkable on the north side, as those of Agricola on the south side of the Grampian mountains, and the Route of the Itinerary be ascertained as far as Inverness, or Tain on the northern boundary of Rosshire.

It is observed by those who have read the Roman Itineraries, that none of the places mentioned in them have a more striking relation in sound, than the Latin word Ithuna, with the modern name of Ythan; But whether the Ré-dykes of Glen-mailen, be the Statio ad Itunam of the Ancients; or whether it be a summer Camp covering a post of more importance about Fyvie or Ellon where the Ythan flows thro' the flat country, are matters that must remain doubtful until the geographical Antiquities in the neighbourhood of that river have been more carefully examined.

While some of the references in this paper, such as those to the "Roman Camps" at Callander and in Glenlyon, will hardly seem very convincing to the modern reader, it contains not a little that merits careful attention. For the moment I am concerned only with Aberdeenshire. Glenmailen I have already dealt with at some length in the

Proceedings,¹ when I mentioned that Shand was its discoverer. At that time I was unaware that his own account of it was still in existence, and I am glad to have an opportunity of reprinting it. It is worth adding that the archives of the Perth Museum contain another description of this camp, accompanied by an illustrative plan. The description is somewhat fuller than Shand's, but does not supplement it on any material point. The writer, whose name is not given, seems to have been familiar with what his predecessor had said, although he had probably visited the site himself. Whether it was he who was responsible for the plan it is impossible to say, but the latter bears to have been executed in "May, 1789, by Theodore M'Ronald." While differing in a good many unessential details, it is virtually the same as the plan published a year or two later in Roy's *Military Antiquities* and originally obtained, as I have suggested elsewhere,² from Shand. That the two should agree in the outline of the entrenchments is in no way surprising, but it cannot be a coincidence that the letters marking the gates and similar features are identical. M'Ronald had certainly seen Shand's plan.

The description of the "Castellum on Barra Hill," as given in the paper, provides an enigma which I have so far been unable to solve. It is compared with Ardoch, the lines being "everywhere as distinct," although "not so lofty," and "the parts as well defined." Moreover, "the figure is a square, only rounded off at the angles." Again, "the four gates ly two and two opposite to one another . . . and their breadth and other dimensions as exact as if the work had been built but a few years ago." Shand had evidently told Roy about it, and Roy had been duly impressed, for on a scrap of paper in his handwriting, sent to General Melville when a visit to Scotland was in contemplation, the "Castellum on Barra Hill" is noted as deserving of a visit. The scrap is included in a bundle of the General's papers which Mr E. W. M. Balfour Melville has kindly allowed me to examine.

Now Chalmers in his *Caledonia*, which was published less than twenty years after the date of Shand's paper, has a full-page plan of what he calls "the British fort on Barra Hill in Aberdeenshire."³ It is circular, with three ditches and only a single entrance. Anything less like a typical Roman *castellum* it would not be easy to imagine. I have never visited the spot myself. But Dr Douglas Simpson, who knows it well, assures me that the plan in Chalmers's *Caledonia* is reasonably accurate, and that there is no entrenchment in the neighbourhood that he can recognise

¹ Vol. I. (1915-16) pp. 348 ff.

² *Archæologia*, vol. lxxviii. p. 212.

³ *Op. cit.*, vol. i. p. 90 (facing).

as corresponding to Shand's description. What he says is borne out by the language used in the *Statistical Account* (1793),¹ as well as by the O.S. Map. There I leave the matter in the meantime.

2. FIFE, WITH A POSTSCRIPT ON COCCEIUS FIRMUS.

So thoroughly did I enjoy Mr Birley's stimulating paper on Cocceius Firmus, when he read it to the Society a year ago, that I feel guilty of something very like ingratitude in criticising it now that it has appeared in print. At the same time, as I indicated in the course of the discussion to which it gave rise, I disagree profoundly with the only part of it that has a direct bearing on the history of Roman Scotland. Mr Birley has gone out of his way to revive a forgotten heresy, and the revival is all the more dangerous because of the attractive garb in which it is presented. In fairness to those who may be led astray, I cannot well refrain from saying what I think.

The root of the trouble, as it appears to me, betrays itself even in the interesting and lucid introductory section. Although Mr Birley is well aware of the distinction between salt-pans and salt-mines, he has allowed himself to ignore it, and yet from the point of view of his own argument the difference may be vital. The Latin word *salinæ*, like the English "salt-works," is ambiguous. If it generally means salt-pans, that is simply because the method of winning salt by evaporation was the one that was most familiar to the Romans. Blümner tells us in Pauly-Wissowa (I.A. 2077) that it was also used of salt-mines—in preference to the rare *salifodinæ* of Vitruvius or the awkward and no less rare *salinarum metalla* of Solinus—and he actually cites as examples both of the passages which Mr Birley quotes from the *Digest*. Presumably he reasoned somewhat as follows. In point of severity a sentence of condemnation to the mines (*damnatio in metalla*) fell but little short of the death penalty itself: *proxima morti pœna metalli coercitio*, as it is put elsewhere in the *Digest* (XLVII. xix. 28). Indeed, if we can trust the pictures drawn by Diodorus (v. 38) and by Cyprian (*Ep.* 77), it must often have been less tolerable. In the circumstances no jurist would have equated *in opus salinarum* or *in salinas* with *in ministerium metalli-corum*, unless he had been speaking of salt-mines, and not of salt-pans, where the hard labour was performed by the sun rather than by convicts, and where the task of the workers, including their women attendants, can have been no more exacting than, say, that of the average farm-hand.

¹ *Op. cit.*, vol. ix, p. 437.

If we could be quite sure that Blümner was right, that would be conclusive. As there is no rock-salt in Fife, there can have been no salt-mines there to serve as a penal settlement. However much we may regret it on sentimental grounds, this would mean the failure of Mr Birley's ingenious endeavour to secure for Scotland the honour of having provided the *Digest* with a leading case. But the matter may not be so simple as all that. In the passage in which he brings the two together, Ulpian is dealing, not with punishments as such, but with sentences determinate and indeterminate in point of time, and he may merely mean that women might be sent *in ministerium metallicorum* or *in salinas* either for life or for a limited number of years. That is, the connection in his mind between these two forms of punishment might be explained by the similarity of the arrangements for allowing a court to fix the length of the sentence. In other words, Blümner may be going too far in interpreting Ulpian's language as implying that *damnatio in salinas* was comparable in severity to *damnatio in ministerium metallicorum*. Whether he is doing so or not, I do not presume to say. But, so long as there is a doubt, we are bound to consider the alternative of salt-pans.

Here the weakness of Mr Birley's argument lies in the fact that the shores of Fife are in no way better suited for salt-pans than are countless other points on the Scottish coast from Maidenkirk to John o' Groats. Indeed, if the *salinae* of the *Digest* are to be located in Scotland—which I greatly doubt—a much more appropriate place for them would be the southern margin of the Firth of Forth, where the manufacture of salt was long an important industry (as witness the name of Prestonpans), and where there would always be a risk of *clandestinos latrunculorum transitus* from the opposite side of the estuary. So far as I can judge, there is no justification whatever for raising the ghost of a Romanised Fife, and it behoves us to see whether it can be laid again.

This should not be very difficult. The only new evidence Mr Birley brings forward is that of the hypothetical salt-works, and he more than hints that these might have been found if Scottish antiquaries had taken the trouble to look for them. He evidently does not realise how careful was the search that some of our forefathers made in Fife for Roman remains of any sort. Unless it be the tract of country through which the Antonine Wall runs, no district in Scotland received so much attention of the kind from Sir Robert Sibbald. It occupies two of the three sections of his *Conjectures Concerning the Roman Ports, Colonies, and Forts, in the Firths, Taken from their Vestigies and the Antiquities, found near them*, which was published in 1711, and it also figures largely in his *Commentarius de Gestis Agricolae in Scotia*, where it is made the scene

of the sixth campaign. "Sandy" Gordon, who naturally included it in his *Itinerarium*, was confident that he had discovered at Lochore the very camp in which the Ninth Legion had so narrowly escaped disaster. Military men, like Melville and Roy, who understood the strategy of the Roman invasion and conquest, did not think it worth their while to waste time on the peninsula. Their neglect of it was outweighed by the zeal of the parish ministers who contributed to the *Statistical Account*, a phase of research which culminated in the *Interesting Roman Antiquities Recently Discovered in Fife* by the Rev. Andrew Small. Writing in 1823, Small was able to claim credit for the identification, not only of "Mons Grampius," but also "of the position of five Roman towns, and of the site and names of seventy Roman forts." Is it conceivable that so successful a seeker could have missed the salt-works, if they had been there for him to find? Seven years later Small's theory of "Mons Grampius" was defended at great length by Lieutenant-Colonel Miller in a paper which is printed in *Archæologia Scotica*.¹

The outcome of all this feverish activity was about as meagre as it is possible to imagine. Apart from one or two hoards of the same character as those unearthed in Kincardineshire and farther north, fewer Roman coins have been found in Fife than in the Orkneys, while in Mr James Curle's well-known list of other Roman objects the county cuts a poor figure as compared with, say, Angus. As for the seventy-five Roman towns and forts, they have long ago vanished into thin air. Even Robert Stuart, *ultimus Romanorum* in the sense that he was the last of the old school of theorists, had little to say in defence of any of them, except perhaps Lochore which he was "inclined to believe" had been the scene of the attack on the Ninth Legion. Lastly, only a few years ago the officers of the Monuments Commission combed the whole district systematically without finding a vestige of any entrenchment that could reasonably be said to resemble Roman work. Nor is this surprising. Fife in itself had but small attraction for invaders: the interior was full of swamps and forests until well on in the Middle Ages. Strategically, again, it was not worth the bones of a single Roman soldier, so long at least as the Roman fleet could keep command of the sea.

The one potential danger-spot was at the north-west corner, where unruly tribesmen, who had made their way either along the coast or through Glenfarg, might have mustered for a raid on the Ardoch-Inchtuthil line. The fort at Carpow, which stood just outside the county boundary, on a magnificent site overlooking the confluence of the Earn with the Tay, may have been partly intended to thwart any

¹ Vol. iv. pp. 19 ff.

movement of the sort, although its main purpose was probably to serve as a naval station within easy reach of Strageth, some ten or a dozen miles inland. Mr Birley, to be sure, considers that the Ardoch-Inchtuthil line was a *limes* laid out for the protection of a Roman Fife. But, if so, it was oddly designed, the northern extremity being left hanging in the air in a fashion which positively invited the tribes of the north-east to take it in the rear. Nor do I see any ground for assigning it, as he does, to the second century. On the contrary, I greatly prefer the explanation of its date and purpose which is suggested by Mr Richmond in his preliminary account of the fort at Fendoch.¹

Having eased my conscience in regard to Fife, I may be allowed to turn for a moment to Mr Birley's main thesis. I do not think I have weakened his case by ridding him of the incubus of Fife. The identity of the three individuals named Cocceius Firmus remains an interesting possibility, and it has never been anything more. I am not sure that his hearers realised how heavy was the burden of proof he was assuming; in that respect the case of L. Tanicius Verus was a much simpler proposition. Thanks to the Emperor Nerva, Cocceius was anything but an uncommon second-century name—the index to Dessau's *Inscriptiones Latinae Selectae* mentions about two dozen different men who bore it—and the *cognomen* Firmus was even commoner. The combination may well have been far from infrequent. It is true that in two out of the three cases the designation *centurio* is added. But, if one turns up any common combination of names in the British *Monthly Army List*, it will be seen that the coincidence does not necessarily carry us very far. On the other hand, there is a stronger card which Mr Birley has somehow refrained from playing, although it figured prominently in his hand.

No part of his paper seemed to me more likely to carry conviction than that in which he sought to forge a link between Cocceius Firmus and the Danube Valley by means of the Auchendavy altars. Though speculative like the rest, the idea has an air of probability, and the argument would have been substantially reinforced if the salt-works had been placed in the Danube Valley too. Nowhere else in Europe are there richer beds of rock-salt, and we know from epigraphic evidence that there were *salinae* in Dacia. Mr Birley is familiar with the inscriptions, but he dismisses them on the ground that in Dacia "the salt was not worked directly by the State," and that private contractors "would hire free labourers or employ slaves." Unless this view has something more than the mention of *conductores* behind it, it is scarcely

¹ *Proc. Soc. Ant. Scot.*, vol. lxx. (1935-36) pp. 405 f.

likely to command universal assent.¹ But we have little or no information as to the arrangements for working salt, and in these circumstances one cannot safely be dogmatic. Where an authority so learned as Rostovtzeff admits that "the organization . . . of the extraction of salt remains almost a blank in our knowledge,"² it would be idle to embark on a discussion.

3. CRAMOND.

It has long been matter of common knowledge that there was a Roman fort at Cramond. The finding of inscriptions and of pottery fragments leaves no room for doubt upon the point. The site, overlooking as it does the mouth of the River Almond, is thoroughly characteristic, but the scanty records of the discovery of structural remains are too vague to enable us to determine the plan and dimensions of the *castellum*. The evidence, such as it was in 1928, is set forth in the Royal Commission's *Inventory of Monuments in Midlothian*.³ The object of this note is to put on record a fresh item, which came to light no longer ago than last winter.

On 17th December Mr A. O. Curle and I paid a visit to Cramond, where he had learned that some houses were being built within what had presumably been the area of the fort. Looking over the ground that had been opened up, we noticed three broken hypocaust-pillars, as well as some odd stones which were blackened by fire. A workman told us that he had dug them up a few days before in excavating for the foundation of one of the new houses, and that he had also struck a line of cobbles. The cobbles indicated a street, while the broken pillars and blackened stones suggested a Bath-house. The suggestion was confirmed a few days later. On 22nd December Mr Curle was informed that a further discovery had been made. Proceeding to the spot at once, he saw a piece of paving some 4 feet below the surface. The portion exposed measured about 6 feet by 2 feet 6 inches and was well laid, being apparently part of the floor of a room, doubtless the Apodyterium, which must therefore have lain at the south end of the suite.

The floor did not remain open very long. I went out next day, but a few minutes before I arrived it had been covered with hot lime. I was, however, able to note the exact position, which was immediately behind the wall on the left-hand side of the road leading down to the beach, and exactly opposite an electric standard which is set up a little

¹ See, for instance, Orth's article "Bergbau" in Pauly-Wissowa, Suppl. iv. pp. 108-155.

² *Social and Economic History of the Roman Empire*, p. 294.

³ *Op. cit.*, pp. 38 ff.

to the north of the Church. The suite of Baths can thus be identified with the one that was broken into in the latter part of the eighteenth century, as we learn from Wood's *Ancient and Modern State of the Parish of Cramond* (1794): "In making a new road to *Nether Cramond*, in 1778, there was discovered, about twenty yards north of the porter's lodge of *Cramond House*, a pavement made of lime intermixed with small stones, about 9 inches thick, and 5 feet in diameter, though of an irregular form. Below this pavement were found burnt earth, charcoal, and several fragments of brown earthen pitchers, the mouths and necks of some of them in an entire state, with an ear on each side. Many pieces of bricks and tiles lay scattered about, the latter much thicker than those now in use, and marked with lines on one surface by way of ornament." The description of a ruined hypocaust is unmistakable. As the porter's lodge of *Cramond House* is a little north of the electric standard, the two sets of Baths are obviously one and the same. So far as can be judged, the building must have stood within the ramparts and not, as Baths frequently did, in an annexe outside.

4. BRIDGENESS.

Early in April of the present year a message reached the Museum that a cist had been discovered at Bridgeness. Mr Edwards, who was sent down to report, found that the term "cist" had been used under a misapprehension. In the course of operations connected with the development of a new housing-site, a deep trench for a drain was being cut down the middle of Harbour Road, which runs from north to south past Bridgeness Point, and in this, about 8 feet below the modern surface, a peculiarly shaped block of coarse sandstone (fig. 1) was lying among sand on the top of two flat, unworked boulders. The exact spot was 113 feet south of the northern side of the road into which Harbour Road debouches,¹ and about 81 feet north of the tablet built into the wall to mark the original position of the well-known Distance-Slab set up by the Second Legion. Two vertebræ of an animal were recovered along with the stones, and these have been identified by Miss M. Platt of the Royal Scottish Museum as belonging to the domestic ox.

When the sandstone block was brought to the National Museum, I at once recognised it as an arch voussoir of a type with which I had become familiar when examining the Baths at Chesters in 1930. It was the first specimen of the kind I had seen in Scotland, but Mr James Curle tells me that several were removed from the ruins of the Baths

¹ The measurement was taken from the N.E. corner of the building in the west.

at Newstead and utilised in building a now demolished arch at Drygrange. The great majority of the Chesters examples are of tufa. In every other respect, including size, the resemblance between them and the one from Bridgeness is extraordinarily close (fig. 2). An entirely convincing explanation of the use to which such voussoirs were put, originally

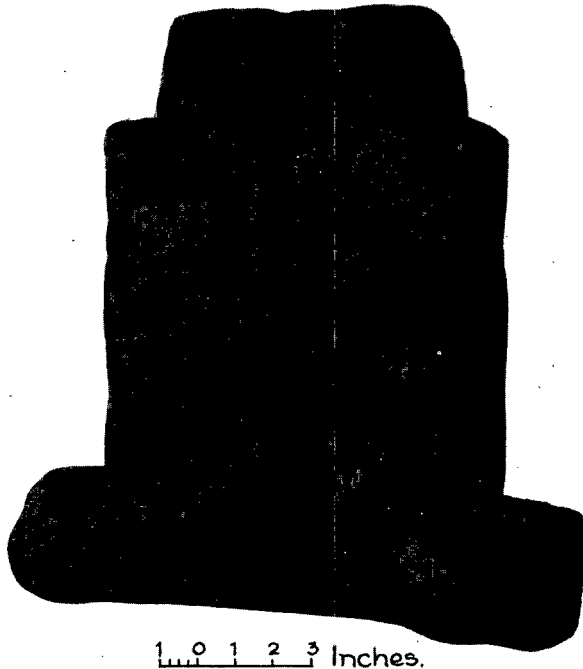


Fig. 1. Voussoir from Roman Bath-house.

suggested to me by Mr Parker Brewis, is incorporated in a paper which I contributed to *Archæologia Aeliana* and to which I would refer for full details.¹ Here I will only say that they seem to have been employed in Roman Bath-houses for the vaulted roof of the Caldarium or Hot Room. The ledges at the top and at the bottom were designed to support the ends of flat tiles, the space between which was left empty, after the manner indicated in the accompanying sketch (fig. 3).² The purpose of the device was twofold. Besides reducing the weight of the roof

¹ *Arch. Ael.*, Ser. 4, vol. viii. pp. 278 ff.

² This was executed, under Mr Brewis's direction, by Mr R. J. S. Bertram, and I am indebted to the Society of Antiquaries of Newcastle-upon-Tyne for permission to reproduce it here.

and therefore also the thrust upon the side walls, it provided a cushion of air which would maintain the temperature of the room below at a higher level than would have been possible with an ordinary ceiling.

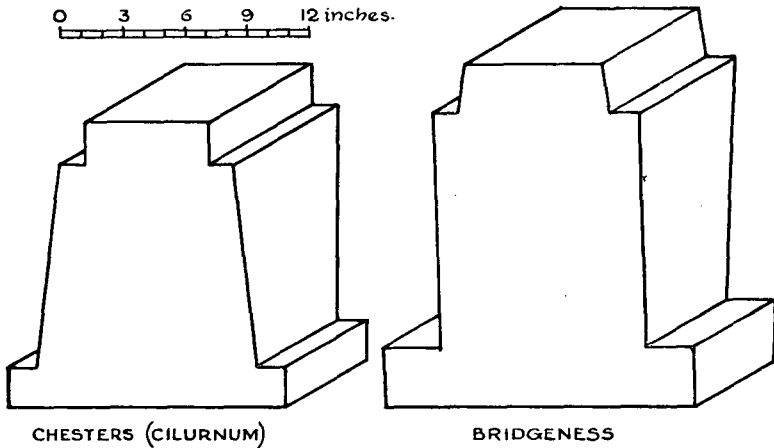


Fig. 2.

My first impulse on seeing the voussoir was to jump to the conclusion that it furnished evidence of the existence of a Roman Bath-house—and

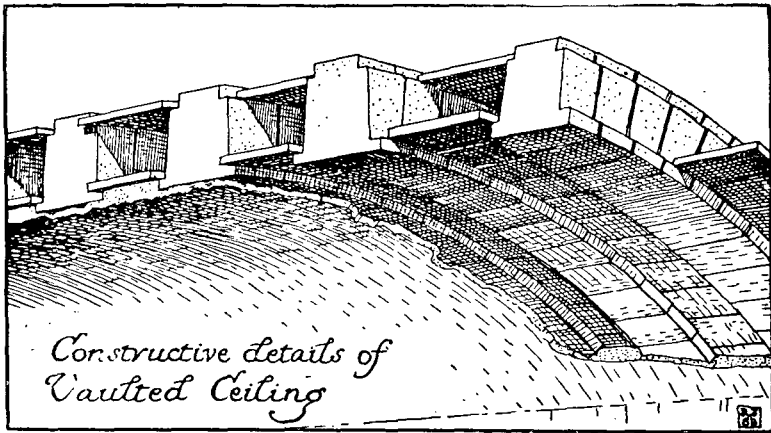


Fig. 3.

therefore of a Roman fort—at Bridgeness itself, whereas I had previously been of opinion that the “terminal station” was at Carriden, about three-quarters of a mile away.¹ A visit to the scene of the discovery

¹ *Roman Wall in Scotland* (2nd ed.), pp. 190 f.

made another explanation appear more probable. The field which is the only likely site for a fort happens to be the piece of ground which is being broken up for building, but in none of the cuts that had been made was there any sign of filled-up ditches, while not the slightest scrap of Roman pottery had been turned up. Mr Samuel Smith, who accompanied me and who has been good enough to maintain a watch, reports that the position is the same to-day. On the other hand, when I consulted the 25-inch Ordnance Map on which the late Mr H. M. Cadell many years ago marked out for me what his special knowledge led him to believe had been the line of the beach near the Point in Roman times, it turned out that the "find-spot" of the stones was 60 feet farther out to sea. Taking this in conjunction with the fact that they were lying among sand, we may infer that they had slipped overboard or been dropped in or near the little harbour when they were being shipped away for use elsewhere. That, of course, must have been after the Romans had left, and the *voussoir* may accordingly be spoil from Carriden. It should be added that the greater part of the 8 feet of superincumbent soil had been heaped up in comparatively recent times, when Harbour Road was constructed, and also that, as Mr Cadell's line was admittedly conjectural, it can hardly be made a basis for precise calculations.

5. CORRIGENDA.

Following upon a personal inspection of the potters' stamps on Samian ware preserved in the National Museum, Professor Atkinson has been good enough to draw my attention to a somewhat serious mistake in the paper which I published six years ago in the *Proceedings*.¹ The stamp concerned is No. 169 in my list. It is outside, on the zone beneath the decoration, and is in cursive script. The surface is so badly rubbed that in the Report on Camelon (where the fragment was found) Dr Anderson prudently refrained from offering any suggestion as to the reading. So anxious was I to have the list complete that I rashly ventured upon **SILVIO**. Professor Atkinson points out that it is really **PAVLLI** retrograde, kindly confirming the correction by sending a photograph of a much better preserved example.

My first mistake has entailed a second. It will be remembered that, not having made any special study of Samian ware myself, I adopted the simple expedient of borrowing from Dr Felix Oswald's invaluable *Index* the note as to the "floruit" of each potter and the locality or localities in which he worked. I accordingly attributed No. 169 to

¹ Vol. lxxv. (1930-31) pp. 433 ff.

Silvius of Lezoux, a potter of the Flavian period. This Paullus, however—there was another—worked at Lezoux and Labié from the reign of Hadrian into the Antonine period. Had I taken the precaution of re-examining each fragment when I added my note, I should probably have avoided my original blunder. The decoration is so obviously late that not even an ignoramus could have pronounced it Flavian, and I should have seen that there was something amiss. The change from Flavian to Antonine necessitates an alteration in the comparative statistics which I gave at the end of my paper, and it will be well to take the opportunity of bringing these up to date in other respects.

Since I wrote, a fragment with the stamp of the Flavian potter **MACCIVS** has been picked up at Newstead, and I have ascertained that the examples of Cinnamus at Bar Hill were only 3 in number, not 4. Further, there are certain amendments which those who have given particular attention to the matter would like to see made in the dating. Thus, they would prefer to regard as "late" Cadgatis (No. 28), Libertus of Lezoux (No. 82), and Secundinus of Lezoux (No. 131), all of whom Dr Oswald had reckoned as "early." *Per contra* they would transfer from the "late" class to the "early" Coccilus of Lezoux (No. 43), Gatus (No. 69), Jullinus of Lezoux (No. 80), and the first two stamps with the name of Quintus (No. 117), while Vironius (No. 155), who was represented by two sherds at Camelon and for whom Dr Oswald proposed no date, they believe to be "early" also.

As Gatus figures only at Cramond, the change in his date does not affect my comparisons. For the rest, the following modifications are required: (1) The total number of pieces from the Antonine Wall is reduced from 85 to 84, of which only 7, instead of 10, can be looked upon as "early," an alteration which emphasises the contrast to which I drew attention. (2) The total from Newstead is raised by 1 to 140, of which 94 are "late" and 46 "early," as against the 96 and 43 of my former calculation. (3) The addition of the two sherds of Vironius brings the Camelon total up to 80, of which 44 are "late" and 36 "early," as against the previous 43 and 35. These modifications do not seem to me to make it any easier to acquiesce in the view that, while the second occupation was prolonged for nearly half a century, the first ended abruptly after about a dozen years.