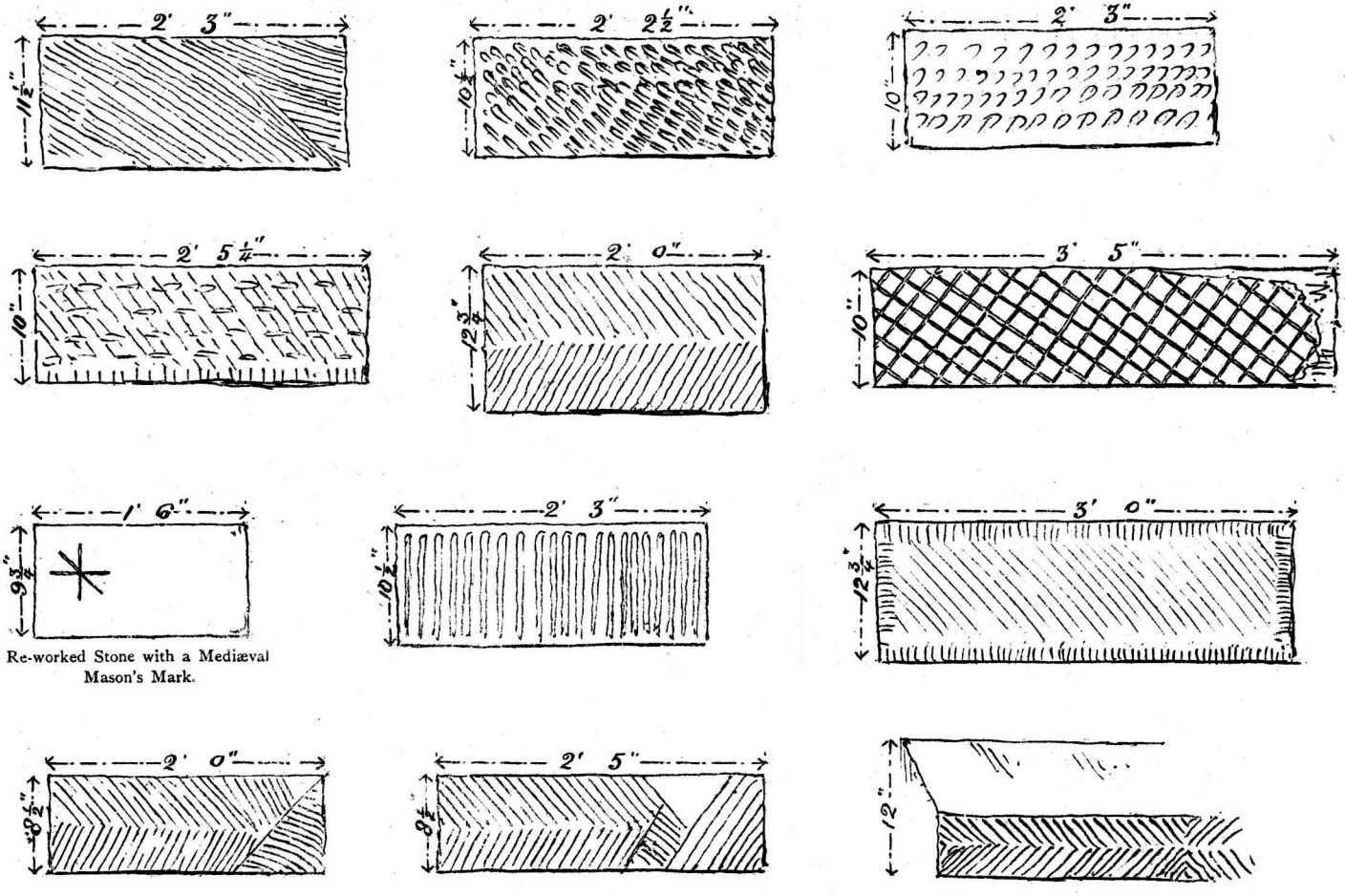
THE AGE OF THE WALLS OF CHESTER, WITH REFERENCES TO RECENT DISCUSSIONS.

BY E. P. LOFTUS BROCK, F.S.A., F.R.I.B.A.

(Read 16th January, 1888.)

I WILLINGLY accepted the invitation of your council to read a paper to this Society on the walls of your ancient city. When this was proposed to me it was not known that an able and exhaustive paper on the subject, by Sir James A. Picton, F.S.A., would be forthcoming; and it is possible that, had this been known, my invitation would not have reached me. As it is, however, I fear the subject has been already discussed and may be considered as settled. It only remains for me to-night to review, here on the spot, before you who know all the local surroundings, some of the arguments I have used in public correspondence.

I can hardly, perhaps, expect that you will consider this an interesting paper, for it will deal entirely with a mass of technical evidences. It is, however, only these that can be looked to if we would extract the secret of the age of the work from the walls themselves; and I must throw myself upon your indulgence while the task is pursued.



Re-worked Stone with a Mediæval Mason's Mark.

TOOL-MARKS ON THE ROMAN STONES IN THE NORTH WALL. SKETCHED BY E. P. LOFTUS BROCK, F.S.A.

It need not be necessary to occupy time in the discussion of the question, Were there any Roman walls to the Roman city of Deva? Yet it is necessary for the completeness of my theme that we should start with the certainty that there were such walls, leaving for the moment their actual positions out of the question. Mr. Roach Smith has conclusively shown that all the principal Roman cities were walled, and Deva, being the home for a long period of the Twentieth Legion and a city of importance, would of necessity not be destitute of the defences common to other cities. We can tell by analogy, therefore, that there were Roman walls. Apart from this we can tell almost certainly by the arrangement of the principal streets, at right angles to one another, which still continues, that their plan had the frame, so to speak, of enclosing walls.

A comparison of the plans of other Roman towns, an elongated square, as some of them are, but not all by any means, shows that the lines of the present walls of Chester are not unlike those of such towns as Colchester, Caerwent, Burgh Castle (as originally built by the Romans), and many others. These are all more or less of a parallelogram, with the four angles rounded. We thus, by analogy, advance the inquiry a step further. While there is everything to justify the belief that Roman Chester was walled, there is nothing unreasonable in supposing that the general plan of the present walls is fairly like what we might expect to find enclosing a Roman city.

A step further may be taken by showing that the existing walls do actually stand on the lines of those of Roman date by two interesting facts. The north gate of Chester, taken down at the beginning of this century, is known to have had a Roman foundation upon which the modern gate is built. The east gate, taken down in 1767, had its well-known arches clearly and conclusively of Roman work-

manship. Both of these gates are in line with the north and east walls respectively, and it is difficult to arrive at any other conclusion than that the gates where built to be passages through walls. If so, it is more likely that the present walls are on the exact old lines of the ancient ones, than that they were only a few feet more or less away from the present positions. This much they might be, but the existence of the gates would not allow them to be more. The retention of the old foundations would be a reason to induce any rebuilders to keep to the old lines rather than to go a little off them. Were any great change in position needed, the gates would have to be altered to suit it, and this, we have seen, was not done.

Analogy with other places will help us yet a step more. With the exception of only a few instances, such as Roman Canterbury and Roman Rochester, there are no Roman walled cities in England which have not preserved some tradition or trace of the courses of their walls, although in most of them actual remains exist. At Rochester it is all but certain, by analogy, that the mediæval walls actually stand on the Roman base. Chichester, until four years ago, was another city without a trace, as many said, of its Roman walls. We had excavations made, and the Roman foundations were revealed, perfect and complete, and supporting the present walls of mediæval date. These considerations render it evident that it is not usual for the trace of Roman walls to be lost in our English cities, and that it is usual for portions to be extant.

It may not be undesirable, before I pass on to a minute survey of the walls of your city, to make some remarks personal to myself.

I arrived at Birkenhead in August last, in consequence of the visit of the British Archæological Association to Liverpool, having purposely avoided giving much attention

to recent controversies relative to the age of these walls. It had been at a time, many years previous, that I had read Mr. Roach Smith's well-known paper claiming a Roman date for a great part of them, and his items of evidence were, therefore, not vividly before me. I had in my hand, however, a paper written by a well-known local antiquary and geologist, whose interest and appreciation of ancient work we all must admire.[1] It is but fair to say that my remembrance of Mr. Roach Smith's theory was influenced by that paper, and the more so since I knew that he did not possess, necessarily, technical knowledge of masonry, nor had he had the benefit of any local residence. It was with these feelings that I undertook to guide our party during their visit, and to make myself conversant with a subject of such extreme importance it was of necessity incumbent upon me to study the walls themselves. My work, cheerfully rendered to the Association, of investigating the buildings to be visited, speedily led me to the first item of evidence, which shook my belief in at least one of the statements made in the paper referred to. It was with respect to the supposed structural impossibility of your Cheshire red sandstone to resist the action of the elements for more than three or four hundred years at the most. At Bebington Church I found the well-known tool-marks of Norman date remaining on the external walls, in full exposure to the south and the west. The stone, being so perfect as to show the easily obliterated tool-marks, indicated that there was at least some red sandstone in the

[1] For convenience of reference, it may be stated that a summary of this paper (read to the Society on December 8th, 1883) has been drawn up by the author, Mr. G. W. Shrubsole, F.G.S., and will be found in vol. i. of the New Series of the Society's *Journal*. This summary has also been reprinted in the Appendix to the volume on *Roman Remains recently found in Chester*.

county that had resisted the elements for double the time stated. The stone has never been disturbed since its erection, and it is likely to exist perfect for many more hundreds of years. At the adjoining village of Bromborough, in the vicarage grounds, is a collection of ancient red sandstone carvings removed from the old church, demolished shortly after the beginning of the present century. There are several examples of interlaced work of Celtic type, testifying to the influences of early Christianity, of a style of design which does not come to us from Augustine. They are doing the unworthy duty of ornamenting the garden as rock work, and while we may be thankful that their preservation is possibly due to this cause, we may express regret that their extreme importance does not cause their removal for permanent preservation into some secure place of shelter. These stones, notwithstanding their bad usage, are perfect. The sandstone has not yielded to the influences of the weather, and, like the walling at Bebington, it is likely to last for centuries. It has been stated, as proof of the rapidity with which the local sandstone decays, that the remarkable quartz pebbles found in its material are not unfrequently found standing out from the surface of stones worked only eighty or one hundred years ago. At Eastham Church, next to Bromborough, there is some good sixteenth-century walling in a pale red sandstone, and many pebbles are found on the surface. These were the first that I saw, and careful observation convinced me that the surface of the stone had hardly decayed at all, but that the masons had left the pebbles projecting wherever they met with them, a sensible practice which, I afterwards learned, is continued to our own day, and hardly ever departed from. Coming to Chester itself, the Dee Bridge, erected in place of its predecessor in the fourteenth century, is constructed of good red sandstone which, consider-

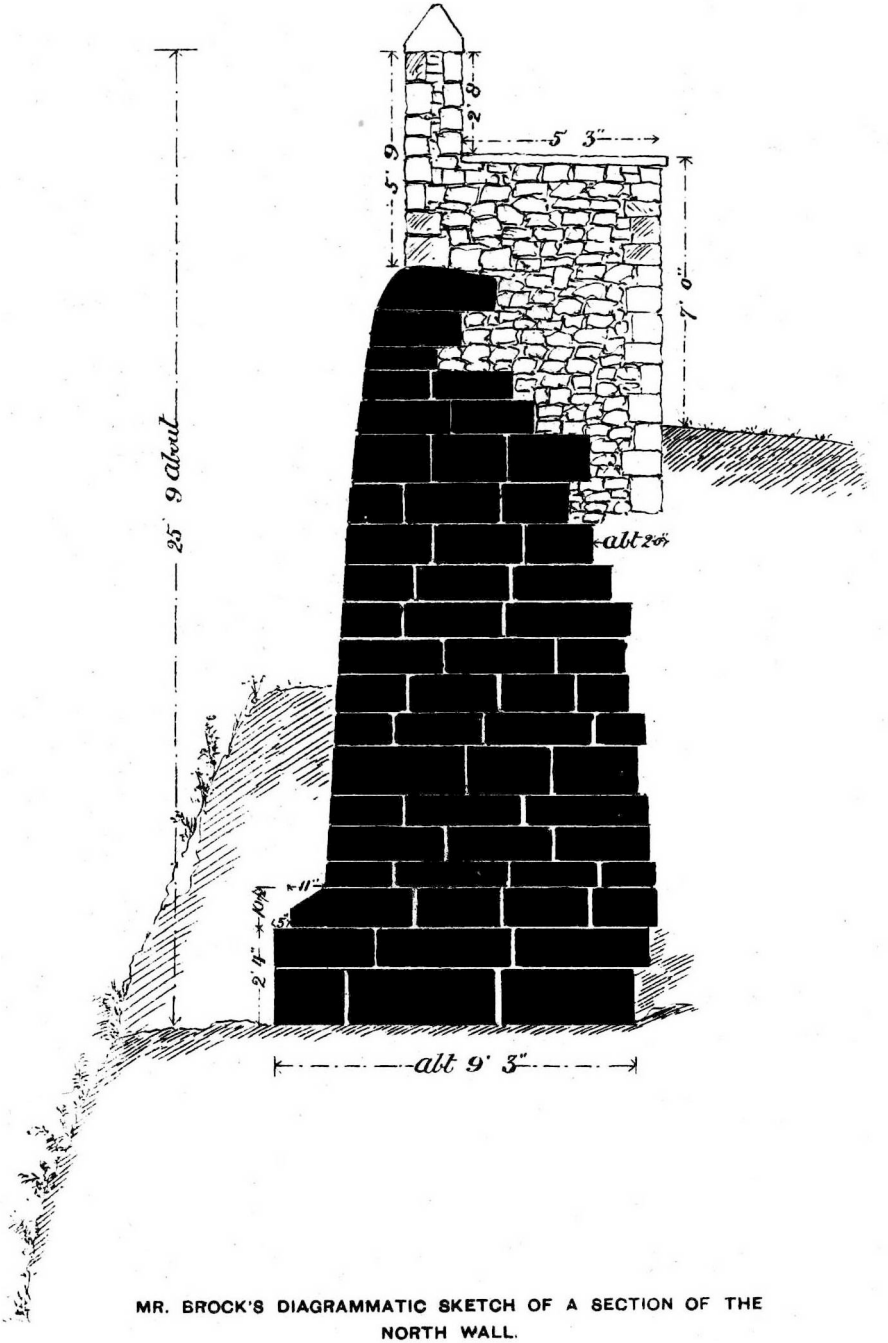
ing its exposed position, always more or less in a humid condition, is as sound as can be expected. The scarped rock of St. John's Hermitage is also another good specimen of very early date.

I came to Chester, therefore, with the belief that there was nothing unreasonable in the supposition that the present walls represent the sites of those of Roman date, and also, since obtaining the evidence named, that it was possible to find red sandstone capable of resisting the elements. I entered upon my task with some curiosity as to the result of the survey of their technical features and evidences of construction, to which I proceeded to subject them.

Turning to the walls of Chester, the first impression on a spectator's mind is that by far the largest portions visible are of mediæval date, with evidences of many repairs. The wall is none too well built, the masonry is for the most part of inferior stone, the work irregular, and the patches where repairs have been effected are frequent. Standing on the north bank and looking at the north wall, six or more repairs are visible in the space between the more solid base and the parapet. The singular custom of ignoring the natural bed of the stone seems to have been very general, and the result is that some of the latest executed portions appear to be the most decayed. The more solid base is, however, the portion which claims our first attention, and reasonably, since it practically determines the discussion which has arisen. Mr. Matthews Jones's section shows the construction of the wall at the point where some repairs were being effected at the period of my visit. These works revealed the mode of building.

It will be noticed that the wall is constructed of large ashlar stones laid in courses, solid from face to face, except where the upright joints do not touch, and these are filled

with percolated earth. The beds of the stones are truly worked, very even and neat, and there is no mortar, except that the rock base has been prepared by a layer of mortar laid on it. Looking at this portion of the wall, it seems impossible to detect any sign of the wall being "double," or of the masonry having such wide joints that a " man could put his arm " into them. This description must apply to either the work above or of some portion that I have not seen. The courses are of varying heights, and the beds of the stones are laid fairly horizontally, with a tendency to follow the undulating nature of the rock on which the wall is built. There is a chamfered plinth now buried beneath accumulated earth. The stones are neatly worked to a face in front, still perfect, but there is no face behind, for the stones end irregularly, some projecting beyond the others. This shows conclusively enough that the inner face was never worked fair to be seen. It is at the point shown on the section, backed up on the city side by a bank of earth, which accounts for the uneven nature of the work, and we may conclude that this bank is part of the original construction. Above the plinth of three courses the wall rises to the height of seventeen courses of the construction already named. There is then a rounded set off, and above this there is a change in the mode of building. Partly on the massive wall of masonry and partly on the earthen bank, with no sort of foundation except what the wall gives, with no extra footings or projecting course on the city side, rises the poorly-built wall, which we have seen from a distance. Mark the difference of its construction. It has an inner and an outer face of rough squared stones not in all cases laid horizontally, but in most laid random, the space between the two faces being filled in with rubble, after the style of all the mediæval walls of Chester. It is built with mortar not over good. It is in and with work of



MR. BROCK'S DIAGRAMMATIC SKETCH OF A SECTION OF THE NORTH WALL.

this nature that the repairs visible from a distance have been effected.

The construction of the base being so peculiar, it is well to dwell upon it at length. I am willing to admit that it is unlike any other city wall in England, and its formation makes much of the recent discussion very reasonable. The construction adopted must have required forethought, and correspondence with the workers at the quarry. The builder must have set out his rod, determining the heights of the varying courses, for while the stones are of equal height to each course, they are not the same, one course with the other. As set out, so must they have been worked at the quarry. As worked, so must they have been delivered, sorted, and built. Now, it is agreed by the greatest number of those, who have taken part in recent discussions, that the face stones are of Roman workmanship. Indeed, no other conclusion can be arrived at, for they bear incontestable evidence that they have been fashioned by Roman hands. They have well-defined and varying tool-worked patterns, and they have in some cases peculiar lewis holes of no modern form. These are T-shaped, but how used I cannot tell. Certainly they could not be hoisted with the lewis now in use. It is in this part of the wall that the extraordinary collection of moulded, inscribed, and sculptured Roman stones has been found—a collection which is remarkable, not only for its interest, but for the enormous quantity met with in such a small space. These stones were doing duty with the other walling, several of them appearing on the face of proper height with the other courses. Many of the other plain stones bore evidence of some prior use, but their heights accorded with that of the courses in which they were found. We have thus evidence that the builders of the wall had these stones to their hand before commencement, and that they studied their sizes.

It may even be that the existence of these stones and others yet to be found regulated the heights of the courses when cut at the quarry for the wall. The evidences of the masonry lead me to conclude that the work was leisurely executed, and well studied before commencement, the builders commencing, as Sir Henry Dryden has well said, with the Roman sculptured stones.

If we examine the position of the upper wall, the section shows that it was so placed by builders who had but little knowledge of statics and who were very careless of their foundations. The effect of this upper wall is to thrust out the lower one; and it must have done so but for the excellence of its construction. The latter is an admirable piece of masonry, still perfect, and not at all like the "ramshackle" wall surrounding the wigwams of some New Zealand savages, to which it has been very unfairly compared.

But it is time to turn to some objections that have been expressed. It is said that the base wall has itself been underbuilt, probably, it is supposed, to carry it down to the rock—a very necessary thing to do, if done properly. One friend has suggested that this was done when the canal was dug. What more likely than for the Roman stones from some prior wall, or from an amphitheatre on the opposite bank, to have been found in the excavations, and used there in the necessary underpinning? I reply that the stones in the wall are all uniform; their edges show no sign of any such ill-usage as a fall into a moat would entail, and a burial there for perhaps much over a thousand years. Nor is there any difference in colour, as there would infallibly have been; but what is even more to the point, there is no difference in the general range of the joints in height.

But it is said that the upper wall is the older of the two, and that the lower wall, although built of Roman stones, is a mere buttress wall to that above it. The date of this

work is assigned either to the period of the Civil Wars or later, when breaches were made, and afterwards repaired by forced labour, Roman stones being dug up from then existing Roman ruins, and the sculptures in cemeteries disturbed by the siege works.

This is a long series of objections, and each item has been strenuously insisted upon. They are capable of being answered, however, with very great ease.

The lower wall is not a buttress wall, for no mason would have built it so. Had the wall above it been first erected, he would have proceeded to underpin it by placing his new wall completely beneath and not partly at one side of it. But the upper wall could never have been erected first, for it would have had to stand on an earthen bank of made earth, with a rapid slope down to the edge of the ditch, scarped in the solid rock. Would any builder have been rash enough to risk such construction? Is it possible to conceive such a wall having been built? It would not have lasted the soaking of a single winter. There are, therefore, at the outset two structural impossibilities. The slope of such a bank, with the best angle that could be given it, would be fifty-two degrees. I have measured it from the lowest point of the upper wall to the extreme edge of the scarped rock of the Roman ditch. No bank of any material except rock, and certainly no bank of made earth, could stand for any length of time supporting such a wall. But it would be necessary to have some sort of flat base to build the wall upon, and this would make the angle worse by so much. There are many points of this discussion that have to be treated with becoming reserve and caution, but this is one that does not admit of any doubt. No such wall could be built on any such bank. The opinion that the upper wall is older than the lower cannot be sustained.

Again, if any such work as the lower wall had been built

during the Civil Wars, or of the time of Queen Anne, is it not reasonable to suppose that there would have been some record, for see what the structure shows us must have been done? The under wall of massive stones may be traced in several other portions, as we shall see, in various other parts of the city. In some places these are several courses in height, in others only a few. All above is walling that bears evidence of having been repaired over and over again. But if the lower courses are really of the date of the Civil Wars or later, it means that not only was the wall rebuilt from its base upwards then, but that the wall has since again been rebuilt all but these few remaining courses. Surely such a series of rebuildings is incredible. I have been at some pains to show that the cost of rebuilding the wall from the Northgate to the Phœnix Tower, a distance of three hundred and ninety-four feet, omitting the breaches and supposing all the stonework to be available, without cost, from some older work, would amount to £2,560; and if this comparatively small length were extended, the cost of the whole wall would be simply enormous. I have shown the minute nature of the corporation accounts, and I have called for some notice of entry of any such heavy expenditure as this work would have entailed. I have had no response. If any such accounts were ever in existence, record must remain. None is produced. In like manner, I have taken the cubic contents of the stones acknowledged to be Roman in the small length of wall referred to. There is sufficient to build a tower as high as that of your cathedral and fourteen feet square, solid. I have already shown the nature of the construction of the masonry in courses. Let us see how it affects the statement that the stones were found in some Roman ruins at the time of the siege or later. Now, such ruins must either have produced sufficient coursed stone to admit of the whole of the walls where

we now see them being erected, or the incredible result must have followed that, in this time of domestic strife, the builders were able to measure the heights of each course of the Roman stones then found, order other stones at the quarry to be cut to match them, and on delivery to build in old and new together with face work so exactly alike as to defy observation. Had any such stones been found, and had the builders wanted to use them, they would undoubtedly have built their wall in the more usual way, in random courses, which would have enabled each stone as it came to be built up, without any sorting to make them agree in height. But little reflection is required to show that this finding of Roman stones in any quantity is a fallacy. Two hundred and more years have passed away since the siege of Chester. In that time the city has extended itself in several directions; the old Roman cemeteries and other sites have been built over more or less, and there has been very great disturbance of the soil. I appeal to any resident to tell me if, during all these works, any large find of Roman stones has been made? Now, the breaches made at the siege can be traced in the wall as it exists to-day. We can see differences of masonry, and in these places we lose sight, more or less, of the base of Roman stones.

It may now be well to make some remarks with respect to the sculptured stones, for the following very reasonable objection has been made. How can this wall be of Roman date when we actually find Roman carvings, &c., built up in its thickness, as an integral portion of the structure? This objection renders it necessary to refer to a new page of archæological knowledge which has been revealed of recent years.

Mons. de Caumont and Mr. Roach Smith, F.S.A., were the first to point out that many of the Roman walls of the cities of Gaul were constructed of masonry that had previously

formed part of older ornamental buildings. More recently the same has been noticed in Belgium, and not long since certain bastions were found, evidently built at a somewhat later date, against the Roman wall of London. Four of these have been more or less examined, at distances apart from one another, by Mr. E. Price, F.S.A., and a few months ago I noticed a fifth. They had in each case Roman sculptures built up as part of their material, although there are none in the wall itself. The adding of Roman towers to previously existing Roman walls may be noticed at Caerwent, Burgh Castle, Richborough, and doubtless in many other places. Who can tell what they may contain! Examination of the London and the Chester sculptures indicates that they are weathered to some extent, although some are so perfect as if but very few years had elapsed between their execution and their secondary use as mere walling stones. Now, what are the probabilities as to these stones? Did they lie in some Roman ruin until discovered by the builders of the wall ages afterwards? I think their state of preservation forbids this belief. I think, too, that they could not have been found in such abundance ready to the builders' use if a long time had intervened. We have to admit that they were either used by the Romans themselves, or that they were removed from their original positions by Ethelfleda several centuries afterwards. Of the two, I consider the former the more reasonable, for the latter would require us to consider that the Saxons rebuilt the walls in stone, which we know they hardly ever used in military works. The other, on the contrary, enables us to indicate an easy solution. It is this. In looking at a map of Chester, an ordinary observer may soon convince himself that the extent of the present walls is very great, and he may reasonably enquire if their course is likely to represent the original size of the

city. My belief is, that the existing line represents some increase, considerable even it may be, of the Roman area of the city in later Roman times. Now, at an earlier date cemeteries would have existed within what is now the line of the walls. What is more reasonable, then, to suppose that on the extension of the area the Roman sepulchres were demolished, and the stones thus ready at hand, on the spot, used in the building of the wall? This supposition derives support from the fact that in London Roman interments have been found in many places which are now well within the area of the Roman wall. In both places, London and Chester alike, the sculptures, the inscriptions, and the moulded stones all point to their having formed portions either of sepulchres or of moderate-sized buildings that may have been so used.

It may be well at this stage of our enquiry to consider the peculiarity of construction, the absence of mortar. This is certainly a novel feature for our consideration, for we can point to nothing in England on such a scale of magnitude as the walls of Chester. We have abundance of ancient British dry stone walls, put together as fences are built, and have always been built, but no buildings. A member of your Society has kindly told me of many retaining walls, and such like works, which are built, and even now built, at Chester and its locality, with dry masonry: but here we have a city wall necessary to be of great strength. Is it likely to have been built after a siege, to resist artillery, without mortar? Can we find anything at all resembling its construction in military works? Is it possible that one construction without mortar would have been adopted for the lower part and a totally different mode of building with mortar for the upper portion? Failing this, and failing the lower part being mediæval, of which there is no sign whatever, there is but the other

conclusion, that this wall, built of Roman stones, is Roman in date from base to summit as far as the dry masonry extends. The opinion expressed by Mr. Roach Smith forty years ago is fully borne out.

It is valuable in this direction to consider the evidences in existence which prove that the Romans did actually build without mortar at Chester. There is direct and positive evidence of this in the sculptured and moulded stones which Mr. Jones has so carefully brought to light. These by their sizes show that they must have been portions of many different buildings and not of a single one. In almost every case their joints and beds show that no mortar was used in their original construction. In some few only the upright joints show that mortar was used to fill them in.

There is also documentary evidence. Dr. Stukeley describes his inspection of the two Roman arches of the Eastgate in 1725, and tells us "It is admirable that these vast arches, made of stones of so large dimensions and laid without mortar can stand at all when their proper butment is destroyed." Mr. Watkin, in his *Roman Cheshire*, gives some very interesting data with respect to the Eastgate, and gives at length the quotation from Dr. Stukeley's book, to which my attention was called by a friend at Chester. Mr. Watkin also prints a note appended to a drawing, published by Hemingway, from which we learn that a statue which existed in the central pier of the arches, in one large stone, was "grooved or fixed into the gate by a kind of dovetail work." This also shows that the masonry was put together without mortar, for the huge stone could not have been lowered into its groove had mortar existed. But the objection has been urged that Dr. Stukeley was not a man of accurate observation, and that he mistook an arch that wanted pointing for one that was built without mortar.

Now, such a point of detail is likely to have been rightly noted, whatever may have been the discursive nature of the worthy doctor's writings; and, as we see, it has confirmation from a writer fifty years later.

The recently excavated sculptures have the merit, apart from their design and inscriptions, of revealing to us conclusively that the Romans did in England, in the instances of the buildings to which they belonged, construct their masonry without mortar. It is needless to say, for the practice is well known, that not only did the Romans erect their principal works in Italy without mortar, but that in Gaul the practice was common.[1] It is of interest to refer to continental usage, and it seems not unreasonable to infer that what was common there should be practised here.

The large number of sculptured stones found has already been referred to, but there is an aspect of their discovery which merits special attention. It is this: The stones are all of Roman date. They are of earlier date than their use in the wall, but they are all Roman. The value of this evidence is of more importance than at first sight might appear. A comparison or two may bring out into greater force this value. For instance, were there any question as to the age of some written document, strong doubts as to its genuineness would arise were it discovered that the written date was earlier than that of the water mark of the paper on which it was written. Were some hoard of coins found, and there were doubt as to when they were hidden, we should be able to know for certain that the deposit must have taken place some time after, and not at all before, the age of the latest coin. Now there is one

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[1] Mr. Thomas Blashill, at a recent meeting of the British Archæological Association, detailed the construction of the celebrated Porta Nigra, at Treves, which is formed of unmortared masonry put together by bronze cramps.

stone which Mr. Jones has very rightly marked No. 1, for it is paramount in importance, and it was the first or nearly the first that was found. It has been called the "ecclesiastical" stone, and it has caused no small portion of the recent discussion. Its Roman date is now set beyond cavil or doubt, for it has had inspection by the best judges in England.[1] Its workmanship, its design, and the singular costume which is not ecclesiastical, all point to its Roman origin. Had this stone been found to be mediæval, it would have greatly tended to disprove that the walls are of Roman date. It would have been like a modern coin found among a hoard of ancient ones. The fact that workmanship of no other age than Roman has been found built up in the walls is a very noteworthy one, and must have its full share of consideration. If these walls were erected, as some assert, so late as after the siege, is it not a matter of surprise that no relic of mediæval Chester has been found used in their construction? There must have been many buildings ruined by the siege, many pulled down before the events of that time of trouble; and yet, although the walls have been opened in more than one place, Roman sculptures, and nothing but Roman sculptures, have been found.

There is full analogy to this in the five bastions attached to the earlier Roman wall of London. I claimed a later Roman origin for these. While they have yielded a great number of Roman sculptures, there is nothing of any other date. In one bastion was found one half of a Roman sepulchral monument, and the other half was found in another bastion at some distance off. The sepulchre was

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[1] See Mr. W. de Gray Birch's paper on this stone, read before the Society of Antiquaries, London, and here reprinted, pp. 25 to 39, by the kind permission of the Council of that Society.

doubtless midway between the two, and its materials, therefore, available for both. It has also to be remembered that none of these stones have been found, at Chester, in the upper wall. All have come from the lower unmortared base.

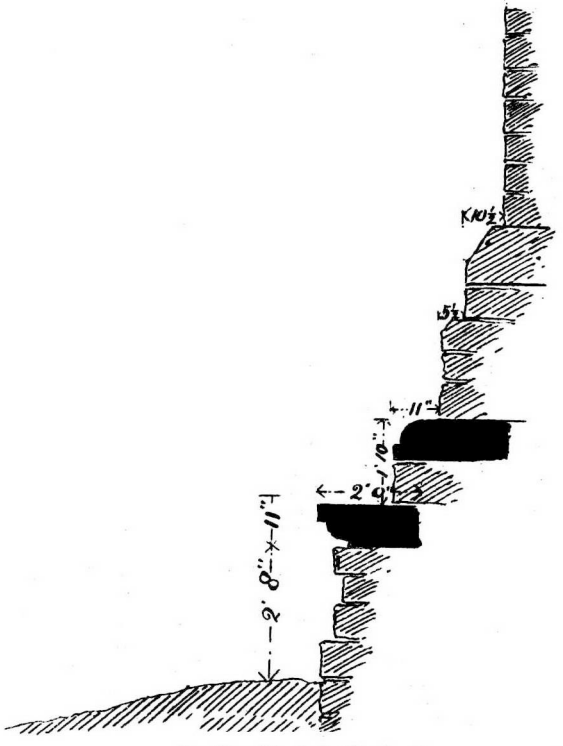
I have now, so far as this section of the wall is concerned, done my best to meet all the objections that have been made. I hope with due regard and respect to the objectors. I now proceed to make a few general remarks with the view of showing that the outline of the section indicates all the usual parts common to many Roman walls. There is the outer fairly worked face; there is the chamfered plinth, such as is found at London, and the Richborough and Chichester bastions. There is the rough inner surface covered by an earthen bank, and, if we suppose an upper parapet higher than the earthen bank instead of the upper wall, we have a design such as we can see at Caerwent, Chichester, Silchester, Burgh Castle, and other places. In fact, and in a few short words: while there are no forcible arguments against the Roman date of the walls, we find that they are constructed after a Roman plan, with all their details worked out as the Romans have worked them out in other places, and that the stones are the work of Roman masons. Is it not, therefore, right to conclude, as I assert we ought to conclude, that the large unmortared stones of the lower wall is Roman work *in situ ?*

I exhibit an engraving of a portion of the wall of Rome between the Matronis and Latina gates, of squared stones, the exact counterpart in size and style of masonry of your Chester walls. Above is later Roman work of brick. I cannot say whether or not mortar is used to the lower portion.

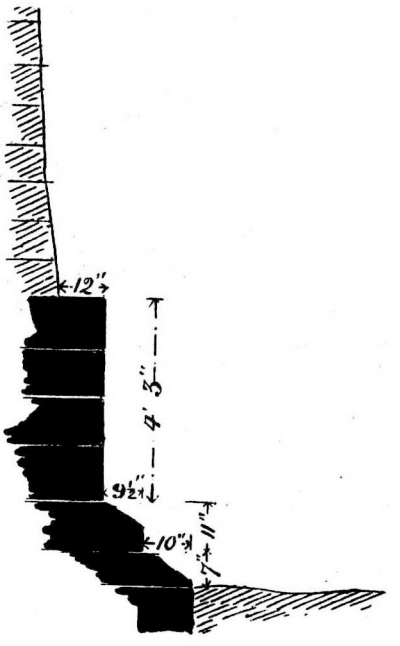
The consideration of the other portions of the walls will take far less time, since we need turn to them only for

additional evidence of Roman date. Three points require brief notice along the line of the north wall. The cornice near the Northgate has been said to be only of Jacobean date. The member of your Society already referred to has recently sent me interesting data with respect to its design, and has shown that instead of its being all of one pattern there are in fact two and perhaps three variations. The decayed nature of the edges of what may be the third pattern makes the latter somewhat doubtful, but there are certainly, he says, two. Among the stones which Mr. Jones has found, there are several mouldings so exactly like both of these patterns as to justify the belief that they are all alike Roman, and this is brought to a certainty when it is apparent that the tooling and other marks of workmanship are of Roman date. We know from Dr. Stukeley's description that there was a moulded cornice over the Eastgate. It is reasonable to believe that there was also a cornice over the Northgate, and that, in erecting the wall to the left of it, the moulded stones taken from adjacent sepulchres were utilised to continue the cornice along the wall. The stones of corresponding pattern found built up as old material in the wall are angle stones, and, therefore, valueless as a continuation of the cornice. I exhibit engravings of the Porta Chiusa and the Porta Appia of Rome, both of which have small cornices, in the latter instance returned around the flanking towers.

In Mr. Hughes' building yard there is an interesting spot for the study of the wall. The ancient lower wall has been reduced in height only to a few courses, and there is a curious plinth formed of old Roman carved coping-stones, much disturbed. Above it is a mass of construction, poorly built, of many varying mediæval dates. A little further on, in rebuilding the wall, part of the core of the wall was believed to be of Norman date. Here



In Mr. Hughes' Yard.



Behind Sinclair's Coach Factory

SECTIONS OF NORTH AND EAST WALLS, SHOWING RE-USE OF ROMAN MOULDED STONES.
BY E. P. LOFTUS BROCK, F.S.A.

sculptured stones of Roman date and of no other date were found. At the wall in Mr. Hughes' yard, objectors to the Roman origin have to consider how it comes to pass that, if the base of the wall, which agrees with that of the lower wall shown in Mr. Jones' section, were erected at the time of the siege, what has become of all the upper part? The few lower courses are clearly of different date than the upper portions. The supposition requires us to believe that the wall was actually wholly built like the lower portion, and that it must have needed all but entire rebuilding since, and several repairs, one after another, since even that! The improbability of the supposition is well shown at this point. It also enables us to consider an objection that has been made. The wall is said to be "double" or "hollow;" the same is said of part of the north wall, although there is no sign of any such defect where Mr. Jones' section was taken. This may be true, and, if so, there is a reasonable solution. We observe that there is no sign of a sloping bank to the inner portion. The wall is faced on the inner as well as the outer side, and it goes down to the modern level of the street. May it not be possible that in adding this facing to an older wall, or to a portion of an older wall, the builders were as careless of their foundations as they were in erecting its counterpart, the upper wall of Mr. Jones' section? There would thus be what would appear like two walls, and any settlement would have the effect of separating them. This is a reasonable solution, but if found to be correct it will be evidence that one part of the wall is older than the other, for if all had been built at one time no such separation would be likely.

Our third point along the northern wall is Pemberton's Parlour, and relative to the inscription recording the spending of £1,000, *temp.* Queen Anne, it need only be

said that this sum does not represent anything like what would be necessary if any entire reconstruction had taken place. The sum was a large one, and, as is expressly stated, it was expended in repairing breaches, new paving, and such like. There is no difficulty in determining, by the colour and the style of the masonry, what works were then actually done. They are generally the topmost and nearly the latest of the works, except those of recent years.

The inspection of the walls above ground having shown Mr. Jones and myself that it would be of advantage to have some excavations made for the inspection of the members of the British Archæological Association in August last, we conferred with respect to the most advantageous positions to show any variations of construction. The works of repair at the north wall had laid open the foundations down to the solid rock; but it was obvious that at other parts there must be no rock base. We therefore determined upon a spot, at the Kaleyards, in the east wall, where the subsoil was likely to be different, and the Roodee wall, which is built against a sloping bank. These positions commended themselves also to us since they had the advantage of being distant from one another.

At the Kaleyards there were three or four courses of massive, unmortared stone, similar to the base of the north wall, but with the city wall built on the bank to the west of these courses, quite apart from them, the city wall having every appearance of being of mediæval date, but constructed to a great extent of good red sandstone, which probably was taken from the older wall and more or less reworked. The older courses are forced out of position by the thrust of the upper wall. Our excavation laid bare the wall to its base, and revealed the same class of work as at the north wall, including even the chamfered plinth. The subsoil proved to be loamy clay, and a foundation had

been prepared for the wall on this, formed of layers of small stones laid horizontally in puddled clay. This mode of forming a foundation is a common Roman one, and it has been met with at several portions of the city wall of London. To say that these foundations belong to an earlier wall, as has been said, is to ignore its constructive features. Wall and foundation are of the same age, and made for one another. Sir James A. Picton, F.S.A., has pointed out some curious features of re-entering angles and strait joints observable in the masonry that call for further investigation at this point.

An excavation was made to the south of what has been described, behind Sinclair's coach factory, at a point where some old buildings, erected shortly after the siege, had abutted upon the wall. We found here the same massive squared masonry and the chamfered plinth, similar to the Kaleyards wall, with which it is in a line. Four courses only remain above the plinth. Just before arriving at the Eastgate there is visible a portion of the inner face of the wall, approached from a court beside King Charles' Kitchen. There is a plain semi-circular arch of doubtful Roman date, but just to the south of it is a noteworthy piece of walling formed of large squared stones, more smoothly worked than elsewhere, probably derived from the facing of some other Roman building; one of them is three feet six inches long. Sir James Picton has indicated a portion of the south wall, which appears to be of similar construction to the north wall, but since he has already so fully described it, this enquiry may be brought to a conclusion by reference to the Roodee wall.

The Roodee wall has been variously described as a few unmortared Roman stones laid under the sloping bank upon which the city wall is built; as a flight of steps; as the abutment of a bridge; and, finally, as a breastwork

built prior to the siege of Chester. Clearly it cannot be all of these. The excavations have revealed a massive wall, which has been traced downwards for thirteen feet. The excavation had then to be stopped on account of the rise of water. For its whole extent, as far as opened, the wall proves to be a magnificent piece of masonry, put together with large stones laid in courses, in perfect preservation. The facing has been neatly worked, and it exhibits tool-marks of Roman character. There is a set off beneath the water, not a chamfered plinth. Some of the joints have flint-like mortar, to which reference will presently be made. Still more recent excavations have revealed the curious fact that although this mass of masonry is fully eight feet thick, it is backed up with hard concrete on the city side, thus forming a solid mass, wall and concrete together thirteen feet thick, making one of the most solid of walls, whether intended to resist the wash of the tides below or the thrust of the bank of earth behind it. It is evident that this wall is something more than a few courses of loose stones laid beneath the bank to keep up the present city wall. That it has no relation to a flight of steps is apparent on finding that the stepped-like look of the upper portion (above ground) is owing to the removal of the facework at this point. This removal enables us to see that the coursed work of the facing is carried through the thickness, and that its construction is precisely the same as to the north wall, except that it is a little thicker, has mortar and concrete backing, and goes down deeper. That this wall is no abutment of any bridge is soon apparent. The wall can be traced for nearly one hundred and fifty feet, although in some places it is hidden by the earth of the sloping bank. Now a bridge must have started at right angles to the face and have gone forwards. But there is in front now only the bare level of the reclaimed land of

the Roodee, and formerly the broad expanse of the river with land a mile distant on the opposite side. A bridge or a pier even would have surely left some traces. No road leads in the direction; no road is known to have done so.

The wall is curved on plan, and it has a general resemblance to the curve of the north-east angle of the city. In these we may perhaps recognise two out of the four curved angles usual in the plans of Roman cities laid out uniformly as at Colchester, and this supposition derives some support from the fact that the end of the wall going northwards lines out exactly with the western face of Watergate. Beyond Watergate, and even at the gate itself, there are foundations that appear to show that there was either an inner wall, or that the Roman wall was once a few yards further east of the present one.

The assertion that this wall was erected for a battery merits more extended consideration. Old maps, we are told, show it so used, and the position of a battery to afford protection at so important an angle where it was so greatly needed is sufficient to show, apart even from the evidences of the maps that a battery may actually have existed at any rate somewhere here. The member already referred to has ingeniously proved this. Old maps also show a ruin, Edgar's Palace, probably a building of Roman date, on the opposite side of the Dee. Later maps, subsequent to the siege, do not do so, and hence it may have been demolished to provide the acknowledged Roman stones seen in the Roodee wall, where in addition many of the internal stones show evidences of prior use. The depth of the Roodee wall he accounts for by the belief that when erected as part of this battery it had a ditch in front of it. After the siege, when all the defences were levelled, this would be filled up, and so its present buried condition is accounted for. These arguments are of no little force, and they have to be

treated accordingly with respect. There are three structural features, however, that I think outweigh them. They are as follow: (1) While the length of the Roodee wall is about one hundred and fifty feet, the depth of any available platform on the top and between it and the city wall is less than twenty feet in the widest part, decreasing to nothing at each extremity—out of this, thickness for a parapet has to be deducted. This space even would not all be available for the placing of artillery, for the city wall is heavily buttressed, and these buttresses encroach into the limited space named. Since the wall has evidently been built slowly and at great cost, it seems hardly likely that, if erected at the time of the siege, it would have been built of such meagre dimensions. (2) Such a work, if erected then, would have been erected rapidly of necessity, and not slowly. It therefore seems incredible that the Roman stones would have been taken down so neatly as they must have been, since they show so true and even an appearance in the Roodee wall, where they are laid in horizontal courses, with through ashlar courses as in the north wall. Instead of this, for rapidity of construction, they would have been laid in random courses. (3) The mortar is Roman mortar. I now exhibit a specimen kindly taken out for me by Mr. F. R. Williams. It had to be sawn through to extract it, so hard and flint-like is its texture. A portion has been subjected to chemical action, and powdered brick has been found in it. This specimen was submitted to inspection at an evening meeting of the British Archæological Association, and it was pronounced to be of Roman date. This may be accepted as decisive evidence, coupled with the resemblance of the work to the walls elsewhere, that the Roodee wall is also of Roman date. In addition there are pilaster-like buttresses projecting from the face of the wall, which would hardly have been erected

if this wall had to resist artillery. The city wall, close to the Roodee wall, is pitted with an enemy's musket shots, which would hardly have been there had the battery been much in front of them.

The position of the battery was perhaps in front of the Roodee wall, extended further away, and probably more to the south,[1] the ancient wall being covered over and hidden from view by its earthworks. On the latter being levelled, it would only then begin to appear through the sloping bank of earth. This appears to be a not unreasonable means of accounting for the evidences of the maps and views, and shows that the existence of the Roman wall is not inconsistent with them.

My task is ended. While the opinions of Sir James Picton and Mr. Roach Smith are already conclusive, I have shown that every item of construction of the walls has its counterpart in other Roman structures. I have shown a reasonable reply to every objection. The tendency of the actual evidence is all in one direction, and upon it the citizens of Chester may rest. All the portions of the walls formed of unmortared or large stones are of Roman date, and they may be shown with pride as unique examples of the work of that remarkable people, from whose time the city of Chester has been famous.

This being so, the walls should be not only thoroughly explored and laid open to observation wherever possible, but all the sculptured stones, found in such abundance, which testify to the early greatness of the city, should be preserved with loving care.

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[1] A position more to the south would be of greater advantage in keeping up correspondence with the fire from the castle, since it would command the angle of the city wall better. An earthen mound, an extension of the bank on which the city wall stands, did actually exist here, and its remains were removed only a few years since.

After the lecture was concluded, Mr. Brock reported that a small third brass coin of Julius Constantius had been shown to him that morning. It had been found by a workman in one of the unmortared joints of the lower wall. It was a genuine coin of an ordinary type.

The following is a verbatim report, corrected by the various speakers, of the discussion, which ensued on the conclusion of Mr. Brock's paper. The Chairman (the Very Rev. the Archdeacon of Chester) explained that, owing to the number of speakers, it had been decided by the Council to allow each speaker a quarter of an hour only, so that all might have an opportunity of being heard.

Mr. W. Thompson Watkin said he supposed he should be looked upon very much in the light of a barbarian for attempting to assault the Roman theory of the walls. He only wished that he could prove them to be thoroughly Roman; in fact no one would be more heartily delighted to do so than himself; but he must say that, after very many years' study of them, he had come to the conclusion that, above ground at least, nothing Roman could be found. He thought it would be almost impossible to answer Mr. Brock at great length in the limited time at his disposal, and that he had best take the subject of the walls under three heads. And the first head would be as to what was above ground. That, he thought, had been very fully entered into previously, especially by the members of the Archæological Institute during their visit to Chester. He might say that he had been in recent correspondence with some of the heads of the Archæological Institute, who were also among the chief Roman authorities in Britain, and whom he was sorry to see were not there that night—Dr. Bruce, Mr. Scarth, Mr. Ferguson, and others. But he

adhered to his former opinion, that above ground he could see nothing Roman, in spite of what had been done in the way of explaining them recently. Now, coming to the recent excavations, he might as well go to the point at once.

The usual Roman method of making a wall was to have an outside ashlared face and an inside ashlared face, with a mass of concrete or grouting between. Sometimes there were rows of tiles, bonding tiles, but occasionally there were none. There was generally also a foundation of boulders laid in clay or massive concrete. Now, he had been very wishful that they should obtain some sample of that concrete foundation. On the south side of the city, or the south side of the Roman area, near the north wall of St. Michael's Church, a portion of the foundation of the south wall was met with—of boulders bedded in concrete. But there were none of these characteristics of Roman workmanship in the wall laid bare on the north side of the city. They had certainly on the outside what he might call a dressed face; but the inside, instead of being faced as in the diagram shown—he had been down twice into the excavation—was formed very irregularly, with great spaces between the stones; and when they were aware of these circumstances they would see that they could not be laid of the regular widths shown in the diagram. There were large spaces but no mortar. The wall was built from the foundations of stones like those (pointing to the tombstones, &c., exhibited) and was eight feet thick. He quite agreed with Mr. Brock that the embankment was perfectly necessary when the wall was made; but who made it? With an irregular face, nineteen feet high, with no mortar, that wall in a comparatively short time, without the support of the embankment, would collapse; he thought any architect would say that. Certainly the Romans, he thought, would

deem it a disgrace to build such a wall as that, especially when the original embankment face was generally dressed. But here they had nothing of the sort. And more than that, look at the material used. Tombstones! Why the Roman Governor of Chester, if he permitted the use of those tombstones for building purposes, would be liable to severe imprisonment under the Roman laws. Even if an extension of the city was necessary, those tombstones would not be used for that purpose; the graves would be respected though the tombstones might be laid down flat on their faces, but not built up in the wall. It had been said, too, that the external stones fitted, and were closely jointed. But he did not see, if they got plane faces on large masses of sandstone, with immense pressure upon them, how they could fail to be closely jointed. If they rubbed two such stones together for a short time, they would see how very soon they would become closely jointed, and where even they were not so plane faced the enormous pressure would help to make them closely jointed.

Allusion had also been made by Mr. Brock to the Romans building large walls without mortar, and he had instanced examples on the continent, but every one of them was of disputed Roman origin, and they were advanced on the ground that they were built of the same material—tombstones and the architectural portions of large mausolea. He did not know if Mr. Brock had seen—in fact he knew he had not seen—the nature of the interior of the wall where this fearful and wonderful cornice was. Four years ago, when making some important excavations there, it was found to be a very poor wall. Certainly it was not backed by a mass like that (alluding to a sectional drawing of the north wall). The large stones in front he admitted were Roman, but they had been put there at some later date, and that date he believed was 1708, the

time the wall was repaired, in the terms of that significant phrase, "In the glorious reign of Queen Anne," contained on the front of Pemberton's parlour. That seemed to him to explain a great deal with reference to the modern wall.

The reign of Edward I. appeared to have been a great building age in Chester, when the walls were restored to something like their former grandeur. But who were those who built the walls under him? They would at that time have found plenty of Roman material lying about, and he had not the least doubt they availed themselves fully of it. The wall at the Kaleyards, he took it, was built at that time decidedly; though he thought a trace of the Roman concrete foundation would be found beneath that wall. He was glad to hear a little concrete foundation had been found recently under the north wall, according to Mr. Brock; he quite expected that something of the sort would be met with; but the very presence of that concrete showed that the wall above it was not of the same age. Two excavations had been made in the north face of the wall, and in each the same building material was found above, yet it was said to have a Roman foundation under it at one spot but not at the other. Why had they not a Roman foundation at the second place? The reason, as far as he could see, was that both walls were of much later date; in one case the foundation had been left, whilst in the other it had been removed. The geological part of the business he would not go into, Mr. Shrubsole would be more competent to deal with that than he was.

If a number of altars had been found built into the wall instead of tombstones, it might have been more reasonably conjectured that they were Roman, for the Roman altars were desecrated as soon as Christianity was introduced into Britain. Many instances were found of these being built up in walls; there was one at Lymne, another at

Caerleon, and on the Roman wall. Dr. Bruce found an altar built up at one station, but no instances of tombstones being so used were met with excepting those of the bastions in London, about which he would speak directly. On the Roman wall two instances had been found of tombstones used as hearthstones, or floors, but these were in ruined buildings, both of which in the middle ages were used by moss-troopers, and were known to be at places where the probability was that the stones were used at that period. In fact it might be said of a certainty, for on the floor of one building, a large villa, several tombstones were found mixed with *débris*, which would not have been the case if the building had remained as it was when the Romans left it. The stones had evidently been brought there afterwards. And with regard to the London bastions! They were not appended to the main Roman wall. Mr. Price, who excavated them, spoke of them as thirteenth-century work. The chief ones were at Tower Hill and Camomile Street. Mr. Brock spoke of five being traced altogether, but the other three had not yielded much.

Mr. Brock: They have not yielded so much, but all are of the same features.

Mr. Thompson Watkin, continuing: With regard to the plinth again! It was said to have been traced all round the walls. It was no feature of Roman work; it might belong to any other age; and if the plinth was destroyed in any such war or commotion as had taken place at Chester it would certainly have been renewed to match. Then, coming to the wall in Mr. Hughes' yard, where was what had been spoken of as a buttressing wall. He did not know what Mr. Brock referred to when he claimed that portion of the wall (pointing to the upper portion of the wall in the diagram) to be older than that below.

Mr. Brock: Upper wall.

Mr. Watkin, continuing: I certainly never said anything of the sort, nor have I heard any one else say so. It stands to reason it cannot be. But there is a buttressing wall in Mr. Hughes' yard composed of Roman stones, whereas the wall behind is very much like the one where the cornice is at the Northgate.

He had written and spoken much about the Roodee wall, and he believed it to be no part of the walls whatever. It was certainly composed of Roman stones in front, and, as he had said, Roman work would be found behind it. Well, the excavations had revealed the truth of that. Mr. Brock spoke of it as a wall thirteen feet thick. He (Mr. Watkin) believed there were something like nine feet of wall and four feet of concrete, and it was found to have extended much further inwards and seemed to have borne up some building. His remark that it was an abutment of a bridge, which Mr. Brock demurred to, was a tentative one; and, instead of the bridge being in the direction Mr. Brock had pointed out, towards the Roodee, it was at right angles to that entirely, so as to cross the creek, which they knew from old maps existed at that portion of the Roodee to the end of the sixteenth century. That might have been a later use for it, but he believed it had originally kept up the bank on which stood the Roman villa they knew existed behind it, from the excavations recently made—to keep up that bank and prevent it slipping forward. A series of landslips had taken place, as they had found, on the Roodee; in fact, between the Watergate and the Water Tower the whole wall fell down from that cause in 1608, and the greater portion of it was rebuilt. So that, while he always admitted that those stones were Roman, he believed them to have been put in position at a later date, and used for that purpose.

With regard to the gates, Mr. Brock had said that

both the Northgate and Eastgate were Roman. But with reference to Dr. Stukeley's sketch, if any one looked at it, he would see that there was nothing Roman about it. More than that, Dr. Stukeley gave details as different again concerning it to what he sketched. He sketched three archways abreast, but said it was a single arch, while all the time it was a double one, with one half blocked up. They knew that from other sources. So that Dr. Stukeley totally contradicted his own words. Mr. Brock also said the accounts for the rebuilding of the walls ought to be forthcoming. Well, he (the speaker) did not know of any case in which repairs were made after a siege, when an invading army entered a city, where any account had been made up. He thought he might just as well ask for the bill of the Twentieth Legion for building the walls originally. If Mr. Brock knew as much of invading armies as he (the speaker) did, he thought he would not look for cases of that sort. With regard to the repairs in Anne's reign, he thought the inscription on Pemberton's parlour was quite sufficient. Mr. Brock had also mentioned that large buildings erected without mortar had collapsed. Well, there was no such thing in the Chester walls; they found nothing of that sort so far, and that, he took it, was another of his (the speaker's) ideas of further evidence that the walls were not Roman. The Chairman reminded him that his time was up. He had had to go very briefly through this discussion; he was handicapped, and would have liked to have gone into it at length, and hoped to do so yet—in "black and white."

Sir James A. Picton, F.S.A., who was next called upon to address the meeting, and who, on rising, was received with hearty applause, said, under the exigencies of the case he was quite prepared to give way to others. He had already, as some of them knew, written rather copiously on

the subject,[1] so that they knew what his opinions were, and it would perhaps be unfair not to allow others to have some part. He was quite ready to reply to Mr. Thompson Watkin in regard to some matters, but was willing under the circumstances to give way. Well, if it was their wish to hear him, he would confine his remarks within as small a space as possible. He was placed in rather a peculiar position. In a paper he had written on the subject and read before the British Archæological Association, in London, on the 16th November previously, he broached a theory as to the origin and object of the Roodee walls, which he pronounced, in his opinion, to have been originally a Roman wharf wall or "emporium," built there for the purposes of the commercial port of Chester, which at that time was in a very flourishing condition. In a courteous communication Mr. E. W. Cox had suggested that the Roodee walls were the remains of a fort or battery thrown up, at the time of the siege of Chester, by the citizens, to assist them in defence of their city. He (Sir James) had considered that subject well and had made a few remarks upon it; but if it would be doing any injustice to Mr. Cox to reply to him before his opinions were published—if any objection could be taken—he would be very glad to withdraw his remarks and leave them till Mr. Cox's observations were published. Perhaps, however, they would not think he was taking an undue advantage if he criticised this suggestion at some little length. Mr. Cox considered the structure to have been a redoubt or outwork raised at the time of the siege, 1642-6, in order to

[1] The speaker referred to his opening address, delivered to the members of the British Archæological Association, on the 16th November, 1887, and entitled "Notes on the City Walls of Chester, Historical and Constructive, by Sir James A. Picton, F.S.A., F.R.I.B.A., President," a few copies of which had been reprinted for private circulation.

defend the fordable part of the river, and to "crossfire" with a battery or fort situated on the site of Brewer's Hall, on the opposite side. He (Sir James) had again carefully considered that question, but could not see his way to altering the opinion he had already formed upon it, that they had there a veritable relic of the emporium of the Roman city, when the Roodee was covered with water and formed a noble estuary or port. He would be sorry to dogmatise. No opinions on the subject could have greater authority than strong probability. Absolute certainty was out of the question. Two lines of argument were open to them. The first was that of historical and documentary evidence. The second was that of the construction and tangible evidence of the remains. If these two lines converged towards the same point, they were as near certainty as it was possible to arrive.

First, then, as to the records and documents. Original records and maps, as they all knew, were extremely scarce. There was a great propensity in authors and historians to copy one from another, which reduced what at first appeared to be a multiplicity of evidence to one single thread. The earliest map of Chester which he could find was that by Wanceslaus Hollar, given in *King's Vale Royall.* The date was not difficult to ascertain within very narrow limits. He gave a print of a Roman altar found in 1648, so that it could not be *before* that date, and the work was published in 1656, so that it could not be *after* that. Mr. Cox spoke of a map of the time of Queen Elizabeth, which did not give the Roodee remains. He (Sir James) had not met with any such map, and from what he had seen of maps of that period, there was not the slightest reliance to be placed on their accuracy. Hollar's map had a view of the city from the west attached. Both map and view were executed with great beauty, and had all the appearance of

accuracy. In the map was shown a platform or terrace running along the outer face of the city wall, about two hundred paces long, according to the scale, returned at each end. Mr. Cox said, "It does not give the Roodee wall, but it gives a sloping bank. The first appearance of the Roodee wall in any map or view is the map of Chester with the outworks copied by Broster." He (Sir James) had the map and view in *King's Vale Royall* lying before him. In the map there was clearly and distinctly shown a narrow platform two hundred paces long, returned at each end, on the site of the Roodee masonry. This was also manifest in the perspective view. Mr. Cox called it a sloping bank. Be that as it might, however, if the platform, as he maintained, existed in 1620, it could not form a platform on the outworks of the royal defences thrown up in 1643.

The next reference by Mr. Cox was to a map of the city, with an account of the siege, published by J. Broster and Son, 1790. The map was not a document contemporary with the date of the siege. It was a compilation, whence derived was not stated. The outlines of the city were much the same as in Hollar's map, with the addition of the earthworks thrown up in 1643, and the fort and battery on the west side of the river, on the site of Brewer's Hall. The descriptions accompanying the map were not contemporary, and would almost lead one to suppose that the writer had not visited the locality. "No. 39," on the map, was described as "outworks on the hill at the Little Roodee." So far from being on a hill, the work was at the lowest possible point, at the edge of the then existing water. Turnpikes were described where none certainly existed till long after the alleged date of the map. It would seem that the writer, finding the platform on the map, and not knowing anything about it, hastily came to the conclusion that it formed part of the fortifications. The

map given in Hemingway's history (1831) was a *facsimile* of Broster's, with the same descriptions attached. He had carefully examined all the publications upon Chester within his reach, and could find no contemporary evidence of any outwork or fortification having ever existed on the Roodee.

Now, let them examine the evidences afforded by the remains themselves. Mr. Cox said "the remains are eminently consistent with a fort of the date 1642, and they accord with nothing so well as that." Let them see in what this consistency consisted. The contemporary accounts of the siege stated that in October, 1642, the Common Council determined that special care should be taken for the defence of the city. In accordance therewith the outworks and entrenchments were carried on with so much vigour that in the beginning of 1643 the "mud walls," mounts, bastions, &c., were all completed, and several effective batteries planted. These were all earthworks; not a word was there of slightest reference to any works at all on the Roodee. The whole of the constructions were completed within about three months. Now, on the supposition that this masonry on the Roodee was a fortification thrown up at the time of the siege, they must believe that whilst everywhere else round the city, where the only assaults ever came, earthworks were found sufficient, on the Roodee, which was free from attack by its situation and never was besieged at all, it was found necessary to have a solid construction of hewn stone. Moreover, that stone was not found nearer than six miles from Chester, and was identical with the remains at the Kaleyards. So that they must believe that in the course of three months the stone was quarried, carted six miles through a hostile host, worked into solid square blocks, and built into a rampart two hundred yards long, carried

down to a depth of twelve feet below the surface and eight feet above, and when completed that it was utterly useless! There was not the slightest appearance of fortification about it. It was simply the breast or retaining wall of a wharf having a frontage to the then estuary, and a return along a creek at the north end. This extent of work, with the difficulty attending sinking the foundations on the shore level, would require at least a year, probably two or three, to complete it. The breadth from the front of the retaining wall to the foot of the city wall was only fourteen feet. The city wall was probably built in the fifteenth century. At all events it was in existence at the time of the siege. What could be done in the way of defence by a narrow strip of land fourteen feet wide and an exposed front of two hundred yards it was difficult to see. All the other outworks shown in the map were constructed on Vauban's principles of fortification, with angles and returns, so that no point was left free from a flanking fire. In this case there was nothing but a long narrow strip, utterly unprotected, which could not have resisted an attack for an hour. Again, Mr. Cox called attention to the battery at Brewer's Hall, and said it was built to protect the ford over the river, and to "crossfire" with the alleged fortification on the Roodee. There was no ford here across the river. The ford was beyond the castle, considerably more to the southwards. The cause of the erection of the fort at Brewer's Hall, was to command the estuary and repel any attack by water. The "fort" was merely an earthwork, or "sconce." But this was effected by a point blank fire across the river, to prevent the assailants from creeping round the flank of the Water Tower and attacking the west wall in front. If anybody would look at the map, a mere glance would show the absurdity of any supposed co-operation from a long

wall facing in an entirely different direction. In point of fact, although the city was furiously attacked on the other three sides, no assault was ever attempted from the Roodee.

There were several interesting corroborations of the existence of an "emporium" or wharf in this locality. He had alluded to the narrowness of the strip of land between the edge of the breast wall and the foot of the city wall. It would be difficult to find a use to which such a narrow long strip could ever have been put; but it must be remembered that the west wall of the city was much later in date than any of the others, and was only built after the tidal water had receded and left the city high and dry. If they regarded the structure as the retaining wall of a wharf, with a return along the creek at the north end, they could easily understand that, when the wharf became useless, in building the city wall it would be advanced as far forward as would be consistent with safety, and so encroach on the original wharf. There was a singular confirmation of this view in the fact that the wharf situated a little more to the east of the Little Roodee—where the water approached the land—was termed the "New Wharf," and was so marked on several of the maps. Down to a recent period this new wharf was lined with warehouses, and approached from the city by a gate called the Ship Gate. The water front had a retaining wall of a similar character to that on the Greater Roodee. These erections were swept away when the city wall was extended, and the land enclosed for building the new gaol. Everything pointed to the conclusion that the work in question was anterior to the city wall, and corresponded in a remarkable degree with the work at the Kaleyards. Both were of Roman construction, built with large stones without mortar, of material not found in the neighbourhood, and

with tool-marks of Roman character still to be seen. He invited careful examination of this ancient relic, believing it, as he did, to be probably the earliest in date of any of the precious remains of antiquity to be found in the glorious old city of Chester.

Professor T. M'Kenny Hughes, M.A., F.S.A., said he came to learn all he could in respect to a subject of which at present he had not sufficient knowledge to criticise. If it would be in order, however, he would like to ask a few questions. For instance, in the course of the remarks of the gentlemen who had already spoken—and who were essentially conversant with the subject—he would have liked it to be pointed out more clearly why they gave no alternative dates for the origin of the walls between the Roman period and the seventeenth century—why they met with nothing of fourteenth-century work? He would like to ask Sir James Picton what was going on in Chester at the time Conway was being fortified, and why they could not be put in possession of certain facts to form a conclusion? They had heard of buttresses, which were not ordinary buttresses, but flat pieces of masonry against the wall, and a good deal had been said about the character of the stone; and he would like to know whether, in the present day, if they were building walls of that character, with such materials and under such circumstances, they would not readily run into the large ashlar work or not? Various things of that sort required explanation. He thought there would be very great difficulty in underpinning the wall, as had been spoken of, although after what he had seen of Mr. Jones' work it might not be so impossible with him. If they looked at descriptions and histories of fortresses, they would, he thought, see how such walls as they had in Chester were worked up. But, perhaps, covering the stones with earth for so long might be

the real point to be considered in their preservation, as well as the wide foss keeping the enemy at a distance from the wall. At present they seemed not to possess sufficient data to form a judgment, and he hoped the few remarks he had made would call them forth.

Mr. De Gray Birch, F.S.A., who was the next speaker, remarked that so much had been said about the wall, that it might be well if at that late hour of the evening he had something to say concerning the stones, which had been neglected by the previous speakers, although they were the key to the position. He submitted that in the course of the extensive excavations that had been made no relic had been challenged either by Mr. Watkin or his followers as having a mediæval origin, with the exception of the important stone exhibited this evening and known as the "ecclesiastical" stone, from its having been so called by the opponents of the Roman origin of the walls. That stone, he was glad to say, had received greater attention elsewhere than in Chester. It had been his good fortune, by the courtesy of the city authorities (whom he begged that evening to thank) to set that stone before the most eminent antiquarian authorities in London; and he was glad to say they accepted it—as he himself had stated it to be from the first—as of Roman origin.[1] Some had stated that the larger figure on the stone indicated an ecclesiastical dignity, accompanied by an acolyte. He believed Mr. Watkin had gone so far as to characterise the figure as of the fourteenth century, for he (Mr. Watkin) had said the figure on the left hand had a strong resemblance to figures on corbels, commonly seen in churches of that

[1] Mr. Birch's paper, read before the Society of Antiquaries, London, on the 8th December, 1887, will be found on pp. 25 to 39, where an illustration of this stone is given.

date. Mr. Watkin also saw in the vesture of the large figure a representation of an ecclesiastical stole or band, and some even went so far as to say they could observe a chalice held in the left hand of the larger figure. But these fancies were now all dispelled. What they really saw on the stone was a Roman matron clad in the ordinary costume of a provincial lady, with the cloak she wore parted, and with a long band coming over the arm—not over the collar-bone, as it would be in the case of an ecclesiastic. She held in her hand, not a cup, but a mirror—a flat mirror, such as might be seen depicted in the hands of any Chinese or Japanese lady of the present day, with a short handle, and a disk of polished silver. She was, no doubt, represented there as holding the favourite implement she was generally seen using during her lifetime. The other figure represented one of her attendants. He invited those present to consider the method by which the raised figures were produced. It would be observed that it was not in the usual method that mediæval stones were sculptured, where the ordinary surface was wholly cut away, leaving the figures in relief. But here they had the stone scooped away, leaving a true margin of stone representing a band, while the scooping had been practised to give sufficient relief. Every one who knew the Grosvenor Museum would call to mind other stones there treated in the same way.

That day, by the kindness of the Dean, he had been allowed to inspect some other stones, which had been taken out of the wall, and carefully deposited in a locked-up shed in the Dean's Field. They possessed exactly the same characteristics. There were a number of sculptured stones resembling in every degree those before the meeting; also stones with lewis holes in them, with tool-marking and bands round the border, stones treated in exactly the same manner, and in respect to which he could come to no

other conclusion than—and he was sure those present would come to no other conclusion than—that they were Roman stones. With regard to these ancient relics discovered in the Dean's Field, he thought it would be right if the Society in its wisdom were to publish them in a tentative manner, and without delay. He knew it was intended to give a detailed account of all the stones taken out of the wall, but in the interest of the archæological world he might say they wished to have this pabulum that they might digest it at leisure.[1]

Mr. Shrubsole, who was the next speaker, said that having on a previous occasion explained his views at some length, he would now only refer to some items which came before them in this discussion for the first time. Mr. Brock had quoted from Stukeley, who in 1725 visited Chester, and professed to have seen a Roman archway at the Eastgate. In estimating the value of this evidence, we must remember that his narrative is often inexact, and, as in this case, contradictory. The Eastgate was standing for forty-three years after it was seen by him. From drawings of the period, we know that what he saw was the pointed arch of an Edwardian building, which was taken down in 1768, when inscriptions and sculptures of Roman age were found, built into the structure, just as in the north wall. Forty years ago, when sewering was being done near the Eastgate, the Roman level was reached at a depth of ten or twelve feet, and with it the paved street. This would bring the crown of the Roman gate about on a level with the pavement over which Stukeley passed, so that instead of seeing it above his head—if it had existed at all—it would have been beneath his feet.

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[1] Mr. Birch's report on these stones, read to the Society on the 9th April, 1888, will be found on pp. 98 to 131.

Mr. Brock had spoken of the supposed bullet-marks to be seen on the walls, as an evidence of their antiquity. Well, he (the speaker) did know, that a tale of this kind was told by the self-constituted "City Guides," but, like many of their tales, it should be taken *cum grano salis.* It was the first time that he had heard of an antiquary endorsing their views. A careful examination of the walls would have shown that these so-called "shot-holes" occurred on the inside as well as on the outside of the walls—an awkward incident for the bullet-hole theory. Their occurrence is due to natural causes, in this way. The walls are built mainly of sandstone taken from the pebble-bed series, so called from the presence of a number of small rounded pebbles. With the weathering of the stone these pebbles drop out, and in each cavity so left, on a windy day, fine grains of sand are whirled around, and little by little the hole is enlarged, until it becomes first the "bullet hole," and next the round-shot hole of the guides' lively imagination.

Speaking of the stone leads me to notice the remarks which have been made as to the good quality of the stone composing the walls.

Sir James Picton: I didn't say that.

Mr. Shrubsole: In the Roodee wall I believe Mr. Brock stated that the original Roman stones still remain, and that they are of exceptional quality, and brought from a distance.

Mr. Brock: I didn't say that.

Mr. Shrubsole: Well. It has been so stated a good many times, during the recent controversy.

Mr. Brock: I would say if I knew it, but I really do not know where the stones came from.

Mr. Shrubsole: Some antiquarians had gone to the Peckforton Hills, and some to Helsby for the stone, but

the point was that the stones in the wall were really local stones, and that their identity as such was established beyond doubt. He would now refer to the finding of a Roman coin in the walls by a workman, as mentioned by Mr. Brock. This circumstance, if true, would be of some value in determining the age of the wall. It opens out a somewhat amusing episode, since it is an open secret that not one, but a hundred or more of Roman coins were, during the past summer, offered for sale at 1s. 6d. each, to strangers visiting the "walls." To enhance their value in the eyes of purchasers, they were guaranteed to be from the "hole in the wall." My surprise is that only one found its way into the wall. I do not say that the coin has not come out of the wall, but that its stay there was very short, and that in appearance it very much resembles the larger importation. It is not the first instance in Chester in which a demand for certain antiquities has led to a supply.

Mr. Rimmer: Where were they found?

Mr. Shrubsole: Very hard to say. The caution to the public against purchasing them would be found in the Chester *Courant* about two months ago. The coins which I saw were third brass Roman, and of the lowest value. They arrived early in the summer, and at one shilling and sixpence each must have proved a profitable investment to the introducer. Another little matter he wished to refer to. Mr. Brock had given them some half-dozen reasons, why there was no military platform on the Roodee. He said there could not be; there was not room. But he (the speaker) had brought a photograph of one of the oldest maps of Chester, and those present might look at it, and judge for themselves whether there really was not ample room.

The next point he wished to bring before them was this,

that the wall, of which they had heard so much that night, was not the oldest wall they had found in the city walls. He referred now to the discoveries made in the wall in Water Tower Street; when a portion of it gave way some four years ago, it was found that at this point the north wall "thinned out," and was found acting the part of a buttress to an older wall built of small ashlar stones well bedded in mortar, which might have been of almost any age. Again, it was not the first wall on the site, for several reasons. The speaker here referred to the diagram of the north wall, as drawn by the city surveyor, observing that there they would see a twenty feet wall, twelve feet of which were buried in earth. He (Mr. Shrubsole) said the Romans were wise builders, and he would ask those present to use their common sense as to whether it was like their work, that, having built the wall, they afterwards banked it up with twelve feet of earth. It was so loosely constructed (being without mortar) that it would not otherwise have held together. The explanation was not difficult, if they understood that there had been a mediæval wall previously on the spot, of which the twelve feet of earth formed the rampart. Further, to admit that the wall under discussion was the first on the site, remembering that it was largely constructed of stones from Roman temples, brought in this dilemma, that the Romans built temples, which subsequently went to ruin before the north wall was constructed. This we know to be contrary to the invariable practice of the Romans. Moreover, the wall could not be older than the age of the stones of which it was built. The style of lettering in some of the inscriptions was certainly as late as the third century. It was foolish to think of Deva without a wall until that period.

He would next call attention to the rude construction of the face of the inner portion of the wall. In the drawing

of it used by Mr. Brock, he challenged its accuracy, and said it did not give a true idea of the wall itself when first opened to view. The stones on the inner face below the soil were of the rudest possible character, projecting one or two feet beyond the line of the face. Many fell down as the earth was removed. The drawing showed the wall as the surveyor had repaired it, and not as it was when first opened out. What had been done, as they might have noticed, was to form a sloping trench down to the base of the wall, and this was what he saw. That the stones on the inner face were irregularly placed, one row projecting one or two feet beyond another, and, naturally enough, some stones had fallen down. He well remembered it, for one day as he was passing he heard the masons, as they were at work, calling, "Look out, here comes another," showing the loose way in which the stones were placed in position. He asked how it was possible to think that a wall could be constructed of uniform thickness and character with such an assortment of stones as they had found in the wall—massive cornices of many patterns, rounded copings, pilasters, and flat tombstones. He could assure them that, in addition to these, much of the wall was built of rough, unsquared stones, that never had a chisel mark on them; they were simply layers or "flags" of sandstone as they were got out of the quarries, with a layer of earth on top and then another layer of rough stones, and "cornices and copings" followed.

The Rev. Chairman here intimated to Mr. Shrubsole that he had exceeded his limit of time, and he at once gave way and resumed his seat.

Mr. I. Matthews Jones (city surveyor), who was next invited to offer an opinion, said he was glad of the opportunity of corroborating in some measure all that Mr. Brock

had stated in reference to the wall, and also to state publicly that he had corresponded with, and personally conducted over the excavations, many whose names stood high on the rolls of archæological science; and none of those gentlemen had expressed opinions adverse to the Roman origin or building of the walls. On the other hand, he had made diligent enquiry and research in regard to the opinions of those gentlemen, who were claimed as authorities as taking an opposite view; but he had not, as yet, been able to find any published record of such opinions, or in support of the assertions that had been made. Anonymous contributors had been plentiful; and certain critics now and then during the progress of the work, at the time the wall was, as it were, partially disembowelled, reminded him of the wise men of Gothan, who, having had removed the internal works of a clock, proceeded to compare it unfairly with a timepiece perfect in all its parts. He might say that the local Society had reason to congratulate itself upon having had the evidence of gentlemen to bear on the wall, whose professional and practical training enabled them to distinguish and appreciate a wall when they saw it; also that their professional *status* was such that they had no need to distort facts, to extenuate or "set down aught in malice" in regard to the monuments of ancient cities and their past history.

Mr. John Griffiths asked the surveyor to give a more direct answer to Mr. Shrubsole's expressed opinion in regard to the construction of the inner face of the wall as represented on the diagram.

The Chairman: The point as to the irregularity of the wall inside?—the assertion of Mr. Shrubsole was that the wall in its present state is not in a tolerably straight line, but "jagged in" very much? Although he might say that being jagged in was one of the arguments of Mr. Brock,

who had told them it was necessary for the support of the wall; yet Mr. Shrubsole had asserted that it was jagged in very much more than was represented on the diagram—two feet he said it was on the south face.

The City Surveyor said the diagram showing the work was prepared and laid down to dimensions, and was absolutely correct, as far as a draughtsman could make it, at the various points where the section was taken. Mr. Shrubsole had spoken of an acquaintance of thirty years with the subject of the walls, but he (the speaker) might be allowed to point out that Mr. Thompson Watkin had referred to Mr. Shrubsole as not having entered into any study of the walls even so late as the year 1874. Now, that was only thirteen years since, and not thirty.

Professor M'Kenny Hughes said he had been down the holes, and had his attention drawn to the nature of the work, and he certainly must say that, after examination, his opinion agreed very much with what had fallen from Mr. Shrubsole.

Mr. A. O. Walker was of the same opinion.

Mr. E. W. Cox said he could give very general confirmation to all that had been advanced both by Mr. Shrubsole and Mr. Thompson Watkin.

Mr. T. Hodgkin, F.S.A., said that he was not sure whether this was not rather a question for architects than for antiquaries. He would be glad if a jury of architects could be empannelled to try the question. He often felt that there was a danger of persons like himself, who were only antiquaries, talking nonsense when they were discussing architectural questions; and, on the other hand, he always remembered with pleasure a visit which he paid to Chesters (not Chester), the Roman camp of Cilurnum, in company with his brother-in-law, Mr. Alfred Waterhouse, who, as an architect, was able at once to explain things

that had puzzled him on every previous visit. There was a point mentioned by Mr. Watkin as to which he felt some doubt, and that was as to the use of sepulchral monuments in fortifications. Mr. Watkin thought that any Roman general who should have dared to use these burial slabs in the rebuilding of the city walls would have rendered himself liable to severe punishment. Whether such an act would have been regarded as sacrilege, and if so, what would have been, theoretically, its punishment, he could not say; but he thought it was clear that practically the thing was done by Roman engineers. If they took the case of the walls of Rome, built by Aurelian in the third century, and added to by Honorius in the fifth, they would find two important sepulchral monuments actually built up in the gates of the city. In the Porta Salara was included a tomb, erected in the reign of Domitian, to the memory of the young poet, Sulpicius Maximus, who died at the age of twelve; and in the Porta Maggiore, the sumptuous tomb of Eurysaces, the baker, and his wife, who, as an inscription facetiously records, "lie buried in this bread-basket." So much for the alleged desecration of sepulchral stones. Visitors to the very interesting remains of Ostia would remember a number of sculptured slabs (not sepulchral) laid flat on their faces and built up into an arch, with no more feeling for the decorations upon them, or regard for their original purpose, than had been shown by those who had immured these sculptured stones in the walls of Chester.

Then as to the idea that the stones either in the north wall or the Roodee wall had been brought from a Roman cemetery, and hastily built up into a suddenly-raised rampart. He wished those who spoke of hasty rebuilding in time of war would consider the case of the Heidenmauer at Wiesbaden. There we have undoubtedly

a wall built up in great haste in tumultuary times, probably in the third or fourth century, to repel the attacks of the Alamanni. And what a wall it is—a conglomerate of the most heterogeneous materials; here the shaft of a column, there a piece of a pediment, all tossed in higgledy-piggledy—anything to get some sort of rampart to shelter the soldiers from the onset of the barbarians. Let them compare that wall with the solid, regular masonry of the north wall, or the structure flanking the Roodee, and he thought they would see grave reason to doubt the theory of the "tumultuary" erection of the latter.

The difference between the disputants in this controversy was perhaps not so wide as some persons supposed. No one would deny, on the one hand, that far the larger part of the walls of Chester, as we see them in walking round the city, is Edwardian, or even of a later date. And, on the other hand, neither Mr. Watkin nor Mr. Shrubsole denied that many of the stones in the particular parts of the wall to which attention has been called (north wall, Kaleyards, Roodee) had been fashioned into their present shape by Roman hands. But were they *reared into their present position* by Roman hands? That is the gist of the present controversy. In this point of view the stones described this evening, which add so largely to the wealth of the Chester Museum in Roman remains, do not at first sight help, but rather hinder, the advocates of the Roman theory. For these stones must have belonged to Roman Deva, and what was the northern rampart of that city while these stones stood in it? And if that rampart were only rebuilt, how could we imagine these sepulchral stones placed in its very foundations when the rebuilding was going on? The rebuilders would thus seem to have given themselves a great deal of unnecessary trouble to very little purpose. The theory advanced by

Mr. Brock, that the line of the city might have been pushed further northward in the interval between the carving of these stones and their inclusion in the wall, would no doubt meet this difficulty; but some further evidence seemed necessary to raise it from a conjecture into a fact. He confessed that what he had seen that day, and especially the continuation of the plinth for so considerable a distance, did seem to him strong arguments in favour of the Roman origin of that part of the wall. The general character of this portion, and of the structure at the Roodee, did certainly remind him very strongly of the undoubtedly Roman remains in Northumberland. Especially he invited comparison between the Roodee masonry and the equally fine and massive work under the northern gateway at Borcovicus. He hoped that the antiquaries of Chester would come over in a body to survey Cilurnum and Borcovicus, and to the best of his ability he would be happy to officiate as their guide.

Great credit, he thought, was due to Mr. Shrubsole and Mr. Watkin for having raised this question, and caused the different portions of the wall to be thoroughly scrutinised. Should the final decision be pronounced, on sufficient grounds, in favour of the Roman origin of some part of the present walls of Deva, he believed no one would be more highly pleased than those gentlemen. Even so Mr. Gardner had raised a most interesting and important discussion on the authenticity of the Paston Letters, and after at first throwing doubt upon them, had ended by declaring himself perfectly satisfied of their authenticity. Perhaps a similar result would be arrived at in the case of their still sceptical friends.

Mr. Brock, in reply, said he would first take Mr. Thompson Watkin's objection as to the impossibility of any stone in the wall being durable enough to last. [Mr.

Watkin: Red sandstone.] The instances he had cited could be seen and examined by all. With regard to these Roman stones being found, he took it that the chances were far more likely that they would be found in later Roman times, for the simple reason that then they would be abandoned, and at still later times covered with earth. For instance, if any one now wanted Norman stones to build into a wall, what chances would there be of finding them? Very few would be found lying about. Yet we were as near to Norman times as that people were to Roman. And if they wanted Tudor or Jacobean stones even, where would they find them, except in some old building erected when they were obtainable, and no later? Therefore, he took it, the probability was that these Roman stones had been found by some later Romans and used by them. With regard to what Mr. Watkin said respecting the cornice at the Northgate being built into the wall in the time of Queen Anne, when the "adornments" were put on, he (the speaker) knew of cases where "adornments" about that time meant simply to whitewash, and he thought it certain that the "adornments" spoken of on Pemberton's Parlour related to new flagging, the new parapets, and so on. He said, with all the assurance of his architectural knowledge, that they could trace the work that was done when that £1,000 was spent; if they wanted to "build" the walls, even excepting where the large stones were found, they would have to spend many thousands. Mr. Watkin said no altars had been found, and that his opinion would have been changed if altars had been found!

Mr. Watkin: I know that; I said it would have been different, and that a different wall would have been built if altars had been used instead of tombstones.

Mr. Brock: Altars were not so plentiful! He spoke of the plinth. He need not trespass on their time with regard

to that, for he had referred to the plinth in the Roman wall in London, which proved the existence of such a feature in Roman times; and here (in Chester) they had a continuous plinth all round the city. The same remark applied to what another gentleman had said. He spoke of the lower stones being all marked with Roman tool-marks. These were very distinct. They might be seen in the north wall, and at the Roodee particularly; also they might be seen in the Kaleyards—a peculiar diagonal or zigzag pattern, which that gentleman knew so well as existing in the North of England wall.

Mr. Hodgkin: We call it the "feather" tool-mark.

Mr. De Gray Birch: There are eight or more different patterns.

Mr. Watkin: I don't deny that the stones are Roman.

Mr. Brock (continuing): Now, they came to another argument. None of these stones—again he spoke as an architect—could be taken down from any other old building and rebuilt as they now saw them in juxta-position with older work without showing a different colour, and the fact that these stones were all uniform led him to believe that they were all placed there at one time, and that time Roman. Not only so, but they could not remove stones three feet long, two feet broad, and one foot three inches high as if they were bricks. They would run a risk in moving them, and they had no modern lewis holes; had they been put up at a recent time they might depend upon it that a modern builder would have used lewis holes, instead of carrying on only a small piece of walling at one time as he would have had to do. If he had a large work to do he would have used modern lewis holes. Mr. M'Kenny Hughes had raised the question how it was that the stones they saw in portions of the wall had no Edwardian marks. He (the speaker) took it that

the whole of the wall from the large unmortared stones to the parapet was Edwardian to a large extent, and if they examined it they would see that it was so, although they might trace work of the thirteenth and fifteenth centuries as well. In the north wall one of the re-worked stones, probably Roman originally, has a very distinct mason's mark, apparently of Edwardian date. But if the wall was not built till the time of Queen Anne, they would not be likely to find any mediæval wall there at all. How did the holders of such opinion account for the existence of any mediæval work?

Another speaker referred to the rough irregular nature of the wall, and that there was no indication of its Roman origin, but the wall was as he (the speaker) had sketched it (on the blackboard). The confessedly Roman stones, even supposing for argument sake that they had all been brought from elsewhere, must have always formed just such a wall as at present. Their unmortared beds showed that conclusively. Objectors to the belief that the stones were *in situ* must be bound to admit that, wherever else they were originally, they must have formed part of walling similar to what they now see. Mr. Shrubsole had objected to Mr. Jones' section, and some of his friends also, but he (the speaker) went about with a powerful argument in its favour—a foot rule. He could assure them that he had measured the wall irrespective of Mr. Jones, he had made a rough diagram, and he asserted that his drawing was correct in every respect. Mr. Jones had had the good sense (in anticipation of remarks of that kind being made) to draw his sketch so that a child might test it by going to the actual spot. The drawing was correct. He said it on the authority of having measured it. He said it on the authority of knowing Mr. Jones' accuracy. Mr. Shrubsole had kindly told them that those were not bullet marks on

the wall. It was true he had not noticed them until that day, but his attention had been called to them by an old inhabitant. He had seen similar marks elsewhere which were known to be bullet marks, and he ventured to say—Mr. Shrubsole's geological knowledge notwithstanding—that those were bullet marks.

It would be noticed in regard to the excavations at the Roodee wall that what was now shown to be the actual face of the work really corresponded with the north wall, and he would ask them carefully to consider whether it was at all possible for any mediæval builders to have found anywhere such an enormous number of what were confessedly Roman stones, with faces so remarkably perfect? Had they been so found, would it not have become necessary to re-face them, and not to leave them with the tool-marks which the Romans had worked so many hundred of years before? He took it that that was no small argument. Then, as to Mr. Shrubsole's stricture on the coin said to have been found. He (the speaker) thought those present would do him the justice of saying that he had laid as little stress as possible on that incident. He had completed his address before he brought the coin under their notice, and after he had sat down. He had known too much, however, of "kindly turns" like that being done, where a question of antiquity was in dispute, to take much notice of such finds. But he believed this coin to be genuine; he believed it was really *found* by the workman who said he had found it. However, he had not laid stress upon it, but if it were queried as a mere matter of positive certainty, he thought one might very well do so.

Adverting to Mr. Shrubsole's reflection on the crumbling nature of the wall when interfered with by the workmen, the speaker said he could not, of course, refer to Mr. Jones' workmen at that juncture; but he thought the incident of

falling stones was reasonably to be accounted for; he must accept Mr. Shrubsole's statement observing only that it was what he (Mr. Brock) did not see. The speaker here pointed out by means of the diagram how likely it was that stones would be liable to fall from the later loose wall-work of the upper wall when any excavation was being carried on below. Some speakers had referred to Roman tiles being used in connection with Roman wall building, but it did not necessarily follow everywhere, and many other questions might be raised as to other modes of building. Tiles were not always necessarily used in such constructions. Referring to the supposed sanctity of tombs in Roman times, he mentioned the well-known fact that the sepulchres of the ancient Etruscans were not respected by the later Romans, who rifled them for the sake of getting the then fashionable vases which they contained. It was very much the case at the present day with ourselves, Christians as we were. When a graveyard was to be altered or extended, or some addition made to a church, it would be found that they were not over particular, despite the "reverence for the dead," which we were supposed to possess. Many a cartload had been sold by builders and used as mere paving stones.

The Mayor said, however late the hour might be, he was sure the audience would not depart without thanking Mr. Brock for his eminently useful and instructive lecture, and the other gentlemen, for the information and light they had throw on a subject of so much interest as the discoveries recently made in Chester. They had reason to feel greatly gratified at the honour those gentlemen had done them in coming there and expressing their opinions that evening; and he was sure they would all agree with him and join in wishing them their cordial thanks.

His Honour Judge Wynne Ffoulkes formally seconded

the motion, which was passed with acclamation, and briefly acknowledged by Mr. Brock, bringing the proceedings to a close.

Note relative to the Coin.—The workman who found it explained to me the position in which it was found, namely, on an unmortared stone lying on the percolated red earth on one of the "beds." He saw it on removing a temporary wooden bearer, erected by Mr. Jones to support the upper part of the wall. It could not have been placed where found while the bearer was in position. The beam had been inserted as soon as the wall had been prepared for it. The coin is covered with green patina, and over this is a reddish deposit similar to the colour of the earth. Query, would any dealer on the walls be likely to trespass upon the excavations to deposit the coin where found, especially since he could get 1s. 6d. by selling it? Would any purchaser be likely to do so after he had given 1s. 6d. for it?

E. P. L. B.