## ON THE AGE OF THE CITY WALLS OF CHESTER1.

By GEORGE W. SHRUBSOLE, F.G.S.

Pennant, who was intimately acquainted with Chester, says of it, that the form of the city evinces its Roman origin, but that no part of the old walls exists. The latter part of this passage, written over a century ago, has of late

years evoked considerable difference of opinion.

Fifty years ago a zeal was shewn in Chester for the preservation of its local antiquities, of which we cannot speak too highly. Then, for the first time in our local history, we find the claim advanced that a large part of the north wall, on the east side of the Northgate, is Roman work in situ. Since then it has figured as such in standard works, and is so marked on the Ordnance map. This opinion received a certain amount of sanction in the Report of the Proceedings of the British Archæological Association for the year 1850. That report gives, in a Paper by Mr. Roach Smith, a "hitherto unpublished" sketch of a portion of "the Roman wall of Chester," and further goes on to explain, that the silence of topographical writers shews, "that if Roman work had been suspected in the Chester City Walls, it had never before been verified?." An opinion much to the same effect was expressed at the Congress of the Archæological Institute at Chester in 1857.

The point in question is an interesting one, and one that the last quarter of a century has given greater facilities for rightly judging than any previous period. During that interval large sections of the wall have been laid open for necessary repair. Besides this, many excavations

<sup>&</sup>lt;sup>1</sup> Read in the Architectural Section, at the Chester Meeting, August 13th, 1886.

have been purposely made at the base of the wall, at the more interesting points, to ascertain its peculiarities and character. The following notes are based upon observations of the structure of the wall extending over a quarter

of a century.

In dealing with the age of the walls, it is my intention to limit my remarks to the one period involved in the question raised by Pennant. Does any part of the Roman wall still exist in the present walls of Chester? It were profitless, as it is well nigh impossible, to judge by mere appearance of the age of a structure on the whole, so destitute of distinctive architectural features, which has had to be repaired or remodelled every century or two. Among much that is uncertain, one period we know stands prominently forward for distinctive recognition in the use of stone, tiles, and mortar in its constructive works, which enables us to distinguish it from all others. I allude to the period of the Roman occupation of Britain.

The position that I take up on this question is opposed to the modern view, believing that, however pardonable may be the claim for the Roman age of any part of the city walls, it is one not borne out by anything to be seen

there at the present time.

It is an element not without value in this case, that the older writers on the subject, as Camden, Pennant, Ormerod, Lysons, and Hanshall make no such claim for the walls. We may extend our remarks to still older authorities, with the like result. It cannot be said that their facilities for judging the age of the walls were less than our own. The opinions held by these writers may be summarized in the words of Ormerod:—" The walls of Chester follow the outline of the Roman work, and probably stand on the Roman foundation."

Again, on the general subject, it may be said that historical evidence is against the probability of any portion of the Roman wall being extant. What are the facts bearing on the case? They are to the effect that after the departure of the Romans, Britons, Danes, and Saxons each, in turn, assailed the walls, and helped in their demolition, leaving them for Ethelfleda to rebuild, and, it is said, enlarge. Again, we find in Norman times an imperative order was issued for the rebuilding of the

walls, to be followed by a fine for non-appearance on the part of holders of land. For their history during the next 500 years the Patent Rolls give us an insight into the state of dilapidation, into which they had fallen from natural decay and intestinal strife. Subsequently, in the Civil War, the walls suffered severely; serious breaches having been made on three faces of the wall. In this condition they remained for long enough, until, as the inscription on "Pemberton's Parlour" tells us, "in the eighth year of the reign of Queen Anne, divers wide breaches in these walls were rebuilt, and other decays therein were repaired, 2,000 yards of the pavement were new flagged or paved, and the whole repaired, regulated, and adorned, at the expense of £1,000 and upwards." From this time a trifling toll on Irish linens, imported into Chester, provided a fund sufficiently ample for a time, to keep the walls in good repair.

Under any circumstances, it is impossible to believe that a perishable stone, of the nature of our sandstone, should have held together as a structure for sixteen hundred years. It is not even credible, that two hundred or three

hundred yards of it should have remained intact.

It is far more probable and consonant with observation, that there may have been, not one, but four walls, in the space of time over which its existence has been spread.

These thoughts by the way. We now proceed to examine those parts of the wall, for which a Roman origin is set up. First of all we take the large stones on the outside of the wall, near Black Friars, midway along the

Roodeve.

Here we find a group of massive stones at the base of a sloping bank of clay, some forty feet in height. Recent excavations alongside have shewn that they form no part of a wall properly so called; they are certainly not Roman, since they exist only as a single row of stones, evidently placed there to assist in holding up the clay bank, on the top of which is the modern wall. Railway embankments are secured in like manner. One fact alone disposes of its claim for a Roman origin. The base of the stones rests upon a quicksand, which is the bed of the old river. To have neglected the solid ground above, and to have built the wall of the castrum on quicksands, in a

hole fifty feet below the level, is a mode of proceeding I cannot imagine any military engineer capable of, least of all a Roman engineer. The purpose of the stones being placed there is clear enough. They are the "footings" of

a wall, and nothing more.

We next examine the reputed Roman work at the Kaleyards. There we have a broken course of large stones, on the outside of the present wall. To ascertain the purpose of these stones, an excavation was carried down to the base of the principal group. It was then found to be a single course of stone, six or seven feet in depth, having an Edwardian plinth, and strongly inclined outwards. It had evidently at one time been part of a wall, of which these stones formed the outer course. Its history would appear to be somewhat as follows:—Some few centuries ago, the city wall stood on the spot now occupied by these stones; the foundation of clay proved treacherous, aided by the loose ground of the fosse in front, and the outward thrust of the ground of the churchyard. Together these causes proved too much for the stability of the wall; it was pushed outwards to such an extent as to be useless—it was dismantled—but the base of it was wisely left in the place where it was found, and the new wall built inside of the old one, on its present site.

We come now to examine the Roman work par excellence of some local authorities. It will be seen on the east side of the Northgate, between it and King Charles'

Tower.

Looking over the wall at this point we see a bold precipitous front of sixty feet—twenty feet of wall, and forty feet of rock, cut to form the canal. Owing to the precipitous character of this scarped rock face, on which the wall rests, no examination of it has been possible, since the canal was made in 1778. Two years since, a scaffolding was reared in front of it, for necessary repairs. After some rubbish had been cleared away at the base, there was exposed the base of a plinth, which is Edwardian if it is anything. This opportunity was taken advantage of to thoroughly examine into the construction of the wall. Owing to certain clearances, we now see the wall under exceptionally favourable aspects. Some features are now

exposed for the first time. We select that part of the wall adjoining the Northgate for our examination, as being the more characteristic. Looked at as a whole from the base to the top, it must be confessed that, for genuine Roman work, it presents several anomalies, if not unique features. We are supposed to be looking at a wall which, from its plinth to the cornice, is believed to have been part of the wall of the castrum which encircled Deva on this side. To begin, the base has a very English-like look about it. Then the irregular size of the stones, large and small intermixed, has not the characteristic appearance of Roman work. The whole is crowned by a cornice, an unparalleled example, so far as the walls of Roman castra in England are concerned, and more nearly allied to the debased classic cornices to be seen in the front of some of the gabled houses in Bridge Street, of Jacobean age, than anything Roman<sup>1</sup>. We miss here, too, from the wall the well-known bonding tiles, and the characteristic mortar.

In reference to bonding tiles, I have to say that either whole or fragmentary they are of common occurrence in Chester. In some instances they are so abundant as to give rise to the idea, that there has been a manufactory on the spot. A few years ago, near the Watergate, a wall was found built up entirely of these bricks, or tiles. Also, I may observe that a stratum of six or eight feet of brick earth is found everywhere about here to overlie the sandstone rock.

As to the practice of the Romans to use tiles in the construction of the walls of their castra hereabouts, I need only refer to the tiles with the legionary stamp found at *Mancunium* (Manchester), and the instance of Caergwrle, a fortified outpost eight miles from Chester, where we find thin slabs of slate used as a substitute. We find tiles freely used in the "Old wall" of Uriconium, and indeed at every station around Chester.

Here I may remark that where, as in the case of the "Great Wall," constructed without the usual courses of bonding tiles, by way of compensation, the stones were placed with their longer axis to the interior, so that as Dr. Bruce remarks, "Owing to the extent to which the stones

<sup>&</sup>lt;sup>1</sup> Mr. Roach Smith does instance the occurrence of a cornice in connection with Roman work, but then the site of it is in Egypt.

are set into the wall, the necessity of bonding tiles—so characteristic of Roman masonry in the South of England—is altogether superseded." Walls constructed after this fashion are unknown in Chester. Whereas walls with bonding tiles have been found, leading to the conclusion that the construction of the walls of the Devan castrum was no exception to the ordinary course of building.

As to the absence of mortar in the wall, this is scarcely in harmony with admitted Roman work in the City. To judge by what we find elsewhere, the Romans were prodigal in the use of mortar. The fact of not finding it either between the stones or in the core of the wall, is almost of itself conclusive. Fragments of red sandstone cemented together by lime, and forming a concrete mass, are not uncommon in the filling in of the wall, and, in some cases, form part of the outside. In each case they are old materials used up again.

It may be thought that these points are not altogether conclusive, as to the age of the wall. Accordingly we will extend our investigation to the nature of the wall on the inner face. To examine this, in 1884, a number of openings were made in the Deans' Field, in the rear of the north wall, and the excavation carried down to the rock. The result may be stated as follows:—The outer face of the wall at this point is 19 feet in depth, while on the inside it is only carried down to 11 feet. The outer course of stones, for a depth of eight feet, proved to be only a single row, backed up by earth containing modern debris, and notably tobacco pipes and glazed pottery. The foundation of the wall on the inside was merely loose fragments of stone, resting on the ground, at the depth of two feet. A wall thus constructed, with a singular absence of everything Roman about it, it were idle to speak of as belonging to that age, while all its affinities bespeak its connection with the work of the last two or three centuries. This wall we have been examining, I may recall, is that figured by Mr. Roach Smith, as an example of Roman work in the north wall of Chester.2

Other structures in the City such as "Julius Cæsar's"

 $<sup>^1</sup>$  Bruce's Handbook to the Roman  $^2$  Journal British Archæological Associawall, p. 33.  $^2$  Journal British Archæological Associawall, p. 212.

so-called Tower at the Castle, and the Old Shipgate, near the river, have been spoken of as Roman, after very superficial examination, I think. Seeing that neither of these structures alluded to is 500 years old, they are really not in the discussion, and may be dismissed from our notice. Most certainly neither of them was included within the Devan camp, at any period of its existence.

A word here may be said as to the construction of the

older portions of the wall.

During the last twenty-five years I have at various times seen hundreds of yards of the present wall laid open for necessary repair; but in no instance have I seen the faintest approach to Roman work in situ. The walls average six feet in width, built up of an outer and inner course of stone, the interior filled in with loose stones and rubbish, on the whole very similar to the rubble walls of the cathedral, but of inferior workmanship. The foundation, in every instance, has been loose stones, both large and small, laid very irregularly, and without mortar. All this is very different from the Roman concrete foundations that we are familiar with in Chester. It seems highly improbable, that the wall of the Roman castrum would be less securely constructed at its foundation, than any other Roman work in the city.

A most important factor in this enquiry is the number of years that a massive wall, built of our local sandstone,

will endure when exposed to the weather.

In this stone, which exists everywhere in and about the city, under cover of a few feet of soil, the sand grains are very loosely compacted together, and when exposed to the weather it soon disintegrates. Its weakness as a building stone is well seen when examined under the microscope. In the Memoir of the Geological Survey it is stated, "that the inferiority of the stone for building purposes is shewn by the condition of Chester Cathedral before restoration, and St. John's Church Tower before its fall<sup>1</sup>." Its inferiority as a building stone we may take as admitted. Its period of endurance we may state to be for small blocks from one to two centuries, and for large blocks from three to four. Five centuries we may take to be the extreme limit of its power, when exposed to the action of the

<sup>&</sup>lt;sup>1</sup> Memoirs of the Geological Survey. Explanation of Sheet 80, S.W.

weather. We have no building in Chester 500 years old, that has not been repaired. In practice I find that the Civic authorities have recased the more exposed points along the wall, such as the Towers, every 100 or 150 years. King Charles' Tower was recased a few years ago, after the lapse of 100 years; or, to take the case of another Tower, the so-called Pemberton's Parlour, the inscription on its front tells us that it was rebuilt in 1710, a later one tells us that it was recased as now seen in 1882—an interval of 170 years. Or, take again, the case of the Cathedral. Its condition prior to its restoration by Dean Howson is well remembered. Its massive outside walls were decayed to such an extent, as to expose the rubble interior. Pinnacles, and all ornamental work, were gone; the whole looking like the face of a sea-worn rock.

This description applies, be it remembered, not to the Norman Cathedral but to one of much later date; its oldest portion being of the time of Henry VI. In the interval since the erection of Anselm's building, there had been three rebuildings, or recasings of the old structure, and the noble work of Dean Howson was really the fourth building of its kind. This gives us virtually three buildings in 800 years, or an average of 270 for the duration of the structure before needing restoration. It was this reasoning which brought home to the mind of Dean Howson (after giving, in his work on the river Dee, currency to the idea of the Roman origin of the walls) the conviction that the oldest part of the Northgate wall was nearer allied to Jacobean times than any other?

Presuming that the Romans used a local stone wherewith to construct the walls of Deva, the inferiority of the stone being admitted, the assumption of any Roman work on the exterior of the walls having survived to the present day becomes inadmissible. The force of this reasoning is fully admitted, but the facts are sought to be discounted, by stating that the stone employed by the Romans was one superior in quality to the local stone, and brought from a distance somewhere among the Cheshire hills. For this statement there is no authority or foundation in fact. All the evidence to hand goes to shew, that the

<sup>&</sup>lt;sup>1</sup> The River Dee; its aspect and <sup>2</sup> Cheshire Observer, March 1st, 1884. history, p. 72.

Romans, in their several works, made free use of our local stone, as may be seen in Handbridge, where several hundred vards of rock surface have been excavated. On one of the rock faces a carving of Minerva still survives, to attest who were the quarriers.1 To make this point more intelligible, I should state that Chester is geologically situated upon the middle member of the Bunter sandstone series, the pebble beds as they are called, from the presence of quartz or liver-coloured pebbles in the mass. When the examination of the Northgate wall was made by the aid of the scaffolding of which I spoke, the face of the stonework was found studded with these pebbles, which are characteristic of our local beds. Some of these pebbles were removed, and brought away for examination. One of them so brought away by Mr. Shone, F.G.S., was found to contain a fossil shell, known to be associated with these beds. These circumstances conclusively prove that the stone at present seen in the Northgate wall, is not an imported variety from a different geological horizon, but is identical in all respects with the exposure of stone on which the Northgate wall rests. Microscopic examination of the stone shews again that the stone in the Northgate wall is identical with our local stone.

That it was the custom of the Romans to use our local stone is to be seen in the presence of the pebbles (before alluded to) in the various Roman altars and inscribed stones in our Museum. If the Romans considered that the local stone was good enough for the construction of important objects, such as altars, &c., we may safely conclude that they would require no better quality of

stone for the wall of the camp.

The geological evidence then, apart from any other, is decisive upon the point, that the present Northgate wall is

shews the amount of weathering to be greater than the original depth of the incised figures. But they are still there, and are as legible now as when first cut, shewing that they bave been cut back by weathering, at the same time and in the same way as the rest of the surface.

Similarly the chiselliugs of the Minerva statue might be cut back, and so long preserved in general outline, though the sharp details would be rounded off.

<sup>&</sup>lt;sup>1</sup> It might, perhaps, seem at first sight, that this enduring persistence of the image of Minerva, on an exposed rock surface, for seventeen hundred years, is inconsistent with the tenor of my argument, drawn from the friable nature of the local stone. The two, however, are reconcileable. On several parts of the wall, there are stones bearing the date of repair in incised figures. The projection of hard quartz pebbles, from the surface of the stone,

built of stone identical with our local stone. No distinction can possibly be drawn between them. There is, therefore, no warrant for the supposition that the stone has been brought from a distance.

The local character of the stone being thus established beyond question, the wall cannot claim a longer life than

is usual with stone of its kind.

Another consideration yet remains to be advanced. It goes to the root of the whole question, as it tends to shew, that the present line of walls, very doubtfully represents the Roman castrum. The extent of the Roman circumvallation has been in the past very much exaggerated. The present southern wall has not the remotest claim to be considered Roman. The latest research would go to show that the western wall certainly, and probably the northern wall, is all outside the line of the original Roman wall; thus leaving only the east wall in part to represent the Roman wall. Respecting this part, the one which has the largest claim to be considered Roman, little has been heard of.

I might supplement these remarks by additional evidence, but I think enough has been said to shew, that there is virtually no foundation for the notion which has prevailed of late years, of the extreme age

of the walls.

The way in which the error has arisen is readily explained. The weathering of the stone is likely to deceive those unacquainted with its peculiarities. If the opinion of its age rests alone on a passing or superficial examination, such is the extent of the "weathering" and the seeming antiquity which one or two centuries will confer upon it, that it seems only natural to infer its high antiquity. The fallacy of this reasoning it has been my purpose to indicate.

In bringing these remarks to a close I revert again to Pennant's statement, quoted at the commencement, that no part of the Roman wall is now visible. For my part, after looking at this question of the age of the walls, and I hope fairly, in its several aspects as to their composition, the historical and scientific evidence regarding them, and the probabilities of the case, coupled with what we know is taking place in walls of known age and of similar

composition, I arrive at the same conclusion as Pennant, that no part of the Roman wall is now visible above

ground.

If I am required to state the age of the older portions of the existing wall, I know of nothing dating further back than the reigns of James I and Charles I.

VOL. XLIV