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SOME OF THE ROMAN REMAINS IN ENGLAND.

BY SAMUEL SWETT GREEN.

For several years I have followed with great interest the excavations which have been made in towns of the Roman period in English history. In 1902 I visited Uriconium, or Viriconium as many investigators believe it should be called. It is situated near the hill Wrekin and is reached from Shrewsbury, in the interesting museum of which place are to be seen the objects found in the excavations. A small town named Wroxeter occupies an inconsiderable portion of the site of the old Roman enclosure.

In 1903, I had an opportunity of watching the trenching which is still going on at Calleva Atrebatum (Silchester, in Hampshire,) and again during the past summer; both times under the valuable guidance of Mr. Mill Stephenson, an accomplished expert. During my recent visit I was so fortunate as to meet at the ruins, and have a long and most profitable conversation with, Mr. George Edward Fox, who is, I understand, the leading authority in England in regard to architectural remains of Roman Britain. A minute record of the discoveries at Silchester appears in the successive volumes of Archaeologia, the official organ of the Society of Antiquaries under whose auspices the excavations there have been made in recent years. Besides visiting Pevensey (supposed to have been the illfated Anderida), Richborough (the Roman landing-place, Rutupiæ) and a Roman villa at Chedworth, as well as other spots rendered memorable by the presence of the Romans, the past summer and in previous years, I took occasion early in August to examine on the ground the excavations now being made at Caerwent, in Monmouthshire, on the site of the old Roman walled town of Venta Silurum and to visit the Roman wall in Northumbria and Cumberland.

I propose in this paper to write briefly about a few of the other more conspicuous and interesting sites of Roman remains and then describe more at length, but in a very limited way, the results of excavations at Silchester.

DATES.

Allow me at the start to refresh your memories by giving you a few important dates. Julius Cæsar, as you remember, first invaded Britain in 55 and again in 54, B. C. As you know, he made no permanent settlement. That was made by the Emperor Claudius, who sent his general, Aulus Plautius to Britain, A. D. 43. That officer, having achieved considerable success, went into camp on the site, it has been conjectured, of the present, but then nonexistent, city of London and sent for Claudius to come to complete the victory.

Claudius came, and during a stay of sixteen days, or so, in Britain captured Camulodunum (Colchester) the stronghold of his opponent. Having returned to Rome, Aulus Plautius continued the conquest with the result of gaining for the Empire the Southern and Western portions of Britain, from the Thames to the Severn. He seems to have fixed the Romans "permanently at Colchester and Gloucester (Glevum), which places from that date became two very important stations."¹

During the reign of Nero, A. D. 60 or 61, came the formidable revolt of Boadicea (Boudicea, according to Thomas Hodgkin, who has ably described the Roman period of history in England in a volume bearing the date of the present year.) The year 78 is memorable; for it was in that year that Cnæius Julius Agricola was sent to Britain by Vespasian as *legatus*. He was the father-in-law of the historian, Tacitus and "the most celebrated and probably the greatest of the governors of Britain."² Under him the Roman arms made great progress.

¹ Scarth's Roman Britain, p. 39. For full titles of books quoted, see list of books at the end of the paper.

² Hodgkin. History of England, p. 46.

In about A. D. 120 the wall between the Tyne and the Solway was built and about 140 the one between the Firths of Forth and Clyde.

The Emperor Septimius Severus set forth from Rome in 208 to bring the affairs of the province of Britain into order, and died, it will be remembered, at York (Eboracum) in 210. The usurper Constantine withdrew the Roman legions, says Hodgkin, from Britain to Gaul in the year 407.

THE ROMAN WALL.

In speaking of the two barriers constructed by the Romans in Britain, Mr. H. M. Scarth writes that "after remaining for centuries neglected, and their works serving as quarries for material, or harbours for robbers in the times of border warfare, they have, in more recent times, attracted the attention they deserve."3 The lower of these barriers is usually known as The Roman Wall and has been exhaustively described in an interesting and elaborate monograph by Rev. J. Collingwood Bruce, the third edition of whose work was published in 1867. "The great fortification," he writes, "which was intended to act not only as a fence against a northern enemy, but to be used as the basis of operation against a foe on either side of it, consists of three parts: I. A Stone Wall, strengthened by a ditch on the northern side. II. An Earth Wall or Vallum, to the south of the stone wall. III. Stations, Castles, Watchtowers, and Roads, for the accommodation of the soldiery who manned the Wall, and for the transmission of military stores. These lie, for the most part, between the stone wall and the earthen rampart."4 The stone wall extends from Wallsend (Segiodunum) on the north side of the Type to Bowness on the north side of the Solway Firth, a distance of seventy-three and a half English miles. The earth wall falls short of this distance by about three miles at each end, not extending beyond Newcastle on the east and terminating at Dykesfield on the west.

³ Page 79. ⁴ Pages 49 and 50. 59

The murus and the vallum both pursue a straightforward course. The former, says Mr. Bruce, "shooting over the country, in its onward course, only swerves from a straight line to take in its route the boldest elevations. So far from declining a hill, it uniformly selects one."⁵

Beda, (A. D. 671 to 735,) "whose cherished home was the monastery of Jarrow, anciently a part of the parish of Wallsend, is the earliest author who gives"⁶ the dimensions of the stone wall. He speaks of it as twelve feet in height. "In all probability" writes Mr. Bruce, "the Wall would be surmounted by a battlement of not less than four feet in height, and as this part of the structure would be the first to fall into decay. Beda's calculation was probably irrespective of it. This, however, only gives us a total elevation of sixteen feet. Unless we reject the evidence of Ridley" (speaking of the wall as it stood about the year, 1572) "and Erdeswick," (who visited the wall in 1574) "we must admit even after making due allowance for error and exaggeration, that the Wall, when in its integrity, was eighteen or nineteen feet high. This elevation would be in keeping with its breadth. The thickness of the Wall varies considerably. In some places it is six feet, in others nine feet and a half. Probably the prevailing width is eight feet, the measurement given by Beda . . . Throughout the whole of its length the Wall was accompanied on its northern margin by a broad and deep Fosse. . . . Where the ditch traverses a flat or exposed country, a portion of the materials taken out of it has been frequently thrown upon its northern margin, so as to present to the enemy an additional rampart. In those portions, on the other hand, where its assistance could be of no avail, as along the edge of a cliff, the fosse does not appear."7

The Vallum, or Earth Wall, which lies uniformly to the south of the stone wall, "consists of three ramparts and a fosse. One of these ramparts is placed close upon the southern edge of the ditch; the two others, of larger dimensions, stand one to the north and the other to the south of

⁵ Page 51. ⁶ Page 52. ⁷ Pages 54 and 55. it, at the distance of about twenty-four feet. A careful examination of the country over which the Wall runs, almost necessarily leads to the conclusion that whilst the Wall undertook the harder duty of warding off the openly hostile tribes of Caledonia, the Vallum was intended as a protection from sudden surprise from the south. The natives of the country on the south side of the Wall, though conquered, were not to be depended upon."⁸

"The third, and perhaps the most important, part of the barrier line consisted of the structures that were formed for the accommodation of the soldiery, and for the ready transmission of troops and stores."⁹ "At distances along the line which average nearly four miles, Stationary Camps were erected."¹⁰ These were "military cities, adapted to the residence of the chief who commanded the district, and providing secure lodgment for the powerful body of soldiery he had under him. Here the commandant held his court; hence issued decrees which none might gainsay. Here Roman arts, literature, and luxury struggled for existence, whilst all around was ignorance and barbarism."¹¹ "All the stations have, on their erection, been provided, after the usual method of Roman castrametation, with at least four gateways."¹²

The best preserved station along the line of the wall is at Housesteads, the ancient Borcovicus, about the centre of the barrier. The enclosure contains five acres or more. I visited that station during the past summer and found its ruins very interesting and instructive. A good way of reaching it is to go to Haydon Bridge, a station on a railway running between Carlisle and Newcastle.

"The list of troops employed to garrison the Wall reveals some of the peculiar features of Roman policy."¹⁸ Whilst the "auxiliary troops were exposed to the first assault of the foe, the sixth legion, composed it is thought chiefly of native Italians, reposed in comparative security at

⁸ Pages 56-57 and 59.
⁹ Page 59.
¹⁰ Page 60.
¹³ Page 61.
¹³ Page 70.

York."¹⁴ "Troops belonging to the same nation were never placed in contiguous stations."¹⁵ "Making every allowance for the occasional reduction of numbers below the proper standard, it may be presumed that the garrison of the Wall usually consisted of from ten to fifteen thousand men."¹⁶

"In addition to the stations, Castella or Mile-Castles were provided for the use of the troops which garrisoned the Wall. They derive their modern name from the circumstance of their being usually placed at the distance of a Roman mile from each other. . . . The chief object of the castella evidently being to protect the party of soldiers who guarded for the day the contiguous mile of wall from any sudden surprise, the erection of any barracks or huts, needed for their temporary shelter, may have been left to their own diligence and discretion. Between the mile-castles, four subsidiary buildings, generally denominated Turrets or Watch-towers were placed. They were little more than stone sentry-boxes."¹⁷

"The advance of Roman armies, and the formation of roads, were uniformly contemporaneous. The barrier therefore had its Military Way."18 In the rebellion of 1745. the government suffered great inconvenience from the fact that only portions of the way could be used and those only by employing pack horses. After the suppression of the outbreak, it "turned its attention to the necessity of having a good road across the Isthmus, and that which is now known in the country as the Military Road was constructed at the public expense."19 The method of examining such portions of the Wall as remain is to pass along this road. A few weeks before I traversed a stretch of it in a carriage, members of the Cumberland and Westmoreland Antiquarian and Archæological Society and of the Society of Antiquaries, Newcastle on Tyne, walked along the road, stopping at places of interest and sleeping in inns near

¹⁴ Page 70.
 ¹⁵ Page 71.
 ¹⁶ Page 72.
 ¹⁷ Pages 72 and 74.
 ¹⁸ Page 75.
 ¹⁹ Ibid.

their route. They took, it was said, about a week in making the excursion.

"The Roman Military Way accompanies the Wall throughout its entire course, and uniformly lies between the Murus and the Vallum. It is usually about seventeen feet wide. and is composed of rubble so arranged as to present a rounded surface, elevated in the centre a foot or eighteen inches above the adjoining ground."20 "The Wall is faced on both sides of it with carefully-squared blocks of freestone. The interior is filled with 'rubble,' of any description, firmly imbedded in mortar. The facing stones are usually eight of nine inches thick, and ten or eleven broad; the length of them exceeds their other dimensions, amounting usually to fifteen and occasionally to twenty inches and more. The face of the stone is cut transversely to the lines of stratification, so as to avoid exfoliation by the action of the weather. The stone is made to taper off towards its inner extremity, so as the more readily to adapt itself to the bed of gravelly mortar intended for it. In consequence of the depth to which the stones were set into the Wall, the necessity of rows of binding tiles, which form so characteristic a feature of Roman masonry in the south of England, is done away with. There does not appear to have been a single tile used in any part of the Wall. On one or two occasions, however, as for example at the Housesteads mile-castle, a single row of stone flags has been used. apparently with the same view that tiles were."21

"The strength of the Wall has in a large measure depended upon the nature of the mortar made use of."²² Such as was used "sets in a few hours and soon becomes as hard as stone."²³

"But little care was expended in preparing the foundation" of the Wall. "The structure was sufficiently broad

22 Page 83.

²³ Ibid. The mortar "has evidently been similar to the grout and concrete used by the railway engineers of the present day. The lime has been ground when in an unslacked state, and then carefully mixed with sand, gravel, and stone chippings. When about to be used the mass has been freely mixed with water." Bruce, p. 83.

²⁰ Pages 75 and 76.

¹¹ Pages 81 and 83.

and solid to stand by its own tenacity. For the most part no excavation seems to have been made The lowest stones of the foundation were usually broad flags, three or four inches in thickness, and these in many places are laid upon a bed of well-puddled clay. Upon these flat stones, was laid the first course of facing stones. which were usually the largest stones used in the structure. In the higher courses the facing stones are uniformly of freestone: but in the ground course a 'whin-stone' is occasionally introduced. The flagstones of the foundation usually project from one to five inches beyond the first course of facing stones, and those again usually stand out an inch or two beyond the second course, after which the wall is taken straight up. One of two courses of facingstones having been placed in their beds and carefully pointed, a mass of mortar in a very fluid state was poured into the interior of the Wall, and stones of any kind and shape that were of a convenient size were 'puddled' in amongst it."24 "Such is the strength of the Wall that if the meddling hand of man had been withheld from it, it might have stood to the present hour in almost all its original integrity."25

Numerous objects of interest have been found in the excavations about the Wall and many of them may be seen at Newcastle and in the collection of the Duke of Northumberland, at Alnwick Castle.

A survey of the Wall was made under the auspices of a late Duke of Northumberland. There have been differences of opinion as to who the builder of the Wall was, but after reading the evidence collected by Mr. Bruce, and giving weight to other considerations, I am ready to indorse the opinion which is now commonly held by antiquarians, that, while Agricola probably drew the first line of forts between the Tyne and the Solway, the Wall itself was built by Hadrian. It is highly probable that it was afterwards repaired by Severus.

24 Pages 84 and 85.

35 Page 85.

64

[Oct.,



THE SITE OF URICONIUM AT WROXETER. SALOP

THE UPPER BARRIER.

The upper wall, or barrier constructed by Hadrian's successor, Antoninus Pius, was formed it is believed by connecting together by means of a deep fosse and an earthenrampart, the forts previously erected by Agricola between the Forth and the Clyde.

ROADS.

At the period when the Roman forces finally left Britain there existed at the lowest computation, fifty walled towns, exclusive of the numerous military walled stations, with their attendant suburbs. The towns and stations were connected by excellent roads, and these were provided at fixed intervals with posting-stations where relays of horses were kept.

Four principal lines of roads have been popularly known as the "four Roman ways." In the time of Edward the Confessor, and probably much earlier, there were four roads in England protected by the king's peace. These were Watling-strete the Fosse, Hickinielde-strete, and Ermine-strete.

Watling street ran from London to Wroxeter; the Fosse from the sea coast near Seaton, in Devonshire, to Lincoln; the Ikinild (Hickinielde) street from Islington near Bury St. Edmunds in Suffolk, to Wantage in Berkshire and on to Cirencester and Gloucester; the Ermine street ran through the Fenway district of the east of England. These streets seem to have represented a combination of those portions of the Roman roads which in later times were adopted and kept in repair for the sake of traffic.

The name of Watling street became attached to other roads, as the Roman road beyond the Northumbrian wall, which crossed the Tyne at Corbridge and ran to the Firth of Forth at Cramond, and the Roman road going beyond Wroxeter (Uriconium) to Leint-warden (Bravinium), Salop. The street in Canterbury through which the road from London to Dover passes and a street in London also bear the name. These are quite unknown to the Roman Itinera (a list of the marching roads in Britain supposed to have received its name of Itinera of Antonine from the son of Severus, Caracalla, known as Antoninus), but are nevertheless undoubtedly Roman roads, and were in use at an

early period in the Roman occupation. There was an important road between Chester (Deva) and Caerleon-on-Usk (Isca Silurum), along which were fortified stations, as in later times there were castles, to guard against the ravages of enemies in Wales. Of the eight or nine stations along the road, three, namely: Uriconium, Magna (Kinchester) and Ariconium must have been considerable towns, judging from the size of the fortified enclosures and the Roman remains which have been found.

"The method of constructing the roads," writes Mr. Scarth, "varies according to the character of the country through which they passed, and the materials at hand. They are raised above the surroundng surface of the land, and run in a straight line from station to station. A portion of the Fosse road which remains at Redstock, about ten miles south-west from Bath, which was opened in February, 1881, showed the following construction:—

"1. Pavimentum, or foundation, fine earth hard beaten in. 2. Statumen, or bed of the road, composed of large stones, sometimes mixed with mortar. 3. Rudenatio, or small stones well mixed with mortar. 4. Nucleus, formed by mixing lime, chalk, pounded brick or tile; or gravel, sand and lime mixed with clay. 5. Upon this was laid the surface of the paved road, technically called the 'summum dorsum.' Other roads do not show the same elaborate construction, but they have resisted the wear of ages, and would have existed to the present time if not obliterated by the hand of man. Many have been destroyed in the present age for the sake of road material. In marshy lands the roads were constructed on piles; these have been found in the approach to Lincoln from the south. The roads varied in breadth, having generally a width of fifteen feet."²⁸

The name of "street" (via strata), as has appeared, commonly attaches to their course and this appellation continues where the road has been entirely effaced.

26 Page 121.

STATIONS.

During the occupation of Britain by the Romans a strait named Wantsun ran between what was then the Isle of Thanet and the Coast of Kent. That formed the nearest and best channel at that time for the commercial trade with Gaul and Germany. At the northern mouth of the strait stood the fortified station of Regulbium (Reculver) and at its southern entrance the Roman fortress. Rutupiæ (Richborough). Other stations on the southeast coast of England were Portus Lemanis (Lymne) and Portus Dubris (Dover). The strait, Wantsun, has disappeared and the sea has retired far from the coast. Portions of the defences still remain, however. The most considerable are those at Richborough. Of them it may be said that they constitute the most considerable and perfect Roman fortification in England. The walls inclose a parallelogram of about six acres, and on three sides are in a good state of preservation. The north wall for a considerable stretch is in such perfect condition as to afford as fine a specimen of undisturbed Roman masonry as probably can be found in England. It is ten feet eight inches in thickness and nearly thirty feet in height. The outer facing remains and the binding courses of tiles are nearly in their original state.

The fourth side of the enclosure is open to the river Stour, but it is believed that the sea formerly came up to the landing-place on that side.

A correction must be made in a statement of Mr. C. Roach Smith, the principal authority in regard to the remains of Rutupiæ. He believed that there was no wall on the east side of the fortifications. Traces have been found, since he wrote, of a return wall on that side, beyond the river. Passing by other stations, Anderida (Pevensey) should be mentioned. The walls are remarkably well preserved and within the enclosure is an early Norman castle. The Roman walls and the later castle are both impressive.

VILLAS.

Turning from the coast, and putting off the mention of towns and cities, we find numerous villas in the interior, especially in the southern and western portions of Britain. These were centres of comfort, prosperity and luxury and often of no little cultivation.

Mr. Scarth states that "in the immediate neighborhood of Bath" (Aquæ Sôlis), "on the borders of Somerset, Wilts and Gloucestershire, and within a radius of five or six miles, thirteen or fourteen villas have been opened, and the pavements and other remains recorded. They are numerous in the more western part of Somerset, and especially in Gloucestershire, Wiltshire, Dorsetshire, Hampshire, Sussex, Berkshire, Oxfordshire, Northamptonshire, Kent, Essex, Lincolnshire and Yorkshire; also remains of villas are found in Shropshire and South Wales, but many that have at different periods come to light have not been recorded in Archaeologia"²⁷ or other archæological journals.

One of the largest villas yet opened is at Woodchester in Gloucestershire, and in it was found the finest pavement yet discovered in Britain.

One of the most perfect villas which is also most complete in its arrangements, is at Lydney "on the western bank of the Severn, not far from Gloucester."²⁸ It is on the skirts of the Forest of Dean, a drive into which, by the late Senator Hoar and John Bellows, has been so pleasantly described by the latter in our PROCEEDINGS.

The villa at Chedworth, Gloucestershire, which, as stated before, I visited last summer, besides having some beautiful pavements, and being interesting in other respects, has a finely preserved bath and hypocaust.

MINING, MANUFACTURING, ETC.

A word should be written about mining and manufactures in Roman times in Britain. There are numerous indications that iron was produced in quantities. Beds of scoriæ and cinders are found in Hertfordshire, Monmouthshire and Gloucestershire. We find, too, hand bloomeries, with ore imperfectly smelted. The beds of cinders are in some cases from twelve to twenty feet in thickness. Hills

17 Pages 161 and 162.

18 Page 163.

appear that have been mined for iron ore. In speaking of the scale of iron-working in the Forest of Dean, our late associate, John Bellows, told us that it was so great that with the imperfect method of smelting, with Catalan furnaces, etc., used by the Romans, so much metal was left in the cinder "that it has been sought after all the way down to within the present generation as a source of profit; and in the time of Edward I., one-fourth of the king's revenue from the Forest was derived from the resmelted Roman refuse."²⁹

The workings of lead, tin and copper were equally extensive with those of iron. Pottery kilns have been discovered in the New Forest in Hampshire, in Somersetshire, Worcestershire, Northamptonshire and Essex. The pottery is, however, of a coarser kind. Castor (Durobrivæ) near Peterborough is best known from its manufacture of pottery.

The so-called Samian ware, which derives its designation from the island whose name it bears, while made in Italy and Gaul, as well as on the Rhine, does not seem to have been manufactured in Roman Britain. It was much prized there, however, and native imitations of it appear to have been produced. "The finest examples" of the Samian ware "show a dense salmon coloured paste, the surface inside and out being covered by a thick glaze of rich coral red."³⁰

Bricks and tiles were extensively manufactured in Roman Britain. So too was plain and embossed glass of every kind; a great variety of vessels has been discovered in tombs. The manufacture of articles of jet also flourished. A large body of designers and workmen must have been employed in laying mosaic floors and painting the walls of rooms.

To say nothing of agriculture, sheep raising and kindred pursuits which were largely followed, mention will have to be made later of one or more other occupations of the Roman inhabitants of Britain. Large numbers of persons were employed in commerce, foreign and domestic, and in the usual avocations of town and country.

³⁹ Proceedings of The American Antiquarian Society, N. S., Vol. XIII (April, 1899-April, 1900.)

³⁰ Short guide to the Silchester Collection, Reading, by G. E. Fox.

BUILDINGS AND WALLS.

It seems proper here to say a word about Roman construction of the walls of buildings. Wood seems to have been the usual building material, excepting for public halls, baths and fortifications. A common mode of construction appears to have been to build the lower portion only of a house of stone and upon this sub-structure to place strong timbers upright and near together. The heavy covering of roofs made it necessary that the supports should be strong. The spaces between the timbers were filled with clay mixed with chopped straw. In describing walls used in Roman Britain for various purposes, Mr. G. Baldwin Brown gives the following list:

"(1) The 'opus quadratum,' or construction with large square stones; (2) the massif of rubble concrete or 'structura caementicia' faced with small parallel-piped stones with or without binding courses of brick; (3) the 'opus testaceum' where the fabric or skin of a structure is of brick; (4) the plain wall of irregular stone-work with no special facing or technique; and finally (5) the light partition of wood-work and plaster."³¹

OBJECTS FOUND.

More articles of bronze than of iron are found in Roman ruins in England, the latter metal corrodes so certainly. Comparatively few domestic utensils appear. Numerous querns or hand-mills, for grinding grain into flour just before using the latter, are turned up. So, too, are balances which are like our steelyards. Two large and interesting collections of tools were found at Silchester.

Surgical instruments made of bronze have been discovered. Great varieties of fibulæ, brooches, used in fastening the outer garment or cloak, are found in large numbers wherever Romans have lived. Quantities of finger rings of different shapes and sizes, some of excellent design, appear. Some of them have engraved stones remaining in them. Collars, necklaces and bracelets turn up in the excavations. Jet

³¹ The Arts in early England, by G. Baldwin Brown, Vol. II, p. 3.

ornaments are especially in evidence in the museum at York. Long pins of metal or bone are found in immense numbers. Occasionally fragments of stone statuary, and bronze images are unearthed.

Roman coins are found everywhere; there were native coins also. Money was coined in Britain before the Romans took possession of the island. Camulodunum and Londinium had the privilege of mints, and coins were struck elsewhere in the time of the Romans.

MUSEUMS.

There are many museums in England which have rich collections of Roman antiquities. The one in the British Museum is very valuable. At Shrewsbury, where, as stated before, there is a museum, the objects of interest dug up at Uriconium offer an imposing display. One of the most important collections is in the grounds and museum of the Yorkshire Philosophical Society at York. The articles found at Silchester have been deposited in the public museum at Reading. There they are admirably exhibited. Instructive models have been provided and a guide book has been prepared by the leading authority on the subject, Mr. George E. Fox, Honorary Curator.³²

There is an excellent museum at Colchester and a good one at Cirencester, and there are many other collections which may be readily found by the use of a good guide book of Great Britain.

WALLED TOWNS.

Among the principal walled towns of Roman England were Eboracum (York), the metropolis of the north and one of the first, if not the first, city in the country during the period of greatest Roman prosperity; Lindum (Lincoln), which has one of the most striking of Roman remains in Britain, in the presence there of the Newport Arch, which formed the north entrance to the town through the wall; Camulodunum (Colchester); Londinium (London); Calleva Atrebatum (Silchester); Venta Belgarum (Winchester);

^{**} See short list of authorities at the end of the paper.

Aquæ Solis (Bath); Glevum (Gloucester); Corinium (Cirencester); Uriconium (Wroxeter); Deva (Chester); Isca Silurum (Caerleon-on-Usk); and Venta Silurum (Caerwent).

The walls of Camulodunum are now under the control of the corporation of the city of Colchester, and Mr. Henry Laver, F. S. A., of that place has been appointed custodian of them.' I had the pleasure of examining portions of the walls under his guidance. They are almost complete in circuit, although not so high as formerly. The casing too, of shaped stones and tiles on both sides is generally gone. Although in some places a portion remains there is usually found only the rubble, and mortar in which it is embedded. An increased thickness in the wall at one place was, it is likely, given to it to afford, as in other cities, a platform for catapults. An arched gate in the city walls remains. A room on the side of this shows walls in an excellent state of preservation. The casing exhibits alternate horizontal portions consisting of two feet of well-laid stones and four layers of tiles. The tiles, as is usual in the inner and outer faces of Roman walls in Britain, only extend through the facing. The venerable town of Colchester occupies a site which was not only the position of a Roman town but also furnished quarters for the King of the Trinobantes. 400 B. C. There are coins belonging to the town bearing date of 250 B. C.

London was not the first place in importance during the Roman occupation of Britain. Tacitus is said to be the first Roman historian to mention Londinium. He does not speak of it as the capital of Britain, or even as endowed with the privileges and rights of a colony or municipium. Camulodunum was a colony and Verulamium a municipium.

The walls, when the Romans left the country, reached from Ludgate, on the west, to the Tower, on the east, about one mile in length, and from London Wall to the Thames, half a mile; at an earlier period they were more confined.

It is unnecessary to say that the baths excavated at Aquæ Solis (Bath) are the most extensive and perfect yet discovered in Roman Britain. 1906.]

The walls of Chester, although they contain material from those built earlier are not, as they now stand, of Roman construction. They are mediæval.

PLACES WHERE EXCAVATIONS HAVE BEEN MADE.

It is evident that it is impossible to make extensive excavations in thickly settled places such as London, York, Chester, Lincoln and Colchester. Reliance has to be placed mainly upon observations made when trenches for sewers, etc., and cellars are dug.

At Silchester and Wroxeter, however, the sites of the old Roman walled cities of Calleva Atrebatum and Uriconium, nearly the entire area formerly occupied by them is vacant.

At Caerwent (Venta Silurum) I understand that about three-quarters of the space within the walls is available for excavation. In these cities excavations of Roman towns have been more or less systematically conducted during the last fifty years. Those at Uriconium were made in 1859-1861 under the direction of Thomas Wright, M. A., F. S. A., for the Shropshire Antiquarian Society.

The site of Calleva Atrebatum (Silchester) is a portion of a farm on the estates of the Duke of Wellington in Hampshire. Some excavations had been made there earlier, but the real beginning of the exploration of the site took place about November, 1864, when Rev. James Gerald Joyce undertook its supervision, upon a plan accepted by the second Duke. That gentleman carried on the work from time to time until his death in 1878. It was then continued by rectors of Stratfieldsaye and Silchester and Mr. Hilton Price. An interval of five years followed, after which the work was renewed in 1890, under the auspices of the Society of Antiquaries, the very competent direction of George Edward Fox, Esq., Hon. M. A., (Oxon.), F.S.A., and W. H. St. John Hope, Esq., M. A., Assistant Secretary of the Society of Antiquaries, and the almost constant, immediate supervision of Mr. Mill Stephenson, an able antiquary and conductor of excavations. The trenching has been made in a most systematic manner every year since it was resumed and the work will be finished, I understand, in about three years.

Excavations at Venta Silurum (Caerwent) were begun in August, 1899. They are conducted by competent directors, under the approval of the Society of Antiquaries, and the discoveries made are carefully reported in successive volumes of *Archaeologia*. It should be remarked that the excavations now making at Silchester and Caerwent are being conducted by gentlemen who are imbued with the spirit of men of science and their work is very thoroughly and accurately done and recorded.

At Silchester when an insula has been excavated and plans and measurements have been secured the ruins are covered up again. Such a course is required by the contract with the farmer who leases the site of the city, but it is also important for the preservation of the remains. That fact is shown by the disintegration of portions left exposed by the late Mr. Joyce. At Uriconium considerable portions of ruins remain in sight and even at Caerwent many foundations can be seen. It is rendered possible in the latter case to allow excavated remains to lie open for a longer time than at Silchester because so large portions of the ground are owned by Lord Tredegar, who takes a great interest in the work, or are controlled by him and the committee in charge.

URICONIUM.

The Roman remains thus far laid bare at Uriconium are shown clearly in Plan No. I. They consist of a fragment of the *basilica*; a little more than half of the great baths of the city; the foundations of two shops; and a courtyard surrounded on three sides by cells, with gateways to the street on the fourth. This courtyard, paved with small bricks laid herringbone fashion, has been considered a market-place, but Mr. George E. Fox, whose description of discoveries at Uriconium I am following closely, says that "a portion at least may have formed a fuel store for the baths, as both charcoal and mineral coal were found in one of the compartments."⁸³

³³ Guide to the Roman City of Uriconium by George E. Fox. pp. 9 and 10.

The fragment of the basilica is the most conspicuous object in the ruins. It consists of "a great mass of masonry of considerable length which stands high above all the rest of the remains. (See A. on Plan No. I.) This broken mass of wall formed a portion of the end of what was the largest building of the Roman city, viz.: the civil basilica, an edifice which contained both law courts and an exchange, and served also as a covered place of assembly for the citizens on public occasions. Of this great building (No. 1.) nothing now remains above ground except the bulky fragment just mentioned. The foundations however have been traced in the fields to the north of it, and we know this much, that it was a huge hall, 229 feet long and 67 feet wide, divided by two rows of columns into a central nave with aisles on either side. Mosaic pavements adorned the aisles, and the nave was floored with small bricks laid in herringbone fashion."34 The Public Baths lay to the south of the basilica. Besides the rooms mentioned on the plan, namely, the vaulted apodyterium (undressing room) which was entered from the basilica or great hall on the north, by the doorway now represented by the large hole in the mass of walling at A: the tepidarium (room moderately warmed); the sudatoria (hot-air bath-rooms); the caldaria (rooms with hot-water baths) and frigidarium (room with cold-water bath), there were two little rooms (9-9)³⁵ floored with red bricks which were probably for keeping the articles required during the different processes of bathing.

A strigil, or curved metal instrument was used for removing perspiration, where we use a sponge and soap. "There may have been a swimming bath in 10, but this part of the ruins is buried beneath a huge mound of earth, and little is known concerning it. If we add that the courtyard of the baths was used for various games, and that the covered walks (*peristyles*)," which surrounded the entire enclosure containing the baths and their accompaniments, "served for

³⁴ Guide, p. 4.

²⁵ One of the two little rooms indicated as "9-9" is numbered "5" on Plan I. It has been suggested that the room marked 9 in the plan may have been used for the closing process of rubbing the bather with oil.

exercise and conversation, we have mentioned in brief the chief uses of the establishment."³⁶

It seems proper here to give a short account of the system of heating buildings among the Romans in Britain and for that purpose I introduce one of the descriptions of Mr. Fox. That system, he says. "was like one in use at the present day, viz.: by hot air, but was unlike our method which employs metal pipes through which the heated air passes, sunk in trenches in the floors, covered by gratings, or placed along the walls. Instead of this, in Roman times, little columns usually of brick, set very close together, were erected on a firm floor of cement, and on the top of these columns was laid another floor from five inches to one foot thick, so that there was a space between the two floors. called a hypocaust, which varied in height according to circumstances. In these baths at Uriconium, the little columns which supported the upper floor were more than three feet high. A small opening in the outer wall of the chambers allowed of the introduction of fuel, which when lighted and continually fed from without, filled all the space beneath the upper floor with flame and heat. Nor was this all; flue pipes communicating with this heating chamber ran up the walls, and the heat radiated from these pipes warmed the room. The flue pipes were sunk in the walls and plastered over, so that they could only be detected by the warmth spread around. In rooms which had to be extra heated the whole surface of the walls was lined by pipes, the heat being given out from the entire wall faces."37

It will be seen by looking at the map of Uriconium (Plan No. 2.) that the ruins which have been uncovered occupied but a small portion of the area of the site of the city and that they stand near the middle of it. The walls surrounded a pear-shaped enclosure of about 170 acres. Their circuit was rather more than three miles. It thus appears that compared with the size of other walled towns in Roman Britain, Uriconium was a large place. Mr. Scarth says the city "seems only to have been fortified with

³⁶ Guide p. 6.

⁸⁷ Guide, pp. 7 and 8.

an earthern rampart and ditch."³⁸ Mr. J. Corbet Anderson writes that "Hartshorne estimated the vallum to have once been fifteen feet in height, but a recent excavation. made where it is most prominent, showed it to be raised only nine feet above the bottom of the ditch; the fosse was found to be ninety-five feet wide. Examined at various points it has been ascertained that this wall is formed merely of a bank of rubble, faced outwardly with a mass of clay, or of small stone boulders set in clay."29 Northeast of the city there was a cemetery, that bordered on the great Roman road, the Watling street, which entered the place from that direction. "Like other Roman towns" in Britain. "the area enclosed by the city wall was probably divided by streets into squares, much after the fashion of a modern American city, but of this we cannot be sure. It is possible the place sprung up along an ancient line of roadway leading to a frequented ford over the Severn. which river lines part of its western side. After a time the open town would be surrounded for defence by a ditch and wall."40

We know nothing of the history of Uriconium, but, in an old Welsh poem there is a vivid description of the destruction of a city on the Welsh border which with great likelihood has been identified with the place under consideration. The statements in the poem when compared with a passage in the Saxon Chronicle make it not improbable that Uriconium was taken and demolished by Ceawlin in the year 584. "The period of the poem and of the raid coincide, and both have to do with the same district."⁴¹

"Be this as it may, one thing is certain, that the city and its inhabitants perished by fire and sword. Everywhere, when the earth which covers its remains is turned over, it is found to be black from the burning, and plain traces of the massacre of the citizens showed themselves when the ruins, amongst which the visitor strays, were excavated."⁴²

²⁸ Scarth, p. 13*J*.
³⁹ Anderson, p. 2.
⁴⁰ Guide, p. 11.
⁴¹ Guide, p. 12.
⁴² Guide, p. 12.

American Antiquarian Society.

The name of the city whether Uriconium or Viriconium, has been supposed to be derived from the famous hill, or small mountain, Wrekin, near which it lies. Mr. E. W. B. Nicholson, Librarian of the Bodleian Library of Oxford University, in a recent pamphlet, says that the name "'Uriconium' should be discarded altogether."⁴³ "The name Viriconium," he writes, "is Keltic with Latinized ending (-um for —on), and is a dog-name. It is derived from that of a man called Virocuo (gen.—kunos—konos) or Viroconos, meaning 'man-hound' or 'male-hound.'"⁴⁴ I give this derivation of Mr. Nicholson without having the knowledge needed to weigh its correctness.

SILCHESTER.

The walls of Silchester (Calleva Atrebatum) are about a mile and a half in circuit and the space within them is 100 acres, which is a little less than two-thirds of the area of Pompeii. While it is a smaller place than Uriconium (Wroxeter) or Verulamium (St. Albans) it is a city of considerable size and compares favorably in that respect with other walled towns in Roman Britain.

The walls enclose an irregular octagon whose longest side is towards the northeast. They are twenty-one feet high near the south gate and elsewhere, and in other places ten or fifteen feet in height. They are about ten feet thick. "They are," says Mr. Fox, "of the usual construction of Roman city walls" in England "excepting that the tile courses, so prominent a feature in Roman camps and towns, are here supplied by lines of flat stones, and that the intermediate facing courses are laid here and there in herringbone fashion."⁴⁵ As Silchester is in a country where stone is scarce, pieces of flint, tied together with mortar are largely used in the facing of the walls. They are lined within throughout their entire circuit by an earthen mound, and inside also there occur at intervals what look like buttresses projecting inwards. These are

43 Vinisius to Nigra, p. 43.

44 Ibid., page 10.

⁴⁵ Proceedings of the Society of Antiquaries, Feb. 27, 1890, p. 86 or p. 87.

78

regarded as the foundations of towers which stood astride the walls. The shape of the walls was influenced by the fact that the city was built inside of British earthworks which, with a ditch in front, encircled an early camp of refuge. Of those pre-Roman fortifications remains are still visible. The irregular plans of Silchester were shared by Uriconium and Verulamium, but were quite unlike the rectangular areas within the walls of Glevum (Gloucester), Camulodunum (Colchester) and Lindum (Lincoln) or the roughly rectangular space occupied by Venta Silurum (Caerwent). A wide ditch, clearly traceable for most of the circuit completes the defence of Silchester.

"The mural barrier is pierced by five gates, north, south, east and west. Two of these occur at the eastern angle of the city; one a mere postern, being evidently to give access to an amphitheatre situated about 300 feet east of the eastern angle of the city. This amphitheatre is formed of mounds of earth in the well known manner of those of Durnovaria (Dorchester) and Corinium (Cirencester) "⁴⁶ There, writes Mr. Fox, "for the townsfolks' pleasure, bullbaiting and bear-baiting were exhibited, possibly theatrical representations very occasionally, and yet more rarely combats of gladiators."⁴⁷

Silchester has sloping ground. The land is generally level, especially in the northern half of the site, and there is a broad flat ridge running from the north to the south gate; but on the east side of this ridge a deep valley extends from near the centre of the city in a south-easterly direction, and the ground also falls away somewhat in the southwestern part of the site."⁴⁸

Within the ring of the walls are three fields traversed east and west by a comparatively modern road and the only buildings to be seen are the church of Silchester, the old Manor House, and those of a farm yard. All else is open and bare.

The Roman city had streets running from north to south and at right angles to them from east to west. One of

⁴⁶ Ibid.

⁴⁷ Guide, pp. 6 and 7.

⁴⁸ Proceedings of the Society of Antiquaries, Feb. 27, 1890, p. 88.

them, a main line of communication, has a perfectly straight course from the north to the south gate, whilst another crosses it at right angles. Coming from the west gate it ran past *Insulae* XI., X., IX., I., XXI., and XXVII, but a discovery made in 1902 suggests that it was then so deflected as to pass out straight through the east gate, at right angles to the section of the wall in which the gate is set.

Little is known of the history of Silchester. A few facts can be gathered from examination of the remains.

It is evident, for example, that the *basilica* and the adjacent buildings were burnt down at one time and it is conjectured that this catastrophe occurred during commotions in the province towards the close of the third century.

Silchester, writes Mr. Fox, "Certainly was not taken by the Saxons, for there are no traces of the burning and massacre which would have accompanied such an event. All that can be surmised is that it gradually perished by slow decay and abandonment."49 Such an ending makes the gleaning for objects of interest meagre, as things of value and use were carried off by inhabitants as they left the city or were appropriated by plunderers. In the main the dependence for discoveries of this kind must be upon rubbish pits and broken and discarded objects left behind. It is remarkable that so large and instructive a collection could be found as that on exhibition at the museum in Reading. It is believed that if Uriconium were to be systematically and extensively excavated our knowledge of Roman antiquities would be largely added to, since that place, as has been previously stated, was evidently destroyed suddenly and burned.

It is an interesting fact that a portion of the entrance at the west gate of Silchester is blocked up, the fact indicating that at some period in its history it felt its weakness and thus rendered it easier to defend the city. A similar expedient was resorted to at Caerwent.

The importance of Silchester as a city is attested by the number of roads on which it is found. "It stands at the point of junction of two main lines, one running up from

49 Guide, p. 7.



PLAN OF BUILDINGS UNCOVERED ON THE SITE OF URICONIUM.

the south coast, the other coming from Londinium, passing through Calleva (Silchester) towards Corinium and so on into Wales."⁵⁰ In the Itinera of Antonine the last four mentioned are: Silchester to Wroxeter; Caerleon-on-Usk to Silchester; Caerleon-on-Usk to Silchester, by another route; and Silchester to Exeter.

In every important Roman town the forum was the centre of life. There the events of the day and private concerns were discussed. The retail shop-keeper offered his goods for sale in the same place, frequently. Wholesale merchants met and transacted business. There revenues were paid into the treasury and justice was administered by magistrates.

Few forums have been uncovered, however. A fine example may be seen at Pompeii. The only one that has been excavated in England is the forum of Silchester. Taking the text of Vitruvius as our guide, writes Mr. Joyce, "we are met by the very singular paradox that at Pompeii, where a forum of the Greek type would almost of necessity be the one adopted, we find a distinctly Latin one and contrariwise at Silchester where we should assuredly have looked for a purely Latin forum, we have a most marked and distinct example of the Greek type. At Pompeii the length of the area is not less than three and a half times its width, and a single colonnade runs the whole length of its sides. At Silchester, the plan, though not absolutely square, is very nearly so, and this square-shaped area is surrounded on its three exterior sides by the double ambulatory."51

The researches of Mr. Joyce, made in 1867 to 1873 have been carefully reconsidered by the gentlemen who are at present engaged in supervising the excavations at Silchester. I proceed to quote from a report of their work published in Archaeologia.

"The *forum* proper consists of an open area about 142 feet long from north to south, by 130 feet wide from east to west. On three sides, north, east, and south, this

⁵⁰ Proceedings of Soc ety of Antiquaries, Feb 27, 1890, p. 86.

⁵¹ Archaeologia, Vol. XLVI., Pt. II., p. 350.

area is lined by ambulatories; the western side is bounded by the wall of the basilica, and here the ambulatory is wanting. Behind the ambulatories, and sheltered by them, lies a line of chambers, mostly rectangular in plan, with some amongst them notably differing from that form. External to all occurs another ambulatory, which surrounds not only the forum but the basilica and its dependencies, being broken, perhaps, by projections of the north and south ends of the latter building. Thus it will be seen that the various offices and chambers of the forum lie between two lines of ambulatories, an inner and an outer one. The roofs of these ambulatories were, presumably, supported by columns."52 The main entrance into the forum was a feature in its architecture and resembled a triumphal arch. The chambers on the north and east sides of the forum were quite possibly shops. On the south side were two apsidal chambers alternating with square ones. It is very probable that all these rooms were used by the governing body of the city as offices of some sort, or courts connected with the forum. The walls of the ranges of buildings on the three sides of the forum were of flint rubble bonded with brick, and varying in thickness from two feet, three inches to three feet, seven inches. They were quite capable of sustaining an upper story, as well as the heavy roof, which was covered either by large Roman tiles or hexagonal stone slabs.

The basilica "lies north and south and occupies the whole width of the *forum*. Its eastern wall bounded the *forum* area; its western was lined by a range of chambers and halls, which were limited by the return of the outer ambulatory, that here borders the great street running from the north to the south gate of the city. The basilica had the form of a long rectangular hall, 233 feet 6 inches in length by 58 feet in width. At each end was a semi-circular apse, 27 feet 9 inches wide, by 18 feet 2 inches deep. The total internal length of the edifice amounted therefore to 269 feet 10 inches. In the centre of the western side was another apse, 38 feet wide."⁵³ As stated before the basilica

53 Ibid., v. 53, Pt. II, p. 542.

⁵³ Archaeologia, Vol. LIII., Pt. II, p. 549.

[Oct.,

1906.]

was burnt down. It was rebuilt, however, and, as it seems, on the former lines, the original plan not having been departed from excepting in the interior where alterations were made.

As in the case of the ranges of chambers in the forum, and the other important buildings in the city, the walls of the *basilica* consisted of flint rubble with binding and lacing courses of tiles. The interior appears to have been divided into a nave and aisles. "Each of the smaller apses, with a portion of the nave and aisles screened off in front of it, may have served the purpose of a court of justice; the central one, with a screen on the top line of its steps of ascent, as a *Curia* for the governing body of the city, and the space in front of it . . as a place of assembly of the citizens on occasions of political importance."⁵⁴

The type of the private houses in Roman Britain was very different from the one which prevails in Southern Europe. Protection in the north had to be secured from damp and cold; in the south from light and heat. The atrium of the Pompeiian house with its open *compluvium* in the roof and cistern of water, *impluvium*, in the floor, was out of place in the climate of Britain. There, rooms had to be arranged for the cold season and numerous hypocausts provided under apartments to be occupied in winter.

Generally speaking, nothing but foundations of buildings are found in Silchester. These are always of rubble composed of flint and mortar. It is generally believed that the mortar used by the Romans in Britain became as hard as stone. That is so commonly the case as not to make a statement to that effect especially misleading. Mr. Mill Stephenson informed me, however, last summer that he finds much mortar that crumbles easily. There was cheating in Britain when the Romans were there as certainly as there is to-day, everywhere. I have already described the character of the walls of houses as seen throughout Roman Britain.

In Silchester we find the low dwarf walls of flint masonry, remnants of floors, a layer of clay from the falling in of the

¹⁴ Ibid,, page 553.

superstructure, (thick in the loftier rooms and thin in the low corridors) the latter strewn with fragments of the broken roofs. As the walls of the earlier houses there were 18 inches thick, the wooden framing must have been of substantial construction and formed of large timbers, since the door frames and their sills all formed part of it.

"The roof coverings of the houses were of three kinds, viz.:—thatch, tile and stone. The stone roofing was cut in thin slabs, hexagonal in shape, lapping over each other like fishes' scales. . . . The tiles were large and flat with a strongly raised edge on each side. They were nailed close together and these raised edges were covered by semicircular tiles narrower at the upper end but broadening towards the bottom."⁵⁵

The houses of Silchester may generally speaking be divided into two classes, viz:-those with a courtyard and those consisting of a row of chambers lined by a corridor on one or both sides. To this second kind, as well as to the first, chambers are sometimes irregularly attached. In a range of chambers with corridors on both sides the former must have been lighted from windows placed above the latter. "The height of the windows from the floor was no disadvantage," however, "as windows," at the time and in the place spoken of, "were only intended to transmit light, and were not meant for looking through."56 Window glass was "rough like ground glass" on one side, "and it appears that it was cast in panes of varying size . These panes were set in frames of wood in moulds. or metal, held in the rabbet prepared for them, by buttons. It is possible that they may have been occasionally puttied into the frames."57

The floors of the houses in Silchester were largely of mosaic or opus signinum. "There are two kinds of mosaics; the one, coarse and common, composed of cubes of brick or of a drab sandstone, and measuring a little over an inch square, is used for corridors and passages, or as a ground for panels of finer work. In the second kind the cubes

⁵⁵ Guide, p. 12. ⁵⁶ Guide, p. 10.

87 Guide, p. 16.

[Oct.,

are not more than half an inch square, and are of various colors, black, cut from a sandstone from the south of England; white, from quarries of fine limestone in Gloucestershire or from beds of the hard chalk in the Isle of Purbeck; grey, produced from the white by the action of fire; a deep orange also from a sandstone; a pale yellow and two shades of red from brick. The only marble used is the Purbeck, and it may here be observed that no Roman mosaics" in Britain, "with rare exceptions, contain material drawn from any foreign source."⁵⁸ Should it be noticed that the pavements in Britain do not show quite the same elegance as the best in the south of Europe, the fact may probably be largely accounted for by the consideration that the coarser materials of the British mosaics did not permit of the same nicety of workmanship which is possible in marble.

In a few cases an imitation of the kind of pavement known as opus sectile has been found in Silchester in which tiles are used in place of cut stones, and spaces between have been filled with cubes after the manner of opus tessellatum. "The construction of the tessellated pavements followed a scarcely varying rule. . . On the earth was laid a bed of coarse gravelly mortar, 4 to 5 inches thick, and upon this a layer of fine opus signinum, of the kind made of lime cement colored with pounded brick, the tessarae of the floors being inserted in this second layer."⁵⁹ A thin fluid cement was run into the joints of the tessarae before the final polishing took place.

"Opus signinum, or the variety of it used for pavements has scarcely attracted," it has been said, "the attention it deserves. Floors of this material, composed of small pieces of brick, together with tiny fragments of volcanic ash, the whole bound by a lime cement, are of as common, if not commoner, occurrence in Pompeii than those composed of tessellated work. Nor are they confined to the meaner rooms of the houses there; very frequently the composition named forms a ground in which are bedded lines of white marble *tessarae* arranged in elaborate geomet-

⁵⁸ Guide, pp. 12 and 13.

⁵⁹ Archaeologia, Vol. LII., Pt. II, p. 736.

rical patterns. The more usual method, however, when it was intended to enrich such a floor was to embed in it. in quite irregular fashion, any small fragments of the much prized varieties of marbles or rare alabasters. Pieces of pavements of the rarer opus sectile are thus used up again, the broken fragments of the flat tile-like hexagons, circles and squares, of which they were composed, being embedded in the mass of the floor."60

There was very little architectural adornment in the houses of Silchester. "Here and there a large hall was divided by a couple of columns, or columns supported the entrance of apses. They were employed to give dignity to the entrance of the house from the street. In houses of the full courtvard type, where the courtvard is surrounded by corridors on all sides, the corridor roofs may have been supported by small columns standing on a dwarf wall, giving the enclosure almost the look of a mediæval cloister. But the glory of the houses was in their profuse colouring."⁶¹ From fragments of wall plasters of rooms turned up in different places it appears that the principal

ornamentation of the walls consisted of simple panelled work "formed of lines in different colours on variously coloured grounds;"62 prevailing tints were reds and yellows derived from the ochres.

The dividing lines between the panels not infrequently had ornamentation of various kinds. Decoration was not confined, however, to mere lines of one colour on another coloured ground. In one house, for instance, where painted ornamental forms were found, there were traces of "goldencoloured draperies and imitations of yellow and grey marbles, no doubt suggested by the marble wall linings of important buildings."63 Architectural forms and floral and other ornaments were pictured on the walls. "It is worth the use made of ears of barley, which the noting ... sight of the harvest fields round the Roman city suggested to the painter. Not only are ears of barley represented, but

⁶⁰ Archaeologia, Vol. LII., Pt. II. p. 749.

⁶¹ Guide, pp. 11 and 12.

Archaeologia, Vol. LII., Pt. II, p. 739.
 Archaeologia, Vol. LII., Pt. II., p. 739.

also the flowers so often found growing among the corn. the corn-cockle, if, indeed, the dull blue guatre-foil placed above the grev circle and repeated below it may be taken for this flower. As the painters of southern Europe drew their decorative forms from the flora around them, from the vine, the myrtle, and the acanthus, so also did the artists"64 of the northern island of Britain. "Likewise to be noted is the strong similarity in the technical methods practised in Silchester and in Italy. After the walls had received the finishing coat of plaster, the setting-out lines of the decoration were drawn upon the surface of the wall with some sharp instrument, probably a stylus. The ground colours were then applied, and the incised lines showing through them served as guides for the application of the ornamentation." As the incised lines are found "filled by the ground colour, they must have been incised in the plaster surface before it received any colouring. This process appears to have been used in decorative painting in Pompeii."65

The rooms in the better class of houses in Silchester, with floors of mosaic or *opus signinum* and walls bright with colour and attractive through other decoration, must have been cheerful abodes. From all that we know, we cannot but believe the homes of the Romans in Britain were centres of culture and refinement. Although examples of the fine arts found in Silchester and elsewhere are not indicative of the highest attainments in such directions, they show taste and knowledge.

The houses are very generally placed along the streets inclosing insulæ, or blocks. Sometimes they stand at an angle to the streets. The insulæ in a few cases are surrounded by walls. In the spaces between the houses are found a number of wells and numerous rubbish pits. A portion of these are latrines. It is in the pits that most of the smaller objects discovered at Silchester are found. The water supply of the city came from the wells. The water does not lie anywhere at a greater depth than eighteen

⁶⁴ Archaeologia, Vol. LV., Pt. 1. p. 249 or 250.

⁶⁶ Archaeologia, Vol. LV., Pt. I, p. 249 or 250.

or twenty feet. The wells, it thus appears, were shallow. They "are sunk through a thick bed of gravel into a layer of sand which underlies it and rests in turn upon a bed of clay. To hinder the sand from collapsing it was found necessary to line that portion of the well with wood."66 Where the stratum is thin, a framing of three or four courses sufficed, but for a greater thickness, one barrel, and sometimes a second was lowered into the well, or the wooden framing was carried up higher, and thus formed a reservoir into which the sand-filtered water rose. The barrels as shown by the bung and vent-peg holes have certainly been used for some other purpose before being sunk in the wells, probably for storing oil or wine, for their length and size preclude the possibility of their having been transported full of liquid."67 "The mouths of the wells were probably covered by wooden platforms with a hole for the passage of the bucket, and no doubt above it the necessary windlass. In one case at least a stone platform was found. The buckets (wooden) were extremely small. They appear to us like toys, but so many remains of them have been found in the wells that there can be no doubt of their use."68 A rare example of a Roman force pump was found in a well in a garden of one of the largest houses.

"The Callevans were well provided as regards food supply with oxen and sheep. The pig was also to be found but less commonly. Of birds little can be said. . . . Of other animals the horse is scantily represented; the skulls of dogs are constantly found, of various breeds and sizes, and some skulls of the common cat have been brought up from the pits. All the animals were much smaller than those of the present day."⁶⁹ Human remains are "scanty in the extreme."⁷⁰

In regard to the preparation of food, "a large iron grid for grilling meat, with a ring in the middle to hold a vessel for warming soup or gravy" has been dug up, "but beyond

68 Guide, p. 13.

88

[Oct.,

⁶⁷ Archaeologia, Vol. LVI., Pt. I, p. 123 or 124.

⁶⁸ Guide, p. 14.

⁶⁹ Guide, p. 14.

⁷⁰ Guide, p. 15.

this we find but few other indications of the culinary art. This however is not the case as regards cereals for food, wheat, barley, oats, etc. . . The flat querns consisting of two discs of stone, the lower convex on its upper surface, the upper concave on its lower surface, and neither of them of any great thickness, are" as stated before "to be found everywhere where Roman remains are discovered . . .

No ovens of the Roman period are known, at least none have been discovered in Britain. We are therefore driven to suppose that if anything in the shape of bread was eaten by the inhabitants, it may have resembled the girdle cake of Scotland or the cakes may have been baked in an iron portable oven beneath hot ashes."⁷¹

"As to artificial lighting, there was no public lighting. The illuminant used was probably tallow or wax instead of oil. Olive oil in the Roman period must have been a somewhat costly import, and the extreme scarcity of the remains of oil lamps upon the site and in Britain generally favours the view that candles of the substance named were used in place of it. Candlesticks are constantly found, more especially of terra cotta."⁷² Some of the few lamps found are of small size. "It is quite possible that such lamps were attached to the domestic shrines and lit on special occasions before the household gods."⁷⁸

Mr. Fox believes that Silchester had its special trade. Over all the north west side of the city, he says, dyeing was carried on. Traces of the furnaces of the dye vats appear. "Over them buildings of a temporary character must have been erected . Besides the dyers' furnaces traces of their ware-houses have been uncovered, lining the road from the west gate towards the Forum. It seems possible that the trade was a late introduction into the town, and that private houses may have stood where the dyers afterwards had the ground to themselves."⁷⁴

It may properly be remarked here that in examining the foundations of houses unearthed at Silchester it becomes

⁷¹ Guide, pp. 15 and 16. ⁷² Guide, p. 16. ⁷⁸ Guide, p. 16.

⁷⁴ Guide, p. 17.

evident that extensive changes were made from time to

"Two other industries," says Mr. Fox, "if such they can be called, have left a trace behind them-that of carving in bone and of extracting silver from copper."75

Among the structures early laid bare in Silchester was a large building, spoken of at first as cavalry barracks, but now regarded as the remains of an inn (hospitium). Attached to it were baths. The excavators were reluctant to pronounce these, or other baths found, as the principal establishment for bathing in so large a city as Silchester. In 1903 they discovered what they believe to be that establishment, in Insula XXXIII, which adjoins Insula VIII, where the remains of the hospitium and annexed baths are to be found.

In an insula to the south of the Forum area is an interesting building which is regarded as a temple. The foundations consist of two concentric rings or footings of slatey stone. On these were built walls forming a sixteen-sided polygon. While the inner wall showed sixteen faces corresponding with those of the outer wall on the outside it was circular within. The diameter of the internal ring is 35 feet 7 inches. The width between the two rings is 9 feet 6 inches. The length of each side of the polygon measured, on the external faces of the outer ring, 12 feet 8 inches. The total diameter of the temple is about 65 feet.⁷⁶ "In all probability," says Mr. Hilton Price, "this was an open building, as no remains of roofing slabs have been discovered."77 An ambulatory ran around the outside of the building. To what god was this structure dedicated? There is nothing to help us solve the question. The late Mr. James Fergusson considered it to have been a Serapeum.78 Mr. Price says that "taking into consideration its circular form, it may be open to supposition that the goddess Vesta might have been worshipped there."79 There is however

time in those structures.

¹⁵ Guide, p. 17.

⁷⁶ Archaeologia, Vol. LIV., Pt. I, p. 75.

¹⁷ Archaeologia, Vol. L., Pt. II, p. 267 or 268.

 ⁷⁸ Archaeologia, Vol. L, Pt. II, p. 267 or 268.
 ⁷⁹ Archaeologia, Vol. L., Pt. II, p. 267 or 268.

a conjecture which is more of a favorite. "The building stands in an important position, with ample space about it and its great ring of 32 columns must have had an imposing effect. We know from the well-known inscription found at Silchester in 1745, that there was a local deity, identified with Hercules, who was worshipped" in that city. "Perhaps we may venture on a conjecture that his temple has been found and that here was the shrine of the Segontian god."⁸⁰

Near the eastern gate of the city are two rectangular buildings separated by a distance of about 50 feet. Those, it is thought, were probably "temples, as buildings have been found in Gaul of similar or nearly similar plan undoubtedly devoted to the service of the gods."⁸¹

In finishing the account of excavations at Silchester. mention must be made of the remains of a building found in the southeastern corner of the area in which the forum and basilica stood. There were found the foundations of what is believed to have been a small Christian church. "The building stood east and west, and consisted of a central portion" (nave) "291 feet long and 10 feet wide, with a semi-circular apse at the west end. North and south of this were two narrow aisles, only five feet wide, terminating westward in somewhat wider chambers or quasi-transepts: the northern of these was the chamber first discovered. and was cut off from the aisle by a thin partition wall. The eastern end of the building was covered by a porch" (narthax) "24 feet 3 inches long and 6 feet 9 inches deep. extending the whole width of the three main divisions. The total external length was exactly 42 feet. The walls average two feet in thickness, and were built of flint rubble with tile quoins."82 The building was "orientated with its apse towards the west. The floor was laid with a pavement of red tile tesserae about an inch square, but in the centre of the apse was a square space in which was a mosaic pattern, the date of which, from a comparison with other

⁸⁰ Archaeologia, Vol. LIV., Pt. I, p. 209.

⁸¹ Archaeologia, Vol. LII., Pt. II, p. 747.

⁸² Archaeologia, Vol. LIII., Pt. II, p. 563.

Roman mosaics, is estimated in the report in Archaeologia" (Vol. LIII, p. 563) "as the fourth century A. D."⁸³ Over the mosaic altar, at first a wooden table, probably, was placed. "The celebrant stood during mass behind the altar, and facing eastwards, this eastern position being the essential thing, and not the position of the altar within a building. The clergy were arranged in a semi-circle round the apse behind the celebrant, and the deacons stood in front and on either side. The chorus of singers occupied the western part of the nave."⁸⁴

Before writing this paper I collected material for treating the subject of religion in Roman Britain, with especial reference to the existence there of Christianity. The paper is long enough already, however, and the contemplated treatment of that subject must be deferred. Probably it is better that it should be, as it would seem well to join with it a consideration of the state of Christianity among the Britains after the Romans left the country and among their conquerors before the coming of Augustine. I also had it in mind to present such evidence as exists regarding the Romanization of the Britains by the Romans during their occupation of the country and regarding the influence of the latter upon the Anglo Saxons and later occupants of the country. These purposes also must be put off, but, meantime, it may be said that enough is known to make the statement of the late Mr. Edward A. Freeman in regard to the insignificance of Roman influence upon the successors of the Romans in Britain appear very extravagant.

It was necessary in writing of the subject of this essay to give a considerable amount of preliminary and somewhat elementary information. While trying to bring this up to date I have deliberately made great omissions and have treated such subjects as have been touched upon only in outline. The essay is in fact little more than a mosaic of descriptions from authorities; its merit consists mainly in condensation, selection and arrangement by a person

[Oct.,

⁸³ The Arts of Early England, v. 2, pp. 11 and 12.

⁸⁴ Archaeologia, Vol. LIII., Pt. II, p. 566.

who had made a somewhat thorough study of the general subject of Roman antiquities in Britain and its literature. Attached to the paper is a short bibliography, which will enable the inquirer to study Roman antiquities in England thoroughly and in detail. The subject is interesting and important.

The value which the Romans placed upon the possession of Britain is shown by the strenuous efforts which they made to get the country into their hands and maintain their position there. Distinguished generals such as Aulus Plautius, Suetonius, Paulinus and Theodosius, father of Theodosius the Great, took part in the work. So did the great governor Agricola.

To say nothing of the invasion of Britain by Julius Cæsar before he became a sovereign, several emperors engaged in the work of conquest and pacification. Claudius began it; Severus rendered great service in the subjugation of the country, dying as has been already stated at York; and Constantius, the father of Constantine the Great. helped to maintain the authority of the empire. Hadrian also visited Britain. It was Vespasian's distinguished successes in Britain which, it is said, won for him the favor of the Roman people and led to his being eventually clad in the imperial purple. His son Titus acquired fame in Britain before he became emperor. Finally Constantine the Great, it will be recalled, when his father, the Emperor Constantius, was in command in the country, fought under him in a short campaign against the Picts and was proclaimed emperor in its capital. Observe too, hints of the presence in Britain of his son the Emperor Constans.

A SHORT WORKING LIST OF MODERN BOOKS WHICH CAN BE ADVANTAGEOUSLY USED IN STUDYING IN DETAIL SUBJECTS BRIEFLY TREATED IN THE FOREGOING PAPER.

References are not given to authors who in the Roman period made allusions to Britain nor to early English writers such as Gildas and Bede. Nor are they made to such inquirers as Leland, Camden and Horsley, who although later, are still old. Pertinent extracts from all these writers

are made in more modern works and sufficiently considered there to meet the demands of inquirers who are not specialists.

Reference may be made, if desired, to:

Notitia dignitatum omnium, tam civilium quam militarium, Imperii Romani, ex nova recens. P. Libbe. Venetiis, 1729, fo. (containing with other information what might be called The Army list of the Roman Empire).

Burton, William. A commentary on Antoninus, his Itinerary, or journies of the Roman empire, so far as it concerneth Britain, London, 1658.

Monumenta Historica Britannica, published by the Record Commission, in 1848.

Corpus Inscriptionum Latinum, published by the Royal Academy of Berlin, Vol. 7. Other inscriptions found in Britain are published by the same society in its Additamenta.

The chief sources of information are the Archæological journals: namely,

The Journal of the British Archæological Association, 1st series, 50 volumes; 2d series, 11 volumes; volumes giving accounts of places visited by the Society.

The Archæological Journal (organ of the Royal Archæological Institute of great Britain and Ireland), 62 vols., and volumes describing places visited by the Society.

Archaeologia (organ of the Society of Antiquaries of London), 59 volumes.

Proceedings of the Society of Antiquaries of London. (Archaeologia contains detailed reports of the work of Mr. Joyce and others at Silchester and the official annual reports of the investigations now making at that place and at Caerwent. It also contains long papers suggested by the excavations at Silchester).

Proceedings of the British Academy for the promotion of historical, philosophical and philological studies, now in its second volume.

Proceedings and other publications of local historical and archæological societies. For mention of these societies, see The Year-book of the scientific and learned societies of Great Britain and Ireland of which the 22d annual issue was published in 1905 by Charles Griffin & Co., Limited, London.

One or two articles in the archæological journals which it seems well to refer to are:

Guest, Edwin. The Four Roman Ways, Archæological Journal, v. 14, p. 99 et seq.;

Watkin, W. Thompson. Roman Forces in Britain, a paper read to the London and Middlesex Archæological Society, 1873. Also supplement in v. 5.

An interesting and comprehensive summary of Roman history and antiquities in Britain and one which I have used extensively in writing my paper is:

Scarth, Rev. H. M., M. A., Roman Britain. London, Society for Promoting Christian Knowledge.

Other good historical summaries are:

Elton, Charles Isaac. Origins of English History. London, 1882, and the chapters on Roman History in Britain in Hodgkin; Thomas. The History of England from the Earliest Times to the Norman Conquest. London, 1906.

I make no mention of standard histories, such as that of Mommsen. I call attention to the following books:

Bruce, J. Collingwood, The Roman Wall. 3d edition. London, Longmans, Green & Co., 1867.

Smith, Charles Roach. The Antiquities of Richborough, Reculver and Lymne in Kent. London, 1850. A very good little pamphlet called, A Short Account of the Records of Richborough, by W. D: Morgate, Keble's Gazette office, is sold at Richborough. I mention this fact as it is hard to get Mr. Smith's book.

There is an article on The Roman Coast Fortresses of Kent in the Archæological Journal of December, 1896.

There are interesting illustrations of the walls at Pevensey (Anderida) in the Builder of Dec. 16, 1905.

Mr. Smith is an authority on Roman London, also.

The pamphlet on the Roman Villa of Chedworth, which also contains a catalogue of the contents of the museum, and which is sold at the ruins, is by Professor Buckman and Robert W. Hall and was printed in Cirencester by W. C. Coles, Steam Press, St. John Street.

[Oct.,

The Roman remains of the villa in Lydney Park are described by C. W. King.

MacCaul, Rev. J. Britanno-Roman inscriptions, with critical notes. Toronto, 1863.

Kenrick. Historical Notes of the 9th and 6th Legions, York, 1867.

Watkin, W. T. Roman Lancashire, 1883.

Buckman, James, and Newmarch, C. H. Illustrations of the remains of Roman art in Cirencester, the site of ancient Corinium. London, 1850.

Wellbeloved, Charles. Eboracum or York under the Romans. York, 1842.

A hand-book of the Antiquities in the grounds and museum of the Yorkshire Philosophical Society. Eighth edition. York: John Sampson, Publisher, Coney Street, 1891. That is a very useful publication.

Wright, Thomas. Uriconium, London, 1872.

Anderson, J. Corbet. The Roman City of Uriconium. London: J. Russell Smith, Soho Square, 1867.

Fox, George E. A guide to the Roman city of Uriconium at Wroxeter, Shropshire, Shrewsbury: Published for the Shropshire Archæological Society, and printed by Adnitt and Naunton, The Square, 1901.

That is a pamphlet sold at the ruins and is an admirable epitome by a scholar of unquestioned knowledge. I have used it, and anything else which I know to be by Mr. Fox, largely, in preparing the foregoing paper. It is illustrated by a plan and map.

A similar epitome by Mr. Fox may be found for Silchester in a Short Guide to the Silchester Collection, second edition, which is sold at the Reading Public Museum. This also contains an admirable annotated catalogue of the collection, by Mr. Fox.

S. Victor White & Co., Balgrave St., Reading, have published a long list of photographic views of Silchester. They also sell lantern slides of the views. They claim to take a new series of photographs every year under the direction of the Society of Antiquaries. I have no doubt that the claim is warranted for copies of the list were given to me at the



ruins and the pictures were spoken of highly by Mr. Fox and Mr. Stephenson.

As may have been surmised before, the principal source of information about Silchester (and the same may be said of Caerwent) is the reports and articles in *Archaeologia*. Copyright of Proceedings of the American Antiquarian Society is the property of American Antiquarian Society and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.