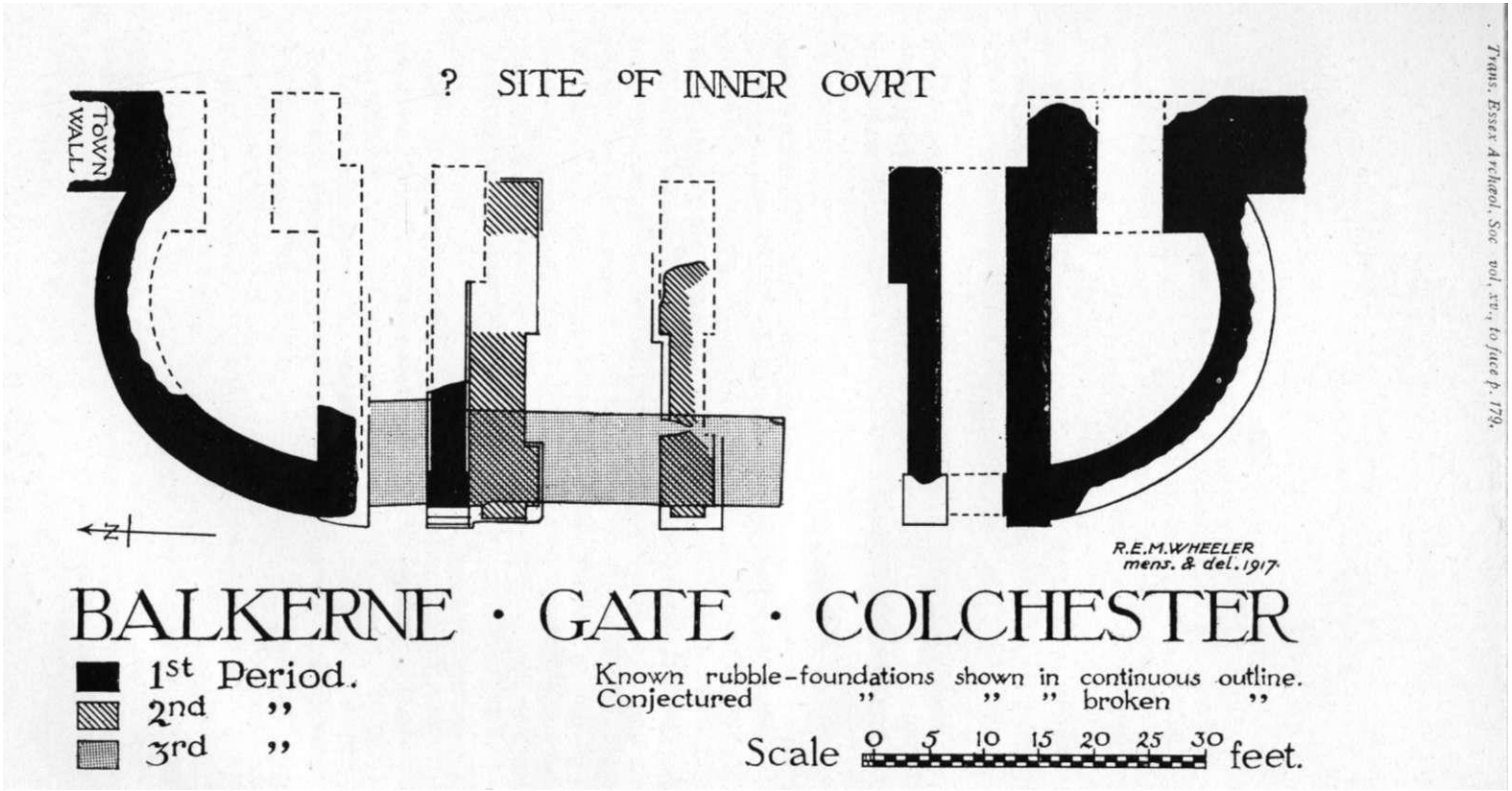
THE BALKERNE GATE, COLCHESTER.

BY R. E. M. WHEELER, M.C., M.A., D.Lit.

Being the Report of an Investigation undertaken by the Morant Club.

ALTHOUGH unique amongst survivals of Romano-British architecture, the Balkerne Gate at Colchester has received scant attention from the archaeologist, and until recent years no effective attempt was made to reconstruct either its shape or its history. Set astride the great Roman road which branched westward towards the midlands and southward to London, this gate, on the crest of the Balkerne hill, must at one time have been the dominating feature of the town wall. Its importance, however, appears to have deserted it with its builders. The London road was diverted to a newer entrance in the south wall, and the old gate, now largely walled up, served its former uses only as a postern for the occasional foot-passenger. By the time of Richard II., its origin was obscured in myth, and it survived, as Colkyng's Castle, to form merely one of the works of defence on the walls. As such, it played a part in the siege of Fairfax in 1648, and doubtless suffered considerably during both the actual operations and the systematic destruction which followed the capture of the town.

In his *History of Colchester,* Morant merely refers to the gate as a fort on the walls, and omits it from his list of the gates of the town. Cromwell, in his history of the town, published in 1825, also describes it simply as a fort, and it was not until the publication of C. Roach Smith's report in vol. ii. of the *Journal of the British Archaological Association,* 1846, that the real character of the remains was recognised. Neither Roach Smith nor Dr. P. M. Duncan, who followed him in vol. i. of the *Transactions of the Essex Archaeological Society,* correctly estimated the original extent of the gate, and the plan published by Dr. Duncan is entirely inaccurate. Mr. John Ward, F.S.A. (Scot.), writing in the *Essex County Standard,* April 23rd, 1910, was the first to propound the theory that the gate had originally four passages, and published a conjectural plan of the remains by Mr. A. G. Wright, Curator of the Colchester Museum.


? SITE OF INNER COVRT
TOWN WALL
N
R.E.M.WHEELER
mens. & del. 1917.
BALKERNE · GATE · COLCHESTER
1st Period.
2nd ,,
3rd ,,
Known rubble-foundations shown in continuous outline.
Conjectured ,, ,, ,, broken ,,
Scale 0 5 10 15 20 25 30 feet.

In 1913, on the initiative of the Morant Club, excavations were begun under the direction of Dr. Henry Laver, F.S.A., and Mr. Ernest N. Mason. The faces of the two northern piers, which had hitherto been covered, were carefully laid bare, and it was at once apparent that Mr. Ward's theory was in the main correct. It was also seen that the gate had at some period been partially rebuilt, but further excavations were found impossible at the time. Unfortunately, Mr. Mason, who had most zealously undertaken the executive part of the operations, died suddenly before a report on the work could be prepared, and the whole matter fell into abeyance. During 1917, digging was resumed by the present writer under somewhat difficult conditions, as access could only be obtained by renewed tunnelling under the foundations of the King's Head public house, which covers the greater part of the site. These tunnels have revealed all the coherent fragments of wall which are now accessible from the front, and have penetrated for a short distance into the fallen rubble and other debris which represent the rear part of the structure. As the evidence afforded by such indications is necessarily of an extremely difficult and uncertain character, continued tunnelling would probably result rather in damaging remains than in revealing them, and for this reason—and also in the interests of the stability of the public house—further excavation under present conditions was abandoned.

The lower courses of the western or front ends of the piers owe their relatively complete preservation to the protection afforded by the wall which was later built across them, but the rest of the foundations appear to have been removed by time and the builder. For purposes of description, the surviving walls may be distributed over three periods.

First Period.—The original proportions of the gateway can now be traced with the exception of the extent of the central pier. The character of the structure is precisely similar to that of the town wall, and no satisfactory architectural evidence has been brought forward in support of the theory that the gate is a subsequent addition. The foundations are of septaria and occasional flint, grouted together with loose sandy mortar. The core of the walls is of the same material, but the mortar is of better quality and contains powdered tile. The walls are faced with $4^{1/2}$-inch courses of roughly squared septaria and some tufa, the latter material being used principally as a facing for the front of the piers. Every fourth course of stone is surmounted by a quadruple lacing-course of brick. The lowest lacing-course is carried through the core of the wall, whereas the higher courses are merely superficial; this method of

construction may be contrasted with that adopted in the Roman wall of London, where the upper brick courses are carried through the structure and the lowest course serves only to level the facing-stones. The average dimensions of the individual bricks are 1 1/2 inches by 11 inches by 8 inches, and the average thickness of the mortar joints is 5/8 inches. Between the original ground-level and the springing of the vault over the footway are four of these quadruple lacing-courses.

The gate consisted of two broad carriage-ways, each 17 feet wide, Hanked by two footways, each about 6 feet wide. The whole gate projects 30 feet in front of the town wall, and the total extent of the frontage is 107 feet. The angles between the outer walls of the footways and the town wall are enclosed to form guardrooms or towers, roughly quadrant-shaped in plan. These towers were entered from the town by a vaulted passage about 12 feet long and between 5 and 6 feet wide. The northern tower still stands to a height of 15 feet, but it is filled in and overbuilt; owing to the slope of the ground it probably stood somewhat higher above its footings than the southern tower. The latter, which is cleared almost to the Roman level,[1] stands to a height of 12 feet. The southern footway is 32 feet long, and retains the original brick vault for the greater part of its length. Near the western end of its southern wall, there are traces of a small pilaster buttress or vaulting-rib, and this wall is carried through to form a slight projection beyond the face of the tower.

The carriage-ways are divided centrally by a pier which, has been wholly or largely rebuilt. Of this pier only three courses of masonry remain above the rubble foundations, and both masonry and foundations are broken away 24 feet back from the outer face. The former extent of the pier is thus left indeterminate, but it doubtless extended to the same depth as the surviving south pier. It is clear from the plan that a pier originally stood on the site of the existing one, and the rubble foundations which survive are clearly part of the original work. The courses of ashlar which remain, however, are of the next period. They contain some tufa, doubtless re-used from the first building, but much of the facing is of an earthy lime-stone from the London clay, a stone rarely used in the earlier work. The hard pink mortar of the first period is replaced by a yellowish sandy mortar of poorer quality.

The pier which originally divided the northern carriage and footways is broken away, like the central pier, a few feet back from

[1] It was cleared out some years ago, and Dr. Philip Laver tells me that a small oven was discovered during the digging in the Roman strata of the tower floor.

the face, but it cannot be doubted that the first plan was symmetrical. The outer face of this pier is stepped to bring it down to the level of the ground, which slopes downward from south to north.

Most of the interior of the northern tower or guardroom is inaccessible. Mr. Mason sank a small shaft into it in 1913 and temporarily revealed part of the inner face of the walls.

The minor objects found during the excavations are of no intrinsic value, and include little beyond a few fragments of pottery. These finds, however, though meagre, are suggestive. In the angle between the northern tower and the town wall, in the sand close to the foundations, Mr. Mason found a good Samian bowl (Dragendorff 29) of the period 70-90 A.D. In the original foundation-sand and road-metal of the northern footway were found, during the recent excavations, fragments of a plate with the quarter round moulding and of a bowl (Drag. 24), both of which are safely dated to the first century. With them was found a black rim of a type which occurred in Flavian deposits at Corbridge and elsewhere. Low down in the road-metal by the foundations of the central pier, which are in all probability original, were recently found pieces of Samian bowl No. 29 and of "transitional" No. 37, and a fragment of micaceous ware; and pieces of other Samian bowls of about the period of Vespasian are identified by Mr. Mason, junior, as having been found by his father in the same layer. Unfortunately the pottery found by Mr. Mason was not classified, but during the recent excavations no pottery of later date than the first century has been traced to these groups.

The Second Period saw the rebuilding of most of the northern half of the gate and probably the blocking of the northern footway.[1] The central pier, as described above, was rebuilt on the site, and probably on the foundations, of its predecessor. The yellowish sandy mortar distinguishes this work very markedly from the earlier structure.

The northern pier must at the same time have been replaced by the new pier which now stands along its southern side. The foundations of this new pier contain much burnt septaria, a fact which suggests that the earlier structure was destroyed by fire. The recent excavations revealed the inner or eastern end of this pier, showing that it extended nearly the full depth of the original work, but much of the middle portion of it has been removed. The shell of the ruined pier, as indicated on the plan, was, however,

[1] This blocking is shewn on plan as part of the later wall (Third Period), but may equally well date from the Second Period.

preserved by the hard Roman road-metal, which was clearly distinguished from the loose black earth filling that occupied the site of the foundations. There was an offset to correspond with the offset of the central pier.

For the date of this period we again have no direct evidence other than that of potsherds. Alongside the foundations of the new northern pier were found a number of pieces of Roman pottery of late date. With the exception of a fragment of a Samian cup (Drag. 27, good glaze) most of the pottery of this group can be assigned to the third or fourth centuries. No post-Roman remains were found.

The Third Period is represented by the rough wall, varying between 8 feet and $9^{1/2}$ feet thick, which has been patched together and flung across the northern foot and carriageways and partly across the southern carriageway. This wall is without foundations other than the broken piers across which it is built, and consists of plundered material carelessly thrown together and bound by loose sandy mortar.

The date of this work is even more conjectural than that of the previous periods. It may have been put up as a hasty defence during the raids and invasions that followed the withdrawal of the Romans, or it may represent the work of Edward the Elder, who is recorded by the Saxon Chronicle to have repaired the defences of Colchester. It can scarcely be later than the Conquest.

The date of the First Period of the Gate has been the subject of varied opinions based upon very inadequate evidence. Such evidence as is now available falls under four headings :—(1) associated finds, (2) type of plan, (3) method of construction and (4) historical probability.

(1) The principal *associated finds* have been mentioned above. They are not numerous but their evidence is singularly unanimous. None of the potsherds found in the earliest strata need be later than 100 A.D. and several are undoubtedly Flavian.

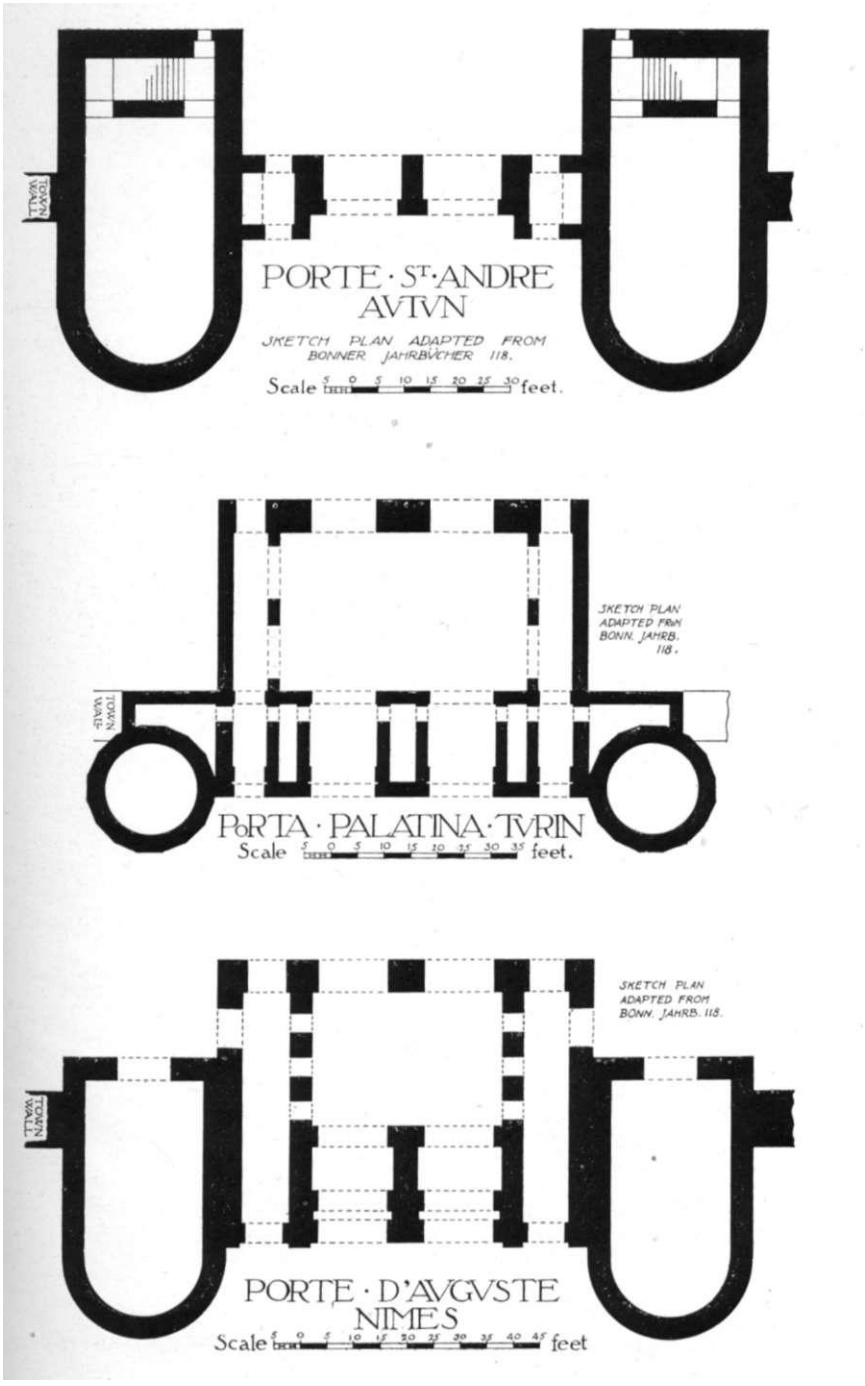
(2) *The plan* is the most remarkable feature of the Gate. It is without known parallel in Britain but falls into a small Continental group which includes the Porte d'Auguste at Nimes, the Porte Ste. Andre and the Porte d'Arroux at Autun,[1] and the Porta Palatina at Turin. The distinctive features common to all these gates are the

[1] The other two gates of Autun appear to have been of similar plan. On the French and Italian gates referred to here, see A. Pelet, *Fouilles a la Porte d'Auguste a Nimes,* 1849; H. de Fontenay, *Autun et ses monuments,* 1889; C. Promis, *Storia dell' antico Torino,* 1869; and especially, R. Schultze, *Die romischen Stadttore* in *Bonner Jahrbucher* 118 (1909), pp. 280 ff. with the note by Kruger in *Trierer Jahresberichte,* vol. iv. (1911), p. 5. It should be mentioned that the date of the flanking towers at Autun is in dispute.

quadruple entrance, the more or less marked projection in front of the town wall, and the flanking towers. Other Roman town gates, as at Lincoln, Fano, Aosta, Pompeii and Cologne, have as many as three entrances, but the normal type is limited to one or two. Of the few quadruple gates, the Balkerne stands out by reason of the peculiar plan of its towers and the extraordinary breadth of its carriage-ways, which are over 17 feet wide in contrast to the 11-13 feet of the other examples.

The projection of these gates in front of their town walls is a natural corollary of their ambitious size. Not only would the large scale in itself architecturally suggest a bold and emphatic plan, but from the more important military point of view it necessitated a correspondingly elaborate scheme of defence, with secondary works which, in the interests both of accessibility from the walls and of economy of space within the town, tended to thrust the front of the structure outwards. These features are well illustrated by the Gate of Augustus at Nimes, which is complete on plan. The outer entrances are some 20 feet in front of the town wall and were flanked by towers which projected yet a further 18 feet beyond them. The entrances of the two carriage-ways, each 13 feet wide, were spanned in depth by three main arches, of which the outer two were close together and held between them a portcullis; the innermost arch, some 18 feet behind the outermost, was closed by doors which folded back against the walls of the passage. The entrance-ways, thus barred by doors and a portcullis, opened on to an inner court 25 feet long by 35 feet broad. This court opened towards the town through two simple archways, and was flanked by the long vaulted footways, which, unlike the curtailed carriage-entrances, extended the full depth of the building, and were each lighted from the court by three windows. They do not appear to have had doors, but the presence of staples shows that they were fitted to receive a barricade in case of need. Their vaulting supported fighting-galleries, which met over the front of the gateway and so commanded the court from three sides, should the enemy break through the outer defences. The centre of each flanking gallery was opposite the juncture with the town wall so that any part of the upper defences could be manned from the walls and towers with a facility which would have been impossible without the bold projection of the front part of the building.

The Porta Palatina at Turin differed only in minor details from the Porte d'Auguste. At Autun, the inner courtyards have been demolished or, more probably, were never included in the plans. The towers here project for half their length inward towards the


TOWN WALL
PORTE · St·ANDRE
AVTVN
SKETCH PLAN ADAPTED FROM
BONNER JAHRBVCHER 118.
Scale 5 0 5 10 15 20 25 30 feet.
TOWN WALL
SKETCH PLAN
ADAPTED FRM
BONN. JAHRB.
118.
PORTA · PALATINA · TVRIN
Scale 5 0 5 10 15 20 25 30 35 feet.
TOWN WALL
SKETCH PLAN
ADAPTED FROM
BONN. JAHRB. 118.
PORTE · D'AVGVSTE
NIMES
Scale 5 0 5 10 15 20 25 30 35 40 45 feet

town and so themselves cover the rear of the gateway ; and the fact also that the front of the entrances is practically flush with that of the town wall strengthen the supposition that the defensive system here was of a simpler type.

The Balkerne Gate projects 30 feet in front of the town wall. It therefore clearly belongs to the courtyard type, and future excavation would be expected to reveal foundations of the inner structure on the east side, north of the reservoir which has effectively demolished everything on the south-east. The whole plan is freakish and unfinished in its present state, but becomes at once reasonable and effective if completed on the lines of the Nimes gate.

The resemblance of the Balkerne to the Continental group has an important bearing upon its date. The introduction of the projecting gateway flanked by towers marked an important development in Italian mural architecture. It indicated a definite departure from the limitations of camp-planning, which had hitherto dominated the mind of the Roman architect and unfortunately appears to have retained its supremacy in Roman Britain. The movement towards a more expansive type of gateway which should offer as much facility for traffic in peacetime as for defence in war seems to have made its appearance, in Italy, towards the close of the first century B.C. One of the earliest examples is probably the Porta Praetoria of Aosta, where the three entrance-archways are some 23 feet in front of the town walls and are flanked by large towers which project 30 feet outside the walls and 43 feet within them; towards the back, they are joined by a secondary system of arches and so completely dominate a defensive courtyard. The Gate of Augustus at Nimes derives its name from its well-known inscription, which dates it to the year 16 B.C. The Gates of Autun are also early, but their less elaborate defensive works suggest a more settled and later period, and on account of the style of their architectural detail are assigned by Schultze to the the time of Tiberius. The age of the Turin gate is less certain. Hyginus records that Augustus ordered the town to be girt with walls, and it is possible that the plan of the Porta Palatina dates therefore from the era of its close analogy at Nimes. The few surviving fragments of the gate, however, appear to be of the same work as the polygonal towers which flank it, and towers of this type are not known to have been used in Roman architecture before the latter half of the third century. At the same time, it is sufficiently obvious that the present towers are not part of the original plan ; they sit uncomfortably on the outskirts of the gate and form no integral feature of the design. It is natural, therefore, to suggest, with Schultze, that the existing remains

represent a third or early fourth century adaptation and partial or entire rebuilding of a much older plan. Without this assumption, not only is an explanation required for the lack of co-ordination in the plan, but also the gate remains an isolated recurrence to an otherwise undoubtedly early type in an age when town gates of more than two spans were practically unknown and when a single entry with simple bastion-defences was becoming the normal type.

The evidence of the plan, therefore, amounts to this : with the possible, but not probable exception of the Turin example, all the Continental gates of similar or kindred design are earlier than the middle of the first century. Again with the one doubtful exception, the gates of the Middle and later Empire are of a markedly different character. The evidence favours a first century date for the Balkerne.

(3) The *method of construction* is commonly regarded as evidence of a late date. It is a widely received tradition that stone-faced rubble walls with brick lacing-courses are necessarily of the third or fourth centuries, and, though the tenet appears to derive its authority only from a limited series of well-known buildings in Rome, it has not been scientifically disputed. Rome, however, where every necessary variety of building-stone was readily accessible and where the traditions of Hellenic construction died slowly, would not *a priori* be expected to provide early examples of a device which is in origin distinctively a builder's makeshift. It was not until the immense development of vaulted architecture under the Middle Empire rendered rubble and cement with a coursed facing increasingly a necessity for first-class building, that the architect became accustomed to regard these as normal materials and to use them for such monumental works as the Circus of Maxentius (A.D. 310).

Turning, therefore, from the architecture of Rome, we are faced in Italy and the provinces on the one hand with the almost equally partial evidence of sub-Roman public buildings, and on the other hand with a vast mass usually of ill-dated and often of casually observed domestic work. A. de Caumont, from his wide knowledge of provincial architecture, expressed the opinion that coursed brick was used with rubble-facing considerably earlier than the third century, and Schultze supports him by dating a Cologne gate of this construction to the early Flavian period. Scanty though our present records be, however, the matter is in reality outside the scope of theory, for both at Pompeii and at Herculaneum brick lacing-courses were in use before A.D. 79, usually but not invariably in conjunction with *opus reticulatum.* In a good example at Herculaneum, the courses are each of six bricks in depth, and this multiplicity of the

brickwork appears to be more usual in early than in late building. Thus at Trier, in the great baths known as the Palace of Constantine, the lacing-courses are at varying intervals and usually only of two, more rarely of three, bricks in depth; and the contrast of definitely late construction with the regular quadruple courses of the Balkerne is still more marked in the irregular work of the Saxon Shore. The thickness of individual bricks is a doubtful criterion,[1] but the width of mortar joints may be credited with some chronological significance, and here again the $^{5/8}$-inch joints of the Balkerne are clearly earlier than the $1^{3/4}$ to 5-inch joints at Lympne and Pevensey. In first-class architecture at Rome, where proportionally finer construction is to be expected, the $1^{1/2}$-inch bricks used in the Baths of Titus (80 A.D.) and the Palace of Domitian (*c.* 90 A.D.) have joints of $^{1/2}$-inch thickness, whereas similar bricks in Hadrian's Temple of Venus (*c.* 125 A.D.) already have twice this depth of mortar, and 150 years later, in the walls of Aurelian, the joints have increased to the same thickness as that of the bricks themselves. The Colchester work takes an early place in the series.

The assumption of an early use of faced cement at Colchester is moreover in complete accordance with general probability. The lack of stone in Essex must have necessitated this form of construction from the earliest period of organised building, and the incidental use of brick lacing-courses is inherently probable from the outset. In summary, the method of construction cannot be held to preclude an early period for the Gate, and exhibits, on the contrary, certain features which seem to militate against a late date.

(4) *Historical probability* is a nebulous source of evidence, but, such as it is, it falls curiously into line with the evidence discussed under (1) and (2) above. The problem of the date of the Colchester town wall is an ancient subject of debate. Dr. Duncan, many years ago, in the article already referred to, propounded the theory which our meagre records naturally suggest. The lack of any sort of fortification prior to 61 A.D., the destruction of the town by Boudicca in that year and the consequent replanning and rebuilding during the following generation, all favour the conclusion that the present fortifications were erected at this period as the fruits of bitter experience. The first occupation of the site by the Romans appears to have been curiously casual. The eastern tribes were early subjugated, and in the consequent security the Roman settlers, although they must have re-organised and partly rebuilt the town,

[1] Roman bricks appear to baffle precise classification; for example, in the Golden House of Nero, contemporary bricks vary in thickness from $1^{1/4}$ inches to $2^{1/2}$ inches (Middleton, *Ancient Rome*, p. 34). The size of those in the Balkerne is far from uniform.

can have introduced relatively little of the Roman system of town-planning, largely dependant as this was upon a regular scheme of fortification. The earlier Roman town must have shared, with other semi-native towns, the informal character which in some cases, as at Verulam and Silchester, the Roman hand never entirely re-shaped in the conventional mould.

The rebellion of 61 A.D. is the only recorded event which could have resulted in a complete re-modelling of the town, and though our records are fragmentary, it is tempting to cite them in favour of the latter part of the first century as the period in which the present scheme of fortification was undertaken. As at Caerwent, the earthen rampart which backs the wall appears to have preceded it, the wall in places being unfinished on the inner surface where it butts upon the rampart. It is more than probable, however, that both wall and rampart were part of a single plan, the rampart being thrown up first as a temporary defence while the wall was building.

In summary, therefore, such evidence as can be gathered from history coincides with that of the pottery and of the plan. The indication is that the Gate was erected in the latter part of the first or beginning of the second century on a monumental scale with two broad carriage-ways, two foot-ways, flanking towers or guard-rooms, and probably a defensive court extending perhaps 30 feet within the town walls. At some period during the later years of the Roman occupation the northern half of the Gate may have collapsed or been destroyed, and was rebuilt. At this time, the northern footway was probably disused and replaced by the northern carriage-way, which was reduced in width by the insertion of the new north pier; the rebuilt Gate thus approximated to the less abnormal type with three entrances. Sometime after the withdrawal of the Romans, however, the Gate was still found to be too vulnerable a spot in the defences and was further reduced by a roughly constructed barricade. It, then or later, exchanged its primary function as a gateway for that of a fort. At the beginning of the nineteenth century or earlier, a tap-room of the former King's Head in Head Street was built across the site.

The general appearance of the original Gate can be reconstructed from its Continental analogies. The footways, as we know, were vaulted; it is improbable, however, that a similar vault of 17 feet diameter was entrusted by a Roman architect to the somewhat slender middle piers, and it is more likely that the carriage entrances were simply arched front and rear and were ceiled by the great beams (? balkens) which carried the fighting-gallery across the structure. There was probably a single upper-story, lighted by a

series of narrow windows and perhaps surmounted by an embattled parapet. The quadrant-shaped towers may not have been higher than the main roof. The footways possibly had no permanent doors; the carriage-ways must have had them, but, as at Autun, there is no evidence of the existence of the portcullis which is indicated at Nimes. The reconstruction of the conjectured rear-court is a problem for a future excavator.