THE ROMAN COAST FORTRESSES OF KENT.[1]

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The Roman camp at Reculver, the first of those which will be described in the following notes, is situated upon the sea coast at a distance of three miles east of Herne Bay and nine north of Canterbury.

In the Roman period that part of Kent known as Thanet was an island divided from the mainland by a shallow strait which in later times was called the Wantsum, and into which the greater and lesser Stour and other streams emptied themselves. At the northern end of this strait and upon a rising ground, hemmed in by sea and marshland, lay the fortress, with perhaps some landing place or haven on the south side. Its position was a commanding one, and no vessel could pass through the strait without being observed from its walls. This condition of things changed gradually. The strait between Thanet and Kent became converted into marshland by the slow silting up of the channel, and the tides and currents of the North Sea during the same period undermined and carried away the loose sandy northern

[1] Read at Canterbury, July 25, 1896. The intention of the following paper has been to deal only with the structures to be found on each of the sites described, to the exclusion of such minor antiquities as may have been discovered within them; these antiquities being too often treated of at needless length by writers on Roman remains in Britain. With relation to the Roman period in our island there would seem to be only two branches of research that can afford results of any significance: firstly, the elucidation of inscriptions; and secondly, the systematic examination of structural remains with their details.

As an illustration of the value of this second branch, it may perhaps be permissible to mention the results achieved by the explorations (begun in 1864, resumed in 1890, and since carried on continuously) of the site of the Roman town at Silchester in Hampshire. In these explorations, although a very considerable number of objects in the various classes of pottery, glass, metal, bone, &c. have been gathered together, their discovery has practically added but little to our knowledge of the period to which they belong. On the other hand, these same excavations have revealed, for the first time in this country, the plan and disposition of a Roman town with its walls and gates, its houses and streets, its temples, baths, and forum, showing in the varied character of the different edifices discovered within its enclosure the extent to which the Roman civilisation had been accepted by the native race, and affording indications, which had previously been only too scanty, of civil government as distinguished from military rule.

The plans of the three fortresses which illustrate this paper are drawn to a uniform scale. They are founded on the 25-inch Ordnance Survey maps, with additions derived from the works of Boys and C. Roach Smith, quoted in the paper.

shore until their action destroyed half the enclosure bounded by the Roman walls. Leland, in the time of Henry VIII, says: "Reculver . . . stondeth withyn a quarter of a myle, or little more, of the se syde." A survey made in 1685 shows that the sea had advanced to no great distance from the north wall of the camp, and in 1781 Mr. Boys, the historian of Sandwich, found that this wall, with the exception of a length of a few rods and the north-east angle, had fallen before the force of the waves. What further ravages have taken place may be seen by a glance at the plan copied from the Ordnance Survey of 1872. Fortunately, before it was too late, Mr. Boys was able to measure the area of the station, which was quadrangular, its greater length being from north to south. The space contained within the walls was 7 acres, 2 roods, 26 poles. The remains of the walls still stand to a height of 8 feet. In Boys' time they were 10 feet high.[1] They can be traced on the west side for a short distance behind the inn, the Ethelbert Arms, for part of their length along the south, and also on the east side up to the point where they have been destroyed by the sea. The south-east corner still exists, and shows a rounded angle unsupported by any tower. In fact, as far as can be seen, there do not appear to have been any towers whatever. The walls, with the exception of a patch here and there, are denuded of their external facing and exposed quite to the level of their foundation, which is composed of a thin layer of beach pebbles. The core is mostly made up of sandstone, which was procured from quarries near the site.

From excavations undertaken by Mr. Dowker (recorded in *Archæologia Cantiana*, Vol. XII., 1878) it would appear that the walls were, in their lower portion at least, built against the sides of the rising ground on which the camp was situated, and that they were 8 feet thick with two sets off inside, the upper 1 foot wide and 4 feet high, the lower the same width and about the same height. The inner face consisted of alternate layers of flint and sandstone. At present all the upper part of the wall is gone, it having been destroyed to the level of the ground within the station. Its original height is therefore not

[1] W. Boys in *Bibliotheca Topographica Britannica*, I, 83, MDCCLXXX. MDCCXC.

obtainable. No trace of a ditch is to be seen. Possibly, a section of the ground in front of the wall would show whether such a defence had existed.

As to the gates there is no information. Mr. Dowker observed that the south wall trended inward from each angle, and conjectured that a gate might have existed near some central point in this wall. There may have been a gate where the modern road, traversing the station from west to east, crosses the east wall, and another gate at a similar point in the west wall, but all this is conjecture. Only excavation can decide the question, if it is not already too late.

Archdeacon Battely, who wrote an account in Latin of Reculver at the end of the 17th century (published after his death),[1] makes mention of the remains of buildings which must have been erected between the north wall of the fortress and the sea shore. In his account he speaks of brick foundations of some size with small vaults in them and of fragments of a tessellated pavement.

He also mentions that many cisterns were uncovered by the encroachments of the waves. These cisterns varied in size, but were similar in their method of construction. They were from 10 to 12 feet square and the same in depth, lined with woodwork of oak, the lining being constructed with posts and planks two inches thick, and the bottoms pugged with clay. They were not unlike tanners' pits, but in his opinion were cisterns for the storage of rain water, as the water derived from wells in the neighbourhood is brackish.

The suggestion of the learned Archdeacon that the boarded and pugged pits were used as cisterns for rain-water is a very plausible one; and although the position was dangerously exposed, it is possible that the remains of buildings mentioned by him may have been traces of the baths of the station. Such baths were occasionally outside the walls.[2]

Very little can be said of the internal arrangements of the fortress. Nothing Roman is to be found above ground. The Saxon and mediæval church, of which there are con-

[1] J. Battely, *Antiquitates Rutupinæ*, &c. 1711.

[2] The baths of the station of Cilurnum, on the Wall of Hadrian, are outside the station lying between its south wall and the River Tyne.

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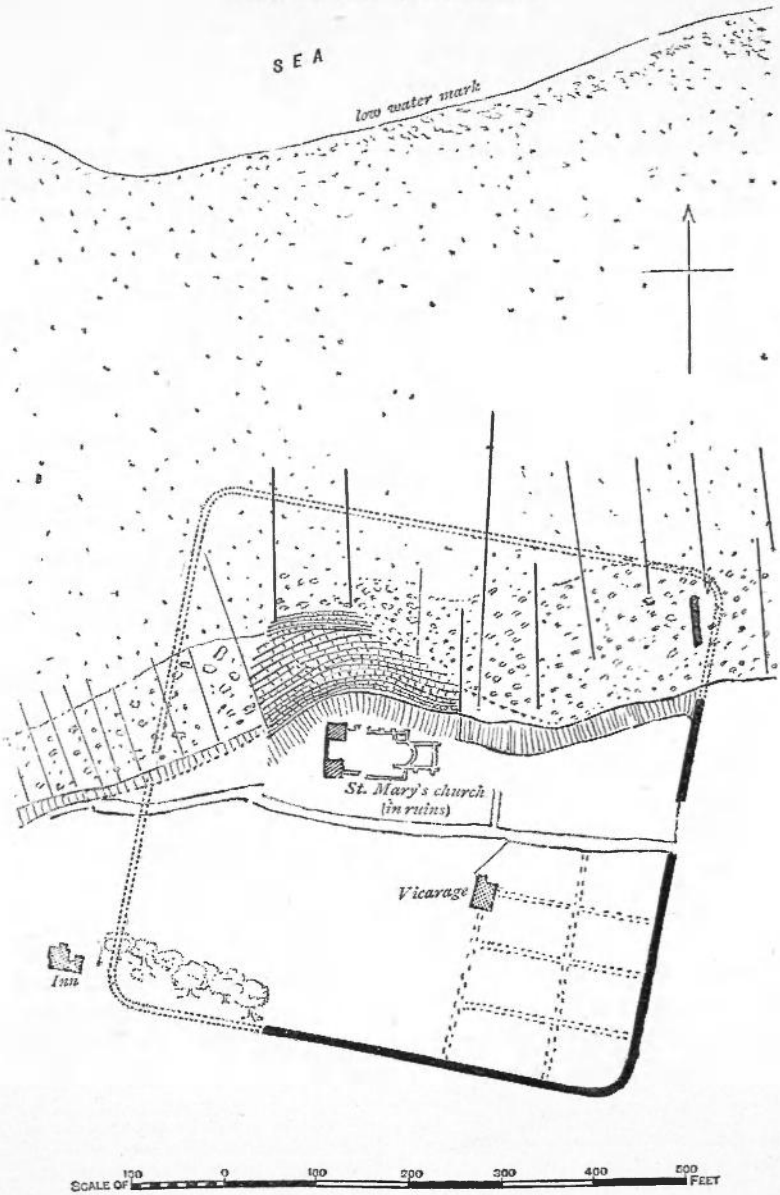
REGULBIUM (RECULVER)



siderable remains, may occupy the site of the *prætorium*, but neither the fragments of masonry existing in this church nor the columns from it (now to be seen at Canterbury in the garden near the Deanery) can be considered Roman, as presumed by the late Mr. Roach Smith. The remains of the chancel considered by him to be part of a Roman building converted into a church in Saxon times, do not resemble in plan any structure likely to have been erected in a Roman station: on the contrary, they are exactly those of the chancel of an early Saxon church. The columns from this edifice do not taper from bottom to top, as erroneously asserted and incorrectly shown in an illustration in Mr. Roach Smith's book on Reculver[1] (such tapering being a sure indication of Roman work), nor have either their bases or capitals any resemblance to any known fragments of Roman architecture to be found in this country. There can be little doubt that the columns in question are of later date than the period to which Mr. Smith has assigned them. Probably they are Saxon imitations of Roman work.

The only mention of *Regulbium* in the Roman period is to be found in the Notitia, where it is named as garrisoned by the first Cohort of the Vetasians commanded by a Tribune. It must not, however, be supposed that from this single and late mention of the station that it was of late erection. Its simple line of mural defence apparently unsupported by towers either within or without, and the rounded angles, are, rather, signs of comparatively early date. There is an absence of tile courses in the walls: also the evidence of coins may be cited, though such evidence must be received with caution. Archdeacon Battely, in his account of antiquities found here, speaks of consular coins having been turned up, and mentions that almost all the Roman Emperors down to Honorius were represented, the coins of Tiberius and Nero being especially sharp and fresh, as if new minted.[2]

[1] C. Roach Smith, F.S.A., *The Antiquities of Richborough, Reculver, and Lymne*, 1850, pp. 197–198.

[2] It is commonly assumed that all the fortresses of the Saxon shore were erected as barriers against the Saxon pirates; but if their plans, and the details of their construction be accepted as evidence, it will be seen that some of them may date from a period before the Saxons had begun to trouble the eastern and southern shores of Britain. It is to this earlier date that the foundation of Regulbium may in all likelihood be assigned.

Next in order and presumably in date stands *Rutupiæ* (Richborough), which now claims attention.

As *Regulbium* guarded the northern end of the strait separating Thanet from the mainland, so the fortress of *Rutupiæ* commanded its southern entrance. It was of far more importance than *Regulbium*, from the fact of its being the principal and oldest port of entry into Britain in the Roman period. The establishment of these two fortresses shows clearly that the strait just named was considered from early times the best and most direct way into the estuary of the Thames for vessels passing from *Gessoriacum* (Boulogne) or from any southern port.

The aspect of land and water has changed as much at Richborough as at Reculver, but in a different way. The waters of the strait have given place in both instances to fertile meadows; but at Richborough the sea, instead of encroaching, has retired, and the coast line is now more than two miles from the eastern side of the hill on which the camp is built.

The aspect in Roman times must have been totally different to the present one. The foot of the hill of Richborough was probably not washed by the open sea, though a broad channel may have flowed close beside it forming one of the southern mouths of the strait, while a narrow strip of salt marsh and sand-bank lay between it and the open sea. A large extent of what is now marshland, lying to the west of the hill, may then have been covered by the waters and so have formed the haven, making of the camp hill an island whose highest point was about 56 feet above high-water mark, judging from the present levels of land and water. The station stood on the highest ground of this island, where, on the east, it sloped somewhat abruptly to the water level. The sea channel on this side could not have hugged the hill very closely, as at no great distance to the south of the station on this same side, and in the low ground presumably near the shore, fragments of a Roman house were discovered in 1846, when the Ramsgate and Deal Railway was in course of construction. Ballast for this railway was taken from the slope of the hill between the camp and the site of this house, and in this operation many refuse pits were found, a pretty sure indication of dwellings in the vicinity which may have

here been scattered over the face of the hill. If any traces of such dwellings were discovered they have not been recorded.

On the high ground south of the camp was an amphitheatre, the remains of which were explored by Mr. Roach Smith in 1849. It was found to be elliptical in form, 200 feet long by 166 feet wide, with an external wall 3 feet 6 inches in thickness. A sloping bank of clay and mortar rested against the inside of this wall. Whether it was a base forming a support for wooden seats is not very clear, but it might possibly have served this purpose. There were three entrances to the arena.

But to return to the subject of the station. The area enclosed by the walls was estimated by Mr. Boys (who wrote of it in his *History of Sandwich* in 1792) at 5 acres, 3 roods, and 8 perches. It was a regular parallelogram, with the greatest length from east to west. The walls, in some places still about 30 feet high, may be seen to be of the usual Roman construction, viz., a core of concrete composed in this instance of boulders, sandstone, blocks of chalk and ochre stone with oolite and travertine occasionally, cemented with a mortar of lime mixed with shore grit, the external facings being of regular courses of squared grit and Portland stone. The lacing and bonding courses, consisting of double rows of tile, occur at somewhat irregular intervals. The width between these courses varies from 3 feet 3 inches to 4 feet 3 inches. Internally the facing appears to be of flint, and the lacing courses are single rows of tiles very irregularly spaced. The walls have, as a foundation, layers of undressed flints. Their total width is 10 feet 8 inches.[1]

The measurements and details here given are taken from the north wall, which remains in a very perfect condition, but much of this wall, and most of what is still left of the others, is so completely buried in ivy as to render investigation difficult—well nigh impossible.

As before stated, the walls of the camp were on high ground. This is so on three sides—north, south, and west; but on the fourth—the east side—the wall ran at the foot of the slope of the hill, and the north and south

[1] See W. Boys, *History of Sandwich and of Richborough*, 1792, and C. Roach Smith, *Antiquities of Richborough, Reculver, and Lymne in Kent*, MDCCCL.

walls descended that slope to join it. Such was the case with the Roman fortress of Gariannonum (Burgh Castle) guarding the mouth of the river Waveney, where it flows into the lagoon behind Yarmouth in Norfolk. It has been questioned by some antiquaries if in either case, at Richborough or at Burgh Castle, a wall existed in the low ground, it being taken for granted that the slope of the hill was a sufficient defence on this side; but the discovery of the foundations of the wall in the low ground at Burgh, and the plan of Richborough by Mr. Boys, in which part of the east wall is shown, should be sufficient to refute a view so superficial of the methods of fortification employed by the Romans.[1] The hill on which the station was erected appears to have been much cut away on its eastern side, probably in mediæval times, and the materials of the wall removed by water carriage, as was certainly the case at *Gariannonum*. They have doubtless been re-used in the building of Sandwich. At each corner of the camp a large circular bastion, 18 feet 6 inches in diameter, capped the angle, while two square towers projected from the west and two from the north wall. The south wall shows one only, but more than half of this wall has disappeared. The east wall having also vanished nothing can be said of its arrangement, but it may be conjectured that it resembled that on the west side. A word must be said with respect to these square towers. It is supposed that they each contained a chamber, but there is nothing to show that this was so. The huge main wall of the camp is seen to pass uninterruptedly at its full height through what remains of the only tower

[1] With reference to the wall in question, Mr. Dowker, in a paper on Richborough published in the *Journal of the British Archæological Association*, Vol. 40, p. 263, says: "Towards the east side of the Castrum Mr. Boys thought he could trace a wall flanking that side, which he has represented, in his plan, as below the cliff near the river; since then the South Eastern Railway has been laid near the spot, and portions of the overturned wall were met with during its construction. I have since ascertained that another large mass, 156 feet in length, lies in the bed of the river. It seems, therefore, probable that the walls quite encircled the Castrum, and on the eastern side they may have been below the cliff."

Apollinaris Sidonius, in his description of the Saxons of his day (A.D. 438–500), calls them arch-pirates, attacking unexpectedly, carrying all before them, and delighting in the tempest and in the crash of the waves; and he speaks of their custom, before returning to their own country, of sacrificing every tenth man of their captives to the gods of the sea. (Ep. vi. 8.) Such enemies as these, it may well be imagined, would make short work of the garrison of any camp unprotected by a wall on the side most open to their attack, viz., the sea.

still standing, and it is evident that the projection outwards of the tower, from the unbroken face of the main wall (not more than 8 feet 6 inches), could not have afforded room for such a chamber. Unfortunately, this fragment of the only tower now left can be but imperfectly examined on account of the encroaching growth of ivy. It seems that these towers were merely rectangular projections built up solid with the walls for a certain height and bonded into them in the upper portion. They were, in fact, not towers as ordinarily understood, but rectangular bastions affording platforms on which military engines could be planted. The tower just referred to is to be found in the north wall. It shows a width on face of 16 feet 3 inches, with a projection, as before stated, of 8 feet 6 inches. Considering it only as a solid bastion, and not as a tower rising above the level of the camp walls, these measures would afford, if deduction be made for the width of the parapet, a solid platform 10 feet 3 inches wide by 16 feet 2 inches deep at the rampart level.[1] The circular bastions at the angles of the camp would each show a platform of a minimum diameter of 12 feet 6 inches.

Little is known of the gates of the fortress with one exception, viz.; a postern on the north side. This is not in the centre of that side, but occurs at 250 feet from the western angle. The camp wall here is thrown forward for a distance of 10 feet 8 inches with a return 10 feet 2 inches long, covering a straight passage from the interior of the camp 15 feet in length. The aperture for entrance left by the return wall is but 3 feet 10 inches in width. A broad drain ran under the floor of this passage. From the exterior the whole arrangement looked like the towers to right and left of it, on a somewhat larger scale. The passage is not vaulted, but must originally have been covered by a roof; otherwise the rampart walk would have been interrupted at this point, which is not likely. If this passage was covered by a flat roof, the platform

[1] Clear indications (though indications only) of the position of the second tower, east of the gateway in this wall, and close to its broken end, may still be seen. The tile courses of the main wall are interrupted in the space originally occupied by the tower, and the face of the wall here is more roughly built than the facing on either side. Traces of the bonding are still plainly visible of the sides of the tower with the main wall.

so obtained would have served the same purpose as the platforms of the other towers.

Another, and perhaps one of the chief gates, is supposed to have existed in the west wall 180 feet south of the north-west angle. It is a curious fact that the wall on either side of the supposed site of the gate trends slightly inward towards it. It may be remembered that Mr. Dowker noticed a similar disposition in the south wall of *Regulbium*. At the distance from the angle named, Mr. Boys found a heavy foundation of masonry, and Mr. Roach Smith, in his work on Richborough, gave an illustration of this foundation from a sketch made when it was uncovered by Mr. Boys. But neither Mr. Boys' description, nor the sketch published by Mr. Roach Smith, throws any light on whatever structure may have existed at this spot. Only careful re-excavation might possibly solve the problem.

It is worthy of remark that in Mr. Boys' plan of the fortress, if a line be drawn from the foundation just mentioned across the area parallel to the north wall, it would be found to fall at no great distance from the point in the east wall where the remains of that wall cease ; a fact which suggests the existence near that spot of an eastern gate corresponding with the western one.

No southern gate has yet been discovered, though in all probability the break in the south wall, which corresponds nearly in position with the postern in the northern one, is suggestive of its site. There, again, excavation is much wanted, and careful excavation could alone show whether the fortress was surrounded by a ditch. At present there are no signs of so important a feature of the defence.

But the great subterranean concrete structure lying nearly in the centre of the area of the camp is the feature which gives a character and interest to this station wanting in so many other stations of larger size. The mass of material of which it is composed measures 124 feet from north to south by 80 feet from east to west. Its entire depth has not been made out, for a shaft sunk beside it to ascertain its depth was stopped at 30 feet from the surface by the rising of the water before the bottom of the concrete had been reached. The upper surface of this

mass of concrete overhangs the body of it by 12 feet on the east and west, and by 10 feet on the north and south sides, the overhanging portions being 5 feet thick. It thus presents at the ground level a floor 144 feet by 104 feet. The materials of the concrete consist of flint boulders bedded in mortar composed of lime mixed with coarse sand, small pebble, a very slight proportion of ground brick, and fragments of shell as if from sea sand. The mortar is intensely hard.

Upon the centre of the platform, or floor, a cross of masonry had been erected, the remains of which do not now exceed 4 feet 6 inches in height. In length from north to south it is 87 feet with a width of 7 feet 6 inches, the transverse arm being 22 feet wide by 47 feet long. The masonry of which it is composed consists of Kentish rag, oolite, tufa, and flint boulders, the mortar resembling in composition that of the exterior walls of the camp. The corners and ends were faced with squared blocks of tufa. Surrounding this cross and bordering the platform at a distance of from 15 to 17 feet from its edge are traces of a wall 3 feet 6 inches wide. Portions of this still remain to a height averaging 1 foot 6 inches. It seems to have been built of boulders with a mortar more sandy and poorer than that found in the other constructions.[1]

The structure described occupied the position ordinarily assigned to the *prætorium* of the fortress, where the roadways from all the gates would meet.

Various theories have been hazarded as to the use to which this mass of concrete was put. In all probability that propounded by the late Mr. T. G. Godfrey Fausset is the correct one; it is well stated by him.[2]

After speaking of the huge concrete foundation as probably intended to support some large superstructure, possibly a pharos, which was never carried out as originally intended, he goes on to say: "The smaller remains —viz., of the wall which probably formed a complete rectangular enclosure upon the platform—are built so exactly and regularly at a short distance within that part

[1] The details here given are derived from Mr. Dowker's report on the structure in *Archæologia Cantiana*, Vol. viii.

[2] In a note at the end of Mr. Dowker's report.

of it which is not mere platform, 5 feet deep, but huge solid foundation, perhaps 30 feet deep, that we may conclude them to have been certainly built with knowledge of, and with reference to, the position and intention of the great substructure.

"This masonry . . . is clearly Roman, with its red mortar and its course of bonding tiles; and so is that of the broader wall of cruciform shape in the centre. May we not suppose these to have formed part of some temporary or substitutional building raised in lieu of the original colossal design? The cruciform remains have always puzzled investigators; their broadest part is too narrow to have formed the foundation of any building containing chambers, but so wide that we may well believe the solid stone wall which must have formed its upward continuation to have been of very considerable height. As a clue, perhaps not unworthy of consideration, I would suggest that this building may have formed a sort of internal buttress or support to a timber pharos built around it, as wooden houses are at this day built around and supported by their stack of chimneys in the centre. A cruciform shape would be the very form best calculated for stability in itself when raised to a great height, and for support to the timbers surrounding it. No one who has seen a Canadian town after a fire, can have failed to be struck with the curious effect of these central chimneys standing tall and alone above the ashes of the wooden buildings; and in this state let us imagine the watch tower of Richborough to have been left by the first Saxon attack after Roman departure. The tall masonry also would not be long in reaching its present level."

The employment of concrete for substructions in the Roman period has never been observed elsewhere in Britain, whence apparently the difficulty found by English antiquaries in coming to a conclusion respecting this example at Richborough. That it was so employed on the continent is known; the most notable examples are to be found in Rome itself.

If, as supposed by Mr. Fausset, it was intended to erect any kind of *pharos* at Richborough, a solid foundation, such as this mass of concrete, would have been required for it. The hill of Richborough was of too loose a sub-

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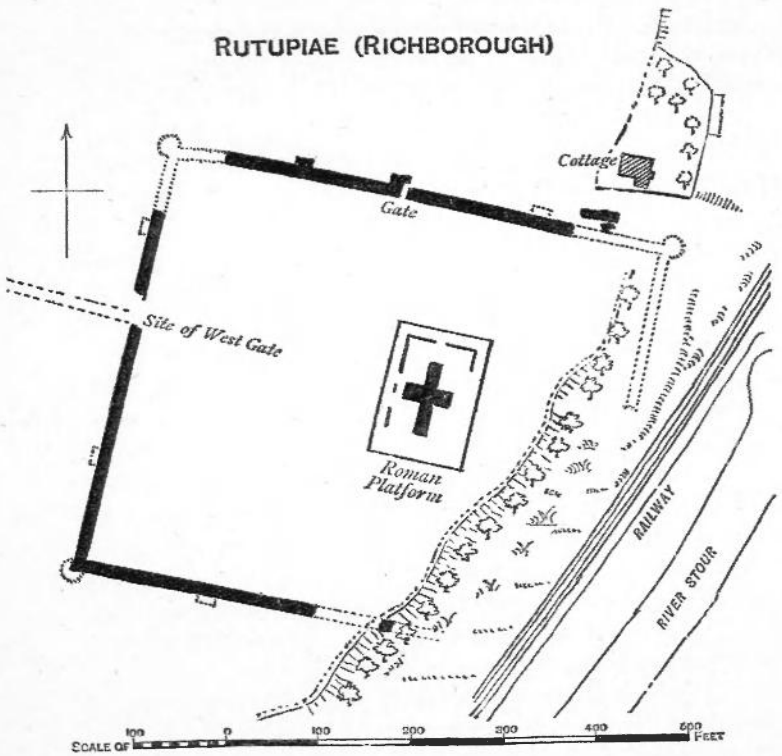

stance to afford support to such a structure, as was contemplated, and it was therefore necessary to dig down to a firmer bed on which to base the foundations of the intended building. A great square pit was in consequence dug through the loose sand to the firm clay below, and then filled with the dense mass of material described.

It will be asked, Why should there have been a lighthouse at this place? The question may be answered by another, Why should there be a lighthouse at or near any port?—at Dover, for example, where the Romans certainly erected one, if not two.[1] Knowing what changes have taken place in the coast line of Kent, it would surely not be an improbable conjecture that the entrance to the strait and to the port of Richborough was quite as difficult to make, if not more so, than the well-lighted port at Dover.

Again, another use for the supposed structure may be imagined, viz.; that of a signal tower combined with a lighthouse.

It has been noted that *Regulbium* stood at the northern, as *Rutupiæ* stood at the southern, end of the strait between Thanet and Kent. As the crow flies the two stations were something over eight miles apart. Under ordinary conditions so trifling a distance would have offered no difficulties of communication between them; but in the Roman period there were insuperable obstacles to direct intercourse, for the marshy estuaries of the greater and lesser Stour falling into the strait intervened between the two stations. They could therefore only communicate with each other by the circuitous route *via* Canterbury, or by water by means of the strait itself, probably not practicable in all conditions of the tide. It will thus be seen how important any means of signalling would become, and there is therefore some reason for supposing that a tower at Richborough may have been erected for this purpose as well as to serve as a lighthouse. By means of signals news of pirate fleets in the estuary of the Thames could be conveyed from Reculver to Richborough, from which station the coasts further south

[1] As to the second lighthouse erected on the western heights, see E. Knocker, *An Account of the Grand Court of Shepway, holden on Bredenstone Hill at Dover, &c.* p. 47 *et seq.*

could be alarmed, and the headquarters of the British fleet at *Gessoriacum* (Boulogne) could be communicated with, if need were, by way of Dover.

Little more need be said as to Richborough. The latest mention of its existence as a military station is in the Notitia, where it is given as the head-quarters of the 2nd Legion, called the Augustan, originally in garrison at Caerleon. This fact alone shows the importance of the place. Yet even the diminished numbers of a legion of the time of Honorius could scarcely have been contained within its walls, and such divisions of it as were not on duty here must have been quartered in others posts. Possibly part of the legion may have been stationed at Canterbury.

The next station to *Rutupiæ* was *Dubræ* (Dover), garrisoned in the time of Honorius by a *numerus* of Tungrians under a *præpositus*. Nothing remains of the station, which, it is presumed, occupied a part of the site of the present town. All that is now to be found of Roman work, much modified however in the middle ages, is the pharos standing close to the Saxon church within the lines of the mediæval castle. Another lighthouse of corresponding character is said to have existed on the western heights.

The three stations—*Regulbium*, *Rutupiæ*, and *Dubræ*—may have been more or less in communication with each other; but the last to be described, *Portus Lemanis*, occupied a position at some considerable distance from the others, and on the southern coast line. A Roman way known in modern times by the name of the Stone Street may be traced running southwards from *Durovernum* (Canterbury) for about twelve miles, at which distance it turns in the direction of the Roman port. This road connected the port with the great highway starting from Richborough, and passing through Kent to London. The port may very well have been fortified and garrisoned at a late date to prevent a hostile advance along it. The fortress stood at no great distance from the eastern end of the vast forest of Anderida, then doubtless recognised as a great natural barrier against the inroads of the piratical Saxons.

The position of *Portus Lemanis*, which might almost

be called a town from its size, not simply a fortified post, is a very striking one. It seems to have occupied a broad point of land slightly projecting from a line of cliffs, running east and west, which formed the northern shore of a strait separating a wide tract of marsh and sandbank from the mainland. In times not long subsequent to the abandonment of Britain by the Roman Government, it may be conjectured that the port, already partly obstructed in the late Roman period, became choked by the accumulation of shingle; the strait for a considerable portion of its length, opposite and west of the town, ceasing to exist. As the sea channel disappeared, the vague tract which had been its southern boundary grew gradually into the broad pastures and arable land now known as the Romney Marsh. The Royal Military Canal which flows at the foot of the line of cliffs referred to, represents in position the strait of Roman times.[1]

At some unrecorded period, but probably before the Norman Conquest, a great catastrophe took place. The whole of the site on which the Roman town stood, undermined by land springs, slipped downwards to the marsh, and the massive walls which had guarded it were rent and overthrown in wild confusion. The walls of the east and west sides suffered least; but on the north, and partly on the east side, masses of the masonry were pushed inward, and in places the towers were parted from the walls and tumbled over. No remains of the southern wall are now visible, but recent excavations have revealed its south-east angle.[2]

Unlike the stations already noted, *Portus Lemanis*

[1] For the state of this district in the Roman period, see C. Roach Smith, *Report on excavations made on the site of the Roman castrum at Lymne, in Kent in* 1850, *with notes on the original plan of the castrum*, and *On the ancient state of the Romney Marshes* by James Elliott, Jun.

[2] Excavations made by Professor Victor Horsley, see *Athenæum*, Sept. 22, 1894. With respect to the date of the landslip it should be observed that the lower portions of the walls, when uncovered in the excavations of 1850, were found to have retained their facing stones intact, which would certainly not have been the case if they had not been covered and forgotten for centuries. On the other hand, the greater part of the masonry which remained above ground has lost its casing, as might be expected. The parish church of Lympne, an early one, on the cliff, is said to have been built from the materials of the ruined station below it, and stones from the ruins are also worked up in the fabric of the mediæval house adjacent to the church. See the Report above quoted, p. 32.

was not strictly quadrangular in plan. The east and west walls were parallel, and probably the south wall next the harbour was at right angles with these; but on the north the wall was pushed outwards, forming an irregular bow-shaped line.

The area within the walls was larger than that of either *Regulbium* or *Rutupiæ*, containing about eleven acres.

The walls were of the usual construction, built on the surface of the ground, with a set-off course of stones at the base inside and out. There were also the usual bonding and lacing courses of tile at intervals of varying width, these courses being carried round the towers. Inside and out, the walls were faced with well-cut limestone blocks from quarries in the neighbourhood, and the rubble core was of the same material. The mortar was in composition like that used at Richborough, but in the facings the pink variety was employed, possibly a sign of work of late date.[1] The thickness of the walls was from 12 to 14 feet.

At intervals along the mural barrier were solid towers or bastions, very much like those of Pevensey in Sussex (*Anderida*), to which station, in the disposition of its defences, *Portus Lemanis* bore considerable resemblance. These bastions probably did not rise above the level of the rampart walk of the walls between them, and afforded, as seems to have been the case with the towers at Richborough, platforms on which to place balistæ. The projection of these towers from the curtain walls seems to have been about 15 feet. They may have varied in this respect, but definite information as to their size is wanting. They were certainly 20 feet high, as were the walls: no doubt both were higher when perfect. They were bonded into the walls and formed one substance with them, not being in any way additions.[2] The distance

[1] C. Roach Smith, *Report*, &c. pp. 14-15. No traces of the pink mortar are to be observed in the remains above ground, though the excavations of 1850 may have shown traces of it in the facing courses now deeply buried. It is used at Pevensey.

[2] In a recent visit of the Archæological Institute to the site (1896), Mr. Hope pointed out that the only tower which can now be made out as such, at the northern end of the west wall, had not, on its northern side, been bonded into the wall. He suggested from this fact that, originally, the station was quadrangular instead of as at present—seven-sided—the tower in question occupying the north-west angle of the quadrangle. For some reason—perhaps to guard against a threatened landslip—the line of the wall had been altered to its present direction, and the former straight

between tower and tower varied: the shortest might have been 125 feet, the longest 315 feet. In plan they were either semi-circular, or possibly semi-circular with prolonged straight sides.[1] In three instances, two on the west side and one on the east, they appear to have had small chambers in their substance, like deep niches, opening to their full width to the interior. One of them, in the middle tower on the west side, was about 6 feet high, 8 feet wide, and 10 feet deep.

On the western side of the fortress there is some appearance of a ditch, but the landslip has so affected all the surface of the ground that it is impossible to say if such a defence ever existed.

Two, perhaps three, gates, if not more, have been found in the walls. The two on the west side have no marked characteristics. They seem to have been simple openings from 5 to 6 feet in width, and probably arched. The principal entrance was on the east side, and the Roman road from Canterbury (*Durovernum*) descended the hill towards it. The massive substructure of this gate is remarkable, formed as it is of two layers of heavy stonework. Upon this platform were erected two semi-circular towers 6 feet across. The distance between these towers, or rather huge buttresses, was 11 feet, the actual archway of the gate probably not being more than 8 or 9 feet wide, if any judgment can be formed from the drawing given by Mr. Roach Smith in his Report, which does not, however, accord either with his plan or his own measurements of the structure. The semi-circular buttresses of the exterior are repeated in the same relative position on the interior face of the wall. In all likelihood there was no chamber over this gate, the rampart walk of the walls being simply carried across it on a timber flooring.

With respect to the buildings within the area of the station, Mr. Roach Smith says: "In the upper part . . . broken walls of a building were found, but they were so

wall pulled down. The theory is a plausible one; that it should be made shows how much has yet to be found out with respect to this station, and how much further exploration is needed on this site.

[1] Mr. Smith says that one tower at G on plan, p. 5, Report, &c., was elliptical in plan, but it is possible that if all the towers had been carefully examined they would have been found to resemble those of the kindred fortress of Pevensey, which are in plan as above described.

dislocated that it was hopeless to attempt tracing them, and we can only surmise that they had formed originally a portion of a series of long, low edifices, which probably extended across the area; for at the centre we succeeded in laying open the remains of a building, of about 120 feet long by 30 wide, consisting of an apartment in the middle with an octangular termination towards the north, and apartments on the sides of double the dimensions. . . . The walls were built of limestone and tiles, the angles composed of a larger number of tiles as is usual in Roman masonry. No vestige of pavement or flooring remained, and nothing was found except some pieces of pottery, a few coins, chiefly of the Constantine family, and fragments of glass, some of which seemed to have belonged to windows. The plan of this building will indicate the peculiar manner in which the western apartment had been broken away and carried downwards, while that to the east and the upper part of the middle room remained nearly *in situ*, having been obstructed probably by a rock underneath. It is impossible to say decidedly for what purpose this building may have been intended, whether it was part of the barracks for the Turnacensian or other soldiers who were quartered in the castrum, or whether it was used as a storehouse. The broken walls on the east, before mentioned, appeared from their character to have belonged to a similar building."

Opposite the southernmost tower on the eastern side other constructions were discovered, consisting of a group of four chambers, three of which had been warmed by hypocausts. The largest of these chambers had an apse in its south wall 15 feet in diameter, and on the east side a rectangular projection filled by pilæ of larger dimensions than the rest, which probably supported a bath. The furnace was just outside the east wall of this projection. The room directly north of this chamber, 21 feet by 11 feet, also warmed by a pillared hypocaust, had arches in the party wall, so that the two hypocausts were in communication. It also had a furnace on its east side. To the west of this room and joining it was another of similar size. Dwarf walls running the length of the room formed the hypocaust, which communicated by an arch in the party wall with the hypocaust of the chamber last described, and received the heat from it by this means. To the south

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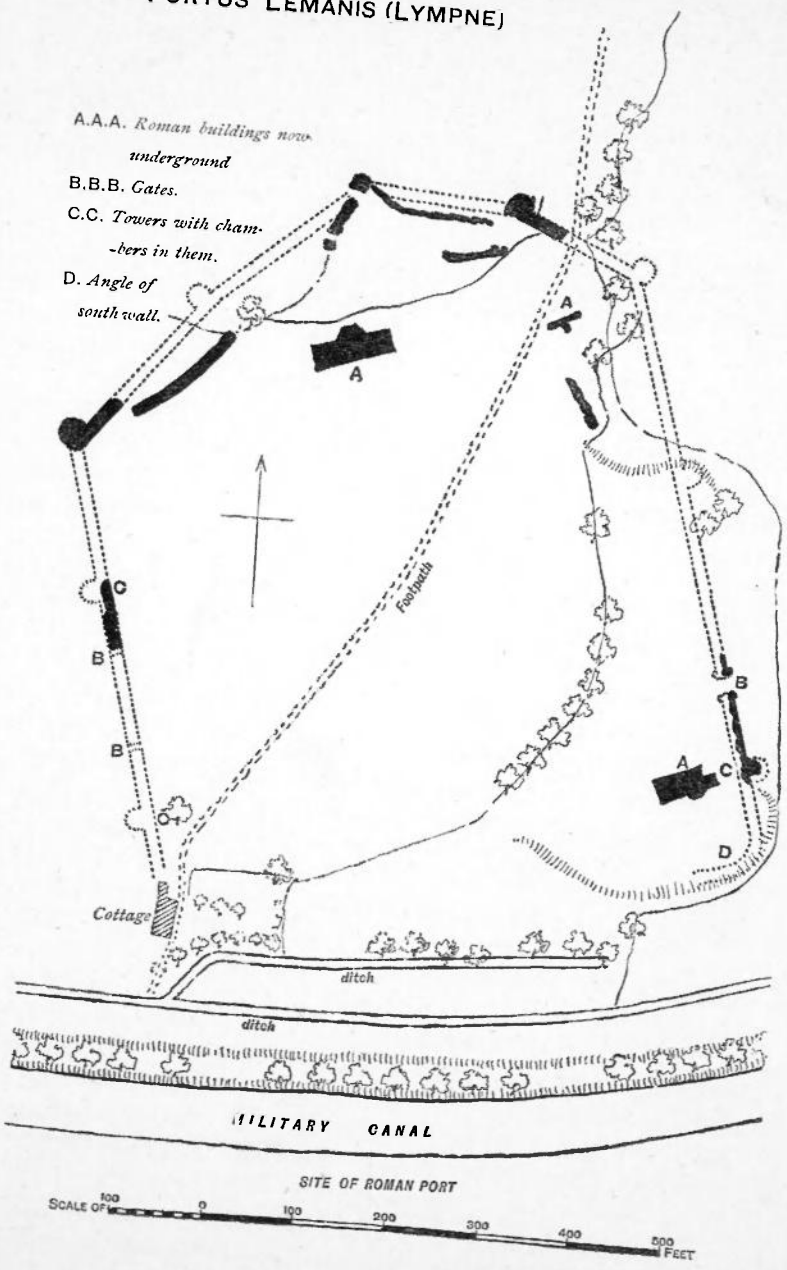
PORTUS LEMANIS (LYMPNE)



was another room of equal size with the last named. It was much ruined.

Possibly this group of chambers may have formed part of the baths of the station. They evidently belonged to a larger whole. T-shaped iron cramps for fastening box flues to the walls were found in the last extension of the room just spoken of. It is probable that they served to hold a jacketting of flue tiles to the walls of this hot bath-room. Traces of painted plaster were also turned up among these ruins.

This short account of the buildings found within the walls may be brought to a close with a notice that vestiges of some chamber near the southern end of the western wall of the station were dug up in the course of the excavations of 1850.

But two important discoveries yet remain to be recorded having a bearing on the date of this station. Amongst the *debris* turned up in these excavations were various fragments of roof and other tiles bearing a stamp with the letters CLBR, which Mr. Roach Smith read as *Classiarii Britannici*, that is to say, marines of the British fleet. These stamped tiles, none of which were perfect, appeared to have been used up as building material, and it is to be observed that none of the perfect tiles found in the excavations in the ruined buildings, or along the line of the wall of enceinte, had any stamp; these broken fragments only, bore inscriptions. Again, in the ruins of the principal gate it was noted that many of the stones had evidently come from another structure, perhaps of some magnitude. One of these stones proved to be an altar, in a much mutilated state, bearing on its face a worn inscription, which, as read by Mr. Roach Smith, purported to be a dedication of the altar by a præfect of the British fleet, Aufidius Pantera by name, probably to Neptune; but this part of the inscription was nearly effaced. This stone had evidently been under water for some time before it was worked up in the masonry of the principal gateway of the fortress, for it had barnacles adhering to it, as was also the case with another fragment found in one of the houses in the area of the station.

It may be well to see what deductions can be drawn from these discoveries.

It is a well-known fact that wherever a camp has been built and occupied by any division of the forces of Rome, naval or military, the name of such division is not uncommonly to be found amongst its ruins, stamped on tiles or cut in stone, usually in a very abbreviated form. The stamp upon the tiles mentioned, if rightly interpreted, together with the inscription on the altar referred to, would therefore go far to show that at some period, probably before Constantine, a division of the British fleet was stationed at *Portus Lemanis*, and that buildings were erected there by its crews. These were no doubt connected with the maintenance of the fleet, perhaps storehouses about the port itself, having to do with the docks.

From the facts revealed by the excavations it is clear that when necessity arose for fortifying the place, either the buildings in question were pulled down, or, being then in ruins, their materials were in part used in the construction of the new fortifications. The neglected state of the altar, and its being made to serve in the masonry of the eastern gate, would seem to point to some late period for the erection of the fortified line around what may, for a couple of centuries, have been an open town and port.

It is strange that though evidence has thus been found on the spot to show the comparatively early importance of *Portus Lemanis*, there is nothing but a brief sentence in the Notitia to prove its continued existence down to the latest period of Roman rule, at which time it was garrisoned by a *numerus* of Turnacenses. At what period its massive walls and towers were erected is matter for conjecture, but it could scarcely be placed earlier than Constantine, if so early, regard being had to the plan and structural details of the fortress. Further exploration of the site might help to determine this important point.

Having thus briefly described the three still existing coast fortresses of Kent, the next question which offers itself for solution is that of the relative dates of their erection.

There are two very definite types into which Roman military stations may be divided. The first shows a rectangular area, sometimes approaching a square, sur-

rounded by a wall unbroken by any external projection; except in rare instances the towers at the gateways had no external projection. At the same time square towers occur internal to the wall, between the gateways, and sometimes in the internal angles, which are always rounded. Sometimes these towers at the angles are reinforced by a widening of the wall, somewhat resembling a platform, for the whole length of the curved line. Occasionally the wall serves as a retaining wall to a bank of earth raised against it on the inside, which bank afforded ample room for placing military engines, and allowed space for the concentration of the defenders at any given point. Generally speaking, the walls of camps of this first type are not so thick as those of the second, some not being more than 5 feet in width. The gates of these stations consist either of a single arch, or double arches, according to their importance, the width of each arch being from 10 to 12 feet. They are always flanked by towers. Between the towers and over the archways, a gallery with windows, back and front, was carried; occasionally, if the gate was a deep one, a chamber took the place of the gallery between the towers.

As a rule, a ditch (sometimes two, or even more ditches) ran at the foot of the walls with an intervening berm, and completed the defences.

It would occupy too much time to enter into the internal arrangements of camps of the first type, though they offer a most interesting subject for study. These notes, however, must be confined to a description of the defences only.

In Britain examples of the first type are to be found in the stations on the Wall of Hadrian, and in the great Legionary camp, at York, and also to these, amongst others, may possibly be added the largest of the camps in Eastern England, the *Venta Icenorum* (Caister near Norwich).

The type of fortified station here described was certainly in existence in the reign of Hadrian (A.D. 117–138). How much later it prevailed it is not easy to say;[1] but towards the end of the third century it seems to

[1] A dated example is to be found in the Legionary camp of Lambæsis, in Northern Africa, founded by Hadrian A.D. 128. See Wilmanns, *etude sur Lambese* (*trad. Thedenat*) *in Bulletin trimestriel des Antiquites Africaines recueillies par les soins de la Societé de Geographie et d'Archeologie de la Province d'Oran*, Vol. I. p. 185 *et seq.*, 1882. 1 plan.

have given place to another, the second type mentioned. In this latter, the unbroken line of enclosing wall was no longer to be seen; instead, the towers, which before had been as a rule internal, now boldly projected from the line of enclosure, and the principle by which every part of a fortification should command and defend the other had been definitively adopted and acted upon.

A fine and remarkable example of the second type is to be seen in the walls of Rome itself, begun by the Emperor Aurelian and finished by Probus A.D. 280, much of which wall still exists. The wall is 12 feet thick in its lower portion, and constructed of solid concrete faced with brick. The square towers occurring at frequent intervals with which it is studded projected as much as 13 feet from its face. The lower part of the towers, like the wall, is solid.[1] The gates of the second type did not essentially differ from those of the first, but the square towers on either side of the arches of entrance were now more often exchanged for semi-circular ones with slightly prolonged sides. In fact, as the years went on, it was found that the last-named form of tower was stronger and offered greater advantages for defence than the earlier square tower, against whose angles the battering ram could be used with effect. The semi-circular tower then came commonly into use, though the square tower was never abandoned. Other forms for towers were invented. In the great palace fortress of Diocletian at Spalato, the gateway towers are octagonal, while those at the angles and the intermediate ones are square.

In this country the towers of the modified semi-circular plan mentioned are almost invariably solid, containing no chambers; they do not rise above the rampart walk, nor are they of any great size. They may be found added to pre-existing walls, or may form part and parcel of the walls of which they are the main defence. In the latter case the walls are generally of considerable thickness, and the structure may fairly be considered one of comparatively late date.

If the facts here stated are studied with relation to the camps under consideration, some interesting deductions may be drawn from them.

[1] See J. H. Middleton, *Ancient Rome in* 1885, 1st ed. p. 430 *et seq.*

If, as there is reason to believe, the type first mentioned be the earlier of the two treated of, it will be seen how closely the plan of Regulbium (Reculver) accords with it. From all that is known of this station it may be supposed that it never had external towers,[1] but it is evident that it had rounded angles; its walls were comparatively thin (only 8 feet in width) and they were built, in part, as retaining walls to ground within them, the higher level thus obtained, in part, substituting the internal mound of the early type. Whether there was any thickening of the wall at each of the angles is not known, but excavation within the only existing one might possibly settle this question, and further excavations along the south side might reveal the former existence of internal towers. The evidence of coins, the absence of brick courses in the walls, all point, as has been already observed, to an early origin for this fortress.

The same cannot be said for *Rutupiæ* (Richborough). The walls are not backed, as at Reculver, by higher ground inside the area, and they have a greater thickness than those of Reculver. But what shows that this station is of later date (at least as far as the existing fortifications are concerned) are the indications of flanking defences to be noted in the rectangular projecting towers, which occur at intervals upon the walls, and the large round bastion at each angle of the enclosure. Though these square towers gave a flanking defence to the curtain between them, and a moderately-sized platform at the rampart level for military engines, yet they had too little projection to be of much value for such defence. They must, therefore, be looked upon somewhat as an experiment in the principle which had begun to be more usually adopted than heretofore, in which boldly projecting towers at short intervals prevented an assailant from attacking the curtain walls between them or forced him to run the gauntlet of an attack on either, or both, sides in doing so.

With one exception—the existing north gate—nothing

[1] On the Column of Trajan at Rome is to be seen figured a camp, a simple quadrangular enclosure, strongly resembling that at Reculver. See Pietro Santi Bartoli, *La Colonna Trajana*, Pl. 7.

is really known of the entrances to this station. It may be that too few traces have been left to make any endeavour to discover them worth the labour it would involve, and yet the attempt should be made, as gateways of what appears to be a camp of a transitional time would perhaps offer in their plan some deviation from the early established form.

It is likely that in the middle of the latter half of the third century, when the sea rovers began to trouble the coasts of Britain, the walls of this camp arose to protect the approach to the harbour, and that the erection of a lighthouse and signal tower was contemplated within the area.

If *Rutupiæ* shows us the principle of flanking defence as yet imperfectly carried out, the walls of *Portus Lemanis* (Lympne) make it plain that that principle was clearly established when they were built. The square towers have given place to the far stronger semi-circular ones, with prolonged sides, part and parcel of the walls, which are much thicker than those of either *Regulbium* or *Rutupiæ*. Another proof of late date may be found in the fact that the enceinte is of comparatively irregular form, as is that of the kindred fortress of *Anderida* (Pevensey in Sussex). *Portus Lemanis* and *Anderida* were probably the latest of the stations built along the southern shores of Britain, and both have a certain likeness in their plans and dispositions to early mediæval fortification.

As far as our knowledge extends at present this is all that can be said as to the periods of the erection of the three fortresses under consideration, viz., that *Regulbium* (Reculver) was the first in date; *Rutupiæ* (Richborough), the second, and lastly, *Portus Lemanis* (Lympne), this knowledge being based upon the varied construction and plan of each station. More fully planned excavation of each station than has yet been made might probably afford further clues; but until this is attempted we have to fall back for information on some fable, and a few facts gathered from time to time from partial digging on the different sites; for which latter we cannot be too grateful to those earnest antiquaries who have undertaken the trouble of what is often a

difficult and, not always, a successful task. It may be confidently asserted, in conclusion, that practically the only means of obtaining new information respecting these Roman remains is by systematic excavation, and by systematic excavation alone.