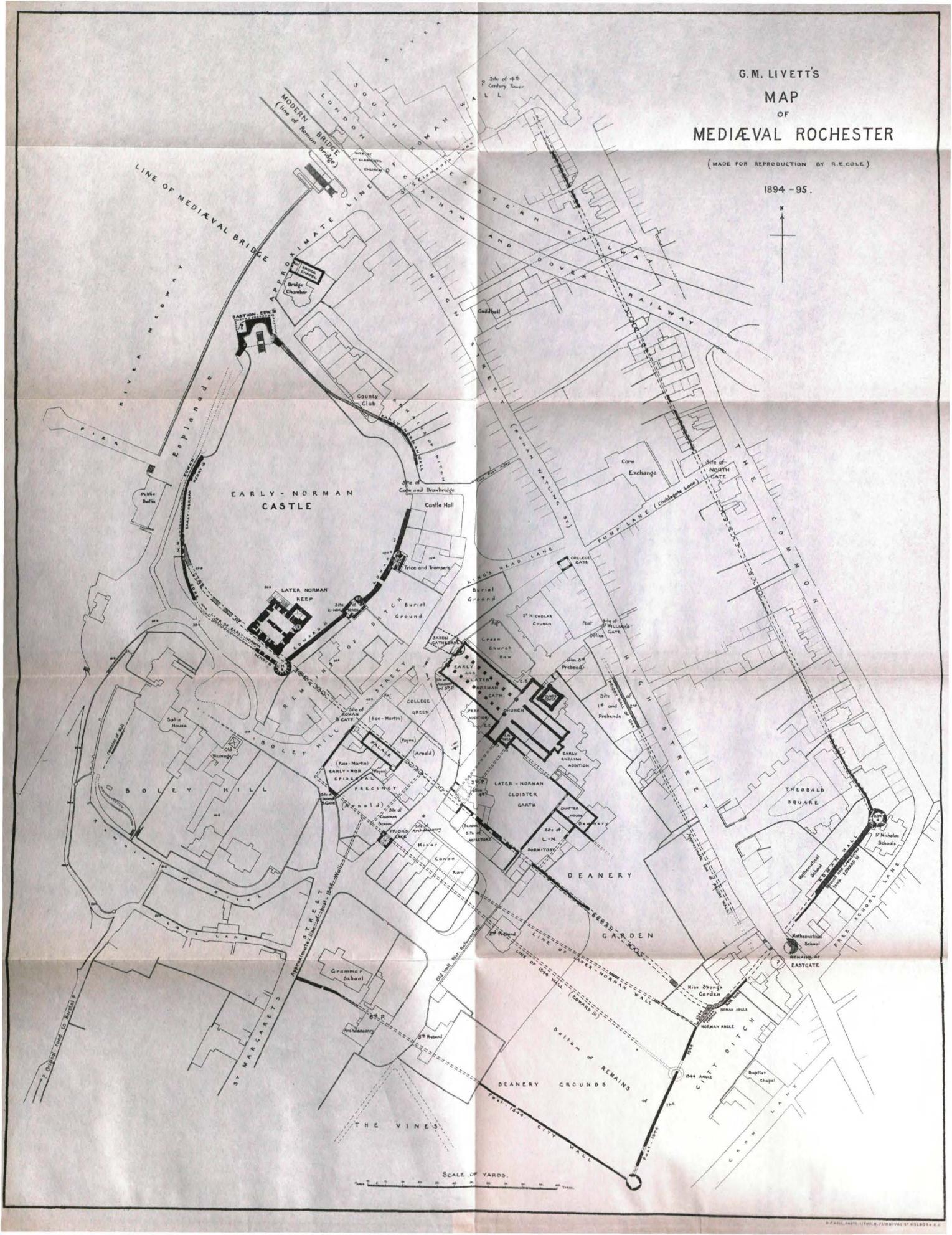


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MEDIÆVAL ROCHESTER.*

BY REV. GREVILE M. LIVETT.

PART I.

CONCERNING THE SAXON CITY OR THE "CASTELLUM WHICH IS CALLED HROFESCESTER," AND THE NORMAN "CASTELLIM" OR CASTLE.

Many archeologists have written upon the walls of Rochester, and each one has added his quota of fresh information and surmise. Once more the task must be essayed. Mr. George Payne's startling identification of the original wall of the rounded south-east angle of the Roman walled town has led to the recognition of other portions of the Roman walls, and has thrown fresh light upon the numerous walls of later date. Now that the exact boundaries of the Roman station are known, the elucidation of the problems presented by the medieval walls has become much simpler than it was of yore.

Mr. Payne has undertaken the description of the Roman walls, and has relegated to the present writer the task of describing the later walls. The accompanying Maps and Drawings are intended to illustrate both Papers.

THE ROMAN STATION.

For the purpose of this Paper a very brief outline of the Roman walls will suffice. + Starting from the east-gate, the site of which lies in front of the new buildings of the Mathematical School, the line of the wall runs southwards through the front door of No. 116, and turns towards the west through Miss Spong's garden. Thence it runs through the Deanery garden, forms the southern boundary of the later-Norman

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^{*} The reader should constantly consult the Folding Map. Reference to the other illustrations will be found in the footnotes.

† See the Plate which accompanies Mr. Payne's Paper on "Roman Rochester."

cloister-garth (Canon Jelf's garden), crosses the Precinct's road immediately south of the sunken gateway, runs on under the north face of Mr. A. A. Arnold's house (Bishop's Palace), crosses Boley Hill Street (the site of the south-gate) through Nos. 7 and 8, runs under the south wall of the keep, and roughly speaking parallel with the modern low retaining wall on the south side of the ballium, cuts into the rounded south-west angle of the castle-walls, and thence runs westwards along the top of the cliff. Thence to the High Street at the foot of the bridge its exact line is not known. Starting again at the east-gate it runs along the city wall, seen from Free School Lane, turns westward again with a rounded angle, runs on to Pump Lane (the site of the north-gate), through the yards at the back of the houses on the common, and so on towards the river. The exact site of the northwest angle and the line thence to the foot of the bridge are uncertain, but it is thought that the west wall of St. Clement's Church and, later, that of the club-house erected on the site of the Church, were successively built on the Roman line. There is no Roman brick in the remains of the walls, except in the foundations (underground) near the north-west angle, which was probably strengthened by "the Count of the Saxon Shore" in the fourth century by the addition of a tower.*

THE SAXON CATHEDRAL.

I am glad to have this early opportunity of describing the complete plan of Æthelbert's first cathedral Church, built in 604 and partly discovered in 1889 (Arch. Cant., Vol. XVIII.). The north-east corner of the nave was disclosed in the summer of 1894, when a trench was dug, for the purpose of lowering the gas main, along the middle of the road that runs by the west front. At the same time the lines of the foundations of the nave walls were followed westwards, in the burial-ground, by means of a probe. The

^{*} There is no brick in the remains of the Roman walls at Hastings (Hestenga ceastre—Bayeux Tapestry). At Pevensey, a castrum of later date probably, where lines of tiles are used to bond the coursed face of the wall to the core, the mortar of the facing stones and bonding tiles is pink, while that of the core contains no pounded brick or tile.

nave seems to have measured, in round figures, 42 feet by 28 feet. The foundations of the west wall seemed to line very nearly with the west side of the burial-ground. No signs of aisles, quasi-transepts, or porch were revealed. If a porch existed at the west end of the Church its foundations must be under the road and could only be discovered by excavation. If the Roman cross-street be represented by lines drawn from the site of the south-gate in Boley Hill Street to the site of the north-gate in Pump Lane it will be found that the west end of the Saxon Church lies upon it. This fact may explain the curious deviation, from a straight line, of the present road from Boley Hill Street to the High Street. This road, which is now called King's Head Lane, was anciently Doddingherne Lane.

THE SAXON CITY.

A word or two about the Saxon city. The chieftain Roff seems to be a mythical personage carved out of the name Hrofescester. The venerable Bæda probably recorded a vulgar tradition when he said that the English nation so named the city "from one that was formerly chief man of it." Mr. Roach Smith broached a likelier and more scientific derivation of the name from the Roman name Dourobrivis and the Saxon affix ceastre or chester. Canon Isaac Taylor (Words and Places, p. 173) has remarked the fact that the first syllable of place-names "containing chester, caster, or caer, is usually Celtic." Dourobrivis is probably "a Latinization of the enchorial name." "In Winchester the first syllable is the Latin venta, a word which was constructed from the Celtic gwent, a plain. Binchester contains a portion of the Latinized name Binovium. In Dorchester and Exeter we have the Celtic words dwr and uisge, water; in Manchester we have man, a district." It is said that Dwr-bryf means a swift stream. The contraction of Dourobrivis-castra and its modification to the common Saxon form of Hrofescester is not more curious than that of many other compounds of castra. In the Saxon charters Rochester appears as castrum or civitas *Hrobi* as well as *Hrofi*, illustrating the interchange of b and f. In Æthelbert's charter the curious combination civitas *Hrofi* brevi occurs. Surely this is a trace of the elided second part of Dourobrivis. It seems to me to be also a mark of the genuineness of the charter.*

Whatever may be the origin of the first syllable of Hrofescester, the Saxon affix is sufficient to prove that Dourobrivis was a walled station. It does more: it shews that we need not look for a castle in Rochester in Saxon times in order to explain why the city was often spoken of as a castrum or castellum. There was no castle in Rochester before Nor-The city was the castellum. In the Saxon man times. charters relating to Rochester civitas, castrum, castellum are synonymous terms; and the walls (muri and mania) of the city are constantly mentioned-intra castelli mœnia supra nominati, id est, Hrofiscestri (Textus Roffensis, ed. Hearne, p. 77)—intra mœnia supradictæ civitatis (p. 85)—in castro quod nominatur Hrofesceaster (p. 80)—ad septentrionalem murum præfatæ civitatis (p. 90). A castellum in mediæval writers is not a keep or tower, but a place surrounded by walls. This use of the word must be borne in mind when we come to consider the Norman castle. The Saxon castellum is the whole city; the Norman castellum is the walled enclosure within the city.

There is a significant passage to which Mr. Hartshorne has called attention in his valuable paper on Rochester Castle (Arch. Journal, vol. xx., 1863). It occurs in a charter granted by Offa in 788, whereby the king conveys land at Trottesclib to the church of St. Andrew the Apostle and to the episcopality of the castellum called Hrofescester—ad ecclesiam beati Andreæ Apostoli, et ad episcopium Castelli quod nominatur Hrofescester (T. R., p. 86). Bæda, too, in the seventh century, speaks of Putta as the bishop of the castellum of

^{*} The process of contraction is easily imagined, especially if one remembers that in pronunciation the third syllable was probably short and the accent laid upon the second syllable: Dourobrivis-cester—D'robis-cester—Hrobiscester—Hrobiscester—Hrofescester. The Rev. A. J. Pearman has kindly sent me an extract from Camden's Britannia (p. 235, ed. 1607), from which it would seem that Camden ought to have the credit of the derivation advocated in the text. Camden concludes his criticism thus: sed pristini illius nominis Duro-brouis aliquid in se retinere mihi videtur,

West Kent called Rochester. "These expressions are intended to convey the idea of the union of spiritual and military authority in the city where the church of St. Andrew had been founded." This union must have lasted throughout the Saxon period. It may have been suspended while Earl Godwin owned the city, and also when William the Conqueror, as Domesday implies, granted the city to his half-brother Odo, Bishop of Bayeux and Earl of Kent. It was certainly dissolved finally in 1126 when Henry I. made the archbishop Constable of the Castle of Rochester and granted him permission to build the keep.

THE EARLY-NORMAN CASTLE.

Mr. Hartshorne, whose laborious research seems to have exhausted the literary materials for the history of the castle, has absolutely dismissed Bishop Gundulf's claims to be considered the builder of the existing keep. The historians of the twelfth century and the style of the building combine in pronouncing it to be the work of Archbishop William de Corbeuil between 1126 and 1139. There is no evidence of any kind to warrant the supposition that this keep took the place of a smaller and earlier Norman keep. The supposition is possible, but there is no reliable evidence. On the other hand there is distinct evidence, both historical and mural, that a castle (in the sense of an area enclosed by walls and a ditch) existed before Archbishop William came on the scene; and the same evidence proves that this castle was formed in the early-Norman period. It is quite possible that Bishop Gundulf was the builder. The mural evidence will be fully considered in this Paper. The historical evidence is supplied by the Domesday record—Episcopus etiam de Rouecestre, pro excambio terre in qua castellum sedet, tantum de hac terra tenet quod 17s. 4d. valet. Mr. L. B. Larking has translated the entry thus: "The Bishop of Rochester also holds as much of this land as is worth seventeen shillings and four pence, in exchange for the land on which the castle stands." (The bishop held of the royal manor of Aylesford. The land seems to have been situate

near Rochester.) Thus it is quite clear that the castle was in existence at the time of the enrolment of the survey record. The date can scarcely be fixed more definitely. It is an interesting little problem. . Domesday implies that the Conqueror intended to build a castle in Rochester, and made an exchange of land for that purpose, and that such a castle was in existence by the time that the survey records were enrolled. The survey was taken in 1086. The king may have begun the work before his death in 1087, but the accounts of the rebellion of Odo, Earl of Kent, in favour of Robert of Normandy against William Rufus make no mention of it. The Saxon Chronicle, under 1087, speaks of the castel of Hrofe-ceastre, but refers probably to the whole city. William of Malmesbury studiously avoids the use of the words castellum and castrum, and describes the townsfolk gathered on the walls of Rovecestra and the besiegers shouting to them to open the gates-regii circa muros desiliunt, clamantes oppidanis ut portas aperiant (Gesta Regum, iv., 306). Probably the early-Norman castle, if begun, was not completed till after Odo's disgrace. Mr. L. B. Larking (The Domesday Book of Kent, p. 185 et passim) shews how the record was influenced here and there by the forfeiture of Odo's estates. It is probable that the words "on which the castle [now] stands" did not form part of the Commissioners' notes, and that they were added at the time of the enrolment. Upon these considerations, then, it may fairly be assumed that the completion of the early-Norman castle may be dated circa 1090.

It is possible that in this early-Norman work we have the grounds on which Gundulf's claims to be the builder of the later-Norman keep were set up. Supposing it to have been begun by William I., the king would naturally commit the work to the hands of the architect of the White Tower of London; or supposing it to have been begun by William Rufus, nothing could be more natural than a desire on the part of the king to strengthen the defences of Rochester when the city fell into his hands; or that he should seek the assistance of the bishop whom he trusted, who was on the spot, who had diplomatically negotiated the capitulation,

whom in the very next year he appointed to administer for a lengthened period the see of Canterbury, who moreover was distinguished far and wide for his architectural skillin opere cæmentarii plurimum sciens et efficax (T. R., p. 146). It was quite in keeping, too, with the character of the Red King that, when he made a grant of the manor of Hadenham to the church of St. Andrew for the victualling of Gundulf's monks, he should exact some return from the bishop, and that it should take the form of a bargain that the bishop should build the castellum for his royal master. It is natural, too, that the monks, fifty years later, should attribute to Gundulf all the glory of the great tower that overshadowed their minster—quare Gundulfus episcopus Castrum Rofense lapideum totum de suo proprio regi construxit (T. R., p. 144). Sixty pounds, the sum named as the cost, would not go far towards the raising of so great a pile, but with the free labour which the bishop could command the sum might very well suffice to make the enceinte of the castle, its ditch and curtain wall.

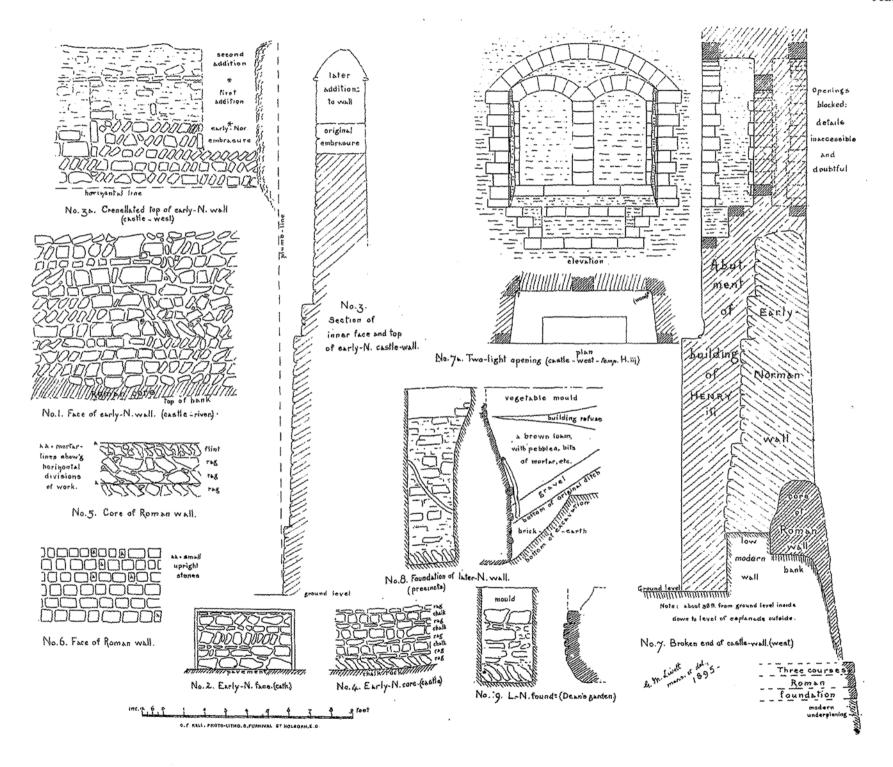
THE EARLY-NORMAN CASTLE-WALL: WEST SIDE.

Quitting conjecture, let us turn our attention to the walls themselves. Parts of the circuit have fallen or been removed in modern times. Parts of what remains are manifestly of later than early-Norman date. Still there are sufficient remains of early-Norman date to prove that the early-Norman circuit was once complete. In course of time the early masonry would naturally require patching and repairing and in parts thorough re-building. Nearly the whole of the wall overlooking the river on the west side of the enceinte is early-Norman. On the north side of the cathedral there is a tower that goes by the name of Gundulf's Tower. certainly a work of early-Norman date, in construction very much like St. Leonard's Tower at Malling. It was built before Gundulf laid out his new cathedral, and may very well be the genuine work of Gundulf. The masonry of the west wall of the castle is so much like that of these two towers that one can have no doubt that it is early-Norman work. I would go further and say, that it seems

impossible to get away from the assumption that Gundulf built the castle in which archbishop William afterwards erected the keep. I believe that Mr. J. T. Irvine, who has kindly allowed me the use of his valuable notes on Rochester, was the first to recognize its early-Norman character and date. His local knowledge is extensive and his authority decisive on this point. The herringbone style of building is the chief characteristic of early-Norman walling in this neighbourhood. There are two distinct kinds. In one kind the faces of a wall are built in courses, every course consisting chiefly of rag-stones laid aslant in either direction, and including also a few stones large enough to fill the course when laid on their proper bed. The castle-wall is of this kind; so also is Gundulf's tower and a part of the wall of the north aisle of the cathedral. In the other kind the faces are built up of similar courses of herringbone work alternating with narrow bonding-courses of flat rag-stones: the narrow courses often decrease in width and run into flat bonding-courses, and vice versa the flat courses change to larger courses of herringbone work. The walls of St. Leonard's Tower at Malling and a portion of the wall of the south aisle of the nave of the cathedral are built in this way. There is a bit of similar walling at the end of Mr. Rae Martin's garden in the Precinct. Sketches of examples of both kinds of early-Norman wall-facing are given in the Illustrations.*

Mr. Irvine has called attention to a special peculiarity of the castle-wall: at intervals it seems to be strengthened by "internal buttresses built flush with the face of the wall." These so-called buttresses consist simply of stones of unusually large size inserted in the courses of herringbone work. is much irregularity in their disposition, and they seem to be used wherever the line of the wall makes a slight angle. This peculiarity may be seen in the wall overlooking the river.† The thickness of the wall at its base is about 4½ feet, at the top 2 feet. Its outer face is plain, while the

^{*} Plate I., Nos. 1 and 2, and Plate II.
† Plate I., No. 1. In this sketch, made from careful measurements, is seen the method of strengthening the wall by the use of large stones.



inner face has three set-offs.* The height of the early-Norman work is 22 feet, but the addition of later masonry of unknown date has increased the height of the wall on the inside to 26 feet. The wall is crenellated; the original embrasures were 2½ feet wide and from 1½ to 2 feet high and from 5 to 5½ feet apart. Some of the embrasures have been filled up with masonry, while the height of those which remain open has been raised by the raising of the wall.+ All this may be seen in the sketches. The size of the courses varies. The material is Kentish-rag. Here and there a bit of tufa or of Roman brick may be detected. There is not a trace of any cut-stone.

The Norman wall runs round the curved angle at the south-west corner of the enceinte. Hereabouts it was refaced on the outside and pierced for openings in the thirteenth century. This later work will be described anon. On the inside of the curve the Norman wall has been robbed of its facing and the core exposed resting upon the solid rock. Here the early-Norman method of construction may be studied. The herringbone manner of laying the stones was adopted only for the facing of the wall and for the lowest course of the foundation. The whole of the core consists of a rubble of chalk and rag, in alternate layers, the rag-stones being laid flat on their natural bed.; (This method of building up the core inside the herringbone facing is better seen in an exposure near the north-east angle of the enceinte, close to the County Club. The early-Norman construction is just the reverse of the Roman. The core of the Roman walling consisted of layers of Kentish-rag set aslant and filled in with flint, and the faces | of big roughly squared

^{*} Plate I., No. 3, shews a section of the crenellated top and of the inner face of the west wall of the castle.

[†] Plate I., No. 3A, shews the face of the crenellated top of the early-Norman wall, with later addition above it.

[†] Plate I., No. 4. Note the single course of slanting stones laid immediately upon the chalk rock.

[§] Plate I., No. 5. Diagrammatic sketch of Roman core.

§ Plate I., No. 6. Measured sketch of Roman face existing at south-east angle of castrum. Note that some small stones, which would not fill the course if laid on their bed, are set upright. A better example of this use of small stones may be seen in the only other remaining part of the face of the Roman wall, at the back of the Choir School in the Precincts.

blocks of Kentish-rag laid in courses—11 courses to 5 feet.)

Near the south-west angle the Norman wall ceases, and its line towards the east is only roughly represented by a low modern wall. The rounded angle suggests the idea that the early-Norman wall followed the line of its Roman predecessor, but there is reason to think that the early-Norman wall made a wider sweep at the curve, and along the south side stood outside the Roman line.

The early-Norman wall overlooking the river embodies considerable remains of the core of the Roman wall. believe Mr. Roach Smith was the first to notice it. It seems to have escaped the eye of Mr. G. T. Clark when he was preparing his valuable Paper on Rochester Castle, published in 1875.* It may be easily studied in the instructive natural section that occurs where the wall is broken down owing to the recession of the cliff. The remains of the Roman core, robbed of its facing, form the outer face of the wall; the early-Norman wall is built up against and upon the Roman masonry; and masonry of post-Norman date is built up against the early-Norman face. † The Roman core cannot be seen from the castle-gardens, but its rough masonry can be easily distinguished underlying the Norman face for many yards, as seen from the pier and esplanade. 1 Anyone who cares to climb along the top of the cliff can trace the core for a considerable distance towards the angle. It forms the foundation of the Norman wall into which it gradually runs and thus at length disappears. At the natural section the junction of the rubble-cores of the two walls is easily traced; the difference between the hard and grey Roman mortar full of coarse pebbles and the softer brown early-Norman mortar full of unbroken shells is remarkable. The wall was

^{*} Arch. Journal, vol. xxxii. The opinions of so great an authority as Mr. Clark upon the keep are beyond criticism, but it may be said once for all that his Paper bears manifest evidence that his notes on the curtain-wall were made on a cursory and insufficient examination of the remains. Moreover he lacked that intimate local knowledge of masonry and materials which are necessary for a thorough and successful analysis.

[†] Plate I., No. 7. Natural section of castle wall, shewing work of Roman, Norman, and thirteenth-century dates.

I Plate IV. From a photo by Mr. Charles Bird.

underpinned and the cliff faced with strong masonry when the Corporation of Rochester acquired the property.* Mr. J. C. Trueman, who was clerk of the works (1870–72), has given the writer some valuable information. At the top of the modern facing there are three courses of ancient masonry which Mr. Trueman left undisturbed. They are not mere facing stones, for Mr. Trueman was able to ascertain that they represent a foundation of solid masonry on which the Roman wall was built.†

THE EARLY-NORMAN CASTLE-WALL: NORTH-EAST.

No remains of the original early-Norman wall along the east side of the enceinte exist; a later and stronger wall has taken its place. Part of the original wall along the north side was pulled down when the County Club and the adjoining row of houses were built. Mr. Clark saw it and described it as "a good example of early masonry." Three or four bits remain between the County Club and Castle Hall. inner face has been stripped off, exposing the core, and the wall has been pierced in several places for doorways. When the Corporation took over the property several pig-sties stood against the wall on the inside. The outer face, which overlooks the ditch of the old moat, shews distinctly the peculiar characteristics of early-Norman work.† It may be seen from the gardens at the back of Nos. 26, 28, and 30 High Street. Here there was no Roman foundation or solid rock on which to build, so that the Normans were obliged to make a foundation for their wall. It consists of rammed gravel. The gravel is composed of brown sand and pebbles, such as is found in the pot-holes of the chalk, whence

^{*} Mr. Apsley Kennette, Deputy Town Clerk, has given the following information: "On June 8th, 1870, Lord Jersey entered into an agreement with Corporation to grant a lease so soon as grounds should be laid out as pleasure gardens. Work commenced at once and completed in 1872. A 74½ years' lease granted in 1875. With part proceeds of river dues (1881) the Corporation purchased the freehold of the castle grounds in 1884 for the sum of £6572 odd."

[†] This view is confirmed. The same method of preparing the foundations has lately been revealed at the south-east angle of the Roman castrum, where a portion of the face has fallen away.

† Plate II.

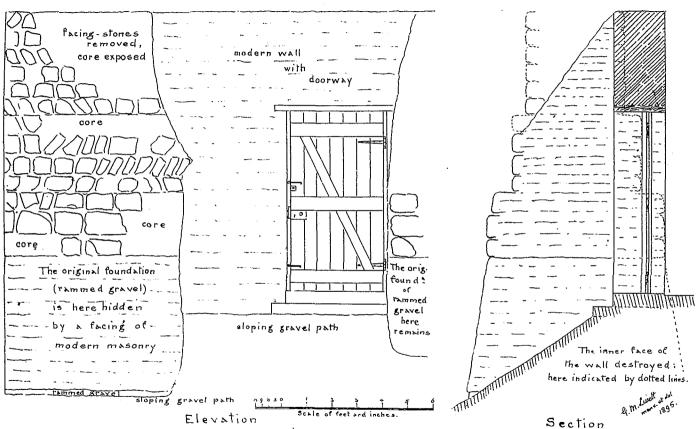
Such pot-holes may be seen in the doubtless it was taken. cliff along the esplanade. This kind of foundation illustrates the common method of early-Norman builders in the district. The foundations of Gundulf's walls in the cathedral consist of gravel and chalk which were thrown in layers into the ditch dug to receive them and then rammed. In the case of the castle-wall the gravel foundation is now exposed on the moat side. Of course the Normans dug the ditch for the moat before building the walls. The material which they dug from the ditch they threw up on the inner side to form a level surface for the ballium. They then proceeded to dig a foundation ditch for their wall along the top of the bank and filled it with the gravel. Where the bank was weak they strengthened it with the same kind of gravel, all well All this is apparent under careful observation. In course of time the loose mould has fallen away from the outer face of the gravel foundation and left it exposed.*

The gravel foundation is fully 7 feet wide and of unknown depth. From it the wall rises, decreasing in thickness by two steps or set-offs. These have the nature of foundation footings, but are above the level of the ground inside the wall. The lower footing consists of three massive courses of rag-stone, is $2\frac{1}{2}$ feet high and has a projection of a foot. The upper one consists of four courses, is 3 feet high and has a projection of 6 or 7 inches. The wall as it rises from the upper footing is 4 feet thick. Other details the reader may gather from the accompanying illustration.*

THE EARLY-NORMAN CASTLE-KEEP.

It is most fortunate that this bit of the wall at the north-east angle has been preserved, for it affords evidence unimpeachable that the early-Norman ditch and curtain-wall completely surrounded the castle-area. There is nothing but imagination to tell us what buildings there were in the ballium at this early date. Perhaps they were made of wood.

^{*} Plate II. Elevation and section of early-Norman wall near County Club. The foundation of rammed gravel is seen on the right side of the doorway; also signs of it under the modern facing on the left side, where embedded in it is a piece of Roman tile.



Early-Norman Castle-wall: Remains near County Club.

C F RELL PHOTO-LITHO. 8. FURNIVAL ST HOLSONN E C

I do not think there was a keep that stood apart from the walls, but I am convinced that here and there on the line of the wall itself there was a tower. There seems to me to be strong evidence that such a tower stood where the southernmost of the two fourteenth-century towers on the east wall of the enceinte now stands. The northern tower is wholly the work of the fourteenth century from the foundations upwards; but the southern tower, though built at the same time, is differently disposed on the line of the wall, and moreover rises from foundations which bear no resemblance to those of its fellow. The foundations are rammed gravel, exactly like the rammed gravel in the foundation ditch of the early-Norman wall. This can only be seen on the north side from the burial-ground, where the bank of the moatditch has fallen away from the foundations; the fourteenthcentury builders faced the parts of the foundations that were then exposed with their masonry. Upon the gravel there is a foundation footing of manifestly different date from the fourteenth-century work above it. I think it is not early-Norman work, for though it is like it in character there is a difference in material and other points difficult to describe. There is a bit of tufa in the footing, and that is probably early-Norman ashlar re-used. I am inclined to think this footing was repaired or rebuilt at some time between the early-Norman and the fourteenth-century periods. But at no period after the early-Norman is it likely that such a foundation of rammed gravel would be made. On the whole I am decidedly of opinion that the early-Norman keep formed an integral part of the curtain-wall and that its site has been It is possible that there was more than one such keep on the wall. There seems indeed to be sufficient evidence at Rochester, as elsewhere, to shew that the early-Norman idea of a castle was an open space enclosed by a strong wall, with a wall-tower here and there, and surrounded by a ditch. It is interesting to note that the late Mr. J. H. Parker, by his researches in Normandy, came to the conclusion that as a general rule the Normans, previous to the Conquest, were content with a stockaded fosse. The idea of a wall in place of the stockade may have been borrowed from

the Roman Castra. Thus the wall and ditch were combined. At Hastings, where the Normans found a small castrum dominating the port, they "dug a castle" round it.

Mr. G. T. Clark has given us a vivid description of the earth-works, which, "whether Roman, Danish, or English," in his opinion had been thrown up around Boley Hill and the castle hill alike before the Normans appeared on the scene. The idea must now be definitely abandoned: it was never more than a working theory, and all the facts can be explained in other ways. Boley Hill is probably Danish. But there is no doubt that the castle ditch was first dug by the Normans. It cut through the line of the Roman wall near the southgate. The wall from the west side of the gate to the southwest angle of the station was then destroyed.

The ditch is well defined in the Bridgewardens' Map of the year 1717, published by Mr. A. A. Arnold to illustrate his Paper on *Mediæval Remains at Rochester* in *Arch. Cant.*, Vol. XVIII. On the south side of the castle it has been to a great extent filled up.

HENRY III.'S REPAIRS: SOUTH AND WEST WALLS.

The early-Norman curtain-wall seems to have stood for 130 years without needing substantial repairs. I can see no evidence of any later-Norman work therein. The Close Rolls contain several entries (some of which will be quoted in the second part of this Paper) which shew that extensive works were being carried out in the early years of the reign of Henry III. Much damage accrued to the castle in the siege thereof by King John in the year 1215. The siege is minutely described by the contemporary historians whose words have been quoted over and over again. The besiegers undermined and demolished, first, part of the curtain-wall, and then the south-east angle of the keep itself. The destroyed parts were rebuilt by Henry III., whose work can be recognized by the materials he used and its limits defined by joints in the masonry. Here and there a bit of tufa (the early-Norman ashlar) or Caen-stone (the later-Norman ashlar) appears in the rough walling. For all their cut-stone the king's builders used fire-stone, a fine micaceous greensand

which was quarried near Reigate and Godstone and was brought to Rochester vid Battersea. It is remarkable that, though the work was executed in the prime of the Early English style of architecture when the pointed arch was in common use, in the castle, both in the keep and in the curtain-wall, one-centred arches were adopted, under the influence of the style of the work which was being repaired. The use of the one-centred arch led Mr. Clark to assign a Norman date to repairs of the curtain-wall which I have no doubt were carried out in the reign of Henry III.

The drum-tower at the south-east angle of the enceinte belongs to this period. The numerous lancet openings are nearly round-headed on the inside. It has suffered serious dilapidation; much of the outer face has been renewed, and in the process the fire-stone of the lancet openings has been replaced by rag-stone. The portion of the south wall of the enceinte which adjoins the drum-tower, some 50 feet in length, seems to me to have been built at the same time, but the evidence of its junction with the tower has been destroyed. The openings in this wall have been described as roundheaded, whereas in reality the head of the internal splay is slightly depressed in form. The foundation of the wall towards the field contains a bit of broken axe-faced Caenstone, clearly a Norman fragment re-used, which goes to confirm the post-Norman date of the wall. The upper part of the broken end of the wall overhangs the lower part, and close to the broken end the thickness of the wall is decreased by means of two quoins, one on the inner and one on the outer face. Moreover from these quoins the line of the wall skews in a curious way, as if to accommodate itself to a wall of slightly different line and construction. A close examination of the core at the broken end reveals bits of foreign mortar sticking to it. These facts prove that the wall was built up against the broken end of an earlier wall at this point. Here then we probably have the limit of King John's demolition of the original curtain-wall and the junction of Henry's new wall with the early-Norman wall which John left standing. The destruction in comparatively modern times of the remaining part of the earlier and less substantial wall up to the point of junction would account for the upper part of the later wall overhanging the lower part. The low retaining wall that now runs along the south side is of two dates: the upper part was built in 1872, and the lower part, seen from the field, is of earlier date.

Connected with the early-Norman wall overlooking the river there is a lot of later work which, judging from its materials and architectural features, must be assigned to the reign of Henry III. Near the bend of the south-west angle the wall was then pierced at intervals for openings, refaced for some distance towards the field, and supported by a buttress of great projection. In the buttress are worked up some masses of concrete which came from the original Roman wall. One of the openings is blocked internally, and the others are hidden by thick masses of ivy. They are small one-centred openings, slightly depressed, and set internally under large round-headed arches. The cut-stone is fire-stone. The rubble jambs contain bits of wrought (later-Norman) Caen-stone.

Near the broken end of the river-wall the remains, some 40 feet in length, of a vaulted building of Henry III.'s date abut upon the inner face of the early-Norman wall, adding 2 feet to its thickness. Three pointed arches of rough ragstone mark the lines of the wall-ribs of the vault; the wrought stone of the actual ribs has been wrenched away. This facing reaches to a height of 12 feet from the present ground level. Above the 12-foot line the original Norman wall has disappeared; and in its place is seen the outer wall of the upper stage of Henry III.'s building. It contains the remains of some blocked two-light openings. The outer jambs and enclosing arches can be seen from the pier. the castle side the openings are hidden from view by the overgrowth of ivy, so that they can be examined only by means of a ladder. They shew the depressed arch (struck from a centre placed below the springing line), which seems to be characteristic of the work of Henry III.'s date.* The

^{*} Plate I., No. 74. Plan, section, and elevation of two-light openings, temp. Henry III., in river-wall of castle. The arches of the openings in the keep, of the same date, are round-headed, not depressed.



CASTLE WALL FROM PIER.

material is fire-stone. The workmanship is very accurate and the joints fine. The fire-stone, however, has suffered the same fate as rendered necessary the restoration of the choir of the Cathedral and the whole of the exterior of Westminster Abbey, originally built with the same stone. It has worn away to the extent of some inches; except in one spot where I was able to identify the marks of the chisel on the original face. This little bit of facing alone is satisfactory evidence of thirteenth-century date.

In quitting this wall I should like to suggest that some of the masses of ivy that cover it should be cut away. It bids fair to do considerable damage to the whole of this precious stretch of masonry. A finer example of combined Roman, early-Norman, and thirteenth-century walling, wisely underpinned in modern times, does not exist elsewhere in the country.*

EDWARD III.'S REPAIRS: EAST WALL AND WALL-TOWERS.

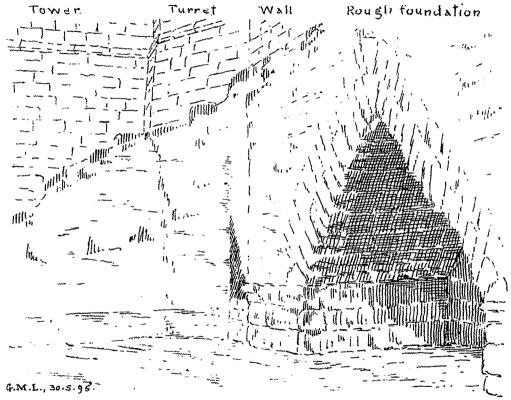
As shewn by the junction of the two works, seen only on the outer face, the east wall of the enceinte with its two wall-towers was built at a later date than the Early English drum-tower at the south-east angle. The wall and towers are doubtless part of the works carried out by John, Prior of Rochester, in the forty-first and forty-second years of Edward III. (1368), when more than £1200 was spent on the repairs of the castle. The particulars of the account appear in a valuable contribution to Arch. Cant., Vol. II., entitled Fabric Roll of Rochester Castle.

Masses of ivy cover the outer face of the wall between the two towers, and various buildings have been erected against it elsewhere. It is impossible, therefore, at the present time to make an exhaustive study of the wall and its junctions with the towers. Some of the junctions are curiously intricate and difficult to trace. They would defy description on paper apart from elaborate drawings. The mere fact of the existence of the junctions seems to have led Mr. Clark to think that the towers, which are allowed to be four-

D

teenth-century work, are insertions in a wall of earlier datein a late-Norman wall. This view I am convinced is wrong. The foundations of the northern tower, which may be seen in Trice and Trumper's stableyard, were certainly built after the foundations of the wall—the former are built up against the latter with a straight joint—but the mortar, which is peculiar and easily recognized, is the same in both. Trueman, who has examined the structural evidence at my request, confirms my opinion. He thinks with me that the foundations of the tower were built only shortly after those of the wall and by the same workmen. Above the foundations the junction is not so decisive as to the order of building. The only explanation of the curious joints that I can offerand it seems a perfectly satisfactory answer—is that the wall and towers above the foundations were built in sections and contemporaneously by different sets of workmen. foundations of the wall were laid down first of all, regardless of any design for the new (northern) tower, and without interfering with the foundations of the old (southern) tower. There was good reason for this plan, for thereby the necessity of drawing off the water of the moat was delayed until the foundations of the wall were completed. Then the water was drawn off and the foundations of the northern tower laid. The water could then be let in again and the wall and towers raised by gangs of workmen, each gang taking a section. There is an entry in the minister's accounts of 1368 which is worth quoting in this connection: "To John Emelyn and his fellows, for pulling down seven perches of the old wall of the said Castle, by task-work, at 3s. 4d. per perch—30s. 4d." (sic). The entry does not prove that only seven perches of the wall were pulled down and rebuilt at this time, but it does seem to point to the work being done in sections. Entries giving this kind of specific information are rare, for very little of the work was done by the piece.

The northern tower contains a vaulted ceiling of the style of the middle or latter part of the fourteenth century. The southern tower has features which would assign it to the same date. The lower parts of both are faced with rag-stone, squared and well coursed. In the fourteenth century the



Foundations of Edw. iii's wall and tower.
From a photograph by C. Bird. Esq.

use of this stone in place of the softer free-stones, Caenstone and fire-stone, was becoming fashionable. It was cut and moulded at the Boughton quarries. It was used for all the quoins and openings of the towers. The same material, in small blocks less carefully trimmed and coursed, was used for the facing of the walls and towers. The difference in the foundations of the two towers has been noticed. The gravel foundation of the southern tower was probably the foundation of an original early-Norman wall-tower which was destroyed when the present tower was built. The foundations of the northern tower consist of solid rubble masonry.

The foundations of Edward III.'s wall are so remarkable that they demand careful description.* The face is rough. They were laid down in a ditch prepared to receive them: probably the early-Norman ditch, cleared and made broader and deeper. The outer bank of this foundation ditch sloped sharply and formed the side of the great ditch of the moat. The bank remains, held up by retaining walls here and there, and almost covers the foundations between the Early English drum-tower and the southern wall-tower. Between the towers and along the wall north of the northern tower the bank has fallen away (or been removed) and thus the foundations are completely exposed to a depth of 13 feet below the foot of the wall. The sloping line of the lost bank is seen on the north side of the northern tower (in Trice and Trumper's yard). Above the sloping line the foundations of the tower are faced, as has been described; below the line they are rough like the face of the foundations of the wall.

The remarkable feature of the foundations of the wall is the series of "arches of construction" which it contains. They have a span of 10 feet, and occur at intervals of 10 feet. The springing line, not always on the same level, is about 2 feet above the present ground-level, and the arches measure 5 feet from this line to the crown or apex. The arches are faced with two courses of thin rag-stones, and are exceedingly

^{*} Plate V. is a rough sketch, from a photo specially taken by Mr. Charles Bird, of the junction of the northern wall-tower and wall adjoining in Trice and Trumper's yard. It shews the rough sloping line of the lost bank of the moat on the side of the tower, and the arches of construction.

rough and irregular in construction. Some of them are triangular-headed; in others the haunches are slightly curved. They were not built upon wooden centrings, but upon masses of gravel thrown into the ditch, rammed, and suitably shaped. In many of the arches the gravel remains undisturbed. Most of it has been cleared away from those in Trice and Trumper's yard, but a coating of it still sticks to the rough stones and mortar-joints. This gravel is like the gravel which the early-Normans used for their founda-I doubt not that it is the early material re-used. In some cases, not in all, the fourteenth-century builders seemed to have screened it as they used it. From a structural point of view this method of making foundations for the wall was sound and economical. It saved material and labour, and the result was as if the wall had been built upon strong piles of masonry. I do not know whether similar arches of construction exist elsewhere in mediæval work.

Accompanying Mr. Arnold's Paper on Mediæval Remains at Rochester there are drawings and photographs of one of these arches. It was discovered when the site of Castle Hall was being cleared. But no adequate idea of the rudeness and peculiar mode of their construction can be obtained apart from actual inspection. Mr. Arnold's plates are valuable, however, in that they shew also one of the two arches through which the water of the moat used to flow under the steep ascent that leads up to the castle-grounds. It is now lost to view. The last remains of the gateway that stood at the top of the ascent, and which appears in the city seal and in various old prints, were unfortunately removed in 1870-72.

THE NORTH-WEST BASTION: EDWARD III.

The only portion of the castle-walls that has not been described is the ruined bastion at the north-west angle, through which an opening, for an entrance to the grounds from the esplanade, was pierced circiter 1872. After a careful examination of this ruin I feel convinced that it belongs for the most part to the work of the reign of Edward III. Very little of the facing is left, but what remains

is exactly like the facing of the foundations of the rectangular towers on the east wall of the curtain, and the lower courses batter in the same way. A small bit of the curtainwall (the broken west wall of the enceinte), which remains attached to the south side of the bastion, was built at the same time. At this point the relation of the wall to the bank behind it may be studied. The bank is faced with the gravel which has elsewhere been identified as the foundation of the early-Norman curtain-wall, and the bit of wall that remains attached to the bastion is built up against and partly overlaps this early-Norman foundation. This alone would point to a post-Norman date for the bastion. The bank behind the Norman foundation is evidently a made bank. It has receded several feet where the wall has fallen away, and from its mould bits of Roman brick may be extracted. These little matters seem to be worth recording, as they help to fix the date of the bank within the wall. It must be remembered that the early-Norman wall overlooking the river contains similar bits of Roman brick. The same fact may be remarked concerning the bank inside the arches of construction in the foundations of the east wall of the curtain. Bits of Roman brick, the remains of Roman buildings, would be abundantly scattered through the soil which the early Normans dug and threw up on to the bank within when they made the ditch.

The end of the bit of wall described in the last paragraph is fairly clean-faced up to a certain height. Above that height it was probably toothed into the older wall which it adjoined. Little features which are difficult to describe tend to the belief that this older wall was the original Norman wall. At this point the Norman wall does not seem to have followed exactly the line of its Roman predecessor, for had it done so some signs of the latter would remain in evidence. The exact line of the Roman wall hereabouts is lost and may never be recovered.

Mr. Trueman reports that when the Corporation made the entrance to the castle-grounds through the bastion they destroyed a rectangular vaulted chamber which was situated low down in the bastion. Mr. Trueman made drawings of this chamber, but they have passed from his possession and I have been unable to trace them. He thinks that the angle shafts which supported the vault remain in situ on either side of the present steps, and that the inner face of the outer wall of the chamber was about 11 feet from the outer face of the present entrance. Some day, perhaps, search may be made for these remains.

PART II.

EXTENSIONS OF THE CITY—INTRODUCTORY.

In the second part of this Paper I have to consider and describe several successive extensions of the boundaries of the city, made in the eleventh and following centuries. The Norman bishops found themselves cramped for want of building-room and soon overstepped the Roman wall. The first extension, which may be called the early-Norman extension, seems to have been made in connection with an episcopal palace. A later-Norman extension was made to afford space for new domestic buildings for the monks. In the reign of Henry III. Boley Hill* seems to have been included within the defences of the city, which were strengthened at the same time by being surrounded by a ditch. In the reign of Edward III. the monks built a new wall whereby a slight addition was made to the area of the city. There are also remains of one wall, perhaps of two, of still later date. All these extensions affected the boundaries of the city only on the south side. Before proceeding to deal seriatim with these extensions and with various matters connected with them, it will be well to recall a few wellknown facts in the history of the cathedral and monastery.

^{*} The name Boley Hill is applied throughout this paper to the high ground on which Satis House and Boley Hill House stand, and not to the road commonly called Boley Hill. Perhaps some day the Corporation may re-name the latter Boley Hill Road, and the row of houses on the west side Southgate Terrace, in order to avoid the confusion that now exists. If it is not out of place here I would also suggest that Black Boy Alley be re-named St. William's Passage. St. Clement's Lane, Cheldegate Lane, and perhaps Crow Lane might be revived with advantage.

The first or early-Norman cathedral was built in the early years of the episcopate of Gundulf (1077-1108). It was laid out with its axis parallel to the Roman wall on the south side of the city; the distance from the south wall of the nave to the Roman wall being fifty yards. Bishop Gundulf also built offices for the monks of the priory which he established at Rochester—tempore ergo brevi elapso ecclesia nova officinarum ambitus convenienter disponuntur. is reason to believe that these buildings occupied their usual position on the south side of the nave. Bishop Ralph (1108-1114), Gundulf's successor, is not known to have done any building. Bishop Ernulf (1115-1124) built the eastern and southern ranges of new offices for the monks on the south side of the choir. Bishop John (1125-1137) practically rebuilt the early-Norman cathedral in the more advanced style of his period, at the same time as Archbishop William was engaged in building the keep of the castle. (Mr. W. H. St. John Hope, in his Notes on the Archaeological History of Rochester Cathedral Church, ascribes the greater part of the later-Norman work to Ernulf. I have reasons for preferring a slightly later date.) There is no record of any building having been carried on during the middle portion of the twelfth century. Bishop Gilbert de Glanville (1185—1215) rebuilt the episcopal palace at Rochester, and he completed the monks' cloister which Ernulf had begun long before. The cathedral was in part rebuilt in the pointed style during the thirteenth century and the early part of the fourteenth century, the work ceasing about 1343 when the central tower had been raised.

Each period is marked by its characteristic building materials. For rough walling the local Kentish-rag was the principal material used in all periods; chalk and flint were often used with the rag. When a wall or other building was destroyed previous to the erection of a new building on or near the same site, as a rule the old materials were re-used in the rough walling of the new building. If these old materials consisted of cut or moulded stones, the kind of stone affords evidence of the age of the destroyed buildings. For cut-stone Gundulf used tufa more than any other

material. He also used a certain amount of Barnack-rag and of fire-stone. In his crypt Barnack-rag appears in the bases, capitals, and monolithic shafts of the central alley, and fire-stone in the imposts of the vaulting of the aisles.* Ernulf appears to have been the first to use Caen-stone at Rochester; he also used Barnack-rag and a stalagmitic marble, the source of which is not known. Bishop John used Caen-stone and the "Ernulfian marble."

In Bishop Gilbert's time both Caen-stone and fire-stone were being used. Caen-stone is seen in the reputed remains of Gilbert's cloister, the arches of which are embedded in the wall of the south choir aisle, and certain fragments of the same material and date are preserved in the crypt. The use of fire-stone is proved by a capital, likewise preserved in the crypt, which resembles the transition caps in Canterbury Cathedral. It is supposed to be a remnant of the repairs executed in the south transept after the fire of 1179. that time fire-stone was used more freely than any other material until in its turn it was superseded in the fourteenth century by the use of cut Kentish-rag. In short, at Rochester tufa is indicative of the eleventh century, Caen-stone of the twelfth, fire-stone of the thirteenth and early fourteenth, cut Kentish-rag of the fourteenth, fifteenth, and sixteenth centuries.

EARLY-NORMAN EXTENSION: EPISCOPAL PRECINCT.

Before discussing the first extension, so-called in this Paper, it is necessary to refer to a deed of quit-claim executed by Gundulf and printed in Thorpe's Registrum Roffense (p. 526). Volo vos omnes scire me jam quietum esse adversus regem de illa cambicione terre, quam ei promisi post Werram Rofe, pro illis tribus acris quas Odo Baiocensis episcopus dedit ecclesie Sancti Andree et monachis nostris, ad faciendum ortum suum juxta murum de foris versus

^{*} This early use of fire-stone, which was quarried from the upper greensand of Reigate and Merstham, is interesting. It also appears, in conjunction with tufa, chalk, and Barnack-rag, in Edward the Confessor's work at Westminster Abbey. At Rochester it does not appear to have been used at all during the twelfth century, though it is occasionally found in work of that period in neighbouring parish churches.

Australem portem civitatis forinsecus, qui jam inclusi sunt muro circumquaque. From this it would appear that the monks acquired three acres of land on the south side of the city, and enclosed the same with a wall about the year 1090. I have not been able to identify the exact boundaries of this land, nor have I found any signs of such a wall in the existing walls. It is not likely, therefore, that the wall was very substantial, and it is probable that it entirely disappeared in the course of the various extensions of the city-wall in later times. In any case this enclosure cannot be regarded as an extension of the city-boundaries, which it left unaltered.

By the first extension of the city-walls a rectangular piece of ground near the Roman south-gate was added to the area of the city. The wall which formed the western boundary of the addition ran southwards from the east side of the Roman south-gate, and is now represented by the high wall which separates Mr. Rae Martin's garden from Boley Hill. Whether this wall is the original wall of the early-Norman extension is doubtful; possibly the characteristic signs of the masonry of the period have been obscured by patching and refacing. The southern wall of the output ran parallel with the Roman wall at a distance of 38 yards from it. A small portion remains at the end of Mr. Rae Martin's garden; it owes its preservation to the fact that to it was attached the second or mediæval south-gate, of which more anon. The face has been patched up at different times, but it still retains enough of its original character to fix its early-Norman date beyond doubt. It is exactly like the bit of Gundulf's walling which is to be seen in the south aisle of the nave of the cathedral. The angle formed by the junction of these two walls, the western and southern walls of the extension, was destroyed many years ago in order that the turn in the road leading to St. Margaret's might be less abrupt. The line of the southern wall, as it ran eastwards, is marked in Mr. Arnold's garden by a ridge in the ground where the foundations still remain. No part of the eastern wall of the output remains above ground. It seems to have joined the Roman wall at a distance of 47 yards from the south-gate.

A competent authority has suggested that this early-Norman extension may be accounted for by supposing it to be the site of the second court of Gundulf's monastic buildings. There was plenty of room, however, for the second court to the east of the principal court or cloister garth. Upon a careful consideration of all the available evidence, I feel convinced that the extension was made for the purpose of providing suitable space for an episcopal domus, or, to use the later term, the bishop's palace.

There is indirect evidence that would lead us to assume that the early-Norman bishops had a house at Rochester apart from the buildings of the priory. In the early years of Gundulf's episcopate, while King William I. was alive, the bishop and the monks enjoyed separate estates—tempore istius regis porciones episcopi et capituli separate fuerunt (Reg. Roff., p. 2). Samuel Denne (in Fisher's History and Antiquities of Rochester, p. 100) says: "That Gundulf raised a mansion here for the bishop is most probable. since he charged the manors settled by him on the monks with an annual payment of several kinds of provisions to himself and his successors, in order to enable them to keep up hospitality when they were in residence." The particulars of the bishop's Xenium are quoted in Fisher, p. 106, from Cotton. Domitian, A x 9, fol. 98, which may be compared with Reg. Roff., p. 6. Of course these quotations do not afford absolute proof that Gundulf built an episcopal palace at Rochester, but that such a palace existed in the twelfth century is certain, for of Bishop Gilbert de Glanville it is recorded that on his succession to the see he found his palaces (edificiis) in a poor state of repair, and immediately set himself to rebuild his cathedral residence which had been destroyed by fire-primo domos cathedrales, que incendio corruerant, erexit (Reg. Roff., p. 11).

The next definite notice of the palace occurs in an instrument which Bishop Lowe dated "from his new palace at Rochester" in 1459—dat. in palacio nostro novo Roff. (Reg. Roff., p. 457). At this point there is a clear correspondence between the record and part of the buildings which now stand within the boundaries of the early-Norman en-

closure. The two houses which are now in the occupation of Mr. George Payne and Mr. Rae Martin are formed within a long rectangular building which is manifestly mediæval. The north wall stands on the foundations of the Roman wall.

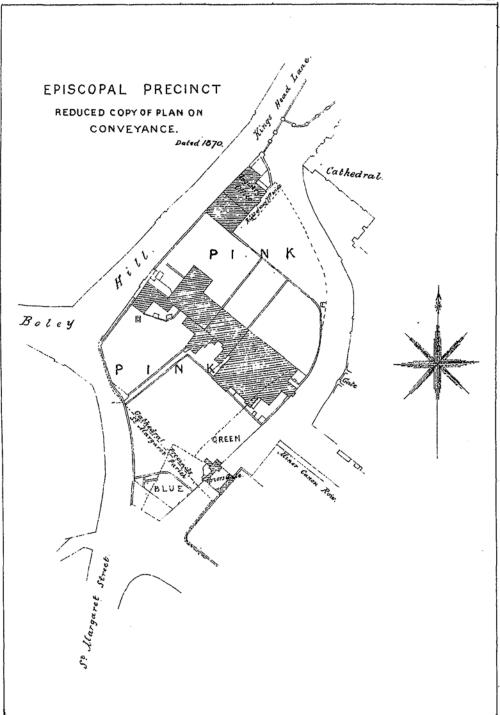
A good sketch of the south-west aspect of the building, made by Mr. Herbert Baker in 1886, was published in the seventeenth volume of the Arch. Cant. to illustrate a Paper on the palace written by Mr. W. Rye. The small window in the west gable and the similar window high up in the south wall towards the east, which from a distance look like Norman windows, are in the style of the fifteenth century, their heads being four-centred. The square-shaped window-label near to the second of the windows just described, lower down in the wall, is moulded in fifteenth-century fashion. ceiled roof which covers the whole building is four-centred These features combine to indicate work of Bishop Lowe's date. But they do not prove that the building is entirely the work of that bishop. Its north face is plastered and rough-cast and affords no evidence. Not so the west and south faces. These faces shew masonry of a composite character. It contains stones of all kinds and of all dates. Some of them must have come from buildings of earlier date than that of Bishop Lowe. One of the quoins of the excrescence at the south-east corner is made up of tufa, fire-stone, chalk, Caen-stone, and Kentish-rag, with modern brick towards the top. The amount of Caen-stone is small, while tufa is distinctly abundant. There are several arch-voussoirs of this material built into the face of the wall. They must have come from an early-Norman building which existed on or near the spot where Bishop Lowe built.

It is probable, then, that Bishop Lowe did not erect an entirely new building, but merely remodelled the structure of his predecessors. Further, it is probable that Bishop Gilbert, 170 years earlier, only repaired (with Caen-stone) a building that had been partly destroyed by fire—for the record that he rebuilt the palace, like many similar records, must be taken in a modified sense. And lastly, it is by no means improbable that the rectangular building that still exists is the framework of an early-Norman structure of

Bishop Gundulf's time, or at latest of Bishop Ralph's, erected while tufa was easily obtained and commonly used, and repaired successively by Gilbert and Lowe. The simple plan of the building and the thickness of the walls (3 feet) are what we might expect to see in an early-Norman building. It is incredible that 400 years after the demolition of the Roman wall Lowe could have raised a new building having its wall exactly on the line of the Roman foundations; almost incredible that Gilbert should have done so after only 100 years. Here, then, I am content to leave this part of the case, believing that a part or the whole of an early-Norman palace has been identified, and that the walls of the early-Norman extension were built to enclose it.

A survey of the cellars under the houses of this block points to the probability that Bishop Lowe made additions to the earlier building on its east side, using the site of the house now occupied by Mr. Arnold. The eastern part of that house is quite modern. The western part was probably rebuilt when the palace buildings were converted into separate dwelling-houses in the middle of the seventeenth century. The Report of the Commissioners of 1647, quoted in Fisher (p. 103), mentions "The scite of the palace, containing one great messuage, called the Palace, where the bishop's court is held, estimated twelve pchs.;" also "Four rooms in the tenure of Bathe," and "A gallery divided into 2 rooms & 4 chambers." It is possible that the site of some of these buildings lies along the west wall of our enclosure, for that wall contains corbels shewing the existence of buildings there at some time. It may be of interest to add that the Report also mentions "The ward, a prison, wash-house, kitchen, three rooms;" and in Fisher we read that Bishop Pearce, in the year 1760, erected an office for the use of his Register nearly on the same spot where the prison stood.

After the notes of this section of the Paper had been jotted down Mr. Arnold kindly gave me some valuable information respecting the recent history of the episcopal property. It confirms the views herein set forth with regard to the original boundaries of the bishop's precinct, and throws some fresh light upon the subject. In Mr. Arnold's



copy of Arch. Cant. (Vol. XVII., pp. 72, 73), and in his handwriting, the following notes appear:-"In the old Leases granted by the Bishop of Rochester for lives—the last dated 9th December 1826—the new houses are described as 'All those 4 tenements now and for many years past made into and used as 3 tenements situate in the Bailiwick or Precinct of the Palace Court of the Bishop of Rochester which were erected and built in the place where the Palace of the Bishop of Rochester stood till the same was demolished in the Great Rebellion.'" "The late Edward Twopenny and his mother Susanna Twopenny were the Lessees for lives of the houses formerly the Palace, College Green, and the office near, under the Lease of 1826. On the 3rd February 1827 the Bishop, Walter King, sold the reversion to the said Susanna Twopenny and Edward Twopenny for £1270 13s. 0d. In 1836 Edw. Twopenny purchased his mother's share, and in April 1870 he sold the whole to the Ecclesiastical Commissioners for £3500—it formed part of the new endowment to the Dean and Chapter."

The expression "the whole" in the second of these two notes included, in addition to the episcopal property, certain contiguous properties which the Dean and Chapter had conveyed to Mr. Edward Twopenny in the years 1836 and 1837, namely, the site of the Grammar School and the site of the old Parsonage House of St. Margaret's. This further information comes from notes endorsed on Mr. Arnold's copy of a tinted plan that appears on the conveyance. The endorsement runs as follows:—

- "Copy of plan on the Conveyance of April 1870 from Mr. Edward Twopenny to the Ecclesiastical Commissioners:
- "(1) The Pink portion—the houses on the site of the Bishop's Palace, College Green, and the office adjoining the Bishop's Registry.
- "(2) Green—the part wh. by a Lease dated 2 Sepr. 1837 was demised to the sd Edward Twopenny by the Dean and Chapter containing 3192 superficial feet.
- "(3) Blue—the site of the old Parsonage House of St. Margaret's, demised by the Dean and Chapter to the sd Edwd Twopenny by Lease dated 9th July 1836, namely that house

then taken down & was then being rebuilt in a more convenient situation."

It is necessary to remember that the Plan was made in 1870.* It was based partly upon the 10-foot Ordnance Survey Map and partly upon private knowledge of old boundaries long before swept away. In one or two unimportant particulars these boundaries seem to be incorrectly represented; but they are sufficiently correct to afford valuable information for the present inquiry. The northern face of the old parsonage house roughly shews the line of the original south wall of the bishop's precinct; and the western face of the grammar school similarly shews the line of the east wall. This east wall would naturally form the boundary line between the episcopal and the capitular property in olden times. When I had seen the Plan I looked carefully for signs of the wall in Mr. Arnold's house, and was rewarded by finding the rough core of a 3-foot wall in the wall of the staircase leading down to the cellars. Its position exactly suits the requirements of the case, and fixes with a fair degree of certainty a point on the line of the wall.

It is natural to imagine that shortly after the grammar school was established, the dean and chapter made use of a spare strip of land along the east wall of the episcopal precinct by building the necessary school-buildings upon it. They were abandoned during the headmastership of the Rev. Daniel F. Warner (1825—1842), and the site, having passed to Mr. Edward Twopenny, was merged into the contiguous episcopal property which Mr. Twopenny acquired about the same time. The early-Norman wall was demolished with The wall which now bounds Mr. the school-buildings. Arnold's gardens on the east side must be the lower part of the outer wall of the sixteenth-century buildings. It contains an Elizabethan fire-place, situate some 32 or 33 feet from the face of Prior's Gate. It can be seen only on the garden side of the wall. Both the sixteenth-century wall and

^{*} Plate III., No. 2. Mr. Arnold has kindly sent a copy of the Plan for reproduction and publication with this Paper. The words Pink, Green, and Blue have been inserted to denote the tints of the original. The names of the present occupiers will be found on the Folding Map.

the early-Norman are clearly marked in the Plan published in Fisher's History and Antiquities of Rochester.

It is evident that the true line of division between the episcopal precinct (called "Cathedral Precincts" in the Plan on the conveyance) and St. Margaret's Parish was lost when the ordnance surveyors made their notes. It ought to follow the line of the destroyed south wall of the precinct. The tongue of ground lying between the west face of the old parsonage house and the roadway, originally lying beyond the boundary of the precinct, must have been added to the precinct some time before it came into Mr. Twopenny's possession. This, however, is a matter for later notice. The parsonage house, too, will be of use in a later enquiry.

Before quitting the Bishop's Precinct a word or two must be added in reference to that part of it which lies between the old palace and the road which now runs from the west front towards Prior's Gate and Minor Canon Row, and falls within the limits of the Roman city. It comprises the front gardens of Messrs. Arnold, Payne, and Rae Martin, and the bit of ground now called College Green, on which stands the Bishop's Registry.

Bishop Gundulf's cloister and domestic buildings on the south side of the nave must have crossed the present line of the road and occupied the green and gardens aforementioned.* Bishop Ernulf's cloister was laid out on the south side of the choir: the chapter-house and dormitory forming the eastern range, and the refectory forming the southern-fecit etiam dormitorium, capitulum, refectorium (Reg. Roff.). western range of the new buildings does not seem to have been built until Bishop Gilbert de Glanville completed the stone cloister—fecit claustrum nostrum perfici lapideum (Reg. Roff., p. 633). In the interval it is likely that Gundulf's eastern range served as the western range of Ernulf's cloister; and it may be that Gilbert's work marks the time of the final demolition of Gundulf's buildings and of the acquisition, by the bishop, of part of their site. The rest of the site, near the cathedral, remained in the hands of the monks, who

^{*} The lines of Gundulf's cloister have been conjecturally plotted on the Map.

used it as a means of approach to the principal entrance to In the fifteenth century a new entrance, the cloisters. guarded by a porch, was made. The half-buried arch, seen in Canon Jelf's garden-wall, was the open entrance into the porch. Its foundation and those of the gateway within the porch were exposed in 1892, when the drains were being overhauled. One of the large blocks of cut Kentish-rag which formed the jamb of the gateway was (of necessity) taken up and deposited above ground hard by. A few voussoirs of Caen-stone, which were found at the same time and deposited with it, are no doubt the remains of the arch of the original Norman entrance. Four feet under the present surface of the road hereabouts there is the surface of a cobbled roadway, which was exposed in 1894 and traced for some yards in the direction of Prior's Gate. This was the level of the fifteenth century.

LATER-NORMAN EXTENSION: SECOND NORMAN CLOISTER.

It is not within the scope of this Paper to attempt a detailed description of the monastic buildings. I believe Mr. W. H. St. John Hope will contribute a Paper upon them to this Journal. I am concerned with them only so far as they influenced the extension of the area of the city from Bishop Ernulf could not find the space time to time. necessary for the later-Norman domestic buildings without overstepping the Roman wall, just as his predecessor had overstepped it to find a suitable site for the palace. placed the whole of his southern range beyond the wall, and in such a position that the wall formed its northern face. It is only the identification of the remains of the Roman wall that explains the great thickness of the north wall of the refectory. It is 7 or 8 feet thick, while all the other walls are from $2\frac{1}{2}$ to 3 feet thick. The discrepancy had been noticed previously, and if anyone had thought of explaining it the Roman walls might have been discovered years ago. It was not until Mr. Payne had recognized Roman masonry in the outer face of the wall of Miss Spong's garden that our excavations proved that the Roman wall at that point turned westwards in a line with the thick frater-wall. Then the thickness of the frater-wall at once became significant.

In order to make good the circuit of the city-walls where he had overstepped or broken through the ancient line, Bishop Ernulf built what may be called the wall of the later-Norman extension of the city. It ran from the south-east angle of the Roman city to the south-east angle of the Bishop's Precinct. Near the latter point it is probable that Ernulf made a gate, for Prior's Gate is mentioned as existing on the site before the gate that now goes by that name could have been built. No part of the wall stands above the present surface of the ground, but its foundations and a part of the wall itself have been tapped and laid bare at various points along the line. It was first uncovered by excavation in the Deanery grounds close to the angle of Miss Spong's garden. (Mr. W. H. St. John Hope uncovered it at this point some years ago.) Here we were able to take measurements sufficient to plot it accurately and to gauge the line of its direction. Following the line of the wall with the probe we again laid it bare in the middle of the Dean's garden, but found it difficult to take accurate measurements. It was then probed for and excavated in the midst of the clump of trees and bushes at the east end of Minor Canon Row, immediately opposite the prebendal house in which Canon Pollock now It seemed to run in a fairly straight line from point to point, and I have therefore plotted it as such. The line thus laid down runs on under the houses of Minor Canon Row towards Prior's Gate. It is not improbable that the foundations of the wall are responsible for the fissure in the east wall of Mr. Hopkins' house.

The wall is 3 feet thick. Its foundations are more substantial in character than the early-Norman foundations recently discovered under the west front of the cathedral and described in the eighteenth volume of Arch. Cant. They differ in depth in different places, probably to suit the varying nature of the ground in which they were placed. They consist of small flints and rag-stones of various sizes laid in a fairly good mortar of light colour. They are rounded at the bottom to fit the rounded shape of the ditch in which

they were laid. All the rag-stones are laid on their proper bed, except a single course at the very bottom in which the stones are all laid uniformly aslant. This peculiar feature, which was observed in both the excavations which we carried down to the bottom of the foundations, seems to have been a survival of the early-Norman method, already described in reference to that part of the castle-wall which stands on the solid chalk. Sections of the foundations and sketches of the face are given in the illustrations.* It will be noticed that in the Deanery garden near the east end the foundations are barely 3 feet deep, and that the lowest course of the wall, consisting of large rag-stones, rests upon them in such a position as to leave a slight set-off. Near Minor Canon Row the foundations are 7 feet deep; in the upper 3 feet they batter to the extent of a foot and there is no set-off. each case the surface of the ground has risen about 1½ feet; but in the excavation in the Deanery garden at a depth of 21 feet we went through a rough plaster flooring or something of the kind, which, judging from the débris of building which had fallen upon it, seems to have belonged to some seventeenth-century shanty that had been erected against the wall.

At its eastern end the wall probably turned at right angles, or nearly so, a few feet distant from its junction with the Roman south-east angle. This angle may be called the Norman south-east angle. The return wall, between the two angles, has been refaced in comparatively modern times.

Ernulf's later-Norman wall served as the southern boundary of the city until the wall of 1344 rendered it unnecessary. In the next section of the Paper we shall see that it was surrounded by a ditch in the reign of Henry III.

CITY-DITCH. EAST-GATE AND SOUTH-GATE. BOLEY HILL. Temp. HENRY III.

In the first part of this Paper reference was made to the events of 1215, when the castle was besieged and taken by King John, and to the repairs subsequently made by

^{*} Plate I., Nos. 8 and 9,

Henry III. The Close Rolls, transcribed and printed by Mr. Duffus Hardy, contain numerous entries relating to works executed between 1221 and 1227. The first entry records an allowance from the exchequer to the sheriff of the county for the repairs of the walls and for making a chapel and chamber in the castle. There are many entries which do not specify the particular work for which the allowances are made. As these entries have not been printed in extenso, a few examples are subjoined.

Under 8 Henry III. (1223) there is a precept which has the nature of a general order to the sheriff that he should cause the breaks in the castle-wall, which had recently fallen, to be repaired, and should charge the account duly attested to the exchequer—Rex Vice-comiti Kanciæ salutem. Præcipimus tibi quod breccas muri castri nostri de Roffa, qui nuper cecidit, reparari facias, et custum quod ad hoc posueris per visum et testimonium legalium hominum computabitur ad scaccarium.

Under 10 Henry III. (1225) there is an entry which mentions the machines of war made for the defence of the castle and city, and records the construction of a bretashe and drawbridge on the south side of the castle—(Computus de operacione Roffe.) Rex Baronibus suis de Scacario salutem. Computate Vice-comiti nostro Kancie xxx libras et novem solidos quos posuit per preceptum nostrum anno regni nostri nono in carpentariis qui fecerunt mangonellos et petrarias in castro nostro Roff et in rogis faciendis ad operacionem castri prædicti et ville nostre Roff. Computate eciam eidem Vice-comiti iiij libras septem solidos et decem denarios et obolum quos posuit per preceptum nostrum anno prædicto in j bruteschia et j ponte turnecc'o faciendis versus austrum ejusdem castri.

There is abundant evidence that the defences of the city as well as those of the castle were strengthened at this time—Computate Vice-comiti Kanciæ quatuor xx et decem libras quas posuit per præceptum nostrum in fio mancione ville Roff. One of the entries under 1225 has a peculiar importance; it is an order for the payment of workmen who were engaged in making the city-ditch—Rex... Precipimus tibi

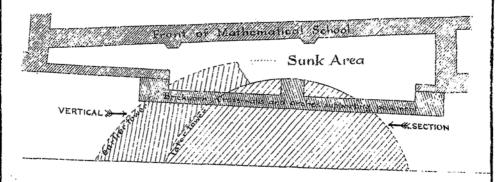
quod per visum et testimonium Willelmi Potin et duorum aliorum proborum et legalium hominum de villa Roff pacari facias operatoribus fossati civitatis Roff stipendia sua singulis septem. Elsewhere William Potyn, Thurstan de Strode, and John Anglicus are described as custodes operacionis Ville Roffensis.

Numerous entries of a general character shew that we must not expect to find all the details, nor even some important details, of the work of Henry III. entered upon the There is no record of work done at the gates of the city, the east-gate or the south-gate, and yet, in view of the fact (about which there can be little doubt) that the city was now for the first time surrounded by a ditch, there must have been some work of the kind. It would be necessary, for instance, to construct a drawbridge at the east-gate. The foundations of a tower, or rather of two successive towers, at the east-gate were laid open in 1893, when the Mathematical School was being rebuilt. I saw what there was to be seen, but thinking that the foundations were to be left open permanently I did not examine them closely. A short time afterwards they were covered up, or nearly so.* This being the case I can only hazard a conjecture that the lower foundations belonged to the Roman gate, and that the later foundations were those of one of the drum-towers constructed in the time of Henry III. in connection with the drawbridge over the new ditch. Mr. Samuel Denne, who gives some further information about the east-gate in The Kentish Traveller's Companion (p. 176), remarks (in another passage) that the gate existed almost entire in Leland's time. The drawbridge is mentioned in the title-deeds of Miss Spong's property, dated at the end of the seventeenth century. The gate and bridge must have been completely swept away a little later, for the Mathematical School was built partly on their site in the early years of the eighteenth century. I have a strong suspicion that the foundations of the towers on the south side of the gate underlie Mr.

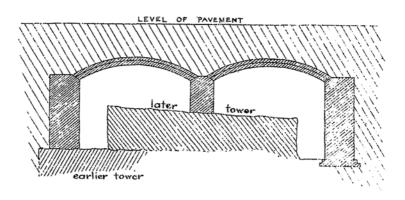
^{*} Plate III., No. 1. Plan and section of foundations at east-gate adapted from official Plans. Drawn for reproduction by Mr. R. E. Cole.

REMAINS AT EASTGATE

(FROM OFFICIAL PLANS BY G.M.L. AND R.E.COLE.)



HORIZONTAL SECTION.



VERTICAL SECTION.

Feet Peet

Leonard's cellars, and that their exact position might be discovered by slight excavation.

For the most part Henry III.'s city-ditch has been filled up and its site used for buildings. It remains in its original proportions along the Roman wall running from the site of the east-gate southwards. Walls and ditch may be seen at the back of the new Baptist Chapel in Low Lane. Originally the ditch must have run on round the Norman southeast angle of the city towards Prior's Gate—the predecessor of the present gate so-called—and thence along the south wall of the episcopal precinct. In 1344 the south-east angle of the city was thrown further southwards, and the line of the ditch altered accordingly.

If the reader, with his eye on the map, have followed the ditch thus far, and will now try to imagine how it could be carried on from Prior's Gate to the river, having regard to the castle-ditch and the south-gate of the city—the Roman south-gate,—he will be confronted with the problem which King Henry's master of the works had to solve. The first glance shews that whether the ditch were made to join the castle-ditch or whether it were carried round Boley Hill, it must of necessity enclose the old south-gate and render it useless.

This consideration in a very practical manner fixes the date of the abandonment of the original south-gate and the erection of the second south-gate (circ. 1225). For many years previous to the recent discoveries this second southgate was regarded as the original and only south-gate of the city. In The Hist, and Antiq. of Rochester (published in 1772) we read: "South-gate was near Boley Hill on the road to St. Margaret's; the hooks on which the gates hung are still in the wall at the north-east corner of Mr. Gordon's [Mr. Rae Martin's garden; the gate is about 9 feet wide; the arch was taken down in the year 1770." This passage refers to the second south-gate. The site and the exact "lie" or direction of the gateway, east and west, are clearly shewn on the Bridgewardens' Map of 1717. Studying the ground with these facts in one's mind, the only possible conclusion is that the ditch ran westwards nearly to the gate,

and then turned at right angles, or nearly so, to enclose Boley Hill; and so on to the river. If Boley Hill had previously been surrounded by a ditch, as is probable, this solution is the more likely. In fact, it seems to be the only possible solution. The only difficulty that it involves is to decide how and where the ditch was bridged in order to give convenient crossing in connection with both Prior's Gate and the new south-gate. But with this question is concerned a later wall, which is now destroyed, but which originally ran down beside St. Margaret's Street to join the wall of the episcopal precinct between the two gates; and here, for the present at least, it must be left.

Boley Hill-not the street that is now so called, but the long-shaped artificial mound on which stand Boley Hill House and the summer-house in the grounds of Satis House-is the subject of an interesting Paper contributed by Mr. Gomme to Arch. Cant., Vol. XII. It is now a part of the parish of St. Nicholas, but the fact that up to the early part of this century its inhabitants enjoyed an independent jurisdiction of immemorial origin carries thought back to the time when it lay wholly without the city. The Danes seem to have made use of it in their attack upon the city in 885. The compiler of The Anglo-Saxon Chronicle and other historians speak of their having "wrought another fastness" (aliud propugnaculum-arcem-aliam firmitatemante portas) before the gates of the city. There can be little doubt that the expressions cited refer to Boley Hill, near the Roman south-gate. The Danes were easily ousted on this occasion, but if the Danish origin of the name Boley, advanced by Mr. Gomme, be correct, it would point to their return and settlement, and this would account for the separate jurisdiction of later days.

Notwithstanding the fact that Boley Hill mound dominated the castle, it does not seem to have been included in the defences of the city until after the siege of 1215. The details of the siege are minutely recorded by the historians (e.g. Rogeri de Wendover Flores Hist., ii., 147-150, Rolls Series). Roger tells us how King John placed his catapults around the castrum or castle, how at length his sappers and miners

threw down a great part of the wall, and admitted the soldiers within the castle, and lastly how by similar tactics he gained entrance into the tower (turrim). Thus it is evident that the king was able without opposition to make use of Boley Hill as a vantage-point at the outset of the siege. Therefore its enclosure within the defences of the city naturally suggested itself to the engineers of Henry III. Perhaps the bretashe and drawbridge mentioned in the Close Rolls were intended to form means of communication between the castle and this newly-enclosed area on the south. How far Henry III. strengthened the hill by new walls it is impossible now to say. There is a line of half-buried masonry in the grounds of Satis House which looks like the remains of an enclosing wall on the river-side. The terraces of the mound are retained by walls composed of old material of various kinds. There is a large amount of it, and it is not likely that it was brought from any great distance to serve its present purpose.

The evidence seems to point decisively to the conclusion that Boley Hill was added to the city by Henry III. Matthew of Westminster probably refers to this area in his description of the siege of the castle by the Earl of Leicester in 1264, wherein he tells us that the Earl fired the bridge, and took the outer ballium of the castle—cum exteriori ballio castri (see The Kentish Traveller's Companion, p. 149).

Extension of 1344. Prior's Gate. Other Works. Temp. Edward III.

There are several well-marked building-eras in the history of Rochester. First, there is the Roman era, when the castrum which in Saxon times became a city was formed. In the early-Norman era the castle had its beginning, and Gundulf's tower and the first Norman cathedral and monastery were built. The same era probably witnessed the erection of the first bishop's palace outside the limits of the Roman area. In the later-Norman era these limits were again extended on the south, the monastery was rebuilt, the cathedral entirely remodelled, and the grand keep of the

castle raised. Then came the Early English or thirteenth-century era, during which the cathedral was enlarged towards the east and rebuilt gradually towards the west; the defences of the city and castle were improved, and Boley Hill was included therein; the east and south gates of the city were rebuilt; and the whole city was surrounded by a moat.

We have now to consider the works that were carried out during the reign of Edward III. It forms, in the history of the city, an era the importance of which seems to have been overlooked. During the middle and the latter part of the fourteenth century both the crown and the priory were busy in strengthening their position in the city. The future historian of the city will discover whether the citizens took any share in this activity. A large sum of money was spent by the king upon the castle and keep in works that were supervised by John the Prior; a new bridge was built over the river, and the walls of the city were thoroughly repaired and on the south side strengthened by a slight alteration in their lines. The king's work may be seen in the face and crenellation of the wall running northwards from the site of the east-gate, and in the bastion added to the north-east angle of the city-wall. The new wall on the south was built by the monks.

The monks seem to have been very active at this time in seconding the king's efforts to make good the defences of the city. They were active also on their own account. They built a new wall along the north side of the priory, where their property adjoined High Street, and in other directions they completely isolated themselves from the rest of the city. It would seem that they thought it advisable to guard themselves against the possibility of attack or plunder from within the city. Even within the Cathedral the same spirit manifests itself, for the screens and strong doors which guard the approaches to the monks' choir are all of this date. is possible, in view of some ill-feeling that existed between the monks and citizens in the fourteenth century in reference to the parish altar of St. Nicholas, that the monks were suspicious of the citizens themselves. It is more probable that the bands of pilgrims that constantly passed

through the city on their way to Canterbury were responsible for the feeling of insecurity which led the monks to strengthen the defences of the priory, and that this was done merely for police purposes. Precentor Venables tells us that the canons of Lincoln in 1285 addressed a moving petition to King Edward, telling him that it was impossible for the clergy to go to their midnight services for fear of being robbed, maltreated, or even murdered by evil-doers, who made the precincts of the cathedral their haunt. at Lincoln was in consequence surrounded by a wall with strong double gates in the reign of Edward II. In the same reign the close at Salisbury was surrounded by a wall; and at Wells early in the fifteenth century Bishop Beckington guarded the approaches to the close and palace by building several new gates. One and the same sense of insecurity may have prompted similar precautions at Rochester and elsewhere. Whatever the cause, it is clear that when Edward III. began to strengthen the defences of the city the monks, having completed the central tower in 1343, suddenly ceased from their task of finishing the rebuilding of their cathedral, and turned their attention to making the defences of the priory independent of those of the city. On all sides the strengthening of old walls and gates and the building of new ones was being carried on with unusual vigour. Thus a fresh light is turned upon this particular page of the history of city, castle, and priory. In this Paper some of the chief points only can be touched upon.

The year 1344 was signalized by the projection of two new walls, both built by the monks under the supervision probably of Prior John de Sheppey. One of these may be called the priory-wall of 1344, and the other the city-wall of 1344, or more simply the 1344 wall.

The discovery of the foundations of the priory-wall, which ran along the south side of High Street, was made in 1887, and the fact was recorded by Mr. Arnold in his paper on Mediæval Remains at Rochester (Arch. Cant., Vol. XVIII., p. 201). The foundations were uncovered once more in 1894 when the new buildings of the post-office were being erected. Some day no doubt the exact line of the wall nearer the east-

gate will be recovered in a similar way. The king's licence "to make and crenellate a wall, of stone and chalk, from the east-gate of the city to the gate of St. William, between the city and the garden of the prior and convent," is printed in Thorpe's Registrum Roffense, p. 552.

The new city-wall of 1344, though built entirely upon the property of the monks, once more extended the boundaries of the city towards the south. The work is that to which the authors of Fisher's History and Antiquities of Rochester (p. 3) and the writers who have followed them assign the date 1290. Mr. W. H. St. John Hope called the writer's attention to this mistake when he visited Rochester for the purpose of going round the walls with Mr. Payne—a perambulation during which several points were cleared up which before were obscure or had escaped notice. The mistake in Fisher's History is easily explained by a clerical error in substituting 18 Edward I. for 18 Edward III.

The king's charter, granting to the monks the city-ditch between East-gate and Prior's Gate, and empowering them to build a new city-wall, is printed in Registrum Roffense (p. 551). It is worth reprinting in extenso:—

Carta Edwardi Regis qua concedit Priori et Conventui Roffen. Fossatum extra Muros Civitatis Roffen.

Edwardus, Dei gratia rex Anglie & Francie, et dominus Hibernie, omnibus ad quos presentes litere pervenerint, salutem. Quia accessimus per inquisicionem quam per dilectum et fidelem nostrum Johannem de Cobham, constabularium nostrum castri Roffen. fieri fecimus, quod non est ad dampnum vel prejudicium nostrum, seu alicujus alterius, si concedamus dilectis nobis in Christo priori et conventui Roffen. fossatum nostrum extra murum civitatis Roffen. qui se extendit a porta Orientali ejusdem civitatis versus Cantuariam, usque portam dicti prioris versus Austrum, habendum et tenendum sibi et successoribus suis in liberam, puram, et perpetuam elemosinam imperpetuum. Ita quod iidem prior et conventus fossatum illud fimis et terra implere, et commodum suum inde facere possint imperpetuum, et quod loco ejusdem muri unum novum murum de petra sufficienter kernelatum, altitudinis sexdecim nedum extra dictum fossatum, et unum novum fossatum extra eundem murum, sic de novo faciendum in solo ipsorum prioris et conventus ibidem, in longitudine et latitudine competens, faciant suis sumptibus, perpetuis temporibus manutenendum et sustentandum, quodque dictum fossatum sic implendum, continet in se quinquaginta et quatuor particatas, et quatuordecim pedes terre et dimidiam in longitudine, et quinque pedes terre in latitudine. Nos volentes eisdem priori et conventui graciam in hac parte facere specialem, dedimus et concessimus, pro nobis et heredibus nostris, quantum in nobis est, eisdem priori et conventui, dictum fossatum inter portas predictas, habendum et tenendum sibi et successoribus suis in liberam, puram, et perpetuam elemosinam, pro commodo suo inde faciend, imperpetuum. Ita quod iidem prior et conventus unum novum murum de petra altitudinis predicte sufficienter kernelatum extra dictum fossatum sic implendum, ac quoddam fossatum. longitudinis et latitudinis predictarum, extra eundem murum ibidem de novo faciendum in solo ipsorum prioris et conventus, sumptibus suis manuteneri, et sustentari faciant imperpetuum, sicut predictum In cujus rei testimonium has literas nostras fieri fecimus patentes. Teste meipso apud Westmonasterium vicesimo tercio die Aprilis, anno regni nostri Anglie xviijo regni vero nostri Francie quinto. - Sub Finem antiq. Cod. MS. Membran. in Fol. penes Dec. et Cap. Roffen, cui Titulus a recentiori Manu, Manerium de Rochester.

There is evidently some confusion of description in this charter, but Archdeacon Cheetham, to whom I have submitted it, agrees with me that there can be little doubt in respect of its purport. The monks are allowed to fill up part of the ditch on the east and south sides of the city, and to build a new wall and make a new ditch. The new work, measured from East-gate to Prior's Gate, is to be 54 perches 14 feet (or 3003 yards) in length. The wall is to be 16 feet in height, built of stone and strongly crenellated. The part of the ditch to be filled up is to be 5 rod 5 feet (or 29 yards) in breadth. Such appear to be the data which have to be considered in identifying the wall, or the line of the wall, of The confusion of description lies in the fact that in the former part of the charter the measurement of 54 perches 14 feet is applied to the ditch which was to be filled up, and in the latter part to the ditch that was to be made afresh outside the new wall and on the ground of the prior and convent, this ground being doubtless part of the three acres which their predecessors acquired in Gundulf's time.

measurements are very exact and must be relied upon. It is evident that the monks did not fill up any part of the ditch along the east wall of the city nor alter the position of the east wall. It is equally evident that they must have begun their new wall at the south-east angle of the city, that is to say at the Norman angle.* From that angle there is a post-Norman wall running southwards for a considerable distance. This wall or part of it must be the eastern wall of the extension of 1344. Now, if a distance of 29 yards be measured from the Norman angle it falls in the midst of a breach in the Beyond the breach the wall assumes a different wall. character, which suggests that it is of later date than the portion between the Norman angle and the breach. It is natural therefore to assume that the wall of 1344 turned westwards in its course towards Prior's Gate at the 29 vards point. That a wall did actually exist at one time along this line was suggested long ago by Mr. Beale Poste, and recently we have been able to trace its foundations at various points. Now, if the distance from the south side of the east-gate to the 29 yards point, and thence to Prior's Gate, be measured on the ten-foot Ordnance Survey Map, it will be found to be as nearly as possible 300 yards. So exactly does this measurement tally with the conditions laid down in the king's charter to the monks that there can be little hesitation in affirming that the lines of the wall of 1344 have thus been recovered.

But there is another consideration which confirms and seems to establish this view beyond doubt. Prior's Gate is on this line, and, to judge from its architectural features, must have been built about the middle of the fourteenth century—it cannot be earlier. It must have been built in connection with the wall of 1344, and doubtless it replaced the earlier Prior's Gate mentioned in the charter and existing therefore when the charter was granted. The walls of a

^{*} To avoid confusion in the mind of any reader who is acquainted with the views of earlier writers, I may here say that I am constrained to reject the theory that Henry III. either built or rebuilt a new wall along the south side of the city. There is no documentary evidence of such work having been done, though, it must be admitted, the absence of such evidence does not in itself afford sufficient ground for rejecting it.

still later extension of the city, which will be described below, enclosed this gate, and must have rendered it useless from the time that that later extension was made. Hitherto that later extension of the city has been regarded as the work of 1344; but the authorities who have adopted that view (which was first promulgated in Fisher's History), regardless of the want of agreement with the measurements given in the charter, have overlooked or been ignorant of the fact that it is manifestly absurd to fix 1344 as the date of the walls which enclosed and rendered useless the existing Prior's Gate, since the architectural features of the gate point to 1344 as the earliest possible date for its erection. This consideration alone is sufficient to compel us to give a post-1344 date to the later extension, and to assign 1344 as the date of the wall that lines with, and was manifestly connected with, the existing Prior's Gate.

The wall herein assigned to 1344 has been destroyed throughout its whole length from east to west; only the gate remains. On the east side of the gate the marks of the wall are still visible. They prove that the wall was 5½ feet thick and about 16 feet high, and that it was crenellated. Above the vault of the gate there is a guard-room, and from the room a narrow door formerly led on to the ramparts. The doorway is blocked.

The demolition of the wall must have been completed in 1725, the year in which Petty Canon Row was built. Sometime before that date a house stood against the wall near its junction with the gate. One of the buttresses of the northwest corner of the house was discovered in 1894 underlying the roadway. The quoins were of brick, and portions of shafts of Ernulfian marble were embedded in the masonry. The house was that which, at the time of the establishment of the post-Reformation Dean and Chapter, had been assigned to the holder of the sixth prebendal stall. It must have been formed in some monastic building which before the dissolution was closely connected with the kitchen. It was in a ruinous state in 1661, when Archdeacon Lee moved from it into the house which Archdeacon Cheetham now occupies.

The foundations of the wall have been traced throughout most of its course from Prior's Gate to the south-east angle. In the course of our investigations the foundations were struck with the probe in many of the gardens of Minor Canon Row. In the shrubbery on the east side of the gardens, opposite Canon Pollock's house, Mr. Payne dug a trench across the line. The solid foundations had been removed, but the foundation-ditch full of building-refuse was clearly marked in the trench. Following the line further eastwards its exact position was recovered in Canon Pollock's garden, where it was defined by a difference in the colour and quality of the grass, easily distinguished when the grass first grew after being sewn afresh at the time when a cinder tenniscourt was converted into lawn. Passing through the quickset hedge that separates the Canon's garden from the Deanery garden the foundations of the wall were traced once more with the probe. They lie under the path, the borders of which are so gaily decked with Dean Hole's flowers. presence in the ground accounts not only for the peculiar position of this path in the garden, but also for the fact that the path forms a ridge, the ground falling from it on both sides. The ridge runs on as far as the old sundial, which is marked in the Ordnance Map, and there it suddenly ceases and the probe fails to strike the foundations. It is likely therefore that from this point up to the east wall, a distance of some 15 yards, the foundations were extracted for the sake of the material by the builders of a post-1344 wall.

The line, if carried on, strikes that of the east wall just where the break in it occurs. This has already been mentioned. It is probable that a bastion stood at this corner, like the bastion of the same period which Edward III. built at the north-east angle of the city. This conjecture is confirmed by the peculiar direction of the return wall towards the Norman angle. For this eastern bit of the wall does not line with the earlier east wall of the city. In fact the 1344 angle juts out into the line of the ditch. This device would enable the defenders of the wall to enfilade the approach to the east-gate from a bastion situated at the angle.

The eastern portion of the 1344 wall seems to have cut through the Norman south-east angle, and to have run on to its junction with the Roman angle in such a way as to leave the outer face of the small bit of Norman return-wall standing intact against it. If, as I believe, this is the true solution of the peculiarities of line which are seen just here, the Norman face must have been rebuilt at some time, for the present face is clearly modern. The actual line of the inner face of the 1344 wall near the Roman angle and its junction with that angle, both underground, were first of all traced accurately with the probe—an illustration of the value of that means of enquiry-and afterwards confirmed by digging, carried out by Mr. Payne and the writer, in Miss Spong's garden. The results, carefully measured and sketched, are shewn sufficiently clearly in the map. The Normans seem to have left the foundations of the Roman wall in the raised ground inside their new line. The builders of 1344 built up to these foundations, and then rounded them off by digging out what remained to the west of the point of junction.

The 1344 wall is composed of materials similar to those of the Edwardian portions of the castle-wall. The core is chiefly chalk, the face Kentish-rag with a small amount of flints. The mortar, however, is not so good; it is more sandy, having a much smaller proportion of lime. There is also a decided difference in the character of the facing: the ragstones are thinner and longer. The excavation in Miss Spong's garden revealed a foundation of blocks of chalk. is quite possible that the monks built this wall in a less expensive manner than was adopted in the king's work at the castle. But this remark does not apply to the Prior's Gate, which is strongly built and is very much like the work of the towers on the castle-wall. The architectural details of Prior's Gate are slightly earlier in character than those in the wall-tower. The vaulting ribs are four-centred, and meet in a boss that is adorned with a voided circle in the centre. The lower order of the great arches is four-centred, the upper order and label are segmental. The massive square jambs are chamfered with a slight hollow and dagger-stop. The window is a wide opening with two-centred head.

The line of the 1344 wall is that which Mr. Beale Poste in his Paper on Roman Rochester (Arch. Cant., Vol. II.) assumed to be the line of the original Roman wall. He imagined that that Roman wall was rebuilt by Henry III. A reference to his plan shews the awkwardness of the assumptions which through lack of adequate evidence he was compelled to make. The Romans could never have built their east wall with such extraordinary irregularities of line, nor could they have built their south-gate so much askew without apparent reason. No explanation of these peculiarities was hazarded. Apart from this the Paper cited is valuable and vivid in its description of the Roman castrum.

Post-1344 Extension of City.

At some unknown date the monks built a new wall to enclose a portion of their land which lay beyond the 1344 This work has been referred to above as a "later extension" of the city. It is not likely that the monks in building this new wall were consciously extending the boundaries of the city, but, as it resulted in the abandonment and destruction of part of the 1344 wall, the post-1344 wall ultimately came to be regarded as the city boundary. In the eighteenth century the post-1344 enclosure was known as the grange yard of the priory. Its eastern wall and part of its southern wall are still standing. The eastern wall is a continuation of the older walls along the east side of the city. It crosses the ditch of 1344 (the old waterway being spanned by a rude two-centred arch which is now blocked). and runs on to a ruined bastion at the south-east angle of its enclosure. Thence it turns westward, and forms the boundary-line between the Deanery grounds and the Vines.

The western boundary of the extension has been swept away altogether and of late years lost sight of. It is marked by a dotted line in the plan of the city published in the earlier editions of Fisher's History and Antiquities. This plan proves that it ran down on the east side of St. Margaret's Street to a point a little to the west of Prior's Gate, where it must have abutted upon the wall of the episcopal

precinct, which previous to the extension under consideration formed part of the southern boundary of the city. The relative positions, however, of Prior's Gate with its adjoining buildings and the buildings on Boley Hill are slightly misrepresented in Fisher's plan: the angle formed by the junction of the two dotted lines at "e" ("the Grammar School") is too obtuse; it should be nearly a right angle.

The line of division between the capitular property and the episcopal property, as marked in the plan attached to Mr. Twopenny's conveyance, accurately fixes the point where the post-1344 wall joined the older city-wall, and roughly indicates the line on which it ran southwards from that point. When the conveyance was made a little bit of ground on each side of the wall near the junction had recently been added to the episcopal property. That on the east side is marked as the site of the Parsonage and formerly was capitular property. Possibly the house was occupied by the Vicar of St. Margaret's for a time during the latter part of the eighteenth century, for when Fisher's History was compiled the old vicarage, near the Church, being irreparable. had lately been taken down and provision was being made for a new vicarage. The peculiar plan of the house suggests that it had been built to fill an odd bit of ground lying between the post-1344 wall and Prior's Gate. Before the wall was built the site of the house may have formed the approach from Prior's Gate to the bridge; and the bit of ground on the east side of the line of wall may have formed the approach from the south gate. The bridge would thus lie halfway between the two gates. One can imagine the capitular property running up to the east side of the bridge. and the boundary wall being built alongside the bridge. The building of the wall would necessitate the filling up of the ditch at this spot, and probably marks the date of the substitution of a level road for the bridge.

The wall is plainly depicted in Dr. Harris's sketch of Rochester, published in his History of Kent (1720). The sketch is taken from Boley Hill, looking east. The wall appears running at right angle to the line of sight. The sharp right-angled turn which existed in the road from Boley Hill to St.

Margaret's is apparent. The wall is crenellated, and behind it the tower of Prior's Gate rises into view.

The wall was demolished early in the present century. Its destruction was involved in the changes that attended the abandoning of the old Grammar School and the Parsonage House, the apportioning of a fresh site for the buildings and play-ground of the new Grammar School, the diversion of the line of road whereby the sharp turn near the site of south-gate was eased and the discarded bit of the roadway added to the episcopal property, the addition of the site of the old Grammar School and Parsonage to the episcopal property, and the building of stables by Mr. Twopenny at the south end of the property thus enlarged.

The wall was certainly standing at the end of the eighteenth century, for not only is it indicated in Fisher's map, it is also mentioned by Mr. Samuel Denne in The Kentish Traveller's Companion (p. 151). "Returning down St. Margaret's Street," wrote Mr. Denne in 1779, "and turning on the right through a breach in the wall, we enter the precincts of the priory through the gateway, anciently styled the Prior's Gate—an ancient stone wall which bounded the grange yard of the priory to the west." Although the general direction of the wall has thus been recovered, it cannot be laid down on the map with absolute certainty. It is impossible to say whether it ran up the east side of St. Margaret's in a straight line or with a slight curve, or whether the modern wall which bounds the King's School play-ground rests on the old foundations or not.

About 100 yards from Prior's Gate, a little above the turning into Love Lane on the opposite side of the street, the modern low wall ends and a much higher one runs on in continuation of it. Just where the high wall begins it is built up against the end of a substantial old wall which runs eastwards from it and separates the ground of the King's School from the Archdeacon's garden. This wall is undoubtedly the south wall of the post-1344 extension. At a distance of some 30 yards from the street the wall diverges slightly from its straight line towards the east and suddenly becomes thinner. If the wall at the south-

west angle of the enclosure were still standing, it would probably explain these peculiarities. There may have been a good purpose in making the wall thicker and stronger near the angle.

Following the line of the thinner wall from the Archdeacon's garden eastwards it disappears from view in the Archdeacon's house and is recovered in Canon Cheyne's garden, where it is plainly marked by a ridge in the lawn. The Archdeacon's house was situated in the Vines on the Canon Cheyne's house was built south side of the wall. on the north side of the wall. Both these houses are old: the one was demised to the Archdeacon in 1661 and has since been enlarged; the other was demised to the Provost of Oriel early in this century. The wall with which they were originally connected lines exactly with the wall which separates the Deanery garden from the Vines. Deanerv side the wall has been robbed of much of its face and the core is exposed. Like most of the later walls of the city and castle the core is composed chiefly of chalk, while the face is made up of Kentish-rag and flint. is a blocked gateway in the wall. Its jambs consist of re-used materials such as tufa, Caen-stone, and the like. Probably the wall was crenellated at one time. The southeast bastion is in a ruinous condition, the whole of its facing on the inside having been stripped off, while the outer face has been renewed. The openings, three in number, blocked externally and much knocked about on the inside, are lined with chalk ashlar and have slightly pointed heads. attempt was made to surround the post-1344 wall with a ditch.

Boundaries of Precincts. Gates. Prebendal Houses.

One wonders, indeed, whether the walls of the post-1344 extension are worthy of the name of city-walls. From the earliest historical times the land on the south of the city belonged to the cathedral Church, and these walls seem merely to express a desire on the part of the monks to bring more of their land into close connection with the priory. The area of the priory was restricted and the monks would

feel keenly the want of space for their varied needs. boundaries of the parish of St. Margaret were certainly not altered by the later additions which lie wholly within that parish. These boundaries, however, are curiously irregular and undefined, and in this we see the result of traditions of the earlier extensions; for, when the time arrived for the boundaries to be marked, the traditional influence of the extensions remained in force though the exact lines of the The ordnance surveyors doubtless walls had been lost. gathered what information they could and made the best of it. In the light of recent discoveries one can account for some of the variations and irregularities, but others remain insoluble. As laid down in the ten-foot Ordnance Map the division between the cathedral precincts and St. Margaret's parish starts at the site of the second south-gate and runs "undefined" to a point a few feet south of Prior's Gate. Here we see the influence of the old wall between southgate and Prior's Gate, along the site of which the boundary line manifestly ought to run. Thence probably it ought to encircle Prior's Gate and go straight through the gardens of Minor Canon Row, following the old line of the 1344 wall. This is the traditional line, but the surveyors mapped the line as enclosing the whole of the gardens and running round them down to the north-east corner of Minor Canon Thence the boundary line, disregarding in an unaccountable manner both the line of the 1344 wall and that of the Norman wall, crosses the road and runs down the Deanery stable-yard to touch the original Roman line. From this point it is marked as "undefined" and runs right through the stables and across the Deanery garden to the old sun-dial therein, and thence again to the south-east bastion, returning northwards along the east wall of the city. In fact in olden times neither the monks nor the parishioners had to consider boundaries for rating purposes, and their exact definition did not trouble them. The present definition is clearly irrational. A more sensible one would be to run the line from the site of the later south-gate up the left side of St. Margaret's Street, along the left side of Vines Lane, down the west side and along the north side of

the Vines. This would do away with a confusing anomaly by including the houses of the Archdeacon, Professor Cheyne, and Canon Pollock in the Cathedral precincts.

On the west, north, and east the cathedral precincts are contiguous with the parish of St. Nicholas. Originally the boundary on the north ran in a straight line from College gate to the south side of the east-gate. In course of time the Dean and Chapter alienated much of their property on the boundary, which formed the south side of High Street, and when St. Nicholas parish began to collect rates for various purposes the officials claimed from the holders of the alienated property. In one case at least the holder resisted the claim, and others may have done the same; but at length they gave way and by their submission practically included their property in the parish of St. Nicholas. This seems to have been the process by which the boundary was altered. The houses from College gate to the east end of No. 74 are in St. Nicholas; thence to the alley beyond No. 84 the boundary runs along the side of High Street; and thence, again, it runs behind the houses and along the wall of the Deanery garden.

On the west side the division between the precincts and the parish runs from College gate along the west side of the burial-ground in front of the cathedral and so up to the site of the later south-gate. From the south-gate the boundary of the parishes of St. Margaret and St. Nicholas runs round Boley Hill to the river. Thus the whole of Boley Hill and the castle area is in St. Nicholas. Formerly they were part of St. Clement's parish, which extended across the High Street and included the north-west quarter of the city. Before Boley Hill was included in the city it must have formed part of St. Margaret's parish. A thorough elucidation of the history of the shifting parish boundaries would form an interesting chapter in the history of the city.

The gates of the precincts and the prebendal houses demand some further notice. St. William's gate, mentioned in the licence to crenellate granted to the monks in 1344, formerly stood nearly at the bottom of the passage which leads from High Street to the door in the north transept of the Cathedral. It must have been built for the convenience

of pilgrims to St. William's shrine in the early years of the thirteenth century. "When the north transept of the nave was building" (cir. 1250), writes Mr. Samuel Denne (K. T. C., p. 167), "it was termed the new work towards St. William's gate." Nothing is known of its size and plan.

Deanery gate, formerly known as sextry or sacristry gate, guarded the approach to the priory on the north, and probably gave access to the prior's lodging as well as to the sacrist's apartments and garden. In the inner arch the segmental and four-centred forms are combined. The outer arch is four-centred, and its jambs consist of two hollow chamfers which rise from the sides of a single large dagger-stop. The gate was evidently built in the reign of Edward III., at a slightly later date than Prior's Gate. Adjoining the gate is the house which was assigned to the third prebendal stall, the holder of which obtained special licence in 1832 to live in the fifth prebendal house. On the suspension of the fourth prebendal stall on the death of Dr. Irving in 1857, the third prebendary moved into his house, which is that now occupied by Canon Jelf, the vice-dean. of the prebendal stalls-originally there were six, two of which were suspended by the Cathedrals Act of 1840-was suspended in the year in which the Act was passed. houses of the first and second stalls ranged along the High Street in the space that is now open. They were pulled down in 1841, in which year Dr. Griffith, the holder of the second stall, moved into the house in which his successor, Canon Pollock, now lives, and which was then rebuilt.

College gate, sometimes called Chertsey's gate and more appropriately Cemetery gate, was built in the fourteenth century. It seems to be slightly later in date than Deanery gate. The arches are four-centred; the inferior order in each case is corbelled; and the slightly chamfered edges of the outer order seem to have risen from dagger-stops, which, however, have been worn away. It gave the parishioners of St. Nicholas access to their cemetery and to the west door of the cathedral. After the removal of their altar from the nave of the Cathedral to their new church, consecrated in 1423, the mayor and corporation retained and still retain the right to enter the Cathedral by the west door. The

publicity resulting from the use by the parishioners and pilgrims of the Cemetery gate and St. William's gate, giving them access to the west and north sides of the church, rendered another gate a necessity. It guarded the western approach to the priory. Mr. Denne writes (p. 153): "The almonry of the convent was at the south-west extremity of the church. It is now the house of the fifth Prebendary. There was, within memory, a gate adjoining to the gable end of this house which enclosed this part of the precinct, now called College Green." Early in the present century the Provost of Oriel, who held the fifth stall, moved into the house near the Vines which is now occupied by Professor Cheyne. The old gate-house appears in Coney's drawing of the west front, published in 1814. Both the almonry and gate-house disappeared long ago. Some posts which crossed the road between the registry and the corner of the burial-ground and barred the way to carriages approaching from King's Head Lane (Doddingherne Lane) were removed in 1887 with the consent of the Dean and Chapter. When the roadway was opened up by the Gas Company in 1894 the foundations of various walls were cut through. most interesting of these was a three-foot wall running south from and making right angles with the south wall of the Saxon church. This must be a wall of pre-Norman date. Another line of foundations indicated a wall that seems to have run beside the road from the almonry gateway towards the fifteenth-century "bishop's gate" or entrance into the cloisters. Two narrow walls, the remains of which contained a large voussoir of moulded Caen-stone, of post-Norman date, seemed to cross the wall just described not far from the small door which leads to Canon Jelf's house. The foundations of the buttress of the destroyed house of the sixth prebendal stall have already been mentioned.

One of the most interesting of the post-Reformation walls in the precincts is that which seems to have been built immediately after the dissolution to separate the Deanery garden from the rest of the precincts. It emerges into view from behind the Deanery stables and runs in front of Canon Pollock's house towards the last city-wall. Towards the

west end it has been rebuilt; and the east end must have been pulled down when Professor Cheyne's house was built. The intermediate part contains many remnants of the monastic buildings which supplied the necessary material, quantities of faced Caen-stone, two pieces of worked Ernulfian marble, a long slab of Purbeck marble, and other interesting stones.

Another wall that is worth preservation at all hazards seems to be the remains of the east wall of the refectory. Together with another and more modern wall, built parallel with it, it forms a slype or passage of communication between the cloister garth (Canon Jelf's garden) and the south part of the precincts.

In conclusion I have to thank many people who cannot be severally mentioned by name for the help they have given in the course of the investigations necessary for the preparation of this Paper. Householders have often welcomed an invasion of their premises, their gardens and cellars. The Dean and Miss Spong have been long-suffering in allowing excavations to be made in their grounds. Mr. George Payne found means for the excavations and co-operated in the elucidation of the later-Norman wall and of the wall of 1344, as well as of the Roman wall in which he is more especially interested. I think I ought to say, however, that I hold myself alone responsible for the views advanced in this Paper. For the Map I have invoked the willing aid of Mr. R. E. Cole, surveyor, whose means of access to the official plans of recent buildings and trained skill in draughtsmanship have enabled him to make a Map which is a valuable contribution to local topography. I have myself measured and plotted all the important portions of the walls, and Mr. Cole has carefully transferred them to his Map. Mr. J. C. Trueman's special knowledge of the works executed in the castle-grounds twenty years ago has been very useful, and Mr. Smith, the caretaker, has been ever ready to lend a helping hand with his ladders. Finally I may say I do not imagine the subject of the city and castle walls is exhausted: it may be that some of the conclusions herein set forth may have to be abandoned at a future date.