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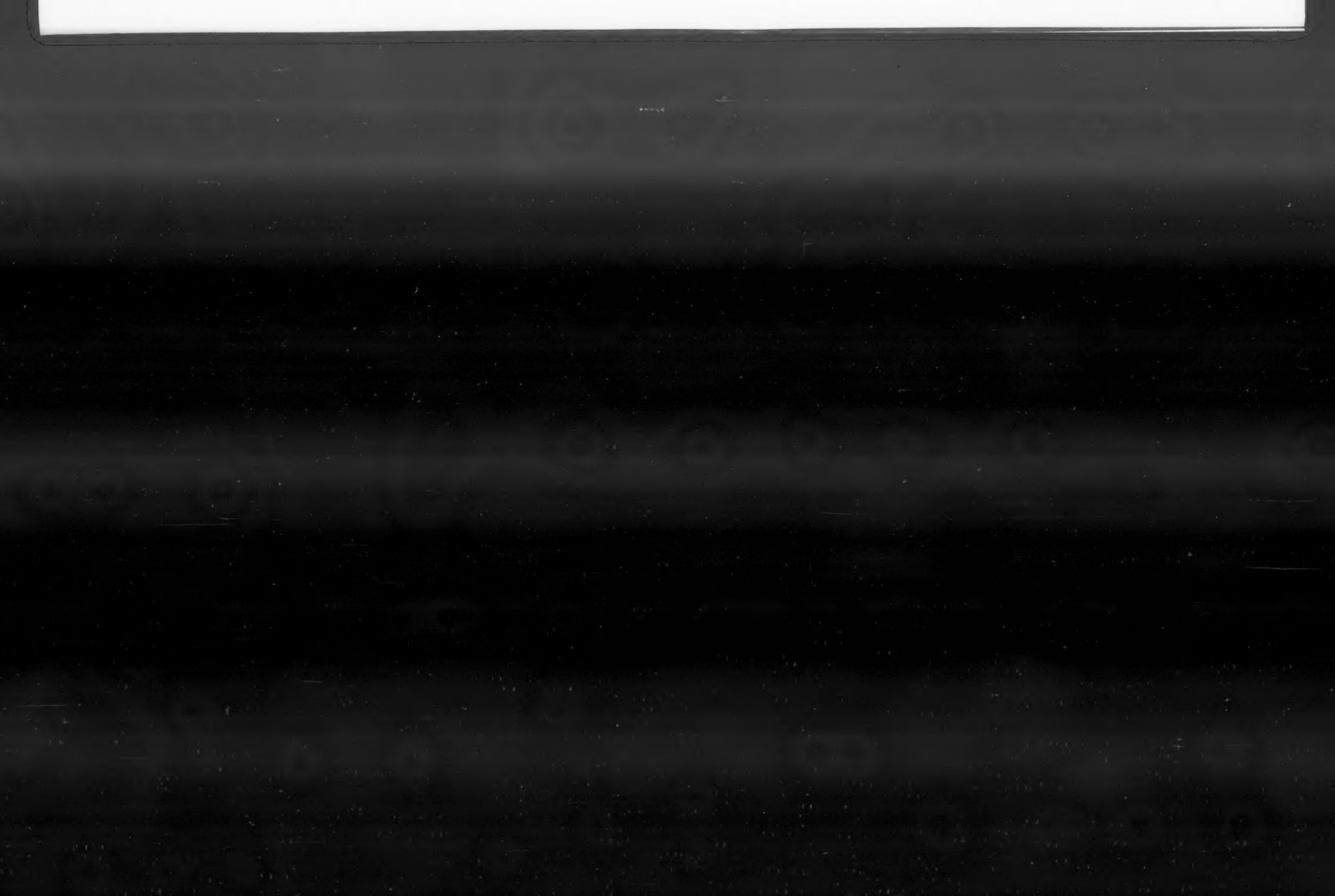

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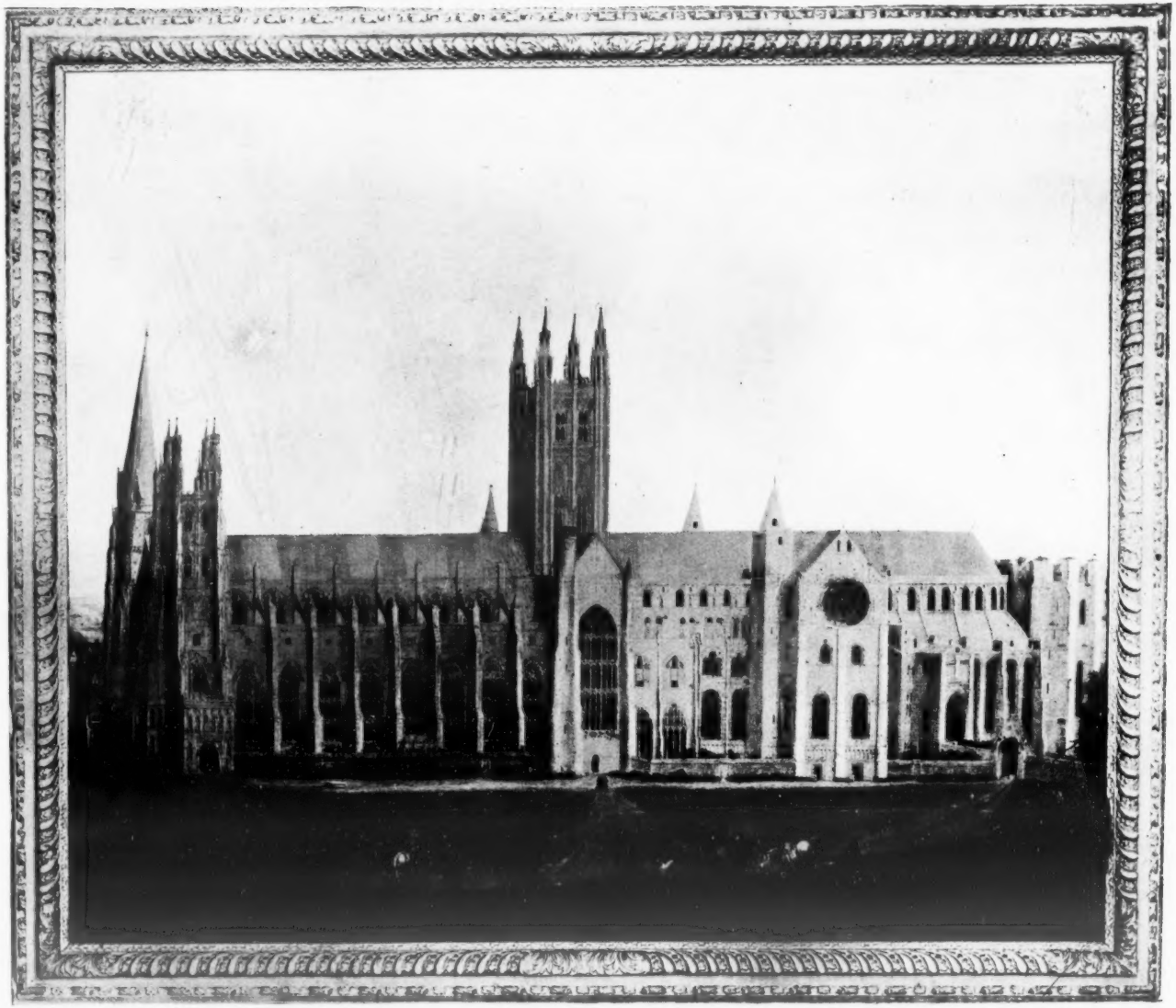
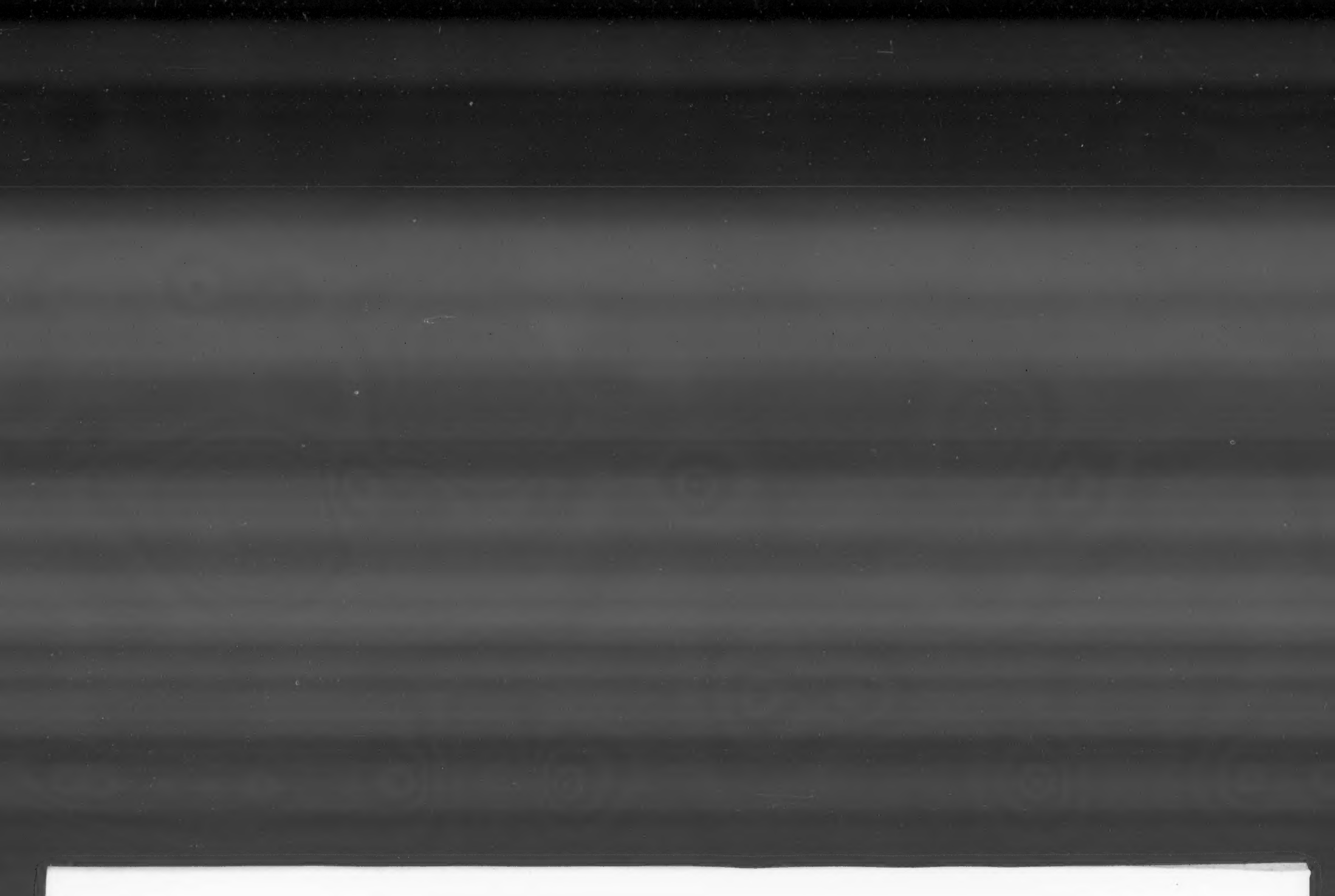
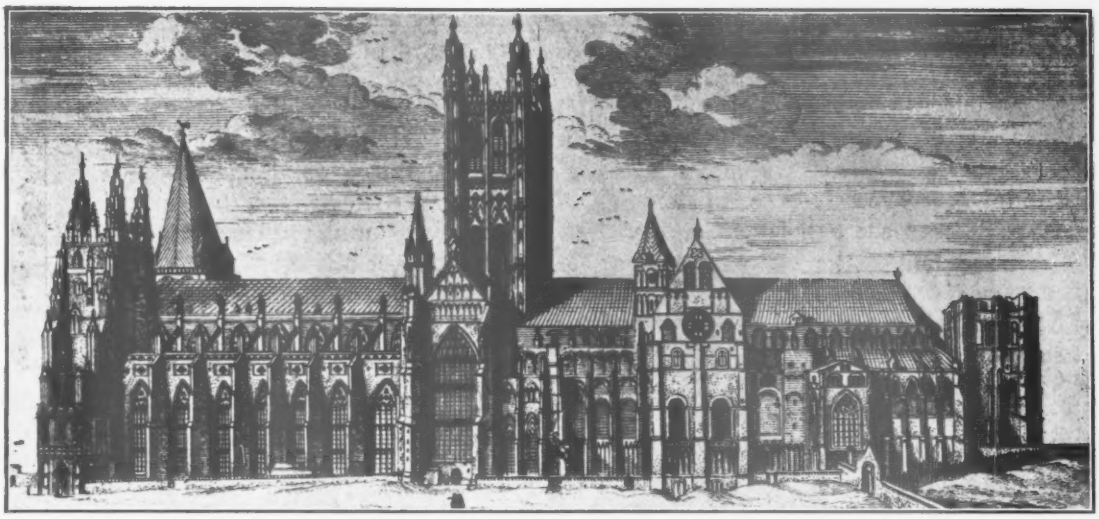


(From the Painting at Lambeth Palace)





(From Dart's Canterbury.)

The Three Towers of Canterbury Cathedral.

THE central tower of the cathedral, which existed from the time of Lanfranc probably to that of Archbishop Chicheley (1414–1443), was known as the Angel Steeple. The Norman drawing in the Canterbury Psalter, presented by Dean Nevile, Master of Trinity, Cambridge, to the library of that college, shows it crowned by an angel, and Gervase confirms the drawing in his history. Thence, no doubt, the term. The two western towers of Lanfranc were capped with *fleurons* in the shape of cocks.

In consequence of its condition of decay the Norman nave was demolished in 1378 by Archbishop Simon of Sudbury (1375–1381), but his violent death in 1381 interfered with the execution of the rebuilding scheme, which finally took thirty-seven years to accomplish.

It seems evident that in the work of demolition the three towers of Lanfranc were spared. As is known to most of those who interest themselves in our cathedrals, Lanfranc's north-west tower survived until 1832, when it gave way to a taste for playing with the antique on the part of the then architectural adviser to the cathedral authorities, a body which seems, in days so different from these, to have had more money than it knew what to do with.

The interior of the south-west tower, or Tower of St. Dunstan, retains much of its Norman masonry, whence it appears that the former tower must also have been spared, and the new design, including the massive buttresses, merely faced on to the old work.

As regards the central Norman tower, we find as late as 1408 Archbishop Arundel (1397–1414) presenting a peal of five sweet-toned bells to the Angel Campanile, which suggests its continued existence to that date. And a careful examination reveals the fact that the walls of the Norman tower still exist as high as the second gallery of the lantern ; but they are from Anselm's period—not Lanfranc's, whence we infer that Lanfranc's Tower was comparatively low and was raised under Anselm. The Norman walls remaining are 4 ft. 3 in. thick, and within them is the 15th century gallery, increasing the total thickness to 7 ft. 7 in. There is every appearance that the Norman work was also galleried or arcaded on the inside, and 4 ft. 3 in. was not, therefore, the total thickness of the earlier wall.

With Prior Chylynden's (1390–1411) works to the substructure of the Angel Steeple let us now concern ourselves. They consisted in recasing the Norman piers with new masonry in the then new manner. I think it is certain that these piers must have been retained, and exist inside what we now see. It is clear that by a clever feat of engineering he succeeded in maintaining the Angel Steeple during the construction of the new tower arches, which were inserted considerably above the level of their Norman predecessors in a singularly masterly manner. The deftness of their design can best be seen from the lantern gallery. The interpenetration of the label mouldings is cleverly managed by striking the transeptal arches with a quicker radius than those of the nave and choir.

It is interesting to note that Lanfranc's western towers were also both maintained while a new angle pier and new arches were underbuilt beneath each of them. We know from many

Photo: Kinninmont and Taylor.

THE INTERIOR OF THE LANTERN. (Showing the change of work.)

examples how skilful the mediæval builders were in the insertion of arcades in old walls carrying weight, and in overcoming the engineering difficulties connected with underbuilding. But what Chylynden accomplished in these examples was a master-stroke. The maintenance of the Angel Steeple explains Archbishop Arundel's gift to it of "the Arundell ryng" precisely at a time when—had demolition preceded rebuilding—there could have been no Angel Steeple in existence.

It helps to explain also the following passage from the Book of John Stone, monk of Christ Church (1415–71), bequeathed by Archbishop Parker to his college of Corpus Christi, Cambridge, and now No. 417 in the Corpus Library: "Anno dñi M° cccc^{mo} xxxiij° lr̄a dm̄calis (*sic*) D positus est p̄mus lapis novi op̄is Campanil̄ Angeli ij° nones Aug." (Upon August 4th, 1433, the first stone of the new works of the Angel Campanile was placed.) This was during the priorate of Molash (1428–38).

This illuminating passage, seemingly overlooked by writers upon the Cathedral, sheds a flood of light upon the history of the Tower, which has hitherto been supposed to be a work of the very end of the century, whereby frequent comment has been made upon its peculiar excellence of design, taking into consideration its late date. I venture upon the following revision of its accepted history.

It is a little difficult to assign the authorship of the work of the inner gallery and the lower half of the lantern, both of which are distinctly anterior to the works above them. My impression is that Chylynden completed the new arches and the spandrils over them up to the internal stringcourse under the gallery, maintaining, of course, above this point the original Angel Steeple, which served to stop the new weather roofs of nave and transepts, but much of which must have been swamped and the whole dwarfed in doing so.

From this point the design proceeds upon broader lines than Chylynden has accustomed us to in any of his work. The detail is more simple and more dignified, and I am disposed to assign the design of it, excepting the tops of the four turrets, to Prior Molash's architect, and the actual execution of that part from the stringcourse aforesaid inside as high as the first stringcourse outside, comprising the lantern gallery and somewhat more than half of the lantern over it. The method of execution of this work differs unmistakably from that above it, the line of demarcation being quite distinct to a close inspection, as the illustration shows. It is clear that the upper part only of the Angel Steeple need have been removed to allow what I venture to call Molash's work to proceed, and we find, both externally and internally, old Norman stones reused in the ashlar work, as might have been expected. To the builder of this section is of course due the plan of the characteristic and dominating hexagonal angle turrets which are devised to give so skilful a play of light and shade to the tower. The hexagon being placed across the angle, each side of the hexagon next the angle makes an angle of 15° with the adjoining side of the tower, as the plan more clearly indicates.

It cannot be supposed that this portion of the work, begun in 1433, took very long to execute, and the truncated tower rising just above the roofs must have been temporarily roofed over when, for

reasons unknown, the work was interrupted, and in this state it must have remained until either Prior Sellyng 1472–95) or Goldston II. (1495–1517), under the ægis of Cardinal Archbishop Morton (1486–1501), set it in motion again without the slightest break in the continuity of the design or details, but with a distinct difference in the method of handling the materials.

We know that Goldston proceeded also to the completion of the new design for the south-west tower, which he found carried only as high as the aisle. The lower part has been assigned to Chylynden, but here also our chronicler, John Stone, sheds a ray of light by recording the death, on December 29th, 1425, of John Grove, priest, who, "deambulans incaute supra valtas ecclesie in novo opere campanilis australis," fell upon the pavement in front of the entrance to the church, broke his head, was picked up half alive, conveyed to the infirmary, and died the same night. Prior Wodnesberg (1411–27) was thus carrying forward his predecessor's operations.

The upper part of St. Dunstan's Tower must not in its present state be taken as a fair index of Goldston's design. It was, no doubt, in a condition of advanced superficial decay, and much of the character of its detail lost, when it was in great part renewed in the thirties by the rebuilder of the north-west tower. Much of the detail is thus doubtful, and important parts bear but little relation to the original conception. But even with these allowances this western tower must always have been in conception and detail vastly inferior to so-called Bell Harry Tower, and it is a reasonable surmise that the upper part of the latter owes its excellence to the fact that it was carried through upon the design of 1433. As well as when he himself was prior it is related that Goldston carried out the works in part under Prior Sellyng, his predecessor, when he must have been the subordinate in the monastery to whom the execution of its architecture was assigned. There seems, therefore, some ground for supposing that he was actually the architect who superintended the work.

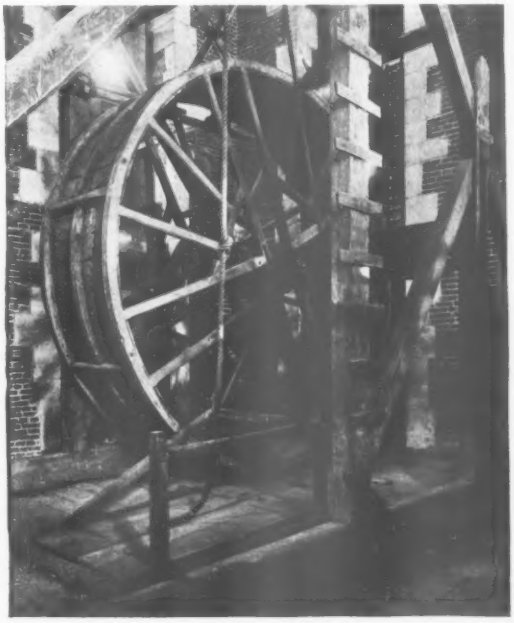


Photo: Kinninmont and Taylor.

THE BRICK-LINED BELFRY AND TREADMILL.

Photo: Kinninmont and Taylor

CARDINAL MORTON'S REBUS.

We read in "Anglia Sacra": "Turrim satis excelsam Angyll Stepyll vulgariter nuncupatam testudine pulcherrimâ concameratam ac opere decenti artificiose undique sculptam et deauratam, cum fenestris vitreatis satis amplis et ferramentis . . . egregie erexit et magnifice consummavit."

Chylynden lined the interior of his staircases with stone, and it is significant that we find the first few feet of the tower staircase which occupies the south-west angle above the gallery so lined. Thence upwards to the top of what I have called Molash's work, the lining is of brickwork of a charming description. This is capped with one course of stone, and from this point Goldston's work rises, lined with bricks of an equally good quality but of larger size, affording a very different appearance.

The whole of the top stage of the tower is also lined with the same bricks. The care and interest devoted in those days to architecture is exemplified by the quite supererogatory patterning out with black heading courses the inner lining of the tower, which could never have been seen but by workmen.

I shall presently refer to some weaknesses of

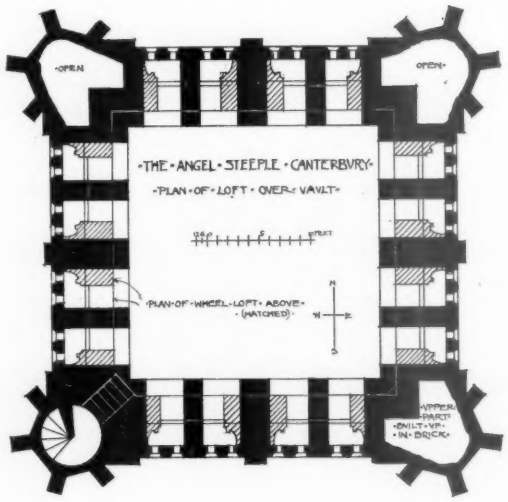
construction; but the tower is, upon the whole, a noble piece of masonry, solidly and conscientiously put together. It would be difficult to improve upon its detail. This applies to the broad and simple yet never coarse mouldings, admirably suited to their elevation, and it equally may be said of the carved ornaments, crockets, pateræ, etc. These, where in a few cases they are still preserved to us, are worthy of the highest praise in their simplicity and breadth of surface and shadow, with which a charming delicacy of execution is combined without any loss of power or of vigorous form.

The ornaments on the flanking turrets are threefold, one pattern being repeated round the tower at the stage of its occurrence. First, the rebus of Morton, consisting of a tun or barrel in the centre of a quatrefoil, with the four letters J M O R in the lobes, the J in the head and the M sinisterwise. Only one of these is preserved, and that imperfectly. Upon the next stage we have the Cardinal's hat, of which one example is nearly perfect, and finally the goat's head—this last also, in all cases but one, much eroded and deprived of its horns. Cardinal Morton bore "Quarterly gules and ermine, on first quarter a goat's head erased argent, attired or," whence, no doubt, the introduction of the goat's head. Oddly enough Warham (1503–33) had a ram's head charged upon his coat, and this may have misled some of the early historians of the cathedral to give him the credit of the tower.[1]

It is interesting to note that some part of the original glazing still remains *in situ*, and singularly beautiful it is. It consists of a very small diamond pattern in wide leads, the interest being in the quality of the glass. This is pure white, but has an opalescent sparkle, arising from its consistency and irregularity of surface. The glazing was restored in 1800 by J. Mayor of Canterbury, who substituted large diamond panes in thin leads, the glass also being thin and poor, in marked contrast with the work it replaced.

Probably at this time a system of window ironwork, which may be referred to in the quotation given above, was removed and the present iron bars substituted, some of them taken from other windows in the church where stained glass had existed, and presumably been destroyed. The contrast in effect between the ancient and later glazing can be well seen in the western windows from the floor of the choir within the screen.

Some constructional points must be noted. The four angle turrets are built hollow with the exception of the upper part of one which is filled with brickwork; but, unlike Salisbury,



one only has a staircase, a source of great added strength where it occurs. This inherent weakness of three of the angles is emphasized by the buttress construction. At every stage where the ornaments already described occur a considerable height of the buttresses is unbonded. The advancing erosion of many of the buttresses in their lower parts has thus subjected their much restricted area to greatly increased and concentrated pressure, sufficient to fracture them in places.

Over the vault of the lantern there is an elaborately arcaded low-ceiled loft or chamber, accessible only by a trap and ladder from what may conveniently be called the belfry above it. The somewhat slender arcades of this chamber are not well disposed to carry the weight of the upper walls, which is concentrated in three piers resting irregularly upon five piers below them. The plan given shows this clearly, and it is not surprising that there is considerable dislocation in the walls of this chamber. To this, probably, is also due the fact that the arches of the belfry lights have in almost every case parted at the apex.

Here and there, but not often, is to be found a butted moulding and even a mitred stringcourse—unusual lapses in mediæval masonry, and curiously inconsistent with the general high level of the workmanship.

The turrets closely resemble in design and character those of the south-west tower of St. Dunstan, the upper part of which we know to be Goldston's. They also show a later character than the rest of the tower, and probably Goldston was wholly responsible for them. In their gabled pinnacles their construction resembles that of joinery rather than solid masonry. Iron has also been largely employed, with the usual attendant

[1] His coat does, in fact, occur in one of the bosses of the vault, which indicates that the vault was not completed before Morton's death in 1501.

Photo: Kinnimont and Taylor.

THE LOFT OVER THE VAULT.

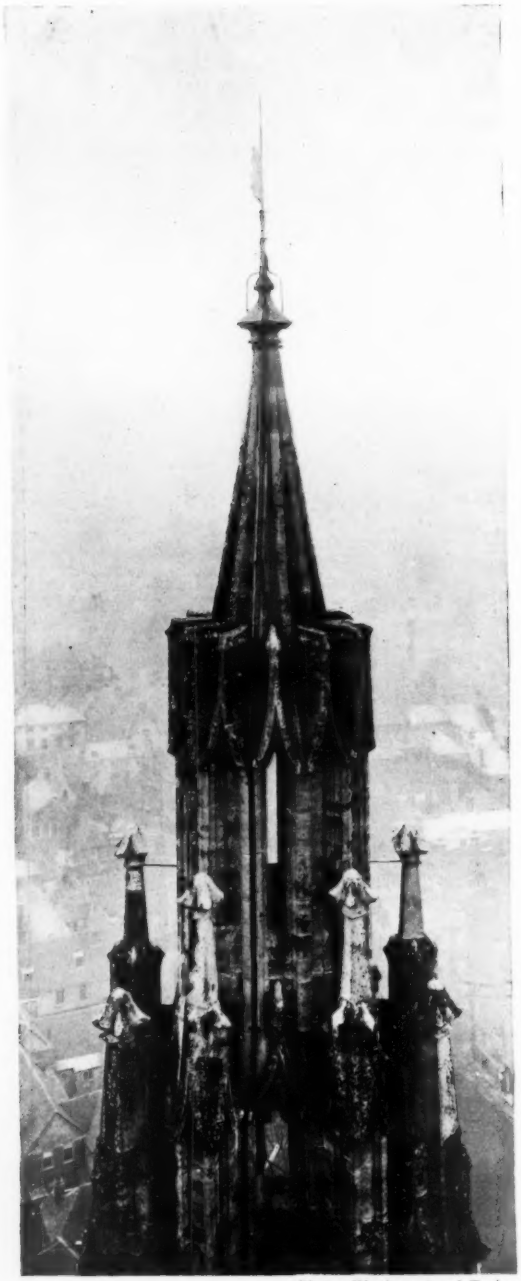


Photo: Kinninmont and Taylor.

THE SOUTH-WEST TURRET.

dislocation. The ridges of the twelve gablets of each turret have been capped by a narrow bar of iron, the object of which is not apparent. It was not constructional, and suggests some crowning decorative feature in wrought iron, although there is no indication as to what this could have been. The vanes are modern, but good.

In mentioning defects of construction it would be unfair to Prior Goldston not to set against them the admirable method introduced by him of strengthening the great piers by a system of straining arches which combines engineering and architectural qualities of the highest order. The same thing in a much more obtrusive manner had been already done at Wells, but for artfully securing a combination of elegance and harmony in such features, which may easily be foreign to their surroundings, Goldston can claim the palm. It is not surprising that these arches are specially referred to in "Anglia Sacra": "Duos etiam arcus sive fornices opere lapideo subtiliter incisos cum quatuor aliis minoribus ad sustentationem dictæ Turris columnis eandem Turrim supportantibus satis industrie et prudenter annexit."

The stone employed throughout is from Caen. Originally used by Lanfranc, it has been consistently adhered to by the subsequent builders of all periods. It may be noted how it has gradually deteriorated in weather-resisting quality, the worst stone used being that of the modern tower. The recent rapid decay of the Great Tower and other parts of the fabric is undoubtedly largely due to the pollution of the atmosphere by coal smoke. The chemical analysis admits of no question upon that point, and raises the not less serious one as to the progressive effect of an increasingly polluted air upon those parts of the building which have up to now resisted all attack of time and weather. One factory chimney can be more powerfully deleterious than hundreds of domestic fires, but is capable of control. May it not be reasonably hoped that the Canterbury manufacturers will take voluntary steps to exercise the necessary control now that the mischief has been brought to light? There ought to be no occasion for the necessity of putting the law in force among a townsfolk proud of their inheritance.

The following emblems occur on the bosses of the fine vault of the tower, which I regret that my photographer has failed to bring out:—

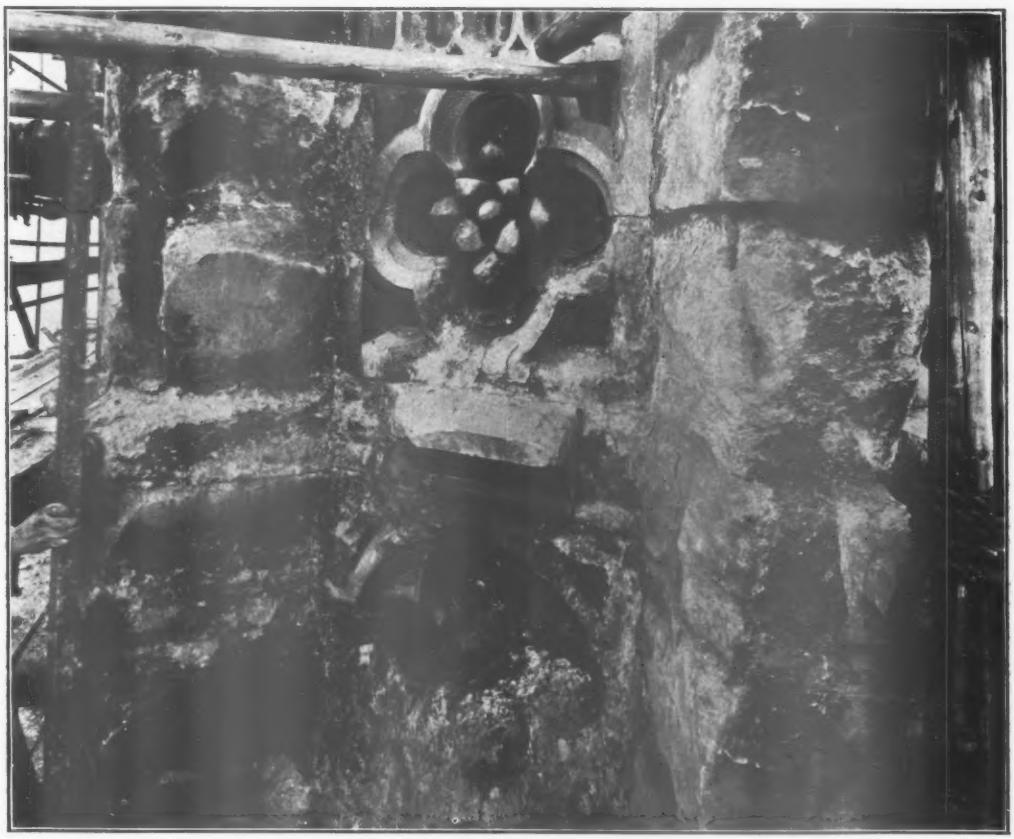
1. The Royal arms of the period (1500 or thereabouts).
2. The arms of the see and Archbishop Morton impaled.[2]
3. The arms of the see and Archbishop Warham impaled.[2]
4. A mitre with the initials T. G., an interesting instance of a mediæval architect signing his work.

The four shields over the arch heads were erected in Archbishop Manners-Sutton's time (1805–28), and are charged with the arms of (1) See of Canterbury, (2) Dean and Chapter, (3) Archbishop Manners-Sutton, (4) Dean Percy. They are merely attached with iron straps. They were probably erected when the parapet was renewed in Portland stone and a few other repairs executed, notably in the eastern of the two south belfry windows.

[2] In each case the pale is charged with only three crosses.

DECAYED BUTTRESSES.

THE BEST PRESERVED TURRET, LOOKING UP.



Photos: Kinninmont and Taylor

DECAYED BUTTRESSES.

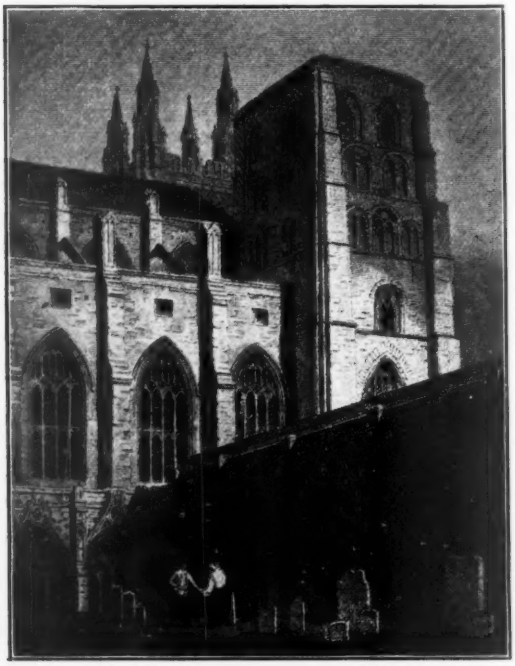
DECAYED LANTERN WINDOW.

Photos: Kinninmont and Taylor.

DANGEROUS TRACERY.

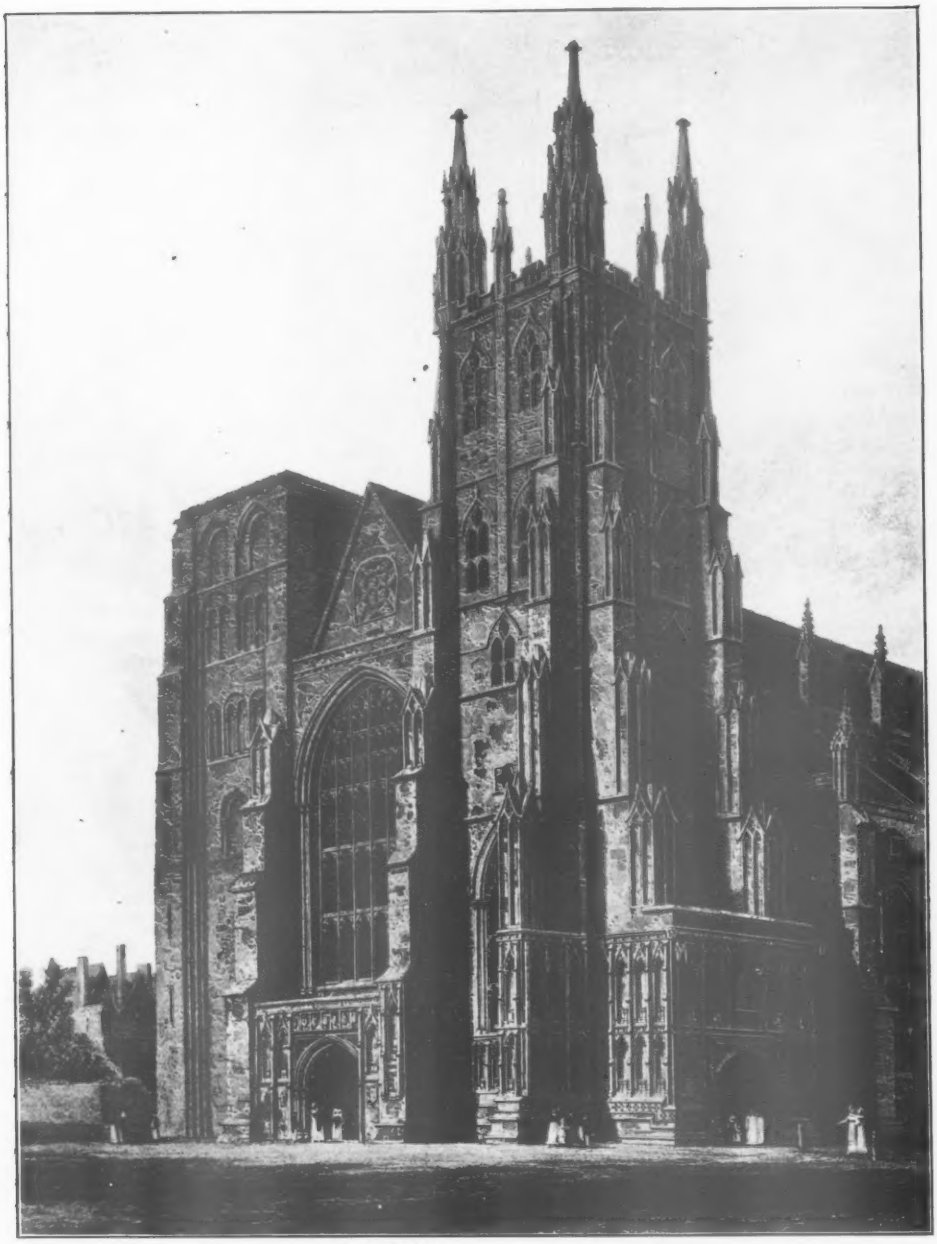
Bell Harry, which has given its now common name to the tower, bears the inscription, "Josephus Hatch me fecit, 1635," and thus appears to have no connection, as has been assumed, with King Hal. It is probably merely a familiar nick-name, such as "Tom" bears at Christ Church, Oxford. "Harry" swings under a penthouse upon the leads, and the tower does not contain—nor is there evidence that it ever has contained—any other bells, a fact to which we owe its fortunate freedom from the destructive ravages of bell-ringing. The great peal of sixteen in the Tower of St. Dunstan dates from the fifties, and no trace remains of the "Arundell ryng." In the so-called belfry or wheel loft of the Great Tower there is a fine treadmill, which may be of early date but is probably restored. It is in admirable preservation and working order, and is used for raising material—one man being able to lift the weight of four.

We have seen that immediately after the tower was finally completed, although the angel had long disappeared, it was still vulgarly called the Angel Steeple. When and why Bell Harry acquired such special significance in the eyes of the people I have not been at pains to elucidate,



THE NORTH-WEST NORMAN TOWER, 1814.
(From Storer's Canterbury.)

THE NORTH-WEST NORMAN TOWER, 1813.
From Storer's Canterbury.)



THE WEST END. (From Britton's Cathedrals.)

but I plead for a reversion to the earlier and more picturesque title.

The work of repair, of which the tower is in urgent need, can be completed in four years, if the necessary funds are forthcoming. Illustrations are given of the condition of some of the buttresses and windows. The best preserved of the angles is shown in the view looking up.

It remains to consider the north-west tower of Lanfranc. Drawings of this tower as preserved to us show that it must have received considerable alterations in later Norman or Transitional times, when it was probably raised a storey.

Subsequently a lead-covered timber spire, one hundred feet high, and a decorated parapet were added. In 1705 a heavy gale injured the spire to such an extent that it was deemed prudent to remove it, much to the detriment of the grouping of the cathedral. Thus denuded, the tower still remained until the episode of 1832 already referred to.

Chylynden and his successors recased, as we have seen, the Tower of St. Dunstan, and reused much of the Norman stone in the process. Not so Austin in his treatment of the long-lived relic of Lanfranc's sturdy and time-hallowed building. It was destroyed root and branch to give way to a spurious copy of a somewhat diseased and falsified

remnant of Chylynden, Wodnesbergh, and Goldston combined, a curious reflection upon modern architectural aspirations!

This tower has never been entirely completed internally. It has no proper floors, and merely rough ladders instead of stairs.

The stone must have been of the poorest quality, and while its comparatively rapid decay has served to impress it with an aspect of hoary antiquity to which it can lay no claim, it will ere long lay a fresh and onerous charge upon the cathedral authorities. A large part of it is in an advanced state of disintegration, so much so that four years ago it was necessary to skin it of many of its pinnacle heads, crockets, and other half-dislocated attachments, in order to secure the safety of the dignitaries and others who have the use of a private passage at its base.

The illustrations given of the last of the Norman towers are probably well known to lovers of Canterbury, but not so well to the general reader.

The Archbishop of Canterbury has kindly permitted the reproduction of the interesting south prospect of the cathedral hanging at Lambeth and painted before the year 1705. If this drawing is trustworthy the spire evidently belonged to the Decorated period.

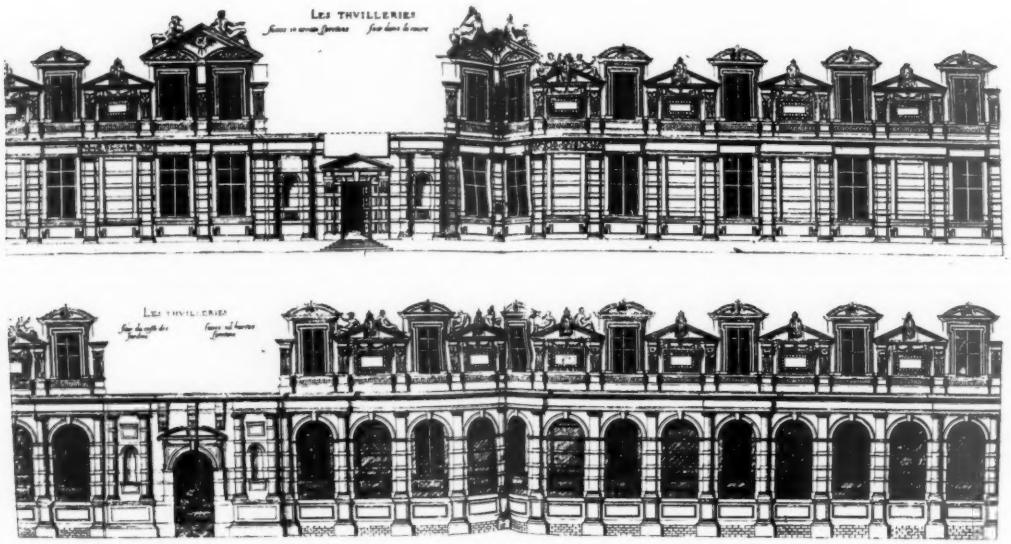
I must conclude with a personal note. This history was compiled during a month's tour last autumn in France, the materials having been collected before my departure on October 6th. On my return I was glad to find that my own conclusions had been substantially corroborated by an anonymous writer in an issue of the *Athenæum* published during my absence. A comparative examination of the building had enabled me to carry the matter a step further than this writer, but to the *Athenæum* is due the credit of first calling public attention to a valuable but neglected page in the history of the Angel Steeple. By the courtesy of Mr. Moule, the librarian of Corpus Christi, Cambridge, I am able to print verbatim from the original MS. Stone's reference to this characteristic piece of mediæval artistic production, so gradual in its growth but so noble in its completion, withal so harmonious and mellow in its aspect of time-honoured existence.

W. D. Caröe.

Philibert de l'Orme.—III.

We left De l'Orme in the disgrace of a court dismissal from the post of Controller of the Royal Buildings. That disgrace appears to have been absolute for the time, and indeed De l'Orme never wholly recovered his position. His impetuous temper had been his undoing. Those furious raids on the dishonesty of court officials, which had won him distinction in his early years, had also made him life-long enemies, and it is to be doubted if De l'Orme had great capacities for friendship. His nature, in so far as one can read it in his writings, was self-centred, and he had now to pay the penalty for a certain aloofness which seems to have detached him from his contemporaries. In this enforced retirement De l'Orme had leisure to complete the account of his new invention in carpentry, described above, and in 1561 he brought out his "Nouvelles inventions pour bien bastir et à petits Fraiz." About this time he must also have made considerable progress with his great treatise on architecture, to which he devoted himself intermittently for the rest of his life. However, he was yet to have one more chance. Probably soon after the close of the first civil war (edict of Amboise, 1563) De l'Orme was instructed to prepare his plans for the Tuileries. The idea of a palace on this site was not a new one. François I. had thought of building here for Louise of Savoy; nothing came of his project, but the scheme was revived by Catherine de Medicis, who determined to build herself a more cheerful residence than the mediæval Louvre. A passion for light and air was to dominate the design. No towering walls were to shut out the sun—the methods of the Italian palace builders were ruled out not less than those of the builders of Fontainebleau. De l'Orme was to think out his problem for himself, and the result was the long low line of the elevation; for the greater part of the building, excepting the pavilions, was designed as a ground storey with an attic storey above, lit by elaborate lucarne windows in the steep-pitched roof. De l'Orme's general plan consisted of a large oblong, about 804 ft. long by 504 ft. wide, with pavilions at the four angles, a single pavilion in the centre of the narrower sides and three intermediate pavilions in the longer sides of the oblong. The oblong itself was divided into three. In the centre was a square court with broad colonnades on two sides only, leaving an oblong open space in the centre. To the right and left of this central court were two narrower courts, each of which was divided in the centre by a remarkable oval building, apparently consisting of colonnades surrounding an open oval amphitheatre. Of this gigantic scheme De l'Orme only carried out the ground-floor storey of the centre part of the west or garden façade, including the great oval stair-

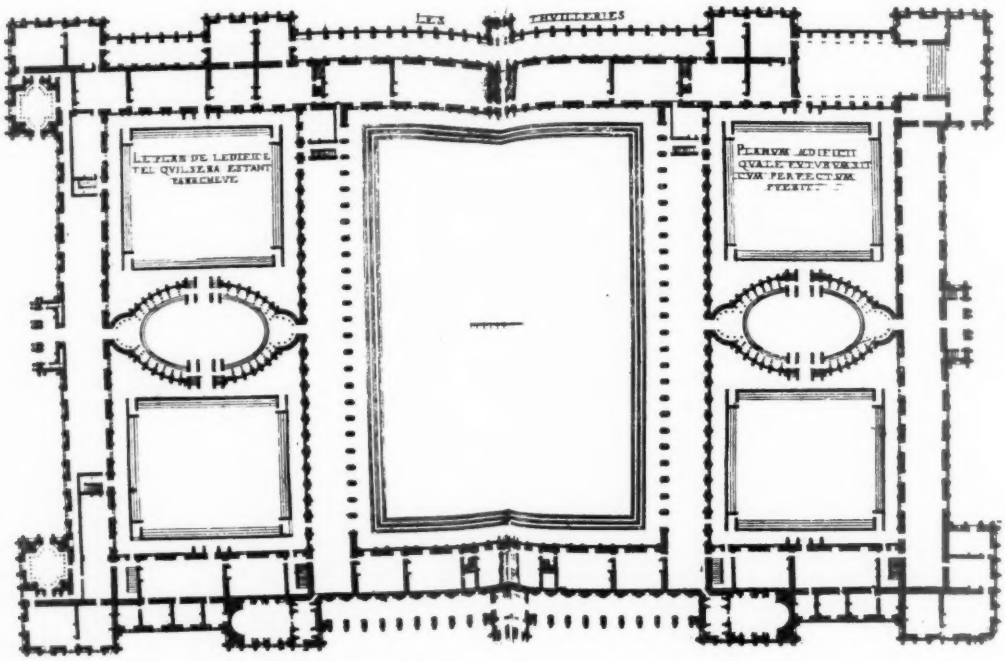
"THE BAD ARCHITECT." FROM DE L'ORME.



THE TUILERIES: ELEVATIONS. FROM DU CERCEAU.

NOTE.—*The bend in the middle of the elevations is due to the fold in the book.*

case as far as the first floor. The side courts were never attempted at all, and the actual building as left by De l'Orme was unmercifully altered by succeeding architects. On De l'Orme's death in 1570, Bullant, who succeeded him, altered the design of the end pavilions. J. Androuet du Cerceau inserted an attic storey, afterwards removed under Louis XIV., and the work was further continued by Lemercier, an able architect who died in 1663. Up to this date no very serious departure seems to have been made from De l'Orme's design, but the ideas of the sixteenth-century master seemed trivial to Louis XIV., and that aspiring young monarch ordered his architects, Levau and D'Orbay, to remodel the palace. This they did in a very wholesale manner. They swallowed up Delorme's graceful central pavilion in the monstrous Pavillon de l'Horloge, doing



THE TUILERIES: PLAN. FROM DU CERCEAU.

NOTE.—*The bend in the middle of the plan is due to the fold of the book.*

away with De l'Orme's terrace on the first floor level. They added a second order to the single order of De l'Orme's design. The lucarne windows were destroyed and the façade terminated with a balustrade. For good or for bad the quality of De l'Orme's work was lost; the delicacy of his detail, the picturesque charm of his outline, had no chance against the weighty classic of Louis XIV. As for the emblems of widowhood with which Catherine de Medicis had adorned her palace—the shattered mirrors, broken fans, the loosened strings of pearls—these were swept away to make room for the trophies of the "Roi Soleil," and in this wholesale garnishing there also disappeared the wondrous newel staircase, esteemed by previous generations a work of superhuman skill.

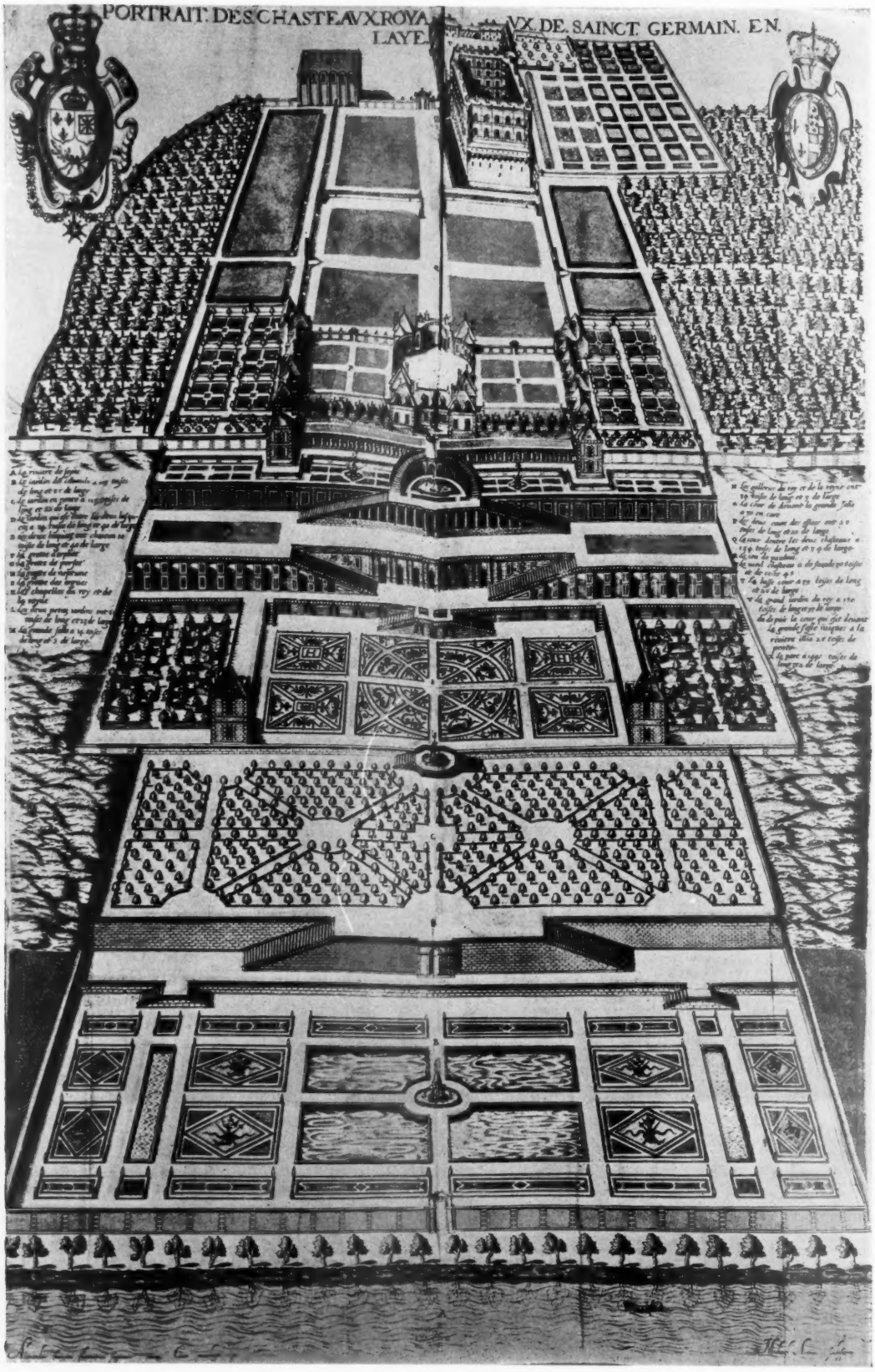
It was indeed a very able piece of masonry. De l'Orme had designed it as a large open-well staircase running round an oval chamber without central supports, and the story was that for some years after his death no one would venture to complete it, till a mason named Boullet stated that he had found De l'Orme's drawing, and was allowed by Henry IV. to complete the staircase, which he did in a very unsatisfactory manner. Another story was that the staircase was designed for De l'Orme by a ghost, a certain Jean Vast, who, finding that De l'Orme was attempting to get possession of his design, destroyed the drawing and fled, whereupon De l'Orme had to finish the staircase as best he could. This account may be dismissed at once as one of the libels industriously circulated by De l'Orme's enemies. If there was one thing De l'Orme had studied and mastered it was the art of setting out masonry, and in knowledge of practical construction he was probably without an equal.

The Tuileries Palace was burned to the ground by the Commune in May 1871,[1] and we are practically reduced to Du Cerceau's plan and elevation as materials for a critical estimate of De l'Orme's masterpiece. So far as it is possible to judge from such scanty evidence, the palace deserved the admiration freely bestowed on it by contemporaries. Fifty years later, when Inigo Jones was called on to design Whitehall, he found no better model for his plan than De l'Orme's design for the Tuileries. I have noted above the originality of De l'Orme's general treatment, how he broke away not only from the traditions of his own contemporaries, but also from those of the Italians, in the deliberate horizontality of his design, a motive, by the way, which he had approached before, in his first design for S. Maur les Fossés.[2] Here, at any rate, was an individual note, the personal contribution of an architect who thought for himself. The general conception of the Tuileries, the grouping of its courts and colonnades, were in advance of what had yet been done in France either by De l'Orme or anyone else. The merit of Lescot's work at the Louvre lay in its ornament rather than its architecture: it was an immense vehicle for superb architectural sculpture. De l'Orme, too, was fond of his ornament, too much so, indeed, but he approached architecture as an architect—he knew that its chief effort should be devoted to the general ordinance of building, to conceptions which include and assign to their proper place all the details that go to make up the whole; with the detail itself one is not very much impressed. It seems to have suffered from that meticulousness which De l'Orme's invention seldom escaped. He himself tells us that his inlays of jasper and marble and the like were dictated by the taste of the Queen-mother, but De l'Orme himself saw eye to eye with her in this; and it is curious to find in a man of his temperament an almost feminine weakness for the knick-knacks of design.

The building of the Tuileries was hardly begun when De l'Orme died, in January 1570. His latter days had been days of adversity, with only the capricious patronage of Catherine de Medicis to stand between him and the hatred of powerful and unscrupulous enemies. With less dignity than Wren, yet not without a curious pathos, he cries out that his long years of service to the State and devotion to his art had earned him nothing but his white beard; and indeed there is no more singular piece of autobiography in the lives of architects than the famous "Instruction de M. d'Ivry, dict de l'Orme," that despairing Apologia *pro vita sua* which he dashed off in the bitterness of his disgrace—not, he says, for his own glory and honour, but in order that all princes, noblemen, and honourable gentlemen may know the truth in face of the great hatred and calumny with which he was persistently attacked. The "Instruction," which is transcribed in full in M. Berty's "Les Grands Architectes," is worth reading, not only for its historical importance but as characteristic of De l'Orme himself. Words fail him in his fury to repel the attacks of his enemies; the facts seem to tumble over each other in his memory, with the result of this half incoherent but very real and personal document.

[1] Fragments of the Ionic orders of the palace have been set up at the Place de la Concorde end of the Tuileries gardens, behind a lemonade stand. One column has De l'Orme's favourite bands and is very ugly, the other is fluted with delicate ornament in the flutes, and is an attractive piece of detail. The diameter of the columns is about twenty inches. Those who study the nuances of classical detail will notice the curious flattened curve of the pulvinated frieze.

[2] See THE ARCHITECTURAL REVIEW, February 1904, p. 44.



ST. GERMAIN-EN-LAYE. FROM A PRINT BY FRANCINI, 1614, BOUND UP WITH THE R.I.B.A. COPY OF DU CERCEAU'S "PLUS EXCELLENS BATIMENTS."

The "Instruction" appears to have been written about 1560, and was addressed to "Monseigneur et meilleur amy," whom M. Berty supposes to have been Eustache du Bellay, Bishop of Paris. De l'Orme's enemies had charged him with amassing a huge fortune in the Royal service. Indeed, French artists at the Court seem to have been heartily jealous of each other. Bullant, who appears to have been an honest sort of man, was probably on friendly terms with De l'Orme, but the younger school of artists disliked him, as being pompous and overbearing. Bernard Palissy gibed at him as one who "se faisaint quasi appeler le Dieu des maçons ou des architectes, et d'autant qu'il possédait vint mil en bénéfices, et qu'il se sçavoit bien accomoder à la Cour." Ronsard was his inveterate enemy. He called De l'Orme "La Truelle croisée," and lost no opportunity of bringing the architect into ridicule and undermining his position at Court. With characteristic malignity, Ronsard wrote a rhyming letter to Charles IX., saying that he had seen too many masons at work on their monkey tricks at the Tuileries. In these days poets did not mince matters, and Ronsard's efforts were as effectual as Ben Jonson's abuse of Inigo Jones at the Court of James I. De l'Orme was no match for the mischievous ingenuity of the professional poet: it was bludgeon against rapier. Ronsard was young and fashionable, and De l'Orme old and unpopular, clumsy of speech, strong merely in his knowledge and force of character—he had no chance against the brilliant if quite unscrupulous swordplay of the Court poet. As for the direct accusations brought against him, De l'Orme replied that so far from having made too much money he had not been paid for half his work, and had been at personal charges which had never been made good to him. As to the revenues derived from his abbeys, these only amounted to 6,000 livres a year, not 20,000, as was stated by his enemies. The only evidence by which these statements can be checked is that of his will, dated December 21st, 1569, from which it appears that he died possessed of considerable means, which he bequeathed to his two natural children, his two sisters, a nephew, and five grandchildren.

Yet unintentionally his enemies gave De l'Orme the opportunity to which he owes his permanent reputation. Had he continued in prosperity till his death he could hardly have written his treatise on architecture, the work of his life by which he retains his place in history. There are architects who have maintained their fame on the merits o their buildings, but their number is small, whereas Alberti, Serlio, Palladio, Vignola, Scamozzi, Perrault, Blondel, Colin Campbell, Percier, and Fontaine—I take the names at random—will always be familiar names, at least to architects. So it was with De l'Orme. Lescot is a merely shadowy person. Of Bullant, whom I believe to have been the greatest of the French sixteenth-century architects, we know little but what we can learn from his rare buildings and his two short treatises ("Recueil de l'Horlogiographie," 1561, and "Reigle Générale d'Architecture," 1564); but De l'Orme has come to be generally, though I think erroneously, regarded as the representative French architect of the sixteenth century, and it is mainly on the strength of his book. It is indeed a most voluminous and remarkable work. The first edition appeared in 1567, under the title of "Le Premier Tôme de l'Architecture de Philibert de l'Orme, conseiller et aumonier ordinaire du Roy et abbé de S. Serge les Angiers"; a second edition appeared in 1626. This includes the "Nouvelles inventions," which are numbered as Books 10 and 11 of the "Premier Tôme," and form a grand total of 698 large folio pages;[3] and this, in De l'Orme's intention, was to form only the first volume of a vast encyclopedia covering the whole field of architecture. Moreover, he tells us himself[4] that he contemplated a book on building plant and machinery, a book on "divine proportions" dealing with the proper seasons and combinations of the stars for laying foundation stones, and a book on harbour building; and in his third book he says that were it not for his time being taken up by great affairs and the Queen's Palace, he would have edited Euclid and Vitruvius together, the latter in particular being "fort indigeste et confuse."[5] He offers the work as the result of more than thirty-five years' experience. He has noticed the folly of people who instead of consulting an architect go to a carpenter, or painter, or notary, and spend the rest of their time in finding out their mistake; whereas the right thing to do is to call in your architect, give him a free hand, and not insist on his copying old buildings. The architect on his part is to be learned in mathematics, philosophy, and history, and is to be a staid, sensible, temperate man of affairs; the point is one that De l'Orme insists on, for the architect will require tact, and is to be careful in the selection of his clients, preferring kings, princes, noblemen, prelates, and the like. If

[3] Ware's gigantic "Encyclopedia of Architecture," which is much less closely printed, has only fifty pages more.

[4] Page 47, edition of 1626.

[5] In the Introduction to his fifth book, De l'Orme gives five explanations of the obscurity of Vitruvius; either somebody had purposely confused the text, in order to keep the art of building a mystery, or the text was corrupt, or Vitruvius had himself collected his notes from other authors, and had not been able to put them into shape.

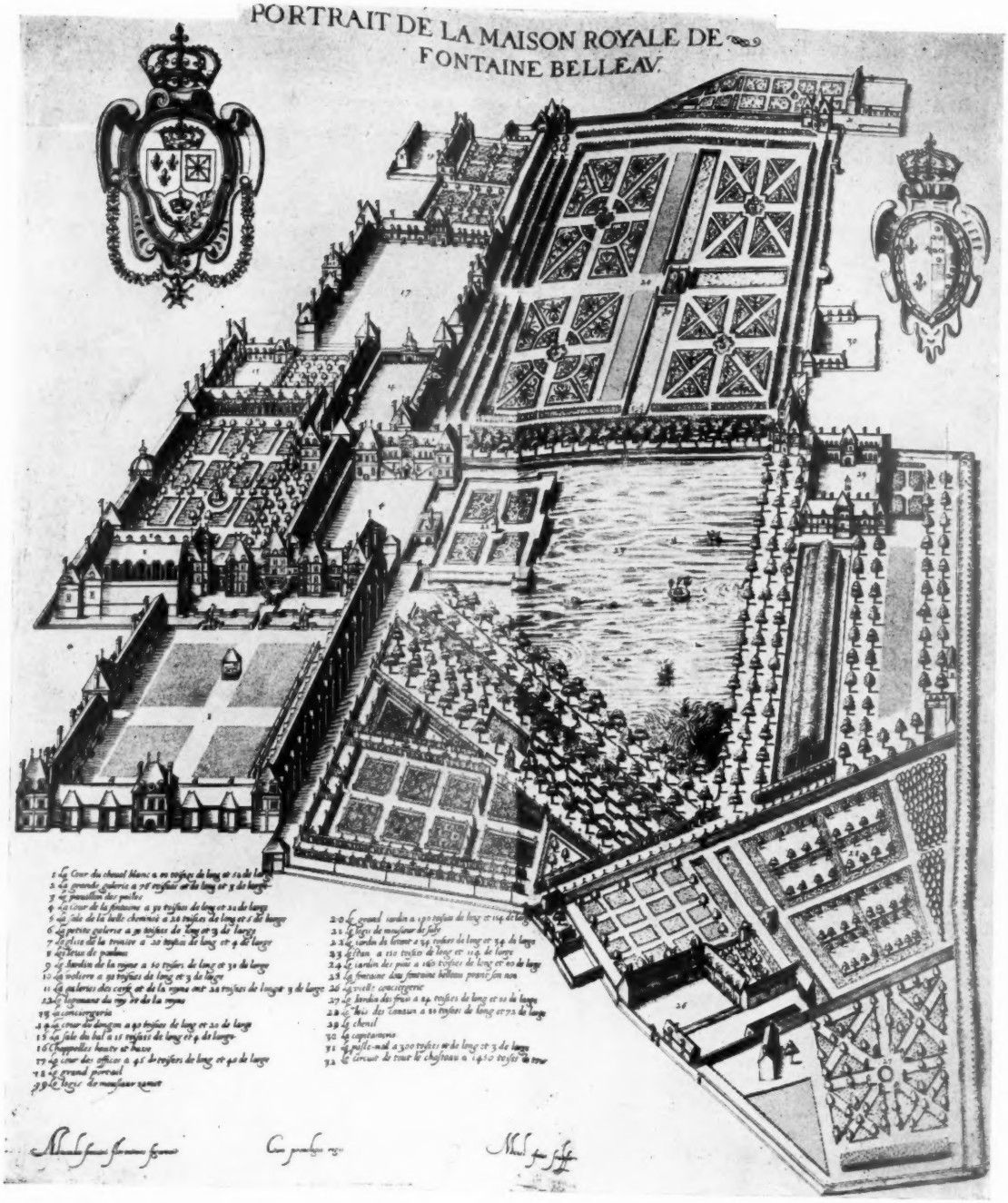
"THE GOOD ARCHITECT." FROM DE L'ORME.

trouble occurs in his work, he must possess his soul in patience; the last thing in the world that De l'Orme ever dreamt of doing, for he protests that had it not been for the interference of his patrons, his work would have been even more excellent than it was, and that no man had ever suffered so much from envy and intrigues as he had himself. As to the architect, he returns again to his qualifications in a remarkable passage, p. 14: "Il vaudrait trop mieux à l'architecte, selon mes advis, faillir aux ornements des colonnes, aux mesures et fassades (où tous qui font profection de bastir s'estudient le plus), qu'en les belles reigles de nature, qui concernent la comodité, l'usage, et profit des habitans, et non la décoration, beauté ou enrichissement des logis, faites seulement pour la contentement des yeux sans apporter aucun fruict à la santé et vie des hommes." These words are downright enough for the most hardened Philistine. It would be perhaps unkind to hint that De l'Orme had one eye on future clients, for though that was a subsidiary motive of his treatise, there can be no doubt that his instincts were intensely practical, so much so indeed that the artist in him was too often starved and obliterated in a merely mechanical technique. De l'Orme's was a complex nature, and this and his very discursive method make it difficult to fix his principles. For instance, having made a bold stand for the architect, a little further on he considers it expedient to hedge, and says that indeed it is only right that noble lords should do what they like and be served as they wish at their good pleasure; the only people they are really to guard against are the impostors, people who know nothing of architecture, but can trick up a drawing; why, even painters, carpenters, and image-makers call themselves architects! All these things, he insists, with much volume and vehemence, are a sham; the architect is the man, the only true friend of the noble lord.

In this connection, and *à propos* of the excellent marbles to be got from the quarries of his own Abbey of S. Serge les Angiers, he refers to the "mobilité de l'esprit mercuriale des Français," which leads them to employ foreign artists and foreign materials, when there are as good men in France as anywhere else, and the best building stones in the world. The rest of the first book is taken up with excellent notes on building materials. Book 2 deals with foundations in a very practical manner; but the human interest lies in the queer fragments of speculation scattered about in his pages. P. 32 is a good instance. He is talking about the square, and after quoting Marsilio Ficinio on the mystical character of the Cross among the early Egyptians, he says

TAILPIECE TO PREFACE OF BOOK III.
L'ARCHITECTURE DE PHILIBERT DE L'ORME.

that after God had created "la machine de l'universe sous une forme ronde et spherique," He divided its circumference into four equal parts by means of intersecting lines at right angles, and at the centre point of intersection He placed the earth. In Books 4 and 5, De l'Orme introduces his readers to the setting out of masonry. His explanation and diagrams are most difficult to follow, and do not always work out. De l'Orme himself admits that the problems require "grand rompement de teste à les excogiter et monstrer," and as an exponent of an intricate subject De l'Orme leaves much to be desired. At the same time, his was the first attempt to deal systematically with stereotomy, and to make generally known what was jealously guarded by the masons as a trade secret. De l'Orme himself tells us that, in his youth, workmen took much trouble to understand the setting out of the famous "Vis Saint Gilles"—that is, a newel staircase with a cylindrical vault running with the stairs—and highly esteemed anyone who mastered it. He admits frankly that in his time there were many in France who did understand this setting out of winding masonry. He himself had done it at Fontainebleau and Anet and many other places; and he gives an interesting and characteristic criticism on the newel stairs in the Belvedere of the Vatican. This staircase he describes as a winding ascent of brick without steps, carried on



FONTAINEBLEAU. FROM A PRINT BY FRANCINI.

a barrel vault with a circular well in the centre, with columns round the well-hole. The work, he says, was "fort belle et bien faite"; but he adds that if the architect had known his business (the architect, by the way, was Bramante) he would have made all the lines follow the ascending curves; whereas, being unequal to the setting-out, he had made all the caps and bases square—that is, horizontal. Moreover, his vaults should have been made in dressed stone, not merely in brick. The criticism is interesting, as showing the different tendencies of the Frenchman and the Italian. No technical difficulties ever daunted the Frenchman, in fact he gloried in their opportunity, whereas the Italian was perfectly satisfied if, somehow or other, he "got there."

As De l'Orme points out, the architect must have good master masons, such as he had trained himself from their youth up, showing them everything, and in all cases "les advertissant et en-

CHIMNEYPIECE. FROM DE L'ORME.

seignant amicablement." This had been his habitual practice, and was the duty of all good architects; but in order to do so architects must themselves master geometry and the art of setting out of masonry, for as for leaving it to the masons, one might as well expect the waggon to drag its own oxen, "la charette conduict les bœufs." It is in connection with this that he gives an explanation of the tail-piece to the Preface to Book 3. The architect is shown issuing from a cave, denoting that he proceeds to his work after long study. He holds up his skirts to show that he is fervent in business, with the other hand he holds his compasses to show that he proceeds by rule "et avec une meure déliberation" (a favourite point with De l'Orme). The twined snake denotes his learning and wiliness, the calthrops at his feet the snares that do beset him—envy, hatred and malice and all uncharitableness. The head of Mercury shows that the architect is learned in science and can speak of his art. The palm is the emblem of his glory, and the Caduceus shows that his fame shall go out into all lands. De l'Orme loved these symbols, and in the conclusion of his "Premier Tome" he fairly let himself go with his well-known allegories of the good and the bad architect (pp. 329–341).

Books 5, 6, 7, and 8, are devoted to the consideration of the orders in all their details. De l'Orme says that he took his own measurements of the antique in Rome, and it is evident from his text and illustrations that he had himself accumulated a great amount of materials during his studies in Rome; and further, that he used his own judgment freely in their interpretation. Palladio's "Quattro Libri dell' Architettura" (1570) was not published till the year of De l'Orme's death. The orders, as given by Alberti, were very clumsily executed. It seems doubtful if De l'Orme was acquainted with the various sixteenth-century editions of Vitruvius, and though he pays a generous tribute to the services rendered by Serlio to French art,[6] he seems, with good reason, to have been sceptical as to the accuracy of his measurements. In any case, De l'Orme went into the whole subject of the Orders with a minuteness of personal study

DOORWAY. FROM DE L'ORME.

[6] Pp. 202 *et seq.* De l'Orme's words are: "C'est lui qui a donné le premier aux Français, par ses livres et desseings, la cognoissance des édifices antiques, et de plusieurs fort belles inventions, étant homme de bien ainsi que je l'ay cognu, et de fort bonne âme," etc.

such as no Frenchman had attempted before his time.[7] Into this disquisition on the Orders it is not necessary to follow him; but it is characteristic of the man that when dealing with the Ionic Order he says that he shall not draw on the antique or Vitruvius for its proportion, but shall follow "l'Ordre des proportions que j'ay trouvé en l'Ecriture Sainte, et les dimensions et mesures du corps humain." He has, he says, followed the proportion given in the Old Testament, as he will more fully declare in the second part of his architecture treating of Divine Proportion. The account is, in consequence, hopelessly obscure, and is not made clearer by some of the plates being upside down. The Orders are followed by a book on chimneys, describing various means of preventing smoky chimneys, with designs for chimneypieces much in the Fontainebleau manner. Then come the two books of "Nouvelles Inventions," winding up with the conclusion and the description of the good and the bad architect.

These allegories are a fit termination to this most curious work. That De l'Orme was thoroughly in earnest is evident in every page, but that he had uncommonly little sense of humour is also evident. That "meure déliberation," to which he attached so much value, is also conspicuously absent, for the book is a vast farrago of genuine learning and enthusiasm for his art, of moral declamation, of personal complaint, and of something not far removed from personal advertisement. Then there are these glimpses into a half-mediæval outlook on nature and the supernatural: thus the stars must be in a certain conjunction when the first stone is laid; some stones suffer from the light of the moon, and there is that mysterious theory of divine proportion. Moreover, his style is extraordinarily prolix, and not redeemed by any happiness of phrase,[8] in spite of curious little marginal notes, such as "chose fort digne de noter"; "Beau discours sur les diversités des sables," and so on. Yet, in spite of all, De l'Orme's personality emerges as that of a man of strong if rather arrogant character, conscious of unusual abilities, conscious also that he had lost touch with his contemporaries, and that his devotion to his art must be its own reward. It is rather a melancholy picture, and one of the caprices of fortune, that, as in the case of Inigo Jones and Wren, the last days of this distinguished architect should have been darkened by contumely and dishonour.

Of his actual position in the list of the great French architects it is possible to speak with some historical assurance. For a time he was undoubtedly the leading architect in France, but he was passed by Lescot; and, as I have suggested above, a critical study of the work of the three men leads to the conclusion that Jean Bullant was the greatest architect of the three. Bullant was a man of bold imagination and fine artistic sense. He had the faculty of playing with the big planes of building, which seems to have been denied to his colleagues. While De l'Orme was immersed in his details, and Lescot was content with dull repetition of the Orders, Bullant was making experiments in abstract form-composition which left a permanent influence on French architecture, and led up to the great French classical design of the seventeenth and eighteenth centuries. An entirely erroneous impression has been created by writers who treat De l'Orme's architecture as the last word of the French Renaissance, and what came after it as decadence. This is much as if one were to treat the Jacobean builders as the representatives of the Renaissance in England, and Inigo Jones and Wren as degenerates. As a matter of fact, there is some truth in Fréart's sneers at De l'Orme's "Gothic" instincts. The ultimate æsthetic possibilities of classical architecture were dimly seen by Bullant only, among his contemporaries, and were not fully realised in France till fifty years after De l'Orme was dead. It is possible to trace a continuous progress from the first half-childish efforts at Italianism in France at the end of the fifteenth century to the matured mastery of classical design which was reached by the French architects of Louis Quatorze. In this progression De l'Orme belongs to the earlier stages. He introduced a mechanism of detail far more complete and correct than any possessed by his predecessors. He effectually limited the master masons to the narrower province of building, and laid down the lines of a science of building as opposed to rule-of-thumb work. I think one may believe his own account that he did much to educate the workmen of his time; and there can be no doubt that he left the technical ability of the building trades at a much higher level than he found them. But an analysis of his own design suggests that though he had mastered the

[7] Fréart, the well-known author of the "Parallels," is most contemptuous of De l'Orme. "The good man" (Evelyn's translation, p. 82), "though very studious, and a lover of the antique architecture, had yet a modern genius, which made him look upon these excellent things of Rome, as it were, with Gothique eyes"; and again: "This makes me judge that the good man was no great designer, which is a very ordinary defect among those of his profession." This comes well from Fréart Sieur de Chambray, who was a virtuoso and not an architect at all.

[8] Menander is described as "Grand déchiffreur des superfluités," a bald translation of Pliny's "Diligentissimus Luxuriæ Interpres." Where De l'Orme's description of Pliny as "Secretaire et greffier du conseil privé de dame nature" comes from I do not know, but I doubt if it is his own.

details of classical architecture, he had not entirely grasped its spirit. The multiplicity of his details, the intricacy of his design, the feeling for the picturesque rather than for mass and proportion, breadth of effect, and simplicity of treatment, show that he was still, perhaps unknown to himself, under the spell of late Gothic. The fine architectural instinct of the French was not to be deceived in the matter, and they followed the lead of Bullant in preference to that of De l'Orme. The last word of the French Renaissance was not spoken in the sixteenth century, but in the seventeenth or eighteenth: possibly it has even yet to be heard.

De l'Orme can hardly be said to have been an architect of genius. He was a learned and very capable artist, but I think he holds his place in history less by his art than by his self-revelation as a turbulent and intensely human personality.

REGINALD BLOMFIELD.

FROM DE L'ORME.

Architecture and Painting.

IV.—By George Clausen.

(*To the Editorial Committee of* The Architectural Review.)

Let me thank you for kindly sending me the Review. I have read Mr. Bayes's paper, and those by Messrs. Blomfield and MacColl, with much interest, and am quite in agreement with them on the main points. I regret that I have not the time now to write a paper, but, briefly, it seems to me that painting, with the exception of portraiture, is under the disadvantage of having—or seeming to have—no relation to the ordinary needs of life. It has become a form of activity which has no definite use. Yet we have many painters who could, if the opportunity were given them, acquit themselves well in the decoration of buildings; though we should all have to learn a good deal. For the habit of thinking out a picture for its decorative value has been almost lost among us, and I feel sure that if more encouragement were given to really good painting as decorative work, it would have a good effect on painting as a whole—by leading us away from our littlenesses.

We might well take example in this from the French, who have always kept a place for painting in conjunction with their great architectural works.

V.—By Halsey Ricardo.

Mr. Bayes makes a most able presentment of his case, so sound and so reasonable that there seems little left for the architect to do but to concur; and then to go on and plead lack of opportunity to fulfil. The main great trouble, which he points out, but not, I think, with sufficient emphasis, is the extreme self-consciousness of the present age, which infects not only the arts but the patrons and employers of the artists. The intelligent seriousness of the would-be foster-father defeats his inclinations. To have to run the gauntlet of all his friends in all their altitudes is anguish to his sensitiveness. Unless he is securely fenced round with a thrice-secured bulwark of logic, formula, and precedent, he cannot face the siege of the connoisseur, no personal harness of his is proof against the storied critic with the long memory: he submits to his own privation, anoints himself with the balm of his cultivated taste, and waits, with not much hope, to see the experiment carried out on some other "vile" body, not his. And this attitude, true of the individual, holds good, *a fortiori*, of the larger public body. A committee dare not take such a responsibility. Sometimes, on the assurance that his back may be found strong enough, a public body, having provided itself with a scape-

goat, may venture to act; but the case is shown by Mr. Bayes and Mr. MacColl to be infrequent.

This mortal caution dates back from long ago —from the Renaissance in fact, though its deadly action is not early apparent. The world, though ageing rapidly, had still some youth in it, even in Queen Anne's day; but soon after the cupboard doors were shut upon childish things, and man's place amongst his fellow men in the universe was the topic that pressed upon his consideration.

Thus the prodigal, negotiating for a return to the parental roof-tree, found the atmosphere within vastly changed from that which he left. The father, discussing this project of resumed cohabitation, whilst expressing undiminished parental affection, hummed and hawed—talked about his position in society, his duties and responsibilities: the brother, whom he left a mason, co-operating with the handy man his father, and who showed an imitative dexterity in the materials he was handling, now occupied a separate private room in the house, called himself a sculptor, with a vote, under the franchise, of his own, and was no longer a son, in the world's eyes, but a lodger. Instead of the early morning exodus to work, the backyard had been covered in—clay, canvas, and paper now taking the place of the actual materials—and a trolly at the side door was waiting to take the articles to the railway station. On inquiry he learnt that the substitutes (models they called them) arrived at their several destinations, were then translated into the required materials, and then again transported to their destined abiding place, or to the market. Art was now divorced from construction, due greatly to his and his brother's action—the early days of home life were gone. The neighbours well remembered the aims and ambitions, the winged words and fiery independence of the prodigal when he left; they learnt to estimate his ideals and, for the most part, to do without them. They were too exalted, too arduous, for daily wear; and, considering how costly they were to produce, they got discouraged when they saw how time and the elements treated them. Besides—this was a prevailing argument—they could not as individuals commission the artist to "splash as ne'er has splashed before" in their houses, because they did not build houses to live in any more; merely tenements that harboured them during a section of their lives, and anything individual that they did or got done prejudiced the letting of it at their vacation. So, in consequence, the practice of decorative painting was dead from atrophy, and no revivalist could dare to pretend to any confidence as to his methods or their durability. Due to this depression, the amateur—as Mr. Blomfield points out—was able to cow and hypnotise the painter as well as the public. What then is the prodigal to do? Mr. Bayes seems to me to give the right answers, except where perhaps in a moment of pardonable (painter's) enthusiasm he attributes too much (for the spectator) to the joy of painting *quâ* painting—the emergence of the rock of dexterity above the flood race of art makes one fear lest it also indicates the shallows. As to the dogmata of treatment and so forth, "non ragionam' di lor, ma guarda o passa." Both the "painted chamber" and the "hole in the wall" principles are logical and valid; and the history of fresco-painting shows how the latter was the aim and development of the former. What the architect asks of the painter is that he should accept the spaces allotted to him, and paint the decoration of them *in situ*. If the spaces to be coloured are—from the painter's point of handling —inaccessible, so that he cannot judge of his effect whilst at work, then he should restrict himself to such a form of decoration—plain colour powdered or diapered, or the like—as he can execute on the scaffold and can assure himself will look pleasant from the usual spectator's standpoint. What the painter asks of the architect is that the spaces to be coloured should be—in reason—suitable, and handed over to him in such a condition that his work shall not suffer from causes beyond control. Neither of them should be afraid of failure—by that route only comes success. But, as Mr. Bayes recognises, such wisdom-teeth cannot be cut on serious walls, because of the aforesaid sense of responsibility, the dignity of the building, and the "waste" (so called) of money. Moreover, owing to this long interregnum, decorative painting on a large scale may be called a lost art, and it is a prime mistake to pick up an art with a view to protracting its existence and carrying it forward at the point where it expired exhausted. You must take it up at an earlier and probably simpler stage, when the canons of the art were fewer, the conventions less disguised and overlaid, and when the apparatus of storytelling was frankly apparent and frankly limited. Failure on such a programme is less courted and less likely to attend the painter, who would do well besides to go through a course of quasi-heraldic decoration of large spaces so as to get a sense of scale and the value of colour, etc., under conditions of distance and light. There are many blank walls aching to be clothed with something a little more animated than wall-paper; there are yards and yards of dead mechanically correct panelling damned for want of the saving grace of some simple decoration in paint, some touch of the human hand. No one is going to suffer these spaces to incur the chance of displaying ambitious failure—no one quite believes in the existence of

contemporary Raphaels, Pieros della Francesca e dell' altre donne; and, moreover, we are not accustomed to save our walls from the chill mortification of stark nudity or machine-made clothing. It was easier in the days when all the public buildings were frescoed inside and many outside, when the walls of private houses as well as palaces were hung with arras and painted cloths, to commission a young painter to go and do what most other painters, young and old, were doing—when the traditions of practice were current and apprenticeship to a popular master the usual thing—it was easier, and the risk of failure both slighter and of less moment. That the work should be done *in situ* and under the conditions on which it will be usually seen, is a postulate of first importance; it is of the essence of the training of a decorative artist, and to insist on this will mean, in most instances, that the painter must be taken young—before he has done more than show promise, before he has begun to exchange the passionate outburst of hope for the sober seriousness of experience, before he has encumbered himself with the vanity of a studio and the other preposterous appurtenances of an artist's outward equipment. This will give us the gaiety that Mr. Bayes pleads for, and which we all of us, unconsciously, so much want—the gaiety of youth, high spirits, and large possibilities. The serene gaiety of a later age is also a precious quality, but naturally we are reluctant to spend it on ephemeral work in the same liberal and improving way that we would use the young man's. We want the flexibility of mind and the locomotive powers of youth, to be ready to climb up into and descend the cupola many times in the day, questioning the exact success of his dispositions of line and colour; to look upon the preliminary sketches as mere starting points—not so much solemn contract to be executed—and all this, he will object, for mere journeyman's pay. Well, that is a living wage, and the work seen of many gives delight to many; whereas the painter of easel pictures appeals to a small secluded audience with only the remote possibility of some day getting hung on the walls of a public gallery. Even when the decorative painter has penetrated into the private house, his panel should be more effective than the picture by virtue of its suitability to its position, for the picture has been painted under conditions of lighting that are not to be reproduced in the private house: and whilst the picture is but a spot in the room, his panels are a contributory enrichment of its entirety, conferring a distinction and individuality on the room itself, and diffusing a content by putting us into the company of pleasant beings as much our companions as those that live between the covers of our books.

CORRECTION.—On p. 255 of the December number "Mr. Charles Butler" should have been "Mr. Cyril Butler," and "Mr. Marshall" "Mr. E. W. Marshall."

Current Architecture.

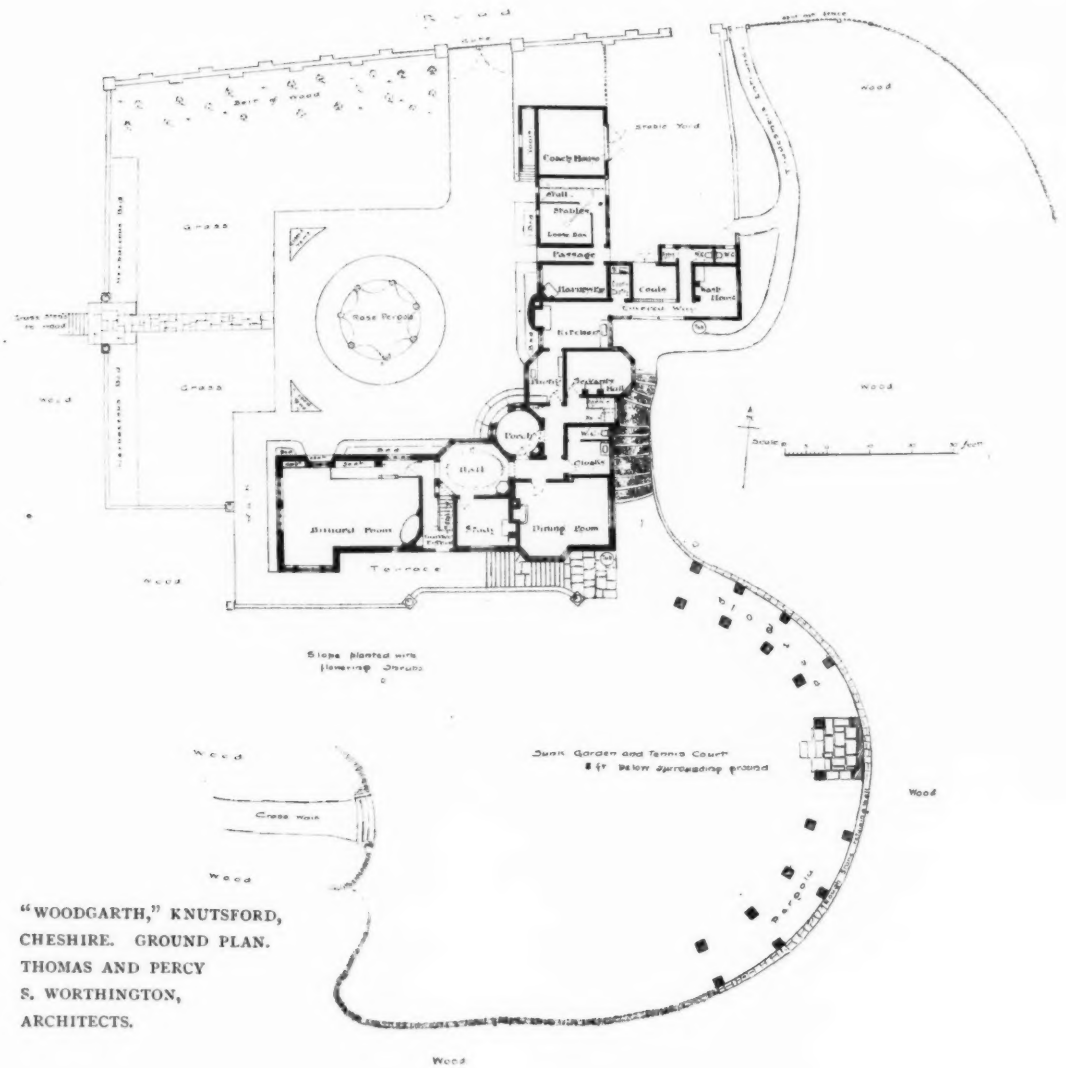
"WOODGARTH," KNUTSFORD, CHESHIRE.—This house has been built for Mr. George Wragge on the outskirts of Knutsford, a small Cheshire town to which Cranford has assigned a niche in literature. A wood of firs and beeches, oaks and birches, has been sufficiently cleared to receive the house and forecourt, and the plan shows how the south front overlooks a sunk garden that was originally a large sand-pit, from which steps lead up to the terrace and down to a grass path along a wooded ravine. Two of the views are taken from this lower level. A pergola follows the curved line of the sand-pit, with a thatched garden-house in the centre. This arrangement allows the blooms of roses and climbers, so often visible on a pergola, to be seen from the windows of the house, and they will appear almost like a bed upon the surface of the surrounding ground. The house is in the shape of the letter L, as shown by the view taken from the wood outside the forecourt wall. Externally the walls are rough-cast, with base and dressings of Alderley stone, and the roof is of stone tiles. The gutters and down-spouts are of English oak, and the heads have each a carved panel and angles decorated with diaper patterns. Internally, the wood-work on the ground floor and staircase is of oak in panelling; floors and doors, etc., and plaster decorations have been modelled from the architect's designs by Mr. Miller, of Messrs. Earp, Hobbs, & Miller. The general contractors were Messrs. Isaac Massey & Sons, of Alderley Edge, and the metal-work in iron, copper, brass, and lead, and the casements, glazing, and decorative colouring, have been done by Mr. Wragge himself. The house has been built from the designs and under the superintendence of Mr. Thomas Worthington and Mr. Percy Scott Worthington, of Manchester.

KINGSTON-ON-THAMES MUSEUM AND ART GALLERY (for plan, see p. 35).—The new building (walls blacked in) is an addition to the Library (walls hatched) which was completed from the same architect's designs about eighteen months ago, and illustrated in the REVIEW for February 1904. The ground floor consists of a museum and a lecture-

room, with the usual odd rooms in connection with it. The first floor is occupied entirely by the art gallery, which is over the museum and is top-lighted. The elevations are carried out in red bricks with stone base and tile roofs with wooden eaves. The contractors for the various works were:—General contractor, Mr. Chamberlain, Addlestone; bricks and tiles, Messrs. Thos. Lawrence & Sons, Bracknell; iron gates, etc., Mr. Albrow, Earlsfield; carving, Mr. Gilbert Seale, Camberwell; heating and ventilating, Messrs. Price, Lea, & Co., Adam Street, Strand. The architect was Mr. Alfred Cox.

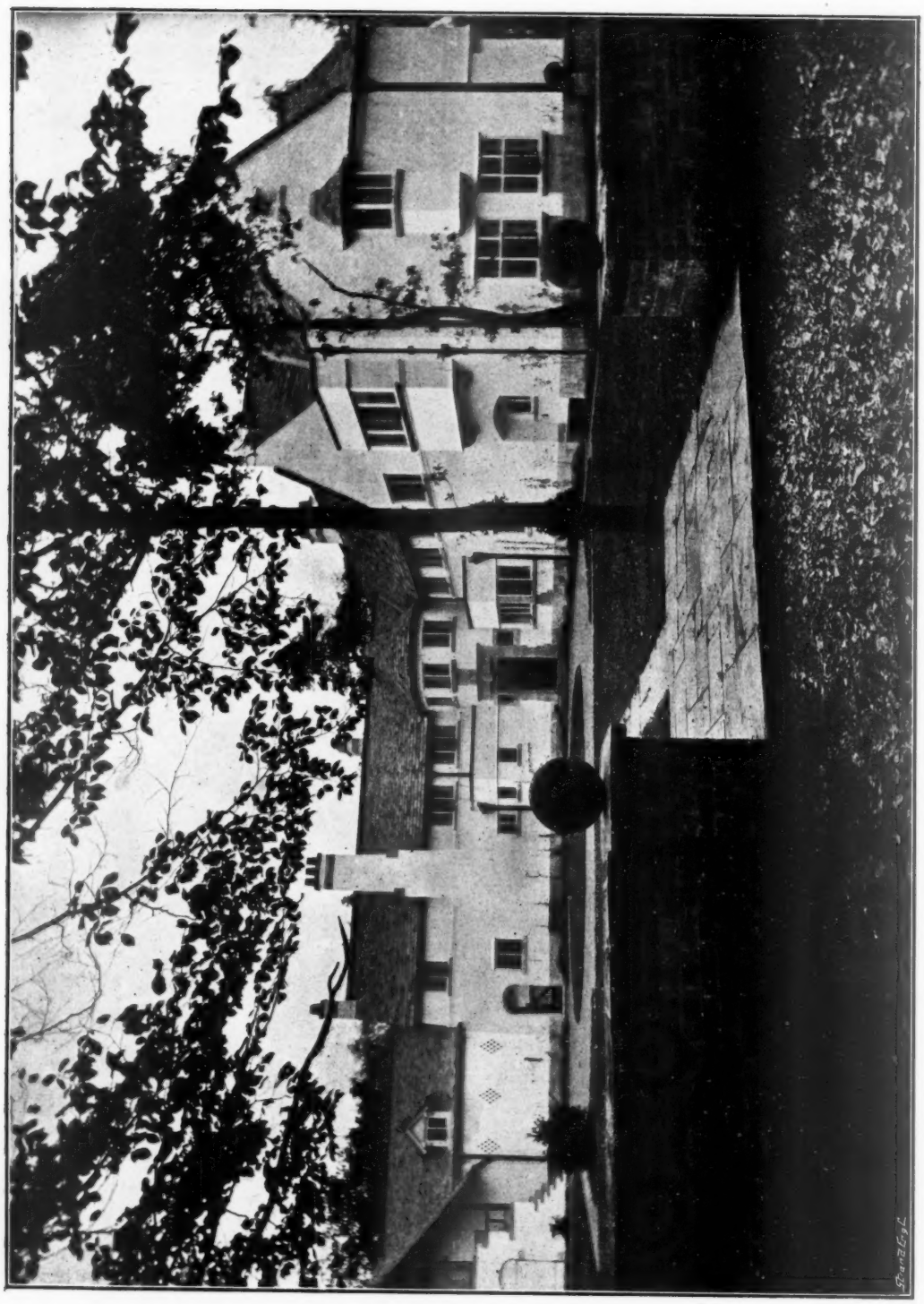
WINSLEY HOUSE, WILTS.—This house has been erected upon the site of an old house, and the unusual shape of the plan is accounted for by the endeavour in the first instance to alter and enlarge the original house; eventually, however, it was found necessary entirely to rebuild. The ground floor contains a large hall, dining-room, drawing-room, and library, in addition to a kitchen and offices. The first floor has eight bedrooms and a large billiard-room with an oriel window, and there are seven bedrooms on the second floor. The house is built of Winsley stone quarried close by, and has a stone-tiled roof, being that common to the district. The contractors were Messrs. J. Long & Sons, the clerk of the works Mr. E. J. Trotman, and the architects Messrs. T. B. Silcock and S. S. Reay, of Bath and London.

"STEEP HILL," JERSEY.—This house is built on high ground looking down on St. Heliers. It occupies the site of an old house, and so enjoys

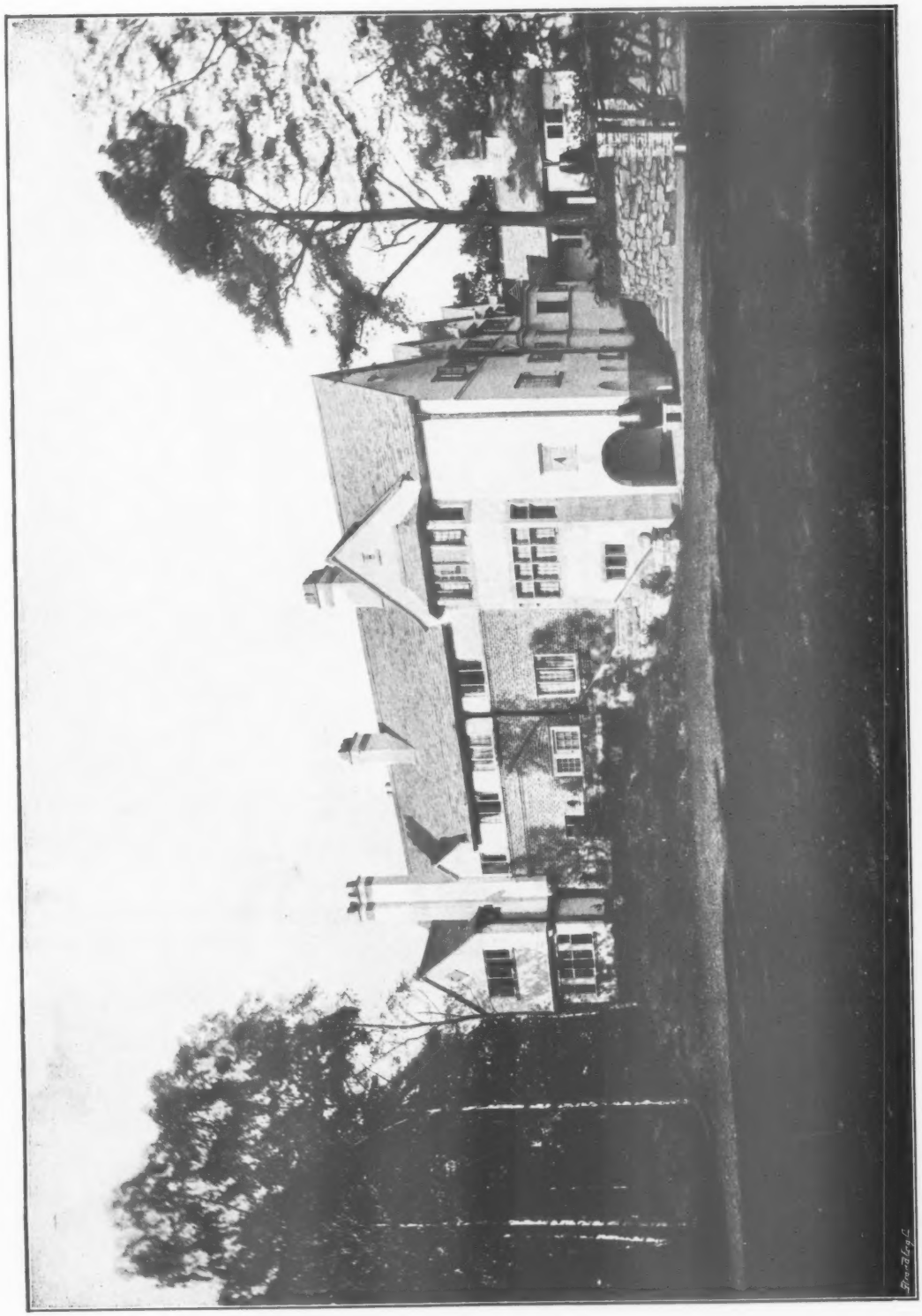


"WOODGARTH," KNUTSFORD, CHESHIRE. GROUND PLAN. THOMAS AND PERCY S. WORTHINGTON, ARCHITECTS.

"WOODGARTH," KNUTSFORD, CHESHIRF.
SOUTH FRONT AND TERRACE STEPS FROM PERGOLA.
THOMAS AND PERCY S. WORTHINGTON, ARCHITECTS.



"WOODGARTH," KNUTSFORD, CHESHIRE. ENTRANCE COURT, FROM THE WOOD
THOMAS AND PERCY S. WORTHINGTON, ARCHITECTS.



"WOODGARTH," KNUTSFORD, CHESHIRE. VIEW FROM PERGOLA IN SMALL GARDEN. SOUTH FRONT.
THOMAS AND PERCY WORTHINGTON, ARCHITECTS.

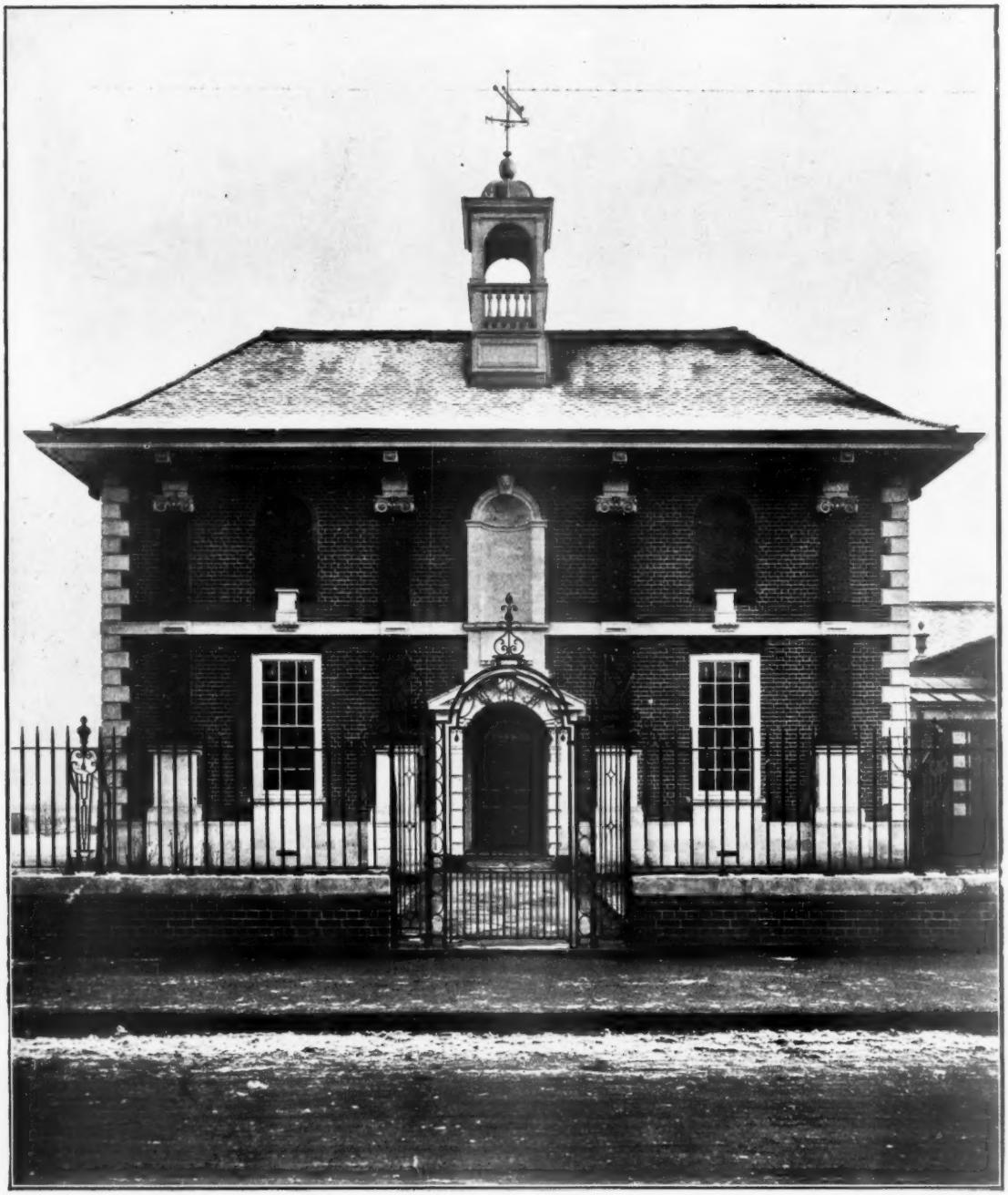
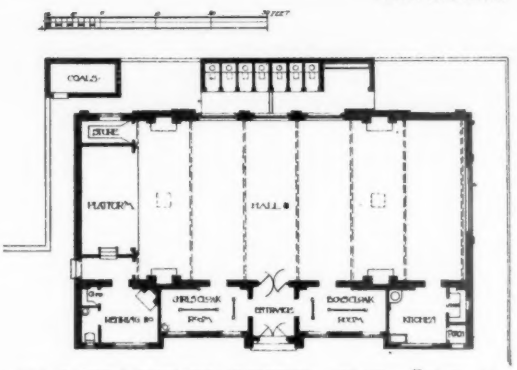


Photo: E. Dockree.

MUSEUM AND ART GALLERY, KINGSTON-ON-THAMES.
ALFRED COX, ARCHITECT.

the advantage of an old garden. The whole house is rough-cast, with hand-made red tiles for the roof. Internally there is a good deal of oak panelling, all made in Jersey. The ceilings of the hall, library, and drawing-room were modelled by Mr. G. P. Bankart. The plan was illustrated in the REVIEW for June 1902. The general builder for the whole work was Mr. Crill, of Jersey. Mr. R. Lloyd, architect, of Jersey, superintended the work throughout. The architect was Mr. Ernest Newton.



ALL SAINTS' SCHOOLS, BEDFORD. PLAN. See p. 40.
C. E. MALLOWS AND GROCOCK, ARCHITECTS.

Photo : E. Dockree.

MUSEUM AND ART GALLERY, KINGSTON-ON-THAMES. ENTRANCE.

ALFRED COX, ARCHITECT.

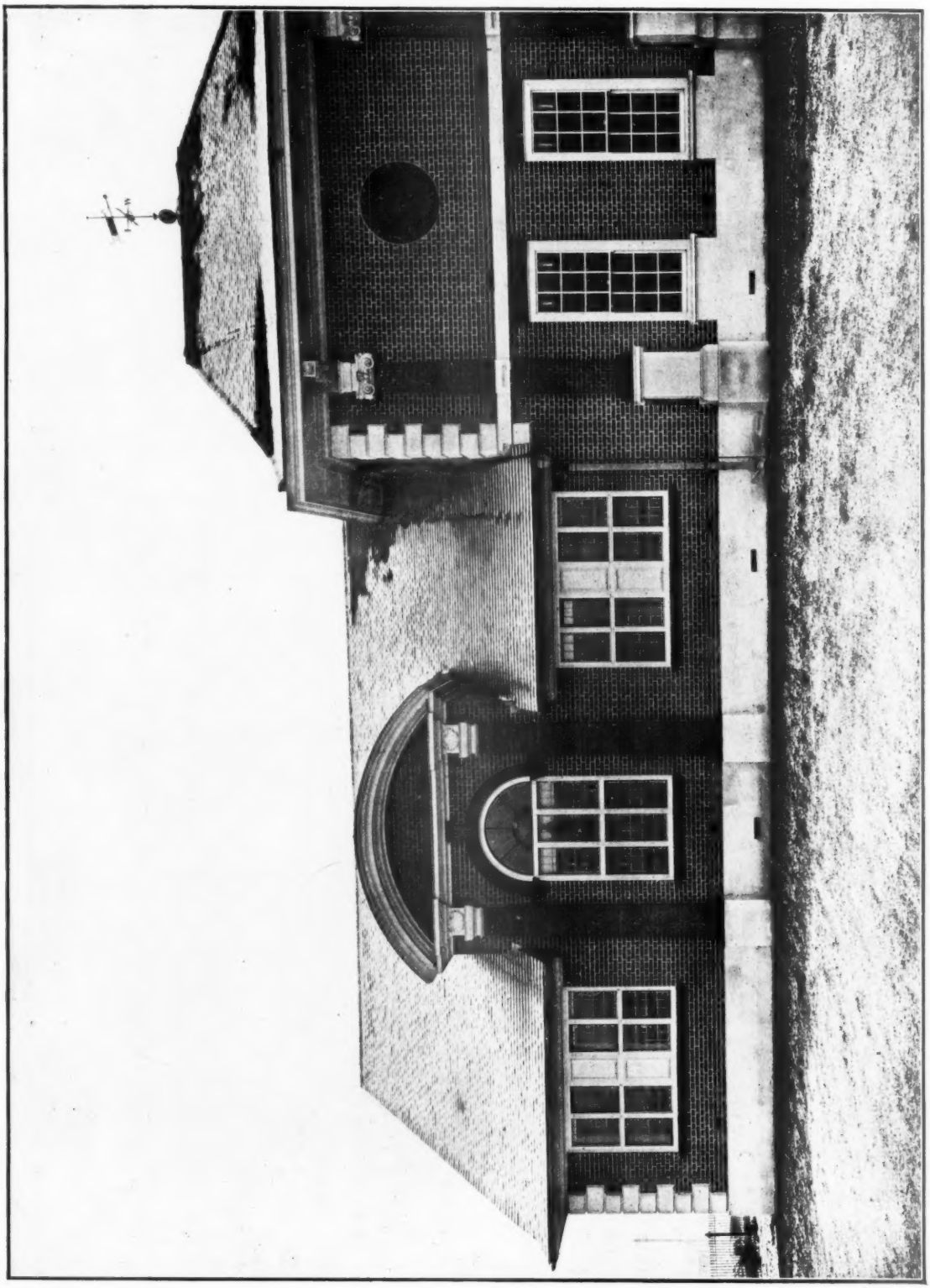


Photo: E. Dockree.

MUSEUM AND ART GALLERY, KINGSTON-ON-THAMES. SIDE ELEVATION. ALFRED COX, ARCHITECT.

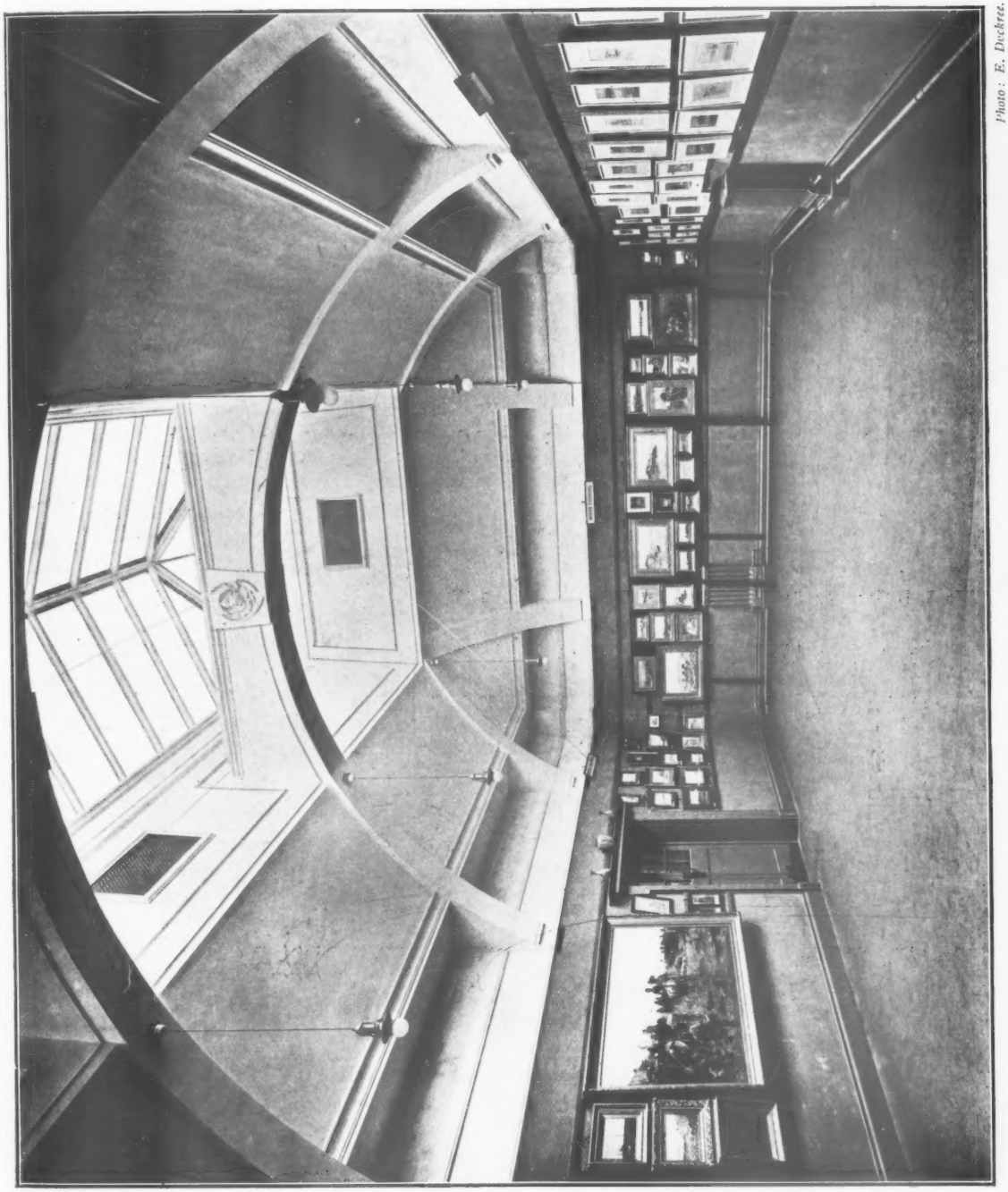


Photo: E. Dockree.

MUSEUM AND ART GALLERY, KINGSTON-ON-THAMES. INTERIOR OF THE ART GALLERY.
ALFRED COX, ARCHITECT.

Photo: E. Doc! ce

MUSEUM AND ART GALLERY, KINGSTON-ON-THAMES. THE HALL.
ALFRED COX, ARCHITECT.

MUSEUM AND ART GALLERY, KINGSTON-ON-THAMES.
GROUND PLAN. ALFRED COX, ARCHITECT.

WINSLEY HOUSE, WILTS.
GROUND AND FIRST-FLOOR PLANS.
T. B. SILCOCK AND S. S. REAY, ARCHITECTS.

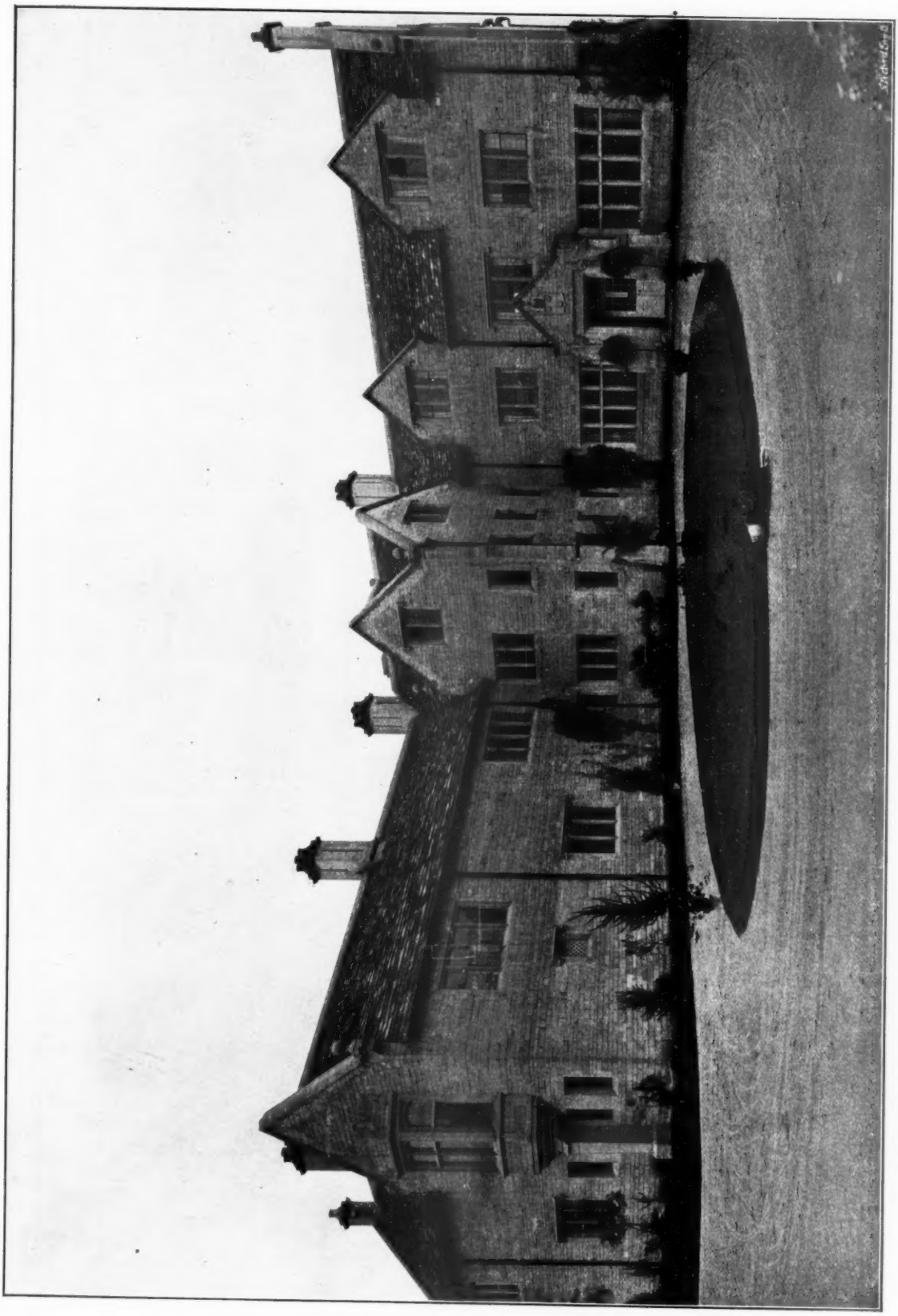
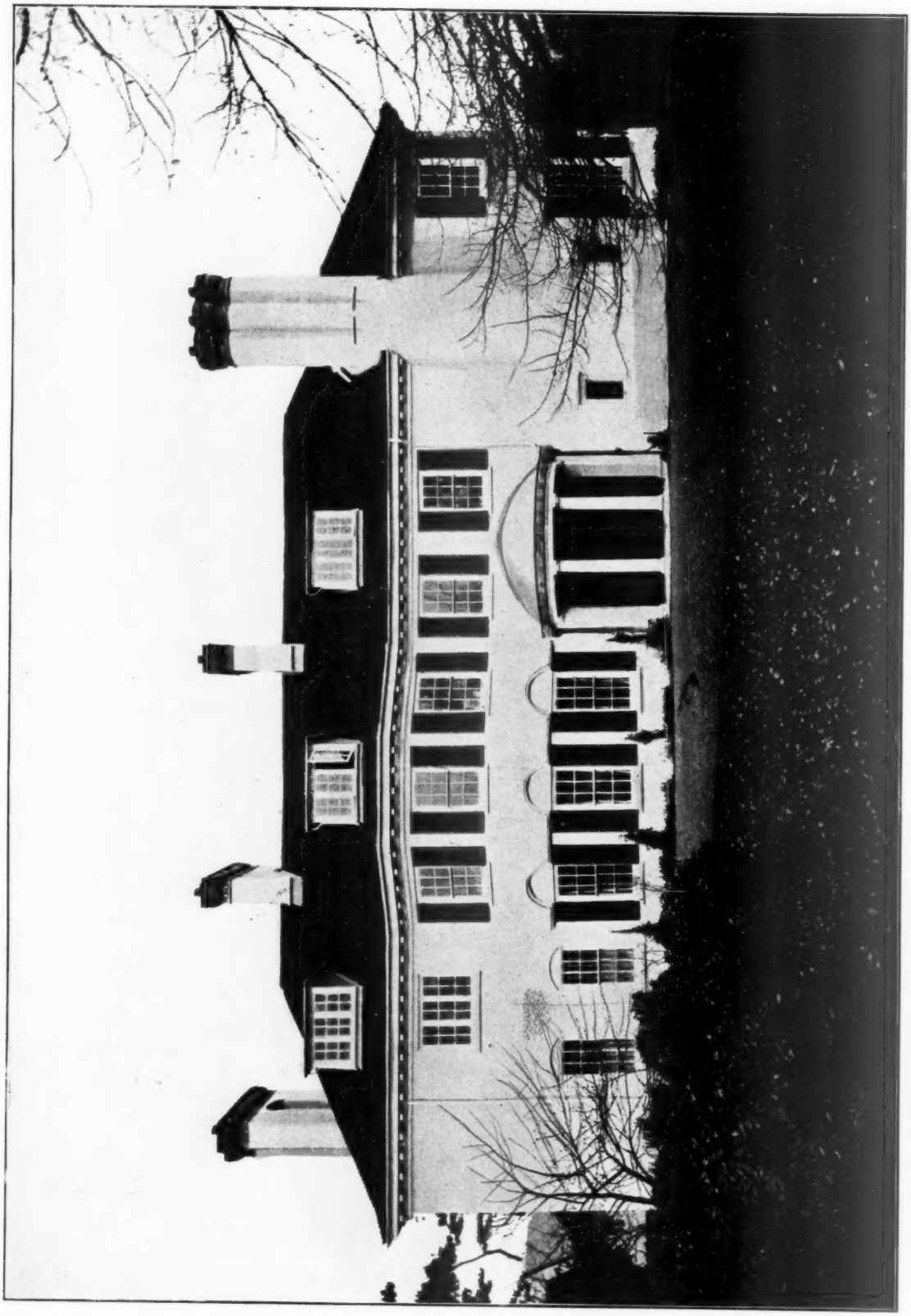


Photo: E. Dockree.

WINSLEY HOUSE, WILTS. ENTRANCE COURT. T. B. SILCOCK AND S. S. REAY, ARCHITECTS.

Photo: E. Dockree.

WINSLEY HOUSE, WILTS. THE HALL. T. B. SILCOCK AND S. S. REAY, ARCHITECTS.



"STEEP HILL," JERSEY. ENTRANCE FRONT. ERNEST NEWTON, ARCHITECT.

Photo: A. Smith.

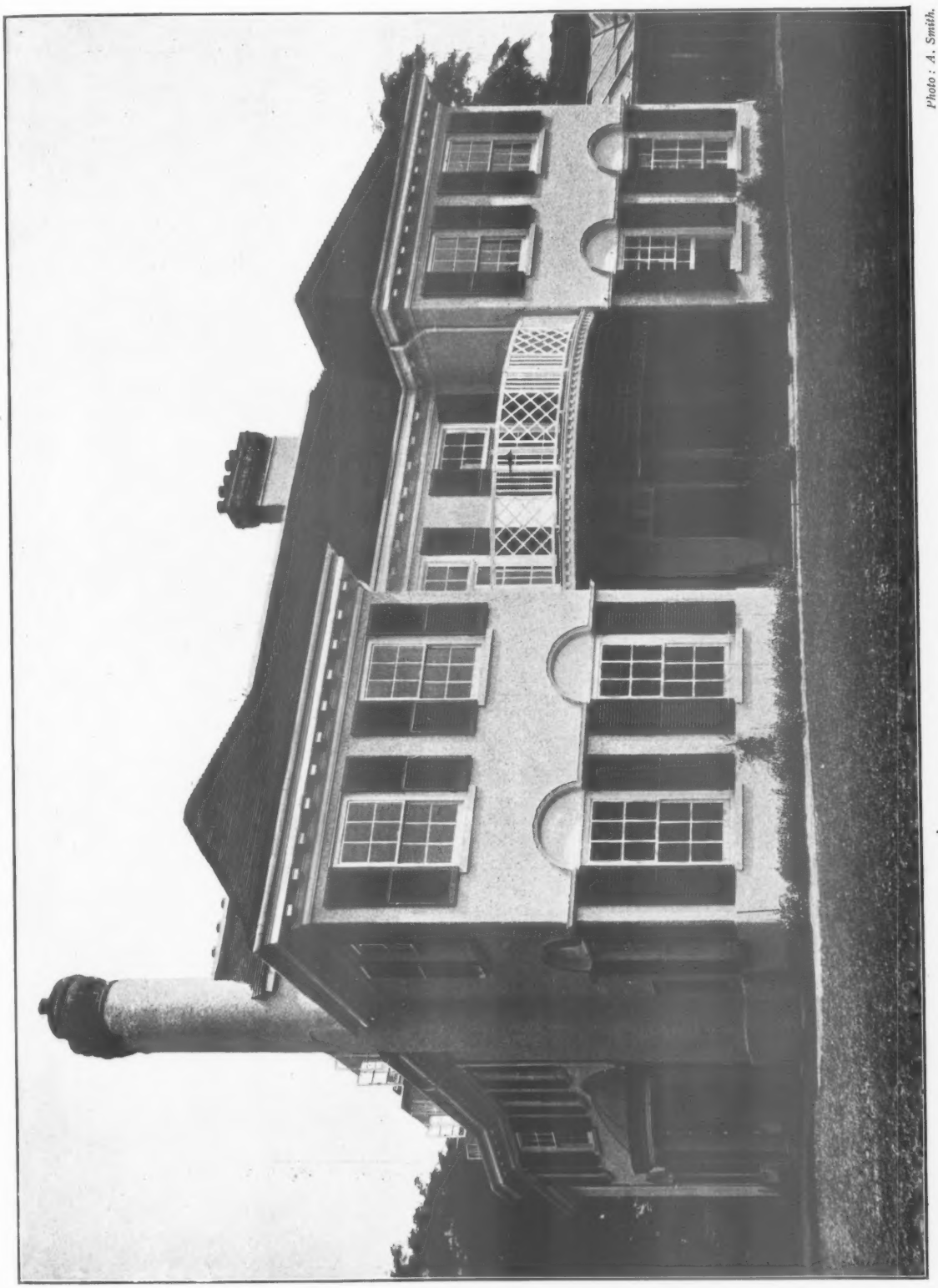
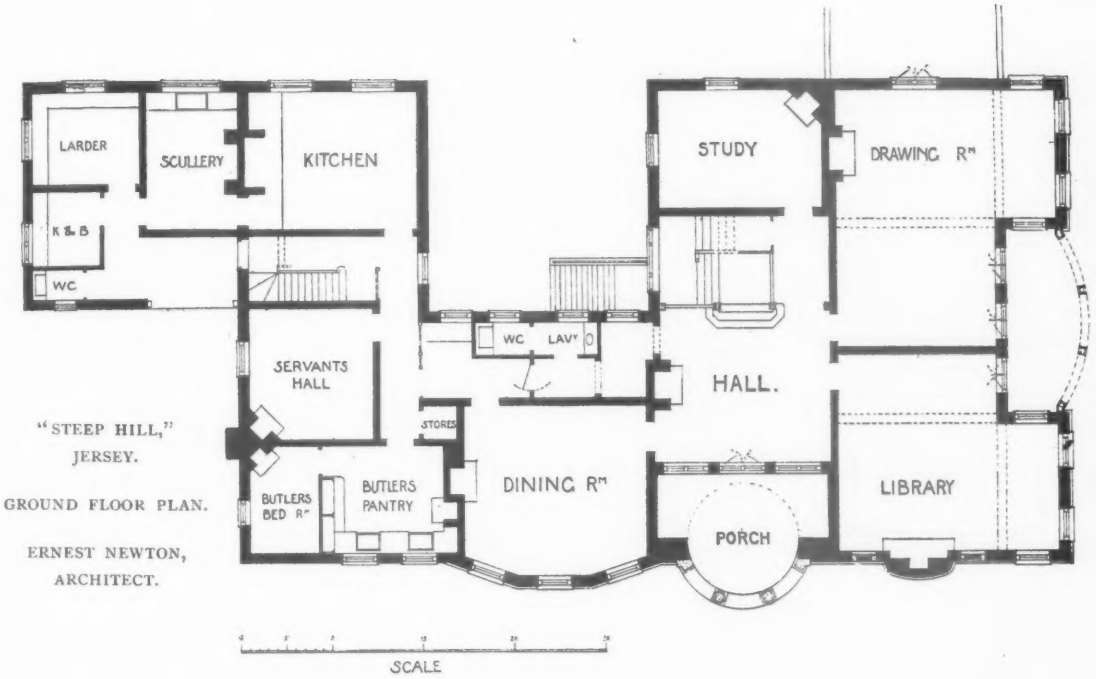


Photo : A. Smith.

"STEEP HILL," JERSEY. GARDEN FRONT. ERNEST NEWTON, ARCHITECT.

Photo: T. Lewis.

ALL SAINTS' SCHOOLS, BEDFORD. C. E. MALLOWS AND GROCOCK, ARCHITECTS.



"STEEP HILL," JERSEY.

GROUND FLOOR PLAN.

ERNEST NEWTON, ARCHITECT.

ALL SAINTS' SCHOOLS, BEDFORD.—These schools have recently been completed in Queen's Park, Bedford, in connection with the church of All Saints. The materials are local hand-made gault bricks with red brick dressings, and red local hand-made tiles for the roofs. The local gault bricks being of varying colour give a pleasant texture to the exterior. The contractors were Messrs. Wharton and Dunstall, of Bedford. The contract was £1,500. Mr. George Wragge, of Manchester, supplied the fittings. The architects were Messrs. C. E. Mallows and Grocock.

Architectural Education.

A Discussion.

IV.—BY F. M. SIMPSON.

THE question as to whether architectural education in England should follow on the old pupilage lines pure and simple, or should start from a sound basis, and proceed systematically, has for many years evoked keen discussion. I do not propose to argue it At last, there seems to be a strong probability that the question will be settled, and settled satisfactorily; and that before long a complete and thorough course for students to pass through before they enter an office, as well as during their term of pupilage, will become universal.

As regards what the details of such a course should be, I need not write at length. They will be outlined in the report of the newly-constituted Board of Architectural Education, now sitting at the Institute. I shall therefore confine my remarks in this article entirely to two main aspects of the question:—1. To the need for the student having a sound general education before he is allowed to commence his technical training; 2. To the necessity of that training being on broad and liberal lines.

To take these in order. In America, where education is a permeating force, understanded of the people, education, in nearly all the States, is graded from the primary schools to the university. There are: (1) the Elementary or Grammar School; (2) the High School; (3) the College, Technical Institute, and University. Boys are passed on from one to another. At the end of the high school course of four years, a school-leaving certificate admits the student to one of the institutions of the third class. The result is that there are no gaps. A student takes his three courses in one stride. His four years in the high school ensure him a good general education; his term in the university, college, or technical institute supplies him with a sound preparatory training in his special subject, which commences at the point where the other leaves off.

Other countries, besides America, recognise the advantages of such a system. I was much interested in a remark made, a few years back, by Sir John Gorst in an after-dinner speech. He said: "When I was in Denmark, I said to one of the leading men there, 'The excellence of your butter is doubtless due to the excellence of your technical schools.' His reply was, 'Not at all; the excellence of our butter is due to the excellence of our secondary schools.'" The deduction is obvious. In Denmark they have also learnt that for a student to attempt a technical course before his mind is prepared to reap the full benefit from it, is a mistake.

I do not know whose fault it is; I do not know whether it is the fault of the method of teaching in our schools, or the result of a curious twist in an average English boy's mind, that allows him to absorb facts, but prevents his making deductions; I only know that amongst the students I have had in London and Liverpool, very few had learnt that elementary but most important lesson—how to learn. Of those few, most had had a university training before they commenced their architectural course. These proved the best students; not because they were older, but because they had learnt to think.

That my experience has not been very different from that of others who come intimately in touch with boys straight from school, is shown by the following extract from an article in the November number of A. A. Notes. Mr. Maule says: "The student's technical education is terribly hampered because his school training has never included any instruction in the proper use of his own language, nor taught him to cultivate or develop any natural capacity for accurate observation, which is really the most vital element in any training worthy the name."

How can this state of things be remedied? How can students be led not only to observe accurately but also to think intelligently? The remedy, it seems to me, is to insist that a student's general knowledge shall be up to a certain standard before he is allowed to commence his architectural course. It must be remembered that the majority of architectural students do not reach the upper forms in our big public schools; many do not go to public schools at all. For these some further training is necessary. It may be urged that this is no business of ours; that it is an affair for the schoolmasters. I venture to think that this is not so. The success of any scheme of technical training must depend, to a certain extent, on what precedes it. Existing conditions cannot be ignored. If a wide gap exists between school attainments and the knowledge necessary for a technical course, the whole fabric of that course may be said to rest on a very rotten foundation. No architect would dream of starting a building without making sure that it had something sound to stand on; and what is true of building is also true of education.

I have already indicated that I believe in a university training for a man who intends to be an architect. But only a small percentage can afford this. The majority have not the money, nor can they spare the time for it. The same objection, however, does not apply to a student pursuing his general studies concurrently with his technical. It may mean a little longer preparatory course, as a certain number of hours each day would have to be devoted to outside subjects, but the extra time would be well spent. The student would reap the benefit from it immediately in the increased power of assimilation, of analysis, of independent thought, which a study of the liberal arts and sciences gives. Architecture is such a complex subject, that a man's general education cannot be too wide and varied. Students who could pass a University Matriculation examination might be exempted from these classes, but for others I should like to see a list compiled, including pure arts subjects, such as English, French, German, together with Mathematics, Mechanics, Physics, Chemistry, Geology, etc. From this list each student should be allowed to choose three or more, no line being drawn between arts and science. To make certain subjects compulsory would, I think, be a mistake. Men are not all constituted alike. To attempt to cram mathematics into some boys' brains is to court failure; on the other hand, the very boy to whom mathematics are anathema is just the one to take kindly to a language, to history, or to chemistry, and *vice versâ*.

Coming to the second question, the main lines on which architectural education should proceed, one is confronted with a difference of opinion. Is such education to be purely technical, or is it to be broad and liberal?

The two most important aims, it seems to me, in any scheme of education, whether for architects or anyone else, are (1) to interest students; (2) to lead them to think for themselves. A training in technicalities of workmanship is of value as regards detail, but it does not touch the big problems of design—the planning, massing, proportions, of buildings as a whole. It may satisfy a student who is a mechanic at heart, but it will not content one with imagination. For this reason, sending a boy who is going to be an architect through a builder's shop has been found to be, on the whole, unsatisfactory. It does some good, but it also does some harm, inasmuch as it narrows the outlook and cramps the mind. I

confess that I do not believe in a student spending much time in workshops. There is no harm in a few hours spent at a "banker" to learn what "undercutting" entails, or in a plumber's shop trying to wipe a joint, or with a plasterer, floating a wall or running a moulding. I do believe, however, and always have believed, in the value of practical demonstrations, at which men, each skilled in his own craft, can explain and illustrate the different processes any bit of work has to go through. Some of these demonstrations might take place in builders' workshops where work for actual buildings is in progress. For instance, in a mason's yard it is no uncommon thing to see one moulding, in different stages, being worked by a number of men. If the student's attention were drawn to these stages, I feel certain that he would learn as much in an hour as he would in many days spent trying to carve the moulding for himself.

Everybody agrees that a knowledge of practical details is necessary for anyone who practises a practical art. But an architect requires something more. He has to deal with buildings as a whole, not merely with individual parts. It is this which differentiates him from the workman. The artistic side of his training must be considered at the same time as the technical. Herein lies the value of a careful study of the world's masterpieces; not for their detail, but for the grand principles which underlie them, and which have made their reputation. I know of no finer incentive to grand planning and bold construction than Trajan's Forum and Caracalla's Baths. Their whole conception is so powerful, so stimulating, that a study of them must be beneficial. A student should not confine his attention to one particular country or to one particular period. The more catholic his studies are the less likely he is to become a slave to and copier of any one style. If he wishes to learn grace, refinement, and beauty of line, let him turn to the work of the Greeks; if strength and scale, to the buildings of ancient Rome. If he wants to see what architecture, in its highest form, means, let him study Byzantine art, with its fine proportions and its glorious domes; and for intricacies of vaulting and restless vigour, he can pick and choose for himself from hundreds of examples of the middle ages.

I said just now in dealing with a boy's general education that one cannot afford to ignore existing conditions. In considering his course of architectural training one has also to remember the conditions under which he will work after his preliminary course is over and he goes into an office. What will he be required to do there? Draw. If he is unable to put pen and pencil to paper, farewell to any support to a scheme of architectural training from architects as a body. And to do architectural drawing properly a student's hand must be trained by other drawing. Personally, I believe in charcoal as the medium, and the figure, either antique or life, as the model. Charcoal gives a man a freedom of handling that nothing else can impart; and the figure means a training in form and in bold line, and an education for the eye. A man who has fingered charcoal and drawn from the shoulder turns out better full-size details than one who has been accustomed to grip a pencil between his fingers and work from his knuckles.

To finish: a man must know his materials, their limitations and possibilities, or else he cannot build; he must have a knowledge of construction and statical laws, so that he can build strongly —the London Building Act does not provide for all contingencies; he must be trained in plan, form, proportion, refinements, and colour, to help him to build beautifully; he must understand the principles of sanitation—a client wants a house to live in more than one to die in, and, to use an Irishism, he won't live to thank you if you kill him; and he must be able to draw, so that if he has any ideas he can give full expression to them.

CORRESPONDENCE.

To the Editorial Committee of THE ARCHITECTURAL REVIEW.

READING Mr. Champneys' article on this subject for the first time one might suppose that the differences between his opinion and Mr. Lethaby's are merely superficial, and that there is an essential agreement between them. But I think it will be found on examination that the differences are in reality vital. It is one thing to say that architecture is an art which must be based on construction; quite another to say that it is a constructional art. The two modes of expression represent two entirely distinct things.

Building is a necessity of human existence, and the business of the architect is to build. A constructional art! Structure must be to him, not a medium of expression, but the absolutely satisfying expression itself; not a means to an end, but the actual end proposed. He is not to think of construction as merely a necessary basis upon which to exhibit something else—something presumably finer—such as art, style, decoration, and so forth. Construction itself, in a most comprehensive sense, is to be his art. It is structure alone, the beauty or nobility of structure, that gives building its peculiar place among human arts, reflecting, as it does, or suggesting, the creative force of nature. Painting, sculpture, decoration, may be applied to building, but they are not building, and have nothing in common with it. The purpose of

those arts is different; when applied to building they may fairly be described as based on construction, but architecture is construction. Architectural history is, in fact, the history of structural idea; in the more splendid periods infinitely varied and repeated, in decadence misused.

This then, it seems to me, is Mr. Lethaby's ideal—architecture as a constructional art; an ideal not quickly or easily to be attained, if ever attainable; yet in this, and perhaps in no other, is there inspiration and hope. But it by no means follows that it is necessary or expedient to cut adrift instantly from all conventions, all accepted architectural models. This is a question to be determined as best one may. No rule can be formulated upon it, and perhaps, too, in the general ignorance, it is a question in which the public voice will be heard. Yet, even so, it is by making structure and not style the evident and proposed object as far as possible that progress will begin. For the problems of building are eternal, like the problems of life itself—no final solution of them can be reached—they are presented afresh to every age. The great historical forms of structure—lintel, arch, roof—are surely not exhausted of interest; rather it seems to me that they hold out a perpetual challenge. New materials and new forms of old materials make little difference to the essential principles of construction. They are only intensitives—extensions of mechanical force; they do not enable us to do different things, but the same things more easily or on a greater scale. Steel, for example, structurally considered, is but wood raised to a higher power.

If, then, the student will keep steadily before him the principle of architecture as a constructional art, I believe he will find his course of study considerably simplified; and while there will be indeed much to learn, there will also be much that he may very well be content not to learn. Out of the confusion of subjects he will select for mastery all those which have to do with structure in a wide sense, and will omit those which are not really connected with structure at all, but with mere adjuncts. That architects should be assumed to know such a strange medley of things is one of the anomalies of our position, and the sooner this encyclopædic knowledge is disclaimed the better. Our business is to build: we are concerned with structure: beyond that our supervision is only a general direction or a financial control. Electrical engineers and such people must be made more and more responsible for their own work. Indeed, may we not hope for a time when many other details of building may be properly left to the crafts concerned in them?

Again, it will not be necessary for the student to spend so much time in the study of ancient styles of architecture as he commonly does now, for he will no longer expect to copy them in his work, and will therefore study them in a more general and structural way. Time spent in "calculation of stresses" and "formulæ" for estimating weights and strengths is for the most part wasted. All such information can be found when needed, or obtained by experiment. And perhaps so much importance will not always be attached to skill of drawing as at present.

On the other hand, I think that a scheme of architectural education ought to include the method of measuring building-work and of estimating the cost of it. I know, of course, that this is very generally entrusted to surveyors, but an architect is surely better for some knowledge of it. Nor is the subject to be considered as difficult or uninteresting: while it is a valuable discipline for a student by training him to exactness of thought, and compelling the habit of structural analysis.

Thus, when all deductions are made, I agree with Mr. Champneys, that there is enough left for much hard and systematic work if the young architect is to be made fit to build. What then? How many years does it require, and what severe and concentrated application, to make a really competent surgeon or lawyer! Why should we expect building, an inherently difficult and bewildering subject, to be learnt in less time, or with less effort, than law or medicine?

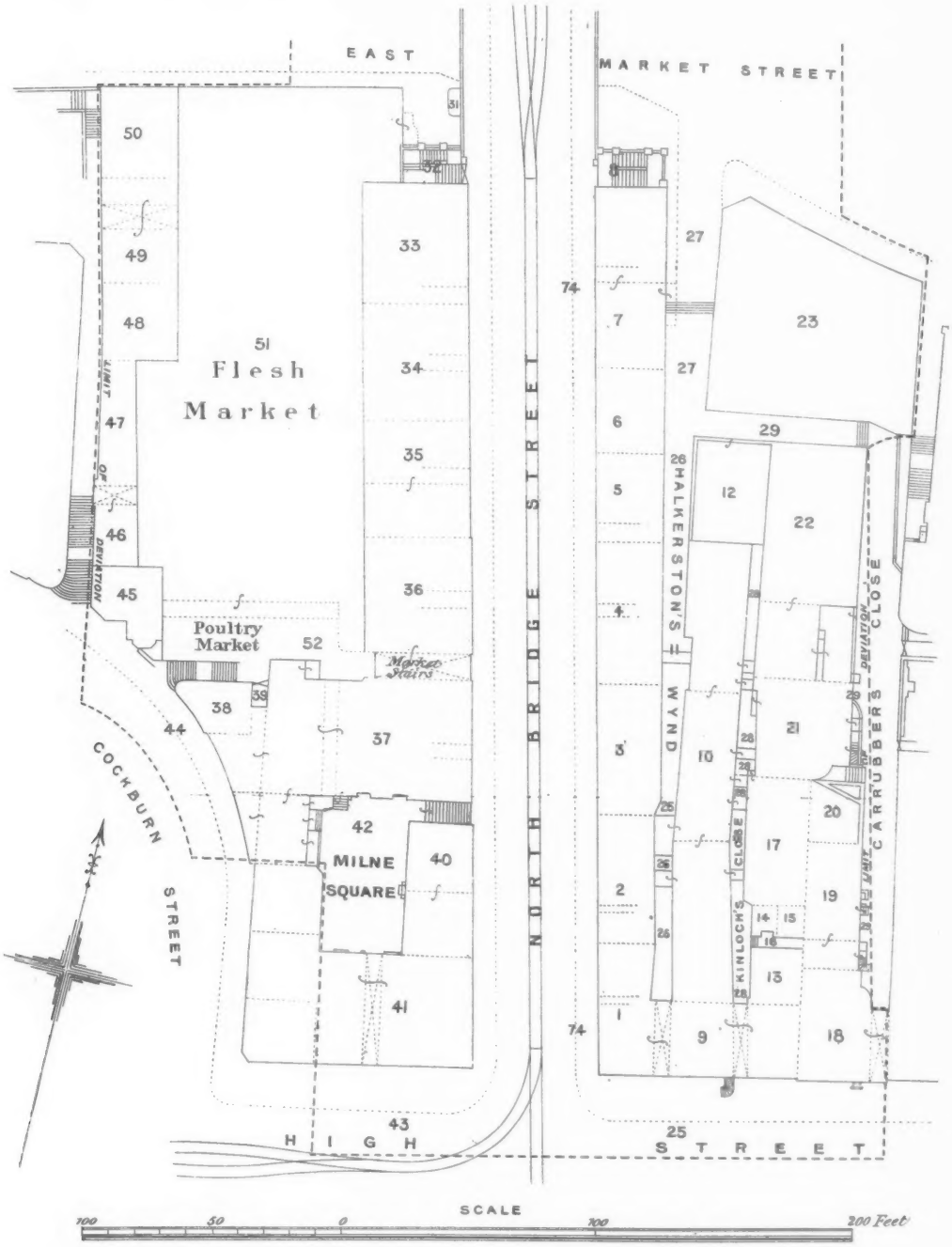
J. L. Ball.

Birmingham.

Old Edinburgh and New.—II.

Coming to the particular piece of land upon which the new *Scotsman* buildings, North Bridge Street, the Commercial Bank, and Carlton Hotel are built, it may be explained that in former times the old Town Guard House stood on the street about ninety feet to the west of the Tron Church, and nearly opposite to it was Fleshmarket Close. From the Fleshmarket Close to Carrubber's Close—both closes are still in existence—and northwards to Market Street, there has been a complete clearance, and the ground is now covered with new buildings likely to occupy the site for several centuries to come. The hillside has been torn, and thousands of tons of its rocky entrails blasted out, until now there is a railway siding away down at the level of the bottom of the Nor' Loch, and large workshops constructed where a great industry is to find its permanent home.

Previous to the formation of Milne Square the closes between Fleshmarket Close and Carrubber's Close came in the following order:—(1) Middle Fleshmarket Close; (2) Bull's Close; (3) Conn's Close; (4) Slater's Close; (5) Lee's Close; (6) Hart's Close; (7) Cap and Feather Close; (8) Halkerston's Wynd; and (9) Kinloch's Wynd.



PARLIAMENTARY PLAN, SHOWING PROPERTY IN NORTH BRIDGE STREET, MILNE SQUARE, COCKBURN STREET, ETC., PREVIOUS TO DEMOLITION.

Conn is said to have been a wealthy flesher (*i.e.*, butcher) about the year 1508. He may have christened Bull's Close adjoining. The Fleshmarket was immediately to the north, and the "Shambles" close by on the edge of the Loch. Access to these was obtained by Conn's, Bull's, and the two Fleshmarket Closes.

Towards the end of the seventeenth century the wealthier dwellers in these closes began to desire more breathing space, and as the original structures fell into disrepair the opportunity was taken to form open squares, or quadrangles, surrounded by buildings. Milne Square was one of these. Robert Mylne was the King's Master Mason. He built Holyrood Palace in 1672, and Mylne's, or Milne Square, as it came to be written, between 1687 and 1689. An ornamental door pediment with the date "1689" on it has been preserved

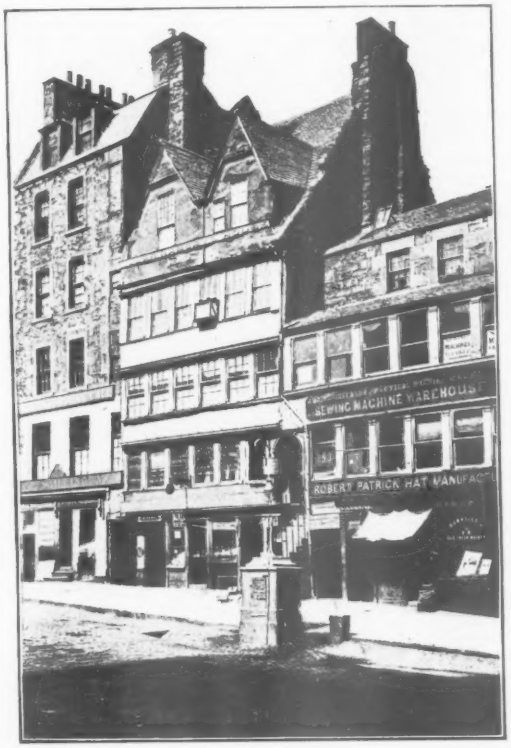
MILNE SQUARE, LOOKING NORTHWARDS. NOW DEMOLISHED.

and rebuilt in the back wall of the new building of the National Bank at the corner of High Street and Cockburn Street, and may be seen by the curious. The pavement of the square was formed at about the same level as the street, and was supported on one tier of vaults at the south end and two at the north end, to suit the rapid slope of the ground. The square absorbed the southern end of Conn's, Slater's, and Lee's Closes with the intervening buildings, while the difference in level at the north end was got over by constructing a stair in the centre, and by prolonging the steep gradient of Lee's Close into the square, in the same manner as at Milne's Court, Lawnmarket, which was constructed in 1690. Of other courts it may be noted that James' Court was formed between 1725 and 1727, and became a very fashionable quarter in which lived Lord Fountainhall,

the Lord President, David Hume, and Boswell and Dr. Johnson in 1733. The court behind Gladstone's Land, Lawnmarket, was formed in 1753.

The first stone of the North Bridge was laid in 1763. The contract was signed on 1st August 1765. On 3rd August 1769 a portion of the bridge fell, but it was restored and first made passable in 1772. On 20th December 1786 the then Lord Provost moved that an application be made in the ensuing session of Parliament for power to widen the approach to the North Bridge, and this improvement was subsequently carried

VIEW OF THE OLD NORTH BRIDGE FROM THE EAST.

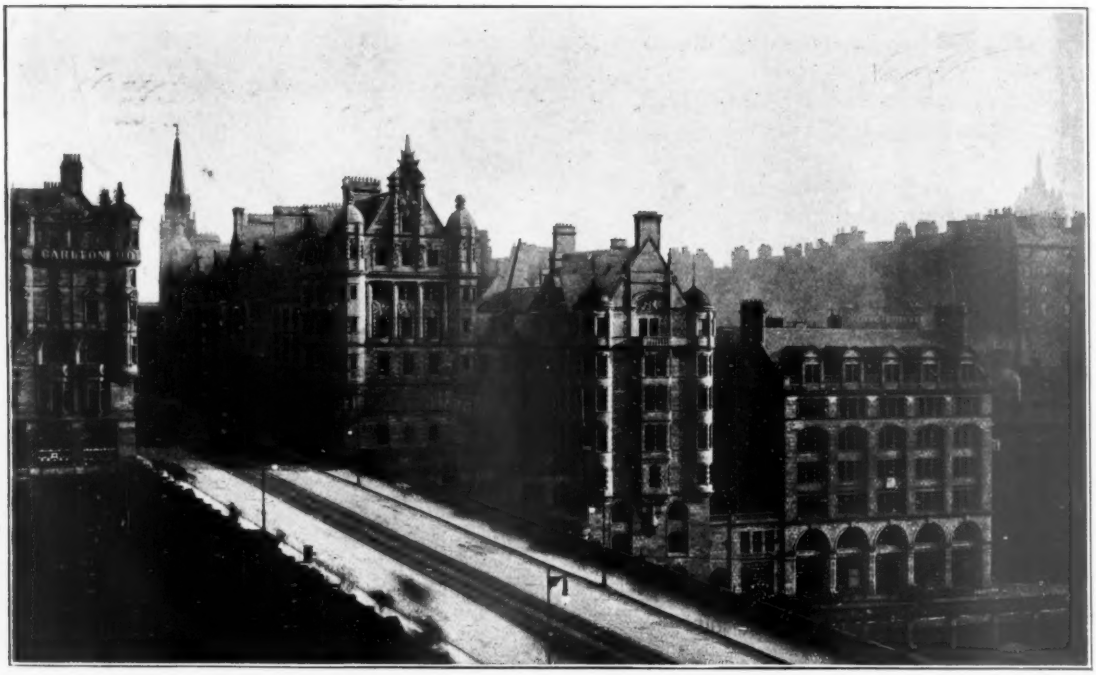


ALLAN RAMSAY'S HOUSE, HIGH STREET. RECENTLY REMOVED IN THE NORTH BRIDGE STREET IMPROVEMENTS.

out. North Bridge Street was then only 36 ft. in width, and embraced the area formerly occupied by Hart's Close, Cap and Feather Close, and the range of buildings between. It was widened at this time by 14 ft. This was obtained by cutting a slice off Milne Square and removing the inclined access from Lee's Close. The street remained at this width of 50 ft. until recently. It has now been widened to 75 ft. In 1860 Cockburn Street was formed, and at the High Street end it cut transversely through Bull's Close and Fleshmarket Close. The lower portion of the street naturally cut through a series of other closes, leaving a few disjointed fragments like Anchor Close and Craig's Close, portions of which still lie on each side of this thoroughfare.

Space does not permit me to dwell on all the particulars of the old buildings which have from first to last occupied the cleared area, nor on the many interesting people who lived in them. One must mention, however, the house of Allan Ramsay the poet, the apartment in which the Treaty of Union is said to have been signed in 1603, the Bourgois Hotel where the Marrowbone

VIEW LOOKING DOWN THE HIGH STREET, FROM THE WEST, 1825.



VIEW OF NORTH BRIDGE STREET, FROM THE NORTH. AS REBUILT.

and other clubs held their drinking bouts and the Senators of the College of Justice came and partook of the Frenchman's celebrated steaks and porter. There were also other taverns of interest, in one of which the Hell Fire Club met, while a survival called "The Presbytery" was there to the end. In one of the houses was born Robert Fergusson the poet. Daniel Defoe and Erasmus Darwin have resided here, and many other distinguished men. The Green Market was removed when the first bridge was built, and lately the Flesh Market, the Poultry Market, the publishing house of Adam and Charles Black, and other buildings of interest past and present. Nearly all the houses in Milne Square were formerly occupied by the aristocracy, or by prominent public men, and evidence of this was visible in the wainscoted walls and other architectural features of interest. Alas, the change! They had descended in most cases to be the homes of the poorest, and even of the murderer—were encrusted all round by public-houses, while the emblem of St. Nicholas, the three golden pills, was conspicuous in announcing its mission to the needy.

To the east of the cleared area was another entrance through the old fortified city wall, designated the New Port, and this, with the path going northwards from it past the Physic Gardens and the Orphan Hospital, formed the eastern boundary of the Loch and led to Multer's Hill and the Long Gate, the ground just in front of which is now Princes Street—the Princes Street where not much more than a century ago people were bribed to take sites that to-day realise over a quarter of a million pounds per acre. Had the Town Council of that time only let out a few acres on ninety-nine years leases, as is done by ducal landowners and others in London, the revenue to-day would make Edinburgh a taxless community and the envied among cities.

Mediæval mingles with modern in the Edinburgh of to-day. We are not perhaps an artistic people, and have taken, in many cases, but poor advantage of magnificent opportunities, but even with much mistaken effort we cannot be robbed of a situation of great natural beauty, a classic street full of quaintness and teeming with traditions. Sauntering in and out of the old closes and squares, we can call up the notable men who have lived in them, and picture the history of which this shell remains, or we may ascend the old turnpikes, and perched on some coign of vantage take in the valley and plain lined with busy streets. Beyond these the town scatters out now towards the glittering waters of the Forth and the horizon of misty mountains.

It is to be feared that many of the old closes will soon disappear, as Milne Square already has done. While it is still a memory we mark its place in the picture that is not yet entirely dissolved.

T. P. Marwick.