THE ARCHITECTURAL REVIEW, JUNE, 1904, VOLUME XV. NO. 91.

ST. GEORGE'S HALL, LIVERPOOL, FROM THE SOUTH-EAST.

Photo : R. P. Jones.

The Life and Work of Harvey Lonsdale Elmes.

THE short but brilliant career of Harvey Lonsdale Elmes is one of the most surprising facts in the history of nineteenth-century architecture. The Greek revival, which succeeded to what might be called the folio period of the Georgian Renaissance, and owed its own origin mainly to Stewart and Revett's great work on Athens, was an essentially academic style demanding an exact and scholarly adherence to antique precedent, and the nearest possible approach to the ideal refinement of antique detail. Yet St. George's Hall, its culmination and masterpiece, was the outcome of ordinary open competitions; and the architect was a young man of twenty-five, in no way remarkable as a scholar or archæologist, who was then at the very beginning of his independent practice, had not once so much as crossed the channel, and never to the end of his life set eyes on a Greek temple, or any of the great secular works of the Roman empire, by which his genius was so splendidly inspired.

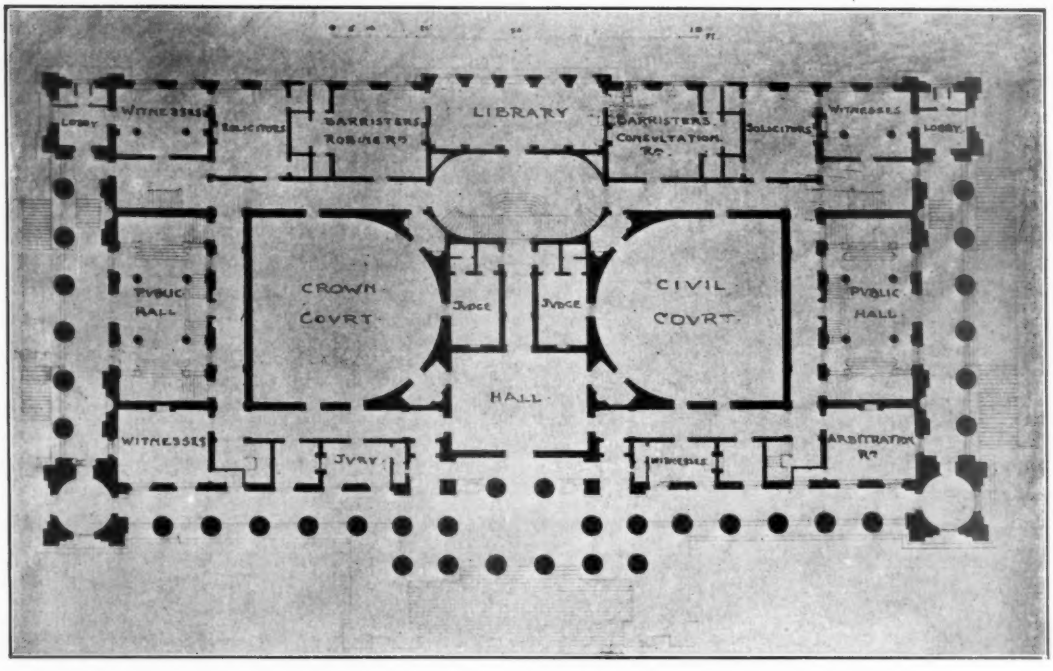
He was born in 1814; his father, James Elmes, was an architect who held the post of surveyor to the port of London, and was known less by his buildings, which were of no great importance, than by his literary work, which included a life of Wren, published in 1823. He describes him as "our greatest architect," and deplores "the apathy of his successors at a time when he and native talent were out of fashion," with reference to the eighteenth-century hostility towards Wren as a heretic in style when compared with that orthodox Palladian, Inigo Jones. In the preface to this book Soane, Cockerell, and Gwilt are mentioned among several professional friends, and no doubt as the young Elmes grew up he found many opportunities for intercourse with that group of architects whose watchword might well have been the advice given to the Augustan revivalists in a sister art—

"Vos exemplaria Græca
Nocturna versate manu, versate diurna."

After his schooldays, of which there appears to be no record, he entered his father's office, and in 1835 went to a Mr. Goodridge, of Bath, for three years, after which he returned to London and carried out, with his father, some houses and offices in Birdcage Walk. About this time he entered into a competition which resulted in the return of his designs with a complimentary letter from the committee, informing him, however, that the whole affair had been abandoned. He was therefore practically at the beginning of his career, when in 1839 his attention was drawn to the advertisement of the St. George's Hall competition. This scheme had originated three years before, when a fund was raised and a company formed to provide Liverpool with a concert hall for musical festivals and other performances on a large scale, for which there was at that time no proper accommodation. Nothing further was done in the matter till 1838, when, in honour of the coronation and by way of making a beginning suitable to any event, an independent and solitary foundation-stone was laid with much ceremony, though no signs of the superstructure had yet appeared, even on paper. The foundations were allowed another eighteen months to settle, and finally, in March 1839, there appeared an invitation to an open competition—two premiums were offered, and the limit of cost was fixed at £30,000. Four months later seventy-five designs were publicly exhibited, and after a weeding-out process of some length, that by Elmes was selected.

In the somewhat fragmentary collection of drawings relating to the Hall now preserved in the

A FACSIMILE OF THE DRAWING BY ELMES.



THE ASSIZE COURTS DESIGN. PLAN.

municipal offices, there are very few illustrations of this original design, but in plan it was a simple rectangle containing two halls seating 3,000 and 1,000 respectively, while the exterior was treated with the Ionic order, which seems to have lost favour with Elmes as his powers developed, since it only occurs once in an insignificant position in the present building. Some pencil sketches for the interior show alternative versions of the roof, which in one case is elliptical, and many ideas may be traced which were to be expanded at a later time.

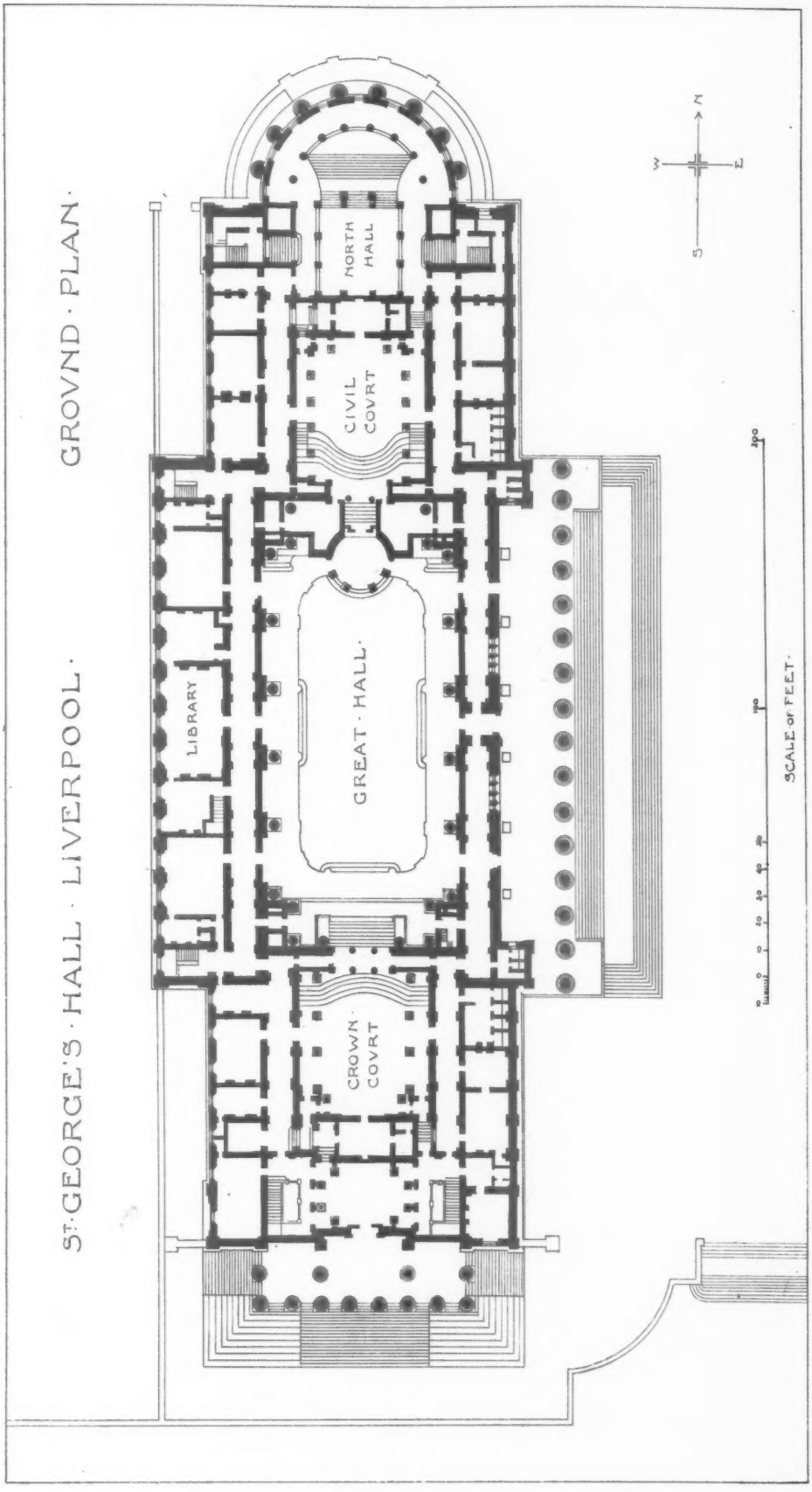
Hardly had this competition been decided, when the Corporation resolved to build new Assize Courts, and at the beginning of 1840 Elmes entered a second competition—eighty-six designs were sent in, and the result was as before.

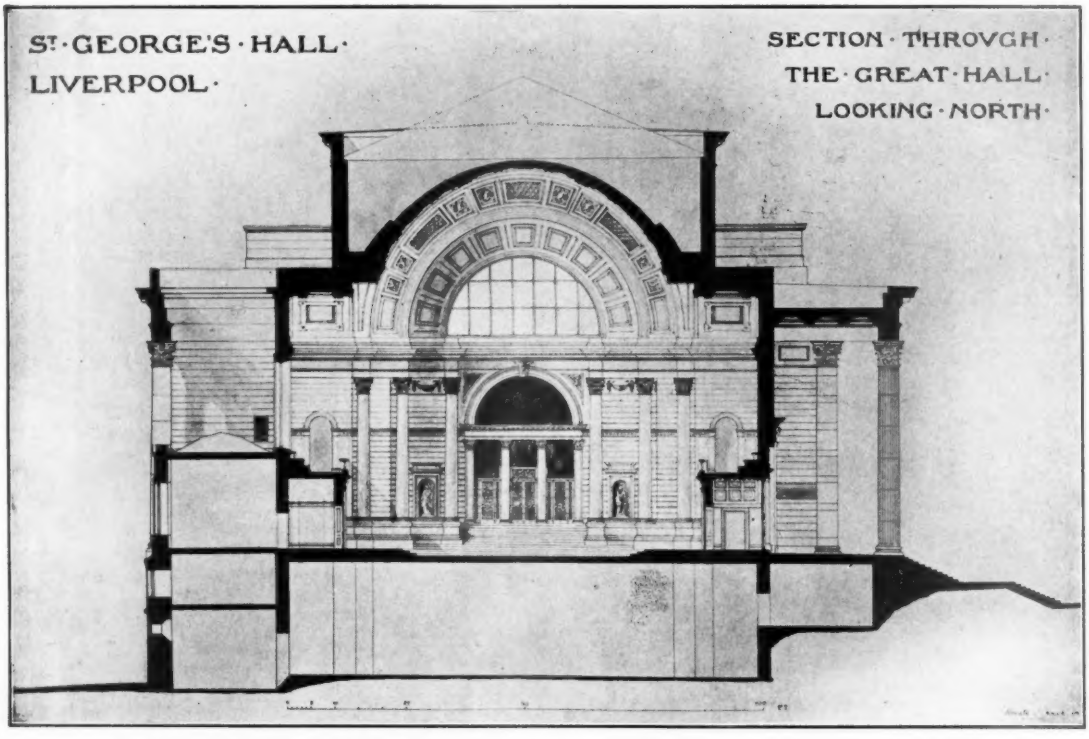
The discrimination shown in the award of this remarkable "double first" may be partly accounted for when we recall that the Greek revival had long been represented in Liverpool by such buildings as the Lyceum, the Wellington Rooms, and the Royal Institution, all dating from the first quarter of the century; also, though nothing is said in the advertisements about an assessor, it is probable that the committees of selection were advised professionally by Franklin the city architect, who had himself travelled in Greece, and had carried out, while holding his official position, the Church for the Blind, and the chapel in St. James's cemetery, a small but very correct Doric temple, which has since lost much of its illusion by reason of an aggressive chimney-pot, and is destined to serve as the humble reminder of a bygone style, opposite the façade of the new cathedral.

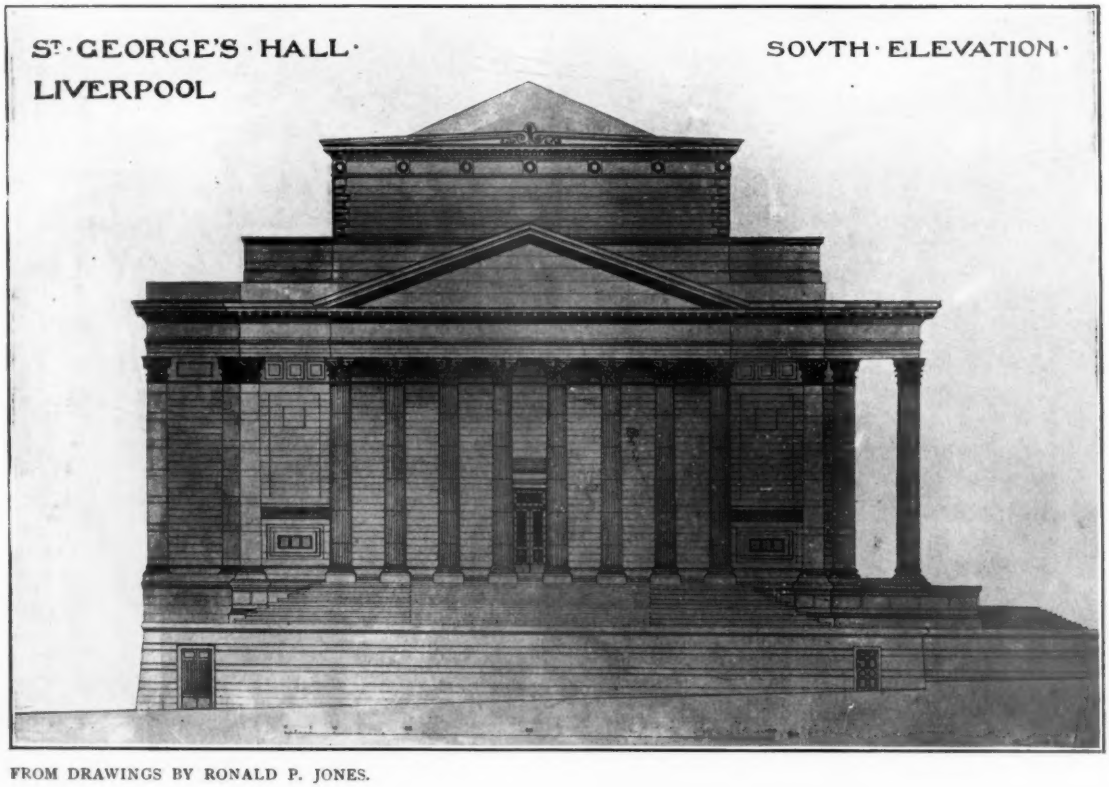
The drawings for the Assize Courts were, like those of the earlier competition, sent in under motto, and one of these is still preserved; but the design No. III., here reproduced, is signed with Elmes's name, and no doubt embodies some alterations which more experienced minds would suggest.

The plan is strictly symmetrical on each side of a centre line, and the arrangement of the courts and approaches is simple and dignified, but judged by modern standards the passages are badly lighted, and some of the smaller rooms would have had a poor supply of air.

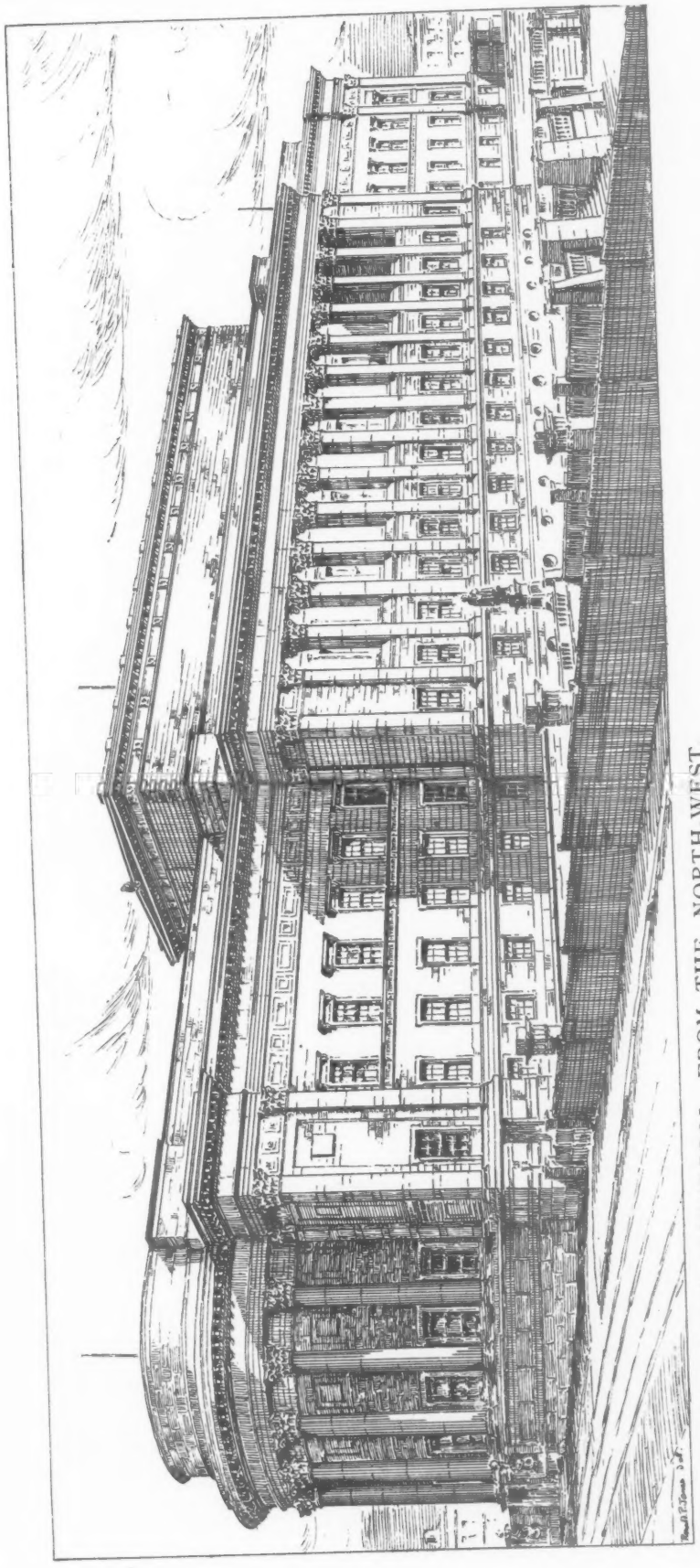
The main elevation is a most refined and beautiful Greek design, even the circular bases of the columns, startling though they seem in a Doric order, being modelled on those of the great temple at Agrigentum, which Cockerell had investigated many years before. One of the defects of the ancient portico was the weakness of the angle column, which from many points of view stands out in isolation against the sky: the Greeks corrected this to some extent by various refinements of design, but Elmes here avoids it altogether by the use of solid blocks at each corner of the building. An objection might reasonably be made to


ST·GEORGE'S·HALL·LIVERPOOL·
GROVND·PLAN·
NORTH HALL
CIVIL COVRT
GREAT·HALL·
LIBRARY
CROWN COVRT
N
W
E
S
SCALE OF FEET·





FROM DRAWINGS BY RONALD P. JONES.



ST. GEORGE'S HALL, LIVERPOOL, FROM THE NORTH-WEST.
DRAWN BY RONALD P. JONES.

the drawing on the ground that the indispensable windows are made to look like panels, and that in actual execution they must have detracted from the classical severity of the effect.

Altogether, though the design on paper is admirable and shows a complete mastery of Greek detail, we can hardly regret that the present building has taken its place, for the Greek Doric is of all the orders the least suited to the climate of an English town, where it acquires an effect of dismal gloom very different from that produced by the temples of southern Europe.

At this time St. George's Hall and the Assize Courts were intended to form the northern and western sides of a square more or less on the present site; but before any further steps had been taken a suggestion was made that the two buildings should be united. The city architect was directed to prepare a combined design, which was forthcoming in October of the same year, and there seems to have been an idea that Elmes could be discarded altogether. However, this arrangement was so obviously unjust that on Elmes claiming the right to prepare new elevations, Franklin not only urged his reinstatement but allowed him to make use of the design already produced.

The Corporation now undertook to defray the whole cost of the building, estimated at £90,000, and the original committee of subscribers was dissolved.

Finally in 1841 a design was approved, and in the following year building operations were begun, this time without any particular ceremony, though the now venerable foundation-stone had to be abandoned as a derelict, since it was nowhere near any part of the hall in its revised form.

In the preparation of the drawings Elmes was assisted by the staff of the city surveyor, though he seems to have seldom visited Liverpool, as his health was already poor, and he disliked the journey from London. He relied considerably on the help of Mr. (afterwards Sir) Robert Rawlinson, who was then assistant surveyor, and continued to take an active interest in the work after his appointment as engineer to the Bridgewater Trust in 1843.

The foundations rest on red sandstone excavated into level steps or stages rising from the south-west to the north-east corners, and these were prepared as soon as the design was decided on.

In the 1842 Academy Elmes exhibited a drawing of the "Assize Courts," as the building was then generally called, and in the course of the year he went abroad for the first time, visiting Belgium and Germany, which could hardly have provided him with any inspiration for his own particular style. He did, however, make one excursion into the domains of the rival style, for he was successful in a competition for the Collegiate Institution at Liverpool, when he produced a Tudor-Gothic design which, if not very remarkable in itself, is at any rate correct and well proportioned, and shows the versatility of his powers. The building committee in this case made the curious proposal to pay him the usual commission on the cost of the façade, but only half that amount on the rest of the building, an offer which he refused, and the work was taken out of his control, though he provided some detail drawings in order to prevent the possible spoiling of the design by other hands.

He was not fully satisfied with the progress of St. George's Hall, and in 1843 he notes that "there is very little doing," but by the next year parts of it were ready for roofing in. The amount of drawing personally carried out by him at this time must have been immense, as he complains in this year of being still without a competent assistant in his office, and the worries and responsibilities of such an undertaking still further impaired his health.

The problem of vaulting the great hall now came to the front; Elmes had intended to use a barrel vault of ordinary brickwork as described in the original contract. But the span of eighty feet was very large, and prophecies were current in Liverpool that the roof would never stand. He evidently began to have doubts himself. "Scarcely a day passes without my thoughts being fixed in that direction, though as yet I have no fear of ultimately accomplishing it. I am not afraid of a single brick in thickness at the crown of the vault, but am anxious to introduce hollow tiles."

The interior arrangement of the hall also came under discussion, and Dr. S. S. Wesley was called in to advise as to the organ. On this point Elmes held very decided opinions, and was strongly opposed to having one end of the hall blocked up, since this would destroy the vista from court to court, an idea on which he based the whole plan of the building, and which will be again referred to more fully. Even the alternative proposal to divide the organ and place it in the two angles did not satisfy him, and nothing was actually done about it till after his death.

He was much pleased with the red granite columns on which the vault was to rest, and claimed their superiority to "any scagliola, however gorgeous," showing an appreciation of the value of genuine material which was not so commonly felt in those pre-Ruskinian days, and was by no means always recognised when the building passed into the hands of Cockerell, though his taste was held to be the ideal of refinement and cultivation. Elmes wished to have bronze capitals for these columns,

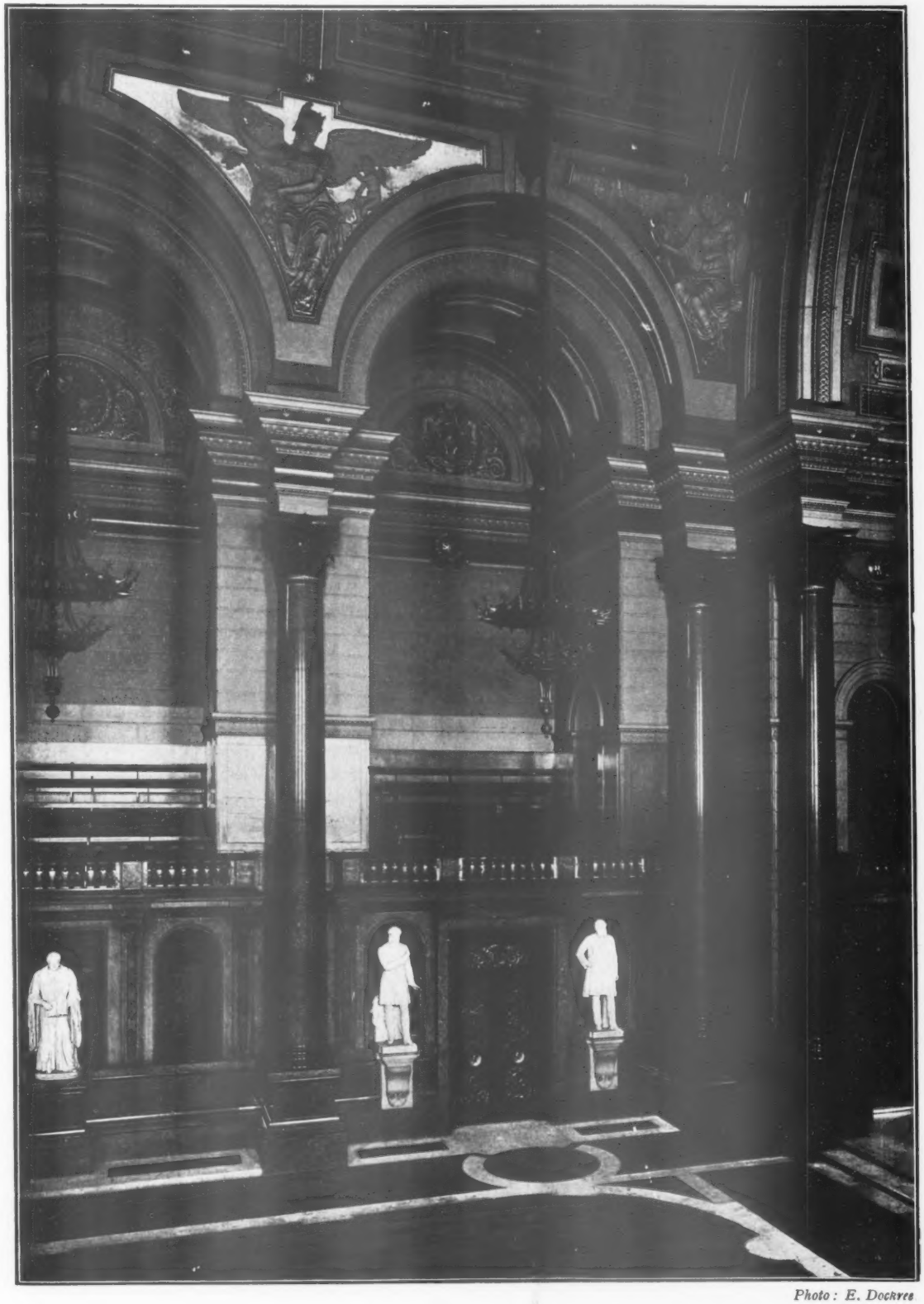


Photo: E. Dockree

ST. GEORGE'S HALL, LIVERPOOL. SOUTH-EAST ANGLE OF THE HALL.

but in case the cost should be prohibitive he suggested iron as an alternative.

In 1846 he remarks that the building is in an unsatisfactory condition owing to bad bricks and bad work and workmen. Still, the exterior at least was almost completed, and in July of this year Cockerell submitted his design for the sculpture in the pediment of the south portico. This was his first official connection with St. George's Hall, but Elmes had from the beginning availed himself of the advice and experience of his father's friend, and had seen and admired the sketch for this group three years before.

In the spring of 1847 he undertook the County Lunatic Asylum at Rainhill, and was also engaged on some private houses in the neighbourhood of Liverpool. Among these, "Druid's Cross" and "Allerton Towers" are fine examples of the usual stucco faced country house of the period; they are simple and dignified in plan and, as might be expected, far superior to the common-place type in the careful grouping of the windows and the refinement of the mouldings and decorative detail.

By this time Elmes's health had completely broken down, his lungs were affected, and he was obliged to leave London for Ventnor, where a few weeks were spent without any good results. An idea of wintering in Italy was discussed, but he admitted that the architectural attractions would be too engrossing to allow of any rest and recuperation. Finally Jamaica was decided on, and arrangements were made that Rawlinson should superintend the work at St. George's Hall during his absence. It seems to have become evident to his friends that a recovery was out of the question, and he may have suspected it himself, for he was careful to prepare a full set of drawings for the completion of the building, even to what he calls the "finishings," which included the decorative treatment of the great hall. This work in itself made further inroads on his strength, and when he arrived in Jamaica at the end of October, with his wife and child, the discomforts of a stormy voyage had reduced him to such a state of weakness that he could not benefit by the change of climate, and only survived for a little over a month (November 26th, 1847).

It is curious that though Elmes lived and worked in London, he never carried out any buildings there, and his practice and reputation appear to have been confined to the neighbourhood of Liverpool.

The inevitable controversy now arose as to appointing another architect to complete the Hall. The obvious successor to Elmes was Cockerell, but fears were expressed that "though he would design beautiful finishings the credit of this would belong to him and not to Elmes," and at first matters were left as they were. A new contract was prepared in 1848 and the work continued under the direction of the city surveyor, the vault of the hall being executed by Rawlinson, who employed hollow tubular tiles instead of ordinary brickwork.

The original estimate of £90,000 had now been far exceeded, and the Corporation was only able to spend part of its annual surplus on the work, which did not therefore make very rapid progress. In the next year Cockerell's group for the south pediment was carried out by Nicholl, with some improvements suggested by Alfred Stevens, who had made a drawing of it for publication. At length, in 1851, the Law Courts were opened; Rawlinson, having finished the vault, severed his connection with the building and recommended that an architect should be called in for the decorations. Cockerell was therefore appointed and remained to complete the work almost at the close of his own professional career. He is often assumed to have succeeded Elmes at once, so that it is necessary to lay stress on the interval of four years during which operations proceeded in accordance with Elmes's final set of drawings. At the end of this time the Law Courts, library, entrance halls, jury-rooms, staircases, and corridors were finished, also the constructional part of the ceilings of the great hall and small concert-room, and the external approaches had been partly laid out.

Elmes's idea of using fresco painting in the great hall was abandoned under the new scheme of decoration, and his views about the organ were disregarded. It was designed by Cockerell in its present form, and carried out by Willis. Two of the large granite columns were removed to make way for it, and they stood for many years disconsolately supporting nothing in the open space on the east side of the hall. Eventually the shafts were divided up into their original sections and utilised (with a final touch of stylistic insult) to form part of a degraded Gothic gateway to one of the parks.

The great hall was opened in 1854 with a musical festival extending over several days, and the whole structure was then practically finished. In later years alterations were made in the approaches, and the laying out of the sloping ground on the west side has only recently been taken in hand. About ten years ago a beginning was made with the scheme of sculpture decoration, and the twelve panels on the wings of the east front have been filled in with bas-reliefs.

There are inevitable drawbacks to youthful genius, and the fact of the final cost amounting to about three times the estimated sum naturally led to some indignation at the time; but fortunately these financial troubles were soon forgotten in

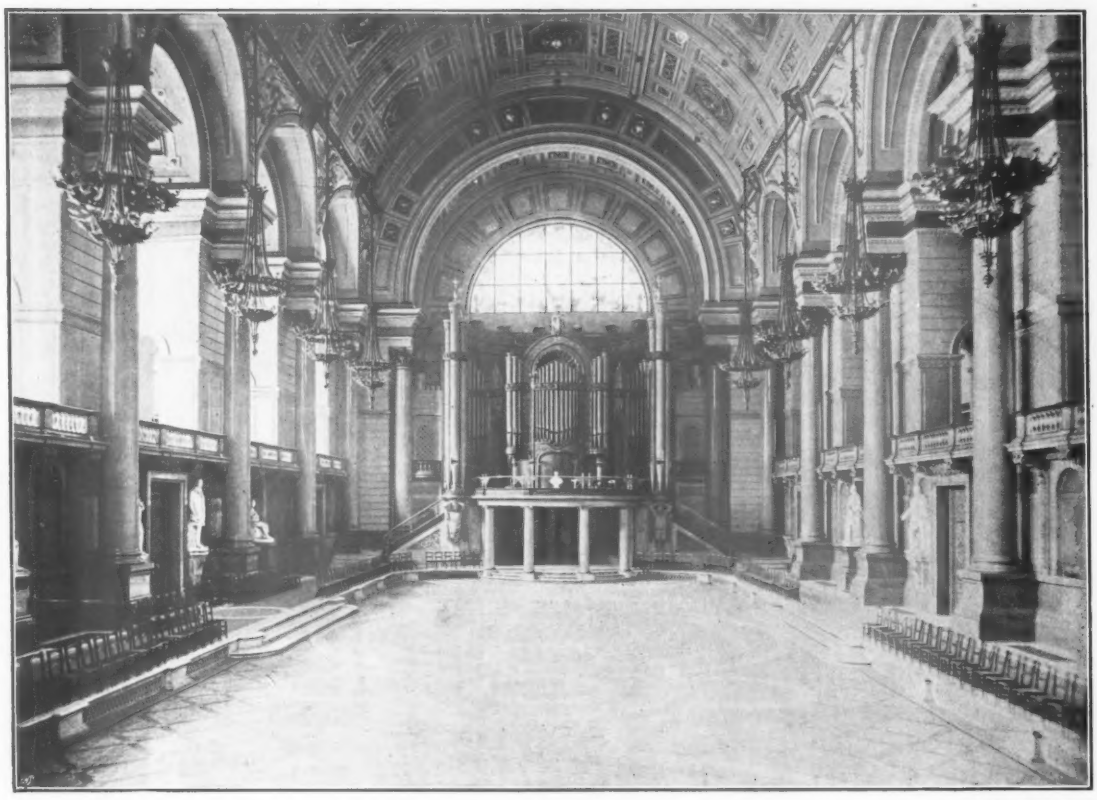


Photo : Rock Bros.

ST. GEORGE'S HALL. GENERAL VIEW OF INTERIOR, LOOKING NORTH, SHOWING FLOOR.

pride at the result of such magnificent extravagance. The merits of the building were recognised by all parties from the first; it had already been described in one of the first numbers of the *Builder* as "the most chaste, classical, and perfect work of modern times," which may be taken to represent the professional opinion of the day; and the municipal spirit was also justly gratified with the carrying out of a structure essentially in the grand style, and on a scale which, as has been said, no Government at Whitehall would ever dare to propose.

Having traced the history of the building, we may now turn to consider it as it stands. Of the exterior it is certainly difficult to speak without falling into rhapsody. The site is one of the finest imaginable, and the general effect is unequalled in stateliness and grandeur by anything produced since the palmy days of the Italian Renaissance. Not a fault of proportion or taste can be detected, and we need only compare it with the exterior of the Madeleine, or the Munich Walhalla, or, on a small scale, St. Pancras church, in order to realise the difference between the literal reproduction which characterised many earlier architects of the Revival, and the originality which genius was able to combine with an adherence to the spirit and forms of classical antiquity. Elmes, indeed, may be said to have treated the revived style very much as the Italians used their studies of the Roman remains, and he was probably saved from antiquarian copyism by the very fact of not being closely familiar with the Greek and Roman temples. Fergusson's remark that "the architect has failed in his endeavours if you are able to detect any feature which would lead you to suppose the building might not belong to the age of Augustus" is absolutely misleading, both as regards Elmes's intentions and the effect of his design as executed. Even apart from the thoroughly modern west façade nothing at all resembling St. George's Hall would have been thought of in the time of Augustus, and the great secular buildings of the later empire with which it may rightly be compared were designed almost entirely for internal effect.

From the south-east the grouping of the side and end porticos with the solid angles gives an admirable play of light and shade; the use of square unfluted piers in the wings, partly filled in by screen walls, prevents any monotony in the long range of columns, while the main entablature, running round the whole building at the same level, serves to bind together the different parts of

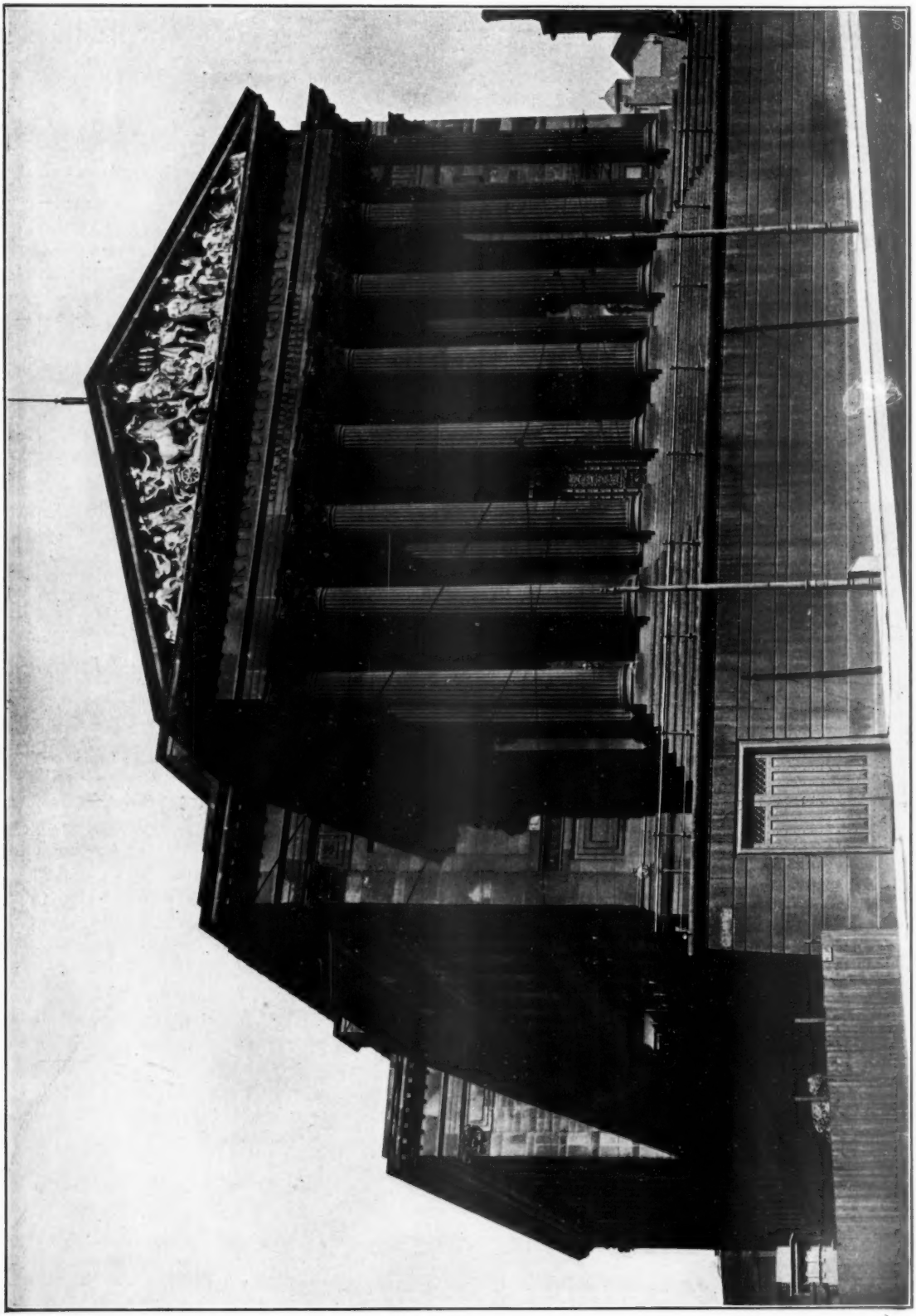


Photo : R. P. Jones

ST. GEORGE'S HALL, LIVERPOOL, FROM THE SOUTH-WEST.

the design. The scale, though exceptionally large, is well maintained, and no one would imagine the building to be smaller than it really is; a result so often produced, from St. Peter's downwards, by the very nature of the "order" with its unvarying proportions. The south portico is slightly smaller than that of the Pantheon, but the mouldings and detail are far more refined, and suggest Greek rather than Roman models. Elmes, though he admired the Greek mouldings, saw that they could not be rigidly adopted if cut in stone of a coarser texture than marble, and no doubt it was partly on this account that he gave up the Doric order of his earlier design.

One of the most effective features of the exterior may be traced through all the designs, namely, the attic storey over the central block; this not only gives repose by its expanse of plain walling, but indicates the presence of a great hall within. It contributes perhaps more than anything to produce a kind of living attitude and expression, such as we notice in St. Paul's and so many of the Gothic cathedrals. The west side is, in some ways, the most interesting, as it is frankly modern, and depends for its effect mainly on the grouping of the windows. In order to admit a good supply of light to the great hall the portico on this side is left unroofed and becomes a screen colonnade, by which symmetry of outline is preserved with the east façade. Hardly any decorative detail is introduced, and the side wings in particular are masterly examples of proportion in window-spacing; the two basement storeys and the rapid fall in the ground level add greatly to the dignity of this fine front, though it is too purely a piece of "architect's architecture" to be much appreciated by the general public, which is apt to regard it as rather heavy and monotonous.

The semicircular projection at the north end seems an appropriate and natural termination to the building, probably from the suggestion of a cathedral apse. We may notice certain refinements of design in the exterior, such as the extra diameter of an inch given to the angle columns of the porticos in order to compensate for the weakness of effect already referred to; the varying projection given to the main cornice in different parts of the building, and the use of elaborate carved enrichments in the mouldings of the south portico, while elsewhere they are left plain. The cream-coloured sandstone from Darley Dale used for the exterior has discoloured considerably in the town climate, and on unfavourable days sometimes assumes a funereal blackness; but the surface of the blocks has weathered with great variety of tone, though there is none of the bleaching effect produced on Portland stone in London.

The plan of the interior is arranged on a central axis, the leading idea being the vista, 300 feet in length from court to court, through the central hall, which must be regarded primarily as a great *salle des pas perdus*. This theory of the vista was most important in the mind of Elmes, and he describes it in reply to an enthusiastic letter of Rawlinson's: "When you contemplated the finished structure as it is to be, you stood on the judge's platform in one court, your eye glancing along the ranges of ruddy columns on either side, in all the richness and strong colour of a foreground; then, reposing for a moment on the lofty arched opening communicating with the hall, whose broad and richly coffered soffit throws a shadow on the grey columns beneath and forms the middle distance, it pierces the atmosphere of the great hall, passes the corresponding opening into the other court, and finally rests upon the further judge's throne."

His opposition to the organ in its present form arose not from any want of appreciation for musical needs, since he was himself a good violinist and fond of all music, but from a deliberate choice of one out of the two uses of the hall for special emphasis. There is a logical inconsistency in plan between the concert hall and the *salle des pas perdus;* in the former the organ and orchestra form the focus of attention from all parts of the interior; but the latter faces both ways, so to speak, for the two courts are of equal importance and the design should direct attention to both impartially. Elmes undoubtedly selected the better alternative from the point of view of architectural effect, as there was no possible method of meeting both requirements with equal success; and for this purpose nothing could well be finer. Compared with the monastic frigidity of the great hall in Street's Law Courts, it is a complete vindication of the adaptability of classical forms to modern needs. The dimensions are 169 feet by 75 feet, or about 100 feet including the width of the side galleries, and the height to the crown of the vault is 83 feet. The design is generally described as a reproduction of the Tepidarium in the Baths of Caracalla, but the differences are considerable. Blouet's great work on these baths had been published in 1828, and Elmes was no doubt familiar with it. He adopted the same dimensions on plan, but divided the length into five bays instead of three, and much improved the design of the vault, where the upper section of the ceiling is marked off by a band of laurel foliage from the range of arches which break into the lower part of the semicircle, and the awkward wavy edges of the Roman groining are avoided. To correct the flattened effect of a true semicircular vault seen in perspective, the curve is in

Photo : R. P. Jones.

ST. GEORGE'S HALL. LIVERPOOL.
SOUTH END OF THE GREAT HALL.

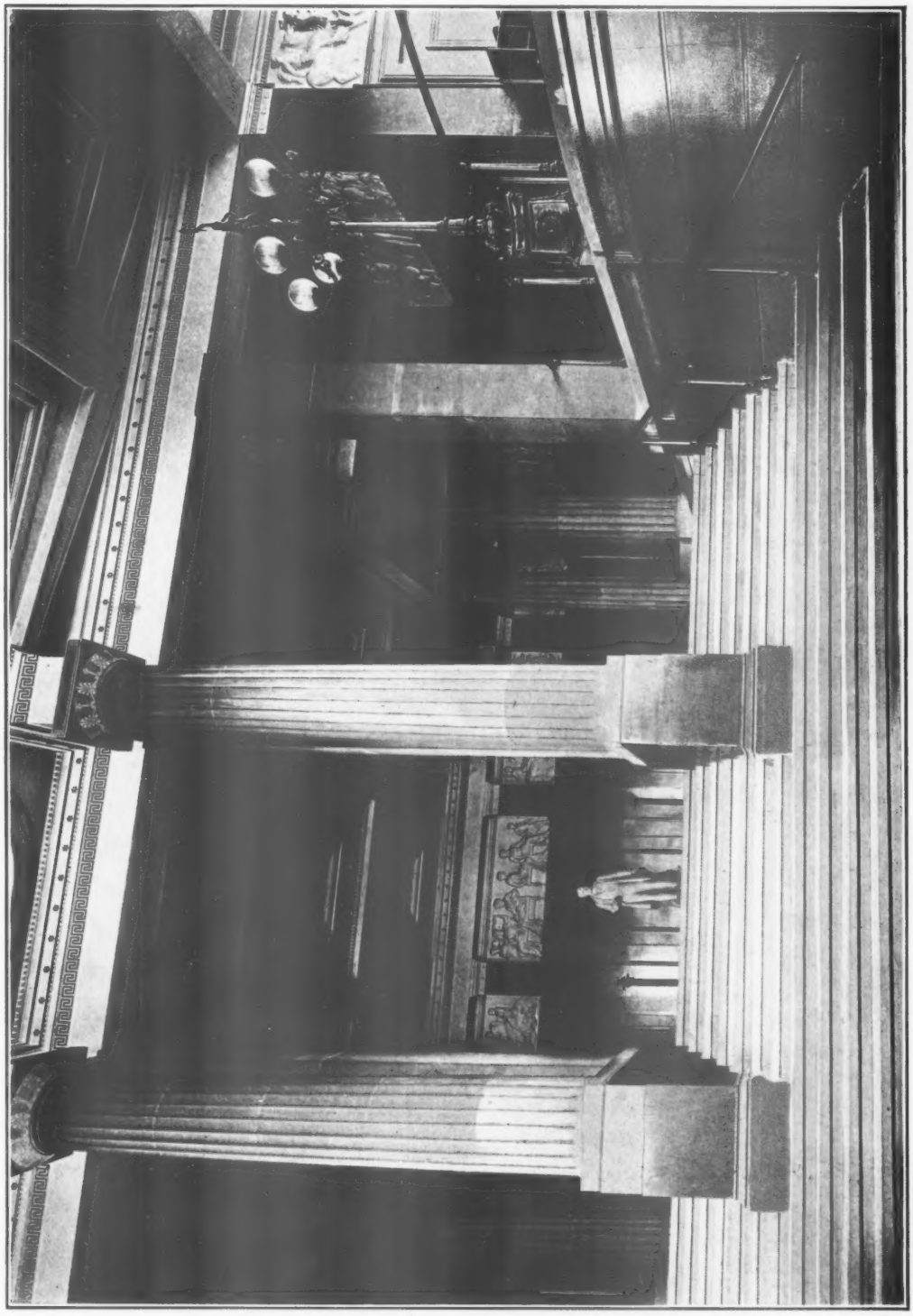


Photo: E. Dochree.

ST. GEORGE'S HALL, LIVERPOOL. THE NORTH HALL.

reality struck from three centres, and the panels above the end windows are slightly distorted in consequence.

The granite columns rest on a grey granite plinth, and various native marbles are used for the balustrades of the gallery, which was given a greater projection than appears on the section reproduced, though a certain number of the seats in each bay are still cut off from a direct view of the orchestra. The small arched openings between the bays are very effective in helping to maintain the scale of the interior, and serve to show the actual size of the main columns.

The general effect of the design itself is far more Roman than Greek, and in this respect contrasts with the restraint and severity of the exterior. Above the gallery level the walls are plastered and decorated in colour, even the capitals of the columns being modelled in plaster on a granite core and painted to represent bronze, since the Corporation had given up the idea of using real bronze, and had applied unsuccessfully to the Government for some old gun-metal. The frieze is imitation red granite, an unfortunate error in taste for which Cockerell must be held responsible, and which raises momentary doubts as to the genuineness of the columns themselves. The spandrels of the arches are filled in by allegorical winged figures in relief, and the ceiling is subdivided into panels and coffers, some of which are pierced as air outlets in the scheme of ventilation.

If anything could have spoilt the feeling of scale it would be the deplorable stained glass which disfigures the end windows. These are shown in a design of Cockerell's as filled by plain glass set in metal grilles of the scallop-shell pattern constantly found in Roman work. The grilles were not forthcoming, and some years later some extremely "local" talent was called in and produced these gaudy representations of the City arms and St. George and the Dragon, both of gigantic proportions and surrounded by borders of colossal roses, thistles, and shamrocks, firmly bound up by knotted cables of a thickness which would be superfluous for the *Oceanic* herself.

No more valuable contribution to the decorative completion of St. George's Hall could possibly be made than the simple removal of this glass, since even if it had been good of its kind it deprives the hall of a great deal of valuable light, the supply of which in the winter months is now very deficient.

The floor is paved with encaustic tiles and bands of stone according to a design of Cockerell's, in which interlacing circles containing coats of arms and symbolical figures and ornament form a kind of Opus Alexandrinum on a large scale. Some of the borders were specially designed by Alfred Stevens. The central area is sunk below the level of the entrances and approached by steps, and for the convenience of dances and entertainments a temporary wooden floor is laid down over it; it is much to be regretted that instead of this floor being taken up when not required it has become practically a fixture, and the pavement itself is not exposed more than perhaps once a year for a few days. The hall thus loses not only the decorative effect of the pavement, but the architectural effect of the change of level which was a carefully calculated part of the design.

The two courts are fine and dignified rooms with ranges of red granite columns supporting the arched ceilings. There is nothing remarkable about them except that in spite of various alterations they have proved most unsatisfactory acoustically; and the same must be said of the great hall itself so far as public speaking is concerned, though for organ and orchestral performances with a good volume of sound it makes an admirable auditorium.

For the sake of the vista, Elmes had to forgo the effect of entrances at the ends of the hall, since the arched openings lead directly to the courts which are also entered from the sides; the surrounding passages, like those of the earlier design, are deficient in light, and were made even more gloomy by being painted with imitation oak panelling, which was renewed in an unnecessarily conservative spirit when the hall was redecorated about ten years ago. In the same way the staircases vainly attempt to persuade us that they are lined with massive blocks of polished granite with impressively deep shadows in the joints. In fact it must be admitted that Cockerell introduced a great deal of "decoration" of this kind which is entirely opposed to modern ideas of good taste, however refined and scholarly his detail may be as a general rule.

At the extreme ends of the building are two vestibules; that at the north is a beautiful piece of pure Doric design which was practically completed at the time of Elmes's death; the southern hall is smaller and contains four Ionic columns, the only example of that order in the entire building. It is lighted mainly through the pierced panels of the bronze doors in the portico, magnificent examples of metal work, 21 feet high, and the largest of the series designed by Cockerell for the hall.

The south portico and entrance hall are at present useless for all practical purposes, since there is no approach to the building from the road at the south end. Originally there were small flights of steps in the retaining wall, leading up to the plateau on which the portico stands, but

these were done away with. As it is, the effect from the south-west is no doubt improved, but the entrance can only be reached by a detour.

The rest of the rooms call for no special description, except the small concert-room over the north vestibule, a most refined and charming piece of design, the credit for which belongs to Cockerell. The decorations are far more Greek in feeling than those of the great hall, particularly in such points as the caryatid figures supporting the gallery, and the Corinthian columns on the platform. The basements of the building are occupied by prison cells, caretakers' rooms, etc., and to a great extent by the engines and chambers for the ventilation system, which was designed by Dr. Reid as early as 1841 and carried out simultaneously with the building operations. The flues from the engine-rooms and from all the ordinary fireplaces are led to four shafts in the inside angles of the attic round the great hall, and thus the difficult problem of chimney-stacks was entirely avoided, with the only restriction that smokeless fuel of some sort has to be burnt.

The early death of Elmes was a serious loss to the architecture of the nineteenth century; he was one of the few men in recent centuries whose ideas and conceptions were on the grand scale of imperial Rome, and they were realised in this instance as far as is possible under the conditions of modern building. His genius had already freed the Greek revival from antiquarian trammels, and might have done much to keep it alive through the triumphant period of the rival style almost up to the inevitable reaction we are now feeling in favour of Classicism. But fortunately his opportunity came to him in time, and no architect, at the close of the longest and most distinguished career, could desire to leave a nobler monument of his powers.

RONALD P. JONES.

Note.—Further illustrations of St. George's Hall may be found in the article on Cockerell published in the ARCHITECTURAL REVIEW for October 1902.

Forms of the Tuscan Arch.

IN a paper which has already appeared in the ARCHITECTURAL REVIEW[1] the leading types of these arches were traced and something of their history shown in connection with the wider developments of European architecture. We return to the subject now because the last word has not been said, nor the full reason given for the conclusions at which we have arrived.

The Romanesque architecture, where the forms in question made their new appearance, arose on the ruins of the past, when the barbarians had done their worst, and Italy once more enjoyed a settled government under her Lombard rulers. Great had been the destruction wrought by the northern invaders, and gradual and tentative was the recovery which followed. The new form of government and of social life took time to establish itself. Only by degrees did the Italian provinces learn that the feudal system was one possessing the elements of permanence, under which progress in new directions was possible. It is this state of things which we find reflected with startling exactitude in early Romanesque architecture. Timid and tentative, as befitted a style conceived in times of uncertainty and only beginning to find its feet, the craft of these builders elaborated its precautions, exaggerated every means of security, and, moving on these lines, attained a distinctive character which was the true expression of the age and society which had given it birth. We may do well to consider for a little from this new point of view the forms of the Tuscan arch.

It is difficult to say from what source the Romanesque builders derived the twin elements of lintel and arch which they used so constantly in dealing with their wall-openings. They may have had them by direct and scarcely interrupted tradition from classic buildings, many of which we should remember had escaped barbarian destruction. In this connection we may cite the examples still to be seen in the Forum of Augustus at Rome (B.C. 2); the Palace of Diocletian at Spalato (A.D. 300); and the arches over the gates of Constantinople (A.D. 450), which lead on well to the earliest Tuscan form, as seen in the door of the Pieve of S. Martino ad Arliano, Lucca, ascribed to the year 720. Or again, as there is some reason to suspect, the Gothic invasions may have so broken in the provinces the prestige of Rome, as to bring about an interruption of continuity, after which art, new born, began in a kind of atavism to borrow rather from Etruscan than Roman sources. The student will here remember the odd idea of Lami,[2] who ascribes the Lombard towers of Tuscany to Etruscan times, and will see in the hint just dropped a possible explanation of the archaic character which misled so acute an observer.

But, from whatever quarter the Romanesque derived its arch and lintel, the use it made of them was all its own, and nothing in that style is more

[1] February 1903.

[2] *Antichità di Firenze*, Lez. VI.

characteristic than the combination in which they are commonly seen. Timidity and exaggerated care to keep within the limits of static conditions are the leading principles of early Romanesque. They stamp it for the work of men who were only by degrees recovering lost ground, and feeling their way to a stable position in the new world that had dawned.

Take the door of the "Torre delle Ore" at Lucca for instance. Its narrow proportions are determined by the fear of having too wide a gap in the wall to cover. The lintel, though of massive stone, is supported on brackets below and saved again above by a singularly solid relieving arch. Fear then, and the desire for absolute unchallengeable stability, saved in part the capitals of an earlier constructive form that they might do service as brackets, and added the arch above the lintel to secure its safety.

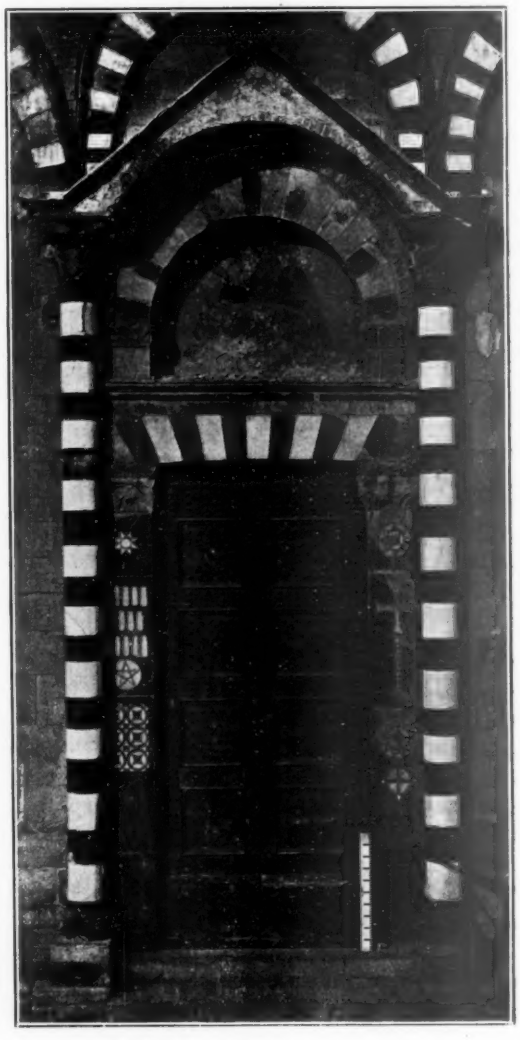
Where building-stone was easily had, and available in considerable masses, as was the case in most parts of Tuscany, a further means of security was readily invented and used, and nothing is more characteristic of Tuscan Romanesque than the width and depth of the lintels which close these doors above. This device would seem to mark the limit of invention in the direction indicated: that of securing safety at any cost that might be necessary to give solidity.

But meanwhile sculpture, the companion of architecture, had been making its first timid advances, and these lintels were soon seized upon as a favourable and indeed necessary field for the decorative effects which it offered to bring. From Grecian knots and fanciful arabesques to the Vine of Jesse and the first rude attempts at figure subjects this carving rose, till the lintel, whose mass and depth had been dictated by supposed static conditions and a desire for superabundant safety, became, by reason of such lavish decoration, perhaps the most attractive and important part of the building.

And here again, inevitably, the old fear entered, and the men who had made their lintels broad and deep lest they should break under the pressure of the wall, began to cast about for new means of security, now that the breadth and depth of these stones had invited so much and so precious decoration. The age that marvelled at the chisel of Gruamons and Biduino could not lightly suffer the idea of damage to works like these, and soon a new device appeared, designed to put the lintels on which they had laboured beyond the reach of peril. Unable further to increase the strength of the lintel-stones themselves, the builders resolved to save them from pressure in a new way. Hence arose in later Romanesque the double relieving arch, almost always found in connection with these richly-sculptured lintels. Designed for their additional protection, this double arch was in itself highly decorative, gave new opportunities to the builder and carver, new importance to the door it crowned, and became at once a valued element in the style that had originated it. Decoration, invited by construction, resulted in the suggestion of fresh forms which profoundly influenced the art of building itself.

The same process and progress is visible over a wider area, and with still more remarkable results, when we consider the influence upon Tuscan Romanesque which was exercised by the taste of that province for decorating its buildings with coloured marbles, or, to speak more exactly, in a dichromy of black and white. This is a matter apparently so little studied, and certainly so little known, that it deserves close and thoughtful attention.

Between works of sculpture in white marble,



SIDEDOOR, PRATO CATHEDRAL.

PRINCIPAL DOORWAY, CHURCH OF S. PIETRO MAGGIORE, PISTOIA.

such as those already alluded to, and the decorative art with which we are now dealing, there is a close and obvious connection. For decorative sculpture, considered from one point of view, is but a means of giving relief to a small surface by alternate spaces of light and shade, and this is the effect gained by dichromatic building even when simply constructive, not to say that when the latter assumes the character of inlaid work, where one marble is let into another, the preliminary stone-cutting for this purpose must approach very nearly to that used in decorative carving. And in fact, we find that carving and dichromy were constantly and simultaneously used in Tuscan Romanesque as alternative means of gaining the wished-for relief. Walls rose, jambs were built, and even arches turned, in alternate courses and voussoirs of black and white marble, while the more delicate and expressive art of sculpture was spent on capitals and cornices, on the quaint animal forms which projected like gargoyles from the façade, or the stiff ranks of human figures which adorned the lintels.

When we compare these two decorative methods, we are at once struck with the rough practical advantage held by dichromatic building over the sculpture which was practised along with it. The first method of relief could be had

wherever there were quarries of black and white stone, as at Carrara and Prato, together with the common art of laying stones in course; while of necessity the latter was limited by the number, certainly few in such early times, of artists who could use the sculptor's chisel with some approach to power and effect. Hence a growing prevalence of dichromatic building over decorative sculpture in every part of the construction to which the easier, cheaper, and more broadly effective art could be well and justly applied, and a natural restraint by which carving was reserved for the more important points, or those which could not easily be relieved in any other way.

Among these the chief in both regards was undoubtedly the lintel of the principal door. Nowhere else was sculpture so well bestowed, or with so sure an appeal to the eyes and interest of an entering crowd, and no other part of the building lent itself with such difficulty as the lintel to that other relief of dichromy which the Tuscan builder loved. To leave its imposing surface in plain white, if polished, marble were to revert to the discarded method of a time when construction was everything and decoration hardly thought of. To form it of one dark stone were equally distasteful and impossible. So, when dichromy had already raised the arch above in alternate voussoirs of white and black, and had even carried its own decorative scheme into the successive courses that now composed the door-jambs, the lintel, as in San Pietro at Pistoia, held still the office of displaying the richest and most effective sculpture which the times could produce or the fabric show.

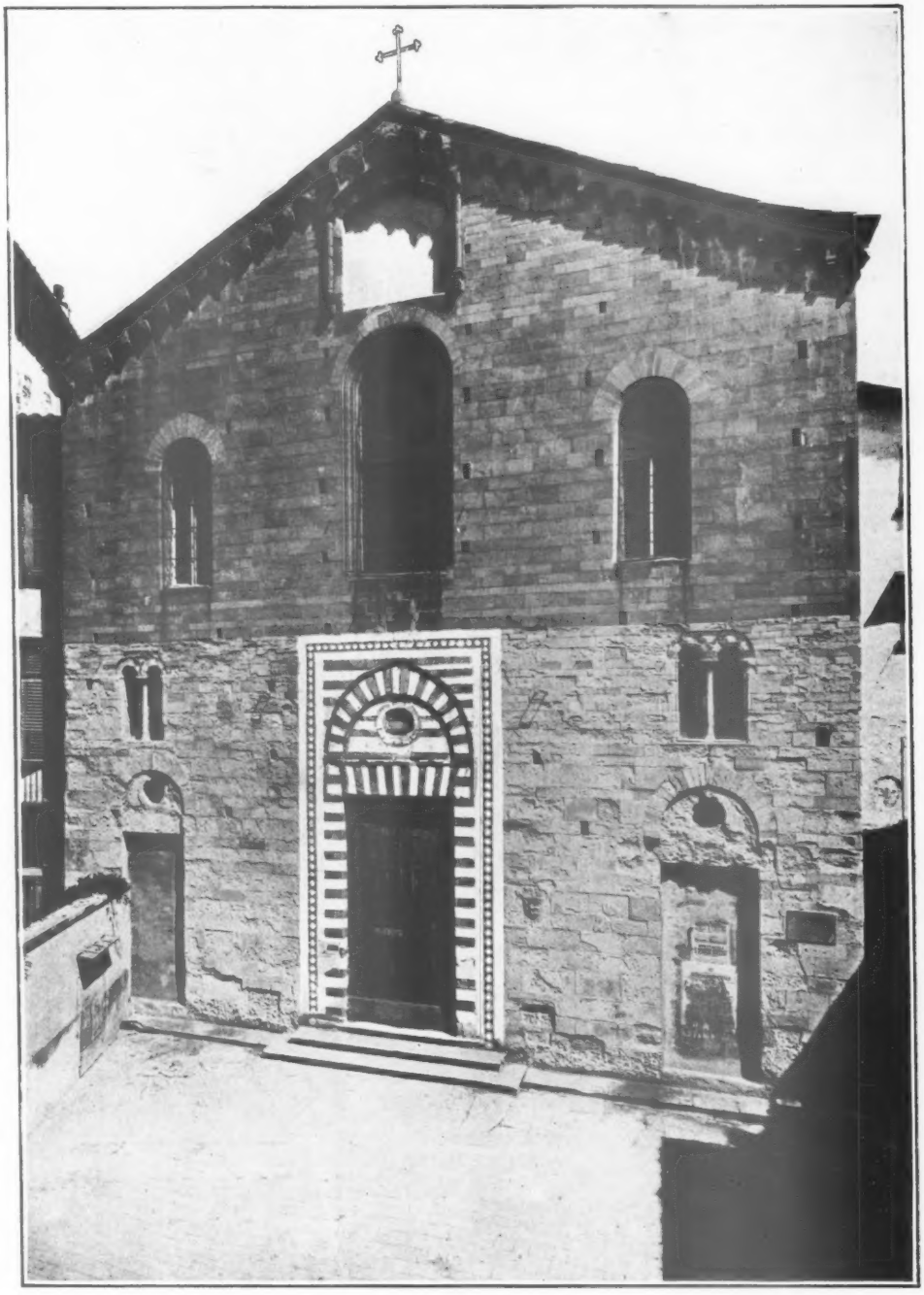
Such a distribution of the surfaces between the two modes of decoration—constructive and sculptural—was, indeed, admirable, and may be considered as marking the highest level reached by Tuscan Romanesque; yet it could not be final, and the day was sure to come when the lower or constructive decoration would intrude upon the very lintel itself: that door-head which the higher art had hitherto kept as its own especial field. The ancient fear of any approach to instability tended naturally to pass away as practice taught builders the strength of their materials, and was further supplanted by a new desire, begotten of wider experience and matured confidence, which led them to play with the forms they had invented or evolved. In the special case before us—the Romanesque door—it had come to be seen that the lintel was of little constructive consequence, where the solid arch or arches above amply sufficed to do all that was required in the way of hindering the upper wall from breaking into the doorway. The lintel was no doubt retained as a traditional, pleasing, and convenient form, but on the understanding that liberties might be taken with it as soon as the need for them arose.

Things being in such a position the consequence could not be long delayed. A time would surely come when death or distance made a dearth of true sculptors, when effect in a building had to be obtained with the greatest economy of means, when, perhaps, the designer was a man with a pronounced taste for black and white in construction, and some building ingenuity. Given all or even any of these conditions, and the problem of the lintel was sure to be attacked and resolved, as we know indeed that it was.

The elements of solution lay not far off, enshrined for ages[8] in one of the most remarkable and central of Tuscan buildings: the Baptistery of Florence: the true *umbilicus Tusciae*. In plan an octagon, this church consists essentially of two walls, an outer and an inner; the former in its mass continuous from cornice to basement, the latter descending only as far as the capitals of the internal columns which surround the shrine. Here the inner wall is stopped, resting on the classic trabeation which stretches from capital to capital across each side of the octagon within. At this level there runs between the two walls an ambulatory from which one can look down into the Baptistery through the openings of a kind of triforium, and this ambulatory is supported on arches concealed behind the trabeation, and bridging between the walls the space from pillar to pillar. So it comes about that behind each lintel in the trabeation lies a flattened arch which corresponds to it, and which supports a part of the ambulatory, as the lintel does the answering part of the triforium and inner wall above. Add that, whether by original construction or later and imitative colouring, the segments of these low arches are alternately black and white, and the bearing of this device on our problem becomes immediately apparent. To the eye of one who knew the Baptistery intimately these hidden arches were always ideally visible through the trabeation which concealed them. If such an observer had the Romanesque problem of the lintel in his mind, their flattened form in such a situation could have but one meaning: a studied approach to the straight line of the concealing lintel—one suggestion, therefore: that which bade him be bold to build his lintel, level indeed, but constructively an arch, making it of many stones cut and set so as to support each other as voussoirs.

Here, again, we have to do with what was in all probability no more than the renaissance of an ancient classic device, borrowed perhaps by the

[8] The last and best authority gives A.D. 350–450 as the date of this building.



FAÇADE OF THE CHURCH OF S. STEFANO, FLORENCE.

Romans from Etruscan building craft. Composite lintels in the form of a flat arch are found in Rome in the Temple of Castor (B.C. 482), and even more to our purpose are those to be seen at the foot of the Tabularium staircase on the Capitol, and in the Forum Pacis (A.D. 75), where composite lintel and relieving arch above it appear together. For, at the moment of which we speak, the weakness of such a lintel was of no consequence, as builders had learned once more to trust the work of substantial support to the true and saving arch that fenced their door-heads above, while its composite construction opened the way at once for a ready solution of what we may take as the architectural problem of the day. Once it was seen that the lintel might be built like the arch above, or any other part of the building, in alternate black and white, the last difficulty in the way of a full and consistent application of structural dichromy was swept away, and those who

could not afford or procure the services of an artist in sculpture were now independent if they pleased of any but the humbler chisel of the common mason.

It is significant that when we pass from the ideal and possible to the real and actual, the finest Tuscan example of such a lintel as we have supposed is found in a Florentine church, that of Santo Stefano *ad Pontem*. This remarkable door has been already noticed by us and its chief claim to interest pointed out, so that readers of the earlier number of this REVIEW referred to should have no difficulty in gaining the further view we now propose to take of these matters from the fresh vantage ground to which the present discussion has led us.

The remark made regarding the doubling of the Romanesque door-head arch may now be repeated with new force in the case of this composite lintel and its consequences. Decorative needs and impulses led to its discovery as a means of completing the dichromy of a building in one of its most important points. And as before, so here also, the result was soon seen in the suggestion of a new form destined to play an important part in architecture, and if not in Italy, yet elsewhere, to become the chief element in a charming style of its own.

This new form was of course that of the horseshoe arch. Such arches have been found, indeed, carved on a sarcophagus ascribed to the third or fourth century—that of the Villa Mattei, Rome—but there the horseshoe forms part of a decorative scheme which has no necessary relation to contemporary construction, and is such as to suggest a merely fantastic superposition of haloes upon the arcade which forms a background for the figures to which they belong. From so doubtful, though interesting, an example we rather return to study the evolution of the horseshoe arch as a genuine constructive device.

Upon the discovery that dichromy could be extended to the lintel by the device of making this a compound structure arose at once the lesser difficulty of adapting the darks and lights of the new lintel to those of its surrounding marbles. Hence the eye of the builder was forced to follow and to dwell upon those very lines which, as the solution was found and an agreeable whole arrived at, gave him, almost by necessity, the form of the horseshoe; the saving arch of the door-head supplying the principal curve, and the eye finding the heels of the shoe among the lines of the lintel voussoirs as soon as these had been arranged to fall in a due correspondence with the arch above. This is what we get at Santo Stefano, and the incidence of the moulding which limits that lintel on each side, cut parallel with the lintel voussoirs and falling true to the corners of the door and of its upper arch, is a conclusive proof that the form was seen and enjoyed by the designer.

So much, then, will be readily granted, while yet many may doubt whether we have indeed touched on the actual origin of so important a form and style as that of the Moorish arch. The very name, it will be said, is against such an idea, not to speak of the fact that if Italian builders knew this shape of arch in early times they lightly let it drop again as out of their way and taste. They may, indeed, have fallen upon it, evolved it if you will, out of the exigencies of some scheme of decorated Romanesque, and even in the precise way just suggested, but this does not prove that others who made a style of what to Italians was a mere suggestion soon forgotten—that the Moors, in short, were led by the same way to their discovery of the arch which bears their name.

We accept the challenge, and seek the proof of what we have sought to maintain in the classic shrine of Moorish Spain itself, the far-famed Mosque of Cordova. Our illustration, a photograph from one of the doors of that building, may be trusted to speak for itself. Compare it with the view we give of the façade of Santo Stefano ad Pontem, and even before the eye has had time to examine the details of the two buildings their general correspondence at once appears. In each case the builder has given importance to his door by framing it in an ornamented oblong which rises above the arch; he has opened an exquisite twin window in the flanking wall on each side, and all his arches gain the lightness which comes of alternating white and black, relief or retreat, ornament or its absence, in the successive voussoirs.

But this is as nothing. Pursue the comparison to more essential points and what do we discover? Time has laid bare only too sadly the very anatomy of the Spanish door—it is as if some richly-wrought veil had been dropped—and through the rent we see that essentially and constructively its lines are those of Romanesque architecture such as Italy in the middle centuries has accustomed us to: a mighty Roman arch turned over a deep and massive lintel. Even the details are suggestive. Remark the moulding over the arch head—at Cordova as at Florence—the bar defining the lintel above; the successive retreat of arch, tympanum, and lintel from the upper and outer wall-face. Or—that we may shrink no more from the vital point and quick of the whole matter—study the lintel of Cordova in connection with the arch it supports. Is it not plain that the voussoirs it still shows are the generative source which once

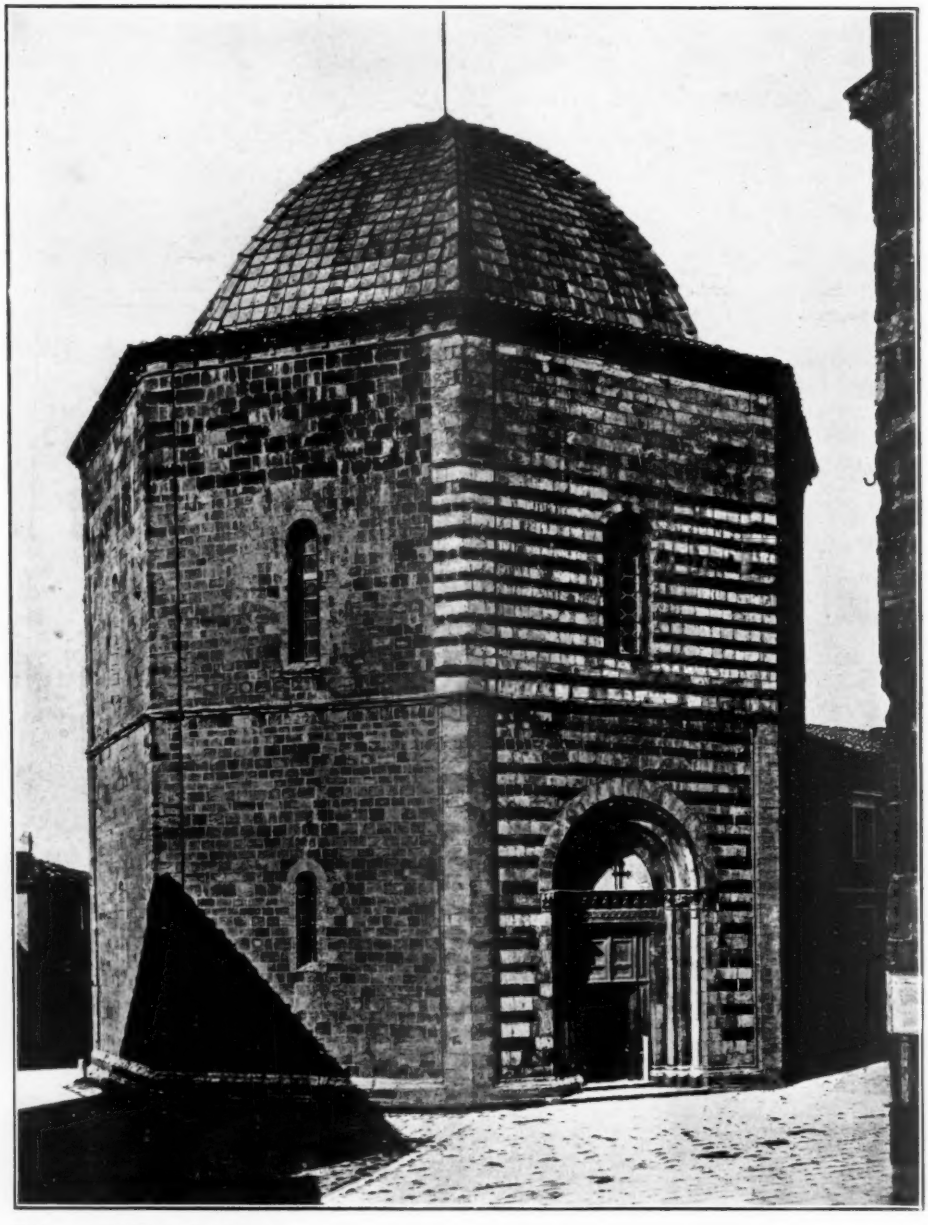
ENTRANCE GATE, MOSQUE OF CORDOVA.

gave the surrounding and including arch its characteristic form? They are merely decorative and imitative, you say: an appliqué of plaster and inlaid work? But even if so, they but correspond the more closely with the lost form they determined: an arch now lost because never built, but only moulded in perishable plaster, as the Moorish habit was, on a foundation essentially Romanesque.

At Santo Stefano, in short, we have genuine construction, at Cordova applied ornament following the same lines. The serious student will think little of so trifling a difference in view of the greater facts which these two examples of door construction perfectly agree to reveal, that the horseshoe arch—call it Moorish now if you will—was the legitimate offspring of the Romanesque, and came into being under pressure of decorative difficulties as soon as these were solved by the use of the composite lintel.

And when, it will be asked, did this happen? And where—at Cordova, Florence, or Byzantium? Wherever first a system of dichromatic decoration led to the invention of the composite lintel as an element in that style: so much at least seems certain.

With regard to Tuscan architecture—the proper field of our inquiry—we ought to remark, in concluding this paper, that the progress we have traced is to be taken as ideal rather than chronological. The chief defect of sculpture worthy to hold high place belonged, for instance, to the



THE BAPTISTERY, VOLTERRA.

eighth century or thereby, and the moment signalised by the Santo Stefano arch preceded, it may be by some ages, the times of Biduino and Gruamons. Much depends upon the date we assign to the introduction of constructive dichromy in Tuscany, and this is not the time to enter on a new and difficult inquiry, for which indeed sufficient data are not yet available. It ought to be noticed, however, that the Baptistery of Volterra, mentioned in a deed of 989, is ascribed on good authority to the late seventh or early eighth century, and shows constructive dichromy in a rectangle about and above the door. This decoration would seem original, as it follows very exactly the courses of rough-dressed stone in the adjacent sides of the polygon. The mosque at Cordova is well known to belong to the close of the eighth century. And, finally, with regard to Santo Stefano it should be said that, while the first document which mentions this church is dated in 1116, nothing is positively known to contradict the old Florentine tradition which tells that it was founded by Charlemagne when he kept Pasch in Florence in 786–7. Thus might be brought together two buildings which certainly, as we have seen, show the most remarkable architectural correspondence, and the eighth century would then appear as the most probable European epoch for the reappearance of the composite lintel with its new consequences.

J. Wood Brown.

Notes.

THE HOUSE OF LORDS' DECISION ON ANCIENT LIGHTS—ARCHITECTS' REGISTRATION.

THE importance of the decision of the House of Lords in the case of "Colls *v.* Home and Colonial Stores" cannot be overrated. Its effect on property in towns is far-reaching, and the development of building operations on reasonable lines is again possible, because some of the difficulties are eliminated which confront the architect when called upon to plan and design buildings in cities and towns where ground is valuable and the space limited.

Without entering into the details of the case, it may be stated shortly that the company had erected a lofty building opposite to some small one-storey buildings, and having enjoyed this almost direct light for twenty years, they sought to restrain the owner of the small property from rebuilding his premises to a greater height, thus claiming a proprietary right to all the light. Not being able to establish their claim to more than a reasonable use of such light, the company took their case to the Court of Appeal and obtained an injunction from the Court and an order to pull down such portions of the new building as exceeded the former height. The effect of this decision of the Court of Appeal was serious, and its result is seen in the grotesque and jagged outlines and maimed façades which disfigure many buildings subsequently erected in our thoroughfares. Fortunately, the injustice of the unreasonable claims of "ancient lights" has been once for all exposed by the Lord Chancellor in his lucid decision.

Light, like air, he stated, is the common property of all; or, more accurately, all have a common right to its enjoyment, but it is the exclusive property of none. He added that it would be impossible otherwise to extend or enlarge a town, for the access of air is undoubtedly interfered with by the buildings which are put up every day round London. But a dweller in towns would not expect to have air as pure, as free from smoke, smell, and noise as if he lived in the country and distant from other buildings. And yet it is the excess of any of these which constitutes a cause of action; it is a question of degree and whether a nuisance has been created such as would give a right of action.

It must not be imagined that this decision of the House of Lords will prevent further litigation. On the contrary, it is possible, as formerly, to dispute the degree or the value of the rights alleged to be "ancient"; but the architect is now able, by the exercise of due precaution in respect to neighbouring "rights," to build on suitable and symmetrical lines.

There are many rules which might wisely be laid down to regulate these rights or facilitate their adjustment. If large owners of property would deal with them, for instance, as the Ecclesiastical Commissioners, few difficulties could arise. For in granting leases they reserve to themselves all questions of "light and air," but protect their tenants by withholding on one hand their consent to the erection of buildings which may interfere with the "lights" of the adjoining owner, and on the other not allowing an "adjoining owner" to make claims against a "building owner," or prevent the erection of buildings after they have approved the plans. But perhaps the ideal conditions, such as must surely be appreciated by every architect, are those which prevail in Scotland—and how many judicious things are to be found there? No claim can be made there for "ancient lights." "Lights" are respected, whether ancient or modern, for the building regulations provide the necessary protection; they regulate the heights of the building, the size and position of "back areas," and the distance of windows from party or boundary walls. If an adjoining owner requires a special light for a special purpose (such as a studio) then he must pay for it. He it is who must take the initiative; even when he has perhaps been in the enjoyment of the light for many years he must pay for its retention.

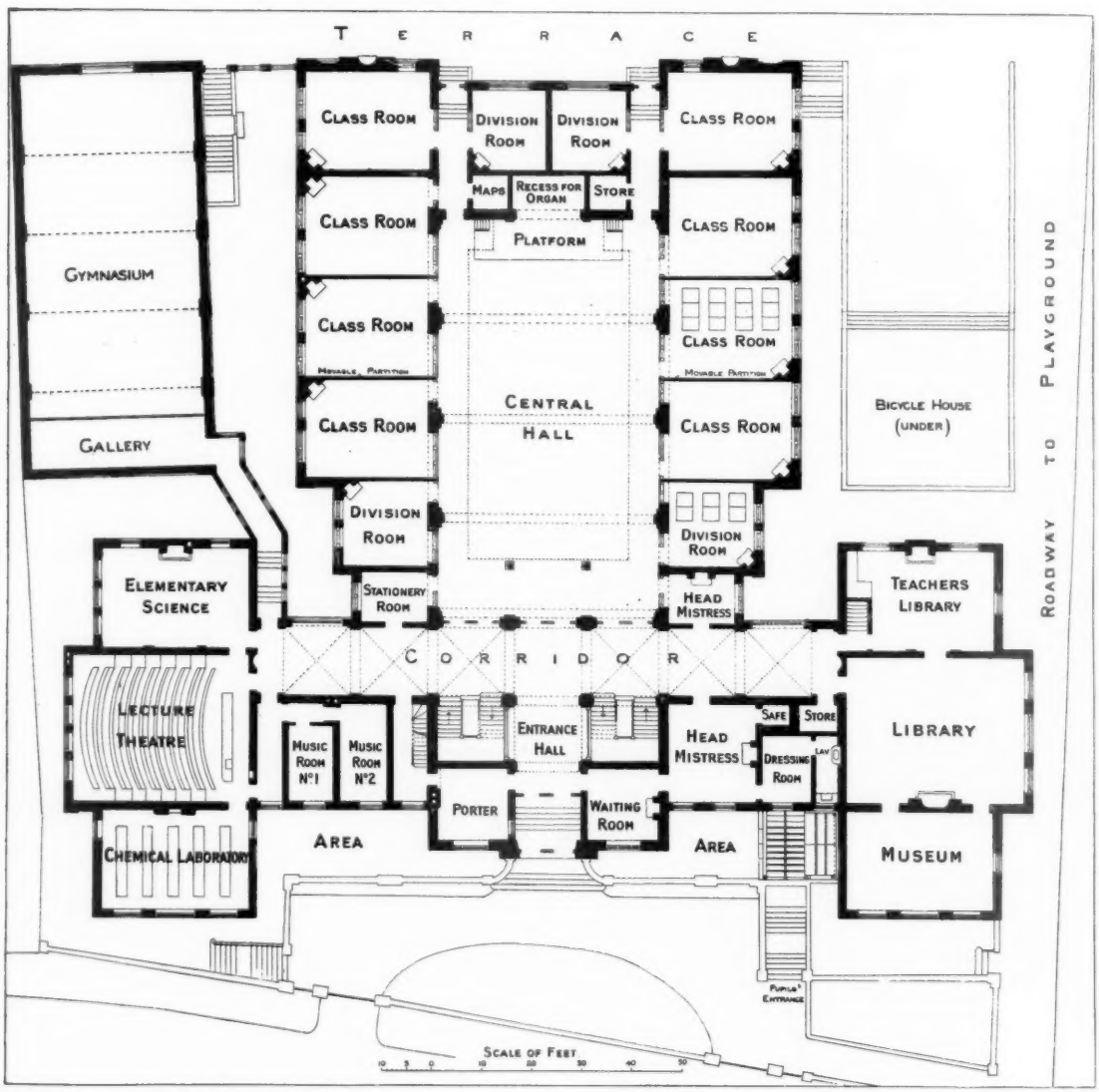
These democratic principles and methods may not be realised yet in the south, but in the meantime it is to be hoped that the Bill before Parliament in connection with the whole problem may shortly be passed.

There can be no doubt that the decision of the House of Lords has revealed the necessity of such revision, and has proved that injustice has been done when one owner has been permitted by lapse of time to acquire a direct light over the property of another. The plucky way in which Mr. Howard Colls has fought his case and carried it up to the House of Lords calls for the thanks of all interested in building operations. It may be understood that he has done this not merely for his own immediate benefit, but in the interests of the community at large, which thus owes to him the important results obtained.

"THE London Committee of Members of the R.I.B.A. for the Statutory Qualification of Architects," has issued a pamphlet of "Reasons for Statutory Qualification." As a recognised Committee of the Institute has yet to report to the Council on the question, it is hardly an opportune moment for considering the reasons of private propagandists.

Current Architecture.

ST. PAUL'S GIRLS' SCHOOL, HAMMERSMITH.—This new school has been built on a piece of ground of about two and a half acres on the south side of Brook Green. The principal entrance and pupils' entrance face north to Brook Green, and at the rear of the buildings is a large playground. The buildings consist of a centre and two wings; in the centre is a large hall 80 ft. long by 45 ft. wide, and about 40 ft. high, with class-rooms opening from it and from a gallery surrounding it on three sides. There are fourteen large class-rooms, and six smaller class-rooms or "Division" rooms. Grouped also near to the centre are three spare class-rooms, and enclosed within double walls and doors are rooms for music and singing. A wide corridor leads right and left from the principal entrance and central hall to the wings. In the right wing are the pupils' and teachers' libraries and the museum. In the left wing are the lecture theatre, the chemical laboratory, and "Physics" room. As carried out the seating in the lecture theatre has been changed, so that the light from the windows falls on the left. On the first floor is a "Cookery" class-room adjoining a service room which has a lift direct to the basement, near to the school kitchen. The drawing school is on the second floor; it has a large north light and skylights in the ceiling. The basement of the building contains the entrances, cloak-rooms, and lavatories for the pupils



ST. PAUL'S GIRLS' SCHOOL, HAMMERSMITH.

GERALD C. HORSLEY, ARCHITECT.

Note.—As carried out the seating of the lecture theatre has been changed so that the light falls on the left.

SAVOY COURT,

SHOWING RESIDENTIAL SUITES AND SAVOY HOTEL (STRAND FRONTAGE).

THE WHOLE OF THE FAÇADE IS OF "CARRARA WARE," MANUFACTURED AND FIXED BY DOULTON & CO., LIMITED, ROYAL DOULTON POTTERIES, LAMBETH, S.E.

Photo: E. Dockree.

ST. PAUL'S GIRLS' SCHOOL, HAMMERSMITH. DETAIL OF FRONT ELEVATION.

and for the teaching staff; also the gymnasium, a covered playground, a pupils' dining-room, a kitchen, scullery, larder, rooms for the caretaker and servants, storerooms, and lift for coals, etc. The gymnasium is at a slightly lower level than the remainder of the basement, in order that the light of the class-rooms on the east side of the building should not be obstructed. There is a gallery in the gymnasium for the use of spectators, entered from the ground floor. On the west side

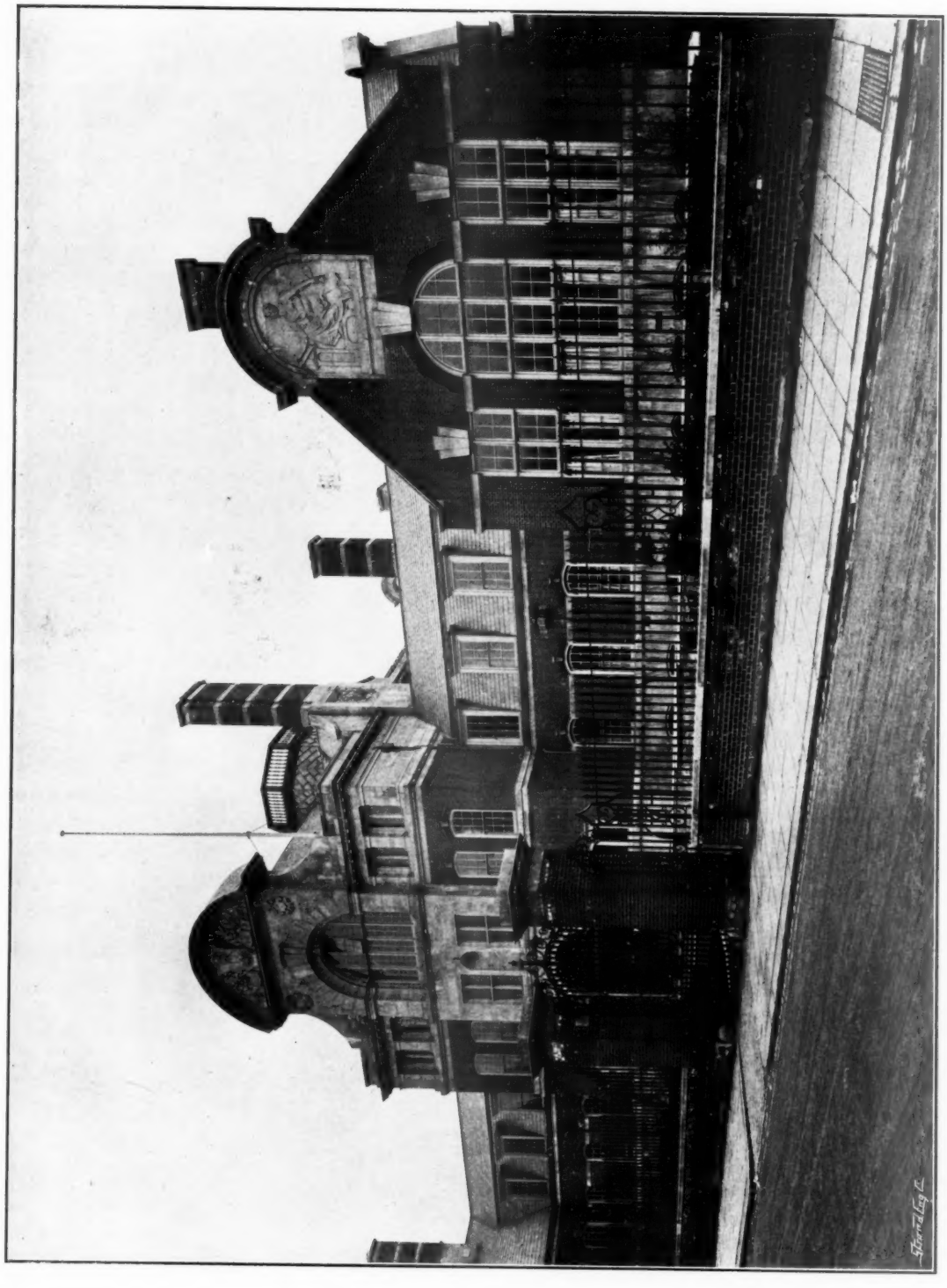


Photo: E. Dockree.

ST. PAUL'S GIRLS' SCHOOL, HAMMERSMITH.
GERALD C. HORSLEY, ARCHITECT.

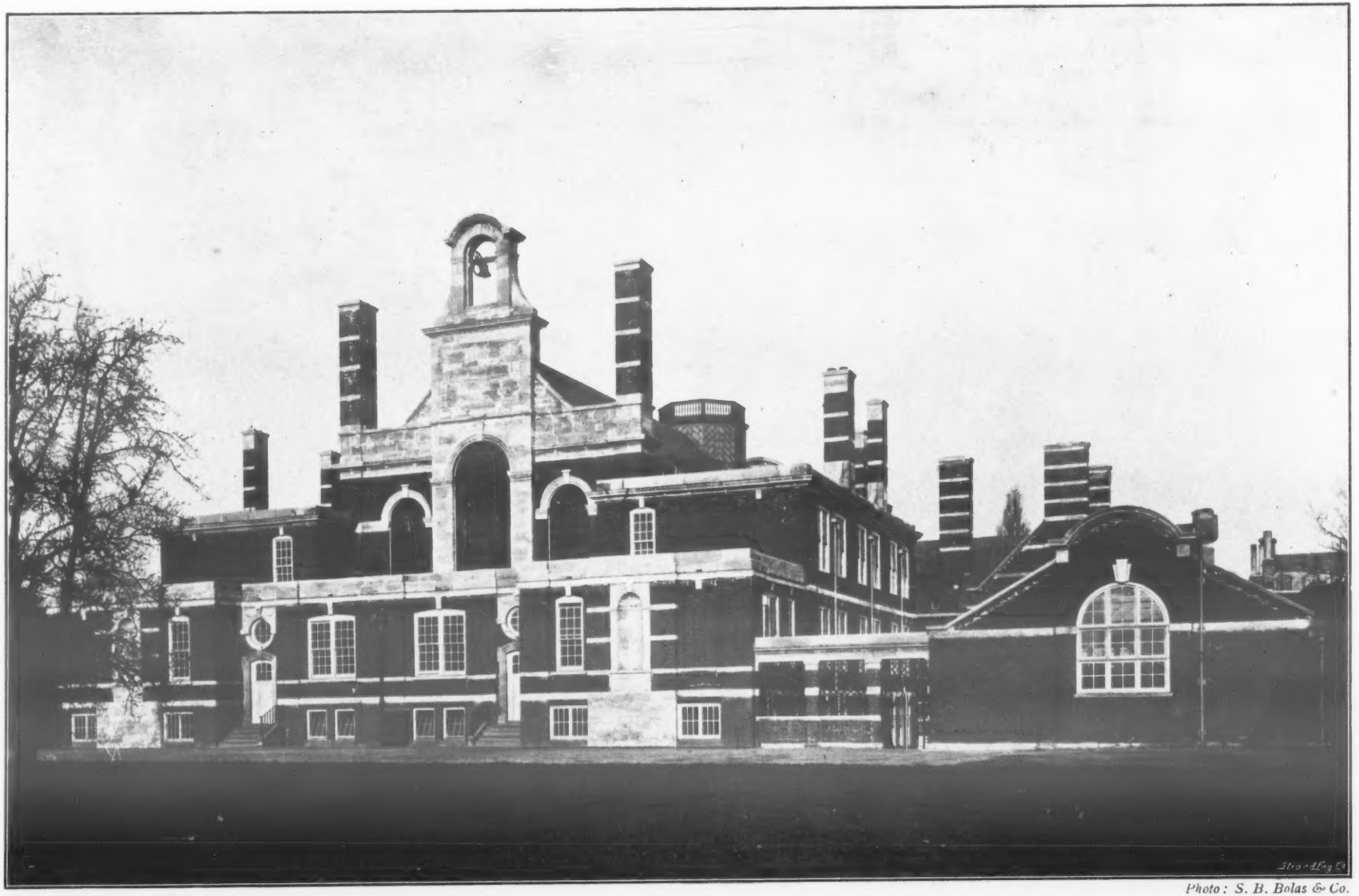


Photo: S. B. Bolas & Co.

ST. PAUL'S GIRLS' SCHOOL, HAMMERSMITH, FROM THE TERRACE.
GERALD C. HORSLEY, ARCHITECT.

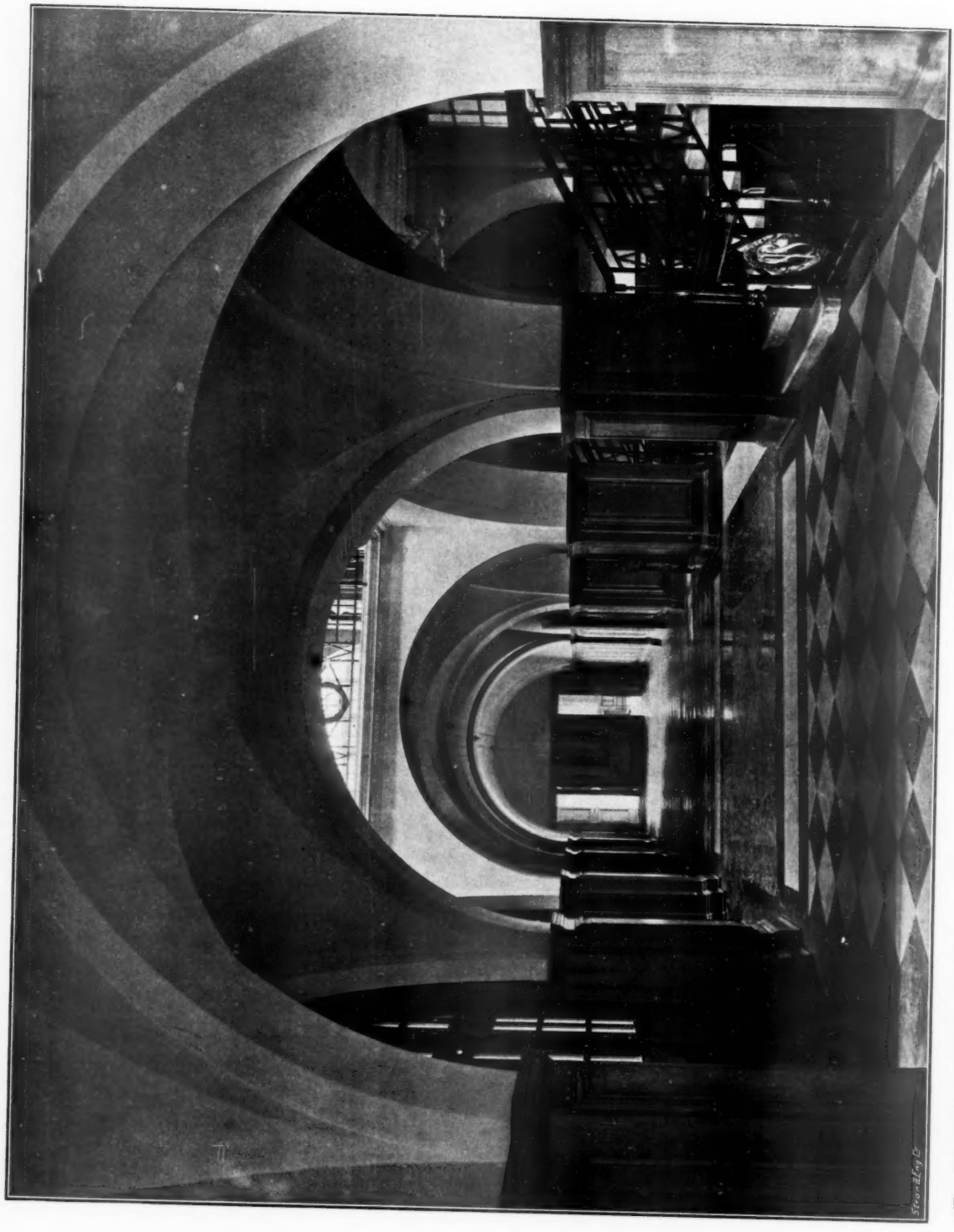


Photo: S. B. Bolas & Co.

ST. PAUL'S SCHOOL FOR GIRLS, HAMMERSMITH. THE CORRIDOR.
GERALD C. HORSLEY, ARCHITECT.

Photos: S. B. Bolas & Co.

ST. PAUL'S GIRLS' SCHOOL, HAMMERSMITH. GERALD C. HORSLEY, ARCHITECT.
SCULPTURE PANELS REPRESENTING "ARTS" AND "SCIENCE," ON THE GABLES OF LEFT AND RIGHT WINGS. MODELLED BY HENRY PEGRAM, A.R.A.

Photo: S. B. Bolas and Co.

ST. PAUL'S GIRLS' SCHOOL, HAMMERSMITH. THE GREAT HALL.
GERALD C. HORSLEY, ARCHITECT.

of the building is a bicycle house, approached by a side road from the front. Red brick and Portland stone have been used for the external elevations. The gables of the right and left wings have sculpture panels in low relief representing "Arts" and "Science" respectively, carved by Mr. Fagan and Mr. M. Murphy from full size models by Mr. Henry Pegram, A.R.A.; and on the entrance doorway in the centre of the building is carving by Mr. M. Murphy, representing the trees of life and of knowledge. In the centre gable is a shield bearing the arms of the Mercers' Company, who are the Trustees to the Governors, and the Company's motto "Honor Deo." A niche above the doorway is intended for a statue in bronze of Dean Colet, the founder of the

Photo: S. B. Bolas and Co.

ST. PAUL'S GIRLS' SCHOOL, HAMMERSMITH. THE GREAT HALL.
GERALD C. HORSLEY, ARCHITECT.

school. Internally the great hall and the walls of the principal corridors and staircases are panelled in oak, and the floor of the corridor is of green and white Italian marble and red Devonshire marble. The buildings are warmed throughout with the low-pressure hot-water system, and the majority of the rooms have open fireplaces as well Flues are provided from each room opening into the roof, in which are placed two "Blackman" fans, which permit the air in the building to be frequently changed. The builders and contractors were Messrs. Holloway Bros. (London), Ltd. The hot-water apparatus and grates were by Messrs. Longden & Co.; the wood block floors by Messrs. Goddard, of Farnham; the electric light fittings by Messrs. Faraday and by Messrs. T. Elsley, who also made the exterior railings and gates. The carving of the centre gable, and the enriched plaster ceilings in the hall and library, were executed by Mr. M. Murphy. The lead guttering and pipe heads were made by Mr. G. P. Bankart, of Bromsgrove.

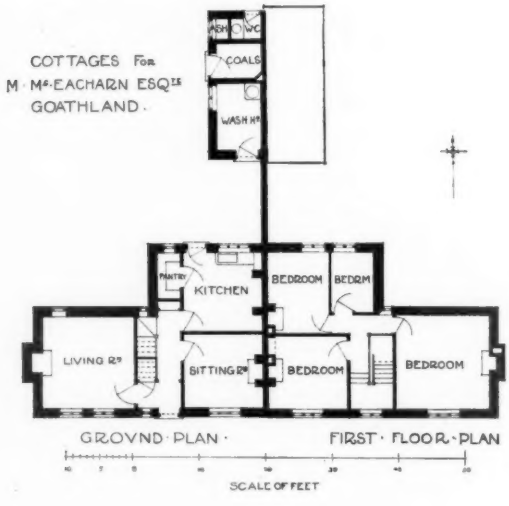
THREE STATIONS ON THE DANISH STATE RAILWAYS.—In the note respecting these stations, which were illustrated in "The Review" for March 1904, the name of the Architect was inadvertently given as Professor A. Meldahl. The buildings should have been attributed to Professor H. Wenck, Knight of the Order of Danneborg, and Architect to the Danish State Railways.

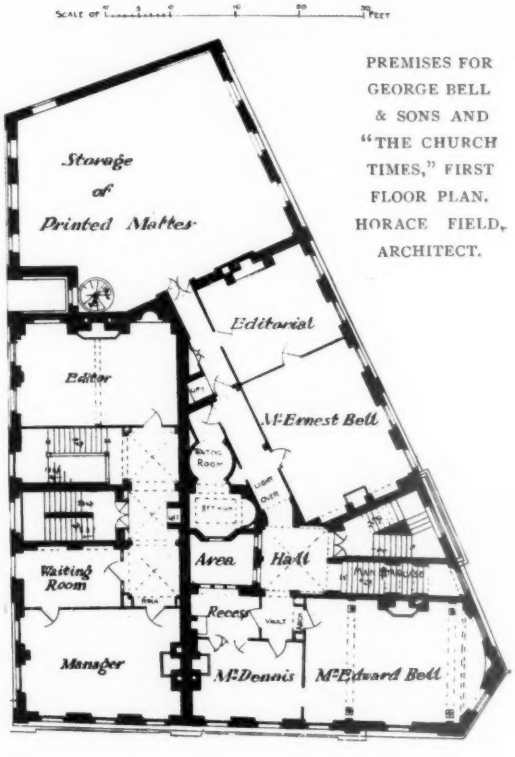
PREMISES FOR MESSRS. GEORGE BELL & SONS AND "THE CHURCH TIMES," PORTUGAL STREET, LINCOLN'S INN FIELDS.—The building is situated next to King's College Hospital, and is faced externally with dark red bricks, supplied by Mr. Willett, and lighter red dressings from Messrs. Lawrence. The stone is Portland stone, the cornice is cement cast *in situ*, and the enrichment carved thereon before the cement had set. Stone has been used sparingly to avoid expense—in fact, a substantial rather than a decorative building being aimed at in consideration of the purposes for which it was required. The smaller portion,

Photo: S. B. Bolas and Co.

ST. PAUL'S GIRLS' SCHOOL, HAMMERSMITH. A CLASS-ROOM.
GERALD C. HORSLEY, ARCHITECT.

facing the yard of King's College Hospital, is used for the publishing offices of the *Church Times*, the larger portion by Messrs. Bell & Sons, publishers. The carving has been done by Messrs. Martyn & Co., of Cheltenham; the building contractors are Messrs. Chinchen & Co., London. Mr. Horace Field is the architect.





PREMISES FOR GEORGE BELL & SONS AND "THE CHURCH TIMES," FIRST FLOOR PLAN. HORACE FIELD, ARCHITECT.

Photo: T. Lewis.

COTTAGES, GOATHLAND, YORKS. WALTER BRIERLEY, ARCHITECT.

Photo: E. Dockree.

PREMISES FOR GEORGE BELL & SONS, AND "THE CHURCH TIMES,"
PORTUGAL STREET, LINCOLN'S INN FIELDS.
HORACE FIELD, ARCHITECT.

Photo: E. Dockree.

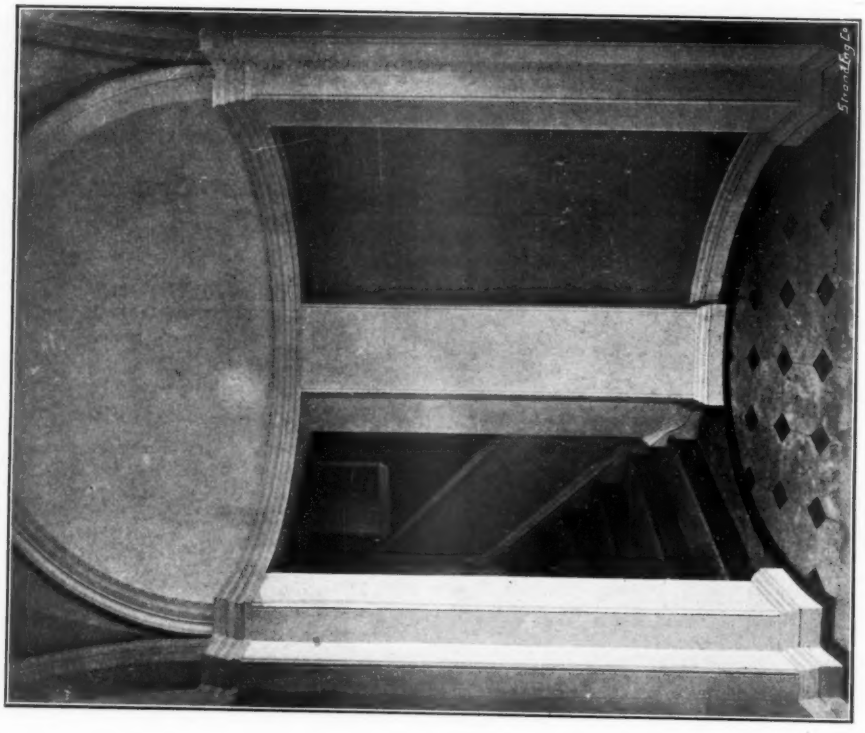
CORRIDOR, FIRST FLOOR, PREMISES OF "THE CHURCH TIMES."
HORACE FIELD, ARCHITECT.

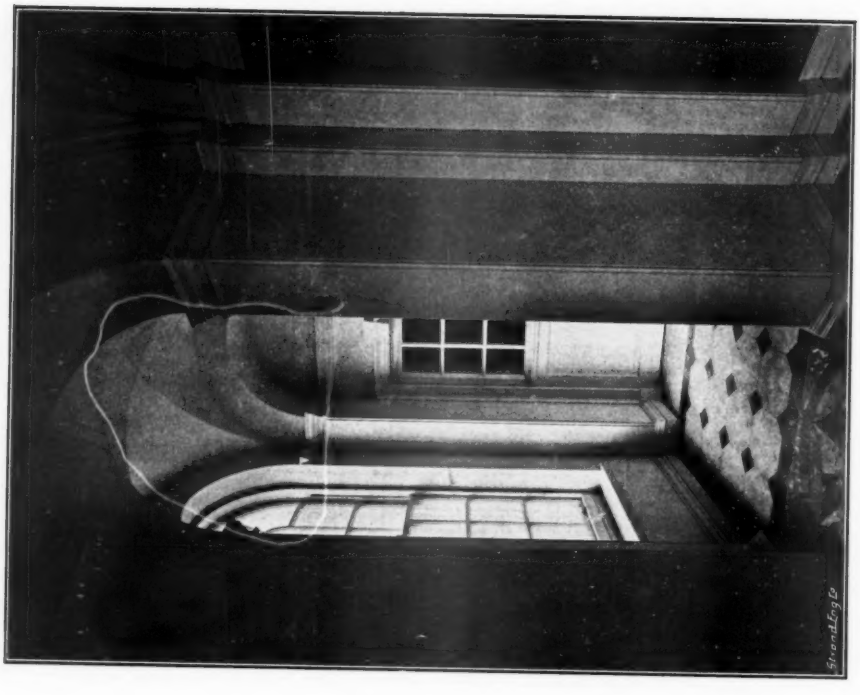
PREMISES FOR GEORGE BELL & SONS AND "THE CHURCH TIMES," PORTUGAL STREET, LINCOLN'S INN FIELDS. HORACE FIELD, ARCHITECT.

Photo: E. Dockree.

Photo: E. Dockree.

PREMISES FOR GEORGE BELL AND SONS.
MR. EDWARD BELL'S ROOM.
HORACE FIELD, ARCHITECT.





Photos: E. Dochree.

PREMISES FOR GEORGE BELL & SONS. THE VESTIBULE, GROUND FLOOR.
HORACE FIELD, ARCHITECT.

Photo: A. H. Pitcher.

MONUMENT TO CANON TINLING IN GLOUCESTER CATHEDRAL.
H. WILSON, SCULPTOR.

FIG. 167. ST. JAMES'S CHURCH, BRISTOL. "ROBERT, EARL OF GLOUCESTER." *A. G.*

FIG. 169. ABBEYDORE. KNIGHT IN BRISTOL STYLE. *A. G.*
(Kindly lent by Samuel Gardner, Esq.)

FIG. 168. SALISBURY CATHEDRAL. WILLIAM LONGESPÉE, FIRST EARL OF SALISBURY. *A. G.*

English Mediæval Figure-Sculpture.

CHAPTER VIII.—THE RECUMBENT EFFIGIES OF THE THIRTEENTH AND EARLY FOURTEENTH CENTURY.

1180–1350.

SECTION II.—THE THIRTEENTH CENTURY OOLITE EFFIGIES OF THE WEST OF ENGLAND.

IT has been shown how before 1200 the masons for the building of Wells Cathedral carved in Doulting stone a series of "bishop" effigies (see Fig. 115) whose execution was the prelude to the statue-making of Wells Front; and also that (as we may judge from two of these effigies which lie now in the north aisle of quire) this carving of recumbent figures continued side by side with the statue-making. St. James's Church, Bristol, has an example of the same kind in the effigy (Fig. 167) called that of Robert, Earl of Gloucester,[87] which, in expression and gesture, comes near the statues in the north-west angle of the Wells Front (see for example Fig. 128), and has a treatment of head and drapery which matches that of the Bible reliefs there. Though given a cushion, this figure at Bristol is little more than a statue laid on its back, and strikes one as an immature performance. But there are "knights" carved in Doulting stone that show more accomplished effigy-sculpture. Two cross-legged figures in Shepton Mallet Church, close to the Doulting quarries, so closely resemble the sturdy warriors upon the Wells Front, that identity of origin seems established. And from the same *atelier* must, we think, have come that well-known and much-admired work, the monument of the great Longespée (d. 1227) on the south side of the nave at Salisbury (Fig. 168). The figure-slab is a detached piece of Doulting[88] stone, laid upon a stage of wooden arcading which still retains some fragments of its gems and painting. These effigy-figures are remarkable for the same sculptor's expression that we have noted at Wells—see the quality of the mail, the dignified presentment of the death sleep, the composed head and lax arm-gesture.

There are, no doubt, in the churches which neighbour on the Doulting quarries, other examples of this art. We believe, too, that a wider range can be traced for the Wells style, and that the "knight" at Malvern (figured by Stothard), whose round targe matches that of a "warrior" figure on the north-west tower of Wells, and possibly the cross-legged figure in Pershore Abbey (where the right hand holds a hunting-horn with the characteristic laxity), owe their quality to the Wells sculptor—even though they may be not actually of the Doulting stone.

We have already suggested that, on the completion of the Wells Front, Bristol, as the mart of western England, would draw the sculptors to its workshops; while the shipping trade of that port could distribute effigies to customers wherever sea-carriage reached. Moreover for such Bristol wares an oolite freestone of finer grain than the Doulting was available close at hand from the Dundry Hill.[89] At any rate, in touch as it were with the Wells technique and within easy conveyance from Bristol, certain classes of effigies are found, such as the early ecclesiastic at Newland, in the Forest of Dean; the early knight at Bisley, near Stroud; the lady at Pucklechurch, and some fragments of two effigies at Bitton, all of which seem to date after 1250.[90] And we note a common manner of "knight" effigies belonging to a wide region all along the Severn sea, and as far as Exeter. We have at Bristol an example in the Mayor's chapel—the southern of the two cross-legged knights—which with Wells draperies shows the right hand laid on the shield, and the lively gesture that indicates later development. And this can be almost matched by a figure in Iddesleigh Church, North Devon. We give (Fig. 169) a knight at Abbeydore, somewhat similar, but with the hand on the sword-hilt, and the detached

A. G.

FIG. 170. EXETER CLOISTER.
DETACHED HEAD OF "KNIGHT."

[87] See illustration in Hollis.

[88] The quarries are scarcely more than thirty miles from Salisbury with a good upland road all the way.

[89] We find that this quarry belonged to the Bishop of Wells in the fifteenth century. The finer stone at Wells came, we believe, from Dundry.

[90] See the Transactions of the Bristol and Gloucestershire Archæological Society.

FIG. 171. ST. MARY REDCLIFFE CHURCH, BRISTOL. "KNIGHT" EFFIGY IN NORTH TRANSEPT. *A. G.*

head (Fig. 170) lying in the cloister at Exeter can be seen to be modelled just like that of this knight. We conclude, therefore, that as London, by means of its Purbeck marblers, established a trade in recumbent figures for the east and south of England, so Bristol with its hinterland of oolite quarries did the same for the west, leading the way in style, and by its ready commerce displacing the Purbeck figures in the thirteenth century, and in the fourteenth keeping at a distance both the wood and alabaster effigies.

It is clear, however, that in this Bristol style of the last half of the thirteenth century there has appeared another element besides the development of Wells technique. We can trace distinct copying of the Purbeck treatments. This is shown in the Bristol figure mentioned above, but still more in the "knight" (Fig. 171) in the church of St. Mary Redcliffe, which has a close resemblance to the second "Longespée" at Salisbury—the Purbeck figure already described in the first section of this chapter. And another thirteenth-century encroachment upon the Purbeck trade is to be seen in the *Hamstone* effigies. The freestone is an oolite of coarse texture, taken out of a hill some twenty miles from Doulting, and with easy water carriage to Bristol. A series of fine effigies in this stone, dating from 1240–1340, occur in the neighbourhood, and are found spreading through Dorset almost within sight of the Purbeck hills. One of the earliest of those remaining is to be seen in Bridport Church (Fig. 172), and this has traces of black paint, as if it had been got up to resemble Purbeck marble. But the style of the *Hamstone* effigies is that of Bristol, and of remarkable quality, as can be seen in the "knight" and "lady" (dating c. 1290) on the floor of the Athelhampton Chantry in Piddleton Church, about four miles from Dorchester. Another *Hamstone* knight in the same chapel shows how, some fifty years later, the craft was still in connection with the Bristol or west country pattern of that date.

But in this second half of the thirteenth century yet another centre of figure-craft must be recognised, as giving models to the effigy-carver in the west of England. The later building of Salisbury Cathedral produced a considerable amount of figure-work, some of which—the reliefs on the quire screen, and those in the chapter house—has appeared in Chapter V., while the scanty remains of the statues of the west front will be illustrated in our next chapter. The style of these last is so different from that of Wells that *no* sequence seems possible, and indeed to date them immediately following is difficult. Something of their expressions and attitudes we may derive from the French sculpture of 1270, as we shall discuss presently. Certain effigies in South England seem directly in touch with this Salisbury influence. The later connections of the statues will be mentioned afterwards. But the style of the chapter-house reliefs may be immediately traced in a figure at Axminster, which is to be probably identified as that of the Lady Alicia de Bruere, whose benefactions to the building of Salisbury Cathedral are recorded. The stone of the effigy appears to be the Chilmark stone of the Salisbury building, and (Fig. 173) she holds between her hands the Salisbury badge. We can see therefore another influence coming in upon and transforming the style of the west-country effigy-carver—and this can be imme-

FIG. 172. BRIDPORT CHURCH. "KNIGHT" IN NORTH TRANSEPT.
(Kindly lent by W. Burnett, Esq.)

FIG. 173. AXMINSTER CHURCH. "LADY" ON SOUTH SIDE OF CHANCEL.
(Kindly lent by W. Burnett, Esq.)

diately seen to bear upon the production of the Exeter and Bristol effigies, c. 1280, in which the Wells technique becomes entirely suspended, and a new manner established.

While the Purbeck art of recumbent effigies died away, c. 1300, these oolite manufactures of the west of England grew in importance, and held their own, at any rate during the fourteenth century, against the importations of wood, alabaster, and chalk stone figures. Elsewhere in England also the close of the thirteenth century witnessed in many districts a flourishing effigy production in the building stones of the local mason craft and usually in direct copy of the Purbeck art. While the thirteenth century was that of the Purbeck effigy, and the fifteenth favoured alabaster, the years from 1280 to 1380 showed the widest vogue of the stone figure. Indeed, the field of effigy-material that opens to us in the fourteenth century is so bewildering in its extent and richness, that a separate section of this chapter is required to deal with it.

Section III.—The Freestone Effigies, c. 1300.

Towards 1300 a great variety of effigies came into the market, worked in stones of larger block and softer texture than the coarse shell-stones which had been earlier in use. Broadly, we see in them three classes of style, which we propose to distinguish as the *south-western*, the *north-eastern*, and the *midland* styles respectively. The district of the first was, roughly, that of the dioceses which bordered on the Bristol Channel and the Severn basin—Exeter, Wells, Hereford, Llandaff, and Worcester (partially); the district of north-eastern style lay in the dioceses of Carlisle, Durham, York, and Lincoln (partially); between was the district of the midland style, which from the diocese of Lichfield stretched across the southern part of the great Lincoln diocese to that of London and its neighbours.

We shall hope to show, when we continue our description of the second or mid-Gothic school of art, that these three regions produced three separate styles, that can be distinguished in all branches of figure-sculpture—in the statues, in the architectural head-carving and reliefs, as well as here in the recumbent effigies—pointing in each region to a special craftsmanship, with special affinities of style, that grew up from the continental connections and the commerce of each seaboard, but at the same time was fundamentally based on the technique of the *local* stones available.

As far as recumbent effigies are concerned, the dependence of the style on stone is distinct. Roughly, there were three sorts of stone used for effigies c. 1300—to be distinguished as (1) oolite, (2) sandstone, (3) crystalline limestone. Now, no doubt quarries of all three sorts — shellstone, sandstone, and limestone—were in working at some part or other of each of the three wide regions we have separated. But, for effigies, circumstances gave a preponderance to one variety in each of the three different regions—to the oolite effigy in the south-western, to the sandstone effigy in the midland, and to the magnesian limestone effigy in the north-eastern district. The determining factor for this preponderance in each case was the building fashion of the local capital towns. Only the quarries that were opened up by the demands of continuous building could be counted on to supply the blocks of considerable scantling, high in the bed, as well as of good length and even texture throughout, which were required for the carving of life-size figures. Accordingly, the effigy trade would take root in the port or capital city that had easy communication with the quarries supplying in each

FIG. 174. HEREFORD CATHEDRAL. CHANCELLOR SWINFIELD (1286–1299). A. G.
EXAMPLE OF SOUTH-WESTERN STYLE.

district the stones most in vogue for building. In the south-west of England the oolite shell-stones[91] had been employed in all the thirteenth-century building of the great churches. The freestones, which Bristol could supply, were especially in demand—they were hard, and though not of great height on bed, even in texture, and capable of being worked with great delicacy. So we find the south-western recumbent effigy, showing the working of these stones, usually with flatly laid, silky folds; with head features expressive, but small—the chins depressed to bring the noses within the compass of the stone, and generally with the hands and other projecting details kept well in bounds.

On the other hand, the free sandstones of mid-England building, c. 1300, at Lichfield, Coventry, Chester, and Leicester, could be got in great heights of bed. There was no need in their cutting to curtail projecting features. We find, accordingly, in the midland effigies, widely-spread draperies, deeply-cut folds, and strongly-pleated skirts. The great blocks, too, gave occasion for elaborately carved architectural canopies. At the same time, the soft granular texture of sandstone fostered a blunt rendering of the features, which have not the sharp incisiveness of the oolite style.

Finally, the magnesian limestones of the Yorkshire building, c. 1300, at York, Beverley, and Southwell, have a close texture with almost the expression of marble, while they are as big in block and as easily worked as the sandstones. The north-eastern style of effigy took from this stone a broad, sensuous manner, in contrast with the crispness of the south-western and the bluntness of the midland style. Particularly it had, c. 1300, a certain billowy riot of drapery which feeds on the plastic quality of the material.

To show better what we wish to indicate in the above distinctions, we give the ecclesiastic (Fig. 174) to represent the south-western manner of effigy, the lady (Fig. 175) the midland style, and the knight (Fig. 176) the north-eastern: in each case assigning to the district what we consider its most characteristic type of effigy. It is not maintained, however, that the effigies in each of these regions are always in the same stone. There are sandstone figures in Yorkshire, and in Gloucestershi and a whole group of oolite effigies in Lincoln shire belongs to the Yorkshire types. Nor ca every effigy of c. 1300, in the districts named, ticketed so that we can pronounce on its orig from one or other of the known centres of effigy carving. But distinct tendencies in the specified directions can, we think, be recognised through out wide regions, and warrant a theory as to their origin in the craft-conditions of workshops in the fashionable building stones, and so a model w set for the district.

Where, as at Worcester, we have oolite and sandstone effigies side by side—as, for example, in the two ladies, the one in Prince Arthur's Chantry the other further east in the south aisle of the Lady Chapel (that shown in Fig. 175)—we can point in the one case to the silky overlappings of dress, in the other to deep-cut pleated skirts. Yet the difference is not one of date, or of fashion in costume, but is explained by the geographical position —that Worcester had within reach two workshops of style, the south-western and the midland, and could draw from either on occasion. That they were most often—not the sculptors with the tricks of style, but the finished effigies themselves—imported, c. 1300, seems to us most likely. As Purbeck goods were conveyed to their places worked, and as later the alabaster figure-works were sent out from Nottingham ready for fixing, so in the last quarter of the thirteenth century the atelier of the soft-stone figures would send them out to where they were wanted. There is, no doubt, some difficulty in this view, as to the way in which the effigy-maker at a distance obtained that knowledge of the deceased's appearance, which it is clear he had as to accoutrements and dress,

[91] The Portland and Purbeck stones may be classed with these as of the same constitution and working. The cathedrals of the south-west of England were entirely built in shell-stones in the thirteenth and early fourteenth century. Sandstone succeeded oolite at Exeter c. 1300, and at Chichester (and to a certain extent at Winchester) c. 1350.

FIG. 175. WORCESTER CATHEDRAL. LADY IN SOUTH AISLE OF QUIRE. EXAMPLE OF MIDLAND STYLE. *A. G.*

c. 1300. It may be that vestments and armour were sent to the workshops, and were put upon models to be copied. Or it is possible that on occasion a wax model was made in likeness of the deceased, and supplied to the effigy carver. But any case the details of costume in effigies become increasingly individual as we pass into the fourteenth century. There were clearly no such stock patterns of knight and lady as were noted in the earlier hardstone and Purbeck figures, and such as we shall find very usually in the stone and alabaster figures of the fifteenth century. At the date 1300 each bishop and each knight had a special representation, at any rate of his costume, if not of his figure and features.

As to the exact centres for these diffusions of effigies, c. 1300, there is little direct evidence. Bristol we have accepted as certainly the principal workshop of the south-western style, though Gloucester may have shared in the trade, and Exeter seems to have produced an allied but different type of effigy-work which we would trace more directly to a fountain head in the statues of Salisbury. Still, the stone and the masons of Bristol were in employment not only in its own churches, but far afield—even at Exeter,[92] we believe, in the starting of the Lady Chapel.

York is as certainly marked out as the centre of the sculpture craft for the north-eastern style. Its Minster and abbeys, and the great churches in connection with its see at Ripon, Southwell, and Beverley, made a body of building whose demand on sculpture was continuous.

For the midlands the sandstone statue-making of Lichfield was the basis of an art in effigy, though Coventry and Nottingham supplied the likely workshops for its trade.[93] Finally, London was undoubtedly the prolific producer of the south-eastern effigies that are found, c. 1300, with a style that has close connections with that of both Lichfield and Exeter. The stones available for London sculpture were chiefly Reigate sandstone and

[92] The use of Dundry stone and lias shafts signifies Bristol masoncraft in the Gloucester "Reliquary" in the Exeter Chapter House, as in that of Wells.

[93] In the east of England the early thirteenth-century building in the great abbeys of the Fens, in Peterborough, Ely, etc., undoubtedly produced a style of figure-sculpture which it derived, not from Lichfield, but from Lincoln, having later developments in the workshops of Norwich. But Caen-stone was largely imported into the east of England for the finer architectural carving, and the connection of east England art is most with London, to which Caen stone came regularly.

FIG. 176. BEDALE CHURCH. KNIGHT AND LADY AT WEST END. EXAMPLE OF NORTH-EASTERN STYLE. *A. G.*

Caen stone brought by sea; this latter, though an oolite, is so sandy and close-bedded that the technique of its working may be classed with that of the Lichfield sandstones.

Stone figures were, however, only a part of the London output; wood and bronze were materials out of which the London imagers executed recumbent figures that were sent out in all directions. Now clearly in bronze and wood the direct masonic conditions of figure sculpture had no power, and we may expect a modification in the direction of the imager's craft. Indeed, the London effigy is of varied affinities. It has generally a midland likeness, but often has this in close alliance with the south-western manner, and withal shares details in common with the north-eastern art.

Were, then, the London sculptors drawn from all parts of England, and so developed there a mixed style of art? It is evident from the accounts of Queen Eleanor's trustees (1292) that for her monuments were employed imagers and masons whose names came from many places, such as Battle, Abingdon, Canterbury, Ireland. Still, we would prefer to regard the facts of the London style in another way. A new manner of figure-carving, as we have mentioned as to Salisbury, becomes distinctly apparent in England in the last quarter of the thirteenth century; this was in essence an imager's technique, and it comes earliest on the scene, we believe, in the London workshops. Just as we surmise that the Londoners' trade of Purbeck figures sent broadcast over England models that were copied in the local stones by the working masons, so now this imager's technique was dispersed from London, and was in the south-west, the midland, and the north-east respectively translated into the masoncraft of each district—a masoncraft founded, as we have described, upon the stone in local demand; and so the manners we have separated arose; London drawing sculptors from each district, but in reality being the centre of style.

The quality of this new manner lies in greater freedom of expression, and particularly in a technique of drapery, which is rendered no longer in the thin lawny ripples or closely set planes, but in clean-cut, billowy masses, with under-cut overlappings. There can be no question, we think, that the impetus for this shift of technique came from abroad; that in it English art began to run directly in the currents of great French sculpture. They were the statuaries of Paris, Amiens, Reims, and Rouen, who, in the figure-crowded porches of the great cathedrals, created new expressions, new attitudes and free treatments of drapery, which thereafter remained the possession of Gothic sculpture, and banished the Byzantine features of traditional style. Towards 1260 the trades of image-makers and ivory-carvers, who stocked the shops of church furniture, were revolutionised by the new motives of figure-work, and dispersed them abroad. And so we find the new draperies appearing simultaneously in the late thirteenth century all over the west of Europe. The London image shops caught the new manner c. 1270, and from them it passed into the current art habit of all the English regions alike.

EDWARD S. PRIOR. ARTHUR GARDNER.

Old Plaster Work.

From a Photo by Mr. F. P. Pritchard.

FROM "THE RISING SUN" INN, CASTLE MILL STREET, BRISTOL