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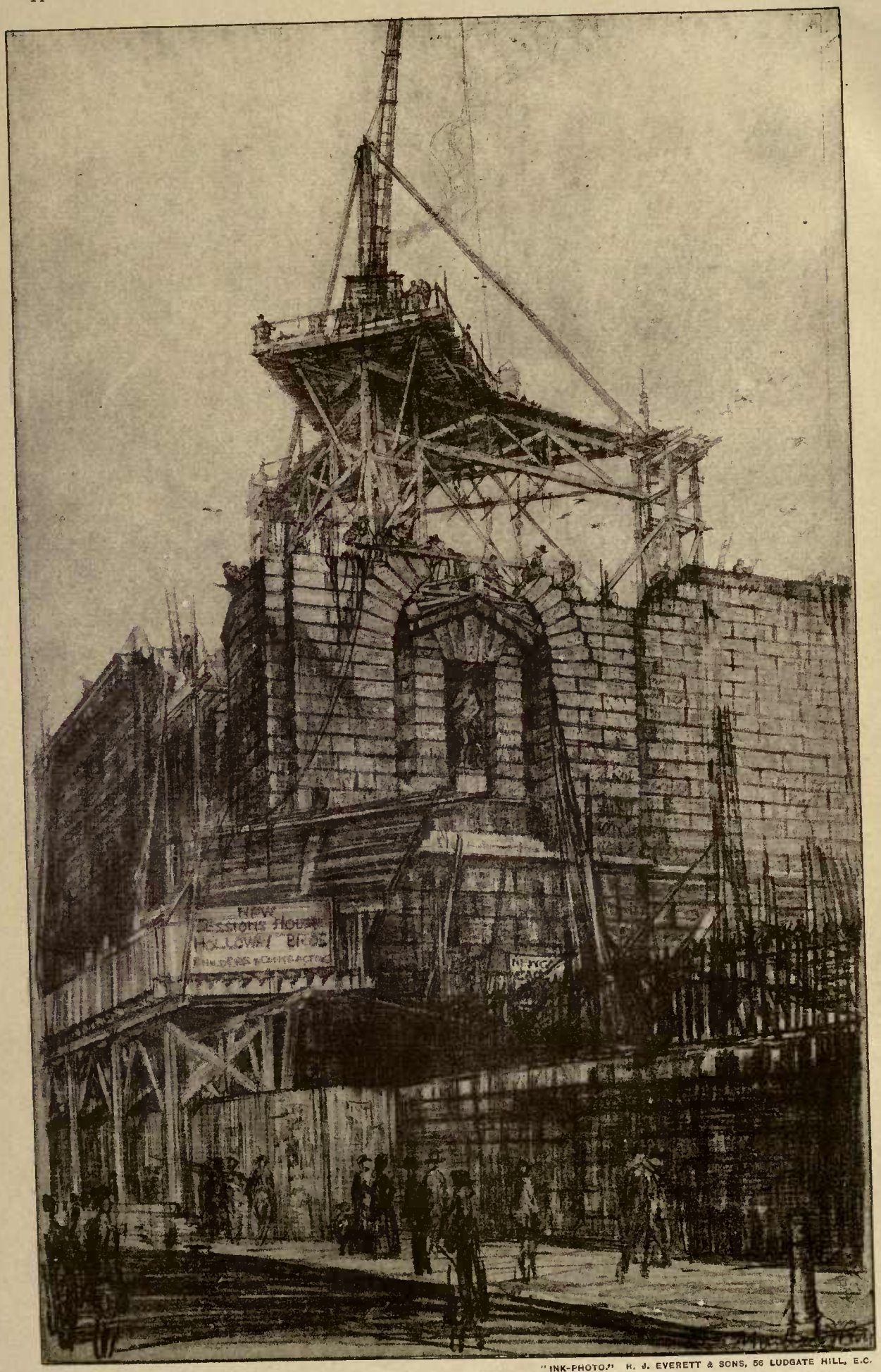
INDEX TO VOLUME THIRTEEN.

EYRE AND SPOTTISWOODE, HIS MAJESTY'S PRINTERS, DOWNS PARK ROAD, HACKNEY, LONDON, N.E.

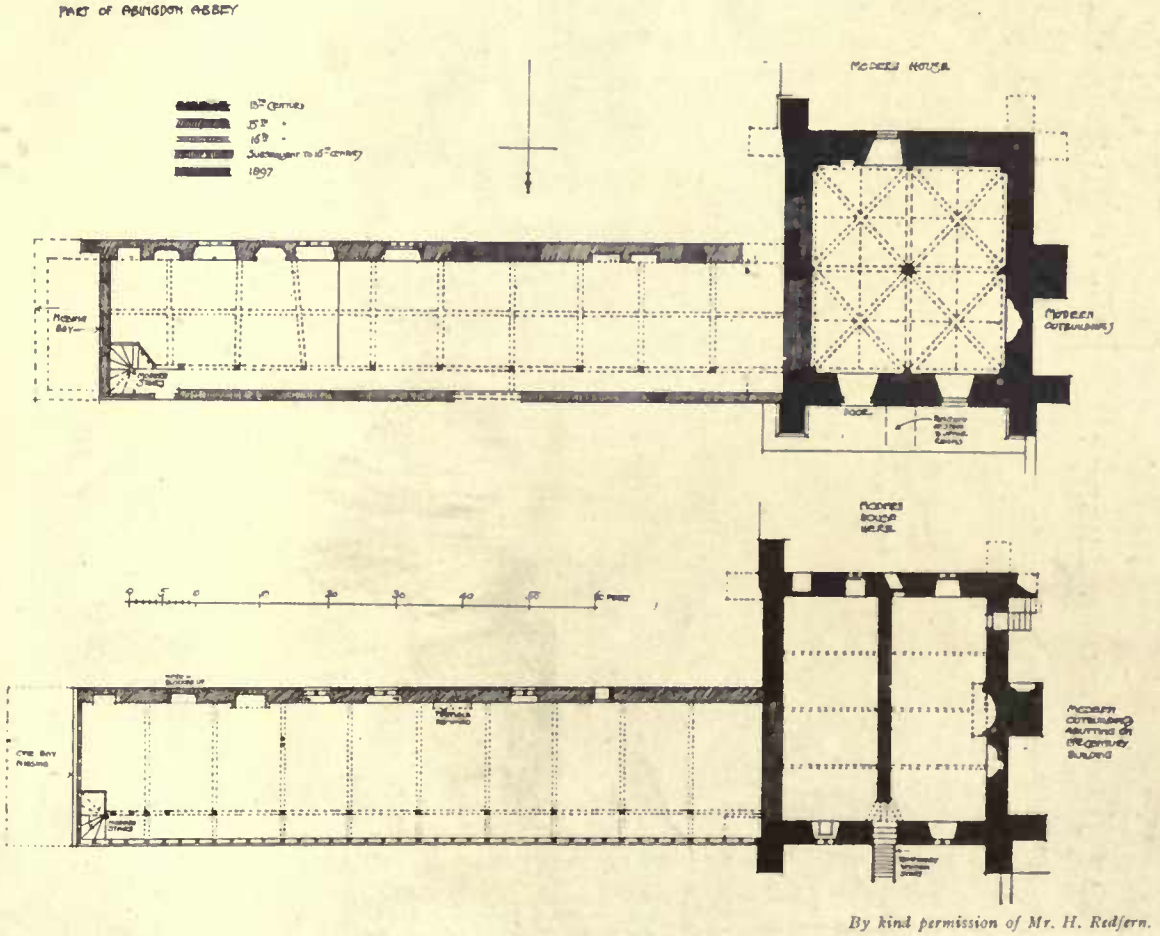


"INK-PHOTO." R. J. EVERETT & SONS, 56 LUDGATE HILL, E.C.

THE LAST OF NEWGATE.
DRAWN BY MUIRHEAD BONE.

Abingdon.

THERE are many towns and villages in England which may be regarded as, in themselves, schools and museums of architecture. The cathedral cities have engrossed our attention, not only to the exclusion of places where there is no minster as a central feature, but even of the minor features in these cities themselves. There is much to see in Salisbury, for example, besides the cathedral—much in Chichester. But, from this point of view, there are smaller towns which rival even Salisbury or Chichester in the abundance of their interesting and beautiful houses. Stamford will at once occur to the mind, where the parish churches must be added to the domestic buildings; or Burford, a dead borough, which at one time must have displayed a street of palaces; or Bradford, or Tewkesbury, or Corsham, or Newbury, or, in short, any place where trade and manufactures were brisk in the years before the Reformation, where good materials were to be had on the spot, and where neither king nor baron nor abbot repressed the æsthetic ambition of the burghers. Such old towns abound. In several of them the architectural relics take us back to Roman times; but while a well-preserved hypocaust or a mosaic pavement is rare, such early features as a Norman keep, an Edwardian church, or a half-timbered house, are frequently found. Abingdon, it may be observed, from the peculiarity of its history—a peculiarity which it shares with St. Albans, Bury St. Edmunds, Gloucester, and other places—is deficient in mediæval domestic buildings. The abbots of these towns discouraged settlers. There were seldom any local manufactures. The town grew, not on account of the abbey patronage, but in spite of its influence. The oldest houses now to be found at Abingdon, when we pass by those of the abbey itself, are of post-Reformation date. From the point of view indicated above, the town shows us specimens of Norman, in one of the churches, St. Nicholas; of First Pointed, in some of the domestic buildings of the abbey; of the Decorated style in the other church, St. Helen's; of Perpendicular in a few of the out-buildings of the monks and the greater part of the last-named church and the bridge. The latest Gothic is, however, scarce, and the more remarkable of the



By kind permission of Mr. H. Redfern.

GROUND AND FIRST FLOOR PLANS. REMAINS OF THE ABBEY BUILDINGS, ABINGDON.

MAP OF PART OF ABINGDON.

SHOWING THE POSITION OF THE BUILDINGS ILLUSTRATED IN THIS ARTICLE.

NOTE.

The buildings illustrated in the article are blacked in. The numbers have reference to the table given on this page. The arrows show the direction from which the Views were taken.

REFERENCE.

1. No. 36, Bath Street.
2. Fountains in Wall of House, Ock Street.
3. Tomkins's Almshouses.
4. Market-House.
5. Town Hall and Municipal Buildings.
6. Remains of Abbey Buildings.
7. Twickenham House.
8. No. 57, East S. Helen's Street.
9. Twitty's Almshouses.
10. S. Helen's Church.
11. Helenstowe.
12 and 13. Christ's Hospital.

buildings were erected after the dissolution of the monastery, and when the abbey church had fallen into ruin.

Of the remains still existing, some interesting features should be noticed. Mr. Harry Redfern has explored the site of Abingdon Abbey, and the municipal authorities, the Mayor and Corporation, have warmly seconded his efforts for the preservation of what remains. The church has wholly disappeared. It was, no doubt, to eastward of St. Nicholas, which stands, and has stood since Norman times, to eastward of the market place. A meadow behind Abbey House is locally and traditionally pointed out as the site. If so, it must have been very long, and the cloisters and residential buildings, like those of Westminster Abbey and many other ancient Benedictine houses, must have covered the ground to southward, between it and the Thames, if they did not extend across a bridge to the islet on which the modern house called The Abbey is built. Of these buildings, only foundations and a few carved stones are left of the church, the chapter house, the cloister, the abbot's house and the domestic offices, the bakehouse and the brewhouse. To westward of the probable sites of these portions is a large and very interesting building of which I am able, by the kindness of Mr. Redfern, to offer a plan and some photographic views. To westward is a modern brewery, which may well occupy the ground formerly taken up by this most important feature of a great mediæval monastery. Rather to the south, on an island of the Thames, was, and is, the Abbey Mill. Abingdon was certainly not deficient in either bread or beer, and the solicitude of the great Abbot, St. Ethelwold, afterwards Bishop of Winchester, in providing both for the monks, is specially recorded in the Chronicle.

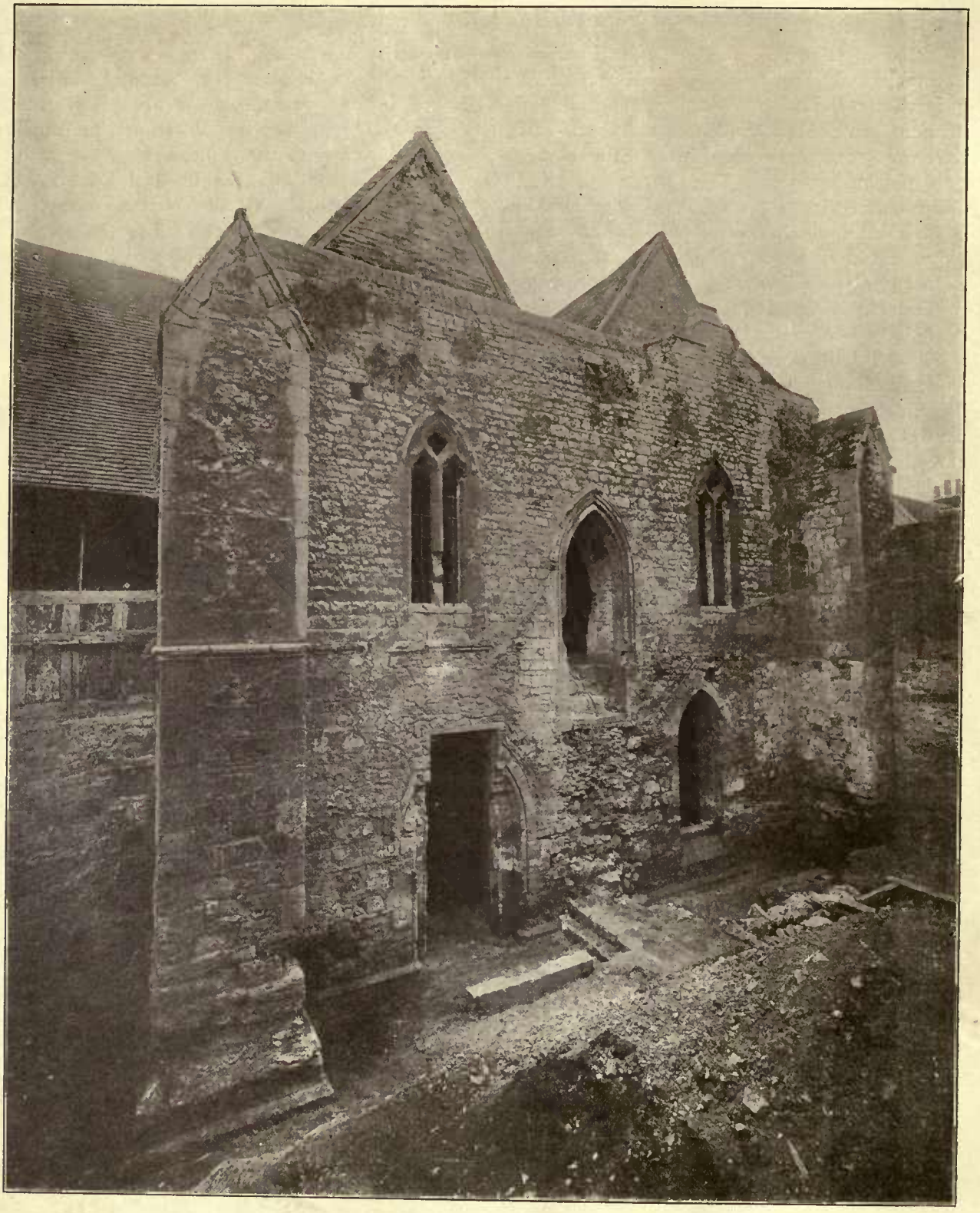
The long building just mentioned may have formed some part of the lodgings of the Abbot, or still more likely it may have been part of an infirmary. The abbots, before the thirteenth century, were noted for their medical skill. To it they owed the most important of their outlying estates—the church manor of Kensington, where they are still commemorated in St. Mary "Abbott's" and several other local names. Faricius, we read, was skilled in the treatment of disease, and to his care Aubrey Vere, the lord of the manors of Hyde, and Neyt, and Kensington, among others, entrusted Geoffrey, his son, who was in ill-health. Faricius so far relieved the sufferings of the youth that when he lay on his death-bed he besought his father to grant to his kind physician 270 acres of the last named manor.

Faricius was born at Arezzo, in Italy, and came to England apparently as physician to Henry I. In this capacity he attended Queen Matilda at the birth of her first child, she having, it seems, resided near Abingdon for the purpose. To her gifts on this occasion, Abingdon owed much, including the materials of the Palace at Andersey. When, in after years, Faricius would have been appointed Archbishop of Canterbury, the monks objected because of the mundane character of his principal occupation; and he died Lord Abbot of Abingdon, to which office he was consecrated in 1100 by Bishop Robert of Lincoln. It will be remembered that Henry I. owed his surname of Beauclerc to the good education he had received at Abingdon.

Of the Norman time, there remains now only the doorway, in the market place, of St. Nicholas Church, so severely "restored" in 1881, if not before, that nothing of the eleventh century, except the form, is left. It is recorded that Faricius built the Abbey Church, probably the eastern end, and possibly the transepts; but all this has perished. He died in 1115, and was locally regarded as a saint, though he was never canonised.

Two other abbots should be noticed. Nicholas of Coleham, or Culham, built the bridge at a spot south of the town called the "borough ford," or Burford; and to him also is attributed the existing structure of St. Nicholas Church. He had been Prior, and was Abbot from 1289 to 1307. The bridge was continued by a causeway and further bridge to Culham in the fifteenth century. The seven arches of the Burford end are all pointed, though disguised in part by a round-arched widening, and are ribbed.

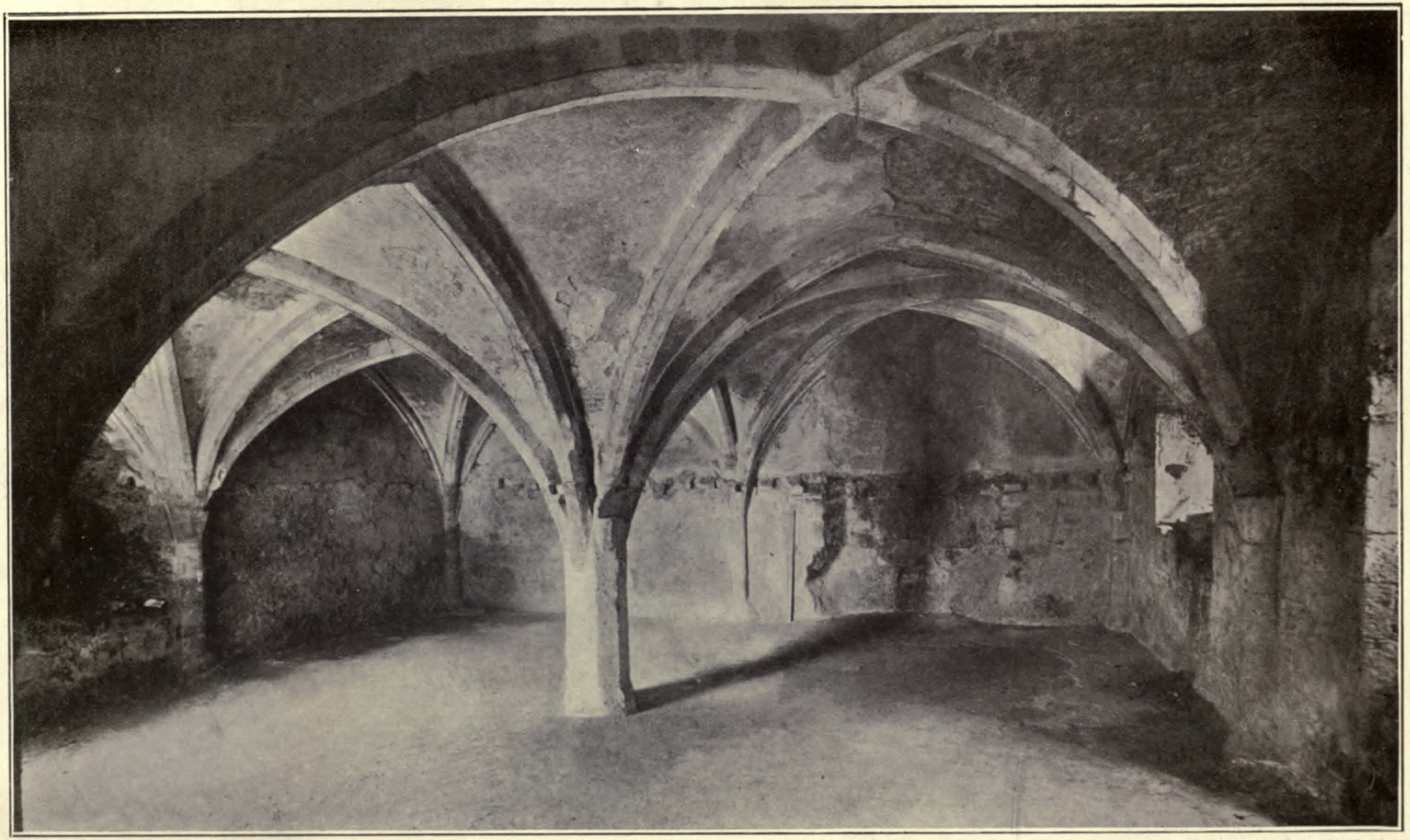
The bridge was taken in charge by a Guild of Holy Cross, which built itself a chapel or aisle in the church of St. Helen, as we shall see further on. The last Abbot is named in a roll of arms of 1515. He is described as "Thabbot of Abyngdon, lord thomas pentecost," and his arms are, "Argent, a cross fleury, between four martlets," impaling "Sable, on a fess between three doves volant argent, ensigned with haloes and membered or, a lion's face between two covered cups gules." Similar doves, but without haloes, appear in the arms of the Lord Abbot of Bury, John Melford, *alias* Reve, whose name precedes that of Abbot Pentecost. In 1537, Pentecost and twenty-five monks surrendered to Henry VIII. The Abbot received a grant of the manor of Cumnor, and a pension. The estates of the Abbey were estimated to produce £1,876 10*s.* 9*d.* a year, equal to some £18,000 now. The Lord Thomas Pentecost, resuming his patronymic, became Dr. Thomas Rowland, D.D., but does not figure again in ecclesiastical history. The influence of the abbots had been always to repress



REMAINS OF THE ABBEY BUILDINGS, FROM THE NORTH-EAST.

By kind permission of Mr. H. Redfern.

the trade of the townsfolk. The early struggles of the burghers were for leave to hold markets and other small privileges, and were uniformly put down with a high hand. In 1327 the neighbouring city of Oxford, in the person of the Mayor and some of the students, came to the help of Abingdon, but spoilt a good cause by their excesses. Part of the abbey was burnt in this riot, which was not quelled until twelve of the rioters had been hanged. It may be imagined that, once the abbey was dissolved, no one raised a hand to save the buildings; and where good stone



By kind permission of Mr. H. Redfern.

INTERIOR, GROUND FLOOR, ABBEY BUILDINGS.

INTERIOR, LONG ABBEY BUILDING, FIRST FLOOR.

By kind permission of Mr. H. Redfern.

was scarce, it is only surprising that this substantial fragment remains.

The building shows two finely-vaulted chambers on the ground floor, with two more in an upper storey, and adjoining them to the eastward a long chamber with an oak roof. To the southward looking across a narrow lawn, which appears to have been in part, at least, enclosed by buildings, to the Thames, was a solid stone wall pierced by several traceried windows. The windows of the vaulted chambers are in the First Pointed style, the Decorated style appearing on the north side in a kind of court. The long building, however, had only windows towards the river in its two centre bays; the two bays at the west end, and the one, all that remains of two which were apparently at the eastern end, looking, according to some indications in the woodwork, into a corridor along the north side. The roof, too, shows that the two central bays on the first floor were separate chambers, with Perpendicular windows looking south, and with fireplaces of the same period.

There is no internal communication apparent between this eastern building—all of the Perpendicular period—and the very substantial thirteenth century house to westward. In it all the original features are First Pointed, but two Decorated windows appear on the north front. An outside stair led to a narrow door. The parapet of the roof seems to have been battlemented. The groining within is very fine, and has survived a long period both of neglect and of injury. Now that it is well cared for, we may hope that archæologists competent to pronounce may identify it and the adjoining chambers. Meanwhile guesswork would be wholly out of place. The external chimney is well known, being probably the only perfect thirteenth century example in existence. The fireplace, which corresponds to it within, is also of the highest rarity, with its graceful shafts and carved capitals worthy of the age which has left us the chapter house of Southwell. The chimney long carried a vane, which is still in existence, after having threatened, until it was taken down a few years ago, to destroy the whole structure. The chimney is now in no great danger except from climbing plants. A second chimney, of the same period in Mr. Redfern's opinion, but wanting the external hood, is on an adjoining building to the westward. This, which was for some years a Bridewell, now consists of tenements, which, with many of the houses in the immediate neighbourhood, exhibits in roof and walls traces everywhere of mediæval architecture. The abbey precincts extended to Bridge Street, the houses on the east side of which are still described in legal documents as "within the boundaries of the late dissolved Abbey of St. Mary of Abingdon." The Perpendicular gateway opens on the market place.

Photo: W. J. Vasey.

13TH CENTURY FIREPLACE, IN UPPER FLOOR OF ABBEY BUILDING.

Near the church of St. Helen a fragment, consisting of little more than a single wall with a Decorated window in it, exists of a cell of the nunnery of Godstow. This relic was for many years a malt store, but, with an adjoining house of good Georgian style, has been rescued and worked into a very charming private residence by Mr. Redfern. Across a narrow street are the massive tower and the many gables of St. Helen's church. On the south a wide quay is flanked by a range of almshouses and the two side-entrances to the churchyard. The spire is very familiar to passengers by river to or from Oxford, and figures in many landscapes from the days of Turner down.

In addition to these monastic relics of the Gothic style, there are the two churches, both of which present features of interest. St. Nicholas stands on the east side of the market place, and must have closely abutted on the abbey church, like St. Gregory by St. Paul's or St. Margaret beside the Westminster. It is said to have been built by Nicholas of Culham; but that Prior, who

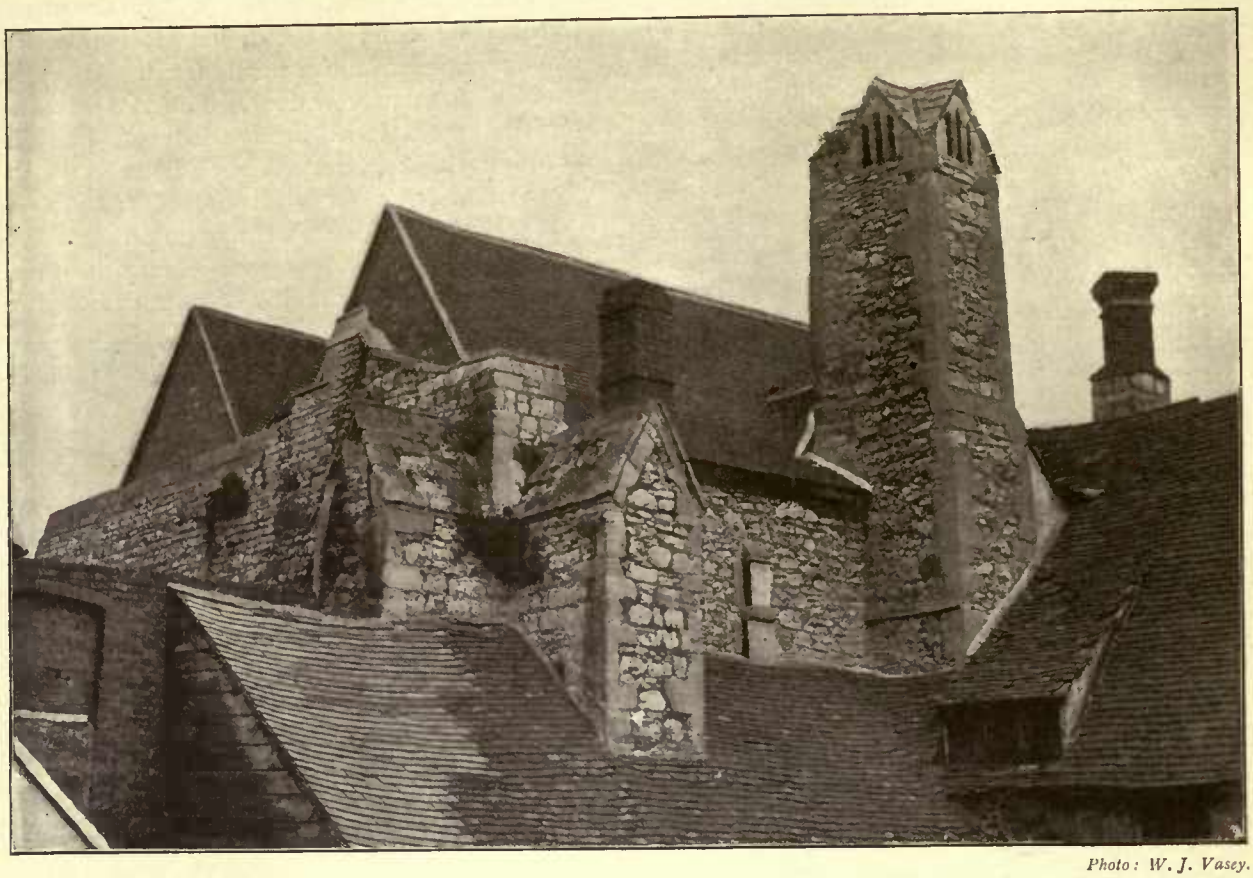


Photo: W. J. Vasey.

13TH CENTURY CHIMNEY, ABBEY BUILDINGS.

was afterwards Abbot, died in 1307, and a considerable portion of the church, especially the western doorway, is of the Norman period. A very "thorough restoration" in 1881 destroyed the evidences on which an opinion could be based. In fact, the church as we now see it is of the Victorian period, even some relics of stained glass bearing the arms of Richard, Duke of York, the father of Edward IV., having been removed and sold. A further falsification of the record occurs on the south side, where the parapet is adorned with a series of small shields with a text from the Psalms in Latin in Lombardic letters. There are, or were, some curious features of a domestic character on the west and north sides, including a gabled stair-turret, which seem to suggest either that a priest's residence adjoined the church or that it was connected with some abbey buildings which have now disappeared. At the south-eastern corner it adjoins the fine Perpendicular gateway. The narrow street just outside the abbey gateway is very picturesque. On the north side is the church; on the east side is the ancient arch, with a hall, now occupied by the municipality, above. On the south is a further range of Perpendicular windows and doorways, now the Mayor's court and magistrates' room. These occupy the ground floor, a municipal hall of very good but simple Palladian design forming the first floor. The Gothic gate had originally a smaller archway on the north side only, but a second arch on the south side was among the alterations carried out during one of the "restorations." The chamber above the gate is approached within from the Town Hall. It was within living memory used as a debtors' prison, where the poor denizens were to be seen hanging their hats and bags for alms from its stone-mullioned windows. It is now in excellent repair, and well furnished for small gatherings and Masonic lodge meetings.

Of the abbey buildings no other complete remains are to be seen. Two large modern houses, one on the north side of the street, called Abbey House, just within the gate, the other, called The Abbey, further on, approached by a bridge over a side stream, should be named, as well as a network of little tenements and lanes, among which, as already mentioned, fragments of old masonry may be identified. Among the houses is the chapel of a Calvinistic sect known from the name of its founder, John Tiptaft, who preached here seventy or eighty years ago.

From St. Nicholas to St. Helen's the distance is considerable. St. Nicholas, as we have seen, is outside the western gate of the abbey, but we find traces of monastic buildings close to St. Helen's also. The Lord Abbot, no doubt, enjoyed the long garden with its ancient quay on the bank

Photo: W. J. Vasey.

ST. HELEN'S WHARF, WITH A VIEW OF ST. HELEN'S SPIRE AND CHRIST'S HOSPITAL BUILDINGS, ABINGDON.

THE HOUSE AT THE EXTREME RIGHT OF THE VIEW IS HELENSTOWE.

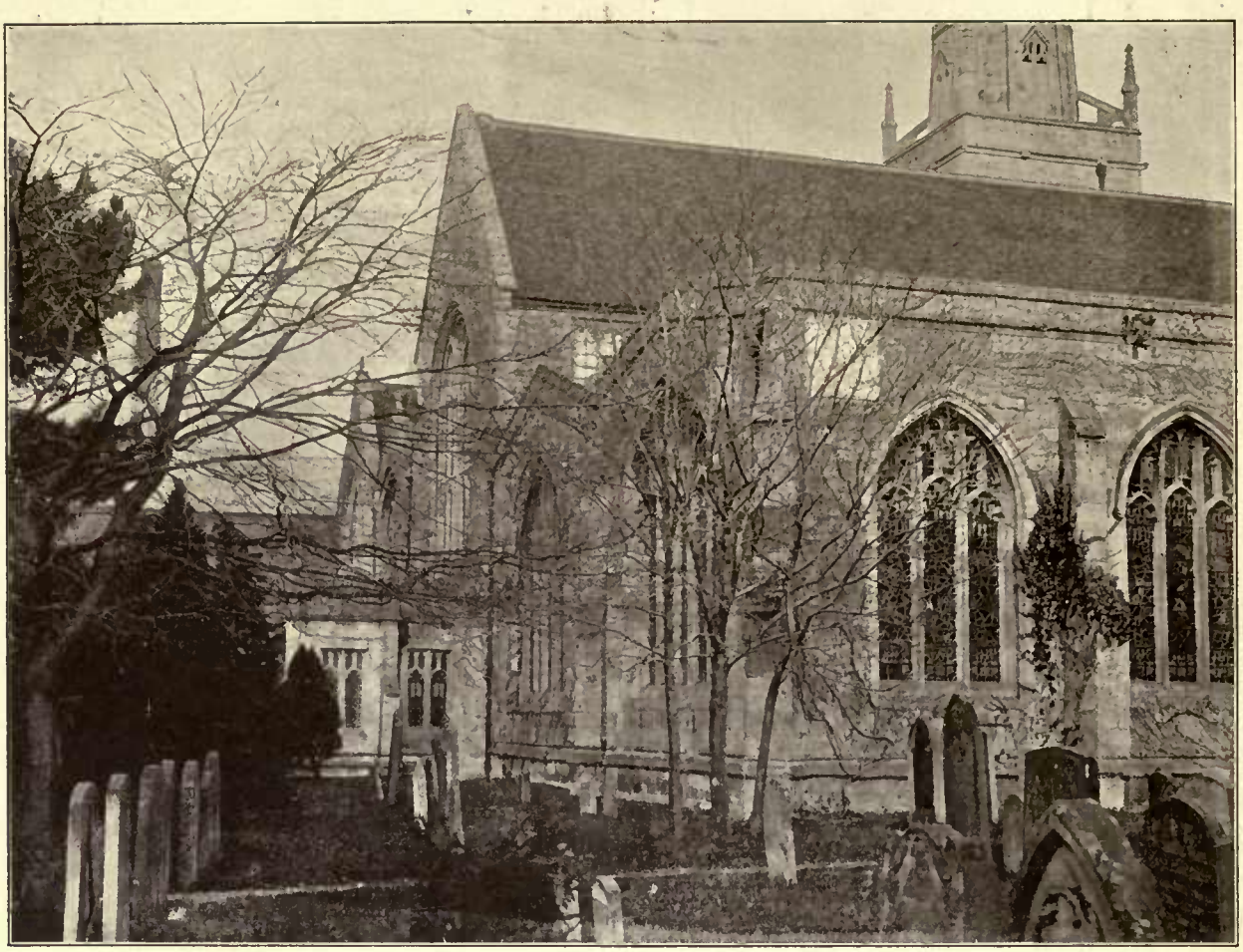


Photo: W. J. Vasey.

ST. HELEN'S CHURCH, SHOWING THE FIVE AISLES.

of the Thames. A number of good houses of the early Georgian period now stand on the south side of East St. Helen's Street, and have gardens which reach to the Abbot's Quay. Some of them are mentioned further on.

St. Helen's Church consists, strictly speaking, of a chancel and nave with two aisles, each flanked by a long chapel. Within, all these separate parts are thrown into the seated area of the church, which is thus described as having five aisles. It has not, however, suffered so much in recent years as St. Nicholas, the greatly larger area rendering a complete gutting and re-building too expensive. The chapels are now called—that on the south, Holy Cross aisle, and that on the north, Jesus aisle. The Lady Chapel occupies the north aisle proper, and the corresponding south aisle is dedicated to St. Katharine. A fine tomb near the north porch commemorates John Roysse, whom we meet again as the founder of the Grammar School. He died in 1571. The carving of his arms—"Gules, a griffin, segreant, argent"—has been well imitated in the decorations of the new Grammar School in the Albert Park. The tomb has been somewhat altered and pulled about, and the old "shewbread" for distribution is no longer laid on it. There are many other monuments of the sixteenth century, when, as John Leland wrote in 1540, the town "stondeth by clothing," as indeed it does still. The hour-glass for the pulpit—on which, in 1591, the churchwardens spent fourpence—has disappeared. There are two monumental brasses, one of 1417, one of 1501. The view of the highly-irregular five gables from the churchyard, round which the three almshouses are built, will be admired.

The almshouses on the west side of the churchyard are the oldest, having been built about 1553. They look best from the garden outside, where a good bow window and small cupola, or bell turret, group very happily with the spire of the church rising beyond. The long cloister porch of dark oak admits the visitor to a hall which serves as a chapel. In it are hung the portraits of several benefactors, and especially of the founders of the allied charities, the building and maintenance of the bridges over the Thames and the Ock, and the endowment of the Grammar School.

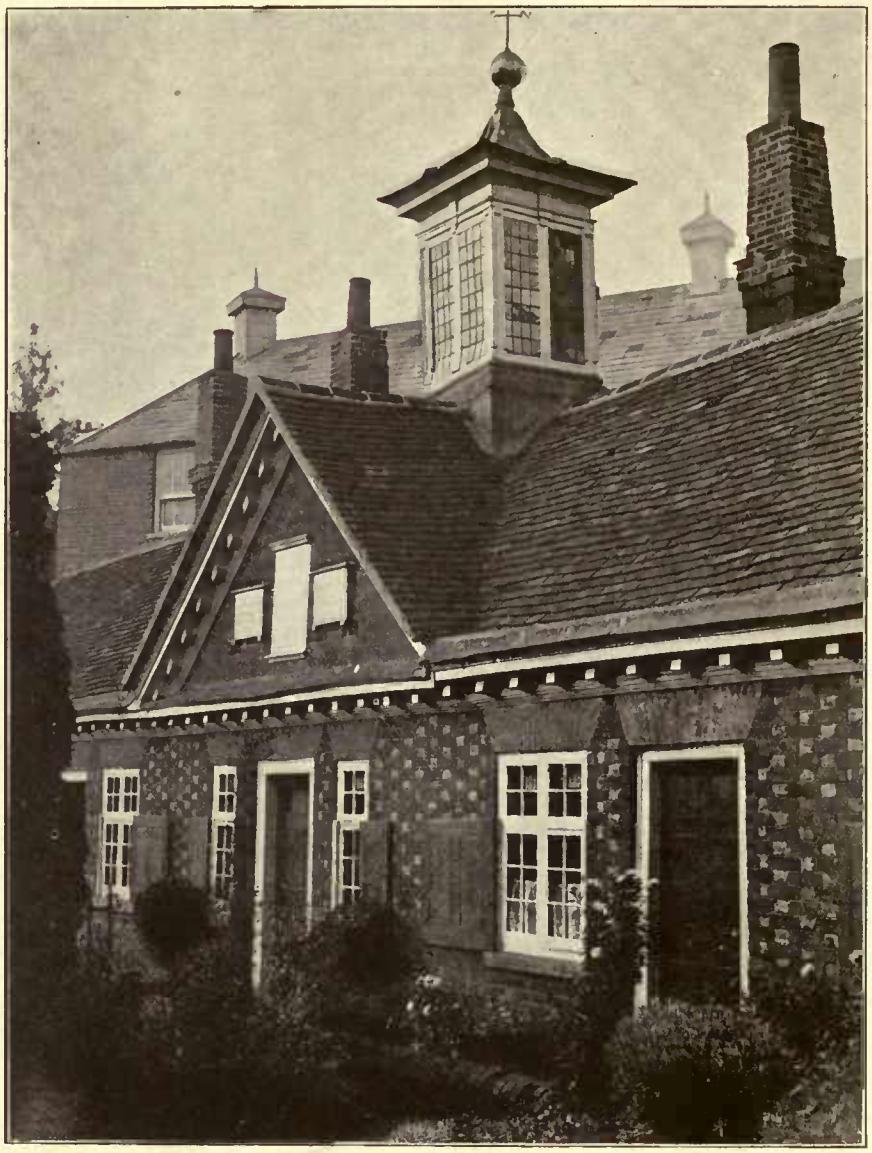
The building of the bridge in the fifteenth century increased the prosperity of the town, and the names of several wealthy burghers are

CHRIST'S HOSPITAL.

Photos: W. J. Vasey.

CHRIST'S HOSPITAL.

connected with it. Burford, "the borough ford," as the name denotes, was the only way across previously, and no doubt was very often dangerous, especially when the Thames was high. With the oldest of the almshouses in the churchyard, and with one of the chapels in St. Helen's Church, is connected the history of a Guild of the Holy Cross, to whom the care and repair of the bridge was entrusted. When guilds were abolished by Act of Parliament in the reign of Edward VI., the lands which belonged to this fraternity were granted for the same uses to trustees, the most prominent being Sir John Mason, Chancellor of Oxford, a native of the town. The estates have increased in value, and under a recent scheme the number of the inmates has been largely increased. In 1797 the additional almshouse on the south side of the graveyard was built as funds permitted, in a quaint style, not unpicturesque. In 1707, a further benefaction by Charles Twitty, an Auditor of the Exchequer, supplemented by other gifts duly recorded on tablets on the front, led to the erection of the pretty little building on the north side. It has a grandiose pediment and a small lantern and vane above, and forms a pleasing object with its flower beds at the entrance of the churchyard from St. Helen's Street.



TWITTY'S ALMSHOUSES. *Photo: W. J. Vasey.*

Nearly as old is Tomkins's Almshouse in Ock Street. The entrance gateposts admit us to two rows of small houses on either side of a narrow garden, and a curious clock tower and lantern at the northern end. It is of brick, in a very simple

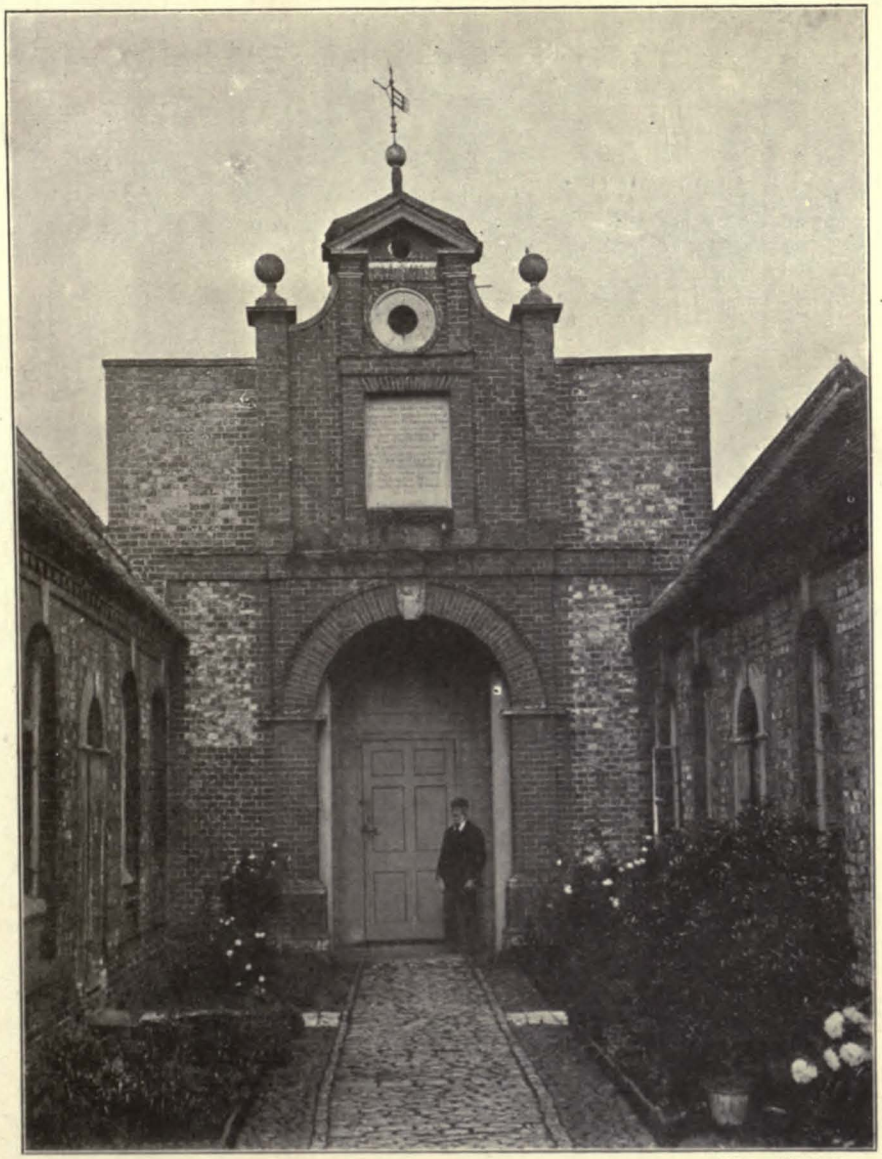


Photo: W. J. Vasey.

TOMKINS'S ALMSHOUSE, OCK STREET.

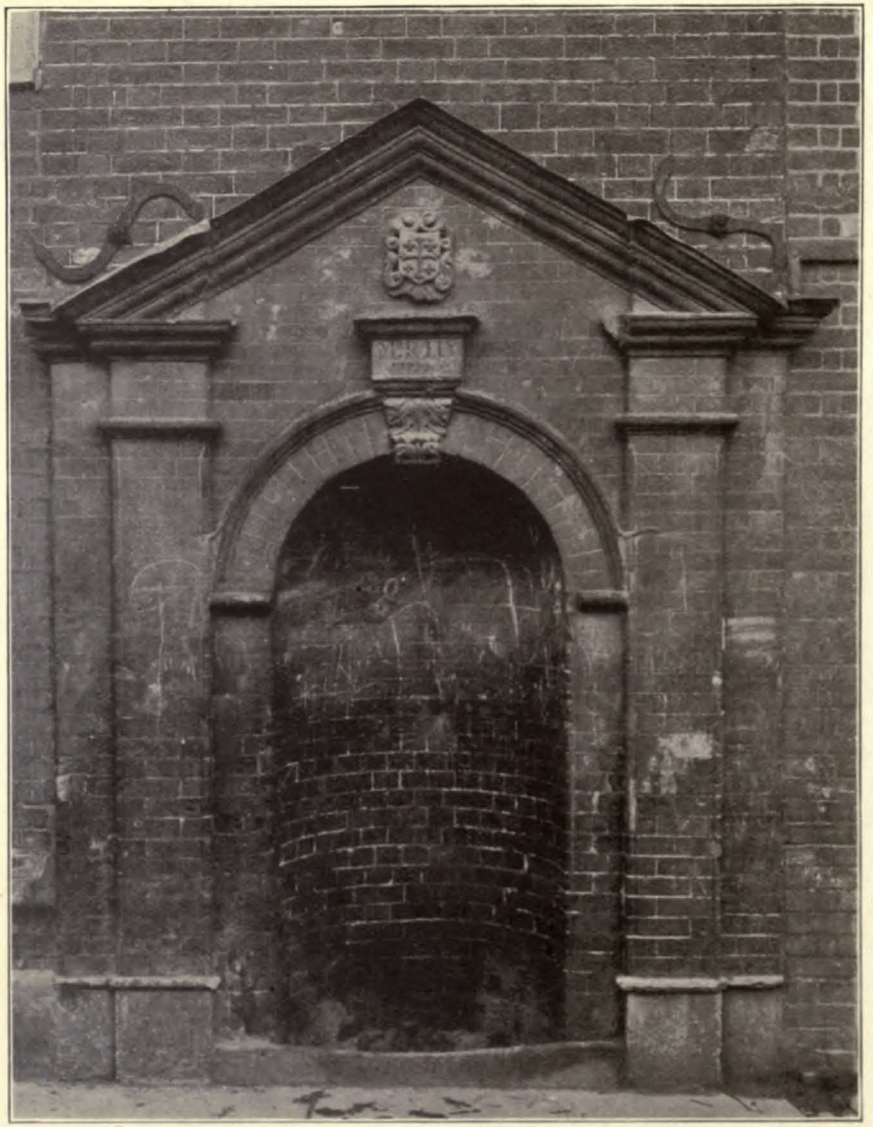


Photo: W. J. Vasey.

FOUNTAIN IN WALL OF HOUSE, OCK STREET, DATE 1719.

but effective style. The tower bears an inscription:—

> These Alms Houses were built in the year 1733 by the order of Mr. Benjamin Tomkins the Elder of this town and according to the form prescribed by him to his Sons Mr. Benjamin and Mr. Joseph Tomkins who were executors to his last Will and Testament by which he gave Sixteen hundred Pounds to endow the same for four Poor Men and four Poor Women for Ever.

Close to these almshouses in Ock Street is a curious brick well or fountain, now sadly neglected and dirty. It was connected with a conduit which still exists on the hill above, being included within the boundaries of the Albert Park. The fountain is only about five feet high, but the proportions would suit a much larger building. It is inscribed "Mr. R. Ely, 1719," and so is older than the almshouses and than any of the Tomkins buildings. In the admirable account of Abingdon in Kelly's *Directory for Berkshire*, we are told that it was erected by Richard Eley in 1673, a date which might connect it with the designer of the Market House; but, apart from the spelling of the name, no inscription to this effect can now be seen on the fountain, and I am forced to suspect an unusually accurate writer of napping on this occasion.

Next in strict chronological order, therefore, should come the famous Market House. A smaller market building stood on the site, faced by the "Holy Cross," of which the Chronicle of Abingdon (*Rolls Series*) has so much to say, and which was built by the same fraternity as the bridge already mentioned. The cross was destroyed by General Waller in 1644. When Abingdon became an assize town, the burgesses determined to build a suitable county hall. The old Market House was accordingly taken down, and the present Market House was specially built to accommodate the courts. The old house may have been like that of Wallingford, a little further down the Thames, or that of Uxbridge in Middlesex, or that of Peterborough.

The new Market House is the great architectural glory of Abingdon, and will strike the visitor who comes upon it suddenly, whether from the wretched shed which does duty as a railway station in Stert Street, or up Bridge Street from the Thames, with a feeling of admiration in the double sense of that word—surprise and pleasure. It stands free from its surroundings, and is built of what appears to be ashlar in good-sized blocks. The outline is symmetrical, the east and west ends consisting of two bays, the north and south of four. Each bay has an arch, but the pilasters seen on the exterior rise through the upper storey to the roof. The order is Composite and boldly carved. At the western end, between the arches, is a small bracket with acanthus to suit the style, the only piece of pure ornament. At the back—that is, the northern side—is a square tower of three storeys rising to the level of the top of the roof, with its dormers, of the main building. The windows of the staircase in the tower have the cross mullions common under the Stuarts. The roof of the tower is flat with a plain parapet, relieved by three urns on each face. The sloping leaden roof of the main building has a balustraded platform in the centre from which the domed lantern rises, the windows of which are round-headed or triangular on alternate faces. This cupola, on which is an elaborate vane, is of wood roofed with lead. The roof of the tower, the open storey, is interesting, being made of oak rafters, flat, but supported by a series of arched beams, from the middle one of which a lamp is suspended by wrought ironwork.

The houses press very closely on the north and north-east side, and Mr. Vasey, the photographer, had some difficulty in bringing the tower into focus. The rafters and beams of the roof were also taken at an awkward angle, but Mr. Redfern's plan will have made all plain. The fine chamber designed for an assize court has been used of late for an art school, being admirably lighted. Visitors should not neglect to see the view from the roof, which is easy of access by the staircase of shallow steps arranged in sets of five.

The local tradition which assigns this beautiful building to Inigo Jones is obviously mistaken. Inigo died in 1652. The old Market House was not pulled down until 1677, quarter of a century later. Mr. Reginald Blomfield has suggested ("Renaissance Architecture," i. 130) that the designs were prepared by Webb, who succeeded to Inigo's business, and there are certain points of resemblance between it and Ashdown, in the same county, unquestionably by Webb. The same difficulty, however, occurs here again, though not to so great a degree, for Webb had been dead three years in 1677. The Market House, too, was not commenced till 28th May, 1678, when the foundation stone was laid at the north-western corner. The modern inscription on the wall is therefore incorrect. Work went on till 1684, but the building had been opened for use a year before.

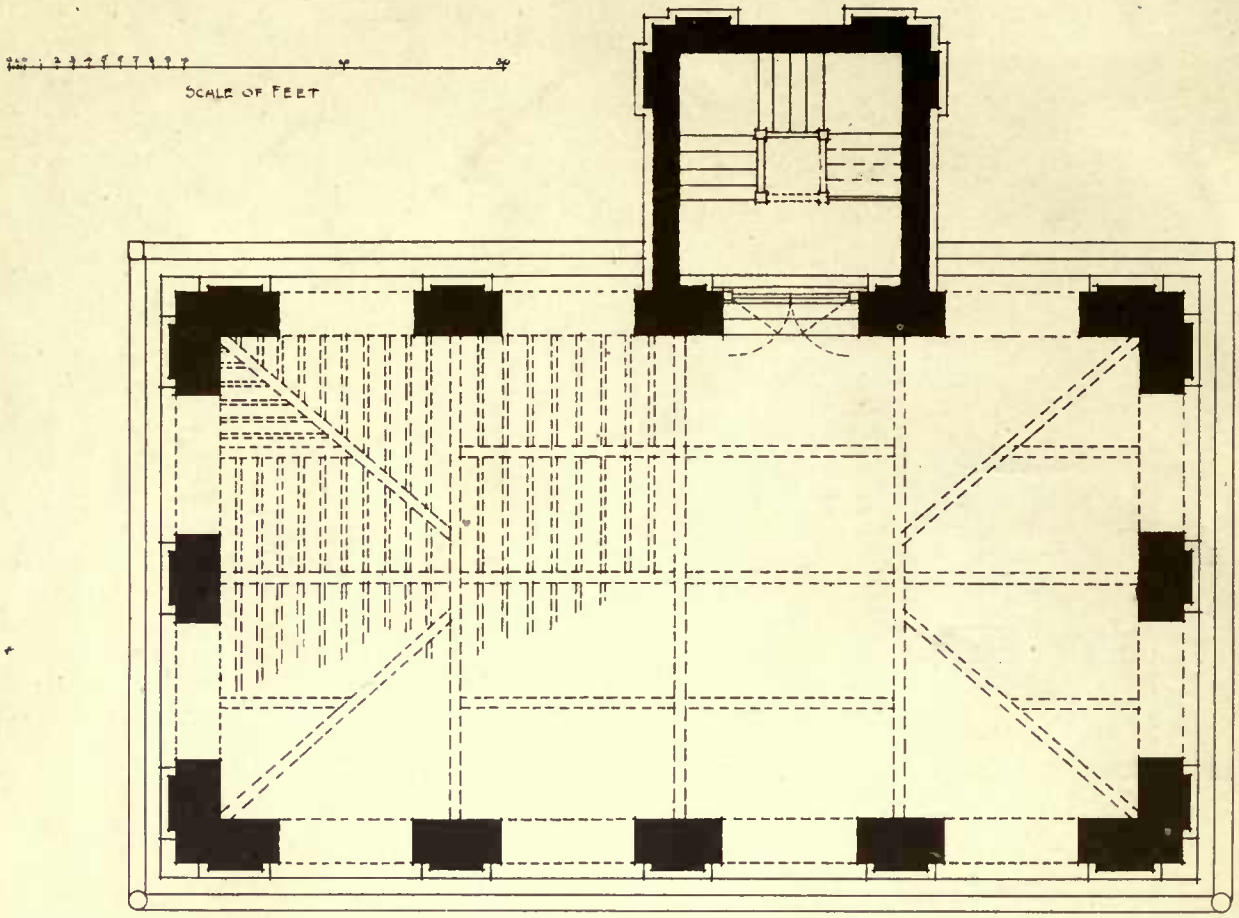
Photo: W. J. Vasey.

THE MARKET HOUSE, ABINGDON.

NOW ATTRIBUTED TO CHRISTOPHER KEMPSTER, SOMETIME A CLERK OF THE WORKS UNDER WREN AT ST. PAUL'S CATHEDRAL.

By the kindness of Mr. Arthur Preston, of Whitefield, Abingdon, I am able to offer what I conceive to be a solution of the questions thus indicated. Mr. Preston's late father rescued certain documents which were treated as waste paper by the municipal authorities of a former generation. Among them are the accounts for the building of the Market House, and I am enabled to write with them before me.

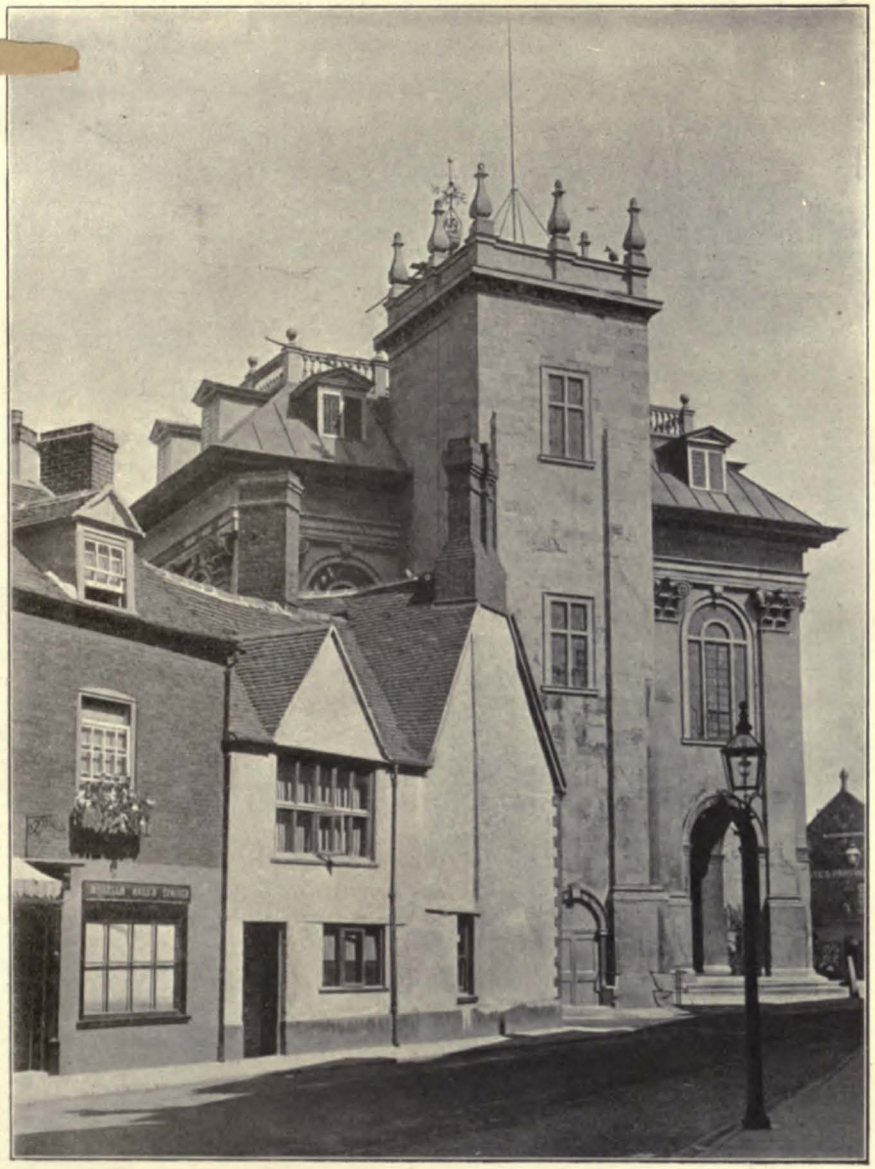
The first item in the account is dated January 1st, 1677, that is, in our reckoning, 1678. The whole entry is as follows:—"To Christopher



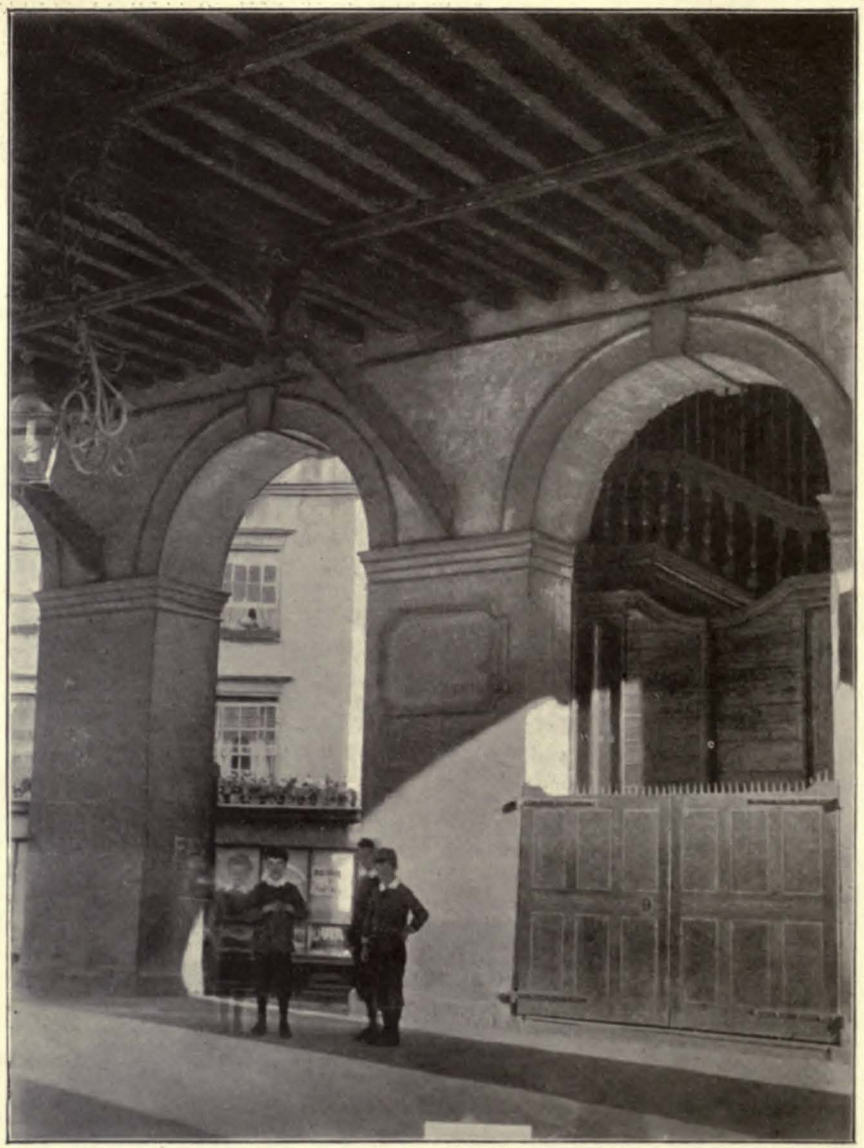
GROUND AND FIRST FLOOR PLANS.

By kind permission of Mr. H. Red'ern

THE MARKET HOUSE.



THE BACK OF THE MARKET HOUSE, FROM EAST S. HELEN STREET.



Photos: W. J. Vasey.

THE FLOOR OF THE MARKET HOUSE.

THE TOWN HALL AND MUNICIPAL BUILDINGS.

Photos : W. J. Vasey.

WINDOW IN HALL OF MUNICIPAL BUILDINGS.

Kempster in part for monies due to him for building the Sessions House . . . £30." Elsewhere Kempster, who usually has "Mr." before his name, is described as "the undertaker." In all, the payments made to him amount to £1,543, the last being on January 14th, 1682 (1683), when he received "in full for all his work done at the Market House," £345 10s. Kempster was almost certainly the same man who was one of Wren's clerks at St. Paul's, and lies buried at Burford, in Oxfordshire. That he designed the Market House seems very probable, and that he was not a common workman, but a person of consideration, may be deduced from another item in the accounts:—"April 14th, 1681. Spent at different times with Mr. Kempster when the account was made with him, 7s." If, then, he did not actually make the design, he must have obtained it from a master, and that master was more probably Wren than either Inigo Jones or Webb. At all events, the enquiry has been advanced a stage, and we know, at least, who built the Market House. It is interesting to note the second entry in the account is for boards supplied by one John Webb, and that the iron work, which is very good, was wrought by Thomas Tomkins, one of a family elsewhere mentioned. The total cost was £2,840.

The Town Hall has been mentioned already as being in part built on the old monastic gateway and other outlying adjuncts of St. Mary's Abbey. Had these newer features been in such a style as the Hotel, which occupies since 1864 the site of the old New Inn, or in such a style as that of the Corn Exchange, the result would have been distressing. Even if, when adding to the old Gothic buildings, some attempt had been made at using what is often with futility called a harmonious design, we might have had the old work disguised or falsified. But the unsophisticated burghers of the time of King George II. built their Town Hall and the adjoining Council Chamber in what they looked upon as the best and only reasonable style of the day. The designer of the wonderful Market House was no longer to be had; but that, apart from the Town Hall, there was a good architectural school in Abingdon is evident from an inspection of some of the beautiful dated fronts to which I hope to advert a little further on. A leaden spout on the Town Hall is dated 1733, and a certificate of insurance framed on the wall, with many other interesting documents, is dated 1736. The Council Chamber is reached from the Gothic ground floor—part, it is believed, of a hospital dedicated to St. John—by a handsome balustraded oak staircase. Some interesting portraits are in the largest room and a few pictures. The balcony which formerly faced the street has disappeared. In the small Council Chamber are many objects worth examining, the first and best being the very fine Venetian window, with its dark oak Ionic columns. A remarkable collection of views of old Abingdon and its vicinity is hung on the walls, and both here and in the lobby are original documents relating to the history of the town. Some of them tell us of the systematic attack made upon the liberties which had been first granted to the town by Mary Tudor, when James II. and Chancellor Jeffreys seized the charter and removed James Cordery, the Mayor. The framed "Orders in Council" relating to this event are dated 27 November, 1687. In a strong room is preserved the collection of gold and silver plate which Messrs. Jewitt and St. John Hope describe as "one of the largest assemblages belonging to any provincial town." The mace dates from 1660, having been made from an older one of the Commonwealth period. A small silver mace, or truncheon, one of three of various dates, bears the arms of Edward VI. The whole collection is full of interest, but hardly concerns us here.

The school was founded by John Roysse in 1563, and is well worthy of a visit. The entrance adjoins that to the Town Hall, and is of a most composite character, but how much in the design is original, how much due to an eighteenth century attempt to imitate Gothic, and how much to a recent "restoration," I cannot undertake to say. The visitor finds himself in an extensive courtyard, the municipal buildings partly Gothic, partly Italian, being on his left. A little further south an inscription over a low doorway catches the eye, *Ingredere ut proficias.* The interior is panelled, and has a gallery of seventeenth century character. The headmaster's seat is of dark oak. The present occupation of the building by the Volunteers has not injured it, and we may compare it with the very interesting schoolroom of the same period and character, still in use, at Bradford-on-Avon in Wiltshire. The school has been removed to a handsome and commodious new building looking on the park at the north end of the town, where a new quarter has sprung up of late years. The school is connected with Pembroke College, Oxford, and has been very successful. It is interesting to note the name of Dr. Lemprière among the masters. An edition of the "Classical Dictionary" was issued in 1804 while he was here.

Abingdon abounds in examples of domestic architecture of the style sometimes if incorrectly denominated "Queen Anne." The Americans call it "Colonial," but of late it has been more exactly described as "Georgian"—a name which, in all the cases illustrated in this paper, fits them very well. Of these the best examples are in East St. Helen's Street. The houses on the south side of this street look on the old quay already men-

tioned and the Thames. Some of them have pretty old-fashioned gardens, each with its summer house, looking over the river. Beginning with the Old Bell Inn, close to the market place, we note the tradition which connects it with the holding of a Parliament during the Civil War, a tradition which probably originated in a visit of Charles I. and the sitting of a Council of War in 1644.

We next come to No. 20, Twickenham House, a typical example of the style, but undated. Behind handsome gateposts are the stable and coach-house, over which are various modern apartments such as a billiard room, all retaining the cross-mullioned windows which we see in the oldest part of Kensington Palace, where they probably date from the reign of Charles II. They cannot be much later here. The western part of the house is considerably later, but in a very good style. The hall door is of wood. Some mantelpiece ornamentation in one of the rooms is particularly pleasing, and seems to have been executed in stucco. Altogether Twickenham House forms a very satisfactory commencement of a street filled with good examples. No. 30 is another, and there are several more, all on the same side, ending with Helenstowe, already mentioned as incorporating a Gothic fragment. Over the door is—

17. IT. 48

I. T. probably denotes Joseph Tomkins, one of a family also commemorated by a fine house now divided in Ock Street, by the almshouse already mentioned, and by a very good house in Bath Street, No. 36, which bears two tablets, cut in the brickwork :—

T.
B. S.

1722.

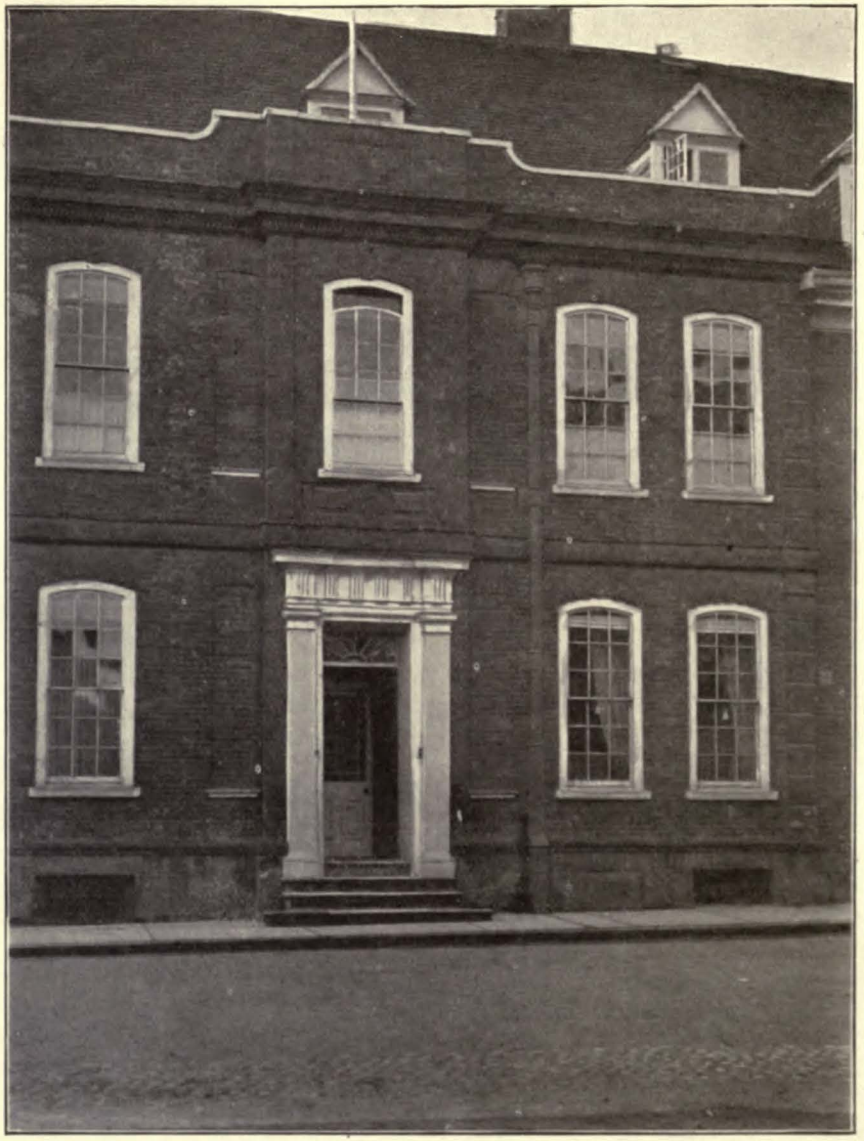
A small house with a very good front is in East St. Helen's Street, on the northern side, No. 57. It has an inscription :—

R
R E
1732.

TWICKENHAM HOUSE, 20, EAST S. HELEN STREET.

Photo: W. J. Vasey.

DOORWAY OF TWICKENHAM HOUSE.



Photos: W. J. Vasey.

36, BATH STREET, DATED 1722.

The first two, in which the Tomkins initials appear, form a group with a large house in Ock Street, and the Dissenters' Almshouse, already mentioned, and all may be ascribed to the same designer. The house which bears the initials of R. R. is more ornate and elaborate, but on the whole scarcely as satisfactory, depending as it does, like too many of the modern houses of the town, on ornament for its effect. An immoderate conclusion that an architect, or possibly a school of architecture, existed in Berkshire at this period, before the first half of the eighteenth century had elapsed. In 1725 Wood was showing his powers at Bath. Burlington and his friends were at work both in London and in York. House-building as a fine art prevailed all over England, the impetus given by Inigo Jones before the Civil War having been revived by Wren and his contemporaries. It

Photo: W. J. Vasey.

57, EAST S. HELEN STREET. DATED 1732.

use of gables, which came in and went out before the building of the Market House, is a tendency to be deprecated, but among the best or most picturesque examples a little house fast going to decay, in Bridge Street, with an elaborately carved barge-board, probably of the sixteenth century, will be noted with pleasure, as will some simpler specimens of nearly the same age in Stert Street and in West St, Helen's Street.

A comparison of these and many other examples, almost if not quite as good, leads to the has been but little appreciated till during the past quarter of a century, but its characteristics, which seem incompatible with any but solid well-proportioned building in sound materials, stone, brick, or timber, and which seem to perish when applied to deceptive stucco or cast terra cotta, are capable of development and honest application at the present day. When studied with appreciation and intelligence they are more likely to lead us to fine works in the future than any attempt, with our present building appliances, to imitate

the triumphs of the middle ages. It seems to me, if we must imitate, which I am not prepared to allow unreservedly, it is better to imitate such satisfactory designs as those of the seventeenth century Market House or the eighteenth century Town Hall, than the comparatively gloomy thirteenth or fourteenth century structures of the Abbey.

W. J. Loftie.

Mediæval Figure-Sculpture in England.

CHAPTER IV.—FIRST GOTHIC SCULPTURE, 1160–1275.

In our introduction we made some remarks on the genius of Gothic figure-sculpture, and tried to show how exhibiting itself in the medium of Gothic building, it found its capacities and its limitations in stone. It may be well at this point to refer to some other aspects of this question, which we have to recognise in our consideration of the subject.

It is clear that the phases of Gothic building, as style succeeded style, were produced by a course of masonic evolution, which owed little to accidents of individual invention or designing imagination. In exactly the same way mediæval figure-sculpture went on its course under no distinct leadership, advancing with the advance in artistic skill of a whole nation, and not owing its improvements to the talent of any individual sculptor. We are quite unable to label the periods of mediæval art by the names of any great masters such as Pheidias in Greek or Donatello in Renaissance sculpture. More distinctly than with the arts of other periods the wholesale craft of the Middle Ages seems to have merged in one art the personal distinctions of the artist.

Still, in statue-making, where delicate distinctions of character or idea were expressed, the personal talent of the sculptor had its individual importance in the Gothic centuries as in others. Though we make full allowance for the impersonal nature of mediæval church building, recognising it as the combined work of a great body of craftsmen, witness the contemporary representations of masons at work—for example, in the famous window at Chartres where vault-rib and statue are depicted as being shaped in the same workshop—yet the personal touch of each individual sculptor must have had its own value. And so, as time went on, certain individuals were bound to be noticed as excelling in the making of statues; such men would become more and more specialized, till from being mere proficients in a certain branch of stone-carving, they would separate themselves from those who were only stone-shapers, and become definitely "imagers." Thus by the end of the thirteenth century we find such mason-imagers mentioned in the accounts of the building of the Eleanor Crosses.[42] Yet it is clear, from the way in which these sculptors are mentioned, that their status was very different from that of the modern artist. The men who made the statues, the fragmentary remains of which excite our admiration, had no distinct position in their art as have the Royal Academicians of to-day, nor were they gentleman-artists of the Italian Cinquecento, welcomed at the court of prince and prelate alike. The mediæval sculptor ranked as a stone-mason, and with men whose skill we should now class as that of artizans. It was the *mason* who was honoured: the statuary of the thirteenth century had his status as "cœmentarius," the craftsman of stone-building.

So we find that while masons or master-masons are recorded in mediæval documents with considerable frequency, *sculptor* is rarely mentioned, and then in such connection that his work might just as well have been stone-dressing as statue-carving.[41] In England no mediæval statue has been found signed by the artist, nor do records allude to him with any distinctness. Almost as a solitary indication that it was possible in Gothic times to appreciate the artist in sculpture, is the reference of Matthew Paris to a *Mariola pulchra* by William of Colchester, whom he elsewhere calls *pictor et sculptor incomparabilis*. The sculptors of the most distinct masterpieces—such as the Wells statues, the Lincoln angels, the chapter-house figures at Westminster—are unknown to us. In some instances we can deduce from entries in accounts (as in the case of the Eleanor monuments) that masons employed, like Master William of Ireland,[42] or Alexander of Abingdon,[43] or goldsmiths like Torel,[44] the maker of the effigies of Eleanor and Henry III. at Westminster, were figure-artists, for the reason that they were paid for *imagines*. We shall mention in due course in our pages any such identifications as would avail us

[41] See Gervase's well-known account of the rebuilding of Canterbury Quire in 1175, in which "sculptores" are stone-dressers.

[42] In the accounts so much paid "Magistro Willielmo de Hibernia cimentario," also "Willielmo de Hibernia imaginatori."

[43] Called in the accounts "operarius," for the making of Waltham Cross, as well as "imaginator."

[44] In the accounts so much paid "Magistro Will. Torel auri fabro."

for a history of Sculptors, but they are really few and of small significance. An account of sculpture in mediæval times can make nothing of the personal element. Our sources for the Gothic history differ very markedly from what are at hand for either the Greek or Renaissance arts, in which the individual achievement was distinctly recognised, and the genius and circumstances of certain celebrated artists constitute of themselves the divisions of the subject. In Gothic sculpture, while we acknowledge that the art of the statue must in each case have been personal, we must perforce treat the Gothic works in the aggregate, grouping them under the headings of style, like mouldings or arch-shapes.

Dealing then with figure-sculpture as part and parcel of the church fabric, we might adopt the conventional headings of book-Gothic and label its divisions "Transitional," "Early English," "Geometrical," "Decorated," and "Perpendicular." Such a classification would, however, suggest that some particular impetus or origin of figure-technique lay in each of these architectural phases, and this can hardly be justified. Specific differences of corresponding value to those readily generalised for the mouldings and arch-shapes fail us in the domain of the figure. We shall be safer with a simpler classification, and will divide our sculpture as "First," or "Early Gothic"; "Second," or "Mid-Gothic"; and "Third," or "Late Gothic," with the implication that the boundaries in these divisions are indistinct, and the changes from period to period those of growth, not kind.

Still, in a wide sense we may (as our introduction has suggested) ally our classification of figure-sculpture to that of the architectural styles. For example, we can associate the First Gothic Sculpture with the sculpturesque dignity of first Gothic building, in which the massive Romanesque refined itself to the Gothic structural grace; a corresponding progress can be traced in the efforts of the sculptor to realise the gracious facts of human beauty. Then, this skill attained, Mid-Gothic sculpture—just as its architecture—turned to variety of expression, and while enriching the simplicities of stone sculpture with the varied expressions of different materials, lost its purely architectonic intention in a romantic fulness of detail. And then the last century of Gothic sculpture, like the last of Gothic architecture, was one rather of hackneyed production by established guilds or schools of art. We find its work at one time the dignified accomplishments of an honoured and well-paid craftsmanship, at another the cheap wares of a commercial industry.

The succeeding four chapters will deal with the First or Early Gothic figure-sculpture, which might be classified first by its occurrence in the fabric of *Transitional* Gothic style (1160 to 1200); then by examples which, along with the achievements of *Early English* building, grew in importance and freedom of style from 1200 till 1250; till from c. 1250 to 1275 (in connection with the *Geometrical* development of Early English art) the great works of English sculpture were produced, which in feeling and technique must be classed as the best, or, at any rate, the most characteristic of Gothic genius. But throughout there was no break or any marked step in the ever-increasing skill displayed by the architectural sculptor. To present our subject as divided into three at specified dates would be to make too much of them, and would disguise the distinctly continuous growth. A more effective classification will be to treat the whole Early Gothic figure-sculpture in one division, with sections for the separate architectural uses which gave a varying dignity and importance to it in the architectural scheme. Our first section therefore will present the head-stops, figure-corbels, figure-medallions, bosses, and other distinct *architectural* uses of figure-sculpture, which in first Gothic sculpture come in marked contrast to the *pictorial* scheme of Romanesque art. A second section will deal with the relief representations of the figure in spandrel and panel, which, starting in such Romanesque pictorial conventions as our last chapter illustrated, gradually acquired in the hands of the Gothic builder the statuesque motive of sculpture proper. A third section will illustrate the statue itself, the standing detached figure, which was the especial work of First Gothic Sculpture. And, finally, our concluding section will exhibit the recumbent statue or effigy, in the treatment of which sculpture, leaning from its first ideal, sought expressions of variety and individuality which were the heralds of a change of feeling.

But it must be understood that such divisions do not mean separate schools or different stages of attainment in figure-style, any more than they do periods in the art. All these classes of sculpture came at the same time from the hands of men engaged in the same craft. It will be seen from our illustrations in this and the following sections that the head-stop of the label has a merit and style identical with what we see in the relief-carving, and that statue, effigy, and spandrel-figure reveal just the same artistic handling. The distinctness of this simultaneous merit in every department is no doubt symptomatic of First Gothic art, when the stone carver, after matching himself against the traditional handicraft of the Romanesque goldsmith, went away ahead of him in the exercise of his stone-craft,

and established the style of Gothic sculpture. So much seems clear: and that then this stone-style affected the imager is probable. That the latter began to take lessons from the stone-carver may be reasonably conjectured, though the almost complete destruction of English image-work, whether in metal, ivory, or wood, leaves us with only indirect evidence for the fact. Still we think it may be seen that by 1290 the goldsmith's image by Master Torel at Westminster is ideal, but no longer of the Byzantine ideal of the earlier art. There has been a new inspiration founded on the stone technique of the effigy-carver. And in France, where both the architectural figures and wood and ivory images have come down to us in a fairly continuous sequence, we can, in fact, trace three stages in the art of the latter. We can see that the ivories lagged for some time behind the Gothic expression of the stone statues, retaining for long Romanesque conventions, and only towards the middle of the thirteenth century adopted the superior motives of the architectural figure. Not till the fourteenth century did there develop again the imagers' technique which went away from the motives of stone sculpture. It is probable that the same course of events took place also in England, and that it was in the fourteenth century that the Gothic craft of image-making began again to have its own patterns and motives of style apart from the architectural carving of the building.

First Gothic figure-sculpture, therefore, is noteworthy for the fact that it was a simple, straightforward art, grown up in the stone-carving of a building. It owes to this its excellences, its directness, and adaptability to position and material. Thus it can be distinguished on the one hand from its Romanesque predecessor, whose technique began in copying the effects of the shrine-modeller and goldsmith, and, secondly, from the Mid-Gothic art, in which variety of materials in stone-carving produced effects which went away from the first ideal—wood, metal, and alabaster each creating their respective techniques, so that the motives of the church-furnisher parted company with those of the church-builder. We are treating our subject, then, for convenience under separate headings: but in expression of art, label-head and relief, image and effigy will be taken as all one and produced by one common inspiration.

SECTION (A).—LABEL-HEADS, CORBEL FIGURE-SCULPTURE, AND OTHER SMALL ARCHITECTURAL USES OF THE FIGURE.

It has been already pointed out that when Romanesque architecture passed into Gothic, figure-sculpture was used in a new way. Old schemes of decoration were discarded and new evolved. And this re-arrangement of function will be seen to be not one of mere caprice, but to have its meaning in the very nature of the new Gothic style. Our illustrations have shown how in the Norman building pillar, capital, and arch-mould were on occasion thickly charged with figure-motives. But the capital which (see Figs. 29, 30, 31, 32, in Chap. II.) had been frequently made the vehicle for subject-representations, keeps this function no longer in Early English art. Only in a subordinate way—as a quip or byplay in the leaf-sculpture—does some head or little figure (usually more or less of a grotesque) appear in the design of the Gothic capital.[45] So, too, figure-compounded shafts such as we illustrated from Kilpeck (Figs. 35, 37, Chap. II.) are unknown in Gothic style in England, and though less decisively, there is a similar rejection of the figure-subject from the arch-mould. In the elaboration of its great doorways, the later Norman art had made each voussoir a beak-head or human mask or some figure-subject set in a medallion (Figs. 36, 48, 62, Chaps. II. and III.). The continuity of the arch-stones was little regarded: but in Early English art the structural emphasis of the arch-line was insisted on with manifold lines of mouldings, and we seldom find this effect interrupted. In the richer doorways, where we have the traditions of Romanesque decoration continued, and figure-subjects are ranged all round the arches, they are usually intertwined in a leafage which distinctly maintains the masonic cohesion of the arch (see Figs. 78, 79).

Now we must recognise in all this no mere shifting of a designer's fancy, any more than any impotence or lack of feeling as to figure-use in decoration. It was rather that Gothic art, having found its theme in the vertebrate expression of stone building, refused to admit any discordant phrase. A figure-subject makes a distinct demand upon the attention, and so becomes a stop or focus of interest; but Gothic implied a connective sculpture in pier, capital, and arch. No subject-sculpture could be allowed to break the supple rhythm of its building lines, because in the anatomy of stone-building itself lay the vehicle for sculpturesque expression.

For this reason there appears in the Transitional style of our Gothic a certain deliberate rejection of the figure-motives of the Romanesque; a certain poverty compared with the rich abundance of the later Norman sculpture; and a

[45] The Font followed the capital: though often largely decorated with figure-subjects in Romanesque art (see Figs. 28, 49, and 53 in Chaps. II., III.), it is plain in Early English, and only after 1350 becomes charged again with figures.

scantiness in figure-work which is marked too beside Continental usage. And this continues till almost the middle of Henry III.'s reign. Our first Gothic Cathedrals, *e.g.*, the early quires and chapels of Canterbury, Chichester, Winchester, and Lincoln, as well as the whole range of the north-country Early English buildings both secular and monastic—*e.g.*, Fountains, Ripon, Beverley, Whitby, Rievaulx—if they have a beauty of architecture, whose quality can be best described as *sculpturesque*, yet get this out of the nobility of the architectural masses, not by the additions of sculpture. Figure-sculpture itself finds hardly a place in the scheme of their building. The capitals are largely plain, the shafts unornamented, the arches mostly enriched with moulding only: base, buttress, and pinnacle owe their effect to their shapely contour and unadorned constructional lines: the storied arcadings of the stately fronts are contrived to admit no statues: the doorheads, that in Norman style were brimming over with figure-subjects, are now mostly or entirely given up to geometrical or constructional piercings. And even in the cases in Early English art where stone-carving has been abundant and rich, as in the nave of Lincoln or the quire of Ely, first Gothic sculpture for some eighty years in England clearly busied itself mostly with foliage: with some few exceptions figure-treatment was absent.

It is accepted indeed that the Cistercians as reformers objected to the sumptuous use of sculpture which appeared in the later Benedictine schools of decoration. Now it was in the magnificent building of the Cistercians and of the Regular (reformed) Canons that the early Gothic style of England was largely conceived: their churches set the fashion of masonry in which our first Gothic was most often built. In the north of England, there was much of this early architecture of the reformed monastic societies, and Cistercian and Augustinian churches were built, as it were, in protest against Benedictine luxury. Here the sculpture, if used at all, was merely employed to emphasise constructional lines or points, and, in the true Gothic spirit, the ornament consisted in the modelling of arch, column, and window themselves, and not in any sculptured fretwork applied to them. Thus, in the north of England, we find scarcely a trace of figure-sculpture proper till we reach the mid-thirteenth century.

In the West, however, and in the Midlands of England there is certainly a difference in this matter: figure-sculpture was less rigorously excluded, though here too we can trace connections between our first Gothic and the Augustinian and Cistercian buildings of Wales and the Welsh marches. Perhaps in this district there was a counter-influence to Cistercian austerity in the arts of the Cluniacs settled at Much Wenlock, as suggested in the last chapter. At any rate in the birth of western Gothic not a little figure-sculpture of capitals and arch-moulds appears at Glastonbury and Wells, and the medallion motives, which Romanesque art had created at Iffley and Malmesbury are continued without break into the full Gothic style. If in the treatment of Wells (*c.* 1175) there is not that exuberance with which the Norman carver strewed his figure-work (compare for example the North Porch of Wells with the South Porch of Malmesbury),[46] still in corbel, label-head, on boss and capital, new occasions for the sculptor's rendering of human beauty and living form are multiplied. And it is to be noted that this is all now in accord with the principles of Gothic expression. Corbels are by their functions excrescences and the fresh starting points of construction. While it may be said that pier, capital, and arch are as connected chapters, the corbel comes like the head-line of a news paragraph. Accordingly the attention, which figure-sculpture attracts, gives the fitting emphasis to the corbel. So, too, the label-stop as the finish of the drip-mould; the boss as the centre of the vault; the pinnacles, and stops of the gable copings, and finally the gargoyles or projecting spouts of the parapets, all may have the expression of their constructive functions helped by the interest that crystallises round figure-representation. It was the apprehension by the Gothic artist of these proper opportunities for his skill with the chisel which separates him essentially from the antecedent Romanesque carver. The latter had continued with increasing dexterity the pictorial representations of classic tradition, but was without appreciation of the scope of sculpture or of its meaning in architecture. But immediately that stone building threw off the traditional methods of Roman concrete, and the heat and fervour of experiments in stone structure evolved distinct Gothic forms of construction—which leant no longer on the wisdom of the ancients, but stood erect in their own right of science—then at once the Gothic sculptor showed himself as an artist with power of human feeling and a skill for its delineation in stone, such as had lain dormant in the human race for nearly a thousand years.

So the expression of the human face became his instrument, upon which he was to play in many keys. The number of heads carved as

[46] At Wells the relief panels on the porch-front and the martyrdom of St. Edmond (see Fig. 82*a*) on the capitals are more foliage than figure. Inside there are label-heads and dragon-stops, but no great figure-subjects, as at Malmesbury, sit at the side of the porch, nor is there any tympanum sculpture of doorhead.

corbels and string stops in a mid-thirteenth-century church was almost endless. Destructions, determined and continuous, have been effacing them for six hundred years, but they still remain to us by the thousand, and the fine quality, vivacity, and variety of their treatment are astonishing. In nearly all instances[47] they are formed of the same stone as the architectural mouldings in connection with them. Usually they must have been fixed in position along with the ashlar of the wall, and it is likely they were worked in the banker-shed along with the wall-stones, for thirteenth-century miniatures in manuscripts[48] show the carved work being dressed before fixing, and side by side with the facing stones. It is, of course, possible that in some cases the carving was from the scaffold, the block being built in rough, as is so usually done in the case of modern carving. But that they were left so intentionally for any time, and then carved as money came to pay the sculptor (our modern habit) is a theory which no evidence has yet been produced to justify. Indeed, we find very often in a series of heads here and there capricious substitutions of foliage, whose date is manifestly that of the walling around; so that we must conclude that the whole was sculptured simultaneously, for there would seem to be no reason for carving some blocks with foliage and leaving others to be worked later. In certain cases head-stops (as in Salisbury Chapter-house) appear not to be built into the masonry, but to be face-blocks fastened in by a dowel behind, and in such cases after-carving was plainly possible. Still there can be little doubt that in most of the head-carvings of corbels and label-stops we have works contemporary with the architecture in which they occur.

[47] The Purbeck heads to be presently mentioned, and one or two of fine stone (either Bath or Caen) let into Doulting labels on the inside of the West front of Wells are the exceptions known to us.

[48] For example see British Museum M.S. Cott. Nero. D.i.

FIG. 63.—BRIDLINGTON.
Head in Cloister.

FIG. 64.—LICHFIELD CATHEDRAL.
Vault-corbel in north transept.

Thus they make a continuous record of head-sculpture which takes us from the earliest Gothic carving to the latest.

This head-sculpture appears at first to be somewhat more advanced than the contemporary representation of the figure. The Norman masks, such as those of the corbel-table (see Fig. 33, Chap. II.), cease after 1150 to be merely horrible, and in some instances, especially in doorways (see Fig. 48, Chap. III.), attain no little shapeliness. Thus, in the Ely cloister, side by side with the bull's-eyed blocks on the Monks' and Prior's doorways (see Fig. 54, Chap. III.) a head set in the label of another doorway which by its ornament seems contemporary, is of effective and pleasant modelling. Heads of a somewhat similar kind may be seen in similar position in the nave arcades of Wimborne Minster and elsewhere, our illustration (Fig. 63) showing one from the beautiful Romanesque cloister of the Bridlington Augustinians, which has the character of those of the Lincoln reliefs (see Figs. 44 and 46, Chap. III.). The date of all these may be about 1150.

By 1175, in the works of Transitional Gothic, examples of growing skill become frequent, as can be seen in the Ely west front.[49] Heads at Oakham Hall, Rutland; a vault-corbel in the south transept of Hedon Church, Yorkshire; two in the north transept of St. Cross, Winchester; and two in the north transept[50] of Lichfield Cathedral (Fig. 64) are Gothic works which show the hard, vigorous execution of a new school of sculpture. Earlier in date and more elementary in modelling are the specimens in the south quire-aisle of St. Frideswide's (the Cathedral), Oxford, and in the north porch of Wells Cathedral.

As has been already said, it was this western

[49] In the Temple Church, London, the heads of the 1180 wall-arcade have been completely renewed or touched up, in a restoration (c. 1840) whose appreciation of Mediæval art was that which gave us the "Ingoldsby Legends."

[50] Only on the east side in the north bay are they of the first Gothic quire-work; the rest have been restored.

A A. G.

(A) Vault-corbel, south transept.

B A. G.

(B) Label-head, nave (east bay).

C A. G.

(C) Capital, north transept.

FIG. 65.—WELLS CATHEDRAL.

cathedral which began at once to develop Gothic figure-sculpture in various directions. The figure-capitals of Wells will be dealt with presently: here we show heads; some from capitals, but chiefly a series of corbel and label-heads from the triforium arcades, which have that variety of type which is symptomatic of a period when the hand of the artist was experimenting with ideas, and hardly yet able to express them. The earliest heads here are those of the transepts and eastern bays of the nave; they are stiffly set upon stunted shoulders, and may be taken as carved before 1200. In expression our illustrations (Fig. 65) may be compared with the Daniel head at Lincoln (Fig. 41, Chap. III.). But the types are various: we have in one the blunt scowl of ascetic severity (Fig. 65 A); in another the archaic grin, which is so singularly like that of early Greek art (Fig. 65 B); in a third a mænadic expression of ecstasy (Fig. 65 C), which occurs again and again in connection with the peculiar snaky foliages of the capitals at Llandaff (Fig. 66 A) as here in Wells Cathedral, and in the church of St. Mary's, Shrewsbury. There are proofs, therefore, in sculpture, as in architectural treatment, of a distinct western local school of art, working in its own stone and developing Gothic on its own lines,[51] at Llandaff, Shrewsbury, and Lichfield, in the sandstone; at Wells and Glastonbury in the local Doulting stone.

FIG. 66.—(A) LLANDAFF CATHEDRAL.
Head in Capital of Nave.

A. G.

FIG. 66.—(B) WELLS CATHEDRAL.
Label-head in west bays of nave, north side.

The west bays of the Wells nave, which are clearly later in date than those to the east, have label-stops and corbels with a larger type of head-carving, and of a smoother style (Fig. 66 B). Contemporary with these bays would come the beginning of the new cathedral at Salisbury, whose foundation stone was laid in 1220. We see there a succession of head-sculptures in white Tisbury stone begun probably about 1225, carried on through the whole building of the cathedral, and advancing step by step to the 1260 master-pieces of the chapter-house and quire screen. The earliest of the series would be in the triforium arcades of the quire and its transept; and next those in the main transept and eastern bays of the nave (Figs. 67 A, B, C). As in the heads just mentioned at Wells, advances are to be seen here on the earlier archaic types of Gothic art. While still mannered and dry, there is a rounder treat-

[51] See the author's "History of Gothic Art in England," pp. 156, 157.

A *A. G.*

(A) Corbel-head, east bays of nave.

B *A. G.*

(B) Corbel-head in south-east transept.

C *A. G.*

(C) Corbel-heads in quire.

FIG. 67.—SALISBURY CATHEDRAL.

A *A. G.*

FIG. 69.

A *A. G.*

FIG. 68.

B *A. G.*

FIG. 68.

B *A. G.*

FIG. 69.

Figs. 68 (A and B)—Corbel-heads in quire. Figs. 69 (A and B)—Label-heads in quire.

BOXGROVE PRIORY CHURCH.

A *A. G.*

ROCHESTER CATHEDRAL.

(A) Corbel-head in quire.

B *A. G.*

SALISBURY CATHEDRAL.

(B) Corbel-head, east transept.

C *A. G.*

SALISBURY CATHEDRAL.

(C) Corbel head, main transept.

FIG. 70.—PURBECK SCULPTURE.

A A. G.

WELLS CATHEDRAL.

Label-head west bays of nave.

B A. G.

SALISBURY CATHEDRAL.

Corbel-head west bays of nave.

E A. G.

SALISBURY CHAPTER.

Label-head of wall arcade.

C A. G.

WESTMINSTER CHAPTER.

D A. G.

WESTMINSTER CHAPTER.

Label-heads of wall arcade.

F A. G.

SALISBURY CHAPTER.

Label-head of wall arcade.

I A. G.

DURHAM QUIRE.

Corbel-head.

H A. G.

SALISBURY QUIRE SCREEN.

Label-head of arcade.

G A. G.

SALISBURY CHAPTER.

Label-head of wall arcade.

FIG. 71.—HEADS OF THE MIDDLE OF THE THIRTEENTH CENTURY.

ment of feature, and less harshness of expression. Almost contemporary must have been the striking Caen-stone corbels of Boxgrove (Figs. 68, 69) near Chichester, which show perhaps a greater archaism (the features being simply worked out in planes and the hair stiffly rendered in tight curls) but in their breadth of feature and nobility of expression we have an earnest of the best Gothic achievements of head-sculpture.

In all the above the heads are of the stone of the walling: moreover we can trace in each instance, at Lichfield, at Wells, at Salisbury, and at Boxgrove, a progress in technique from inexpert beginnings. This implies in each place a *local* development of craft. Yet at Salisbury and elsewhere there are heads which must be kept distinct from these local free-stone carvings. We find head-corbels of Purbeck marble, which there is reason to suspect were carved at Corfe, in Dorset, and supplied ready worked to the churches. The vault-corbels (Fig. 70 A) of Rochester quire (C. 1220) and certain heads (Fig. 70 B, C) at Salisbury (those which in the great transept and in the eastern transept come lowest in the walls, and would therefore be built in before the triforium labels) are fine examples of Purbeck art. Their execution suggests a strangely developed capacity in the Dorset quarryman,[52] and that his craft-skill gave an impetus to the free-stone carver both at Salisbury and Boxgrove. The Purbeck heads at Salisbury are bold in design, and deeply cut so as to allow them to be seen from below in spite of their dark colour—for possibly they were not painted.[53] The nature of the material no doubt contributed to the style, and since at Boxgrove there is a large quantity of Purbeck pillar-work, we may think the flat-sided, deep cutting of the Caen-stone heads (see Fig. 68) imitated from it. The solution of this question will, however, be attempted more fully when we come to the discussion of the Purbeck effigies.

The latest or western bays of Salisbury nave, like those of Wells, have heads in white stone on a scale of importance, and of an execution which bring them within touch of the best period (Fig. 71 A and B). From 1250 onwards we may gather from all parts of England proofs of an extraordinary ability developed in the mediæval stone-sculpture. The specimens we illustrate (Fig. 71) are drawn from Westminster chapter-house (C and D), from Salisbury chapter-house (E, F and G), from the quire screen (H), and from Durham quire (I). Also we give an example from the "Angel Choir" at Lincoln (Fig. 72). In each cathedral the working has been in a different stone—that of the local building—a fact which can leave us with scarcely a doubt that in each case we have workmanship of the local masons. We may thus appreciate the wide amount of artistic talent that was at hand for the purpose of mediæval architecture.

It is unnecessary to point out the great advance of the execution over what had been done twenty years earlier. There is, moreover, in these heads, apart from the workmanship, a delicacy of sentiment which strikes us as specially English beside the robuster, fuller types of French sculpture. This is apart from the fact that head-stops and head-corbels are rare in continental Gothic, as rare,[54] indeed, as the interior label-strings, to which our examples are mostly attached. But it would be out of place to enter here into any comparison of English work with the sculpture abroad. Recognising that our label-heads are in style, as in stone, local, we can see variety of style everywhere, yet in all a level of attainment that is wonderfully kept up: and this art, though its best-preserved examples are now found in our larger churches, was exhibited in the smaller parish churches also, where remoteness and the

[52] *Quarrerii* is used in the accounts of the Eleanor Crosses, 1291, for the Corfe masons when they were supplying worked Purbeck marble in quantities.

A. G.

FIG. 72.—LINCOLN CATHEDRAL.
Label-head in "Angel Choir."

[53] At Rochester, however, the Purbeck has been at some period painted.

[54] Head-corbels are found in the early Gothic of Maine and Anjou. The triforium of the church of Semur, near Auxerre, has heads in its arcade much as in England.

A. G.

FIG. 73.—HAYLING CHURCH (NEAR PORTSMOUTH).
Spur of base.

FIG. 74.—OXFORD CATHEDRAL.
Vault-corbel in chapter-house.

FIG. 75.—WELLS CATHEDRAL.
Vault-corbel in passage to chapter-house.

manner of building often necessitated the employment of local talent. For example, at Hayling we have specimens of a fine and peculiar Caen-stone

A. G.

FIG. 76.—WELLS CATHEDRAL.
Vault-corbel in north transept.

carving of C. 1260, and the grotesque there will be presently mentioned; here the corbel-head and base spurs (Fig. 73) will indicate that this island had its thirteenth-century carver, whose place was no mean one in the history of our sculpture.

It has been suggested that the excellence in the head was generally in advance of that of body-representation. In some corbels an attempt was made to introduce a good deal of the figure, and there is not uncommonly a contortion of attitude due to inexperience rather than intentionally grotesque. We illustrate this from the Oxford chapter-house of C. 1220 (Fig. 74), but it can be seen, too, in the Durham quire of C. 1260, and even in the beautiful figure we show (Fig. 75) from the staircase to the Wells chapter-house, also C. 1260.[55] The earlier corbel (Fig. 76) from the north transept of Wells is free and graceful, but we must go to Crowland and Lincoln and to a date possibly beyond 1270 for a well-constructed and satisfactory use of the figure-motive in archi-

[55] The corresponding corbel on the other side of the staircase is less powerful.

FIG. 77.—LICHFIELD CATHEDRAL.
Arch-mould to north transept doorway.

A. G.

FIG. 78.—LINCOLN CATHEDRAL.
South doorway of "Angel Choir."

A. G.

FIG. 79.—WESTMINSTER CHAPTER HOUSE.
Moulding of doorway.

tectural support. Once achieved, this regular pattern of angel bracket continued till the end of Gothic sculpture.

The introduction of the figure into the arch-mould made an equal difficulty for architectural sculpture. Abroad we get an attached series of brackets, applied to the voussoirs, and making canopied niches for the statues. The simplicity and boldness with which this is done in the great doorways of Paris, Amiens, and Reims, and the fine scale of the whole, disguise, if they do not atone for, the awkwardness of the positions which are so given to the figures. In England, however, as far as we know (for many of our doorways have perished), this method did not find favour in our thirteenth century. The tradition here descended from the medallion arch-moulds of late Norman work, such as those of Barfreston and Malmesbury (see Figs. 61 and 62 in Chap. III.), where in a connected trellis of arabesque each voussoir shows a figure subject. In mid-thirteenth century certain rich doorways, as in the west front of Dunstable and in the transepts of Lichfield, seem to revive this tradition. The arch-moulds of the transept door on the north side of Lichfield are sufficiently preserved to allow us to illustrate its sandstone figure-carvings (Fig. 77) which are set in the outer and inner orders of the arch, while between them the midway order is enriched with carving, but without figures. A similar arrangement of orders is seen in the more magnificent doorway on the south side of the so-called "Angel Choir" of Lincoln. The inner order of door-arch is carved with elegant seated figures in niches, which are, however, so set into the profile of the arch-mould that they do not break its contour. The outer order (Fig. 78) has in similar fashion little figures of about three-quarter length standing in the hollows of the leaf enrichment, and these tiny works of stone sculpture show all the *naïveté* and grace of the modelled terra-cottas that have been found at Tanagra. The chapter-house doorways of Westminster and Salisbury have also moulds in which are figure-carvings. At Westminster (Fig. 79) leaf and figure twine together: at Salisbury (Fig. 80) are to be seen the Virtues trampling on the Vices, and though each is set in a niche, the projection is kept within the curve of the arch-mould and does not break its lines. In attitude and action these little figures may compete with the Lincoln examples for delicate grace.

The figure-work of Gothic capitals, however, can stand on no such level, for, as has been indicated, it was only a caprice of the carving art. It never made itself of serious import, or achieved anything much beyond the success of a grotesque. Still, as a step in the progress of Gothic design, the figure-capital comes in place. Romanesque art had made picture-capitals in illustration of sacred

A *A. G.*

WELLS CATHEDRAL, NORTH PORCH.
The Martyrdom of St Edmund.

B *A. G.*

WELLS, SOUTH TRANSEPT.
In west aisle.

C *A. G.*

WELLS NAVE.
In north aisle east bay.

D *A. G.*

DURHAM QUIRE.
In triforium north side.

E

LINCOLN.
Corbel in south-east transept.

F *A. G.*

LICHFIELD CHAPTER.
Capital of wall arcade.

FIG. 81.—FIGURE CAPITALS OF THE FIRST GOTHIC PERIOD.

A. G.

FIG. 80.—SALISBURY CHAPTER-HOUSE.
Moulding of doorway, "The Virtues and Vices."

story, and some of its first sculpture was the transfer of painted representation to carving. But as the capital grew smaller, the space allowed only the slighter scenes of symbolic figure-work (see Figs. 31 and 32 in Chap. II.), and so thirteenth-century art took it up. The solemnities of religious feeling were the theme and inspiration of statue and relief; but the capital was issued by the sculptor as his brochure, or rather novelette. Its aim was to give little stories of everyday life, or fables from the Bestiaries, or the Books of

A.G.

FIG. 82.—LINCOLN CATHEDRAL.
Capital of door in south quire aisle.

beasts, which represented mediæval natural history. At Wells, nave and transept have in their capitals (Figs. 81 A, B, and C) quite a library of such novelettes; but we illustrate examples also from Lincoln (Figs. 81 E and 82), Lichfield (F), and Durham (D). This *rôle* of the story-teller passed on to the wood-carving of the latter part of the century, particularly to the *miserere* carvings of stalls, which we shall illustrate in their place.

The execution of these relief-carvings in the capital is generally slight and summary. They must be judged on the plane of their intention, and are really part of that reaction from seriousness, that by-play of mockery, which in the Feasts of Fools, of Asses and such like, made buffoonery and grotesque a diversion of religion. And before leaving these lesser exhibitions of First Gothic figure-art, we should say a word on the thirteenth-century grotesque. Mediæval sculpture was throughout markedly impressed by that back-current of art which, running counter to the ordinary motives of human beauty, introduces expressions of terror and contortion, aspects often indecorous and vulgar, dragons and monstrosities, or the strange lessons which magic and mysticism drew from animal life, a development whose significance has been discussed in Ruskin's "Stones of Venice." The various expressions of grotesque certainly make a considerable feature in the whole sum of Gothic church-sculpture. A later chapter will therefore be specially devoted to it. Here we illustrate (Fig. 83) some examples which, belonging to the First Gothic sculpture, seem to carry with them the fine style of thirteenth-century art. The dragon from Lincoln (A) is dignified. And if such representations as those on the base of the door-shaft at Peterborough seem merely horrible, and in part a legacy from the truculent fancies of Norse heathendom; if the devilry of such a face as that of the Oxford chapter-house (B); or of the Lincoln imps; or of the Hayling head (D), is simply unclean and disgusting, still not a few of such thirteenth-century fancies (as for example the gargoyles at Chichester (F) and those two or three of 1240 on the south side of Ely quire) have with all their monstrosity and contortion a nobility of line and a statuesque breadth of treatment which rank them beside the great works of sculpture. In the little dragons and salamanders which at Wells (Fig. 83 E), Chichester (Fig. 83 G), and Hayling writhe and twine among the foliage, we have often the suggestion of animal movement, and the lithe beauty of it such as we look for in the naturalistic art of to-day.

E. S. PRIOR and A. GARDNER.

NOTE.—Illustrations Nos. 64, 74, 75, 77, 81e, and 83b are from photographs kindly lent by S. Gardner, Esq.. Nos. 63 and 66a are from casts in the Royal Architectural Museum, Westminster.

A A. G.

LINCOLN CATHEDRAL.
Dragon on plinth, north side.

B

OXFORD CATHEDRAL.
Corbel in chapter house.

C A. G.

HAYLING CHURCH.
Spur of base.

D A. G.

HAYLING CHURCH.
Capital of font shaft.

E A. G.

WELLS CATHEDRAL.
Corbel in north transept.

F A. G.

CHICHESTER CATHEDRAL.
Gargoyle on north side of nave.

G A. G.

CHICHESTER CATHEDRAL.
North quire aisle.

FIG. 83.—GROTESQUES OF THE THIRTEENTH CENTURY.

Architecture and the Royal Academy.

A DISCUSSION.—IV.

BY PROFESSOR F. M. SIMPSON.

THE discussion on "Architecture and the Royal Academy" has suggested to me that a brief account of an exhibition held in the Walker Art Gallery, Liverpool, in the spring of 1895, may be of some interest, as it was arranged somewhat on the lines indicated by Mr. Ricardo in his article, and endorsed by Mr. Belcher. It was an Arts and Crafts Exhibition, and one room, 70 ft. by 35 ft., was devoted entirely to Architecture. In the circular sent out to architects, it was stated that the following were admissible:—(1) Drawings to scale, plans, elevations, sections, &c., either mounted on stretchers, or framed and glazed; (2) photographs of executed work, if accompanied by a plan or explanatory drawing; (3) perspectives, either mounted or framed, if accompanied by a plan; (4) measured drawings and sketches of old work. The wall space allotted to each exhibitor was 30 sq. ft., but in some instances permission was given to exceed this. As a result 180 exhibits were hung, representing about 60 architects. The dimensions of the room allowed drawings of considerable size to be shown, and amongst them were many half-inch scale working drawings. Each man's work was hung together, no matter what it consisted of, and the effect was not bad, and by no means so motley as might have been expected.

The point of interest, however, is not so much that the exhibition was held, as how it was received. I may at once frankly state that financially it was not a success; but otherwise I think one may fairly claim that it was. The interest it aroused was considerable, not only amongst architects, who warmly expressed their satisfaction with the experiment, but also amongst those of the general public who came to see it. The feeling of the latter was that the drawings shown meant "busines"; that there was no humbug about them, no make-believe; that they didn't pretend to be anything but what they were; that they were honest representations of a man's work. With this was coupled the sensation that it was pleasant to get a bit "behind the scenes" and see how things were done. As one man said to me, "I like the exhibition, although I don't understand all of it; I like it because it is a practical exhibition of a practical art." This remark is not surprising when it is remembered that men who interest themselves in public affairs often have to deal with plans, and understand them better than architects sometimes imagine. They may not be able to grasp fully the architectural beauty of a plan or section; that requires a trained imagination; but I deny that such drawings do not interest them. Of course, many people are not interested in them, neither are they in the exhibitions at Burlington House. Equally true is it that there will never be the same enthusiasm over an exhibition of architectural drawings as over a picture exhibition. Apart from the fact that architecture has not so many admirers as painting, our exhibits are not the real thing, no matter whether they consist of models, perspectives, or working drawings. But although we cannot have the real thing in a gallery, no strong reason exists why we should not try to get as near to it as possible; and a photograph supplemented by a plan and detail drawing will give one an insight into a design, which no perspective, whether prepared in or out of an office, can convey.

Another point I should like to mention, which I fancy has not been touched upon before. An architectural exhibition conducted on practical lines can, I think, do a lot of good to builders, foremen, clerks of works, and workmen generally. The exhibition at Liverpool was thoroughly appreciated by many of these. Every evening several were to be found in the gallery studying, admiring, criticising the drawings. Of course, admission was free, but if such an exhibition as has been suggested could be held at the Academy, or elsewhere, one evening a week might well be set apart when the entrance fee could be small. Four men paying threepence each bring as much money as one man who pays a shilling, so it by no means follows that a reduced fee means less gate-money. More than that, I should like to see the masters of technical schools allotted a number of free admission tickets for students. If the exhibition were held in the Academy, and the Council of that body decided that they could not afford to grant any free admissions, a few pounds spent on tickets by the London County Council, the Carpenters' Company, and other bodies, for the benefit of their students, would not be thrown away.

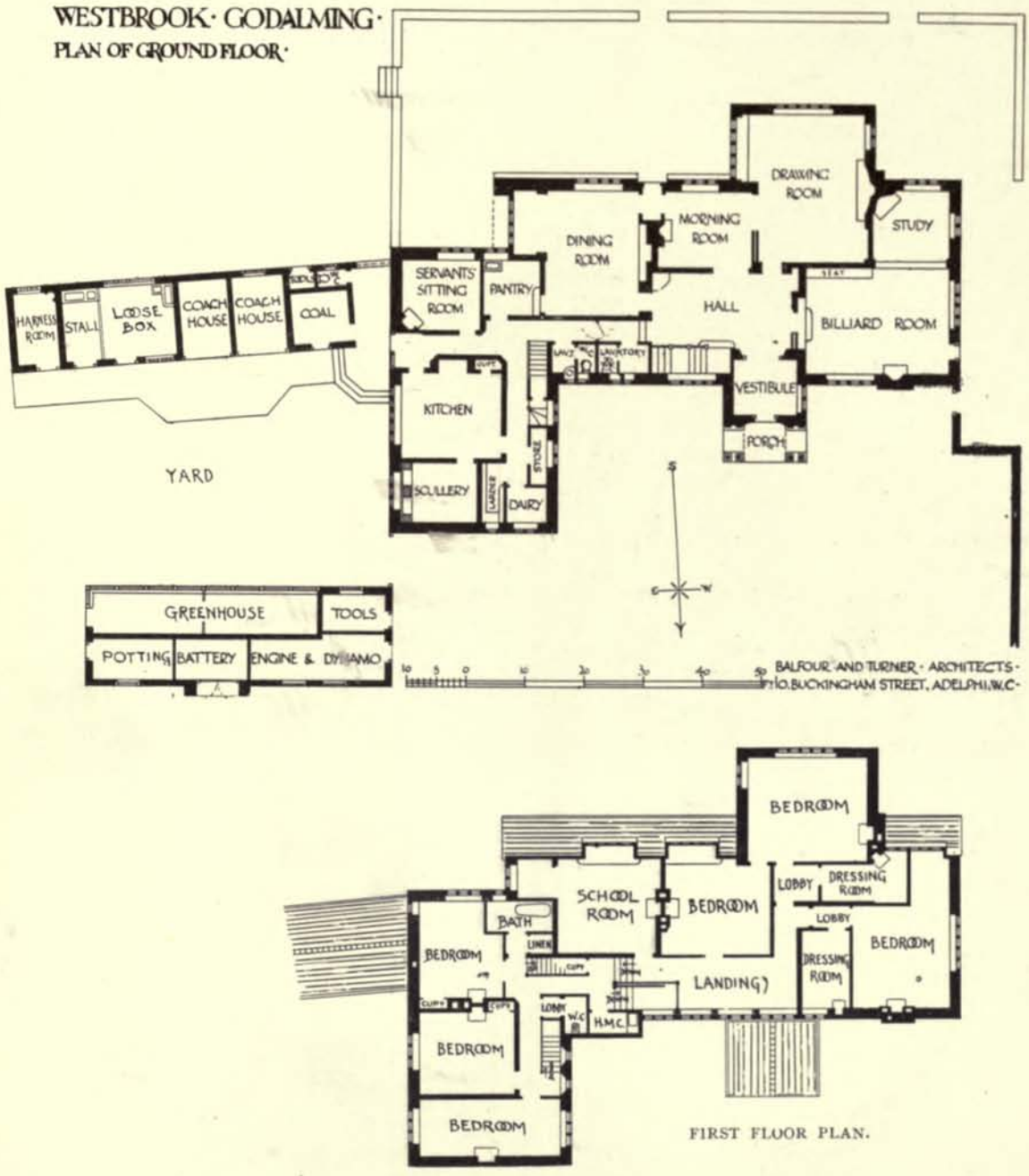
But that has nothing to do with this discussion. I write merely to show that an architectural exhibition arranged on different lines from that of the Academy has, at least once, been held in England, and that it aroused considerable interest amongst architects, workmen, and some of the general public.

One more word. As our true exhibitions are held in the streets, why not have them catalogued? A board hung on each lamp-post giving the numbers of the houses and the names of their architects may be regarded as a suggestion *pour rire*, but it would at least enable us, as we walked through our towns, to know whom to bless and whom to curse, and no one would be likely to lodge a complaint that he had been pilloried!

FROM THE SOUTH. *Photo: A. E. Cockerell.*

FROM THE NORTH-WEST. *Photo: A. E. Cockerell.*

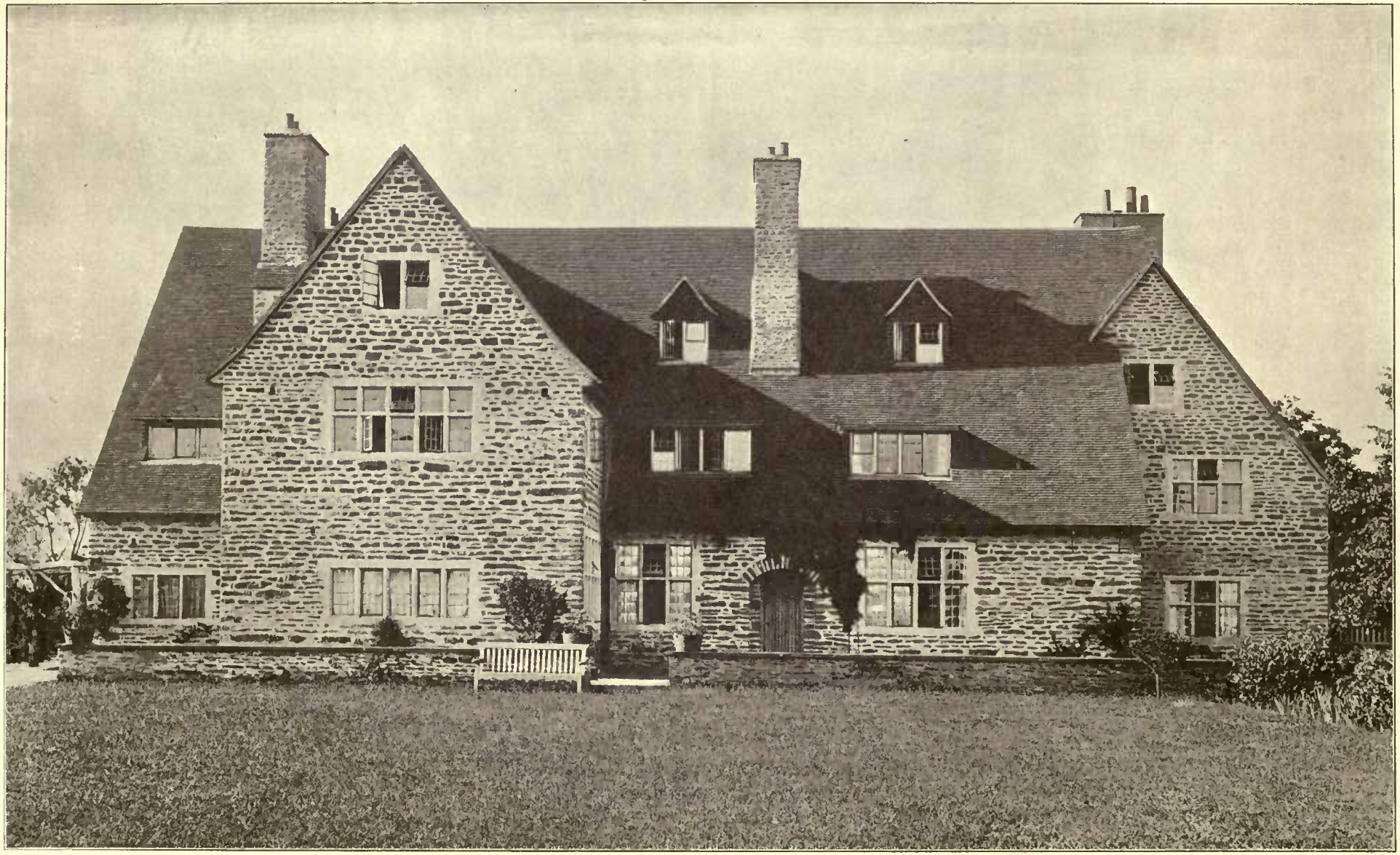
"WESTBROOK," GODALMING.
BALFOUR AND TURNER, ARCHITECTS.



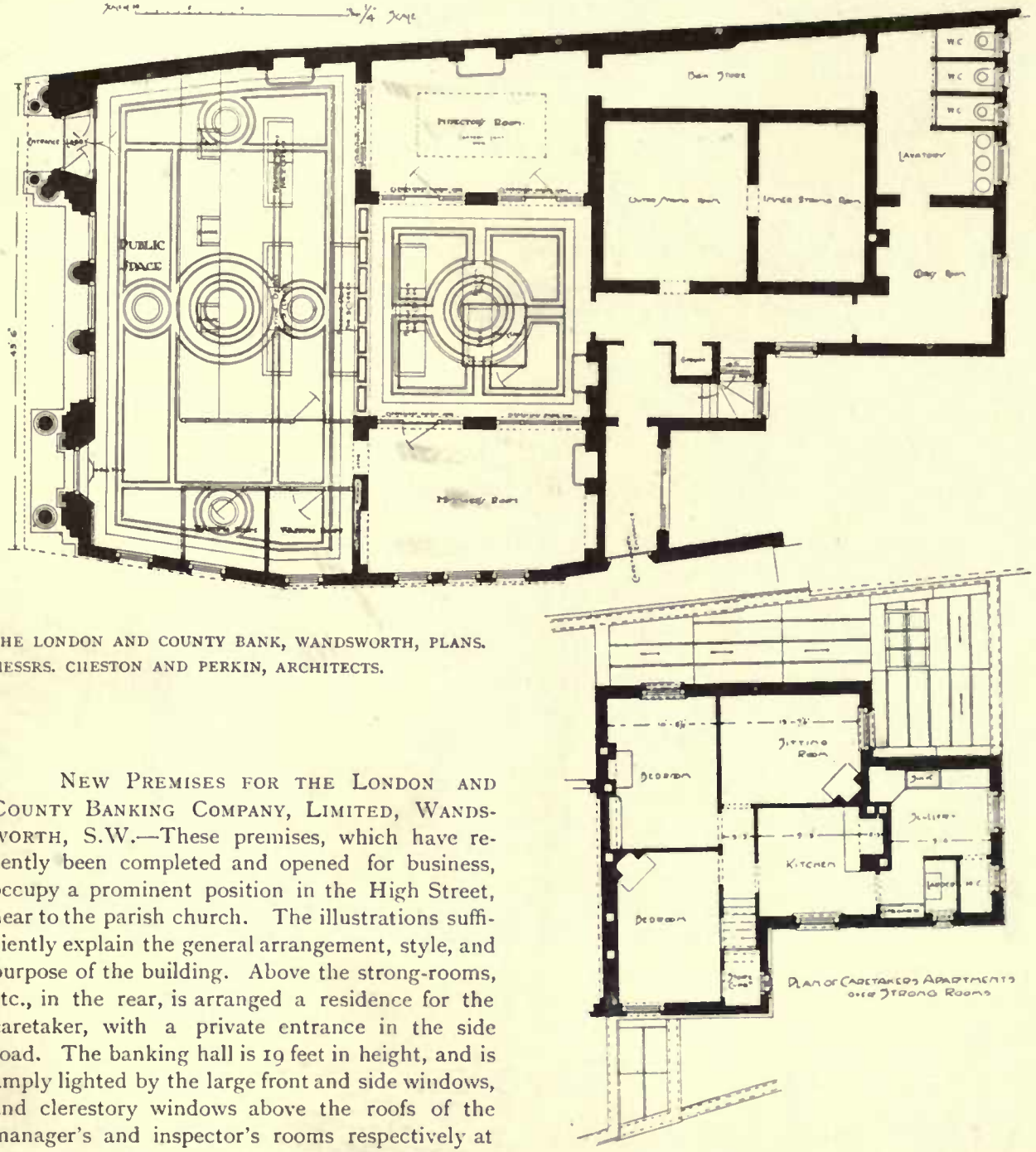
FIRST FLOOR PLAN.

Current Architecture.

"WESTBROOK," GODALMING.—The plan of this house was partly governed by a desire to obtain the view of the town to the east for both the dining-room and the drawing-room without making external bay windows. The external walls are of Bargate stone with a half-brick lining, and are just under 2 ft. thick. The internal walls are of brick. The stone was obtained on the site and used with its natural face, irregularities being filled in with mortar in a similar way to Devon and Somerset buildings. Doulting stone was used for window and other dressings, and the windows have gun-metal casements and lead lights filled with Crown glass. The floors are of stone and cement concrete, with a finishing of coke breeze concrete to which Oregon pine boards averaging about 16 in. wide are nailed. The chief staircase is of English oak with solid steps; the hall is panelled with the same wood. The drawing-room is panelled in deal painted white, and has an Austrian oak floor carried on deal joists, for dancing. The roof is covered with old hand-made tiles on 1¼ in. vertical deal boarding. The architects were Messrs. Balfour and Turner.



"WESTBROOK," GODALMING. GARDEN FRONT.
BALFOUR AND TURNER, ARCHITECTS.



THE LONDON AND COUNTY BANK, WANDSWORTH, PLANS.
MESSRS. CHESTON AND PERKIN, ARCHITECTS.

NEW PREMISES FOR THE LONDON AND COUNTY BANKING COMPANY, LIMITED, WANDSWORTH, S.W.—These premises, which have recently been completed and opened for business, occupy a prominent position in the High Street, near to the parish church. The illustrations sufficiently explain the general arrangement, style, and purpose of the building. Above the strong-rooms, etc., in the rear, is arranged a residence for the caretaker, with a private entrance in the side road. The banking hall is 19 feet in height, and is amply lighted by the large front and side windows, and clerestory windows above the roofs of the manager's and inspector's rooms respectively at either side. Accommodation is provided for four cashiers and thirteen clerks, in addition to the manager. The floors of the offices are paved with pitch-pine blocks, and the public space with Roman mosaic paving. The panelled and decorated ceiling of the banking hall is in fibrous plaster. The joinery generally and the office fittings are in American walnut, and have been specially designed by the architects in keeping with the style of the building. The strong-rooms are faced internally with white glazed bricks. The offices are warmed by means of hot-air stoves, and lighted artificially by electric light. Gas is also laid on throughout. A natural system of ventilation has been adopted by means of Tobin fresh-air inlets, fitted with filters and regulating valves, foul-air extractors being provided near the ceilings. Two sunburners are also provided in the banking hall to assist in the extraction of vitiated air, and also to light the office in the event of a temporary breakdown or failure of the electric light. Externally the buildings are faced generally with Ancaster stone, the plinths, pediments, cills, string courses, cornice and balustrade above, being of Portland stone from the Whitbed. The work was carried out by Messrs. Higgs and Hill, builders, and the architects are Messrs. Cheston and Perkin.

Photo: E. Dockree.

THE LONDON AND COUNTY BANK, WANDSWORTH.
MESSRS. CHESTON AND PERKIN, ARCHITECTS.

Books.

MANUEL D'ARCHÉOLOGIE FRANÇAISE.

C. Enlart: Manuel d'Archéologie Française, depuis les temps mérovingiens jusqu'à la Renaissance. Première partie: Architecture, Tome I.: Architecture religieuse. xx and 816 pp. 405 illustrations. 8vo. Paris (A. Picard et fils.) 15 frcs.

THIS "Manual of French Archæology" is to appear in two parts: the first devoted to Architecture; the second to Sculpture, Painting, and Applied Art. The volume now under review is the first of Part I.; the second, which will complete the part, deals with Civil and Military Architecture (including Monastic), and is in the press.

Few can write with authority on so vast a subject. M. Molinier was at first asked to undertake the work, but he could not accept the invitation. The name of M. Enlart is not yet so well known in England, but he is well qualified for his task. Trained at the "École des Chartes" and at the "École Française de Rome," he has since written important books on Romanesque Architecture in Picardy, and Gothic Architecture in Italy and Cyprus; besides a number of smaller works. He has, as "Professeur suppléant," occupied the chairs of French Archæology at the "École des Chartes" and at the Louvre, and has delivered a course of lectures on the same subject at the University of Geneva. In his preface, he states that he has found the collection and co-ordination of materials for his lectures the best possible preparation for this work. As to this particular volume, he claims to have visited every country, and nearly every building, referred to therein.

The book begins, not with a bald glossary, but with an interesting description of the constituent parts of a

building, and of the details and ornaments belonging to each. When technical terms occur, Latin, Low Latin, Old French, and Provençal equivalents are often given with them. Then follows a chapter on proportions and general character, in which M. Enlart comes forward as an apologist for the Gothic style. He considers Gothic ornament natural in scale, and excellent in that it is so exactly adapted to the masonry to which it is applied. Deviations in axis and irregularities of construction may be compared with similar absences of mechanical exactness in Nature, and it is pointed out that some of these irregularities are intentional and reasonable, as when a church is left without windows on the side facing the mistral or sea gales. An especial warning is given against reading symbolic meanings into results of inaccuracy or carelessness.

An interesting chapter on the life of artists in the Middle Ages includes some striking instances of architects travelling far in connection with their work. An ambassador from St. Louis met one as far away as China, in A.D. 1253. There are given, also, details as to architects' emoluments and the contracts that bound them. We are met at once with the fact that individual copyright did not exist. It must not be inferred from this, that architects did not put a high value on themselves and their works, any more than from the fewness of the great names that have been preserved. This fewness is due to the destruction of so many inscriptions and records, rather than to modesty on their part. Instead of copyright there was a guild monopoly, and the guild was a very close one, which guarded its secrets well.

Other chapters of general character, and general interest, deal with funds available for building during the period with which the book deals, the transport of materials, their re-employment, copying and archaism, changes, and restorations, the reasons for analogies between different countries and districts, and the relative value (so often discussed before) of architectural and documentary evidence. Warnings are given as to some pitfalls likely to entrap the inexperienced and unwary when studying texts.

After this introductory section come five others, devoted to the five great periods of French Architecture, viz.—(1) Roman and Merovingian; (2) Carlovingian, including the baptisteries; (3) Romanesque; (4) Gothic; (5) Renaissance, till the final disappearance of all Gothic feeling and forms. Each section begins with a study of the origins of the style of the period with which it deals, and of its general character. It then details the development of the building as a whole. and of its parts and ornaments during the time. The main schools of each period are indicated, but no attempt is made to define their exact boundaries. This cannot yet, and perhaps never can, be done, the overlapping and interpenetration of styles was so great. If they are ever defined, Mr. Enlart is convinced that they will follow the limits of provinces or lordships rather than of dioceses; it was vassalage that kept artists, as other folk, tied to particular lands. Great attention is also paid to the spread of French styles to other lands, but M. Enlart does not exaggerate France's supremacy even in the Gothic period. It is plain, for example, that he recognises the great independence of the development of English Gothic, though he points out that our Norman style is the same thing as the Romanesque of the duchy, and can trace influences from the schools of Champagne (William of Sens) and Anjou, as well as Normandy, in the Gothic period. He considers it especially worthy of remark that the Cistercians, who did so much to spread French Gothic abroad on the Continent, built so little (he cites only Roche and Fountains Abbeys) in that style here. Mr. Bilson's paper on the beginnings of Gothic* is discussed, but it is decided that the locality of the first ribbed vault cannot yet be definitely settled. English work in France itself is referred to, and England receives the credit of having taught Norway its Norman architecture, and Gothic as well. In Sweden, this English Gothic met French, brought thither, in 1287, by Étienne de Bonneval and his fellows, who were commissioned to build a cathedral at Upsala on the model of the Paris cathedral of Notre Dame.

To the Renaissance, little space is devoted as compared with that given to the two preceding styles, but a good account is given of its introduction into, and development in France, with a list, accompanied by short notices, of the chief workers in the style there.

The book ends with a chapter on accessories of ecclesiastical architecture, such as pavements, altars, tabernacles, fonts, screens, and pulpits. These are dealt with here, rather than in Part II., for two reasons, viz.—(1) that they are often part of the masonry, and (2) that they are so important liturgically, that a complete idea of an ecclesiastical building cannot be obtained without considering them. Stained glass is, however, left with Painting and Sculpture for the Second Part.

The work is written in an interesting style, and every point in it is illustrated by copious references to examples. Each section is followed both by a bibliography, and by a list of buildings, classified according to departments. These lists will make the manual especially valuable to those who like to spend "holidays among the glories of France."

The illustrations include half-tone plates from the excellent photographs of the "Commission des Monuments Historiques," and from others by the author, and reproductions of pen drawings, of varying merit as such, but generally good, and always well chosen to explain the points in connection with which they are introduced.

The book is worthy to become, as its originators wish that it should, the standard manual on the subject of which it treats.

G. H. PALMER.

* "Journal of the Royal Institute of British Architects," 1899 and 1902.

THE PAVEMENT MASTERS OF SIENA (1369–1562).

"The Pavement Masters of Siena (1369–1562)." By Robert H. Hobart Cust, M.A., Magdalen College, Oxford. Handbooks of the Great Craftsmen. Edited by G. C. Williamson, Litt. D. Price, 5s. net. London: Geo. Bell & Sons.

THE history of the pavement of the Cathedral of Siena covers the years from about 1350 to our own day. The greater part—particularly those portions anterior to the sixteenth century—has been lately almost entirely renewed by copying the original panels both in materials and method of workmanship; and is chiefly valuable to us now as a copy of the greatest church pavement of the Renaissance, magnificently typical of Italian art of that time; so typical, indeed, that had we but little else to go upon, it would not be impossible to construct a theory of the manner of that art in other directions.

A pavement has always played an important part in architecture. The older literature and legends of the East—the first home of art—tell us with much particularity of the pavements in actual buildings, and in story. To portray or to symbolise the mysteries of the heavenly bodies, the waters of heaven and of the earth beneath, the chief natural changes of the year, on the floors of their temples and buildings of importance was a favourite custom of the early builders. Pausanias describes the polished marble floor like unto a lake of black water, before the great ivory statue of Zeus in the Temple of Olympia, which reflected the figure and lighted lamps, as it were in the sea of heaven. In Roman pavements and later in those of Byzantine time and influence, as in Sta. Sophia and St. Mark's, the idea of water, the "glassy sea," can be seen typified. This symbolism travelled westwards with the knowledge of eastern art, and Gothic cathedrals in Italy and the north give us pavements adorned with representations of the four rivers of paradise, the zodiac, the seasons, or the labyrinth, mysteries bound up with the lives of men.

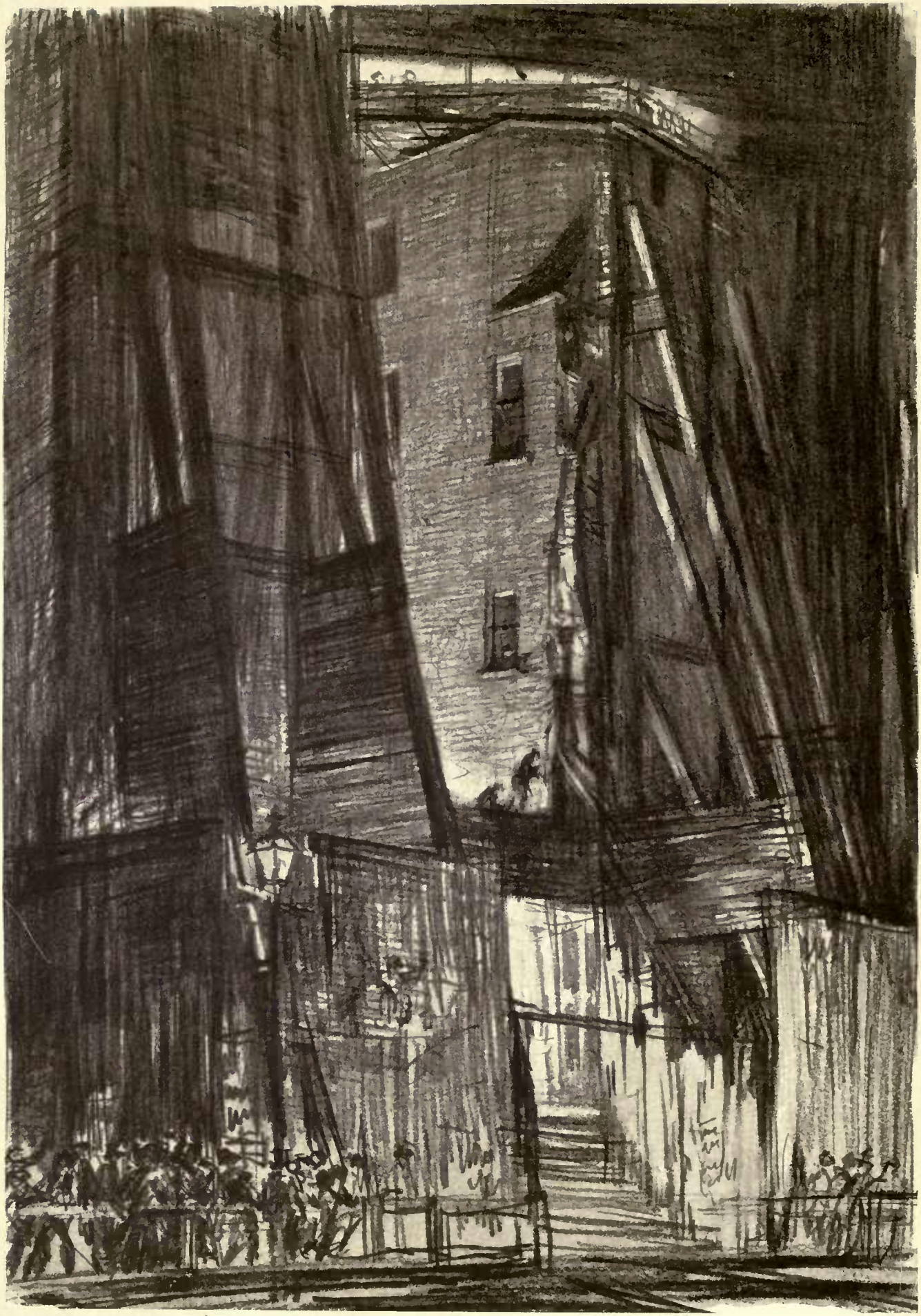
But the pavement of Siena strikes a different note. Except for a compartment of the nave floor illustrating a wheel, which we may conceive to be a survival of a labyrinth, and some noble representations of the virtues, which are among the earliest work (presumably executed between 1350 and 1400) now remaining in the Church, there is little to suggest the earlier Gothic pavements. We find the subjects of the panels of the floor to be scenes of classical allegory, and—in greater numbers—pictorial representations of biblical events. Strong as these works are in perfection of "line" drawing, as for example in the fine series of sibyls in the north and south aisles; and in greatness in design, as in the "Allegory of Fortune" by Pinturicchio, the pavement suffers in part through its extraordinary pictorial quality. "The Expulsion of Herod," for instance, a vast subject picture crowded with figures recalls an early Italian battle piece. In the "Massacre of the Innocents" we think of the arrangement of Botticelli's "Calumny."

If the object of a pavement is to represent subjects in marble or stone inlay, which we are accustomed to see treated with great success on painted panel or canvas, then some portions of the Siena pavement are without a rival; but we may assert that such a height of pictorial representation is not the fittest form of pavement art; and that, remarkable as they are, the "Relief of Bethulia," "The Expulsion of Herod," and the "Massacre of the Innocents," do not give the same sense of fitness which is aroused by the simpler representations of the "Sibyls," the "Justice," "Fortitude," or the "David"; those, in fact, which belong to the early period in the pavement history. If this is the case in the work of the full Renaissance, it is still more apparent in the later works of Beccafumi and his followers, and in the modern cartoon-like panels of the last century. The varying materials of stone, marble, or mosaic, cannot compete with the fine qualities of paint or tempera. Simple and dignified design is preeminently necessary in a floor. While a "Massacre of the Innocents" will make a mosaic panel of movement and pathos, on a floor it has a look of being dropped from a wall; on the other hand a labyrinth or a representation of the Zodiac would make dull paintings; but on a floor, as we know is the case at Ravenna, Chartres, or Otranto, their effect is fine, and is one which arouses and stimulates the imagination.

All this may be owing to the simple reason that a picture on a floor is difficult to see and understand by reason of its position. The prevailing habit of one art to imitate another, as here at Siena the stone-worker imitates the painter, does not affect us in other cases. We admire the Flemish tapestry, the picture woven, in close copy of a painting; on the wall it is right, on the floor it would become accursed; and I think Mr. Cust says truly of Beccafumi, where he speaks of his discarding the old *graffito* method in his outlines for a greater use of parti-coloured marbles, "Even now it is doubtful whether the results are so practically durable or so artistically satisfactory on the floor as the older work. It would seem they, in a sense the apotheosis of this species of work, should be set up perpendicularly so that the full effect of their superb draughtsmanship could be fairly perceived and appreciated."

Mr. Cust has given us a very interesting account of the craftsmen of the Siena pavement and of the work itself as it now is. Research has enabled him to determine in large measure its authors and dates. His book as a handbook is admirable; well arranged, clearly printed, and well illustrated with plans and reproductions from photographs. The visitors to the Cathedral will find it useful, while as a book of reference it is all that is needed. We may regret, however, that it was decided, as the preface declares, to omit criticism. Artists can make up their own minds as to the fitness or otherwise of some of the work for a pavement; but as the book is likely to be used by the student and the amateur, a critical chapter might with advantage have been added. The book, however, could not have been written without some expression of view, as the extract quoted above shows.

GERALD C. HORSLEY.



HOUSEBREAKING IN THE STRAND.
DRAWN BY MUIRHEAD BONE.

Architecture and the Royal Academy.

A DISCUSSION. V. (*Conclusion.*)

1. BY ALEXANDER GRAHAM.

THE question of devising some satisfactory mode of representing architecture on the walls of an exhibition gallery seems as far from solution as it was in earlier days, when the Royal Academy took up its new quarters in Burlington House, painting and sculpture finding ample accommodation in lordly galleries, while architecture was compulsorily housed in a small chamber of anything but lordly proportions. Year after year comes the same lament that this Architectural Room is a failure, the contents being uninstructive to the student, and equally unattractive to the sight-seeing public. And then comes the outcry that the responsibility for such failure comes from within the walls of the Royal Academy, and not from without.

A little consideration of the whole subject by any unprejudiced architect may assist in the solution of a problem which has already entered the controversial stage. On the one side we have the Council of the Academy, the recognised authority on national art, prepared with open hands to receive for exhibition any meritorious work by painter, sculptor, or architect. With the first two there can be no difficulty, for their work, either with brush or chisel, is unmistakeable evidence of individual skill. But with the architect the case is totally different. The work submitted by him for exhibition is neither more nor less than a representation, either pictorial or geometric, of a building or parts of a structure of some kind or other, and, consequently, must be judged from another standpoint. Such exhibits are not necessarily the work of architects, but are, in most cases, the handiwork of professional draughtsmen specially trained to make pretty pictures to catch the public eye. There was a time when architectural drawing was rightly regarded as a technical art, and T-square, rule, and compasses were the principal implements employed by an architect to convey his ideas to paper. Drawings of this character will be found to prevail in works on architecture of the eighteenth century, and elaborate specimens, prepared by architects of high repute in the earlier half of the nineteenth century, may still be studied in portfolios in architectural libraries. But the most noticeable examples of pure architectural drawing may be seen in the Burlington Devonshire collection, where the handiwork of Palladio, Inigo Jones, and other masters of art may be studied side by side. These productions are, in many cases, supplemented by sketches of modelled and decorative work, sufficient to convey the architect's ideas of scale, proportion, and fitness in the composition and adornment of his building. But this method of drawing, which achieved such admirable results, would be regarded with something akin to contempt by the pictorial draughtsmen of our own time, and is not likely to find favour in an age which encourages sham perspectives, false accessories, and impossible skies.

Some few years ago I was inspecting the architectural drawings at the Royal Academy Exhibition, when the tomb-like silence of that restful chamber, known as the Architectural Room, was broken by female utterance, "Oh, what a pretty building!" I turned round and found only two other occupants, a man and a woman. Waiting an opportunity, I examined the drawing which had stirred female emotion. Yes! It might fairly be called a pretty building, with its stately white façade, whether of brick or stone, terra-cotta or marble, it was impossible to say. Shadows were there, such as can only be seen under a tropical sun, nameless birds hovered in the cloudless sky, and a carriage and pair was dashing up the spacious causeway. In a shadowy corner was the inevitable policeman, and near him was a small bareheaded boy, gazing with wonder at the monumental edifice. How I pitied that poor boy in the blazing sunshine! Then, taking note of the town that was to be adorned with this "pretty building," I resolved to pay a visit there when an opportunity offered. And what did I see? A long façade of dark red brick with a northern aspect, in a narrow, ill-paved street that would have been fatal to the springs of a well-appointed carriage. And for want of better material to cover the wall space of one poor little gallery, the Council of the Royal Academy are compelled, as a matter of necessity, to admit similar productions, commonly called architectural drawings. Can you blame them?

To suppose that the public are likely to be attracted by pictorial representations of buildings, or, in my opinion, by architectural drawings of any kind may be dismissed as hopeless. They see in the galleries devoted to painting and sculpture the creations themselves of the sculptor and painter face to face. In the Architectural Room they do not see the architect's creations, but only pictorial attempts of various degrees of merit, all necessarily ineffectual to represent them. So much of the pictorial art as finds place in an architectural drawing is an endeavour to represent, with more or less effect, the dimensions of a

building, its symmetry, proportions, grace of line and traits of invention. But an architectural drawing entirely fails to make felt the structure's weight and mass, or to exhibit any skilled combination of the forces of down pressure, thrust, and resistance which it embodies. The nobility of aspect, never absent from an ancient masterpiece of architecture, is a testimony to its having been conceived as an embodiment of these, quite as much as a presentment of grace, symmetry, and proportion of line and surface. And in the realised combination of all its factors lies such a structure's supreme charm. In the Architectural Room no indication is possible that, in the conception of any design, one ounce of ponderable matter has been consciously dealt with. If, therefore, a work of architecture can only be fully judged in realised combination of all its factors, and if none but a skilled architect can form an approximate forecast of their realised expression, it is surely desirable to impress upon the general public their absolute and hopeless incapacity to pass judgment upon architectural designs.

It is a matter of regret that there are no present indications of a return to the old order of honest architectural drawing, and that, in spite of continued ill-success, the prevailing custom of representing buildings by little pictures, admirably adapted for books and serial publications, should be encouraged. Perhaps the day may come when geometric drawings to a large scale in line and colour, and perspective sketches to a very small scale (sufficient to indicate the general appearance of a building), may find favour with the architect. And if the Council of the Royal Academy were to make known their sympathies with him by an intimation that pictorial drawings were to be of limited size, and that geometric drawings and details of ornament and decorative features would be judged on the score of architectural merit rather than as displays of draughtsmanship, a step would be taken, in my opinion, in the right direction.

It is not essential, nor is it desirable, that such drawings should be of that elaborate character which is the marked characteristic of the handiwork of successful students in the École des Beaux Arts. Nothing can be more beautiful, as examples of architectural drawing, than the meritorious studies of the Pantheon by M. Chadanne, or the restoration of the Baths of Diocletian by M. Paulin. Few of our students, entering the arena of practical architecture, could find leisure, after the office day work, for such laborious undertakings; but, such is the skill displayed by many of them in competitive work submitted for our annual prizes and studentships, there is little doubt they would hold their own in any international competition.

Our period and country give rich opportunities to the art of architecture. The growth of municipal life, the spread of education, and the munificence of citizens in bequeathing works of art to adorn the galleries of our great towns are among them. The Vestry Hall of a previous generation has given place to the Town Hall with its stately chambers and façade of palatial aspect. The village school has been superseded by educational buildings of almost monumental character, and galleries embellished with painting and sculpture are finding favour with a better-informed population. It is within the range of possibility that, contingent upon a short period of peace and prosperity, these newly-formed municipalities may be competing with each other in the near future in the erection of buildings sumptuous with marble and mosaic, and embellished with the best creations of both painter and sculptor. Nothing could tend more to further such a desirable result, for the national benefit, than an exhibition at Burlington House of drawings, sketches, and models, by the architect, the painter, and the sculptor, embracing the chief constructive and decorative features of one or more notable buildings in course of progress. Such exhibits placed together in the same gallery would bear testimony to the brotherhood of art.

2. BY D. S. MacColl.

The discussion on the architectural exhibition at the Academy has run its course through several numbers of the Architectural Review.* I am to attempt a summing up, and to add anything that occurs to an observer interested but not implicated in the matter.

Mr. Ricardo's article, from which the discussion started, contained a criticism and a definite proposal. The criticism was, in brief, that (1) the space allotted to architecture in the summer exhibitions is too small to allow of proper illustration; (2) that proper illustration would consist of working drawings, including plans, sections, and details to ½ inch scale, models also, and photographs of completed work, at the discretion of the exhibitor; (3) that proper illustration does not include the pictorial perspectives furnished by professional draughtsmen: that these form the bulk of the present exhibitions; that they are there in the vain hope of attracting popular interest to architecture by mimicry of the adjoining pictorial

* October, 1902, by Messrs. Ricardo, Norman Shaw, Belcher, and R. Blomfield; November, by Mr. Ernest Newton; December, by Messrs. Basil Champneys and Beresford Pite; January, 1903, by Prof. Simpson.

exhibition, and that they are there in this abundance by direct encouragement in the tradition of selection and hanging. Perspectives, he urged, should be small-scale explanatory sketches by the architect to give a general idea of grouping.

Mr. Ricardo's proposal was that the summer exhibition should be abandoned to the present tradition, making itself as popular as it may, and that a supplementary exhibition should be held in the winter months, when the Academy is already open for the Old Masters. Ample space might then be found for an exhibition such as veritable students could approve, and architects who at present abstain might feel disposed to take part.

Mr. Ricardo's criticism brought out a very interesting statement of the Academical view from Mr. Norman Shaw and Mr. Belcher, to be considered in a moment; but first there is a more radical reply to be disposed of. In the view of Mr. Blomfield and Mr. Champneys not only the Academy exhibition, but any exhibition of architecture by drawings is futile. Of this view it may be said that it will commend itself rather to the men whose ideas and methods, and also their position as architects, are settled, than to the younger and less reputed. An exhibition has two possible virtues: advertisement for the exhibitor, and instruction to be gained from other exhibitors. The man who has won his place may have got beyond the need, or at least the desire, of the second, and he may be chary of giving up his designs to the inevitable cribbing that follows successful work; but the beginner is more fluid in his ideas, more eager to learn from contemporaries, and he may be glad to show, not to the public, but to the fellow artists who in the first instance give him his reputation, of what he is capable.

Granted, then, that there is to be an exhibition, we now have it, under the hand of two academicians, that within the Academy as without, the present exhibition is condemned. Both are at one with Mr. Ricardo in disapproving the pictorial perspective. If ever that has been the darling of the hanger's tradition, it is now, we may take it, to be black-listed. Mr. Norman Shaw's picture of things from within is not that of complacent hangers displaying, from embarrassing profusion, models of what ought, in their view, to be displayed. They are revealed as making the best of a poor business. The small room is too big really. There is not enough of good work to go round its walls. And the academic appeal to architects is to rally, to send no more of those pictorial perspectives, to revert to severe professional methods of drawing, and to send in those ample working drawings that they have fondly supposed there was no space for. Here, then, is one misunderstanding and delusion very usefully cleared away.

Mr. Ricardo's black picture, rearranged in this fresh light, shows as follows:—There is no need for a winter exhibition, because at present there is more than room for all drawings of the right sort sent in; all that is wanted is more of the right sort, and none of the right sort are overlooked. (Mr. Pite, it should be noted, is sceptical on this head.) We may take it, however, that the Academy is not, at present, prepared to admit photographs. Mr. Shaw throws his weight rather into the scale of highly-finished drawings, such as are made by French *Prix de Rome* students. It is urged, in reply, not unreasonably, that to demand this standard of drawing from working architects would mean bringing in the outside professional draughtsman, whom we have just dismissed, in a new rôle, and confusing the issue afresh between the merits of the thing represented, the building, and the charms of technique in its representation. Mr. Champneys and Mr. Pite are all for the actual working drawings, with no titivation for exhibition purposes, and Mr. Pite urges that framing and glazing should not be enforced. The idea is that architects should address one another in the current language of the workshop, by the indications that are perfectly intelligible to themselves, and with the least disturbance of their actual work for purposes of parade. Mr. Simpson points to a provincial exhibition, successfully arranged in accordance with Mr. Ricardo's ideas, and demands greater facilities for the visits of students.

Such being, in sum, the agreement and divergence of the views expressed, I will add the observations that occur to me on the subject.

1. The Exhibition and the Public.—Architects will surely be wise if they make up their minds to it that the public who will take the trouble to understand architectural drawings of any kind, or who, having taken the trouble, will be competent to appreciate, must always be a small one. Mr. Belcher's idea that "in time the public would also come to appreciate how much is due to right proportions and to proper relations and scale of each part to the whole building . ." is, I fear, an amiable dream. The number of people who appreciate all this will continue to be a meagre company outside of the profession, and what is more, very limited inside of it. To think it unnatural that only two visitors enter the architectural room for every two thousand in the painting rooms is to misconceive the situation. If there were only good pictures in the painting rooms these would be as empty as are those of the National Gallery. In the matter of painting the Academy has definitely capitulated to public taste.

It has no teaching, no convictions, holds up no standard; it is not an academy at all, but a universal provider. If this were profitably possible in the case of architecture, the same thing would have happened. But drawings, even of the worst kind of architecture, have so feeble an attracting power on popular taste that the efforts of the most pictorial perspective-maker have not compromised the architectural room beyond redemption. To suppose that people will be tickled by a pictorial perspective after a debauch of pictures, is like expecting a child to be corruptible by bread thinly buttered after unlimited cream tarts. By the nature of things, then, rather than by their own virtue, the architects alone in the Academy have still a respectable position that defies their efforts to lose it. If no pictures were in the adjoining rooms it is conceivable that by this time the architects of the popular art journals, the designers of art-nooks and all the rest of it, might have made a popular show of architecture in the Academy; as it is, they have not a chance: the bad picture is too much for bad architecture.

The architects, then, may thankfully resign themselves to seeing, in their Academy exhibition, instead of a bait for the obstinately shy public, a possible influence on students of their art, a place where a sense of honour and shame might be kept acute, and a premium put upon the right ambitions. The smaller the room the more intense may be the effect produced. The managers of the exhibition ought to go beyond selection, and actively invite the thorough representation of notable work. Better four good buildings on the four walls than a job lot of four hundred. And let them be assured that the more they aim at doing the best thing for their students, the more they will interest and influence the perceiving part of the public. Severity will not alienate them; paltering does. The difficulty of understanding the conventions of architectural drawings has been very much exaggerated. To an intelligent man there is nothing inscrutable in an elevation, a plan, or a section. Every man who wishes to find his way makes use of a map. It is only in a few matters, like staircases, that the architect's drawings call for a small exercise of spatial imagination. The mystery in architectural drawings is not what the lines stand for, is not the construction, for that may be learned, is not the planning, whose convenience may be appreciated; it is beauty of design that is the mystery. The man who has the clue to this will find architectural drawings neither dull nor difficult; to the man who has not they can only be a bore.

2. PERSPECTIVES.—It is not, then, for the perceiving part of the public that the pictorial additions to perspectives are required; they are sauce for the artless client, and in decency should be shown to him only *in camera*. But the reaction against these dressings of perspectives might, it seems to me, do injustice to the uses of the perspective itself. The fictitious perspective is mischievous, but in many cases a diagram is really called for to realise the effect of the building, given the actual spaces round it. If these are not taken into account, the perspective is fictitious. But suppose the width of existing streets or spaces taken into account, and that the building has a feature like a dome, set back from the street elevation. In the conventional elevation, which supposes the eye to be at the level successively of each part drawn, the dome projects above the roof-line by the whole of its actual height. I defy most draughtsmen to guess accurately at the true effect from the other side of the street by an inspection of plan and elevation only. A diagram would have to be constructed by the designer for his own purposes, and this would be a proper part of his exhibition apparatus. Conventional perspectives, moreover, of the bird's-eye sort, are very useful in giving a general idea of dispersed groups of buildings; not of their aspect, but of their constitution as plan and elevation. Familiar instances are Loggan's views of colleges, which are not reliable in detail, but enable one to grasp easily the setting out of these buildings. The policemen and hansom cabs should be reduced to their true function, which is to give a useful reference for scale. To serve this purpose *their* scale must not be fictitious.

3. MODELS.—Some years ago models were urged upon architects as more nearly approaching the real thing than drawings. Mr. Blomfield has enumerated various drawbacks: I may point out another in their ordinary use. We see them as toy-like objects from above. To get anything like the real aspect they should be supplemented with a screen, pierced with eyeholes at a height corresponding to the height of a spectator's eye on the scale of the model. Otherwise they only serve the purpose of the bird's-eye views referred to above.

4. PHOTOGRAPHS.—Mr. Newton is surely right in his contention that photographs are the most satisfactory common term for comparing completed buildings, and the least misleading means of judging what any single building looks like. A picture of a building is one thing, viz., a pattern selected out of the lines, surface, and shadows of a building, with some humouring for the picture's sake; and we all pictorialise a building that pleases us at all as we look at it. But the uncompromising account of the facts is another thing, and it is the thing we want for judgment, without the picturesque draughtsman's bias pei-

verting it. From most of the picturesque draughtsman's efforts, it may be added, one can learn precious little about the architecture, especially when he employs a manner proper to thumb-nail sketches on a drawing several feet in extent.

Photographs, then, would seem to be the proper supplement of the architect draughtsman's work in an exhibition. There is one point, however, that has been a little lost sight of throughout the discussion. The summer exhibition at the Academy is only one moment of an exhibition that is going on all the year round. This exhibition takes place in the pages of architectural periodicals like our own REVIEW. Now a photograph, unless of large size, is, like a small drawing, a tiresome thing to look at on a wall: it is much more comfortably visible on the printed page, adjustable in the hand. This fact seems to indicate the reviews as a natural exhibition place for photographs and small drawings, while the Academy is the necessary place for those larger working drawings that cannot be printed on a page without inconvenient reduction. The fact, I may add, that so wide an all-the-year-round exhibition is open to architects, makes the duty of the Academy to enforce a high standard the more easy, because there need be less fear of injustice by exclusion and a large review of material is ready to hand. Our policy, it may not be out of place to say here, in this REVIEW, is to present, liberally, material that has one claim or another to be considered in such a sifting. We present it, as in an exhibition, without comment, reserving that for the really outstanding cases.

5. THE WINTER EXHIBITION.—May I return, last of all, to Mr. Ricardo's suggestion, for the purpose of pointing out that, oddly enough, for the first time, I suppose, in the history of its winter exhibition, the Academy this year has given a room to architecture. The architecture, it is true, is that of one Old Master, Dædalus to wit. But in this fact, I think, we may see an opening for an exhibition that would meet Mr. Shaw's desire for scholarly drawing of monuments, and also Mr. Ricardo's for ample illustration of interesting modern work. The difficulty with an aged body like the Academy is to establish a new precedent; the difficulty, for it, is to annul the precedent once established. Here is the precedent dropping from the sky (or coming up from the shades). Let the architects claim it for established that they now have proprietary rights in the gallery to the right of the entrance at winter exhibitions; that there is to be an architectural "Old Masters." Such an exhibition might include studies of old work such as Mr. Schultz did in Greece and Constantinople. But it might also include the drawings of deceased Masters up to the most recent, as is the case on the painting side. The precedent, it may be remarked, has set out with a fine carelessness of established rules: there are photographs in it, and casts and models, as well as drawings.

The upshot of our discussion then is, that we may look for a new departure at the summer exhibition of the Academy, if architects will respond to Mr. Shaw's challenge and send in workmanlike drawings; and that if architects know how to deal with Fortune when she is off guard, they have their Old Masters' exhibition secured. If these two changes should spring from the friendly interchange of views here the discussion will not have been in vain.

Notes.

THE discussion on architectural drawing and its exhibition is brought to a conclusion in the present number, with the result, we may hope, of some clearing up of ideas on that subject. It will be immediately followed by the discussion of a more fundamental question, that of architectural education. This will be dealt with in the following way:—Before inviting an interchange of views and projects, we shall publish a series of statements, as full and exact as possible, of the existing systems of education, not only in the various British centres, but also in France, Germany, and America. This comparative survey will furnish a ground-work for criticism, and we invite the close attention of theorists to this "Blue Book" work when they come to express their view of what is the desirable system for England. Things are in a highly fluid state at present between the old prentice-system and the various tentatives at regular teaching; and a great deal will depend on the lead given to thought in the next year or two before it stiffens into organisation.

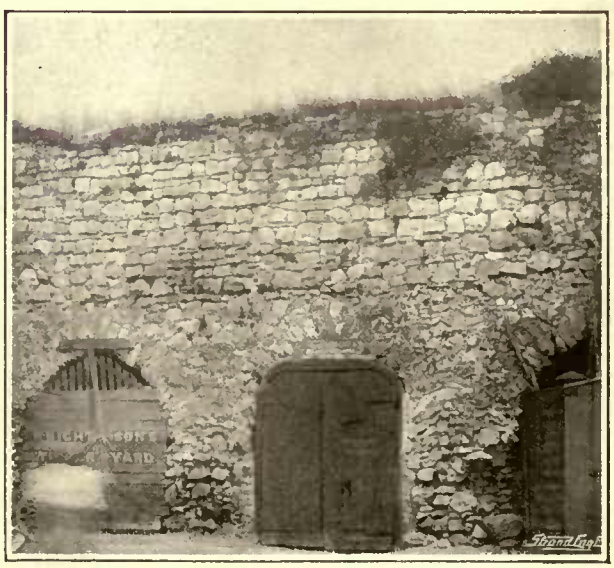
We hope in a later number to give some illustration of the remarkable discoveries at Knossos in Crete, due to the energy of Mr. Arthur Evans. In the meantime we may advise all architects to visit the display of photographs, drawings, and casts illustrative of these discoveries to be seen at Burlington House, in an exhibition that ranges from Dædalus to Mr. John Brett.

Mediæval Southampton.

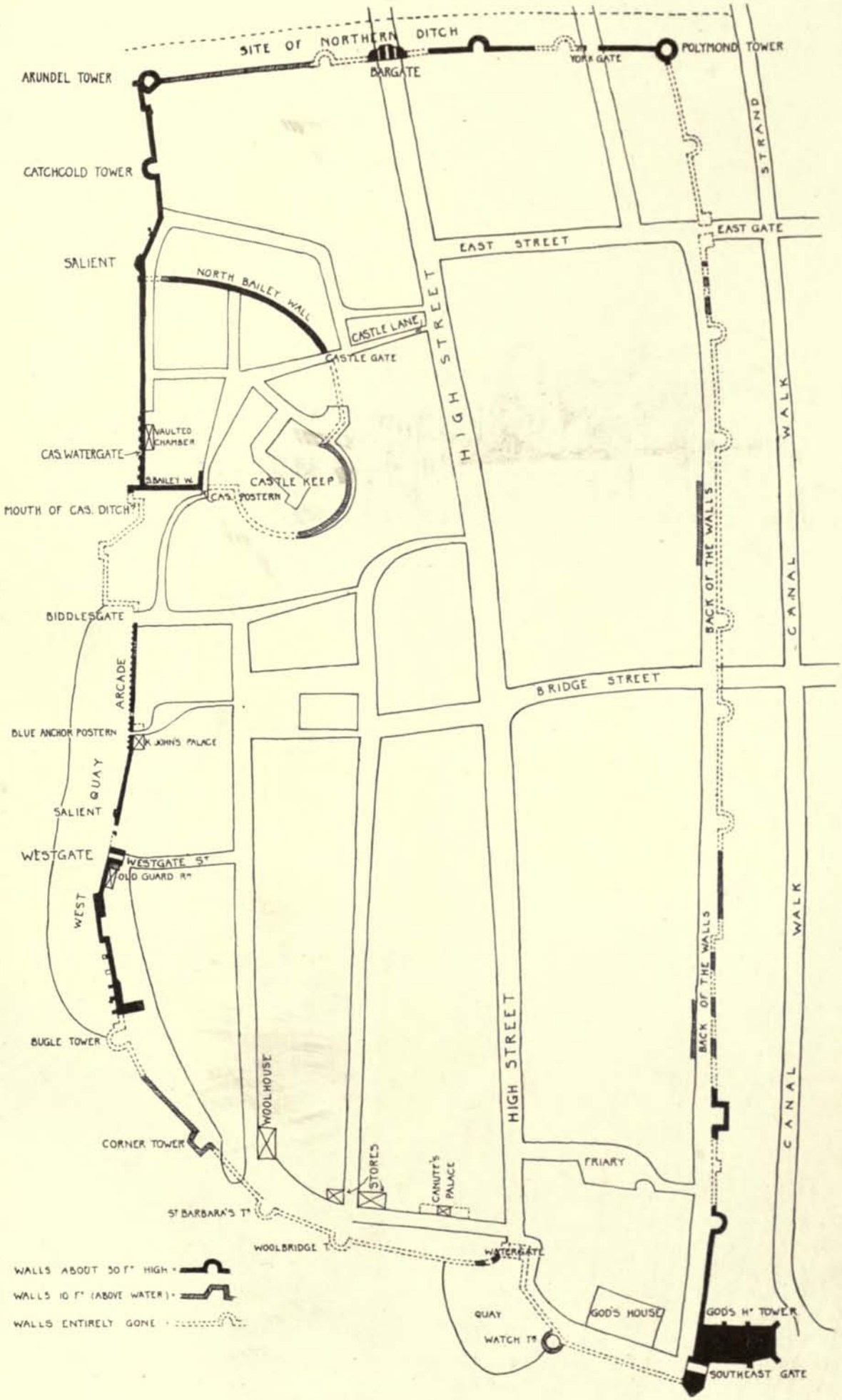
Of the endless stream of travellers who pass through Southampton on their way to distant lands, probably not one in a thousand ever thinks of the town as anything more than an important modern seaport whose prominence is practically coincident with the South African War. But Southampton has seen other periods of prosperity besides the present, and can still exhibit to the sightseer relics of her greatness which date back at least to the time of William the Conqueror. It is not certain whether the spot was fortified in Saxon times; but if it was, the defences were evidently unavailing, for the Danes landed here in 873 and plundered the inhabitants. They landed again in 980, and again a few years later, which incidentally proves that the town was of some importance to have commanded such attention from enemies. Later on Southampton had to protect herself almost constantly against the French, and in 1338 suffered terrible disaster at their hands when they landed from fifty galleys and sacked the whole town, being only driven off with the assistance of the country round after the damage had been done. But it was not only as a town which enemies might destroy at their leisure that Southampton excelled, though singularly enough nearly all its historical associations are connected with war, either aggressive or defensive. It was here that Edward III. and the Black Prince embarked with their army for the campaign which ended at Creçy, and, at a later date, Henry V. mustered his army here and sailed away to fight at Agincourt, while the town supplied its quota to assist in checking the Spanish Armada.

There have been two periods of activity in building the walls, the first in Norman days following the incursions of the Danes, and the second in the fourteenth century as a reply to the sack of the town by the French; but while there are many portions which are entirely Decorated in style, there is little of the Norman work remaining which has not been altered at the later period. The town, that is to say the old town which was enclosed within the walls—for what is now Southampton Docks was, until 1838, merely two hundred acres of slime and mud—stands at the southern end of a narrow spit of land abutting upon Southampton Water, and bounded on the east and west by the rivers Itchen and Test, so that it was eminently adapted to become a strong fortress. The base of the walls on the west and south was washed by the tide, and a broad ditch protected the other two sides. This ditch has long since disappeared, but its name survives, for the narrow alley now standing upon its site is still familiarly called "The Ditches."

The circuit of the walls comprised seven gates, five chief towers, and nineteen or twenty smaller ones, the number of the latter being differently given by various authorities, the discrepancy probably arising through a misconception as to what was a tower and what was merely a large flat buttress. In addition to these defences, the western curtain was strengthened and dominated by the Castle, which stood on a high artificial mound, but has entirely disappeared, except the bailey wall which ran inward in a double curve from the town wall and joined it again further south near the vanished Bridlegate. The Castle consisted of a keep standing in the midst of a small enclosure to which there were two gates, the chief of which, Castle Gate, stood in what is still called Castle Lane, where a fragment of the masonry still juts out into the roadway marking the exact site. The Castle Postern has entirely disappeared. Castle Watergate may be dismissed for the present, as it is included in the circuit of the walls. History does not tell us much about the Castle itself, but from the records of the various Constables we gather incidentally that it was not an unmixed blessing to live in a walled seaport town; for in 1206, Robert de Cantaloupe was instructed to seize ships for the King, and owners who hesitated in parting with their vessels were to be treated as enemies; and in 1339, Sir Richard Talbot was commanded to see that the town defences were kept up at the expense of the inhabitants (this was the year after the great sack by the French). By 1376 the burgesses felt



NORTH BAILEY WALL.

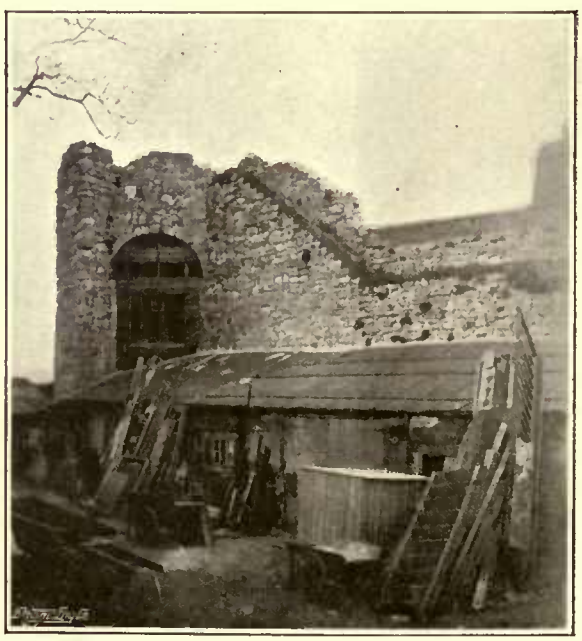


SOUTHAMPTON: THE WALLED TOWN.

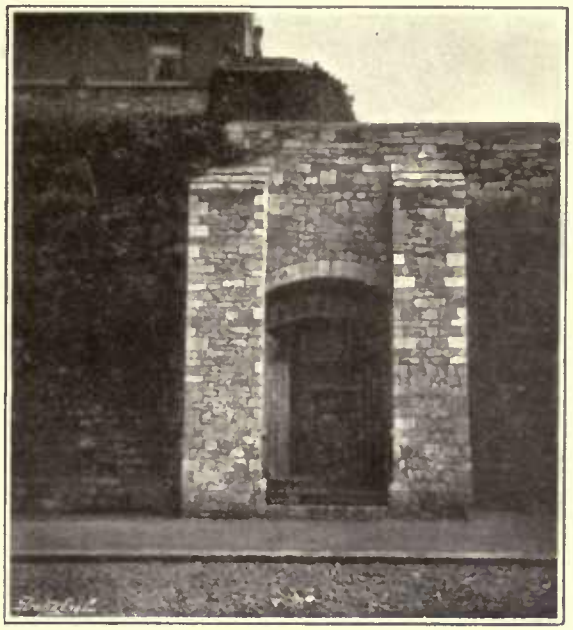
NORTH-WEST ANGLE WITH ARUNDEL AND CATCHCOLD TOWERS.

themselves so burdened with the incessant murages that they petitioned the King to accept the town at their hands and relieve them of the expense of keeping the walls in repair. The Castle was early allowed to fall into decay, and by 1550 it had become customary to shoot rubbish on the Castle Green. In 1618, what remained was granted away to the Gollop family, who speedily cleared the site by permitting the stone to be removed for the repair of the walls.

The most convenient point for commencing a survey of the walls is the north-west angle, where the northern ditch emptied into Southampton Water. Along the western side of the town, where the walls still stand nearly 30 ft. high as far as the south bailey of the Castle, there are two towers which claim notice. The first is Arundel Tower, the summit of which stands about 60 ft. high above the former water level, or about 55 ft. above the Western Shore Road, which was made within the last fifty years and skirts the whole of this side. The tower is now a mere shell of Decorated masonry, with indications of the rampart walk and a flight of steps leading from the north town wall to the summit. The second tower, 130 ft. away, is called "Wind Whistle," or "Catchcold" Tower, and is seemingly of Perpendicular date, as it is evident from the masonry on either side that it is an insertion in the Decorated curtain. Further south the wall breaks forward to an obtuse angle which is dominated by a salient carried out to a diagonal buttress on flat arches and also Decorated in structure. This fourteenth century masonry ceases a few feet further to the south at the spot where the north bailey of the castle swept round to the town wall and terminated in a broad buttress built upon the sea-front of the wall to take the thrust. Here the stonework changes



INTERIOR OF ARUNDEL TOWER.



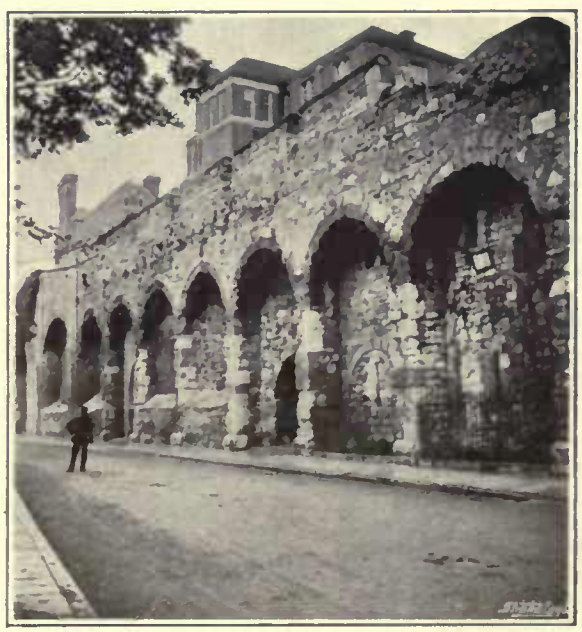
CASTLE WATERGATE.

from large and small stones used indiscriminately to small ones of uniform size and roughly squared, and as it is exactly similar to the Norman work in King John's Palace it may, without fear of contradiction, be attributed to the same period. This continues to the south bailey, a distance of about 120 yards in an unbroken line, save for seven buttresses towards the end, which seem to have been added at various times as the tide weakened the foot of the wall and rendered repairs necessary. Between the fourth and fifth of these stands the Castle Water Gate, and to the left of this is a vaulted chamber 55 ft. 3 in. by 19 ft. 6 in. by 25 ft. high. It is roofed with a barrel vault upon strong transverse arches. There is no access to it from above—it may have been entered from the Water Gate—and the floor level is above the present roadway and consequently 6 ft. above the water-line. It has one narrow-pointed window and a small doorway opening to the sea. The Water Gate is a mere fragment of its former self and has three steps remaining of a flight which led to the small Castle Quay, a landing stage to which the door of the vaulted chamber probably also gave access. From this gate to the south bailey there seem to have been other vaulted chambers, as there are indications of loops and windows in two storeys.

South of the bailey the wall crossed the castle moat—if there was one as Davies' "History of Southampton" suggests, but its use is not evident—and projected south-west in a large bastion which protected this moat, Biddlesgate and the West Quay, though not a vestige of these features remains. Bridlegate or Biddlesgate seems to have been merely an arch in the wall protected by machicolations, but was of great importance as it formed one of the chief approaches to the then shipping centre.

At this point the West Quay, now incorporated in the Western Shore Road, commenced and extended about 230 yards as far as Bugle Tower. Half the Kings of England landed and embarked here during their periodical excursions into the region of their real or imaginary French possessions, and among other travellers a large number of the Pilgrim Fathers sailed from this once narrow strip of gravel to help in founding the mighty nations which have arisen in North America.

Resuming the circuit from Biddlesgate there are two other gates which led to the Quay, Blue Anchor Postern and Westgate, both of which are still in existence. Here also begins the Decorated arcading with which the Norman walls were strengthened, together with three towers which were pulled down in 1775. The walling is 30 ft. high, the Norman portion 4 ft. thick, and the Decorated addition 3 ft. thick, making a total thickness of 7 ft. The supporting piers of the arches are built into the older work as high as the springing, but above that the outer wall is 16 in. thick, and stands 20 in. clear of the Norman wall behind, forming a continuous machicolation hidden in the thickness of the wall. The Arcade has been built without regard to the openings in the rearwork, and would almost seem to have been contrived to block the windows. This is particularly the case with the building called King John's Palace, which occupies the two bays south of Blue Anchor Postern. The town documents make frequent mention of the "King's Houses," and this edifice and another which stood on the north side of the Postern—Blue Anchor

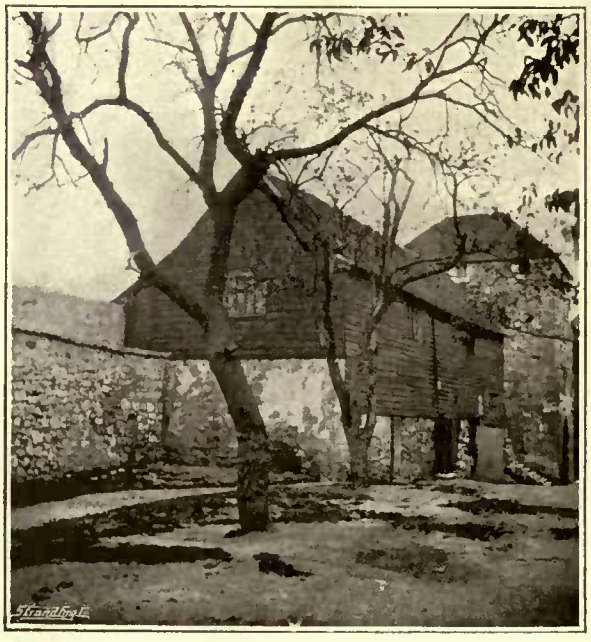


THE ARCADING, WITH KING JOHN'S PALACE AND THE BLUE ANCHOR POSTERN.

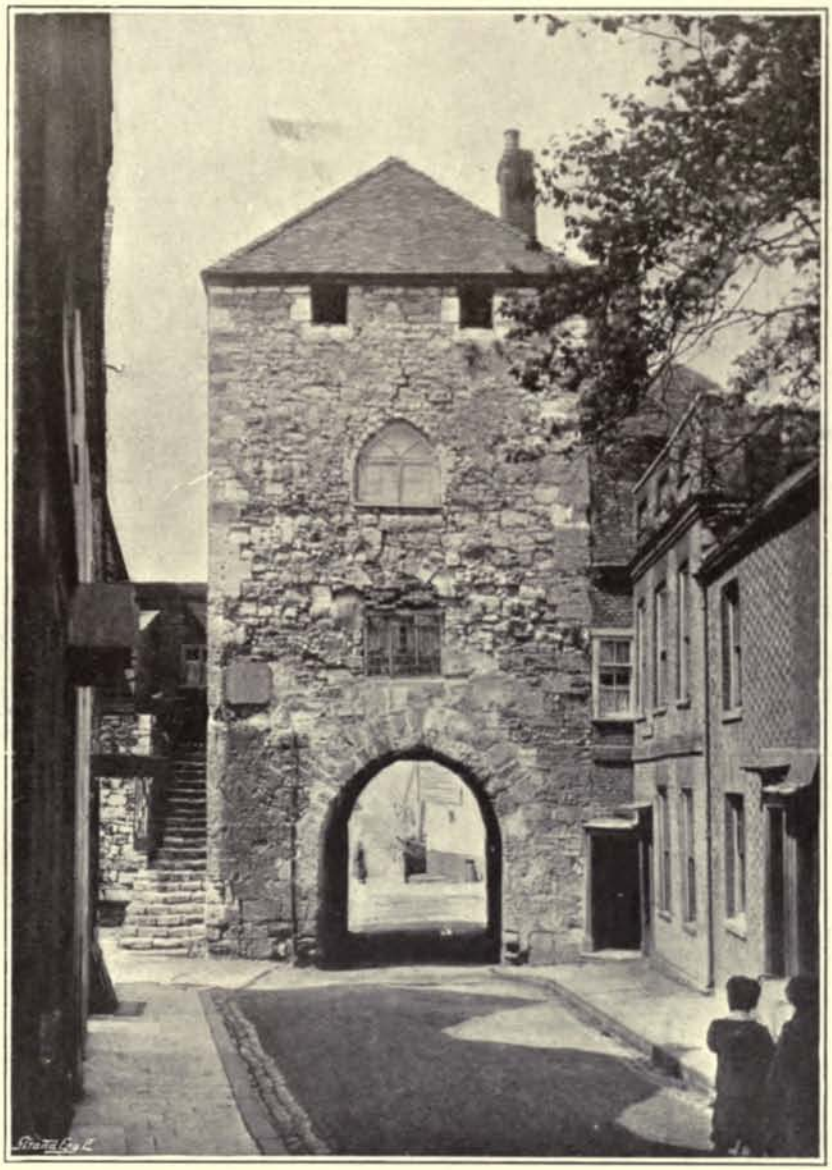
WESTGATE FROM THE QUAY.

Lane being merely an alley between them, and the Postern a plain pointed arch with a portcullis —are commonly held to be the houses referred to, but the Rev. S. Davies, to whose "History of Southampton" the present writer is indebted for much of his information, combats the idea, saying that their small size is against the suggestion, and that the Castle was not a hundred yards away, where the King would certainly secure far better accommodation. Be this as it may, King John's Palace shares with the Jews' house at Lincoln the distinction of being the chief relic of Norman domestic work in England. It is simple in the extreme, and measures about 40 ft. square. Internally it had two floors, the upper being chief, with a fine shafted fireplace on the north wall and the chimney carried up in an external projection upon four plain corbels. There is also on this floor an intramural passage, which leads from the east wall along the south till it ends in the town wall upon the west. The house had a doorway to the beach, and therefore does not seem to have been intended seriously as part of the defences, but in the fourteenth century the arch was blocked up and only an oillet left. The windows are all two-light round-arched, with simple mouldings and a shaft with a cushion capital between the openings.

There are no more features of interest except a salient—in the middle of which the masonry changes from Norman to Decorated—similar to the one already described, between this point and the Westgate. This Westgate is a structure of Decorated date, and one of the most picturesque spots in Southampton. It is three storeys in height, and was formerly square topped with two embrasures on each side for artillery, but the



THE OLD GUARD ROOM.



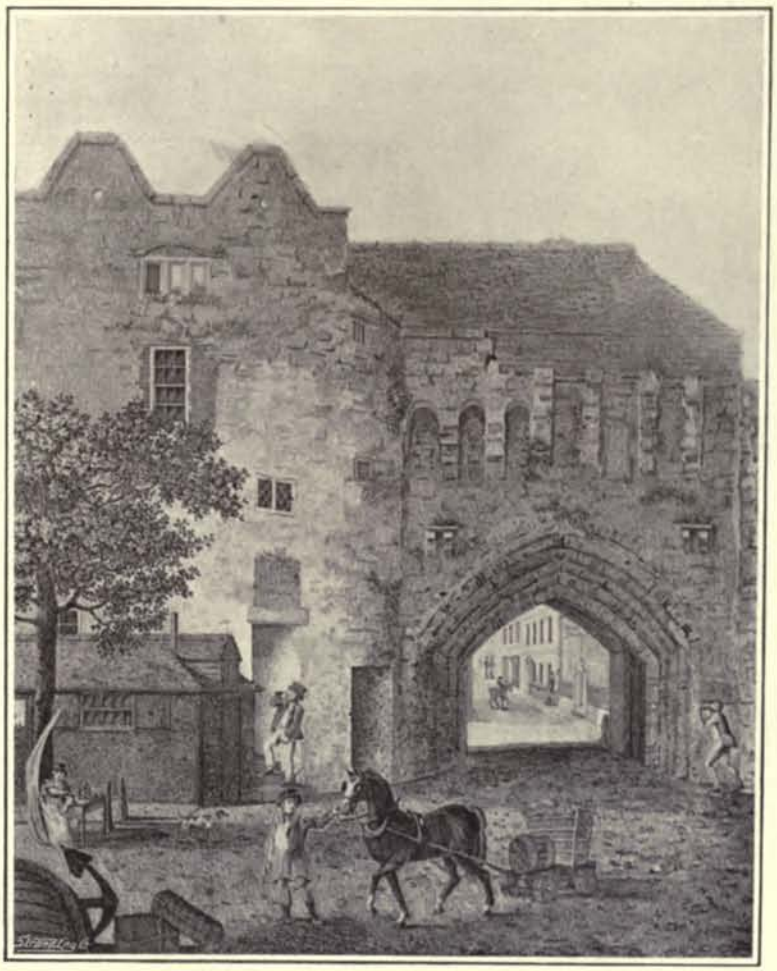
THE WESTGATE.

embrasures are converted into windows now, and a tile roof adds just the requisite amount of colour to render it a perfect "bit" for artists. It was defended by portcullises worked from above, and, in addition, there are rows of holes in the vaulted archway for the purpose of pouring boiling water or lead on an enemy. Beside the gate is a flight of steps leading to the "alure," and separating the gate from the old Guard Room, also a Decorated structure, built of wood on a stone base, and erected against the town wall, but still preserving the alure, although the part covered by the Guard Room is incorporated in the building. The town guard mustered here in times of danger, received their orders, and marched out along the ramparts to their allotted posts. South of the Westgate the work is Decorated, clearly marked in most places, but at intervals degenerating into a slovenly rubble as if built in a hurry, possibly when the French, in 1404, were ravaging the Isle of Wight and were expected at Southampton. Behind a portion of this wall are the remains of another vaulted chamber. There are the remains, too, of an arcade similar to the one described, but consisting of six arches, of which only two are complete. The sixth of these probably abutted against Bugle Tower, which has disappeared, but is known to have stood somewhere near this spot. From here onwards as far as God's House Tower, at the south-east of the town, there is little enough to show that fortifications ever existed along this front, for in addition to Bugle Tower, St. Barbara's and Woolbridge Towers have disappeared, as well as the town Watergate and nearly the whole curtain wall. The West Quay ceased at Bugle Tower, and from here to the Watergate Quay the tide washed the foot of the walls, leaving at low water a narrow strip of shingle called the "Gravel."

THE SPANISH PRISON.

Between Bugle and Corner Towers the walls remain to a height of about 10 ft., and appear to have been patched up incessantly, and now have little interest. The foundations of the Corner Tower are still visible. The southern defences were destroyed by Act of Parliament, 1803–4, to allow of harbour improvements. Behind these vanished works were, and still remain, the granaries and stores, chief among which is the Woolhouse, a rectangular structure of fourteenth-century date, with quaint semi-cylindrical buttresses. It is more familiarly known as the "Spanish Prison," and is thus a link with the Peninsular War. The foundations of the other stores have been used as a superstructure for their modern successors, but the Decorated masonry and buttresses may be still seen 20 ft. high in places. In this same line behind the wall is also the fragmentary portion of a building which was evidently another Norman house but of considerable extent, and it has in consequence been called "Canute's Palace," for no other reason apparently beyond its size. It was over 100 ft. long by 16 ft. wide, two storeys in height, and consisted of two long galleries superimposed. Probably it was divided into apartments by wooden screens. It has no features of interest, as the original openings are greatly disguised, and even the alterations which were made in the Decorated style have almost entirely gone. Old drawings of this portion of the walls show a high semi-circular tower of three storeys with a sloping base, called Canute's Tower, which, as no existing plan gives this name to any portion of the defences, is probably to be identified with Woolbridge Tower. The drawings show a breach close beside the tower, and as a breach is known to have been made near the Watergate about 1780 this surmise is probably correct.

The Watergate, or Flood Gate as it was occasionally called, was an erection dating back to Richard II., and afforded the only approach to the Town Quay: and this is the chief cause of its destruction and the disappearance of the adjoining curtain. Something still remains of the curtain in a house west of the gate, where there are four machicolations in cement, and the house next to where the gate stood still follows the curve of the old wall, but is also masked in cement. An undated engraving of this portion, apparently about a hundred years old, shows these same features in stone, so that it is probable that the removal of the stucco would reveal the original town wall. The arch of the Watergate soon proved utterly inadequate for the traffic, and a postern was then cut on the western side, which was also insufficient. Then a breach was made east of the gate, and after that anyone who desired to tranship goods to his premises merely made a breach of his own at the most convenient point. The eastern breach was made too close to the gate and shook the abutment, so that a part of the Watergate collapsed in 1800, and the whole was taken down



THE WATERGATE. FROM AN OLD PRINT.

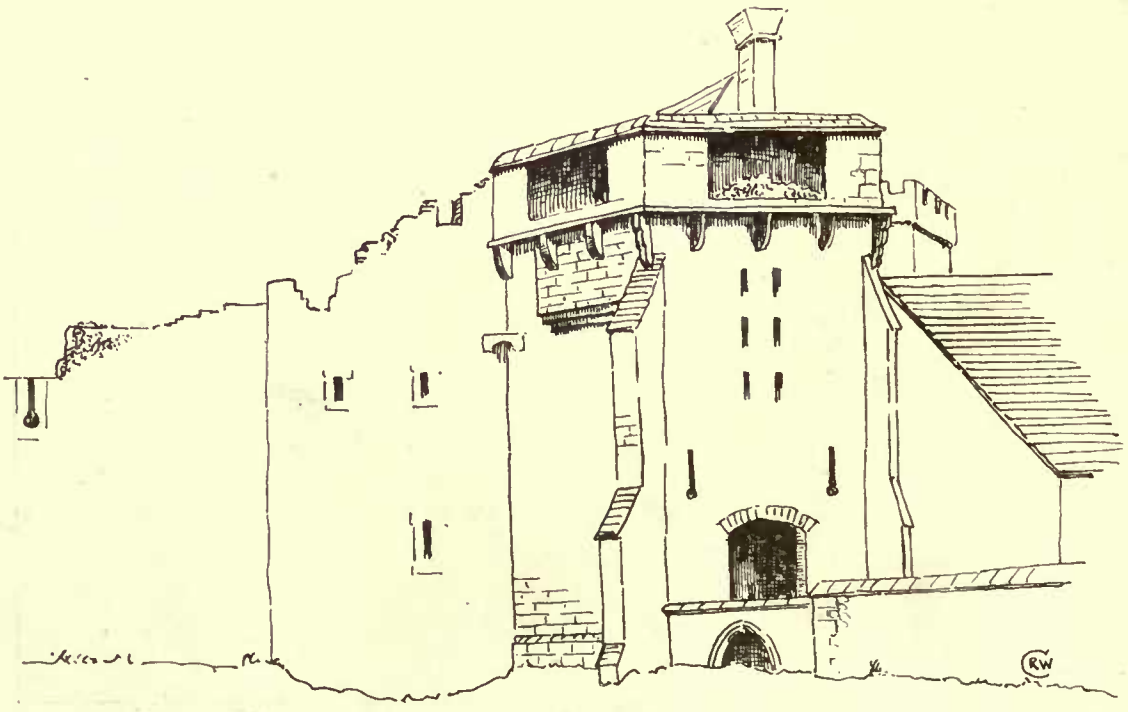
GOD'S HOUSE TOWER.

BACK OF THE WALLS.

four years later. The Watch Tower, which was similar to Woolbridge Tower, has disappeared, but its foundations exist in the base of a bay window of a public-house, and thus render it possible still to trace the walls across the south of the town.

God's House Tower, so called from its proximity to God's House or the Hospital of St. Julian—now the French Church—is of two periods, the left-hand portion in the illustration dating back to the thirteenth century and the rest being a century later. Both portions, except the tower proper, seem to have been carried up higher, and probably were adorned with battlements. The addition of the later portion has thrown the gateway into a corner as it were, but this was done as a protection to the sluices of the ditch and seems to have been a necessary precaution owing to the frequent French attacks. In the fifteenth century this building was used as a store, and from 1707 till 1855 was the town gaol.

Turning northwards from this point, the wall continued in a long, sinuous line for a distance of nearly a quarter of a mile to Polymond Tower, at the north-east angle, with only one gateway—Eastgate—and six or seven semicircular turrets, all of which have practically disappeared, not apparently by deliberate licensed-by-Act-of-Parliament vandalism, as was the case on the south side, but by the more insidious process of individual destructiveness. The southernmost of the semicircular towers is still standing, together with a few fragments of wall about breast-high and of Decorated masonry, with tumbledown cottages built into and up against them. These are all the actual remains, but the names of vanished defences still survive, and incontrovertibly fix the position of ditches and walls. Thus what was once the passage-way which gave access to the ramparts in times of stress is still called "Back-of-the-Walls," and, incidentally, it is still quite as noisome as it could ever have been, even in the "good old days." Cats, children, and dustbins abound in this locality, and one of the latter occupies the interior of the rectangular projection, shown on plan as coming next to the still remaining tower. Outside this wall was a moat, stated frequently to have been a double ditch, though old drawings and engravings only show a single one



EASTGATE, FROM AN ENGRAVING BY HOOPER, MADE IN 1784.

THE POLYMOND TOWER.

about 30 ft. wide. This spot has seen many changes since the ditch was first dug, for subsequently, about a hundred years ago, a canal was projected and actually excavated, though never opened. This has now been filled up and built over, leaving only a narrow alley (on the exact site of the counterscarp of the old moat) called officially "Canal Walk," but, as already mentioned, popularly known as "The Ditches," the two names taken together forming a very complete epitome of its history. Bridge Street is a comparatively modern road, and was not made until the defences became useless.

The Eastgate, now destroyed, consisted of a semi-octagon projecting between two round towers and wholly Decorated in style. It was well supplied with oillets, and seems to have been very strong with a battlemented summit arranged for artillery, which was thus able to sweep the whole ditch with its fire. It had a drawbridge until 1670, when it was removed, and a bridge built in its place of stone taken from the Castle. There appears to have been a chapel over the gate. This structure was entirely destroyed in 1775, probably so as not to obstruct the line of the canal.

The next fragment in existence is St. Denys or Polymond Tower, a building little known even to natives of the town, as it lies now hidden from sight at the end of a brewer's yard and embosomed in trees and creepers. Its first name is probably connected with St. Denys Priory, the scanty remains of which lie about two miles up the River Itchen. The name of Polymond is attributable to John Polymond, who was nine times mayor of Southampton between 1365 and 1392, dates which are quite in agreement with the character of the tower.

The north wall of the town, 200 yards in extent, is the shortest of them all, with three semicircular towers, of which a fair amount remains still to be seen, and one gate, Bargate, at once the joy and sorrow of Southampton. Its gateway is so narrow that it effectually blocks all traffic year in and year out, and year in and year out schemes are drafted by which either the gate is removed or the roadway engineered round the side, as has been done at Warwick. To remove it would be little less than a deliberate sin, for it is one of the most picturesque of mediæval gateways in the kingdom. It consists mainly of three portions—the wide Norman arch in the centre, which was the original gateway, and flush with the line of the curtain; two semicircular towers of Early Decorated type, projecting into the ditch; and a semioctagon (Richard II.) occupying the space between them and projecting still further outwards. It once

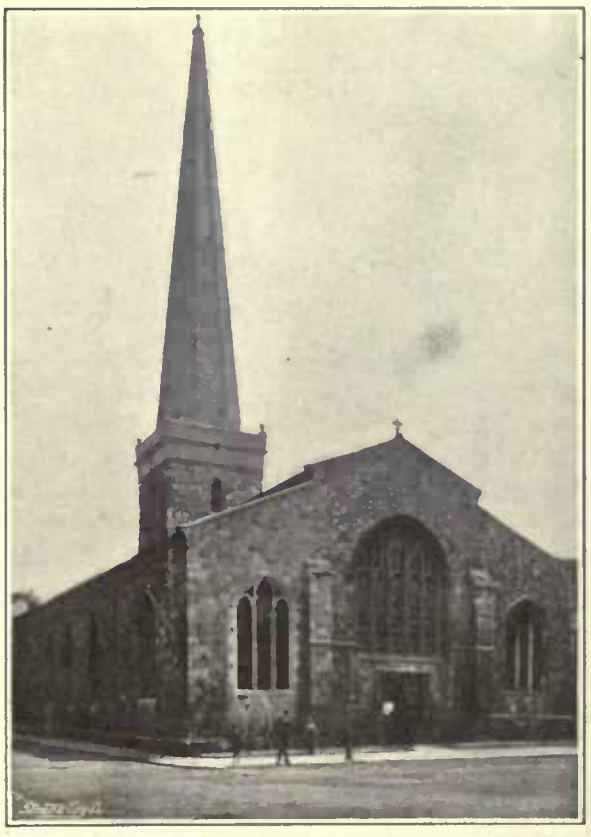
THE BARGATE.

had its drawbridge and portcullises, but these disappeared when this portion of the moat was filled up, about the beginning or middle of the sixteenth century. It has been altered many times, for Queen Elizabeth blocked up the centre and cross oillet with a coat-of-arms, and at one period of its history a vandalistic corporation placed sash windows in the position of the side oillets. The two posterns were cut about the year 1770. The two lions cast in lead once guarded the bridge giving approach to the gateway. The town side of Bargate is a restoration, and has a modern appearance, but the sun-dial is original. In a bellcote to the left is a watch-bell dated 1605, the only remaining one of several about the walls which sounded the time of day, and also on occasion the alarm. York Gate, to the east of Bargate, is a modern insertion. There is nothing to be seen of the walls from Bargate to Arundel Tower, and this portion seems to have been masked by old timber buildings for at least two centuries.

Apart from the old walls, Southampton has not much of architectural interest. There are many churches, it is true, and at least three of them are of ancient foundation, but these have unfortunately been mutilated or re-built. St. Mary's, the mother church, which, for some reason unknown to the writer, lies half a mile outside the walls, was founded by Matilda, but pulled down in 1550 because the spire formed an inconveniently good landmark for French invaders. It now forms the core under the road metalling of Bargate Street and East Street. Another and smaller church was built a few years later, a third in 1711 (enlarged in 1833), and the present one commenced in 1878 from designs by Street. It is rather a curious coincidence that the spire of the present St. Mary's is not yet built, though it is on account of funds, and not of French invaders.

ARUNDEL TOWER BEFORE THE "OLD TOWER" INN WAS REBUILT.

Holy Rood Church was originally built in the middle of High Street (corner of Bridge Street), and in 1320 was removed to a less prominent position on the other side of the pavement. It was rebuilt fifty years ago, all except the tower, which, however, is quite as uninteresting as if it had suffered along with the rest of the edifice. It contains a very good brass lectern of the fourteenth century, representing an eagle on a globe, which in turn is supported on a tower standing on three lions. Even St. Michael's Church is but the shadow of its former self, for the whole interior arrangement has been ruthlessly altered. Originally it was Norman—and very early Norman, too, as is attested by the plain and massive tower crossing; but the nave arcade has given way to iron and stucco columns of a not very great many years ago. The external walls are original Norman masonry for the most part, with Early English windows inserted, and Perpendicular tracery again inserted in the earlier arches. There is also a very good sixteenth century monument to Sir R. Lyster in the north aisle, but space will not admit of an illustration; some old chained books and a very good carved Jacobean chest and cupboard in the vestry dated 1646. But the gem of St. Michael's is the font. This consists of a square block of black marble on a cylindrical base sculptured with rude carvings, and credited with being of fabulous antiquity. It seems probable that, together with the fonts at Winchester Cathedral, East Meon, and a fourth in the north of England, the one at St. Michael's dates from about 1180, and is the work of Flemish artists, the shallowness of the carving being due not



ST. MICHAEL'S CHURCH.

FONT, ST. MICHAEL'S CHURCH.

so much to inability on the part of the worker as to the hardness of the material. The whole font is untouched except for the small angle shafts of the base, which replace the original ones.

Of monastic and semi-ecclesiastical institutions Southampton *has had* a large share; but for the most part these buildings are no more, and even the actual location of some of them is in dispute. But those of which a vestige remains a few words may be added. St. Denys Priory (Augustines) was founded in 1124, and does not seem to have been famous for the good behaviour of its monks, for the records preserve a set of rules drawn up on account of the prevailing dissoluteness, which would hardly be considered necessary in the most depraved of modern communities. It was duly suppressed under Henry VIII., and the property passed through various hands and suffered various acts of vandalism until, in the beginning of last century, all that remained was pulled down, except a fragment of Early English walling pierced with a single lancet window and the relics of a doorway, which stands isolated and forgotten in a field by the river. A convent of Friars Minor (Franciscans) also existed within the walls, but the only trace of the fraternity now remaining is a fragment of a conduit head a mile from the old town dating back to about 1300.

The Hospital of St. Julian, or God's House, which gave its name to the south-east tower on the walls, has rather more to show of its former extent; but, although it was built in 1195, the

TUDOR HOUSE.

portions which remain—now the French Church and a gateway leading thereto under a tower—show a mixture of transitional Norman and Perpendicular details, and are of no particular interest.

One house of all that must have enriched such a thriving city alone stands to-day as evidence of former greatness—Tudor House, in St. Michael's Square, a very fine and rich example of half-timbered construction. Nothing is known concerning it, but as Henry VIII. was a frequent visitor to the town, popular tradition has invented a legend that Anne Boleyn resided there, and it has a considerable romantic interest for those who can swallow myths which are not in any way supported by documentary evidence.

ROBERT W. CARDEN.

Forms of the Tuscan Arch.

IN the domestic and civic architecture of Italy during the twelfth and thirteenth centuries, we find arches of which our illustrations should enable the reader to typify for himself the most frequent and characteristic forms. They are constructed of massive masonry. The intrados is generally semicircular, though it becomes slightly pointed in some of the later examples. The extrados varies extremely, but its varieties may be reduced to one or other of three dominant types. In the first of these it is a portion of a circle struck from a higher centre than that of the intrados, so that a greater or less "horseshoeing" is perceptible at the base of the arch.* In the second the extrados is composite and rises above the intrados in the graceful form of a Gothic arch. In the third this effect of height is greatly increased by a device borrowed from the first type, and the extrados becomes what would be called in Italian an *arco composto sorpassato*, where the forms of the Gothic and horseshoe arches are seen in combination.† We may be allowed to regret that this arch has not received more attention in modern architectural practice: it is undoubtedly a form capable of very noble use and development.

Taking the second of these types as the most frequent, normal, and characteristic, we are now concerned to note that closer examination shows it for something much more subtle and remarkable than it would seem at first sight. Here is no mere Gothic form given to the extrados of what is substantially and structurally a round-headed arch. The voussoirs which compose it are, at least in many cases, so cut that the twin forms of extrados and intrados in this doubly composite arch are the just and beautiful result of its inward structure. The principle of the semicircular intrados makes itself felt in the upper voussoirs whose joints lie along the radii of that curve. But the lower voussoirs on each side answer to the extrados, as their joints radiate from two centres which lie near the opposite corners of the base. Thus this interesting arch is partially Gothic, not only by the form given to its extrados, but in the principle of its construction, and may be held for a composite form of a very deep and remarkable kind. As to its distribution that is wide enough. A stroll along the narrower and more ancient streets of almost any Tuscan town will bring the student face to face with unnumbered examples, and the same may be said of Umbria, where Perugia and Assisi are peculiarly rich in material for these studies. A remarkable, if not unique, variant may be cited from the Bigallo at Florence. Here the small door has in its head an arch whose extrados and intrados are both pointed, while, however, the joints of the voussoirs radiate from a single normal centre. This example then is essentially Romanesque, though its outward form has become completely Gothic. Of uncertain date,* it should be particularly noted as furnishing the final link in the chain of these successive and varied forms of arch construction.

The best point of departure for the study of such arches will be found in certain church doors of Lucca and its neighbourhood. To mention no others, the façades of San Frediano and Sta Maria Forisportam in that city, and a remarkable door or window raised many feet from the ground in the north face of the campanile at Diecimo (valley of the Serchio)† show plainly the primitive way of building by which in early times their architects sought to gain a certain desired effect

* An example given may be seen in the village of Monsummano Alto, Tuscany, which has hardly been inhabited since the plague of 1348.

† The illustration of this form is taken from an ancient arch at No. 1, Por Santa Maria, Florence. It is a rare example of double-pointing in early times.

* This door is plainly part of an older building—perhaps of the famous Guardamorto—which has been saved and incorporated with the Bigallo.

† Similar door or window arches may be seen in the town of Lucca itself by those who have not time to travel further afield. They will be found in the south face of the Campanile of San Frediano; the east face of the Campanile of the Duomo, and a civil example, though but ill-preserved, may be traced on the north face of an ancient tower at the corner of the Piazza del Salvatore and the Via Calderia.

TYPICAL TUSCAN ARCH—POR S. MARIA, FLORENCE.

of height in such constructions. The door-jambs were treated as flat pilasters with projecting and sometimes richly floriated capitals. Over these was laid a deep and massive lintel, and it is this which, with its elaborate and deeply-cut foliage or figure subjects, forms such a strongly-marked feature in the ancient architecture of Lucca. Over this again the pilasters were repeated in a stunted form and with capitals less boldly marked, and from these, at last, sprang the simple round-headed arch which it had been the architect's purpose in all this storied underbuilding to carry as high as possible above the headway of the door. Here then we have a reason for the depth given to the great lintel stone, and for the presence of the smaller pair of pilasters which rested on it, while the remarkable sculpture generally found on the lintel and the mouldings, if no more, which served as capitals to the final pilasters was no doubt designed to reduce, if not remove, the somewhat clumsy effect of what was in fact a double stilting of the arch.

The Diecimo door* shows us the same arrangement of parts, but in the simplest form, and stripped of all adventitious ornament, and it is particularly useful as helping us to see clearly the connection of the Lucchese door-heads with the composite arches of Tuscany. Imagine that the doorway of S. Maria Forisportam has been chiselled to the absolute level of the wall-face, and you have a result exactly like what may be seen at Diecimo. In the latter example the jambs have lost their capitals, except at the angles of the doorway, where the simple brackets which still remain to support the lintel may certainly be held for a survival of them at the two precise points to which the reducing process we have supposed could not reach. Now such brackets under the lintel are a well-known feature in the older Tuscan doors—Florence has many examples of this arrangement—and it is therefore interesting to find at Lucca the fuller form of which they are the incomplete survival.

Nor is this all that may be learned at Diecimo. The severe plainness of construction seen here is carried out with consistence even in the door-head, where the simple Romanesque arch has neither carving about its extrados nor mouldings to mark where it springs. Thus nothing is left to mask the real nature of its building, and both the lintel

* This cannot easily be photographed, hence we have substituted for it in the illustrations a door of the same type which is found in the west face of the Torre delle Ore, Lucca, and will serve the purpose of this study equally well.

DOOR OF BIGALLO—FLORENCE.

NORTH DOOR—S. M. FORISPORTAM, LUCCA.

and what it immediately supports are seen for what they truly are: a stilting in two stages, meant to give height to the round-headed arch above.

Now just as the brackets of this door have helped us to understand those commonly found in such situations throughout Tuscany, so does the upper part of the same example throw light on what we are chiefly concerned with here: the varied forms of arch used in the Tuscan door-heads. Judged and interpreted by what is found at Diecimo, these horseshoe and Gothic forms, in all their varied combinations with the Romanesque arch and with each other, are nothing but attempts successively made to gain, with a new grace unknown to the older style, the same effect of height and proportion once sought in the studied stilting of a simple round-headed arch. That the new expedients were successful is seen in the fact that the builders who employed them were able almost at once to dispense with the help of that lavish ornament which their predecessors had so freely used to mask or relieve the clumsiness of the plan on which they worked.

Such a view of the matter may easily be confirmed by greater and more striking instances of what is essentially the same practice. At Pisa, for example, the Cathedral has Romanesque arches in the central nave, but in the aisles both arches and vaulting become pointed, and for a very obvious reason. The aisles are double, and the columns which divide them being a good deal shorter than those of the nave, it became a difficult matter to contrive arches and vaulting in the aisles which should combine well with those built to support the clerestory. Now the problem was solved not by stilting, but by introducing Gothic arches in the aisle arcades, and so carrying these up to a point where vaulting common to both might easily connect them with the round arches of the nave.*

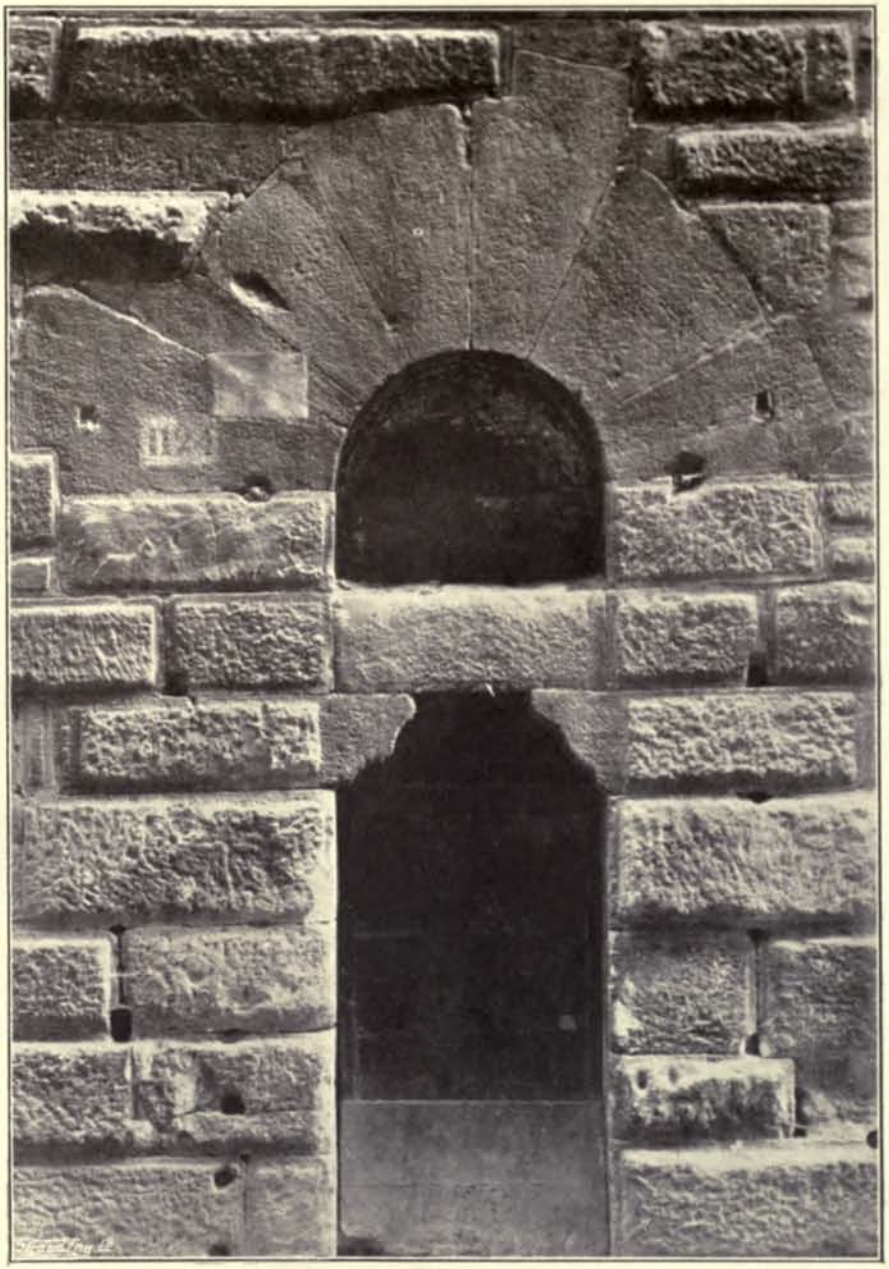
Or take the case of the horseshoe arch. When at Lucca, in the opening years of the thirteenth century, a new porch was ordered at San Martino, the architect found his limits strictly defined by the projection of the Campanile on the south and the line of the Church wall on the north, while yet the arches he was to build must be made to fall opposite the three doors in the façade. The arch next the Campanile had perforce to be made smaller than the other two, and the architect, wishing in spite of this difficulty to gain something like a just proportion, or rather to mask as far as possible the want of it, has given this smaller arch more than something of a horseshoe shape as the most graceful form of stilting which he knew or could contrive.*

A very singular example of the horseshoe arch is to be seen at Florence, which not only confirms the conclusion we have already reached, but shows considerable connection with the Lucchese stiltings already noticed. The lower part of the façade of San Stefano of Florence has fortunately been left in its primitive state: it is commonly held for work of the twelfth century. The main door is set in a flat frame of black and white marbles laid in alternate horizontal bands. These become vertical wedges in the lintel, which is built in the form of a level arch. Above this rises a slightly-pointed arch to form the door-head. That is, the extrados is slightly pointed over a semicircular intrados, and the peculiarity here is that the intrados so combines with the slanting lines of the lintel voussoirs as to be in them prolonged downwards through the lintel in the form of a horseshoe. So far, studying the intrados alone, we see that this result might be simply an accidental form unintentionally evolved in the course of construction. But when we pass to the extrados it is plain that what we have found here was a studied effect of art. The door-head arch is outlined by a shallow three-line moulding about the extrados. Now these lines are carried onwards and downwards through the depth of the lintel at the same inclination till a short horizontal return brings them to meet the corners of the doorway. Thus the horseshoe form stands out here as a clear intention of the builder. By a strange coincidence the iron-plated door below bears an actual horseshoe nailed upon it: the same which one story connects with the visit of Charlemagne to Florence in the opening years of the ninth century, and another with the death of Buondelmonte at the beginning of the thirteenth. For us it is enough to remember how we have found the lintel and horseshoe arch important elements in the stilting of door-heads at Lucca, and to notice that here at San Stefano of Florence these are singularly combined to serve the same purpose.

Before leaving San Stefano it may be well to notice another detail, which confirms in a remarkable way the view we are about to take of the real nature and history of the horseshoe arch. That it was invented as a peculiarly happy and ornamental mode of stilting the Romanesque arch, may be proved from the classic mode of its construction. In Spain, where, as is well known, this arch attained extraordinary development under

* Another and probably earlier example of the pointed arch, apparently used from mere delight in its form, may be found in San Paolo a Ripa d'Arno. It was evidently well known to the early Pisan builders.

* Other examples of the horseshoe arch at Lucca may be seen in the Annunziata Gate and—very remarkably—in the west face of the Campanile of San Pietro Somaldi. These, however, like the pointed arches of San Paolo at Pisa, would seem to have been built for no other reason than that of fashion or delight in the form for its beauty's sake.

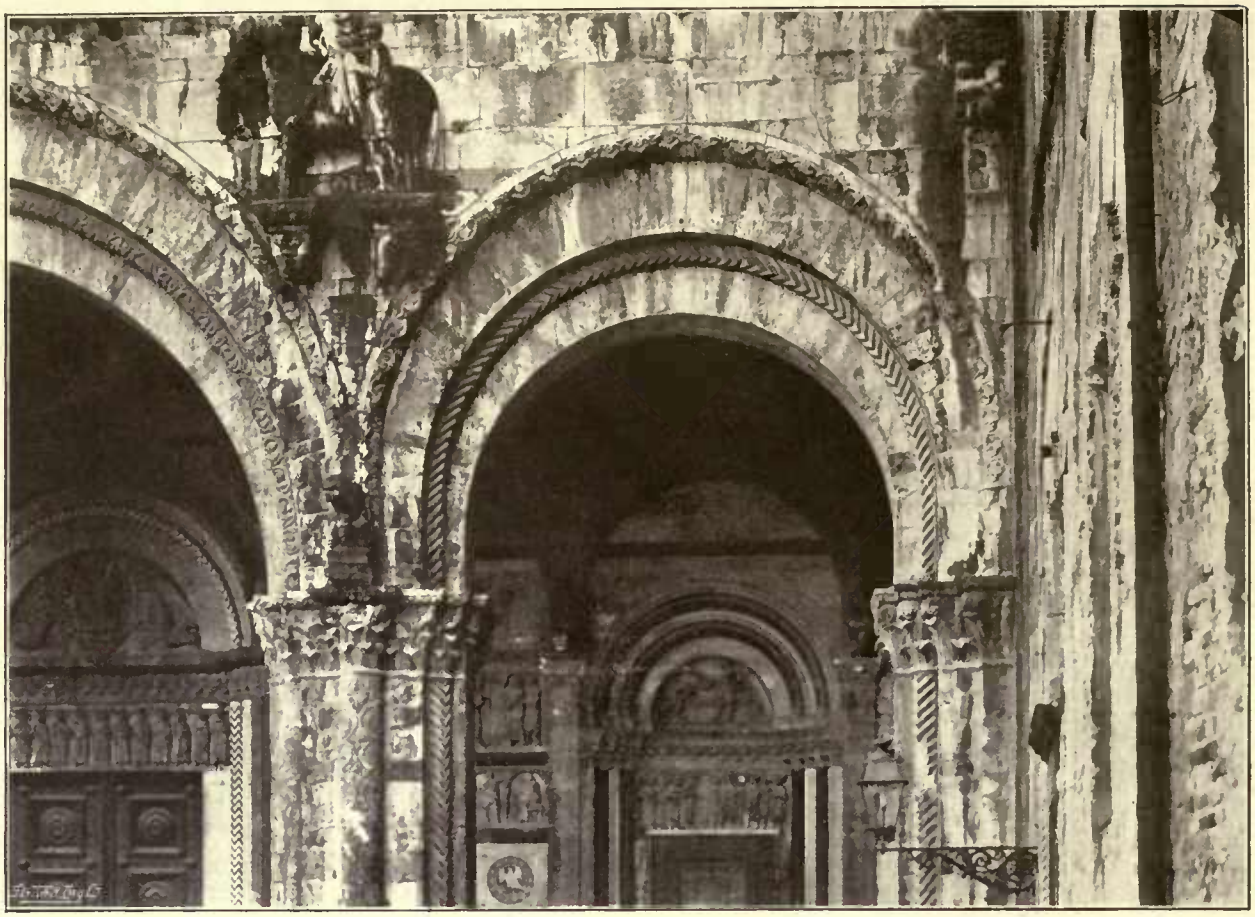


DOOR OF TORRE DELLE ORE—LUCCA.

the Moors, only the upper part of the horseshoe —barely half the curve—was built as a true arch, that is, with radiating voussoirs. The rest, and in it all that is most characteristic of this beautiful form, was composed of stones or bricks laid level in the usual courses of the wall, but allowed to project more and more and dressed to the curve desired. Now this very form of construction may be seen at San Stefano. The intrados of the horseshoe, as we have noted already, needs and has no more than the inevitable lines of the lintel voussoirs for its definition. But the course of the moulding which prolongs the extrados and passes down through the lintel, cuts across the joints of stones laid horizontally and dressed at the ends to meet the angle of the first voussoir of the lintel on each side. Thus here, as in the classic Spanish examples of this arch,* the horseshoe proclaims itself by its internal construction for what indeed it is; the most striking form ever given to the supports of a stilted arch.

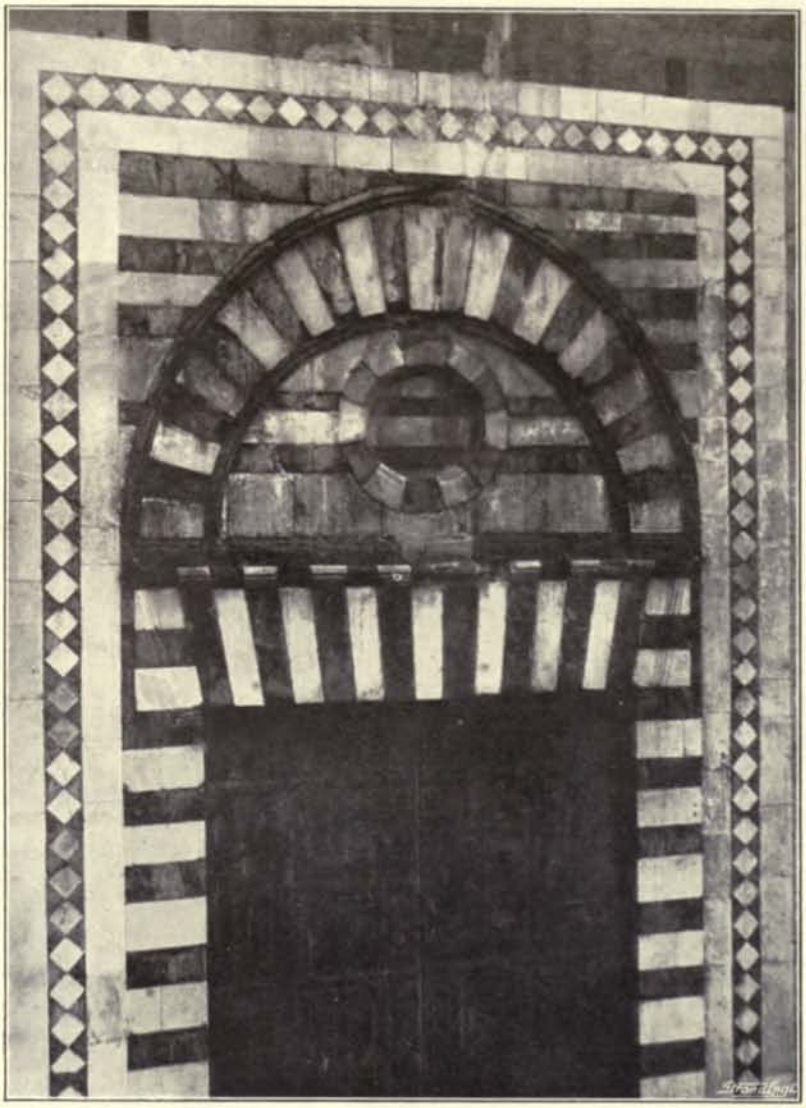
Much that we have already noticed is now of service, if we choose to inquire whence it was that the Italians derived the arch forms which they used with such subtlety and effect. Not only the horseshoe arch at San Stefano, but the whole character of that doorway with its surrounding ornament is oriental, and that to such a degree as to suggest at once an influence of the

* Such as the Moorish gateway at Burgos, the Puerta de Justicia of the Alhambra, and the Puerta del Sol, Toledo, to mention only a few well-known cases.



SOUTH FAÇADE ARCH—SAN MARTINO, LUCCA.

EXTERNAL ARCH—PORTA DELL' ANNUNZIATA, LUCCA.



WEST DOOR—S. STEFANO, FLORENCE.

Saracenic architecture upon the Italian. And this idea is confirmed when we remember the geographical position of Pisa and Lucca, where the forms of the pointed and the horseshoe arch undoubtedly prevailed from early times. May it not well have been that like the silk and dyestuffs of the Levant these new and charming forms of arch here first reached Italian soil, and hence spread through the breadth of Tuscany, affecting Umbria on the south, and on the north even crossing the Apennines to Modena, where there is still a distinct trace of their early influence.* Thus our view would be, that so introduced, these forms of arch became early known over a considerable part of Italy, and were soon combined with the native Romanesque so as to result in the subtle and remarkable arches which we set out by describing.

Yet the matter is not quite so simple as this, and an enquiry into origins, however brief, would be faulty did it take no account of other facts pointing to a further and perhaps the ultimate source of at least one if not both of the forms in question. In the Baptistery of Venice is to be seen a carved slab of marble, which came from the early church built on that site in the first half of the ninth century. The carving betrays, as we should expect, a Greek chisel, yet on one face of the slab stands, clear and unmistakable, above a pair of columns with Byzantine basketwork capitals, the characteristic form of the horseshoe arch.* If then, by way of Pisa and Lucca, Tuscany and Umbria at large received from the Saracens elements of design which profoundly influenced their native practice, we are yet to look to Byzantium as the place where in all probability

* In the façade of the Duomo where we find a remarkable arcade of horseshoe arches.

* This slab has been figured and described by Cattaneo, "L'Architettura in Italia," Venice, Ongania, 1888, p. 250.

CAMPANILE ARCH, S. PIERO SOMALDI, LUCCA.

these forms were first tried since the Christian era and on European soil.

Think of the peculiar character of Byzantium in this connection: for, indeed, if architecture be the unconscious expression of an age's mind, this can by no means be left out of account. The capital of the Eastern Empire was founded to be a better and grander Rome. To surpass the glories of the West was the daily dream of those who lived by the Bosphorus. And surely, inevitably, this desire to surmount and surpass found its lasting expression in a new style of architecture—the Byzantine—when at last the serene height and beauty of St. Sophia's dome spread above supporting arches, whose form was still that of Rome. The triumph of the new style was not won in a day, however, nor reached without many an experiment, in which the builders of Byzantium strove for increased height in their arches before fixing on a dominant cupola as the best expression of their mind and the nation's spirit. In Greece hard by, the tombs of prehistoric kings might have furnished them with the form, if not the true structure of the pointed arch, while our Venetian example shows that Byzantium knew, perhaps from Asiatic teachers, the effect to be gained by stilting in the form of a horseshoe the round-headed arch of Rome. Such devices, then, we may believe Byzantine builders had tried and had discarded. They do not enter into the substance of that style, which gains its effect of height rather by multiplying arcades one over the other to crown the whole at last with a wondrous dome. But though discarded at Byzantium, these forms were not forgotten nor lost, and at last, in the outskirts of that vast empire and by the banks of Nile, they had their renaissance, and came to their kingdom.

The Copts who served the followers of Mohammed, untrained yet in the arts, as the architects of their first mosques were under the influence of Byzantium, and in their work done for the new

conquerors appear for the first time in clear relief along with the Byzantine dome, the twin forms of the pointed and horseshoe arch. Well suited to a style which, while availing itself to the utmost of the profusion of marble columns which every ancient site afforded, aimed above all at an effect of lightness and height, these arches rose along the African coast far as the victorious Saracen pressed, till in Spain the horseshoe had the final advantage, and became in Moorish hands the characteristic note of a style not to be surpassed for dainty elegance. But all this may surely be regarded as but the subtle elaboration brought at last by Arabian minds to themes borrowed from Greek, and perhaps ultimately from Indian sources.

Much there is which must always remain difficult and obscure in every attempt to trace the ultimate origin of these architectural forms; but their nearer history grows increasingly clear, and the part which Italy played in their extension and development is plain enough. If Spain in her Moorish provinces may claim the perfection of the horseshoe arch and of the style which was founded upon it, France has undoubtedly the credit of first working out the possibilities of the pointed style, and by the banks of the Seine began what is generally called Gothic architecture. Yet Italy, as a natural consequence of her situation in regard to the nearer East, had the advantage of receiving these forms in their first and most direct importation. Her builders played with them out of sheer delight in their novel beauty, as in the south door-head of the façade of San Paolo at Pisa (pointed), or the campanile arch of San Piero Somaldi at Lucca (horseshoe); they used them as convenient ways of overcoming constructive difficulties as in the aisles of Pisa Cathedral or the porch of San Martino at Lucca; finally, in their hands these twin arch forms subtly combined and varied became the prevalent Tuscan fashion for the extrados of window and door-heads. At Siena, where perhaps this style reached its acme, and where, therefore, the chances of further development were greatest, at least one church remains to form an indubitable link between the extremes we have been considering. Built during the twelfth century in the pointed style, it recalls on the one hand the Mosque of Fostat, and on the other carries us on to the developments of the pointed arch which took place on French soil. So near did Italy come to the glories of the Gothic style.

The reason why Italian architecture held a merely intermediate and subordinate place in the development of the pointed arch is plainly to be seen in almost all the examples we have noticed in this paper. When the forms of the pointed or the horseshoe arch reached Italy they were used by the Italians either out of mere delight in their ornamental effect or in their strict subservience to the round arches of the native Romanesque. Never does it seem to have entered Italian minds, unless for a brief moment at Siena, that the fundamental form of an arch could be other than the semicircle. Pointed as a leaf above, or bent to a horseshoe shape below, the line of the extrados during all these centuries was a thing to be played with at will, while still, beneath, the intrados stood fast in the stubborn form and force of ancient Roman building. Even when, dazzled for a little by the imported glories of Milan and Assisi, Italian builders yielded so far as to dream a brief Gothic of their own, the style was in decadence almost as soon as born, and carried in itself clear signs of the coming age. The door-head of the Florentine Bigallo, altogether pointed in form, is still by the lines of its voussoirs structurally Romanesque, and precious, therefore, as showing the last stronghold of the semicircular arch which expands hard by in the Loggia, where Orgagna (if indeed he built it) was bold to discard the cusped ornaments of his tabernacle in Or San Michele, and let his work stand free in the strength of the coming Renaissance. Roman, Romanesque, and Renaissance: these are the three "R's" of Italian architecture.

J. Wood Brown.

Current Architecture.

House at Wendover.—This house has just been built for Sir Thomas Barlow, Bart. It stands in a bend of the downs, the entrance front looking north over the Aylesbury plain. The piers and railings (shown in the view of this side) will be connected with the house by yew hedges when the laying out of the grounds is completed. The south front will overlook a formal flower garden, backed by low hills. The house is built of local red brick and flints, the stonework being Doulting stone. The roof is tiled. Both bricks and tiles vary in colour, and are mingled at hazard, with the object of keeping the house as quiet in tone as possible, the site being bare of trees.

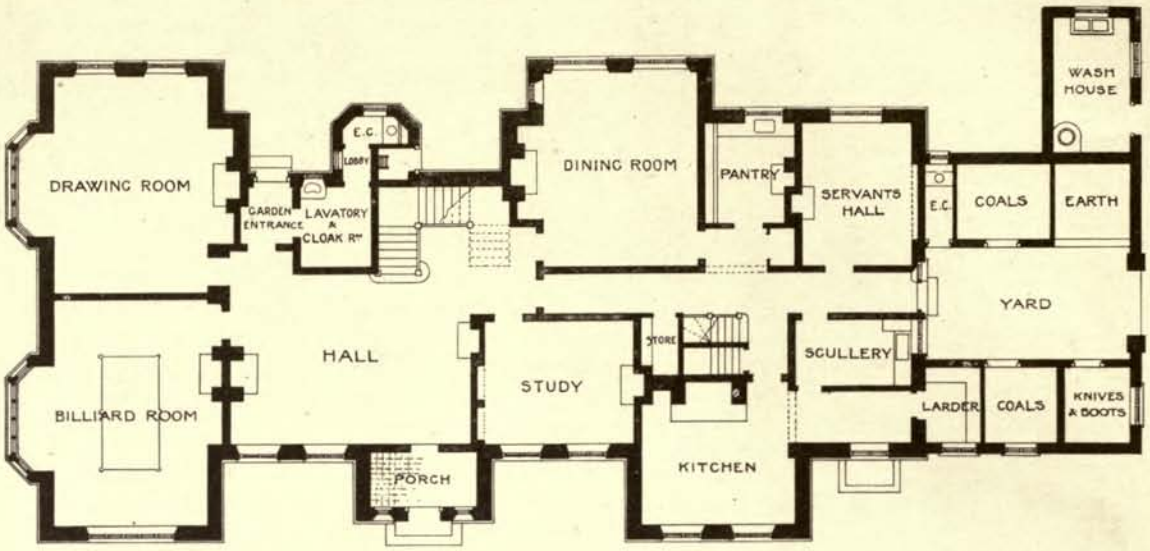
The architects are Messrs. Marshall and Vickers; the builders, Messrs. Webster and Cannon, of Aylesbury.

Photo: Bedford, Lemere & Co.

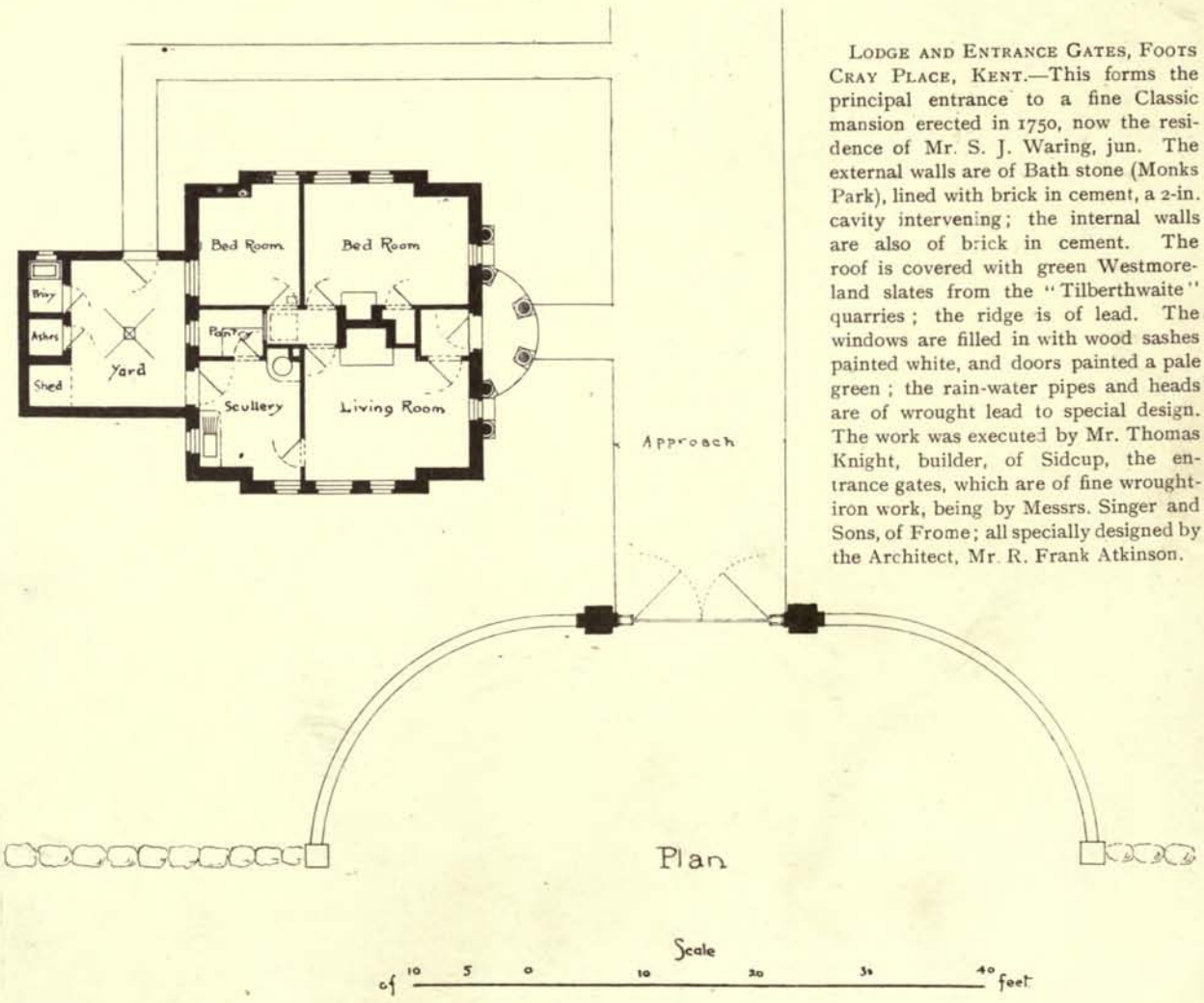
HOUSE AT WENDOVER, BUCKS. ENTRANCE FRONT.
MARSHALL AND VICKERS, ARCHITECTS.

Photo: Bedford Lemere and Co.

HOUSE AT WENDOVER, BUCKS. GARDEN FRONT.
MARSHALL AND VICKERS, ARCHITECTS.



HOUSE AT WENDOVER, BUCKS.
MARSHALL AND VICKERS, ARCHITECTS.



LODGE AND ENTRANCE GATES, FOOTS CRAY PLACE, KENT.—This forms the principal entrance to a fine Classic mansion erected in 1750, now the residence of Mr. S. J. Waring, jun. The external walls are of Bath stone (Monks Park), lined with brick in cement, a 2-in. cavity intervening; the internal walls are also of brick in cement. The roof is covered with green Westmoreland slates from the "Tilberthwaite" quarries; the ridge is of lead. The windows are filled in with wood sashes painted white, and doors painted a pale green; the rain-water pipes and heads are of wrought lead to special design. The work was executed by Mr. Thomas Knight, builder, of Sidcup, the entrance gates, which are of fine wrought-iron work, being by Messrs. Singer and Sons, of Frome; all specially designed by the Architect, Mr. R. Frank Atkinson.

PLAN OF LODGE AND ENTRANCE GATES, FOOTS CRAY PLACE, KENT.
R. FRANK ATKINSON, ARCHITECT.

Photo: Bedford Lemere & Co.

LODGE AND ENTRANCE GATES, FOOTSCRAY PLACE, KENT.
R. FRANK ATKINSON, ARCHITECT.

Books.

THE DICTIONARY OF ARCHITECTURE.

"A Dictionary of Architecture and Building; Biographical, Historical, and Descriptive." Edited by Russell Sturgis, A.M., Ph. D. In 3 Vols., price 25s. each net. London: Macmillan & Co., Limited.

THE "Dictionary of Architecture and Building," which Mr. Russell Sturgis and his fellow-workers have produced, is an unusually interesting and complete book of reference. The articles cover a very wide range, and the most important are written by men whose names are a guarantee of historical accuracy. The administrative aspect of the "business" of modern architecture has but an ephemeral interest, and might perhaps with advantage have been presented in a more condensed form. The only English work of the kind, "The Dictionary of Architecture," compiled by the Architectural Publication Society, has the disadvantage of being in six large volumes, and is not so well arranged for reference; its information on many subjects is moreover already a little antiquated. The aim of the new Dictionary is to be not only extremely handy and thoroughly up to date, but by means of "alphabetical arrangement carried to minute sub-division and cross-references in abundance" to make it easy for the student to obtain an outline of a subject, and also to compile a list of most of the works bearing on it.

Mr. Russell Sturgis and Mr. Robert Gibson deal respectively with the architect in America and England. These articles are concerned mainly with his training and functions as a "professional man"; we gather that in America he is nowadays "primarily the fiduciary agent whose business it is to administer the funds committed to his charge." In England he appears still to cherish the rags of tradition, and to attempt to "engraft upon the outgrowth of the living world as much as he can of a past archæological flora, even at the sacrifice of some of the more modern tendencies." These generalisations may perhaps be considered more as representing to some extent the popular view than as a statement of facts. There is, as we know, a great deal of modern American work which proves that in reality the American architect takes his art seriously, and is as little disposed, as are English architects, to fill the rôle of entrepreneur. Indeed, Mr. Montgomery Schuyler, writing in a later article on the architecture of the United States, emphasises this point, and in criticising the modern country house claims that the American architect, by giving to material and methods of construction an appropriate architectural expression, has really developed a vernacular type "which, being of no style, yet has style." He even sees great possibilities in the "tall building," the qualities of which our insular minds have been slow to recognise, when the problems of construction are carried by serious architects beyond the point which now satisfies the "practitioners."

It appears, from Mr. Sturgis's article on bricklaying, that "trade customs" are not unknown in America. There is, for example, an amusing little lament that the bricklayer's "custom" is to use the minimum of mortar, and this is defended on the grounds that unless there are interstices to allow the water to trickle away, the internal face will be affected! The "custom" is not wholly confined to America, but the slower wit of the English workman could never have invented so ingenious a defence.

The architecture of Asia Minor from the fifth century, B.C., to the end of the twelfth century, A.D., is dealt with in an interesting article by Mr. Phenè Spiers, who contributes also most valuable accounts of Imperial Roman, Persian, and Syrian work.

The origin, characteristics and history of Byzantine architecture are very ably treated by Professor Hamlin, who presents the subject clearly and concisely. He considers that the chief distinction of Byzantine architecture is "the revolution in structural design brought about by the invention of the dome on pendentives, and Sancta Sophia, its greatest achievement, as one of the really great buildings of the world." Owing, however, to the fact that the Eastern Empire declined before the culmination of the arts, it never carried the early principles of construction to their logical conclusion. Professor Hamlin also contributes other important articles on Indian, Moslem, and Scottish architecture.

Under the heading "Church" is given a useful list of the principal churches in Europe, with approximate dates of foundation, notable additions or re-building.

Mr. Lethaby, in his extremely suggestive article on modern design, lays down as a fundamental principle "the expressive use of materials for the satisfaction of worthy needs," and insists that old monuments should be studied as essays in practical building with a view to estimating the value of their structural methods for the needs and materials of to-day. We have been so much accustomed to study architecture from the archæological point of view and to its presentation as an art of tabulated styles, that we have almost forgotten that its history is really a record of the struggles with problems of construction. The expression of the true constructional functions of columns, arches, vaults, domes, has inevitably shaped the building and confined the design or intention of their builders within the limits of this expression. It must not, however, be inferred that Mr. Lethaby is suggesting a retrograde movement, and advocating a primitive and rudimentary architecture, ignoring all that has gone before; he very truly observes that "Within the phenomena of the architectural styles there are certain large principles common to all vital periods, and it is these principles which will still form the positive conditions of modern architecture." And "he who at this time knows best what the constant spirit of past art has been knows best what its future may be."

To see ourselves as others see us is always instructive, and when that view is in the main so sympathetic as Mr. Clipston Sturgis's, there is little to cavil

at. His article on English architecture is a most able one. One gathers that the essentially English character of our national Gothic appeals strongly to his imagination, while that of France he considers a more logical, scientific, and complete art. He argues that the aims of the English cathedral builders and those of the French were different. He writes, "The first impetus of Gothic came as did that of Romanesque from across the Channel" (from Normandy, a country which he describes as "quite as much English as it was French"), "but like its Norman predecessor, it took on a distinct impress and character at the hands of the English. They showed no more enthusiasm over problems of vaulting than they had over the dome," and further, "in all the architectural history of England one must be impressed by the fact that architecture, as a science, was not practised in England, but that, as an art, it called forth the best energies of the Nation," but "with the French, Gothic was a scientific building, and their superb abilities were directed, were concentrated on the achievement of the perfectly balanced vault." There is doubtless much truth in this view, but "art" and "science" would seem to be too sharply opposed. The English domestic work with "its sobriety, directness of purpose, its unambitious qualities, and its lack of pretentiousness," receives its full measure of praise, but he is not sparing in his condemnation of the "superb foolish and wholly un-English work of Vanbrugh and the men of the early eighteenth century," with its open colonnades entirely unsuited to the English climate and its wasteful and often embarrassing symmetry, in fact he does not hesitate to condemn Blenheim as "a superb example of folly seeking vainglorioously for fine effects, and neglecting wholly the fundamental aim of sound architecture." This wholesale condemnation of the English Renaissance work betrays a bias which, however natural, is a little out of place in a work of this kind. Of Inigo Jones and Wren he has little to say, but no record of architecture in England can be complete, which ignores the fine work of these masters, and lumps it with that of the amateurs and formalists who succeeded them; it had a most important influence, and set a type which was followed throughout the country, a type moreover which was definitely English. In his general summing up, Mr. Sturgis pays this flattering tribute to the national character of our architecture: "Notwithstanding shortcomings and faults, no country contains in itself a more precious architectural heritage than England; for, if it teaches no great lessons of art, it is yet instinct with all those qualities that have made England great, and every stone tells the history of a people who for all time have stood for freedom and justice, for honesty and uprightness." It seems a little ungracious in the face of such a testimonial to take exception to the opinion that our architecture teaches no great lessons in art. We are all probably agreed that the science of French Gothic was ahead of that of England, and experiment was indeed carried to the extreme verge of safety; but as an expressive building art English Gothic has certainly many lessons to teach. Mr. Clipstone Sturgis also contributes a short article on "English Romanesque."

Mr. W. P. P. Longfellow in his article on Greco-Roman Architecture, attempts the defence of the Romans against the charge of having tampered with the sanctity of the Greek orders; he does not deny the fact, but points out that the Romans were not artists in form as were the Greeks; they accepted "the orders" as their natural heritage, but could not be content with the limitations imposed by them; he considers, however, that the result fully justified the departure from strict tradition, and that Roman architecture is "a much greater intellectual achievement," "its problems were more complex and difficult, its conceptions grander, its combinations more inventive and interesting." Greek work was more limited in its range than Roman, but it is impossible to imagine anything more intellectual than its absolute purity and refined beauty. Having fixed upon the simple post and lintel treatment they were content to leave it at that, and lavish their best energies in a constant refining. They sought no fresh fields for the display of their building genius, attempted little that was complex. As Mr. Longfellow says, "The habit of cumulative design seems to have been foreign to the Greeks; of Roman architecture, as would appear, this was the strong side, and it is doubtful whether anything has surpassed the majesty of its great combinations." We need not defend the Romans for their vigour and want of delicate perception, nor apologize for the culture and refinement of the Greeks. The characters of both came out in their buildings, and it is quite natural to find them entirely different.

Professor Frothingham, jun., and Mr. S. Safford Fiske deal exhaustively with the architecture of Italy, and the fourteen articles treating respectively with Piedmont, Liguria, Lombardy, Venetia, Emilia, The Marches, Tuscany, Umbria, Latium, Abruzzi and Molise, Campania, Apulia, Basilicata, and Calabria review the work of each province historically and critically instead of dealing with the country as a whole. Italy is such a vast storehouse of art, and its phases of architecture are so many and various, that only by such an arrangement could any clear idea be given and the difficulty of overlapping be avoided.

Mr. Alexander Graham contributes a most useful article on the Architecture of North Africa, in which he says that notwithstanding the labours of many distinguished archæologists, "there cannot be said to be any continuous history of North Africa as recorded by its monuments." The remains of the great structural works in Carthage he attributes to the Greeks, and considers that the fine arts were not indigenous; and although the streets of the old city are still unexcavated, all claim to a native architecture may be dismissed.

Mr. Russell Sturgis wrestles with the thorny problem of "Restoration," and the early part of his article seems almost to be an apologia for the restorer; "it was," he says, "natural to remove from a church of the thirteenth century an organ loft which had been

put up in the 18th;" later on, however, we have the sounder doctrine that "Buildings should be stayed up, fastened together, held in place," but nothing more; "no modern work whatever shall be put upon them in the way of rebuilding, carving, painting, or the like." This is, of course, excellent so far as it goes, but if nothing is to be added to falsify the history of the building, neither must its record be mutilated by removal; his view that on the whole the restorations of the great French cathedrals has been judicious can hardly be endorsed; many are, or have been, suffering a deliberate process of scraping and reworking. This passion for neatness and newness is gradually but surely destroying their value. Chartres is assuming a jaunty and youthful air. The priceless glass is being taken out, washed, flattened, and re-leaded. Almost everywhere this ruthless "restoration" is going on, and in a few more years the glory of many a fine building will be no more than a memory.

"Truth in Architecture," Mr. Henry Rutgers Marshall defines as "The expression, in design, of the essential facts of the plan and structure." He then goes on to say that although "there is a great æsthetic value in certain expressions of constructional function, to claim that the expression of constructional function is necessarily æsthetic is certainly impossible, for, were this true, all scientific engineering would have architectural value, which manifestly is not the case." It is doubtful if anyone has seriously claimed this, and it is quite true, of course, that an engineering work of merely mathematical exactness may have little or no æsthetic value; but French engineers, at any rate, have added to this scientific exactness a certain grace, an almost Greek refinement and nice adjustment of parts, and have produced iron structures, which, although we may be shy of calling them architecture, have nevertheless a distinct beauty "after their kind," a beauty as different from that of a stone building, as both the material and its possibilities are different. The conclusion he arrives at is that "this constructional and practical worth may quite properly be subordinated to other elements which are incompatible with it, provided that the latter, without it, are capable of producing æsthetic results which with it would be impossible of achievement." This seems to mean that the constructional expression may be ignored if it happens to interfere with a preconceived "design." It is difficult to understand how a building can be æsthetically satisfying when the expression of its chief function is deliberately subordinated.

The book is very fully illustrated by a large number of excellent photographs and drawings; many of the latter are of English origin and of familiar aspect. By a curious oversight, Nesfield, whose book "Sketches from France and Italy," has been very largely drawn upon, and whose position as an architect of undisputed talent gives him a place among the "Immortals," receives no biographical notice, although scattered throughout the Dictionary are many short accounts of the life and work of men of less eminence. The articles, as a whole, are adequate, and many of them are of exceptional interest. Mr. Russell Sturgis has not only proved himself to be a most skilful and tactful editor, but has also contributed a great many useful and able articles, in addition to nine out of the ten devoted to the architecture of France; and he is to be congratulated on the completion of a work which contains much new matter, is excellently arranged, and is as complete on the scientific aspect of architecture, and the "professional practice" of to-day, as it is in everything dealing with its history.

ERNEST NEWTON.

FRA ANGELICO.

"Fra Angelico." By Langton Douglas. Second Edition, £2 2s. nett. London: George Bell and Sons.

ONE quiet Sunday afternoon in San Silvestro on Monte Cavallo, Michael Angelo was talking with his friends of religious painting, and he is reported to have said that "in order to imitate to some extent the venerated image of our Lord it is not sufficient merely to be a great master in painting, and very wise, but I think that it is necessary for the painter to be very good in his mode of life, or even, if that were possible, a saint, so that the Holy Spirit may inspire his intellect." We are persuaded that the great master had the Blessed Fra Angelico in his mind when he spoke these words, for the saying is true of him in both kinds—the master of San Marco was as good a painter as he was a monk; and we welcome this new edition of the Monograph by Mr. Langton Douglas because he says so; as far as we know, he is the first who has said so, plainly, since the time of Giorgio Vasari. Mr. Langton Douglas would not have us forget the judgment of the delightful biographer, for he quotes the words we are thinking of at the very beginning of the introduction: "Fra Giovanni Angelico da Fiesole . . . was no less pre-eminent as a painter and miniaturist than as a religious." Mr. Langton Douglas makes an excellent remark at the end of Note 3, pp. 89, 90: "Critics and commentators are too ready to conclude that they have convicted Vasari of inaccuracy." We should like to see this sentiment expressed under the middle paragraph of page 3, "And if a rich afterglow affected the imaginations of those Dominicans who in the succeeding age drew Fra Angelico's portrait, surely the colour that the picture thus gained would lose nothing at the hands of Giorgio Vasari! He was too fine a literary artist to spoil a beautiful story at the bidding of historical truth." We do not believe a bit of it. Vasari never darkened counsel with words: he told us plainly what he thought and what the gossips of the Florentine workshops thought, in all singleness of heart; mistakes he made, but they were due to slips of memory, to wrong information and to lack of time, for unfortunately he was very busy over his architecture and painting; let us not slander him by calling him a "literary artist" if that means saying

what he knew to be untrue. For our part we can believe all he tells us about Fra Angelico, down to the prayers he uttered whenever he took brush in hand. Surely many an artist to-day (not only the very saintly) must pray in secret for power to overcome the difficulties of his craft. We remember to have heard hurried cries for help out of the wrestle before their canvases, both to heaven, and—alas! that we must say it—to another place as well.

Mr. Langton Douglas guides us with devoted care through the long development of his hero as the artist adds grace to grace culled from Nature and the antique, beginning with the miniature-like painting of his early period, of which the Coronation of the Blessed Virgin Mary (No. 1,290) in the Uffizi is perhaps the finest example; and ending with the great histories of Saints Stephen and Laurence on the walls of the Chapel of Nicolas V. in the Vatican. No greater stride was ever made by any artist! Fra Angelico seems to have been developing to the very end of his long life, and to have died, a growing boy, at the age of sixty-eight. We are always astonished when we see the date of his birth—1387. Chronologically he was the very first of the great revivalists of the quattro-cento, and, as Mr. Langton Douglas points out, he led the van of reform, but with such a gentle spirit that the critics have often classed him as the last of the Giottesques. His reverent nature would not throw down all tradition at a blow, but choosing the best, especially in technique, he infused new life into worn-out formula. Let any artist make a drawing of one of the heads of the saints from the Perugia altar-piece, and he will at once be convinced of the true mastery of Fra Angelico, his subtle drawing and modelling, and above all his broad containing line. He was never a very powerful draughtsman, but for subtle line and character in young heads he holds his own with all later artists; among the latest an interesting comparison lies with the young Legros, in his religious works. Even the fine touch of Lorenzo de Credi ruined Fra Angelico's altar-pieces at San Domenico.

One misapprehension we must notice in the description of the Last Judgment, in the Academy, on page 51. The angels are said to be dancing "hand-in-hand" in the blessed fields full of flowers, whereas they are dancing hand-in-hand with mortals who have put on immortality, blessed souls clothed in bright raiment and crowned with wreaths of roses, white and red, one soul between every two angels. The angels may be known by their wings and heavenly halos. The ceremony appears to be that each soul shall be individually welcomed to the celestial fields by his guardian angel (we like to think); his angel leads him as partner to the "Ballo dei angeli," and on completing the round escorts him through rays of light to the Celestial City, the only exception being two souls of monks, a Dominican and a Franciscan (Saint Dominic and Saint Francis), who walk together in holy converse along the pleasant paths of Paradise. All this agrees even more closely with the glorious rondel, may we call it, of Jacopone da Todi, which is rightly quoted in full, and might be printed in golden letters:—

"In quella rota vanno i santi
Et li angiol' tutti quanti—"

One other point we think Mr. Langton Douglas does not allude to, but it may be that his greater knowledge of the Giottesques silences him. We believe Fra Angelico was the first to illuminate heaven from the Source of all light. The light in his picture of the Risen Christ surrounded by His Saints (No. 663), in the National Gallery, radiates from the figure of Christ, the saints and angels on His right are lit from the right, those on His left from the left; and so also in the Coronation of the Blessed Virgin Mary (No. 1,290) in the Uffizi, the rays of light follow the engraved lines of the glory behind the Christ. As a rule Fra Angelico insists upon the Giottesque principle of lighting his wall-paintings from the light of the building in which they are painted to a most realistic extreme, as, for instance, in the very long cast shadows to the capitals of the pilasters in the picture of the Madonna of the Corridor in San Marco, where the faces too are lit with a raking light, anything but becoming, as if they were really standing there illuminated by the distant window at the end of the corridor. The good Frate was, however, in a difficulty when he painted the great Transfiguration in one of the cells near by. Here the supernatural personages are lit from the direction of the natural light, the window of the cell, and so are the three Apostles at the foot; the Saint Peter comes aright, for he is beyond the Christ, and the lighting does not contradict the glory of the Transfiguration; Saint John, however, is between the Christ and the window of the cell, but his face receives a strong reflected light from the glory.

All the wonderful light effects in these paintings in San Marco are produced by the simplest means, the Crucifixion in the Corridor, for instance, is painted with the fewest possible colours; the light grey plaster ground forms the greater part of the sky, landscape and middle tint of the light part of the robe of Saint Dominic, the shadows are lightly drawn in brown and the high lights put on with fine strokes of white, making as solid a monk as we could wish. The portraits of Saint Dominic at the foot of the Cross, so often repeated, are all different; can it be that they are portraits of the monks occupying the cells in the painter's time?

The Frate's naturalistic treatment of the naked human figure is religious in its exactitude, down to the very hair growing on the body, which is drawn and copied from nature hair by hair with a decorative devotion to truth, even in these pictures of the Crucified Saviour. Another instance of naturalism is the way the grain of the wood is differentiated in the crosses, and especially in the ladder used at the Deposition, in the Academy; the rungs are of a different wood to the uprights; the nails, too, in this picture are silvered to make them more real. The painting of the saints and angels in the frame of this picture is so beautiful that it may be compared to the painting of

the flowers in the frame of the Gentile da Fabriano opposite, but the Fra Angelico is as light as the Gentile is dark.

To date a picture from the architecture represented in it would, we fancy, be rather a dangerous expedient, but we confess it appears to lead to just conclusions in this instance. It is so easy for a painter to try fantastic experiments with bricks and mortar that he may sometimes record ideas of architecture before they were put into solid form, especially when architect and painter were the same person, as was often the case. We seem to remember classical details and even "obtuse-angled pediments" in Giotto, and pinnacles surmounted by classical statues.

We think it was unnecessary for Mr. Langton Douglas to depreciate the Florentine School "from Uccello to Michael Angelo," as he does in his "Conclusions" in order to exalt his hero. The works of these great artists are not to be circumscribed by our modern cant of pictorial and literary motives; as long as the scientific or even literary ideas are treated with the artist spirit they are good in painting, as, for instance, the perspective pictures of Pietro di Borgo and the fables of Bellini, to take other schools than the Florentine. Or, again, the wrestle of Hercules with Antæus by Pollaiuolo of that school—all depends on the way it is done.

The interesting pages referring to landscape art are not convincing to us, at least as regards the effects of distance; we do not feel the power of the third dimension of space in any Florentine work. Fra Angelico, Alessio Baldovinetti, and all of them, made their distances by adding small quantities of white and grey to each plane as it receded; even the limitless atmospheres of Lionardo da Vinci affect us much in the same way as the series of planes of shallower and shallower relief in the gates of Ghiberti, and not as the actual space of Titian's backgrounds.

We quite agree with Mr. Langton Douglas in his contention that Benozzo Gozzoli had little to do with the frescoes in the Chapel of Nicolas V. Never in all his life, even in his best time, could Benozzo Gozzoli have designed such big backgrounds or such grand and simple figures as may there be seen, the final work of his master, Fra Angelico. Vasari was right when he described Benozzo Gozzoli: "Although he was not of great excellence as compared with many who surpassed him in design, yet he distanced others of his age by his perseverance, and among the quantity of works produced some are necessarily good," good to us that may mean; he painted at least something loved by each one of us, so we have a kindly feeling for him; but his crowded, crumpled towns and his ill-drawn grimacing figures are as unlike the frescoes of the chapel of Nicolas V. as the work of a devoted pupil can be unlike the work of his master.

We have tried to say what we can to support Mr. Langton Douglas in his contention that Fra Angelico was a good artist as well as a good man, and we are glad to see this second edition of his work, for we hope it means many converts to his teaching, and no better study than the art of Fra Angelico, in its purity and soberness, can be recommended to a distracted modern.

CHARLES HOLROYD.

Correspondence.

We insert the following correspondence relating to the articles on the Cathedral of Siena, (1) by Mrs. Richter (THE ARCHITECTURAL REVIEW, September, 1901) and (2) by Professor Langton Douglas (THE ARCHITECTURAL REVIEW, November, 1902).

I.—BY LOUISE M. RICHTER.

IT has been said, and not without reason, that the Duomo of Siena is an edifice that bears the evidence of its date in itself. There is certainly no doubt that, like other sacred buildings in Italy, "it grew out of an earlier construction by successive modifications and additions."* We can only solve the question, *why* it has been built such as it stands before us now, by concluding that final results must have been quite unpremeditated in its original design. To what an extent some of the earlier elements of Gothic art have been grafted on the existing Lombard-Romanesque stock, is proved, for instance, by the ribbed vaultings which are brought together with functional groupings of support in the interior. Charles Herbert Moore, in referring to the Cathedral of Siena as the first in date* amongst the more important Gothic buildings in Italy, goes even so far as to say that in the interior it exhibits no more advanced organic character than the naves of St. Ambrogio of Milan and of San Michele of Pavia—both supposed to have been built 200 years earlier. This amply proves how much the Sienese Cathedral has retained its Lombard-Romanesque character. But it is, therefore, none the less Gothic in its architecture, since it has been shown† that Gothic is an art, not only derived from Romanesque, but that it *is* Romanesque completely developed.

In default of reliable documentary evidence we must judge architecture by very much the same rules of art criticism that guide us in judging old pictures which bear no name and no date. The statement of Malavolti, a Sienese historian of the time of the Renaissance, that a *new* cathedral was begun at Siena in 1245, has no other documentary support, except that money was spent on the Duomo and workmen paid in

* Norton "Historical Studies of Church Building," p. 91.

* "Development and Character of Gothic Architecture," p. 275.

† Charles Herbert Moore "Development and Character of Gothic Architecture," p. 9.

1246. This, according to an entry in the Nuovo Documenti*, may just as likely imply that alterations with regard to that building were energetically taken in hand at that time. There is certainly no evidence to prove that the old Cathedral, which had been dedicated in the 12th century by the Sienese Pope Alexander III., was entirely demolished so as to make room for a new cathedral,† as has been surmised by Mr. Langton Douglas and other writers on Siena. The evidence that "Stilkritik" affords us, lies, in fact, much rather the other way. It tells us that in Siena, as was the case with so many other cathedrals in Italy, the Duomo underwent a gradual process of modification and alteration, and that the earlier Gothic elements, such as are perceptible in the interior of the church, must have been engrafted on the older structure long before 1245, and even before the Cistercian monks built the Abbey churches of Casamari and Fossanova. The same tale is told by the Campanile built upon the solid foundations of one of those towers of defence which in the mediæval times formed so essential a part of the city.

When the Cistercian monks came to the neighbourhood of Siena to build the abbey church of San Galgano, some of them, as is well known, were subsequently summoned to Siena to act as architects of the Siena Cathedral. Not, however, to transform it after the model of their church at San Galgano, but simply to go on with such alterations as had been begun and carried on by earlier architects. It was then that some elements of the Burgundian Gothic were introduced, now chiefly perceptible on the exterior of the building.

With Giovanni Pisani came the Pisan influence, so evident in the decoration of black and white marble. Later on, in 1315, in order to add a new choir, an enlargement towards the eastern side of the cathedral was resolved on, and at the same time also the building of a new baptistry, which was to be like the old one, an integral part of the Cathedral. This work, begun with great energy under Camaino di Crescentino, was at one time interrupted, but boldly brought to completion about 1333, in spite of serious territorial difficulties. We may, therefore, fairly surmise that also the choir, so essential a part in the functions of the church, was completed under Camaino di Crescentino, who, according to Milanesi, remained in the service of the Duomo until 1338.‡ This does not, however, exclude that later on again alterations may have been undertaken with regard to the choir, and not completed till 1370, as Veri di Donato, not always a reliable chronicler, states in Muratori.

So anxious were the Sienese to outvie Pisa, Lucca and the rival city Florence, that again in 1339 they decided that a *new* Cathedral should be raised. But here again the plan was not entirely to demolish what already existed, but was to be limited to the construction of a new nave with double aisles on the southward side of the old nave, which was thus intended to be converted into a transept. This huge plan, however, was, as is well known, doomed never to be carried out.

We may finally state that in Siena, perhaps more rapidly than in any other Italian Cathedral, did the northern Gothic subsequently develop into what is generally styled the Italian Gothic, that lofty and serene architecture which, instead of superseding its predecessors, rather clung to the older lines, crowning the rounded arch with the pointed gable.

But how well the Sienese architects knew also to create the so-called purer Gothic, is shown by the eastern much more than by the western façade of their Duomo, and more especially by those noble ruins on the south side, now the only record of what might have been the finest Gothic temple in Italy.

* "Nuovo Documenti di S. Borgese and L. Baneli," p. 4.
† Langton Douglas, "History of Siena," p. 273.
‡ "Milanesi Documenti" Tomo I., p. 183.

II.—BY LANGTON DOUGLAS.

In my article on Siena Cathedral,* I called in question two statements of Mrs. Richter in regard to that building. I also mildly complained that she had quoted a document not quite accurately, when, in fact, she had made six mistakes in transcribing a passage but five or six lines in length. The first assertion of hers that I disputed was this:—"The Cathedral of Siena is the oldest Gothic building in Italy; as such it marks a new era in the history of Italian architecture, and with it the Gothic style makes its first appearance on this side of the Alps." Whatever signification be assigned to the term "Gothic," this statement, I hold, is indefensible.

The Cathedral of Siena, as Mrs. Richter agrees, is a Romanesque structure upon which certain Gothic elements were superimposed. Documents prove that none of these purely Gothic elements—that is to say, the clerestory windows, the external decoration, and the façade—were of an earlier date than 1259. And, as the tyro in the study of Gothic architecture knows, the Gothic churches of Chiaravalle di Castagnola and Fossanova were then more than half a century old.

Mrs. Richter now contends, however, that the earlier structural portions of Siena Cathedral are Gothic because they are Romanesque. "Gothic," she quotes—and in a sense the statement is a truism—"is but Romanesque completely developed." Therefore, she concludes, it is right to call a Romanesque church "a Gothic building." It might just as reasonably be argued that it is right to call an ape a man, or a chrysalis a butterfly. But let that pass. Let us admit for the sake of argument that it is right to call a Romanesque cathedral a Gothic building, and let us further admit—an opinion I hold to be even more erroneous—that the old twelfth-century church was incorporated in its entirety in the thirteenth-century Duomo. All this being granted, it yet remains indefensible to say that with the Siena Cathedral "the Gothic style makes its first appearance on the southern side of the Alps." For there are many North Italian buildings in which are to be found all

* The Architectural Review, December, 1902.

the principal elements common to the Lombard-Romanesque and the Burgundian-Gothic styles, which are of a much earlier date than the earliest assigned to the existing Cathedral of Siena.

The second statement of Mrs. Richter which I objected to was her assertion that the choir of Siena Cathedral—the existing choir above the Baptistery—was finished before 1318.* From the year 1310 to the year 1318, Camaino da Crescentino was the chief architect of the Duomo. After that date, up to his death in 1338, there is evidence to show that he received at least occasional employment from the *Operai*, but he no more directed the work upon the Cathedral and Baptistery. Mrs. Richter runs away from her former statement, and now maintains that the choir was finished, not in 1318, but about 1333. But this revised conclusion is as erroneous as her original statement. For there is clear documentary proof that the choir above S. Giovanni was yet unfinished in 1356. In a document of that year, Domenico d'Agostino and Niccolò di Cecco, two distinguished architects who had been consulted by the Sienese authorities, advised the *Operai* "to complete the addition which is above San Giovanni, on which men are now at work."†

Mrs. Richter attempts to strengthen her untenable "surmise" by unjustifiably throwing discredit upon Neri di Donato's veracity. She is probably not aware that Neri was living in Siena at the time when the present choir and façade were being built, and that he took an intelligent interest in the architectural work that was being carried on. Neri is in the best sense of the term, a first-hand witness, for he was a diarist rather than a chronicler; and no competent historian capable of dealing with documentary sources has ever regarded him as an unreliable authority on the local events of his own time.

Mrs. Richter again shows an inadequate knowledge of the documentary evidence relating to the history of the Duomo, in her reference to the great unfinished cathedral that the Sienese planned in the fourteenth century. She states that this plan was "limited to the construction of a new nave." That, it is true, was the original plan, but it was soon found to be impracticable: it was discovered that, in order to complete this new church, it would be necessary to pull down the campanile, the cupola, and all the vaults of the old church."‡ It is always a matter of surprise to me that practical architects could ever have arrived at any other conclusion. This work of destruction was never carried out. For the Sienese were unable to realise their great plan, and they decided to complete and to beautify the older Duomo, the present Cathedral.

It is possible that some portion of the twelfth-century church, of which I have spoken in my *History of Siena*, was incorporated in the great cathedral which the Sienese began to build in honourable rivalry with neighbouring cities, in the great age of the communes, the thirteenth century. But both documents and *stilkritik* alike, show that but a very small part of the church Alexander III is said to have consecrated, can have been embodied in the thirteenth century edifice. The application of *stilkritik* has led those architectural experts of America, France, and England who have written fully upon the subject of Siena Cathedral, to speak of it as a thirteenth century building. Moreover, Mrs. Richter herself, in her *Siena*, published in 1901, speaks of the "new church"* that the Sienese began in "the thirteenth century." This conclusion she herself arrived at by the methods of *stilkritik* after two lengthy periods of residence in Siena. And it is this new church that she said was "the oldest Gothic building in Italy." Rather than confess her mistake, she now denies the results of her previous prolonged study of the Duomo; and, although she has not, I understand, visited Siena since her book was published, advances the theory that a great part of the twelfth-century church was preserved. For the same reason, she includes the Romanesque style under the term Gothic.

But, in reality, Mrs. Richter still gives the existing "Gothic" church a later date even than I do! In my article I showed that the employment of layers of black and white marble which prevails in the most essential parts of the structure of the Cathedral was due to Pisan influence.† Mrs. Richter now seeks "to go one better," if I may say so without discourtesy, and asserts that this feature in the Cathedral is due to Giovanni Pisano!‡ Mrs. Richter's use of *stilkritik* leads to curious results. She admits that the pointed windows of the clerestory were the work of Cistercian architects, and were built between 1259 and 1272. But the striped piers which support the clerestory were not completed, she holds, until after 1288, the year in which Giovanni Pisano was appointed chief architect. From which it follows that an application of critical tests leads to the conclusion that Siena in the thirteenth century was a kind of topsy-turvy land, and that the building of the Duomo began at the top.

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* Richter: *Siena*, Berlin and Leipzig, 1901, p. 37:—*Unter Camainos Leitung (bis* 1318) *scheint der Chorbau zu ende geführt zu sein.* . . . Fortunately Mrs. Richter's admirable account of Sienese art contains few mistakes of this kind.

† Arch. di Stato, Siena, *Arch. dell' Opera del Duomo, Libro di Documenti Artistici*, Documento, No. 5. See Milanesi, *Documenti*, Tomo I., p. 252.

‡ See the document referred to above. Milanesi, *op. cit.*, Tomo I., p 252.

* *Das neue Gotteshaus*—Richter, *Siena*, 1901, p. 34.

† See THE ARCHITECTURAL REVIEW, November, 1902, pp. 183 and 184.

‡ Contemporary documents prove that these stripes were in existence long before Giovanni Pisano was born. In my *History of Siena*, and also in my article in this REVIEW, I stated that the date when the thirteenth century church was begun was unknown. I have now in my possession documentary evidence, which I shall shortly publish, pointing to the conclusion that this church was begun in the third decade of the thirteenth century.

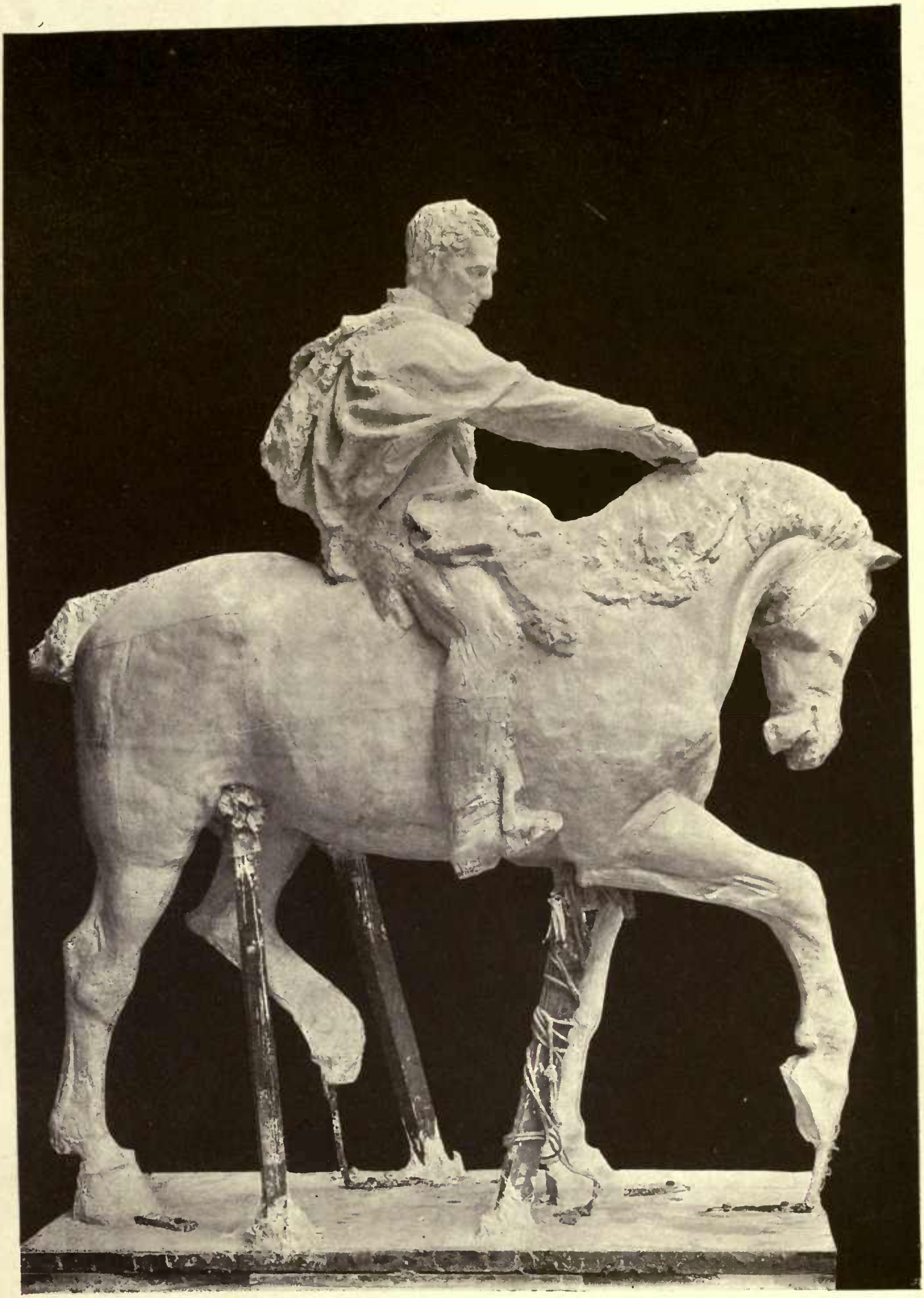


FIG. 1.—ALFRED STEVENS'S FULL-SIZE MODEL IN PLASTER FOR THE EQUESTRIAN STATUE OF THE DUKE OF WELLINGTON.

AS DESIGNED TO BE SEEN FROM THE NAVE.

The Wellington Monument of Alfred Stevens.

A Description, with Illustrations, of the existing Models and Drawings for the Equestrian Statue.

I DO not propose, in the present notice, to return upon the personal and official history of the Wellington Monument, or to enter upon the personal issues raised by the action of the Committee for its completion; my object is to place before the public, so far as it can be done by illustrations, with explanatory notes, the material from the hand of Stevens that exists for carrying out the equestrian statue, and for tracing the history of the design. In the absence of ocular evidence, statements on one side or the other cannot be checked, and the reader is confused by words like "sketch" and "model," which do not convey to him any exact idea of the facts. The small sketch-model, made for the competition in 1857, is familiar enough to visitors at the South Kensington Museum; but very few people have ever seen the full-size model, the work of Stevens's later years. It has been preserved, since his death, in the crypt of St. Paul's; the casual visitor did not see it there, because it was covered up; and even when it was uncovered, the bad light, its closeness to the wall, and the absence of the Duke's head, which Mr. Stannus had sawn off and preserved separately for greater security, made it difficult to form an exact idea of the design and of its condition. A drawing of this model, by Mr. John Watkins, with the head still attached, was published in Sir Walter (then Mr.) Armstrong's "Alfred Stevens: a Biographical Study.* This gives a fair notion of the general design from one point of view. In 1901 a small flash-light photograph of the model, as it appeared in the crypt, was published in *Black and White*, and this was re-published recently. In this, naturally, the head was missing. So far as I am aware, no other reproduction has appeared, so that the model is fully published for the first time in these pages. We have not reproduced Stevens's pen-and-ink sketches of the whole monument under the arch at St. Paul's. They are exhibited at South Kensington and St. Paul's, and a tracing of one of them is given in Mr. Stannus's work.

The first care of the Committee, when they had obtained possession of the large model, was to have it accurately piece-moulded and thus reproduced in facsimile. The head was reproduced in the same way, and fitted on in accordance with the marks made for this purpose. Stevens's plaster, which will remain, of course, absolutely untouched, rests for the present where it was, till it has been decided where it can best be disposed for safe keeping and public inspection. Our photographs are taken from the facsimile of this model, nothing what-

FIG. 2.—THE EQUESTRIAN FIGURE FROM THE SMALL SKETCH MODEL AT SOUTH KENSINGTON.

(*Compare Fig.* 11.)

* "Librairie de l'Art," Paris and London, 1881. The substance of this book, the first on Stevens, had appeared in *l'Art*. It is now out of print, and somewhat scarce. The later book, by Mr. Hugh Stannus, *Alfred Stevens and his Work*, is a folio published by the Autotype Company, 1891, at £6 6s. It contains a splendid series of reproductions from the artist's work, as well as the fullest account of his life that has been given. No reproduction of the full-sized model of the horse, however, is included, nor any of the sketch-model or of the monument as it stands.

FIG. 3.—THE FULL-SIZE MODEL. FRONT VIEW.

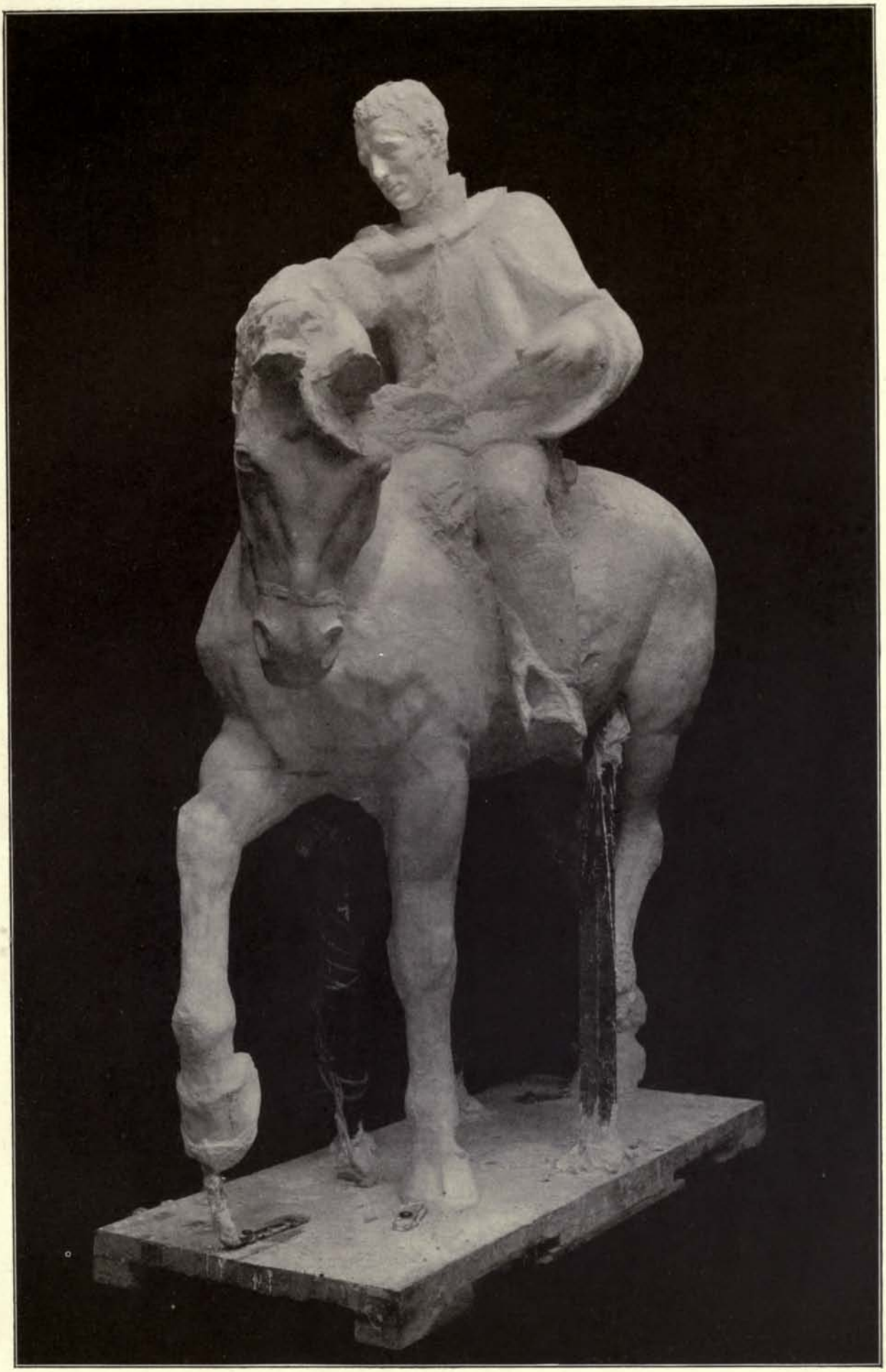


FIG. 4.—THE FULL-SIZE MODEL. ANOTHER VIEW.

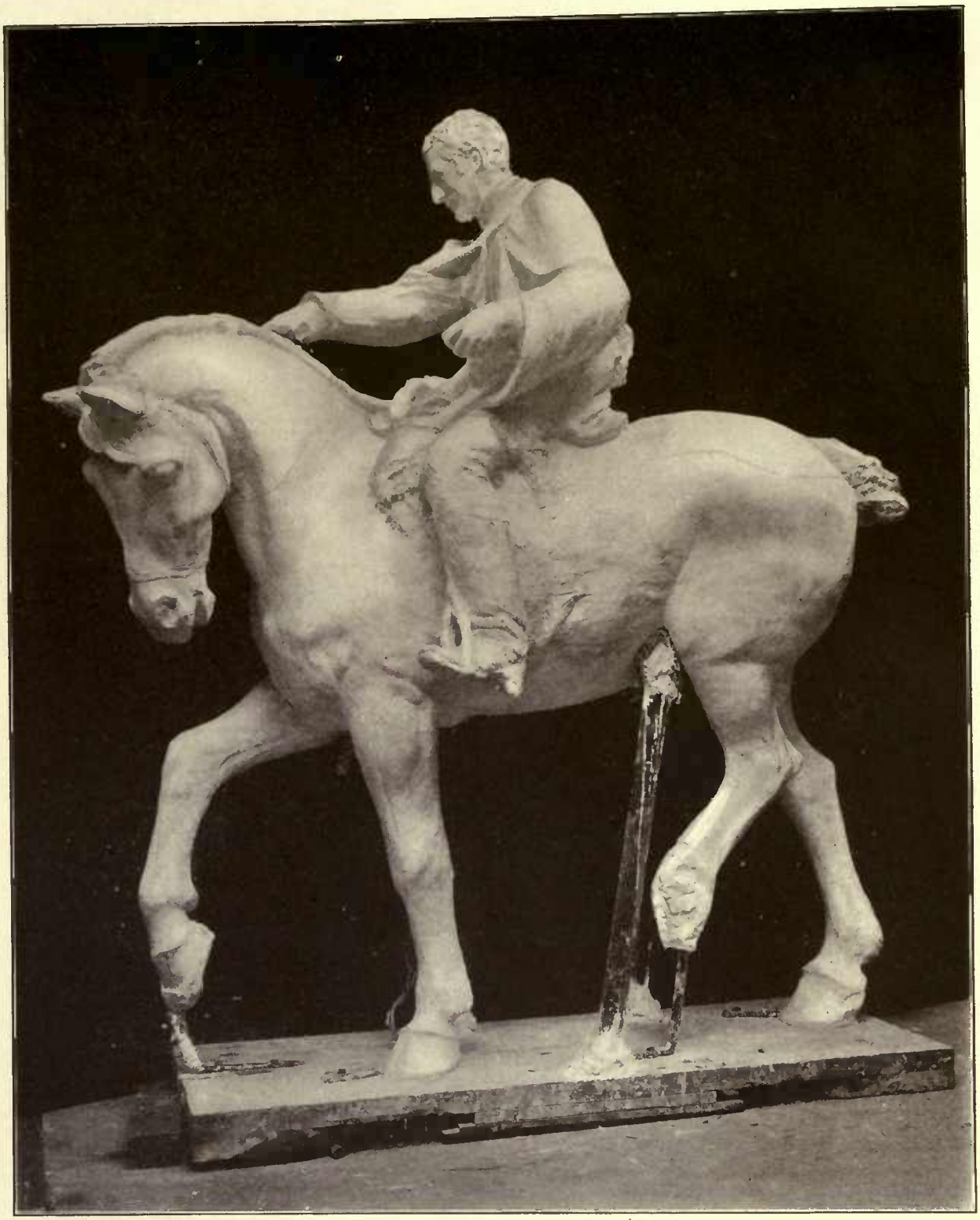


FIG. 5.—THE FULL-SIZE MODEL AS DESIGNED TO BE SEEN FROM THE NORTH AISLE.

ever having been done to remove even those accidental roughnesses which arise from the rather careless joints of the piece-moulding in Stevens's plaster. This, then, is the equestrian group so far as Stevens had completed it, and exactly as it passed from his studio after his death (Figs. 1, 3, 4, 5).

The reader is now in a position better to understand the references made to this model and to the original sketch-model in the statement of the Committee's intentions. It will be seen that in several particulars the large model is defective. The near hind hoof is missing, leaving the leg short; the tail is a mere stump; the drapery of the Duke

FIG. 6.—DONATELLO'S *Gattamelata* AT PADUA. (*Compare Fig.* 1.)

is fractured, the fingers of the right hand broken, and there are some other minor defects, as well as accidental roughnesses of surface in the plaster. The sketch-model, however (Figs. 2 and 11), comes in to supplement the other. In particular it gives Stevens's design for the treatment of the horse's tail, a beautiful and characteristic feature. It also supplies the missing hoof, the tip of which touches the ground and gives a third point of support. It will be observed that there are variations in detail between the first sketch and the later model. The action of the horse differs somewhat, the near fore-leg being more advanced, with slightly *cabré* effect; more trappings are indicated in the sketch, the form and covering of the Duke's legs is different, and, most noticeable of all, in the sketch he holds his cocked hat in his right hand above the horse's neck, its feathers drooping to the mane; in the plaster the hand is simply placed on the mane of the horse. The bridle, not actually given, is of course supposed by the action of the two hands.

I will allow myself a little digression here. If the reader will compare a photograph of Donatello's *Gattamelata* at Padua (Fig. 6), with this group by Stevens he will see where he probably got the plastic motive of this detail, and indeed of the whole group. The growth of the one out of the other is a beautiful instance of how great art usually forms itself very closely on some preceding work, and is none the less original. The variations on the action of horse and man in Stevens's group are in one sense slight, yet cumulatively amount to a new creation. The later design is as new a creature as the son of a man who preserves much of his father's type. Donatello's Condottiere stretches out his baton in a line that connects his arm with the horse's neck. Stevens, with his eye for the possibilities of grand design in the ordinary thing, made the hat serve the same plastic office in a most interesting and beautiful way. The motive, moreover, according to a tradition that Mr. Clayton has preserved, was not only decorative. The idea was to represent the Duke at the moment of the final advance at Waterloo, when he gave the signal for the charge by lifting his hat.*

In respect of some of these details the evidence seems to show that Stevens had simplified his design as time went on. At least we cannot be sure that he would have reintroduced them into his final model.

We now find ourselves in face of the question, How far can this model be regarded as Stevens's final and finished design? His biographers, one of them closely concerned with him in the last stages of the monument, state clearly that he looked forward to the completion of his entire project, in spite of the refusal by the authorities at the time to admit the horse. How far can we accept the existing model as his last word? To this question it may be replied that no man can be certain, with a fastidious lover of perfection like Stevens, that had he lived he would not have modified his project even in matters affecting its general design. But this is certain, that no man can affirm what changes, if any, of a radical kind Stevens would have made. We may, therefore, put aside all this region of conjecture as unprofitable. Stevens's magnificent design is there, arrested, possibly, in some particulars by his death; but in a shape that no living man, even if he had Stevens's genius, would have the right to touch, supposing he had the desire. No equestrian statue ever erected has escaped criticism from the point of view of the action and anatomical details of the horse. Stevens's will, like others, be the mark of such criticism. But, as Mr. Legros has well said, anyone who took in hand to correct a design by Stevens "would cover himself with reprobation and ridicule."

Discussion, then, limits itself to the condition of the detailed modelling. How far had Stevens "finished" his model? Here the fact evidently is that he had not given the last refinements. The state of the hoof, the tail, the hands, the draperies, the mane, the holsters, and much of the surface modelling, speaks of a stage short of this. The head, fortunately, had been brought to a

* Mr. Clayton has been good enough to give me the words of the chroniclers who vouch for the incident. Hooper writes, "Wellington was seen to raise his hat with a noble gesture as the signal for the wasted line of heroes to sweep like a dark wave, and roll out their lines and columns over the plain." Cotton, an eye-witness, says more simply, "The Duke stood on the ridge immediately in front of the line, with his hat raised in the air as a signal to advance."

higher state of finish, and is a most interesting reading of the Duke as portrait sculpture. It is less the Iron Duke than the portrait on the cenotaph below, it is a younger and more genial face, and curiously like in some respects to the sketch by Goya that is now in the Print Room, and that was the occasion of the only encounter in which Wellington was put to flight.* The rest of the work had not been wrought to that pitch. Stevens's practice was to do a good deal of his final shaping by work upon the plaster with riffel-files and other scraping tools. He had probably learned this method of working under Thorwaldsen, whose assistant at one time he was, for a set of those tools belonging to Thorwaldsen is in existence. Parts of the horse show signs of having been modelled thus in the plaster, and there can be no doubt that Stevens would have taken up his details again and wrought them nearer to the degree of finish we find in the bronze of the allegorical groups. On the other hand we must remember that the horse will be farther from the eye than these groups, that at the height of the monument, and in the light of St. Paul's the difference between highly-finished detail, and detail short of that finish will be hardly discernible, and we may well suppose that Stevens would have treated his detail more broadly than in the case of a group to be seen at the level of the spectator's eye. What appears rough, then, in a photograph of the cast taken in the latter circumstances, does not represent the effect at the given height, which will be an effect rather of mass, contour, and main shadows. All this in Stevens's model is, thank God, determined.

Finally, as I have already incidentally observed, there are certain accidental roughnesses of joints and surface in the plaster which are merely the result of imperfect casting, and which there is no reason for religiously conserving. Even the head is not free from these marks. I will only add now, that none of us really know, although we may surmise, what the effect of the model would be till it is tried in position, and that it will be reasonable to postpone all discussion of detail till that shall have been done.

A word remains to be said about two illustrations (8 and 9) which accompany the photographs of the earlier and later models. The first of these is a drawing by Stevens. I came across it some years ago when examining the collection of Mr. Herbert Singer, by whose courtesy it is published here. It belongs evidently to the earlier stages of the design, when Stevens was debating with himself the form to be given to one

* According to the story, Goya objected to some criticism by the Duke, and taking down a large sword from the wall, chased him from the studio.

FIG. 7.—HEAD OF THE DUKE FROM FULL-SIZE MODEL.

or two features of the group. The drawing is not one of his studies from life, but a rough sketch for this special purpose. It is in red chalk, and over this he has made corrections in pencil for most of the contours, which are not distinguishable in a monochrome reproduction. In particular, he has dropped the hand lower, and seems hesitating about the hat. He has also taken up the leg and made a more careful study of that.

The other of these illustrations (Fig. 9) is a very interesting document. When Stevens had obtained the commission for the monument, he considered himself obliged by the terms of it to build up a full-sized solid model of the whole design for trial *in situ*, a work that cost him a great deal of time and money. This model was made partly of wood and partly of clay or plaster. Of this intermediate model no trace has yet been found, and the probability is that it was destroyed. But happily it was photographed, and one of these photographs has been preserved by Mr. J. R. Clayton, who has kindly allowed me to reproduce it here. There are several interesting points about this photograph. If the reader will compare the views we give of the original sketch-model of the whole monument (Fig. 11) and of the monument as it now stands in St. Paul's (Fig. 10), he will see that the architectural form was considerably modified and the disposition, in relation to it, of the allegorical groups. There are different ways possible of reading Stevens's

FIG. 8.

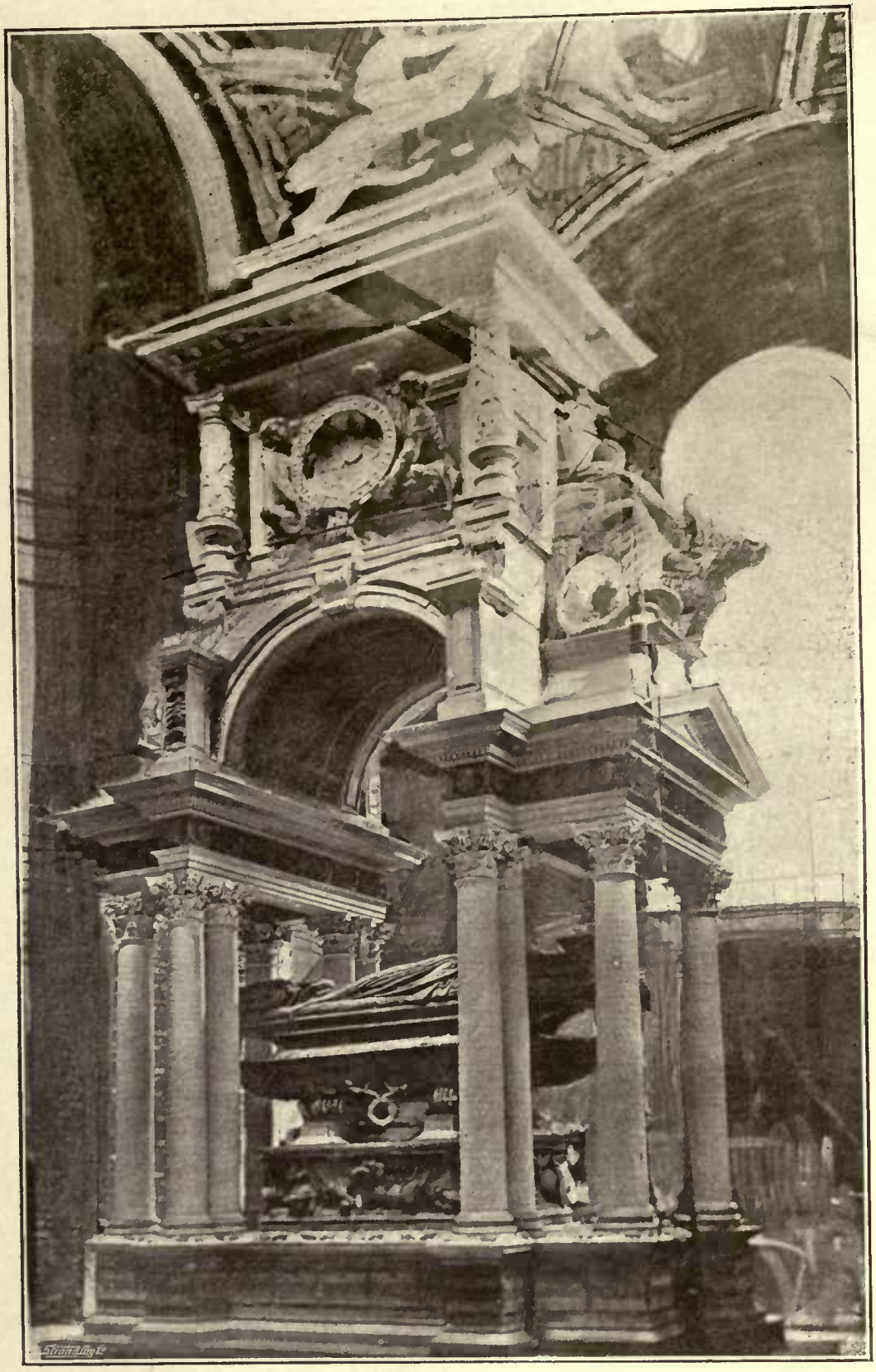


FIG. 9.—VIEW OF THE FULL-SIZE MODEL FOR THE MONUMENT, IN STEVENS'S STUDIO.

FROM A PHOTOGRAPH IN POSSESSION OF MR. J. R. CLAYTON, WITH CORRECTIONS IN PENCIL BY STEVENS.

Photo: S. B. Bolas and Co.

FIG. 10.—THE MONUMENT AS IT NOW STANDS IN ST. PAUL'S.

Photo: S. B. Bolas and Co.

FIG. 11.—THE ORIGINAL SKETCH MODEL FOR THE MONUMENT (SOUTH KENSINGTON).

motive in this change. He may have felt, when he saw his sketch set up, that it divided into too many distinct stages above the columns, and that the allegorical groups dropped too much below the waist of the design. He accordingly drew these up nearer the equestrian group, combining them more closely with the square structure that forms the present crown of the monument, and heightening his arch at the same time by giving it a sort of stilted hood, that breaks over what had been the base of the superstructure. I think in designing this feature he must have been influenced by those curious hooded arches that form so noticeable a feature in the filling between the piers of Wren's dome.

An alternative reading of his motive for the change that suggests itself to me, is that it was forced upon Stevens by the fact that his equestrian statue was disallowed. Without it there was a danger that the square structure designed as its pedestal would appear unmeaning. He seems, therefore, to have determined on a compromise which would allow the monument to look reasonably finished without the horse, and still permit of the horse eventually taking its place. I think any designer who compares the part below the allegorical groups with the same part in the original project will be driven to this conclusion. It was here that the compromise had to be paid for in a rather stretched elongation. The photograph here reproduced shows Stevens in the act of making the change. He had already raised the groups slightly by the gables under them. and inserted the stilts, and this photograph shows the whole design at a very fine moment. Over this photograph he has sketched, in pencil, just traceable in our reproduction, the new disposition of the arch, and at the same time he has scribbled over the equestrian model and the allegorical group. This equestrian model, by the way, was evidently a flat wooden one, enough to give the silhouette from one side and the other. The photograph appears to me to have been taken from a previous one, on which some corrections in paint had been made, and the sketch of the cathedral arches had been added in the same way over the background of Stevens's studio.

Yet another point is brought out by this photograph. It will be observed that on either side of the escutcheon in the square panel are models of supporting figures that appear neither in the sketch nor the finished work. These also are pencilled over, and it is not unlikely that Stevens may have felt compelled to relinquish a charming feature for want of funds. It is arguable, of course, that at the moment he preferred bareness at this point, in fear of competition with the allegorical groups. There are studies for the figures in the corner of Mr. Singer's drawing, already described, as well as a sketch for the Valour. It is not beyond possibility that these models exist somewhere, and that the present notice may call the attention of the possessor to their identity.

Stevens also altered the design of the small pedestal immediately below the horse, and his drawing for it has been preserved; but into this and the question of his intention with regard to some other details of the monument I will not at present enter. I shall be glad, however, if anyone in a position to add details to the known history of the monument will communicate with me on the subject. My object here has been to lay before lovers of art, at the earliest possible moment, this our great English Horse and Rider, and to share with them the joy of its rescue from the limbus to which it has been so long condemned. It is hardly necessary to explain that the props which appear in the photographs are necessary to support the plaster. They have not been painted out, to avoid any sort of doctoring of the photographs.

D. S. MacColl.

Allhallows, Lombard Street.

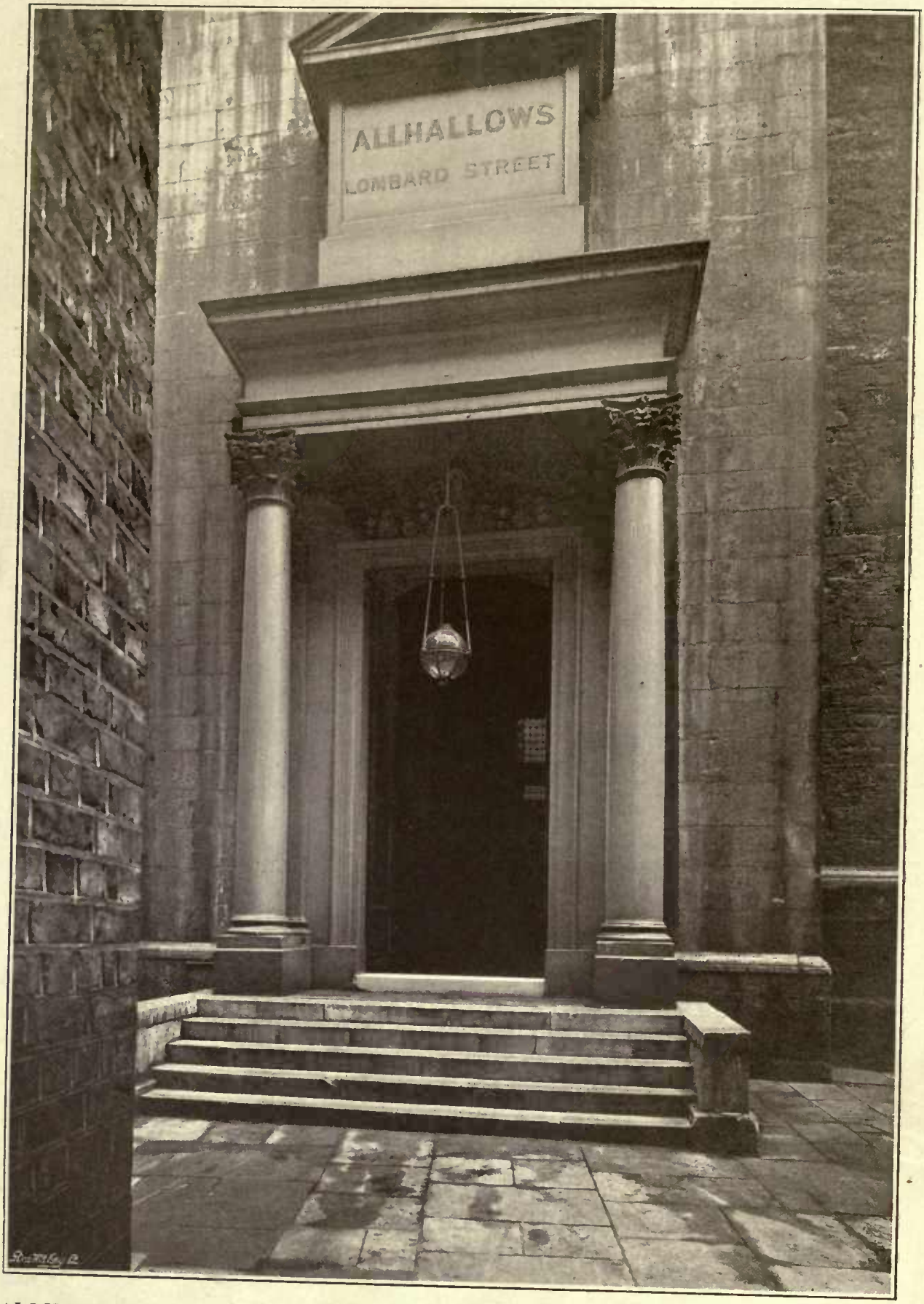
THE proposed destruction of another of Wren's City churches, on the grounds that they have outstayed their usefulness and that their site has become too valuable for them to cumber it any longer, wakes up afresh the anxious question as to what is to be the logical outcome of such reasoning, and what may remain to be considered our possessions as each heirloom is taken away from us on the plea that we are too poor, both in sentiment and in purse, to maintain it. The Commissioners appointed under the Union of Benefices Act, have given in their report to the Bishop of London, and it is now being considered by him and by the Dean and Chapter of Canterbury. The report recommends that the church and site of Allhallows should be sold by the Ecclesiastical Commissioners, and the property developed in connection with the frontage premises in Gracechurch Street. The proceeds, they suggest, should go to the building of churches in poor districts under the direction of the Bishop of London.

It is stated that the Bishop finds himself unable to withstand the recommendations of this report, or to do other than his best to further them, considering the heavy nature of the responsibility of his charge. The possibilities of useful action from the proceeds of the sale, so glaringly enforced by the hard glitter of statistics, overwhelm the less defined actualities of present service, and the decision becomes too serious to be settled on any other than the so-called business grounds; figures shall be the justification, and by figures it shall be determined.

But, one asks, Is it right that so much responsibility should be thrust upon a man, or even a dean and chapter? Are our national monuments to be at the mercy of considerations that are local rather than national, and our custodians of them asked to determine their fate, without feeling free to exercise any further discretion than what would be allowed by an actuary?

Here is a case in point. Allhallows Church is from the hand of Sir Christopher Wren; it is (though this is but an accidental piece of colour) his last work in the City. England will be poorer by its removal. It can never be replaced. By the loss of its churches the City becomes less and less civilised—more sordid and more brutal. The amenity and the small decencies of the streets are

ALLHALLOWS, LOMBARD STREET. SOUTH SIDE OF THE SCREEN. *Limelight photo: E. Dockree.*



ALLHALLOWS, LOMBARD STREET. PRINCIPAL ENTRANCE. *Photo : E. Dockree.*

ALLHALLOWS, LOMBARD STREET. THE TOWER.

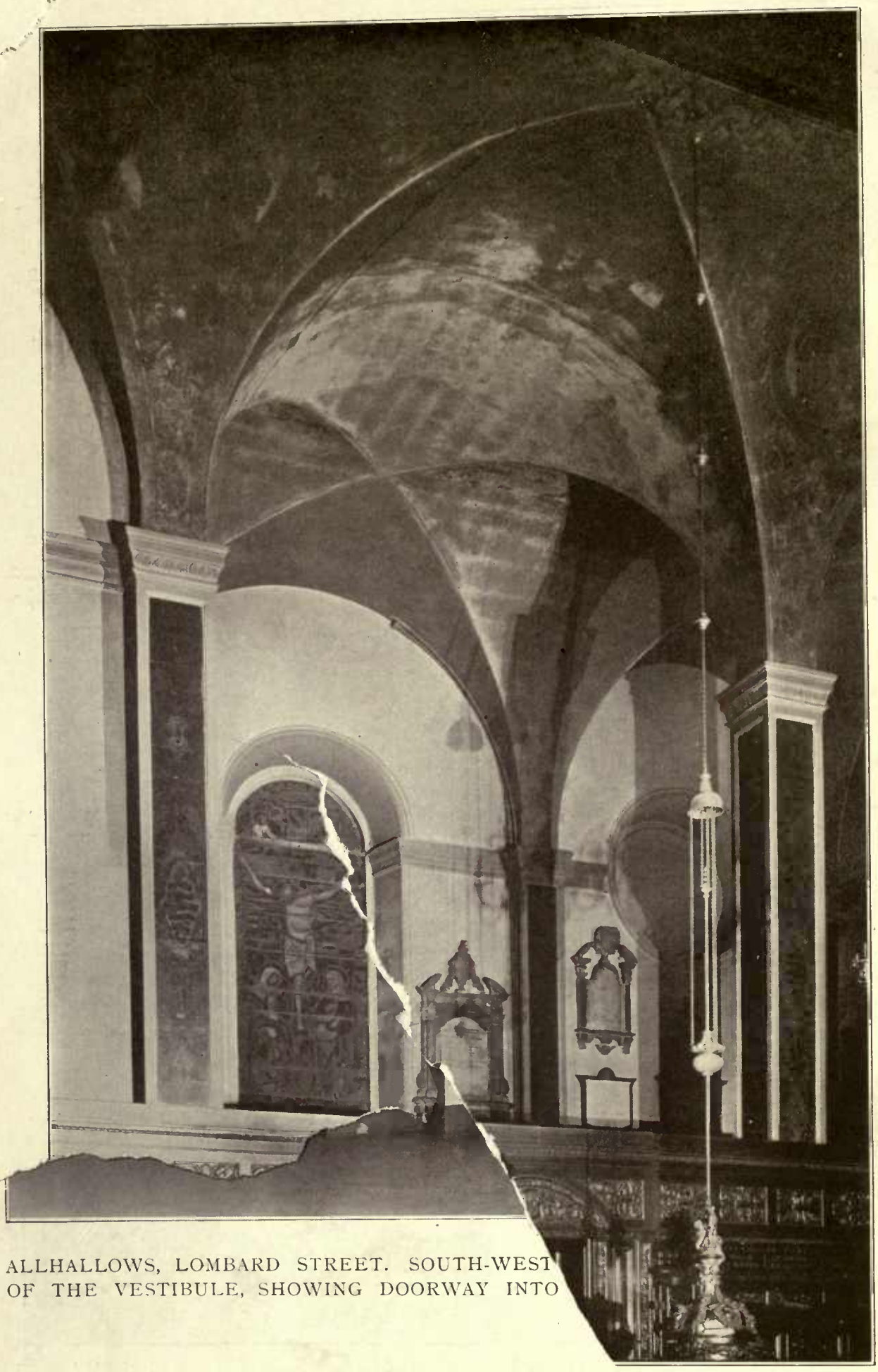
Photo: E. Dockree.

Limelight photo: E. Dockree.

ALLHALLOWS, LOMBARD STREET. SOUTH-WEST CORNER OF THE VESTIBULE, SHOWING DOORWAY INTO PORCH.

Limelight photo: E. Dockree

ST. OLD GATEWAY TO THE
ALLHALLOWS, LOMBARD STREET, NOW PRESERVED IN THE PORCH.
CORNER OF VESTRY.



ALLHALLOWS, LOMBARD STREET. SOUTH-WEST
OF THE VESTIBULE, SHOWING DOORWAY INTO

Limelight photo: E. Dockree.

VESTIBULE.

Limelight photo: E. Dockree

ALLHALLOWS, LOMBARD ST. OLD GATEWAY TO THE CHURCH. NOW PRESERVED IN THE PORCH.

ALLHALLOWS, LOMBARD STREET. THE FONT.

Limelight photo: E. Dockree.

Limelight photo: E. Dockree.

ALLHALLOWS, LOMBARD STREET. INTERIOR, LOOKING EAST.

disappearing, giving place to violent buildings that are fevered and short-lived. If architecture has no influence on the swarms that throng the streets, why go to the expense of putting up costly architectural fronts to dominate these streets? If architecture has an influence, then surely we should not lessen the number of examples that we cannot replace, and of whose influence we cannot define the reach? Many ingredients go to constitute the usefulness of a church; the temper and habits of the neighbourhood fluctuate; the number of people within its walls do not comprise all its congregations: a church has its votaries beyond the pew-opener's ken, and these votaries have their claims, claims which amount to rights. Is there to be no provision for such folk in the City, and are we to add, amongst the many other signs in Lombard Street, the Bishop's Wash-Pot and Shoe?

Nor is it only the destruction of our national

ALLHALLOWS, LOMBARD STREET. THE PULPIT.

Limelight photo: E. Dockree.

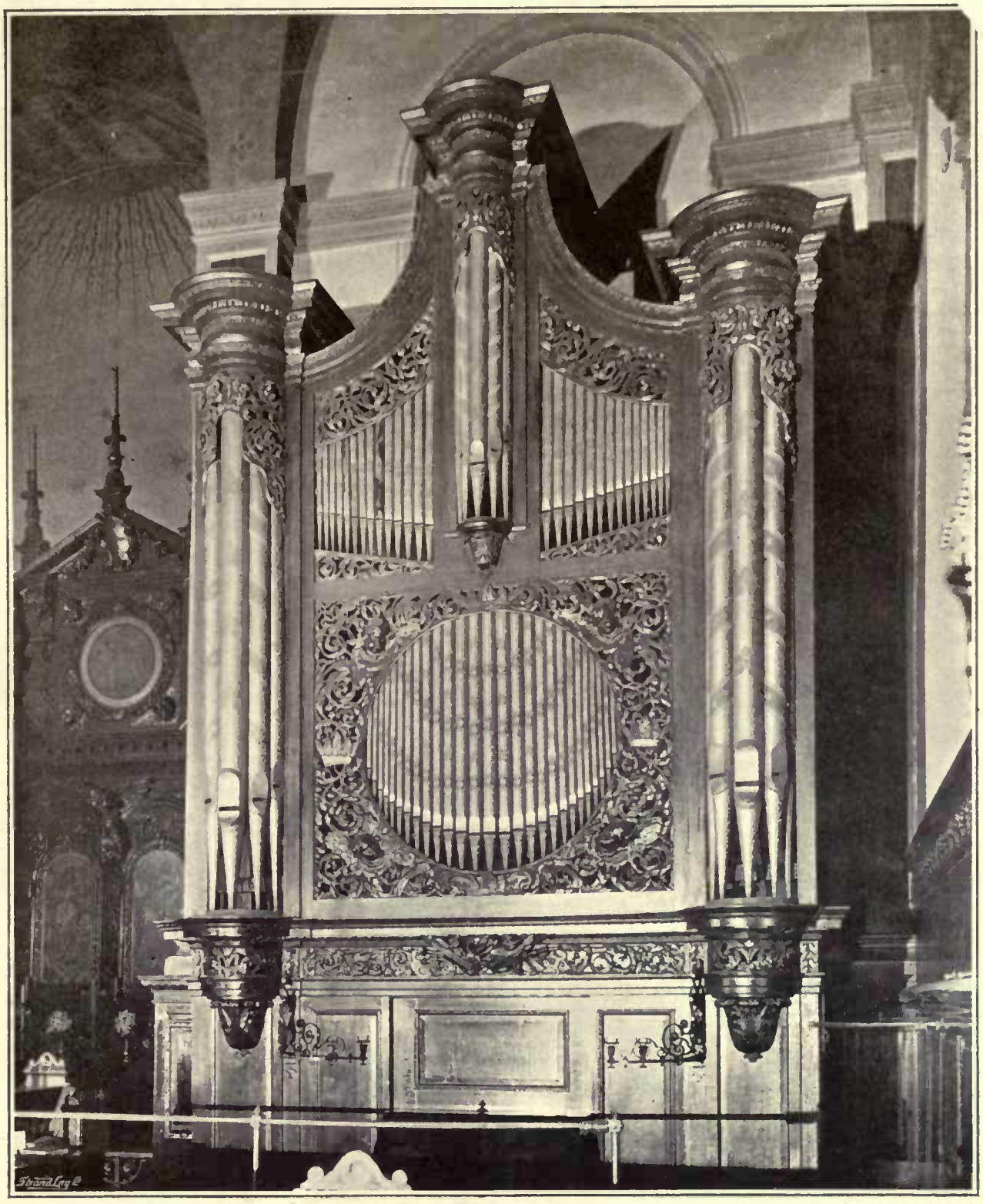


Photo: E. Dockree.

ALLHALLOWS, LOMBARD STREET. THE ORGAN.

monuments that we have to deplore, due to the overweighted responsibility of their guardians; they dare not also refuse to accept the gifts from impulsive unaccredited donors. Anyone may dump down a sackful of plate upon the altar, or stick painted glass into the windows of our architectural masterpieces, provided the money value of the gift is heavy enough to precipitate the responsibility of their guardians, which for the most other while remains unavailable in solution. And these disastrous additions count as so much loss to us; the indelible window darkens our churches and impairs their usefulness; the heaped treasure adds to the anxieties of the church's custody, and nothing to the impressiveness of devotion. The Church of Allhallows points the

moral of the stained glass injury. Some eager donor has filled all the windows with painted glass, so completely darkening the church already obscured by the tall buildings hemming it in on all sides, that they have had to cut a skylight in the ceiling, and withal keep a couple of score of gas lights burning, to counteract their unfortunate acceptance of this pious donation. Moreover it is nearly as difficult to remove these additions, when once placed, as it is to replace a building when once demolished.

It seems then, that public monuments, such as our City churches, need putting under a different guardianship—a guardianship more remote from the influences of parochial or diocesan considerations, more tender and reverential of the works of our fathers "and of the old times before them," and more alive to the influences which make for good in the fret and turmoil of our streets, and in the want of any inspiring ideal in the modern architecture that composes them. If the Dean and Chapter of St. Paul's are open to the attack of the same logic, how long may we still count upon seeing our Cathedral standing on so valuable and so vendible a site?

It is worth while remembering that there was a period when St. Paul's itself was practically a City church without congregations.

HALSEY RICARDO.

NOTE.—The following facts may be added to Mr. Ricardo's argument.

(1) The Rector (Canon Rawlinson) died October 6th, 1902. There being a vacancy in the living, the trustees of London Parochial Charities took the opportunity to move for the demolition of the church, setting forth their reasons in a long letter to the *Times*, and stating that a sum of £6,000 a year could be realised by the sale of the site of Church and Rectory. The Rectory, however, is the Langbourn Chop House, let on a long lease, and if the tenant had to be bought out, the large sum demanded would much decrease the sum to be realised for the Bishop's Fund. Moreover, there is No. 18, Gracechurch Street, one of the houses backing on to the church; here, again, a lease of nine years must be met, and the tenant does not at all wish to be bought out or to move. As the churchyard cannot be built over because of the Disused Burial Grounds Act, the site is further curtailed in width. These are but one or two difficulties to be considered before the £6,000, or even £3,000 or £4,000 can be thought of.

(2) *Ancient Lights.* This does not apply really to the frontage in Gracechurch Street, as Nos. 18, 19, 20, 21, are all in the hands, now, of the London Parochial Charities. But the Lombard Street shop owners would probably object to any higher building than the present church. This also applies to the houses on the west side of Ball's Alley and the block of offices which draws light from the narrow court leading to the Langbourn Chop House.

(3) *The Actual Use made of the Church.* This has been greatly misrepresented by the advocates of destruction. The population is, roughly, 260. The church has an average congregation of 50; and 60 communicants a month. It is open daily from 11 a.m. to 4 p.m. for private prayer.

Limelight photo: E. Dockree.

ALLHALLOWS, LOMBARD STREET. THE CIVIC SWORD AND MACE RESTS IN THE CORPORATION PEW. REMOVED FROM ST. DIONIS BACKCHURCH IN 1878.

How Exeter Cathedral was Built.

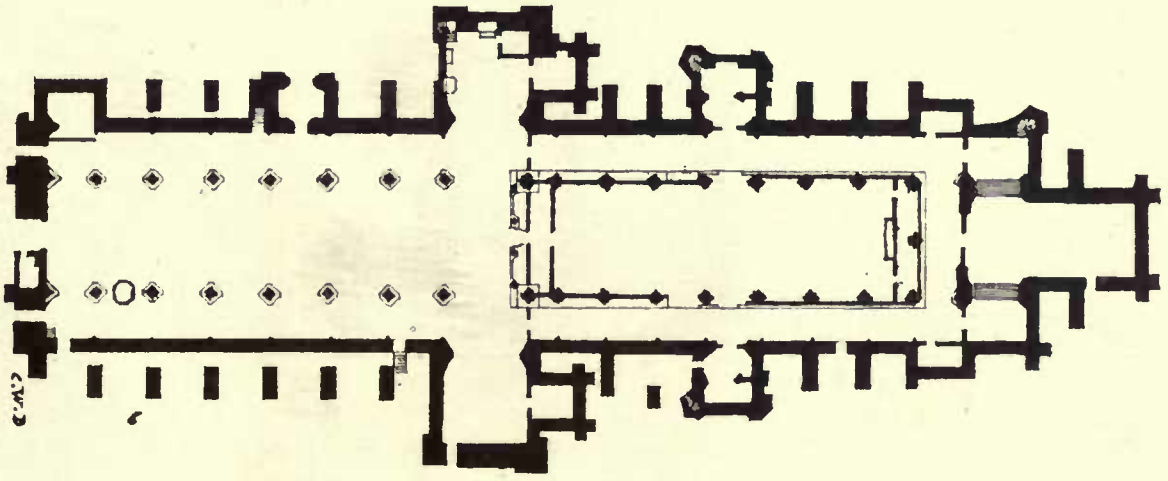
I.

It is a foolish occupation arguing for preferences in things supreme, but I have been drawn to take a special interest in Exeter Cathedral, because it is the first that I ever saw. Moreover, its unusual form, its unity, completeness, and, up to now, comparative freedom from the falsifications of restoration, do lend it, perhaps, a peculiar power and attraction. Its unity has impressed all writers. Isaak says:—"Yet is the same so uniformly compacted as if it had been builded by one man, and done in an instant of time."

We are now so used to write and read of "Gothic," and of "styles and proportions," that we are apt to forget the mystery of it; that just this thing should have been wrought into stone at all. Some twenty years ago I was standing before the west front of Coutances when two young architects with the accoutrements of sketchers came up. They talked together a minute, looked around, pointed, wagged their heads, and in some subtle way conveyed to me a sense of their disapproval of the cathedral, and then turned their backs and sauntered away. Every writer on any one of our cathedrals seems to feel himself called upon to show that it is not all that it might have been, and to point out how it could have been improved. In this respect we are hardly in advance of a Mr. Ralph, a gentleman of taste of two centuries ago, who disapproved of Westminster Abbey, and pointed out how its defects of proportion could be remedied by putting a plaster ceiling at two-thirds of the interior height. Now all this is absurd, and reminds one of how the man of science in Fenimore Cooper disapproved of the quadrupeds because they had not "rotary levers" instead of hindlegs.

It is not criticism to object to the Pyramids, or to wish that the Parthenon had a dome, or to point out, with Professor Freeman, that Exeter might have been higher.* "You might as well," I once heard Morris say, "criticise a geological period." The office of criticism is to know facts, and to understand conditions, to perceive essential truths, to set aside the unreal and trivial, but to worship that which is worthy. And Exeter *is* worthy—a marvellous thing, the spirit of which will only speak to us through our reverence and wonder. The noble materials in marble pillars and stone vault; the strongly moulded arches; the unbroken vista; the sense of reality, power, serenity, and fairness, make a whole of amazing beauty (Fig. 1). The sun strikes through the great windows, and fills the interior with positive sunlight; the pillars, set diagonally, allow of full sight into the aisles, thus making the whole width effective, and they take the light and shadow in broad spaces; the arches are easily adjusted to the piers, and their many mouldings follow the same diagonal planes as the pillars they rise from. The dainty triforium is an exquisite foil to the large clerestory above and the great arches beneath. The tracery is as beautiful as tracery can be at its best—romantic yet reasonable, strong yet elegant, various yet balanced—and the way in which the quatrefoil balustrade along the window sills allows the light to filter through its intricacies is perfectly lovely. The vault is unbroken for fifteen bays, and each severy is supported by a dozen pairs of stout diverging ribs, without sub-division or caprice of any sort. The lines are multitudinous as the timbers of a half-finished ship, and in the distant vault, the web-fillings appear to be quite hidden by the stout moulded ribs. The bosses are rounded masses of intricate foliage like great nests built in the branches of the vault. The

* Professor Freeman, author of "Exeter," in Historic Towns Series, is not to be confounded with Canon Freeman, whose book with the works of Dr. Oliver, Britton and Carter, must be the basis of all future study of the cathedral.



EXETER CATHEDRAL. PLAN

FIG. 1.—THE INTERIOR FROM THE WEST.

Photo: E. Dockree.

corbels of the vaulting shafts have figure subjects, the Virgin and Child or a Coronation, the others foliage: here and there traces of gold and vermilion show how they were decorated. The west window is magnificently stately; what a blaze of splendour must have streamed through it when it was filled with fourteenth century glass, the plainer parts of which were fretted over with white vine-leaves on a ruby field.* All the hundred windows of the church seem to have been filled with stained glass, almost the whole of fourteenth century work; the east window contains glass both of the early and late parts of that century. The clerestory window in the middle of the north side of the choir retains enough glass to show that these windows were filled with bright figures on a grisaille ground. In the head of the window at the west end of south choir-aisle are also considerable remnants which furnish some clue as to the lower tier of windows. St. Gabriel's and its companion chapel have both preserved much early glass; the finials of canopy work in the heads of the lights show that these originally had figures like the early portions of the great east window. In the clerestory of the nave are to be seen in several places borders of fourteenth century work to the lights which show that the nave also had early patterned glass (Fig. 2).† The beauty of it all when the sun struck through the forest of tracery may not be told.

FIG. 2.

Even if you enter the nave by the west door you must not miss seeing the north porch, the walls of which have been but little touched since it was finished. Traces of colouring, rose-red and white, remain. In the niche over the door stood a statue of the Virgin mentioned in 1409. The vault is carefully built of chalk, the boss is the Lamb in a wreath of roses, and round the noble arch-mould of the door runs a trail of roses. Compare this with the doves in the hollow around the west door—both have the touch of poetry common to all the finest ornament.

High up on the left of the nave is the beautiful "Minstrels' Gallery" (Fig. 3). On the floor to the right in the sixth bay was the Courteney chantry where the fine, but terribly restored tomb, now in the south transept, stood, within what Westcote describes as "a sumptuous, curious little chapel lately taken down." Before the figures were scraped they showed traces of gilding and colour. The knight's armour was gilt, and on his breast were blazoned the arms of Courteney. On the north side, opposite, was the chantry and tomb of Bishop Brantingham.

To its infinite advantage, Exeter still retains its *pulpitum* (choir screen), called "la Pulpytte" in the Fabric Rolls (Fig. 4). It is of early fourteenth century work. The range of niches above, where at present are some dark post-Reformation paintings, must originally have held sculptures—almost certainly a series of the Life of the Virgin. Amongst the wreckage of carving now in the cloister, is a fragment of a fine relief of St. Elizabeth embracing the Virgin, which may very well have belonged to the sculptures of the *pulpitum* wrought in 1323–24.* On the loft above stood the "organs" and the great eagle lectern for the Gospels. Still higher was suspended the nave rood with the attendant figures of St. Mary and St. John. Indications of the attachments of the beam which carried this crucifix have been found in the walls.† Beneath it, and in front of the *pulpitum*, was the altar of Holy Cross.‡ To the right and left were two other nave altars, those of the Virgin and St. Nicholas (for Exeter was a seaport town).

The transepts (see Fig. 4) stand under the Norman towers; in this respect the church is more like Geneva Cathedral than any other; Angoulême has a somewhat similar arrangement, and Poictiers seems to have been prepared after the same type. At Exeter, however, it may have been a purely English development from the Saxon churches with closed-in transepts. Here the ancient arches have been enlarged, and the big traceried windows cut through the Norman walls. The vaulting of these transepts is in wood. High up are the delightful stone galleries which climb out on the air. The clock in the north transept is ancient and interesting.

In the choir aisles are three stone knights, very fine—in the battle-harness of Bannockburn. One is Raleigh or Chichester, his neighbour is Bohun, and the third is Stapledon. Notice the raised gesso work of the mail and on the sword-belt;

* Portions remain in this very interesting window, which is to be sacrificed, I suppose, for a correct *twentieth*-fourteenth century example.

† The windows generally are delightful in their present state, made up with old glass on old lines, if not original: Carter, a century ago, spoke of them as ancient.

* Scott says that the choir door is old, the painting of it old "restored." It is well to know on documentary evidence, as no one can be certain when once the restoring machine has passed over a work of art. The backs of the two recesses in the Screen were pierced by Scott reluctantly, the former state may be seen in Britton.

† The veil before the great cross is mentioned in 1402.

‡ Oliver puts this in the north tower, but the nave under the Rood was its position in many other churches.

FIG. 3.—MINSTRELS' GALLERY, NORTH SIDE OF NAVE.

Photo: S. B. Bolas and Co.

Photo: S. B. Bolas and Co.

FIG. 4.—VIEW ACROSS TRANSEPTS, SHOWING PULPITUM.

also the carved heads, which serve as corbels to the arch of the recess, over the first-named effigy.

The south choir chapel is that of St. James. Here is a stately canopied tomb recess. The other chapel, on the north of the choir, is St. Andrew's, with another beautiful recess, almost certainly for the tomb of Dean Kilkenny (1302). From the transverse aisle, or Retro choir, open the Lady Chapel and two side chapels—St. Gabriel's on the south and St. Mary Magdalene's on the north. Two little added chantries, late and rich, also open from the Retro choir. The blue "star-freckled" vaults of St. Gabriel's and its companion chapel are in large part original, the patterns of the ribs, however, are, Scott says, "foolish additions." Directly at the back of the high altar and its reredos was the feretory, a narrow chamber for the preservation of relics. A remnant of a small door which gave access to it may be seen by the corner of Bishop Stapledon's tomb. In the Gabriel chapel is Bishop Branscombe's effigy, lying under a later canopy. This figure is one of the most perfect works of English sculpture, and must be included in any selected dozen tomb-statues from the whole country. After we have picked out a king and a queen, a knight and a lady, I do not know where to go for a bishop so grand as this one. Wrought about 1280, perfect in early maturity of style and easy mastery of craftsmanship, as well as in pose, dignity, and feeling; it was painted to the highest pitch of the image-painter's art, and in this is unrivalled amongst early effigies. It is a thing superb.* Opposite on the north side is Bishop Stafford's tomb.

The Lady chapel is full of points of interest: the forms are all a little earlier than in the rest of the church. The tomb recesses are of great beauty, those to the right containing Purbeck effigies of early bishops. The arcaded stone stalls by the altar are also especially noticeable; an image of the Virgin stood over the altar. Window tracery and vault are unsurpassable. The painting of the vault, Scott says, is an exact "reproduction" of what was found.

In the choir the lines and forms are much the same as in the nave, but in the eastern bays—the "presbytery"—the carved corbels from which the vaulting shafts spring, and the bosses of the vault are even more exquisite. They were wrought just at the moment when carving burst into full leaf—the June of architecture—before there was a sign of the crumpling which evidenced approaching decay. These carvings of nut, maple, oak, thorn, sycamore, vine, and fig, are crisp and fresh as if the dew were on them. The bosses of the vault have figure subjects: over the altar is a Coronation of the Virgin and a Crucifixion, with Mary and John and sun and moon. Westward are Samson and the lion, a siren, two dragons fighting, a woman playing a viol, and a noble king's head—all triumphs of romantic beauty. The restored gilding and painting of these bosses represent pretty faithfully the original; for the rest "the indications were slight" and the ribs were imitated from the Lady chapel. The wall surfaces seem to have been coated with a soft rose colour; some of it may still be seen over the pulpitum on the north, and also in St. Andrew's Chapel. The marble columns, of a colour changing between grey-purple and grey-green, were polished. Points like the corbels and caps of triforium were gilded, and the bosses were highly coloured and gilt like great enamelled clasps.

On the right of the choir, which had a marble floor, is the bishop's throne, which rises some sixty feet, an oak spire of tabernacle work.* The misericordes, re-set in the modern stalls, are the finest series of "Early English" woodcarvings anywhere to be found—foliage, birds and beasts, knights, fables, and fairy stories. The stone screen dividing off the aisles is modern save the open cresting at the top. Scott found this set on a plain wall which Carter says was ancient. Further east, by the south side of the altar, is the triple stone-stall, the presbytery proper, usually called the *sedilia*. Here an open tabernacle of stone is supported on slender brass columns which seem to be original. Isaak speaks of it as "a monument fairly arched, and three seats, with side pillars of brass, erected to the memory of King Edward (the Confessor), Edith his queen, and Leofric the first bishop." Carter says the columns were gilded brass. There is reason to suppose that Leofric was re-buried beneath this stone seat, for no other tomb is known, and at Westminster Abbey an old coffin, supposed to be that of the first founder, was moved to a place under the sedilia on its erection in 1307, and the sedilia came to be known as Sebert's Tomb, just as the one at Exeter was called Leofric's Stone.† On the opposite side of the altar space is the canopied tomb of Stapledon, the bishop who finished the works of the choir. It has a fine effigy, and on the ceiling of the canopy which surmounts it is a faded painting of Christ displaying His five wounds. Westward of this is the early Purbeck tomb of Bishop Marshall.

The ancient high altar and its reredos were, as we know from the fabric accounts, of extraordi-

* A careful drawing of the painting was given in an early volume of the Trans. Ex. Dioc. Socy.

* The paintings at the base are said to be "revived," but are as dead as oil-cloth. There appear to have been images in the open spire-work.

† Lyttleton speaks of the remains of three *paintings* of the Confessor, Queen Edith, and Leofric the bishop, on these stalls.

nary splendour. Leland says that Bishop Stapledon made "the Riche *Front* of stonework at the High Altar, and also made the riche silver *Table* in the middle of it. Yet some say that Bishop Lacye made this silver *Table*, but there is no likelyhood in it." The "Table" must have been a silver retable. In 1324 John the Goldsmith was paid *pro opere tabulæ argente*, and as this was something different from the frontal, which is mentioned separately, it implies, as we have said, a panel above the altar, which would have occupied a space similar to a recess in the Winchester reredos before that was restored. Above this imagery in beaten silver was the *tablatura lapidis*—ranges of niche-work and sculpture—rising as high as the points of the arches behind it,* and spreading over into a vaulted tabernacle from which hung the golden dove. On either side of the silver retable probably stood the famous statues of St. Peter and St. Paul, given by Bishop Stapledon. When Carter made his survey the reredos was in position, but the face had been destroyed. From the top of it a curious little flight of steps crossed to the east window where a casement opened, evidently to give access to the top of the reredos. From the vault of the choir was suspended a silver corona of lights. All this was but the setting and background for an appropriate and impressive ritual, rising at times into such dramatic festivals as Grandisson's special *ordinale* for Christmas Eve, when, at the first nocturn, a youth holding a lighted torch appeared in the east from behind the high altar, and sang, "Hodie nobis coelorum Rex de Virgine nasci dignatus est." He was then joined by six other choir boys singing together (in allusion to the song of the morning stars of Job) "Gloria in excelsis Deo et in terra pax"; then passing slowly through the choir they disappeared beyond the western entrance.

II.—The Sculptured Frontispiece.

The western gable rises above a ground-story of niche-work and sculpture which stands in advance and includes the three western porches (Fig. 5). It is usually called the Western Screen, but this is an unhappy and non-explanatory name. So far from its purpose being to hide it is to manifest. It is an external Iconostasis—a sort of title-page to a great book of doctrine. This work is usually assigned to Brantingham, 1370–94. Canon Freeman says it was completed somewhere between 1377 and 1399; but in his analytic plan he shows it as of fifteenth century work. He writes, however, that the only intimation we have of a more exact date is the statement that 6 ft. of glass at a shilling per foot were inserted in the vestibule of the church in 1377–78. He has before told us that some work about the great west door, and to the new chapel next the font (supposed to be Grandisson's burial chapel in the west front) was done as early as 1329–30. In the year before, thirty-three stones from Silverton, being 80 ft. run of gutters above the porch, were provided. Freeman, however, would, I think, wrongly refer this to some *repair* to an old west porch. Again, in 1346, there is an entry for costs of work about the porches (*adhuc custus porticorum*). Fourteen stones were also prepared at Wells about the same time for the "tablature" of the porches. Freeman says that the "porches" are here spoken of as separate, and we must not understand these entries as referring to the Western Screen, but that they can only apply to other sculptures, those in the south porch, for instance. His position obliges him to speak of the western recesses severally as porches and to give them the early date; but he will not allow that "*porticorum*" applies to them collectively with the niche-work connecting them. He allows even further that Grandisson completed the little chapel in the west front for his own burial (1369). Now the windows of this chapel are so adjusted in regard to the niche-work, etc., of the frontispiece that it seems impossible to suppose that all was not built together. And indeed the very fact of Grandisson's burial here in the thickness of the west wall goes to show that he regarded it as his special work. The work of the "porches" was still in hand in 1348, when Grandisson subscribed £10 to what seems to have been a special fund (*pro constructione porticorum*). Great efforts were being made at this time for the completion of some work, as in 1349 eight hundred indulgences were issued for benefactors to the fabric. From these indications it seems plain that the image-wall was executed as a separate work almost immediately after the completion of the nave (about 1345) under Grandisson. "Tablature" is used elsewhere in the Rolls for the imagery behind the high altar.

If now we turn to the frontispiece itself we may be surprised that such work can have been ascribed to the same time and influence as produced the east window, which is known certainly to be of Brantingham's time, and is typically "Perpendicular" in style. The niche-work may be just the last word of the old era, but it is certainly of fine mid-century character. The central statues of the lower tier, as well as all the supporting angels, must also be of Grandisson's time. These romantic, cross-legged kings, habited

* Some marks of the old reredos were found at the last "restoration," *see* Scott's "Recollections." Many vestiges of it were found about 1815, *see* Britton. The balustrade under the east window is modern, done when the reredos was destroyed.

in diapered stuffs and an early type of plate-armour, can hardly have been wrought many years after the terrible scourge of the Black Death which changed so profoundly the spirit of mediæval art. The upper row of sculptures, and those at the ends below, are doubtless later. It is on one of the pedestals beneath the two central upper figures that the Coat-of-Arms of Richard II. appears, and this seems to be the only reason that has led to the supposition that the whole of this romantic work was of that king's time. The image-wall of Exeter is still practically intact, except for a specimen of what "restoration" may be expected to achieve, and thus furnishes by far the best point of departure for the study of the storied west fronts of our great churches.

The sculptures have been examined more than once with a view to reading the general meaning of the scheme and identifying the individual figures. I shall follow each account in sequence as far as it appears to be valid. Carter, a century ago, made a survey of the cathedral, the results of which were published in the *Vetusta Monumenta* (1797). He also etched most of the sculptures of the kings for his *Specimens of Painting and Sculpture*. For this purpose he made sketches of all the figures and these are especially valuable for comparison with the statues in their present state.

In the first-named publication, the two central niches above the great door are said to have formerly held two seated figures—that on the left being, when he wrote, destroyed. The figure to the right is described as a Royal Figure, his foot on a globe which was divided into three parts. The statues on each side of these, at the same level, are ten of the Apostles (twelve, counting the returns of the two buttresses) with their attributes. On the face of the two buttresses, and at the same level are the Four Evangelists with their symbols. To the right, at the angle, is St. Michael triumphing over Satan. Over the smaller north door in the west front are three small figures, the fourth being lost. These are Justice with scales, Fortitude with lance and shield, Discipline (or Prudence) with a heart (?) in her hands, and religious dress. All are crowned and are trampling down Vices. On the jambs of the central door are four small figures in relief crowned and seated.

Britton, in his "Cathedral Antiquities," gave a list which pretended to identify all the figures with a haphazard jumble of historical and Biblical persons; early kings of Wessex, Godfrey de Bouillon, and Guy de Lusignan, appear here in no recognisable order and for no conceivable reason. Although this scheme was abolished by the criticism of Cockerell fifty years ago, it still appears in the most recent and popular guide-book, along with regrets expressed, in regard to the sculpture, "that there is so much of it!"

Cockerell, in his remarkable book* on mediæval sculpture, 1851, gives the result of prolonged study of the iconographical schemes of our cathedrals. He properly identifies the remaining one of the two central figures with Christ, and points out that He was in the act of crowning the Virgin. Her figure had been destroyed and His was made to do duty for one of the English kings by the addition of a sceptre. The twelve Apostles are severally identified by Cockerell—1. St. Philip holding loaves of bread; 2. St. Bartholomew holding his own skin; 3. St. Matthew with a book; 4. St. Thomas (?); 5. St. Andrew; 6 and 7. SS. Peter and Paul on either side of the Coronation of the Virgin; 8. St. John with cup; 9. St. James with palmer's hat; 10. St. Simeon; 11. St. James the Less with fuller's club; 12. St. Jude (?) broken. He explains the remarkable reliefs of angels in the spandrels of the central door as being "in ecstatic attitudes as if dazzled," and alludes to Psalm xxiv., "Lift up your heads, O ye gates . . . . and the King of Glory shall come in." As some substantiation of this, he points to the choir of rejoicing angels along the battlements. The four Evangelists in the upper tier of the two buttresses have their usual symbols at their feet. St. Matthew and St. John with an angel and an eagle, St. Luke and St. Mark with a calf and a lion. The remaining sixteen figures of the upper row (excepting that at the south angle), Cockerell assigns to the twelve minor and four greater Prophets.

In the lower row two pairs of figures in the buttresses, below the Evangelists, are, Cockerell suggests, four Doctors of the Church—St. Jerome and St. Gregory, St. Ambrose and St. Augustine. The rest of the lower row he explains as being English Kings, from Alfred to Henry VI.

The identification of the two central figures above the great door as having been Christ and the Virgin is certain. The head and gesture of the remaining figure are entirely characteristic, and the globe on which His foot rests is the world subdivided into its three then known continents and the ocean (Fig. 6). A lovely version of the Coronation of the Virgin occupies a similar position at Wells, and no other could so properly gather up the meaning of the Exeter scheme. Distributed over the front are four Coats-of-Arms.

* This book shows Cockerell, the exquisite classicist, to have had quick insight into the meaning of mediæval art, and a true enthusiasm for it; a man full in intellect and in heart. He speaks of the "intensity of character and the delicacy of execution." The knight, with his visor up, "casting a shadow over his face, and reminding us of Michael Angelo, is the very model of deliberate valour."

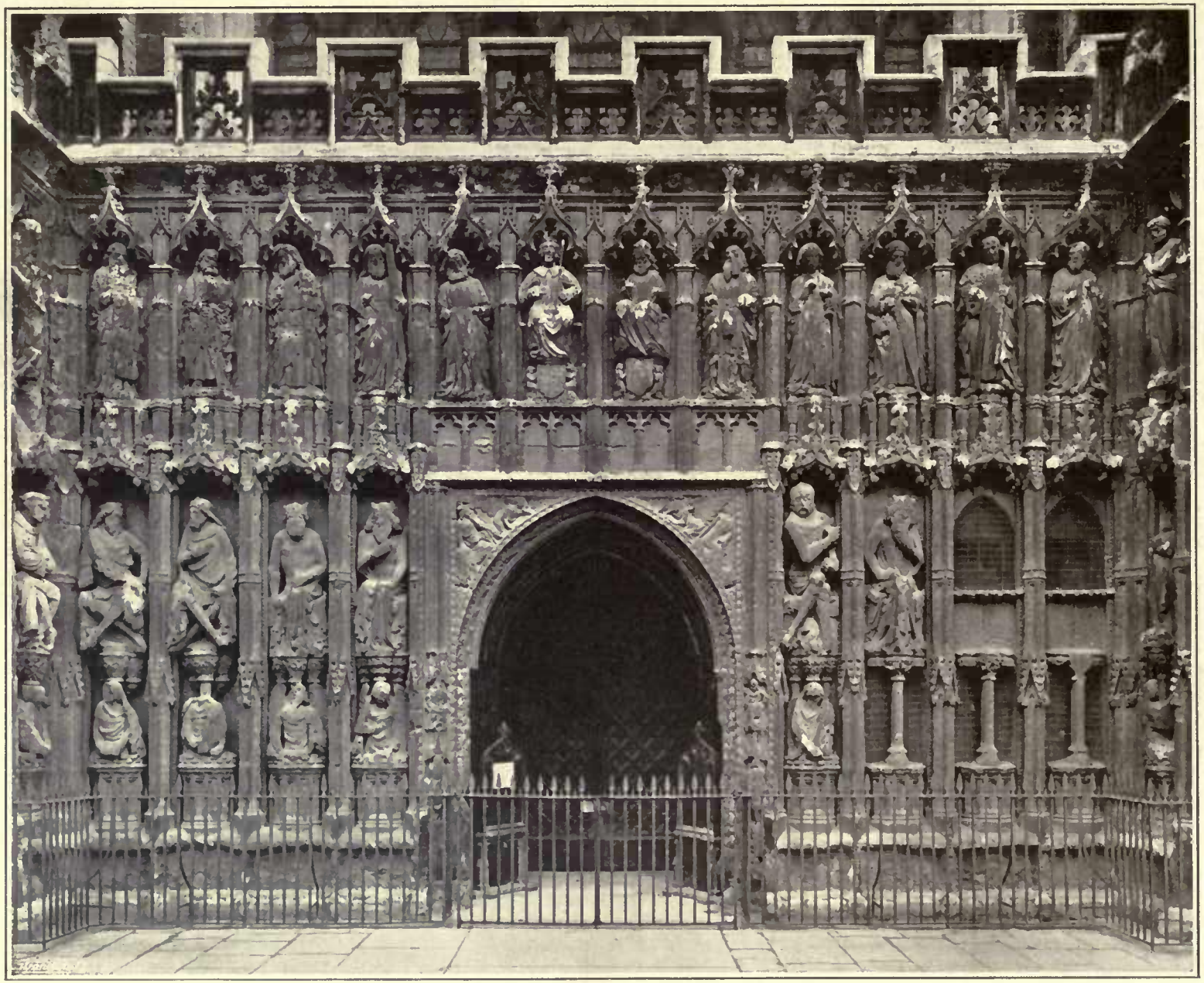


FIG. 5.—THE IMAGE WALL AND CENTRAL DOOR.

Photo: S. B. Bolas and Co.

FIG. 6.—STATUE OVER CENTRAL DOOR.

Above, on the two great buttresses, are the pseudo-coats of Athelstan the benefactor to Exeter, and the Confessor, who founded the cathedral.* Beneath the Coronation of the Virgin are two other coats—that on the left is England impaling the Confessor—the well-known arms of Richard II., that on the right shows the pseudo arms of Leofric the first Bishop of Exeter, impaling the ordinary Arms of the See. The two doubtless stood for the reigning king when the upper statues were wrought, and the See. As, however, Richard II's. arms come under the niche where the Virgin was enthroned, it is now filled with a mean and silly figure of a king,† and this and the figure of Christ, we are told in the guide-books, represent Richard II. and Athelstan. It is also certain that the Apostles stand much in the order Cockerell gives. St. Philip comes first as the first called. St. Peter and St. Paul usually stand on the right and left of the central group, and here, where they share in the dedication of the church, it was especially appropriate. St. Paul is a bald, bearded man with a sword; St. John, much younger, carries the chalice; St. James is a splendid figure with staff and wallet and scallop shell in his palmer's hat.

The subject of the south angle Cockerell calls St. George, rather than St. Michael, as was first proposed. Here he appears to be wrong, as in Carter's sketch the figure is feathered as an archangel. That the rest of the figures in the upper row are prophets is also certain: they carry scrolls on which they seem to write or to read, and their headdress is the characteristic hat given in the MSS. to Jewish persons of authority. On the scrolls were probably written extracts from their prophecies. In the east window three prophets bear scrolls on which are inscribed Gen. xvii. 19, Deut. xviii. 1–5, and Isa. has *Egredietur virga de radice Jesse.* The lower figures, with the exception of those on the buttresses as we have seen, have hitherto been called English kings. The short list which Cockerell gives is much more reasonable than that in Britton, and there seemed little to be said against the supposition because this scheme appeared to be parallel with the well-known galleries of the kings on French Cathedrals. In France, however, the kings have not such important positions as at Exeter and Lichfield. And by this reading, moreover, Richard II. in whose reign Cockerell supposes the statues to have been carved, and Edward III., his great predecessor, were represented only by two busts over the south door.

Only a few years after Cockerell wrote, V. le Duc pointed out that the statues of kings on the cathedrals dedicated to the Virgin were the kings of Judah (*Dictionnaire*, s. v. Cathédrale), and this is now generally accepted. M. Emile Mâle, in *L'Art Religieux*, 1902, points out that the Gallery of Kings "is another form of the tree of Jesse." The figures are crowned because they were all of the royal line, if not all kings. At Paris there were twenty-eight, exactly the number in the genealogy as given by St. Matthew. But the number is not fixed; at Chartres there are eighteen, at Amiens twenty-two. The presumption now becomes that the English scheme follows the French model; and, in support of this view, so many points can be urged as to amount to proof. Examination of the images themselves shows (and this has never been pointed out) that the second in order was a king playing upon a harp, who cannot be any other than David (Fig. 7). Another figure held a flower, which must be a bud of the Tree of Jesse: one or more had crosses on their breasts. It is common, in the Trees, to find the prophets associated with the royal ancestors. In the Dorchester window we have Jesse, David playing his harp, together with three or four others of the royal line, and twelve prophets. On the beautiful rose-coloured cope at South Kensington (c. 1300) there are Jesse, David and his harp, Solomon, Rehoboam, and Abijah, together with twelve prophets, and the Virgin. The large figures of the Christ Church reredos

FIG. 7.—DAVID.

* Two large isolated figures stand above these arms and are usually named Athelstan and the Confessor. According to Oliver these were renewed about 1820. They are too remote to say anything about.

† Oliver says this figure was done about 1818. The whole top row of niche-heads and battlements above are "restored" work of doubtful character. The new figure in the lower row called "William the Conqueror" (!) preserves the old attitude as described by Cockerell; but what a poor, scowling creature it is beside the old figures—and still we go on putting our trust in "restoration," not even knowing what it is we restore, and always full of belief for next time.

are unfortunately for the most part destroyed, but the two which remain besides Jesse and the central Nativity, are David and another king sitting cross-legged so exactly like the kings of Exeter that we can hardly doubt that they were the work of the same hand,* and the supposition that the kings are English does not seem to go very far back at Exeter or Wells or Lichfield. From his account Cockerell seems to have been the first to apply the theory to Wells, and this in opposition to the old interpretation of the Clergy (which he cites) as reported by William of Worcester in 1450. According to this traditional account the North tower was devoted to stories of the "Old Law," and the West face and South tower to the "New."†

In 1634 several cathedrals were visited by some antiquaries who have left an account of what they saw, which has been printed in the *Gentleman's Magazine*. They tell us that at Lichfield there were 100 fair statues curiously graven and carved in freestone, of kings, patriarchs, prophets, fathers and apostles, that grace it much, and angels and a majesty at top. This very valuable account is not by itself conclusive, but in a "History of the City and Cathedral" issued in 1805 (John Jackson, jun.), we are told that a statue of Charles II. took the place of Christ, and "on both sides [on] the steeples were all the old Patriarchs: The next two rows were filled with figures of prophets or prophetesses and judges. Underneath sit a range of the kings of Israel and Judah in various postures, King David playing upon his harp, and in the centre a statue with a mitre supposed to be St. Chad [probably a virgin originally] . . . . the walls between the large and small doors were filled with figures of the twelve Apostles." Over the north door was also a Jesse "or descent of kings," twenty-eight generations, "also the descent of Priests."

In these descriptions of Lichfield we have outlined a scheme sufficiently large even to explain the image front of Wells, and it can hardly be doubted that at the other end of the scale the west door of Rochester should be explained on the same analogy. Here the King standing in one jamb is probably David and the Queen (bearing a *scroll*) Bathsheba, the lion in the capital over the king is the symbol of the tribe of Judah.

At Exeter there are twenty-nine figures in the lower tier, but the four on the buttresses seem to be of another type. The penultimate figure in Carter's sketch looks very much like a woman's; it was headless, but it is tempting to suggest that it represented the Virgin; of this, however, I do not feel at all certain without verification. But I have no doubt at all that the first three are Jesse, David, and Rehoboam, and that the genealogical line was continued to either the Virgin or Joseph or both. The figures on the buttresses which Cockerell assigned to the four Doctors of the Western Church, were, with the exception of the third, headless at the time that Carter made his notes; they all, however, had ecclesiastical vestments and bore scrolls; the third one having also a mitre. The scrolls mark them as teachers, and it is possible that Cockerell was right;* the four Doctors are often found together in MSS. Four of the great figures of the south porch at Chartres represent them, and they appear to be sculptured over the chapter-house door at Rochester.

A French miniature (MS. Harl., 1585) shows us to the right and left of the Throne of Heaven St. Peter and St. Paul. Beyond St. Peter are St. Jerome and St. Gregory; beyond St. Paul are St. Augustine and St. Ambrose. In the vault of Heaven is a door guarded by Faith, Hope, and Charity. The last point may well introduce a suggestion as to the four little crowned figures on the jambs of the great door. It seems in any case unlikely that only the four subsidiary virtues should have places to the exclusion of the theological virtues. Now, if these small figures at the central door represent Faith, Hope, Charity, and Humility, we can better understand the position of the others over the north door. An eighth virtue is very frequently found together with the better known seven, when conditions of design call for it. On the north porch of Chartres are sculptured Prudence, Justice, Fortitude, Temperance, Faith, Hope, Charity, and Humility,† and the same selection is made on Andrea Pisano's door of the Baptistry at Florence. M. Mâle remarks that Humility was happily chosen since the mediæval theologians considered Pride (which she tramples beneath her feet) to be the root of all vices.

One other small point—between the two busts over the south door is a carving which, according to Cockerell, is a double-necked swan, the badge, he says, of the Plantagenets. It is, however, far more probably the well-known badge of Bohun, a splendid example of which appears on the tomb of the Bohun wife of Edward Courteney, now in the south transept, but which formerly stood in the south aisle to which this doorway

* Carter says that the second king is Solomon and that the smaller statues compr se the Apostles, Moses, &c. It is evidently almost a counterpart of the Exeter Scheme. *See also* bosses, South Walk of Cloister at Worcester, as described by Cockerell.

† This division agrees with what is found in French churches (see Mâle).

* An alternative solution would be that they represented the priestly line of descent, but that three of the figures had their heads dest-oyed shows that they were probably the Fathers.

† Humility is found at Salisbury.

leads. Opposite their tomb in the south aisle were, Isaak says, their arms in the glazing: she married Courteney about 1325, and he, it is said, gave the large sum of 200 marks to the fabric fund. Besides the sculptures of the front proper, there are within this south porch two magnificent groups representing the Annunciation and Nativity, and beneath the former a Secondary Annunciation—the angel appearing to Joseph. The key-stone of the vault of the great porch is a Crucifixion. On the vault of Grandisson's Chapel is Christ in Majesty. The whole is evidently a harmonious scheme. We are not likely to have statues of Rufus, Henry II., John, and Edward II., surrounded by rejoicing angels in this sculptured Bible of Exeter, which was all illuminated in bright colour and gold.*

NOTE.—Here I cannot venture on more than a suggestion in regard to Wells, but I have no doubt that its scheme fell in with the general system, and that no secular history was included. On the left the images are mostly Kings; on the right Ecclesiastics. There are exceptions, but the Arabic numerals on the statues probably show that they have been moved at some time. The Kings are probably the ancestors of Christ, and the priests may be the priest'y line; the rest are saints, prophets, apostles.

W. R. LETHABY.

* Oliver. At Lichfield also this was the case: the account before cited goes on, "These statues were formerly all richly gilt and painted." These west fronts—the early door of Rochester, the images of Exeter, and the latest effort of Gothic symbolism at Bath—are sculptured Heavens where the saints stand tier on tier beneath the throne of Christ.

Photo: G. E. Martin.

"SANDHOUSE," WITLEY, SURREY. THE STAIRCASE.
F. W. TROUP, ARCHITECT.

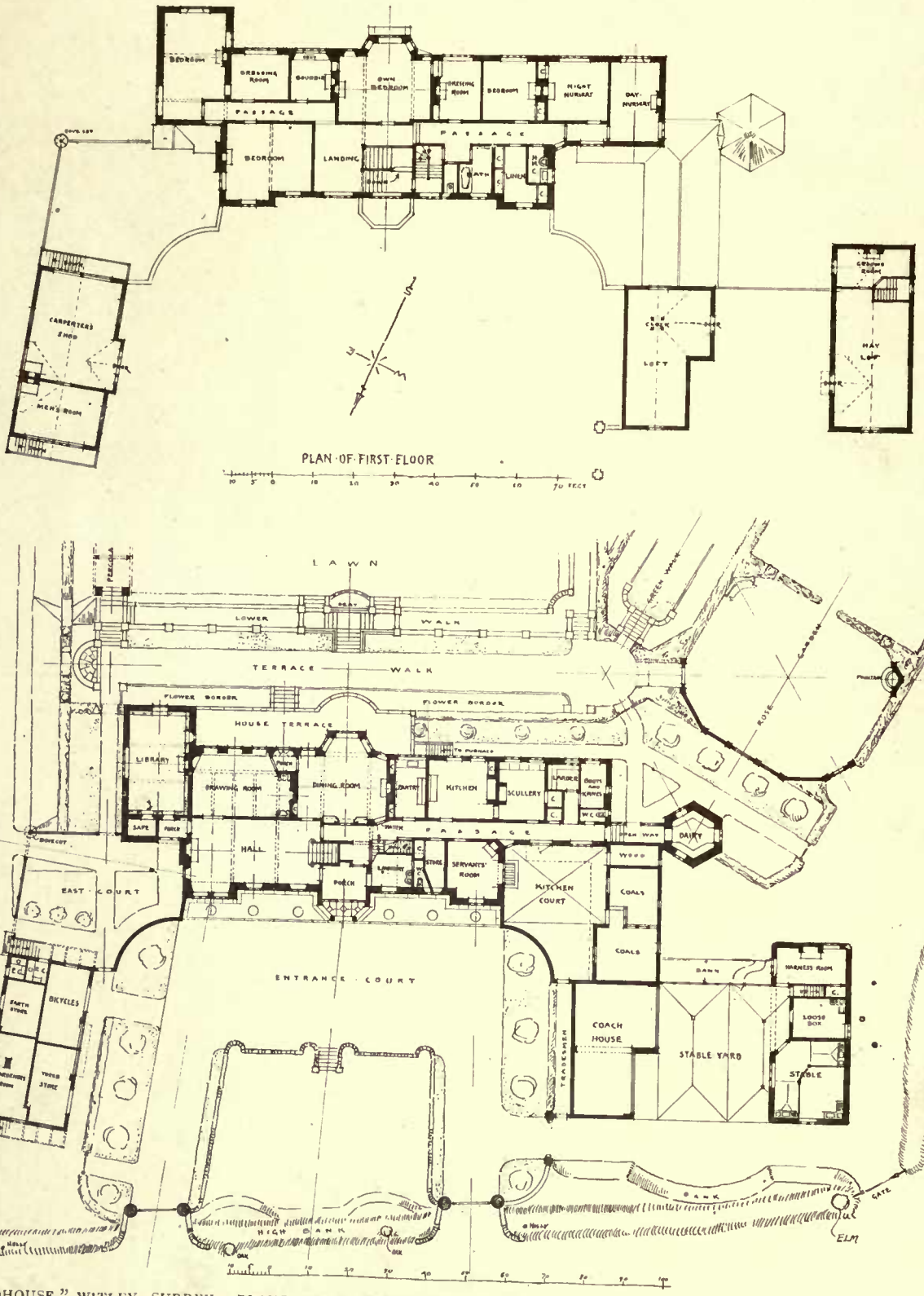
Photo: G. E. Martin.

"SANDHOUSE," WITLEY, SURREY. THE DINING ROOM.
F. W. TROUP, ARCHITECT.

Current Architecture.

SANDHOUSE, WITLEY, SURREY, FOR JOSEPH KING, ESQ.—The position this house occupies, close to the roadway, was dictated by the subsoil. Most of the ground is clay, but at this point the sand from which the adjoining hamlet of Sandhills takes its name, finishes in a spur on which the house has been built. The entrance court is a foot or two below the level of the road, and the ground falls away more rapidly beyond the house southward, giving a sunny aspect for the garden, and the opportunity for terraces, walls, and garden steps, as the ground dips towards the orchards and green glades beyond. The bricks used for the house come from a kiln close by. As they are wood-burnt, most of the headers are vitreous flare-ends of a soft grey colour, and these have been worked into a diaper over the whole of the buildings. The contrast of the two colours, grey and red, becomes exaggerated in the photographs. The diaper in reality is almost identical in colour with the lead, of which a good deal occurs in pipes, heads, and elsewhere about the buildings. All the window frames, doors, etc., are of oak. Weatherboarding is also of oak, except the stables and workshops, where elm has been used. There is some stonework in gate piers, terrace walls, and so forth, which is of the local Bargate stone, the copings and dressed stone is Portland, and a good deal of paving and steps about the garden have been done with old London flagstones. Internally the woodwork of the principal rooms is English oak. In the dining-room ceiling (shown in one of the photographs) all the beams and joists are left rough from the saw, and whitewashed. With regard to the plan, it was the particular wish of the owner that the kitchen, scullery, etc., should have a south aspect, and overlook the grounds.

The somewhat unusual south larder has double windows and triple walls, and is supplemented by good cellars and a detached dairy with covered approach. The latter has also the triple wall and a thatched roof. A small enclosed garden has been formed at this end of the house for the use of the servants, the kitchen garden being to the east of the house, where a good aspect and sheltered situation was available. Mr. Herbert Hutchinson, of Haslemere, was the builder, and Mr. F. W. Troup the architect.



"SANDHOUSE," WITLEY, SURREY. PLANS. F. W. TROUP, ARCHITECT.

"SANDHOUSE," WITLEY, SURREY. ENTRANCE FRONT (NORTH).
F. W. TROUP, ARCHITECT.

Photo: G. E. Martin.

Photo: G. E. Martin.

"SANDHOUSE," WITLEY, SURREY. GARDEN FRONT FROM THE PERGOLA. F. W. TROUP, ARCHITECT.

Burlington 1732

FRONTISPIECE TO PALLADIO'S ARCHITECTURE.

THIS IS FROM LORD BURLINGTON'S COPY, NOW IN THE AUTHOR'S POSSESSION.

Andrea Palladio.*

ANDREA PALLADIO was born at Vicenza in the year 1518—there is some uncertainty as to the date—and was the son of Pietro, stone mason, of that city. He is said to have begun his career as a sculptor—the probable meaning of which is that he helped his father in building—but to have given up sculpture for the study of architecture. Mr. Fletcher, repeating a story given by Temanza and Milizia, says "his master at this time, it is believed, was Giovanni Fontana." The famous Giovanni Fontana known to Vasari was some twenty-two years younger than Palladio, so that we should like to hear more of this other Giovanni Fontana, "architect of the Grand Palace of Udine." Temanza rested his assertion first on a passage at the end of Vasari's "Life of Jacopo Sansovino," which mentions "un Giovanni intagliatore e architetto" as belonging to Vicenza; and secondly, on a supposed record that the design for the Basilica of Vicenza was sent in under the joint names of Maestro Giovanni and A. Palladio, and he assumed that this Giovanni must have been Palladio's master; but the passage in Vasari was added by certain of his editors; moreover, this unknown Giovanni is there described as a sculptor of ornament rather than an architect, and there seems to be no evidence for the story worth the name. An entry of a payment to "Messer Andrea, architect," in 1540, discovered by Bertotti Scamozzi, probably refers to Palladio; and, if so, shows that he was already recognised as an architect, but, so far, his early training is a matter of conjecture, and he probably learnt his business with his father, with such education as he picked up from his patron and employer, Gian Giorgio Trissino. In 1541 Palladio accompanied Trissino to Rome to study the remains of Classical architecture, and subsequently he visited Ancona, Rimini, Naples, Capua, and Nîmes. He refers to the famous double staircase at Chambord, but there is no evidence to show that he ever went there. In 1547 he was at Tivoli, and in 1551 he was at Rome for the third time, in the company of Venetian gentlemen. It is during these years, from 1540 to 1551, that he appears to have collected the materials for his work "Le Antichità di Roma," published at Rome in 1557 and at Venice in 1565.

Meanwhile, he had begun practice as an architect. His earliest work is said to have been certain alterations to the Palazzo Trissino at Criccoli for Trissino in 1536, but even taking full account of the precocity of artists of the Renaissance, it is hardly likely that he was employed here as architect. The probable explanation is that he acted as foreman or superintendent for Trissino, possibly with his father Pietro as contractor. This is only a theory, but Imperiale definitely states that Palladio was "famulus" to Trissino, and that it was Trissino who first introduced him to the study of architecture. Palladio's first important work was the addition of the two-storied arcaded Loggia to the Salla della Ragione at Vicenza in 1545 to 1549. In 1549 he is said to have been summoned to Rome by Paul III. to advise on the completion of St. Peter's; but as the Pope died before his arrival, nothing came of the visit. The whole story, however, seems to be doubtful. In 1556 he designed the church of St. Giorgio Maggiore at Venice, and the Church of Il Redentore at Venice was begun from his designs in 1576. Among his other important buildings are the series of palaces at Vicenza, such as the Palazzi Chiericate, Thiene, Valmarana, Barbarano, and Porto, the Casa del Diavolo, and the Palazzo del Consiglio, the Olympic Theatre at Vicenza, the Convent of La Carità at Venice, and various country houses, of which the most important executed design was a villa for Paolo Almerigo, a favourite model of eighteenth century architects. There is a good deal of confusion about the name of this building. The villa in question (which is shown on page 18, Book II., of the 1570 edition of Palladio and on plates 14 and 15 Book II., of Leoni's edition) was built for the Referendary Paolo Almerigo (not Armerico) "within less than a quarter of a mile" of Vicenza. Mr. Fletcher calls it "the Villa Capra." Now Palladio did build a house for Signor Giulio Capra "in un bellissimo sito sopra la strada principale della Citta" (Vicenza), which is shown in page 20, Book II., Palladio, 1570—immediately following the plate of Almerigo's house. Milizia first called Almerigo's house the Villa Capra, and Mr. Fletcher appears to have followed him.† Palladio's literary work is of course of first-rate importance in the history of architecture. In addition to the "Antichità" and the Commentaries of Cæsar he helped Daniel Barbaro (not Barbero) in his edition of "Vitruvius" (1556), and in 1570 he published the final results of his studies in those famous four books which have done more to influence architecture than any book ever written on the subject, except the treatise of Vitruvius. His latest design was made for the Theatre of the Olympic Academy at Vicenza. This was begun

* "Andrea Palladio: his Life and Works." By Banister F. Fletcher. G. Bell and Sons. 1902.

† The initial confusion appears to have arisen from the fact that in the eighteenth century the Villa Almerigo belonged to a Marquis Capra.

in 1580, but Palladio did not live to see the completion of this building, for he died the same year, and was buried in S. Corona, at Vicenza. In 1845 his remains were removed to the Communal Cemetery, on which occasion, says Mr. Fletcher, "a loud volley of cannon proved an impressive finale to the solemnity of the occasion."

In spite of this and similar literary embellishments, Mr. Fletcher's account is hardly adequate to his subject. The scanty collection of facts which, with one or two additions, I have summarised above, are pretty well all that Mr. Fletcher has to offer, supplemented by a catalogue *raisonné* of Palladio's buildings and designs; but the facts are taken from Paolo Gualdo's life, published at Padua in 1749, and the account of his buildings is drawn from Palladio's own description as translated in Leoni's edition of Palladio's four books on architecture, together with certain notes and dimensions from "Les Bâtiments et les desseins de André Palladio," Vicenza, by Ottavio Bertotti Scamozzi, first published in 1776 in Italian, and in French in 1796. Mr. Fletcher calls the latter author indifferently Bertotti and Scamozzi, much to the mystification of his reader. Few dates are given to the buildings, and as they are not arranged chronologically in Mr. Fletcher's book the student has no opportunity of tracing the development of Palladio's style. The illustrations consist of photographs and reproductions of engravings from the works of O. B. Scamozzi and Leoni. Considering that many of the latter's engravings are well-known to be inaccurate, it is somewhat singular that Mr. Fletcher should have reproduced them in preference to Palladio's original woodcuts. There is little trace of any research on the spot, or, indeed, of any personal appreciation of the precise value of Palladio's work. In view of such alarming developments as are now taking place under the comprehensive title of "L'Art Nouveau," one the more regrets the inadequacy of this biography. An authoritative critical study of Palladio, and his time would be of great value in the present state of architectural practice.

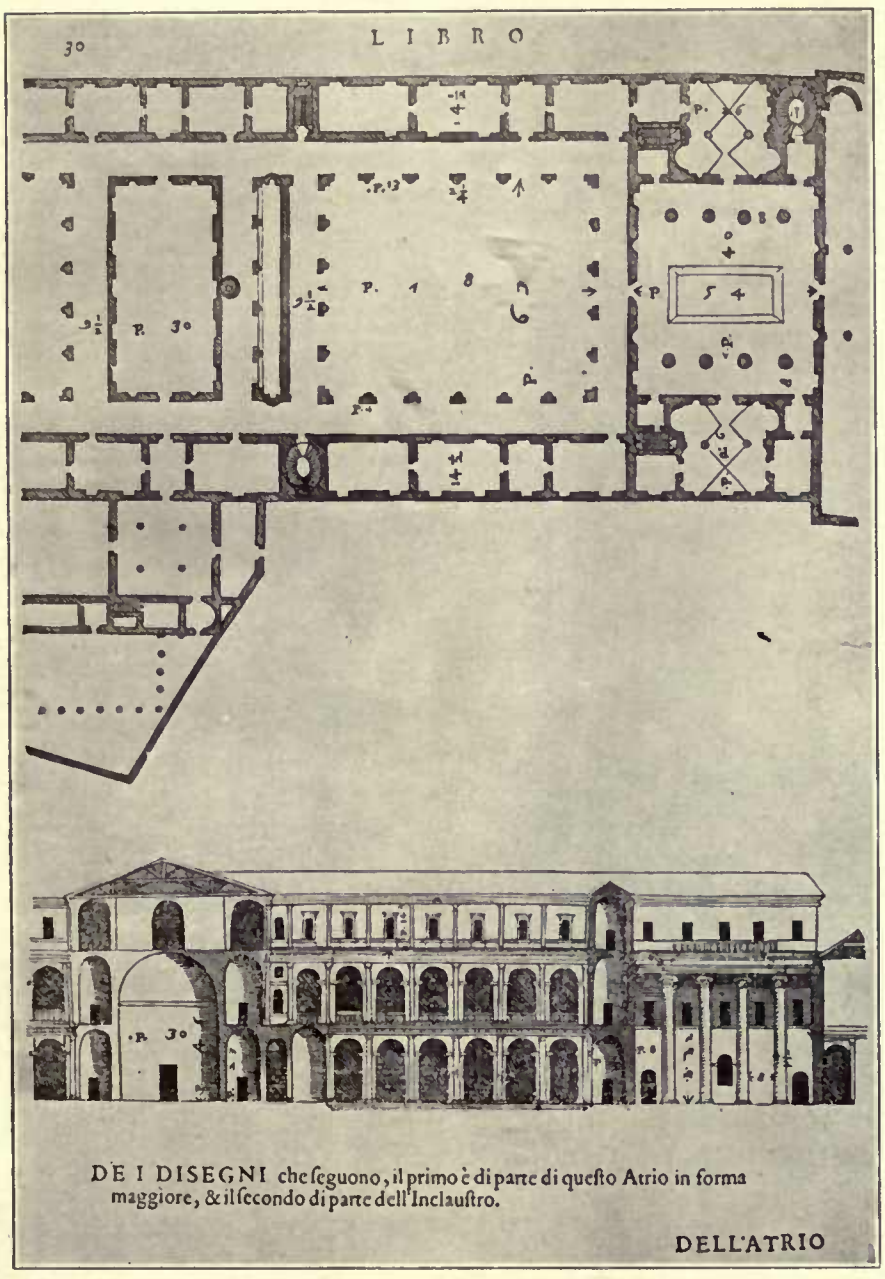
Mr. Fletcher's account is deficient in historical background and inaccurate in facts. It is no great help to the student of Palladio to be told (p. 4) that on the 23rd of May, 1498, Savonarola "was, alas! burnt as a heretic at the stake," or that "antiquity seems to have formed the principal study in every branch of learning at the time." What antiquity? The wisdom of the Egyptians or of the Greeks, of the Romans, or of whom?—or to be told (p. 5) that Michelozzi, Cronaca, San Gallo, and Mangelli, are all "Cinque cento Florentines in favour of the Renaissance." There were seven designers of the name of San Gallo, was it Giuliano or Antonio, Aristotile or Giovanni? and one would like to hear more of the architect "Mangelli." Vasari mentions a stonecutter and architect Mangone who erected many palaces and buildings at Rome "with considerable ability." Why, again, should a comparatively unimportant designer, such as Baccio Pintelli (not Pentelli) be mentioned in the company of Brunelleschi, Bramante, and Peruzzi? There is a want of proportion in such grouping as this. On p. 6, Mr. Fletcher says: "Later Sansovino built the library of St. Mark's, Venice, and also the magnificent palace of the Procuratie, which Palladio specially eulogises, etc." Palladio's words are: "Procuratia nova, la quale è il piu ricco e ornato edificio che forse sia stato fatto da gli antichi in quà." It is known that Scamozzi built what is known as the "Procuratie nuove" after Palladio's death, and he refers to it as his work in his book, pt. 1, p. 125, l. 50. There can be no doubt that Palladio is here referring to the library which, according to Vasari, Sansovino built for the Procurators of St. Mark's. On p. 8, we are informed that "in these days" (*i.e.*, when Palladio was at Rome, 1540–1550) "Rome was gay with music and laughter, bright with an influence which was slowly but surely effacing the rust of barbarity which had so long remained on the surface of the ages, and loosening the fetters which had long bound them in indolence."

> "Purpureus, late qui splendeat, unus et alter
> Assuitur pannus . . . .
> Sed nunc non erat his locus."

The date in question is, say 1550. It appears then that Alberti, Fra Giocondo, Brunelleschi, Bramante, Raphael, Michelozzo, Peruzzi, Sanmichele, Sangallo, Sansovino, and the great architects that preceded Palladio, had been labouring under "the rust of barbarity" and "the fetters of indolence," and that it was reserved for Palladio to place the arts on a proper footing. This is a new reading of history with a vengeance, but the merely casual student will find a good deal in this work to make him rub his eyes. On the same page, Mr. Fletcher states that of the remains of ancient Rome existing at the time of Palladio's visit "the four gates still stood, those of the Rotunda, St. Adriano, St. Cosino and St. Agnes". Imperial Rome possessed, according to the late Professor Middleton, some forty-five gates, but I do not find in his list any of Mr. Fletcher's four gates, though one learns from Palladio himself that the Porta Viminalis was known as the Porta St. Agnese, probably on account of its proximity to the seventh century church of Sant' Agnese fuori i muri. Palladio himself gives the names of fifteen gates in "L'Antichità di Roma," which Mr. Fletcher does not appear to have consulted. On the other hand there was "the Rotunda," or the Pantheon, in

existence; and also the Church of SS. Cosimo and Damian. Does Mr. Fletcher refer to these buildings?

Mr. Fletcher's descriptions of buildings are not always easy to follow, as on p. 87, the portico of the church at Maser is described as "hexagonal." As, however, it appears from the illustrations to be a regular composition of four columns and two angle piers, carrying a tri-angular pediment, perhaps "hexastyle" would be a more suitable term. On p. 88 the plan of a church measuring 44.6 wide by 77.0 long is described as "nearly square." So again on p. 93 we are told that Inigo Jones used Palladio's design for the convent of La Carità at Venice, in Houghton Hall, Bedfordshire, a building now in ruins, the point of resemblance being a certain recessed portico at Houghton "about twenty-two feet by twelve with four three-quarter Doric columns." On looking up the plan of La Carità in Palladio, I find that Palladio designed it as a large cloister court, 86 by 70, with three orders, entered by an atrium or vestibule 60 feet long by 45½ wide, open to the sky in the centre with a colonnade of four columns on either side of the composite order 40 feet high. The figures are taken from Mr. Fletcher's account. From this it would appear that there was not the very slightest resemblance between the design of La Carità and the designs of Houghton or of the Queen's house at Greenwich, to which Mr. Fletcher also refers. On p. 98 we are correctly told that Palladio's module is the diameter of the column taken at the base, except in the case of the Doric order in which the module is half the diameter; but nine lines lower down we are told "the module in this" (the Doric order) "and the Ionic Corinthian and composite orders is taken as the half diameter." Palladio states twice over that it is only to the Doric order that the half diameter module applies. Mr. Fletcher has been at some pains to explain the Vicenza foot, "an English foot," he says, "is to the Vicenza foot as 1.1¾ is to 1 foot, so that by adding 1-7th to a measurement in Vicentine feet, we obtain the equivalent in English feet." Leoni (Palladio, Book II., Chap. 2, p. 60, ed. 1721) says that "the English foot makes only 10¼ inches of the Vicentine foot." About this statement there can be no misunderstanding, and it seems to me preferable to the elaborate system of adding 1-7th. Mr. Fletcher's English is somewhat peculiar. In his "Forewords" he uses "Pedagogy" as synonymous with pedantry, and it is not apparent why Raphael should be accused of making plans "to exploit the ancient works of Rome" when all that he contemplated was their illustration and record. Again, "Agora" and "Palæstra" are not nominatives plural, as Mr. Fletcher appears to suggest. On p. 120 we come across another of Mr.



LA CARITÀ, VENICE. FROM PALLADIO, ED. 1570.

Fletcher's startling historical statements, "as to France, says Boffrand, Milizia in l'Hôpital des enfants trouvés, and Goudouin in l'Ecole de Médicine, were followers of Palladio." But Boffrand was the architect of the Hôpital des Enfants trouvés, and as for Milizia he was not an architect at all, but a most industrious if inaccurate writer who published his "Lives" of the more celebrated architects at Rome in 1768.* Mr. Fletcher's concluding chapter on the influence of Palladio and his school is a perfect farrago of uncritical statements. He repeats the foolish story that Inigo Jones designed the garden front of St. John's, Oxford, for which there is no authority either on its own showing or in documentary evidence, and that he designed the Palladian Bridge at Wilton, which is known to have been designed for Lord Pembroke by Morris a hundred years later. There is no evidence for the statement that Inigo Jones was in "a lucrative practice" before 1612. It is very doubtful whether he had designed any architectural work at all before that year. After an excursus on Lord Burlington, Mr. Fletcher assures us (p. 126) that "at the universities Wren carried out many works bearing the impress of his Palladian training;" and, as an instance, couples together the Sheldonian theatre at Oxford, and the library of Trinity, Cambridge, two quite dissimilar buildings, both in date and treatment. It is well known that Wren never travelled in Italy, and that the only foreign influence which seriously affected his work was that of the architects of Louis Quatorze, and they took Vignola for their model in preference to Palladio. The mistake is a serious one, for it shows a total misconception of the character of Wren's work and of that of the architects who succeeded him. Early in the eighteenth century a dead set was made against Wren by the younger generation, and the whole point of their disparagement of Wren was that in fact he was a free lance who disregarded the niceties of Palladian architecture. Lord Burlington was an amateur and a prig, but the architects ought to have known better than to join in a conspiracy of silence against one of the greatest architects the world has ever seen. Mr. Fletcher, however, bravely jumbles together Hawksmoor, Vanbrugh, Lord Burlington, Robert Adam, and Sir William Chambers; indeed one wonders why he should have stopped short at this point and not swept into his collection Decimus Burton, Sir Charles Barry, Greek Thompson and Professor Cockerell.

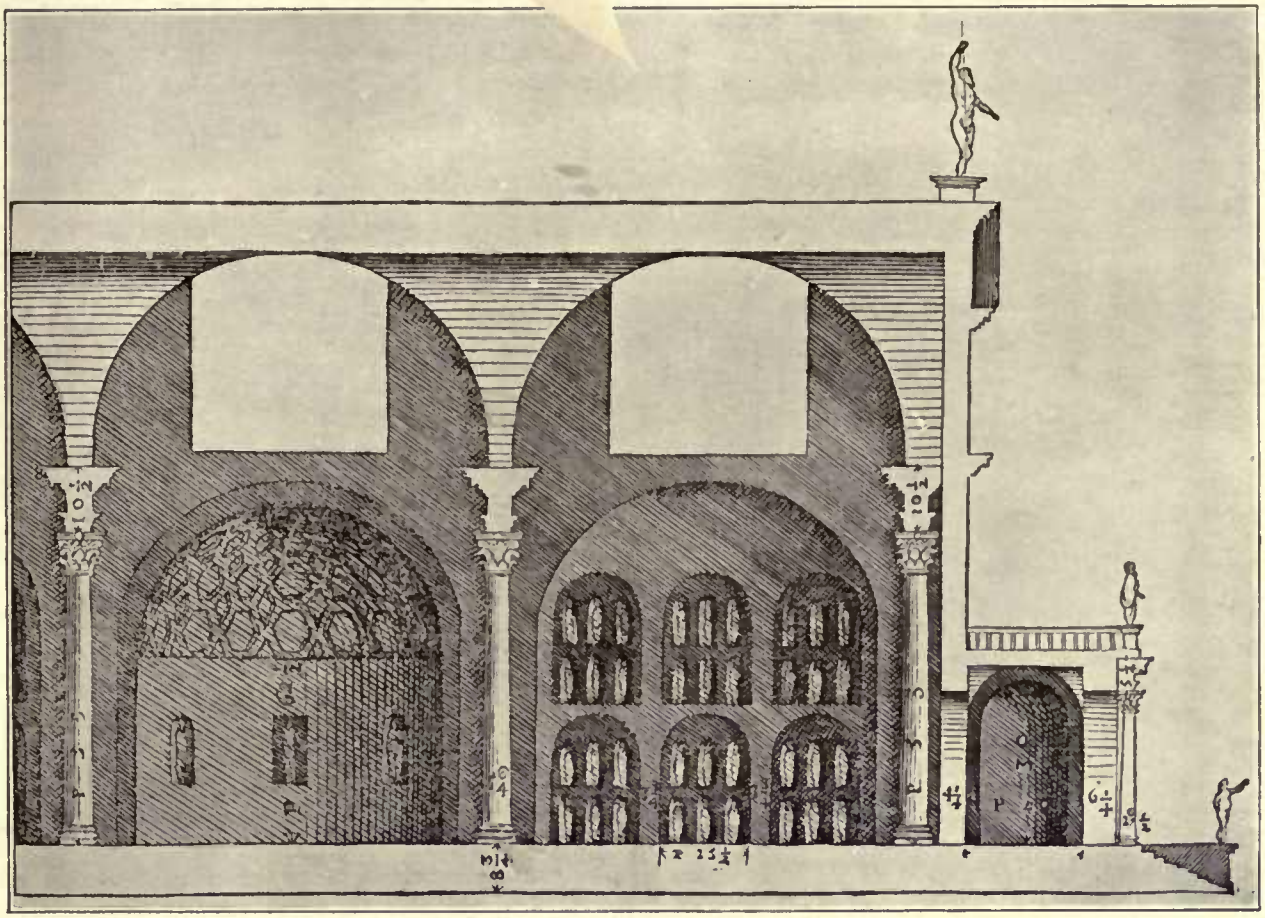
If Mr. Fletcher addresses himself again to the study of Palladio, his readers would be grateful for an extension of his area of research, and he may perhaps recall a certain caustic remark in Leoni's preface: "'Tis pity that the authors who have made mention of him are silent in the particulars of his life. They have taken great pains in giving us a long list of the fine buildings wherewith he adorned his country, but to little purpose, since we have them drawn and explained by himself in the second and third books of his architecture." Had Mr. Fletcher even consulted Vasari, he might have placed Palladio in some sort of relation to his contemporaries. He would have told us that he designed a theatre in wood and open to the sky, in the manner of the Colosseum, for the "Signori della Compagnia della Calza" at Venice, and that he employed Federigo Zucchero to paint the scenery for his theatre in twelve large pictures, representing incidents in the life of Hyrcanus king of Jerusalem, the hero of the tragedy to be performed in this theatre. Mr. Fletcher might also have gleaned the more important fact that Palladio was a member of the Academy of Florence—a body which included in its ranks Titian, Paul Veronese, Tintoretto, Bronzino, and many others, including the excellent Vasari himself. In the Bologna edition of Vasari (1647, the edition on which Temanza founded his wild theory about Giovanni "Fontana") two pages and a half are devoted to an extravagant panegyric of Palladio and a complete list of his works. The writer states that Palladio had made of Vicenza the most honourable and beautiful of cities, and that in regard to his design in general "sarebbe stata lunghissima storia voler raccontare molto particolari di belle e strane inventioni e capricci." Caprice in connection with Palladio is hardly what one would expect, and the whole passage bears evident marks of being a later interpolation. It seems to me an *ex post facto* and worthless testimonial, but Mr. Fletcher may be glad of a passage to support his enthusiasm for "our master." What the student wants to know is Palladio's place among architects, how he came to occupy the position in history that he does, what were the sources from which he drew his inspiration, and the genesis of his individual methods of thought and design. Architects do not spring into existence fully armed, as Pallas Athene sprang from the brow of Zeus. One wants to know and understand their antecedents, the labours of their predecessors which became their heritage, the intellectual atmosphere of the time which made them possible at all; and this is, in fact, the function of historical criticism. Palladio, for instance, could hardly have conceived of his books on architecture and his antiquities of

* Milizia's "Lives" appears in Mr. Fletcher's Bibliographical List, but I see no mention in it of the late Mr. William Anderson's "General View of the Renaissance in Italy." Mr. Anderson was one of the very few recent writers on architecture who approached his subject from the standpoint of an architect, and his untimely death is a real loss to students.

FROM THE LARGE EDITION OF BARBARO'S "VITRUVIUS."

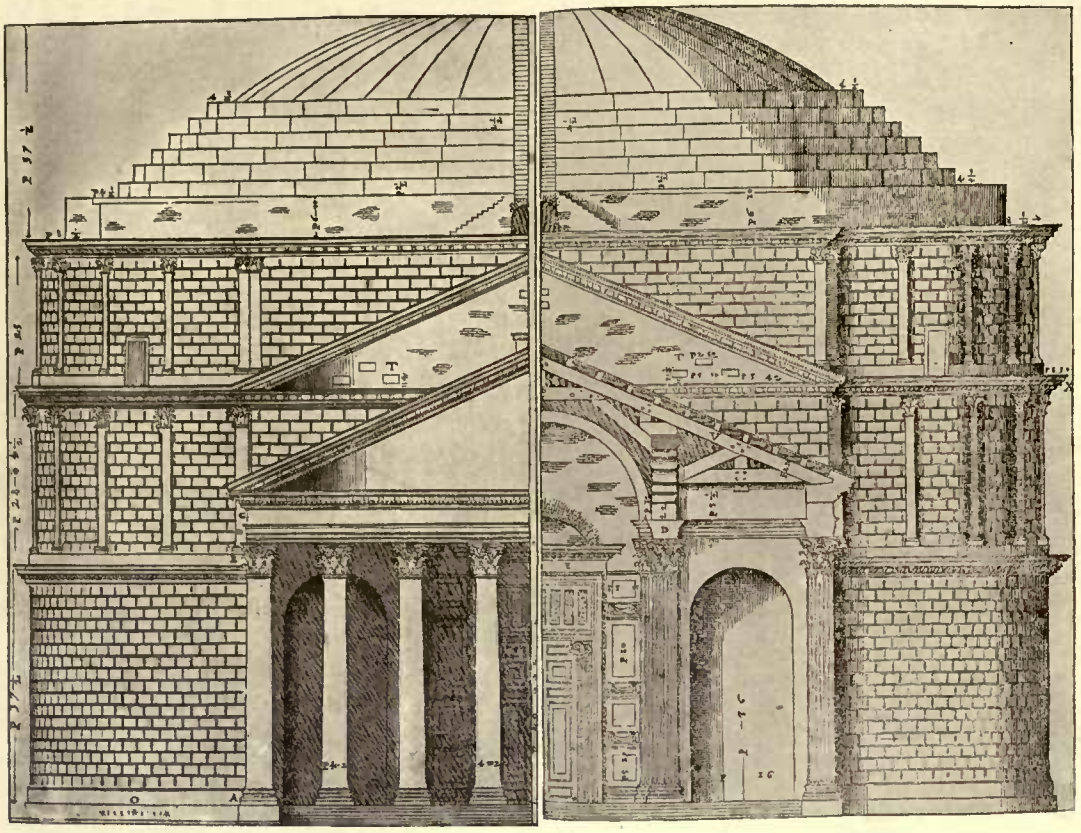
Rome if Alberti had not written his ten books, "De Re Ædificatoria," more than a hundred years before, and if that extraordinary scholar and architect, Fra Giocondo, had not led the way with his "Corpus Inscriptionum," and if Daniele Barbaro had not produced his immensely learned commentaries on Vitruvius in his own lifetime; and if, in short, all the great architects of the hundred years before him had not given the profoundest study possible at the time to the remains of classical architecture then existing in Rome. Flavio Biondo had written his "Roma Instaurata" as early as 1430-40, and his MS. was printed at Rome in 1480. Poggio's MS., "De Fortunæ Varietate," written about the same time as Biondo's work, was printed at Basle in 1538. Moreover, the works of Albertini, Pomponius Leto, Fulvio, Calvus, Lafreri, Marliani, Fauno, Labacco, and Ligorio, were all earlier than Palladio's book; and besides these there is Serlio's work to be considered. Serlio published the first of his books on architecture in 1532, and completed the series in 1540. Now Serlio was in the field long before Palladio, for the first book which he published was actually the fourth in the complete set, and in this book he gave a full account of the five orders and their various ornaments, while in the book next published (third in the complete set) he treated "of all kinds of excellent antiquities of buildings, of Houses, Temples, Amphitheatres, Palaces, Thermes, Obelisks, Bridges, Arches triumphant, etc.", with the motto, "Romæ quanta fuit ipsa ruina docet." Among the buildings delineated are the Pantheon, the Temple of Bacchus, the Temple of Peace, the Temple of Piety, the Temple of Vesta, four unnamed Temples (one of Minerva Medica), various designs of St. Peter's, S. Pietro in Montorio, the theatre of Marcellus, the theatre at Pisa, a theatre near Viterbo, Trajan's Column, the Colosseum, the amphitheatres at Verona and Pisa, a palace on Monte Cavallo at Rome, the harbour of Ostia, the Thermæ of Titus and of Diocletian, one of the Pyramids, the "Bankers' building", S. Georgio in Velabro, the Temple of Janus, the arches of Titus and Septimius Severus, an archway at Beneventum, the Arch of Constantine, arches at Ancona and Pola, at Castel Vecchio in Verona, and others; and Serlio concludes his third book with some account of works by Bramante, Peruzzi, and Raphael. When Palladio took up the study of Roman antiquities Serlio's work was the acknowledged authority on the subject; and not only did Serlio, in fact, anticipate Palladio in nearly every instance, but his survey covered a good deal more ground. Palladio's book was therefore by no means such an epoch-making affair as it has been generally represented to be, but he went one better than Serlio in that he gratified the taste of the time by restorations of the buildings he represented. These restorations were quite hypothetical, and in many cases improbable, yet they were so apparently complete as to satisfy entirely an appetite for classical knowledge as uncritical as it was insatiable. One would willingly exchange the whole set of Palladio's restored antiquities for a dozen trustworthy measured drawings of the buildings as they were when he saw them. That in making this criticism one is not asking the impossible is proved by the fact that while Palladio was at work on his fancy drawings other men were actually endeavouring to give a faithful record of the buildings themselves. In 1575 Stefano du Perac published his "vestigi dell' Antichità di Roma," in which he says that his object was "rappresentar fidelmente i residui della Romana grandezza." In order to show the historical untrustworthiness of Palladio's drawings, I give his version of what they both call "the Temple of Peace" (the Basilica of Constantine), together with du Perac's view of the fragments actually remaining at the time; and both du Perac's and Palladio's views of the Pantheon. There can be no doubt, from other evidence, that du Perac drew what he actually saw, and his work has historical value to this day, whereas Palladio's version has retired to the limbo of those academical exercises in restoration which have been the plaything of architects from his time to our own. It appears from a comparison of the blocks in Serlio's "Architectura" and Marliani's "Urbis Romæ Topographia," that Palladio used the work of his predecessors freely and not always accurately. Marliani's book appeared in 1535; it was dedicated to Francis I., and is said to have gone through eleven editions in the sixteenth century. On page 46 of the fifth edition is given a plan of the Basilica of Constantine, with dimensions which differ from those given by Palladio. But Marliani's dimensions are right and Palladio's are wrong. Serlio's plan is identical with Marliani's. Judged by modern standards of research, Serlio's work in this direction is the more valuable of the two; and as for the erudition displayed by Palladio, almost any important building by Baldassare Peruzzi — such, for instance, as the Palazzo Massimi alle Colonne at Rome — shows profounder study and a more intimate grasp of the architecture of the past than the whole of Palladio's books and buildings put together.

Palladio's extraordinary reputation is indeed a remarkable illustration of the luck of history. It has transcended the fame of abler men. It appears and re-appears at regular intervals, and in England, at any rate, the work of this architect

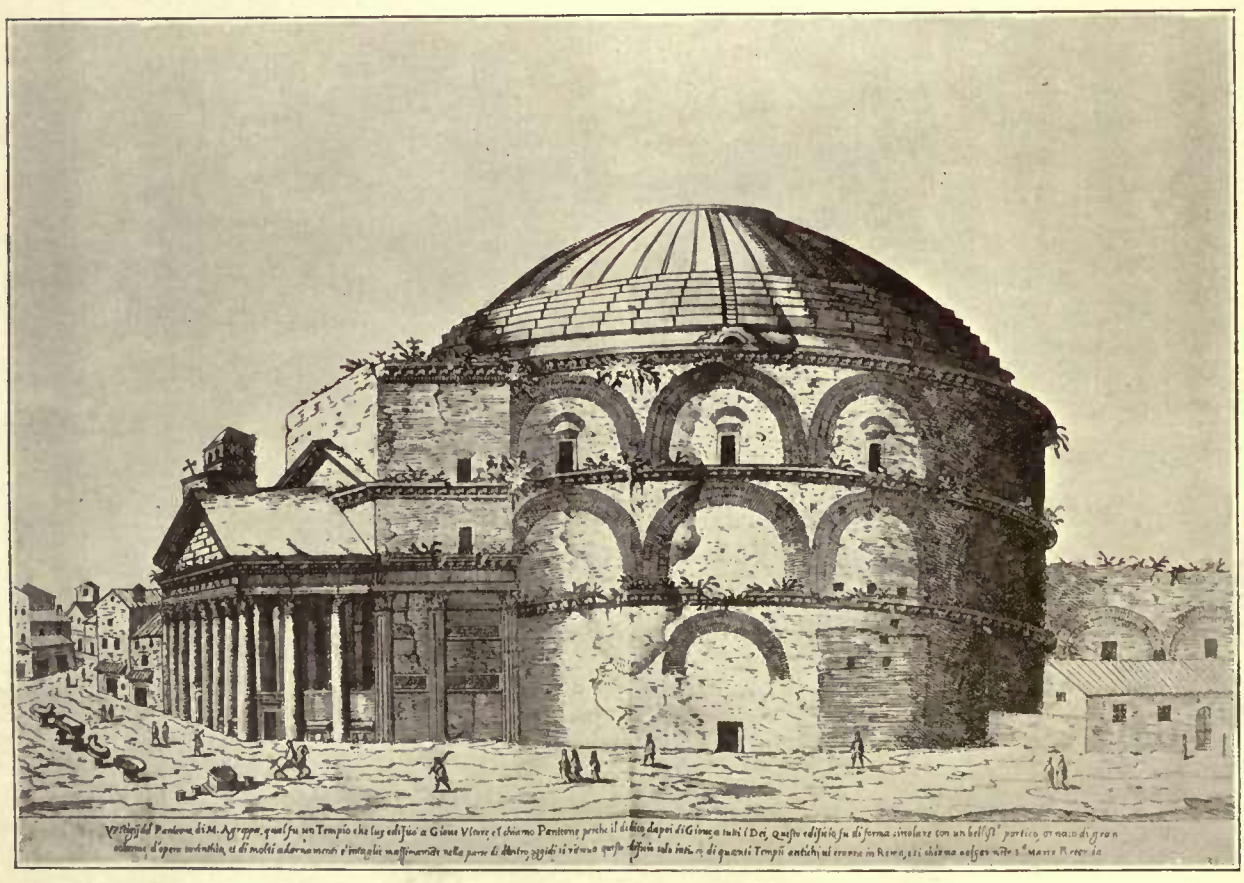


"THE TEMPLE OF PEACE" (BASILICA OF CONSTANTINE), AS SHOWN BY PALLADIO. ED. 1570.

"THE TEMPLE OF PEACE," AS SHOWN BY DU PERAC.



THE PANTHEON, AS SHOWN BY PALLADIO.



THE PANTHEON, AS SHOWN BY DU PERAC.

(whom Mr. Fletcher, with somewhat nauseating iteration, describes as "our master") should be introduced to students with very great care and numerous limitations; for at recurring intervals Palladio has been a sort of old man of the sea to the art of architecture. There is assuredly a good deal of chance in reputations; an astute and able man in a poor time can acquire a reputation of more or less fictitious value, until somebody takes the trouble to look into the work that the man actually did. Palladio was certainly happy in his opportunity. His fame rests partly on his writings and partly on his architecture. In England, at any rate, and I think to a considerable extent in Italy, his writings were the principal factor in his success, for his four books on architecture appeared at the precise psychological moment. Somebody was wanted to codify the result of the last hundred years of work. The great effort of the Renaissance was over. That whirlwind of energy which had swept through every nook and cranny of the arts was nearly spent, the reaction was setting in, and of that reaction Palladio was the exact exponent. More neat and orderly in his methods than Serlio, more comprehensive than Vignola, with the touch of pedantry in his nature that suited the times and invested his writings with a fallacious air of scholarship, he was the very man to summarize and classify, and to save future generations of architects the labour of thinking for themselves. After the days of the intellectual giants came the schoolmaster to put everything in order. What to them had been facts and vital elements of expression were now to be docketed as thin abstractions. Architecture was to be put into a strait waistcoat in order to keep it respectable and adjust it to the standard of the virtuoso. The result is rather depressing. The neatness and precision of the pedant are poor stuff after the clanging blows of the heroes. Yet I suppose even heroes cannot go on banging each other for ever, and no doubt it is well that somebody should come and tidy up before the next set-to. This seems to me the explanation of Palladio's commanding reputation in Italy. More than any other man of his time, he hit the taste and temper of his audience. Under the guise of scholarship he was able to justify the most astonishing follies in architecture, and for the time his fame was paramount, but it had no staying power. The Italians were much too brilliant and versatile a people to acquiesce in their strait waistcoat. They very soon turned their back on their pedagogue, and indulged to their hearts' content in a wild orgie of exuberant and unlicensed architecture. The impudence of Borromini was the inevitable sequel to the dogmatism of Palladio, much as in England the Gothic revival was the result of Kent and Campbell's pedantry.

Palladio's reputation in England in the eighteenth century, amounting almost to fetish worship, was, again, partly the result of accident. There is no doubt that by the beginning of the sixteenth century Palladio's treatise was generally recognised as the authority on architecture. The French, it is true, with the fine instinct which has always guided their architecture, preferred Vignola. But Palladio was so complete and systematic that to others he was inevitable, and when Inigo Jones came to Italy at the end of the sixteenth century, he fell headlong into the arms of this teacher, studied the antiquities of Rome by the very untrustworthy light of Palladio, and came back to England to put into practice the results of this narrow if devoted study. It is unnecessary to dwell on the commanding genius of the English architect. He swept aside the puerilities of Elizabethan design, and definitely set up Palladio as the model of architecture. What would have been gained if he could have come under the influence of Peruzzi instead of Palladio is now only a melancholy speculation. Fortunately, Wren did break away from Palladianism. His extraordinarily intelligent genius was much too active and alert for any such hide-bound stuff, and he became the great architect that he did because he was in fact a very great constructor. The weaker men who succeeded him had to fall back on rule and text-book, and Palladio recovered his ascendancy in England because his method exactly adapted itself to the taste of the English virtuoso of the eighteenth century.

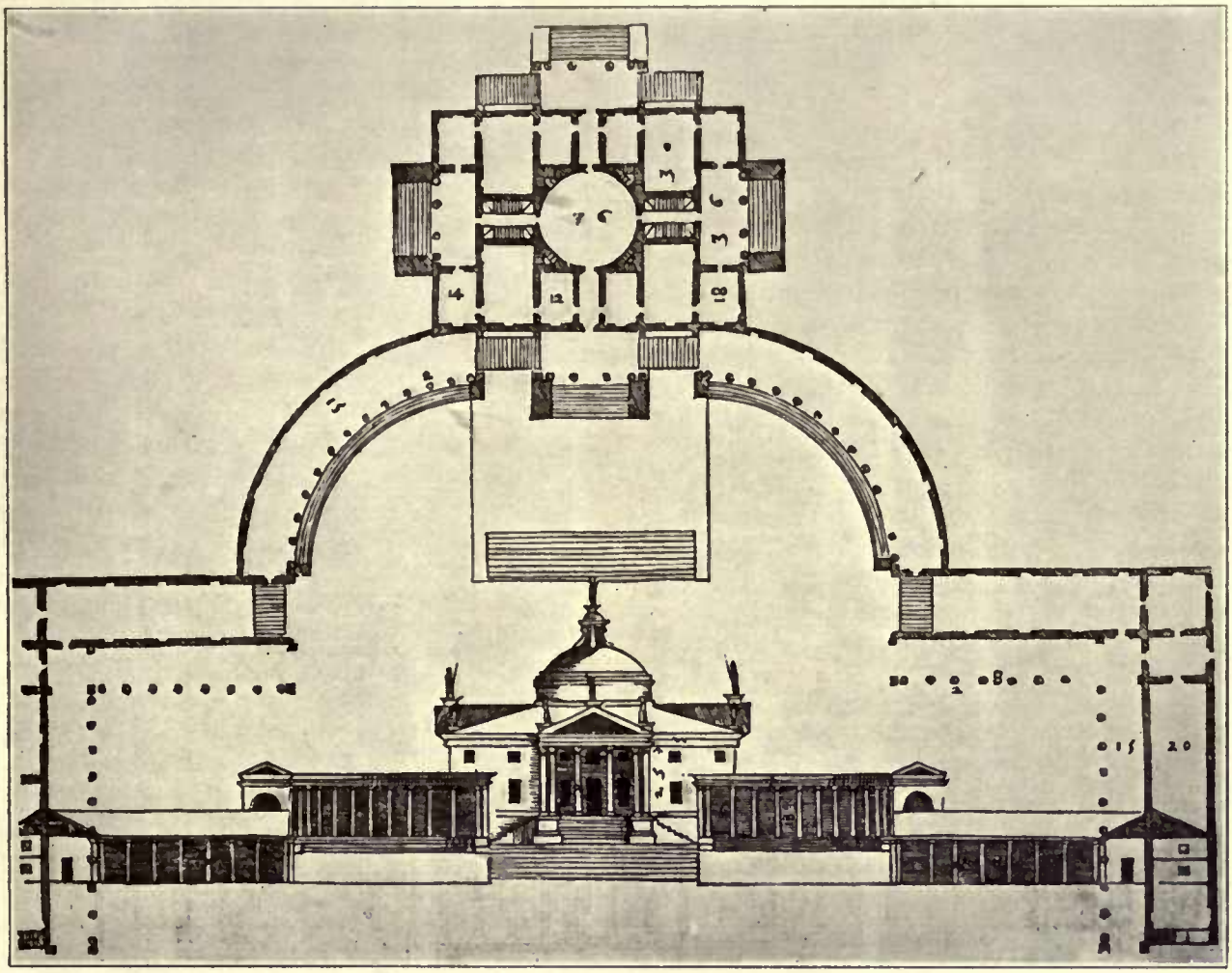
The positive value of Palladio's treatise on architecture consists chiefly in its lucidity and orderly arrangement. The chapters are short, and on the whole to the point, though by no means original. Palladio acknowledges his obligations to Vitruvius as his master and guide, and indeed follows him closely, only omitting the fables and anecdotes with which Vitruvius adorned his pages. His illustrations (always excepting the drawings of ancient buildings) are workmanlike and very well drawn. His examples were selected with fine taste, and he gives a more complete explanation of the orders than any treatise hitherto published—an explanation, moreover, that was easily grasped by his readers; and I think that in this lay the secret of his success. Yet the book has some serious defects. There is a large parade of learning, but where it is not borrowed from other writers it is chiefly drawn from Palladio's inner consciousness; and then there is that uncomfortable habit of advertisement, for, out of the four books that Palladio wrote, two are in fact mainly occupied with the

illustration of his own inventions. His motives may, of course, have been disinterested. He may have honestly believed that no better illustrations of his theory were to be found than his own practice, and at least there is no trace of jealousy in Palladio. He is as enthusiastic about the merits of his contemporaries as he is about his own; but we regret his failure in historical sense. Palladio was, it appears, a self-made, and to some extent a self-educated, man. There is little evidence that he received his training from any architect, and he appears to have picked up his knowledge as he could. To a man of Palladio's temperament, the desire to parade his learning must have been irresistible, and he found his chance in the preciosity of the later Renaissance. It is in this, more particularly, that he seems to me to have shown his weakness. Alberti, for instance, the first serious modern writer on architecture, was induced to write his book, not only by his real interest in the art, but also by a certain intellectual restlessness that was not to be satisfied until it had got abreast of its subject and reduced it to ordered shape. His interest lay in the facts of building, but Alberti was a scholar and a gentleman, and not in the least concerned with the advertisement of his own capacity as an architect, whereas in this regard Palladio was a most conspicuous offender, and the first to set a disastrous precedent. Moreover, the real concern of all great architects has been with building, not with the dressing up of antiquity. It is true that there was no escaping the orders in the sixteenth century, yet other architects were able to avoid the obsession of that fixed idea that the orders summed up the whole meaning of architecture. Philibert Delorme, for example, the first edition of whose works appeared three years before Palladio's architecture, was able to devote himself at length to the intricate problems of setting out of masonry, and to matters of construction in his "nouvelles inventions pour bien bastir," a matter to which Palladio, with his stucco translation of stonework, appears to have given the very slightest consideration. I do not know if Palladio was ever a play-actor, but the theatricality of his design did not confine itself to his buildings. The same insincerity, the same inability or unwillingness to grasp the essential facts of architecture are visible in his books.

The "Antiquities of Rome" do not remove this impression. This little book (of which, by the way, and of Palladio's edition of Cæsar's Commentaries, Mr. Fletcher gives no account) was published at Rome in 1557. It is a small octavo of thirty-two pages, and is, in fact, a collection of archæological notes on Rome, taken from ancient and modern writers. Palladio says that he was induced to write it by the decay of the great monuments of Rome, and also by his having come into possession of a certain small book, entitled, "Le Cose Maravigliose di Roma," "tutto pieno di strane bugie." This little book was no other than the famous twelfth century guide-book known as the "Mirabilia urbis Romæ." Palladio's own remarks are scarcely less strange than the lies with which he says this book is filled. He states that Rome was built in the year 5550 of the world's history, and offers an exact date for the birth of Romulus and Remus. There are no illustrations, though Palladio says he measured many of the buildings with his own hands; * and the notes are brief descriptions dealing indiscriminately with gates, bridges, aqueducts, fountains, vestal virgins, Roman marriages, and the like. It is a surprising fact that this worthless little book went through at least eight editions, and was translated into Spanish in 1589. Palladio's edition of the Commentaries of Cæsar was published by Franceschi at Venice in 1575. A pathetic interest attaches to this book. Palladio states that he had always interested himself in military matters, and indeed there is a story that on one occasion he surprised some officers by putting a number of galley slaves through the drill of the Roman legionaries. It appears that he directed the attention of two of his sons, Horatio and Leonidas, to the subject, and they set about making a series of designs to illustrate Cæsar's campaigns. Their untimely death left the work unfinished, and some time afterwards Palladio published this edition as a monument of his sons' labours, asking his readers' pardon for any faults, on the ground that in so far as they were the faults of his sons, they were but young men, who had devoted themselves to an excellent study; and in so far as they were his own, they were those of a father too distracted by grief to collect the material necessary to complete the work. It does not appear whether Palladio translated the Commentaries himself, or used an existing translation. From the absence of any reference to translation on the title-page and in the preface, I am inclined to think the latter, and the chief interest of the book lies in the quaint imagination and curious research of the illustrations.

Palladio's position as an architect is much less easy to determine. That he possessed great knowledge of certain forms of architectural detail,

* There seems no doubt that Palladio did measure some, at any rate, of these buildings, and left a good many of his notes in manuscript. Some of them came into the possession of Lord Burlington, who published his plans of the "Thermæ of Rome" in 1730; but a comparison of the various sixteenth century measured drawings of Rome shows that plagiarism was the regular rule; and as students of this period are aware, writers hardly ever acknowledged their obligations to each other.

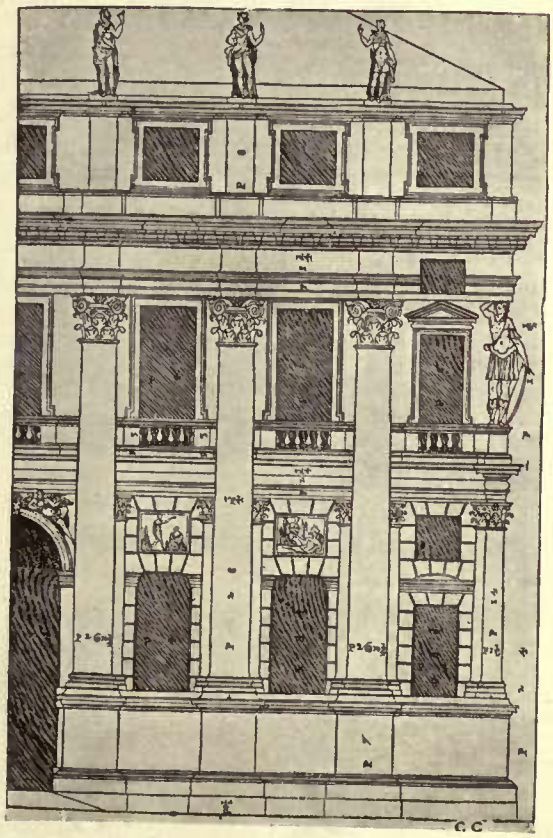


HOUSE FOR THE TRISSINI AT MELEDO. FROM PALLADIO, ED. 1570.

and though not exactly a fine sense, yet a very great feeling for proportion, is certain. He was, moreover, a most ingenious planner, and, so far as resource and knowledge go, a skilful builder. No doubt if Palladio were among us now we should think him a very great man; but we live in an unfavourable time, and one has to consider that when Palladio practised the age of the giants was hardly over. Vignola, and Giacomo Sansovino, and Galeazzo Alessi, were his contemporaries, and it seems to me that any one of these men, in their different ways, was a more original architect than Palladio.* But it is when one compares him with his immediate predecessors that the failure appears. With all his skill and knowledge, Palladio possessed little originality. He was a master of the orders, and of temples, pro-style, peripteral, pseudodipteral, and all the rest, and he played with the devices of his learning, combining them and re-combining them with all the zest of a pedant. But when it was all done there was no charm about the work, or at least no more than the arid satisfaction to be derived from a meritorious student's exercise; and the reason is that there was little genuine architectural imagination behind it. The best of his town palaces, with all its ability, leaves one cold. Contrast, for instance, the Palazzo Thieni, at Vicenza, with Peruzzi's Palazzo Albergati, at Bologna. Palladio's work is fine in proportion and severe in treatment, yet it is not severe enough, and the mechanical façade makes no such appeal to the imagination as the massive fortress-like front of the Palazzo Albergati. Mr. Fletcher gives a photograph of the Arco di Trionfo at Vicenza, attributed to Palladio. This, again, is a characteristic piece of work, fine in proportion, admirable in detail, cold, scholarly, accomplished, but without a grain of imagination in it. Compare this with Sanmichele's superb Porta del Palio at Verona. Sanmichele used classical detail not less severe than Palladio's, and his treatment is even simpler. Yet, while Palladio's arch would

* I recently came across a curious confirmation of the regard in which Palladio was held during his life. A year or two before 1570, Pellegrini was appointed architect to the Cathedral of Milan, and it appears that his methods and mistakes so exasperated a certain Martino Bassi of Milan, that the latter made a formal protest to the Deputies of the Fabric, and cited in support of his charges the written opinions of four eminent architects—Palladio, Vignola, Vasari, and Gio. Battista Bertani of Mantua. Bassi published his account of the whole affair at Milan in 1570, and proved that Pellegrini was guilty of making two parallel straight lines vanish to two different points on the horizon.

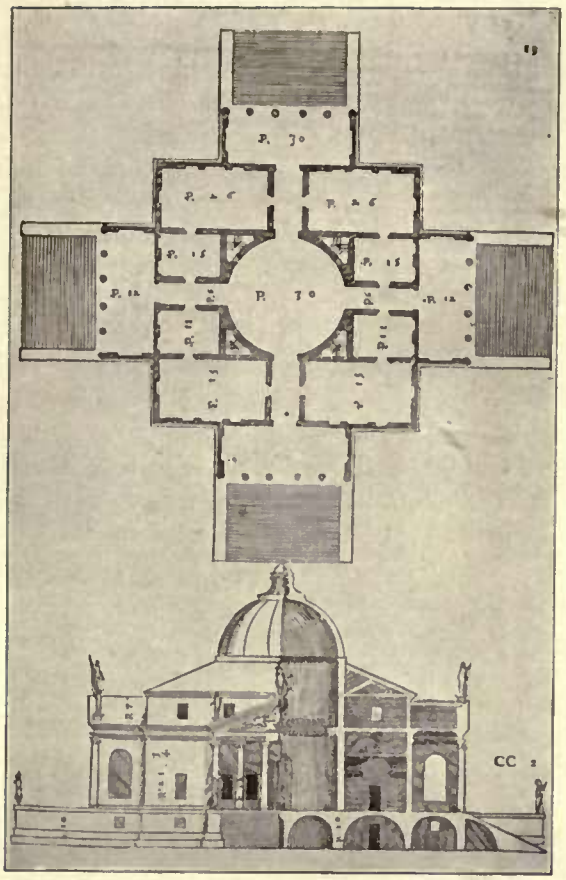
be within the reach of any well-trained architectural student, the Porta del Palio is, I suppose, about the finest gateway in existence, one of the world's masterpieces. Where Peruzzi and Sanmichele used their brains, Palladio used his notebook. His sense of proportion has always been held up to admiration as the greatest of his qualities. That sense seems to me to have been mainly technical. A sense of proportion is shown not merely in the exact adjustment of the proportion of the order to certain recognised canons, it is shown to the only purpose for which an architect need consider it, in what we generally call a sense of scale. Now considered in this aspect, Palladio's work shows some conspicuous failures. In the first place, he seems to have had little idea of the use that can be made of a blank wall. Where Peruzzi would have got quality from the plain surface, Palladio breaks it up again and again with some irrelevant order; and even his warmest admirers have to admit that he never knew how to handle the ends of his buildings. In the new fronts that he put to the Palazzo della Ragione at Vicenza, his only recognition of the angle is to double the columns, and draw in the subordinate order, though the front absolutely cries out for one solid piece of wall. At the Palazzo Barbarano he ran his engaged columns into each other, with the result that there is no line at all; and at the Palazzo Valmarana he appears to have given up the end as a bad job, for after putting a mighty great order to the five central bays of the front, he ends up with pilasters half the size, and a figure above them. A man with a sense of scale in the wider meaning of the term, with a grasp of the imaginative possibilities of the different parts of a building, would never have dropped into such bathos as this.



DETAIL OF PALAZZO VALMARANA.
FROM PALLADIO, ED. 1570.

The last criticism I have to suggest on Palladio's architecture is that he shows little sense of material. Most of his palaces are of brick, covered with stucco, and though no doubt he would have preferred to build in stone or marble, he never seems to have realised the possibilities of brick itself, either in combination with stone or without it. By this means he was able to spread his money very thin. He gave his clients large pretentious palaces, and they appear to have been satisfied. Yet a keener artist would have got more out of his materials than this. Peruzzi did, and Inigo Jones, and more conspicuously Wren, who at Hampton Court showed once and for all what could be done with brick and stone properly handled. It seems to me that an artist of deeper conviction and greater power would not have been content to go on imitating stone with stucco, and producing what was in fact not very far removed from stage architecture. There is this to be said for Palladio, first, that it had been the practice of the Romans to use their splendid brickwork as the mere drudge of architecture, and in nearly every case to cover it up with some other material, so that Palladio may have considered it a point of honour to follow the habit of the Romans; and secondly, that his patrons may have asked him to make stone with bricks, and insisted on his building those vast pretentious ill-constructed palaces at an impossible price. A man of genius would have found his way out of the difficulty, but Palladio seems to me typical of the able second-rate architect, of the man who can draw well and design freely, but who fails as an artist both in imagination and temperament.

Yet his life and work deserve close study if only for the understanding of the architecture of the last three hundred years; and to enable the student to grasp the fact that there is such a thing as a standard in architectural design, and one that he does well to observe until he is able to walk by himself. I have ventured to suggest a few criticisms of the work of this famous architect, because it seems to me that in the erratic, I might say chaotic, state of modern architectural taste, there is danger of a too abrupt revulsion from anarchy to rigid dogmatism in design; and the restoration of Palladio as an object of idol-worship, talk about him as "our master" and the



VILLA ALMERIGO.
PALLADIO, ED. 1570.

like, are all in the direction of setting back the hands of the clock, of perpetuating dulness. In the present state of uncertainty the study of history is extremely important, and it is essential that careful critical study should be applied to the architecture of the past, and that the facts should be presented in true historical perspective and proportion. It is with this intention that I have offered these criticisms on Palladio's work, but it is not to be overlooked that as architects go he was a learned man, and that within his narrow limits he was a past-master of technique, and an architect who, in such churches as those of S. Georgio Maggiore and Il Redentore at Venice, showed himself capable of fine and distinguished architecture. Although the really great quality of Roman buildings seems to have escaped him, although in his laborious search for details he caught no glimpse of that magnificent daring in construction which is the glory of Roman architecture, he yet had a real passion for antiquity, and definite convictions as to the path that architecture should follow. There is something attractive in the modesty which led him to believe it was not for him to revolutionise art, but to find in the past his guide for the future. He had not the slightest sympathy with the impudent audacity of ignorance, with what his biographer, Scamozzi, calls "la folle ambition de se singulariser, et de passer pour créateurs ou réformateurs de l'architecture." The stand he made against this tendency was the essential service that Palladio rendered to architecture. The position he occupies in the history of Italian art is not unlike that filled by Sir William Chambers in regard to English architecture of the eighteenth century. Both men were purists, even pedants, and their professional ability was not illuminated by any flash of genius. Yet both men made a conscious and deliberate stand against the merely fashionable license of their time, and endeavoured to recall the art of architecture to the graver practice of the past. It is a service that needs doing again. The remains of the classical tradition was the last effective influence in England, but that influence practically came to an end a hundred years ago, and the efforts of English architecture since that date have given us nothing in its place except any quantity of false sentiment. With rare exceptions, the architectural exploits of the nineteenth century were of the nature of guerilla fighting; they may or may not have been magnificent, according to taste, but they were certainly not war; and the work of steadying English architecture has yet to be done if it is ever to resume its rightful place in the great procession of history.

REGINALD BLOMFIELD.

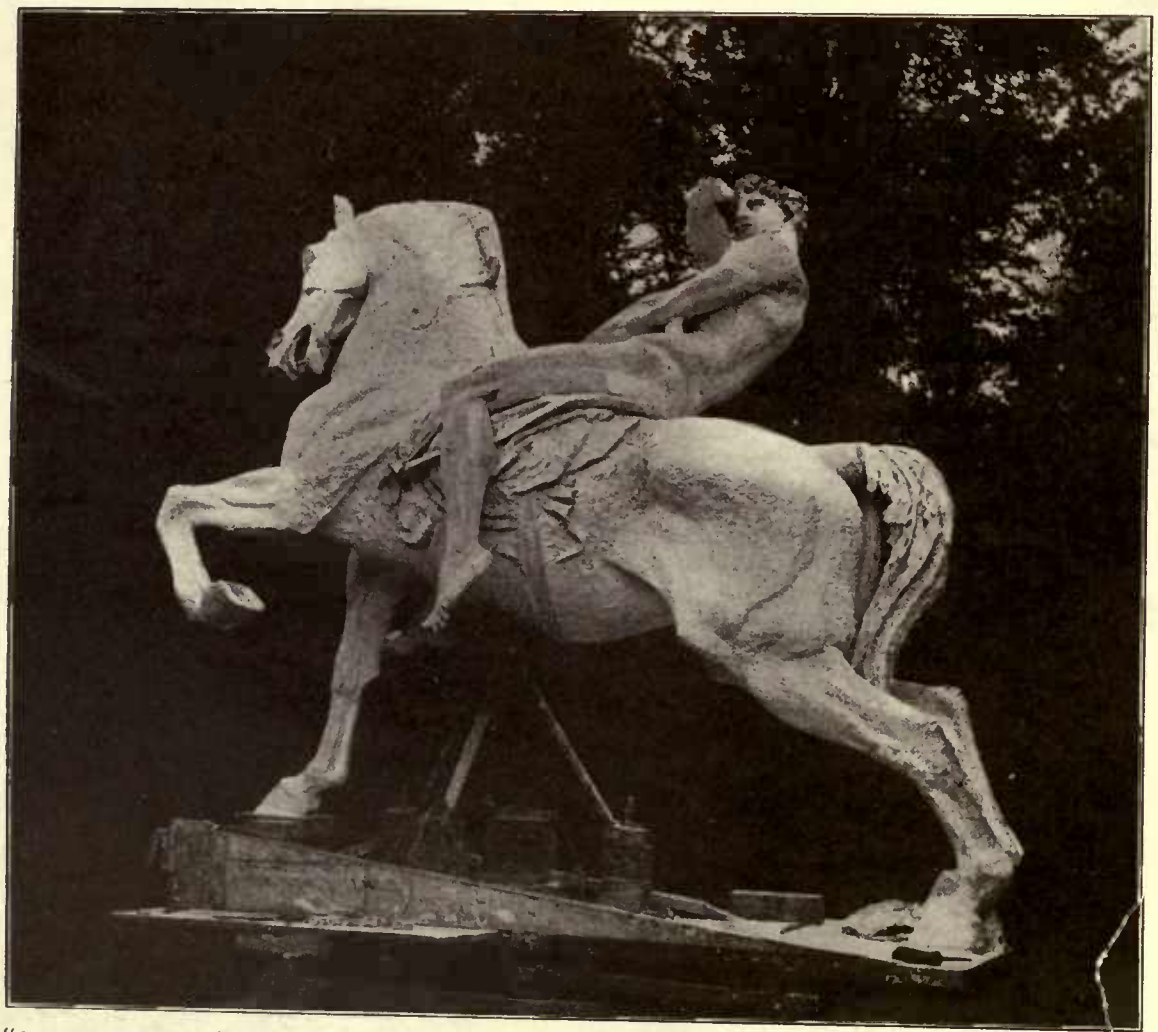
S. GEORGIO MAGGIORE.

Photo: { *E. Dockree.* / *J. C. Ashton.*

Mr. Watts's Colossal Equestrian Statue.

MR. WATTS'S remarkable project is now so far advanced that it is being cast in bronze at the instance of Earl Grey, and will be set up on the Matoppos as a memorial to Cecil Rhodes. When the design is completely finished to his mind, Mr. Watts intends to present it to the Government, and I have suggested elsewhere that the right thing would be for the Government or some public body to find the bronze as a small mark of penitence for our neglect of a public servant, of esteem for a national benefactor, and as a beginning of better things in the treatment of artists when England is so fortunate as to breed them.

The design of a man and horse in sculpture is so difficult a thing that there is only one supremely successful example on the colossal scale in the world; for the *Colleoni*, constantly quoted as the greatest, does not, for all its expression of threatening energy, rank with the *Gattamelata* in plastic composition. Equestrian compositions, from the time of the Renaissance, divide roughly into two lines: those of the horse *passant* and of the horse rearing. Donatello's sources were the Greek horses at Venice and the *Marcus Aurelius*. The type of the other line was the *Colossi* of Monte Cavallo, along with the equestrian figures of emperors on various Roman coins; for the Parthenon frieze has been familiar only for about a hundred years. Leonardo's projects, which never reached bronze-founding, are divided between these two types, the type of Donatello and the type of the rearing horse. Modern design shows a third variety, of which a familiar example is the *écorché* of a horse by M. Isidore Bonheur, as remarkable for its design as for its anatomical usefulness. M. Rodin's admirable model for the statue of General Lynch follows this closely in some respects, as Mr. Tweed reminds me, and Mr. Watts's *Hugh Lupus* at Eaton Hall is of the same family. The later design, here illustrated, is varied from that by bringing the hind legs into line. A curious action results, which appears intended to combine in one



"PHYSICAL ENERGY." BY G. F. WATTS, R.A.
(By permission of the Artist.)

Photo: Fredk. Hollyer.

pose a spring on the part of the horse and a checking and transforming of that impulse by the rider. This characteristic hesitation among various things hinted at affects the design throughout, reappearing in the character of the surface modelling; but the whole work is of a different order from various pitiful groups that encumber our public places. This aim at a plastic expression of physical energy should find a site in London, which has at present only the fine Charles I. and the decent King George to its credit. At the same time the Duke of Wellington attributed to Boehm, with its ludicrous attendant figures, ought to be sent to Aldershot, and the jolly old scrag and London landmark that was banished to that camp should be brought back and replaced on the arch till we have something overwhelmingly better to show.

If the first of these projects is carried out, Mr. Watts will see at least one result of his life-long campaign for a grave public art in this country. He will not, however, have been granted what he asked for at first, a few public walls to exercise his painting upon. Twenty years after the shabby treatment he and other artists received at the hands of the Houses of Parliament Commission, and the refusal of the London and North Western Railway to find him paint and scaffolding for the decoration of Euston station, he returned to the charge on behalf of the younger generation. In 1863 he was not yet an academician, and therefore still cherished illusions about the aims and character of the Royal Academy. He developed before the Royal Commission on that body a scheme for the training of its students. His belief was that in this country we have all that is needed in talent and in character to produce an art reflecting what is majestic in national history and aspirations, an art of gravity and dignity; and that nothing was lacking for this monumental revival but the walls to paint on, the paint, the wages of painters, and the direction of the young into this kind of art. He appealed to the Academy to make a beginning by getting permission for some of its students to work upon the walls of class rooms in the public schools during the long vacations. He thought a start might be made by reproducing the designs of Flaxman in flat colour, and that academicians like Maclise would be ready to furnish other designs, and perhaps to superintend or appoint superintendents. Such work would be provisional, and might even be effaced later on, and replaced by something else. And he thought that this scheme would not only be a valuable training and stimulus for the students, but would temper a little the curious ignorance and contempt of art in which the fine type of Philistine bred at our public schools for the most part grows up. Mr. Watts's proposals fell apparently on deaf ears, but perhaps now that the Prince of Wales has joined himself to the critics of the Academy Schools the Council of that body may ask themselves whether its professedly principal object is being carried out in any real sense, and whether a scheme like this is not worth considering. Architects will look in vain for the steady help of mural painters till some school, be it the Academy or another, provides wall space and materials, so that students can get the necessary initial training.

D. S. MacColl.

The Arts and Crafts Exhibition.

A Discussion.

I.—BY A MEMBER OF THE SOCIETY.

There is no Exhibition held in London which is so hard to criticise as the Arts and Crafts. The variety of objects requires a knowledge not only of design but, in most cases, of workmanship. Very few, if any, critics, however gifted, are equipped with these essentials.

Lord Byron's verses are still true, that "a man must serve his time to every trade save censure. Critics all are ready made." We find in many periodicals smart articles on this exhibition. The fault of most art critics is that they know too little and write too much. It is easy to select a few specimens and put them in the pillory; but I believe it could be proved that there are better examples in this year's show of jewellery, silver work, furniture, glass, tiles, textiles, needlework, metal work, etc., than are to be found in any shop in London. Of course I refer to modern work entirely. If this is so, and I am convinced my assertion can be demonstrated, it seems hardly fair to select some articles which are not of the first rank and use them as pegs for a diatribe. The original object of the Society—that of exhibiting works that are not admissible in the

picture shows—has been successful: also that of bringing forward the executant from his obscurity. The whole aim has been to try and induce people to value an article because thought and labour have been expended on it. A piece of jewellery, or square of printed cloth, is interesting, and worth having, not on account of the material used, but from the amount of skill in design and technical knowledge or craft employed.

It has been urged more than once that the exhibits are childish; that may be so, but in any effort to bring back an art or craft from over elaboration, it is necessary to begin *de novo*. The senseless application of ornament is the usual resource of unskilful designers to hide their ignorance. It is much harder to produce an article depending on form and proportion for its beauty than one full of meaningless ornament and fussy detail. We see this more strikingly in architecture. Pure Classic is not employed now as it requires too much knowledge and thought to work it in. It is a favourite sneer to dub any demure and sober design as affectation. This, no doubt, would have been the critics' term for the introduction of the notes of the cuckoo and quail in Beethoven's Pastoral Symphony, or the bird melodies in Wagner's Siegfried Idyll. To some minds there is no music unless it is played on a big brass band with lots of drum and trombone to pick out the air.

Though one objects to the arrogance of the critic, that is no reason why some defects of the exhibition should not be admitted and deplored. A new departure was entered on this year, namely, the introduction of recesses in the North Gallery allotted to certain exhibitors and firms. This, though giving the latter a better opportunity of showing their productions, led to the inclusion of several articles that certainly would not have passed the Committee. In connection with this subject, one may mention that, two exhibits that have been particularly held up to ridicule were rejected by the Committee three years ago. These recesses were practically *hors concours*. This ought to be remedied in future. Nothing should be exhibited that has not been approved by the Committee. This unfortunate body has no light task. We are constantly reminded of the labours of the Royal Academy Council, but theirs are confined to one class of exhibit. When you have to select and arrange some two dozen different classes of objects the labour is proportionately greater.

Few are in a position to compare accurately the work of this year's exhibition with the first two. Were it possible to place them side by side the improvement would strike one as immense. Certain names unfortunately would be absent, such as Morris and Burne-Jones, but the average level would be much higher. Many of the exhibits are remarkable for a restraint in design, that is a noticeable feature of this year's show. It seems strange that here in England there should be so small an appreciation of the work done by the Society when its influence has almost revolutionised the decorative work of the world. Let me conclude with the words of M. Folcka, the Swedish Representative on the jury of the International Exhibition at Turin.

"You all know where we have to look for the origin of this movement of which we see around us—at this exhibition—the actual results; a movement which began more than thirty years ago, and with which are inseparably joined the names of William Morris, of Edward Burne-Jones, and Walter Crane.

"For us jurors at this First International Exhibition it should be a duty to give our special homage to the art of England, and I take liberty to propose that we create a grand and unique Diploma of Special Honour as an act of homage and thankfulness to England."

Truly a prophet is not without honour save in his own country.

MERVYN MACARTNEY.

A reply for the critics will appear in the May number.

Note.

WE are obliged to hold over the second part of Mr. Lethaby's account of Exeter Cathedral. This will appear in the May number of the ARCHITECTURAL REVIEW, and also the first instalment of a series of articles on architectural education, to which reference has already been made. We shall begin with an account of the German system, written by Mr. Bailey Saunders, who drew up a report on this subject for the London University Commission some years ago, and has brought his investigations up to date for the present purpose. The May number will also contain the first part of a critical examination of the architectural discoveries at Knossos, by Mr. Phené Spiers. We may join here in urging the claims of the Cretan Exploration Fund, which have been put anew before the public by Mr. George Macmillan. Everyone who is stirred by curiosity to know yet more of those secrets of remote antiquity that lie a few spade-depths below the surface of the ground, and can afford to pay for that curiosity, should send Mr. Macmillan a cheque.

English Mediæval Figure-Sculpture.

CHAPTER V.—FIRST GOTHIC FIGURE-SCULPTURE (1175–1280).

CARVING IN RELIEF.

PRE-GOTHIC figure-work had been almost solely in *relief*, whether in Anglian cross-work, in Saxon roods and panels, or in the Norman tympana. We shall in the following chapters show the Gothic sculptor as essentially a worker in the *round*, and this different sense of his art appears also in his reliefs. A new style appears in them. For the slabs and panels of the earlier sculpture had been detached from the church fabric, either entirely separate from it, or added to its structure as a picture might be. But in the feeling of the Gothic artist the sculpture had to be part of the building, and so the First Gothic reliefs were carved not on, but in the scheme of the construction. There may have been, also, detached reliefs, carved in stone, in the thirteenth century, of the same kind, as we have shown in the Saxon art (Figs. 14, 15, and 19, in Chaps. I. and II.). and in the Romanesque (Figs. 56 and 57 in Chap. II.). We give, for example, a Majesty from a church at Durham (Fig. 84), a stone-carving in low relief, which seems certainly a work of the thirteenth century. There is another at Sompting, in Sussex, very similar, but of earlier date, and coarser execution. The oblong shape of these slabs makes it likely that they were carved for screens or some detached position. But it was not till the fourteenth century that there began the great trade in alabaster reliefs, and the "Alablasters," as they were called, of Nottingham and York, sent re-tables, screens, and figure-panels to all parts of Western Europe, even to Iceland. In the century of First Gothic art, the furniture for the altar seems to have been ordered from the carpenter and goldsmith—images and tabernacle-work being of wood enriched with gilding and precious stones, or very commonly entirely in precious materials, gold, silver, and ivory.[55] This, at any rate, is the conclusion to which we are led by the records and accounts, which, while they abound in references to these goldsmiths' images, are deficient in hints of any important pieces of marble or stonework being used as church-furniture in English churches of the First Gothic period.

FIG. 84.—STONE RELIEF AT DURHAM.
(From a photograph kindly taken for the purpose by Mr. Freeman, of Durham.)

We are, too, justified in believing that the constructions necessary for shrines and screens were generally in the hands of the goldsmith, when we see how Henry III. made his marble shrine for the Confessor at Westminster in a design unknown to English mason-craft, with mosaic incrustations, upon which we are not surprised to see the signature "Petrus civis Romanus" engraved. This seems evidence that up to 1250 the native marbler had not attempted elaborate shrines.[56] In the latter part of the thirteenth century he asserted himself, as for example in the monuments of Archbishop Gray, at York, 1260, and of Bishop Bridport, at Salisbury, 1263. After which, as our later chapters will relate, stone and marble tombs were constantly carved with figure-reliefs. In such works the mason-imager appeared by the side of the goldsmith-imager, and was commonly employed upon marble and stone furniture, sedilia, Easter sepulchres, altar-screens, as well as on shrines and tombs, and covered all with figure-work.[57]

In the First Gothic art, however, the talent of the relief-carver had been used strictly for the larger architectural work. Mason and sculptor, as has been said, were one person, and accordingly his reliefs were worked in the scheme of his build-

[55] The Exchequer Rolls show that there were fifteen golden statues set with precious stones ready for the shrine of the Confessor in 1261. See also in the Liberate Rolls of 1242 payment for silver tabernacle to ivory image at Westminster.

[56] The accounts of the works done at Westminster in 1253 suggest an intention of copying the shrine of St. Alban for that of the Confessor. The mosaic erection is dated to c. 1268.

[57] A distinct entry as to the mason-imager is in the Close Roll of 1259, where John of Gloucester, the king's mason, is ordered to supply five images of free stone.

ing—that scheme which, in the thirteenth century, developed the wall as tiers of arcades. Between the extrados of the arcade-arches of one tier, and the level springing of the next, were interspaces (spandrels) which made convenient fields for sculpture, in a way that was, as our last chapter explained, agreeable to the building genius of the Gothic artist. Similarly when the arch compassed two subsidiary arches, as so frequently happened in the development of Gothic construction, a spandrel ready for decoration declared itself, which, in many cases, became filled with figure-sculpture. These interspaces, also, under the impetus of Gothic art, developed structural decorations—*i.e.* geometrical piercings outlined with moulded voussoirs—the trefoils and quatrefoils which were the beginnings of tracery. When, as often happened, such openings were blind, they afforded an excellent lodgment for figure-sculpture, and advantage of them was largely taken.

In these three positions, therefore, First Gothic figure-relief found its occasions, and the uses made of them fall broadly into divisions under the attendant conditions of the architecture. When developed above a wall arcade, the spandrels provided a running frieze for a continuous set of subjects level with the eye, as in Worcester quire. Similarly in the scheme of the thirteenth century bay, the triforium of the arcade gave a place for bolder figure-work, ranged in a connected theme, as along the Lincoln "Angel Choir," or in the transept ends at Westminster. So also such quatrefoils, trefoils, etc., as came in the heads of structural arcades, as, for example, in the Wells front, allowed figures and subjects to be set in their recesses. Finally, in the single spaces of great doorheads, we have sculpture-fields, in which the interest is concentrated, and where a different type of figure-relief appears, in this position rapidly developing into the statue. So, for example, we have the sculptured Majesty of Lincoln, and the figures of the Madonna so usually set in the chapter-doorways, as at Westminster. We will, accordingly, take the thirteenth-century reliefs in the above order, and deal first with those subject-reliefs which run in continuous series.

Arcade-structure had been largely practised in the Romanesque art, and its later ornament after Stephen's reign had been very profuse and varied. This ornament grew less exuberant in Gothic style, but the arcade did not immediately lose its Romanesque tradition—at least this is the case in the South and West of England. In the North, as already said, the Gothic evolution of building found its motive in the rejection of the rich sculpture of the later Romanesque, and the figure-ornament, which had been largely employed at

A. G.

FIG. 85.—BRISTOL. ELDER LADY CHAPEL. C. 1200.

Durham, Adel, and Bridlington, is entirely absent from the graceful arcadings of the First Gothic abbeys of Yorkshire and the North. It is different, however, southward and westward in England, where we can see in the First Gothic arcades an immediate derivation from the ornamentation of Rochester, Barfreston, and Malmesbury. At first we have the same symbolic representations, zodiacal beasts, warriors and dragons. The "Elder" Lady Chapel, as it is called, of Bristol Cathedral, the first building of which was c. 1200, gives a good example (Fig. 85) illustrating the direct descent of the Early English carving craft from the Romanesque of the Wiltshire and Gloucestershire tympana, as shown in our preceding chapters (see Figs. 26 and 48). At Bristol the figure-work is on scarcely a larger scale than on the 1186 arch-moulds of St. Mary's Chapel, Glastonbury, or on the capital of Wells porch (see Fig. 81, Chap. IV.). In the Wells triforium, as one of our illustrations of the Wells label-heads (see Fig. 66, Chap. IV.) incidentally showed, was spandrel-work of this kind, but of finer finish. In the Chapels at the eastern end of the Worcester Quire—that part of the new "front" which was probably the first built, c. 1224—the wall-arcades have a series of spandrels carved with fabulous beasts and fighting knights, elegant and distinct in design. We have here probably the latest instance on a big scale of these Romanesque motives which we have traced upwards from the rude beginnings of Scandinavian design. In the same work, but farther west, at Worcester the wall-arcades of the eastern transept show quite a different type, which we may speak of as the inauguration of Gothic sculpture. Though very many of the spandrel-carvings have been, unfortunately, touched up or entirely reworked in the restorations which afflicted Worcester Cathedral in 1857, still there remains enough to show the distinct style. On the south side is a

series of some twenty spandrels giving a detailed representation of the Doom. The whole Gothic drama of the subject is set out with all its stock characters—the angelic trumpeters, the bursting tombs, the mouth of hell (Fig. 86), the tortures of the damned, and the angel leading the saved to glory (Fig. 87). In the liveliness of the gestures and the emotions depicted there is an echo of the Vézelay sculpture, and we may trace the style to those traditions of Cluniac sculpture which have been suggested for the sculpture of the West Midlands (see Chap. III.), but the technique of the work is shallow, and the treatment dry and lean as compared with the Burgundy work. There has probably been much damage from the scraping process of restoration, but while the style is that of Gothic stone-carving, we recognise little advance on the goldsmith's art of fifty years earlier, as we saw

A. G.

FIG. 86.—WORCESTER. SOUTH-EAST TRANSEPT.

this, for example, in the Gloucester candlestick (Fig. 38, Chap. II.), or in the Lincoln reliefs (Figs. 41 to 46, Chap. III.). On the north side the spandrels represent scenes from Old and New Testament history, and not much of the ancient carving is left undamaged. The style here is different again, with a quietude which is much in contrast with the energy of the Doom spandrels. One might trace an artistic descent from the reliefs (see Fig. 58, Chap. III.) in Kelloe churchyard. There is yet another type of work in these Worcester spandrels. Some half-dozen on either side of the quire to the east of the transept are to be noted as apparently representing the history of the building of the cathedral. We are shown the "master-mason" and the "working-mason," and the Bishop, who presents the model of the church on the altar. This last is perhaps the most accomplished of all the Worcester works, and in its technique is but little inferior to what

A. G.

FIG. 87.—WORCESTER. SOUTH-EAST TRANSEPT.

we shall find in the earliest reliefs on the west front of Wells (see on to Fig. 104).

Such was the Gothic sculpture of 1225: at Westminster we can see that of twenty years later. It occupies parallel positions to that at Worcester, in the spandrels of the wall-arcades in the eastern chapels and in the north and south transepts. The misfortune at Westminster has not been restoration but a wanton destruction to make room for later monuments, and a surface decay of the stone, which has obliterated all the edges and tool marks. We show the best preserved of what must once have been very beautiful sculpture. The attitudes and expressions of these little figures, and the skill and knowledge of their relief, are as perfect as can be, and the only archaism perceptible lies in the experimental placings and attitudes of the figures in order to fit

FIG. 88. WESTMINSTER ABBEY. CHAPEL OF S. EDMUND.
(From a photograph kindly lent by S. Gardner, Esq.)

A. G

FIG. 89.—WESTMINSTER ABBEY. NORTH TRANSEPT. WEST SIDE.

them to the spandrel shapes. Foliage is called in to help the demi-angel with the crown (Fig. 88), but the maladroitness visible in our illustration (Fig. 89), where it is attempted to fill the field with figure-work only, is still more apparent in some of the neighbouring compositions.

At Salisbury we have reliefs to be dated from c. 1265 to 1275. Those on Bishop Bridport's tomb-canopy are the earlier, and though much defaced, are probably the work of the sculptors who afterwards carved in the Chapter-house. The wall-arcades there remain with their full series of subject-reliefs in what may be called good preservation. Restoration has been hard at work on them, but it has been of a different kind from the unintelligent, coarse substitutions of Worcester. Moreover, the sympathetic and learned skill of W. Burges, who was in charge, provided for his renewals the hand of a competent sculptor. Since, however, in this renewal old and new were both together painted, and subsequently, when the painting began to peel off, were again stripped to the stone, the distinctions between the actually genuine work and what was so cleverly imitated to match it are rendered obscure. Fortunately, we have from Burges a detailed description [58] of the sculptures as he saw them first and admired them, and with hints from this we can pick our way to the most genuine examples. It will be seen that though the Salisbury work lacks the intrinsic First Gothic charm which everything has at Westminster—perhaps because there we have merely to deal with decay, whereas restoration, however clever, inevitably destroys as much as it preserves—still we can recognise a skill in grouping and composition which is a distinct advance on anything we have at the "Abbey." The plastic expression and balance in Lot and his daughters turning their backs on the pillar of salt (Fig. 90), or in Jacob's brethren setting forth to Egypt (Fig. 91), will establish this point; and in most of the compositions this merit has at any rate not been altered in the recarving, though heads and hands are almost entirely new throughout. We have, however, picked out our examples to show some of the few ancient heads remaining. And the cleverness of Burges' restoration will be seen by comparing the heads of Noah (Fig. 92) and Pharaoh (Fig. 93), which are genuine, with that of Lot (Fig. 90), which is the one head added in this piece, or with the heads put by Burges' sculptor to all except one of "Jacob's Brethren" (Fig. 91). The draperies throughout are genuine, and it can be seen that their treatment is different from both what it was at Westminster and what we shall presently illustrate at Wells. Indeed, it shows its later date by its distinct step outside the First Gothic manner.

A. G.

FIG. 90.—SALISBURY. CHAPTER HOUSE. "LOT AND HIS DAUGHTERS."

(Lot's head has been restored, and also partly the hands and arms of the other figures.)

[58] "The Iconography of the Chapter House."

A. G.

FIG. 91.—SALISBURY. CHAPTER HOUSE. "JACOB'S BRETHREN."

(All the heads of the figures, except the third from the right and various hands, arms, etc., are restorations.)

A good deal of colour remained on these reliefs when their renovation was undertaken thirty years ago, and W. Burges, a born colourist, made a striking success of its renewal, as great a success as it is likely modern methods can achieve. Still, for all this, the question of the effect of the mediæval colouring on architecture and sculpture cannot logically be judged on the basis of such restorations, however clever, at the hands of our Revival architects Burges, Street, or Butterfield. They are the best we can do, but to take them as examples of what they imitate is an unfairness to ancient art, for, like any other art effect, that of colour can be effective only by its sincerity. A learned imitative restoration represents only the knowledge of the restorer. As such it may charm the scholar who can recognise the culture and imagination it implies; but it creates no general expression of value for the criticism of the genuine art of the thirteenth century. It is therefore a shallow connoisseurship which, looking at mediæval architecture painted up to the nineteenth century standard of scholarship, exclaims, "how barbaric and crude this mediæval colouring must have been!"; or which argues that cathedrals were meant to appear solemn and shadowy in the drab of plain stone surfaces, and calls the painting of his sculpture a *faux pas* on the part of the mediæval artist. Like Greek sculpture mediæval figure-work was undoubtedly always painted, sometimes heavily, sometimes delicately.[59] That in the thirteenth century this painting would be simple and direct we can call in evidence the whole record of the thirteenth-century art. On backgrounds of blue or red the figures stood out in pale tints enforced with brown and gilding; the flesh colours were palely rendered, the lips and the eyeballs picked out darker, the draperies white, green, and black, powdered with gold and coloured patterns. How these colours were harmonized, what was the art—the expressive glory—of their combination, if we have no examples in sufficient preservation to show us directly, yet there is left us a fair means of estimating. If we turn to the contemporary manuscripts, to the Apocalypse at Trinity College, Cambridge, for example, or to that exhibited in the show cases of the British Museum Library, or, indeed, to any English thirteenth-century manuscripts, we find in their illuminations and miniatures not only the delicate drawing and plastic liveliness which we might expect from the contemporaries of the Westminster and Salisbury relief-carvers, but a quality of colour, whose analogue we may find in ancient eastern carpets, or, close on our own day, in the masterpieces of Japanese artists. Our attempted restorations of this colouring would naturally be failures, just as surely as our paintings, for all their effort, do not show the lively colour sense of the great Venetian paintings; just as surely as our imitations of the Eastern arts are vulgar and unpleasing. And it shows some hardihood on the part of our artistry with its conscious weakness in architectural decoration to say "sour grapes" to the brightness and splendour of mediæval architectural sculpture.

A. G.

FIG. 92.—SALISBURY. CHAPTER HOUSE. "THE ARK."

Only here and there now can we see the actual vestiges of the ancient colouring, and where they

[59] The Liberate Rolls of Henry III. abound in orders for the painting of images.

A. G.

FIG. 93.—SALISBURY. CHAPTER HOUSE. "PHARAOH'S DREAM."

remain they are the ground colours which at the time of the painting were materially altered by glazings and diapers. Nothing really representative of the thirteenth century is left us. Painted in tempera, it must have faded and been continually retouched. The old quire screen of Salisbury, now set in the north-east transept (and sadly flaunted by the grimacings of the modern church furnishings opposite), has some suggestion, perhaps, of the effect of coloured relief-carvings. The backgrounds of full colour can still be discerned, and the gilded angel-wings, the warm flesh-colours, and the cool grey draperies are indications of the delicious harmonies so often to be seen in the manuscripts. The whole must have had a lively smiling countenance, each spandrel with its minstrel angel and all gay with colour and gilding (Figs. 94, 95). The date of this work may be put at c. 1270, almost on the edge of the period which we have called that of First Gothic sculpture.

Passing to the larger relief-sculptures of the triforium, our great thirteenth-century example is that of the Lincoln "Angel Choir," and we take it next (though the similar reliefs at Westminster are rather earlier in date) because its motive is most directly that of the Salisbury quire screen, but carried out on a big scale at a height of some forty feet from the floor. The notion, as shown in the easternmost bays, has been to carve a choir of jocund angel minstrelsy looking down from the triforium spandrels. Lincoln, in the wall-arcades of St. Hugh's quire, had some angel reliefs on a small scale carved between the labels. In the "Angel Choir" the idea seems at first to have been as simple. But when the work had advanced so that by the taking down of St. Hugh's apse the new building could be joined up to the transept, a more serious artist, and one whose art was pregnant with a mediæval mysticism, appeared on the scene, and his influence put a deeper note into what was primarily a decorative composition.

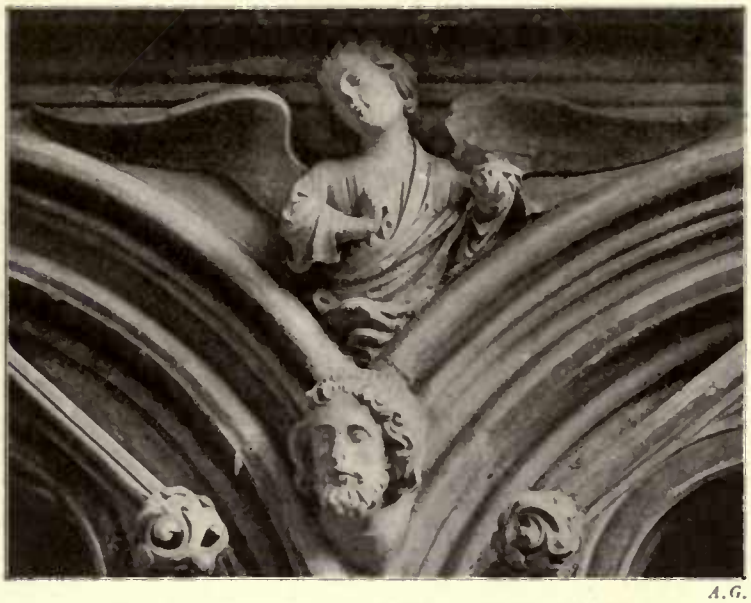
The Lincoln angels come in aptly here, too, because the assertion has been made that they were clearly uncoloured, and that no traces of paint have been found on them. Our illustration (Fig. 99A) of the *central* angel with crowns disproves this. It will be seen that the camera discloses a diapered pattern on the wall face, and we can scarcely doubt that the usual thirteenth-century colour-treatment was given here as elsewhere, and that a dark background spangled with gold stars was painted for all the figures.

Our plan (p. 151) gives the subjects distinguished by letters, so that the reader may follow our analysis of their peculiarities and our ascriptions to various hands. In each bay it is to be noted that there is a *central* angel and two *flanking* figures. C. R. Cockerell, in his well-known treatise [60] written in 1851, gave very definite meanings to all of them, so that the angels are often called by his names. We have, however, no faith in his interpretations, and prefer to indicate each work by the paraphernalia and attitudes given by the sculptor. Looking at their art, then, as being the most interesting gauge of varying authorship, we at once perceive a marked difference between the eastern and the

[60] "Iconography of the West Front of Wells Cathedral."

A. G.

FIG. 94.—SALISBURY. ANCIENT CHOIR SCREEN.
(Now in North-East Transept.)



A.G.

FIG. 95.—SALISBURY. ANCIENT CHOIR SCREEN.
(Now in North-East Transept.)

western angels. A distinct division is marked in the middle bay, where the *central* angel on either side belongs clearly to the western series, which in style is much superior to the eastern set. We may conclude that as in similar cases, the work was begun with the east front of the new building, and with the erection of the first two or three bays which could be built outside the existing apse of the church. The date of this beginning is said to have been in 1256. So since these carvings have been worked and built before fixing into the work, the first set may belong to that year. There are in these four *central* full-fronted angels with spread wings, and ten *flanking* angels. The larger number of these—all the *flanking* figures except one, and two of the *central* angels—would seem to be from one hand, and they are marked A in plan. We give as an example of this style the harping angel from the north side (Fig. 96 a). It will be seen how the figure is short and stout, with baggy folds of drapery broadly rendered, and it shows particularly well-developed feet. The heads in this style are large featured and with pleasant expressions, but the dust now settled on their noses gives them in the photographs an expression not intended by the sculptor; still generally it may be said that their quality is not of much distinction: they must rank with the decorative sculpture of the Salisbury angels. The other three figures—the two opposite *centrals* in the east bay, and one of the *flanking* angels, marked B in plan, are from a different hand. They are longer in their anatomy with narrow shoulders and wide hips, the heads queerly modelled with Jewish noses, the draperies being full and confused, while the wings are turned upwards at the tips instead of as in the A's. Moreover, despite their somewhat grotesque appearance when viewed from the triforium directly opposite, below in the quire they show an emotional suggestion which is less conventional than in the A's, though the quality of the execution is perhaps on a no higher plane. All these eastern angels are pedestalled on baggy clouds, and their hair, which is coarsely rendered in blobby curls, is bound with fillets.

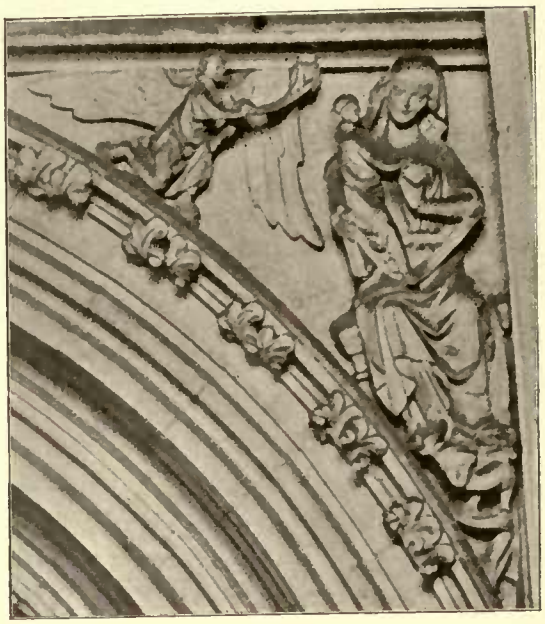
In the *central* angels of the mid-bays of the "choir" we come to an evident change of quality. Since, as we know, the work of building was protracted—the new shrine not being ready for the saint till 1280—we may suppose an interval of some years before the angels of the western bays were carved. They show a different motive and a superior class of execution. This is not perhaps the case with the angel on the north side close upon the transept, but is certainly so with the other *flanking* angels on the same side (which we have marked C) as well as with the two *centrals*—that with the crowns (shown in Fig. 99 a), with the angel of the the scales (Fig. 98 a), and those shown in Figs. 96 c and d. They all have the same large heads and full features, which we saw in the A's, and mostly the same cloud bases, but the expressions are graver and finer, and the draperies more functional to the attitudes. They differ, however, from one another not a little in quality; the *flanking* angel that swings the censer is almost as fine as anything (Fig. 96 d), and the angel of the scales (Fig. 98 a) is no mean achievement.

Still there is a clear gap between the C's and the three great angels which we have marked D. It is the character, mystic and intense, breathed into these three reliefs (Figs. 98 b and 99 b), which has established the reputation of the Lincoln angels as some of the most remarkable of mediæval works in sculpture. The concentration and dignity of the intellectual expressions, and the sure touch shown in the technique of their sculpture, give the figures a distinction which it is difficult to match elsewhere. Their fault is that they are adapted to be seen rather from opposite than from below.

Besides the distinction of their quality, there are certain treatments of detail which sufficiently mark the D figures as coming from a different hand. The heads are smaller, with short necks, and delicate features, the draperies are clearly and simply cut, with strong functional lines. A peculiarity is to be seen in the fine female heads shaped triangularly by the wimple, which in each case appear in

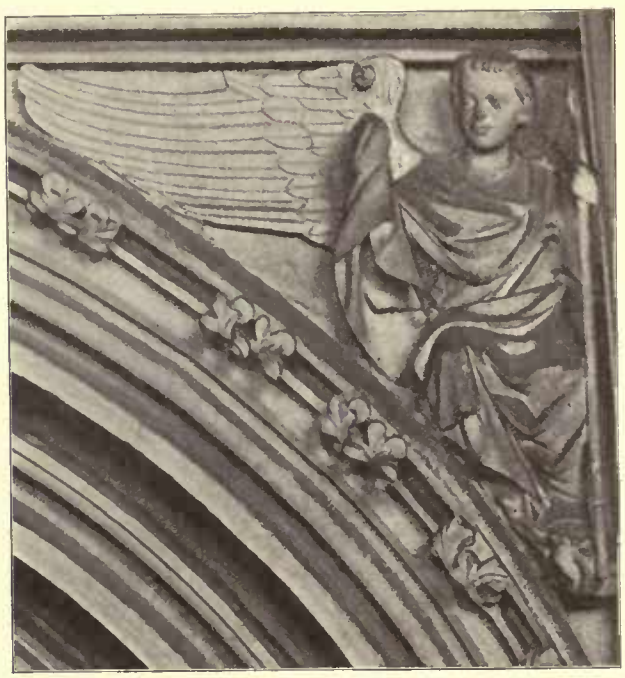
A. G.

a. ANGEL WITH HARP. NO. 3 IN PLAN. "A" TYPE.



A. G

b. MADONNA. NO. 30. "F" TYPE.



A. G.

c. ANGEL WITH SPEAR. NO. 13. "C" TYPE.

A. G.

d. ANGEL SWINGING CENSER. NO. 10. "C" TYPE.

FIG. 96.—LINCOLN CATHEDRAL. ANGEL CHOIR.

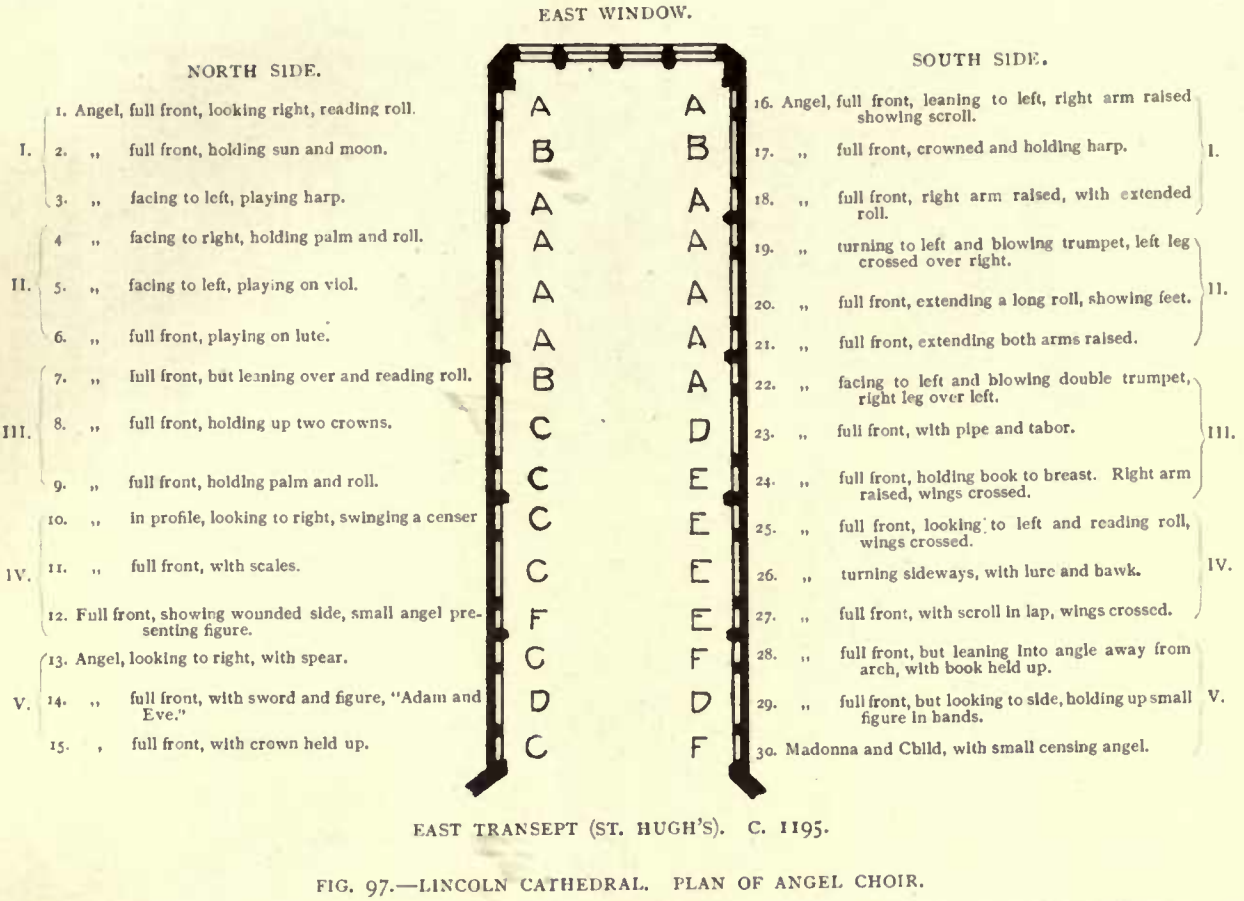


FIG. 97.—LINCOLN CATHEDRAL. PLAN OF ANGEL CHOIR.

(The Roman numerals indicate the bays from the east: the capitals the works which seem to have the same qualities of style.)

the bases. We do not show the angel with the pipe and tabor (No. 23 in plan) but with it the female head is attached to a dragon tail: and very similar human headed dragons take the place of supporting clouds in the figures which we have marked as E and F. Two of these—the *central* angel (No. 26 in plan) and the *flanking* Madonna (Fig. 96 b)—have merits which might rank them with the great D figures. But the sentiment of their sculpture is different: the heads, too, are larger and with long necks, the whole attitudes being less statuesque, and the draperies with a somewhat different handling. These E's and F's, though we distinguish them as showing different methods of treatment, as for example in the wings and also in the attitudes, may possibly be from the hands of one sculptor. We may regard him as working by the side of and influenced by the great creator of the D figures, but with an individuality of his own. As a sample of E, we give (Fig. 99 d) the *flanking* angel of the fourth bay from the east on the south side. This is a charming figure, lively and graceful, as is also the *central* angel with the hawk next to it; with the similar two *flanking* angels to the east they are clearly from one hand. But still more sprightly is the "Madonna" (Fig. 96 b), which we associate with the other *flanking* angel of the fifth bay (Fig. 99 c), and with the spandrel on the opposite side, that which instead of an angel has a man showing his wounded side. These are all fine sculptures, but their style—the long necks of the figures, their arch expressions, the airy poising of their heads, as well as the arrangement, and picturesque detail of the fluttering wings—can hardly have come from the same hand which moulded the stern-faced, concentrated sculpture of the "Expulsion from Paradise" (Fig. 98 b).

On the whole, then, we conceive the sculptors of the sixteen spandrels of the western bays to have been *three* persons. The first of these, whose work we initial C on the plan, may have been the sculptor of the A's of the eastern bays, who, after the interval, continued his work with greater skill and under a new inspiration. That inspiration we can scarcely doubt to have been derived from the sculptor of the great angels, initialled D. But side by side with them both was another fine sculptor (or possibly there were two), whose art was not so stern and intellectual, but graceful and plastic; and his masterpiece must be allowed to be the "Madonna."

E. S. PRIOR.

A. GARDNER.

(To be continued.)

a. ANGEL WITH SCALES. NO. 11. "C" TYPE.

(From a Photograph kindly lent by S. Gardner, Esq.)

b. THE EXPULSION. NO. 14. "D" TYPE. *A. G.*

FIG. 98.—LINCOLN CATHEDRAL. ANGEL CHOIR.

A.G.

a. ANGEL WITH CROWNS. NO. 8. "C" TYPE.

A.G.

b. ANGEL HOLDING SMALL FIGURE. NO. 29. "D" TYPE.

A.G.

c. ANGEL WITH BOOK. NO. 28. "F" TYPE.

A.G.

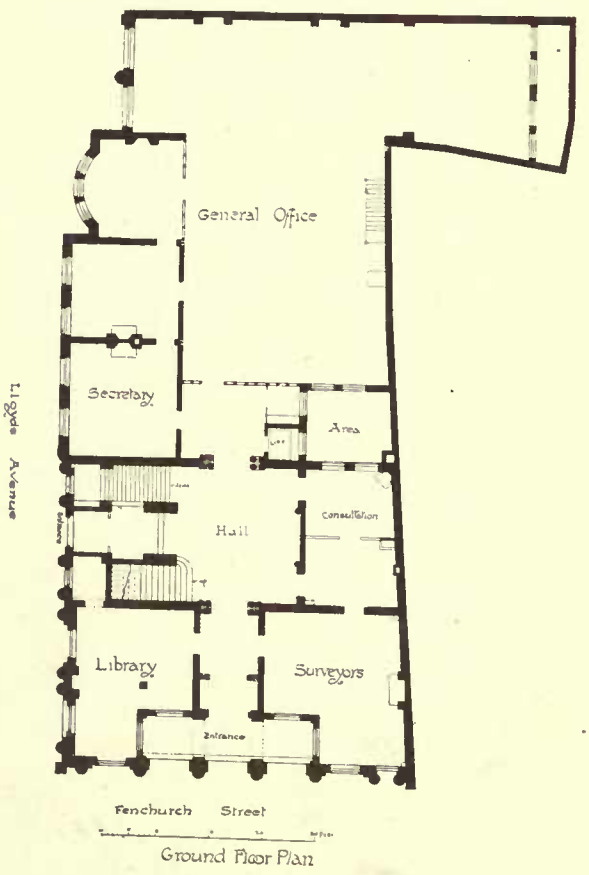
d. ANGEL WITH SCROLL IN LAP. NO. 27. "E" TYPE

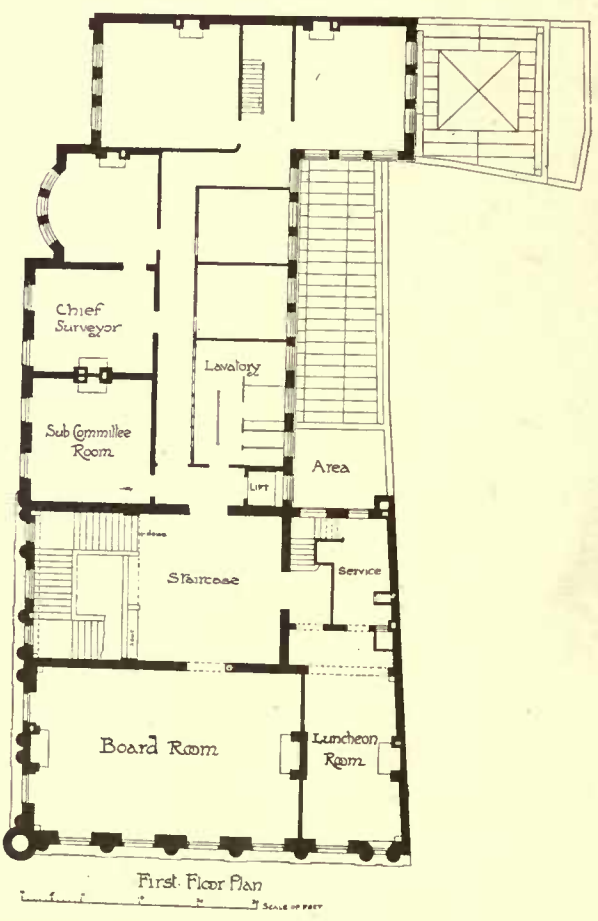
FIG. 99.—LINCOLN CATHEDRAL. ANGEL CHOIR.

Current Architecture.

LLOYD'S REGISTRY. — This building is situated at the western corner of Fenchurch Street and Lloyd's Avenue, a new street recently formed through the site of some old East India warehouses, and has a frontage of 70 feet to the former and 150 feet to the latter thoroughfare. It was necessary to provide larger and more commodious office room for the increasing business; a large store or strong-room for the books and registers of the Society; a library and a luncheon room; also classification and committee rooms, a board-room, and a museum in which to store models of ships and machinery and other memorials of the Society's work. The general scheme has been a free treatment of Georgian classic. The roof has sufficient pitch to be visible from the street. Portland stone has been mainly used for the façades, with bands of Hoptonwood stone on the Fenchurch Street frontage. There is a large amount of carving on the façades, including a frieze running round the main building above the door and window heads, by Mr. George Frampton, R.A., who is also responsible for four bronze figures between the rusticated columns on the ground floor, which represent ancient and modern shipping. Professor Gerald Moira has executed the decoration of the vaulting over the main staircase and upper hall, and is also decorating the ceiling of the board-room with painted panels emblematical of the sea. The upper and lower halls are, with the staircase, built of Devonshire marble, and the stairs are of Carrara marble. Round the walls of the upper hall is a frieze designed by Mr. F. Lynn Jenkins. The interior walls of the board-room have a scheme in Numidian, black Belgian and Irish green marbles, and the dado is of African mahogany with richly-carved panels. Messrs. Mowlem and Co. were the contractors. The whole of the fittings and furniture have been specially designed by the architect, Mr. T. E. Collcutt.

ALTERATIONS AND ADDITIONS AT CORNBURY PARK, OXON, FOR VERNON WATNEY, ESQ.— The whole of the new work was built of stone procured from the quarries on the estate. This stone was highly commended by Evelyn. The whole of the interior has been more or less remodelled. The oakwork has been carried out by Messrs. J. Garvie and Sons, of Aberdeen, and the builders were Messrs. Higlett and Hammond, of Guildford. Mr. John Aitchison was clerk of the works, and Mr. John Belcher, A.R.A., the architect.





LLOYD'S REGISTRY. PLANS.
T. E. COLLCUTT, ARCHITECT.

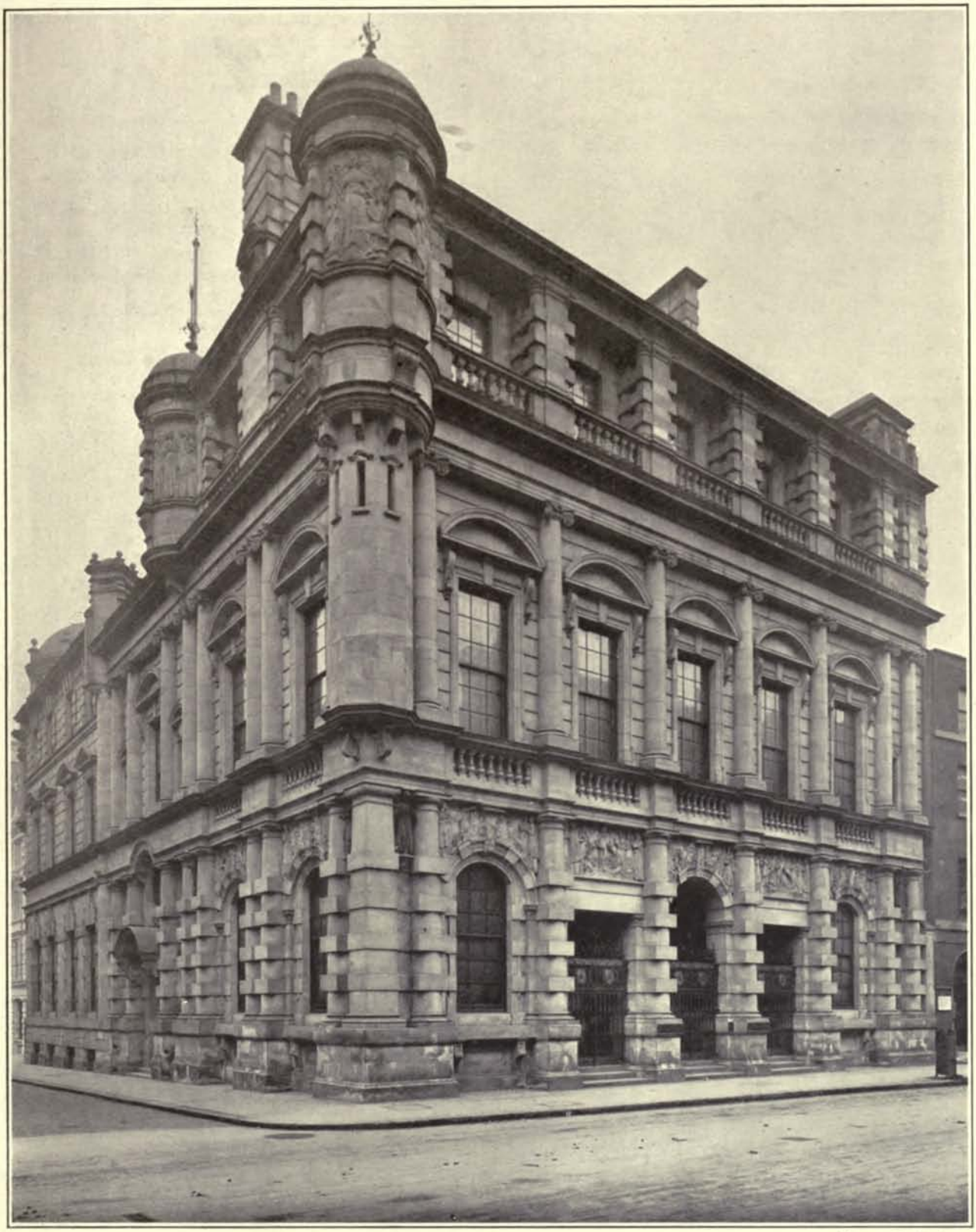
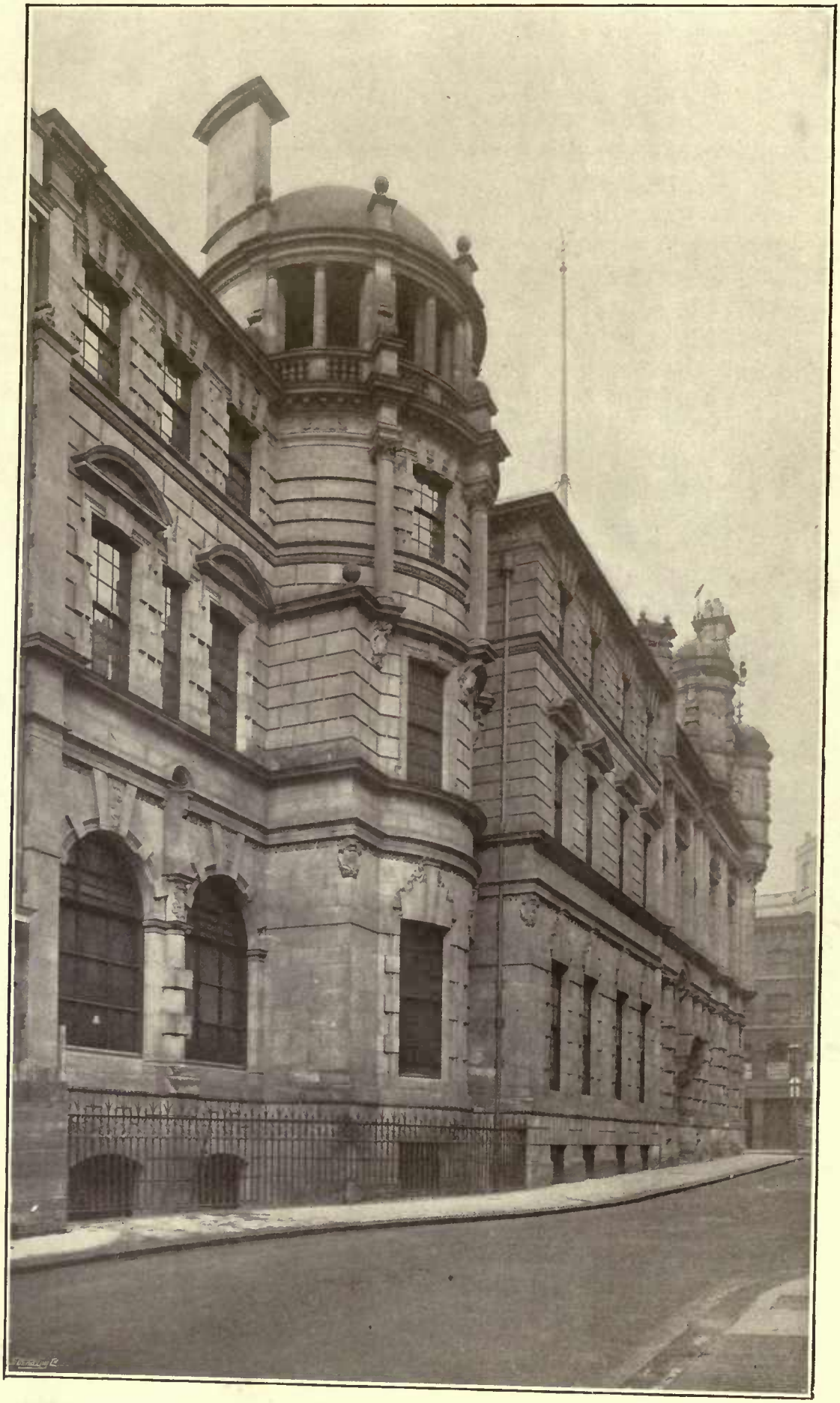


Photo: E. Dockree.

LLOYD'S REGISTRY. GENERAL VIEW.
T. E. COLLCUTT, ARCHITECT.



LLOYD'S REGISTRY. VIEW IN LLOYD'S AVENUE.
T. E. COLLCUTT, ARCHITECT.

Photo : E. Dockree.

Photo: E. Dockree.

LLOYD'S REGISTRY. THE UPPER HALL.
T. E. COLLCUTT, ARCHITECT.

Photo: S. B. Bolas and Co.

LLOYD'S REGISTRY. THE BOARD ROOM.
T. E. COLLCUTT, ARCHITECT.

CORNBURY PARK, OXON. NEW PRINCIPAL ENTRANCE.
JOHN BELCHER, A.R.A., ARCHITECT.

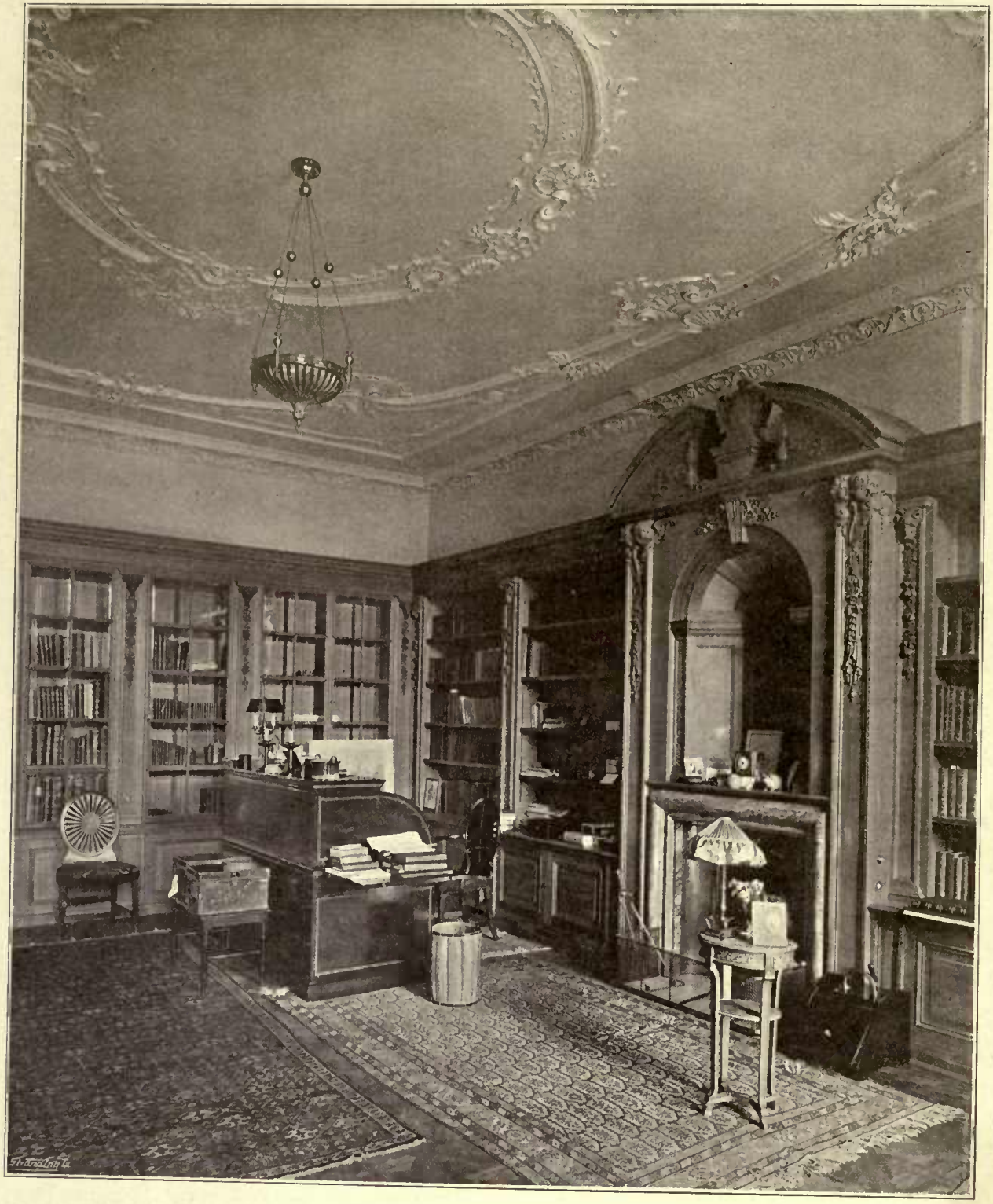
Photo: S. B. Bolas and Co.

CORNBURY PARK, OXON. THE VESTIBULE AND CORRIDOR. JOHN BELCHER, A.R.A., ARCHITECT.

Photo: S. B. Bolas and Co.

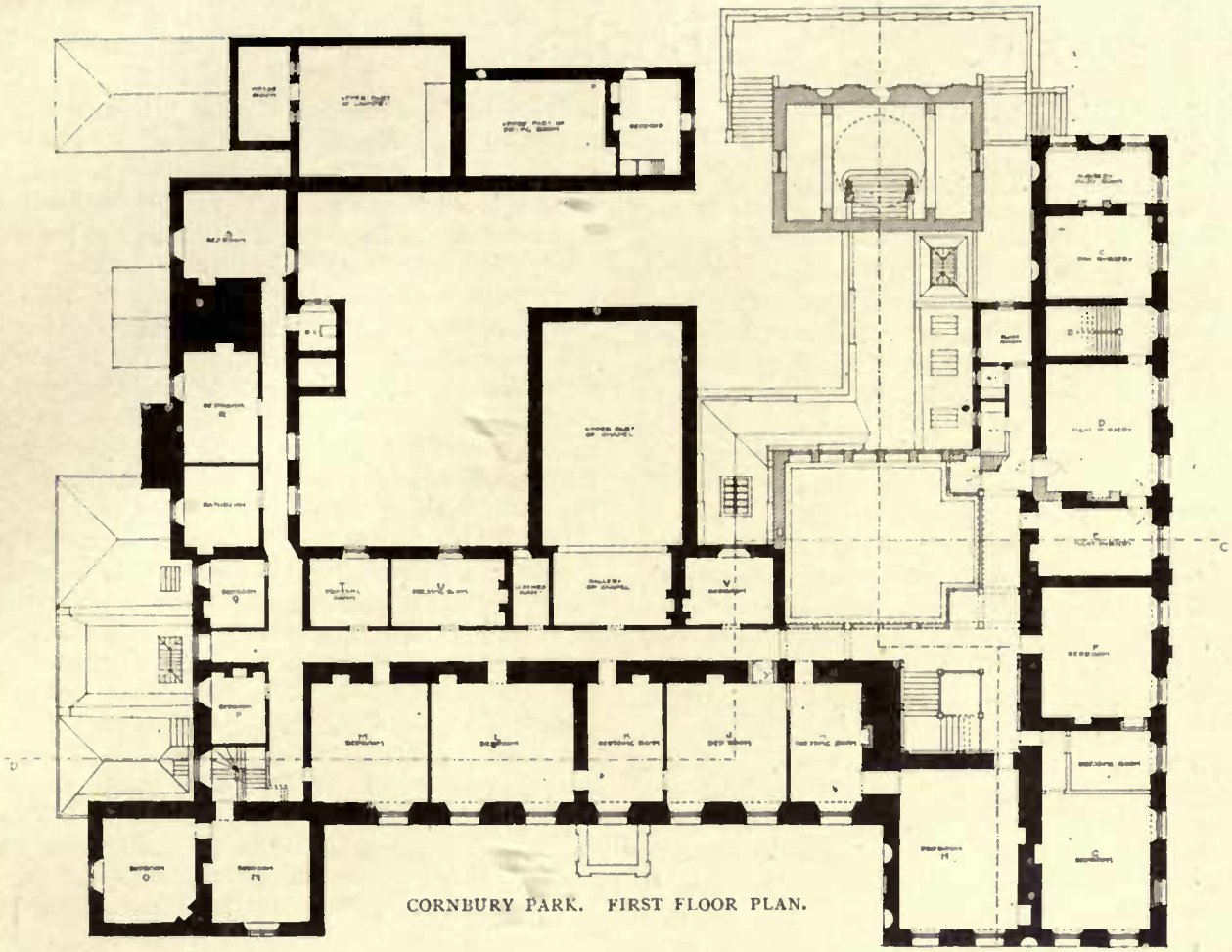
Photo: S. B. Bolas and Co.

CORNBURY PARK, OXON. THE HALL.
JOHN BELCHER, A.R.A., ARCHITECT.

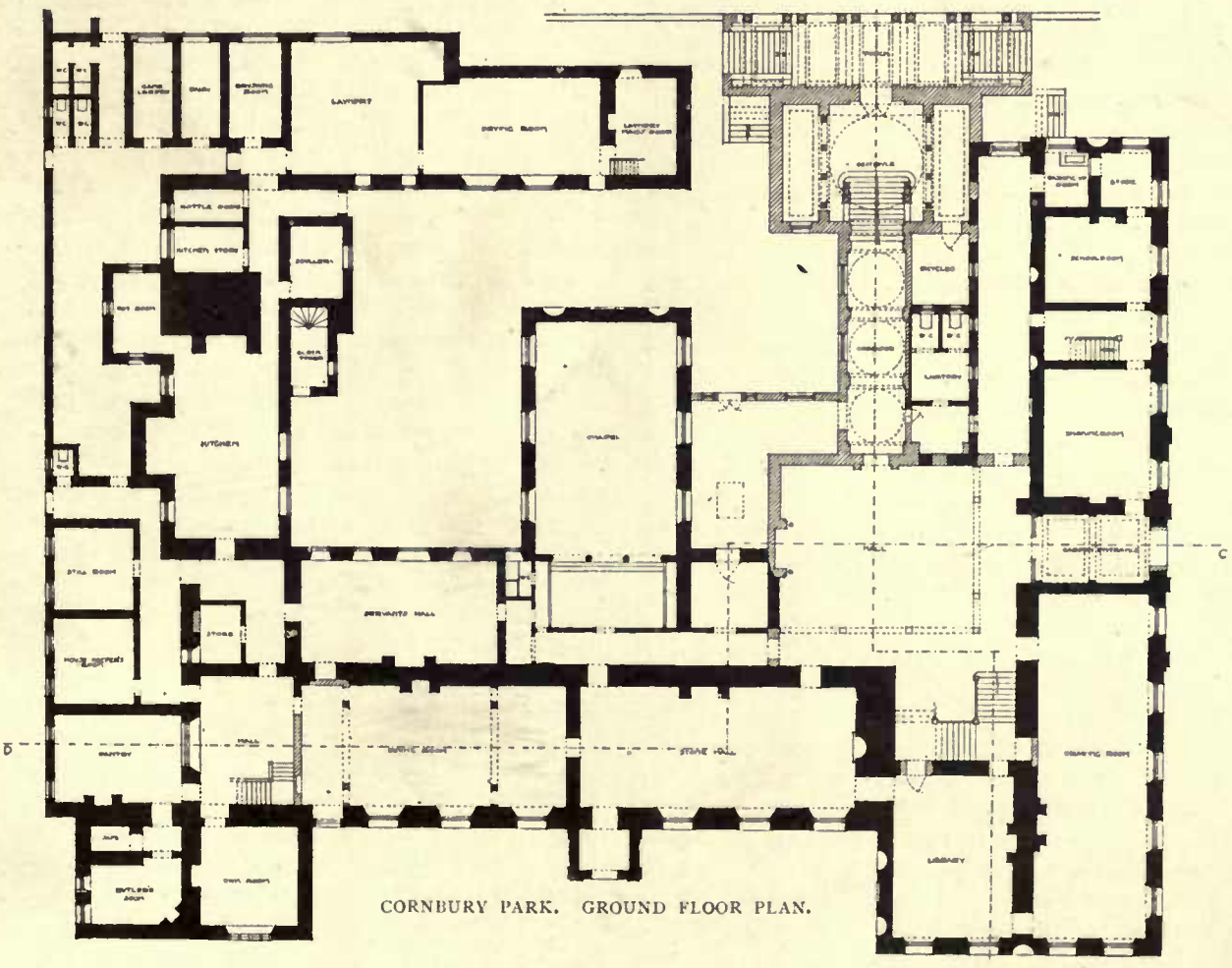


CORNBURY PARK, OXON. THE LIBRARY.
JOHN BELCHER, A.R.A., ARCHITECT.

Photo: S. B. Bolas and Co.



CORNBURY PARK. FIRST FLOOR PLAN.



CORNBURY PARK. GROUND FLOOR PLAN.

Books.

ENGLISH WOODWORK.

"English Interior Woodwork of the XVI., XVII. and XVIII. Centuries." By H. Tanner, junr., A.R.I.B.A. Price 36*s.* nett. London. B. T. Batsford, 94, High Holborn. 1902.

THIS volume contains a series of carefully measured drawings of the best and most characteristic examples of panelling and other interior fittings. It ought to prove very instructive to the student, and most useful to the designer. Indeed, it is open to question whether Mr. Tanner's labours will not chiefly result in a saving of trouble to that large and ever-growing class who having no ideas of their own will appropriate all they can. Against this fear we may set a feeling of satisfaction that such designers will be led aright—since they so badly need leading. Mr. Tanner discriminates carefully between a number of styles and enumerates the few first attempts, now extant, of Italian workmen to introduce Classical forms. Of these, which generally take the shape of Italian ornament grafted upon late English Gothic, he mentions examples at Hampton Court, King's College Chapel at Cambridge, the Vine and Christ Church in Hampshire, and a few more. These specimens of Italian work were imitated in many country churches, wherever a school of native carvers, whether in wood or in freestone, existed. They were and are very obnoxious to "restorers," and in hundreds of cases have perished; to which cause I should be disposed to attribute their rarity rather than to any feeling on the part of workmen, that "the style was too severe for the English to handle," as Mr. Tanner supposes. He points out that the Classic style was chiefly recommended to our forefathers by the Dutch and German examples. Many German pattern books were to be had in the sixteenth century, but our artists improved on the florid style fashionable in the Low Countries and on the Rhine. He traces to these sources many such "vile vagaries" as "the pedestal-like pilasters surmounted by human bodies," and the multiplication of parts without knowledge "of the grammar and general composition of Classic and Renaissance work." The style then prevalent in England, the last phase, namely, of Gothic paid little or no attention to general proportions. "Such periods of doubt and uncertainty," says Mr. Tanner, "had to be passed through, for the maturity of a national style, such as that attained under the guidance of Inigo Jones, was not to be accomplished in one turn of the wheel." The most important point to be noted in this last sentence is the evidence it affords of the complete conversion of some at least of our modern architects, to see the absurdity of what was a stock principle with the critics and others who wrote during the prevalence of the so-called "Gothic Revival." Forty years ago and less it was common to hear St. Paul's described as "a heathen temple." One rather eminent author called the western towers of Westminster Abbey, Grecian. That, in the third year of the twentieth century, the Palace of Whitehall or St. Stephen's, Walbrook, should be spoken of as in "a national style" would have seemed a thing incredible. Yet it is impossible to pass by this entirely reasonable expression of Mr. Tanner's without recording the full assent which it demands, and without remarking that all through the introductory essay there are similar postulates, often inferred though not repeated in words. We find in short that the peculiar form of Palladian architecture, which was brought to perfection by the great English architects, was wholly different in its results, when adapted to our insular requirements and materials from what prevailed in France, Germany, the Low Countries, and above all in Italy.

I have perhaps wandered from the tenour of Mr. Tanner's introduction, but his sentences are so full of suggestion that it is difficult not to dwell upon one or more of them. The principal subjects of his drawings are the chapel and hall screens of the Charterhouse, Hardwick Hall, some Elizabethan staircases and Broughton Castle, all of the sixteenth century; Haddon Hall, Knole, Bolsover, Guildford, and other country examples. Plate XXXIX. brings us to a series of specimens of Wren's buildings in London, all the woodwork left in St. Stephen's, Walbrook, after the recent destructive "restoration"—which, by the way, Mr. Tanner does not mention—being represented in measured drawings. Hampton Court occupies three plates and Chelsea Hospital two more. The last of the 50 plates contains a series of examples of seventeenth and eighteenth century staircases. Among these is one from a building which, till recently, was little known, the old royal palace at Kew. It was built in 1631, and is of red brick, with some curious plaster work on the ceilings. The staircase is here figured. Of all these pictures special attention may be directed to the vestry door of St. Lawrence, Jewry, of which, besides a beautiful elevation, we have sections and enlarged details of important features; and to the details, in three plates, of Thorpe Hall, which was built in 1656 by John Webb, who carried out the designs, and seems to have succeeded to the professional practice of his wife's cousin, Inigo Jones. Mr. Tanner indulges in no perspective views; his book is evidently intended for use by working designers, and no doubt will prove a mine of suggestions to many students. It proves once more, what too often we forget, that examples of good art are to be had without wandering beyond the limits of our native shores. Any attempt to introduce foreign forms, however fine in themselves, must be made in wilful forgetfulness of the numberless beautiful carvings which are scattered broadcast through our own country. It is safe to say, and I doubt not Mr. Tanner would bear me out in asserting, that for each specimen to be found in these admirable plates, at least ten more will occur to the mind of any one acquainted with even a limited number of the old houses and churches of England.

W. J. LOFTIE.

EXETER CATHEDRAL. CORBEL AT SOUTH-EAST ANGLE OF CROSSING.

HEAD OF A LAY MASTER, POSSIBLY THE ARCHITECT.

Photo: S. B. Bolas and Co.

How Exeter Cathedral was Built—II.*

III.—The Norman Church.

The history of Exeter Cathedral has been less fully unravelled than has been the case with many others. Dr. Oliver, in a valuable survey made before Scott's restoration, printed some interesting extracts from the Fabric Rolls, but his reading of the building itself was not satisfactory.*

Canon P. Freeman's careful examination of the Fabric, taken together with his citation of the documents, is the best authority we have. Professor E. Freeman, in his history of Exeter, published in 1886, quite ignored his namesake's work, published a dozen years before, and fell back on Oliver; and still more recent accounts seem to have been compiled by jumbling the two incommensurables together. It is a pity, in regard to Exeter, that we have not had the advantage of such an analysis as Professor Willis made of the development of Canterbury and Winchester.

* "Lives of the Bishops of Exeter," etc., etc

The great singularity of this cathedral is to be found in the two massive Norman towers which stand on either side of the body, or, if I may be allowed to use the better French word, of the Vessel, at the half-length. These are said to have been the work of Bishop Warelwast, 1107–36; † but the fineness of the ashlar masonry and the advanced detail would almost suggest work wrought in the second half of the twelfth century. The South Tower is entirely Norman, including the four crowning turrets and their corbel tables (Fig. 3), but the upper storey of the North Tower was built, or rebuilt, in 1478–86, together with the pointed leaded roof which is shown in King's etching for Dugdale. This leaded spire balanced a pyramidal leaded roof about 55 feet high, which from the first seems to have surmounted the South Tower. Weatherings above the slope of this leaded spire are, or were, to be found on the inner angles of the four Norman turrets which stand well in over the angles and allow the passage-ways to pass through them and the spire to spring from them. That from the first these towers formed transepts opening from the interior is shown by the comparatively large windows, one of which is to be seen in the west face of the North Tower, while a second in the same, and two others in the South Tower may be traced.

During the works carried out by Scott, evidence was found which shows that the walls of the nave aisles are still in part Norman for their entire length. At successive points along the aisles, especially on the south side, signs are to be seen that early pier-responds have been cut away, and the base of one of these was found *in situ* under the present wall-seat. These show that the piers of the nave arcade were about 18 ft. 6 in. apart from centre to centre. (See Trans. Ex. Dioc. Archl. Soc., N. Series, Vol. V., p. 120.) The later pier-responds are evidently cut into an older wall,

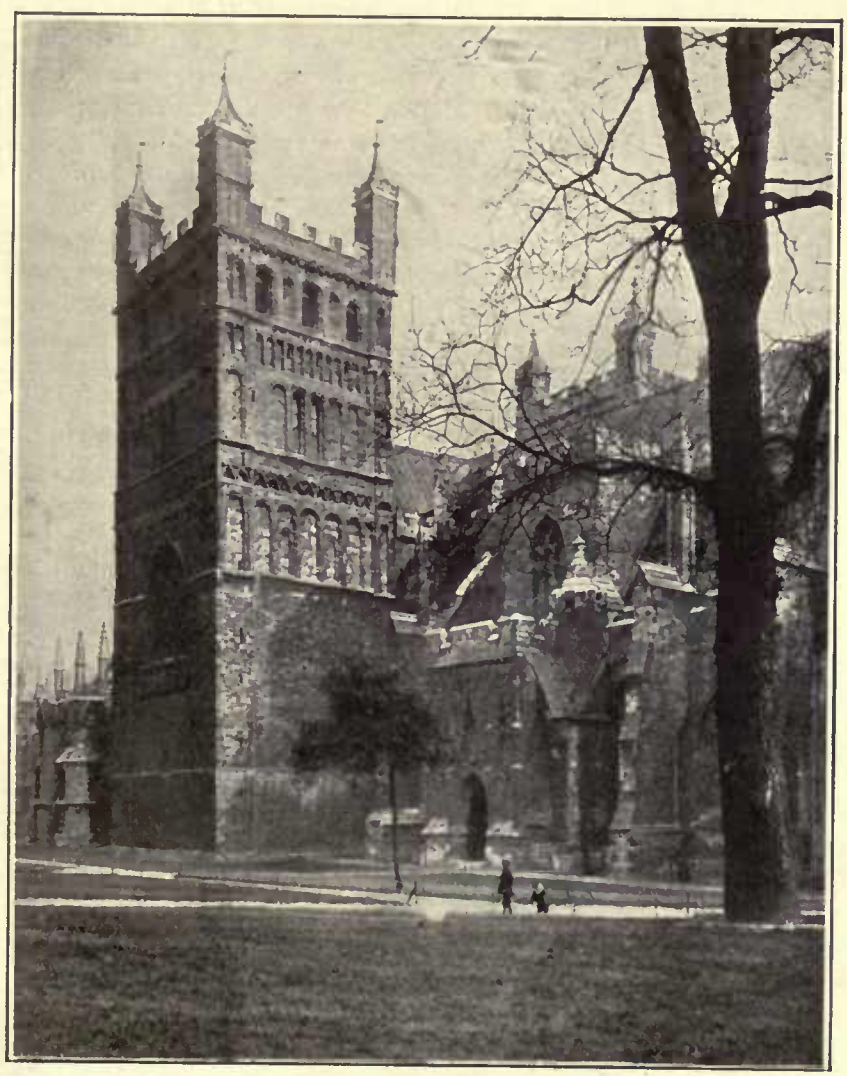


Photo: E. Dockree.

FIG. I.—NORTH TRANSEPTAL TOWER.

* Continued from the March issue.

† A fifteenth-century chronicle quoted by Freeman. The character of the masonry of the North Tower has been much falsified by that abomination wide tuck pointing.

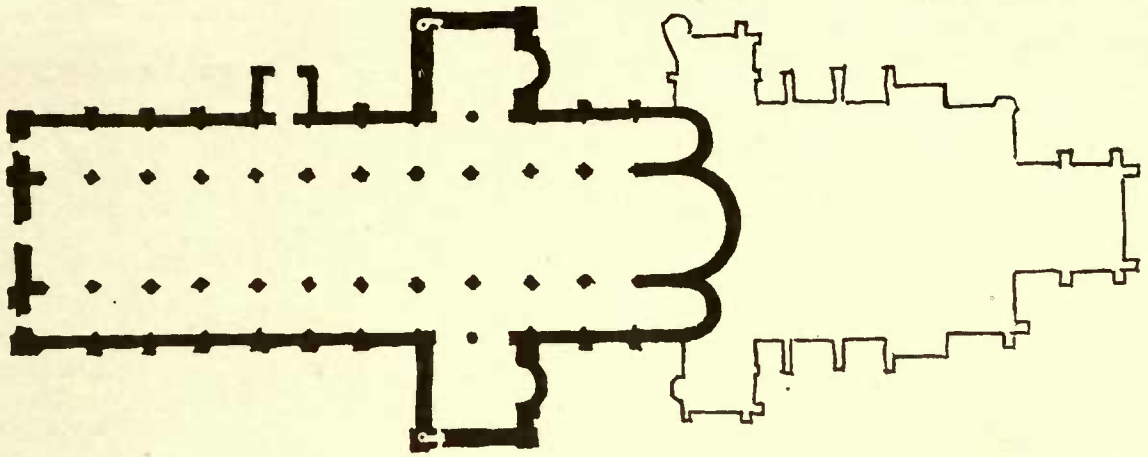


FIG. 2.—PLAN OF NORMAN CHURCH.

and even the early thirteenth-century door to the cloister is also an insertion, while a part of the west wall is almost certainly Norman work.

On the exterior the evidence is still clearer. On the south it may be seen how the nave-walling ranges with the masonry of the tower, and on the north we have not only a Norman plinth in continuation with that of the tower, but the lower parts of the flat Norman buttresses of the aisle-wall are preserved. These buttresses, which project 9 inches, were 4 feet wide, and the interspaces were about 14 feet 6 inches, which again gives us 18½ feet for the dimensions of the bays.

In the eastern limb of the church there is a decided break in the work after the third bay from the crossing. Up to this point the fourteenth-century marble columns are 8 or 9 inches bigger than those beyond, and differences may be seen in the arches and other details. Further, on the inside of the nave-walls, just above the wall-seat, a chamfered plinth is to be seen which is plainly part of the Norman work; a similar plinth may be traced along the south aisle of choir for three bays. An article written on the discoveries made while Scott's work was in progress, contributed to the *Saturday Review*, says: "It is now known that the Norman cathedral ended eastward in a triple apse, since the foundations of one of the three divisions were discovered in the north aisle, at the end of the third bay from the west. . . . . The western bays are, in fact, the old Norman walls transformed."* There were probably also small apsidal chapels opening from the transept towers where there are now square chapels. These towers must always have had altars from whence their names of St. Paul's Tower (north) and St. John's Tower (south) are derived. In the Fabric Roll of the year 1280 we are told of alterations to "St. John's Tower," and in 1285 there are entries for similar work in "St. Paul's Tower," and for removing "St. Paul's altar." In 1287 "St. John's altar" was also moved into the enlarged chapel opening from the tower (Freeman, p. 73). We can even carry back the altar of St. John a century further, for about 1235 Bishop Bruere gave a portion of his garden "juxta turrem Sct. Johannis" for a new Chapter House; and Bishop John, who died in 1191, was buried in the South Tower (evidently before the altar of his name saint), "where his tomb remains undisturbed."*

FIG. 3.—CORBEL-TABLE TURRETS, SOUTH TOWER.

* See "Exeter Cathedral and its Restoration," T. B. Worth, 1878.

If we consider the original spacing of the bays of the nave, of which, as we have seen, clear evidence remains in place, we find that each tower with its thick walls occupies the space of two bays. As the old choir doubtless ran on westward of the towers,† the great arcade would almost certainly have been continuous, and it is probable that the towers at first opened from the aisles with a pair of arches,

* Oliver: a document of 1409 speaks of this tomb of Bp. John in St. John's Tower (in Lyttleton): Leland says the same.

† Freeman.

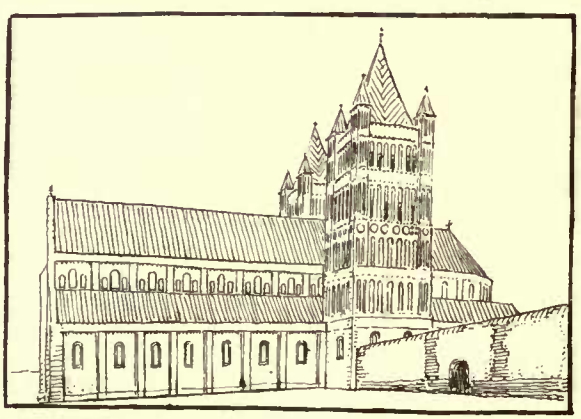


FIG. 4.—SOUTH VIEW OF NORMAN CHURCH.

and that the great alteration of c. 1280 consisted in throwing these into one and heightening the opening in each case.

We are not left without some indications of the treatment of the church in detail. The remnants of the pier-responds along the nave show that they were accurately built with alternate courses of bright red and white stone, the red stone bonding on each side of the responds (of 2 feet wide) in an exactly symmetrical manner. Here we have another instance of the counter-changing of two varieties of stone, of which the Chapter House of Worcester is such a remarkable example, and which is also found at Chichester and other places.

Even for the height indications might probably be found on the inner faces of the towers as seen in the roof-spaces of the heightened church. (Since writing the above I find that Britton states "That the roof of the new church was raised considerably higher than that of the old one is evident from the ancient Norman windows and other ornamental work which may be seen on each tower between the present vaulting and the roof.")*

The windows of the church, we may suppose, were generally like those which remain to us in the towers. Altogether, the Norman church, with its companion towers and leaded spires, standing high above the nave and choir, furnishes a distinct type in the history of English architecture.

IV.—The Lady Chapel and the New Work.

According to tradition, Bishop Marshall (1194–1206) finished the church after the "plat and foundation" of his predecessors. On the south side of the nave (exterior) are Early English consecration crosses, which may witness to the dedication of the nave altars at this time.*

A Lady Chapel is mentioned in a document of 1237, which provides for certain masses in the chapel of the Virgin. Oliver concluded that this was the present Lady Chapel; and Canon Freeman supposed further that a large eastern extension was made to the church at the same early date to connect the chapel with the old work, and he assigns to Marshall the "longer choir (presbytery), Lady Chapel, and six other chapels, north porch," &c. That is, as he follows it in detail, the entire ground plan as it exists to-day. Moreover, he says that the whole was vaulted only four or five feet lower than at present; and even the towers were opened up "partially" with pointed arches. Further, he supposes that Branscombe (1257–80) made a first recasting of the Lady Chapel and its two side chapels. Then came Quivil (1280–91), who "designed the decorated cathedral, and transformed the transepts, east bay of nave, Lady and adjacent chapels, and retro-choir." That is, according to this theory, leaving the Norman choir and Marshall's supposed Presbytery as an island to be dealt with by Bitton (1292–1307), Quivil transformed the work round about, and made a specimen bay of his new design in the nave.

The evidence submitted for the extensive work assigned to Marshall ought to be overwhelming, in face of the improbability that here, at Exeter, we should get, at the end of the twelfth century, the same fully-developed plan as at Salisbury, and that such a great work was superseded *on the same lines* from 1280 to 1310. Canon Freeman's sug-

* It would be very interesting to have careful drawings of these parts.

* The chapter house was built by Bruere (1224–44). The large door in south wall of nave was probably also his work, and inserted in the Norman wall to give access to the chapter house.

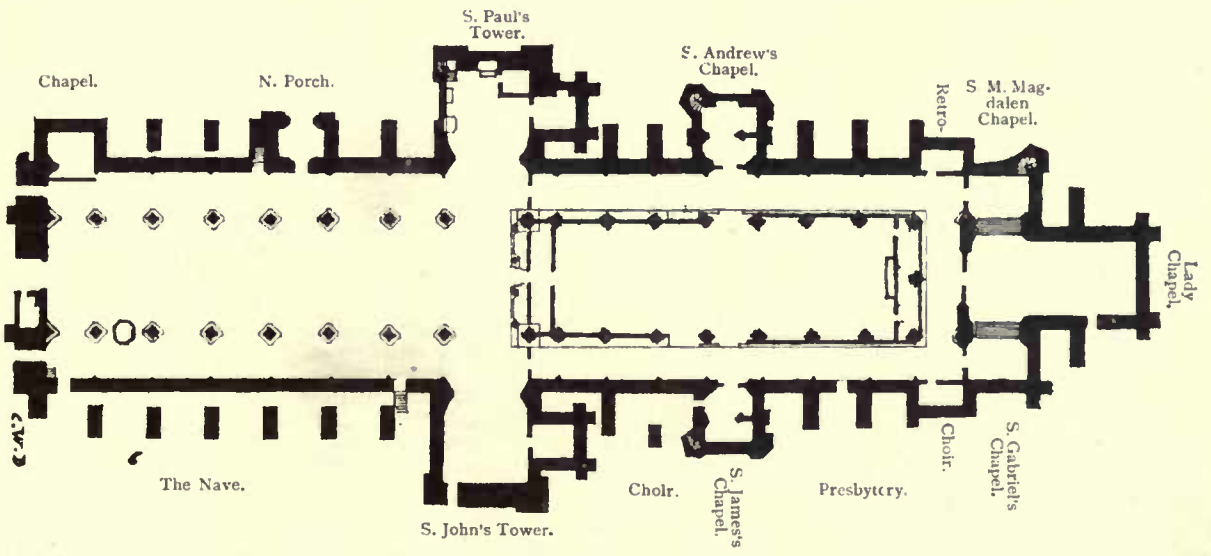


FIG. 5.—EXETER CATHEDRAL. PLAN.

gested proofs from the structure all seem to me to fail, and the allusion to a "Chapel of the Blessed Virgin," in 1237, does not necessarily imply the early existence of the present eastern Lady Chapel. The strongest point in favour of such a large eastern extension at an early time is a deed of Branscombe's (1280) endowing St. Gabriel's Chapel, where he had chosen his place of burial, "in the chapel almost anew constructed (*de novo constructa*) by the Chapel of St. Mary on the south side," which Freeman reads: "in the almost reconstructed chapel." Further evidence seems to be required before we should accept the Marshall theory as proved.*

The place assigned to Quivil by Freeman, is that he "designed" the *transformation* of the Norman and Transition church into a decorated one. It is certain that work done in his day (which included the finishing of the remodelling of the transepts), deeply impressed his contemporaries and successors. The witness of the stones themselves, however, taken together with the documents, is final as against the great claims to initiation set up for Quivil. †

The existing Fabric Rolls show that an important "work" was already in hand on Quivil's accession; the first of the rolls now in existence being of Branscombe's last year. We have no knowledge of how many are lost, but it is certain that a work and the rolls of accounts are complementary to one another, and that the series of rolls dates from Branscombe's time. Again, when we find that already in 1280, in the latter half of which year Branscombe died (July 22), the alterations to the transeptal towers were in full course, we are driven to carry back the origin of even that part of the work still earlier. Provision for such a work could not have been made in the first two or three months of Quivil's rule.

The deed of Branscombe's, before referred to, shows that the Chapel of St. Gabriel, next the Lady Chapel, was in July, 1280, nearly completed. Again, Freeman himself, speaking of the Chapels of St. James and St. Andrew opening from the choir aisles, says, in an aside out of the line of his main argument for Quivil, that "Branscombe, toward the end of his time, began to transform these chapels into their present state—just as he had, a little before, reconstructed the Gabriel and Magdalen Chapels. For the very first entry in our Fabric Rolls is for three windows for St. James' Chapel, September, 1279. It is most probable that the St. Andrew's Chapel was in part transformed at the same time."

I object here to the idea of a mere re-editing of old chapels, but it is certain, in any case, that the windows of the present south chapel were being wrought nearly a year before Branscombe's death, and that St. Gabriel's Chapel (St. Gabriel was this bishop's special patron) was at the same time being built for the place of his tomb, and that the Lady Chapel in its present situation by St. Gabriel's was spoken of as in being, although possibly only rising from the ground, like its flanking chapels.

If we now turn to the building itself we find that the lower part of the Lady Chapel, with its companion chapels and the retro-choir, certainly form part of one effort, and are of earlier date than the rest of the work. In the *sedilia* of the Lady Chapel we have the only example to be found in the church of the trefoil foliage typical of Early English, and it is associated with naturalistic leafage in a way that could only be found in work wrought not later than the first years of Edward I.

If the five chapels of the eastern limb of the church were well advanced by Branscombe before his death, and even the remodelling of the transepts was in progress in the first months of Quivil's reign, it is evident that the whole scheme for recasting the eastern end must have been already settled, and the "design" of the present church must be credited to Branscombe and not to Quivil.*

Everything shows that Branscombe was a great organiser and man of affairs, and his rule extended to twenty-three years, as against Quivil's eleven. He instituted the Diocesan Register, which shows that in 1259 no less than forty new or enlarged churches were consecrated in his diocese. He gave liberally to the building of Newnham Priory and Bodmin Friary. He restored the establishment at Crediton, founded the College of Glaseney, and built the bishop's house at Clyst. He collected the constitutions of the cathedral body, and instituted a celebration of St. Gabriel, with the annual feeding of 500 poor. Even his own magnificent effigy was probably wrought before his death, and seems to speak of a dominant and ambitious character.

It fell to Quivil not only to continue the work in hand on his accession, and to carry the eastern chapels on to completion, but we must allow him the chief part in the next block of work undertaken, that is to say, the Presbytery immediately west of the retro choir. The Presbytery and the choir seem in the Fabric Rolls to be specially

* Freeman supposes that the buttresses of choir and Lady Chapel, the corbel table of the latter, and the internal piers between it and the side chapels, belong to Marshall's time: the windows of Retro-choir he dates about 1230, and says they resemble those of the Choir of Westminster, "c. 1230"—a mistake in itself, as this should be c. 1250—and the Exeter windows show a considerable advance on Westminster.

† He appears to have made generous gifts to the Fabric, and this may be the reason of his reputation.

* Even St. Edmund's Chapel, at the north-west end of the nave, seems to be as early as the other chapels.

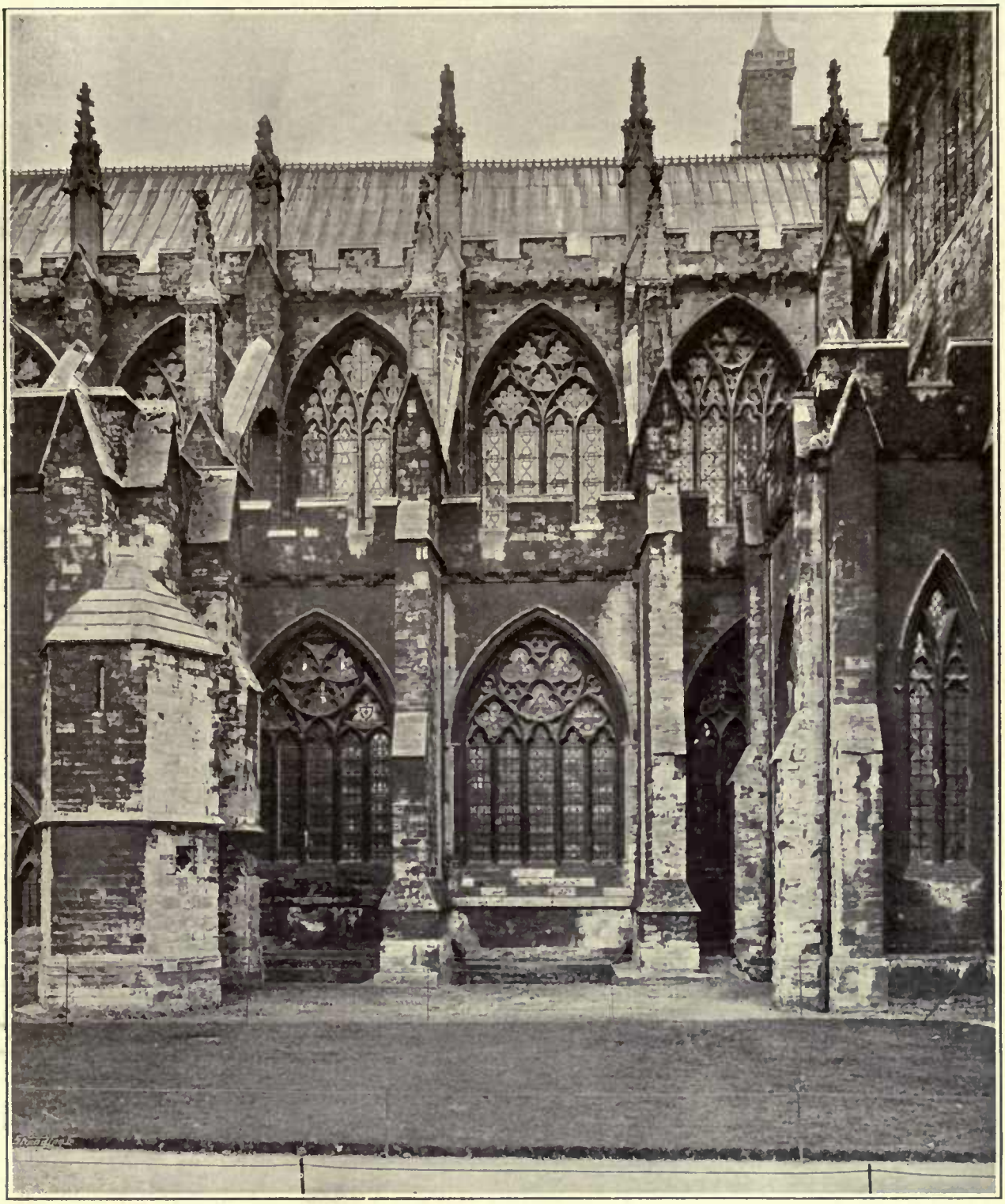


FIG. 6.—EXTERIOR OF THE CHOIR FROM THE NORTH.

Photo: S. B. Bolas and Co.

called the "New Work"; and the Fabric Roll for 1308 speaks of Quivil as first founder of the new work (*primus fundator novi operis*). Eight years after his death the Presbytery was ready for its roof, and in two years more (1301) was completed even to some of the glazing. If we consider the long preparation required for such a work, including the great marble pillars from Corfe, we are surely forced to assign to him the chief glory of the Presbytery. In his Obit he is said to have "enlarged the church in respect to the new work therein," and that he did it largely at his own expense. He was buried in the centre of the still hardly completed Lady Chapel, and was celebrated first amongst its benefactors. Freeman supposes that his enlargement of the church by the new work refers merely to the remodelling of the transept towers, but I think

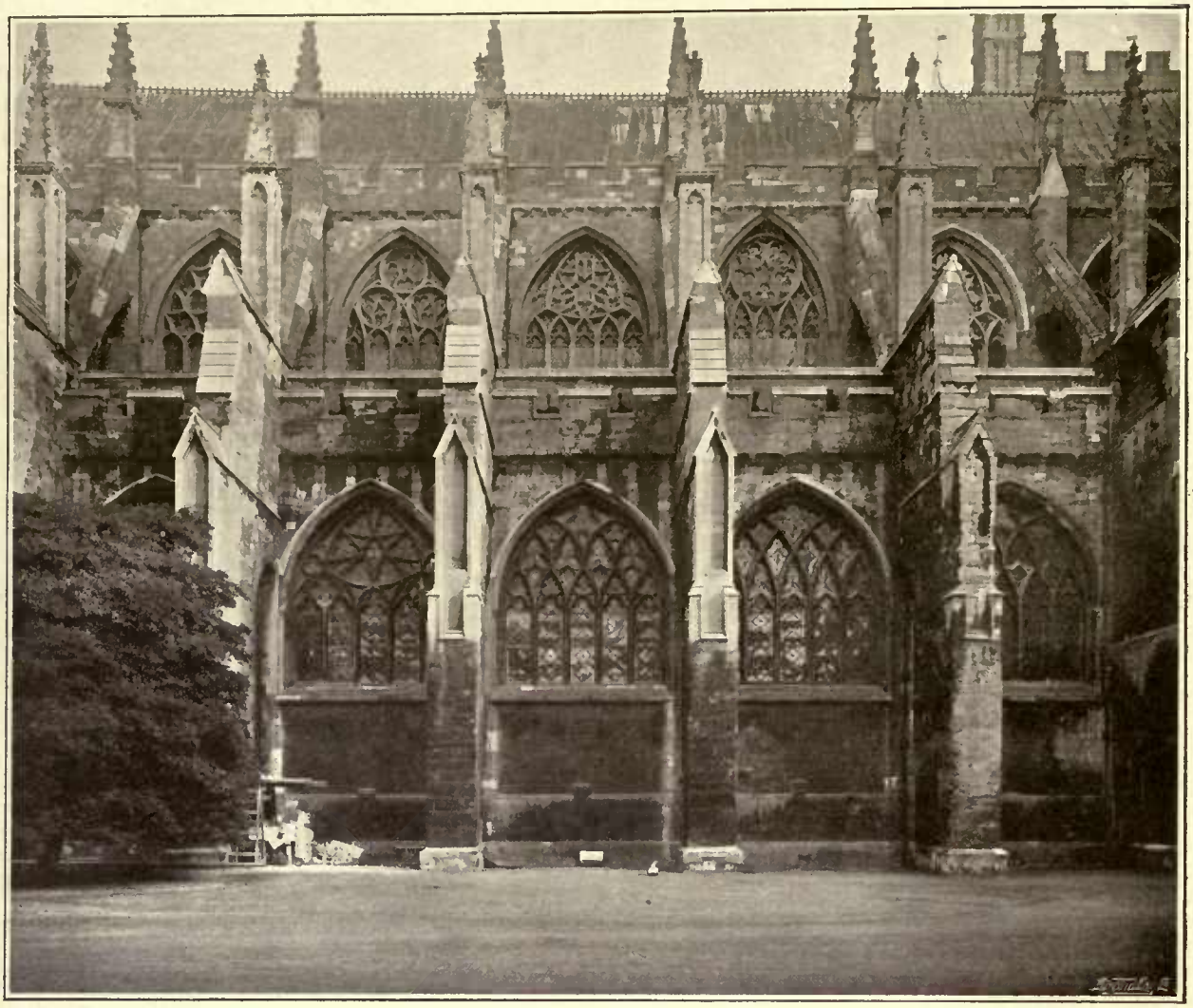


FIG. 7.—EXTERIOR OF NAVE FROM THE SOUTH. INDICATIONS OF TEN COUPLED BAYS OF THE CLOISTER MAY BE SEEN ON THE AISLE WALL.

Photo: S. B. Bolas and Co.

further consideration of the extracts he gives shows conclusively that the Presbytery was his; and the phrase "first founder of the new work" is an argument against Marshall's supposed prior extension.

Bitton, who was to complete Quivil's work, succeeded in 1292. Under him in 1301 the vaults of the eastern chapels were painted with gold, silver, azure, and other colours.* In the same year the glazing of the east gable of the new work was in progress (*frontis novi operis*) and this, as Freeman says, undoubtedly refers to the east window of the Presbytery. In 1303 Thomas the Plumber was at work *super capellam B. M., et alibi super novum opus*. Here it plainly appears, as Lyttleton has already remarked, that the New Work is distinct from the Lady Chapel.

Again in 1303 we have an entry for setting the glass in the upper gable, in the eight upper windows (clerestory), and the six aisle windows of the New Work. The glazier was Master Walter le Verrouer, and the moment speaks of the structural completion of the Presbytery.

The second division of the new work, the choir proper, seems to have followed the first, six or eight years later (Fig. 6). In 1310 Master Walter le Verrouer was setting the glass, and in the previous September the stalls were moved into their place in the new choir. There is a marked difference in the carving of these two sections; and in the eastern, or first executed, bays, there was at first no triforium, which was only cut in by Stapledon in 1318 to range with that in the choir, which had it from the first. Bitton died in 1307,

* This seems to be the moment of the completion of the Lady Chapel. Its beautiful reredos agrees with this date. "The centre niche is the only original one remaining; the others on either side are of somewhat similar design but have been badly restored. They do not join the centre one as they must have done originally, as the modern pinnacle is stuck against the ancient one, and conceals a portion of the crockets and springing of the small canopies. The whole of the centre niche has been richly painted and gilded, but when the new work was added the old was covered with yellow wash. The modern work is, probably, a rough imitation of the original."—*See* Collings' *Gothic Ornaments*, 1850.

and was buried in the midst of the new work before the high altar. We may assign to him the structure of the choir, which he must have seen nearly completed before his death.

Examination of the fabric demonstrates, I think, that the crossing and the first bay of the nave, form part of one work with the choir, the carving throughout having closer affinity with the nave than with the Presbytery. The first bay of the nave did not receive its glazing until 1317 and 1318; along with other windows about the crossing and in St. Edmund's Chapel at the north-west angle of the nave. This bay we may perhaps assign to Stapledon (1308–1326); he, however, was for the most part engaged in finishing and furnishing the works of his predecessors. Much of the glazing, the bishop's throne, the sedilia, the altar and high canopied reredos, and the pulpitum, all were provided before his death. He was buried to the left of the high altar, and Grandisson, his successor, in 1328 dedicated the new work.

Grandisson, in his turn, took up what he called "the half-finished church," but it seems almost certain that the work of the nave must have been well in hand in Stapledon's last year when he bought fifteen great poplar trees for scaffolds; and it appears from the rolls that this year was one of the two points of maximum expenditure in the course of the works. The other was in 1310 when the choir was being completed. As early as 1328 work was going forward at the west front, and in 1332 William Canon reckoned with the Dean and Chapter for marble found by himself and his father for the fabric of the nave, and received at this time a small balance of £7. 8s. He also bound himself to do any repairs found necessary at the time of fixing. This he fulfilled and received 54s. (which had been disputed) in final settlement, September 9th, 1334. The details show, as Freeman has pointed out, that this reckoning included all the marble work of the nave except the east bay, which had been done before, and comprised the triforium as well as the great columns. The design and origin of the new nave must, it seems from this, be pushed back into Stapledon's time. In 1338 Grandisson wrote an order for twelve oaks, and these, no doubt, were for the roof, as Freeman supposes.

In 1341 £190 was spent; in 1342 £144, but after this there is a sudden drop to an average of

Photo: S. B. Bolas and Co

FIG. 8.—INTERIOR OF THE NAVE FROM THE CLERESTORY.

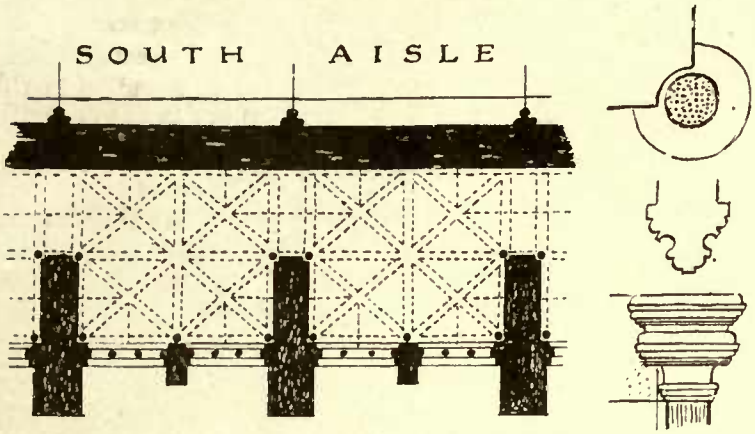


FIG. 9.—RESTORATION OF NORTH WALK OF CLOISTER.

about £40 as the work of the nave drew toward a close. There was not, I suppose, any cessation in the progress of the works from the time when Branscombe began at the east end, let us say about 1270. As soon as the masons were taken off one part they were probably set about the next, in a clearly defined general scheme. Thus the beginning of the nave would date from the completion of the crossing and first bay. The average annual expenditure seems to have been about £200. For seventy-five years this would amount to £15,000, and this sum, about £300,000 of our money, we may put as the cost of Exeter Cathedral. Amongst the last items of expense was the bringing of water to the close, and the erection of St. Peter's fountain in 1346–48. This was a conduit near the N.W. angle of the nave; it is shown on the old coloured plot of the close. Even a wall which enclosed a yard on the N. side of the nave, now destroyed, belonged, I suppose, to this time; it had a fine coping, and the yard probably formed the plumbery.

In 1353 a new work was begun "in front of the great cross," the expenses of which were altogether £46—this, Freeman supposes, is the Minstrels' Gallery.*

The north walk of the cloister attached to the nave appears to have been built along with the nave buttresses which form an integral part of it. Marble for it is mentioned in Canon's bill for 1332.

The form of this north walk can be easily conjectured from the fragments which remain, although it is to be hoped that no one will want to "restore" it (Fig. 9). The trivial game of restoration is surely now played out. This cloister formed a series of alcoves between the buttresses. From fragments which were found in 1817, it appears that the bosses, vaulting, and tracery had been richly gilt and painted, and that there had been large windows between the buttresses.* A south walk, and probably one to the west, were added about 1370–80; the windows were glazed. There is some doubt as to an east walk, and in the "scientific restoration" now begun of this thing, for the previous existence of which there is no proof, a great buttress of the chapter house has been cut away to make room for it. The other, too, will vanish, I suppose, when money is forthcoming for this whim. The expenditure shown in the fabric accounts rises again at the building of this cloister, and its erection seems to have formed a separate work (*opus claustrale*). The accounts rise again in 1390, the year when the new east window was inserted.

On one other last point I have to differ from Freeman's valuable book, which sets out its *facts* so accurately that they can often be used against his conclusions. He assigns to Bishop Oldham (1504–19) not only the three late chantries, but also the graceful screens to the three eastern chapels; now those before the chapels of St. Gabriel and St. M. Magdalen, bear illuminated on the jambs of their doorways, faded but certain, the Arms of Stafford (1395–1419)—or, a chevron gules, on a bordure azure eight mitres or. These screens were probably erected in 1410 when Stafford invited subscriptions for the fabric. The wood doors in these screens are very well painted in an early style, those of the north chapel with flourishes of white on a vermilion ground, and those to the chapel of St. Gabriel with a beautiful Annunciation, Gabriel bearing a scroll inscribed *Ave Maria plena gratia*.

V.—The Architects and other Artists.

As we have seen, Exeter Cathedral, as it stands to-day in its seeming unity and exquisite "proportions," was no exercise in original design, but is the result of recasting a pre-existing church by making an extension eastward, retaining the old towers and rebuilding the nave on the old lines. According to our point of view such a work is either a compromise and a cobble, or a thing superpersonal, a unity whose day was three centuries.

This process of building was conducted by a series of head-masons, carpenters, plumbers, and glaziers, who were engaged and "sworn" as occasion required, to carry on the work at fixed wages. We have in the Fabric Rolls of Exeter a series of accounts for the building done from 1279 to 1440. There are upwards of a hundred tight little rolls

* For the fine collection of musical instruments figured here see Carl Engel's "Musical Instruments." They comprise the Ciffern, Bagpipe, Clarion, Rebec, Psaltery, Syrinx, Sackbut, Regals, Gittern, Shalm, Timbrel, Cymbals.

* *See* Britton.

of parchment, about nine inches wide and two to five yards long. I have looked over one or two of these, not, it is true, at sufficient leisure to add to what has been extracted by Oliver and Freeman, but a glance shows the precision with which the names and wages of the masons and other artists were set out week by week. And it is certain that a day or two of labour would make plain that a great deal of the work could be assigned to the individual workman who wrought it. These Rolls, as a series, are, however, incomplete, especially it would seem at the beginning.

In the practice of Mediæval building, as each considerable effort was made, what was called a "New Work" was constituted, together with a special fund and responsible heads, who were called "keepers of the work." The Rolls show that here at Exeter, exactly as at Westminster Abbey, building was carried on under the joint charge of a master of accounts and a master of masonry.* Dr. Oliver has printed in full a roll for 1299, an important moment when the beautiful work of the Presbytery was nearing its completion. In it the wages of each man is set out for every week in the year; it is headed "Compotus Domini Roberti de Asperton et Magistri Rogeri Cementarii, custodum novi operis." Nine or ten other masons are mentioned besides Master Roger; five received 2*s.* 2*d.* a week, the others less. Richard de la Streme, evidently the foreman, heads the list with 2*s.* 3*d.* At the end of every quarter is entered, "In Stipendio Magistri Rogeri Cementarii, pro termino, 30*s.* Et Domini Roberti de Asperton, 12*s.* 6*d.*" The latter in one place is called Vicar, so that we may know that he was one of the clergy. Cementarius is, of course, "Mason"; the latter word came more into use in the fourteenth century. The wages of Architect Roger were thus just under 2*s.* 6*d.* a week. Master Walter, the carpenter, at the same time, received 2*s.* 3*d.* a week. This Master Walter appears together with a sudden addition to the staff of carpenters in the third quarter of this year, 1299, and his advent probably marks the moment of beginning the roofs of the Presbytery. Four years later we hear of three shillings paid to Roger, the mason, for going to Corfe to buy stones. We may almost certainly assign to him the vault of the Lady Chapel, the upper part of the Presbytery, and the beginning of the choir. Possibly he was architect of the Presbytery from the first. William de Montacute was working as a sculptor at this time. Freeman says that he executed carved doors for the choir in 1302, and brackets and bosses in 1313. But with our usual English eagerness to give away English art, he adds that William de Montacute was a Frenchman. Now Montacute is close to the Ham Hill Quarries only about thirty miles away in Somersetshire. We may associate him more exactly with the bosses of the high vault which were wrought 1303–4; they cost 5*s.* each.* Under the Corbel at the S.E. angle of the crossing is carved the head of a layman in a master's cap. It is very fine and characteristic and may have been intended for the mason or sculptor. See Frontispiece.

FIG. 10.

In 1286, Richard de Malmesbury was employed in painting, at 2*s.* 1½*d.* per week. In 1301, the vaulting of the eastern chapels was painted with "gold, silver, azure, and other colours." (The stars and silver moons on blue still remain, although much restored.) In 1303, Thomas Plumber was paid for covering the chapel of the Blessed Virgin Mary, and other parts on the new work, and Master Walter le Verrouer was engaged in glazing the Presbytery. He was still busy in 1310, when he was receiving 3*s.* a week for himself and two boys in setting the glass.† Six lights of his great east window still remain to us, re-inserted amongst the later glass.

* See my account of the Westminster Architects, Journal of the R.I.B.A., June 1891.

* In 1299, Henry Manger, mercator of Kaim (Caen), was paid for stone. In 1304, we hear of Portlonde stone.

† The calling in of little masters with their apprentices was general. In 1299, we find a carpenter *cum garcione suo*, four days, twenty pence. We may note also here, as a custom of the carpenters' trade, that they had gloves provided for raising timber.

FIG. 11.—CORFE MARBLE-WORK.

In 1309, William Canon was paid "for marble from Corfe for the columns." The Canons were the great Purbeck marble contractors of the time. It is interesting to note how the mouldings of the columns at Exeter are similar to the Purbeck work of Winchester Presbytery and Wells Chapter House (see Fig. 12). The "Corfe marblers" evidently supplied their own mouldings. In this same year Master John de Glaston (carpenter or *junctor?*) moved the stalls to their situation in the new choir. The superb bishop's throne of oak is the work of Robert de Galmeston, who in 1316 received £4 for making it by piece-work (*ad tascam*); Nicholas Pictor receiving 11*s.* for *imaginibus;* the oak had been bought in 1312 for £6 12*s.* 8*d.* John, the goldsmith, in 1319, was paid for work in silver for the altar. In 1317, the choir screen, called "la pulpytte," was begun. William Canon wrought the marble-work, and the Dean and Chapter gave him £4 "of their courtesy," so pleased were they with the result.

Amongst the sums paid for the *Pulpitum*, one is mentioned in 1324 to an *Imaginator* of London, "*p. imaginibus talliand.*" The London image-makers were doubtless the finest school of sculptors in the country.

As we have seen, Bishop Stapledon must have begun the works for the nave before his death. The head mason at this time, 1325–6 (name not printed by Oliver), received 33*s.* 4*d.* a quarter; and the clerk, his co-keeper, 12*s.* 6*d.* as before. This mason we may probably look on as first architect of the nave, and an hour's search in the Roll of this year would almost assuredly give us his name. We are not left in any doubt, however, as to who was Grandisson's architect a dozen years later when (1338) the Bishop wrote to his bailiff at Chudleigh to deliver "au gardeyne de meisme loeur xii. cheynes (twelve oaks for the work) convenables pour la dite eglise . . . selon la visement Sir Thomas de Doulcote, clerk, et Maistre Thomas le Maceoun" (by the advice of our clerk and of Master Thomas the mason). This is the moment when the masonry of the nave was nearing completion. At this time we still have exactly the same dual control as was the wont forty years before. By means of this fact we can probably explain an entry of six years earlier; this is the memorandum mentioned before, in which William, Canon of Corfe then (January, 1332) reckoned for marble supplied by his father and himself for the nave (including equal to eleven and a half great columns at £10 10*s.* each, etc.), whereof the said William received payment from "Dominis John Shireford et Petro de Castro," Wardens of the said church, by the hands of the said Master Petro de Castro.

The Cathedral was no sooner finished than an amendment was made at the east end. According to Oliver, Henry de Blakeburn, a canon, gave a hundred marks for a new east window in 1389. In the Fabric Roll for this year is an entry for a skin of parchment *ad pingendum magnam fenestram.* In 1391 an agreement was made with Robert Lyen, the glazier of the church (and sworn to that office with a yearly salary of 26*s.* 8*d.*), whereby he was to receive twenty pence for each foot of new glass; and for refitting the old glass (Master Walter's) he was to receive 3*s.* 4*d.* a week, and his men 2*s.*; all new glass being supplied by the Chapter. In 1396 William Houndling and William Gervys are mentioned—the former had a salary of 26*s.* 8*d.*, I suppose, as master mason, as that was now the rate for mastership; and in him we may have the architect of the east window just inserted. Oliver, speaking generally, says, "The headmason, or overseer of the works had an additional salary of 26*s.* 8*d.*" In 1412 John Tilney, mason, was called in to inspect the ruinous chapter house, and work on it was undertaken soon after. Probably the upper storey is his work. John Harry, "freemason," was cathedral mason in 1424, at a yearly fee of 26*s.* 8*d.*, over and above his wages. In 1437 he began the new vestry for the Lady Chapel. At the same time John Budd, painter of Exeter, was working in the Cathedral, he painted the clock in 1424, and two years later he repainted "Old St. Peter," a figure which stood at the choir gate.

In 1429 Henry Glazier of Exon received payment for glazing a new window in the western tower. Many entries in the rolls use the word "tower" in a way difficult to be understood, but approximating to our "bay." Probably this payment dates the clerestory windows in the west bay where the work is clearly late.

So do these old rolls of accounts reveal to us the methods used and the persons engaged in the simple and romantic craft of building as practised in the middle age. We might define "Gothic" in five words, as the Art of many Little Masters, the "Renaissance" as the Art of a few Great Masters.

In conclusion, I wish, as a student and lover of Exeter Cathedral, to express a hope that the glass in the west window will not be sacrificed for newer fashions of stained glass. It is unobtrusive—indeed, pleasant—and is already 150 years old. It is most interesting historically. Winston supposed that the ruby glass used in it was the last made in England before the process was rediscovered in France. Its removal and the insertion of the most up-to-date plaything must injure the old stonework. As a Devonshire man I protest against the extravagance of violently destroying this window.

W. R. Lethaby.

Architectural Education.

A Review and Discussion.—I.

THE Englishman's belief in happy-go-lucky methods has lately received some rude shocks in results that were neither happy nor lucky. It is established now that battles may be lost on the playing-fields of our public schools, and that even Waterloo was not won there; that to manœuvre for a "muddle" or a "mess" in the sure and certain hope of genius punctually declaring itself to clear it up is dangerous when an empire depends upon the wager, and that a systematic neglect of system is only one kind of pedantry. The suggested remedy of entrusting our affairs to "business-men" can hardly be listened to with a grave face when we find those same business-men confessing that they are out-paced in energy and outwitted in combination by the foreigner they were accustomed to despise. The average "business man" is as hollow a person as the average "artist." It seems admitted on all hands that it may be desirable to devote to military and commercial affairs something of the study, training, and keenness that we give at present to sport. Energy and independence we have in abundance, but we are too fond of living from hand to mouth, too disdainful of systematic professional schooling.

If South Africa, Germany, and America have been teaching us these lessons in public and commercial affairs, the chaotic state of architectural design sharpens the question whether here, too, the conditions of education are not partly to blame. Art is not, to the same extent as war or business, a pursuit in which great numbers of the average man must and can be drilled to perform subordinate and half-mechanical services, and to a greater extent than these it depends on original combining and creative power. But this power, when it exists, calls for drilling in two respects. Architecture is science made art; a knowledge of the principles of construction is a first necessity of the architect, and modern architects ought to be ashamed of the fact that "engineer" and "architect" seldom mean the same person. But the decorative as well as the constructive sense calls for training. "Originality" in design is the merest weed, and must be grafted on the old stocks and pruned if any fruit is to come of it. Genius itself must learn its use and the conduct of its forces from a study of the past.

In England we maintain for architects relics of a mediæval system of training stripped of its severe sanctions. No one is forced to be a prentice before he calls himself an architect, and the amount of practical training a prentice obtains depends too much on the chances of his own industry, and his teacher's conscience or leisure. Yet there are advantages in this early practical office-training that it would be rash to imperil by hasty action. For theoretical and historical training the student must turn to one or more of those schools that have sprung up to supplement the traditional system. But unless the prentice system is relaxed, this study has to be carried on in the evenings, after hours. On the one side we have the Academy courses, which are practically confined to draughtsmanship; on the other hand, the efforts of the Architectural Association to form a school preparatory to, or concurrent with, apprenticeship. There are other courses at Kensington and at University and King's Colleges. Into the merits of all these fragments of a system it is not the business of this preliminary notice to enter. But it may be said that they do not constitute at present a complete and authoritative technical school of architecture as foreigners understand the word. The foreigners may not have said the last word of wisdom on the subject, but it is hoped that a review of the existing schools in England, and of the more systematic education of France, Germany, and America may lead to a useful discussion of the problem how far such a school or set of schools is possible and desirable in England, and of the relation this systematic education ought to bear to the office training. The moment seems to be ripe for the reorganising of teaching in all its branches; the work of the new University of London in co-ordinating individual schools is a hopeful beginning, and the clearing up of ideas and concentration of forces on the part of architects might lead to something more satisfactory than the present state of things. With a view to this we shall give accounts as full and authoritative as possible of the existing systems in different countries, and then invite discussion based upon this Blue-book survey. We begin with the country that has a very complete apparatus if it has not an art proportionate to its educational system.

GERMANY (WITH AUSTRIA AND SWITZERLAND).

By T. Bailey Saunders.

When Secretary to the Commission which reconstituted the University of London as a teaching body, it fell to me, a few years ago, to examine the relation between technical education and University studies in Germany, Austria, and Switzerland, and I thus had an opportunity, which I have since endeavoured to improve, of seeing what has been done in those countries to provide the best possible training for every kind of professional career. If a description of what has been done for the training of architects in particular be of any value or interest at the present moment to the readers of this Review, I gladly do my best to give it.

Let me begin with Berlin. There is some advantage in doing so, not only because the famous Technical High School in the suburb of Charlottenburg is the largest and, on any general estimate, must surely be accounted the best in Europe, but also because similar schools elsewhere, even if they do not accept it as their exemplar in all the details of technical education, cannot escape its influence. On its size—the main building has a frontage of some 750 ft. and a depth of some 295 ft.—on the completeness of its equipment, on the number of its halls and lecture-rooms, laboratories and museums, or on the excellence of its library, there is no need to dwell, unless for the sake of mentioning that in this respect as ample provision is made for the study of architecture as for the study of any other subject pursued within its walls. For architecture is there regarded as a subject of education quite as definite and important, and demanding just as systematic a treatment, as any other kind of special knowledge. Equally with civil engineering, mechanical engineering, naval architecture and naval engineering, chemistry and mining, and general science, it takes full rank as one of the six departments into which the school is divided, and it is actually the first of them. Attached to this department is a fine museum comprising several large rooms or galleries, in which models, drawings, paintings and various objects of art are displayed. The great attention given to architecture among the technical subjects pursued in the school seems to me, at least, to be a matter of the highest significance, because, although the opinion that it is not technical in at all the same sense in which the other subjects are so, and ought not to be studied under the same roof with them, is not unknown in Germany any more than in Great Britain, the opinion is one which finds little favour with the authorities at Berlin. The fact, too, that, according to the latest statistics, out of 4,811 students in the school during the last winter term 843 were found in this department, is fairly conclusive evidence that the authorities are not alone in their view. The curriculum laid down provides for both the scientific and the artistic aspects of architectural study, and in this as in other subjects it is very important to remember that the aim of the school is to furnish, not practical experience of actual work, but instruction in the practical application of science.

The mention of students in such large numbers may suggest a question as to their social position and previous training; and without some information on these points no one, it may be said, can form any correct idea of the part which the Technical High School at Berlin, or any other institution of the like kind, plays in the educational life of Germany. I hasten to state, therefore, that the students are drawn, to a far larger extent than has prevailed hitherto in England or in France, from all classes; and that in common with the students at most of the German Universities they are drawn in the main from the families of military or naval officers, professional men, the clergy, civil servants, schoolmasters and teachers of all kinds, bankers, merchants, shopkeepers, and farmers. The lowest age at which they can enter is seventeen, but in consequence of the thorough character of the previous training demanded few enter before the age of eighteen, and in many cases, owing to the exigencies of military service, much later still. The utmost care is taken in the department of architecture as in other departments that those only shall be admitted who are likely to make the best use of the instruction provided. To matriculate and obtain all the advantages of full studentship, a candidate must *inter alia* have passed the *Abiturienten* or leaving examination in a German classical or semi-classical or upper modern school, or have passed some other examination which, in the opinion of the Prussian Ministry of Education, is of a similar standard. In this connection it is interesting to know that, according to a recent computation, only 7 per cent. of the students in all the Prussian Technical High Schools came from secondary schools of a lower rank than those mentioned. When I was last in Berlin one of the professors told me, indeed, that half of those attending lectures in Charlottenburg came from classical schools. In addition, however, to the matriculated students there are others called *Hospitanten*, who may be men unable to satisfy these conditions of entrance, which are, in fact, severer than obtain at any English University, and who nevertheless may desire to attend some of the lectures. For them, or for others unwilling to follow a complete course of study, different arrangements are made; but in every case a

sufficient equipment in the way of previous knowledge is required. Of the 843 students in the department of architecture during the term cited 350 were *Hospitanten*—a number, be it said, out of all proportion large in comparison with those in other departments.

The instruction provided is on an elaborate scale, and as in the Universities so here, too, it is highly specialised. In the department of architecture alone there are no less than eight regular professors, ten assistant professors, and sixteen *Privatdocenten* or licensed lecturers and readers—in all thirty-four members of the teaching staff, who are directly engaged in giving instruction in one or another of the scientific or artistic aspects of this one subject. For sciences preliminary or accessory to the subject, such as mathematics, geology, and hygiene, the lectures and classes of nineteen professors and readers in other departments are available; so that a pupil in architecture, if he takes the full curriculum, can make his choice among fifty-three teachers. This choice is, in theory at least, a free one. The regulations expressly lay down that the student may determine for himself which lectures and what courses of practical work he will attend, thereby ensuring him that *Lernfreiheit* or academic freedom which is the distinguishing feature and one of the most valued advantages of German university life. He can, if he so wishes, obtain a certificate that he has attended such and such lectures, or passed such and such terminal examinations, should he desire to submit himself to this test; but the whole apparatus of compulsory curriculum, compulsory examinations during the period of study, terminal reports, and so on, which are characteristic of the English system, is not to be found at Berlin except in the case of scholars and exhibitioners. Nevertheless, for the guidance of the students, certain courses of study are recommended, and are, in fact, generally followed, although sometimes, it is true, a student will strike out a line of his own. The head of each department, moreover, is always ready to give advice to such students as ask for it, and to assist them in the choice of the lectures and practical work most suited to their individual aims. But unless this *Lernfreiheit* is borne in mind the tables which I now propose to give, showing what lines the instruction in architecture follows, may easily be misunderstood as pointing to a compulsion which does not exist.

The full course in architecture occupies four academic years, and each year is divided into a winter term beginning in October, and a summer term beginning in April. Each set of lectures is paid for separately, and, apart from the matriculation fee of £1 10s., the average annual cost to the student in fees works out at from £15 to £20. Without an ample subvention from the State—and the Prussian State is not only ready to spend money on education, but also knows how to spend it advantageously—the fees received would obviously not cover the expenses involved. Sometimes two or more lectures on the same subject, or lectures and classes for practical work, may be advertised for the same hour; but owing to the number of the teachers and the extent to which specialisation is carried, it is an arrangement under which the students gain rather than suffer. The instruction over the whole course of four years is arranged as follows*:—

The Architectural Curriculum in Berlin.

First Year.

Winter Term.

Monday.	*Tuesday.*	*Wednesday.*	*Thursday.*	*Friday.*	*Saturday.*
(1) Descriptive Geometry. (2) Ornamental Modelling (practical classes). (3) Ancient Art.	(1) Experimental Chemistry. (2) Figure Modelling (practical). (3) Experimental Physics. (4) Theory of Construction (two practical classes).	(1) Statics of Construction (including Mathematical principles). (2) Surveys and Measurements. (3) Ancient Architecture (practical studies in details).	(1) Experimental Chemistry. (2) Drawing of Ornaments (practical). (3) Surveys and Measurements. (4) Surveys and Measurements (practical classes).	(1) Figure Drawing from Models (practical classes). (2) Experimental Physics. (3) History of Art (Ancient, Early, Christian, Mediæval, and Early Renaissance in Italy). (4) Theory of Construction (two lectures).	(1) Descriptive Geometry. (2) Landscape Drawing in ink, pencil, carbon, and water colours (practical classes). (3) Geometry (practical classes).

Summer Term.

(1) and (2) as in the winter term. (3) Early Christian and Italian Mediæval Art.	(2) and (4) as in the winter term.	As in the winter term.	(2), (3), and (4) as in the winter term.	(1) and (4) as in the winter term. (3) History of Art (Italian Renaissance and Baroque).	(1), (2), and (3) as in the winter term. (4) Surveys and Measurements (practical classes in the field).

* These and the further particulars given in this article are in each case taken from the current prospectus.

SECOND YEAR.

Winter Term.

Monday.	*Tuesday.*	*Wednesday.*	*Thursday.*	*Friday.*	*Saturday.*
(1) Ornamental Modelling. (2) Ditto (practical classes) (3) Internal Construction (practical classes) (4) Theory of Construction (higher course). (5) Ancient Art.	(1) Simple Buildings (practical classes). (2) Figure Modelling (practical classes). (3) Simple Buildings (lecture). (4) Decoration and Furniture (Ancient, Mediæval and Early Renaissance). (5) Contracts and Estimates.	(1) Working Drawings from given Sketches (practical classes.) (2) Ditto (lecture). (3) History of the Evolution of Ornament (4) Theory of Construction (higher course).	(1) History of Architecture in Western Asia and Greece. (2) Drawing of Ornaments (practical classes). (3) General Mineralogy.	(1) Figure Drawing from Models. (2) History of Architecture in Western Asia and Greece. (3) Statics of Construction (higher course). (4) Ditto (practical classes). (5) History of Art (from ancient times to the early Renaissance). (6) Foundations, bridge-building, retaining walls, planking and strutting.	(1) Plans and Drawings (practical classes). (2) Ancient Architecture (practical studies). (3) History of Architecture in Western Asia and Greece. (4) Landscape Drawing in ink, etc. (practical classes). (5) Foundations, joists, etc.

Summer Term.

(2), (3), and (4) as in the winter term. (5) Building materials. (6) Early Christian and Italian Mediæval Art.	(1), (2), and (3) as in the winter term. (4) Decoration and Furniture (Renaissance to the end of the 18th century).	(1), (2), (3), and (4) as in the winter term. (5) General Geology. (6) Practical work in Geology. (7) Architectural Technology.	(1) and (2) as in the winter term.	(1) as in the winter term. (2) History of Roman Architecture. (3) History of Art (Italian Renaissance and Rococo). (4) Principles of railway, steel, and hydraulic construction.	(1) History of Roman Architecture. (2) and (4) as in the winter term. (3) General Geology. (5) Principles of railway, steel, and hydraulic construction.

As the course progresses it will be noticed that the lectures and practical classes become more numerous and take on a still more specialised character.

THIRD YEAR.

Winter Term.

Monday.	*Tuesday.*	*Wednesday.*	*Thursday.*	*Friday.*	*Saturday.*
(1) Building in wood. (2) Drawing of Ornament in Particular Methods and Ornamental Studies (practical classes). (3) Mediæval Architecture. Designs in stone, brick, and wood (practical classes). (4) Renaissance Architecture. Designs (practical classes). (5) Select species of Ornament. (6) Ventilation and Heating. (7) Theory of Construction (higher practical course).	(1) Theory of form and construction in Mediæval Architecture. (2) Insurance against accident. Industrial Hygiene (technical part). (3) Drawing. Architectural Perspective (practical classes). (4) The chief kinds of public and private buildings. The laying out of towns. (5) Practical classes in sketching designs. (6) Ventilation and Heating.	(1) Gothic Architecture. (2) Mediæval Architecture. Designs in stone, brick, and wood (practical classes). (3) Renaissance Architecture. Designs (practical classes). (4) History of the Evolution of the leading forms of Ornament. (5) Figure sketching on specified lines. (6) Do. (practical classes). (7) Figure drawing from the life (practical classes). (8) Theory of Construction (higher course).	(1) History of Architecture in Western Asia and Greece. (2) Building in brick. (3) Building plans in detail (practical classes). (4) Plans and details in Mediæval forms with special reference to brickwork (practical classes). (5) Principles of building in iron. (6) Do. (practical classes).	(1) Building plans on specified lines (practical classes). (2) History of Architecture in Western Asia and Greece. (3) Building in brick. (4) Building plans in detail. (5) Plans and details in Mediæval forms with special reference to brickwork (practical classes). (6) Statics of construct on (third course). (7) Do. (practical classes). (8) Modelling and drawing from nature (practical classes).	(1) History of Architecture in Western Asia and Greece. (2) Insurance against accident. Industrial Hygiene. (3) Modelling and drawing from nature (practical classes). (4) Do. (lecture). (5) Rococo styles (general history of style, decoration, and industrial art).

Summer Term.

(1), (2), (3), (4), (5), and (7) as in the winter term.	(1), (3), (4), and (5) as in the winter term (2) Industrial Hygiene (social, chemical, and physiological part).	As in the winter term.	(1) History of Roman Architecture (3), (4), (5), and (6) as in the winter term.	(2) History of Roman Architecture (1), (4), (5), (6), (7), and (8) as in the winter term.	(1) History of Roman Architecture. (2) History of styles in the 19th century. (3) and (4), as in the winter term. (5) Industrial Hygiene.

FOURTH YEAR.

WINTER TERM.

Monday.	*Tuesday.*	*Wednesday.*	*Thursday.*	*Friday.*	*Saturday.*
(1) Building in wood. (2) Mediæval Architecture in stone, brick, and wood (practical classes). (3) Renaissance Architecture. Designs (practical classes). (4) Select species of Ornament. (5) Ventilation and Heating.	(1) Theory of form and construction in Mediæval Architecture. (2) Decoration in colour (practical classes) (3) The chief kinds of public and private buildings. The laying out of towns. (4) Practical classes on sketching designs. (5) Ventilation and Heating (practical classes).	(1) Gothic Architecture (2) Ornamental Designs. Extempore sketches (practical classes). (3) Mediæval Architecture in stone, brick, and wood (practical classes) (4) Figure sketching on specified lines. (5) Do. (practical classes). (6) Figure drawing from the life (practical classes).	(1) History of Architecture in Western Asia and Greece (2) Building in brick (3) Building plans in detail (practical classes) (4) Plans and details in Mediæval forms with special reference to brickwork (practical classes)	(1) Building sketches on given lines (practical classes). (2) History of Architecture in Western Asia and Greece. (3) Building in brick. (4) Plans and details in Mediæval forms with special reference to brickwork (practical classes). (5) Building plans in detail (practical classes). (6) Modelling and drawing from nature (practical classes). (7) Machinery.	(1) History of Architecture in Western Asia and Greece. (2) Machinery (practical classes). (3) Modelling and drawing from nature. (4) Do. (practical classes). (5) Rococo (general history of style, decoration and industrial art).
SUMMER TERM.					
(1), (2), (3), and (4) as in the winter term.	(1), (2), (3), and (4) as in the winter term.	As in the winter term.	(1) History of Roman Architecture. (3) and (4) as in the winter term.	(1), (4), (5), and (6) as in the winter term. (2) History of Roman Architecture.	(1) History of Roman Architecture (2) Machinery (lectures). (6) Do (practical classes). (3), (4), and (5) as in the winter term.

Such is the course of study in architecture provided at Berlin. By a recent ordinance of the Prussian Ministry of Education, those who take it are under certain conditions enabled to enter for examinations which, if passed, confer a diploma in the subject. It must, however, be clearly understood that entry for such examinations is voluntary, and that there is nothing to prevent anyone from engaging in private practice as an architect who does not take out a diploma or has not undergone the technical training provided. There are eminent architects in Germany, as there are in England, who consider that too much importance may easily be attached to technical training, and that theorists may come to regard it as usurping the place which ought to be taken by artistic insight and practical knowledge. The extreme form of this opinion is that architecture ought to be excluded from the Technical High School, on the ground that its chief factors are of the nature of Art, and that what scientific knowledge it requires is of an elementary character. This, however, as I have already mentioned, is not the general opinion, and young men who aspire to appointments in architectural firms, or to winning confidence in independent positions, as a rule undergo the technical training in full, and may possibly in some cases seek the special diploma which is now open to them to obtain.

The examinations for the diploma are two. They are conducted by a commission appointed by the Ministry of Education on the nomination of the department in question. To enter for them a student must be matriculated, and, if he is a German subject, he must possess the full leaving certificate from a German classical, semi-classical, or upper modern school—a condition which is relaxed only in the case of foreigners, who are required, however, to produce evidence of a preparatory education of a like thoroughness.

For the first examination the student must have spent at least two years in a German Technical High School or some foreign school approved for the purpose. He must also submit certain drawings certified by his teachers to have been executed by him during his course of study; or, in special cases, otherwise formally attested. These drawings must include:—

(*a*) Geometrical drawings, together with skiography and perspective as applied to details, and showing the lines of construction.

(*b*) Drawings illustrating the laws of statics.

(*c*) Drawings showing elementary construction in stone and wood.

(*d*) Freehand drawings, especially from ornaments and natural objects.

(*e*) Drawings illustrating the theoretical principles of ancient architecture.

(*f*) A survey with levels, taken by the student under the supervision of his teacher, or of a qualified surveyor, certified by one of them, and with the field books appended.

(*g*) The design for a small building of the simplest kind, with special reference to construction.

Should these drawings be approved, the student may present himself for the examination, which consists partly of set problems and partly of oral questions in the following subjects:—

(1) The leading laws of physical phenomena.

(2) The elements of inorganic chemistry.

(3) Descriptive geometry, together with projection, skiography, and perspective in their applications to architecture.

(4) Statics: (*a*) The theory of equilibrium as applied to the

determination of strains in trusses, the determination of bearing weights and cross-strains for ordinary beams, stability of walls and arches; and (*b*) the stability of beams in regard to tension, pressure, thrust, bending, and breaking.

(5) The elements of construction. The simpler forms of construction, including the most important details, but excluding iron construction.

(6) The principles of ancient architecture. The special forms and successive styles of Greek and Roman architecture.

Failure to pass in any of these subjects, or to work out the set problems satisfactorily, involves failure in the whole examination, as the principle of compensation is not recognised. The candidate is allowed only one further opportunity of making good his deficiencies.

The second examination can be taken at the earliest at the end of the fourth year, and at an interval of at least three terms from the first. Here, too, a large number of drawings must be submitted, and these must, as a rule, form part of the work done by the student in the School, and be so certified by his teacher. They must include—

(*a*) A drawing of a building in perspective, showing the shading, and of a scale large enough to show details.

(*b*) Drawings showing elementary construction in stone, wood, and iron.

(*c*) Drawings, on a large scale, of entire buildings or parts of buildings, in ancient mediæval or Renaissance times.

(*d*) Simple and diversified designs, showing a detailed acquaintance with different styles and various kinds of architecture

(*e*) Drawings and studies in ornament, coloured decoration, and natural objects.

(*f*) Original design for an entire building or for the important parts of one, showing the original sketches.

If these are approved, the candidate is asked to work out, within three months, a set task intended to exhibit his professional talents and the extent to which he has mastered his technical knowledge. If he does this satisfactorily he is admitted to the examination, which consists, as before, of problems and oral questions. The questions now range over the following subjects :—

(1) Statics of construction; analytical and graphical calculation of walls, arches, ceilings, and roofs.

(2) Theory of construction, including foundations and internal detail.

(3) Town and country houses; construction and arrangement of agricultural buildings, dwelling houses, and public offices.

(4) Ventilation and heating; hygienic, physical, and technical principles; general arrangements.

(5) Building materials.

(6) The principles of ancient and Renaissance, as also of early Christian and Mediæval architecture.

(7) The history of the foregoing styles, and of their chief periods; the general plan and construction of the more important buildings.

(8) General history of Art, with special questions in (*a*) construction, including statics, ventilation, heating, materials, etc., or in (*b*) ancient and Renaissance architecture, including theory, construction, materials, history; or in (*c*) early Christian and Mediæval architecture, including similar details.

This second examination is governed by the same conditions as the first, and failure in one subject involves failure in all. On passing it, the candidate receives his diploma, and the School is now empowered to grant him the general degree in engineering which is granted to successful students in other departments. He may then call himself, if he chooses, *Diplomirter Ingenieur*.

I ought to add, however, that this arrangement, which in the case of architectural students in the School came into operation only in October last, is, so far as they are concerned, provisional. It does not extend to a further examination, as in the case of students in other departments, whereby the degree of "Doctor of Engineering" can be obtained. My impression is that if the architectural student in Berlin wishes to have any diploma at all, he will enter for the examinations conducted by the State, which are indispensable to all who aspire to public appointments, whether in the service of the State or of the municipalities. These examinations are three in number, and the first two correspond generally to those which I have described, although, so far as I am in a position to judge, pure mathematics plays a larger part in them than is now considered necessary in the School. Four or five years ago, the course of instruction there in the first and second years comprised lectures and practical courses four times a week on higher mathematics and mechanics, but these have recently been struck out of the course at Berlin—a change which architectural educationists in this country may find instructive. As for the third of the State examinations, it can be taken only if and when the candidate has spent at least three years in practical work of an official kind. It is held by a mixed commission appointed by the Ministry of Public Works, and follows the same lines as the second, except that the oral questions refer in the main to the construction and arrangement of public buildings, and include legal and administrative problems.

The extent to which architectural education is provided in Germany, and the place assigned to it in every attempt there made to bring the highest knowledge to bear upon professional training generally, may be seen in the fact that a complete curriculum, together with examinations for a diploma in this subject, is also provided in the eight other Technical High Schools within the borders of the Empire, namely, in those at Hanover, Aix-la-Chapelle, Brunswick, Dresden, Darmstadt, Carlsruhe, Stuttgart, and Munich. A similar advantage is certain to be offered in the Technical High School now building at Breslau. These institutions are not incorrectly described as Technical Universities—*Hochschule* is, indeed, the old German word for university—and, besides Berlin, those at Hanover, Stuttgart, and Munich are already authorised to grant degrees. The curriculum in architecture which they supply,

although doubtless governed by similar aims, is not identical in plan, in regard either to the distribution of the subjects or to the time allotted to them. The difference, may, I feel, be important in the eyes of those who are preparing, or desire to prepare, educational schemes; but so far as Germany and its Technical High Schools are concerned, the space at my disposal will not allow me to do more than examine these differences very briefly in the case of one of them.

For this purpose I select the school at Munich. Although much smaller than its northern rival, both in equipment and in the number of its students, this Bavarian institution, I am told, enjoys the distinction of being regarded by a good many natives and by most foreigners as second only to that at Berlin, in the advantages which it offers for a sound and comprehensive education in architecture. This may, however, be largely due to the position which Munich occupies as one of the acknowledged homes of Art, to the Italian influence which forms so striking a feature of the city, and, in particular, to the number of fine buildings which it contains. From the atmosphere in which the school flourishes it might be expected, perhaps, to attach less importance to the scientific than to the artistic aspects of the subject, but I cannot find that such is the case. On the contrary, as will presently appear, this very atmosphere seems to produce the opposite effect, for greater attention is there given to mathematics than is given at Berlin, and students who come from classical schools are recommended to devote a preliminary year to a course in which mathematics plays a large part.

Nor are the conditions of matriculation quite the same, although they are hardly less severe. Candidates from industrial schools* in Bavaria, if sufficiently qualified, are admitted. There are also some indications of academic compulsion at Munich. A student, for instance, cannot obtain a certificate that he has attended a course of lectures unless he enters for the terminal examination held by the lecturer. The kind of curriculum in architecture provided for those who have had their previous training in semi-classical, upper modern, or industrial schools, may be seen by the following table :—

THE ARCHITECTURAL CURRICULUM AT MUNICH.

First Year.	Winter Term. L.	Winter Term. P.C.	Summer Term. L.	Summer Term. P.C.
Higher Mathematics, Part I.	6	3	–	–
Descriptive Geometry	4	4	4	4
Experimental Physics	6	–	4	–
General Experimental Chemistry including the elements of organic chemistry	–	–	5	–
Technical Mechanics, Part I.	–	–	4	–
Theory of Construction, Part I.	1	4	2	4
Theoretical principles of Ancient Architecture	1	4	1	6
Skiography	1	2	–	–
Drawing of Ornament	–	4	–	4
Algebraical Analysis (for those from semi-classical schools)	–	–	4	–
Practical Studies in Ancient Architecture (optional)	–	–	–	1
Second Year.				
Technical Mechanics, Part II. (Graphic Statics)	3	–	–	–
Statics of Construction	–	–	2	–
Theory of Construction, Part II.	3	6	3	6
Building Materials	3	–	2	–
General History of Art	4	–	4	–
The styles of Ancient Architecture	2	–	3	–
Principles and styles of Mediæval Architecture	2	4	2	4
Principles of Renaissance Architecture, Part I.	1	4	1	4
Perspective	1	2	1	4
Drawing from Ornaments and Figures	–	4	–	4
Studies in ancient styles (optional)	–	2	–	1
Third Year.				
Surveying	4	2	–	4
Applied Physics (Heating, Ventilation, etc.)	3	–	–	2
Architecture of Public Buildings	4	8	3	8
Farm and Agricultural Buildings	2	2	–	–
Mediæval Architecture (designs of smaller buildings)	–	4	–	4
Principles of Renaissance Architecture, Part II.	–	2	–	2
Perspective	–	2	–	–
Subterranean Construction	–	–	4	–
Drawing from Ornaments and Figures	–	4	–	4
Modelling	–	6	–	6
Practical Surveys	–	–	–	1
Practical Designs	–	–	–	2
Farm and Agricultural Buildings, Part II. (The last three optional.)	–	–	2	2
Fourth Year.				
The Renaissance Style	–	–	2	–
Studies in Renaissance Architecture	–	14	–	14
Studies in Mediæval Architecture	–	4	–	4
Internal Decoration	1	4	1	4
Æsthetics	1	–	–	–
Estimates	–	–	2	–
Railway Buildings	–	–	1	–
General Machinery	3	–	–	–
Architectural Hygiene	–	–	2	–
The laws affecting Architects in Bavaria (obligatory for aspirants to Government Service)	3	–	–	–
Drawing from Ornaments and Figures	–	4	–	4
Modelling	–	6	–	6
Laying Out of Towns	1	–	1	–
Historical Development of the Farmhouse (The last two optional.)	2	2	–	–

The numbers given represent the hours devoted to each subject every week. L = lecture, P.C. = practical class.

A friend at Munich tells me that some of the older architects in that city are apt to complain of a lack of practical knowledge in those who try to exercise their profession soon after undergoing this curriculum, and that by way of partly, at least, supplying its alleged deficiences in this respect they recommend a year's apprenticeship in a good firm before beginning the curriculum at all. Others argue that the deficiences, if any, would be entirely overcome if in addition to this previous training the student were to spend his summer vacation in working in an office.

To the adoption of so rigorous a measure it may

* *I.e.*, schools in which the elements of technical education are taught to boys.

be objected, however, that even a German student requires some relaxation after several months' close attendance at lectures and classes, and that a scheme which calls for supplementary effort of this kind leaves something to be desired. Another criticism which I have heard made is that while the curriculum seems to afford sufficient opportunity to the student to develop any artistic capacities which he may possess—for example, in drawing or painting—the amount of scientific knowledge to be mastered allows him only a very short time for these exercises, and that, if the architect is to be anything of an artist, he will do well to spend a year in some special school or academy for them alone. The conclusion to be drawn from these comments is, I imagine, that the public cares little what education a man has received or what examinations he has passed, so long as he proves himself to be a good architect in actual practice.

After the full account which I have given of the examinations at Berlin I propose to be very brief about those at Munich. They are arranged on somewhat different lines. There is, first of all, an *Absolutorial* or leaving examination, open only to matriculated students who have been regular in their attendance at lectures. This can be taken in two parts, and to pass it is fair evidence that the candidate has gone through the curriculum with success. If he gets a first class in all the subjects comprising it, he may be recommended without more ado for the diploma. In other cases, however, the diploma involves a separate examination. But this *Absolutorial* examination at Munich seems to carry the ordinary student no further than a first examination for the diploma. It also provides for the submitting of drawings and the working out of problems as a necessary preliminary, and the first part deals in the main with mathematical subjects, elementary chemistry and physics, and freehand drawing. The second part is virtually the first examination for the diploma; but in view of the possibility of a student obtaining the diploma by this and the introductory examination alone, it partakes to some extent of the subjects of the final examination. The final examination at Munich resembles final examinations elsewhere, except that the attention to mathematics and mechanics characteristic of the school is kept up to the end. Since 1901 the school can also bestow the degree of Doctor of Technical Science on architectural students who submit an approved thesis and stand an oral examination. Of the two examinations conducted by the State the first is not required of those who have taken the diploma, but the second is obligatory, and no candidate can be admitted to it who has not already engaged in practice.

I now pass to Vienna. The Austrians take some pride in the fact that theirs was the first country in Europe to adopt a regular system of State-aided technical instruction and to promote the specialisation of study, although they readily admit that their efforts in this direction have, partly owing to financial considerations, been thrown into the shade by Germany. The Technical High School in the capital is in point of size, equipment, and the number of its students more comparable with the one at Munich than with the one at Berlin, and, like the Bavarian institution, it shows a tendency to prescribe a definite curriculum and make it compulsory. The *Lernfreiheit*, which is expressly stated in the statutes to be the principle underlying the instruction given exists, perhaps, only on paper; as a matter of fact courses are laid down in each department, the students are expected to take them, and examinations are held to decide the extent to which they have learned from them. That is to say, the system to which we are accustomed in England is making its way, and the specifically German system, which, in the opinion of very competent observers gives better results, is gradually being discarded. In the judgment, indeed, of one most distinguished Austrian man of science whom I consulted, the Technical High Schools in the Dual Monarchy are for this very reason, in their whole aim and character, only magnified secondary schools. There are others, I need hardly say, who dispute this view, and, now that the Technical High School in Vienna has the right to grant a doctor's degree, claim for it that it is, or soon will be, on the same intellectual level as the University. Students are admitted to it only on conditions similar to those which prevail in Germany, and the candidates from classical schools are further required, whatever department they may enter, to show a sufficient acquaintance with geometrical and freehand drawing.

The full architectural course takes four and a half years, and the instruction and the hours of work are distributed as below. This course is laid down with the approval of the Ministry of Education, and as such it apparently embraces only those subjects which are necessary for the State examinations.

THE ARCHITECTURAL CURRICULUM AT VIENNA.

First Year.	Hours a Week. Winter.	Summer
Higher Mathematics	.. 4	4
Descriptive Geometry and Working Drawings	.. 10	10
Elements of Pure Mechanics in combination with Graphic Statics (including practical work)	.. 5	5
Technical Chemistry	.. –	3
Theory of Architectural Forms	.. 3	–
Architectural Drawing I.	.. 6	6
Freehand Drawing I.	.. 4	4

	Hours a Week. Winter.	Summer.
Second Year.		
Technical Mechanics I.	4	–
General and Technical Physics	5	5
Geology, Part I.	4	–
Mechanical Technology	5	–
Construction (lectures)	5	–
Architectural Drawing II.	7½	13
Freehand Drawing II.	2	6
History of Architecture I.	2	2
Machinery	3	3
Third Year.		
Elements of Surveying	4½	–
Mechanics and Graphic Statics	7½	2
General Architecture (practical classes)	16	–
Ancient Architecture	3	3
Architectural Drawing and Studies in Composition I.	7	16
History of Architecture II.	2	2
Drawing of Ornaments I.	6	6
Modelling I.	4	4
Fourth Year.		
Early Christian and Mediæval Architecture	2	2
Drawing of Ornaments II.	6	6
Modelling II.	4	4
Architectural Drawing and Studies in Composition II.	13	8
Agricultural and Industrial Buildings, Public Offices	3	3
Studies in Composition in ditto	7	10
Engineering	6	–
Fifth Year.		
Renaissance Architecture	4	–
Architectural Drawing and Studies in Composition III	21	–
The Laws affecting Architects	2	–

Beyond this, however, attendance at lectures on political economy is also obligatory, and students can take them in their first, second, or fifth year. But the following courses are recommended as well, and they seem, indeed, to supply some obvious deficiencies in the regular curriculum:—Statics of Construction (third or fourth year), Heating and Ventilation (second or fifth), Contracting (third or fourth), Æsthetics (first or second), Building Materials (third or fourth), Pictorial Perspective (third, fourth, or fifth).

The system of examinations in the Technical High School at Vienna provides that students who wish for certificates of satisfactory attendance can obtain them by submitting to terminal examinations in the subjects in which they study. The test imposed consists of oral questions, designs worked out in the practical courses, and tasks done at home. The main examinations, however, are those ordered by the State, which are obligatory on all who desire to become civil servants, or to obtain official recognition of their capacity for private practice. The first of these examinations, in the case of architectural students, covers such subjects as higher mathematics, descriptive geometry, physics, geology, mechanics, and graphic statics; but a student who has passed the terminal tests in them with sufficient distinction is exempt. The second deals with the other subjects given in the obligatory curriculum, and the student, in addition to solving set problems and answering oral questions, may submit work done in the course of his studies at the School, and, under proper guarantees, may also submit evidence of work done outside it. Students who desire it can, after passing the two State examinations, proceed to the degree of Doctor of Technical Science on writing an approved dissertation and undergoing a further oral examination of a severe character; but this degree is taken, as a rule, only by those who wish to become academic teachers.

As to the value of the curriculum and of the diploma to be obtained by the examinations at Vienna, I cannot do better than give the readers of THE ARCHITECTURAL REVIEW the benefit of an opinion expressed to me by an eminent architect of that city, who is also distinguished by his practical share in the work of education. For obvious reasons he does not wish his name to be mentioned, more especially as he deals not only with the results produced by the Technical High School, but also with the position of architects who are educated in the industrial schools or in the Academy of Art. With regard to these three institutions, "the industrial schools," he says, "were originally intended in the main to provide foremen and master builders, but the more talented students from these schools have in the last decade often proceeded to the Academy of Art, and, owing to the advantages of the two-years' course there given them, have found themselves in a position to compete successfully with those who have gone through the regular curriculum at the Technical High School. These students have received a practical training which in many cases makes them more fitted for the exercise of their profession than the others, who come from the Technical High School full of theoretical knowledge, which they seldom find very useful in actual work, and therefore easily forget. The result of this is that those who have received their training in the industrial schools often prove better assistants than men with diplomas, and often succeed in competitions where the others fail. It is generally felt, indeed, that, in view of these circumstances, the curriculum at the Technical High School cannot be regarded as entirely satisfactory, and that other relations than those which now exist ought to be established between the three institutions." The bearing of these observations on some features of the problem of architectural education in England is obvious.

As German methods to some extent prevail also in the Polytechnic at Zürich, this brief description of them will be incomplete unless I refer to

that institution. Its aim, at least, is to provide instruction as good as that given in Germany; and German professors, I am told, sometimes become professors there, and *vice versâ*. Its importance may perhaps be measured by the fact that it is a Federal institution administered by a Council appointed by the Swiss Government, which furnishes it with an annual subsidy of £32,000—a sum defraying nearly 95 per cent. of its total expenses. It has also the advantage, for the purpose of this paper, of being situated, like the institutions of which I have already treated, in the same city with a university; so that its efforts are partly directed by an already existing academic influence and partly spurred by honourable rivalry. In the opinion of most of the authorities of the Polytechnic, however, it has long surpassed the local university, which is not a Federal but only a cantonal establishment.

Although the architectural department is the first of the eight into which the Polytechnic at Zürich is divided, it is not either in equipment or in the results which it achieves on a level with one or two of the others; certainly not with the chemical or mechanical departments. This, I understand, is one of the causes, and possibly also one of the effects, of the defective education and comparatively low standard of general culture which the average Swiss architect exhibits. It is true that care seems to be taken here as elsewhere that students shall not be admitted to the classes unless they have had a satisfactory previous training. They are not admitted before the age of eighteen unless they have been specially distinguished at school; nor are they relieved of a somewhat strict entrance examination unless they possess the leaving certificate from some recognised school, or have already engaged in practice with some success. But so far as I can gather from the judgment of a friend of mine in Zürich very well qualified to pronounce an opinion, the curriculum in architecture at the Polytechnic is of a dull character, and entirely lacking in the flexibility which is so distinctive a feature of the best teaching in Germany. It is obligatory in the sense that every student is, with few exceptions, bound to attend all the lectures in the course, and also to enter for the corresponding examinations, although in the last year and a half he is free to determine of what lectures and practical classes his course shall consist. One of the features of the Zürich curriculum, I may mention, is an arrangement by which private classes are held for the repetition of the substance of previous lectures. The course in architecture occupies three and a half years and is arranged as follows:—

THE ARCHITECTURAL CURRICULUM AT ZURICH.

	Hours Weekly. Winter.	Summer.
First Year.		
Higher Mathematics	4	–
Repetition	1	–
Descriptive Geometry	2	–
Repetition	1	–
Practical Classes	4	–
Construction	3	3
Practical Classes	6	6
Architectural Drawing	6	6
Drawing of Ornaments (Models)	3	–
„ „ (Sketches)	–	4
Modelling	4	–
History of Ancient Art	4	–
„ Mediæval Art	–	4
Theory of Form (practice in Sketching)	–	2
Mechanics	–	6
Repetition	–	1
Practical Classes	–	2
Geology	–	3
Repetition	–	1
Second Year.		
Theory of Style	2	3
Composition (Practical Classes)	6	8
Construction	3	2
Practical Classes	6	6
Statics of Construction	4	–
Repetition	1	–
Theory of Building I.	2	–
Perspective	1	–
Practical Classes	2	2
Drawing from Figures (including the nude)	6	–
Drawing of Ornaments in Colour	4	–
Hygiene	2	–
Decoration	–	4
Landscape Drawing	–	4
Machinery	–	3
Practical Classes	–	2
Technology of Materials	–	3
Repetition	–	1
Construction in Iron	–	3
Third Year.		
Theory of Style (Renaissance)	2	5
Composition (Practical Classes)	6	8
Internal Construction	2	–
Theory of Building	2	–
Construction in Iron (Practical Classes)	3	–
Drawing from Figures (including the nude)	6	4
Drawing of Ornament (Sketches)	4	–
Mediæval Architecture (with Practical Classes)	–	4
Ornament and Decoration (Practical Classes)	–	4
Internal Construction (Estimates)	–	2
Public Buildings	–	2
Landscape Drawing in Water Colour	–	4
Architectural Law	–	4
Fourth Year.		Winter
Theory of Style (Renaissance)		2
Composition (Practical Classes)		12
Drawing of Ornaments		4
Commercial Law		4
Repetition		1

The examinations for the diploma are two: one preparatory, taken at the end of the second year and covering the instruction in integral and differential calculus, descriptive geometry, mechanics, machinery, and the history of Art; the other, an oral test in the following subjects:—rough buildings in stone and wood, construction (including iron), hygiene (including heating, ventilation, water supply, etc.), comparative architecture and architectural history, theory of build-

ing, general law. In addition the candidate is required to produce in his last term a design for a large building on set lines.

I ought not to conclude this paper without drawing attention to a movement now on foot in Germany which has a special interest in connection with architecture. The German workman is beginning to feel that he would occupy a better position in the eyes of employers, and be more likely to succeed against undesirable competitors, if he were able to produce a certificate of efficiency, and if such a certificate were made a condition of employment. This movement, I am told, is particularly strong among the higher class of workmen engaged in the building trades. The subject recently came up for discussion in the Reichstag, when the Government announced, however, that an inquiry into the conditions prevailing in these trades had not yielded results which could as yet lead to legislative action. But the movement is hardly likely to be suppressed by this declaration, which may well have been dictated by the exigencies of the political and social situation in Germany at the present time; for the view that the workman requires to be educated quite as much as the professional man is undeniably sound. In no sphere of employment, indeed, would such training be of greater benefit to the public, and if the good architect could always be sure of finding good workmen, it would be so much the better for his art.

T. Bailey Saunders.

The Arts and Crafts Exhibition.

II.—By D. S. MacColl.

I am to reply for the critics, but I must premise that I do so as a designer who has enjoyed the hospitality of the Society and sympathised with its general aims. Anything I say is by way of pointing out how these aims may be furthered and more efficiently carried out.

With that in view, nothing, I think, is gained by Mr. Macartney's general sally against the critics, unless their attacks are met in detail and refuted. So far as my observation goes, the Society has been till now the spoiled child of criticism; what it has done has been taken at its own valuation, and the illustrated art reviews have vied with one another in reproducing what has been exhibited, and saying that it is all first-rate. If then, this year, one or two of the more thoughtful critics have sounded a warning note, there is probably reason for it, and it will not do to treat them as ignorant and spiteful assailants. It is sounder policy to recognise where the arrow has found a joint, and stop that up. The phrase I have just used recalls the fact that many joints in the Society's exhibition not only exist, but gape. Mr. Macartney says that "very few, if any, critics are equipped with the essential knowledge of workmanship as well as design." Surely a very elementary knowledge of workmanship is sufficient to judge of yawning mitreings; to recognise when the doors of cabinets will not shut, or their drawers open. And it will not do to pretend that the workmanship all round is anything to boast of, or even that there is a great deal that is out of the way of the most ordinary skill. There were, here and there, in the exhibition, examples of really remarkable craftsmanship, but the skill required in most cases for the execution of the work is nothing out of the way, and not to be compared with what is to be seen any day of the week in the shops of the so-called "commercial" firms.

The pose of "craftsmanship," then, is one in which the Society invites criticism, and even ridicule. We should recognise that skill of hand is not a very rare thing—skill of mind is; and the attitude of the amateur who is surprised at getting through an elementary piece of mechanical work without a glaring breakdown is not an edifying one. The Japanese who would perform for twopence really difficult feats of metal inlay would have a right to laugh at British gentlemen taking credit for getting a few pieces of wood nearly to meet one another, without warping to the extent of a semi-circle. Mr. Macartney knows good workmanship far too well to be deceived. In a previous exhibition, some furniture designed by him was really worth examining from that point of view; it went beyond the A B C of carpentry into some finesse. I suggest, then, as the first piece of sensible reform at the Arts and Crafts that the names of workmen should not be flourished in the catalogue, unless the workmanship is really exquisite, or requires in the workman himself some power of interpretation.

I have mentioned furniture. The extravagance or poverty of a great deal shown this year has been so fully commented on by others that I need not say anything on that head. The root of the mischief evidently was the abdication of the committee from the duty of judging one another's work. When committees come to this pass the only step that remains in that direction is to form themselves into an academy. But the Arts and Crafts Society will doubtless have the good sense to retrieve a false step. Furniture is evidently a difficulty for the single handed designer, as I have

before now pointed out. If his designs are not extravagantly "individual," he can hardly put a high enough price on the single article to pay him for his time; to make good unassertive design pay he must be a capitalist and produce things on a large scale, *i.e.*, start a shop; and the capital at least is equally required if he devotes himself to elaborate articles in costly material. Nothing is gained by obscuring this fact and complaining that "the conditions of modern life and our commercial civilisation" make it impossible to sell kitchen chairs at five pounds a piece. Much of the talk about "commercial manufacture" as opposed to Arts and Crafts manufacture is rubbish, and not very honest rubbish. The strength of William Morris's position was that he had capital as well as designing power, and ran a shop successfully. Why do artists live in jerry-built houses? Merely because artists are lazy, ill-tempered and jealous; and no two or three of them can find enough business ability and co-operative spirit to combine, build a house, and live in it. Why do they use jerry-designed furniture? Because for variations on a kitchen chair they expect the world to pay them as if for a piece of sculpture or jewellery. The fact is that at present the Arts and Crafts people have a quite unfair commercial advantage over the so-called "commercial" shop. Call a shop not a shop, but a "guild," and all the papers will publish admiring articles about its contents which otherwise would have to be paid for in the advertisement columns. Let me beg our designers then, having dropped the piece of cant about the workman, to drop this about commerce, and apply themselves to commerce frankly. In a very short time the use of the word guild for what is not a guild will cure itself. All the doubtful commerces will call themselves guilds, just as all the drabs call one another "ladies."

In the furniture business, then, and any other that requires a number of workmen and production on a large scale to pay workmen and designer, the commercial problem is a serious one, and the big shop with moderate prices is the solution. Let me return for a moment to what I have called the kitchen chair. Mr. Macartney is right enough in saying that in England, when this new movement began, things had to start *de novo*. It would be still more exact to say that we middle-class people, when we began to rub our eyes under Ruskin's preaching, had to sacrifice our "parlours" and to start from the only part of the house that had not succumbed to the art immediately preceding our own, namely, the kitchen. The new movement, very wholesome so far as it went, was to spread the kitchen over the rest of the house; for the kitchen, just on the point of becoming obsolete through the disappearance of cooks, had been overlooked by Victorian design, and there lingered in it clean walls and floors, plain wooden dressers, unteased copper and brass, and a few bits of good old furniture in disgrace. It was very difficult, however, to get things like these in the shops, and the new designers had to pay themselves for putting them on the market by adding a terrible deal of "art" to them. Hence those horrible town and village industries of repoussé (and repoussant) copper and brass; hence those other industries of wood carving which imitated the considerable abundance of bad design to be found on old oak chests and furniture. Hence the necessity, even for a Morris, of covering an honest paper or stuff with space-devouring patterns. If anything simple and satisfactory escaped and got into use it was because someone made a present of it to the world. Here is the history of one of those escapes, which I happen to know. Shortly before the first Arts and Crafts Exhibition, I think, the late James MacLaren, an architect whom many of my readers will remember, had some work to do at Ledbury, and in a walk we took one day we found, in a little Worcestershire village, a real survival of village industry, an old man who made rush-bottomed chairs, with no other apparatus than his cottage oven for bending the wood. MacLaren made him one or two drawings, improving a little upon his designs, but perfectly simple and in the old spirit, and got him to make a few chairs after these designs, which he was quite content to do at eight shillings apiece. When the Art Workers' Guild was formed, these chairs, known to some of its members, were adopted, and passed from that into many houses. Whether they are still made I do not know, but they were made without disturbing the market price, and without the designer asking anything for such work as he put into them. If a designer is to be paid on a moderately-priced article, it must be made and sold in large quantities. It will not pay the middle-class artist to make things so simple with his own hands, for we cannot pay him at his middle-class designer's rate for this elementary handicraft. He must either make himself so superlative a craftsman that he can concentrate on single, elaborate and costly pieces, or he must organise a staff of workmen who will turn out his simpler designs in sufficient number to give him a percentage on the quantity. If he puts out, say, £5 worth of time on the initial design, he cannot hope to get it back on one or two repetitions such as he could make himself; and it would be a waste of his time.

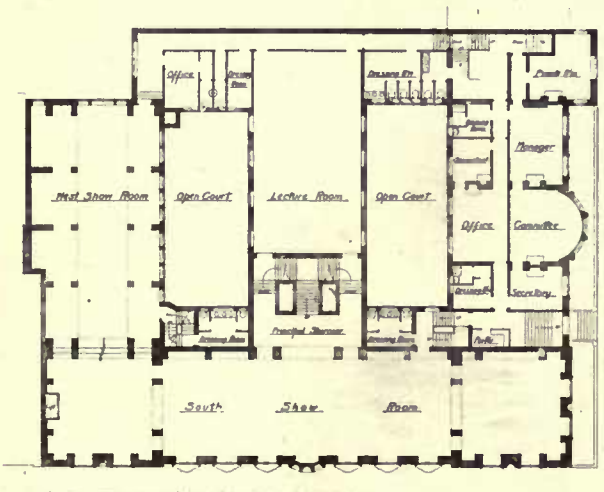
This economical difficulty does not apply equally to all the crafts. There are objects which can be made rare and precious by design and work, and can also be made by one or by a few pair of hands and fetch a price that will pay on a small quantity.

That is why jewellery has come to the front lately at the Arts and Crafts, and the same thing applies to some other crafts.

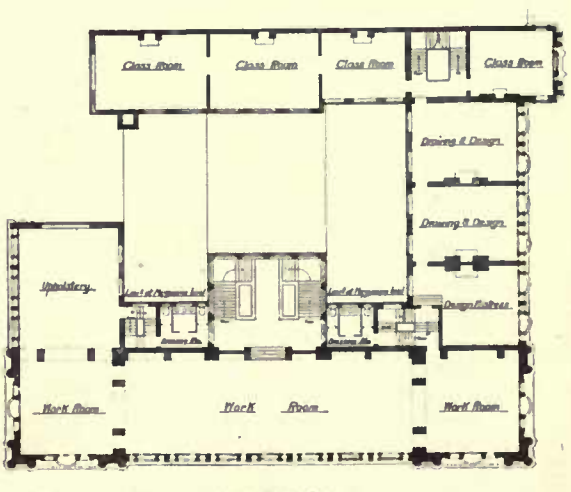
My view then of the present problem for the arts and crafts movement is that it is mainly a commercial problem. Till that is solved we shall have a superabundance of cranky amateur productions of a purely exhibition kind. If there are to be solid results it is time for the Arts and Crafts Society to start shop-keeping. To take over the exhibition idea of the nineteenth century even when the older exhibitions, like the Academy, were in decay, was perhaps unavoidable, and it may be necessary to continue it for some time to come; but the sooner this preliminary advertising stage is over, and the honest shopkeeping begins, the better. At present what happens is this. An idea receives its advertisement at the Arts and Crafts Exhibition. But it is not the inventor who usually gets the benefit of his idea. It is the shops, which straightway set their own designers or facile students from Kensington to parody anything in which there seems to be a chance of money. The really wicked competition is not "commercial" competition; it is artistic competition, the competition of the cribber with the original designer, the cribber who is prepared to make a colourable imitation of a design for a quarter of the price, since it costs him nothing in thought or time. Protection can never be perfect against this sort of thing, especially since artists often make part of their income by raising up fresh hordes of these cribbers, but there are two ways in which the evil might be checked. One is for self-respecting firms to extend their practice of going to the original designer, putting his name on their wares, and giving him a royalty. The other is for the arts and crafts group in each town to go into business and keep open all the year round a shop in which people will be able to find the ordinary useful things for house furnishing at reasonable prices as well as to commission from designers the rarer and more costly. A strong committee for selection would be required, but the thing is not impossible.

Current Architecture.

THE ROYAL SCHOOL OF ART NEEDLEWORK, SOUTH KENSINGTON.—The Royal School of Art Needlework was founded in 1872 by H.R.H. Princess Christian, and with the help of the late Lady Marion Alford, Lady Welby, and other ladies, was started in quite a small way in Sloane Street, with the double objects of reviving the almost lost art of decorative embroidery, and of giving remunerative employment to needy ladies of refinement. Since 1876 the school has been housed in some old buildings of the 1862 Exhibition at South Kensington, where, under the presidency of H.R.H. Princess Christian, who has personally worked strenuously and unremittingly in its interests, it has prospered, and has just taken up its quarters in the new building erected for it at the corner of Exhibition Road and Imperial Institute Road, and almost adjoining its old premises. As the workers of the school have frequently to deal with very large pieces of work, such as drop scenes for theatres, it is necessary that both the work-rooms and show-rooms should be spacious. The accompanying first and second floor plans give the show-rooms and principal work-rooms. There are more work-rooms on the third floor, besides kitchen and dining-rooms. The rooms in the east wing of the third floor have been leased to the School of



FIRST FLOOR PLAN.

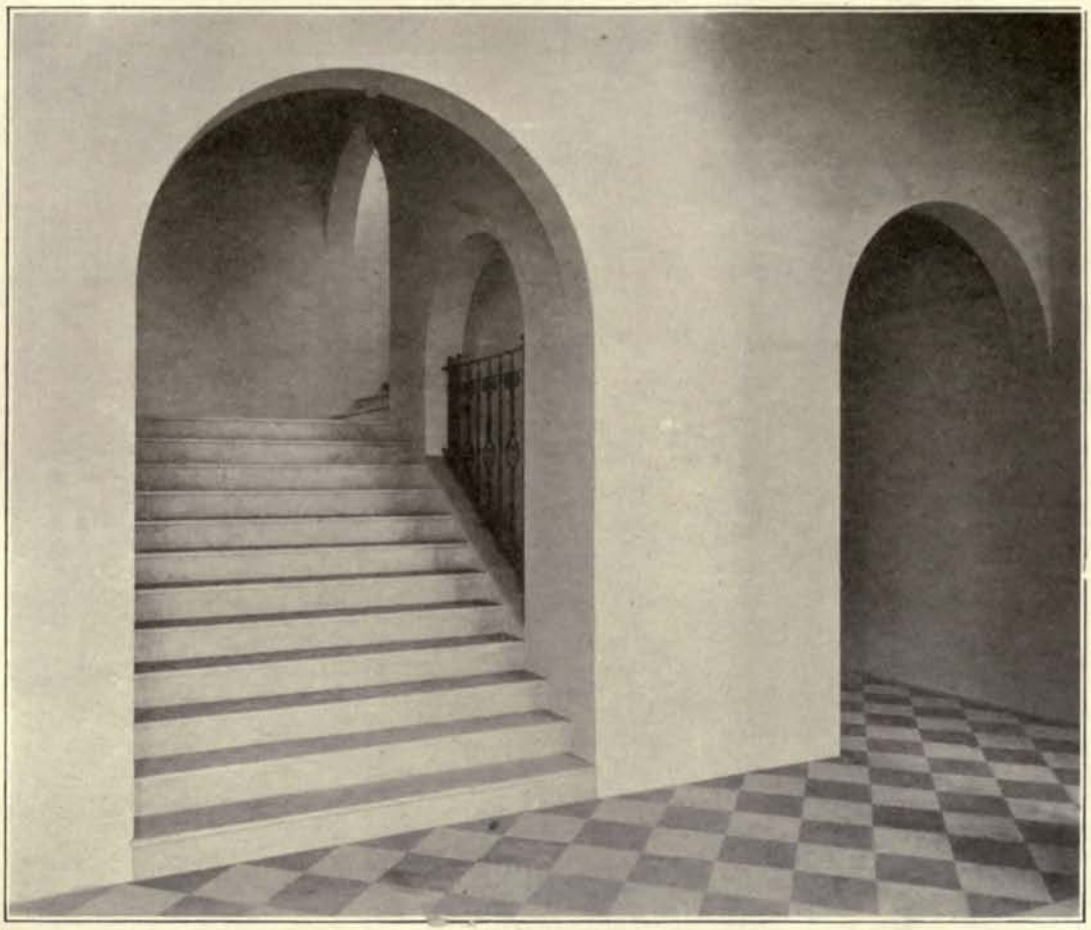


SECOND FLOOR PLAN.

THE ROYAL SCHOOL OF ART NEEDLEWORK, SOUTH KENSINGTON.
F. B. WADE, ARCHITECT.

Photo: E. Dockree.

THE ROYAL SCHOOL OF ART NEEDLEWORK, SOUTH KENSINGTON. GENERAL VIEW. F. B. WADE, ARCHITECT.



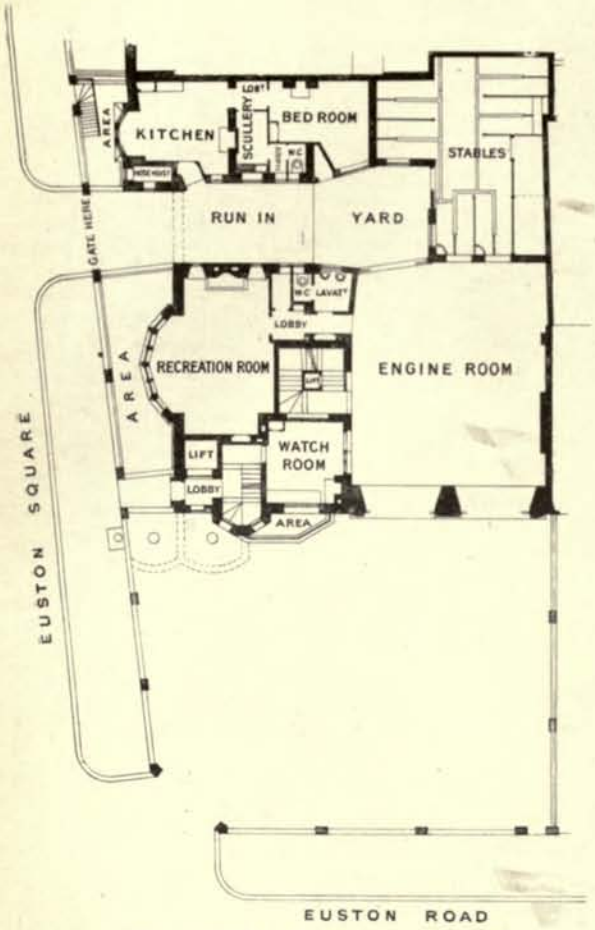
THE PRINCIPAL STAIRCASE, FIRST-FLOOR LEVEL.

THE WEST SHOW-ROOM, LOOKING NORTH. *Photos: E. Dockree.*

THE ROYAL SCHOOL OF ART NEEDLEWORK, SOUTH KENSINGTON.
F. B. WADE, ARCHITECT.

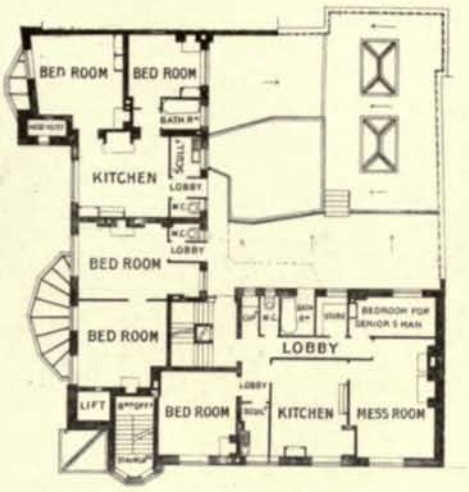
FIRE BRIGADE STATION, EUSTON ROAD, W.C. VIEW FROM EUSTON SQUARE. W. E. RILEY, SUPERINTENDING ARCHITECT, LONDON COUNTY COUNCIL.

Photo : E. Dockree.

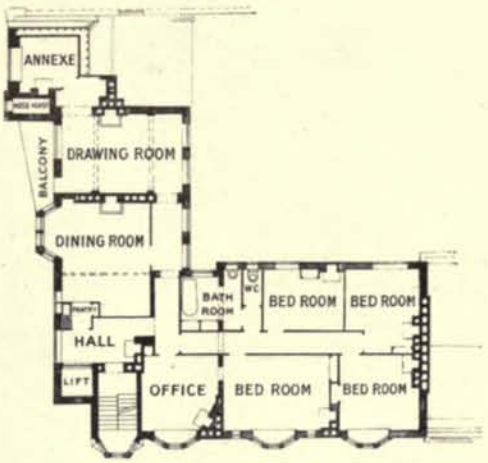


PLAN OF SITE & GROUND FLOOR PLAN.

THIRD FLOOR PLAN.



FIRST FLOOR PLAN.



FOURTH FLOOR PLAN.

FIRE BRIGADE STATION, EUSTON ROAD, W.C. PLANS.
W. E. RILEY, SUPERINTENDING ARCHITECT,
LONDON COUNTY COUNCIL.

Wood-Carving. The mezzanine floor and a large part of the basement have been leased to the Technical College. The admission of plenty of daylight to the work-rooms has been an object of the first importance, the attainment of which without architectural flimsiness has suggested the treatment of the second story. It being unnecessary to make the building lofty, breadth of treatment has been aimed at in order that it might hold its own among its greater neighbours. To this end each story is emphasised by colour contrast. Thus the roofs show green slate throughout unbroken by patches of lead-work. The second story is all Portland stone, and the walling of the show-room story is of red brickwork. The interior walls throughout are treated plainly, battens being let in for the purpose of hanging embroidery work, etc., a treatment which applies also to the principal staircase. The landings are paved with black and white marble squares, the treads and risers of Belgian white marble. The general contractors were Messrs. G. H. and A. Bywaters & Sons. Mr. F. B. Wade is the architect.

FIRE BRIGADE STATION, EUSTON ROAD.—The site has a frontage to Euston Road of about 58 feet, and to Euston Square of about 57 feet. The station is built with Portland stone facings to the height of the ground floor, and above that in red brickwork, with projecting oriel windows in

JOINT STATION OF THE EAST INDIAN AND BENGAL & NAGPUR RAILWAYS, HOWRAH, CALCUTTA. HALSEY RICARDO, ARCHITECT.

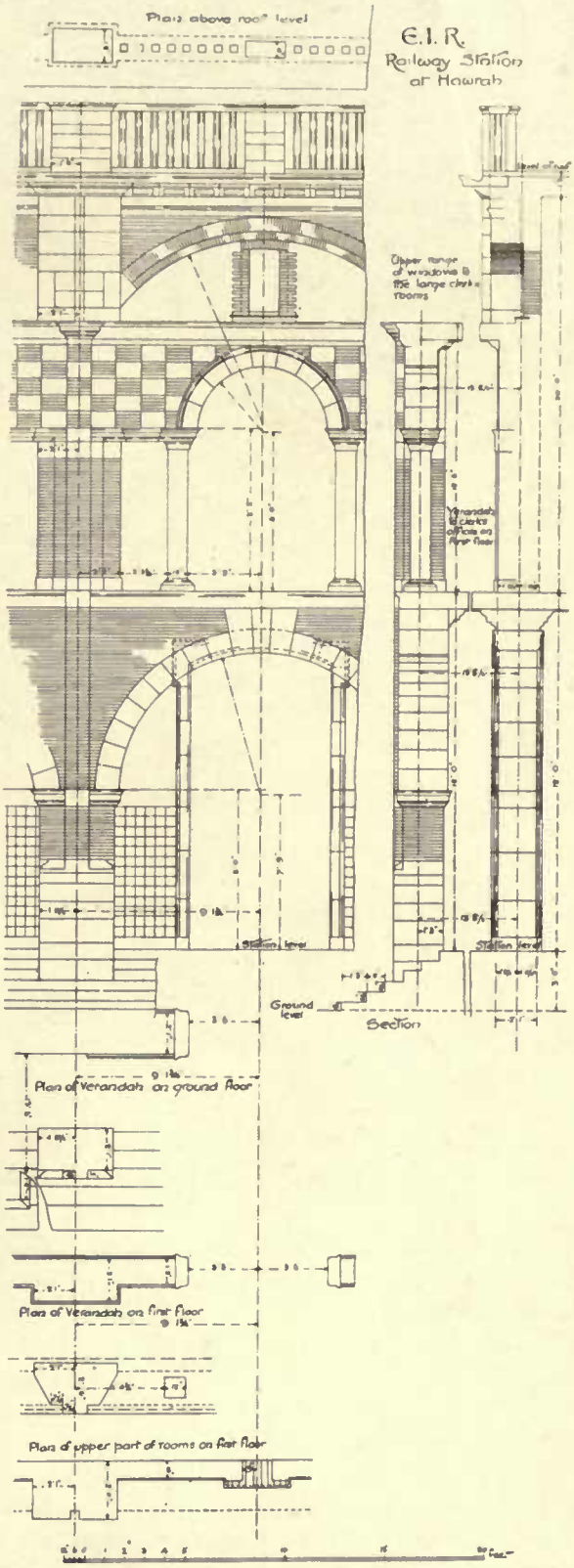
stone, and stone dressings to those windows immediately beneath the oriels. The accommodation provided on the ground floor is:—

Engine room, 39 feet by 33 feet, lined with glazed bricks, and paved with grooved stable bricks, gives standing room for horsed escape, steamer, and hose cart, ready for immediate use. The run out will be across the courtyard in front of the station of the same depth as the adjoining gardens, through a gateway at the junction of Euston Road and Euston Square (Seymour Street). The run in is on the Euston Square front through an archway into a small yard, from which the back engine room doors open. Stables for six horses in the rear of the engine room, top-lighted. Provision is made for a fodder room with loft over adjoining the stalls. The watch room is on the Euston Road front adjoining the engine room doorway, and has a floor area of about 150 feet. The recreation room has a large bay window looking on to Euston Square, and has a total floor area of about 400 feet. Adjoining is lavatory accommodation with spray bath. The third officer's private entrance is at the angle of the building, and is approached from Euston Square. It communicates directly with a lift and staircase to the third, fourth, and fifth floors, where are situated the third officer's quarters. One suite of quarters for a married coachman is also on the ground floor, and adjoins the run in.

The basement extends under all the ground floor with the exception of the engine room and stables, and consists of:—Laundry fitted with six troughs, three coppers, heating chamber, and six drying horses; battery room under stairs; workshop; separate storage accommodation for coal, coke, wood, and oil; twelve coal stores for station officer and men; three cellars for third officer's quarters.

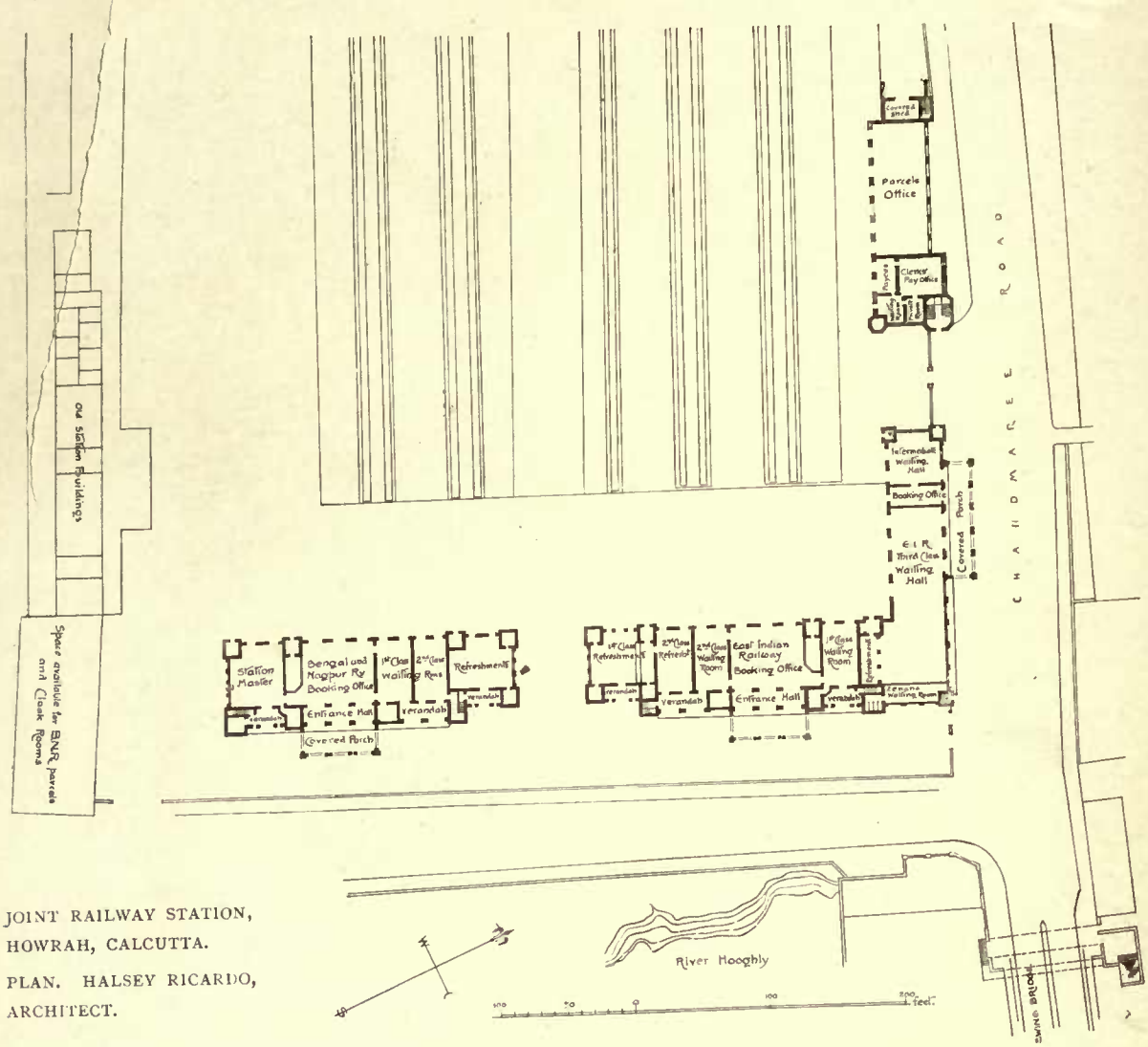
The architect is Mr. W. E. Riley, Superintending Architect to the London County Council, and the work has been carried out by Messrs. Stimpson & Co., of 78, Brompton Road, the contract sum being £14,377.

JOINT TERMINAL STATION OF THE EAST INDIAN AND BENGAL & NAGPUR RAILWAYS AT HOWRAH, CALCUTTA.—The traffic on the East Indian Railway having outgrown the old station, and the Bengal and Nagpur Railway requiring an entrance into Calcutta, the Directors of the East Indian decided to build a joint terminal station for the two lines. Howrah is across the water to Calcutta, to which it is joined by a bridge, and stands much in the same position as Waterloo does to Westminster, except that the river is wider. The station is being built of thin red bricks with a wide mortar joint, for the most



DETAIL. JOINT RAILWAY STATION, HOWRAH, CALCUTTA. HALSEY RICARDO, ARCHITECT.

part, stone being used only sparingly. The plan shows the arrangement on the ground floor; the first floor is used by the District Traffic Superintendent, Traffic Manager, Telegraphs, and their clerks, and on the top floor there are residential chambers for four officials. Mr. Halsey Ricardo is the architect.



JOINT RAILWAY STATION, HOWRAH, CALCUTTA.

PLAN. HALSEY RICARDO, ARCHITECT.

The Palace at Knossos, Crete.

ALTHOUGH the first visit to Knossos was made by Dr. Evans as far back as 1894, in which year he was able to purchase a portion of the property, it was not till 1900 that he succeeded in acquiring the whole site. The excavations were commenced in March of the same year, and have been carried on since with so much energy and dispatch as to have brought to light the remains of a palace covering an area of nearly 500 feet square, almost equal in extent to that of the Houses of Parliament.

The palace was built on a slight eminence, about two-thirds (including the great central court) crowning the crest of the hill; the remaining third occupying a slightly lower site on the slope of the hill (see Fig. 1).

The great central court, measuring 200 feet by 86 feet, runs nearly north and south, and the largest portion of the palace is on its west side; portions of the eastern block are built on a level some 24 feet below the pavement of the central court.

The walls of the western side of the palace consist of a basement about eight feet in height, the floor of which is a little below the level of the central court. Those of the eastern side of the palace consist in part of two storeys, which together make up the 24 feet above referred to. The superstructure on both sides which contained the principal halls of reception probably rose to about the same height on each side. A series of terraces existed on the east side, and the lower building, which seems to have formed part of the palace, is a bastion, the walls of which are about 50 feet below the level of the central court.

In consequence of the great thickness of the walls of the basement of the western block and their close juxtaposition, the large plan which we publish is not at first very easy to read, and as a matter of fact, it probably resembles

that of the basement of most buildings from which, failing other evidence, it would be difficult to scheme out the plan of a superstructure. In the palace of Knossos, however, two other considerations have to be taken into account. Firstly, the greatest width which could be floored or even roofed over without intermediate supports was 18 feet, and there is only one hall of that dimension in the palace, that in front of the "hall of the double axes"; and, secondly, the superstructure built with rubble masonry in clay mortar, framed together and bonded with timber, required foundation or basement walls of exceptional thickness. Broadly speaking, it would seem that the west wing of the palace was the public portion, including the entrance portico from the west court, "the corridor of the procession," the south terrace with its double portico, the south propylæa leading to the megaron, and the throne-room: the east wing was the private or residential portion.

There would seem to have been two principal entrances to the palace, one in the centre of the north front, the other from the south-west corner of the west court, which Dr. Evans considers to have been the agora, where the Minoan King met his subjects. It was a large open square, the western limit of which has not yet been explored, and probably responded to that feature which in French palaces is known as the "Cour d'honneur." In support of his theory Dr. Evans calls attention to the stone bench (Fig. 2) built into and forming part of the masonry of the west wall, where, sheltered in the early part of the day from the rays of the sun, the king's subjects could await his summons. A similar stone bench has been found in the palace at Phaestos, excavated by the Italians, in front of a terrace wall also on the west side. The northern entrance, Dr. Evans points out, "represents the main point of intercourse between the palace and the city on the one hand, and the port on the other. Two lines of ancient roadways in fact here converge—one leading to a region which we know to have been covered with prehistoric houses, the other pointing north in the direction of the sea, where traces exist of an ancient haven some four miles distant." This is the only part of the palace in which there is evidence of some kind of fortification, and the road of access is dominated by towers and bastions, whilst other provisions in the plan of the inner or western corridor suggest that its passage was properly protected. The slope of the ground on the east and south side (the floor of the south terrace rose from 10 to 12 feet above the ground) may have been considered a sufficient protection on those sides, and the western court was probably enclosed with a wall.

Dr. Evans' theory as to there having been "four main entrances roughly answering to the points of the compass" is not borne out by the

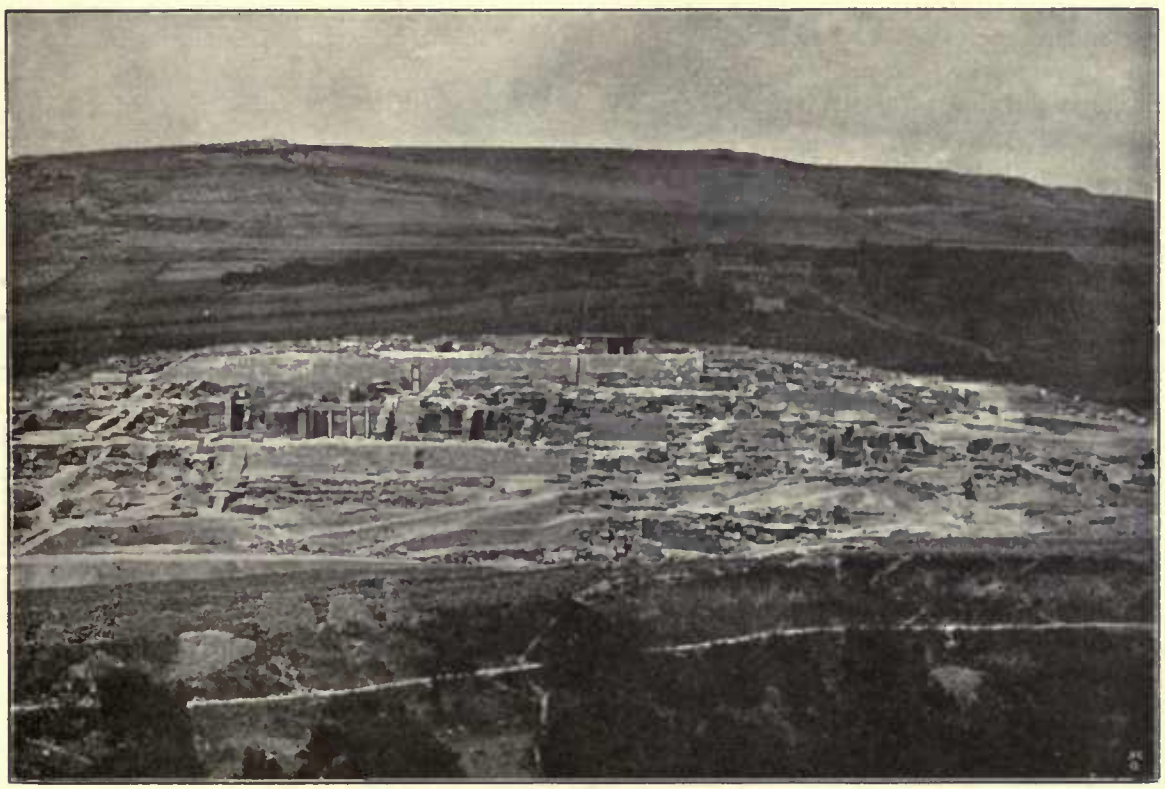


FIG. 1.—RUINS OF THE PALACE OF KNOSSOS, CRETE, AND GENERAL VIEW OF THE REMAINS ON THE EAST SLOPE.

(By permission. From the "Annual" of the British School at Athens.)

plan, as the north-west entrance corridor leads first to the south terrace, the propylæum in front of the great hall can only be reached from that terrace, and on the east side the entrance to the "hall of the double axes" is from a terrace to which so far no direct approach has been found (see Fig 1). Although at first sight the plan with its great central court and main entrance at the north end, and the relation of the walls all built at right angles to one another, resembles that of a Roman palace, which suggests its having been set out symmetrically or on a well-considered programme; a further study shows that it differs widely from the Roman principles of symmetry and central axes. The walls of the west front jut out into the western court at varying distances. In the central court there are projecting blocks at the north-east and south-west corners, and the entrance passage is not quite in the axis of the central court. In this respect, however, it is more in accordance with Greek principles where the work was set out on the spot to suit the site and requirements, and the entrance portico and blocks of building were placed without any regard for that symmetry which seems to have been all important to the Roman builder. The far greater picturesque grouping of the various buildings, as suggested in the plan, recalls that which we find on the acropolis at Athens, and in the sacred enclosures at Olympia, Delphi, and other shrines of Greece, rather than in the palaces of the Cæsars, or the Thermæ of Rome. It is, however, precisely this which renders a clear description all the more difficult, increased by the fact that the upper floors which contained the great halls have all perished, so that it is only by the most minute examination of the upper part of the walls remaining, that Dr. Evans has been able to suggest the probable plan. In this he has been partially assisted by the parallel afforded in the palace at Phaestos, also in Crete, which has been explored by the Italians during the last two years.

With the exception of its construction to which we shall return later on, and one hall to which the title of throne room has been given, there are no architectural features in the basement storey of the western block which it is necessary here to enter into. They consist of an endless series of storerooms and magazines which in their solid masonry and general construction were far superior to that of the ephemeral materials of which the upper floors were built. Curiously, however, it is probably owing to this latter fact that Dr. Evans' discoveries have been made; a fierce conflagration apparently burnt all the timber of the roofs and columns, and subsequent rain crumbled away all the walls* and virtually buried the palace. The inhabitants returned to plunder the palace and search for the treasures, but the stone substructures were too heavy to be moved and have consequently remained *in situ*. Had the upper part been built in stone the palace would not have been buried in the same way, and within a couple of centuries the materials would all have been taken away to use up in the erection of other buildings.

The principal state entrance was in the south-west corner of the west court through a portico of one column in antis.† This arrangement is found elsewhere here, and at Phaestos. The architect having settled the width of the portico, preferred to use one column as an intermediate support (if the span was not too great) instead of encumbering the entrance with two columns. At Phaestos the antæ or responds of the portico to the great megaron project six feet from the side walls so as to retain as it were the one column, although in the rear wall there was a central doorway beyond. In the

FIG. 2.—WESTERN COURT AND GREAT GYPSUM WALL.
(By permission. From the "Annual" of the British School at Athens.)

* These in some cases carried with them portions of the fresco painting with which they were decorated, for as it would appear from Dr. Evans' description the finest of these have been found in the basement corridors.

† The evidence of the columns lies in the stone base still *in situ* measuring 3 feet in diameter and 4 in. high: throughout the palace, all the columns were in timber and raised on stone bases.

rear on the right of the portico was the guard room, and on the left a passage 10 feet wide, called by Dr. Evans "the corridor of the procession," the walls having been decorated with paintings representing a state procession. This corridor led to a terrace 28 feet wide and 165 feet long so far as it has been traced. Dr. Evans thinks there is evidence of its further extension, which would be necessary if only to give access to the central court. This terrace, facing the south, was probably roofed over with a peristyle (Fig. 3), carried by two rows of columns which would form a sufficient protection from the sun when at its zenith. At a distance of 85 feet from the west end of the terrace is the axis of the propylæa leading to the great megaron, which seems to have consisted of a portico of one column in antis. The stone base no longer existed, but traces were found of the antæ projecting four feet from the side walls, which suggested an arrangement like that at Phaestos.* In the rear of this portico was a wall pierced with three doorways, the sill of the right hand one only existing. At a distance of 4 feet 6 inches beyond the doorways and on either side of the propylæa walls were found the bases of two other columns. The width between these walls was 30 feet, far too great a span to roof over without intermediate supports. It is probable therefore that there were three other columns and a pier on each side forming a double avenue similar to that which has been found at Phaestos, except that there, owing to the greater width across the central avenue, viz., 24 feet, the aisles only could have been roofed over. This would bring the four columns and pier in a line with the end of the walls as found. Beyond this was an open court, called the Court of the Altar by Dr. Evans, the stone base of an altar having been found in a rectangular recess on the right of the court. The level of the court of the altar is about 5 feet below that of the great megaron, portions of the upper walls of which were found by Dr. Evans. He assumes therefore that, as at Phaestos, there was a flight of stone steps (of which all traces are now gone) leading up to a portico of one column in-antis. Here the antæ measured 8 feet on the right hand side and 6 feet 6 inches on the left, and the wall in the rear had two doorways only. These led into a hall 24 feet deep and 36 feet wide, whose roof was carried by three columns down the centre.* Two doorways in the rear of the megaron opened into a cross corridor leading from the upper long gallery on the right (which rises above the corridor of the magazines), and on the left to a door giving access to a flight of eight steps descending into the central court. This flight of steps, in the centre of which was a single column, formed the approach to another long room crossing the palace, in the centre of which was found the lower portion of a wall; this may only have been a stone bench, but Dr. Evans suggests that it carried a central line of three columns. There was no necessity, structurally speaking, for them, as the hall was only 16 feet wide, and, as we have pointed out, there is a hall 18 feet in width whose roof was carried without intermediate supports. The question of the admission of light to these halls is too large a question to take up here; but Dr. Evans' proposition of a well for light on the left scarcely seems probable, in view of the fact that there is a cross wall below in the basement; the well for light would surely have been carried down to the lowest floor. The only alternative for obtaining light is that which is suggested in the great Roman Thermæ, where the halls, rising above the side passages and smaller rooms, have clerestory windows over the same. The only other rooms shown on the plan are apparently state bedrooms, which might be occupied by the king's guests if our theory as to the residential portion of the palace being in the eastern block is correct.

* In the palace at Phaestos there were no substanchions to the megaron, so that the bases, sills of doorways, and foundation of walls have all been preserved.

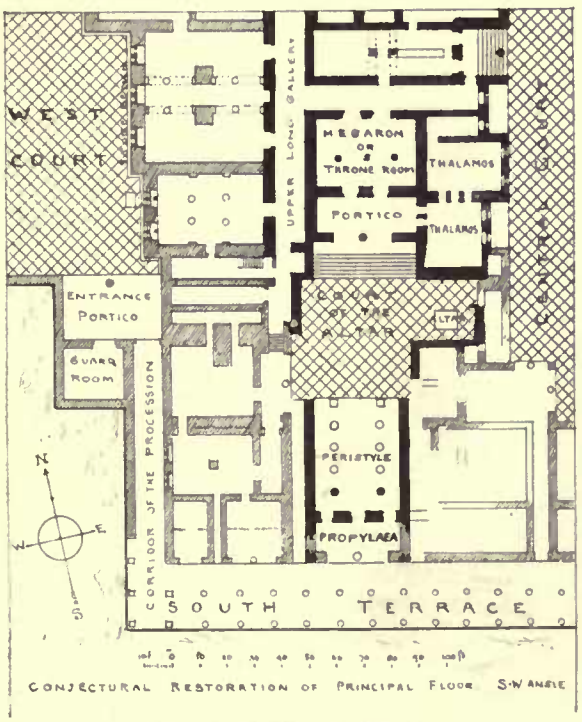


FIG. 3.—WESTERN BLOCK.

Portions blacked-in taken from Dr. Evans' restoration.
Portions hatched, taken from general plan.
Portions outlined, conjectural restoration.

* They are not quite central, perhaps to give more room for a throne in the rear. Dr. Evans points out here that the hearth as found at Tiryns and as described in the Homeric poems has not been found either here or in the palace at Phaestos.

The lower portion of the walls of the west front, about 6 feet high, are in two thicknesses of gypsum blocks, each 18 inches thick, with a core of rubble and clay between of 3 feet. They still carry in parts the remains of a superstructure in rubble masonry and clay mortar, which shows that an upper storey existed consisting either of lofty halls or of two floors with staircases of wood.

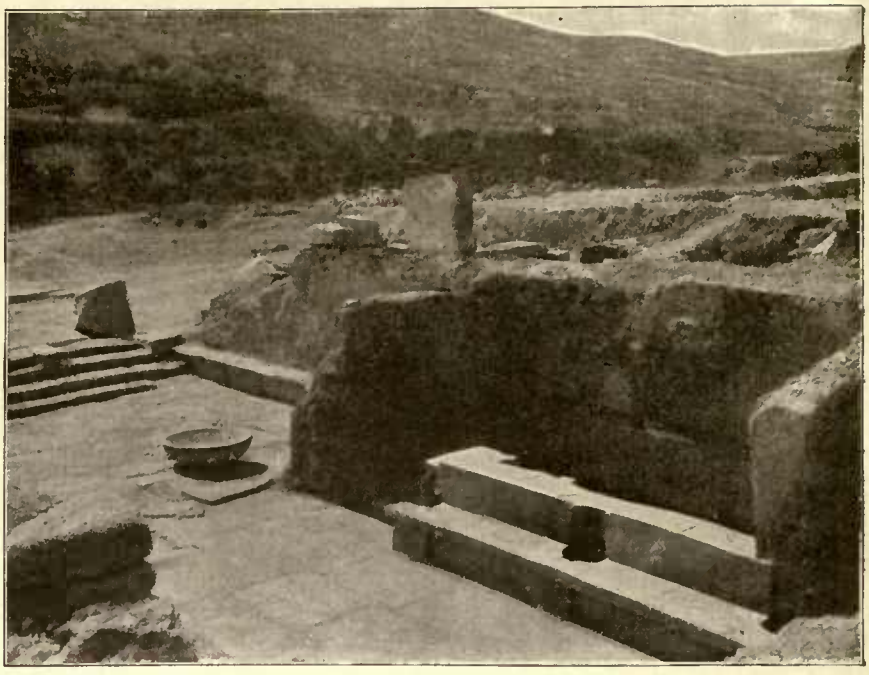


FIG. 4.—ENTRANCE TO THRONE ROOM ON LEFT. WELL-HOLE PARAPET AND BENCH, SHOWING SOCKETS FOR WOODEN COLUMNS.
(By permission. From the "Annual" of the British School at Athens.)

The only other hall which it is necessary here to describe is that which Dr. Evans calls "the throne room." This was one of the first important discoveries made in 1900. Through four doorways facing the central court one descends five steps to an ante-room, and thence through two doorways on the right to a room measuring 20 feet long by 12 feet 6 inches wide, in the centre of which, against the wall on the right hand side, was a stone seat with back to it of very original design.* On the same side of the room and returning at the end is a stone bench. The great megaron in the palace at Phaestos is called the throne room, and the much larger size of the megaron here would incline us to think that Dr. Evans' "throne room" was more probably used for cabinet councils. A room 20 feet long would not accommodate more than twelve councillors seated, with the Prime Minister presiding on his chair of state. In front of the throne (Fig. 5) is an open court or well-hole, the floor of which is sunk about 2 feet below the level of the throne room, and is approached by steps. It is not deep enough for a bath, and as there is no outlet drain for the water must have been filled and emptied by slave labour. It may, as Dr. Evans suggested, have had fish in it. This court for light was divided from the throne room by a low wall (Fig. 4) with three columns in timber, the sockets of which were sunk into a stone bench on which either the secretary or notaries of the council might have sat. Beyond the throne room was a small room in which was found a pedestal lamp showing how it was lighted.

* A cast of the same was in the Winter Exhibition of the Royal Academy.

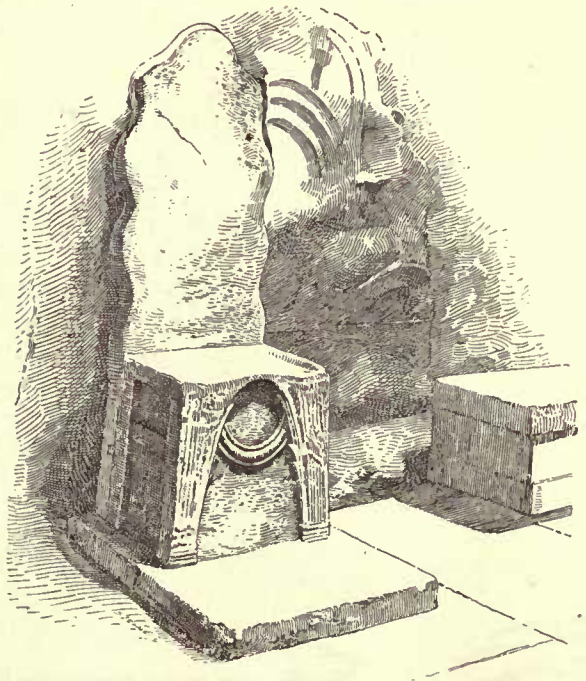


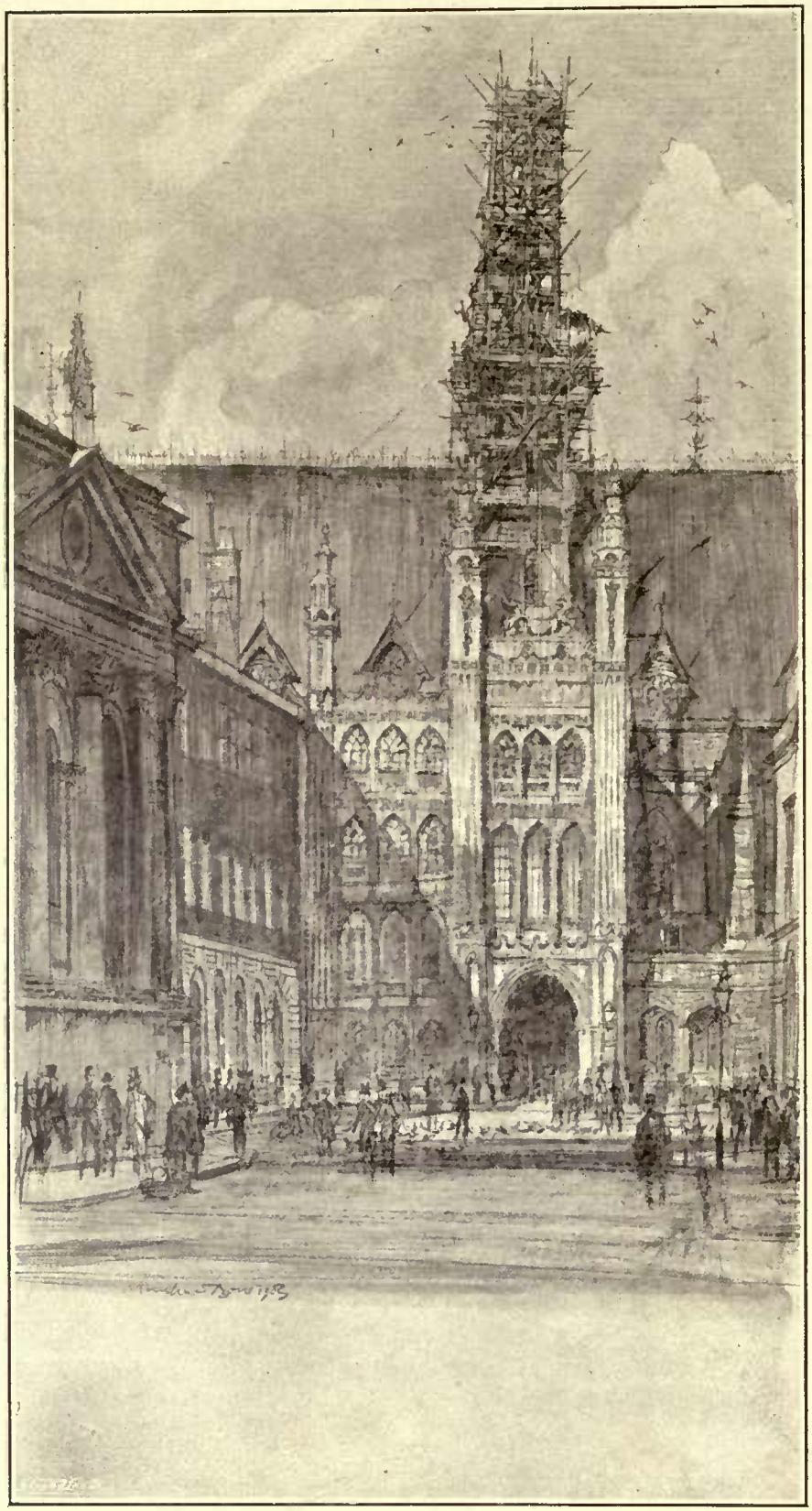
FIG. 5.—THE THRONE.

The communications between the west and east blocks of the palace have not yet been ascertained either at the south or north end of the central court. From the thickness of the walls we may assume that buildings in one or two storeys were carried across the north entrance.

R. PHENÉ SPIERS.

(To be continued.)

The Editorial Committee is indebted to the Council of The British School at Athens for the use of several illustrations.



THE GUILDHALL. FROM A DRAWING BY MUIRHEAD BONE.

Orvieto Cathedral.

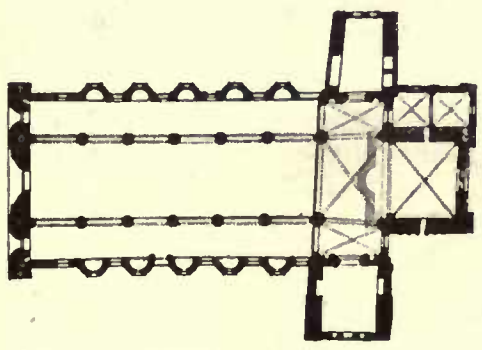
In the thirteenth century, in the great age of the communes, Guelph Orvieto, like Ghibelline Siena, broke the lawless tyranny that had checked her commercial expansion, the tyranny of the feudal lords whose castles girdled her *contado;* like Siena, too, she became justly proud of the position she had won as a free commune, and sought to give concrete expression to the two strongest impulses that can possess a people, religion and patriotism.

Orvieto was not so large, so rich, nor so progressive as Siena; it was not until the year 1290 that Pope Nicholas IV. laid the first stone of her new Duomo. But although begun nearly half a century later than the great cathedral of her neighbour, and at a time when the influence of northern art was beginning to be felt in every part of the peninsula, the Duomo of Orvieto is even less Gothic than that of "the Virgin's city." The reason is that Orvieto cathedral was built under the influence of the most conservative of all Italian schools of architecture, the Roman. "The basilicas of Rome," says Bryce, "beautiful in themselves, and hallowed as well by antiquity as by religious feeling, enthralled the invention of the Roman architect."* Tradition relates that the architect of Orvieto cathedral took as his model the favourite church of the papal patron of the nascent Duomo, S. Maria Maggiore. At any rate, like S. Maria Maggiore, the Duomo of Orvieto was a basilica without transepts, with a large apse or tribune at the east end. The arcades of the nave are composed of round arches carried on round piers, which, although built in courses, merely serve the purpose of columns. Above the arcade is a heavy projecting cornice, supporting a gallery. The high clerestory is lit by pointed windows, the only parts of the original building which were at all Gothic in character. A peculiar feature of the church was the seven small semi-circular apses on each of its sides, of which five in each aisle now remain.

It is not known who was the first architect of Orvieto cathedral. The Commendatore Luigi Fumi,* the learned historian of the Duomo, holds that the design for the church, as well as one of the two existing designs for the façade, was made by Arnolfo di Cambio, when, in the year 1282, he visited Orvieto to execute the monument of Cardinal de Braye. The Commendatore surmises that the *Operai* of Orvieto, finding a renowned architect at work in their city, asked him to furnish them with designs for their projected cathedral. Although the *onus probandi* of a theory of this kind rests upon its propounders, Commendatore Fumi has little to say in its favour. As, however, the weight of his name has given it importance, it may be well to summarise the reasons why it cannot be entertained.

First of all, it is impossible to bring any documentary evidence in support of it. It is more than doubtful whether Arnolfo Fiorentino, Niccola Pisano's pupil and the sculptor of the tabernacle of S. Paolo fuori le Mura, the Arnolfo who visited Orvieto in 1282, was identical with Arnolfo di Cambio the great architect. Professor Frey, who first promulgated the theory of the two Arnolfo's,† has since strengthened it, and has defended it, I think, successfully against the criticisms of De Rossi.‡ But if we admit for the sake of argument that Arnolfo Fiorentino and Arnolfo di Cambio were one and the same person, Signor Fumi's case is not much strengthened by that admission, for it is certain that in the year 1282 Arnolfo had not yet won fame as an architect. In fact there is no evidence to show that he had yet been employed in any architectural undertaking whatsoever. All the buildings that he is known to have planned belong to a much later date. What ground is there, then, for Signor Fumi's theory that because Arnolfo was a renowned architect, he was asked by the authorities at Orvieto to furnish a design for their projected cathedral? Not only cannot the distinguished archivist produce one piece of documentary evidence to support such a theory: he cannot show that Arnolfo ever visited Orvieto after completing the De Braye monument, or that he was ever

* Bryce, *The Holy Roman Empire*, London: Macmillan, 1890, p. 291.

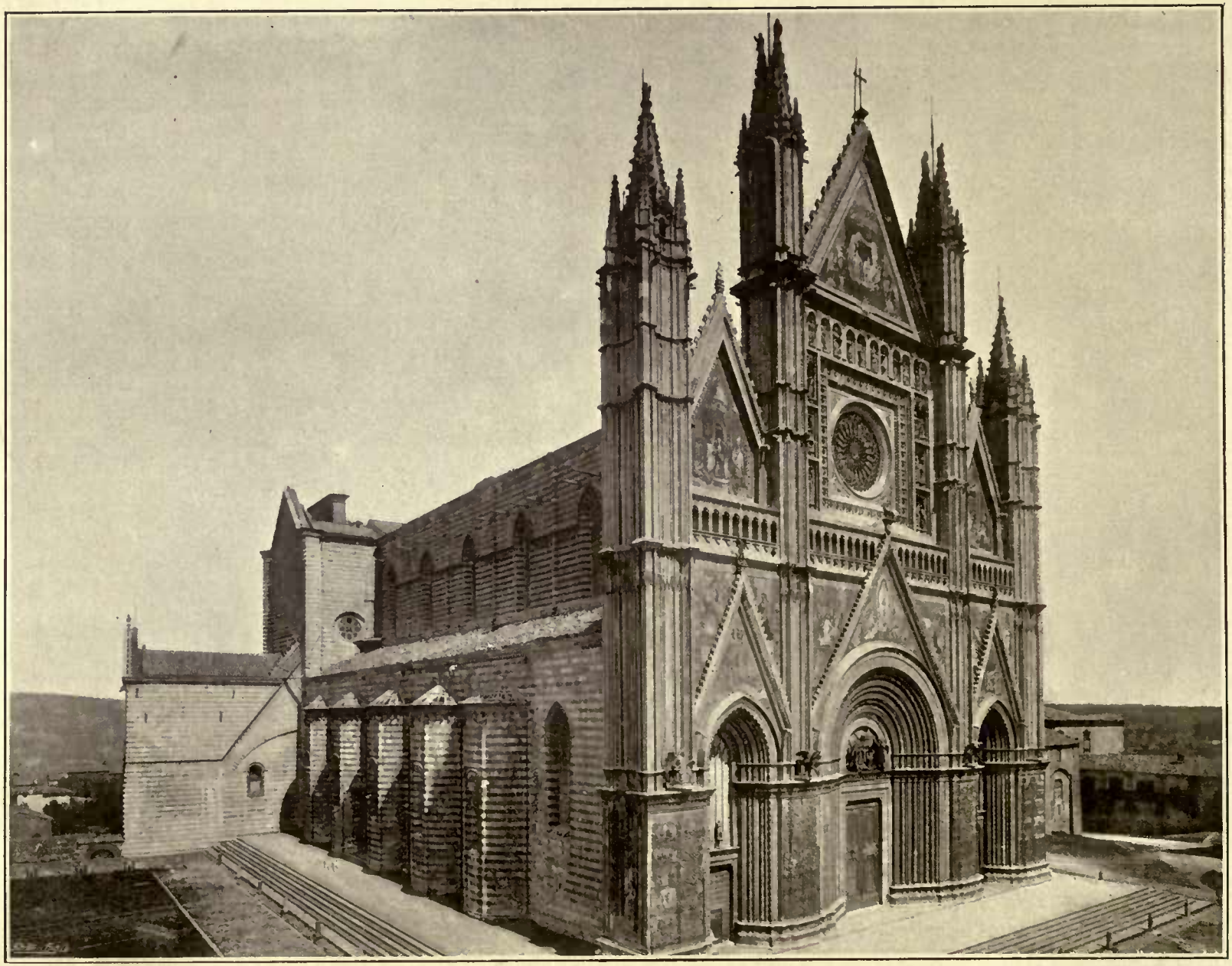


ORVIETO CATHEDRAL. PLAN.

* Fumi, *Il Duomo d' Orvieto e i suoi restauri*, Rome, 1891, pp. 5, 6, 8. It is with great reluctance that I differ from the Comm. Fumi, whose monumental work on the cathedral of Orvieto is, perhaps, the best monograph on an Italian cathedral that has yet seen the light.

† Frey, *La Loggia de' Lanzi*, Berlin, 1885, pp. 82 and *seq.*

‡ Frey, *Arnolfo di Cambio architetto è da identificare collo scultore Arnolfo fiorentino?* In the *Miscellanea Storica della Valdelsa*, anno i, fasc. 2, pages 86-90.



ORVIETO CATHEDRAL, FROM THE NORTH-WEST.

consulted in any capacity by the *Operai* of the Duomo.

Secondly, it is highly improbable, on the face of it, that the same artist, in the same year, and for the same building, would make two designs so absolutely inharmonious as the design of the Orvieto cathedral and the earlier of the two existing designs for its façade. The cathedral of Orvieto was, as we have already seen, almost entirely romanesque in style; the first of the designs for the façade with its very acute gables and pinnacles is aggressively Gothic.

Thirdly, admitting again for the sake of argument that Arnolfo Fiorentino and Arnolfo di Cambio were the same person, there is no work of of this artist that resembles in the slightest degree either the original nave, or the earlier of the two designs for the façade. The only façade, if any, by Arnolfo di Cambio of which anything is known, is the old façade of S. Maria del Fiore at Florence, of which there is a representation in one of Poccetti's frescoes at San Marco. Dr. Nardini * contends that the façade there depicted was built in accordance with Arnolfo's original design, which was not altered, he maintains, in any important particular by Giotto or any other architect of the Duomo. This façade reveals to us Arnolfo as a timid and tentative follower of the new movement in art. It shows us that he was still largely under the influence of his early teachers. Is it conceivable that the artist who was ultra-gothic in 1282, after a lapse of twelve or thirteen years, during which he had been surrounded by Gothic influences, showed himself a novice in the style which he had formerly wielded as a master? Nor if we look at the only existing works of this period designed by Arnolfo, that is to say the De Bray monument and the tabernacle of S. Paolo fuori le Mura, can we find anything that supports Signor Fumi's theory.

Fourthly, as regards the façade, there are no grounds for believing that it was begun until the year 1310, when Lorenzo del Maitano was summoned from Siena. Richer towns than Orvieto often left the façade of their cathedral unfinished for a long period. We know that the work upon the Duomo of Orvieto was often delayed for want of money. Some authorities have held that the lower portion of the façade was already begun in 1307, because in that year a prohibition was issued which forbade ball-games and archery practice in the neighbourhood of the church, in consequence of damage that had been done to the external sculpture and to the windows. But the actual wording of the prohibition clearly discourages such an inference, and tends to show that it was the lateral doors and windows of the edifice that had suffered injury.°

It cannot be proved, then, that Arnolfo di Cambio designed any portion of the Duomo. Nor have we any documentary evidence to show who was its original architect. But evidence of style leads us to suppose that he was some mediocre master of the conservative Roman school. After all, the question is not of very great importance. For, apart from its façade, and those of its internal decorations that belong to a later age, the cathedral of Orvieto is an uninteresting building, and does not occupy any important place in the history of architecture. The façade, however, although for the most part a mere screen or frontispiece, like the majority of elaborate Italian façades, is one of the most beautiful in Europe.

Its author, Lorenzo del Maitano, was born in Siena about the year 1275. His father, Vitale, was a sculptor; and it is probable that Lorenzo himself first followed that art. While the future architect of the Orvieto façade was a youth, Giovanni Pisano was at work in Siena; and that great artist seems to have influenced the young Maitano as he influenced all the other sculptors of the school of Siena, a school which was destined to become the most productive in Italy.

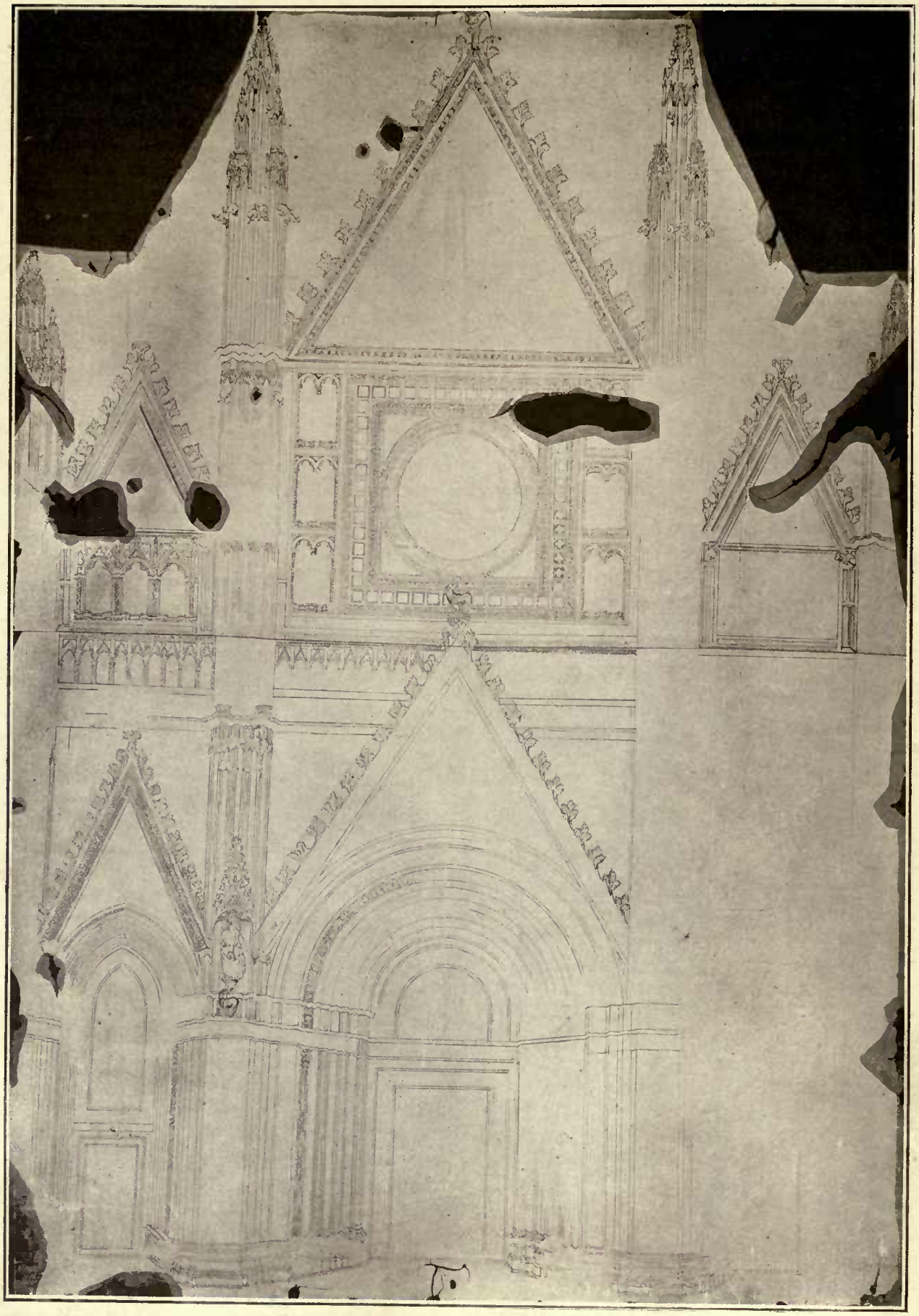
It was in September 1310 that Maitano was elected *capo-maestro* of the Duomo of Orvieto. In his agreement † with the commune it is specially provided that he shall repair the cathedral, which threatened to become a ruin, and shall provide it with a façade. How it was that the new Duomo was already in so desperate a condition, it is not difficult to conjecture. Italian architects were always deficient in construction. Shortly after the original church had been completed, except for its façade, the clergy of the cathedral found that they had not sufficient space for the proper performance of the great offices of the Church. It was decided to add a transept to the cathedral. This addition was badly made; and the ill-constructed church, after being thus tampered with, soon began to show signs of dissolution. It was then that Maitano was summoned from Siena to restore and buttress its cracking walls, and to build its façade.

For a somewhat inferior missal, the Sienese artist designed a glorious illuminated frontispiece. His first designs, the work of a pioneer of the Gothic style, were tentative. He made at least three drawings for the façade, of which the two

* See Nardini, *Lorenzo del Maitano e la facciata del Duomo d' Orvieto, estratto dall' Archivio Storico dell' Arte*, anno iv., fasc. v., Rome, 1891, page 11.

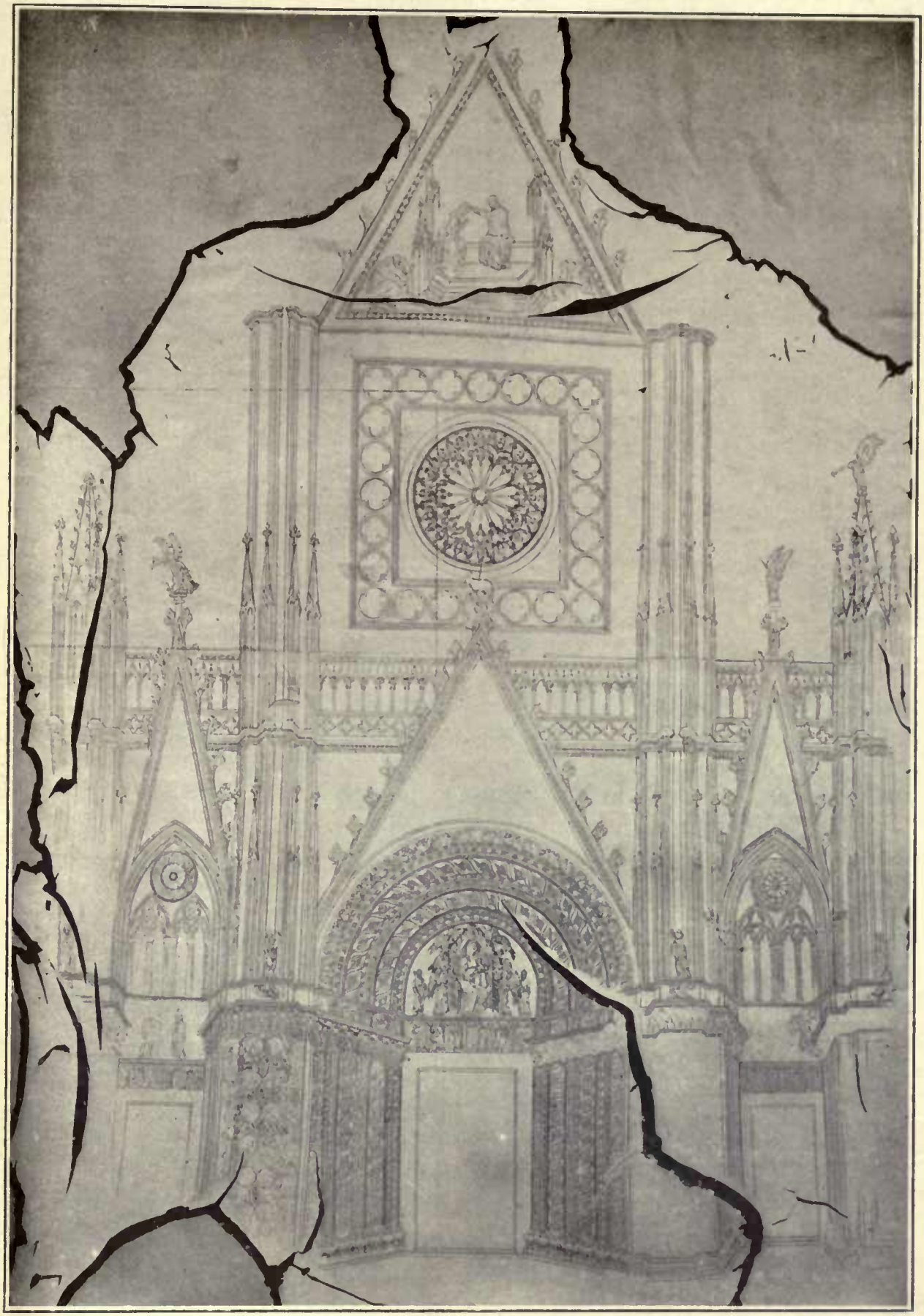
* Fumi, *op. cit.*, 91, 92, also p. 439, and *seq.*

† Arch di Stato, Orvieto, *Deliberazioni del comune dal* 1310–1312, carta 67 tergo. See also Milanesi, *Documenti per la Storia dell' Arte Senese*, i., 172, 173.



ONE OF THE ALTERNATIVE DESIGNS FOR THE FAÇADE OF ORVIETO CATHEDRAL. BY LORENZO DEL MAITANO.

(From a photograph specially taken for and presented to THE ARCHITECTURAL REVIEW *by the Commune of Orvieto.)*



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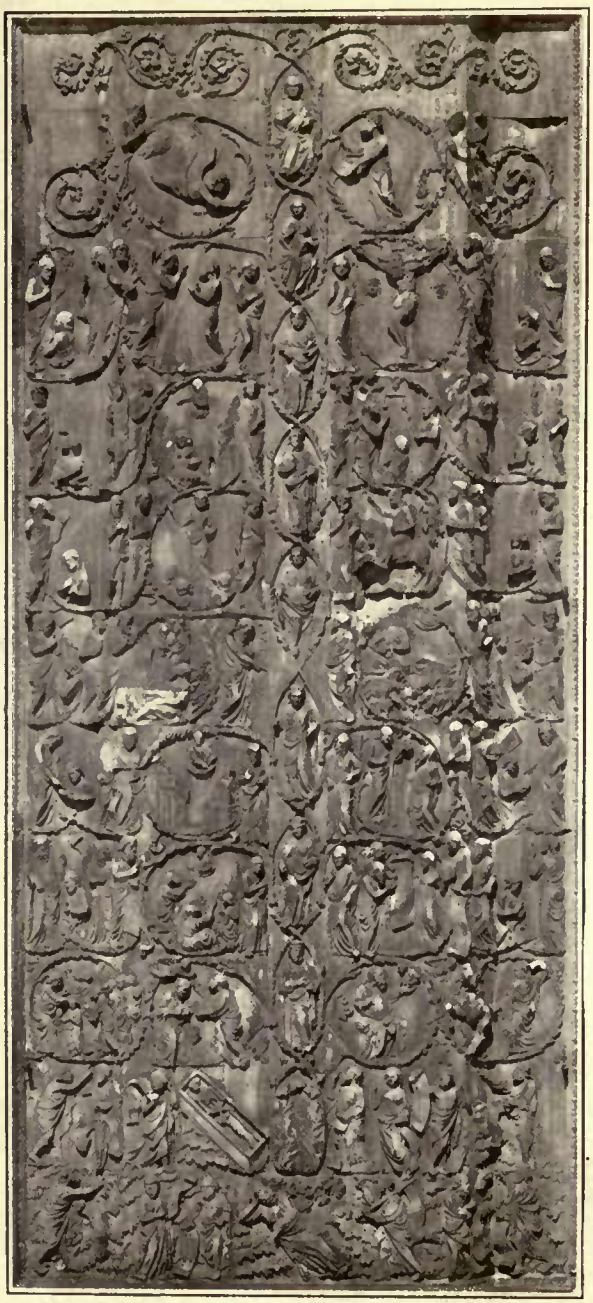
(From a photograph specially taken for and presented to THE ARCHITECTURAL REVIEW *by the Commune of Orvieto.)*

ultimately rejected remain to us.* The first of these, the one attributed by Signor Fumi to Arnolfo di Cambio, shows us a single-gabled façade. On one of its pilasters we see sketched the kind of surface ornament that ultimately adorned the building. For the rest the design is aggressively Gothic. The Italian, after the manner of converts, delights in extremes. His gables and pinnacles, with their elaborate cusps and finials, are more acute than those of the masters he imitated. Subsequently, as French influences acquired more and more power over him, he decided to construct, for the first time in Italy, a façade with three gables. But whilst in appearance, and in some measure in construction, this façade was, as Dr. Nardini says, *terribilmente ogivale*, it was in one respect thoroughly Italian, unlike the façades of the great French cathedrals it imitated; it was for the most part a mere frontispiece, although more intimately related to the structure of which it forms a part, than is the façade of the Duomo of Siena. Its gables rise high above the roof of the church; and many of its most pronounced features have little or no organic connection with the building behind it.

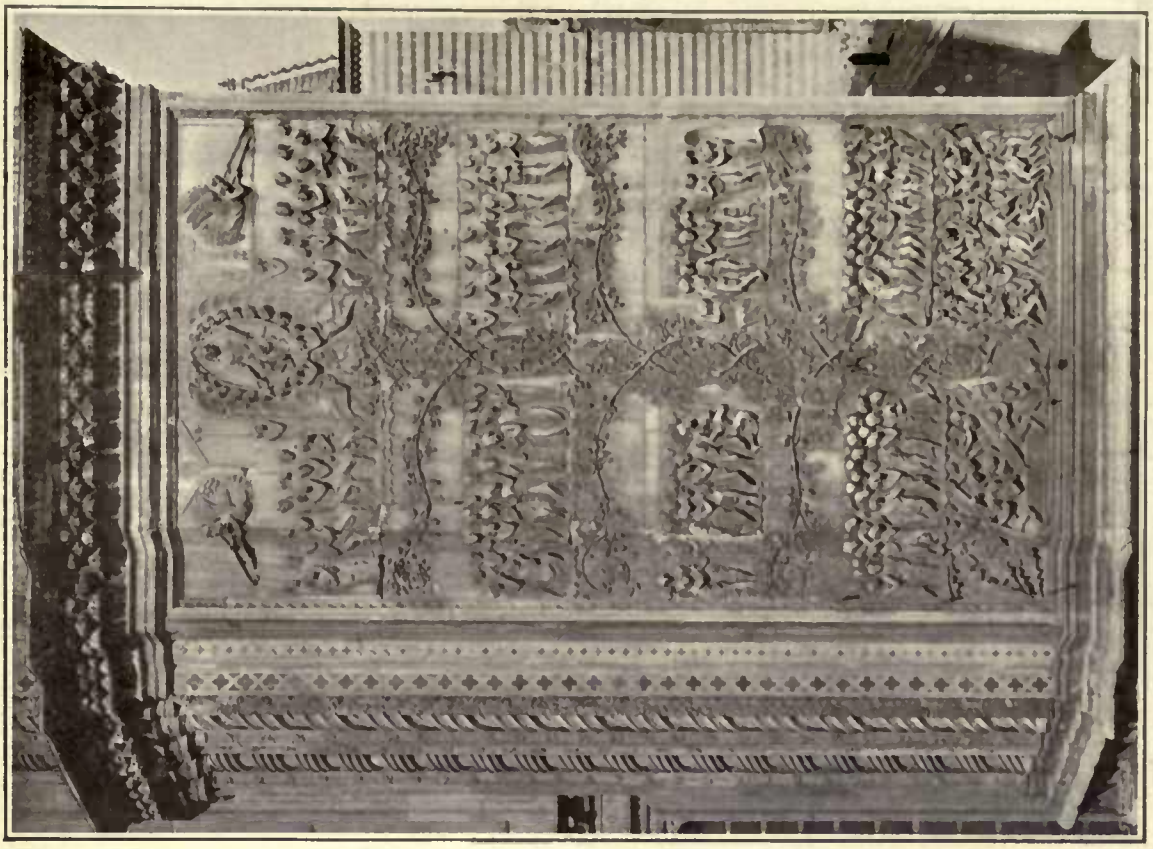
The reliefs on the pilasters on either side of

* I am indebted to the Commune of Orvieto, to the Opera del Duomo of that city, and, more especially to the President of the Opera, the Comm. C. Franci, for the photographs of the designs of the façade, which were specially taken for this article.

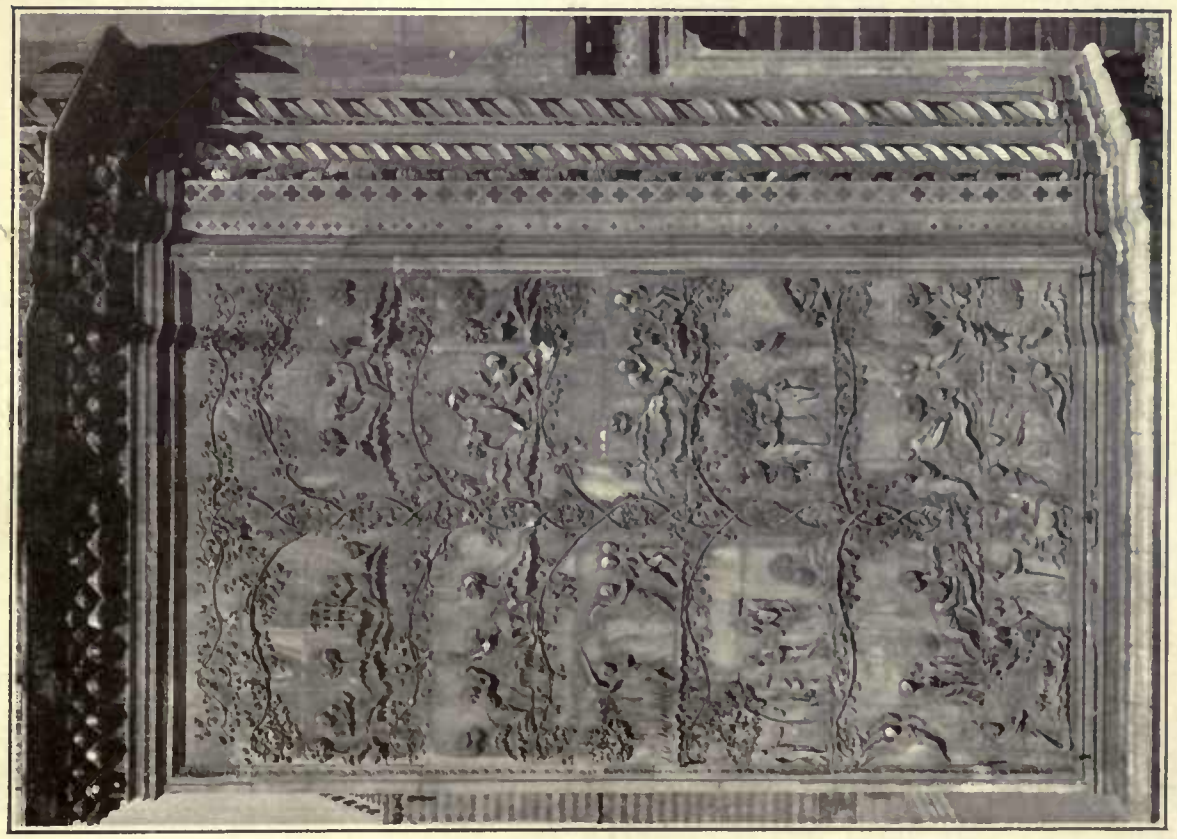


GENERAL VIEW OF CARVINGS ON LEFT-HAND CENTRE PIER, THE FAÇADE.

ORVIETO. GENERAL VIEW OF CARVINGS ON RIGHT-HAND CENTRE PIER, THE FAÇADE.



ORVIETO. GENERAL VIEW OF CARVINGS ON RIGHT-HAND PIER, THE FAÇADE.



ORVIETO. GENERAL VIEW OF CARVINGS ON LEFT HAND PIER, THE FAÇADE.

ORVIETO CATHEDRAL. THE FAÇADE. DETAILS. THE CREATION.

each of the doorways form the most beautiful part of the surface ornament with which this façade is covered, and they are the portions of the decoration that have suffered least from the drastic restoration which the façade has experienced. These reliefs, I hold, were executed whilst Lorenzo del Maitano was *capo-maestro* of the Duomo, and for the most part by himself and his assistants.

An accomplished critic, M. Reymond,* has recently sought to prove that Drs. Bode and Burckhardt have erred in attributing these reliefs to Sienese sculptors. His argument, however, is of little value, as it is based upon an assumption which is now proved to be erroneous. He holds that the existing façade of Siena cathedral was erected under the supervision of Giovanni Pisano in the latter part of the thirteenth century. He goes to that façade for evidence as to the character of the achievement of the Sienese school of sculpture in that age, and maintains that the sculptors of Siena, responding to the demand for statues on the new Gothic façade of their cathedral, had entirely forsaken the art of low-relief, and had devoted themselves to figure sculpture. As it has now been clearly proved that the existing façade of Siena cathedral was not built until after the year 1370, all the conclusions that M. Reymond bases upon the supposition that it was erected a century earlier fall to the ground.*

It is possible to show, too, by more direct argument that the French critic's conclusions are erroneous. Like their master and inspirer, Giovanni Pisano, all the members of the large Sienese school of sculpture that left examples of its handywork in every great town in Italy in the first half of the fourteenth century, practised the art of making bas-reliefs. Witness the reliefs of Agostino di Giovanni and Agnolo di Ventura at Arezzo, of Tino di Camaino at Naples and at Florence, of Cellino di Nese at Pisa and Pistoia. Witness Goro di Gregorio's remarkable reliefs representing the miracles of S. Cerbone in the cathedral of Massa Marittima, works which have entirely escaped the notice of M. Reymond and other writers upon Tuscan sculpture.† It is a fact capable of mathematical demonstration that, excluding the reliefs on the pilasters of Orvieto

* Reymond, *La Sculpture Florentine*, Florence, 1897, vol. i, pp. 132–137.

* I have dealt with M. Reymond's arguments in my recently published *History of Siena* (Murray, 1902). But since writing that book I have been able to strengthen in some important particulars the case for the Sienese authorship of these reliefs.

† The *arca* of S. Cerbone bears an inscription which states that it was made by Goro di Gregorio, of Siena, in 1324. The inscription is of the same date as the *arca* itself.

ORVIETO CATHEDRAL. THE FAÇADE. DETAIL. ADAM AND EVE IN PARADISE.

ORVIETO CATHEDRAL. THE FAÇADE. DETAIL. THE NATIVITY. BY A SIENESE FOLLOWER OF GIOVANNI PISANO.

Cathedral, the Sienese sculptors, in the period 1310 to 1340, carved more bas-reliefs than all the other sculptors of Tuscany put together.

M. Reymond argues somewhat naïvely that delicate work of this kind would not have been executed at so early a period in the history of the façade as that of Lorenzo del Maitano's overseership. To advance such an argument is to display ignorance of the history of Italian façades. The most beautiful, the most delicately-modelled reliefs that are to be found in such a position, around the doorways of a great church—I refer to the reliefs Jacopo della Quercia moulded for the central portal of San Petronio at Bologna—were finished before any other work upon the façade was taken in hand. The west front of the great Bolognese church has remained unfinished until this day. The history of the façade of San Petronio is not an isolated case. It was customary in Italy to complete first the central doorway of the façade.

But it is not enough, it may be urged, for those of us who believe that Maitano and his pupils executed reliefs at Orvieto to prove that the art of sculpturing in low relief was largely practised by the Sienese, and that in constructing a façade it was customary amongst Italian architects to begin with decoration of the central portal. In order to prove our case we must show that there are definite grounds for connecting these reliefs with the name of Maitano. I will summarise, then, very briefly, my reasons for maintaining that they were executed in part by him, in part under his supervision :—

First of all there are good grounds for believing that the lower part of the façade was completed during Maitano's tenure of the position of architect of the Duomo. It is true that the documents relating to the history of the façade during the first eleven years that he held office, that is to say, from 1310 to 1321, have disappeared. But the existing documents, which belong to the following period, that is to say, to the period which began in the year 1321, and closed with Maitano's death in 1330, suffice to show that during those years the lower part of the façade was completed ; whilst the documents relating to the period following Maitano's death tend to prove that the lower story was then finished, and that the arcade above it was in process of construction.

Secondly, we know that it was Maitano's own idea that the façade should be decorated with reliefs similar to those which now adorn it; for such reliefs are clearly indicated in one of his tentative designs for it.

Thirdly, it is certain that Lorenzo del Maitano and his assistant Niccola Nuti practised the art of sculpture. If they resembled at all the other Sienese followers of Giovanni Pisano they must have practised largely the art of sculpturing bas-reliefs.*

Fourthly. the terms of Maitano's agreement with the Commune of Orvieto prove that one of

* The Comm. Fumi admits that Lorenzo del Maitano executed some of the reliefs. *See* Fumi, *op. cit.*, p. 92.

ORVIETO CATHEDRAL. THE FAÇADE. DETAIL.
(A) THE ADORATION OF THE MAGI.
(B) THE VISITATION.
BY A SIENESE FOLLOWER OF GIOVANNI PISANO.

the objects of the Orvietans in engaging the Sienese master was that he might carve bas-reliefs for the façade of their cathedral; for in that document it is expressly stipulated that he shall be allowed to maintain what pupils he wished at the expense of the Opera del Duomo *ad designandum, figurandum et faciendum lapides* for the façade. Now the phrase *figurare lapides* is the phrase which in documents of the period is always used to signify the making of bas-reliefs. If the writer is speaking of foliations or other similar ornament, he does not use the verb *figurare*, but the word *fogliare*. In the Latin of the period the word *figura* always means a statue. The phrase for "To make statues" is not, however, *figurare lapides*, but *facere figuras*. The phrase *figurare lapides* is almost invariably used to indicate the carving of bas-reliefs composed of figures of men or beasts.*

I hold therefore that one of the objects of the Commune in engaging Maitano was that he might make, and superintend the making of, reliefs. In his first tentative design for the façade, as we have already seen, he sketched reliefs on one of the pilasters similar in general design to those which adorned the completed work.*

The conclusions that we have based upon the evidence of documents and of the original designs are, at least, not contradicted by such scanty evidence as *stilkritik* affords as to the authorship of these reliefs. Whilst there are no other existing bas-reliefs by Lorenzo del Maitano and Niccola Nuti with which we can compare these of Orvieto, we are justified in concluding that any works they executed would show strong traces of the influence

* Nardini, *Lorenzo del Maitano e la facciata del Duomo d'Orvieto: estratto dall' Archivio storico dell' Arte, anno iv., fasc. v.* Rome, 1891 pp. 14, 15.

* I believe that the reliefs were completed in 1321. There is evidence to show that in that year some of them were put in their places. (Arch di Stato, Orvieto *Arch dell'opera del Duomo*, Cam. i., 1321, Aprile 28, Maggio 5, c. 93, 96.) And it was in 1321 that Maitano set up the *fabbrica* of mosaic.

ORVIETO CATHEDRAL. THE FACADE. DETAIL. THE RESURRECTION.

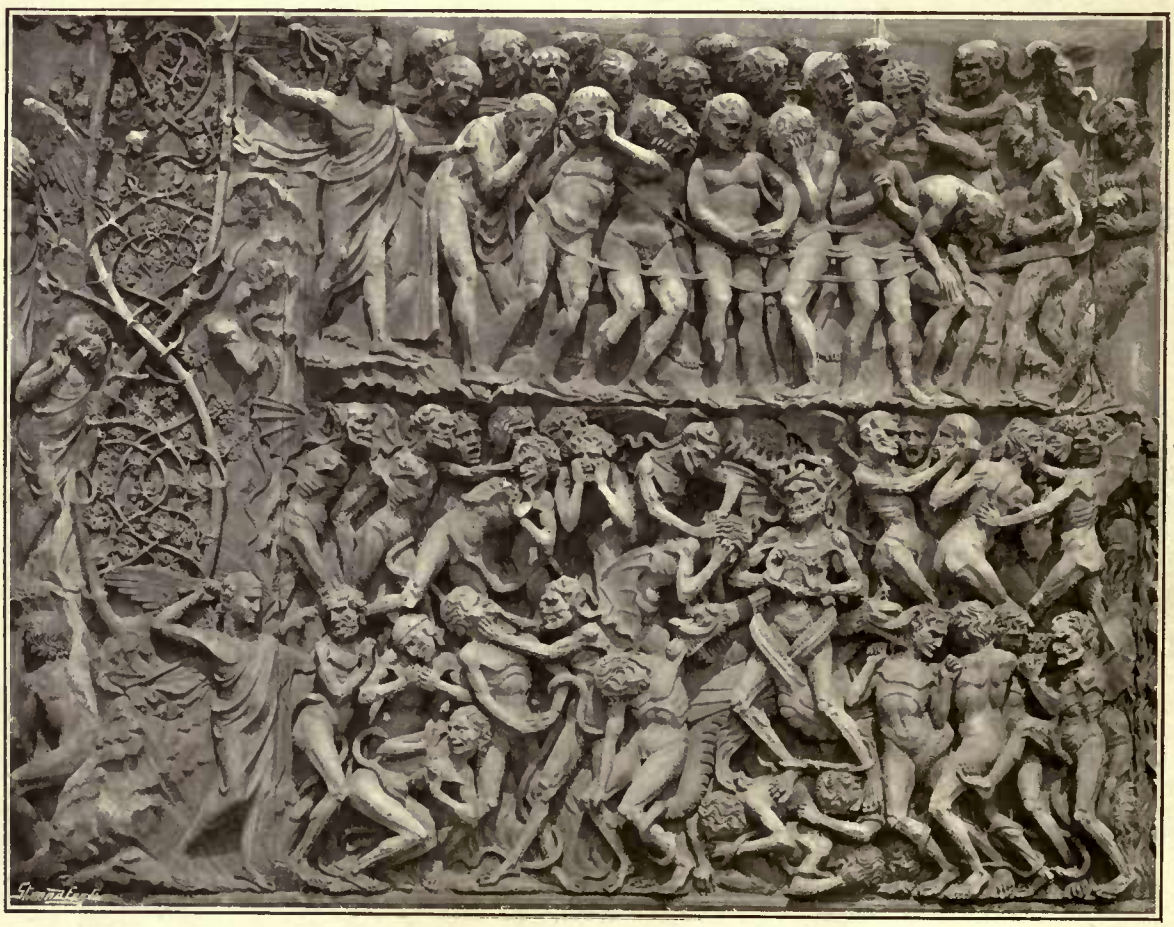
of that master whose personality dominated Sienese art in the closing decades of the thirteenth century—I mean Giovanni Pisano.* We shall expect to find in them, too, evidences of the influence of Giovanni's great father, Niccola, whose reliefs on the pulpit of Siena were the most important works in sculpture then existing in their native town. And this is just what we discover in the Orvieto reliefs. The scenes on the northernmost pilaster recall the manner of Andrea da Pontedera; and the reliefs of the central and southern pilasters are evidently, as Crowe and Cavalcaselle held, by other followers of the great Pisan masters.

But whilst I agree with M. Reymond and the Commendatore Luigi Fumi that Andrea Pisano executed some of the reliefs on the northernmost pilaster, I cannot accept their conclusion that they were made in the middle of the century during the time when Andrea was *capo-maestro* of the Duomo. I see no reason for disbelieving that all these reliefs were executed during Lorenzo del Maitano's long tenure of the position of *capo-maestro*.

First of all, as I have already shown, there are documentary reasons for believing that the lower part of the façade was completed before the year 1321, and there is no evidence of any kind which encourages the view that Andrea da Pontedera or any other sculptor executed reliefs on the pilasters of the façade after that date. Secondly, the reliefs on this northern pilaster which reveal the hand of Andrea are very much less mature than the reliefs on the bronze doors Andrea made for the Florence Baptistery in the year 1330. In the years 1347 and 1348, when Andrea held office at Orvieto, he was a very old man tottering on the verge of the grave. As *capo-maestro* he probably contented himself with superintending the work of others, giving the *operai* the benefit of his long artistic experience, but doing little with his own hand. All the evidence we have points to the fact that Andrea twice visited Orvieto, and that these reliefs of the northernmost pilaster were executed before the year 1321 under Lorenzo del Maitano's supervision, if they were not designed by him, after the decorations of the two central pilasters had been finished.

In addition to Niccola Nuti and Lorenzo's son Vitale, another Sienese sculptor, Goro di Gregorio, worked upon the reliefs of the façade. The study of his *arca* of S. Cerbone at Massa Marittima has led me to conclude that some of the scenes to the

* Ruskin gives the reliefs on the façade to Giovanni Pisano. He discusses the façade of Orvieto in Lecture VII., "Marble Rampant," in *Val d'Arno*, and in the appendix to that book.



ORVIETO CATHEDRAL. THE FAÇADE. DETAIL. THE INFERNO.

ORVIETO CATHEDRAL. THE INTERIOR, LOOKING EAST.

left of the central portal are from the hand of this unrecognised genius.

It may be urged that Lorenzo del Maitano cannot have been as great a sculptor as is claimed, for, if he had been, there would be remains of other important works undertaken by him. To the archivist no argument could be more fallacious than this. He knows well that of several of the great Sienese and Florentine artists of the *Trecento*, men who in their own day were regarded as equal in power and achievement to the greatest of their contemporaries, not one single work can be identified. Where, for instance, are the works of two of the most distinguished masters of the very school of sculpture to which Maitano belonged? Where are the works in sculpture of Lando di

Pietro and Ramo di Paganello? And of Agostino di Giovanni and Agnolo di Ventura have we more than a fragment of one authentic sculptured work? Maitano died in middle life. The twenty best years of his career were passed at Orvieto, where he was actively employed as chief architect. His early works, like those of Andrea da Pontedera, and other great artists of that period, have disappeared. If Andrea had died when he was fifty-five years old, it would have been impossible to prove that any existing work was by his hand.

No argument can be drawn from Vasari's silence as to Maitano and his achievement. The *capo-maestro* of Orvieto Cathedral was not the only distinguished artist whom the Aretine biographer ignored. Nay, are there not great Florentines, even, whom he has failed to take note of? What Florentine architect of the middle of the Trecento more deserved mention than Francesco Talenti, to whose genius the *campanile* called Giotto's and the Florentine cathedral owe so much? But Talenti finds no place in Vasari's pages.

The reliefs on the pilasters of the façade of Orvieto Cathedral were, I maintain, executed in the period 1310 to 1321, in part by Lorenzo del Maitano, in part under his supervision. They belong to the golden age of the art of Siena, to the age of Duccio and Simone Martini, to the age of Pietro and Ambrogio Lorenzetti, to the age of the architects of the great unfinished cathedral. Maitano was an artistic kinsman of Simone. Like Simone, he owed a great deal to the influence of Giovanni Pisano. Like Simone, he was a great designer. He had, too, something of that painter's marvellous grace of line, something of his devotion to a hieratic sumptuousness, something of his love of brilliant colour, as well as something of his extraordinary fineness—we might almost say fastidiousness—of technique. Excepting the works of Jacopo della Quercia, the reliefs of Orvieto were the greatest achievement of the Sienese school of sculpture.*

Maitano was not only an architect and a sculptor, he also designed mosaics for the façade; collecting together capable artists he set up a *fabbrica* of mosaic in Orvieto in the year 1321. And the early mosaic pictures on the lower part of the façade were executed by him or under his supervision. This work was continued by his son Vitale, by Andrea Orcagna, and by other great artists. But of the early mosaics that adorned the façade not a vestige now remains. It was not until the year 1570, two hundred and sixty years after Maitano had begun the work that the façade was completed. Only one important alteration was made in the original design, and that was the work of another Sienese, Antonio Federighi, in the middle of the fifteenth century. Already in 1417, more than thirty years before Federighi took office, proposals had been made for a change in the design. Finally, in the year 1450, Isaia da Pisa had been commissioned to make a new design for the uppermost story of the façade. The design this artist provided was the cause of great controversy, a controversy not settled until after Federighi became *capo-maestro* in the year 1451. Federighi finally decided to raise the altitude of the central gable of the façade by inserting a row of niches above the circular window similar to those Maitano had placed on each side of it. He also increased the height of the pinnacles which flanked the central gable. Thus he gave the façade a more imposing appearance than it would have presented had Maitano's final design been carried out. For the rest, the façade to-day differs in no very important particular from that designed in the fourteenth century.

The other additions to the original cathedral possess but little architectural interest. The Cappella del Corporale, the chapel built as the shrine of a blood-stained corporal, a relic of the Mass of Bolsena, was erected in the year 1330. In it, as in the festival of the Corpus Domini, the Catholic Church commemorates Heaven's witnessing to the truth of her central Mystery. For the sacred relic Ugolino di Maestro Vieri—one of that company of great goldsmiths of Siena who, in the fourteenth century, made crowns for emperors and kings, golden roses and chalices for popes, and beautiful vessels for the great Italian cathedrals—executed a reliquary which is one of the finest existing examples of Italian goldsmith work of the Middle Ages.

The large chapel on the south side of the church opposite the Cappella del Corporale is still known as the Cappella Nuova. It was ordained by the Commune in 1397, but it was not finished until the year 1444. The frescoes which cover its walls and its vaulted roof were begun three years later by Fra Angelico, and were completed by Luca Signorelli in the early years of the sixteenth century.

Notwithstanding the artistic importance of the frescoes which adorn this chapel, in its internal decoration as in its structure, the cathedral of Orvieto is inferior to that of Siena; but as long as men love beautiful things they will make pilgrimage to the Umbrian town to see Lorenzo del Maitano's façade and the diversely-beautiful, strangely-consorted frescoes of the Artist-Saint and Michael Angelo's precursor.

R. Langton Douglas.

* "Here in the façade of Orvieto, you have not only perfect Gothic in the sentiment of Scripture history, but such luxurious ivy ornamentation as you cannot afterwards match for two hundred years."—Ruskin, *op. cit.*, p. 134.

Architectural Education.

II.—Great Britain.

THE ARCHITECTURAL ASSOCIATION DAY SCHOOL.

By Arthur T. Bolton.

The Architectural Association occupies an unique position in architectural education, being a professional society originated some fifty years ago for the purpose of mutual teaching. It differs therefore in nature from an endowed college, both in being self-supporting and also in being directed entirely by architects on an extremely popular basis, that is to say there is only one class in the membership, so that the youngest beginner, just joined, has equal rights with grey beards who can recall the time when the Architectural Association was non-existent. Essentially a society of young men, it is managed by a committee constantly recruited from those who have in any way distinguished themselves or attracted the favourable consideration, and consequent votes, of their fellow-members.

As, however, the older men make it a point of honour to retain their membership long after they have ceased to derive any personal benefit from their subscription, so there is no society of young men that could be more solicitous to consult the old heads in every proposed step that is considered to be in any way important. It follows, therefore, that the Architectural Association commands in a remarkable degree the confidence of architects as a body, and also that its teaching will be of a broad character representative of all sides of the profession as a whole.

This preliminary statement is necessary because the work of the Architectural Association is not to be judged from the basis of a merely ideal curriculum, and also because both its characteristics and success are derived from this unique position.

It does not rest with the writer to describe the multifarious activities of the Architectural Association, nor to detail the work of the evening school, which will indeed be referred to only in so far as it is related to the work of the day school student, subsequent to the completion of his first year's course.

The Architectural Association Day School, now fully established, meets the long-felt need for a training ground, where the boy straight from a public school can acquire such indispensable preliminary knowledge, of a technical character, as will enable him to profit by the time spent under articles as a pupil in an architect's office.

It would be out of place here to dwell on the importance of pupilage—it may be taken as the accepted system—and it is only necessary to state that the Architectural Association Day School is a preparation for it and not a substitute.

There is no hard and fast limit of age for joining the day school, but 16 is the very earliest at which a boy should leave his school, and 17 or 18 is much better, while those who have been at the university will naturally be 21 or 22. The course is annual, from October to July, and is divided into the usual three terms. Students can, and do, join and leave at the beginning of any term, completing their year's course accordingly; but to join in October is the most convenient arrangement. On completing the first year's course the student enters on his pupilage with an architect, and should, during this first year of his articles, continue to attend the school for two days in the week, following out the second year course, which affords him systematic teaching supplementary to the practical work of the office in which he is engaged for the other four days of the week. The student can delay his articles for a year if he desires to spend the whole of his time working out the second year course, but the former arrangement presents many advantages in actual working.

The above outline shows the non-academical character of the scheme, also how it works in with every-day architectural practice. Architects send their pupils to the school for this preliminary training, and there is a combination of "actual" and what is quaintly designated "theoretical" work.

Let us now take the first year's course and show what the intending architect's pupil is taught as a basis for his subsequent studies. The work can be roughly divided into a History and Construction side, although the cross connections are carefully brought out in every possible way. Similarly the teaching can be separated into lectures and studio work, though here again these are interdependent.

In the studio or drawing work the chief aim is thoroughly to ground the student as a good

geometrical draughtsman, able to deal with the daily work of an architect's office. This naturally involves freehand work as well, and the elementary setting up of perspectives is given as an aid to out-of-door sketching. The method of survey for the measured study of old buildings is taught, by a typical example thoroughly done, and is then encouraged and required as vacation study.

The geometrical drawing work follows the course of the lectures, and is, as it were, explanatory of them; thus the drawing out of the four orders accompanies those on Greek and Roman architecture, and their origin and meaning is thus brought home to the student. A plan to 32nd scale of an extensive Roman building such as the Baths of Caracalla is a valuable exercise, and the working out in plan and section of the two types of Roman Basilica, the vaulted and the timber-roofed, leads on to the developments of Romanesque and Gothic.

Such, in outline, is the first term's work. In the second the student's time is divided between the History and Construction drawing work. A Byzantine and a Romanesque church are drawn in plan section and elevation, parallel with the lectures on the same subjects, and the study of Gothic architecture is entered upon by drawing out two bays of an early French vaulted refectory.

Meantime the Construction subject, an eight-roomed cottage, is most completely set out from the original to the scale of eight feet to one inch, as a contract drawing, to be traced, printed, and coloured, the half-inch details drawn out with the full sizes complete, and the specification written precisely in accordance with office requirements. The lectures on Construction throughout follow the course of the building of the subject, starting from its requirements and proceeding to cases, different and more elaborate, but always remaining in touch with the actual case in which the students are engaged.

It is possible in this way to interest the pupils in Construction, not as a matter of theory, but as a vital part of the subject in hand. This Construction drawing extends through the third term. The utility of the method to the future pupil is obvious, it means that on entering his office he has a certain grasp of what is going on and of what he is wanted to do.

In this second term the instruction in measuring old work is given, and during the Easter vacation very good independent study is obtained.

In the third, or summer term, the History drawing carries on Gothic Architecture by the most advanced students drawing an elaborate tracery and vaulting subject, two bays of an English decorated chancel in plan section and elevation, while the others draw a similar subject of an earlier character. Renaissance is then drawn out, by well-known subjects such as Clare College to $\frac{1}{8}$ in. scale for the earlier, and the Banqueting House at Whitehall for the later, two bays of the latter being worked out to $\frac{1}{2}$ in. scale. The Lectures follow on in all cases.

In this way the students do not simply listen to one or more lectures on a period, to be as easily forgotten as heard, but being simultaneously engaged on drawing out a typical specimen have the said lecture, as it were, constantly repeated to them, in the shape of the necessary instruction they require in making out their drawings. A student may learn nothing from a discourse on vaulting, but if he has to set it up geometrically simultaneously, he must indeed be dull if he has not an intelligent interest in vaulting ever after.

The assistant masters, present the whole time, give constant attention to the students, who are strictly enjoined not to draw anything which they do not fully comprehend. Models and photographs are kept in use to counteract the tendency of students simply to imitate the flat copy, without taking the pains to realize the solid form, of which it is the geometrical representation.

The development of intelligence, of powers of observation, and of memory, the inculcation of the best methods, and the insistence on serious and continued work are the objects the staff of the school have in view.

There is an essential difference, which cannot be gone into here, between the work of architects and of purely graphic artists, demanding a different training to that common in Schools of Art. It is also beneficial in the long run to the future architect if the development of his artistic self-consciousness is retarded, rather than quickened, at this early stage of his career—technical mastery which denotes the genuine artist is to be purchased by a training beyond the range of the brilliant amateur. It is not of much service to the student to veil in a cloud of words the sustained effort and real work required, and much harm is done by injudicious treatment of this vital matter.

It is impossible here to enter into all the minor details to show how the whole scheme is made to work together in all its parts as a means to the end of giving the student a broad outline of the History of Architecture, and of the principles of Construction, so as to qualify him to profit to the full by his articles; but it may be pointed out that no definite direction is given to his tastes; that is left to the architect whom he adopts as his master, and to the growth of his own individuality hereafter. The object is to acquaint him with the main lines, so as to counteract the bias and prejudice that arises from one-sided learning.

On the completion of the first year, the student, now an articled pupil, takes the Second Year Course, which teaches design in the form of an application of the work he has followed out previously.

There is a twofold object in this; in the first place the most vital part of an architect's work, the power, that is, of giving form and character to buildings is commenced early enough to cause the student to develop a real interest and love of his work; and secondly the attempt to apply what he has thought himself to have learnt brings out at once the weak places in his past work.

It is one thing to have drawn out a Greek column and quite another to apply the same in a small design of say a Doric character. The back elevation and internal sections of objects, hitherto mainly conceived as flat outlines, now acquire to the student a painful interest. It is interesting to mark the student grappling with the application of his knowledge, and the advantage to him of making his first essays in design along the main lines of historical development, will, I think, be denied only by the most thorough-going of artistic revolutionaries.

For lectures the Second-year student has at once thrown open to him, gratis, all that are given in Division I. of the Evening School of the Architectural Association, and should any student have so advanced himself, he can attend the lectures in Division II. at half fees.

All the students, First and Second years, attend the visits of the Day School to buildings, ancient and in progress, to museums and to workshops, all of which serve to bring them in touch with the realities of their work. They thus have opportunities of acquainting themselves with materials and methods of work in a manner calculated to interest them in those subjects.

The association together of these beginners, their use of the Architectural Association premises, Common Room and Library, together with the facilities for attending the meetings and social gatherings of the Architectural Association, all serve to throw them, as it were, into the full current of the profession, and enable them to realize its characteristics and aims before they have advanced so far that retreat is difficult, if not impossible.

It will be seen, then, that the boy from school entering the Architectural Association Day School should become in two years a hard-working architectural student, well grounded in the outlines of his profession, and able to avail himself for his future advancement, of all the facilities which for fifty years, with a constantly increasing development, the Architectural Association has offered to architectural aspirants.

THE ARCHITECTURAL ASSOCIATION EVENING SCHOOL.

By William G. B. Lewis.

The instruction given in the evening school conducted by the Architectural Association is divided into three sections: 1. Lectures; 2. Studio or drawing school; 3. Classes for Sketching and Measuring, Water-colour, Modelling and Design.

1. The Lectures are given with a view to preparing the student for the R.I.B.A. Examinations, and are mostly attended with that object, and the ground covered is such as to give the student a sufficient knowledge of a sound character to enable him to pass the examination in the subject taught. Each lecture is of one hour's duration, followed by an hour's class work, during which the instruction is of an informal character, and the accuracy of the notes and sketches made by the student is checked by the lecturer. Home work is set in connection with the lectures, and the students are encouraged to study the subject in a thorough manner and to take an interest in it for its own sake apart from any ulterior object to be attained. Prizes are awarded for the home work done, but as a rule the competition for them is very limited, as the standard is so high that but few have the time or energy to keep up to it throughout the whole course.

Lectures are given on the following subjects:—

Division I.

	No. of Lectures
Greek and Roman Architecture, and Ornament	13
English Architecture to A.D. 1500	16
Mediæval and Renaissance in Europe	12
Plane and Solid Geometry	8
Elementary Physics as applicable to Building Construction	14
Elementary Building Construction	16

Division II.

Materials, their nature and application	15
Construction (Advanced)	10
Hygiene, Drainage, Water Supply, Ventilation, Lighting, and Heating	12
Professional Practice	6

The lectures on the art side cover the history of the Classic, Mediæval, and Renaissance styles in Greece, Italy, France, Spain, Germany, and England, the growth, development, and decadence of each style. The most important buildings are described and illustrated by diagrams or lantern

views: the planning, arrangement, construction, materials, and workmanship explained. The characteristic features, mouldings, sculpture, and general details, are also described and illustrated.

The lectures on building construction and materials describe in detail the sources of supply, the qualities and defects of the materials used by the different trades, and the methods of application, the form and dimensions suitable for different purposes, and various classes of buildings in which they are used.

Isometric projection and sciography are included in the geometry lectures. The latter is very little used by English students, and it is probable that the lack of appreciation of the amount of light and shade required to produce a good effect in a building is due to the small amount of attention given to the study of sciography.

The legal position of the architect, the London Building Act, valuation, dilapidations, light and air, contracts, agreements, specifications, and approximate estimates, are dealt with in lectures on professional practice, and sanitary legislation in those on hygiene.

Under "extra subjects" are included lectures on—

	No. of Lectures.
Land Surveying and Levelling .	8
Quantity Surveying and Estimates .	6
Ornament and Colour Decoration .	5

as these subjects are not set in the R.I.B.A. Examinations.

2. *The Studio.*—This is held twice weekly, from 6.30 to 10 p.m., and deals with all the problems a draughtsman may encounter in his daily work. Owing to the students being of two classes—(*a*) pupils in London offices and (*b*) older men who have served their articles in the country, they differ widely in the amount already learnt and the subjects they wish to take up, so that nearly all the instruction has to be of an individual character, and as a student does not spend sufficient time in the studio to attain more than a most superficial knowledge of architecture, the principle aim of the instruction is to encourage him to cultivate his eye to see accurately and to induce him to develop his reasoning faculties, thus setting him on the road to acquire knowledge after he has left the studio. This is the more important, as in most cases he has copied without understanding and his information is rather that of rote than of memory based upon a comprehension of the principles and a proper appreciation of the reasons.

All drawings (including those of the Orders) prepared in the Studio must as far as possible conform to one of the scales in general use in an office, viz.:—

Eighth of an inch to a foot for general drawings.
Half an inch to a foot for general details.
Inch to a foot for small subjects and finer work, such as furniture, decoration, etc.
Full size for mouldings, carving, and such parts as are usually drawn full size for the workman.

The object is to accustom the eye to the sizes of various parts and details and to enable comparisons to be made, as it is most important that a beginner should understand the relative sizes of different buildings and the parts of which they are composed. This is of assistance in enabling him to judge scale and proportion in his work.

The work of the studio consists of—

(*a*) Drawing examples of architecture—Greek, Roman, and Gothic.
(*b*) Drawing ornament from the cast.
(*c*) Demonstrations on Descriptive Geometry, Perspective, and Æsthetics.
(*d*) Construction.
(*e*) Design of buildings and parts of buildings.
(*f*) Time sketches.

(*a*) When the subject drawn is a part of a building a small key elevation and plan are drawn on the same sheet to show its relation to the whole design. In cases where a cast of the ornament is in the Studio, the student is encouraged to make a full size measured drawing of it, for which he will have greater advantages when the schools have been moved to Westminster, and the casts of the Royal Architectural Museum are available in the same building.

In making the drawings attention is directed to the proportions of one part to another and to the disposition of the ornaments and mouldings.

(*b*) In drawing ornament the effect produced and how it is obtained is pointed out, and attention is drawn to any particular points, either in design or execution, that render it suitable for its position or the material in which it is executed, the way in which unity is secured by the treatment of detail, and the method of obtaining symmetry without absolute repetition, and freedom and vigour without loss of refinement. On completion of the drawing the student is asked to make a small scale sketch of the same subject as a study in "shorthand."

(*c*) Seven lectures and demonstrations are given in perspective, the aim being to give the student a sound geometrical knowledge of the subject while teaching him the easiest methods of

putting buildings into perspective, and by means of illustrations and photographs he is shown the advantage of a thorough knowledge of the subject in respect to design.

The Descriptive Geometry demonstrations were added as a preliminary course, it being found that scarcely any of the students have even an elementary knowledge of this subject, a deficiency which seriously handicaps them in a proper understanding of the connection between a drawing and the work it illustrates, so that practically none are able to realise the grouping of a building from a set of plans and elevations without the aid of a set-up perspective.

The lectures on Æsthetics, which have only recently been started, are intended to help the student to be more self-critical in making a design, and include such subjects as Composition (grouping and proportion), Form (mass and line), Colour, and Workmanship. The æsthetic principles which have governed the forms of capitals to columns and piers, how they were developed and changed with the changing style, and their relation to surrounding work and suitability to their position have been pointed out to show that similar principles should govern the design of details.

(*d*) Examples of construction are drawn from copies, but students are in all cases recommended to draw from small scale diagrams in books, adding the jointing from larger details, as this sharpens the intellect which mere copyism tends to blunt.

(*e*) In Design, subjects are set in three sections, viz.: (1) A part of a building, generally a constructive subject of a simple character, which has to be treated architecturally; (2) a whole building has to be designed for a special purpose, conditions as to locality, site, materials, and in some cases cost being stated; (3) smaller objects, internal fittings and decorative details which are required to be drawn to a large scale or full size.

The first set of subjects would be taken up by students of the first division, and those of the second division can choose from either the second or third set. In all cases they are recommended to make a sketch design to a small scale.

(*f*) Time sketches are set with a view to assisting the student to form an idea quickly. The general subject is announced, and in some cases illustrations are exhibited for a fortnight, and then removed. Definite particulars and conditions are only given on the evening on which the sketch is to be made. It must be commenced and finished in one evening, between 6 p.m. and 10 p.m., and may be in pencil, ink, or colour.

One of the greatest difficulties to be contended with is the fact that nearly all the students come to prepare their "testimonies of study" for the Institute examinations, and wish to do only the minimum amount of work which they suppose will enable them to "scrape through." In consequence, while the examination undoubtedly induces them to take up many subjects which they would otherwise neglect, the drawings tend to become mere copies instead of testimonies of *study*, and the students do not derive the benefit they should from preparing them. As far as possible they are compelled to do the various drawings thoroughly, and every inducement is used to make them real students instead of being such only in name.

3. Classes are held in the early summer to teach the methods to be adopted in sketching and measuring buildings, two members of a committee of visitors attending each meeting, which are held at South Kensington and buildings in and around London.

Students may also learn under a professional water-colour painter (formerly an architect) how to put on paper their impressions of colour and study grouping and composition, the meetings being indoor followed by open air ones. To prepare for this class an elementary water-colour class is previously held indoor, enabling students to acquire facility in handling their brush.

The modelling class is under the direction of a well-known sculptor, and is of great assistance in giving a knowledge of the value of projection, and an appreciation of surface and form.

Six years ago the Design Class was resumed. This is supervised by voluntary visitors, who are practising architects, and attend each monthly meeting to give the students criticisms upon their designs. The subjects are those of a simple nature for a lower division, and more complex problems in design for advanced students, corresponding in a great measure to the method pursued in the studio, with the exception that the student is not taught during the preparation of the subject, but obtains a criticism when he has finished his design. In most cases a subject is given two meetings, the general design being submitted at the first, and half-inch scale and full-size details at the second. Workshop demonstrations are occasionally arranged when the practical working of various materials are given to show the student their limitations.

The student enjoys the following advantages in common with other Architectural Association members. (1) He may borrow books from the library numbering 3,000 volumes. As any volume may be obtained on loan, the library is probably the finest of its kind in the kingdom. (2) A discussion section, which was started a few years ago to afford an opportunity for the study and

discussion of those subjects and difficulties which constantly occur in actual practice. Visitors of experience, in the subject being discussed, are invited to attend. Incidentally the power of speaking in public is thus acquired. (3) Fortnightly meetings of the Association are held on Friday evenings, when papers on various subjects of interest to the profession are read and discussed. (4) On alternate Saturday afternoons during the spring months visits are organised to buildings in progress in London, and he is enabled to acquire some practical experience of the manner in which some of our best public and private buildings are carried out. (5) Similar visits are made in the summer to interesting buildings in the home counties. (6) The excursion, which usually takes place in July, is arranged for the study of the work to be seen in a particular district in England. Rooms are taken at a convenient centre by those participating in the visit, and a round of visits paid to everything architecturally interesting within a range of twenty miles or so.

The session of each year begins in June, but class-work in October. The course extends over four years, lectures and studio being taken alternately, and the former are so arranged that no overlapping occurs.

The number of students attending the classes and studio is 200, the staff numbering 17 lecturers and instructors. The names of 28 architects are on the list of visitors to the Design Class.

The Royal Institute of British Architects has for the last twelve years made a grant of £100 to cover the deficit in the working of the educational scheme, but with the exception of this sum the whole of the cost is defrayed by the Association, with the assistance of the students' fees, and no grant or Government subsidy is received.

Architecture at the Royal Academy—I.

AFTER the very frank interchange of views that took place in these pages between leading architects inside and outside the Academy * and the general agreement on certain defects, one looked forward with some curiosity to the exhibition of this summer. It will be remembered that in the discussion initiated by Mr. Ricardo the following principles emerged, and were emphasised by two of the Academy architects who took part in the discussion. First of all the picturesque water-colourist with his perspectives was to be severely discouraged, not only because his spanking hansoms, giddy scenes of fashion, oriental warmth, spacious vistas, and so forth, were a "mild nuisance and nightmare" (Ruskin's description of Raphaelistic art) to those who care for pictures; but still more because all this, neither attractive nor tolerable pictorially, is not architecture. Instead of this misdirected effort, it was contended, we ought to have workmanlike geometrical drawings of elevations, of plans and of sections, with a sketch perspective when necessary to give an idea of effect and grouping. Tinting, when employed, was to serve the purpose of distinguishing materials, and no more. Secondly, we were given to understand that the reason of the largely unreal and inadequate character of the exhibition is that enough material of the right sort is not sent in to cover the walls even of this one little room. Architects were told that the fault lay with themselves; that if they sent in workmanlike drawings, these drawings would be welcomed and hung.

My mind, that of a disinterested observer of the exhibition, remains so far innocent that till events disprove it I take people to mean what they say. I thought therefore that as everybody appeared to approve of changes, and the desire was echoed by some of those in authority, we should find a new departure in the current exhibition, or at least a fair proportion of examples of desirable practice. Judge of my surprise when I found myself faced on entering by a blushing wall of water-colours. The centre and keynote is a pictorial view of Mr. Bodley's church at Clumber. This is Mr. Bodley's diploma piece, and we may surmise therefore that he does not share the ideas of his colleagues on the exemplary style of architectural drawing, and perhaps that, being on the council this year, he had hung a side of the gallery in illustration of his ideas. But this explanation will not cover the whole ground, for on turning to another wall I find that from Mr. Belcher's office comes a water-colour perspective with all the features he had so strongly and properly condemned. Here are hansoms more than usually spanking; here is that conflict of semi-pictorial painting with semi-architectural drawing that results in a depressing, washy-woolly world. It is true that Mr. Belcher sends a model of part of this building to restore the balance a little. I conjecture that the production of picture-perspectives can only be gradually slowed down and extinguished; that practice cannot keep pace

* See ARCHITECTURAL REVIEW for October, November, and December, 1902; January and February, 1903.

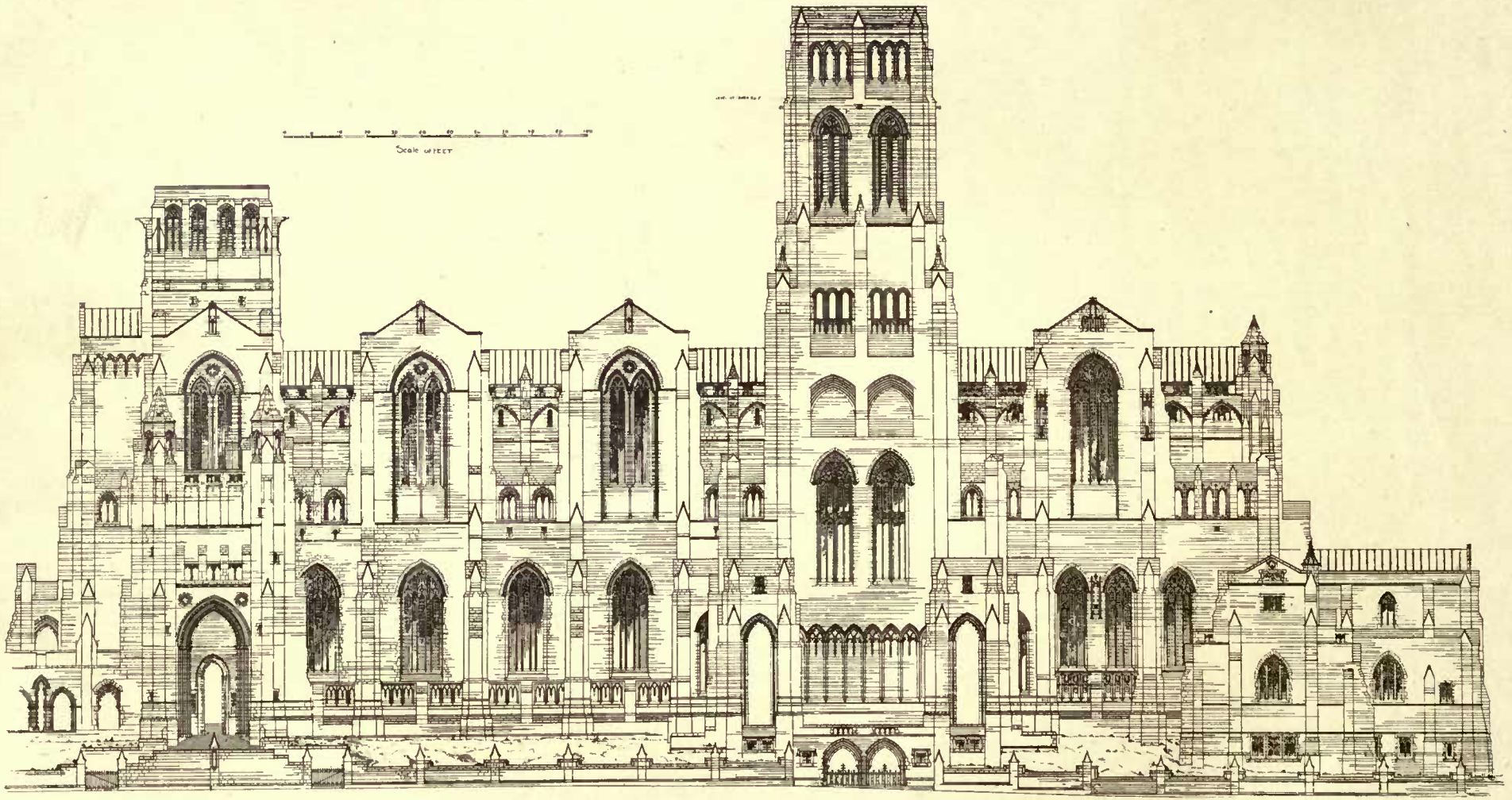
with righteous theory; but these discrepancies bring a shock to minds, like my own, that remain incurably innocent.

The proper attitude of the critic, then, for a great part of this exhibition would be to treat what is shown, not as architecture, but as water-colours, and in the present notice I shall yield to this desire of the architects and treat them as painters. It would be a salutary result of this challenge if architects could be brought to believe that in the judgment of painters, painting, as most architects practise it, is not worth the pains. Mr. Bodley's church is not a fanciful or meretricious drawing; it was possibly drawn from the fact, as the very ugly arrangement of the path suggests. But it is a dull and tiresome kind of water-colour. It would be much better in black and white, or in flat tint and conventional shadow. As it stands it is neither agreeable picture nor satisfactory convention of drawing. If Mr. Bodley's idea of a landscape does not recommend his architecture, neither does Mr. Goldie's idea of an interior. This acute-funnelled perspective, with the awkward emphasis on the tesselated pavement, is not the view a picture-maker would choose, to recommend the architecture. The colour adds nothing pleasant to the architectural fact, and it cannot be called natural; where, then, is its advantage? Much the best of the semi-pictorial drawings is of a house designed by Mr. George Jack. The drawing is, I gather, from the hand of Mr. Oswald Crawford. It shows no little skill of effect in the sky and garden, and the stonework is laid in with care for its character and freshness of touch. Here is something that almost stands its ground as a picture, and indeed must, for this one view of the house is somewhat puzzling architecturally. It would be in place as the supplement to drawings and plans, just as a photograph would. The drawing, again, by Mr. Joass, of Mr. Belcher's Cornbury Park interior, is a much better type than the perspective already referred to: the general scheme of tinting is agreeable and skilfully carried out. But even here there is a conflict between conventional tinting and the realism of light in the reflections on the floor. Another skilful water-colour, with a free use of gouache, is a view of a pergola by Mr. Mallows. Mr. Flockhart is another clever sketcher, but 1535 is not a first-rate example of his powers. At the other end of the scale are drawings like Mr. Harrison Townsend's, of a pulpit, where the execution is no better than the design. Of the remainder, some are cases of legitimate tinting, either to explain that bricks are red, and so forth; or sketches of coloured decoration; but the lead is given by drawings that muddle tinting with landscape effect.

A more serious matter than the persistence in parts of the exhibition of a mistaken pictorial tradition is the rarity of examples of the right method. There is hardly a plan or section in the exhibition, except when it has been slipped into the corner of a drawing. There is no important building fully illustrated. If we take projects, it certainly would have been interesting to compare the competition designs for the Liverpool Cathedral: but only one or at most two designs are illustrated with an approach to completeness. If we take important buildings in course of construction, Mr. Aston Webb's bay of the College of Science and elevation and perspective of the new Museum buildings are satisfactory representations so far as they go; but no one can guess from these latter what is the height and character of of the galleries behind the street front. That the fault does not lie altogether with exhibitors is proved by the case of Mr. Ricardo. From the exhibition, at first sight, one would suppose that the champion of workmanlike and complete illustration had sent in no more than an elevation of his Johannesburg building. But this drawing is numbered 4, so it is probably the survivor of a series that included plans and sections. An experience like this is not encouraging, and goes to prove Mr. Ricardo's contentions.

And that brings me to the last general consideration before the quality of the designs is dealt with. The policy of the hangers evidently is not to limit the exhibition to what can properly be seen in this small room, and to show this limited number of buildings adequately. Their policy is to include as many fragmentary designs as possible, whether they can be seen or not. The result is a number of little drawings piled up so high that the top rows are beyond examination without stilts, while the bottom rows demand prostration on the floor. The idea, in short, is that drawings are not there for examination, but merely to satisfy the exhibitor by storing his design in the Academy, so that he can claim such honour as invisibility at the Academy confers. I contend that this policy is absurd. If the architects at the Academy are of opinion that the material sent in is good enough to require more space, surely they could obtain a second or a bigger room. If that, by strange Median laws, is impossible, it would surely be better to select a limited number of designs each year, show them comfortably and adequately, and print an honour list of those which have been accepted but crowded out. At present nothing is completely shown, and a great deal is hung but practically not shown at all. Much of it is quite insignificant, but the attempt to make it out is fatiguing and irritating to the visitor.

D. S. MacColl.



LIVERPOOL CATHEDRAL COMPETITION. DESIGN PLACED FIRST BY THE ASSESSORS.
G. GILBERT SCOTT, ARCHITECT. ELEVATION TO ST. JAMES' ROAD.

Liverpool Cathedral Competition.

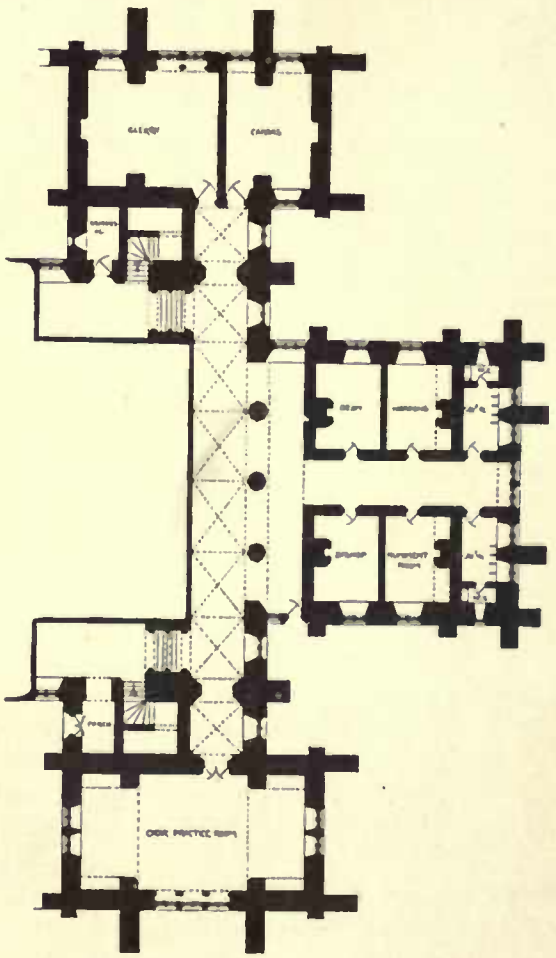
THE decision of the Cathedral Committee not to accept any of the plans submitted appears to me the most astounding act of folly ever committed by any selecting committee. Folly is too mild a word; it is a foolishness which borders on immorality.

No doubt there was the saving clause in the conditions that the Committee did not bind themselves to carry out any of the designs, but in the face of the assessors' award they cannot shelter behind that. The author of the design placed first, having successfully run the gauntlet of the preliminary competition, has during the past year prepared further designs and drawings, and will hardly be satisfied with the reason given. And the profession will not be satisfied either. The alleged reason for this strange proceeding on the part of the Committee is that the placed design does not allow of a large congregation being within sight of the preacher. This, it is stated, the Committee laid stress upon in the conditions; the same committee who issued the famous restriction, "the style is to be Gothic." It seems incredible that when they thus declared their predilection for one particular style, they did not know what it meant; and yet that is the obvious conclusion, for no admirers of Gothic architecture, who really understand it, will claim that one of its advantages is that in Gothic churches the congregation can see and hear better than in churches of other styles. The restriction was withdrawn, true; but that the feeling of the Committee remained unchanged at the time of the first competition was only too evident from the selections which were made then. Have the Committee now changed their minds? have they begun to realize that a mediæval plan is unsuitable for a modern cathedral? If that were really so, one would welcome their conversion; whilst regretting that owing to its tardiness a great injustice is likely to result. But until a statement to this effect is officially made one remains sceptical, and finds it difficult to believe that the reason given is the true one;* for the advisory architects have spoken with no uncertain voice. They say that in the design they have selected they find "pre-eminently shown"—an "original conception—fine and noble proportion—knowledge of detail—and that power combined with beauty, that makes a great and noble building." And the majority of the Committee apparently find none of these things. Who is more likely to be right, Messrs. Bodley and Shaw or the members of the Committee?

Let the design speak for itself. We publish it so that architects who have not seen the plans may have the opportunity of judging whether the chiefs of their profession have blundered.

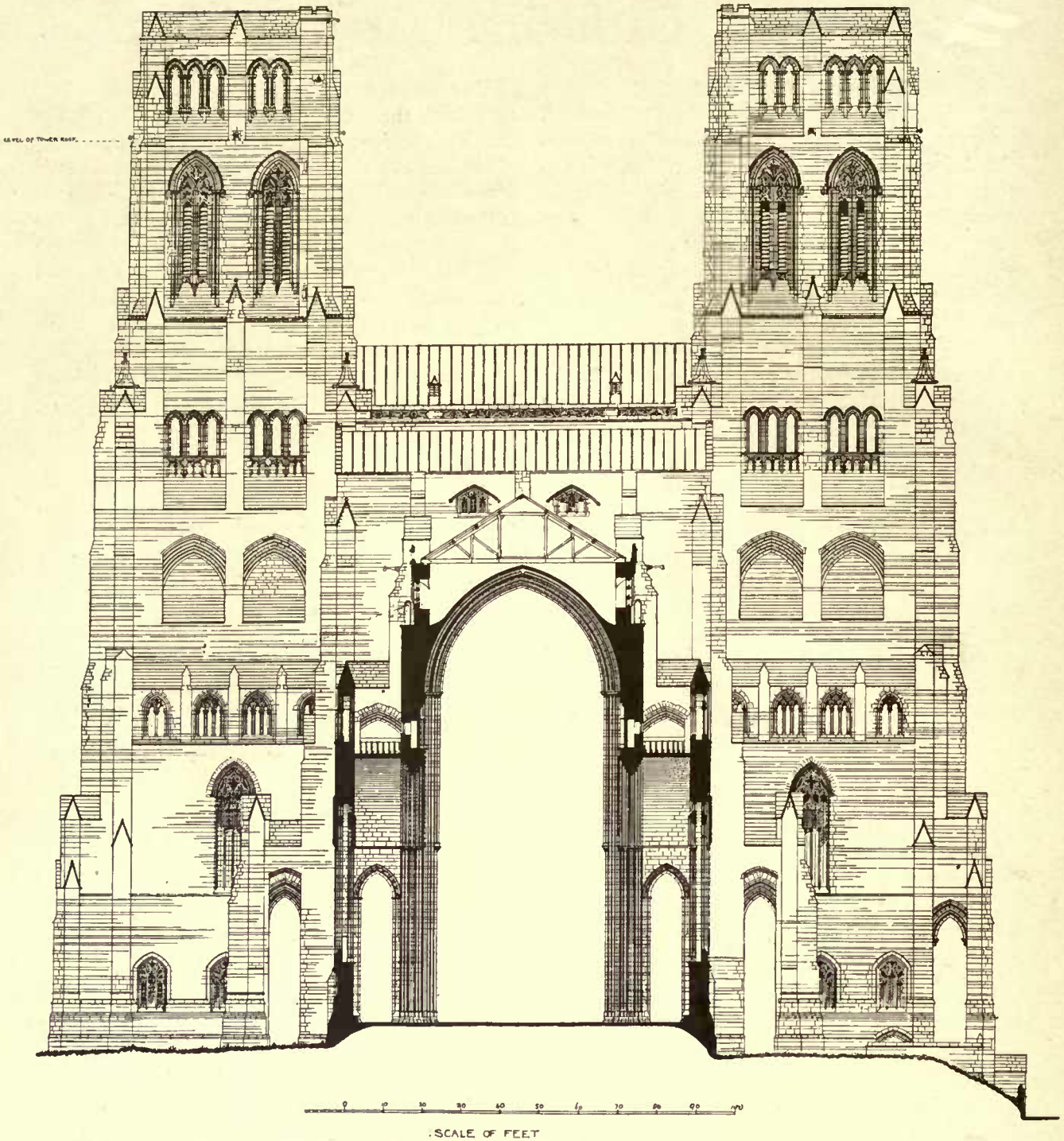
No. 1 is the selected design, and its author is Mr. George Gilbert Scott. This sounds like an extract from a fifty-year old paper.* Mr. Scott is the only competitor who has attempted to grapple with the peculiarities of the site. As was pointed out in our review of the preliminary competition, the only spot from which the cathedral can satisfactorily be seen is from the other side of the cemetery, where the ground is considerably higher than that on which the church will stand. To avoid the ugly effect of a long roof seen in elevation, Mr. Scott breaks his side by carrying three of his bays—two to the nave, and one to the chancel—higher than the main roof, and by placing two large towers over the transepts, which are connected by a high transverse roof. The effect externally is most striking, and the internal height

* No official announcement is made as to the authors of the different designs, but the following is believed to be a correct list:—No 1, Mr. G. G. Scott. We may welcome the successful advent of one whose grandfather occupied a unique position amongst English architects, and whose father was the architect of some of the finest churches of the last quarter of the last century. No. 2, Messrs. Austin and Paley; No. 3, Mr. W. J. Tapper; No. 4, Mr. Malcolm Stark; No. 5, Mr. C. Nicholson.



LIVERPOOL CATHEDRAL COMPETITION DESIGN BY G. GILBERT SCOTT. PLAN OF THE CRYPT.

* The rejection can hardly be on account of the author's youth. Such a plea might be put forward in some places, but hardly in a town that owes St. George's Hall to the genius of Elmes.

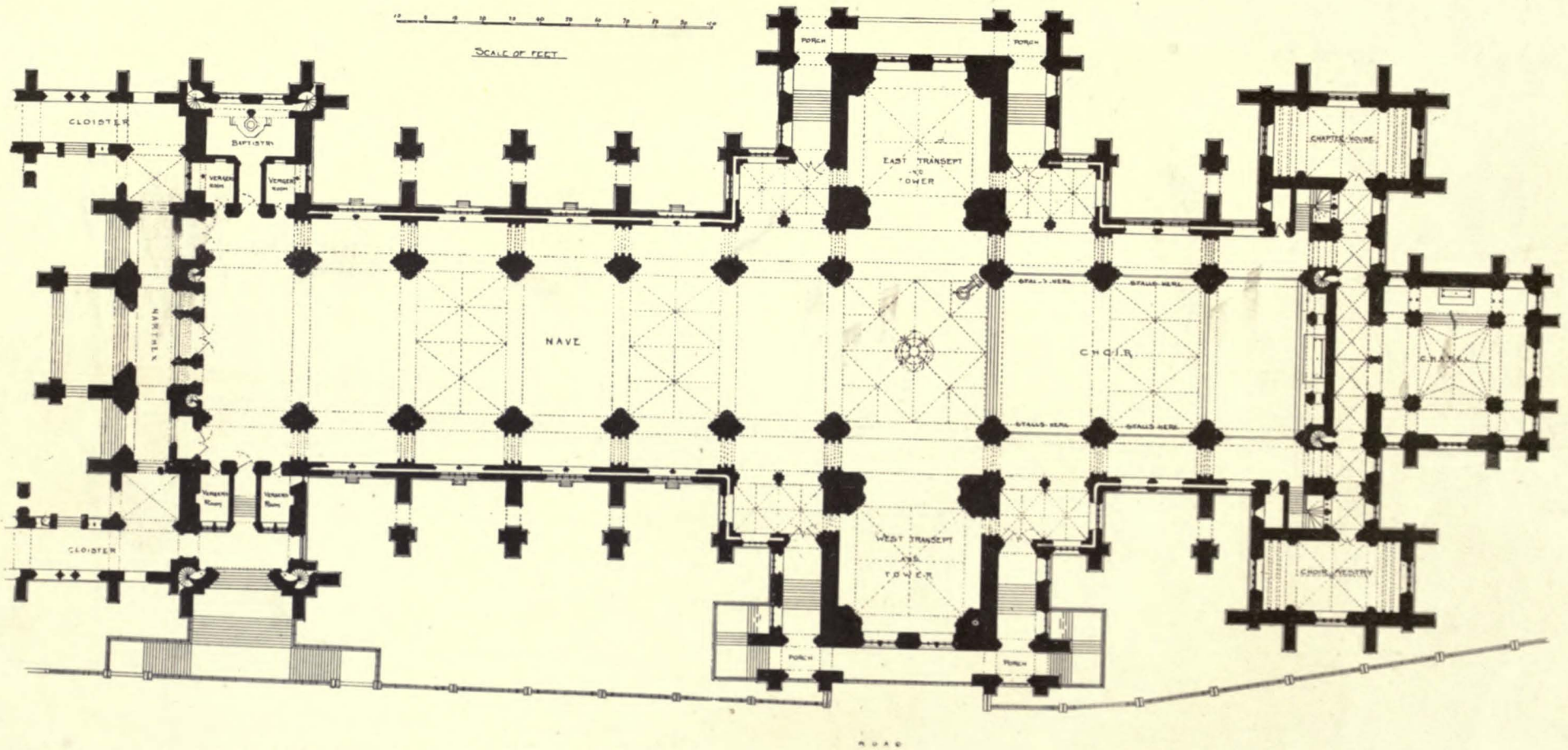


LIVERPOOL CATHEDRAL COMPETITION DESIGN BY G. GILBERT SCOTT.
CROSS SECTION, LOOKING EAST.

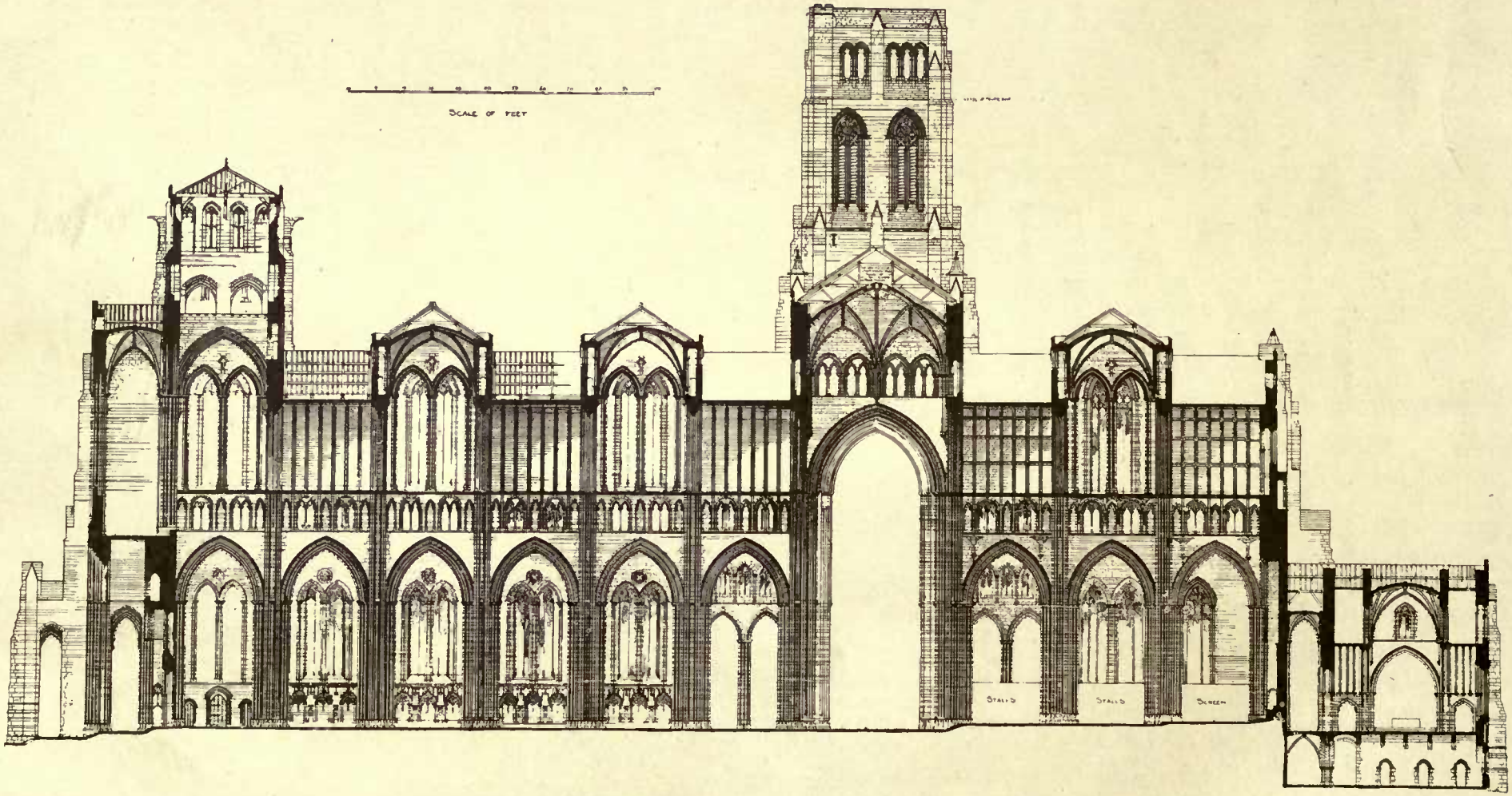
is so great (116 feet by 136 feet), that little danger need be felt that the vault will appear too much broken. There is no window in the south end (it must be remembered that the entrance is to the north) except a small circular rose window, and the assessors suggest that a larger one should be substituted. There is no difficulty in providing this, although one may think that Mr. Scott was perfectly right, considering the aspect, to keep his window as small as possible, and let it appear as a jewel in a wide setting. No competitor has faced the difficulty of providing a satisfactory approach to the cathedral, but Mr. Scott's suggestion of an atrium seems a possible solution. His entrances to the church, however, lack dignity, and appear too small. Another fault in his design is his vestry accommodation. This is not fully shown on the plan, but it appears to be inadequate.

As regards the point raised by the Committee that his plan is bad for seeing, his nave is certainly somewhat narrow. But it is evident that absolutely no reason exists why it should not be widened 5 or even 10 feet. If this were done, no shadow of a cause would remain for the rejection of his design. To pass it over will be a national calamity. It is in its way almost as great a work of art as St. George's Hall; and is stamped by an originality, without a trace of affectation, rarely met with in modern architecture.

F. M. Simpson.



LIVERPOOL CATHEDRAL COMPETITION DESIGN
BY G. GILBERT SCOTT. GROUND PLAN.



LIVERPOOL CATHEDRAL COMPETITION DESIGN BY G. GILBERT SCOTT. LONGITUDINAL SECTION.

THE GUILDHALL, PETERBOROUGH. THREATENED WITH DEMOLITION.

(See next page.)

The Guildhall, Peterborough,

Threatened with Demolition.

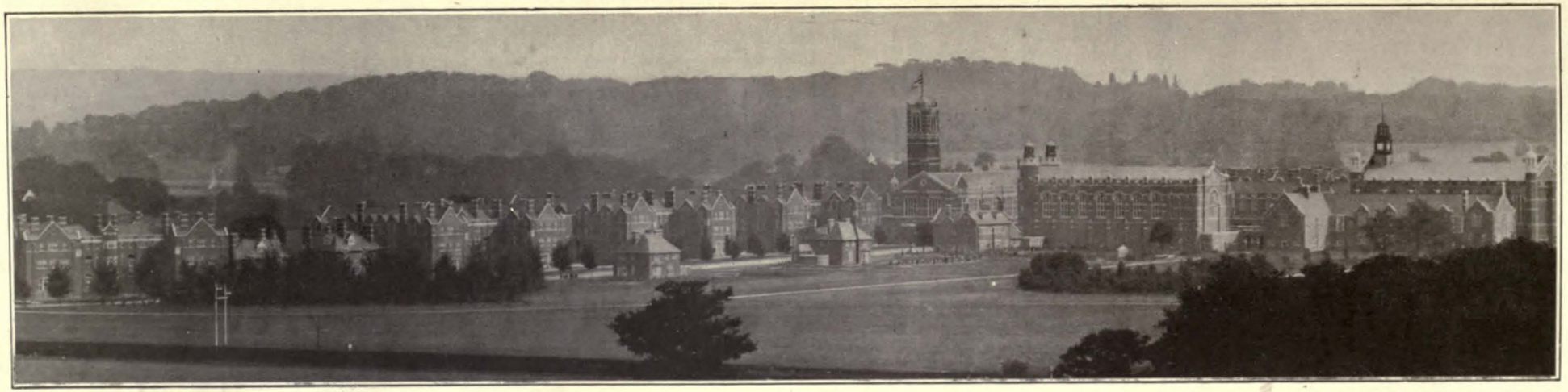
THE Guildhall at Peterborough was built in the reign of Charles II., whose arms appear on the east front. A little lower down the date 1671 is cut on the keystone of the centre arch. In plan there are two arches on the south and north sides and three on the east. The west side is concealed by an annexe, which does not improve the view of the old building. The first floor is supported on beams, the ground floor, as at Wallingford, Windsor, Uxbridge, and many other places, being open. The arches are built on low columns with wide capitals and square, plain bases. The windows of the upper storey are cross-mullioned in stone and dormers open in the roof, a gable and clock being over the king's arms. Altogether, this is almost the only building, outside the cathedral close, except the thoroughly-restored church of St. John adjoining, of which Peterborough can boast which does not belong to the nineteenth century or later. A movement has long been on foot among the citizens to remove it in favour of something larger, and, if we may judge by the specimen next door, something uglier, but it has so far been defeated.

W. J. LOFTIE.

Current Architecture.

CHRIST'S HOSPITAL.—The new buildings (at West Horsham) occupy an extensive estate of about 1,200 acres, three miles south-west from the town of Horsham. The buildings, designed by Messrs. Aston Webb, A.R.A., F.S.A., and E. Ingress Bell, and built by Messrs. Longley and Sons, of Crawley, Sussex, are of brick and stone, in an Italianised Late Gothic style, with but little ornamentation. The foundation-stone was laid by His Majesty King Edward VII. (then Prince of Wales), October 23rd, 1897, and the total cost, including land, has amounted to about £500,000.

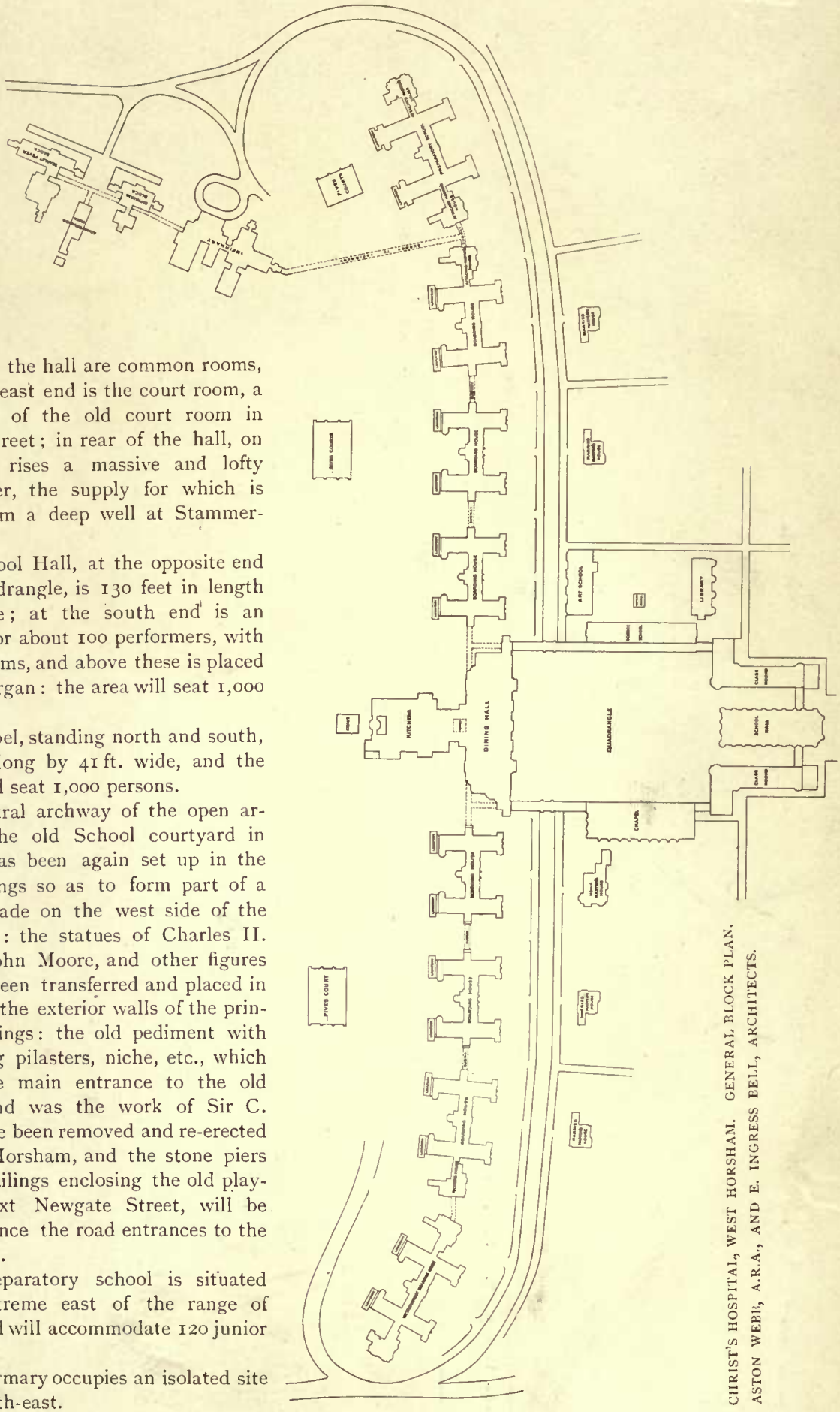
The boarding-houses, facing south, are arranged in detached blocks of two houses each, along the convex face of a flattened curve, on either side of the dining hall, which has kitchens and offices in the rear; to the east of this line, curving northwards, and therefore detached, is the infirmary, and beyond that, other detached buildings forming a sanatorium. In the centre, extending southwards from the dining-hall, is the great quadrangle, enclosed on the east and west by cloisters and open arcades; adjoining the cloister on the west is the chapel, and similarly placed, on the east, are art schools, the science schools and laboratories, and the library and museum; at the south end of the quadrangle stands the school hall, running north and south, and on either side of it are large detached blocks of class-rooms, connected with the hall by covered ways from the cloister. A broad roadway, lined with trees, runs out east and west from the north end of the quadrangle, and is continued round the curve northwards on either side to the boundary of the estate; this road separates the boarding-houses from the private residences of the masters, which lie to the south of it, on both sides of the great quadrangle, each having its own gardens, bounded on the south by a secondary road; beyond the school hall, southwards, is a large open space, with a straight avenue on each side, a measured quarter of a mile in length, for running, etc., and in the centre of its south side will eventually stand the music school. The house blocks are planned generally in the form of the letter H, each bearing the name of some distinguished old "Blue," each block consisting of two separate "houses," called in every case "A" and "B"; the central or connecting block in each is allotted on different floors to house and assistant masters, matron and maids, the boys being lodged in the transverse blocks, which have exits on the east and west; every "house" has on the ground floor its own day room, prefects' studies, changing room, and offices; the upper floors consist of dormitories, 83 by 21 feet, with baths and lavatories at each end, and separate staircases. The dining-hall, which has four entrances from the quadrangle, is 154 by 56 feet, and capable of dining 820 boys and the masters; the north wall is now almost entirely covered with the great painting by Antonio Verrio, formerly in the old hall, and representing the visit to the school in 1672 of King Charles II., and his foundation of the Mathematical School; there are also numerous fine portraits, and the old reading pulpit has been restored and set up on the south side; at the



GENERAL VIEW OF THE BUILDINGS.

Photos: A. H. Fry.

THE QUADRANGLE. THE CHAPEL ON THE LEFT, THE DINING HALL ON THE RIGHT.
CHRIST'S HOSPITAL, WEST HORSHAM. ASTON WEBB, A.R.A., AND E. INGRESS BELL, ARCHITECTS.



CHRIST'S HOSPITAL, WEST HORSHAM. GENERAL BLOCK PLAN.
ASTON WEBB, A.R.A., AND E. INGRESS BELL, ARCHITECTS.

west end of the hall are common rooms, and at the east end is the court room, a counterpart of the old court room in Newgate Street; in rear of the hall, on the north, rises a massive and lofty water tower, the supply for which is derived from a deep well at Stammerham.

The School Hall, at the opposite end of the quadrangle, is 130 feet in length by 50 wide; at the south end is an orchestra for about 100 performers, with retiring rooms, and above these is placed the great organ: the area will seat 1,000 persons.

The chapel, standing north and south, is 147 ft. long by 41 ft. wide, and the interior will seat 1,000 persons.

The central archway of the open arcade, in the old School courtyard in London, has been again set up in the new buildings so as to form part of a similar arcade on the west side of the quadrangle: the statues of Charles II. and Sir John Moore, and other figures have also been transferred and placed in niches on the exterior walls of the principal buildings: the old pediment with its flanking pilasters, niche, etc., which formed the main entrance to the old schools, and was the work of Sir C. Wren, have been removed and re-erected at West Horsham, and the stone piers and iron railings enclosing the old playground next Newgate Street, will be used to fence the road entrances to the new school.

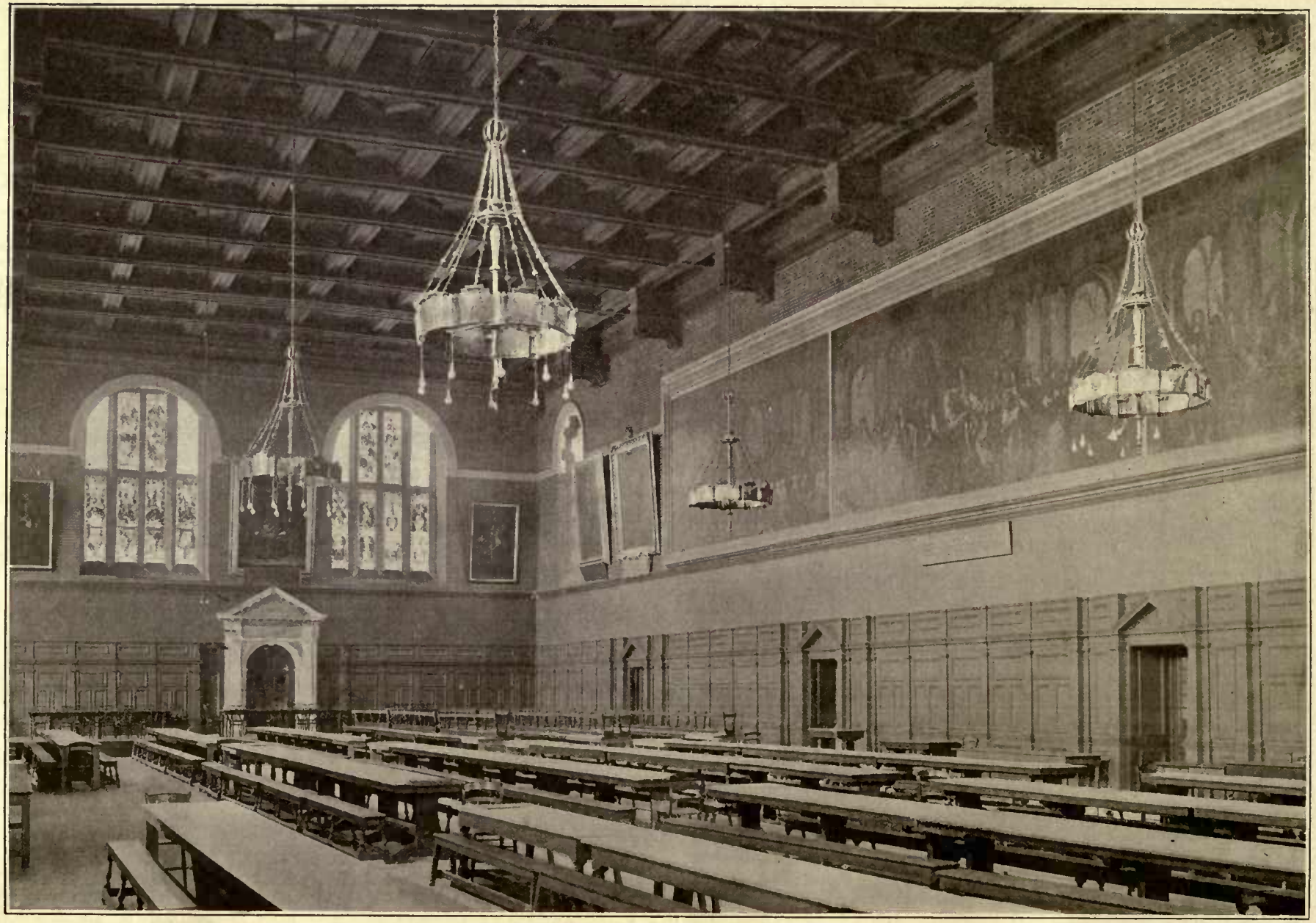
The preparatory school is situated at the extreme east of the range of houses, and will accommodate 120 junior boys.

The infirmary occupies an isolated site on the north-east.

SEMI-GRAND PIANO IN LOUIS XVI. STYLE.

Photo A. H. Fry.

CHRIST'S HOSPITAL, WEST HORSHAM. THE QUADRANGLE, LOOKING SOUTH-EAST.
SHOWING SCIENCE SCHOOL AND THE SCHOOL HALL.
ASTON WEBB, A.R.A., AND E. INGRESS BELL, ARCHITECTS.



CHRIST'S HOSPITAL, WEST HORSHAM. THE DINING HALL.
ASTON WEBB, A.R.A., AND E. INGRESS BELL, ARCHITECTS.

Photo: A. H. Fry.

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CHRIST'S HOSPITAL, WEST HORSHAM. THE CHAPEL, LOOKING EAST.
ASTON WEBB, A.R.A., AND E. INGRESS BELL, ARCHITECTS.

Correspondence.

ANDREA PALLADIO.

To the Editorial Committee of THE ARCHITECTURAL REVIEW.

GENTLEMEN,—

Mr. Blomfield has done me the honour of contributing to your columns a lengthy and somewhat splenetic criticism of my little book on Andrea Palladio; but in my judgment, such as it is, he has not added anything to our knowledge of the eminent architect about whom so much ink, both vitriolic and otherwise, has been spilt. Your readers will have gathered that, in Mr. Blomfield's opinion, both literature and history, so far as Andrea Palladio is concerned, would have benefited if it had occurred to him instead of to myself to write the book about which so much more has been heard than its author thought was possible when he penned it. I have distinctly stated that it is impossible to assert the authenticity of many of the statements made in my book as there are absolutely no proofs forthcoming. Mr. Blomfield with many "probables" and "possibles" can only reiterate what is believed, and surely my beliefs are as well grounded as his own. With regard to Palladio's earliest known work, it is *more* than probable that he was capable of working under the supervision of Trissino at the early age of eighteen, a fact stated by me. It is so easy to quibble, but I have failed to find that Mr. Blomfield has any evidence upon which he can either refute what I have stated as facts in the confident manner he tries to do, or assert as facts some of the bold statements which he has made, both to the disadvantage of the dead Palladio and the living Fletcher. Why doubt Milizia in regard to the name of Almerigo's house? Has Mr. Blomfield better information at hand? As to the spelling of different names, I have found much diversity among the various authorities. Vasari is known as Oasari; but in quibbling one might argue that his name was Aretino. I have referred to Bertotti Scamozzi under his first name in order to avoid confusion with Vincenzio Scamozzi. Regarding Palladio's original woodcuts they would give a quite inaccurate idea of most of the buildings as erected. As an example the Chiericati Palace might be mentioned, for to this building were added the unsightly stucco finials and statues not in Palladio's design. The "alarming" (?) developments called *L'Art Nouveau* I have failed to find outside a small section of Suburbia, and cannot see how my book, if otherwise written, could influence this movement. Antiquity in the time of which we write was generally understood to be that of the Romans, this, if Mr. Blomfield wishes, can be traced back to early Egyptian and prehistoric ages. Scamozzi is hardly reliable in regard to the list of his own and Palladio's finished works. In some writers' opinions his jealousy of Palladio was great and his conceit immense. The "rust of barbarity" is not mentioned as affecting the great architects. Palladio was born, as I have stated, in an age pregnant with ambition, "To continue the great work of the Renaissance," and we owe him gratitude for the records which he has left behind, records neglected by most of his predecessors. Mr. Blomfield is at some pains to prove Palladio's inferiority to many other architects and describes him as "An old man of the sea," and seems to grudge him the success he so well deserved. The knowledge of his "antecedents, 'the labours of his predecessors,' 'the intellectual atmosphere of the time that made them possible at all,'" would need to embrace at least two centuries of history, and this I have not attempted. Mr. Blomfield informs us that Palladio's extraordinary reputation is indeed a remarkable illustration of the "luck of history," that his position as an architect was not easy to determine, and that he lacked sincerity and originality; he yet finds (as an extenuation I presume) "that he had a great feeling for proportion, was a most ingenious planner, and so far as resource and knowledge go, a skilful builder." Is this the faint praise which damns? It is strange that Mr. Blomfield should also indulge in "literary embellishments." "That whirlwind of energy sweeping through every cranny of the ages" had evidently not accomplished its mission of regeneration in Palladio's time, hence the necessity of those writings which were in Mr. Blomfield's opinion invested with "a fallacious air of scholarship," and which were eagerly sought for and read. On this page of the "Review" we are told that "the heroes banged each other," that "clanging blows" were exchanged and that "heroes" cannot go on behaving like this for ever—I trust not. The Italians, by a gymnastic feat unknown to us, got clear of the straight waistcoat by turning their backs on their pedagogues, and we find them indulging in their freedom by a wild "orgy of exuberant architecture." The metaphor needs no comment. The fine instinct of the French is a point which I prefer to leave to Mr. Blomfield's superior decision. One is, however, glad to find near the end of this remarkable "Review" that, despite all his previous accusations against Palladio, he condescends to state that "as architects go" (does he mean archangels), "he was a learned man, a past master of technique, and an architect who, in (at least) two churches, shewed himself capable of fine and distinguished work." The "fallacious air of scholarship" is considerately toned down to "modesty" further on, and the former "insincerity" now becomes "a conscious stand against the impudent audacity of ignorance, and desire to recall the art of Architecture to the graver practice of the past." How pleased Palladio would be for this crumb from the higher criticism of Mr. Blomfield's table, and in his name we must thank this generous critic and remark that "All's well that ends well"—for Palladio.

BANISTER F. FLETCHER.

[As Mr. Fletcher complained of "gross unfairness" in the review of his book, we agreed to print a letter from him in reply, and accordingly insert it at length, with this explanation to our readers.—Ed. ARCHITECTURAL REVIEW.]