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With which is incorporated "Details". . .

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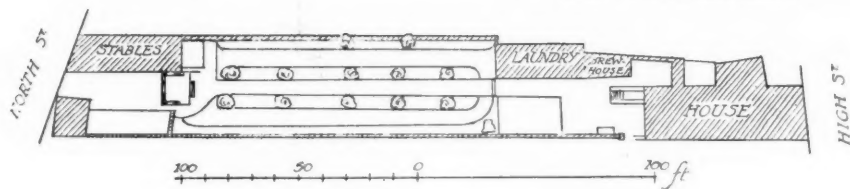


Photo: "Architectural Review"

CARVED WOOD VASE ON STAIRCASE NEWEL
NO. 25 HIGH STREET, GUILDFORD



Photo: "Architectural Review"



Plan of house, garden, and outbuildings, as originally existing.

NO. 25 HIGH STREET, GUILDFORD

BY J. ALFRED GOTCH, F.S.A., F.R.I.B.A.



THE house numbered 25 in the High Street of Guildford is an interesting example of what may be effected by care and skill in the treatment of a small and fairly simple problem. The frontage to the High Street (about 22 ft.)

is no wider than might be expected for an ordinary shop; the plot of ground upon which it is built widens out gradually at the back to a little over 40 ft.; in length it extends to rather more than 300 ft. Of this distance the house and its adjuncts occupy about 130 ft.; then comes a rectangular garden of about the same length; and at the further end are the stables. A straight vista is contrived down the middle, ending in a small garden-house which masks the stable yard. The whole arrangement is as simple as can be, but it has an air of distinction, and the unobtrusive evidences of thought which it displays are quite enough to lift it out of the vast region of the commonplace.

The same quiet handling marks the treatment of the street-front. The ground floor is occupied by the shop, which has a central doorway recessed between the two flanking windows, which are divided into large panes—not visible in the illustration because of the shutters. Below the glazed portion is the stallboard with carved panels, and the doorway itself is surrounded with bold carving and other architectural accessories. Happy were the times when the shopkeeper's demands did not exclude these interesting touches! In the present day every inch of

frontage must give facilities for the display of goods: even the space requisite for the support of the wall above, although attenuated beyond the limits of apparent safety, is grudged. There is no width left at the side of the door for carving, nor any height for it between the pavement and the window. All, all must be glass.

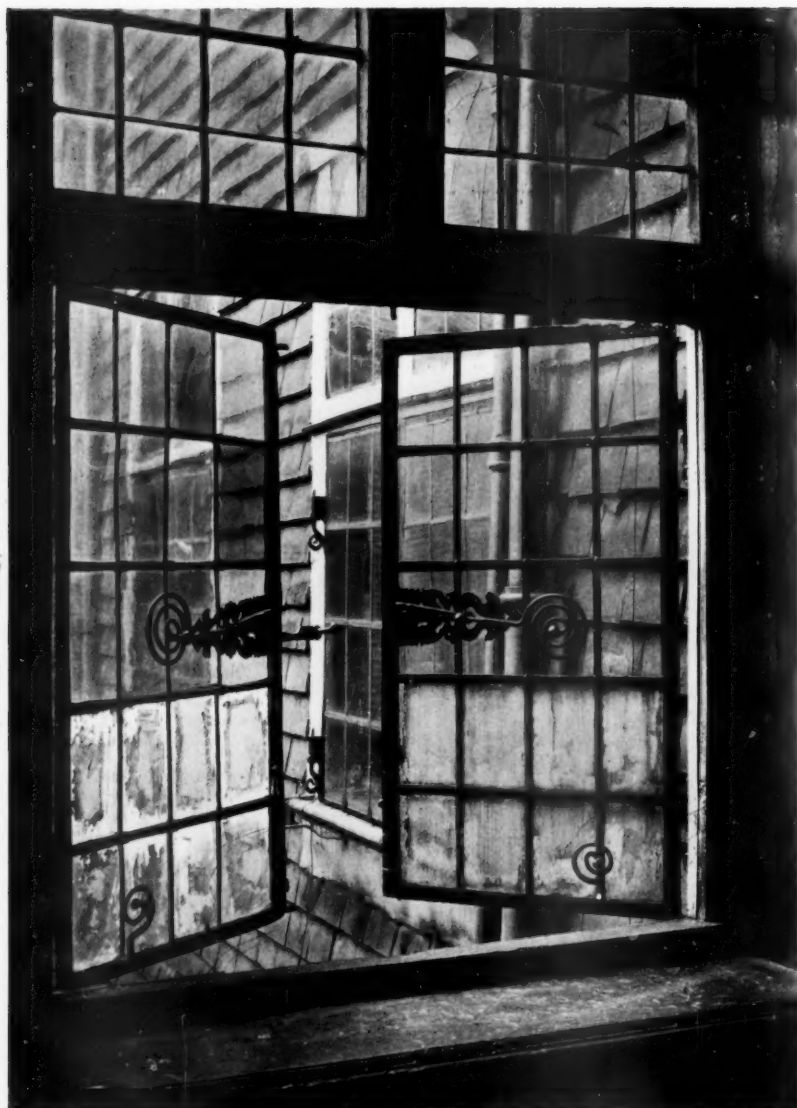
When this house was built, in the latter half of the seventeenth century,¹ the tradesman's demands were not so exorbitant, and the architect was able to impart a certain amount of dignity to a substructure substantial enough to satisfy the

¹ From information kindly given by Messrs. Clemence and Moon of Guildford it may be stated that the date 1665 is scratched on a window of the ground floor, together with the name James Bignold.



BAY WINDOW ON REAR ELEVATION OF HOUSE

Photo: "Architectural Review"



CASEMENT WINDOW, FIRST FLOOR

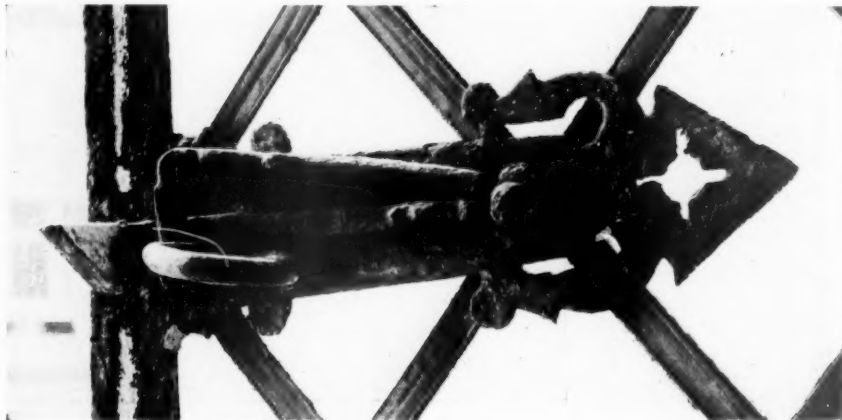
Photos: "Architectural Review"

eye that it was equal to the task of carrying the house above it. The house-front is projected beyond the shop, and is divided by pilasters into three bays, each of which contains a large window on the two floors. Enough wall space is still left to produce a broad effect, and the whole is crowned with a widely projecting cornice. By carrying a moulding across the strips not occupied by the upper windows the effect of a deep frieze is obtained; and

type is so unlike anything which the traditions of England could supply that the conjecture is

by stopping the pilasters below this moulding their height is made proportionable to their width. The middle window of the upper storey is slightly projected, and the cornice breaks forward round it; it is also brought forward above the side pilasters, thus enhancing the variety and interest of the whole composition by very simple means. On the first floor the middle window is furnished with a plain iron balcony, slightly enriched with a central panel, and with a kind of basket for holding a vase or flower-pot over the two corner standards. The whole front is an excellent example of simple ingenuity and judicious restraint.

Inside the house there is rather more richness of treatment, particularly in the staircase and the ceiling of one of the rooms. The staircase is of a type not widely adopted in England, although there are several examples of its kind. The newels are stout and plain, and the handrail and strings are correspondingly massive. But the particular feature which is most noteworthy is the boldly carved balustrade. This



CASEMENT FASTENER, SECOND FLOOR



Photos: "Architectural Review"



THE STAIRCASE



DETAIL OF CEILING TO PRINCIPAL ROOM ON FIRST FLOOR

Photo: "Architectural Review"

probably correct that we owe it to Dutch sources: and in support of this theory may be cited an example quite as fine, if not finer, in that small but highly interesting house, the Brewers' Hall at Antwerp. Provided the theory is correct, it is curious to reflect that while English and Dutch politicians were fighting, the workmen of the two nations should have been fraternising. In harmony with the balustrade are the boldly carved vases which serve as finials to the newels.

The ceiling already mentioned is in keeping with the date of the house, and follows the fashion of the time. In treatment it is far bolder and more massive than had been customary in the early half of the century. Deep, broad, and straight ribs form a square within which is a circular design. The modelling is in high-relief, although not so high as in some contemporary examples where much of the plasterwork was so detached as to require a core of wire: they march, indeed, in this respect with the wood-carving associated with the name of Grinling Gibbons. Here, however, the ceiling just avoids this exuberance.

The garden front is quite plain except for a rather quaint bay window with rounded angles.

The doorway which closely adjoins it is probably original, but it is a pity that the flight of steps which leads from it to the garden has lost its balustrades, which have evidently been replaced by the present heavy brick side walls.

Not a little of the whole effect of the house is derived from its lead glazing, which, although perfectly plain, imparts scale to the building and a lively play of light and shade, owing to the impossibility of maintaining the small quarries accurately in the same plane. The opening casements are generous in size, and are secured by some charming ironwork in the shape of fasteners.

These latter are very ingeniously contrived, and though so many years have elapsed since they were fashioned they are still effective, locking the casements in the tightest possible manner. From the large detail view of one of them (given on page 308) it will be seen that the catch-bar is raised simply by a turn, being pressed back into position by a spring.

The whole house is interesting not only for its architectural detail, but as an example of the sober magnificence affected by the superior shopkeepers of the period when John Milton sent a copy of his "Paradise Lost" to his "loving friend, Mr. Francis Rea, Booke-binder in Worcestershire."

FLINTWORK

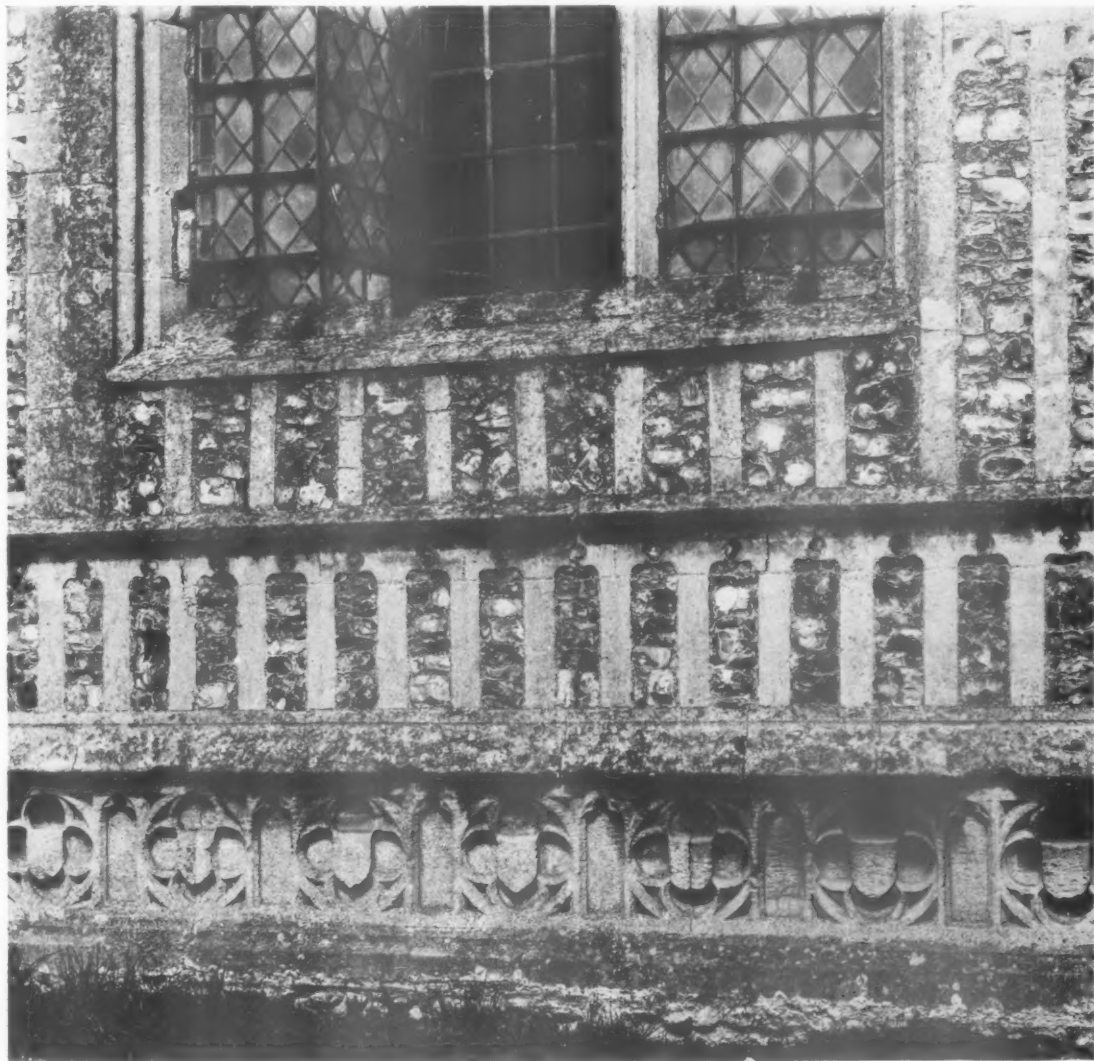


IN the Middle Ages, when transit was difficult and slow, wherever a chalky subsoil yielded an abundance of flint its use in local building followed as a matter of course; but it is only in the Eastern counties that a typical flint manner was developed.

Kent and Sussex show rubble walls of flint either undressed or split, with stone dressings, but never got beyond that simple use, except in the direction of small checker-work of flint and stone, as in the towers of Steyning and St. Clement, Hastings. Buckinghamshire and the adjoining counties have some very pleasing work of flint and chalk in checker patterns, which are also of sporadic occurrence all over the country, and persisting through the early Renaissance; but nowhere is anything

found to compare with the characteristic flint-and-stone panelled detail of Norfolk and Suffolk.

It would be a matter of considerable interest to trace the rise of this peculiar and distinctive treatment (by some called "flush-work") of which the remaining examples are entirely of the Perpendicular period, and somewhat late in the style, earlier flintwork in East Anglia being similar to the more ordinary treatment usual in other counties. The later work exhibits a marvellous degree of skill and accuracy, the faces of the flints being knapped to an almost perfect plane surface, and in some cases (as at the Old Bridewell, Norwich) truly squared as well. This superlative accuracy of workmanship in an intractable material is well shown in the charming south porch of Kersey, Suffolk—an early example, as flintwork goes. The porch-front is a stone structure in the main, many



DETAIL OF LADY CHAPEL, LONG MELFORD, SUFFOLK

Photo: "Architectural Review"

FLINTWORK



SOUTH PORCH, KERSEY CHURCH, SUFFOLK

Photo: "Architectural Review"

of the smaller patterns of flint being inserted as an inlay in shallow sinkings in the surface of the stone, as may be seen in the (extremely few) instances in which the flints have fallen out. Some of the details of this porch partake almost of the character of the mid-fourteenth century, and the porch spandrels carved with fishes and seaweed in extremely delicate relief are delightful, as are the characteristically Suffolk "crowned lion" label stops: but the Perpendicular style in Suffolk is

anything rather than the stark and stiff bogey conjured up by the generalising text-books. A curious feature (invisible in the photograph) is the occurrence of several merely incised foiled patterns on the stonework.

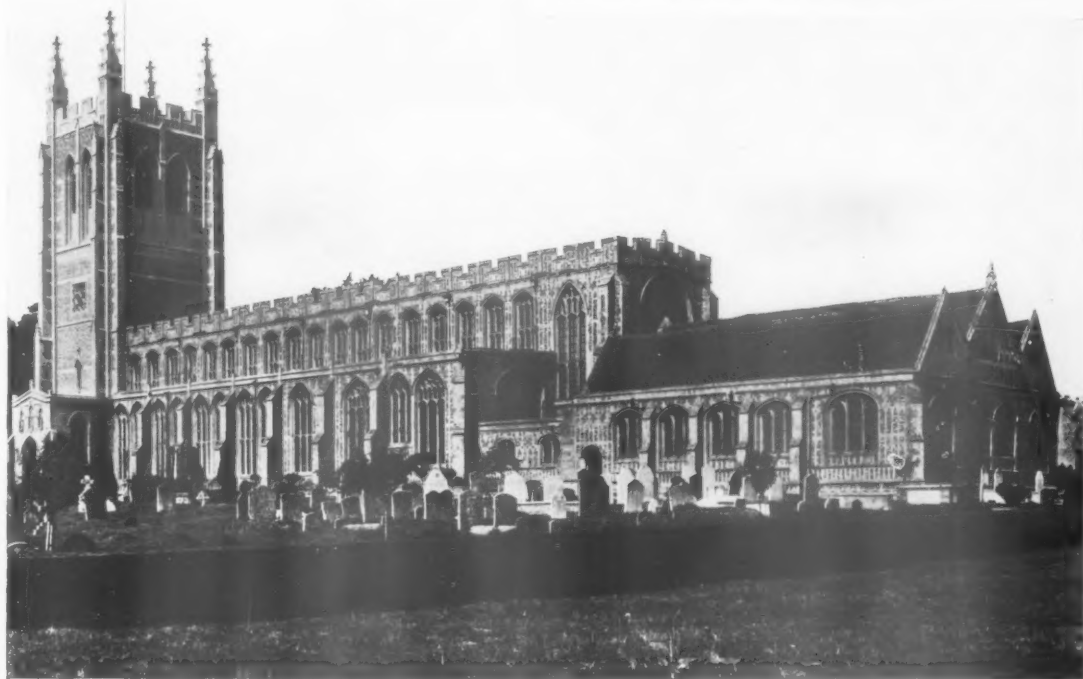
The split flints vary in tint from blue-black to rich yellow, and in some cases, as at North Walsham, they are carefully arranged in zones of different colour. At Kersey there is no ordered setting on any scheme of this kind, though black

flints alone are used for the quatrefoiled inlay above the second base-mould; in the rest of the work black, grey, orange, and all intermediate shades are mingled at random, and with the stonework, which has weathered to a silvery grey, produce a beautiful effect of sparkle when illuminated by sunlight.

The most usual positions for the display of flint panelling and inlay are the south porch and west tower—it is but rarely that a complete church is uniformly covered with this enrichment. Such examples do exist, however, notably Long Melford and Stratford St. Mary, in both of which cases shields, monograms, and badges are displayed in stone on flint, or *vice versa*. The work at Long Melford, of which a portion is shown, appears to be actual panel construction, and extends over every foot of that extremely large church, with the exception of the buttresses; at Stratford the buttresses are panelled as well. At Lavenham the use is more sparing; here the aisle walls, porch, and parapets are faced entirely with stone, flint appearing in the walls of the fourteenth-century chancel (as rubble), the Spring chapel, clearstory spandrels, and west tower. The last-named is nobly treated, black flints being used in mass for the walling, with square angle turrets of panelled ashlar, and deep voussoirs above the label-moulds of all openings, alternately flint and stone. The



THE TOWER, LAVENHAM PARISH CHURCH



LONG MELFORD CHURCH

introduction of the mullet or five-pointed star of the de Veres at several points of the walling lends interest to the surfaces.

Some doubt may be felt as to how far these flint-panelled buildings possessed their present charm when first erected. It is difficult to imagine such fine towers as Lavenham, Southwold, Walberwick, Wymondham, or Holme ever looking other than noble; but though the modern west tower erected at Long Melford by the late Mr. G. F. Bodley is respectable after its kind, its effect is hard and unsympathetic, and all modern-dressed flintwork seems of necessity to possess these qualities.

EAST ANGLIAN ROOD-SCREENS

THE very interesting series of painted screens of East Anglia described and illustrated in the April issue of *THE ARCHITECTURAL REVIEW* might be supplemented by the well-preserved fragment at Kersey, Suffolk, which has apparently escaped general attention. The portion remaining consists of the base of one side of a screen contemporary in date with the bulk of the church's fabric—i.e. of the late fourteenth century. It bears a series of six

painted figures (possibly later), all seemingly representing kings. The paintings are darkened by age or varnish, but are otherwise unharmed, and their subjects could doubtless be ascribed. It is at any rate safe to name the second from the left St. Edmund the King and Martyr, as he is identified by the arrow which he carries, and was a popular saint in Suffolk within the influence of the monastery of Bury. The various panels are simple and dignified in design, and their drawing shows considerable skill. The general colour-scheme from left to right is: 1st panel—pale blue robe, red ground; 2nd panel (St. Edmund)—red and ermine robe, green ground; 3rd panel—green and ermine robe, red ground; 4th panel—red robe, green ground; 5th panel—grey or faded blue robe, red ground; 6th panel—red robe, green ground. There is a considerable amount of jewelled detail in crowns and collars, standing up in relief and executed apparently in gesso.

Kersey, like Worstead, was a great centre of the woollen industry, and conferred its name on a species of fabric—kerseymere; while the adjoining village of Lindsey is also known for the term linsey-woolsey.

EDWIN GUNN, A.R.I.B.A.



Photo: Edwin Gunn

PORTION OF SCREEN AT KERSEY, SUFFOLK

GOTHIC VAULTING

BY C. R. HOWLAND



HISTORICALLY the vault is the most important structural feature of Gothic cathedral architecture, for it was through the efforts made to solve the problems of its erection that the fundamental law of the system, the functional grouping of supports, was developed.

When the builders of the thirteenth century grasped the value of the vault in spanning wide spaces, and attempted to employ it in the naves of their churches, they came face to face with this mechanical and artistic difficulty—they could not rely upon inert mass for the equilibrium of such large piles as they were contemplating; they must seek a less clumsy means of sustaining the tremendous vault-thrusts.

They did not need to look for new constructive principles. Two quite efficient—balanced thrust and concentration of strains upon isolated points of support—they had inherited from the building methods of older times; for not only did all the constructive members of the Gothic church exist in the earlier Romanesque, but even the Romans had known the use of arches and vaults exerting side thrusts that were met by external abutments, and neutralised by downward pressure upon the walls operated on, and had been familiar also with the mode of sustaining vaults by a framework.

The task that lay before the mediæval architect of the Gothic school was, therefore, merely to re-apply old principles in a novel way, to solve through them a new and difficult problem—the successful elevation of immense vault formations.

In Roman and Romanesque days the structural elements enumerated had been used in a purely rudimentary manner, especially the systems of external and internal supports. The buttresses, for instance, were not in Roman edifices confessedly functional members, devised to meet with economy and efficacy a lateral pressure; on the contrary an effort was made to disguise them, either by planning buildings in such a way that some of the enclosing or dividing walls should stay the vaults, or else by employing vast walls which would secure stability by their inert mass. Occasionally engaged columns were placed on the outside of walls at points where stress would naturally be met, but they were employed merely for a decorative purpose.

There was an advance in the system as the Romanesque builders improved the art of construction. The engaged columns were replaced

by pilaster strips, which were used partly for ornament and partly to stiffen the walls, less massive than similar Roman formations had been. These pilasters had not sufficient projection to bear much vault pressure, but they were capable of enforcing the aisle walls against vaults of little span. They were of considerable importance historically, for they marked the place where in erections of this kind the walls required additional strength; and later they developed into true buttresses, when Romanesque builders found, in beginning to vault the nave, that the pilaster buttresses, which had been adequate to stay the walls of the vaulted aisles, were not equal to the thrusts of vaults of greater span. The expedients adopted to increase the resistance of the clear-story buttress developed the principles that were to recreate by a gradual evolution the Romanesque style into the Gothic. Nor was the elementary character of the internal supports less marked than that of the exterior system in Roman and Romanesque buildings. The framework supporting the vaults was buried in the thickness of the masonry, instead of made to project from, or even to appear upon, the vault's surface.

The beginning of Gothic dates from the earliest functional grouping of supports in the twelfth-century churches of San Michele of Pavia and San Ambrogio of Milan. The growth of the rudiments embodied in these Lombard structures is not, however, to be traced through Italian monuments of architecture. We must go north of the Alps to study the transitional stages to the final perfection of the Gothic form.

This is the natural sequence: The Italians, for their part, had a style, which, inherited from their ancestors, had gradually become modified to meet their needs. The people north and west of the Alps, on the other hand, had up to this time blindly imported building forms which were not well suited to their climate and their race. Unbound by classic traditions, and dissatisfied with the existing architecture, the latter were ready to seize upon and to grapple with an artistic problem, through the solution of which a suitable system might be built up. Therefore, when the rudiments embodied in the Lombard churches were transmitted to the north they were accepted and developed logically in accordance with climatic and local conditions, and in a manner expressive of the distinctive genius of the people.

The earliest Gothic movement was confined to the Ile-de-France, a region now largely included in the departments of the Seine and the Oise. Later it had rather wider boundaries, which embraced the royal domain of the Capetian Dynasty

GOTHIC VAULTING

and portions of the adjacent provinces of Champagne, Burgundy, Orleans, and Berry. Throughout this section the movement was general and spontaneous, although some localities were more apt than others at grasping the value of the principles imported from Italy.

To study adequately the evolution of Gothic from Romanesque we must consider buildings that antedate what is generally regarded as the transition period, monuments of the twelfth century, which are essentially Romanesque, containing only elements of the Gothic, showing merely the beginning of a movement toward an independent structure that will have in every part an artistic as well as a mechanical value.

The more important problems involved in the development of the style can be best realised by following a brief outline of the primary growth of the system of external supports. An early form of the flying buttress appears in the twelfth-century Abbaye-aux-Hommes at Caen. Here an attempt was made to enforce the vaults, the groin-arches of which are curves of low sweep exerting strong lateral thrusts, by springing a demi-vault from the top of the aisle walls to abut it against the nave walls under the aisle roof. This concealed flying buttress was illogical, and essentially inefficient, for only a fraction of its strength met the thrusts of the vaults, the rest being wasted upon the walls between the piers where no props were required. The level of abutment was, moreover, lower than the point of greatest thrust. The strength of this constructure, therefore, resides necessarily as much in the inert mass of its wall as in its system of abutments.

The next step is seen in the development of the flying buttress at the Abbaye-aux-Dames at Caen, and in Durham Cathedral. Here the demi-vaults were sprung from the aisle walls opposite the piers, and abutted at the piers only at the points where the thrusts of the vaults were gathered. These arches were not quite effectual; their point of abutment was too low, and much of the strain of the vault-thrust consequently fell upon the walls. Therefore, inasmuch as they are neither well adjusted nor externally apparent, these abutting arches, although true flying buttresses, are not the logical members of Gothic architecture.

In order to appreciate that the evolution of the other components of the Gothic building involved similar difficulties, we have only to reflect upon the absolute interdependence of the parts of the Gothic edifice. The shape and performance of each of these constructive elements are vitally affected by the nature of others with which they are related. The configuration of the vault determines the character of its supports; upon the shape and disposition of the buttresses depend largely the

equilibrium of the structure and its artistic effectiveness; the piers share the labour of the buttresses, and supply to the rib members functional support; the rib system, as it appears in its perfected form, constructed quite independent of the vault, serves as a strong centering, and prevents any rupture occurring in one part of the vault from spreading to other cells; and at the same time, built as it is with each of its ribs resting upon an individual stay, it carries out the principle of functional grouping of supports which the buttresses and piers observe.

The first definite stage in the development of true Gothic begins with the introduction, as a constructive device in vaulting, of the pointed arch, which had up to this time been used only as an ornamental feature in windows and doors; for, lessening materially the difficulties with which architects had to contend, this innovation marked the beginning of a sure and rapid advance. In the first place, because it exerted a less-powerful thrust than the round-arched vault, its external stays could be considerably reduced.

Through the experiments that resulted, the flying buttress was brought more directly to bear upon the points of greatest pressure. To meet these points, which were higher than those upon which the abutting arches of the Abbaye-aux-Hommes and Durham Cathedral had operated, it was necessary to spring flying buttresses over the aisle roofs, and make them marked external features. Examples of this form we find in Saint-Remy at Rheims, Saint-Leu-d'Esserent, and Saint-Germain-des-Prés at Paris. This important improvement of external supports the pointed arch supplemented by melioration of the vault form itself. Through its use it became possible, with a given span, to erect the crown of the vault to any level. Thus groined arches could be erected over the oblong compartments of the naves without either doming or stiling, a thing which had been impossible with the round-arched vault, with its compartments separated merely by transverse ribs.

The early Gothic method is seen in its inception in the ground-storey vaults of the eleventh-century Abbey Church of Morienvall, near Crépy-en-Valois; and is found in its complete character in the later Abbey Church of Saint-Denis, which dates from 1137 to 1141. In spite of the fact that the system employed in the apsidal aisles of the church at Morienvall was awkwardly and incompletely carried out, two important principles were introduced—the use of the pointed arch and the curving of the diagonal vault ribs. The pointed arches were poorly conceived and adjusted, and show plainly that they were introduced as a result of experimental efforts to vault successfully a curved oblong



RHEIMS, WEST FRONT

June 1911

GOTHIC VAULTING

space; and that they were not used because their form was admired for its artistic value. As for the vault ribs, one is missing, and the other—a heavy, round-arched one—is not well applied.

The advance upon Morienvall made in the church of Saint-Denis is so great that it would seem as if there must have been intermediate progressive steps, although we are not able to trace them. In the well-developed apse and choir aisles which at Saint-Denis replace the rudimentary apsidal aisles of Morienvall the vaults are adequately executed, and are sustained by a full rib system of which the transverse and longitudinal members are pointed, and the diagonals, round-arched, strengthen the groins by their vigorous projection. By the intersection of the ribs far above the crowns of the enclosing arches the vault cells are much domed. Thus the rib system is not only independent, but it performs as well a new office, in that it determines the forms and constitutes the strength of the vaults, a function which, so far as it is possible to discover, it had never fulfilled up to this time.

These vaults of Morienvall and Saint-Denis are, it must be remembered, ground-storey vaults of small dimensions. The efficacy of the constructive members adopted can be better estimated by the degree of success of their application in the vaults and vaulting systems built on a larger scale.

Although chronological sequence cannot be accurately determined, it would seem that the cathedrals of Senlis and Noyon were erected very soon after the Abbey Church of Saint-Denis. The original choir vaults of Senlis must have been the very earliest of any considerable scale that were constructed upon the Gothic principles above noticed. The configuration of this vault is of special significance. The shape and arrangement of the supporting piers indicate that the original vaults, which have since been replaced, were sexpartite, a form regarded by many authorities as the earliest used.

Just what the initial progress of sexpartite vaulting was in France proper it is not possible to ascertain, since hardly any vaults built upon this model prior to those of the Cathedral of Paris, which was completed about 1180, remain on the Ile-de-France. Much may be learned, however, concerning the early development of this form from the sexpartite vaults of the Norman churches at Caen. Those of the Abbaye-aux-Hommes, which date from the beginning of the twelfth century, are certainly among the first, if they are not, indeed, the very first, sexpartite vaults built. They are not truly Gothic; their rib system, lacking longitudinal or wall ribs, is not complete, nor is it independent, for its ribs, instead of disposing the form of the vaults, are themselves determined

by their forms; moreover, the transverse ribs are round-arched and the diagonals elliptical, and they violate the Gothic law by exerting the maximum instead of the minimum thrust. Without doubt, nevertheless, they furnish the pattern upon which the Gothic sexpartite vault was later built up. The lateral vault cells, on account of the positions and the curves of the intermediate and diagonal ribs, take on a new character, which is, in a rudimentary manner, Gothic, for twisted surfaces are necessary to cover the triangular spaces enclosed by these ribs and the clearstory wall. Still, because of the peculiar upright elliptical form of the longitudinal arches, these superficies are not especially pronounced, and give an awkwardness of effect not characteristic of the similar twisted surface of the Gothic system. This feature is very important, since it was upon this concentration of thrusts at the highest possible point that the compactness of the pier, which is so essential to the Gothic system, depends. Probably the adoption of this particular kind of vault at the Abbaye-aux-Hommes was due to the unusual arrangement of the piers, which have alternately a single engaged shaft and a shaft coupled with a broad pilaster—a method derived from the Lombard churches, which exhibited a reciprocal disposition of piers.

Whether or not the principle of the sexpartite vault and its appropriate system was really discovered and rudely embodied merely by accident in the Abbaye-aux-Hommes at Caen, it certainly became fruitful at once on the Ile-de-France, where it was consistently worked out to its perfection. In the cathedral at Senlis, where the piers alone indicate by their shape what must have been the rib skeleton regulating the construction of the vault, the full artistic and scientific value of the constructive law had been educed.

From the present remains it is not possible to decide what the external means of abutment of the high vaults was at Senlis; and as there are no evidences that any flying buttresses, sprung over the aisle walls, existed at this period, it seems probable that the heavy piers, reinforced by the triforium vaults, sustained the thrusts. The main piers, made up of square members and engaged vaulting-shafts, were excellent, both in their functional grouping and in their expression; but, being very massive, they took up too much room. In the erection of these component parts, a new skill in masonry is shown in the selection and in the handling of material, a factor very important in the growth of the Gothic system. Indeed, in every particular this cathedral illustrates strikingly the logical course by which the style attained its final effectiveness; for while the interior, though heavy in its proportions, is frankly Gothic, the exterior is peculiarly Romanesque. In this manner



SENLIS, LOOKING EAST

GOTHIC VAULTING

the French Gothic grows, from within outward, developing organically by a gradual perfecting of its essential framework, and leaving outer details as a last consideration.

At the contemporaneous Cathedral of Noyon, the choir, although larger in its scale, and built in a manner somewhat lighter and freer, resembles in many particulars that of Senlis. The vaults, which have been preserved to the present day, are quadripartite in oblong compartments. Therefore the vaulting-shafts and piers succeed one another in a uniform series, instead of varying alternately. The vaults are but slightly domed, since only their transverse ribs are pointed, and the round-arched longitudinal ones are stilted so much that their crowns are brought up to almost the same level as the crowns of the diagonal members. The transverse and diagonal ribs are respectively supported by three vaulting-shafts, which rest on the capitals of the ground-storey piers. The ground-storey piers of the choir proper are plain round columns with a single engaged shaft. The single columns of the sanctuary are more slender than those of the choir, and are monolithic with a slight entasis; their capitals are pure Gothic in their functional adaptation to the peculiar structural conditions. The means of external support cannot be determined with accuracy, inasmuch as the buttress system has been reconstructed; it is probable, however, that true Gothic flying buttresses were sprung over the aisle walls to abut against the high clearstory.

The Gothic principles, already far advanced in this choir of Noyon, are more completely carried out in the nave of the same church, where the lighter proportions of shafts and piers and the greater magnitude of openings, evince a better understanding of the freedom afforded by the new constructive method. Further evidence that a distinct stage of advance has been effected may be found in the choir of Saint-Germain-des-Prés, Paris, the nave of Saint-Stephen's at Beauvais, the churches of Saint-Leu-d'Esserent and Saint-Martin at Laon, and other similar edifices, which were undoubtedly of about this same period.

In the greater cathedrals of the latter part of the twelfth century and of the beginning of the thirteenth—the cathedrals of Paris, Laon, Chartres, Bourges, Rheims, and others—we may study the surprisingly rapid development of the Gothic style to its highest perfection. Of these edifices, the Cathedral of Paris is the first in which a systematic application of the Gothic principles is distinctly shown; and the efficiency of the system could not be better illustrated than in the nave, the vaulted stone roof of which has stood intact for seven hundred years. Its vaults are sexpartite in form. The cells are entirely governed

by the sustaining ribs, of which the longitudinal are pointed and the diagonals semicircular. The latter intersect at a point higher than the level of the crowns of the transverse ribs, the intersections of which are, in turn, higher than the crowns of the longitudinal members; in consequence the vaults are distinctly domed, assuming a form almost universal at that time. The lateral vault-cells are naturally oblique to the axis of the nave, and their surfaces are very irregular on account of it. This peculiarity Moore, in his "Gothic Architecture," explains as follows:—

"More or less obliquity and irregularity of surface is a constant and necessary characteristic of true Gothic vaults, even of those which are quadripartite. Gothic vaults are never simple intersecting pointed vaults. The new constructive principles do not permit of such forms. Gothic vault-forms do not permit of description in geometric terms. They vary according to the spans, the altitudes, the curves, the points of springing of the arches that compose the rib system, and it is by the forms and relation of these arches only that such vaults can be described. In the vaults of Paris the filling-in consists of successive courses of arched masonry reaching from rib to rib over each triangular space of the plan. The beds of these successive courses are not parallel one with another, but incline variously according as the mason found necessary or convenient in developing the twisted concave surfaces required by the varying spans and positions of the ribs. In early vaults like those of Paris the courses usually have considerable rise near their springing, from the longitudinal rib toward the diagonal; and they become more level as they approach the crown of the vault, where they are more nearly parallel. But perfectly parallel they hardly ever can be where each course is properly a surface which is concaved in all directions. The masonry of these vaults, especially in the choir, is perfectly faced, and closely jointed."

We see the progress of the style continued at Paris—the slender vaulting shafts rest upon the immense capitals of the cylindrical columns which constitute the ground-storey piers, and by the attenuation of these supports the inner space of the edifice is considerably increased. The equilibrium of the building is maintained entirely by the opposing action of thrust and counter-thrust. Originally there were double flying buttresses: the piers which divided the double aisles rose above the roof to meet each the head of a flying buttress, that sprang from the outer buttress to span the outer aisle, and to support another flying buttress, which in turn sprang over the outer walls to abut against the great piers. In fact there is but one defect in logic in this building: an incon-

gruity between the sexpartite vaults and the form and magnitude of their sustaining piers; this, moreover, seems to have resulted from changes made in the building after the construction had reached the springing of the vaults.

The difference between the Cathedral of Paris and contemporary erections of a similar character was merely in unessentials, which varied according to local taste and individual architectural genius. In no two are the structural parts arranged exactly alike, but in all of them is shown a clear apprehension of the new style.

The system made further progress as the thirteenth century advanced. One of the first improvements effected was in the construction of the ground-storey pier. The plain round columns, which at Paris and Laon had replaced the huge and inconvenient but entirely adequate piers of Senlis and of Noyon, had been found unsatisfactory, since they failed to afford independent supports for the various members of the superstructure. This defect was remedied in a pier built for the nave at Paris, a pier which was essentially Gothic in its construction, since it provided continuous support from the pavement for all the vaulting members. From this time forward the continuity of the members, from the pavement upwards, was invariably observed in Gothic buildings; this does not mean that each vaulting member had an individual support from the pavement, but that each group of the superstructure rested upon an independent ground-storey shaft. Furthermore, after the beginning of the thirteenth century, sexpartite vaults, which had up to this time been the popular form, yielded their place to the quadripartite vault. Much improvement was, however, effected in this form. The long longitudinal round arch was replaced by the pointed arch, which had been employed in the sexpartite vaults of Paris, and in similar buildings of the same period; and the excessive doming of these early vaults was done away with, by bringing the crown of all the arches more nearly to the same level. The rib system of these later edifices is, in the number and function of its members, closely correspondent to that of the finished earlier system—it is quite complete in its constructive members and in its independent pier supports; but ridge ribs and surface ribs are not yet introduced. In a word every member of a Gothic building is now logically conceived and adjusted, but excellence in treatment of detail is not invariable in dealing with minor structural exigencies.

We have yet to see the fullest distinctive perfection of the Gothic system fully realised in the Cathedral of Amiens, begun in 1220, which is, in its scale, the finest in France. Here there is a

grand summing-up of all the Gothic principles, efficiently and artistically applied.

Of just what are the characteristic features of a fully developed Gothic cathedral structure we can gain a clear idea from Moore's excellent summary:

"1. The plan consists of a nave, the eastern portion of which forms the choir, with side aisles (sometimes single, sometimes double), and a transept, usually also with aisles. The nave and the aisles terminate at the east almost invariably in either a semi-circle or a polygon, around which the aisles are continued. At the west the termination is square, the aisles of this end terminating in towers. The nave is separated from the aisles, and the aisles when double are separated from each other by rows of piers which support the superstructure. The whole is enclosed on the ground storey by a thin wall, beyond which, opposite the piers, are the far-projecting and massive buttresses.

"2. The vaults, whose plan and construction determine the number and arrangement of the piers and buttresses, are furnished with a complete set of ribs, namely transverse ribs, diagonal ribs, and longitudinal ribs. These ribs are independent arches, of which the transverse and longitudinal ones are pointed, while the diagonals are usually round; and upon them the vault masonry usually rests—the one never being incorporated with the other.

"3. The ribs spring from slender shafts, compactly grouped, and often detached, though having their bases and capitals incorporated with the great piers which rise from the pavement, through successive storeys, to the nave cornice. Each one of these piers is a compound member consisting of a central body, with which are incorporated all the vaulting shafts, besides the columns which carry the pier arches to the ground storey, and those above which carry the arches of the triforium, and finally the buttresses of the clearstory. Upon the piers are concentrated all the side pressures of the vaults, but these side pressures are so neutralised by the buttressing that the piers require only to be massive enough to bear the weight of the vaults.

"4. The clearstory buttresses which receive the thrusts of the nave vaults are reinforced by flying buttresses springing over the aisle roofs and rising from the vast outer buttresses, which are incorporated with the respond piers of the aisles.

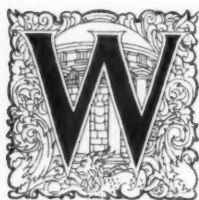
"5. The walls, required for the enclosure only, are reduced to the minimum of thickness, and are confined to the ground storey and to the spandrels of the arcades. The apertures fill the whole space laterally between the piers."

Such a logical composition as this which Moore has described is that culmination of Gothic art—the Cathedral of Amiens.

NEW LIGHT ON OLD SUBJECTS

V—COCKERSAND ABBEY AND ITS CHAPTER-HOUSE

BY ALFRED W. CLAPHAM



WITH but little variation the great majority of monastic establishments follow the well-defined lines which custom and the exigencies of the conventual life had laid down in the early years of the Church.

It is consequently only occasionally that an abbey or priory ruin in this country presents any important deviation from the general plan of them all, and it is in the endless variety of their detail that most of their interest is centred. The abbey of Cockersand is thus fortunate in having possessed and retained a chapter-house of that polygonal form which flourished in this island alone, and even here never became a common feature. In addition to this, the abbey choir stalls, a unique example of early wood-carving, have also been preserved, though removed from their original position. The chapter-house at Cockersand, while it does not challenge comparison with the great structures at Lincoln and York, being indeed of comparatively small size, is yet a refined and beautiful expression of "Early English" art which has hitherto almost escaped notice. The stalls also, though a cast of part of them rests in the Architectural Museum in Tufton Street, have hardly received the recognition they deserve.

Situated on a flat tract of land lying between the estuaries of the rivers Lune and Wyre, half-way up the coast-line of Lancashire, the Abbey of Cockersand is remarkable for the dreariness of its surroundings. The level meadows, intersected in every direction by dykes that stretch for two miles inland from the ruins, were at one time little better than a great salt-marsh, inundated by the spring tides and fit for little else but pasture. The outer walls of the abbey itself, built upon a slight eminence looking over the desolate sands of Morecambe Bay, were again and again undermined by the attacks of the sea. "St. Mary in the Marsh upon the Cockersand" was indeed, in position and surroundings, no desirable retreat, and it is singular that a convent of considerable wealth and importance

should have risen in so remote a spot. Founded first as a hospital towards the close of the twelfth century, it soon rose to the dignity of an abbey, being colonised by Premonstratensian canons from Croxton in Leicestershire. Its history is chiefly a record of disputes with the neighbouring priories of Lancaster and Cockerham, and presents few features of interest to the general reader. At the close of the fifteenth century the records of the successive visitations of Bishop Redman provide a more intimate picture of the life of the inmates. Excessive drinking, it appears, was indulged in, and two of the canons had to be exiled to other houses for a more serious offence. When the abbey fell amongst the greater monasteries in 1539, it was tenanted by twenty-three canons. Their home soon after came into the hands of the lords of Thurnham Hall, whose suc-



FOURTEENTH-CENTURY STALLS FROM COCKERSAND ABBEY
NOW IN LANCASTER PARISH CHURCH

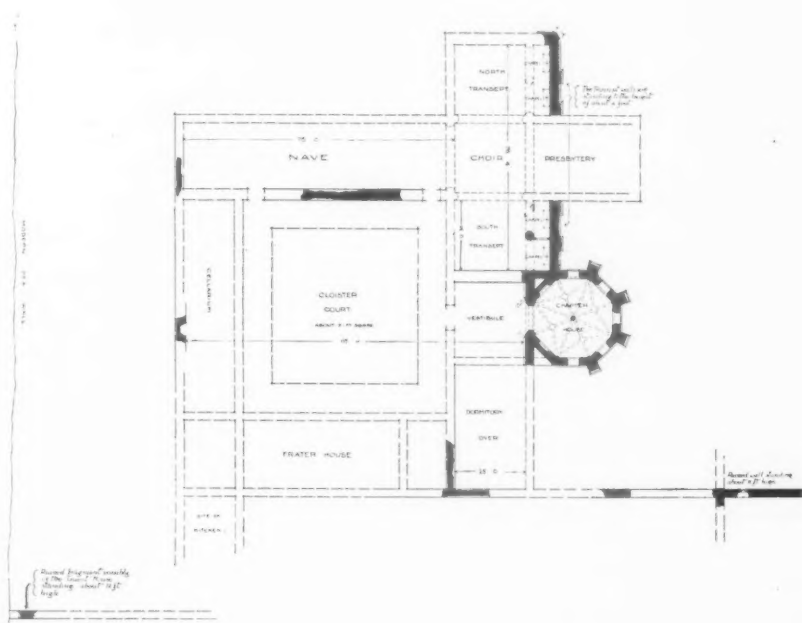
THE CHAPTER-HOUSE OF COCKERSAND ABBEY



INTERIOR, LOOKING NORTH-WEST

cessors hold it at the present time. With the exception of the chapter-house there is little of interest to be found amongst the ruins. The accompanying ground plan (which is sufficiently indicated by the remaining fragments of walls and the mounds of fallen masonry) will show the general arrangement of the building. The aisleless nave of the church, a feature of common occurrence in convents of the Premonstratensian order, was no doubt similar to those still partially standing at Bayham, Titchfield, and Egglestone. The chapter-house was approached from the cloister by a vestibule, probably divided into three aisles and vaulted in stone. Externally the building has been refaced with a red sandstone, and consequently all the features of interest it may once have possessed have now disappeared. It is finished on the three eastern sides with an embattled parapet, and has a low-pitched pyramidal slate roof. The

original entrance on the west face still remains, though the mouldings are much weathered. It is a plain semi-circular arch, formerly springing from side shafts, which are now missing, and probably dates from the foundation of the abbey. Internally the chapter-house is an octagonal apartment, 27 ft. 9 in. in diameter, having a fine vaulted roof springing from a central column and forming,



PLAN OF ABBEY

THE CHAPTER-HOUSE OF COCKERSAND ABBEY

on plan, four quadripartite bays. This arrangement is very unusual, as it throws the window openings out of the true centre of the vaulting cells above them. There is, however, no apparent awkwardness in the result. The central pier is formed of eight clustered and engaged shafts, keeled on the outward face and having each a moulded cap, the bell of which is ornamented with the stiff leaf foliage of the Early English period. The vaulting ribs, consisting of three main members divided by deep hollows, are all of similar section, except the wall ribs, which are formed with a simple hollow only. At the intersections are foliage bosses, four in number, of excellent workmanship. It is unfortunate that the building was for long used as a burial-place for the owners of the neighbouring Thurnham Hall, as this has necessitated the raising of the floor level, which is now some distance up the central column and above the sills of the windows, and has quite destroyed the original proportions of the building. The window tracery, if any existed, has now entirely gone, some portions of geometric work on the north side being of very doubtful date. Each opening had two shafts on either side, one free and one engaged, and the internal hood mouldings terminate in sculptured heads all much defaced.

The polygonal or circular chapter-house became a favourite feature of English work in the thirteenth century. There is evidence of the existence of some twenty-four of these buildings, and of these ten still remain complete. The form was most popular amongst the secular canons, amongst whom it received its highest development. The Benedictines came second with five ex-

amples, followed by the Augustinians with four and the Cistercians and Premonstratensians with two each. The example at Alnwick Abbey, which with Cockersand is representative of the last-mentioned order, was a circular structure some 25 ft. in diameter, of which only the foundations remain. In regard to geographical distribution, these buildings were spread over the whole of England from Tavistock in Devon to Carlisle, while three instances occur in Scotland, at Elgin, Inchcolm, and Restalrig. Elsewhere they are almost unknown. The earliest example and the prototype of all the rest is the chapter-house of the Benedictine cathedral of Worcester, which dates from *circa* 1130. It was originally circular, and still retains this form internally, and is surrounded by a Norman wall arcade. It is possible



VIEW FROM EAST



VIEW FROM WEST

THE CHAPTER-HOUSE OF COCKERSAND ABBEY



MISERERE OF STALLS FROM COCKERSAND ABBEY,
NOW IN LANCASTER PARISH CHURCH

that the form was suggested by the earlier round churches, some of which, as at Ludlow Castle, were aisleless and roofed with a timber pyramid "spire form." The close proximity of other monastic buildings, and the consequent fear of fire, led to the insertion of the central column and the stone vault. The column was, however, always looked upon as an incumbrance, and was finally dispensed with and the building vaulted in one span. Of the later examples of this class of building the best instance is the beautiful little fifteenth-century chapter-house at Howden (Yorks), which, apart from the fall of its vault, is still practically complete.

The traditional removal of fittings and furniture from the dissolved monastic houses to neighbouring parish churches is generally found on examination to be devoid of any foundation, the unusual richness or lavish decoration of a screen, a roof, or a piece of tabernacle work having alone given rise to the popular belief. There are, however, a few instances of the genuine transfer of monastic "loot" to parish churches, which are all the more surprising when one considers the low repute into which the Gothic craftsmanship was rapidly falling at that period. The choir stalls at Richmond, Yorks (brought from Easby Abbey), and the still finer series at Whalley, Lancashire, are well authenticated instances of this practice, while at Lancaster there is every prob-

ability that the magnificent fourteenth-century stalls in the parish church originally adorned the choir of Cokersand Abbey. It is true that an alien priory was long attached to the church at Lancaster, but the fact that the existing fabric is almost entirely of later date than the confiscation of the alien houses makes it more than improbable that the stalls were transferred from the

earlier church. On the other hand there is the persistent tradition of their Cokersand origin and the neighbouring instance of a similar transfer at Whalley.

As at present arranged they stand on either side of the sacarium, the returned stalls (two on each side) being placed against the east wall. The seats, fourteen in all and 2 ft. 5 in. from centre to centre, are provided with misereres more or less mutilated and carved with grotesque figures. The canopies are supported on buttressed shafts at the back and front, carried up in the form of crocketed pinnacles and finished with carved finials of unusual form. Above each seat is an ogee arch richly crocketed and filled in beneath with a pierced panel of flamboyant tracery, each bay being of different design. Rising slightly behind these arches are lofty gables filled with similar panels, the crockets forming a nearly continuous edging of carving and presenting an almost infinite richness and variety. The comparative scarcity



MISERERE OF STALLS FROM COCKERSAND ABBEY,
NOW IN LANCASTER PARISH CHURCH

of "Decorated" woodwork adds largely to the value of the present example, which is undoubtedly the richest specimen of fourteenth-century wood-carving now remaining in this country.

The church of Cockerham is said to possess the Cockersand bells, and at Mytton near Clitheroe is a rood-screen said to have been derived from the same source. In the latter instance, however, the screen was undoubtedly intended for its present position, and was erected at the cost of the abbey, which then held the advowson of the church. Be this as it may, the forgotten and inconspicuous Lancashire convent has transmitted to the present day, in its octagonal chapter-house and its splendid stalls, some indication of the beauty and originality of monastic work even in the remoter parts of England, and has preserved for itself two monuments of its days of prosperity, while the very existence of so many of its greater fellows is rescued from oblivion only by lingering tradition and their written records.

The foregoing notes, with the accompanying photographs, should therefore be of value to all who take an interest in mediæval architecture, more especially in those examples which are not rendered familiar by constant illustration.



CENTRAL PIER, WITH CAPITALS,
COCKERSAND CHAPTER-HOUSE

THE PRACTICAL EXEMPLAR OF ARCHITECTURE—LVIII



WHEN Walker named his picture *The Harbour of Refuge* he expressed in a few words the chief characteristics of these old hospitals. The picture was actually inspired by the buildings at Bray, and a star is marked on the accompany-

ing plan showing the approximate position from which the view was taken. Certain liberties have been taken by the artist in his delineation of the enclosed garth—the pump with its sheltering box hedges has been left out, and a statue put in its place, and the whole has been made more formal to give breadth to the picture; but the old, worn, red brick, touched by the setting sun, is painted to the life.

Jesus Hospital (or Almshouses) was founded in the year 1627 by William Goddard. Lysons's *Magna Britannia* gives the further information that it was "for forty poor persons, six of whom must be free of the Fishmongers' Company: these have an allowance of twelve shillings a week, if married; seven, if single. The remainder of the pensioners must be persons fifty years of age, who have been householders in the parish of Bray for twenty years; their allowance, two shillings a week. They have all wood and coals and a gown or coat every year."

The buildings are disposed around a large quadrangle—the forty rooms one by one round the four sides. In the middle of the front, facing the east, the entrance to the "quad" is placed. To give some importance to this feature the building is much higher at this part, indeed it is almost as tall as the chapel which is built on the axis of the entrance. A niche is arranged over the door containing a statue of the donor, which is replete with a curious comeliness of quiet beauty—qualities which many of the statuaries of the seventeenth century were able to impart to their creations. The arrangement of the rooms (only one room deep, and with windows front and back) is such as to allow the sun to touch every several one. That is one great thing—sunlight; the other, only secondary in importance, is warmth. The fireplaces are large, compared with the size of the chambers, with little cupboards for the "wood and coal" placed at the sides. Besides adding materially to the comfort of the inmates, these substantial corners are capable of carrying the fine chimney-stacks which give so much character to the roofs. No feature is more English than this one, no feature susceptible of more various and manifold treatment. And

THE PRACTICAL EXEMPLAR OF ARCHITECTURE

it is curious how little is made of it to-day, for no part of architecture is more starved and feeble. In these almshouses the stacks are arranged (always on the outer slope of the roof) in groups of two placed diagonally on a kind of plinth. They are all built of small bricks without ornaments beyond those trifling ones affected by the bricklayer—oversailing courses and steeply sloped weatherings; but the effect is charming. The slope of the roof to the quad has dormer windows in it to light the lofts, and it also serves to light the porches. It will be noticed that one door from the quadrangle goes into two rooms by means of a small porch into which the party-wall butts. The party walls, for greater security against fire, are taken over this porch, carried on an oak beam, and go into the centre mullions of the dormers. So that it seems as if the old builders considered

utility as well as other things. Stonework has been used sparingly for the facing of doorways and windows and the cope-stones to the gables. This gives a delicate note in the otherwise ruddy walls and roofs. The chapel is a simple building in keeping with the rest of the group. A judicious and pardonable richness is shown in the window tracery, that is all. Within it has a fine oak screen, well proportioned and with less of extravagance than many contemporary things. A photograph and drawing of it will be given in another issue.

J. M. W. H.

The inscription on the building runs as follows:—"Iesus Hospital, founded in the year 1627, of the sole foundaçon of William Goddard, Esq^r., wherein he hath provided for fortie poore people for ever and lefte it to the sole care and government of the righte worl^d Company of Fishmongers of the City of London of which Company he was a free Brother. This new stone erected 1844."



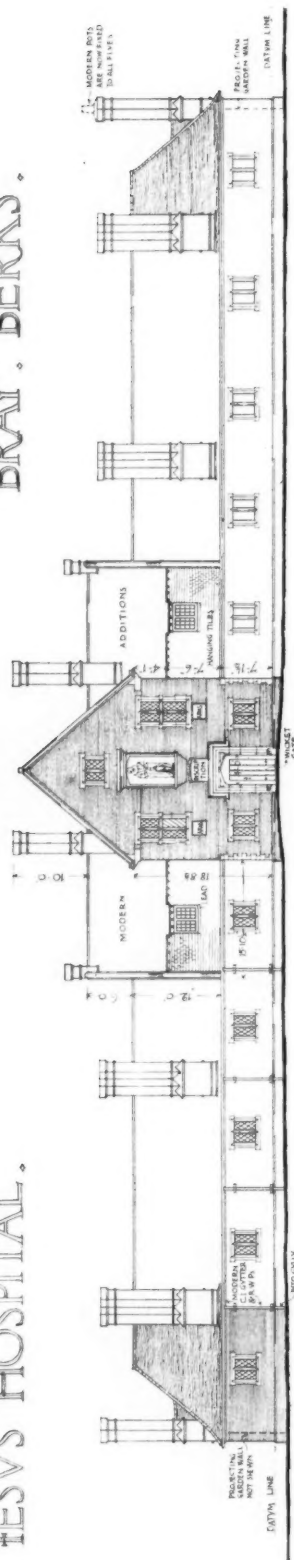
EAST ELEVATION TO QUADRANGLE



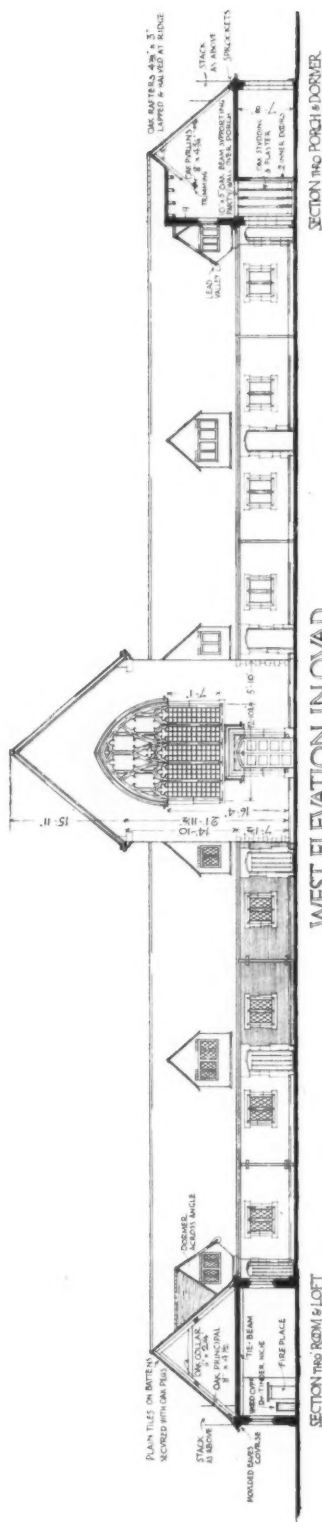
THE CHAPEL FROM THE GARDENS

HEVS HOSPITAL.

BRAY. BERKS.



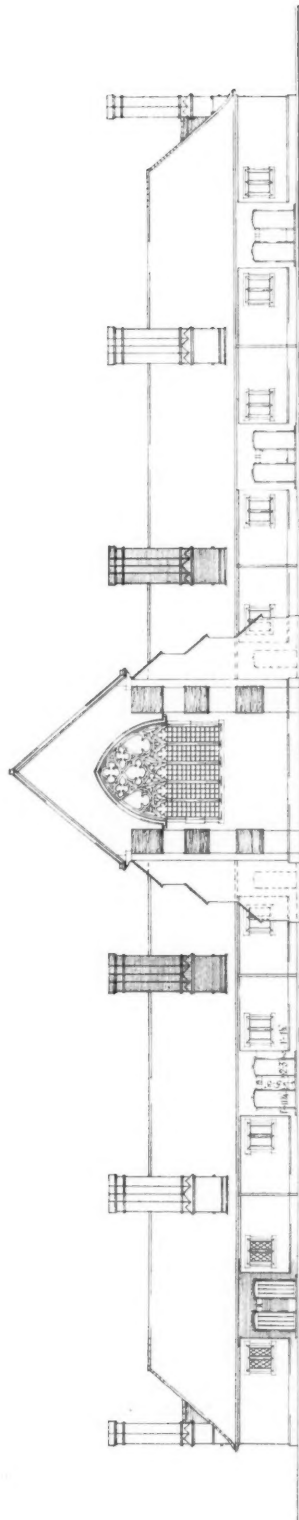
ELEVATION TO ROAD



SECTION TWO ROOM & LOFT

WEST ELEVATION IN QUAD.

SECTION TWO PORCH & DORMER

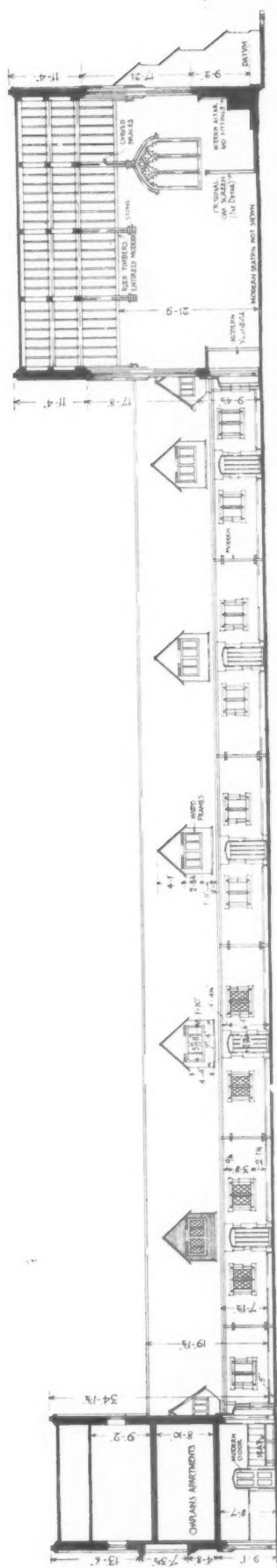


REAR ELEVATION TO GARDENS.

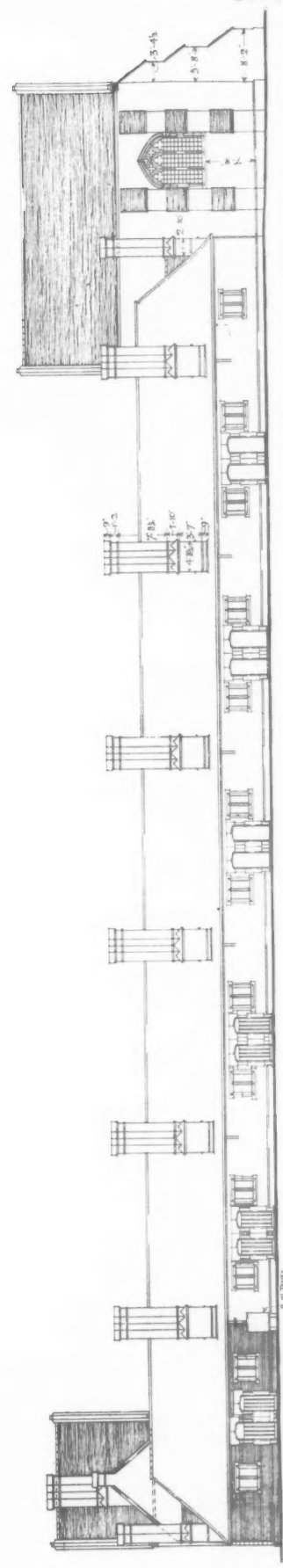
SCALE OF
1" = 10' 0"

MEASURED AND DRAWN BY J. C. ROGERS

IESVS HOSPITAL, BRAY, BERKS.



SOUTH ELEVATION IN QUAD.



NORTH ELEVATION.

THE S. & W. EXTERNAL ELEVATIONS HAVE A VARIATION IN THE TREATMENT OF THE DOORWAYS. THE JAMBS AND ARCH ARE FORMED IN CWT. SLAYED BRICKS AND THEY ARE SET IN PANELS FLUSH WITH THE FACE OF PLINTH. IT IS MOST PROBABLE NO GUTTERS ORIGINALLY EXISTED.

WALLS & CHIMNEYS ARE OF 2' RED BRICK LAID WITH A 3/4" MORTAR JOINT. ALL MOULDINGS & BRICKS ARE CWT. & ALSO THE SPILL OF PLINTH, AN OXFORDSHIRE GOLIETH HAS BEEN USED FOR ALL STONE DRESSINGS.

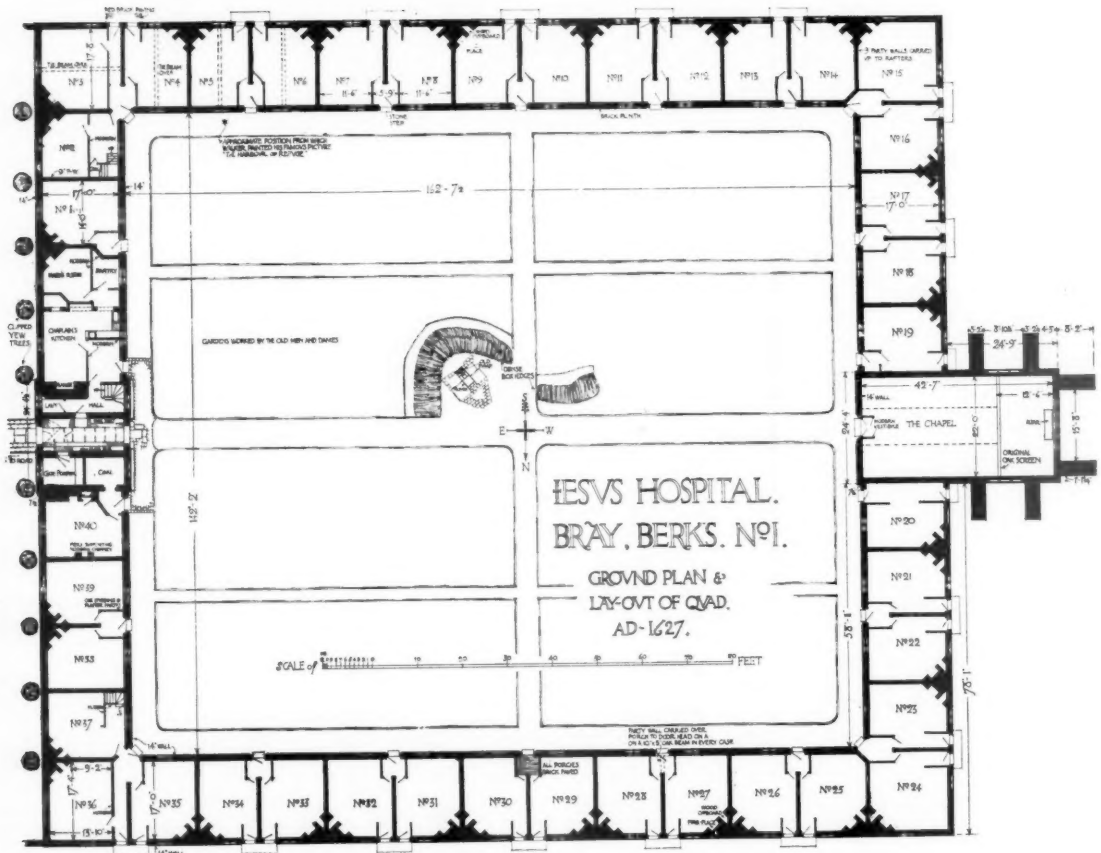


MEASURED AND DRAWN BY J. C. ROGERS

THE PRACTICAL EXEMPLAR
OF ARCHITECTURE



ELEVATION TO ROAD



MEASURED AND DRAWN BY J. C. ROGERS

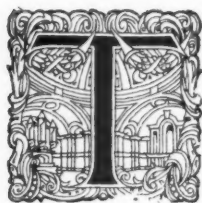
THE PRACTICAL EXEMPLAR
OF ARCHITECTURE



SCALE FOR DETAILS

MEASURED AND DRAWN BY J. C. ROGERS

RICHMOND BRIDGE



THE giant octopus of London spreads its arms unceasingly. It is not so many years since Richmond lay quite outside the limits of the metropolis, and was on that account esteemed as a fashionable retreat for well-to-do people, as well as a much-favoured place for select outings and expensive dinners; but the growth of London has vastly changed its fortune. Still preserved to a great extent from spoliation by reason of its Crown parks and municipal possessions in land and gardens, the town nevertheless has altered in character, and the growth of London has meant, among other things, that the bridge which is a delightful feature of Richmond will doubtless in the near future be altered or perhaps replaced, in order to accommodate the ever-increasing traffic that goes over it. While the bridge remains, therefore, in its original form, some record of it may here be preserved.

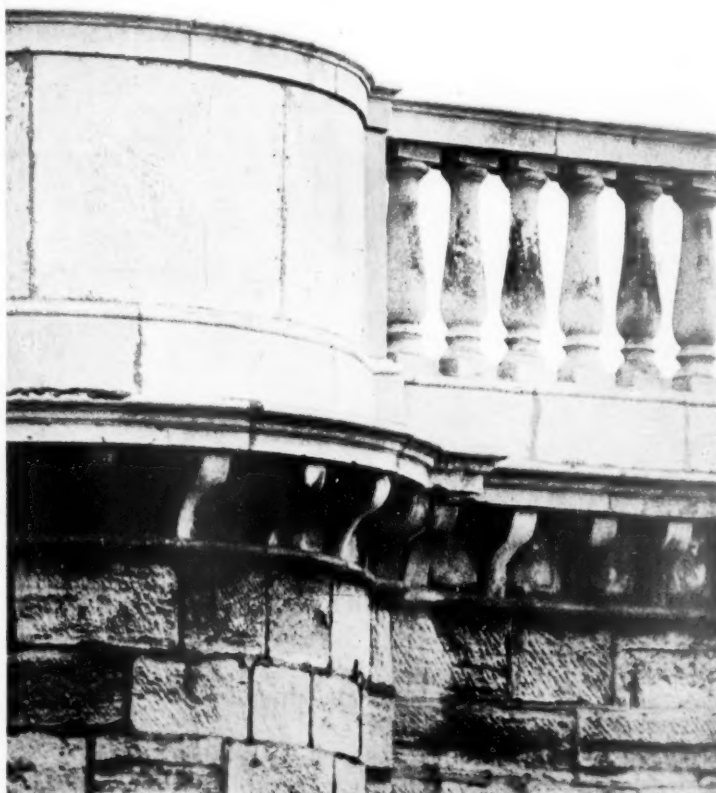
From the traffic point of view it is of course quite inadequate, just as so many other bridges across the Thames are—none more so than Waterloo Bridge, of which some account was given in the May issue of *THE ARCHITECTURAL REVIEW*. But as an architectural design it is of considerable interest, and the hope may be expressed that when the time comes it will be dealt with in a satisfactory manner or be replaced by a structure worthy of the position. A few miles further up the river, at Kingston, the same difficulty of endeavouring to make an old bridge adequate for modern needs has been experienced, but the tramways which have been taken across it, with their hideous overhead gear, have ruined its appearance, and at the same time have rendered the bridge dangerous alike to foot-passengers and to traffic. A Bill for the widening of that bridge is now before Parliament, and it seems evident that the same or a similar process will be adopted in the case of Richmond Bridge.

Richmond Bridge belongs to the latter part of the eighteenth century, having been erected in 1774-1777 from designs by James Paine and Couse. It comprises five arches—a central one of 60 ft. span, and two smaller spans on either side—and is built of ashlar,

now weathered to a white that dazzles in the sunshine. Maurice, long since, wrote about it in his grandiose manner, with all the elegant phrases of his day, not omitting such poetical extravagances as cars of luxury that went over the bridge "glittering with brilliant tints and burnished gold" and the "thousand barks" below "array'd in gorgeous pride"; but from the architectural standpoint it must be admitted that he was giving expression to a very just estimate of the structure when he wrote—

There, Attic elegance and strength unite,
And fair proportion's charms the eye delight;
There, graceful, while the spacious arches bend,
No useless, glaring ornaments offend . . .

It appears from records that for upwards of three centuries a ferry existed across the Thames where Richmond Bridge now stands. This ferry was held on a Crown lease, and at the time when the proposal to build a bridge was mooted the then proprietor of the ferry offered to sell his right to the Commissioners for £6,000, or an annuity of £200: in the former case undertaking to bear the whole expense of building a bridge. The structure he proposed, however, was a wooden structure; and for this reason, as well as the knowledge that he would be holding a monopoly over all



DETAIL OF PARAPET

RICHMOND BRIDGE



GENERAL VIEW FROM THE SURREY BANK

traffic across the bridge, with charges imposed accordingly, the inhabitants of the town made strong protests. At that time there were three schemes put forward. First the one mentioned above, secondly a scheme for a bridge a little lower down, and thirdly one for a bridge still further down, in line with a narrow little street called Water Lane (still existing). In the end, the ferry proprietor's proposal for a wooden bridge was quashed; but it was at this point across the river that the new stone bridge was constructed: a mistake which cannot now be rectified except at very great expense, but one which should never have been made, and one moreover which, if there had been any such considerations of town planning as now prevail, would never have been permitted to pass: for the main street of Richmond is George Street, and the narrow little thoroughfare called Water Lane, leading to the river, is axially in line with it. At this point, therefore, the bridge should have been built; instead of which the present road beyond George Street turns sharply to the left up the hill, and then there is a steep descent to the bridge: whereas at Water Lane the roadway could have been taken across level. These very deficiencies were in the minds of the inhabitants of the town at the time, and are actually expressed in a report which was drawn up; but for some reason or other the existing position of the bridge was adopted. Opposite Water Lane was the estate of Twickenham Farm, the owner of which objected to any bridge being taken across here, though his house was half a

mile away. And that perhaps explains why the bridge was not built at the best place.

The cost of the bridge was £26,000, the bulk of which sum was raised in "Tontine shares" — £100 shares in the form of annuities according to a scheme evolved by an Italian named Tonti. To defray the cost, tolls were in force, and there were small toll-houses at each end of the bridge. In 1822 the tolls were reduced (being then one penny per person), and when the last survivor of the first Tontine died in 1859 the bridge was thrown open free, and the toll-houses and gates were removed. At a later date, 1868, the present cast-iron lamp standards and the seats in the recesses on either side were fixed, and in regarding them one is surprised to note such good taste displayed at a period when the influences of the Great Exhibition were so fresh and vigorous.

The proportions of Richmond Bridge are very pleasing, and the balustrades excellent, though the old difficulty associated with a raking cornice is once again presented. It can never be solved satisfactorily, but Paine made a very good attempt in Richmond Bridge.

James Paine, it may be added, was born in 1725 and died in 1789. He had a very extensive architectural practice, and in addition to numerous houses for the nobility in town and country he designed bridges at Chertsey, Walton, Kew, Chatsworth, Chillington, and Richmond. Gwilt, in his memoir of Sir William Chambers, says that "Paine and Sir Robert Taylor divided the practice of the profession between them until Robert Adam

entered the list and distinguished himself by the superiority of his taste in the nicer and more delicate parts of decoration."

Paine was clerk of works (or resident architect) at Greenwich Hospital, and afterwards held a similar post at Richmond New Park and Newmarket. He was finally attached to the Board of Works as "architect to the King," but was displaced in 1782, very soon after his appointment, by Burke's Reform Bill, without gratuity or pension.

In 1764 he was living in a spacious house which he had built for himself in St. Martin's Lane. Two years later he removed to Salisbury Street, and about 1785 went to Addlestone or Sayes Court near Chertsey. In 1783 he was High Sheriff for Surrey, and in the commission of the peace for Essex, Middlesex, and Surrey. Some months before his death he retired to France, where he died in his 73rd year.

He had a son named James, also an architect, but there are very few buildings to his account: which perhaps is the corollary to the fact that he was left well off by his father.

R. R. P.

CURRENT ARCHITECTURE

"ROWALLAN," AYRSHIRE

MACGIBBON and ROSS, in "The Castellated and Domestic Architecture of Scotland," vol. ii, give a description of the old castle of Rowallan, about three miles from Kilmarnock—a fine specimen of the Scottish mansion of the sixteenth and seventeenth centuries. As this castle was situated on rather low ground, and close to the river, it was thought it might be damp. Owing to the disposition of the ground also it would have been a difficult matter to add to it in such a way as to provide for the requirements of a larger establishment without spoiling its architectural character. At the time, therefore, when fresh accommodation became necessary it was decided, on Mr. Lorimer's recommendation, to leave the old castle exactly as it was, and to build the new house on an adjoining portion of the policies, which had been planted several generations ago with the view of a house of Classic type being placed in the centre of a square park.

The idea was that the old castle might ulti-

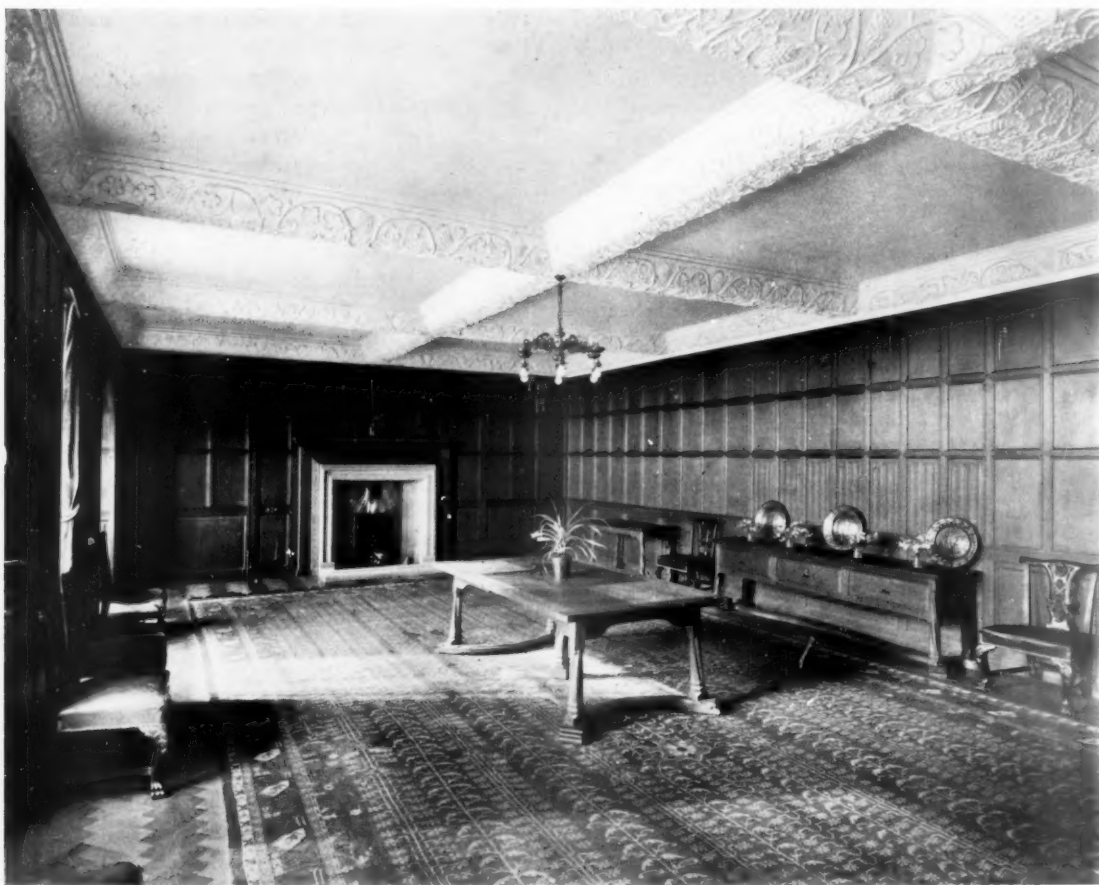


Photo: Thomas Lewis

"ROWALLAN," AYRSHIRE: THE DINING-ROOM
R. S. LORIMER, A.R.S.A., F.R.I.B.A., ARCHITECT



Photo: Thomas Lewis

"ROWALLAN," AYRSHIRE: MAIN STAIRCASE

mately be repaired, and used as a dower-house for the estate, or a factor's house, or some such purpose. Nothing in this way, however, has yet been done.

In the architecture of the new house it was decided to follow the style of the old one, and the type of similar houses of the same date, such as "Auchans," Ayrshire, and several other typical

examples of existing houses. And in carrying out this work the architect has achieved a very notable result.

The new house when originally designed was intended to be much larger, but owing to the death of Mrs. Cameron Corbett it was decided to proceed with only a portion of it, and it was

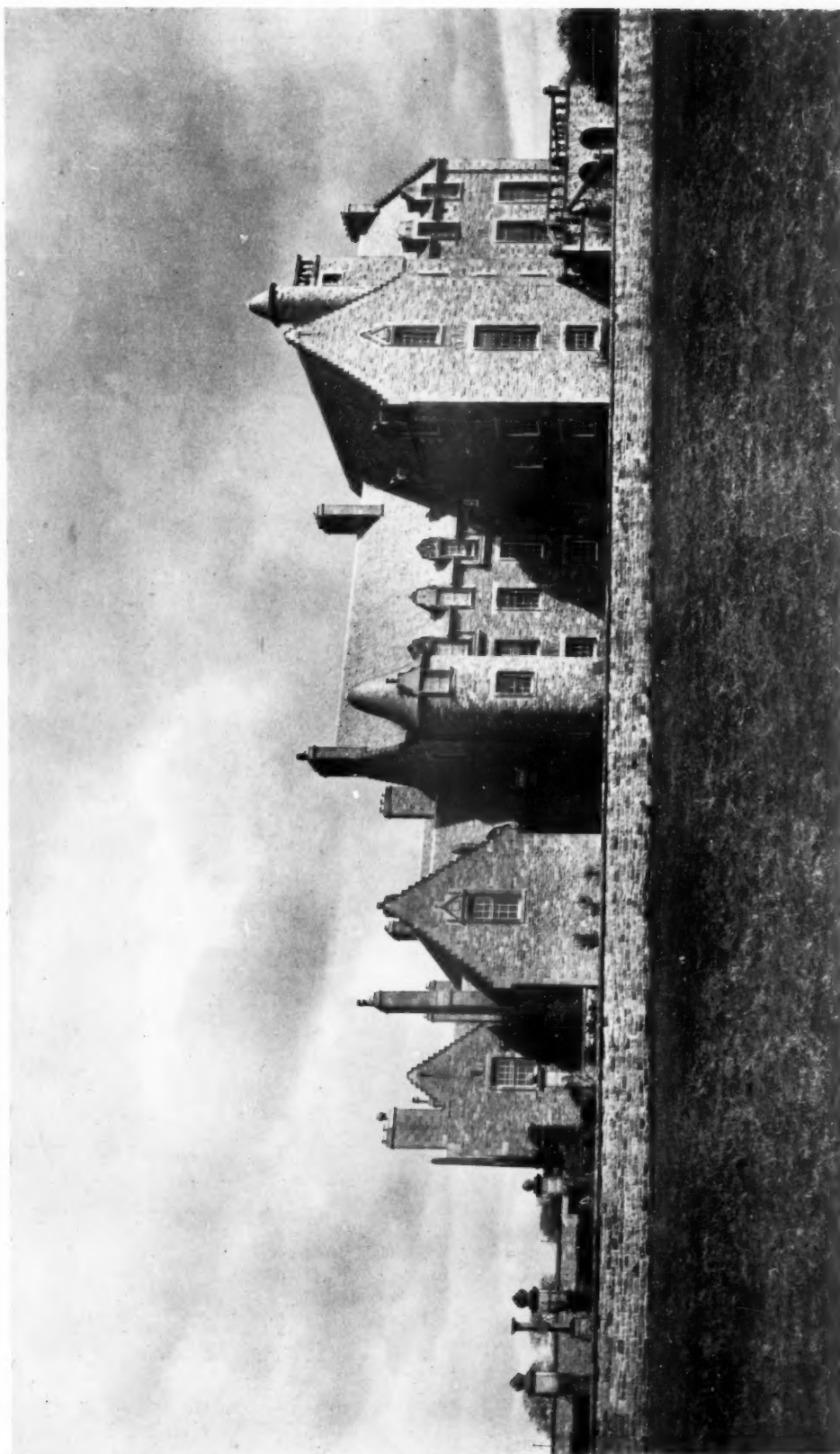


Photo: Thomas Lewis

"ROWALLAN," AYRSHIRE: VIEW FROM WEST



Photo: Thomas Lewis

"ROWALLAN," AYRSHIRE: VIEW FROM EAST
R. S. LORIMER, A.R.S.A., F.R.I.B.A., ARCHITECT

CURRENT ARCHITECTURE



Bridge and Garden Pavilion



Gate-house

Photos: Thomas Lewis

"ROWALLAN," AYRSHIRE

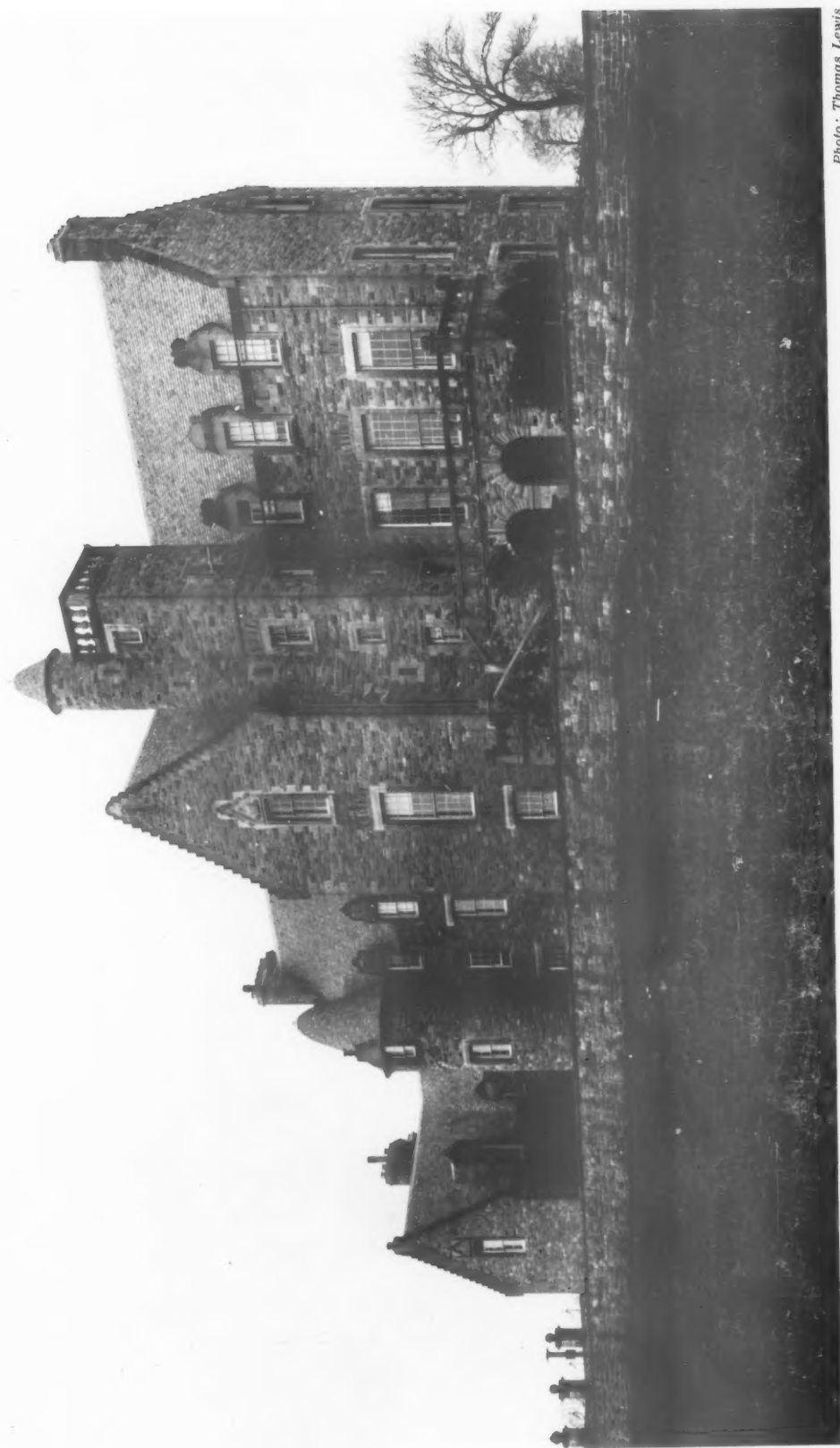


Photo: Thomas Lewis

"ROWALLAN," AYRSHIRE: VIEW FROM SOUTH-WEST
R. S. LORIMER, A.R.S.A., F.R.I.B.A., ARCHITECT



"FOREST HILL," WIMBORNE: FIREPLACE
IN OUTER HALL

ultimately built in a somewhat truncated form, as now shown at the south end. On this account the plan is omitted from the illustrations here given.

Almost all the stone required for the building, with the exception of the large stones for sills and lintels, was quarried a few hundred yards from the site, the old quarry out of which Rowallan Castle was supposed to have been built having been reopened for the purpose.

FOREST HILL: DORSET
HOUSE FOR M^{RS} E. P. BELDEN

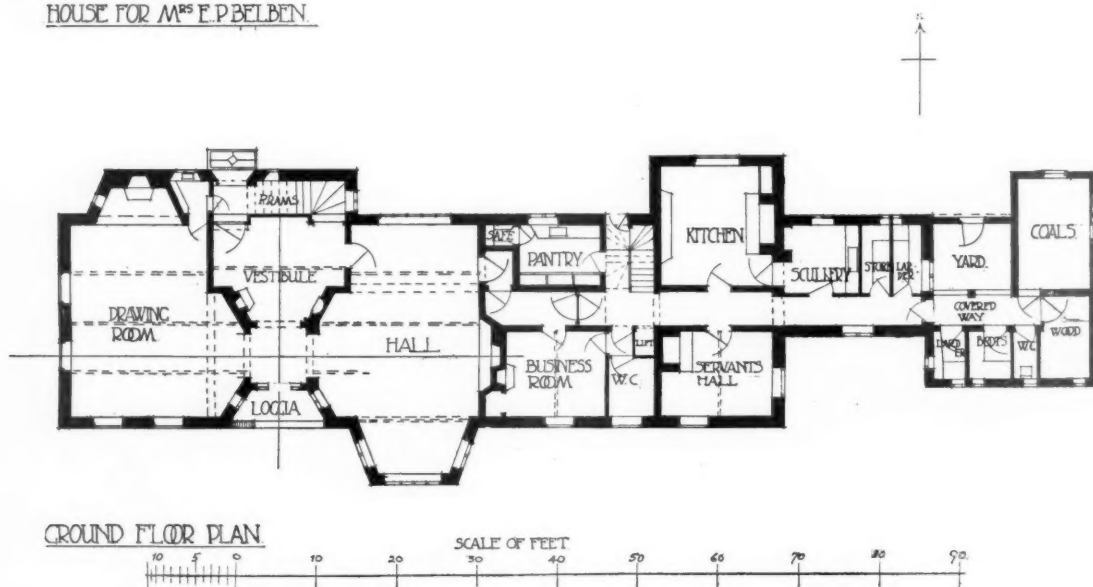
The general building-work was carried out by Boyd & Forrest, of Kilmarnock; plasterwork by Stuart's Granolithic Co., of London; metal casements and leaded glass by Henry Hope & Sons, Ltd., of Birmingham; heating by Mackenzie & Moncur, Ltd., of Edinburgh; Well fires, tiles, etc., by the Well Fire Co., of London; enriched plaster ceiling and electric-light fittings by the Bromsgrove Guild of Applied Art, Bromsgrove, Worcestershire; finishings in dining-room and library by Scott, Morton & Co., of Edinburgh; stable fittings by Musgrave & Co., Ltd., of London; balcony and stair railings and electric-light fittings by Charles Henshaw, Edinburgh; painter and paperhanger work by John L. Duncan, Glasgow.

"FOREST HILL," WIMBORNE, DORSET

THIS house was planned for a hilly site overlooking Poole Harbour, the views to the south and west being particularly fine. The principal feature of the plan is the room indicated as "hall," which is used as a general sitting-room and dining-room.

The materials employed were hand-made red bricks and tiles for the chimneys and roof, and for most of the interior fireplaces. The walls were covered with rough plaster externally. The joinery in all the best parts of the house is of oak. The large bay of the hall was built of Purbeck stone, with green Chilmark dressings, the upper part of the bay being covered with elm weatherboarding.

The architects were Messrs. Forsyth & Maule, F.F.R.I.B.A., of London.





South front.



North front, with entrance doorway.

"FOREST HILL," WIMBORNE, DORSET
FORSYTH AND MAULE, F.F.R.I.B.A., ARCHITECTS



HOUSE AT DORE, SHEFFIELD
EDGAR WOOD, F.R.I.B.A., ARCHITECT

HOUSE AT DORE, SHEFFIELD

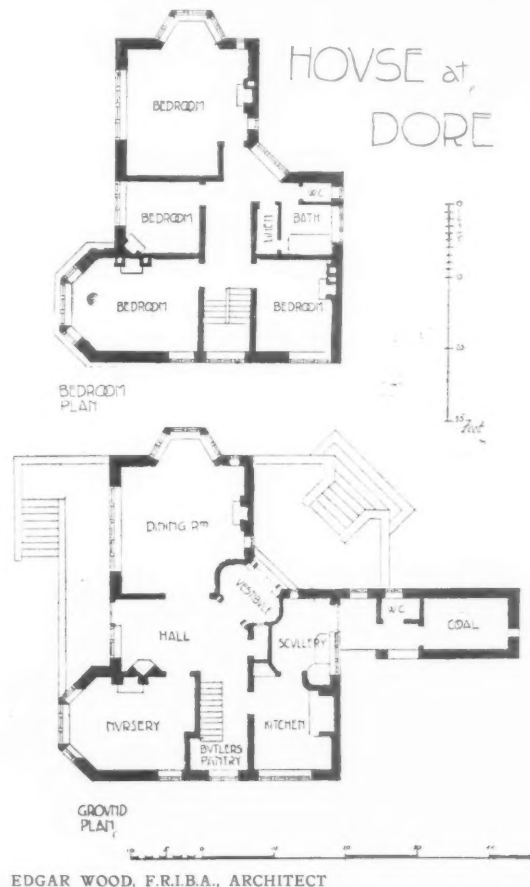
THIS house, by Mr. Edgar Wood, F.R.I.B.A., occupies a very elevated position and commands an extensive view of the surrounding country. It is built of random stone rubble, which was obtained on the site. The roof is covered with stone slates.

At the time the accompanying photographs were taken the house had only just been completed, so that the garden presents a somewhat rough appearance—a defect since corrected.

The accommodation, as shown by the plan on this page, consists of large hall entered through a vestibule, with the dining-room on one side and nursery on the other, both of which have bay-windows that greatly add to their comfort and convenience. The kitchen and scullery are placed on the east side, with coal and w.c. in a one-storey outbuilding adjoining; while on the first floor are four bedrooms, bathroom, w.c., and linen closet.

PULPIT AND BISHOP'S CHAIR,
ALL SAINTS' CHURCH, EALING

ALL SAINTS' CHURCH, Ealing, London, W., has been built through the munificence of the late Miss Frederica Elizabeth Perceval, in memory of her father, the Right Hon. Spencer Perceval, who



BISHOP'S CHAIR, ALL SAINTS' CHURCH, EALING, LONDON
W. A. PITE, F.R.I.B.A., ARCHITECT

was Prime Minister in 1809-1812. Mr. W. A. Pite, F.R.I.B.A., was the architect.

The proportions internally are very pleasing, and as there is no chancel arch an unbroken length of roof from east to west has been secured. There is a fine metal pulpit, with symbolical figures of Adam and Eve, surmounted by a figure of Christ; this pulpit, together with the lectern, being the work of Mr. Nelson Dawson. The pulpit is executed in armour-bright iron and copper, with some enamel introduced as colour-enrichment. The choir and clergy stalls are richly carved, and similar handiwork is displayed in the tracery to the holy table. Noteworthy, too, is the bishop's chair—a well-designed and well-executed piece of church furniture, here reproduced. It is of oak, and was made by Mr. Alexander G. Lee, of London.



PULPIT (METAL AND ENAMEL) IN ALL SAINTS' CHURCH, EALING. BY NELSON DAWSON

THE BERKSHIRE COUNTY HALL

THE new Berkshire County Hall has been erected in the Forbury at Reading, adjoining the Assize Courts. It is the outcome of an open competition, held in 1909, and was opened in March last.

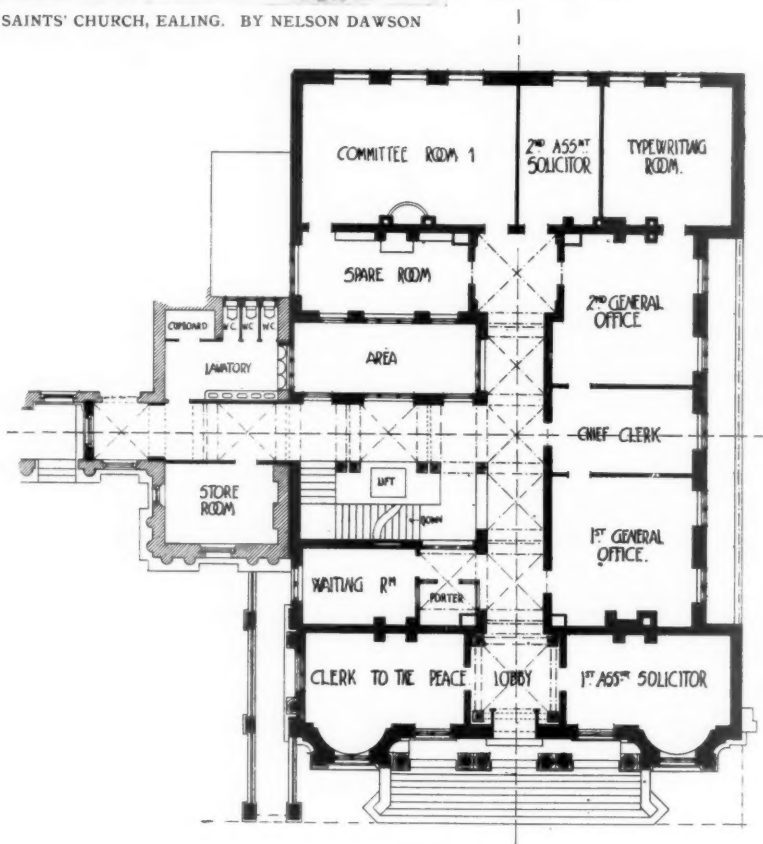
In the arrangement of the building particular attention has been paid to the planning of the committee-rooms so that members of the council using these rooms can have direct communication from the hall of the Assize Courts, as well as from the front entrance of the new building. The committee-rooms have been placed at the back of the building on the ground and first floors, so as to ensure privacy and quietness, in a position where they are easily accessible from the main stair-case and lift.

The main staircase (with passenger lift) is planned so that it will be equally convenient of access from the main entrance of the new building and from the Assize

Courts, and is so placed that it serves each department centrally on the upper floors.

The ground floor provides accommodation for the Clerk of the Peace and his department, the Education Secretary being placed on the first floor. The second floor is devoted to the County Treasurer's department, Land Steward, and Medical Officer, and the third floor is utilised for the Surveyor's department.

The lavatories are all placed on an internal area, which greatly simplifies the drainage system. They are also in a convenient position for use either from the new building or the hall of the Assize Courts.



GROUND FLOOR PLAN

SCALE OF 10 5 0 10 20 30 40 50 FEET

BERKSHIRE COUNTY HALL, READING

CURRENT ARCHITECTURE

The elevations are treated in a broad simple manner, relying upon the general proportions for effect rather than the use of elaboration of ornament. They are carried out in red brick (five courses to the foot) with Portland stone dressings. The roofs are covered with specially made tiles on the Italian principle. These tiles and bricks have been made in Reading by Messrs. Collier.

In the committee-room on the ground floor (shown by the photograph on this page) there is some

The general contractor was Mr. E. C. Hughes, of Wokingham. Among the sub-contractors were the following:—Messrs. H. H. Martyn & Co., Cheltenham, ornamental plasterwork, stone-carving, and wrought-iron lift enclosure; Bratt, Colbran & Co., London, grates; Thomas Elsley, Ltd., London, fenders and iron grilles; Heywood & Co., London, roof lights; Shanks & Co., Barrhead, lavatory fittings; J. W. Singer & Sons, Frome, electric-light fittings and exter-



BERKSHIRE COUNTY HALL: COMMITTEE ROOM, GROUND FLOOR
WARWICK AND HALL, A.A.R.I.B.A., ARCHITECTS

Photo: Walton Adams

interesting woodwork, including a fine chimney-piece inlaid with a geometrical pattern in the centre panel and having on either side pilaster strips crowned by cherubs' heads. The carving to this chimneypiece is very well executed, as also that on the overdoor, which has a cherub's head, with foliage enrichment, as central feature. A detail of the latter is given on page 349; on the same page, too, is another detail of interest—the carved panel on the east elevation of the building.

June 1911

nal lamp standards; Stuart's Granolithic Co., Ltd., London, granolithic floors; Strode & Co., London, heating and ventilation, fire mains, and electric lighting; Waygood & Co., London, electric lift; J. Whitehead & Sons, Ltd., London, marblework; John Tann, London, safes, strong-room doors and steel-grid shelving.

The architects were Messrs. Warwick & Hall, A.A.R.I.B.A., of London.

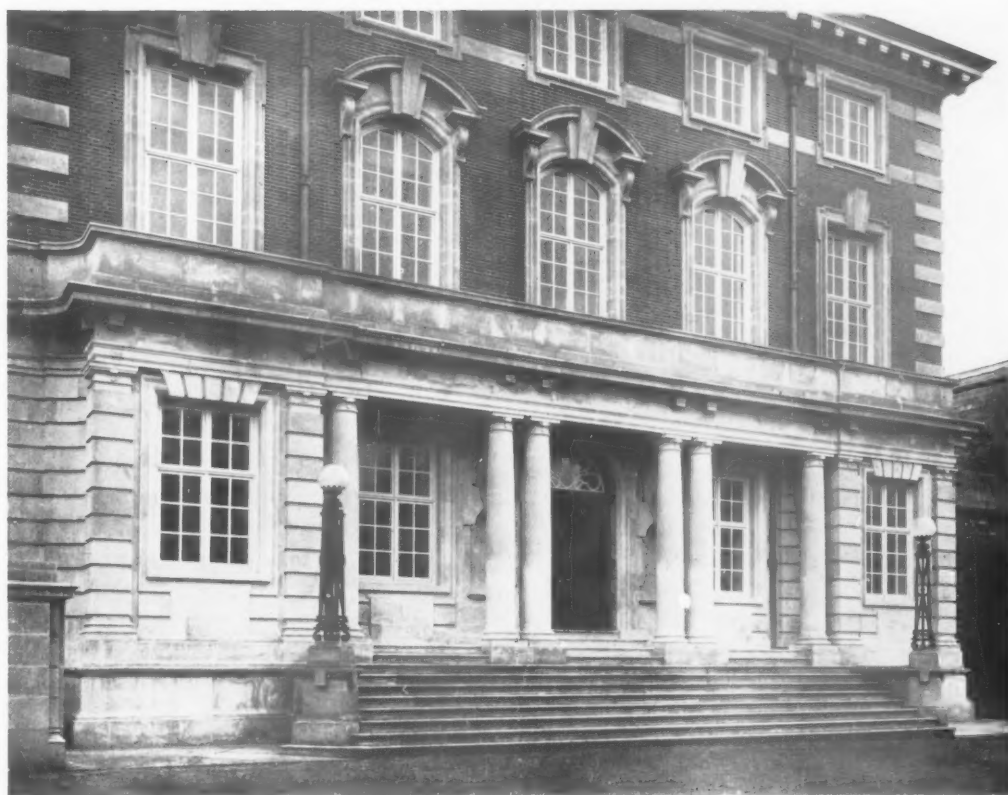


Photo: Walton Adams

BERKSHIRE COUNTY HALL: PRINCIPAL ELEVATION
WARWICK AND HALL, A.A.R.I.B.A., ARCHITECTS



General view from Forbury Gardens



Detail of entrance loggia

Photos: Walton Adams

BERKSHIRE COUNTY HALL
WARWICK AND HALL, A.A.R.I.B.A., ARCHITECTS

CURRENT ARCHITECTURE



Corridor, second floor



Staircase, first floor

Photos: Walton Adams

BERKSHIRE COUNTY HALL
WARWICK AND HALL, A.A.R.I.B.A., ARCHITECTS

COMMITTEE FOR THE SURVEY OF THE MEMORIALS OF GREATER LONDON



THE wonderful promise which the spring of this Coronation Year holds out of a fine summer should do much to encourage the members of our Committee to take their cameras and their sketch-books and accomplish a really notable part of the work which still lies to our hand. The camera's task is made immeasurably easier by the bright weather, for the London haze is a severe handicap upon the production of useful photographic records of the architectural features in town. The opportunity should not be lost, in the days of bright sunshine, for obtaining clear and well-defined views of details which can be got at no other time.

Much good work is being done by various members of the Committee all over London, but there is still room for a greater and more organised effort. We are apt to allow our activities to become somewhat spasmodic, and to forget the larger aim which we have pledged ourselves to hold in view. Each building, as it is surveyed, should be for us a part of the history of its own neighbourhood, as that is, in its turn, a part of the history of London. The territorial conquest by the topographer can only be achieved by a patient and persistent effort to cover a given portion of the whole, and a desire on the part of



CARVED SHIELD ON EAST ELEVATION

each member to make himself an authority upon every inch of the ground which comes within the limits of his investigation. Especially should it be the aim of our local secretaries to make them-



BERKSHIRE COUNTY HALL: OVERDOOR TO COMMITTEE ROOM

SURVEY OF THE MEMORIALS OF GREATER LONDON

selves personally acquainted with all the buildings within their province, and to collect forthwith every possible bit of evidence in connection with their record. From every quarter the news of contemplated destruction or alteration of old buildings is reaching us, and nothing should be allowed to stand in the way of completing a district and thus reducing the area of unrecorded monuments.

It should be remembered, too, that photographs

Indeed, a building is not properly surveyed until it has been ascertained that no single detail of old work has been omitted from the series of photographs and drawings.

An example of what patient organisation can do is to be seen in the work of the Royal Commission on the Ancient Monuments of England and Wales. The scope, of course, is not so wide as our own, since the Commission's limit is the year 1700, and



GARDEN DOORWAY, FRIENDS' HOUSE, CROYDON

Photo: S. H. Wratten

of detail are of even greater importance than general views for our purpose. The greater number of houses have been altered or restored to such an extent that their casual appearance gives little of their real character. Single features, however, have often escaped damage, and fine detail-photographs of the mouldings, carving, balusters, glass, and other smaller parts will often restore for us the original appearance of the building and give us a clue to its true significance.

much less detail is required; yet, by a carefully thought-out plan and a smooth system, it seems probable that all the counties of England and Wales will soon have complete illustrated inventories of their ancient possessions. A little more definite co-operation between members and a slightly more exacting organisation amongst ourselves might be productive of a quickened pace and a more useful method of reaching speedily the goal which we have set before us.

WALTER H. GODFREY.

THE QUEEN VICTORIA MEMORIAL

SIR THOMAS BROCK, R.A., SCULPTOR



PROPERLY speaking, the National Memorial to Queen Victoria in front of Buckingham Palace includes the whole scheme of gates, piers, and gardens, with the Memorial as central feature, and the processional roadway—the straightened and widened Mall—that leads to the triumphal archway at Charing Cross. But for the present purpose the description must be confined to the memorial statuary group, which was unveiled by His Majesty the King on May 16th. In referring to this, however, as the focus of the whole scheme, one cannot avoid recalling to memory the original scheme by Sir Aston Webb, which was selected ten years ago in the limited competition that was held. The perspective showed a spacious semi-circular area enclosed by a double colonnade connected to pavilions, and having water-basins and parterres. The necessary funds for this effect, however, were not forthcoming, and the scheme had to be shorn of many

of its features, the enclosing colonnades being represented in the finished work by low balustrades, and the parterres reduced to quite a commonplace gardener's affair. But the greatest mistake in the alteration of the scheme was undoubtedly the bringing of the roadways from Buckingham Palace Road and Constitution Hill *within* the enclosure, instead of keeping them outside. It was obvious at the time what the effect of such a change would be, and as a result it means that the spectator has to stand in a whirl of traffic. But, setting aside such considerations of the scheme as a whole, attention may be centred on the Memorial itself, for which Sir Thomas Brock is entirely responsible. It has already been the subject of a good deal of criticism, some of which is not a little flavoured with bitterness. After all, if names are an engulging attraction to the throngs who make the turnstiles at Burlington House go merrily around year after year, they are just as much masters to the critics. The adage about giving a dog a bad name finds very pointed illustration here, and we are afraid the sculptor of the



GENERAL VIEW FROM SOUTH-WEST

THE QUEEN VICTORIA MEMORIAL



GENERAL VIEW FROM SOUTH-EAST

Photo: "Architectural Review"

Queen Victoria Memorial has experienced more than an abundance of attention from those who were prepared to vilify his Memorial before they had even seen it. We have no intention of taking up the cudgels on his behalf, but the importance of this work at least claims that it shall receive fair criticism; and it is with the object of presenting it in a thoroughly adequate form that the accompanying photographs have been taken.

It must be admitted that Sir Thomas Brock has not, in this work, done anything exceptional, and the criticism that some of the figures have a too-pervading air of the studio-model has, we think, a good deal to support it. At the same time there is some notable work, in particular the boy figures, which are very pleasingly disposed, and the figure of Queen Victoria herself, which certainly is regal and imposing. The crowning figure of Peace we do not much care for, as it is of a type which is very familiar; but the figure of "Courage" below it, on the north side, is very finely grouped, strong in its lines, and worthy of a sculptor who has achieved a considerable reputation.

The low-relief sculpture around the base is, in our opinion, not good. There are few sculptors who have ever achieved success in this direction. Nor can anything be said in praise of the architectural detail. It is, in fact, the worst feature of the Memorial, being of an Italian Renaissance

type, with a plethora of bad motifs. The Memorial, however, certainly masses up well, and, if it does not reach any great position as an imaginative work, is imbued with a good deal of stately feeling in keeping with the great ideas it embodies.

At the time of the unveiling, Sir Thomas Brock gave to the *Times* an account of the genesis of his idea for the Memorial and some account of its development; and as the sculptor himself is best qualified to explain his own work, his words may here be included. He says:

"I believe that a meeting of the Executive Committee, after the preliminaries had been arranged, decided unanimously to ask me to undertake the work. I was sent for by Lord Esher and informed of their decision. They thought that they might thus get a work which would have more harmony and rhythm than they could expect if a number of sculptors were engaged upon it. I felt great diffidence in undertaking the commission, fearing that I might not be able to do justice to so great a theme; but I thought that at least I could try, and so I began my preliminary sketch-model. It was intimated to me that the Committee would like me to travel for a year and examine the great examples of the monumental sculpture of Europe. I felt, however, that if I were to do so before having determined on a general scheme I should be somewhat bewildered on my

THE QUEEN VICTORIA MEMORIAL

return, and that the result would not embody the expression of my own personal feelings. This being so, I decided to proceed with my model, which was done to a very small scale, but was sufficient to convey a fair idea of my proposals.

"I felt first that I must begin by giving what I thought was the true foundation upon which the Throne must rest, and so it occurred to me that there should be a large raised platform surrounded by walls containing fountains and great basins into which the fountains discharged. This would suggest the maritime greatness of the Empire. This

idea was further developed by the retaining walls being decorated by mermaids and tritons. It also appeared to me that this base should likewise be emblematic of the courage and wisdom of the people, which are suggested by the reclining allegorical figures over the fountains, on the one side representing the Navy and Army, typifying courage, and on the other side Science and Art, symbolising intelligence.

"To carry this idea further I placed on the pedestals flanking the steps at the front and back of the monument groups of colossal figures



THE PRINCIPAL FIGURE

Telephoto: "Architectural Review"

THE QUEEN VICTORIA MEMORIAL



TRUTH

Telephoto: "Architectural Review"

supported by lions—in the front, on the right a figure of Peace and on the left a figure of Progress; and at the back, facing the palace, figures of Labour, Agriculture, and Manufacture. These, I felt, would represent all the qualities of the nation upon which Monarchy must depend for its security.

"The central feature, which rises to a height of 82 ft. above this foundation, I devoted entirely to those qualities which made our Queen so great and so much beloved. The statue of the Queen I

placed in front, seated enthroned with Orb and Sceptre and looking towards the heart of the great city whose people she knew and loved so well. On the right of the great pedestal I placed a group of Justice, and on the left a group of Truth. I felt that she was just, and that she sought the truth always and in all circumstances. At the back I placed a group of Motherhood, symbolising her great love for her people.

"Above, ornamenting the main corners front and back, I placed eagles, emblematic of Dominion,

THE QUEEN VICTORIA MEMORIAL



JUSTICE

Telephoto: "Architectural Review"

and on the superbase figures of Courage and Constancy; and rising from above, on an orb, a figure of Victory with outspread wings, with the right arm uplifted, and holding in her left hand a palm branch.

"The small sketch-model of this Memorial was completed a few months after Queen Victoria's death in 1901. The fact that it had so far reached maturity became known almost accidentally to King Edward, who paid me the honour of a visit to my studio to inspect it. His Majesty was

favourably impressed by the conception, and made certain critical suggestions to which I deferred, and which are embodied in the Memorial as it exists to-day.

"I then proceeded with a more elaborate model to a scale of one-tenth the full size. This was completed and approved by King Edward in the summer of 1902. It was then that His Majesty realised the magnitude of the work, asking me how long it would take to complete. When I mentioned ten years he replied 'Why, we shall all be

THE QUEEN VICTORIA MEMORIAL



MOTHERHOOD

Telephoto: "Architectural Review"

in our graves by that time.' I did not see my way, however, to name any earlier date, but as a matter of fact it is not more than nine years since the work was actually begun. I must now leave the Memorial to the judgment of my own and future generations, but I feel it incumbent upon me to say that whatever that judgment may be, the entire responsibility for the work rests with myself; for no artist could have been accorded greater freedom or treated with more complete confidence than I have enjoyed at the hands of the Memorial Committee."

The Architectural Review

As already indicated, there has been no lack of criticism—there never is—and from the columns that have been written about the Memorial a few excerpts are given below in respect of what may be called an endeavour to judge the work fairly and without prejudice.

"Sir Thomas Brock, in choosing the form of monument to Queen Victoria, set himself a task of extraordinary difficulty," says a writer in the *Morning Post*. "The figure of Her Majesty had to be distinct, predominant, and the sculptor has insisted on this necessary predominance some-

THE QUEEN VICTORIA MEMORIAL

what at the expense of artistic coherence. Viewed from the front the Queen is in perfect scale with the groups of 'Truth' and 'Justice' on either side. But when examined from the north or the south side of the structure all sense of perspective is lost. The symbolical figures referred to are actually nearer to the eye than is the statue of the Queen; yet her figure is so much larger in proportion that unity of design is upset. The figure of the Queen, judged by itself, is on the whole splendid. The upper part, in particular, has great dignity. The

front face is, perhaps, a trifle severe for the great-hearted lady who for so many years ruled the British Empire by love and kindness, but in profile the features are noble and sympathetic. The Memorial is sure to be extremely popular. It comprises all the factors that appeal to national pride and sentiment, and they are presented with a power hitherto absent in British monumental sculpture."

Another writer in the same issue says:

"In our notice of the base of the Memorial we praised its breadth and nobility of scale, the



Telephoto: "Architectural Review"

THE SUMMIT: "VICTORY," WITH SUPPORTING
FIGURE OF "COURAGE"

THE QUEEN VICTORIA MEMORIAL



Photo: "Architectural Review"

DETAIL OF LOW-RELIEF SCULPTURE AROUND WATER BASIN

magnificent sweep of the basins which repeats the curves of the sculptured panels of the base, the finely proportioned pediments, and the various figures in high-relief and in the round. On the panels sea-maidens, tritons, and children sport with joyous abandon on sea-horses, dolphins, and nautilus shells, all excellent in composition. The movement of the figures has a swing and swish that suggest the seas ruled by Britannia, but the Gothic waves respond to the force of neither moon nor wind, and the living waters in the basins emphasise their archaistic rigidity. The success of the lower part led us to believe that the monument when complete would be an imposing achievement, superb in scale and noble in decoration. And our faith was not lessened as the scaffolding rose to the sky. Within the wooden posts and beams seemed to be space enough for the display of these qualities. But now that the Memorial is uncovered we find unfulfilled the early promise of a really great monument. The scale, the general proportions of the architecture, are splendid. The figures disappoint. There has been no great effort to break from the spiritless bounds of convention. 'Truth' is partly draped, wings spread from her shoulders, a mirror rests on her right arm, her left foot tramples a serpent. Then there are a naked child and a seated figure. This group is weak in rhythm, confused in line, and, save for the mirror, it might represent anything but 'Truth.' 'Justice,' which faces north, is known by her sword; 'Motherhood' by her children. From the artistic point of view 'Motherhood' is the finest group. It is broad and monumental in treatment. The idea is concentrated in a harmonious design of not very striking originality. The gilded figures which surmount the Memorial are the least impressive of all. They fail in the monumental sense of design. They seem to be

modelled with the elaboration of statuettes. Distance and atmosphere resolve objects into silhouettes that express character and emotion with unmistakable truth. Detail in a work of art should never disturb the fecundity of a distant mass; and it is this insistence on unessential fact that robs the figure of 'Victory' of illusion. This 'Victory' appears to be insecure in her position. Seen in front, the wings and drapery seem to be overbalancing the figure. From almost every point of view we find in these figures awkward angles instead of buoyant or triumphant lines, and the gilt gives a heavy prominence to the forms that diminishes the suggestion of height."

With regard to the time occupied in completing the Memorial it may be stated that the lower portion was ready to be opened to public view in May 1909. This part included the marble basins, retaining walls, sculptured panels, granite paving, steps, plateau, and bronze electric lamps. In this portion of the Memorial there are about one thousand tons of Carrara marble and eight hundred tons of granite. Each basin measures 190 ft. in length by 24 ft. in width and 2 ft. in depth. Shallow wells in the gravel at the end of the lake in St. James's Park, and the lake itself, supply the water for the cascades, the quantity required being 108,000 gallons an hour. Engines erected at the pumping stations in St. James's Park provide the power, and after the water has passed through the cascades and basins it returns to the lake. The chief engineer to His Majesty's Office of Works is responsible for these admirable arrangements.

The central architectural portion of the monument was executed and erected by J. Whitehead & Sons, Ltd., and the architectural marble-work of the lower portion by Walton, Gooddy, and Cripps, Ltd.

THE COUR DE MARBRE, VERSAILLES

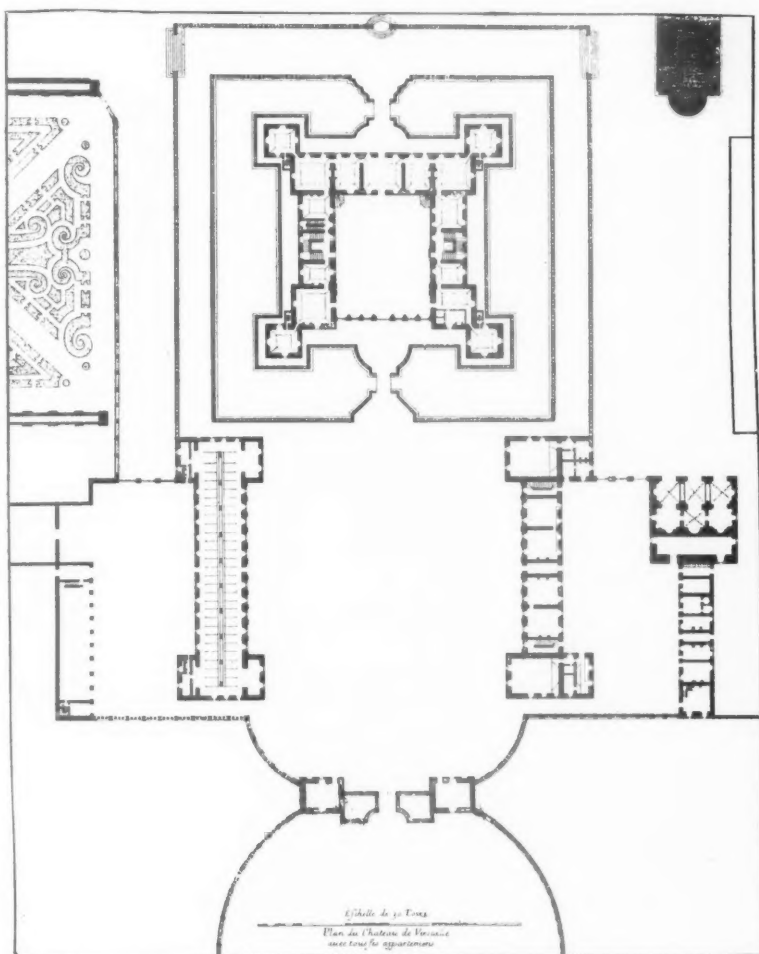


ALTHOUGH it is now indissolubly associated with the life and court of the "Grand Monarque," yet the actual founder of the immense palace of Versailles was Louis XIII, who first erected on land purchased from Jean de Soisy, and adjoining the estates comprised in the seignory of Versailles, a small hunting pavilion. This insignificant building was subsequently superseded, in 1624-6, by a square-built symmetrically-arranged brick and stone château of moderate size designed in the quaint and picturesque style of the Early Renaissance. In 1632 Louis XIII acquired from Jean François de Gondi, first Archbishop of Paris, the land and seignory of Versailles, and from this date the King, drawn hither by the attractions of the chase, made from time to time large additions to the already extensive gardens and parks that surrounded his modest building. Owing, in all probability, to the fact that the popular taste in art was being rapidly carried towards that phase of extravagant decoration which was to reach its zenith sixty or seventy years later, the unpretentious and homely character of the design of the royal château does not appear to have met with the approval of contemporary critics. For instance, Saint-Simon, the trenchant chronicler of the court of Louis XIV, called it "un petit château de cartes," and Bassompierre declared it was "un chétif château de la construction duquel un simple gentilhomme ne pourrait prendre vanité." Despite these adverse criticisms, the hunting box of Louis XIII was, on the whole, a good example of the work of an able architect, whose identity, owing to the divergence of opinion of many authorities, it is now difficult to ascertain.

Most of the writers on Versailles insist that Lemer cier, who was born at Pontoise towards the end of the sixteenth century, and died at Paris in 1660, was the architect of the original château, and there is no doubt that, through Riche-

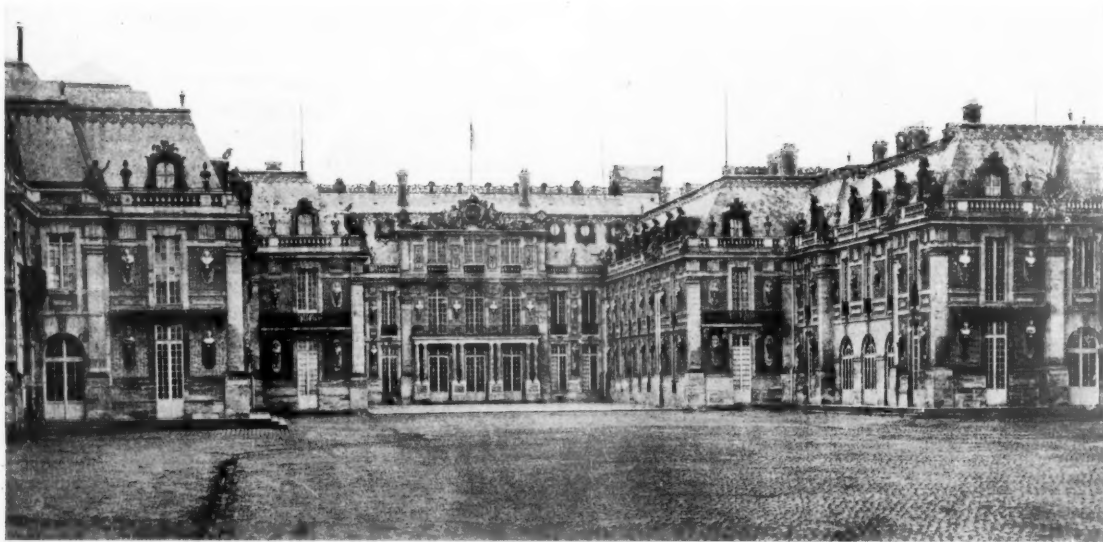
lieu's influence, Lemer cier was appointed first architect to the king. However, M. Pierre de Nolhac, whose official appointment as curator of the museum at Versailles entitles him to speak with special authority, states that the architect of Louis XIII's château was Solomon de Brosse.¹ But whether designed by Lemer cier or by de Brosse it is evident that the building, with its brick and stone façades and high-pitched roofs, was of a very interesting character. It consisted of a main group of buildings flanked by four pavilions, symmetrically arranged on the north, south, and west sides of a courtyard (afterwards the celebrated "Cour de Marbre" of Louis XIV), the whole being encircled by moats and low balustraded walls. The subsidiary accommodation, comprising the servants' quarters and the royal stables, was contained in two blocks of buildings, placed in the large front court of the château: the three groups of buildings, congregated near the eastern boundary of the site, being separated by a stone

¹ Vide "Versailles and the Trianon," by Pierre de Nolhac.

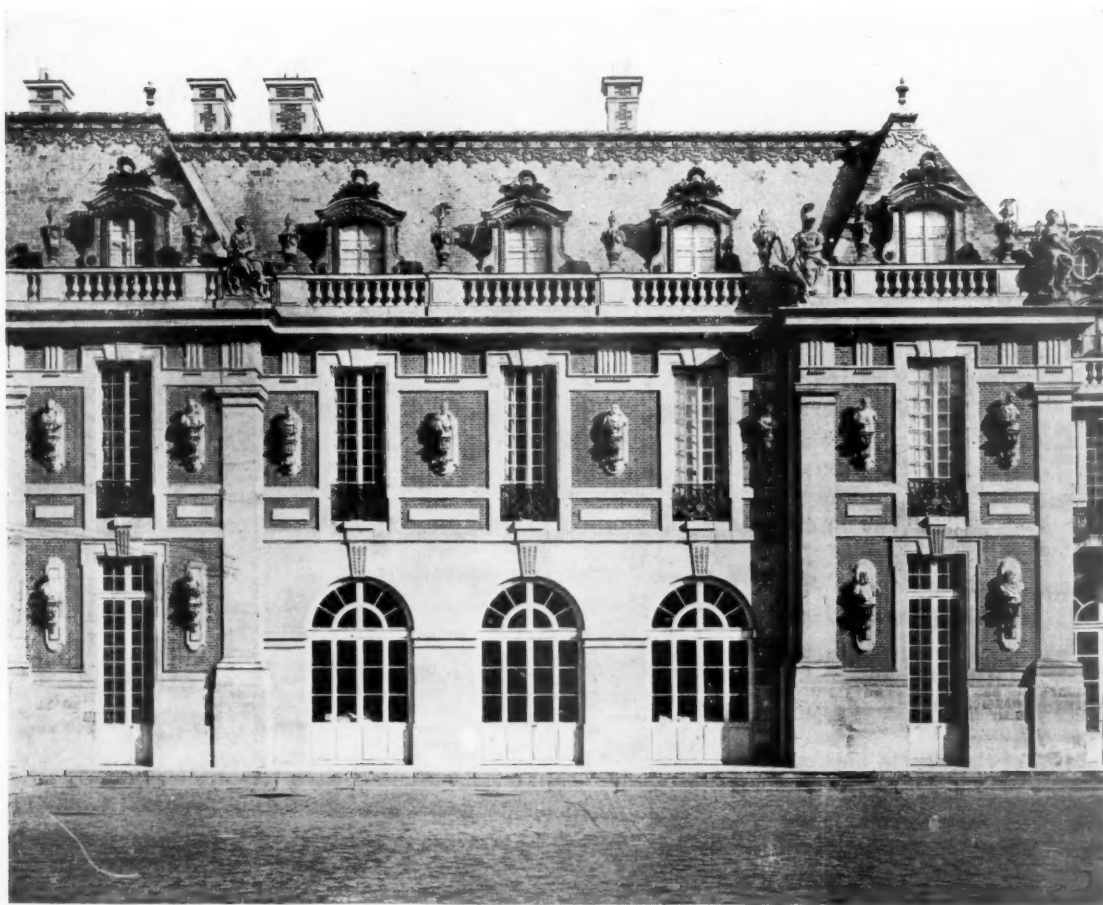


PLAN OF THE ORIGINAL CHATEAU WITH OUTBUILDINGS (1667)

THE COUR DE MARBRE, VERSAILLES



GENERAL VIEW OF THE PALACE FROM THE COUR DE MARBRE



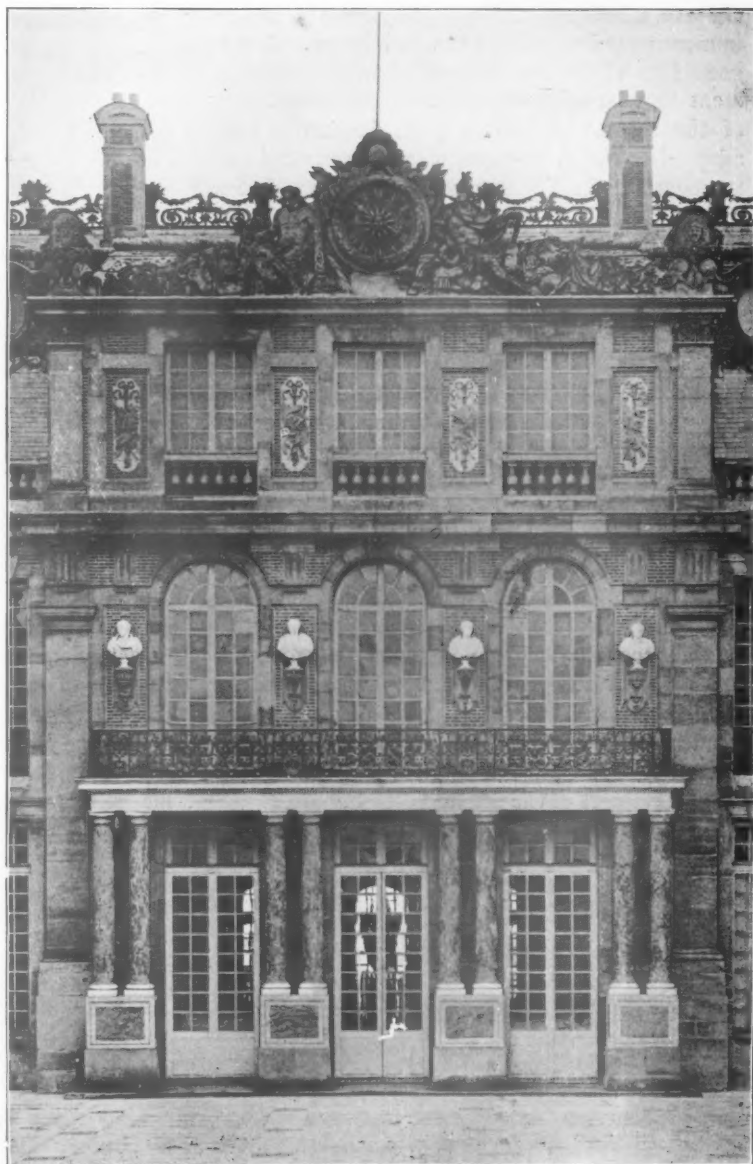
WEST WING, COUR DE MARBRE

arcaded screen and small entrance lodges from the enclosed circular-shaped front approach. (See plan on p. 359.)

Although the greater part of the original château has been absorbed by later additions, yet portions of the older building are to this day closely discernible in the marble court. In spite of this, however, it would not now be possible to reconstruct conjecturally the building of Louis XIII with any degree of confidence were it not for the fortunate circumstance that a folio volume of engravings of the Château of Versailles,¹ as it appeared at various periods of his reign, was published with the approval (or perhaps by command) of Louis XIV.

These engravings, executed chiefly by Israel Silvestre, are of great interest in exemplifying the evolutionary process by which the small château of Louis XIII became, many years later, the splendid palace of his son. The first three plates of the book consist of plans of the building and its surroundings, the last of the three, dated 1667, being a large-scale plan showing the internal arrangement of the château and its dependencies. The fourth and fifth plates, dated 1664, and entitled respectively "*Veue et perspective du château de Versailles du côté de l'entrée*" and "*Veue perspective du château de Versailles de dedans l'antecour,*" probably represent the building very much as it was soon after its completion, and before any considerable alterations had been made, by the architect Leveau or his successor Mansart, either to the château itself, or to its outbuildings.

With regard to the architectural treatment of the side elevation of the building, there are, fortunately, still in existence various engravings published during the reign of Louis XIV by which we are enabled to form a reliable opinion as to the measure of its success. One of these plates, en-



CENTRE PORTION OF LOUIS XIII'S CHATEAU, AS AT PRESENT

graved by Silvestre in 1664, entitled "*Veue et perspective du château de Versailles du côté de l'orangerie,*" represents the south façade of the old building as forming a background to the small orangery, placed in a sunk court in the gardens and approached by two flights of steps from what is now known as the "*parterre du Midi.*"

The architectural details of the inner elevations of the old building abutting on the marble court are shown by two engravings made by Le Pautre in 1676, one of which (reproduced on the next page) depicts a representation of Molière's tragedy of "*Alceste,*" given in the court itself on the first day of the King's fêtes at Versailles of that year. On this occasion there was no scenery other than that afforded by the three façades of Louis XIII's

¹ This volume can be seen in the Library of the Royal Institute of British Architects.

château, which were brilliantly illuminated with an immense number of lanterns and lamps. A very good idea of the excellent effect of this arrangement may be gained from Le Pautre's engraving of the scene. Buildings have frequently been adapted to the purposes of stage representation—as especially in the case of Greek plays—but it would seem that no result could be more happy than that which was attained on the occasion of this court representation of "Alceste" at the old palace of Versailles.

These plates clearly depict the characteristics of the older work, of which the richness of the ornamentation of the lofty roofs, the highly decorated chimneys, the pedimented dormers, the curious excrescences taking the form of angle turrets or balconies carried by quaintly designed corbels and crowned with small domes, and the treatment of the wall surfaces with their large panels, enriched with consoles supporting busts, are especially noticeable. When first erected the building had no projecting feature other than the pseudo-portico of eight coupled marble columns to break the continuity of design and otherwise disturb the architectural repose of the small brick and stone façades; nor did the Doric columns, supporting balconies, of the end walls of the north and south wings form part of the original design.

MODERN FRENCH SCULPTURE



IN tracing, briefly, the development of modern French sculpture, one may take as a starting-point Claux Sluters, the Burgundian Fleming who modelled the wonderful Moses Well and the tombs of Jean Sans Peur and Philippe le Hardi at Dijon. His works are a curious compromise between the Gothic and the modern spirits. His art is distinctively Gothic in the sense that it is sculpturally undecorative and uncomposed, though exquisitely subordinate to the architecture it adorns; yet it displays very forcibly the emancipation of the sculptor from the thralldom of the architect, and in this respect Sluters is one of the most interesting and stimulating figures in the history of French sculpture. Jean Goujon, however, is to be considered as the first modern French sculptor; and he remains, too, one of the very finest, even in a competition constantly growing more exacting since his day. His works cover and line the Louvre, and anyone who visits Paris may get a perfect conception of his genius—certainly anyone who, in addition,



ENGRAVING BY LE PAUTRE (1676) SHOWING THE ORIGINAL CHATEAU OF VERSAILLES

visits Rouen and beholds the lovely tracery of his earliest sculpture on the portal of St. Maclou. He was eminently the sculptor of an educated class, and appealed to a cultivated appreciation. Coming as he did at the acme of the French Renaissance, when France was borrowing with intelligent selection whatever it considered valuable from Italy, he pleased the *dilettanti*. There is something distinctly "swell" in his work. He does not perhaps express any overmastering personal feeling, nor does he stamp the impress of French national character on his work with any particular emphasis. He is too well-bred and too cultivated; he has too much *aplomb*. But his works show both more personal feeling and more national character than the works of his contemporaries elsewhere.

After Goujon, Clodion is the great name in French sculpture until we come to Houdon, who may almost be assigned to the nineteenth century. Clodion is the essence of what we mean by Louis Quinze. His work is clever beyond characterisation.

Like the Louis Quinze painters, he has his thoughtless, irresponsible, involuntary side, and like them—like the best of them, that is to say, like Watteau—he is never quite as good as he could be. He devoted himself almost altogether to terracotta, which is equivalent to saying that the exquisite and not the impressive was his aim. Nine years in Rome, he became enamoured of the antique in the most sympathetic degree; yet it was the statuettes and figurines, the gay and social, the elegant and decorative side of antique sculpture that exclusively he delighted in. His work is Tanagra gallicised.

After him it is natural that there should have been a reversion to quasi-severity and imitation of the antique (just as David succeeded to the Louis Quinze pictorial riot), and that the French contemporaries of Canova and Thorwaldsen (those literal, though enthusiastic, illustrators of Winckelmann's theories) should be Pradier and Etex and the so-called Greek school; of a far different character from which, and of a far nobler character, is the succession of the greatest of French sculptors



URN AND FIGURE ON PARAPET, COUR D'HONNEUR, VERSAILLES

since the Renaissance and down to the present day—Houdon, David d'Angers, Rude, Carpeaux, Barye. Houdon is one of the finest examples of the union of vigour with grace; and though his fame rests chiefly on his busts of Molière, Diderot, Washington, Franklin, and Mirabeau, and on his splendid statue of Voltaire in the foyer of the Français, and his San Bruno at Rome, that masterpiece "Diana" shows how admirable he was in the sphere of purely imaginative theme and treatment. To see the work of David d'Angers one must go to Angers itself and to Père-Lachaise, the Louvre being lamentably lacking in anything truly representative of this most eminent of all French portraitists in sculpture.

Of Rude's genius one's first thought is of its robustness, its originality. His strongest side was that which allies him with his artistic ancestor, Claux Sluters. But he lived in an era of general culture and æstheticism, and all his naturalistic tendencies were complicated with theory. He accepted the antique not merely as a stimulus, but as a model; and he was not only a sculptor, but

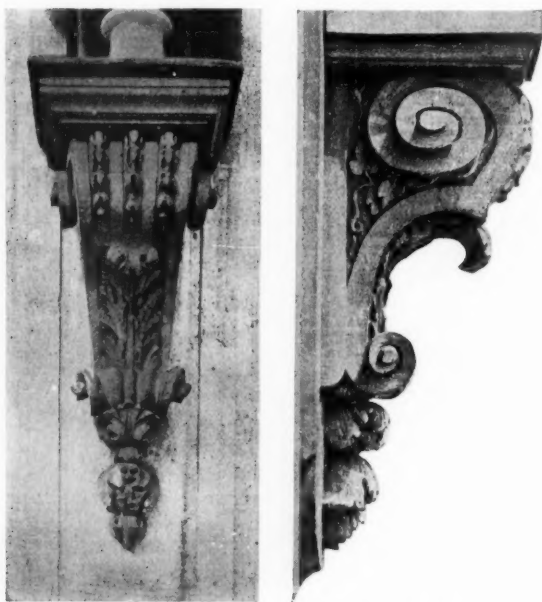
FRENCH SCULPTURE

a teacher. But it is idle to wish that Rude had neglected the philosophy of his art, with which he was so much occupied, and had devoted himself exclusively to treating sculptural subjects in the manner of a 19th-century successor of Sluters and Anthoniet. He might have been a greater sculptor than he was, but he is sufficiently great as he is. In all his successful work one cannot fail to note the force and fire of the man's personality, and perhaps what one thinks of chiefly in connection with him is the misfortune (which we owe to the vacillation of M. Thiers) of having but one instead of four groups by him on the piers of the Arc de Triomphe. Carpeaux used to say that he never passed the "Chant du Départ" without taking off his hat—and one can well understand his feeling—for, without question, this magnificent group easily and serenely takes its rank among the masterpieces of sculpture. Carpeaux perhaps never did anything that quite equals the *chef-d'œuvre* of his master, Rude, but the essential quality of the "Chant du Départ" he assimilated so absolutely and so naturally that he made it in a way his own, and if he never rose to the grandeur of this superb group, he nevertheless showed in every one of his works that he was possessed by its inspiration even more completely than was Rude himself. His passion was the representation of life, the vital and vivifying force in its utmost exuberance, and in its every variety; he was infatuated with movement; and his figures are, beyond all others, so thoroughly alive as to seem conscious of the fact and joy of pure existence—as witness "La Danse" on the façade of the Opéra; though possibly his temperament

gives itself too free a rein in the well-known work in the Luxembourg Gardens, "The Four Quarters of the World supporting the Earth."

Of Barye, last of the succession of sculptors named above, it may be said that his position is more nearly unique than any of the others, having had either the good luck or the mischance to do his work in a field almost wholly unexploited before him. The small scale of his works is in great part due to his lack of opportunity to produce larger ones. Nowadays one does what one can, even the greatest artists; and Bayre had no Lorenzo de' Medici for a patron, but, instead, a frowning Institute, which confined him to such work as, in the main, he did. But he did it *con amore*, and thus lifted it at once out of the customary category of such work; his bronzes never being *articles de Paris*. The illustration, in intimate elaboration, of elemental force, strength, passion, seems to have been his aim, and in every one of his wonderfully varied groups he attained it superbly. For his inspiration, fauna served him as well as the human figure; though, could he have studied man with the facility which the Jardin des Plantes afforded him of observing the lower animals, he might have used the medium of the human figure more frequently than he did. With him terminates the succession here briefly outlined, and from Barye to the Institute is a long way—as long as from the Institute to Rodin. To attempt any recitation of its exponents would be bewildering. For those who desire to gain such knowledge that most delightful volume, "French Art," by Mr. W. C. Brownell, may be commended.

In comparison with the great men of the Renaissance, the French academic sculptors are too exclusive devotees of Buffon's aphorism that "style is nothing other than the order and movement which we put into our thoughts," and too little occupied with the thought itself—too little individual. Modern academic French sculpture feels the weight of De Musset's handicap—it is born too late in a world too old. Culture, the Institute, oppress individuality. But whereas Corot and Millet have triumphed over the Institute, there are—there were, at least, till yesterday—hardly any Millets and Corots of sculpture whose triumph was assured. Yet the names of Dalou on the one hand, and of Rodin on the other, come at once to mind: Rodin especially as the genius of a new, vital movement in sculpture, a movement which sets aside "grace of pose, suavity of outline, pleasing disposition of mass, smooth round deltoids, and osseous articulations" as the only excellences to achieve, and endeavours, first and foremost, to embody an idea, a temperament, a sentiment, and to do so by a direct, intimate return to Nature.



CONSOLES IN THE COUR DE MARBRE, VERSAILLES

