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Photo: R. P. Jones.

GIRGENTI: TEMPLE OF CONCORD. INTERIOR LOOKING WEST.

Some Aspects of Sicilian Architecture.

I.—THE TEMPLES.

In number and importance the Greek colonial temples easily outshone those of the "old country," the Doric group in Sicily and South Italy, and the Ionic on the coast of Asia Minor, though each style attained to the highest point of refinement and perfection at Athens, which was neutral ground common to both.

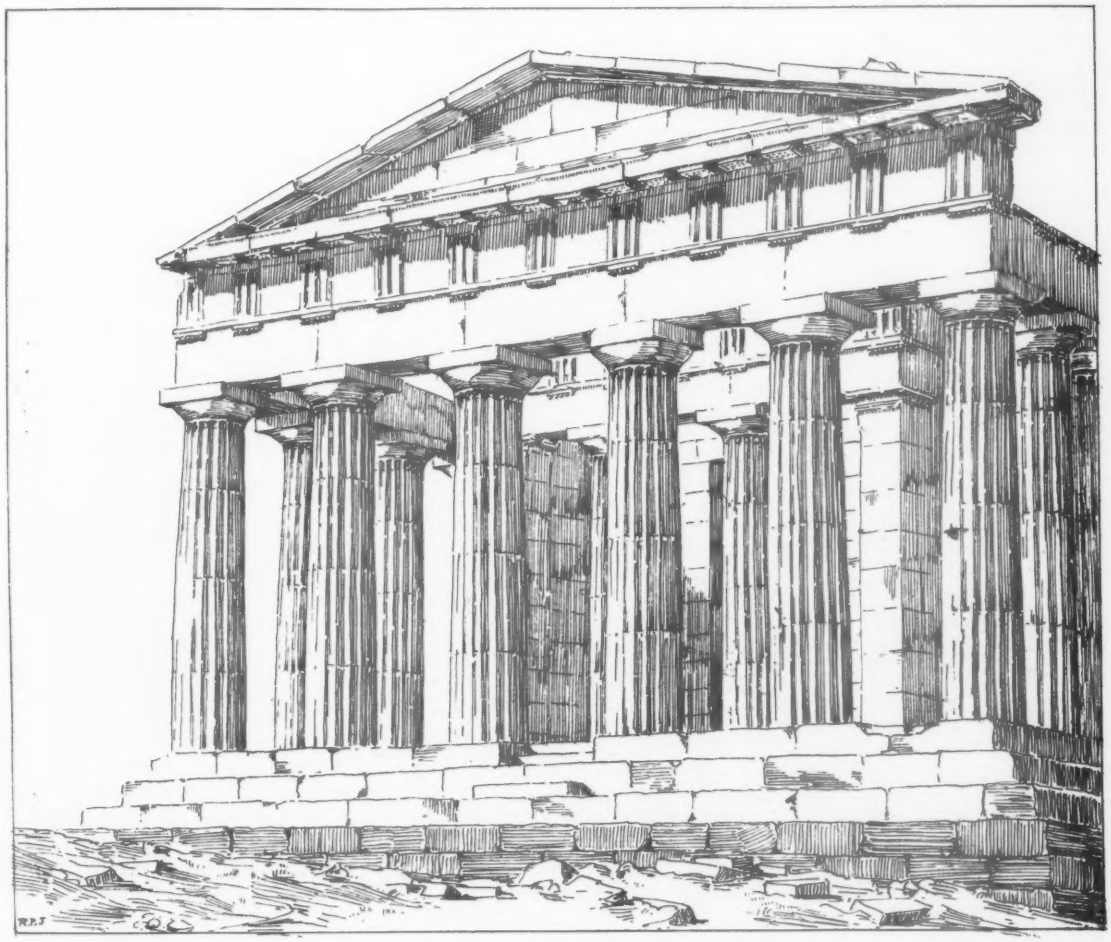
Of the Eastern work only the scantiest fragments remain, but the Sicilian temples still form an unequalled series illustrating the evolution of Greek architecture from the archaic period, and standing in scenes of exquisite beauty and variety.

Historically considered, the remains at Syracuse or Selinus claim the first place for antiquity of date, but it is probably at Segesta that the majority of visitors to Sicily receive their first impressions. As an introduction to a style of severe grandeur, nothing could be more appropriate than the journey into a wild and remote district from the luxuriance of the Conca d' Oro surrounding Palermo, and the oriental splendours of Monreale and the Capella Palatina.

As always in Sicily, the scenery becomes more barren as we leave the coast, and everything tends to deepen the effect of desolate solitude produced by the long drive into the mountains, and the distant view, suddenly revealed, of a single temple, apparently still perfect in outline, set against a background of rugged peaks, without any visible trace of the city which it once adorned.

The structure is in reality only the outer shell of a temple which was never completed. It was founded about the middle of the fifth century and was therefore contemporary with the Parthenon, and may well have been as we see it now when the Athenian deputation visited Segesta with a view to the great Sicilian expedition, and were deluded into so exaggerated an idea of the wealth of the city.

The peculiar interest of the building lies in the unfinished state of the masonry and the light



GIRGENTI: TEMPLE OF CONCORD.

THE EAST PORTICO.

which it throws on the Greek method of erecting a temple, since it proves that the peristyle and not, as we should expect, the sanctuary itself was the first part of the work to be put in hand.

The proportions of the order are very massive considering the date, but this is partly due to the columns being still in the rough and unfluted, except just below the capital, where they were worked for a short distance on the shaft before it was built up to serve as a guide to the masons. We may recall that the state of these columns was noted by certain of the Greek revivalists in England, and in the spirit of sincere flattery they actually imitated it as a variation on the usual type of Doric order.

The shafts stand on square base blocks connected by a sill or plinth of equal height but less width, no doubt intended to receive the same kind of treatment as those of the great temple at Girgenti; in other respects the design conforms to the ordinary type. The temple was formerly surrounded by a sacred enclosure or grove, and was always outside the bounds of the actua city, which occupied the peak of an isolated hill several hundred feet above; some signs of domestic buildings can be traced leading up to a small but well-preserved theatre, perched on the extreme summit and commanding, as a natural back scene, a glorious view of the distant hills with the temple below in the foreground.

Segesta is without question one of the most extraordinary instances of overpowering effect obtained by means which in the abstract seem disproportionately simple if not meagre; the temple consists of nothing but thirty-six unfinished columns carrying an entablature, and constructed of coarse stone with no refinement of detail; even the scale is only moderate: it covers less ground than a large parish church, and would dwindle into insignificance among the colossal ruins of Karnak or Luxor. But there can be few sights more profoundly grand and solemn than this bare amphitheatre of mountains, where the temple still defies the work of time like the embalmed corpse of a long-dead religion.

Indeed, if we are to judge the merit of architectural works according to their power of producing the finest effect with the simplest means, it must be admitted that the Greek temple stands *facile princeps*, independently of its position and of the classical associations which it suggests. On the other hand it is as well to reflect that not a single detail of the impression we now receive at Segesta was present to the minds of the Greeks themselves. The complete structure would have been finished to the highest point of exactness and delicacy, the whole surface faced ostensibly with the finest white marble, and decorated with sculptured relief and brilliant colouring, while the garden close around it formed a centre for the religious life of an active and populous city.

This aspect of such a temple is more easily imagined at Girgenti. If the setting at Segesta is tragic, here it is lyric; though the city has not altogether vanished, it has receded from the ancient boundaries, leaving the temples half buried among meadows and orchards, or standing out boldly on the ridge of a cliff, where the goat-herd still pastures his flocks as in the days when Theocritus wrote the Idylls. At the eastern end of the ridge, almost overhanging the precipice to the south, and approached by a steep ascent leading to a terrace, is the temple of Juno Lacinia, of which only one range of columns still remains entire, though parts of the rest are mostly in position. The order is of the fifth century: it is of no great size, but recalls Athenian models in its comparative slenderness and in the delicate curve of the echinus, though the mouldings in general are not worked with much finish, as the rough and porous stone of Sicily had always to be coated with a preparation of marble dust and cement, which received a high polish, and became in effect a thin veneer of marble on the outer surface. Some traces of this covering can still be seen, while other parts of the stonework are discoloured by reddish-brown streaks, said to have been caused by fire.

Further to the west stands the Temple of Concord, which competes with the Theseum at Athens and one of the Pæstum temples for the distinction of being the best-preserved example of Greek architecture we possess. But for the roof it is practically entire, and in many parts the mouldings and flutes are clear and sharply cut, though little of the artificial surface remains. On the seaward side of each column the action of the sirocco has worn and disintegrated the stonework, which has everywhere weathered to a beautiful golden brown colour, in harmony with the prevailing yellow tone of the whole landscape.

The interior is remarkable for the stone staircases leading up to the space between the inner ceiling and the roof proper; these are steep and narrow like the mediæval turret stairs, but differ from them in being planned on a square with straight flights and quarter landings. Openings cut in the cross-walls of the naos above the ceiling level gave access to that part of the roof which was over the peristyle at each end, and one of these can be seen in the illustration here reproduced. In the Middle Ages the temple was converted into a church, and a series of arched openings was made in each of the side walls. These, however, are scarcely noticeable from the outside, and do not disturb the general effect.

GIRGENTI: TEMPLE OF CONCORD FROM THE SOUTH-WEST.

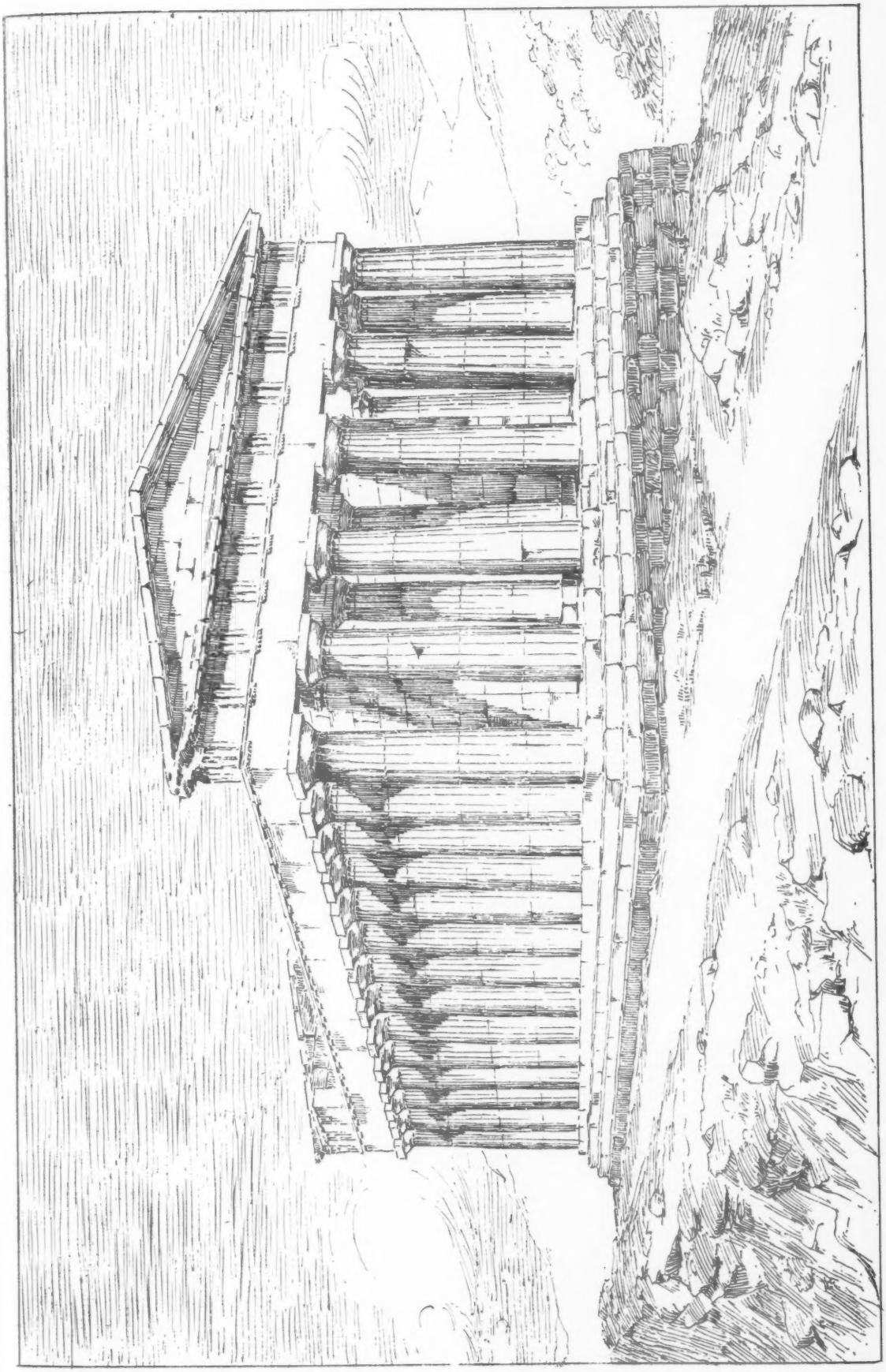
Photos: R. P. Jones.

SEGESTA: THE TEMPLE.

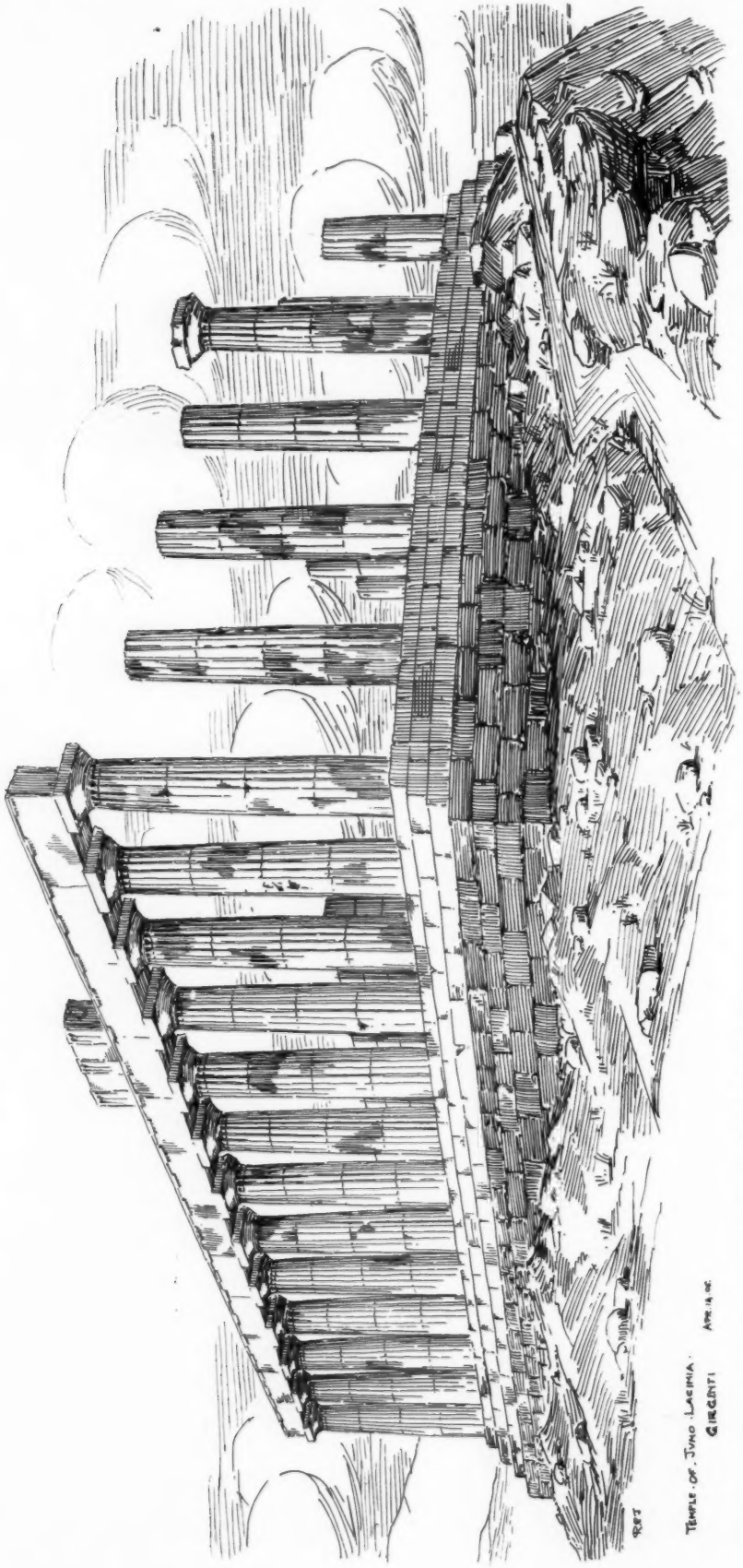
GIRGENTI: TEMPLE OF CASTOR AND POLLUX.
THE NORTH-WEST ANGLE.

The fine position near the edge of the cliff, and the beauty of proportion in the temple itself, combine to produce an effect of power and dignity which is astonishing when we realise how small are the actual dimensions—the extreme length is less than 150 ft., and the height of the columns about 20 ft.; and we are inclined to wonder why, with perfection so easily attainable, the Greeks ever felt it necessary to increase the scale at all.

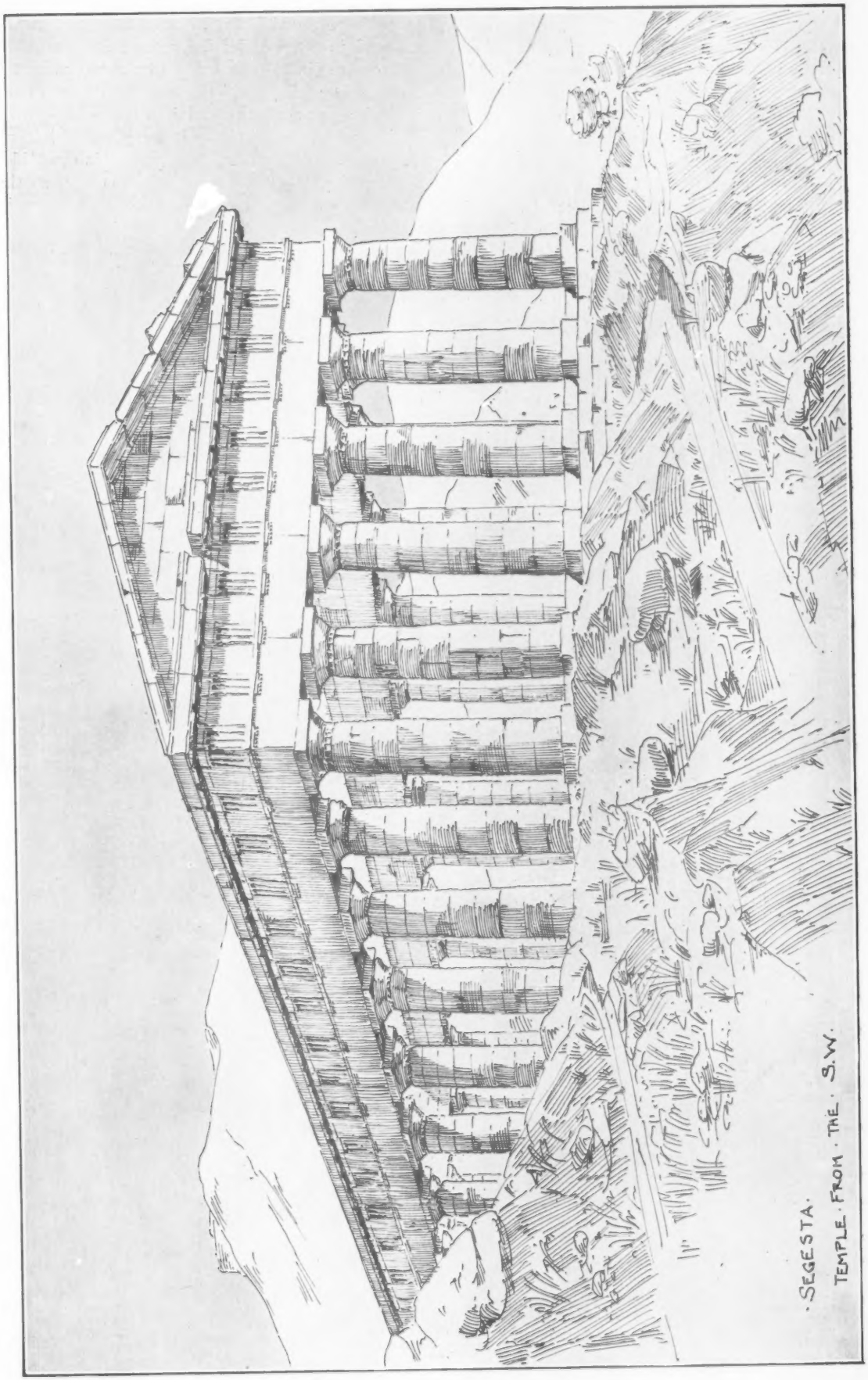
Next in order come the remains of two larger temples, between which lay the "golden gate" giving entrance to the city for those who



GIRGENTI: TEMPLE OF CONCORD FROM THE SOUTH-EAST.



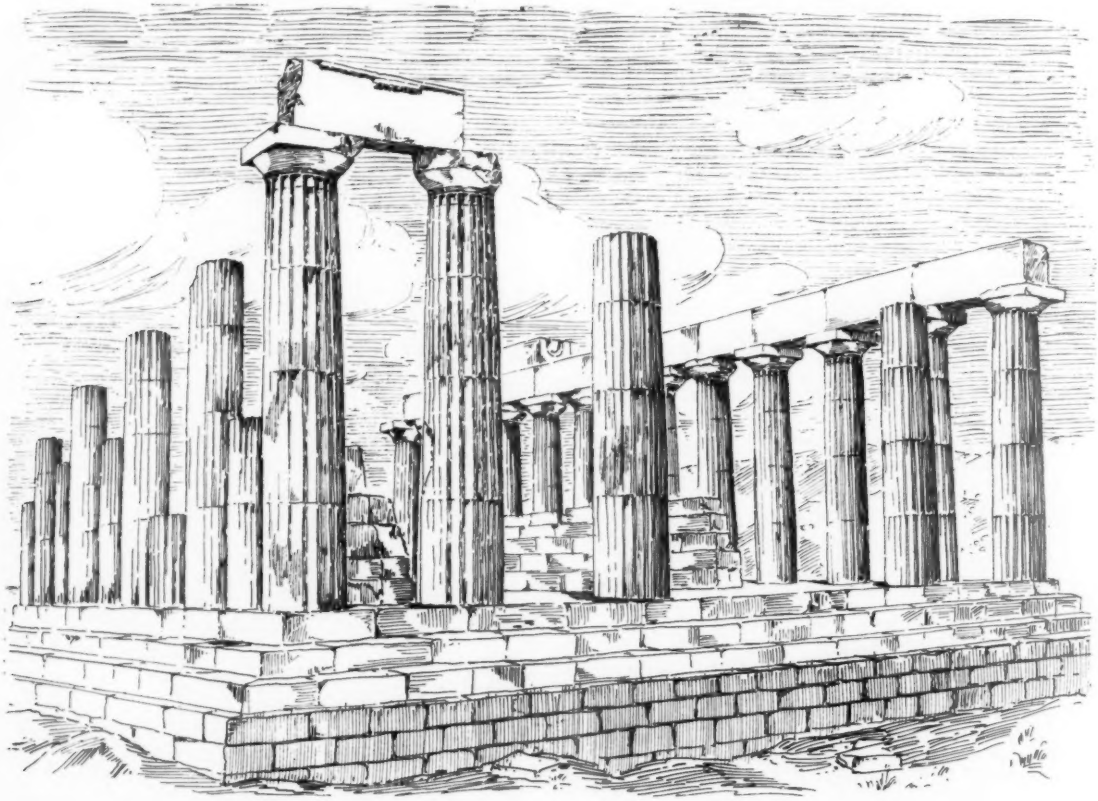
GIRGENTI : TEMPLE OF JUNO LACINIA FROM THE NORTH-WEST.


·SEGESTA·
TEMPLE·FROM·THE·S.W.

approached it from the harbour. These are both reduced to chaotic heaps of masonry half overgrown with wild flowers and haunted by myriads of bronze-green lizards, which bask on the sun-baked fragments of column and architrave. The eastern temple, that of Hercules, is not remarkable except as having contained the famous statue which fascinated that early art collector, Verres, and led to his night attack upon it, of which Cicero gives such a graphic account. The temple of Zeus to the west was one of the curiosities of Greek architecture, on account of its exceptional size and design. It covered nearly 70,000 sq. ft., with columns 60 ft. high, and as a result of this exaggerated scale it was found impossible to obtain blocks large enough for the architraves; consequently the peristyle had to be walled up solid, as was the case in later times with the portico of St. Peter's, which was originally designed to stand free. The columns, therefore, became semi-attached, and on the inside were treated as flat pilasters, while the problem of lighting the peristyle was solved by the provision of windows between the columns. The width of the naos was proportionately small, no doubt to avoid a roof-span of impracticable size, and this variation from the customary scheme of planning involved the use of seven columns at each end, another unusual feature, to which the only parallel occurs in the so-called basilica at Pæstum where there are nine. The order was again unique in possessing a base, which was also continued along the walls as a plinth moulding.

Begun in 480 B.C., this temple was left unfinished after seventy-five years, and in the Middle Ages was much used as a stone quarry, so that only a small part of the whole mass now remains on the site. The interior contained, in some position not definitely known, colossal stone figures in an attitude of support, one of which has been put together from rough fragments and lies on the ground like a gigantic mummy.

In striking contrast, the temple of Castor and Pollux, close by, is almost diminutive in scale. Like its neighbour, it was entirely overthrown by earthquakes, but in modern times four columns and an angle of entablature have been set up again. The original cornice had presumably disappeared, as its place is taken by fragments from another temple with mouldings and carving of much coarser execution. Such as it is, however, the restoration is one of the most picturesque ruins in Sicily; and, thanks to a somewhat sheltered position, a good deal of the surface facing, and even of the colour decoration, still survives.



GIRGENTI: TEMPLE OF JUNO LACINIA.

It will be noticed that a horizontal joint occurs in the frieze, and that the metopes and triglyphs are formed from the same block of stone. This unusual method of construction would of course not be evident when the facing was complete; but it seems to suggest that the metopes were not intended to be carved in relief.

These five temples, with that of Vulcan further west, of which few traces can now be seen, formed a series hardly to be equalled in the Greek world. Every advantage was taken of the natural changes of level in the site, and they were so disposed as to be visible in a continuous line to all who arrived at the city by sea. Even the view of the Acropolis as approached from the Peiræus could not have been more magnificent.

It was, perhaps, rivalled by Selinus, but there the earthquakes were even more devastating, and the temples now lie in confused heaps, often just as they fell, without the romantic and beautiful surroundings of Girgenti. The difference is perfectly symbolised in the mere fact that at Selinus it is enough to indicate each temple by a letter; however incorrect the titles may be at Girgenti, we could not there think of giving up the dedications and resorting to the use of M or N.

The real interest of Selinus lies in the archaic details, and must be sought in the museum at Palermo. The metopes show the crude beginnings of Greek sculpture, which was capable even at that time of the startling truth and realism of the dogs in the Actæon subject; the gradual refinement of the capital can be traced from the bulge of the archaic echines, and the deeply-cut channel at the necking; while the scheme of colouring in a rudimentary form is shown in the blue triglyphs and red cornice mouldings. There are also complete examples of the terra-cotta enrichments which were applied to certain of the entablatures instead of carving in stone, including a form of cresting which ran up the slopes of the pediment, a design singularly unlike Greek work, and suggesting Egyptian influence.

Finally, the temples at Syracuse represent possibly the oldest work on the island. Compared with the great structures of the outer city, such as the theatre or the fortifications of Euryalus, they are insignificant; in fact, Syracuse appears to have been destitute of any religious buildings at all worthy of her pre-eminence in Sicily. The temple of Apollo is said to date from the beginning of the sixth century, and the plan is unusual in possessing an extra row of columns at each end. A few of the shafts are still standing, so closely set, and with capitals of such wide projection, that the distance between the abaci is reduced to a few inches.

A second temple, slightly later in date, was converted into the cathedral, and the two sides of the peristyle were filled in to serve as outer walls to the aisles. In the interior the stern outlines of the Doric order form a striking contrast to the meretricious stucco decorations of the Renaissance, and this reminiscence of an earlier religion is further suggested by the conversion into a font of a great wine-mixing bowl taken from the neighbouring temple of Bacchus.

RONALD P. JONES.

COTTAGE AT FORD. SKETCH BY A. WELFORD.

AMIENS CATHEDRAL. INTERIOR OF THE CATHEDRAL.

Architectural Refinements

and Mr. Goodyear's Exhibition of them at Edinburgh.

THE readers of THE ARCHITECTURAL REVIEW have already, in last September's issue, been put in touch with the remarkable photographs of Italian and other mediæval churches which Mr. Goodyear has been exhibiting in many places, and has now carried back to the United States. I had the privilege of seeing them at Edinburgh, and the following pages give some of my impressions, and the view which I was finally able to take of the particular issue which Mr. Goodyear's sagacity and zeal have put before archæologists and the lovers of mediæval art.

The first reflection that comes to an architect when asked to take a new view of mediæval building and accept a new explanation of its beauty is a disheartening one. We have for such a long time been endeavouring to reproduce these architectural masterpieces of the Middle Ages! There have now been some five or six successive generations of architects copying the mediæval styles, and all to no use. Each generation of stylists has had no difficulty in showing its predecessors to have been futile and superficial.

A hundred years ago a beginning was made with battlements, pinnacles, and ogee curves, and then the Wyatts or Wyatvilles seriously copied Salisbury to give Hereford a clerestory, and with great applause reconstructed abbeys and castles for romantic clients. But immediately their successors thought little of such efforts, for with Pugin and the ecclesiologists the Gothic revival was no scenic romance, but a faith! So the tale went on, and not faith alone, but a moral purpose was found to lie in foliations and vaulted construction—the only question was as to the particular phase of mediæval architecture in which the expression was most faithful and most moral. The next generation of architects therefore studied all and every phase. They measured and modelled, till from the offices of Scott, Street, and their able pupils came works in which not only the superficial aspects, but the very anatomies of mediæval construction were revived with every section and every joint exact to the life of some period or other. Yet Pearson found he could go one better! In the dramatic intensity of his mimicry he rendered the hesitating inexpertness of the Romanesque axe-choppers and detailed in all its experimenting indecision the Gothic advance from the lancet to the tracery bar. And now, when one has been to Edinburgh, one must reconsider all this—at any rate so the Scotch reviews tell us—all this moral and religious exaltation, all these learnings of the tape and the sketch-book, all this dramatisation of mediæval conditions. If Mr. Goodyear's exhibition means anything, it means that we moderns have failed—dismally failed—to produce any adequate representation of the mediæval building. And why? Because an unnoticed secret has lain hid behind the splendid shapings and bold constructions of the cathedral-builders and all the craft of their masonry. The true quality of mediæval architecture was not in such obvious things, but in *refinements*—in "optical refinements," in "perspective illusions," in "horizontal" and "vertical curves," in "leaning façades, asymmetries, and obliquities." A little wearily the architect asks, "Are we, then, to start afresh? Shall we skew our tee-squares, and crook-back our set squares? Shall we draw our elevations with the French curves and write 'deflections' and 'bends' in our specifications? Shall our quantities have it thus: "70 ft., extra only, for optical illusion"? We are told that already in the States architects are doing these things.[1] And one feels what a pity it is that all this discovery was not promulgated in time for the Liverpool Cathedral Competition.

It is fair, however, to say that this is merely an architect's view, and is not Mr. Goodyear's. Though his friends are giving New York the benefit of asymmetric planning, he himself holds to the pessimism born of past experience. He is doubtful whether even when we have specified refinements to contractors we shall succeed in getting the mediæval art into modern buildings. He is no reformer, indeed, of modern architecture, but merely concerned in the historical accuracy of research. This question of irregularity in ancient building has occupied him more or less for thirty years, and during the last ten he has visited, photographed, measured, and plumbed an extraordinary number of ancient churches—mostly in Italy, but at Constantinople also, and as near to us as Amiens and Wells. There is no question that by this hard work he has won his way to our complete acknowledgment of the facts so beautifully displayed in his exhibition at Edinburgh. If not exactly the discoverer of irregularities, he can claim to have been the first to have systematised their phenomena, and to have made it easy now for everybody else to perceive them. Mr. Goodyear's

[1] One reads in a recent publication of Mr. Goodyear's how "Messrs. Gordon, Tracy & Swartwout, of New York, have publicly announced their purpose of constructing vertical curves in the Episcopal Cathedral of Denver."

catalogue lays, perhaps, a little too much stress—quite pardonably under the circumstances—on the *hidden* grace of these refinements, which are not to be perceived by careless glances, and yield their secrets only to the initiated eye. As a matter of fact, some of these graceful obliquities have obtained the comment of observers, and the handbook of a cathedral usually points out that the Lady-chapel bends to one side as a symbol of the bent head of the Figure on the crucifix. It has also been remarked that mediæval walls are not always perfectly vertical. Indeed, the asymmetry of ancient church construction and general decoration has struck not only Ruskin, but the whole army of sketchers and measurers that have for fifty years been making drawings of churches and cathedrals. Still, Mr. Goodyear must be freely allowed the merit of giving these facts a classification and a nomenclature. His are the first steps to a scientific understanding of what his measurements and photographs triumphantly show to be accessory to so much of the ancient beauty of architecture.

It has to be added, however, that Mr. Goodyear wishes to carry us further than classification. Aim as he may at being only an accurate recorder of irregularities, he cannot help going behind the phenomena he tabulates and showing us, not the method only, but the meaning of it all. At page xiv of his classified catalogue I read as follows: "Aside from the accidental element, the builders of the Middle Ages frequently practised predetermined and carefully considered constructive arrangements which were intended to make their buildings more imposing, more attractive, and more interesting to the eye." There can be no question that this deliberate intention is what his exhibition is designed to prove to us. He shows how such arrangements are specially observable in those cathedrals which may be taken as expressive of national aspirations, "on which therefore unusual care has been lavished," such as St. Mark's, the Duomo of Pisa, and the Notre Dame of Paris. Indeed, the title of "Architectural Refinements," applied to the exhibition, makes it quite clear that to Mr. Goodyear the irregularities found by him are not only not mistake nor accident, but are due to an intention of design—in fact are proofs of a distinct theory of beautiful creation in the art of building. The following pages will discuss this interesting point.

THE ARCHITECTURAL REVIEW has already given in full the heads of Mr. Goodyear's catalogue, with the classification which he has adopted. And if I do not take this classification as the basis of my remarks, it is not that I wish at all to criticise Mr. Goodyear's arrangement. The photographs, some of which are here reproduced, supplement his nomenclature of bends, deflections, and such like. But I think the various classes of appearances may, perhaps, be better brought before the reader's eye if I take a hint from an informal summary given by him in the text of his catalogue,[2] and arrange his phenomena thus:—

CLASS I.—Variations from regularity which have the appearance of:

(*a*) Errors of measurement, such as the unequal spacing of piers in arcades or of window-widths in a series of bays.

(*b*) Errors of squareness, as when transepts are not accurately at right angles to naves, or when arcade walls go canting away from a front.

CLASS II.—Irregularities which have the appearance of resulting from weak abutments or foundations, such as the spreading of arches, the curving of walls, the leaning of façades, etc.

CLASS III.—Irregularities which present themselves as seemingly due to difficulties of site, as when existing buildings cramp a rectangular setting out, or prevent the regular symmetries.

The above three classes of appearances are sufficiently common in all buildings, whether modern or ancient: the facts that they suggest have engaged the attention of all architects called upon to be surveyors.[3] Three other classes are not so common to us.

CLASS IV.—In this I put deviations from regularity with which we have less experience in the modern building of churches, for the reason that our builders are not hampered by the necessities of a church service going on during the course of erection. Both in their buildings and additions the old builders had to provide that services should begin at the earliest date possible and not be interrupted. The choir of a new church was roofed in somehow as soon as it could be, and subsequent building had to be carried on outside its enclosure and at a disadvantage for exactly fitting the old work. So in mediæval buildings as they have come down to us there can be seen frequently irregularities occasioned by the retention of walls, screens, temporary roofs, etc., to the last moment, until the new work outside of them could be with great rapidity made good on to the old.

[2] See p. 22 of the Illustrated Catalogue, "Aside from variations due to indifference to formal regularity, to the cessation and recommencement of work at different periods, to changes of plan, and to local or physical causes of some special nature, there are those inherent to the mason's art, as practised in mediæval times."

[3] I have found curves similar to those of the cloister at Bologna in a whole series of back-yards in London, and have called on the adjoining owner to amend the thrust of his shed that seemed to have caused them.

NOTRE-DAME, PARIS. INTERIOR, LOOKING EAST.

CLASS V.—There is another set of variations from formality which have also somewhat fallen out of the custom of moderns for the reason that our building is so strictly governed by the use of the drawing-board. When there was less of this drawing, the habit of the mason and the convenience of his craft made walls to batter and arches to be slightly stilted, and all the building of churches to show a host of other small manipulations away from the exact rigidity of the ruled line. Mr. Goodyear's irregularities have the appearance of sometimes being just these, and nothing else.

CLASS VI.—Finally, there are variations which have the appearance of none of the above, and may be accepted as intentional, but on other grounds than workman's habit; as, for example, when the Italian garden arranges a sham perspective; or when, to save heaven's jealousy of a too great perfection, a flaw or irregularity is purposely introduced, as is common in Eastern art.

Now, the above six appearances can, I think, comprise all Mr. Goodyear's phenomena of refinement; but however much they may appear to us so to classify themselves, Mr. Goodyear is not satisfied. He claims that, if not in all the examples given in his collection of photographs, in the bulk of them the above appearances mean nothing. What is really exhibited is an art of irregularity, a *maxima ars* which is able *celare artem*, and this was the traditional secret of design permeating mediæval building, but lost at or about the time of the Renaissance.

It is recorded that when the followers of Xeno explained their theory that movement was impossible, Diogenes got out of his tub and refuted them by walking. But all the same the Cynic missed the point, which was not that men did not appear to walk, but that there was another way of taking the appearance of it. So it is no use for the cynical critic to point to the appearances and say, "These are against you, Mr. Goodyear." A philosopher is entitled to discover an interpretation different from the obvious, and to say in any particular case that a refinement may have the appearance of an irregularity or a craft-habit, and yet be due to a definite system of æsthetic design.

Taking the classes of appearance in order, Mr. Goodyear's position with regard to his critics may be put before the reader.

CLASS I.—*Errors in Measurement, in Levelness, or in Squareness.*—Every architect knows that the equalities, parallelisms, and rectangulations, which his dividers, tee-squares, set squares, etc., draw on paper so easily, are not always exactly kept in the executed building of modern work. It is a commonplace to specify that stairs, cupboards, etc., must be made from the completed carcase and not from the drawings themselves. Architects, therefore, are accustomed to think some small inaccuracies inevitable; but Mr. Goodyear points out that his refinements are on too large a scale to be taken as due to these trivial variations. This may be so, but it may also be fairly urged that the exact habit of extreme accuracy with which we draw and set out building is a modern *refinement* for which the ancients had neither the taste nor any easy recipe. So if, despite our care and our distinct ideals of straightness and squareness, a bungle of these niceties is very general, would not such a bungle be more conspicuous in ancient building? Should we not expect that much larger irregularity which the photographs show? Mr. Goodyear is ready for this argument. "I find," he says in effect, "a very great exactness of setting out in some mediæval buildings, therefore when inexactness is distinct it must have been premeditated." Indeed, he goes further and establishes for certain buildings a modulus of error, any excess on which must, he argues, be due to intention, and not to carelessness. But can a modulus be so determined? *Humanum est errare*—in a very irregular way. The mason sets out six spaces accurately, and celebrates the event, perhaps, too lavishly one night, and the next morning "has a head" and makes a terrible break in the average of accuracy. In my observation of mediæval work the greatest accuracy of setting out is to be found in the works which show in other ways the evidence of greatest superintendence and organisation. In fact, the *regularity* is the *refinement* which has to be accounted for.

CLASS II.—*Settlements, etc.*—The second class of appearances presented in his photographs—i.e., those that seem to be the bulging of walls, the flattening of arches, and the spreading of abutments—give Mr. Goodyear a great deal to say. For example, as to the cloister walls at Bologna and Verona, which have an outward curve in plan—such as has an extraordinary resemblance to that produced by thrust, for they are on upper stories—he remarks that there were no vaults to produce such a thrust. But wood ceilings and roofs, as well as vaults, can push out walls in this fashion, and we are not told that there were neither floors nor roofs. This seems an omission in his argument. Again, as to the cathedral of Vicenza, where his photographs show piers that have all the appearance of having been pushed outwards, he remarks that the side walls of the chapels abut the transverse vault arches, and that therefore no outward thrust was possible. This, of course, is true if the said walls were built before the vaulting, but if between the chapels they were of a

subsequent building by even six months later than the vaults, the elimination of thrust from the question is not so clearly demonstrated. The catalogue does not clear up this particular point.

In fact, questions of thrust and settlement are always attended with difficulty in view of the many chances that produce them: there is more than one kind of movement to be reckoned with. Deformations of walls and arches often occur in the course of building while the work is green, or as the weight of the upper portion gets its bearings. A stop of the work for a few months before the ties and bonds of a roof are in place will cause walls to shift from the upright. I remember in a church with which I had to deal how long frosts stopped work for some months. On starting to build again we found "horizontal and vertical deflections" appearing in many walls which had been built quite parallel and plumb. No cracks or ruptures were visible, for the work was too green; the movements had been gradual, and the masonry had taken the new positions as if built in them. The arcade wall, in fact, presented just the appearance that Mr. Goodyear thinks so significant at Notre-Dame, for until the ties of a roof are on, a triforium hoisted on spindles of arcade piers is as top-heavy and likely to lean as a notice-board stuck on a post.

All architects are familiar, too, with the movements of arches and vaults in the course of construction if the centerings are weak, or if they are struck too soon. Often such settlements show no signs in the finished work; but Mr. Goodyear seems sure that movements of any kind in the churches he shows must produce manifest dislocations. Now mediæval mortar was probably very slow in setting, and after considerable deformations would cohere and set solidly. Also, during the extension of building any serious breaks would be likely to be made good and show no sign if afterwards faced with marble or mosaic. In the faces of such churches as St. Mark's, or the Duomo of Pisa, cased with marble upon a core of rubble, we would not be likely now to see the dislocations that took place in the original core of the walls. I cannot, however, find that Mr. Goodyear meets this point against him by telling us distinctly that the marble casing in these cases was part of the first construction. He certainly gives us the certificates of architects, but they are far from conclusive on this particular point.

A distinct class of settlement is that which takes place after the building has got its bearings from some new shifting of the thrust and weight on the masonry. When this has been sudden, as from earthquake or tempest, dislocation of the masonry is no doubt conspicuous. But when, as in the gradual giving way of foundations —from the withdrawal of water from a subsoil, for example—the shifting of strains is slow, the compositions of walls is wonderfully tolerant of them. A solid piece of stone can sag or bend a good deal without cracking, as can be seen in the ordinary marble chimney-piece, where the lintel slab on end, originally cut true level, is often curved down an appreciable fraction of an inch in its bearing of 4 ft. or so: the molecules of the solid marble have rearranged themselves and no crack appears. A homogeneous block of masonry is certainly as elastic: a solid pillar of it like Eddystone Lighthouse leans considerably to a wind. Therefore, when Mr. Goodyear says any movement in vaults at Amiens or in walls at Notre-Dame has been impossible because no cracks show, we can accept his conclusion as final only if we accept his philosophy altogether.

CLASS III.—*Crooked Sites, etc.*—Mr. Goodyear, of course, acknowledges that a crooked street front may be the cause of a crooked setting-out; but he does not often admit this chance as a possible explanation of what he shows. Of the other chances of a site which might limit formal symmetry he takes no account. Yet the alignment of ancient buildings often compels "asymmetry" in a new building. When, for example, in St. Mark's, the new cathedral made use not only of the wall of the old basilica but of the walls of two independent buildings outside, it would be a wonder were all these of the same alignment! But in this case perhaps Mr. Goodyear admits the point, for he says he lays no stress on the "deflections of plan in St. Mark's as indicating design." Still, St. Mark's is one of his picked examples of refinement which we are told should show every class of it. He should therefore have given us this point clearly.

There are a good number of other asymmetric plans on which Mr. Goodyear does lay stress as being designed. Unfortunately the exact history of the setting out of these churches does not come so immediately to the knowledge of everybody as is the case with St. Mark's. I am bound to confess myself ignorant as to the sites of most of the churches whose asymmetric plans are given us. It is therefore with the conceit of an ignoramus I suggest that one or two may have been, like St. Marl[illegible]uilt crooked because they had to be.

CLASS [illegible]—*Misfittings of work where alteration or stoppage of building has occurred.*—What seem to be these are in many of Mr. Goodyear's exhibits; but he evidently rejects such appearances for this reason, that the Italian churches from which he draws his examples were built straight away from set designs, and were subject to no vicissitude of subsequent re-designing, but were completed and handed over as we see

churches handed over by contractors to-day. He mentions how they were built in the eleventh, twelfth, or thirteenth century, as the case may be, and no doubt follows the best authorities. Yet the idea recurs that Italian churches may have had sometimes the same sort of history that is familiar to us in the churches of North Europe; a history of constant unfinishing, of perpetual change of design, of additions on all sides; so that the final result, as we see it, is just a medley of rebuildings. Mr. Goodyear supposes us to know that the churches he shows were not of this sort; but one wishes he could give his ignorant readers occasionally the facts he knows so well himself.

I must confess myself unable to surrender, as to some of his examples, the ideas which the examination of English cathedrals suggests. There are in our most ancient churches two particular places where we expect to find irregularities, deflections, and breaks of design. The one is some few bays to the east of the crossing, the other some few bays to the west of it. Now, in our northern churches we know what, at such places, these appearances mean. They do not show any particular architectural refinement, but indicate the history of the building—a history which may be summarised as follows:

The first building of a great church for monks or canons was to provide for their daily services. The ritual of this required a sanctuary for the main altar, a presbytery for the movement of the clergy, and a choir space for their singing. The apse met the first requirement, the bays east of the crossing and the crossing itself gave the second, and the two or three bays west of the crossing gave the third. From apse to the screen which separated the choir from the nave was the working-part of the church. It was built as a whole and kept-intact during all subsequent additions and rebuildings. Continuations of the fabric and additions to it went on outside, and, when complete, were joined on. One can see how this space asserts itself in our churches, so that their lengths exhibit settings-out in three divisions: (1) that of the original service-space as above defined; (2) the completion of this first designing of the church, begun at the west end, and often only at some considerable interval made one with the first; and (3) an addition of chapels begun outside on the east, and afterwards joined on to the quire by the removal of the original apse. Now, many of Mr. Goodyear's "refinements" are the deflections, bends, and curvatures which occur just at the spots where, if this setting-out in three sections had taken place, there would be likely to be misfits. Take the plan and internal view of Fiesole Cathedral, for example.

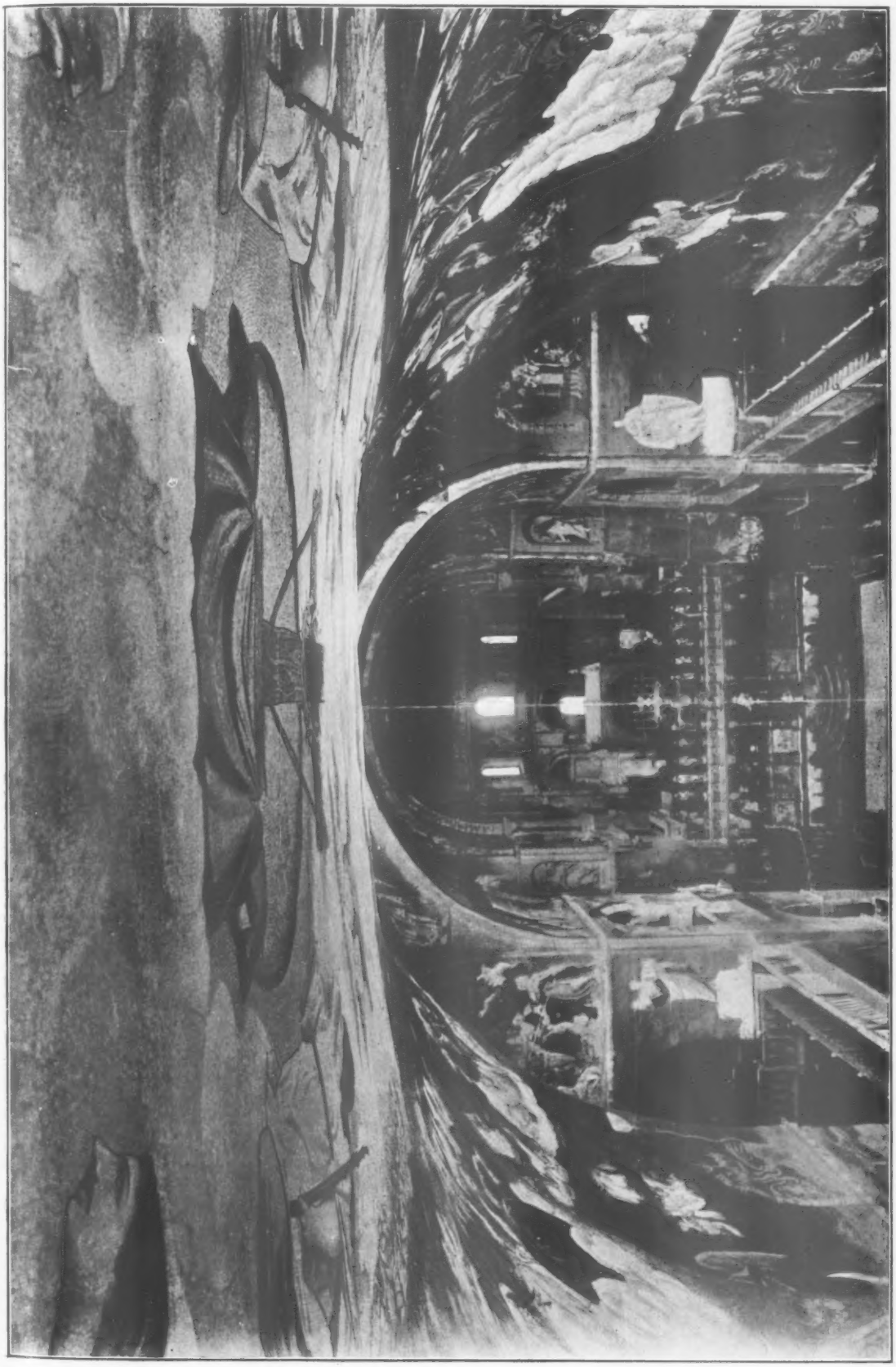
Now, Mr. Goodyear has satisfied himself that such a history as I have sketched above cannot by any possibility be supposed for this cathedral; for had it been possible, he would have dealt with this possibility. So in the case of many others, Mr. Goodyear claims that he has visited and examined all these churches and knows their history, whereas his critics know them not. The retort is a telling one, and until I have been to Fiesole, Troja, etc., and seen for myself, my conjectures lack substance.

Class V.—*Masoncraft Habits.*—The Edinburgh Exhibition showed how constant in mediæval buildings was the sloping backwards of piers and arch jambs, often with a slight curvature, and Mr. Goodyear claims this as an entasis based on the tradition of the classic column. He is able to show that in many of his instances the idea of the lean having occurred through thrust is not tenable, for it is to be seen at the internal angles where thrust would not be felt. The piers which have it have evidently been built to have this backward curve. Is this, then, an architectural refinement?

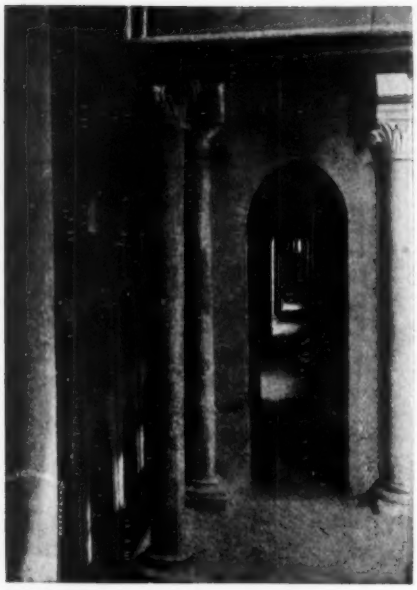
His critics point to the fact that these vertical leans of pillars, etc., follow the backward slope of the walls, so that the "entasis" of the pier is really part of the "batter" of the wall. It is curious that Mr. Goodyear, in all his investigation of leans, never once uses this common word "batter"—the fact of which is as common as the word in all stone-building. Until architects came and drew their walls upright, the masoncraft of all ages and styles had been building walls to batter. It does not, therefore, seem necessary to credit the builders of Amiens with some subtle constructive skill, nor am I much impressed at Mr. Goodyear's discovery that the "Suisse" there and the "Bedeau" knew all about it. I believe, too, that the slight stilting of arches, to which Mr. Goodyear devotes many illustrations, is just another constructive expedient of stonecraft to allow of the centres being well wedged up without their bearing on the abacus of the capitals.[1] The setting back of pillars on an upper storey behind the line below, as at St. Mark's, is also a mason's expedient to prevent the edges of his strings being flushed off. But such possibilities do not enter into Mr. Goodyear's argument for his refinements.

Class VI.—*Perspective Devices.*—These are clearly not of construction but of design. Mr. Goodyear has long maintained that at Poitiers the drawing-in of the arcades to the east and the lowering of arches were designed to produce the

[1] There is a curious case in Chichester Lady-Chapel of the vault diagonals being horse-shoed for such a purpose.



ST. MARK'S, VENICE. INTERIOR VIEW SHOWING THE DEFLECTION OF THE VAULT OF THE "PARADISE."



CLERESTOREY PASSAGE,
CHICHESTER CATHEDRAL.
From "Gothic Architecture in England," by Francis Bond.

optical illusions of a long perspective. This fact is now generally admitted, and there are other examples of the same kind, such as Bernini's staircase to the Vatican. Italian and American gardens go in for scenic illusions of this sort: they can hardly be called refinements. Their obvious artificiality bespeaks, I think, rather a coarseness of building conception. But in a less theatrical way the optical illusion has been used in all architecture to enhance the dignity of the principal or sacred object. When a floor, for example, is raised towards the east end; when the arch over the sanctuary is allowed to come below the line so as to give a space for a painting or mosaic, we can recognise such ceremonial dignity as designed—but I do not hold with Mr. Goodyear that the secret of it has been lost. Even before Mr. Goodyear enlightened his American friends we European architects had been making good use of such devices.

He will think this all a captious, carping way of presenting his discovery to the reader. I admit that the above very general observations are not conclusive as to any particular church in which of his own knowledge Mr. Goodyear may assert irregularities to exist such as cannot be retained in any of the above six classes. Though he throw a dozen to the wolves, he may still escape with an example which is of such undoubted designed irregularity that it may be rightly called a refinement. This position must be left unassailed. Being unable to go myself and see St. Mark's, Pisa, and Fiesole, I bow to the authority of those who have seen.

It has occurred to me, however, that I have nearer at hand an example of irregularity which, if not recorded as yet by Mr. Goodyear, surely deserves his accurate investigation with level, tape, and plumb-bob. In the cathedral of Chichester the lines of beauty so appreciated by him at Fiesole are clearly marked. To the observer standing at the west end the Purbeck strings that mark the storeys can be seen running continuously to the east, broken only at the crossing. They exhibit great sweeping curves which with tender subtility incline inwards to the lantern arches as if they were planned to look like cupids' bows. The axial alignment is so varied that the square line at the crossing would cut the east wall some feet to the north of its middle point, and the west wall some feet to the south. And immediately that the eye is attuned to these curvatures it looks around and sees them everywhere. In all the vertical and horizontal lines of the old architecture appear delicate sinuosities. Nothing seems exactly rectangular, nothing quite plumb upright. The vaulting piers show for their height fully as much entasis as those of St. Quentin or Notre-Dame in Mr. Goodyear's photographs. Every refinement noted by him seems to have occupied the attention of the builders. The main arcades of the nave have that perspective lowering towards the east which is so significant at Florence and Fiesole. There is that backward setting of piers in the upper storeys which is found on the façade of St. Mark's; the transept galleries lean away from the crossing as at Notre-Dame; the façade leans outward as at Pisa; and, rarest refinement of all, there is a bend in the plan of the west front.

Must, then, Chichester Cathedral take its place with Pisa Cathedral, with St. Mark's, Venice, and with Notre-Dame of Paris, as being exceptionally refined? Should it, as Mr. Goodyear says of the last, "by the multitude and complexity of its phenomena stand quite apart from other northern cathedrals"? Before accepting the honour for Chichester of being a special sampler of all the secrets of architectural refinement, I feel I ought to be as sure of its history as Mr. Goodyear is of that of Pisa and Notre-Dame. I have, therefore, made a chart to indicate the positions on the ground plan of some fourteen distinct varieties of masoncraft that are to be found in its walls—the distinctions being such that they, in my opinion, represent the several works of fourteen separate generations of masons. Now what I notice is this: That the leans and the curvatures which he calls refinements somehow seem always to require at least two of these generations of masons to perfect them. This seems the case alike with the vertical and the horizontal bends, and with the perspective illusion of the nave, the last being indicated as the achievement of two

setters-out and of someone who compromised between. And as to the magnificent line of beauty shown in the horizontal curves of the strings it would seem that three generations of builders laid the groundwork of it, while to our own late days was it left and to Sir Gilbert Scott to put the finishing touches. In fact, the discovery I make is that all these refinements are not so much architectural as genealogical, for their schemes of beauty continued through many generations. Thus in 1091 Bishop Ralph laid the first arc of one great horizontal line of curvature; after some twenty years and a fire a second arc was achieved. Another eighty years elapsed, and after another fire see how Bishop Seffrid has ordered a third arc to be laid out; and then in the fulness of time has come the modern architect to complete its delicate perfection. What consummate patience and forethought! the looking forward to fires and settlements, and all the accidents of time, even to the final removal of the Arundel screen, so that the spire might fall and the lantern be rebuilt with that exact vertical elevation of piers which the tee-square designing gives! For it has been from all these happenings that there has issued the magical sweetness of the Chichester refinement.

Can one venture, then, on a theory of the genealogical designing of mediæval cathedrals? Turning to Mr. Goodyear's pages, I feel that he must commit us to a distinct faith in transmigration, if not of souls, at least of a designing intelligence, elaborating beauty in cycles of building. In some hundreds of years, through all and by means of all the vicissitudes of settlement, re-designing, and casing with marble and mosaic, have been conceived and perfected the leans and curves of the consummate irregularity of St. Mark's. And almost equal thereto has been the hereditary refinement of the Notre-Dame façade. In 1208 the first masons laid out and set up its first delicate leans of eleven inches in the height of fifty feet; their successors of the next generation slowly curved the front back; and, finally, their grandchildren piously completed the ancestral design with the comparatively easy work of building the towers upright.

Though Mr. Goodyear is not quite explicit on the point, he very cleverly suggests how such a refinement was kept in view. The first page of his catalogue darkly hints at it in a quotation from M. Enlart: "Le monopole de la corporation semble avoir été assuré surtout par la garde jalouse d'enseignements secrets." Certainly long chains of deliberate design can be postulated only on the assumption that the art of building in the Middle Ages lay in the hands of a secret corporation, with an occult traditionary method, an inviolate law of design that had force during hundreds of years, and, however long the building, to the end shaped and perfected its construction.

Here, then, we have the most distinct argument which I have yet come across for the existence in the Middle Ages of the Freemason Guild—those mysterious banded builders who did it all and said nothing. The whole contention as to "King Solomon and Hiram," as to the "Four Brethren," as to the "Comacine Guild," and those wandering "Lombards" who, without leaving a trace behind, built all the cathedrals—why, it all appears not only possible but probable under this new light! As certain Scotch architects, who have welcomed the Edinburgh Exhibition, say of it: "It completely revises the ordinary view of Gothic work." I conclude that Street was ill-advised, and Wyatt Papworth a shallow critic, in denying the Freemason architects. Nothing but the authority and initiation of a "mystery" could keep alive through generations and bring to perfection a scheme of design so recondite that, except on the supposition of an ineffable holiness attaching to it, it could not be perceived. Its secret was not in itself or its refinement, but in the success of its secrecy; in its masterly pretence that all the time its crooked ways were mis-measurement, accident, settlement, or some make-believe constructional necessity. Even Viollet le Duc, who was for years in charge of Notre-Dame, and knew every stone of it, never found out the secrets of these wonderful Freemasons. Let us yield to the whole fascination of Mr. Goodyear's discovery, and at one gulp take down "Comacines," "Freemasons," and "Refinements."

But I refuse to go with Mr. Goodyear on one point. He seems to reckon that the irregularities he exhibits, as well as being subtle and traditionary, are necessarily beautiful; making "building more imposing, more attractive, and more interesting to the eye"; as indeed "the necessary conditions of the creation of a work of art in architecture." Now, my objection is not that I do not think as Mr. Goodyear when I see the beauty of the mediæval cathedral, and note how haphazard and accident have woven a gauze of mystery over its shapeliness; the play of this seems inseparable from my idea of it. I had the honour, I remember, some many years ago, about the time when Mr. Goodyear began his investigations, of telling the Art Congress of Edinburgh how much the texture of ancient art made, in my sight, its beauty, which our modern building has missed. But though to my eyes this must always be so, all the same I feel that it is just association that has made roughness and irregularity seem the factors of beautiful building. We have had such a precious lot of "tee- and set-square"

architecture, whereby walls have been built perfectly upright, string-courses set out dead level, and our buildings show just smoothness and mechanical perfection, and nothing else. To get into an old church where there is none of this perfection is felt to be a relief. And then through this veil of imperfection the simplicity and power of the old building appeal to us; we associate the texture with the art that lies underneath it. Our ideal of its beauty makes its skin and its life seem one. Yet on any conscious examination of the question I incline to the thought that exactness, smoothness, and certainty are the real refinements which come into the making of a great work of architecture, as in everything else. And I believe that the mediæval builders just thought so too. They had no æsthetic ambition in making walls knock-kneed and façades round-backed. They made the best of their conditions; and as practical men do now, they concealed the ugliness of accident, and still, in spite of it, and in disregard of it, strove after perfection. No more then than now could the craftsman be persuaded to bungle his work. There are two classes of mind to whom the appeals of art are made—the practical and the mystic. Has not the connoisseurship of modern art in our days unhealthily stimulated this latter? We suffer art to lie in all sorts of recondite and subtle recipes; in all sorts of moral and secret emotions. Mr. Goodyear's gospel will be good tidings to the mystic and the idealist, but to the craftsman it is foolishness.

EDWARD S. PRIOR.

Current Architecture.

KELLING PLACE, HOLT, NORFOLK.—This house has been built adjoining the high road that runs from Holt to Cromer, on a site which in 1903 was some seven acres of bare turnip-field. How this was laid out, and the use made of the boundary coppices, can be seen in the block plan (p. 72). Already under careful gardening such satisfactory growth has been made in the trees and shrubs planted, that the look is that of an established property. The scheme began with gardeners' lodges and a walled vegetable-garden, sheds, greenhouses, etc., from which good crops have been quickly obtained. In 1904 orchards were planted, and a sunk flower-garden begun with terraces and garden-houses, and at the same time the house, the dairy, and stables were put in hand, and the whole was ready for occupation in under two years from the start. These works have not been carried out in the ordinary way by a general contractor. Messrs. Wenham & Waters estimated for and executed the plumbing, heating apparatus, hot-water service, electric bells, telephones, and engineering works, which included a deep well-sinking, and the installation of electric light, also casements and glazing; but the general building was done under the superintendence of Mr. Randall Wells and Mr. Blower, who employed men and purchased materials as required. Certain circumstances made this method of building necessary for the cheapest execution. The material for the walls was in the ground, and how far and in what way it would prove serviceable could only be ascertained by making extended excavations. An acre in extent and 6 ft. in depth was therefore designed to be dug out as a sunk flower-garden, and its effect can be seen in the photograph of the south elevation. There were obtained by the digging pebble facings for the walls, and ballast of all kinds for concrete, as well as a good deal of building sand and material for road-making and garden paths. In addition, the surface earth was used for terraces, and there remained several loads of ballast which were sold to the local authorities. As to cost, there was spent in the excavation, sorting, and distributing of this material just £965. Reckoning the material supplied to the building at 5*s*. a yard, and the gravel applied to other purposes at 3*s*., a return was got of close upon £900. The labour of excavation was therefore practically covered; but, of course, the levelling and walling of the area, and its planting, etc., were extra expenses. The house and garden walls were built as concrete masses without planking, and faced with the larger pebbles. Internally brick was used for angles, and to tie the facings in with core; externally this was done by the bonding in of a local stone, which being of a yellow cast shows darker in the photograph than in actual effect. The lintels, chimney stacks, and jambs of the upper windows were constructed with ¾-in. tiles made from the Norfolk clay, which burns naturally to buff and pink shades, matching the colour of the pebbles. The roofing was of pantiles of the same local shade. The floors were of fine concrete without steel joists, but reinforced with iron chainage. The cost of this concrete construction was, under the circumstances, very reasonable—the walls generally cost from 13*s*. to 15*s*. per cube yard; the tile construction was done at about 2*s*. 3*d*. per foot cube; while the stone as fixed ranged from 2*s*. 3*d*. to 2*s*. 9*d*. per foot cube. Internally oak was used simply and constructionally; for this use it could be locally obtained at a cost hardly above that of good deal.

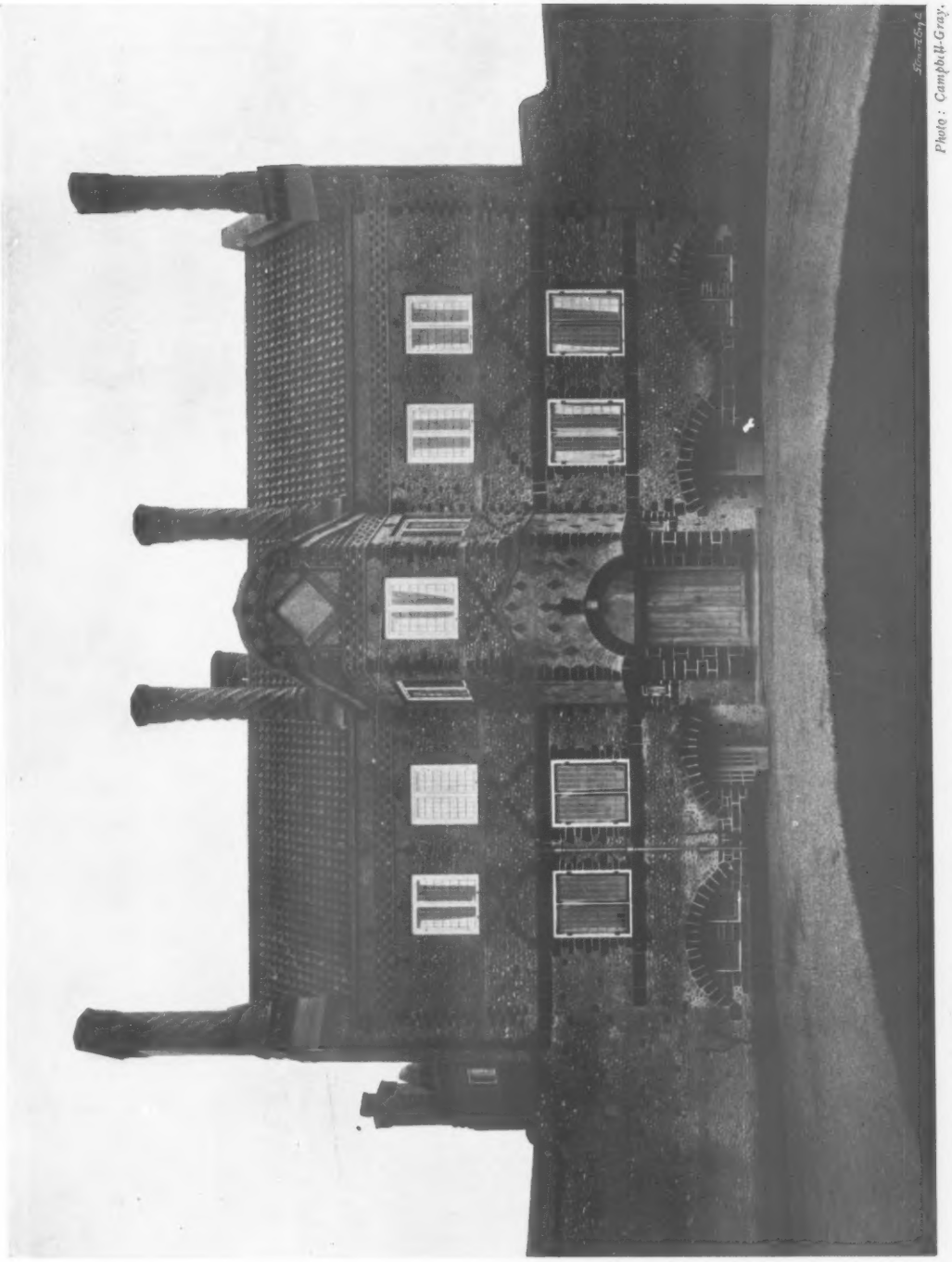
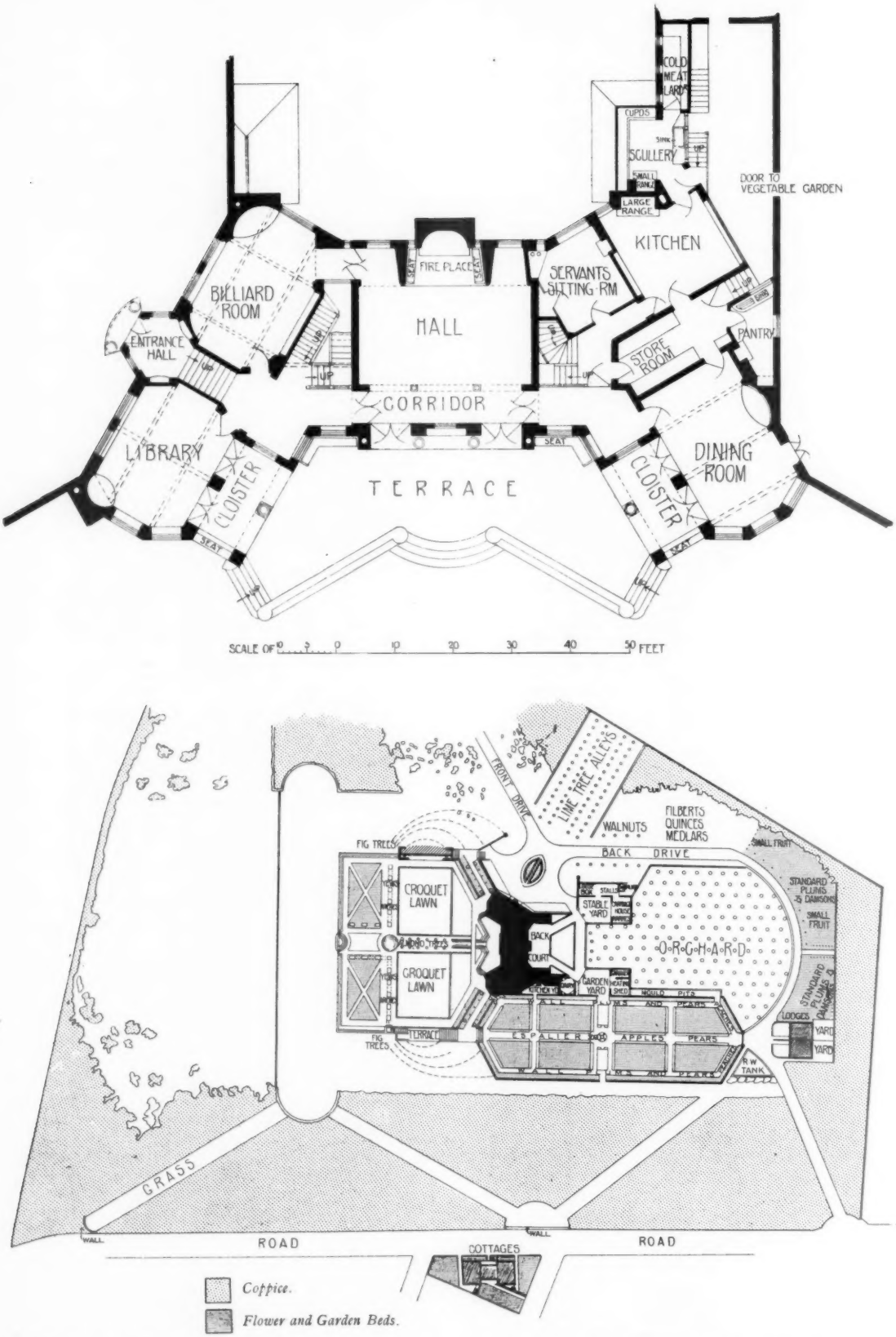


Photo: Campbell-Gray.

KELLING PLACE, HOLT, NORFOLK. ENTRANCE COURT AND DOORWAY.

EDWARD S. PRIOR, ARCHITECT.



KELLING PLACE, HOLT, NORFOLK. GROUND PLAN OF HOUSE, AND BLOCK PLAN OF HOUSE AND GROUNDS.
EDWARD S. PRIOR, ARCHITECT.

Photo: Campbell-Gray.

KELLING PLACE, HOLT, NORFOLK. VIEW FROM THE ROSE GARDEN.

EDWARD S. PRIOR, ARCHITECT.

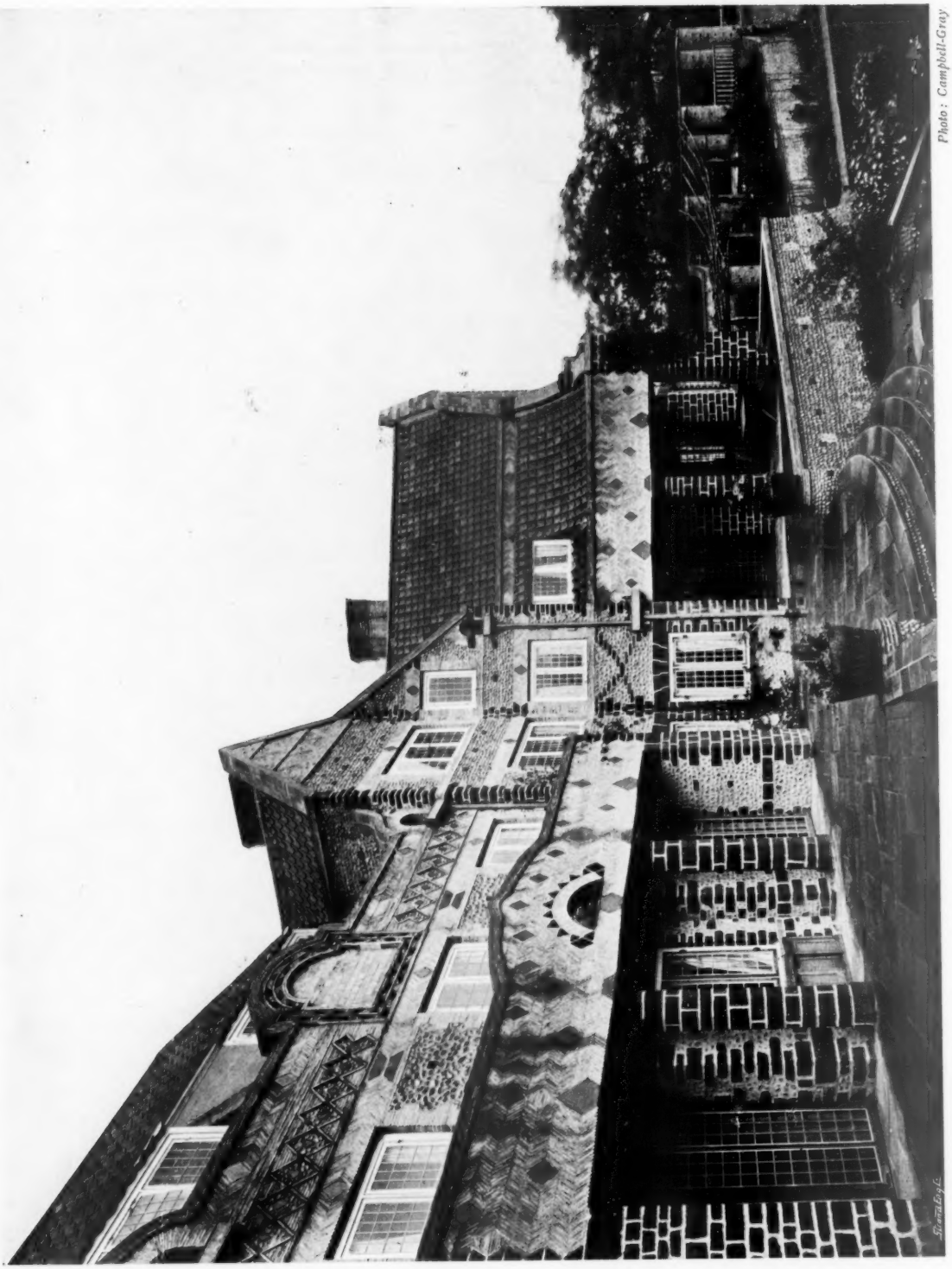


Photo: Campbell-Gray

KELLING PLACE, HOLT, NORFOLK. THE TERRACE.

EDWARD S. PRIOR, ARCHITECT.

Photo: Campbell-Gray.

KELLING PLACE, HOLT, NORFOLK. VIEW FROM THE LAWN.
EDWARD S. PRIOR, ARCHITECT.

EDWARD S. PRIOR, ARCHITECT.

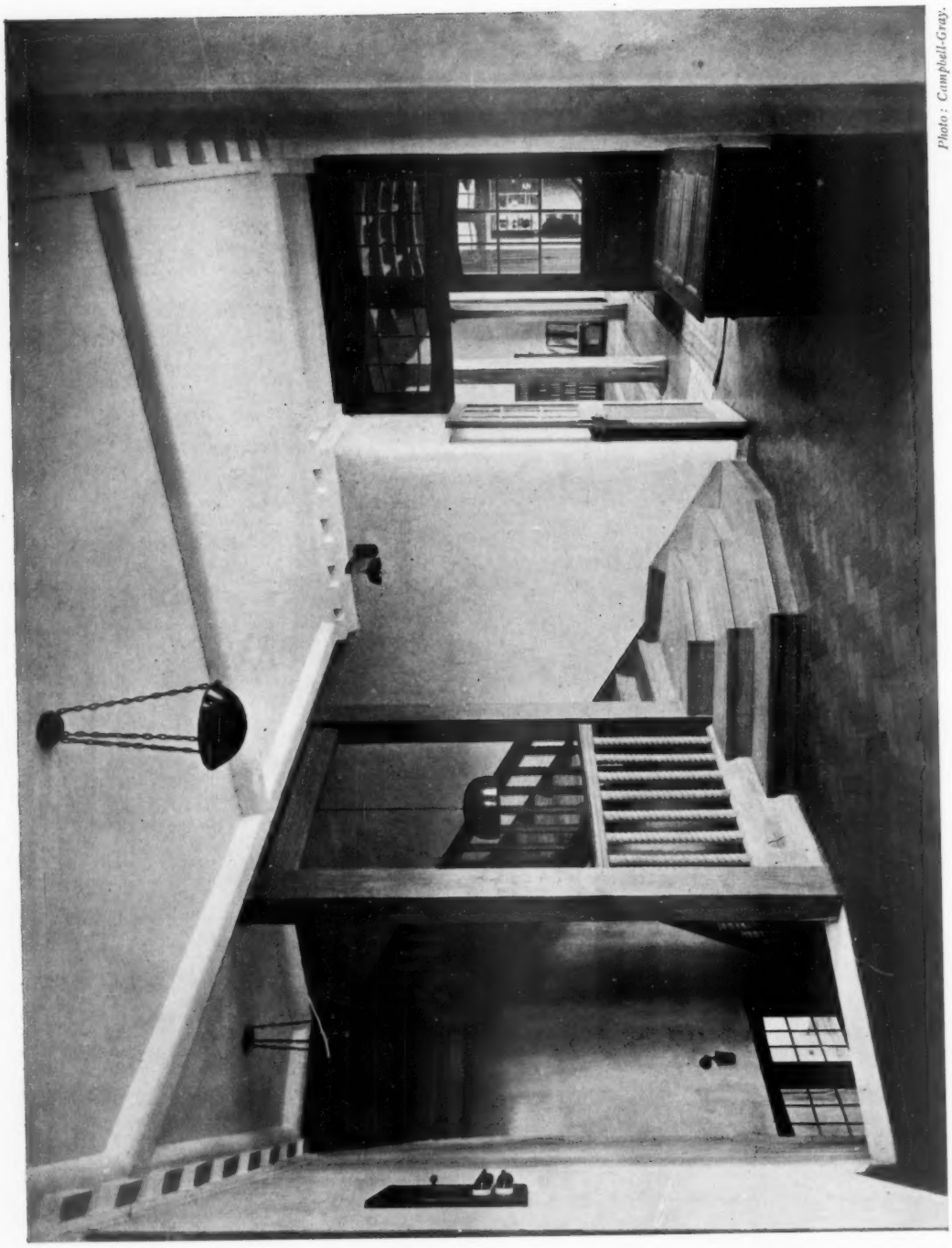


Photo: Campbell-Gray.

KELLING PLACE, HOLT, NORFOLK. STAIRCASE AND CORRIDOR.
EDWARD S. PRIOR, ARCHITECT.

Photo: Campbell-Gray.

KELLING PLACE, HOLT, NORFOLK. THE HALL AND CORRIDOR.
EDWARD S. PRIOR, ARCHITECT.

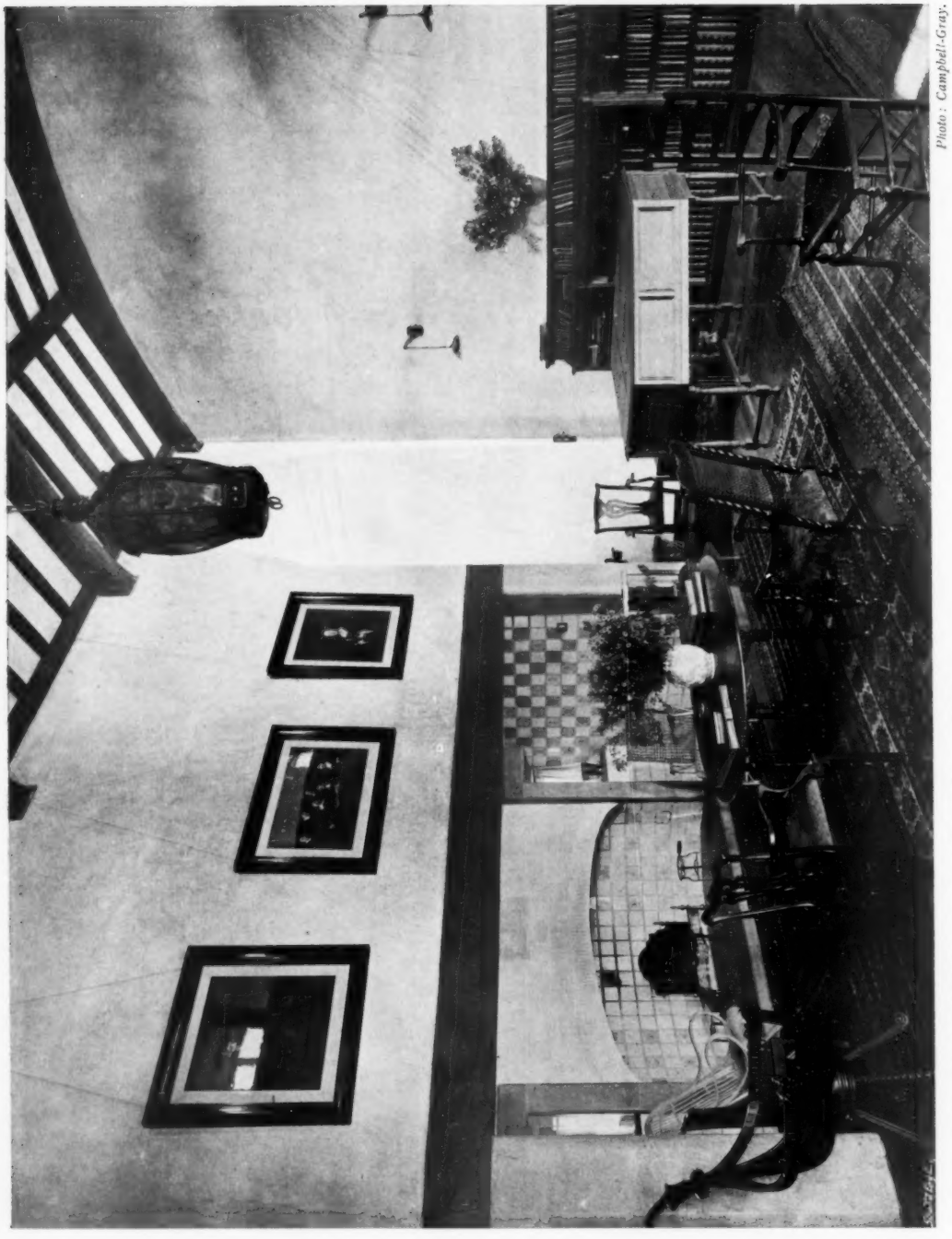


Photo: Campbell-Gray.

KELLING PLACE, HOLT, NORFOLK. THE HALL AND FIREPLACE.
EDWARD S. PRIOR, ARCHITECT.

Photo: Campbell-Gray.

KELLING PLACE, HOLT, NORFOLK. CORRIDOR OVERLOOKING THE HALL, FIRST FLOOR.
EDWARD S. PRIOR, ARCHITECT.

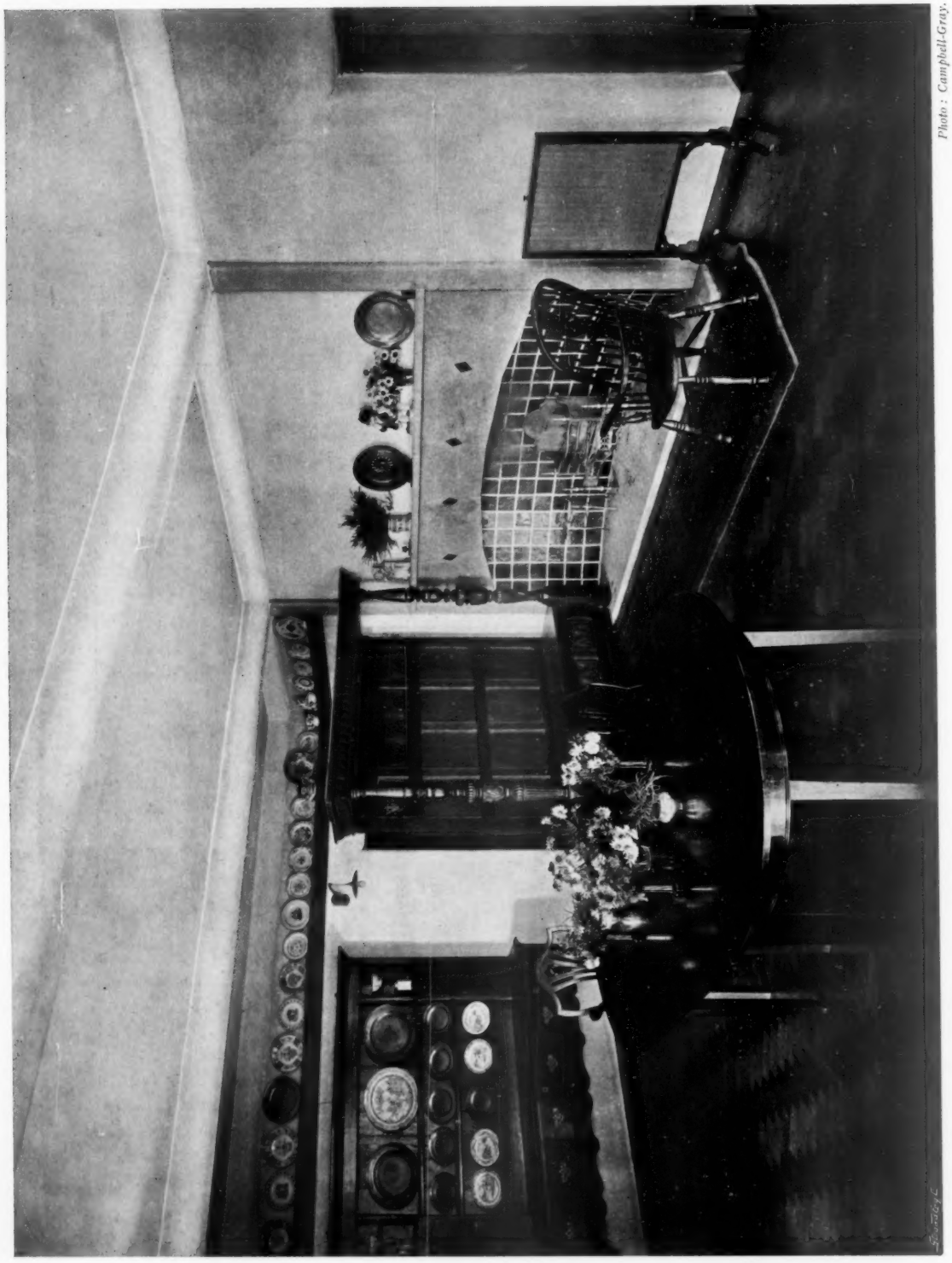


Photo: Campbell-Gray.

KELLING PLACE, HOLT, NORFOLK. THE DINING-ROOM.
EDWARD S. PRIOR, ARCHITECT.

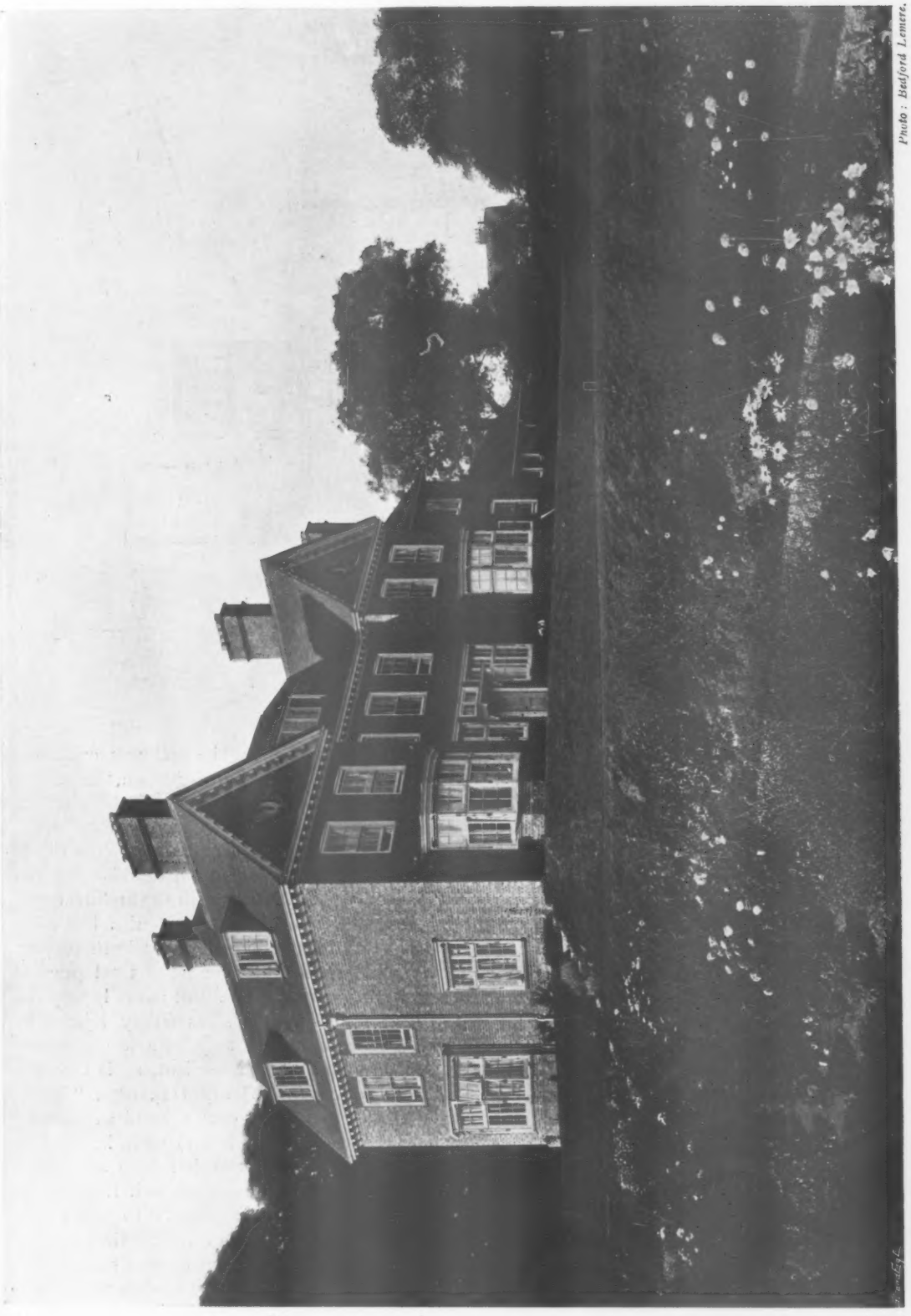


Photo: Bedford Lemere.

WICKERSLEY, BROUGH, EAST YORKSHIRE.
JOHN BILSON, ARCHITECT.

WICKERSLEY, BROUGH, EAST YORKSHIRE. PLANS.
JOHN BILSON, ARCHITECT.

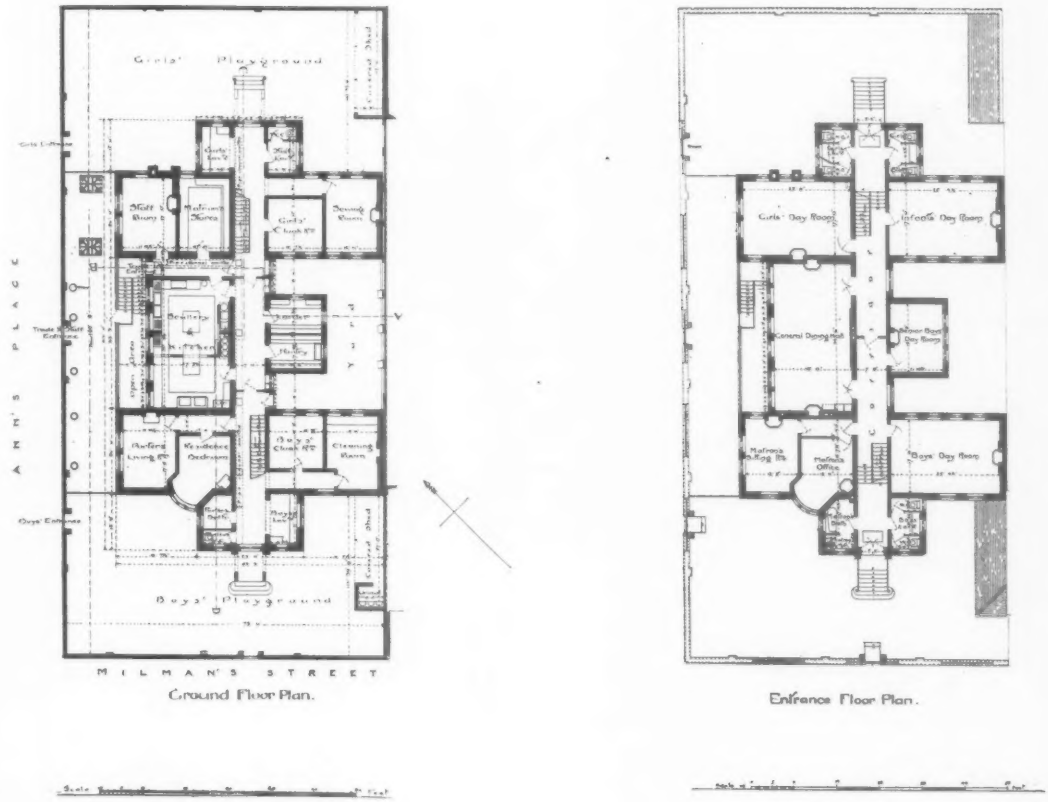
The walls and ceilings of the principal rooms have been left ready for a scheme of painted decoration. In these ways and others the work has differed from that ordinarily specified to contractors; but, carried out without contract, the house has been built cheaply, quickly, and the best use has been made of the materials to hand. In order to secure such a result experiments had first to be made, and the gardeners' lodges and the garden walls were designed as tests in the use and cost of the materials. Quantities were then taken out for the house itself and priced in accordance with the experience gained. In the result the expenditure on it has been kept to the sum of the estimate, £8,000. No contractor would have taken the work at this price from drawings, for it would have been impossible to have shown him how he was to vary his ordinary methods so as to build in the ways intended. In this case, therefore, an advantage has been got in the direction of cheap and reasonable building by departing from the professional routine. But in a professional paper some other aspects of the matter may be touched on, for there are some dangers in this departure. In the first place the fixed price of a contract not only gives confidence to the client, but acts as a deterrent from alteration of the accepted plans. The architect can resist upsets to his scheme by insisting on the penalty of paying largely for going outside the contract works. But when there is no contract and it appears as easy and cheap to build a room one way as another, the knowledge of this is provocative of new ideas, and though the architect may protest against the expense, it is with less effective weapons. At Kelling fortunately there were but trivial modifications, and the total price of estimate was not exceeded. But not only may the architect find his best ideas fatally injured by afterthoughts, but there may be a further inconvenience to him. When a client, as is recorded in the Pipe Rolls of Henry III., says, "I will have it done though it cost a hundred pound," and then (as is human nature) when he is called on to pay that sum feels he has been a fool, and would turn and rend someone—if there is no contract, there is no contractor to rend! Instead of the architect appearing as the mediator and reducer of the exorbitant bill (for so it always appears to the man who pays) he has to face the music alone as the expender of his client's money, and may fare badly. Mr. Edward S. Prior, of 3, Old Serjeants' Inn, London, W.C., is the architect.

Photo : Bedford Lemere.

WICKERSLEY, EAST BROUGH, YORKSHIRE.
JOHN BILSON, ARCHITECT.

Photo: Bedford Lemere.

WICKERSLEY, BROUGH, EAST YORKSHIRE. THE DRAWING-ROOM.
JOHN BILSON, ARCHITECT.



ST. GEORGE'S HOME FOR CHILDREN, CHELSEA.
EDWIN T. HALL, ARCHITECT.

WICKERSLEY, BROUGH, EAST YORKSHIRE.—This house has been built for Mr. G. L. Shackles on a site sloping southward, with views to the south and south-west over the Humber. The walls are of local kiln bricks, and the roofs are covered with hand-made tiles. Messrs. S. R. and T. Kelsey, of Goole, were the builders; and Mr. John Bilson, F.S.A., of 23, Parliament Street, Hull, was the architect.

ST. GEORGE'S HOME, CHELSEA.—This building is situated in Milman Road, Chelsea, and is practically detached, having ample play-yards and abundance of air space. It is designed to accommodate 106 children, the sexes being placed separately in the two wings, each having a separate staircase; the lavatory, bath, and closet accommodation being adjacent to the staircases. There are dormitories, lighted and ventilated generally on both sides by windows, each containing about twelve beds. A common dining-room is provided, and there are separate day-rooms for boys and girls, and one for the elder boys. There are quarters for the matron, for the married housekeeper and attendants, and sick wards for minor ailments. The heating and hot-water services are on the Duplex boiler system. The kitchen plant is complete, the cooking being done by steam and gas. The exterior facings are of red bricks with Portland stone dressings; glazed facing bricks are largely used in the kitchen department, the lavatories, and other much used parts. The staircases are of fire-resisting materials, and have ready access to the open air. Messrs. Foster and Dicksee, of London and Rugby, were the general contractors; the Val de Travers Company supplied the asphalt linings; the Farnley Iron Company the glazed bricks; the Albion Iron Company and Doulton & Co. the stoves, grates, etc.; Rust's Mosaic Company the mosaic flooring; Messrs. Dent and Hellyer and Doulton & Co., Ltd., the sanitary ware and fittings; Messrs. Colledge and Bridgen the door furniture, locks, etc.; R. Waygood & Co., Ltd., the lifts; Messrs. G. and F. May the cooking and laundry machinery; Messrs. T. Potter and Sons executed the electric wiring and supplied the fixtures; while the heating and ventilating was carried out by Mr. E. P. Milne. Mr. Edwin T. Hall, of 54, Bedford Square, London, is the architect.

Photo: Bedford Lemere.

ST. GEORGE'S HOME, CHELSEA, LONDON.
EDWIN T. HALL, ARCHITECT.

Notes.

The Alleged Jervaulx Abbey Font—The Architect's Primary Duty—The R.I.B.A. Prizes and Studentships—The Baptistery of St. Jean, Poitiers—The Suburbs and the Trees—Architects and Politics.

THE interesting stone font illustrated in THE ARCHITECTURAL REVIEW of December last is somewhat of a mystery in the matter of date. It would be a bold man who would dogmatise about so elementary a design, but it is probably very early. It is safe, however, to be very positive that it never was at Jervaulx Abbey; as to that there is no room for doubt. It is little surprising, therefore, that the font escaped "wanton destruction" at the hands of Richard Bellasis, who, ruffian as he was, could not destroy the non-existing. Jervaulx was a Cistercian house, and unlike the other Yorkshire abbey which Bellasis dealt with, Bridlington, could therefore have had no parochial or quasi-parochial use.

Some wild theories on the plan and arrangement of monastic houses would be obviated by wider knowledge of the aims of the various orders.

Monks, such as Cistercians, were not necessarily priests. The clerical dignity (*clericatura*) was not a condition precedent of monks, as it was of regular canons, such as the Austin canons of Bridlington.

Houses of regular canons often devoted the nave of their abbey to parochial use, retaining the quire (entirely cut off by a screen from the nave) for their own use.

The Cistercians never in any circumstances did anything of the sort, and could, therefore, have no use whatever for a font.

Up to the time of the Black Death, which gave the death blow to monasticism, the Cistercian nave was the church of the conversi or lay brethren, and the general public had no access, unless they were guests of the monastery. The Black Death killed off practically all the conversi, and no more seem to have been "professed." Even then there was no parochial work done in the nave. Indeed, there was no parish in which to do it. The Cistercian rule provided that "neither in cities nor towns are our monasteries to be built, but in places far removed from the conversation of men," and in practice a site was generally chosen in a secluded valley.

This much we learn from the paper on the Cistercians by E. Sharpe (he of the "Parallels"), amongst much that is pure nonsense. The most radical mistake that Sharpe made was to describe the undercroft of the dorter (dormitory) as the fratry, "the ordinary day-room of the monks." This mistake arose from ignorance of the meaning of the word "fratry," which is a corruption of "refectory." The fratry, therefore, had nothing to do with day-rooms, and, indeed, the monks had no day-room but the cloister. There they worked in the intervals of observing the canonical hours in quire. The dorter undercroft was used as a store-room, and had a fireplace where the monks went from the cloister to warm themselves when their fingers got too cold to work. Cistercian and, indeed, most cloisters in the early fervours of monasticism were unglazed, and a calefactory was essential.

This engaging theory of a "fratry" day-room, set rolling by Sharpe, has rolled through many a description of monastic houses, and might now with advantage be decently buried.

Let us reverently lay the Jervaulx font in the same grave.

LAWRENCE WEAVER, F.S.A.

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I SUPPOSE that the thing which is demanded before all from the man who deals with any kind of art in the present day is individuality. And the demand has so much semblance of reasonableness at first sight, that one scarcely wonders at the cry having been caught up and thoughtlessly repeated by many of those who ought to know perfectly well that there are whole classes of productions in which the limitations are so great that it is impossible to comply with the requirement. To be individual in a work of art which is self-sufficing and stands alone is good—even though the individuality be pushed to eccentricity (except when the eccentricity is wilful, for purposes of advertisement)—but to be strikingly individual when one's work forms part of a larger whole is not only not a virtue but is one of the greatest crimes which the decorative artist can commit, who thereby damages the general effect, to the beauty and completeness of which his work should contribute. It is not by the warring competition of rival individualities that impressiveness is obtained, nor is that desirable quality approached any more nearly by the systematic bondage of the crafts to the architect; although it is he, of course, who should conceive the main scheme. The frequent failure to co-ordinate the various crafts to harmonious impressiveness (which has been helped

perhaps by the commercialism of modern times), has caused some extremists to take refuge in the theory that it is the architect's business solely to build, and that any improvement in the art of architecture (which is building beautifully) is only to be hoped for by following the lines of its early development, beginning with simple construction and banishing ornament altogether. Though this is rather an heroic way of evading the difficulty, and one which savours of affectation, there is much to be said for it. If all extraneous matters were turned over to other craftsmen, the architect would be freer to concentrate his attention upon those problems of construction and general proportion which no doubt interest him deeply, and with which his training should fit him to cope better than any other craftsman can; he would learn to think in material rather than with the pencil, and would no doubt develop a juster feeling for the beautiful proportioning of his voids and solids, his projections and plain surfaces, than is generally apparent in architectural design at the present time. He would approximate more closely to the Roman and Byzantine "mechanicus," the constructive engineer whose marvellous achievements still extort the wondering admiration of our smaller age, and would not be worried with the thousand and one small problems which now make conscientious architectural practice such a thorny path. No longer would he have to struggle so ineffectually with problems of colour for the solution of which a specially delicate and well-trained eye is necessary; nor would he have the vexation of designing ornament which cannot be carried out in the material in which he has conceived it, or which becomes out of scale when enlarged to its intended size. The ornamentation would be the business of a professional decorator, or group of decorators, the general scheme being laid down in consultation, and the work of each one arranged with reference to the total effect. The sculptor, the colourist, the glass painter, the plasterer, the joiner, the metal-worker—each should have his say, and add the product of his talent. It may be said: "But this is just what happens in a large office—each clerk has his speciality, and the designing is divided accordingly." It is quite true that there is a considerable division of labour in these factories of design; but all the produce goes out under one name, and the individual designer is without the spur which the acknowledgment of each man's work would lend to his efforts; nor is the average architect's assistant well fitted to design everything, no matter in what material the design is to be carried out, though it is often assumed that he is. One's interest and sympathy is rather with the men who do their own designing, and who have not become so successful as to have more work passing through their office than one brain can possibly keep grip of; but even to these last one would almost think the plan suggested above would afford relief if the habit of autocratic rule has not become ingrained. It is an approximation to that under which mediæval triumphs were achieved.

A. G.

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The R.I.B.A. Prizes and Studentships for 1905–6 have been awarded as follows:—

Essay Medal and 25 Guineas.—Subject, The biography of a British Architect (deceased) practising in the nineteenth century: 6 essays submitted. Winner: Mr. W. H. Godfrey. Certificates of Hon. Mention: Mr. Martin Shaw Briggs, A.R.I.B.A., and Mr. Albert E. Bullock.

Measured Drawings Silver Medal and 10 Guineas.—Fifteen sets of drawings submitted. Winners (bracketed equal): Mr. Albert E. Poley, for drawings of Hampton Court Palace, and Mr. George John Coombes, for drawings of Christchurch Priory, Hants. Certificate of Hon. Mention: Mr. Percy W. Lovell, for drawings of Santa Maria dei Miracoli, Venice.

Soane Medallion and £100.—Subject, The realisation of the ideal mansion described in Bacon's essay "On Building": 10 designs submitted. Winner: Mr. Walter S. George. Certificate of Hon. Mention: Mr. Robert Atkinson.

Owen Jones Studentship; Certificate and £100.—Five sets of drawings submitted. Winner: Mr. Charles Gascoyne. Certificates of Hon. Mention and 5 guineas each: Mr. W. J. Davies, Mr. Arthur D. Nicholson, and Mr. A. R. H. Jackson.

Pugin Studentship; Silver Medal and £40.—Twelve sets of drawings submitted. Winner: Mr. G. Drysdale. Certificate of Hon. Mention: Mr. Jordan Green.

Godwin Bursary; Silver Medal and £65.—Five sets of drawings submitted. Winner: Mr. H. Inigo Triggs.

Tite Prize; Certificate and £30.—Subject, An open-air swimming bath with an arcaded or colonnaded enclosure: 21 designs submitted. Winner: Mr. Alec George Horsnell Medal of Merit: Mr. Charles Bulwer Pearson. Certificate of Hon. Mention: Mr. C. L. Wright.

Arthur Cates Prize; £42.—One set of drawings submitted by Mr. John H. Markham.

Grissell Gold Medal and 10 Guineas.—Subject, A stone skew bridge: 6 designs submitted. Winner: Mr. George Nott.

Ashpitel Prize awarded to the Student who distinguishes himself most highly in any Final Examination held during the year. Winner: Mr. John H. Markham.

Special Prize of Books, value £10, for merit displayed at Special Examination in November: Mr. A. R. Myers.

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For some time, more or less casual attention has been given to the ancient Baptistery of St. Jean at Poitiers; but until the last year or so it has hardly been possible for it to be studied under conditions favourable enough for a proper estimation of its value to the student of the history of architecture. By the unwearied and, in their way, even heroic endeavours of Father Camille de la Croix, S.J., who has devoted the best part of his life to this labour of love, the ancient edifice is now made weather-proof and

kept clean; its fabric is cleared of all the excrescences that had accumulated during years of ignorance, neglect, and misuse; and every atom of the old work has been carefully secured in its own place, without the least attempt at any of that fatal tendency to restoration which has played havoc with many of the finer buildings of old France. Moreover, Father de la Croix has satisfactorily reconstituted the history of the Baptistery—a matter of some moment in view of the general mis-statements which still appear in most accounts of it. The making of the new road which now encircles the building gave him a rare opportunity to investigate its foundations; and he was able to trace them completely while that work was in progress. A most careful and critical examination of everything thus disclosed, and a comparison of all the remaining portions with those other monuments of the Middle Ages in which Poitou is so rich, have led him to conclusions which, without here entering into consideration of the evidence supporting them, may be thus shortly summarised.

CAPITALS FROM THE BAPTISTERY OF ST. JEAN, POITIERS.

The original form of the building was strictly rectangular, consisting of two main halls communicating with each other, in one of which was a reservoir, provided with steps, supply and waste pipes, and used for the ceremony of Baptism by immersion. These halls were almost surrounded by smaller chambers, with one exception, also exactly rectangular, of which the precise use remains obscure. The date of the erection is certainly to be placed in the second half of the fourth century; and it is also certain that much of the material used in its construction came from an earlier building, and had to be mutilated to be made available. In the seventh century, an almost complete rebuilding took place, probably under the influence of the abandonment of baptism by immersion; and most of the subsidiary chambers were destroyed, while three *absides*, two of them rectangular and one pentagonal (still existing), were erected. To this period also belong most of the decorative features which form examples, so rich and so important, of Merovingian art; particularly the capitals and sculptured panels, still to be seen in their original positions. These also came from some neighbouring building; and it is conjectured, on apparently reasonable grounds, that they may have been furnished from the chapel of Ste-Marie-hors-les-Murs, built at the end of the sixth century by St. Radegonde. During the eleventh, twelfth, and thirteenth centuries further modifications took place; the mural paintings, of which traces are still extant, and the two semicircular apses, being referable to the latter

period; and again in the fourteenth and fifteenth centuries.

All this is set forth in admirable detail in the *Étude Sommaire* which Father de la Croix has contributed to the transactions of the Société des Antiquaires de l'Ouest (vol. xxvii., 2nd series, 1903). But he has done more. Having, with infinite pains, obtained the permission of the Commission des Monuments-Historiques to set up the necessary scaffolding; he, with his own hands, has made casts of every single decorative feature in the Baptistery, and these he has arranged for the present in a wooden building near by, where he has found a refuge since the expulsion of his Order from France. The photograph of the beautiful series of capitals which accompanies this note was made from these casts, which are most courteously placed at the disposal of anyone who is interested in the subject. They will ultimately pass into the possession of the Société des Antiquaires de l'Ouest, and, it is hoped, be installed in the Baptistery itself—a worthy monument of a most unselfish and most able undertaking.

E. F. S.

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The present is the age of suburbs. Although Hampstead is not the middle of London, as it was once predicted it should be, the growth of suburbs is enormous. The centre of the town becomes more and more a place of business for use in the middle hours of the day by an immense multitude of people whose homes are in the suburbs. Every year the process becomes more marked, the business, the shops, the theatres, increase in the centre, but the population sleeps elsewhere. Only very recently has the importance of the suburb been recognised. Suburban shops are growing in size and importance, suburban town-halls are rising on a grandiose scale, suburban societies—musical, literary, and many more—give evidence of an interest in their own local history and local affairs which scarcely existed a few years ago. Finally, there is almost a complete belt of suburban theatres, many of them large and important.

The question may be asked whether all this growth be really suburban in character. Is it the town itself that is coming out into Middlesex and Surrey at such a rapid rate? Will suburban life continue to differ from town life and retain its characteristic features? On the whole we believe it will. The increase of the suburbs indicates a strong wish for some complete change of air and scene after the day's work on the part of business men, a change that London properly so called does not afford. Primarily a suburb is a place of residence, but not of business, for business men. The immense changes and incessant rebuilding going on in the more central parts have caused large masses of the working population to migrate also, and this is leading to the erection of working-class dwellings and cottages in the suburban belt—a change of considerable importance. Yet the new building neighbourhoods for this class of occupier are distinctly suburban in character for the most part, showing that amongst small householders and artisans there is a strong desire, when the day's work is done, to make "home" amongst surroundings which, if not actually "country"—most characteristic of English words—shall at least suggest it. "Town" will still be the place where a man works, separated by some distance from the place where his family await him in the evening.

The great characteristic of our older suburbs, in spite of much local change, is largely privacy; and this is mainly secured by gardens. Without discussing suburban architecture for the moment, it may be said that upon entering a suburb the first thing that strikes the visitor is the pretty effect of partial concealment afforded by trees, often of considerable size. Trees are found in some places planted by the roadside, sometimes an isolated tree has been preserved, but they are nearly always seen in the private gardens. An old custom, now unfortunately losing its power, consisted in giving colour to the road by a copper beech, a lilac, and a laburnum near together. The older suburban church often stands in a garden, and trees may be said to differentiate the suburb from the town more than any other feature. The advantage to the architect who desires to avoid making his suburban road exactly like a London street—a thing equally desired by his client—needs not to be told, but will this continue to be the case? Already we see the greenery of the villa—it would often be more correct to say the so-called villa—reduced to a few creepers and a shrub or two endeavouring to maintain their existence in a strip of gravel barely a yard wide, a ridiculous thing, yet testifying to the popular taste, for this tiny "garden" is carefully tended and sometimes gay with flowers.

The true suburban idea, the sense of being "beyond the city's hum," but not wholly so, is found in those older suburbs where the trees are largest and have had some space to grow in. In these cases, or a very large proportion of them, the trees were found there when the suburb was built *and were not cut down*. There lies the heart of the question. For in the newer suburbs the arrival of the speculator and the builders upon the scene is the signal for a wholesale destruction of trees—trees that might have been an ornament

to the place and vastly improved the appearance of a "desirable residential neighbourhood."

It is clear, too, that trees are wanted in such places, for the very first thing that is done by the planners of building estates is to plant fresh ones where such a thing is possible, and at least some shrubs where it is not. For the space about a villa—even of the most expensive sort—is now generally cramped, and the air of pleasant privacy and retirement, so usual in the older parts of Hampstead and St. John's Wood—to take two well-known examples—is declining. Yet, every here and there a tree has been spared by the builders, and the effect is magical, relieving the eye, which cannot contemplate villas indefinitely, and introducing some variety of colour and form, all highly favourable to architectural effect and beneficial to the locality.

The usual accompaniment of developing a suburb is the destruction of its natural beauty. A house and grounds in the neighbourhood of London are for sale. It is essentially a country house; the grounds are large, say from ten to twenty acres, they are studded with stately trees and a large amount of "shrubbery." In all probability there is a small lake, and it is rare for the property to be quite level; on the slopes of the northern heights of London, and again far to the southward, there is an amount of picturesque irregularity which is often most beautiful. Why not utilise all this where practicable? Not every tree, nor every sloping ground or little lake, can be saved. But a good deal of beauty could be preserved, of that we are sure. And it must be remembered that we are not pleading for trees on sentimental grounds. What we desire to see is that new "neighbourhoods" should not necessarily remain for many years the arid, shadeless places they often are, the red brick and new paint staring at the passer-by under a fierce July sun.

The laying out of a suburban estate has rarely been grasped as a whole. Where the property has been secured for a public park of course our remarks do not apply, though even then a little more attention to the surroundings might be given with great advantage in many cases. But where the speculative builder simply works his will everything depends upon what sort of man he is. How often is he a man of taste who would wish to harmonise art and nature? We have spoken of lakes and sloping ground. The preservation of the former, though not impossible, might present difficulties, but the retention of the latter need not be difficult. For after all the most attractive building estate, the one which will first attract and longest keep the favour of the public, is that in which town and country are best combined, and the original purpose of a suburb most nearly achieved. Surely in designing such a thing it ought to be possible in very many cases to keep not only a large proportion of the trees but a great part of the ground. We can easily imagine an estate well dotted with houses and gardens, but with much of the ground utilised as a general park or garden for all the tenants. In places where a steep slope occurred, the creation of a terrace with a little "garden architecture"—again for the benefit of all—would not involve any great exercise of ingenuity; nor, if the designer were, as he should be, a man of business as well as a man of taste, need it involve any pecuniary loss. A really well-designed building estate, in which natural beauty and woodland were conserved as far as possible and the villas harmoniously grouped, would pay very well. It is a matter of detail whether such a place should call itself a Garden Suburb. J. C. P.

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"Confound their politics."—*National Anthem.*

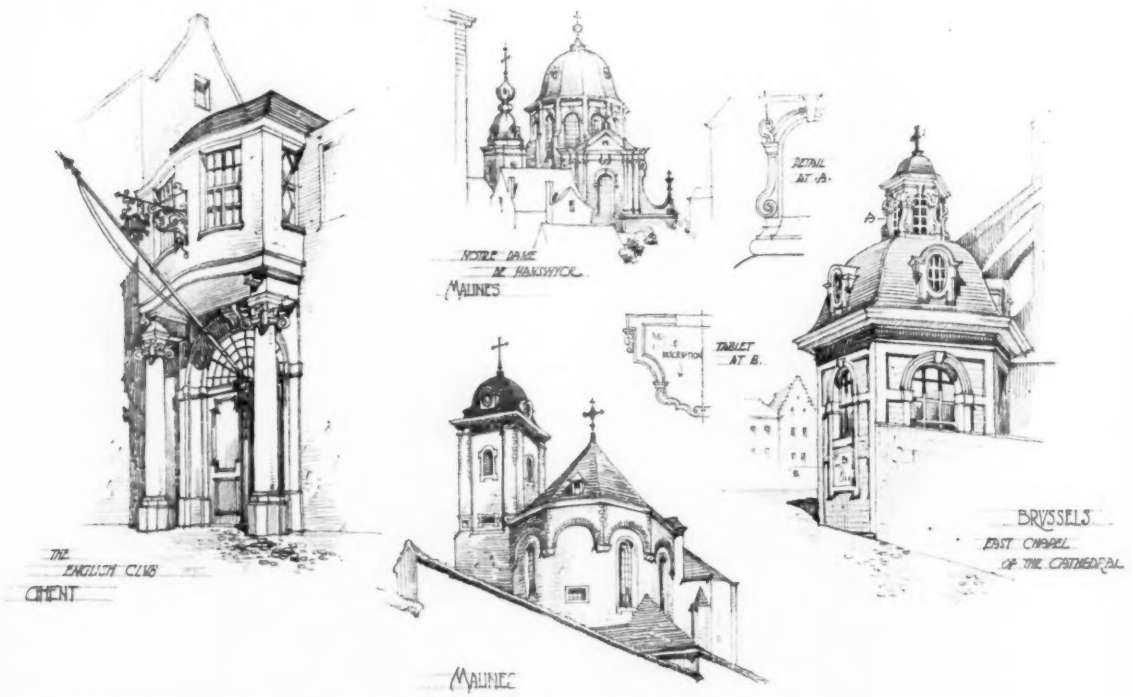
AT a time when the country was plunged into the turmoil of the General Election, the daring thought may have crossed the minds of some of us that the part played by architects in such affairs is not a particularly noticeable, or, it may be said, a particularly worthy one. Indeed, it appears to be the general rule in those places where architects most do congregate, whether in Conduit Street or Tufton Street, in a certain club near Berkeley Square, or in the City rendezvous (wherever that may be), to belittle the great national questions of which the science of politics is composed. The superior person to whom this remark applies usually presents a *blasé* appearance of detachment from such mundane trivialities, and causes the uninitiated to suppose that the perpetual contemplation of the beautiful leaves in his artistic soul no place for politics. The puny strife of Radical and Tory is as nothing to him compared, say, with the importance of getting a classic man on to the Institute Council; and if he is asked his opinion as to street improvements or traffic, he sends in reply a plan of an Italian ghetto with a few picturesque and poetical hints as to how to adapt it for tramlines and tube stations. Even so cultivated and public-spirited a man as Sir Gilbert Scott said that the only time he was ever interested in politics or elections was at the time when his War Office designs were being considered, and a change of government would seriously affect him for better or for worse. It is only a short time since a well-known member of the L.C.C., who was nominally elected to watch over art interests, resigned

because he found himself involved in such ridiculous party trifles as education and housing. This narrow limitation of interest is by no means creditable. To a man of fine intellect no doubt the petty local or sectarian squabbles that form a part of political work are distasteful, but such things are often exaggerated by reporters, and can easily be forgotten by anyone who has his heart in his work.

The natural and ultimate effect of this apathy is especially apparent at the present time, for a glance through the list of members of the new Parliament reveals the name of no well-known architect to represent the interests even of his own profession. At a moment when the Registration Bill is to the fore, when housing, street improvements, and building bye-laws are constantly being discussed, architects voice their grievances to some sympathetic nobleman with dilettante leanings, and hope for the best. It has never hitherto been deemed derogatory for a member of our profession to figure as an M.P. Sir Christopher Wren, whose practice must have been as exacting as that of most moderns, somehow contrived to sit for three constituencies in succession during the busiest part of his long life, though how he did it we know not. No doubt the cares of state lay lighter on men's shoulders in those days, but nearer our own day, when the hustings were fraught with terror for the candidates, Sir William Tite found time to represent Bath. It is usually believed that there is something about an architect's work that prevents him attending to Parliamentary duties; another theory more bluntly suggests that he reaps little advantage from the position, and hence his "backwardness in coming forward." It has also been thought that he rarely is able to bear the heavy expenses of the election and afterwards.

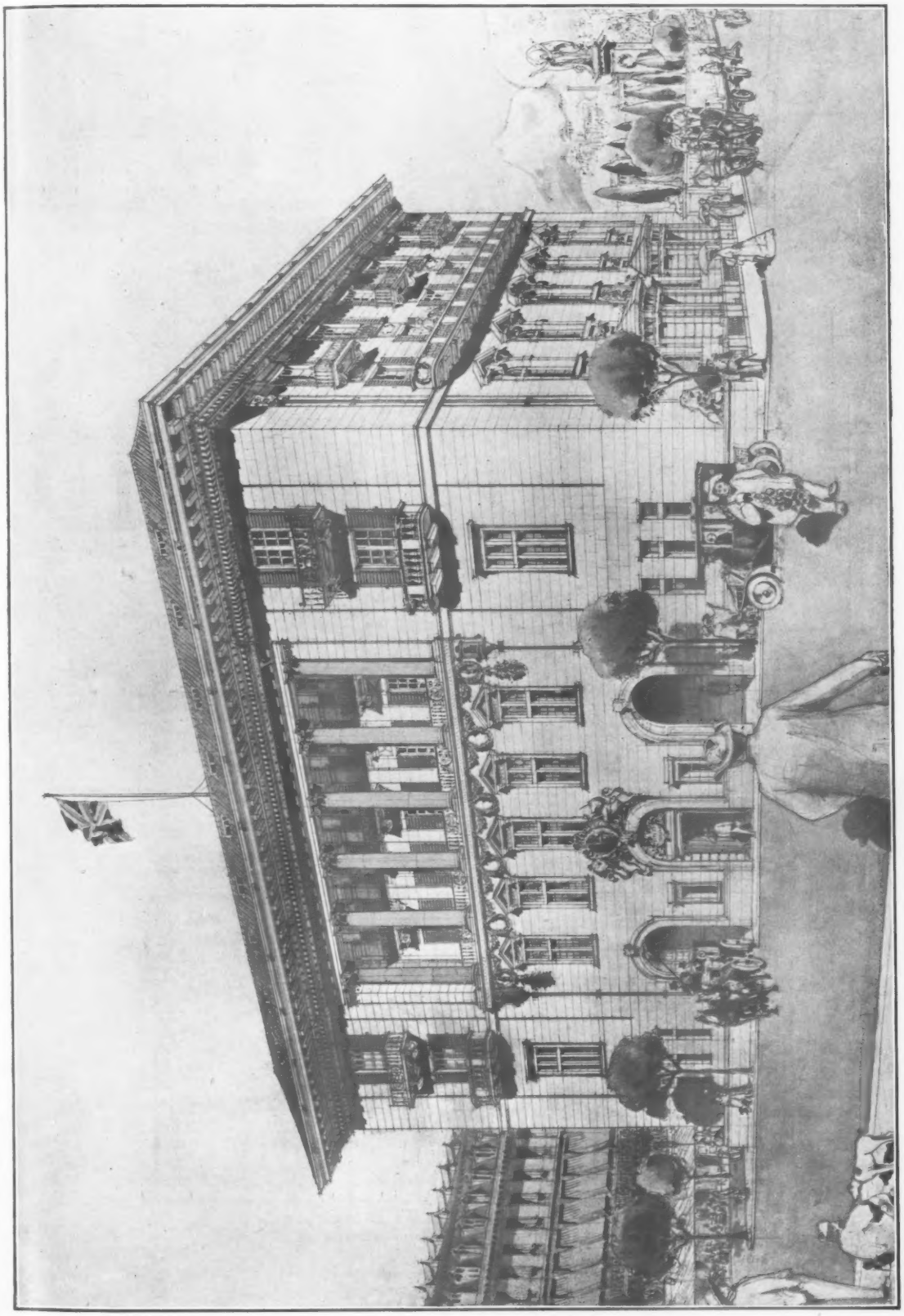
Considering these statements, it is certain that an architect's work requires no more personal supervision than does that of legal and medical men, and yet solicitors and doctors sit in the House. Certainly, to barristers and solicitors alike the woolsack and the other legal appointments offer an allurement, but the same excuse cannot be urged for the presence of doctors. Then it must be remembered that more than one architect during the past fifty years has made over a quarter of a million of money, so that although for the average member of the profession it is impossible to aspire to Parliament, it is quite feasible for some of the more fortunate and more gifted to do so. To the man who views the honour solely in the light of how it will affect his income, a most sordid object, it may be suggested that as an M.P. he gains much prestige in the eyes of the British public. But such arguments should hardly be necessary to further the claims of what is the birthright of every Englishman—the right to take part in the legislation of the State either as a humble but enlightened voter, or as a member of our great National Assembly.

M. S. B.

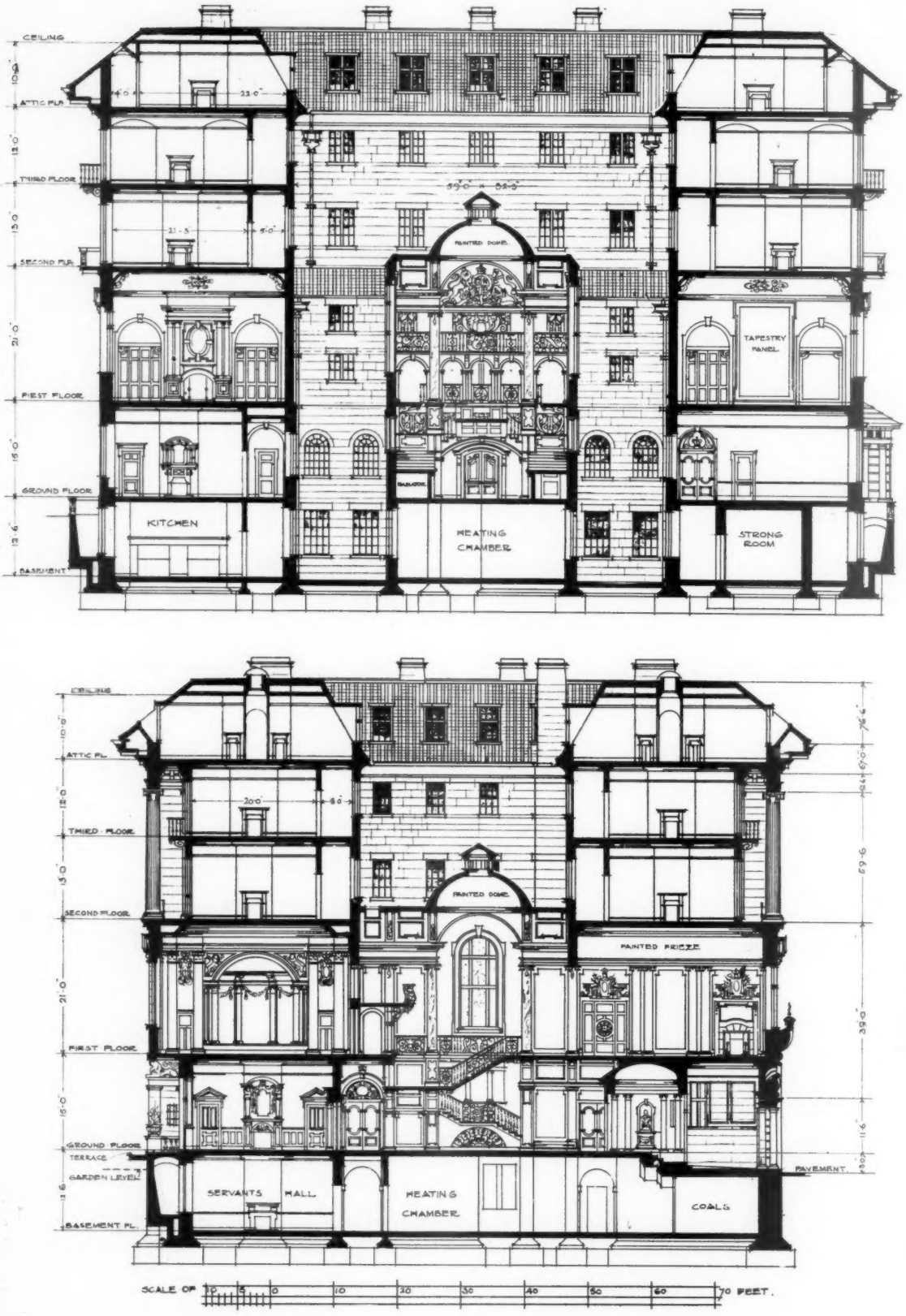


SKETCHES IN BELGIUM BY HERBERT A. HALL.

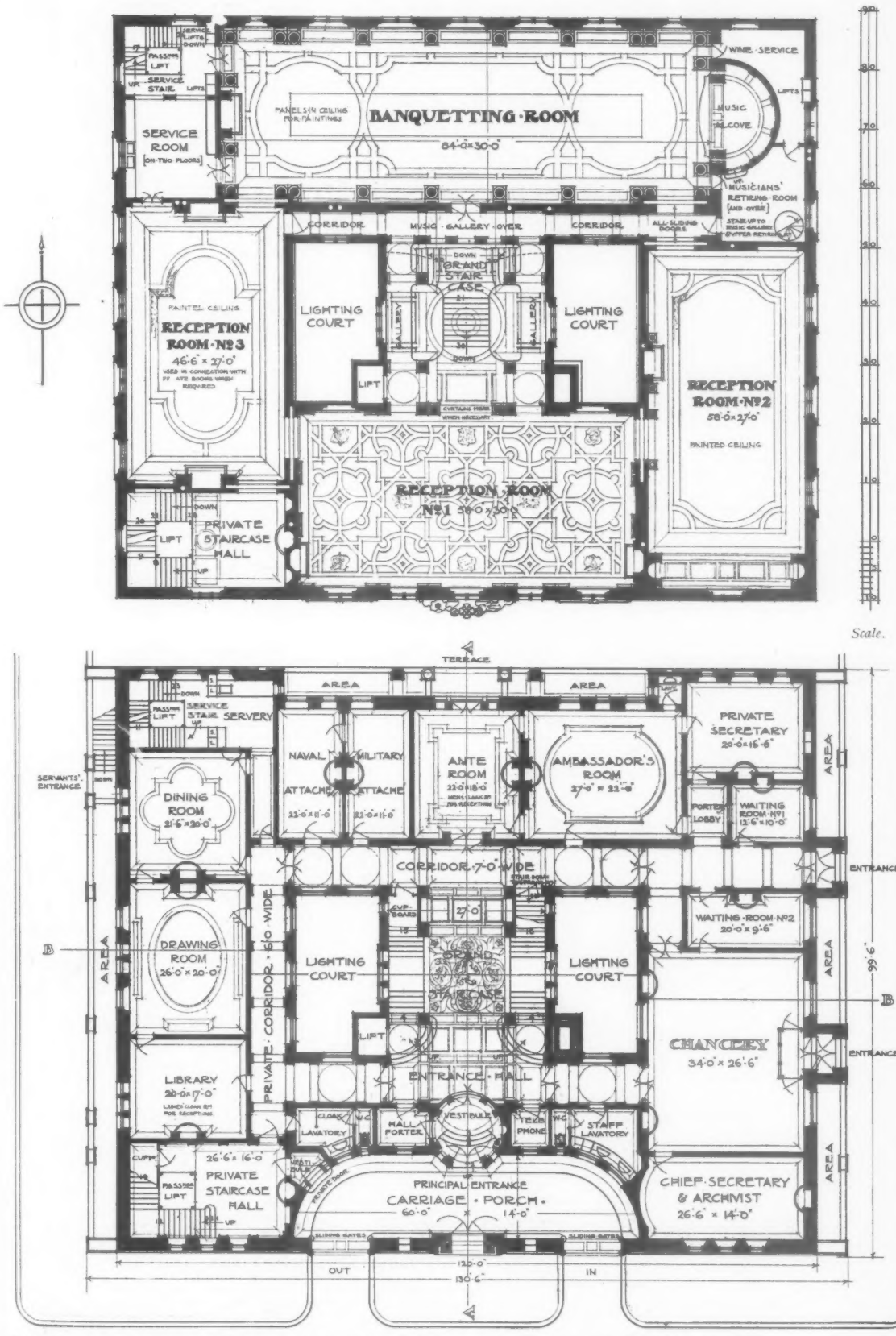
The Royal Academy Gold Medal Design.



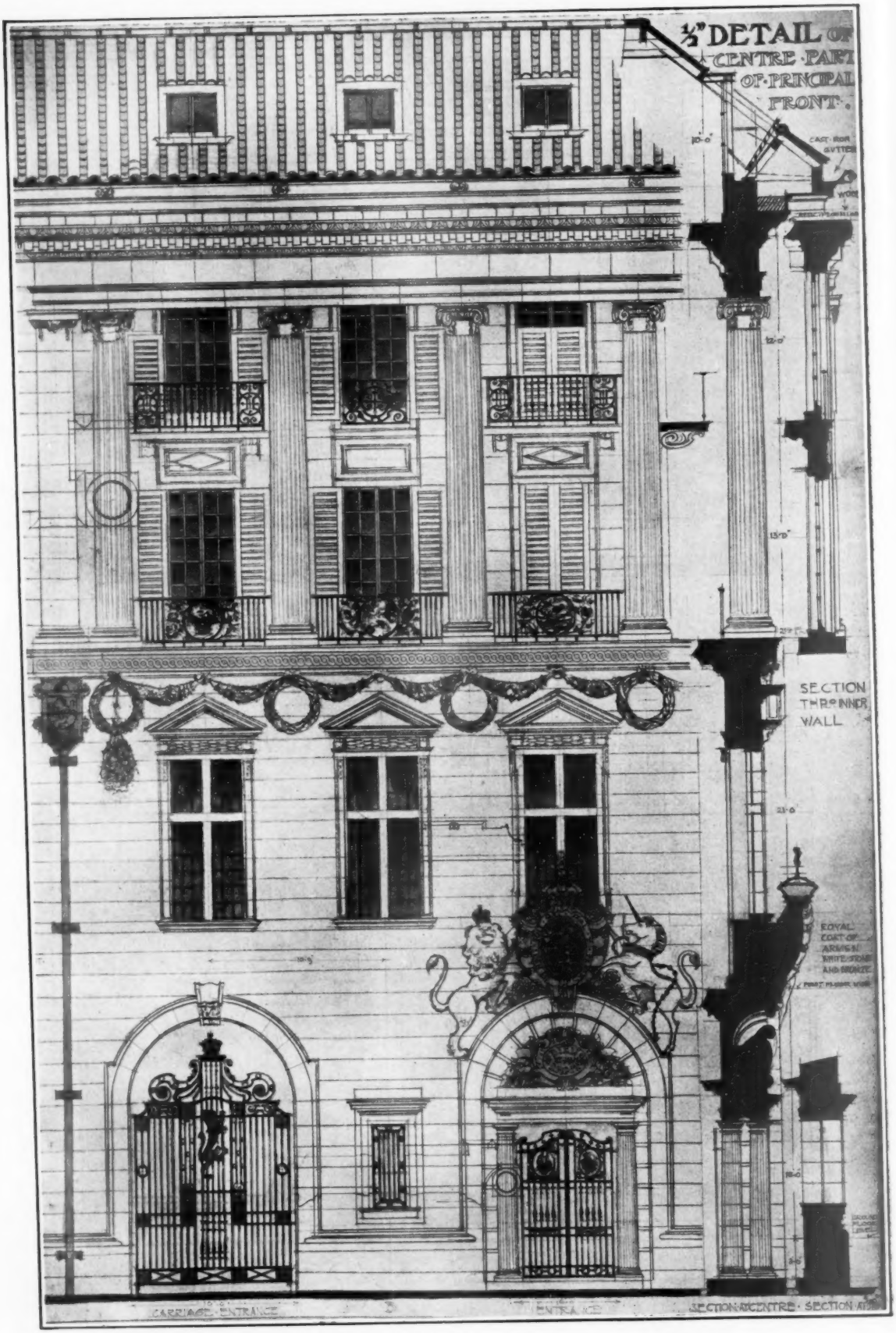
THE ROYAL ACADEMY GOLD MEDAL AND TRAVELLING STUDENTSHIP.
DESIGN FOR A BRITISH EMBASSY IN A FOREIGN CAPITAL.
WINNING DESIGN BY LESLIE WILKINSON.



DESIGN FOR A BRITISH EMBASSY IN A FOREIGN CAPITAL. SECTIONS.
WINNING DESIGN BY LESLIE WILKINSON.



DESIGN FOR A BRITISH EMBASSY IN A FOREIGN CAPITAL. GROUND AND FIRST FLOOR PLANS.
WINNING DESIGN BY LESLIE WILKINSON.



DESIGN FOR A BRITISH EMBASSY IN A FOREIGN CAPITAL.
WINNING DESIGN BY LESLIE WILKINSON.