THE ARCHITECTS' JOURNAL

THE ARCHITECTS' JOURNAL
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Forthcoming issues of THE ARCHITECTS' JOURNAL will illustrate two new London theatres recently completed by well-known architects. The first of these, the new Vaudeville Theatre, will be illustrated next week. The façade and outer walls of this theatre have been left untouched, but behind and within these Mr. Robert Atkinson has constructed a new auditorium and an up-to-date block of dressing-rooms.

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PRINCIPAL CONTENTS

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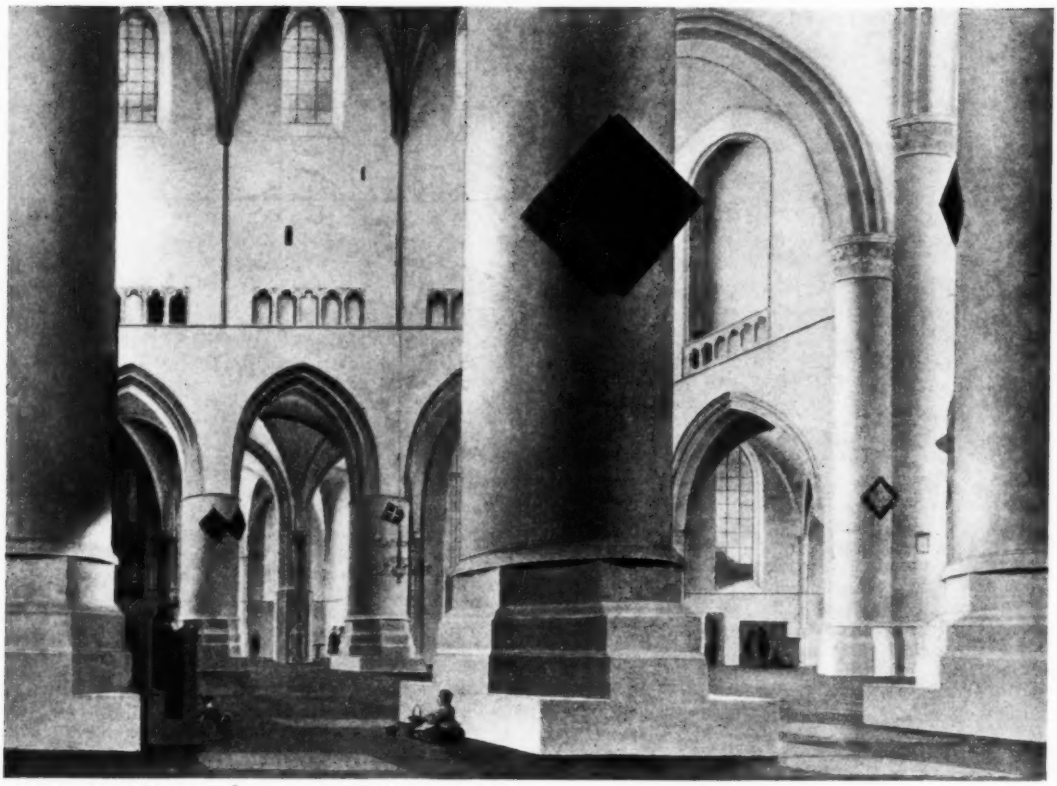
CHRISTIAN BARMAN, *Editor*

The Editor will be glad to receive MS. articles, and also illustrations of current architecture in this country and abroad, with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.



RENDERINGS OF ARCHITECTURE

Selected and annotated by Dr. Tancred Borenius

ix. Pieter Saenredam (1597–1665)
Interior of the Church of St. Bavo, Haarlem

Pieter Saenredam was the son of the famous engraver Jan Saenredam; he studied first under his father, and subsequently under Frans de Grebber, who, it may be recalled, was also Lely's master. He lived mainly at Haarlem, but was in the habit of touring other Dutch cities in search of architectural subjects for his paintings and drawings. He shows a marked preference for the rendering of church interiors, and the present example goes to prove how in him a great exactitude of statement was by no means incompatible with a sense of effective composition and keen sensitiveness to atmospheric values. It is an interior of the noble church of St. Bavo, at Haarlem, commonly known as the "Groote Kerk" (the Large Church), and built towards the end of the fifteenth century. The artist mainly operates with big, simple masses of white; it is, indeed, a "symphony in white" in the Whistlerian sense, and shows the utmost subtlety in the modulations within a very restricted compass of tone.

[National Gallery. No. 2531.]

THE
ARCHITECTS'
JOURNAL

Wednesday, March 3, 1926

THE ARCHITECT AND HIS TERRITORY

In this issue we continue the series of articles which we began last week, dealing with what might be termed special buildings of minor importance. Yet in one respect these buildings are of very great importance. They may be said to represent the boundaries of the architect's domain, and boundaries, as the people of a great empire have cause to know, must be stoutly and stubbornly maintained. Now, it seems to us that these architectural boundaries are not being maintained with all the pertinacity, the courage, the obstinacy which must be brought to bear if they are to be held; held against a tenacious foe from whom reconquest will be exceedingly difficult. The fact is, and most architects must realize this, that the ironmonger (we use the word loosely, and intend it to include the compilers of the manifold catalogues of ready-to-use commodities) is persistently encroaching upon the architect's territory, so that he is less and less called upon to, and less and less capable of, designing these special buildings of minor importance.

The result of this attack upon the architect by the ironmonger was first observed, and is still, perhaps, most apparent, in the railway station. Curiously enough the first railway station in London, Euston, was the work of an architect, and by no means an unsuccessful achievement, but it is wellnigh the only success in the country. As for the thousands of small rural stations which besprinkle the country, how is their devastating ugliness to be explained?

We shall be told, of course, that it is our old enemy, the machine, which is responsible for this state of affairs. Since the efficiency of a machine bears some relation to its size, machinery leads to centralization, centralization leads to standardization, and standardization leads to catalogues; and if the building itself cannot be catalogued, all its parts can, and this, of course, appeals to the man of business, who is thus able to go straight to the compiler of catalogues with his wants. Meanwhile, he, the compiler, finding himself unattacked in an enemy's country flowing with milk and honey, grows bolder and bolder, until already he has issued catalogues of standardized houses and standardized tin churches, and there is scarcely a single class of building which he has left alone, scarcely a single class of building concerning which the architect need feel no apprehension, so that he, poor fellow, is obliged to depend entirely upon those who do not place beauty quite at the bottom of their list of values.

But the point which we wish to emphasize is that this attack was begun upon these special buildings; and architects should endeavour to retrieve their territory. First, however, they must befit themselves for their task; they must be able to design a small railway station, a football stand, a bandstand, a public shelter, a public lavatory, a lamp standard, a telephone kiosk, a sports pavilion, and the like. Candidly, we fear that the number of architects who have given a thought to buildings and objects of this kind is small. This state of affairs is, we think, being remedied in the larger architectural schools, and the student is being made to realize that such things are rightfully within his province, and that if the compiler of catalogues has, for the nonce, invaded it, he must do battle to win it back. It is the public that ultimately decides these issues. Let it once become thoroughly dissatisfied with ugliness in daily life, let it realize that such ugliness is neither a sign of economy nor of efficiency, let the architect be there ready and able to give it the beauty which it wants, then, we think, the compiler of catalogues will be compelled to retire into his own territory.

Another thing that we shall be told is that the types of buildings are to-day so manifold that no one man can be expected to be conversant with them all, and that just as there are specialists in the medical profession so, too, there must be specialists in the architectural profession. There is something in this, but not so much as the advancers of the argument think. And we will make use of the same simile to deal with it. The G.P., whom we may liken to an ordinary architect, may not be able to deal with all our ailments in the most competent manner, but he at least defends the boundaries of his domain, and permits of no encroachments. Moreover he is able for the most part to make a diagnosis of most diseases, that is to say, he is at least aware of the extent of his territory. But many architects we fear are not so well informed about their own affairs. As for the need for specialization, this can never exist in the same degree in the architectural as in the medical profession, since all good buildings are informed with common qualities: those of fitness and beauty.

And so it is to be feared that unless the architect bestirs himself the conquest will go on, and he will be for ever beating a retreat until at last he will find himself without territory. The encroachment will have become acquisition.

NEWS AND TOPICS

Mr. Topham Forrest's recent paper on "London One Hundred Years Hence" will be read with the greatest interest by all lovers of the metropolis, and it is to be hoped that his conclusions, arrived at after long deliberation upon the problem, will shortly be published in pamphlet form. He anticipates that the London of 1950 will embrace Uxbridge on the west, Watford on the north-west, Romford on the east, Dartford on the south-east, and Purley on the south, and that much of the land which now exists between these places and London will be covered with streets and houses within a quarter of a century. It is a rather appalling prospect. Fancy half the population of the kingdom concentrated within twenty miles of Charing Cross! What a target this vast and densely-populated area will be for hostile airmen!

* * *

Mr. Topham Forrest does not think it possible to check the growth of London, and he scarcely mentions the possibility of the establishment of satellite towns which would attract to themselves some of the population otherwise destined to swell the metropolis. So long as London is developed on the right lines he would let it grow, even though it ultimately reached from Bedford to Brighton. Many town-planners have maintained the desirability of keeping a wide band of open country encircling London, and cutting it off completely from surrounding towns. Mr. Forrest, however, while acknowledging that this might have been possible a hundred years ago, believes that to-day such a belt even if it could be secured would fail in its purpose because its distance from the centre would largely detract from its utility. And after all the belt itself represents but a single geometrical and dogmatic expression of an ideal which can find fulfilment in many other ways, for the object of the belt is only to ensure that there shall be reasonable access to the country from all parts of the metropolis. The system of parks advocated by Mr. Forrest would not only add greatly to the beauty of London, but also in a very real way to the well-being of the community.

* * *

With regard to the problem of "zoning" London, Mr. Forrest has very clear ideas, and does not hesitate to recommend the prescribing of certain areas for residential, commercial, and industrial purposes. Yet there seems to be a danger of over-simplifying the problem, and, moreover, the obvious method of separating, for instance, the residential from industrial districts is only justified in reason if we make certain æsthetic assumptions which are, perhaps, questionable. Mr. Forrest tells us a common story, the truth of which has been exemplified time and again, "A district is laid out for residential purposes, and good-class residences are erected. To their dismay, however, the owners find presently that right in the heart of the district a factory is being built. The only reason for building it there is probably that the land happens to be somewhat cheaper than in the adjoining commercial area. The erection of such a factory is the first step towards the decline of the area." This is clearly a case where the *ugliness* of the factory has injured the amenities of the neighbourhood. If the time should arrive, however, when factories will be as beautiful, and, perhaps, even more beautiful than the best of private residences, the particular zoning regulation which segregates factories from residential neighbourhoods will have no justification whatsoever, except, of course, insofar as it concerns such factories or industries as would be objectionable to near residents on grounds other than æsthetic. Some time ago I happened to be staying in Yarmouth in a cottage with a small garden which happened to be quite close to a timber-yard, having associated with it some perfectly delightful buildings, expressive of their purpose, yet designed with the accomplishment characteristic of our eighteenth-century forefathers. I felt it a privilege to be living in a house that commanded so pleasant a prospect. If at some future date the spirit of urbanity should return to grace our industrial buildings, these latter, instead of being eyesores to be hidden from public view as far as possible, may rank among the ornaments of our cities.

* * *

Mr. Forrest's proposals for the improvement of Central London are drastic. A new radial road from the Victoria Memorial towards the Army and Navy Stores (I hope this does not mean sacrificing Wellington Barracks), a large "place" in front of Victoria Station, to be connected up by a new and direct road to the Mall, and a formal boulevard cutting through the Park from Hyde Park Corner in the direction of Paddington, are suggested. With regard to the vexed question of Charing Cross Bridge he is in favour of a compromise, whereby the main line traffic would be dealt with at an enlarged semi-terminal station on the south side on the site of the present Waterloo Junction, while provision is made for those desiring to continue to the West End. Charing Cross Bridge, with Hungerford Bridge, is about 120 ft. in width. This width would suffice for a combined rail and road bridge—50 ft. for railway purposes and 70 ft. for the roadway—which would begin at York Road and pass over the Strand to an enlarged St. Martin's Place. Waterloo Bridge being in a straight line with the centre of the British Museum, Mr. Forrest advocates the making of a new road between these points. As he says, the average Londoner is immensely interested in the planning of this central area of the metropolis, and if only his imagination be appealed to in the proper way he will give adequate support to the administrators who are trying to remodel it in accordance with improved standards of design. Unfortunately, Greater London is too big to inspire much in the way of civic pride; but it is quite possible to stimulate a local patriotism which will help to maintain the character and dignity of the older suburbs of London, possessed, as they are, of their own individual beauties and an historic renown. Mr. Topham Forrest says: "I am not out for rebuilding London. I would not do it if I could. London might be spoiled in the process!" This is well said. And we may quote one last and admirable sentence from this admirable paper: "The right building in the right place, and in many places no building at all, should be the keynote of all re-development."

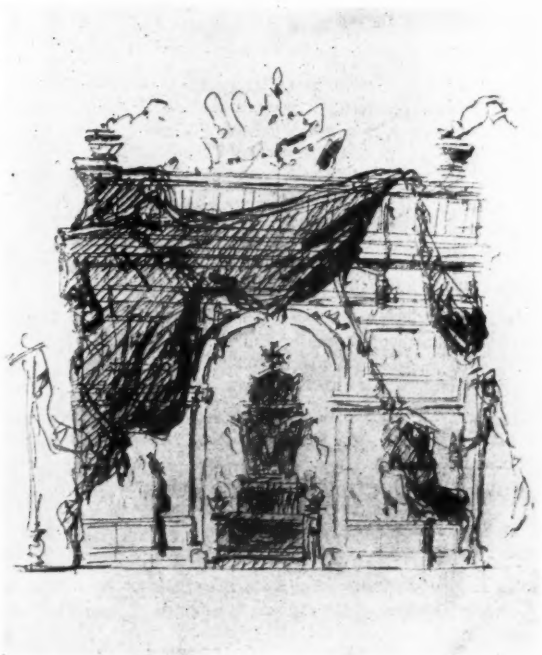
* * *

Meanwhile, some of the great provincial cities are effecting improvements in their central areas. In Birmingham it is proposed to move the civic centre of the city

to the vicinity of the Hall of Memory, which lies off Broad Street. Already a large area has been cleared, and other buildings are now being demolished in order to clear a site for the erection of the new masonic temple which the Warwickshire Freemasons have undertaken to build as a memorial to those members who fell in the war. The lay-out and development of this area is receiving the careful attention of the General Purposes Committee of the Corporation. It is hoped at some future date to erect modern municipal buildings to house all the departments of the Corporation's activities. These have already outgrown the capacity of the present Council House, and have had to be scattered throughout the city. An improvement on such a scale will probably have to wait till the financial situation is more favourable. The reconstruction, however, of the interior of the Town Hall to provide accommodation for an additional 500 people will be proceeded with immediately. At present the seating capacity is 2,245. The work will involve an expenditure of over £36,000, and occasion will be taken to improve the acoustics of the hall. Important street widenings and the creation of new avenues are also proposed. An arterial road, 80 ft. in width, from Stephenson Place across New Street Station to a point in the Horse Fair below Holloway Head, if Parliamentary powers are obtained for its creation, is expected to remove one of the greatest obstacles to the development of the central area.

* * *

When next an occasion arises for flag-flying and the decorating of our streets, why not give the business into the hands of the architects? Whether the architect of each building should be allowed to design its decorations, or whether it should be left to an architect-in-chief would be a matter of arrangement alone. I give a sketch of the way in which a great architect proposed to drape a great national monument for the funeral of Victor Hugo. The architect was Charles Garnier, and the monument the famous Arc de Triomphe.



The Worshipful Company of Goldsmiths are organizing a competition, open to all workers in precious metals, for the design and manufacture of racing cups and trophies, and it is stated that the selected work will receive consideration when the designs are being chosen for certain important race trophies in 1927. The judges are Sir Edwin Lutyens, Mr. C. M. St.J. Hornby, Mr. Muirhead Bone, Mr. B. J. Fletcher, and Mr. F. Courthope. The Worshipful Company are desirous of raising the standard of craftsmanship, feeling, perhaps, that there is no reason why England should not join in the Renaissance in gold and silver work which is discernible in Denmark and Sweden. Another competition which the company is organizing is for the improvement of household plate, but, alas! I feel that little interest is now taken in household plate; changing values have brought motor-cars and amusements to the fore, and there is little enough left for fine metalwork. Nevertheless, the aim of the Goldsmiths' Company is to be approved, and I hope that interest will be restored in one of the most ancient of the crafts. A closer co-operation between commercial houses and designers and a more discriminating demand on the part of the public are essential, and these competitions may help to bring this about.

* * *

Although architects who had been to the Paris Exhibition learned little, perhaps, from Colonel Cole's paper at the R.I.B.A. on Monday night, the paper was rendered interesting by the international knowledge of the lecturer, and the consequent value of his opinions upon exhibitions in general and the Paris Exhibition in particular. His remarks upon the sizes of the various buildings, their lighting, and the presentation of the exhibits, were all valuable lessons which most architects—visitors to the Exhibition—must have learned for themselves. It was in his asides on lighting that he engaged our attention most. The lighting at Paris was, he declared, in no way comparable to that which was adopted in San Francisco, or more recently at Rio, where all the main Exhibition buildings were lit by flood lighting. What a sight London would be, he thought, if we could only light it by the same means. In years to come, he prophesied, the necessary recesses for holding the flood lights would be an accepted architectural detail.

* * *

The plans of the new east to west business thoroughfare, extending from the Leeds Town Hall by way of Park Lane to St. Peter's Square, have just been approved by the Leeds Improvements Committee, and will shortly be available for publication in detail. The scheme is one of the greatest developed by Leeds or any other provincial city in the last quarter of a century. It involves the demolition of a great deal of business property, including hotels, banks, shops, and offices, and provides an 80-ft.-wide road, with some uniformity of façade along the whole northern side. Sir Reginald Blomfield, R.A., who has been acting as adviser to the City Council, says, in an interview: "A scheme of this kind is very necessary in order to let light and air into the city, and to enable the Town Hall to be seen to greater advantage. It will provide a most excellent thoroughfare, which ought also to prove to be very fine for shopping. The scheme is important as a considered scheme from start to finish, and as a big contribution to civic architecture."

Music—even "frozen music"—hath charms—to attract crowds into churches that would otherwise be empty. At the week-end I joined quite a long queue that I found waiting patiently at the south-east door of Southwark Cathedral. I learned that there was music toward, with the London Symphony Orchestra approaching for the dulcet making thereof. I must needs share in the anticipation of these joys. Moreover, I wanted to see whether Southwark Cathedral showed within its walls any more noteworthy recent change than that betokened by the adoption of the latest of its several aliases. Of course, I was well aware that years ago Sir Arthur Blomfield had done considerable rebuilding there, and had thereby got himself into hot water with certain malcontents, such as seldom fail of cautelous censure of an architect's work; but, as in the leading case of "Soapy Sam" in similar instances, Sir Arthur "came out with clean hands." As I need hardly call to mind, the cathedral was once upon a time St. Mary Overie; next it was known as St. Saviour's Collegiate Church; and, finally (as I hope), it is Southwark Cathedral. Nor—thought I as I took my seat and glanced discreetly around—nor is it entirely unworthy of that last ambitious appellation. For it is, certes, a building of magnificent features and noble traditions. I would recall its associations with Cardinal Beaufort, with John Gower, Edmond Shakespeare, John Fletcher, Philip Massinger, Lancelot Andrewes, Dr. Sacheverell. To this mixed bag of celebrities I would fain add George Gwilt, architect, whose monument just outside the church proclaims him—I noted in passing it—having been "many years a resident in this parish." This same Gwilt, if I remember aright, brought out a revised edition of the immortal *Fergusson*. He also, for love of the church, effected considerable restoration thereto, and did it for nothing; which, a cynic has said, is approximately what it was worth. Anyhow, a stained-glass window in the cathedral commemorates him as a benefactor. Of much more recent date is a window to John Harvard, in presence of which all pious Americans offer costly oblations.

* * *

In a review of Manning Robertson's *Laymen and the New Architecture*, in the *Irish Statesman*, Mr. C. P. Curran gives an illuminating and succinct definition of the "new architecture" which has entered into its kingdom in Scandinavia and the United States, and has established outposts in London, in Bush House, and Adelaide House. The "new architecture" cuts itself free from the classical and Gothic traditions. It is to be judged in terms more elemental than any appropriate to these schools. It is sensational and dramatic rather than intellectual or emotional. It relies on the dramatic appeal of large masses, unbroken surfaces, deep bands of shadow and the emphasis of texture and colour. It is vivid and arresting: freer than Greek, more orderly than Gothic. Its broad surfaces and carefully-selected colour-schemes, within and without, leave no place for stereotyped and promiscuous ornament. What detail there is shows increased refinement in line and moulding, and a concentrated attention upon the proportions of doors, windows, and fittings. It has nothing to do with the affectation of "period" work, but sets out with imagination, common sense, and the resources of modern material to satisfy the multifarious functional demands of our day.

In a column-long review of Mr. Humphry Ward's *History of the Athenæum, 1824-1825*, there are cited from the book many not altogether unimportant particulars, such as those relating to the prices of various wines, and mention is very properly made of the club's holdings in books and pictures. It is even more interesting æsthetically to be reminded that the beautiful head of Athene, which serves as the crest of the club, was drawn by Lawrence and engraved by Wyon, and that the statue of Athene over the portico is the work of E. H. Bailey. Useful information, certainly; but how is it, I should like to ask, that in this otherwise excellent review I see no reference to the architect? Be it remembered that I am speaking of the review, not of the book, from which I make no manner of doubt, not even so insignificant a detail as the name of the architect has been omitted. Perhaps—I snatch at the assumption as one clutching at a straw—the reviewer thought the name of the architect so well known that there was no necessity to recall it. Or—avaunt, wretched superstition!—is it possible that some malign fate still dogs the blameless career of Decimus Burton? Full justice has never been done, even by his brother architects, to his architectural achievements and his manly worth.

* * *

Aberdeen Town Council invite architects to submit competitive designs for pleasure buildings to be erected at the Sea Beach. No prizes are mentioned.

ASTRAGAL

ARRANGEMENTS

WEDNESDAY, MARCH 3.

At the Institution of Heating and Ventilating Engineers. 7.0 p.m. Joseph Meech, A.M.I.E.E., on The Design and Application of Electric Motors Relating to Heating and Ventilating Installations.

WEDNESDAY, MARCH 10.

At the Edinburgh Architectural Association. 8.0 p.m. C. D. Carus Wilson, F.R.I.B.A., on Principles of Design.

At the Institution of Structural Engineers (Manchester Branch). R. Travers Morgan, A.M.INST.C.E., on Building Construction from a Surveyor's Point of View.

THURSDAY, MARCH 11.

The Institution of Electrical Engineers. 2.30 p.m. Visit to the Underground Railway Repair Shops at Acton.

At the Royal Society of Arts. 8.0 p.m. W. A. Harvey, F.R.I.B.A., on Housing: Past, Present, and Future.

At the Northern Polytechnic. 7.0 p.m. Annual Speech Night and Exhibition of Students' Work.

FRIDAY, MARCH 12.

At the Town-Planning Institute. 6.0 p.m. William Haywood, F.R.I.B.A., M.T.P.I., on the Control of Design—Scope and Method.

MONDAY, MARCH 15.

At the Royal Institute of British Architects. 8.0 p.m. George H. Duckworth, C.B., F.S.A., on The Making of a Slum.

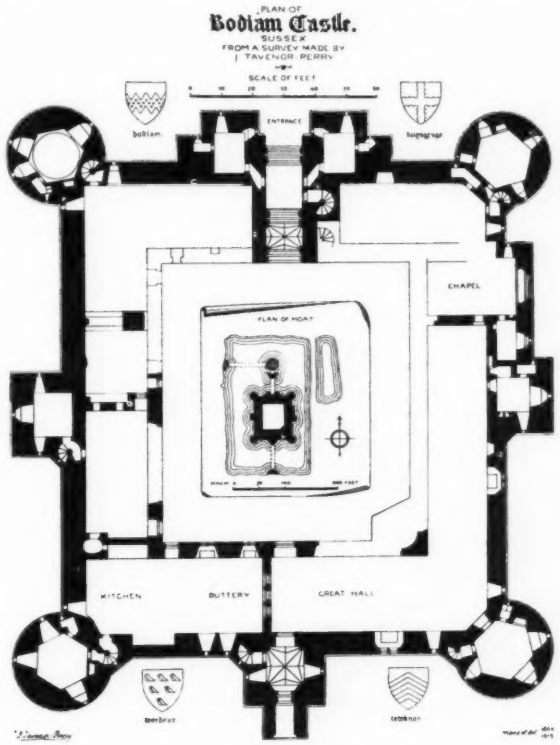
At the Edinburgh Architectural Association. 8.0 p.m. Annual General Meeting of the Associate Section.

LORD CURZON'S BOOK ON BODIAM

BY SIR REGINALD BLOMFIELD

BODIAM CASTLE stands in the broad and pleasant valley of the Rother. Though it is some 30 ft. above the level of the river, it has a spacious moat over three acres in extent, fed by springs in the upper ground. When, in the year 1386, Sir Edward Dalyngrigge obtained a licence to fortify and crenellate his house, he decided to build a castle strong enough to resist any adventurous raiders who might work their way up the river from Rye. Only nine years before the French had sacked that town, and burnt its church, the marks of the fire are still to be seen there; and "the worthy knight," as Lord Curzon calls him, was determined to run no risks. Accordingly, he selected a site on the rising ground near the river, excavated the upper side, and raised an embankment on the lower out of the spoil of his moat. In the island left in the middle he built his house on a courtyard plan, for stout defence as well as habitation, with walls rising sheer out of the moat, four round towers at the four external angles, a mighty gateway on the north side, with a barbican as an advanced post, a tower over the postern gate, towers in the centres of the east and west sides, and five drawbridges over the moat. Within the walls he built his living-room, chapel, guardroom, men's quarters, and multifarious offices set round an internal open court, 86·7 ft. long from north to south by 77 ft. from east to west. The external dimensions are given as 178 ft. by 175 ft. Dalyngrigge formed a harbour near the river, 250 ft. long by 80 ft. wide, and a tiltyard 525 ft. by 280 ft. wide; which Lord Curzon, with the best intentions, tried to turn into a cricket ground for the villagers of Bodiam; "cherishing," as he humorously says, "the innocent belief that this piece of ground, if drained, levelled, and turfed, would provide an excellent cricket ground. I set about its reclamation. The result was a disastrous failure." The ground declined to be reclaimed, and the rushes resumed their possession.

Altogether, Bodiam was a well-designed and very completely equipped fortress house. It is this remarkable building which Lord Curzon describes in his monograph, a memorial not only of a great historical monument, but also of the fine public spirit which led him to purchase the castle and land adjoining, and to devote much time and money to its preservation. Its history is curious. The castle seems to have been unlucky. At one time it was supposed that the building was never completed and occupied. Lord Curzon, as the result of much careful research into its history, and investigation of the building itself, came to the conclusion that it was inhabited by Dalyngrigges, Lewhnors, and others, down to the middle of the seventeenth century, when it was "slighted," as the term was, by the Parliamentarians; in other words, rendered uninhabitable. It has remained so ever since, and would probably have ceased to exist but for three men: first, Thomas Fuller, of Brightling, who bought the castle and twenty-four acres odd in 1829, "in order to save it from being dismantled and the stone used for building materials," the fate which overtook much of Camber Castle, near Rye; secondly, Mr. George Cubitt, afterwards Lord Ashcombe, who in 1864 bought the property and spent a great deal of money in preserving the fabric; and, finally, Lord Curzon, who in 1917 bought the property, "sold the bulk of the estate on the manor to the tenants, but reserved the castle, the manor house, the wharf, and adjacent lands to the extent of fifty acres, in order to make a worthy setting for the castle, which I had resolved to restore with a view to presenting it ultimately to the nation." It was a great thing to do; and Lord Curzon carried through the work with characteristic thoroughness and excellent judgment. He did not, in fact, "restore" it, he did something very much better, he preserved it exactly as it is so effectually that his hope that it may stand for another thousand years may well be realized. Lord Curzon's account of his work is interesting, and characteristic of the man. His untiring industry carried him through researches into State papers, Court rolls, Pipe rolls, account rolls, and lots of other rolls that would have daunted any ordinary student. On page 21 there is a list of forty such sources of information.



A Plan of Bodiam
(From Bodiam Castle, Sussex)

Also he studied the buildings with most minute care. He has stated the results with excellent clearness, and the three chapters on "Owners of the Castle," "Construction and Destruction," "Renovation and Research" are models of lucid statement, which make the somewhat florid prose of the introductory chapter the more remarkable. One would hardly have expected from a man of the writer's education and attainments the frequent use of the word "commence," the superabundance of adjectives in

the introductory pages, the description of the moat as "a watery cincture," or of Sir Edward Dalyngrigge as having "espoused the profession of arms," when all he did was to become a soldier. Lord Curzon draws a romantic picture of the early owners. "It could hardly surprise anyone," he says, "were a team of richly-clad knights, falcons on their wrists, and their ladies mounted on gaily caparisoned palfreys suddenly to emerge from the barbican gate for the enjoyment of the chase; or even were the flash of spearheads and the clatter of iron-shod hooves to indicate the exit of a party with more serious intent." The passage is characteristic of Lord Curzon in his "Endes vein." The only criticisms I would suggest is that the castle was not large enough to contain the knights and their ladies, the palfreys, and their falcons, as well as the iron hooves and the spearheads—and it is more probable that apart from Dalyngrigge and his household its inmates consisted of a handful of hard-bitten rascals who seldom washed. But the writer had an irresistible instinct for pomp and circumstance, and these are very slight blemishes on a thorough and scholarly piece of work.

Lord Curzon has many claims to remembrance, but not least among them will be the sagacity and splendid public spirit which led him to rescue and leave to the nation two such priceless historical monuments as Tattershall, in Lincolnshire, and Bodiam Castle, in Sussex. The book is very well turned out by Jonathan Cape. It is freely illustrated by photographs and reproductions of old drawings. One would have liked measured drawings of sections and elevations, but full dimensions are given, and there is a very interesting plan at the end of the book, showing the castle after the excavations of 1919-20.

Bodiam Castle, Sussex. By the Marquis Curzon of Kedleston. London: Jonathan Cape. Price 30s.

THE MODERN STREET

BY J. D. BERESFORD

ii: *Concluded*

AFTER all these qualifications and restrictions I turn with a sigh of relief to the thought of my ideal modern street. When I think of it as a route, I see it from, say, the top of an omnibus, and I want primarily a vista. Without that there is no goal, no sense of movement. So much has been written lately about the "graceful curve" of the Regent Street crescent. But I do not desire a curve at that place. I should prefer to have ahead of me the prospect of Piccadilly Circus, and beyond that Waterloo Place, a glimpse of the Green Park, and a distant view of the Abbey seen dimly through the haze. If the voyager needs also the dramatic value of surprise, he will find it without cramping his outlook, when he turns at right angles into Pall Mall from which my fancy has cleared away the block of buildings between Cockspur Street and Pall Mall East, revealing the sunny, or at least open, spaces of Trafalgar Square, with some touch of green on it. I have in imagination rebuilt the National Gallery and the shops and hotels on the east and south sides—we must find a new site for the Union Club we have so carelessly removed—but I have left St. Martin's Church, not for its intrinsic beauty, but because I find it interesting.

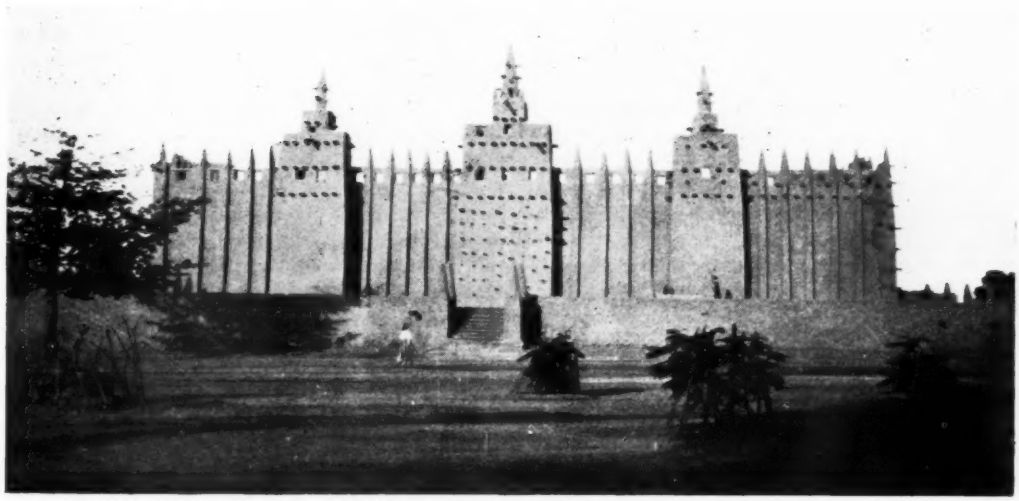
So much for general effect, which, it will be noticed, all tends towards giving a view of some district of London as a whole; our essentials being space, light, air, and a prospect. Let us turn now to the question of the street in relation to itself—as a promenade, perhaps—rather than in relation to some dimly visualized destination towards which it leads. And in the first place, I do not want a mechanical uniformity. I should not like my Regent Street or Oxford Street to be an even line of precisely similar buildings, so that one followed the perspective of its stringcourses and other right lines to the infinity of an almost achieved vanishing point. Human nature cries out for diversity, and resents the suggestion of the static and mechanical as much in architecture as in the other arts. Our street must be alive. If it is to serve its three uses it should have some expression of human activity, even when it is deserted by humanity.

The most obvious suggestion in this connection is to break the fatal determinism of those vanishing parallels by the introduction of occasional buildings that are not shops. A theatre, a museum, or a church on an island site between two side turnings, set back slightly from the general frontage line, would serve our purpose. And those buildings would all be objects of beauty to lead our stroller on from point to point, and at each one he would pause and admire. Here, too, though I would prefer all my shops and stores to be in one architectural style, the various blocks between my theatres, museums, and churches need not be of the same height, nor precisely of the same design. Moreover, if we could solve the smoke problem, we could have diversity of colour, and in the matter of sunblinds, for example, to those shop-fronts which I am inclined to neglect; sunblinds that might so easily be actuated by an electric switch from within in order to adapt the illumination of those fugitive colours to the passing shadows of an April day.

I have been dreaming, but what else can we do in this era of transition? We cannot recall the past by longing for it, so let us dream as clearly and as beautifully as we can for the future. The freeholders of London insist on rebuilding it piecemeal; one by one our old streets are being destroyed by the insistence of modern needs, but hope is still left at the bottom of the box.

There was a time when, as I have said, the streets of London provided us with the inexhaustible story of its emergence from mediævalism; when the infinite divergences of individual taste produced a heterogeneous collection of buildings that, greatly as they differed one from another, nevertheless produced some effect of an individual whole—the spirit of London of the rich and the poor cheek by jowl striving with and against each other to achieve a purpose of which they themselves were ignorant.

Now, with the increase in the size of our unit, London and the world at large are becoming more self-conscious. We no longer serve the unknown purpose quite so blindly as we once did. And something of that purpose should be expressed in our modern streets. None can define it, but we know it, vaguely, as the struggle towards enlightenment.



NIGERIAN ARCHITECTURE

BY GORDON H. G. HOLT

PUNCTUATING the hot, shimmering expanse of sands stretched within the elbow formed by the Jolibà and Niger rivers, various African towns bear witness to one of the most redeeming qualities in man's mind—that of willed and æsthetic creation. For there, black and primitive though they be, the Ethiopians show us, in their buildings, what, long ago, the Mycenæans, the Mayas, and the Nordic tribes had also shown in theirs, namely, that an insistent urge to make something both practical and pleasing is part of the fundamental endowment of the human race. It has stirred minds and limbs alike from old and from deep. If racial idiosyncrasies and evolutionary agencies have fashioned its flowering, neither are responsible for the circulation of its sap, and it may well be, as some eminent critics contend, that the more elemental the channel through which it passes, the less impoverished does it become. This theory, it is rumoured, is apt to raise controversial storms, and I shall not explore its validity here, but I may, perhaps, be allowed to state this much: The blessings of civilization and its culture do not so greatly affect the quality of an æsthetic urge that, having them, invests it with a final superiority. The slums of London are not more hygienic nor more beautiful than the slums of Wagadaga, and he would be a bold man who would assert, with any profit, the greater excellence of modern European sculpture over the negro carvings so delightfully patronized by the late Apollinaire or Mr. Roger Fry. But, if it is foolish to praise the one at the expense of the other, it is also foolish to deny their respective values, and the value to be sought in the artistic works of what we call backward races lies in the directness and emphasis of their instincts, feelings, and of the means at their disposal. Thus, cut off from the cradle of our own polity, far Nigeria, which Herodotus so guardedly labelled "Æthiopes Macrobilii," and whose coast, if you remember, Robinson Crusoe hugged with such caution in his early adventures, does show us an architecture of merit. The negro seems to have an innate comprehension of plastic form. Add to it a sure taste in his handling of material, and bear in mind his few variations on structural types, and it will seem no wonder, after all, if we find these buildings of distinct grandeur.

Above, the Mosque of Djennè, the largest in Africa, and once a notable place of pilgrimage. Below, the old Mosque of Timbuktu.

A glance at the accompanying photographs reveals that just as negro dancing or music is charged with a mighty rhythm—indeed, at times throwing tune and motion into baffling violence—so negro architecture relies on some such equivalent help, though one proper to a more static medium of expression. Unfortunately, the data available for a full critical analysis is yet too scanty; here and there do we glean fragments: Levi's *Traité d'ichnographie africaine*, or Sir James Frazer's

The Golden Bough, are valuable but incomplete, and, under the circumstances, it is better to leave out social, religious, and fetishistic premises, and build our appreciation on a purely æsthetic ground. Even so we are liable to go astray, for the atavistic remnants of barbarism left in us cannot be trusted too far. Still, certain definite senses do sway us as they sway the negro. The sense of rhythm, for instance, whose simplest parts, like some trochee or adonic metre, are easily relished; the sense of colour, the spatial sense. Therefore a combination of those, if skilfully contrived by the artist, will, in an architectural work, appeal to us no less than to the negro, and when we come to consider the façade of Djennè Mosque (page 347) we have a shrewd idea that the effect it has on us and on the natives is much the same. We respond to the rhythm, and we are delighted to discover how simple it all is, and how subtly its parts have been assembled. For, of subtleties, this façade surely has a fair amount. Subtleties of contrast; hefty and spruce vertical digits; outer *corps d'avent-garde* studded above only, whereas the central one is, throughout, lavishly set. Even the incidentals betray an alert mind, as in the finials topping all vertical ribs. The stuff is alive and free from artifice, simple, yet rich. Would that some of our buildings bore, within their own fashion, as much dignity with so graceful an air!

This, the largest mosque in Africa, is built of adobe, floated until a fine crust gives it the homogeneity it needs. Once upon a time it was a celebrated goal of pilgrimage, but the infiltration of white races has altered its character, and Djennè itself, the capital of the Fulami Empire, has, since the French Protectorate, undergone a steady change. Most of the houses are heaped together, cozened of space, squat, and ruled by the austerest demands of geometry. It is a cubist town and, with civic needs barely felt, the effect is admirable. The illustration below shows the façade of a notable's house. The thing, again, is charming, because it just happened without forcing the bonds of tradition (similar houses are often to be seen). The motif above the doorway, cutting its staccato line against the cobalt sky, is found—enlarged by one more aliquot part—over the principal gateway of the town. What meaning it symbolizes I cannot hazard, but it speaks clearly of a love of emphatic and pure shapes. The piers to the city walls are capped with ovoidal finials, like huge sugar-loaves, and these are also made to occur at the angles of the more ambitious dwellings; in their case an added reason may be expected, such as the scaring of evil spirits by the display of potent and virile members. To us it is very curious, yet did not Goethe say that "der Abergalube ist die Poesie des Lebens," and can we deny the silhouette they make is an attractive savour?

The chief peculiarity throughout all West African architecture is not the scarcity, or smallness, of windows—bound to occur in equatorial countries—but the treatment of the upper part of façades. Classical architecture gave the cornice and the Renaissance the balustraded parapet. The negro needs them not. Nevertheless he must have a finish, and he favours a plastic one. It is there, on the skyline, that he bestows his fancy, concentrates his skill. Finials, cuttings, panels, whose series of horizontal projections, such as gargoyles and ends of beams, are scattered with a free hand and allowed to play with the sun a game of lights and shades.

Timbuktu, farther north, one of the mystery cities of olden days, is, alas, also slowly rotting, though it may breathe anew when the French link it up by air with Algeria. Until then it lies stagnant, picturesque, and pathetic. If the old mosque (page 347) harbours few faithfuls, a multitude of sacred Crown pigeons perch on the timber ends and fill the besotted air with their soft ruculations. Both towns are true oases, and the shadowy pools of their trees break the fierce onslaught of a pitiless sun. At night, whilst white and yellow ochre burnous stalk the narrow streets, in search of others, whilst guttural syllables are croaked and muffled, and eyes flash in dusky faces, strange shapes fling against the heavens the passionate message of a race smitten with the blight of defeat, no doubt, but proud still, and still capable of feeling the stirs of their own exotic rhythm.

A native-built house in Djennè.

CURRENT
ARCHITECTURE
SECTION

MR. H. S. GOODHART-RENDEL

BY HOWARD ROBERTSON

THERE are, there have been, and there always will be a large body of architects whose motto in design is "safety first." There is no stigma in the adoption of methods of caution, particularly in those cases where an attitude of conservatism is unaffected and natural; and from the material point of view a strict adherence to proved and recognized forms helps enormously to smooth the path of practice. The majority of clients prefer well adapted and cleanly executed "reminiscences" to fresher conceptions which are often tentative, and sometimes crude; the builder recognizes the well-worn theme, and feels himself on familiar ground. And finally, the architect himself, pressed for time and mindful of the dangers of the *imprévu*, is able to fill in his spaces with "noughts and crosses" of the current vocabulary, or even turn over his decorative details to the competent hands of the period craftsmen. Design, personal design, is for the architect a costly luxury. The impress of personality and character on stone and brick and wood involves an infinitude of study, and study means expense. And when, finally, the work is completed, the designer has raised himself as a target for the critics, and has risked his reputation of professional balance and sanity. By taking risks he may win fame and success in the long run, but in the meantime recognition may be slow, and his "press" recalcitrant. Whatever may be the effect produced on the layman by work which bears the imprint of personality, there can be no doubt whatever as to the stimulus which it gives to other architects. Whenever, in a gathering of architects, opinions clash and argument arises, then you may be certain that personality is under the microscope. As with persons, so with art, and the net result is always the same, an awakening or at least a tonic for all concerned.

Mr. Goodhart-Rendel is one of those designers whose work will never receive *universal* approbation by his confrères. It is much too strongly hall-marked with the very personal outlook of its designer to meet with the unstinted approval of those who, in many matters, hold divergent views from its author's. It is a high compliment to Mr. Goodhart-Rendel to believe that his statements in bricks and mortar are not universally accepted without reserve. In no single work of his has character been sufficiently negligible for that to happen. It is extraordinarily interesting to follow the recently published work of some of our more prominent younger architects, for there is evidenced so much ability, so much cleverness and ingenuity, and yet such great differences of outlook. In domestic work real knowledge of effect and real skill in planning are often coupled with an extraordinary capacity to absorb some particular manner and produce a highly competent sample of the particular "taste" selected. It is not copyism, it is not plagiarism; it is, in fact, a perfectly legitimate process which generally produces harmonious results. But to a certain type of mind the feeling that a design is "à la manière de . . ." (or,

Sketch for Tower, Church of St. Mary, Pimlico.

Hatchford End, Cobham,
Surrey. The west wing.

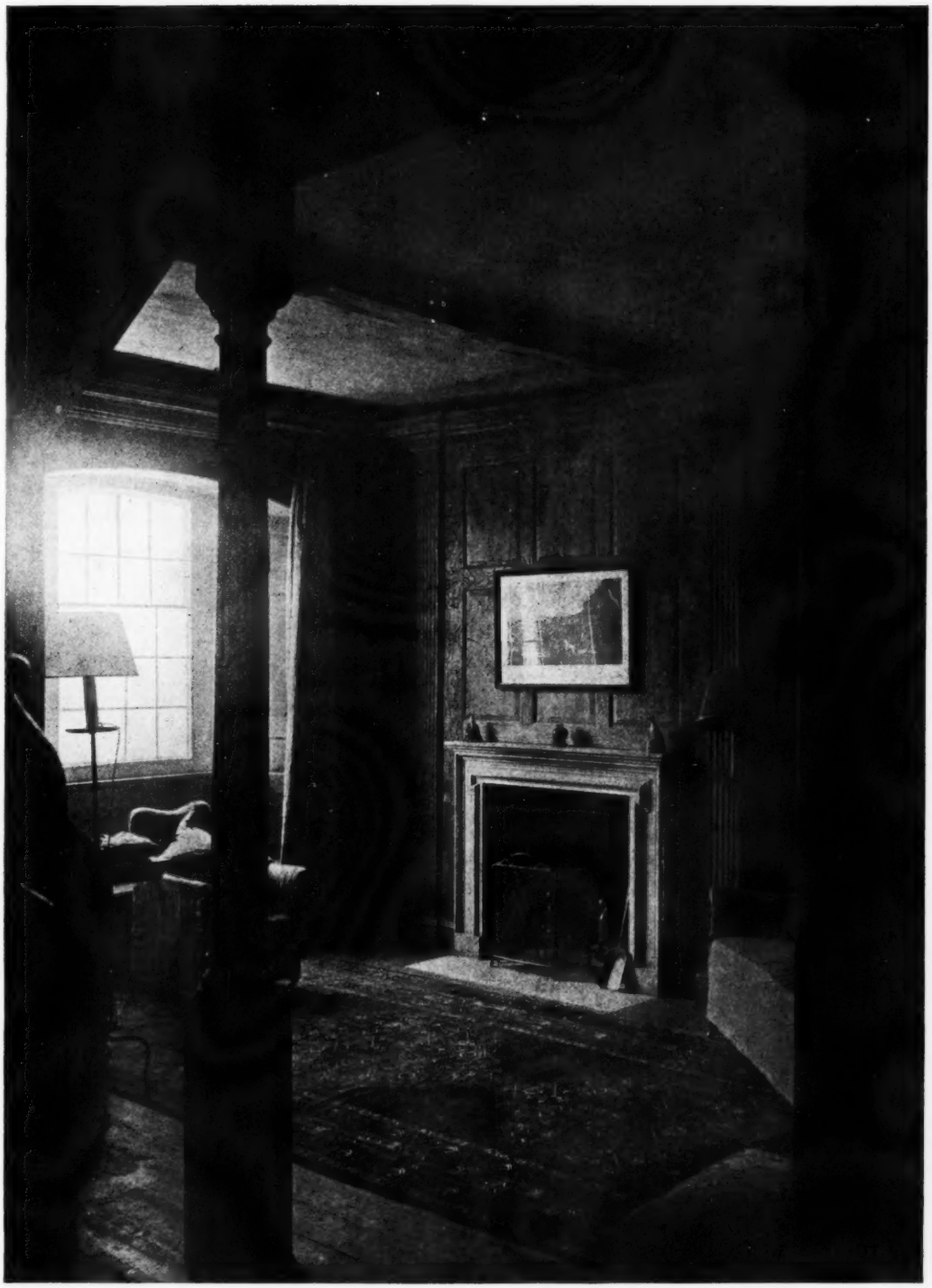
Ellisfield Manor House, Hampshire. Above, the south front. Below, the south front of the new wing.

at least, betrays an almost suspicious alertness in absorbing not only the right manner, but all the latest tricks in it), provokes the thought that, figuratively speaking, another depressingly perfect gentleman has arrived to swell the already large number of those whose architectural manners are nice, but whose personality is negative. To this category Mr. Goodhart-Rendel does not belong. His architectural manners are urbane and courteous rather than precious. His knowledge of architectural tradition is such that he can not only play the theme, but can compose variations upon it. He uses his vocabulary of architectural elements and forms not so much to speak in rotund periods as to tickle your fancy with a freshly piquant phrase or a wilfully old-world expression. He has moods that are calm and reposeful, and others that make you smile and even chuckle. And so, most certainly, there will always be many people who are convinced that while undoubtedly Mr. Rendel has talent, yet undoubtedly Mr. Rendel's work has something the matter with it. The truth is out! Mr. Rendel's work cannot be "quite quite"; for Mr. Rendel, architecturally, is not orthodox.

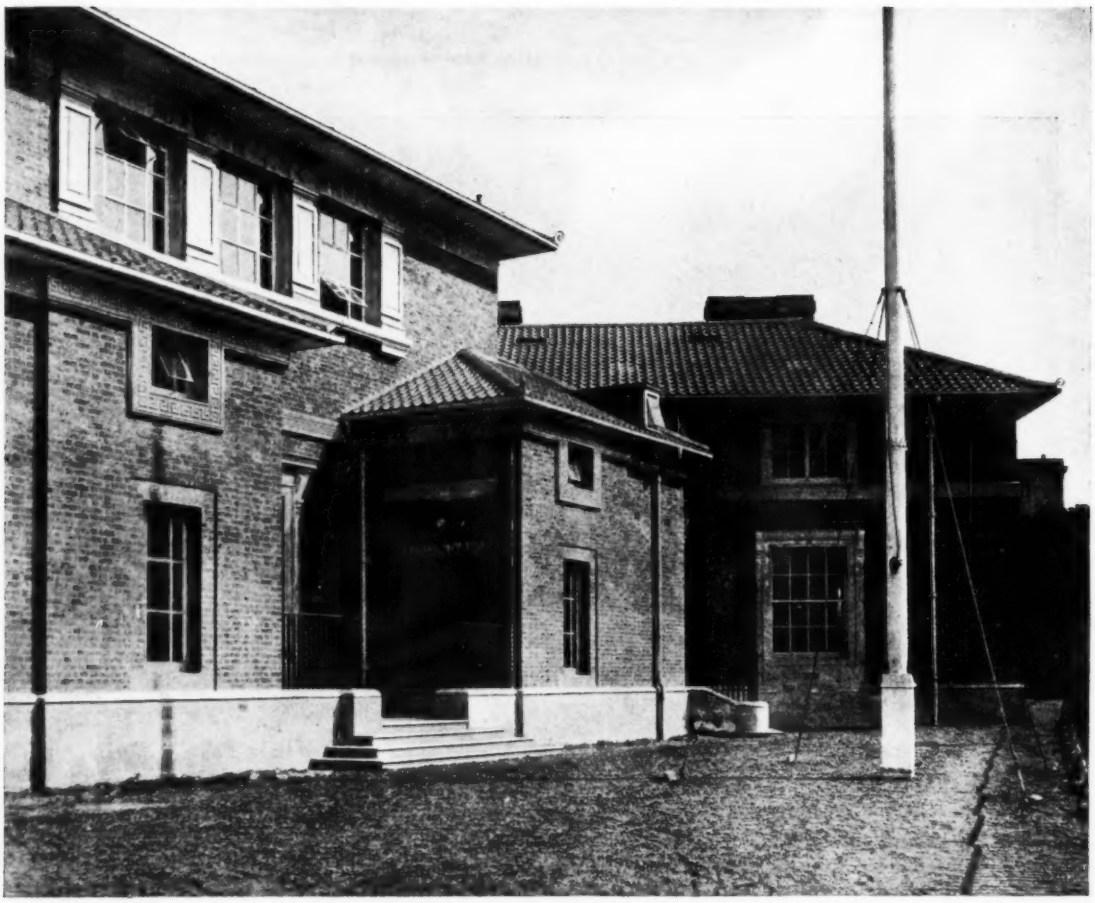
Although a young man to-day, Mr. Goodhart-Rendel seems to have been producing buildings, and projects for buildings, for several generations. One can only conclude that jobs and clients forced their way even to his nursery door, for one of the writer's earliest architectural memories is his house at Englefield Green, known as "The Pantiles"; almost wickedly modern it seemed in the old A.A. "brick and tile period," with its winking "lucarnes" and Franco-German-Italian flavour. To-day it might almost seem to hail from Copenhagen, which shows that its designer was acting in the reputed capacity of Manchester to London. It is almost impossible, however, to "date" Mr. Goodhart-Rendel's buildings. He is always experimenting, but his designs are not architectural reach-me-downs, and are, in fact, delightfully influenced by their surroundings, requirements, and what a student recognizes as the "atmosphere of the programme."

How satisfactory is Dene Place in its Surrey setting, and how readily does one pass from London suburbs to Woking and "Wychwood." And how completely satisfied one is with the little village of West Clandon on the Guildford Road, where church and farm cottages reveal the architect in a mood of respect and tenderness for the English village, with never a suspicion of an attempt to make his houses into self-conscious "architecture." Most assuredly our president will agree that here is a case where the English countryside is not only unspoiled, but enriched. In an entirely different setting, and in an entirely suitable vein, are Mr. Goodhart-Rendel's recent designs for villas on the Riviera, at Cannes. Here again there is a strong influence of the local tradition, the *provençale* flavour blended palatably, but without pedantry. And Mr. Rendel has even repressed the desire, which must certainly have assailed him, to indulge in the little harmless perversity of caricaturing with knots of blue faience and cactus-plant ironwork the flashy and dusty modern French villas which have ousted the simple farmhouse type. To this spirit of perversity Mr. Rendel, however, sometimes yields, and one may even feel that he is toying with the idea of producing the equivalent to the "jolie laide," the house that consciously rejects prettiness in favour of a definite essay in characterization. It must be a pleasant, if dangerous, pastime, and in suggesting as the outcome of this method a

Ellisfield Manor House. The elm-panelled hall.



Ellisfield Manor House The elm-panelled hall.

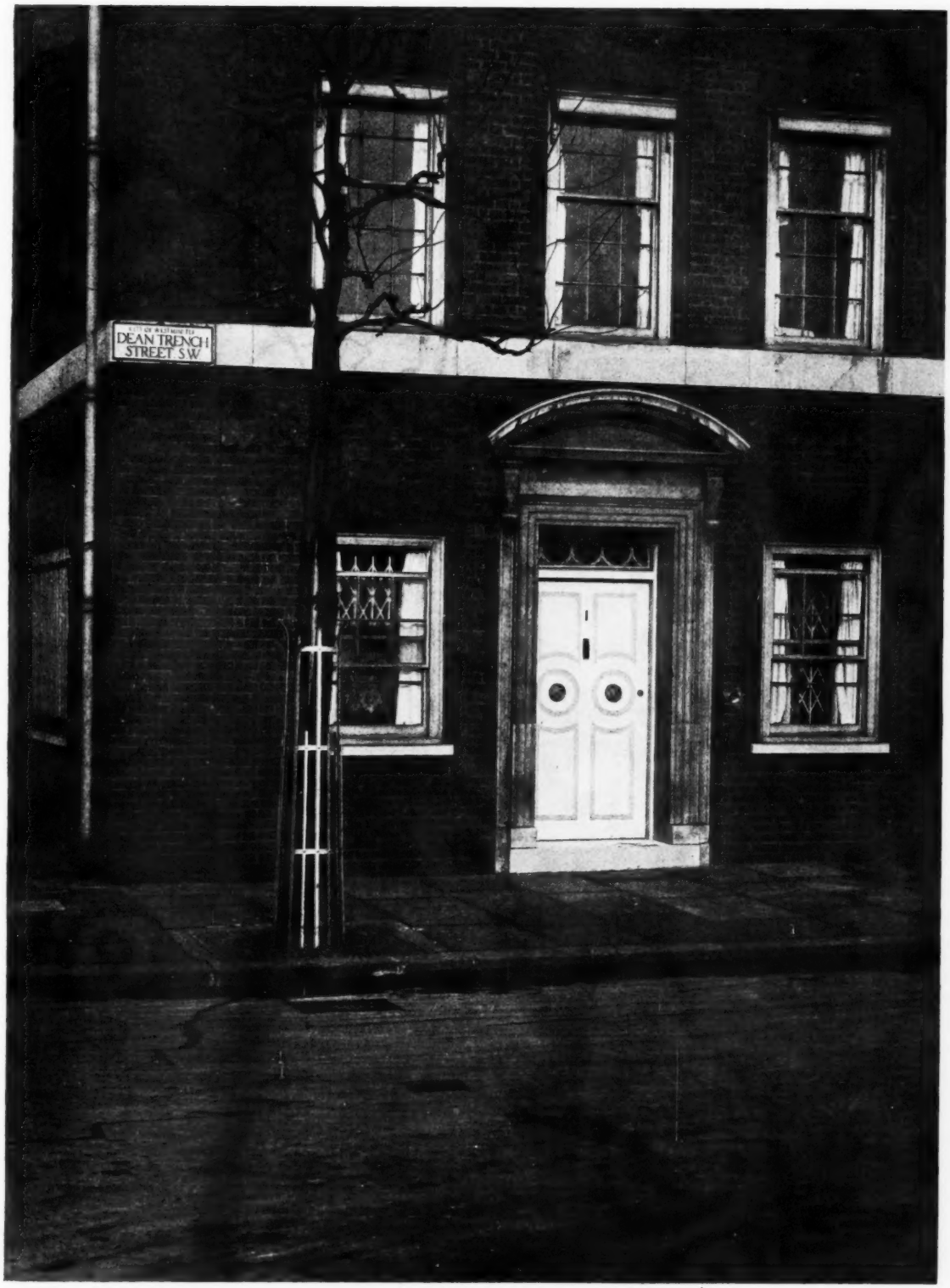


Eton Manor Clubs, Hackney Wick.

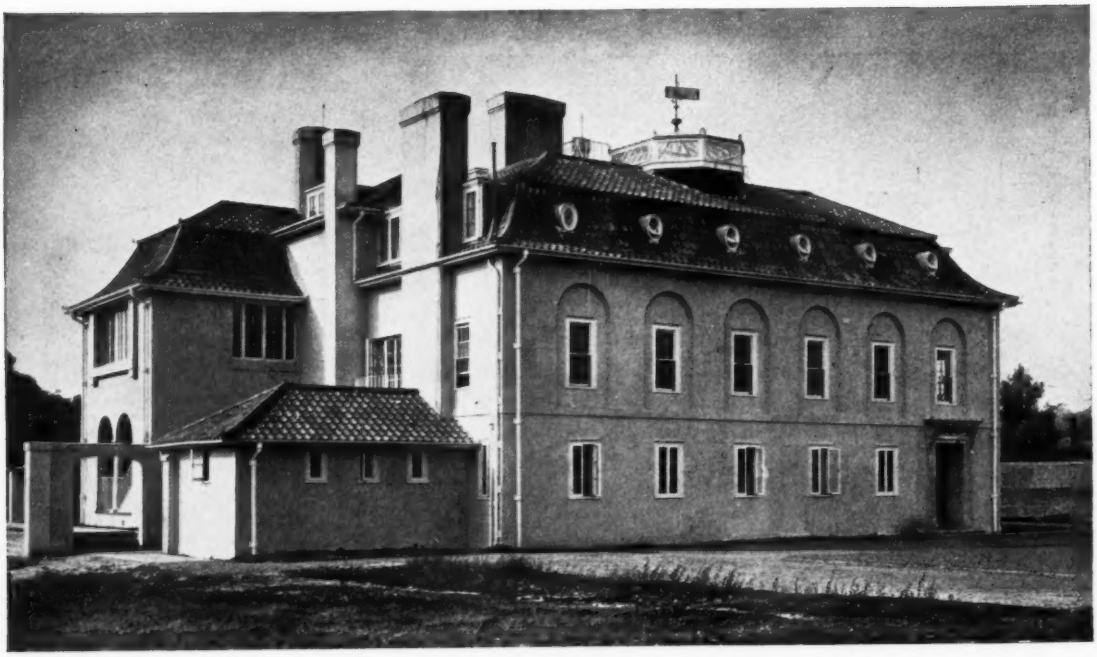
definite example from amongst his work one treads on hazardous ground. But to the writer it appears that Ellisfield Manor House and the porch at Hatchford End are toying, the one with a suggestion of wilful " frumpishness," the other with the desire to place at all costs an architectural bon mot. But even here it is the mood, and not the adequate expression of the mood, which may leave the critic cold. Having determined upon an action, the architect carries it through with a Gallic logic and completeness. The adequate expression of the idea is displayed in detail, as well as in the mass; and in the interiors of the " Pantiles " and " Ellisfield " there is a sure touch which, in a different way, is equally evidenced in his many schemes of church design and decoration, which, as the results make clear, Mr. Goodhart-Rendel so thoroughly enjoys. Of buildings on a grandiose scale it is hoped that we may some day see an example, for the photographs shown at the first Architecture Club exhibition of office buildings at Calcutta, which were designed at an early stage in his career, reveal pleasant possibilities of broad and free design.

An architect's designs are bound up with their author's personality. In Mr. Rendel's case, it is easy to reconcile design and character, for his spoken and written word are by this time familiar. His buildings reflect the versatility and the lightness of touch which add such spice to his utterances on architectural topics. With these qualities are mingled a whimsical curiosity, a desire to rummage in the box-room where are stored all the little oddities which most architects are rarely in the position to bring out and utilize, although secretly longing so to do. Mr. Goodhart-Rendel has been privileged either by daring or good fortune, and we are the richer for his obvious enjoyment of freedom, or for the slyness of his wink at restrictions neatly circumvented. His architectural mind is unprejudiced, or, perhaps, he has prejudices which pass too quickly to leave a trace ? The pervading impression of his buildings, when all minor criticism is recorded, is that they are planned with all the competence and pleasure which are natural in a cultivated architect who takes himself and his art with just the right degree of seriousness.

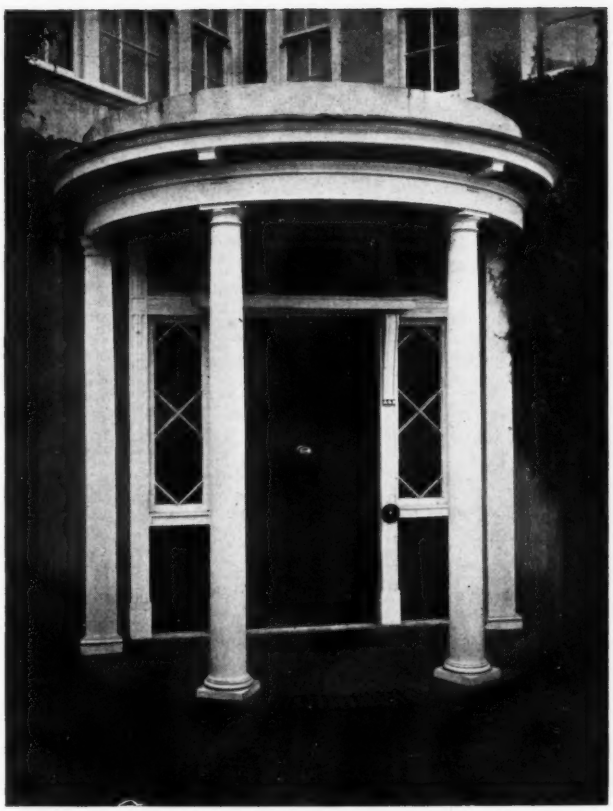
It is curious that, with all his affection for, and knowledge of, Gothic architecture, Mr. Goodhart-Rendel does not appear to have ventured upon some little experiments in the Gothic manner applied to the domestic type of building. It is true that his addition for St. Mary's Presbytery, Pimlico, has a touch of ecclesiastical austerity, but it reminds one more strongly still of those tall, half-Gothic half-Renaissance slate-hung houses which nod across the quays in French towns like Havre. Perhaps some day he will send to the Royal Academy, drawn by Griggs, a mansion " in the Gothic taste." But most likely, though we might one day see the house, the drawing would be found unsuitable for fitting into that fashionable architectural-room wall pattern.



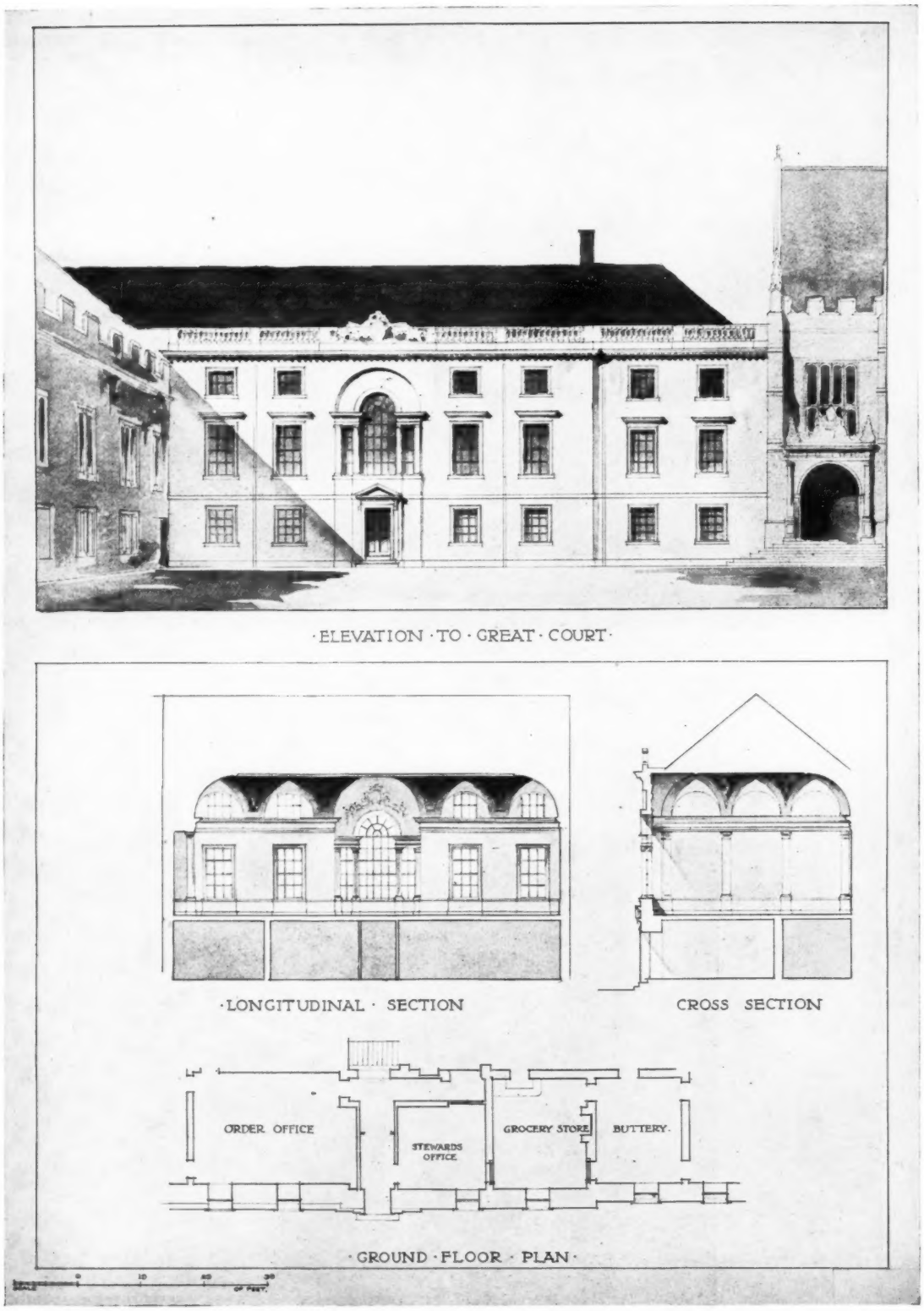
A façade in Dean Trench Street, Westminster.



The Pantiles, Englefield Green. Above, the entrance front. Below, the hall.

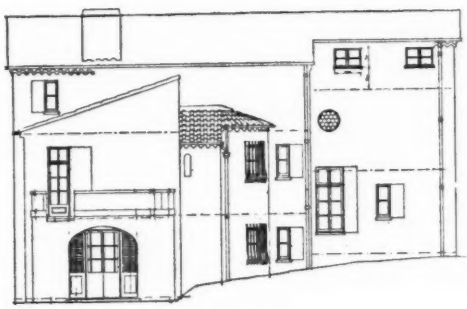


Dene Place, West Horsley, Surrey. Above, a view from the lawn. Below, the principal entrance.

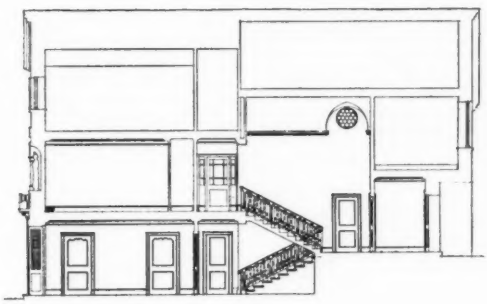


Design submitted for Trinity College, Cambridge, War Memorial Hall.

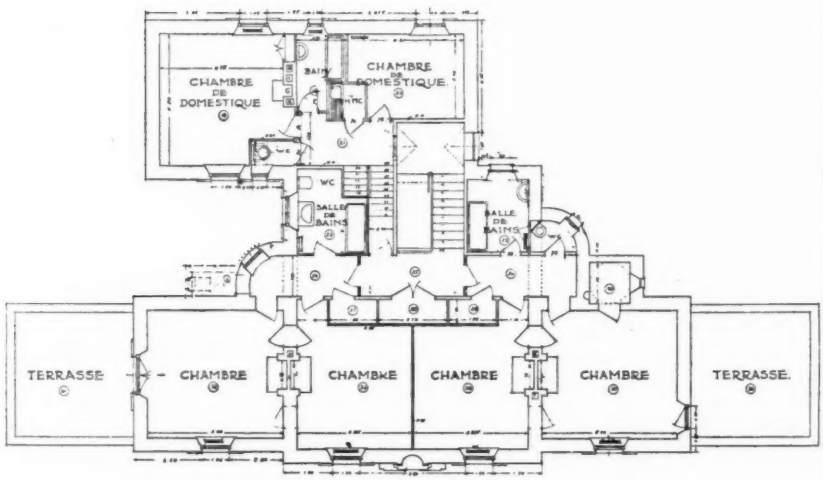
FAÇADE SUD-OUEST



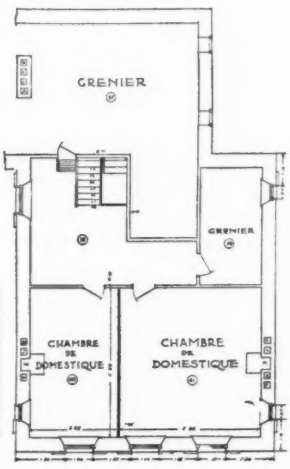
FAÇADE SUD EST.



COUPE SUR LA LIGNE A.A.

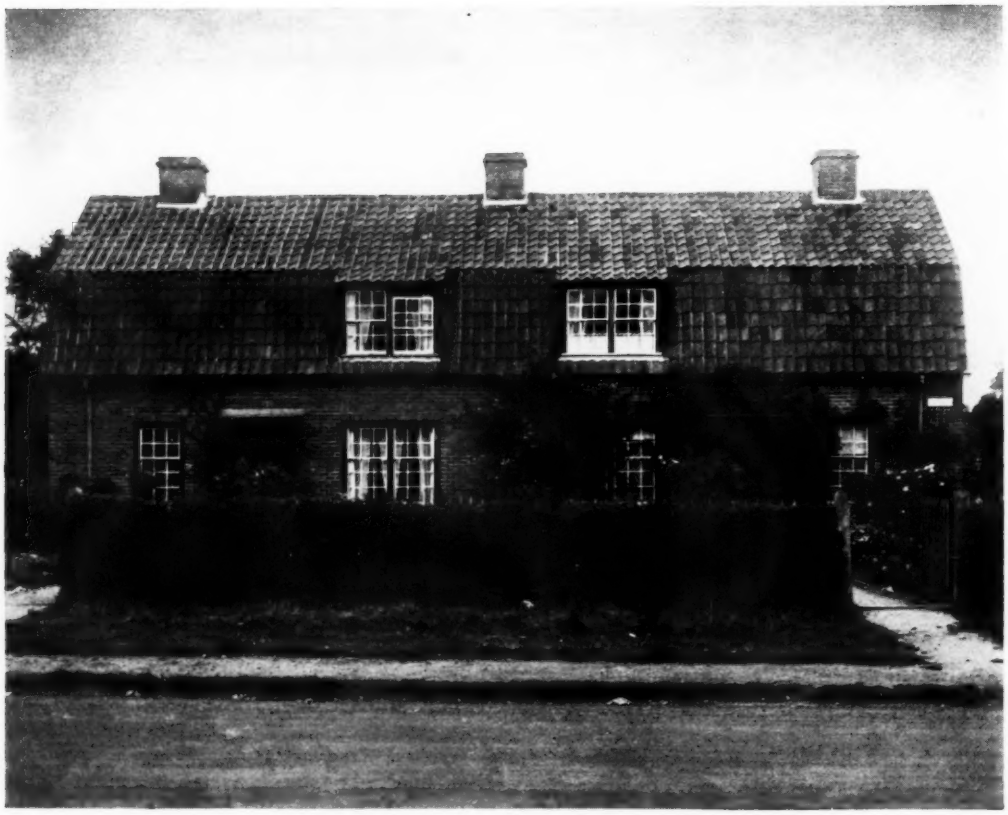


PREMIER ÉTAGE



DEUXIÈME ÉTAGE

A villa at Cannes.



Above, village shop and cottages, Ley Green, Hertfordshire. Below, cottages at East Clandon.

THE COMPETITORS' CLUB

ISOLATION HOSPITAL FOR INFECTIOUS DISEASES AT DONCASTER

[*For the benefit of new readers it may be pointed out that* SENESCHAL, *whose contribution appears weekly on this page, is a well-known architect with many competition successes to his credit. Among the tasks which* SENESCHAL *sets himself is the publication of a brief synopsis of the conditions of recent competitions as soon as they are issued. On February* 10 *full particulars were given of the competition for new offices for the West Bromwich Permanent Building Society. The competition dealt with this week is of much the same magnitude. Readers are referred to the two special issues of the* JOURNAL *on hospitals published on June 24 and October 8,* 1925.—*Editor,* A.J.]

CONDITIONS OF COMPETITION

OPEN to architects in private practice. Assessor, Mr. T. R. Milburn, F.R.I.B.A.

1st premium	.. .. ..	£200 (merging)
2nd ,,	.. .. ..	£100
3rd ,,	.. .. ..	£75

If the work is not proceeded with, successful competitor to receive 1½ per cent. on £50,000, and ½ per cent. on estimated cost over this. Designs to be sent in (carriage paid) to Mr. W. Bagshaw, Town Clerk, Town Clerk's Office, Doncaster, not later than 5.0 p.m. on Monday, May 10, 1926. Questions must be addressed to Mr. W. Bagshaw before Monday, March 8, 1926.

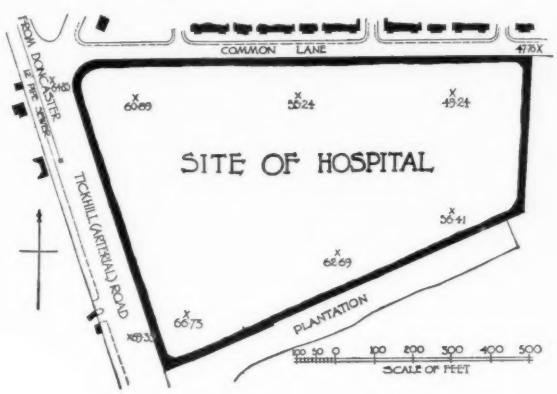
ACCOMMODATION REQUIRED

The hospital accommodation required in the scheme comprises seventy beds for patients. The hospital may in the future be extended by sixty beds.

(1) WARD BLOCKS

Four ward blocks are required, two for scarlet fever cases (acute and convalescent), and one each for diphtheria and typhoid fever respectively. Each should contain fifteen beds in all, comprising one ward for six beds for males, one ward for eight beds for females and children, and one single bed ward for either male or female cases, in addition a nurses' duty room, food store, linen store, coal store, store for patients' clothes and boxes, bath, sanitary and sink-room accommodation. A lavatory basin for the doctor and nurses should be provided in the wards. A nurses' lavatory and w.c. should be provided in each ward block. In the case of the block for convalescent scarlet fever cases provision should be made for glass-roofed verandas adjacent to each ward.

One cubicle block for single cases of infectious diseases containing ten single bed wards, five for males and five for females, with nurses' duty room, food store, linen store, coal store, store for patients' clothes and boxes, bath, sanitary and sink-room accommodation, nurses' lavatory and w.c. It is suggested that the various ward blocks and the administrative block should be connected by open ways with glazed roofs. A discharge block to be provided comprising undressing room, bathroom, and discharge room.



The scheme should provide for the future extension of the hospital by sixty beds, in four blocks, each for fifteen beds, and similar to those already described. These ward blocks to be shown on the block plan only.

(2) ADMINISTRATION BUILDINGS

The resident staff for the present scheme will comprise one matron, twelve nurses, ten domestic staff, and one porter. The following accommodation is required: Doctors' room, laboratory, dispensary, small waiting-room, matron's sitting-room, bedroom and bathroom, nurses' dining-room and pantry, nurses' recreation room, single bedrooms for twelve nurses, linen, box-rooms, bath and sanitary accommodation, domestic staff dining and recreation rooms with pantry, single bedrooms for ten domestic staff, linen and box-rooms, housemaids' closets, bath and sanitary accommodation. The kitchen and stores department should comprise a kitchen with general scullery, vegetable scullery, larders for meat, milk, vegetables, and general provisions, linen room, mending room, store for beds and bedding, and coal store.

Competing architects should keep in mind the future extension of the hospital and design the block for extension to accommodate double the present staff, with kitchen and stores department able to cope with the increased number of beds. The extension to be indicated on the block plan, or other plans if desired.

Porter's lodge containing an office, visitors' room, living-room, three bedrooms, bathroom, and w.c.

(3) RESIDENT MEDICAL OFFICER'S HOUSE

This should comprise two living-rooms, kitchen, four bedrooms, and the usual offices.

(4) TECHNICAL SERVICES

The laundry should comprise separate receiving rooms for staff and patients' clothes and foul linen, general washing room, drying room, ironing room, dispatch room, small store, and lavatory. Boiler-house, heating and hot-water supply plant, destructor, disinfector, small workshop, and lavatory; ambulance shed and petrol store. Suitable sheds should be provided for infected and disinfected vans. Mortuary with pathological laboratory, small service room, and viewing space.

(5) GENERALLY

The entrance to the hospital may be either Tickhill Road or Common Lane. It can be assumed that a good foundation may be obtained at a depth of 3 ft. below the existing surface levels. The requirements of the Ministry of Health must be complied with. Competitors are referred to the Ministry of Health Memorandum dated January, 1924: "On the Provision of Isolation Hospital Accommodation by Local Authorities." All roadways, footpaths, boundary walls, railings, and entrance gates to be provided. The whole site must be enclosed.

Note.—Any further accommodation which will make the new hospital as efficient and modern as possible should be included. The accommodation may be varied if by so doing the design of the hospital from the administrative, hygienic, and medical points of view would be improved. Where the areas of rooms are not indicated the sizes are left to the discretion of competing architects. It is suggested that the walling be brickwork and the roofs slated or tiled, but any form of construction may be submitted. The upper floors of buildings should be of fire-resisting construction. Importance is attached to economy, but it is desired that the buildings be of pleasing appearance. There should be a clear interspace between all ward and living-room floors and the ground.

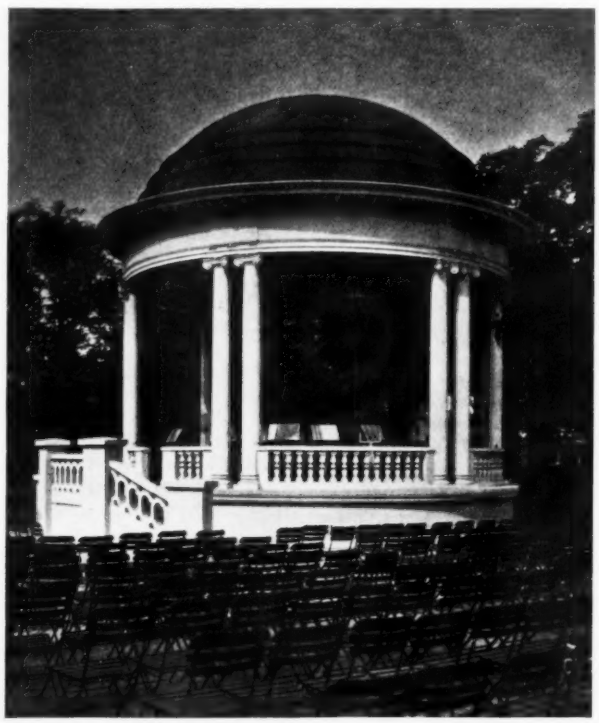
SENESCHAL

SPORT AND RECREATIONAL BUILDINGS

BY EDWARD R. BILL

II: BANDSTANDS

STRUCTURES for the staging of musical performances in the open air may be conveniently divided into two categories. First, those for performances in which wind instruments take the premier place, as in a military band; and, secondly, those for orchestral concerts, in which stringed instruments predominate. Typical examples of the former abound in every park and public place throughout the country, while the latter are principally met with at seaside and inland watering places. The selection of the site will depend upon special local circumstances, but any position exposed to high tides, noise, or noxious odours must always be avoided. The terraced amphitheatre known as "The Oval," at Margate, is an excellent example of what may be achieved in an open space bordering on the sea, while the novel and romantic idea of a floating bandstand, as in Peasholm Park, Scarborough, where it forms the centre of brilliant nocturnal galas resembling fairyland, may be with advantage repeated elsewhere in similar surroundings. The placing of the bandstand, as on the Grand Parade at Eastbourne, is more the ingenious solution of a difficult problem than an example of an ideal setting. At St. Anne's the bandstand is set in the middle of an open court, having terraces for seats all round, and enclosed by high grass banks, which serve as a protection from the wind. The bandstand at Morecambe stands in the beautiful West End Gardens, surrounded by lawns and flower-beds aglow with colour. As a good example of the sea-front situation, the Empire Bandstand, Ramsgate, may be cited, while the bandstand in the Quarry, Shrewsbury, with a sweeping avenue of giant limes to form a background, is a fine example of an inland setting.

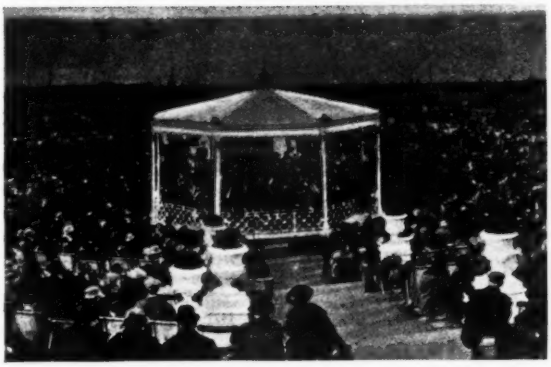


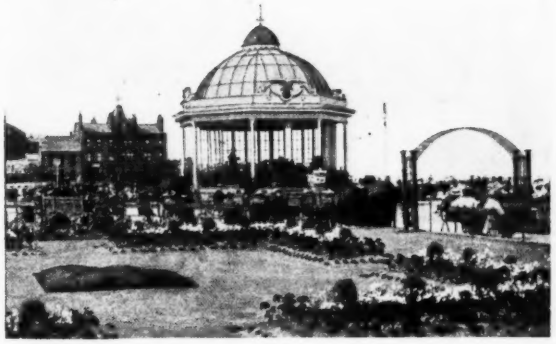
The bandstand, Municipal Gardens, Southport.

The military bandstand consists usually of a boarded stage or platform raised some 3 ft. above the ground, and resting on a low podium wall of masonry, woodwork, or other suitable material. It is usually approached by a flight of steps, which must be wide enough to allow an easy passage for the larger instruments between any handrails at the sides. A border of stone flags is sometimes laid around the outer edge of the wooden platform, and this, while serving as a gangway, also affords protection to the boarding from the effects of driving rain. Its value as a sound reflector is a debated point. The area of the floor will vary according to the number of performers, but an allowance of about 15 ft. superficial floor space per man will generally prove sufficient. Where dulcimers and such-like instruments are to be provided for, a more liberal allowance may be necessary. The army regulation establishment for a military band is twenty-two men, a band sergeant, and a bandmaster, but in some regiments the actual number sometimes reaches fifty. The ordinary bandstand may measure from 25 ft. to 30 ft. in diameter; but where it is necessary to provide occasionally for two or more regimental bands playing in combination, removable wooden platforms extending round the stand, with some form of temporary roof or rainproof awning to cover them, should be provided. The shape of the stand on plan is optional, but some form of polygon is generally preferred. The octagon plan is a very general favourite, but other shapes are frequently encountered, such as the rectangular at Southend, the oval at Scarborough, and the circular at Southport.

Enclosing the stage there is usually some kind of railing, 2 ft. 6 in. or so in height above the floor. A pleasing alternative to this feature is a balustrade of stone or wood, on the lines of the Southport stand, while bronze offers great possibilities in design where the cost is not prohibitive. Sometimes the stand is placed within a railed enclosure to prevent trespass and damage to the music stands and chairs during intervals in the sessions, but where this is not included in the scheme, gates should be provided to the railings round the floor. The customary method of supporting the roof is by means of ornamental iron columns. The orchestral stand at Scarborough spa furnishes a striking example of the charm and dignity resulting from a simple architectural treatment of the Doric order, while the coupled Ionic columns at Southport is another instance of sympathetic handling, and merits high praise.

An important point affecting the design of bandstands is the provision of wind-screens. Fixed glazed lights to form the sides are seldom found successful, but sliding and folding screens, with the upper portion open on all sides, have been used with good results. The principal difficulty encountered in dealing with a screen not reaching to the top of the stand is the provision of some kind of head to serve as a guide-rail for the top attachment to the screens. The open space between this head or transome and the top of the stand is sometimes treated as an open treillage frieze. This is a great improvement on the open space from an æsthetic standpoint, and does not materially affect the exit of the sound. Perhaps the best type of screen is the collapsible pattern, with sliding fittings fixed in the centre of each leaf, and having bottom bearings similar to those fitted in the Luton bandstand. Where the screens run up to the full height of the ceiling the head can usually be hidden at the back of the eaves cornice or entablature. This type, though preferable from an architectural standpoint, has the great disadvantage of throttling down the sound on those sides where the





Bandstands at Margate and Morecambe.

screens are closed. In many situations this would prove no inconvenience, as, for instance, where the audience face in one direction only. In fitting wind-screens to existing stands, where the space between the columns carrying the head and the adjacent railing is insufficient to allow the opening of a centre-pivoted leaf, the type with corner pivots should be used.

The ceiling of the stand may be of boarding, and formed flat, or very nearly so. Domed ceilings should always be avoided. The ceiling, though flat, need not be uninteresting, for it offers a good field for decoration. Sometimes the embellishment takes the form of painting, but more often a geometrical arrangement of the joints in the boarding, or the introduction of small moulded ribs to form a pattern. Panelling offers rich opportunities for design. The roof too frequently follows some fantastic outline; indeed, an Oriental silhouette is often considered indispensable to this type of structure. A comparison of these bizarre inventions with the simple sweep of the dome of the Southport stand, or the unbroken curve of the effective roof at Scarborough, demonstrates at once the fallacy of this conception. The artificial lighting of the stand may be effected by some fifteen 60-watt (or a lesser number of 100-watt) gas-filled electric lamps, arranged in two concentric circles and fixed at a height of about 10 ft. above the floor. The area occupied by the seating accommodation for the audience should be paved and drained. Grass remains damp for some time after a shower, and is, therefore, not a suitable surface on which to place the chairs. Folding deck-chairs, which may be quickly removed under cover in the event of rain, are considered ideal for seating, although they are more liable to be broken.

Where the band consists mainly of an orchestra of stringed instruments the platform is usually enclosed at the back and ends, the front being open towards an audience facing in one direction. The best material for lining the enclosure on the inside is wood panelling, constructed with a 6-in. air space between it and the outer covering. This air space should communicate with a similar air space underneath the floor, which should be boarded, and project well out into the auditorium. The wood sides should be in direct contact with the boarded floor, together with which they will form a satisfactory resonator. The ceiling generally takes the form of a semi-hemispherical dome, open towards the front, but a straight ceiling rising towards the front is frequently employed. At the back of the stand should be the retiring-rooms, with store-rooms and performers' lavatory accommodation. Wherever possible, a large proportion of the audience should be seated under cover in a sheltered auditorium, and covered promenades within hearing of the music often prove a great attraction. Pay-boxes and turnstiles are required at the entrances, with turnstiles only at the exits. Lavatory accommodation is an essential too often overlooked. Where outside public lavatory accommodation is provided under the same roof as that for the band audiences, separate entrances from inside the turnstiles must be arranged, but with no door communicating with the public side, which otherwise would become a free entry to the band enclosure.

Bandstand at Luton, showing top rail for folding and sliding wind screens not reaching to the ceiling. Note how the effect might be improved by filling in above the head of the screen with treillage work to form a frieze.

CORRESPONDENCE

STEEL HOUSES

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—I am not an architect although, like many other laymen, the consideration of buildings, their shapes and sizes, enters largely into my daily life. For this reason, for many years I have been a reader of your JOURNAL. The impression I get from this reading is that English architecture is very conservative. It lives on tradition, and glories in the fact that it does so. New ideas in construction and art do not often originate in this country. We are not brilliant originators, although we are very good adapters. America and France appear to supply most of the new ideas in architecture and building construction at the present time, and this may be one of the reasons why the steel house, the one bright modern example of home-fed originality, does not appeal strongly to the architectural profession.

The adoption of the steel house as a practical help towards the solution of the present housing problem raises the question as to whether the use of sheet steel is limited to the small dwelling. Is it possible to extend the art of building in sheet metal to warehouses, commercial buildings, and larger offices, and is not this a natural development of the constructional methods now in general use on these types of buildings? The mere suggestion of such a possibility at once arouses antagonistic feelings on the grounds of tradition and art, but at the present time, while the country is short of the traditional building tradesmen, it has, owing to the great depression in the shipbuilding industry, a large surplus of boiler-makers. For the sake of this important trade, therefore, it is worth while to consider whether large buildings could not be built of steel frames and plates in the same way as ships. Ships, after all, are but steel houses made to float, and sometimes they are very beautiful houses.

Structurally the modern building is "steel framed," which means that its roof, floors, and walls are carried on steel joists and stanchions. The walls do not support the structure, they are used only to keep out weather and to keep in warmth. Metal plates are well able to keep out weather, and, when suitable, lagged on the inside, they will not transmit heat. Also, for an equal duty, they are much thinner than walls of stone or brickwork. Technically, there appear to be no primary objections to a building built like a ship. Artistically, however, there are obvious objections. Are these objections insurmountable?

The present fashion in architectural style for buildings, such as city offices and warehouses, is "classical." The frontage elevations are Greek in form, if not in spirit. The columns and cornices are decorative, and not structural. The stonework, so sturdy in appearance, has no duty to perform in holding up the buildings. Modern stonework, instead of supporting, usually has to be supported. One has only to look at the many examples of Greek temples supported securely on vast plate-glass shopfronts to realize this. One feels that this phase of architecture is transitional, and that in time we shall laugh at much of the pseudo art of this period. We shall think it as amusing as a locomotive disguised as a horse and painted dapple grey, or an Atlantic liner shaped like a trireme. Professor Lethaby, who writes most pleasingly for the laymen in his handbook on architecture in the *Home University Library*, states: "Nothing looks well that has been done for 'look.' It seems right at first, but quickly the doing becomes diseased. Only by being intensely real can we get back wonder into building once more. We have this awe of a ship, a bridge, a machine. Why should that ancient thing, a house, have become so vulgar and pretentious? It seems to be the result of 'good taste.'"

Cannot an all-metal building be designed which would look as right as a ship or a bridge? It would mean a new art, but the possibilities of such an art are wide. The materials available, in addition to steel, include cast iron, copper, and aluminium—metals which are practically unaffected by the foul atmospheres of our industrial towns, and which should be at least as pleasing to the eye as the blackened, soot-filled stonework which now prevails. If some of our enlightened and overworked architects would collaborate with some of our clever, but sadly over-leisured naval architects, they might together evolve a new art of building which would be truly Greek in spirit—direct, clean, honest, and structurally efficient. At the same time they would create a new and useful industry which would be of material help both to the steel maker and to that nationally vital trade of the boiler-maker.

R. W. GREGORY

HOUSES OF PARLIAMENT BUILDING STONE

To the Editor of THE ARCHITECTS' JOURNAL

SIR,—Professor Beresford Pite, in the issue of THE ARCHITECTS' JOURNAL for February 10, 1926, says:

> The much-deplored and expensive failure of the masonry at the Houses of Parliament, where the same stone was used, is due to the careless scamping and irresponsible way in which that work was done.

He draws a moral that the best stone needs careful selection, weathering, and bedding. I wonder if he knows how true his words may be proved to be by the case of the stone used in the Houses of Parliament?

The Anston Quarries, from which 200,000 cu. ft. of stone were taken for this purpose, were worked indiscriminately from the surface to the bottom of the formation to a depth of 35 ft., the stone lying in seventeen beds varying in thickness from 4 ft. to a few inches. Although most of the stone was of good quality there were some beds of softer nature, yet the whole of the beds were used, no particular beds were followed horizontally, no supervision at the quarries was provided for, and no seasoning of the stone took place. The stone was sent to London within a fortnight of quarrying, even throughout the winter. So little stone was rejected at the quarries that almost the only waste was that derived from cutting the blocks. The thickest beds, viz. the 4-ft. beds, were near the top of the quarry, and it follows from the method of working that while the plinth course and the lower parts of the building were from the upper beds, the higher portion of the building was constructed of the stone from the lower beds.

The whole building, except the upper part of the tower and the front towards Abingdon Street, was done with Anston stone. It cannot be denied that a great part of the Anston stone was of the first quality. It was harder and more difficult to work than Portland stone. Thousands of satisfactory blocks may still be observed in the building.

It is thus perfectly clear that the choice was not so much at fault as the supervision of the quarrying and selection of the stone. The service of an expert was actually offered for the modest salary of £150 per annum, to exercise supervision over the quarrying and delivery of the stone; but this offer came to nothing, because it could not be agreed who was to be responsible for the payment of this trifling amount. Moreover, at the building, the blocks used for sculpturing were selected by the masons indiscriminately from the largest sizes, and no particular care was taken to mark the bedding, so that a great many stones were surbedded—an example of unpardonable slackness.

All this is set forth in Mr. J. Vincent Elsden and Mr. J. Allen Howe's book, *The Stones of London*, and I do not think the authors will be found erring in their history.

From another source I learn that an examiner of the stone was actually employed at the Anston Quarries, during the first months, but was dismissed when another Government came into power. The variation is slight, but interesting.

SCRUTATOR

LITERATURE

GERMAN BAROQUE

THE name *baroque* is familiar enough, and most people would at once recognize the quality which it denotes, whether it be found in a work of this or that country or artist. All the examples brought together in Hermann Popp's invaluable book present the same unmistakable characteristics which stamp them as belonging to the movement. They furnish, however, but another proof that the qualities which distinguish buildings of one school from those belonging to another are not invariably those which constitute its true greatness. Baroque architecture forms a group which includes a greater range of æsthetic merit, or demerit, than any other known to the history of the art; indeed, it was only the other day that Sir Reginald Blomfield pointed out how the modern enthusiasm for the baroque had caused some of the ugliest buildings ever produced by man to be held up for admiration. There are some of M. Popp's examples that can only be described as preternaturally ugly, but they are not ugly because they fail to attain any definite standard set up by the laws of baroque design, whatever they may be. Nor does the excellence of those examples which are supremely good (the greater majority are fascinating, and, on the whole, admirably conceived) derive from any such standard. The Bayreuth church, for instance (illustrated on the following page), is typical of a class of buildings which impress us because they possess the qualities common to all great architecture—breadth, ease, subtlety of handling, a sensitive adjustment of the parts to one another, baroque or no baroque.

Those, however, who are anxious to study the manifestations of this particular manner of design will here find all the most characteristic devices. The internal angle treatment of the Münster gaol, for example, with its double windows united by pediment, elliptical panel and branching stone steps, is entirely typical. M. Popp's work abounds in such. Architects are getting a little spoilt nowadays in matters of book-production; a good many of the books brought out for their benefit are sumptuous folios, the pages of which are (it is a matter of course) printed on one side only, with margins at least six inches wide. Dr. Popp's book measures one inch in thickness, and at a guess (the illustrations not being numbered) I should say that its 274 pages contained not less than 450 illustrations. You have a few dozen churches to begin with; castles and large country mansions follow, with town houses after these. Eight or ten pages are devoted to monumental staircases, of which that in the great hall at Brühl Castle is surely the most astounding. A handful of fountains, grottos and obelisks completes a most attractive collection.

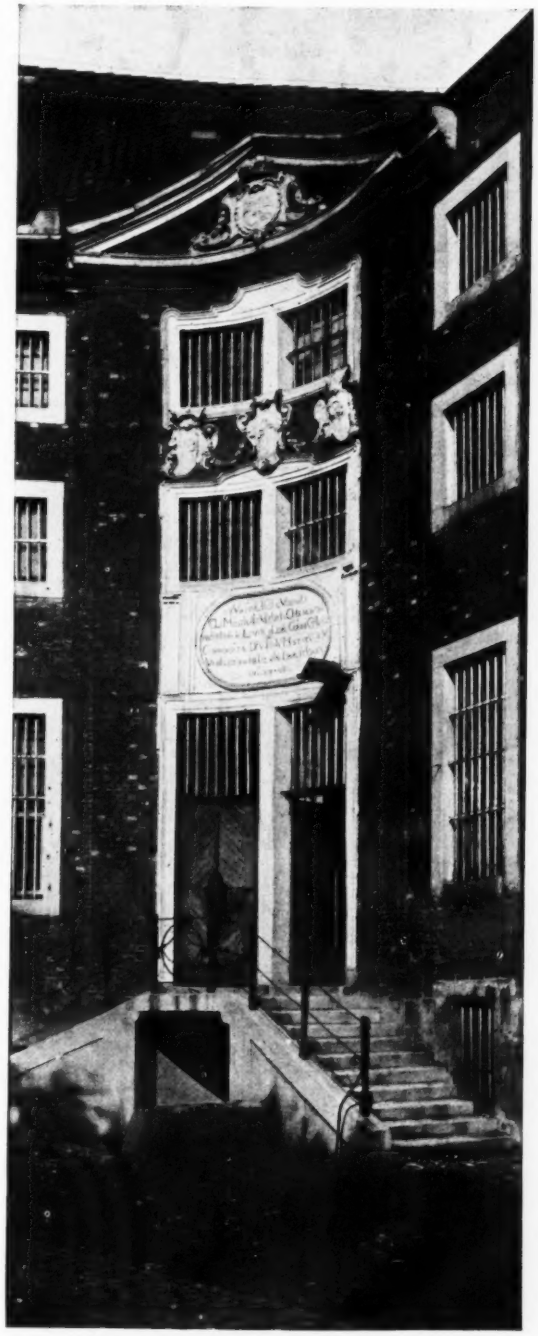
R. D. COUTTS-BLAKE

Die Architektur des Barock und Rokoko in Deutschland und der Schweiz. By Hermann Popp. Stuttgart: Julius Hoffmann. Gm. 38.

OLD LONDON

Architects will find much to interest them in Mr. George Byron Gordon's book *Rambles in Old London*, which has recently appeared under the imprint of the Bodley Head. The author lays stress upon the antiquity of our metropolis. "It is commonly supposed," he tells us, "that London was founded by the Romans. Even Roman London is usually dismissed by writers with a word as though it were something detached and alien to the London of history. Most writers are content to begin that history with the close of the Saxon settlement, and many seem unable to realize that it had much of an existence before the Norman Conquest. Yet, if we may depend upon evidence that would be accepted without question elsewhere, the beginnings of the City were more remote from its later Roman days than these are from the present. We have ample proof that during a period from twelve thousand to three thousand years B.C. a race of people in Western Europe was living in settlements provided with strong fortifications, and that the same people were erecting huge structures of stone, earth, and wood as places of worship or as monuments of some kind, of which works Silbury and Stonehenge are among the surviving witnesses. The same people were the real founders of London." This is a delightful book, with many valuable illustrations.

Rambles in Old London. By George Byron Gordon. London: John Lane. 15s.



Prison at Münster (1732–1734). From Architektur des Barock und Rokoko.

Above, left, early eighteenth-century house at Ellingen; right, late seventeenth-century church at Wickrathberg. Below, church at Bayreuth—St. Georgen (built 1705–1711 by von Gedeler; tower, 1716–1718, by J. D. Ranz). [*From* Architektur der Barock und Rokoko.]

COMPETITION CALENDAR

The following competitions are announced with the full approval of the R.I.B.A.

Wednesday, March 31. New offices for the West Bromwich Permanent Benefit Building Society. Open to practitioners within fifteen miles of Birmingham. Assessor, Mr. W. A. Harvey, F.R.I.B.A. Premiums, £100, £75, and £50. Particulars from Mr. J. Garbett, Secretary, 301 High Street, West Bromwich. Deposit £2 2s.

Thursday, April 1. Public Hall, Topsham. Premiums £50, £40, and £30 respectively. Assessor, Mr. Walter Cave, F.R.I.B.A.

Monday, May 10. Isolation Hospital for Infectious Diseases, Doncaster. Assessor, Mr. T. R. Milburn, F.R.I.B.A. Particulars from Mr. W. Bagshaw, Town Clerk. Deposit £1 1s.

Monday, May 31. Australian National War Memorial. Villers Bretonneux, France. Open to Australians. Particulars from High Commissioner's Office, Australia House, Strand. Deposit £2 2s.

Monday, June 14. Dance Hall, Restaurant, Pavilion, and Shops at the Sea Beach, Aberdeen, for the Town Council. Assessor, the President of the Incorporation of Architects in Scotland. Particulars from Mr. A. B. Gardner, Town House, Aberdeen.

No date. Manchester Town Hall Extension. Assessors, Mr. T. R. Milburn, F.R.I.B.A., Mr. Robert Atkinson, F.R.I.B.A., and Mr. Ralph Knott, F.R.I.B.A.

No date. Lay-out for new cemetery for Leicester City Council. Open to local practitioners. Premiums, £100, £50, and £25.

No date. Cenotaph for Liverpool, on the St. George's Hall Plateau. Particulars from Town Clerk.

The conditions of the following competitions have not as yet been brought to the notice of the R.I.B.A.

No date. Conference Hall, for League of Nations, Geneva. 100,000 Swiss francs to be divided among architects submitting best plans.

No date. Café in the Mooragh Park, for the Ramsey Town Commissioners. Particulars from Mr. J. Bell, clerk, Town Hall, Ramsey.

No date. Open Air Bath, Morecambe. Premiums, £100, £50, and £25. Particulars from Town Clerk.

SOCIETIES AND INSTITUTIONS

The R.I.B.A. and Schools of Architecture

The Council of the R.I.B.A., acting on the recommendation of their Board of Architectural Education, appointed in 1924 a visiting board to visit and assist those schools of architecture throughout the country applying for exemption from the R.I.B.A. examinations or whose courses are recognized by the R.I.B.A. for the purpose of exemption from its examinations. The visiting board is composed of the chairman of the Board of Architectural Education, who acts as chairman of the visiting board, a vice-chairman, the hon. secretary, and a teaching member of the Board of Architectural Education. In addition, one of H.M. Board of Education's inspectors accompanies the visiting board upon its visits to those schools of architecture which have official relations with H.M. Board of Education. The Council of the R.I.B.A. have now received from the Board of Architectural Education a report of the action taken as a result of the reports of the visiting board by the schools visited during the last two years. The following schools are included in the report : The Architectural Association School of Architecture ; University of Manchester School of Architecture; The Northern Polytechnic, Department of Architecture, Surveying, and Building; University of Cambridge School of Architecture; University of Liverpool School of Architecture; Edinburgh College of Art, School of Architecture; Royal West of England Academy School of Architecture, Bristol; The Technical College, Cardiff, Department of Architecture; University of London, Bartlett School of Architecture. The reports from the various schools show that the suggestions made by the visiting board have been found to be of great value, and the Board of Architectural Education have received numerous letters from the schools visited expressing gratitude for the helpful action of the visiting board.

The Garden Cities and Town-Planning Association

The spring tour of the Association this year will be to the West of England, the cities to be visited being Oxford, Bath, Bristol, Cardiff, and South Wales. It will afford, under most favourable conditions, a unique opportunity of seeing municipal development, with special reference to housing, town planning, slum clearance, etc. While it is hoped that as many as possible will be able to join for the full period, arrangements can be made to suit the convenience of those who cannot spare the time to do this and would prefer to participate in sections of the tour only. Full particulars may be obtained from the Secretary, Garden Cities and Town-Planning Association, 3 Gray's Inn Place, London, W.C.1.

The Architect Players

The Architect Players will present "A Night at an Inn" (by Lord Dunsany) and "The Rose and the Ring" (by W. M. Thackeray) on Wednesday and Thursday, March 24 and 25, at 8.15 p.m., in the hall of the Art Workers' Guild, 6 Queen Square, Bloomsbury, W.C.1. The company includes : Mesdames A. G. Lanchester, A. Thompson, E. Caldicott, I. J. Macfadyn, E. Meikle, S. Moberly, N. Nickalls, E. W. Scott, and A. Sleigh; Messrs. E. L. Bird, R. A. Duncan, R. E. Enthoven, F. C. Holland, G. H. Jellicoe, J. C. Sheppard, G. W. Silk, L. S. Slaughter, F. H. Smith, W. E. Smith, and C. S. White. Tickets, Price 7s. 6d., 5s. 9d., and 3s., may be obtained through members of the company, or direct from Mrs. Lanchester, 19 Bedford Square, W.C.1. Early application is requested.

TRADE NOTES

At the Vaudeville Theatre, Strand, which has just been reopened after being reconstructed from the designs of Mr. Robert Atkinson, special precautions were taken to prevent water or damp penetrating from the ground into the building. Water existed in considerable quantities above and below the foundations, and in order to secure a dry basement, and to prevent damp from encroaching in any part of the building, Novoid was mixed with the ordinary concrete, and used in all cases where this danger was likely to arise. This material was used for many portions of the work, such as for the footings of the brickwork, bedding the stanchions, dampcourses, all the basement floors, for rendering the existing walls under the stage, and for certain stairs and staircases. Novoid was used in proportions ranging from 7 to 14 per cent., and was applied in accordance with the specified instructions of the manufacturers, The Dart Co. (Novoid) Ltd., 26-28 Billiter Street, London, E.C.3. The building will be illustrated in our next issue.

Many manufacturers keep a map marked with various coloured pins to show the geographical disposition of their orders in hand. If Messrs. Smith, Major and Stevens, Ltd., keep such a map it must be one of the world, judging from a list of orders received in less than a month for their S.M.S. lifts. Orders in towns as far apart as Nottingham and New Zealand, and London and Australia are shown in this list, Bristol, Ipswich, Glasgow, Chatham, Derby, Belfast, Luton, Plymouth, and Sandgate being some of the towns included. In all twenty-six order pins—one for each of the seven days of the week, would have to be fixed to the map. The buildings in which the lifts are to be installed include insurance and other commercial buildings, garages, furniture works, Admiralty buildings, dairies, a foundry, telegraph office, a hosier's, cold storage, biscuit works, a bank, hospitals, and industrial works, and the orders include passenger, goods, and service lifts. A six-ton motor lorry lift is included.

THE WEEK'S BUILDING NEWS

Richmond Town-Planning Scheme

The Ministry of Health has approved of a town-planning scheme for Richmond.

Bournemouth's Housing Progress in 1925

During last year 1,049 new houses were erected in Bournemouth.

Housing at Uckfield

The Uckfield Rural Council has passed plans for the building of twenty-eight houses.

A Municipal Store for Fulham

A new municipal store and garage is being built at Fulham at a cost of £1,600.

Housing at Guildford

The Guildford Town Council proposes to build fifty-six more houses at a cost of £28,000.

Hospital Extensions at Huddersfield

The erection of a new hospital block to cost £32,000 has been decided upon by the Huddersfield Board of Guardians.

A New Scottish Church

A new church is to be built at Mosspark for the Church of Scotland at an estimated cost of £15,000.

Housing at Hull

The Hull Housing Committee has instructed the city engineer to build 208 all-brick houses at an average cost of £408 each.

Workmen's Dwellings at Sidmouth

A large number of workmen's dwellings are being erected on the Arcot Estate at Sidmouth.

Improvements to Chelsea Infirmary

The Chelsea Guardians propose spending £20,000 on alterations and improvements to their infirmary.

Housing at Lochend

The Edinburgh Dean of Guild Court has granted a warrant for the erection of 250 houses at Lochend.

A New Grammar School for Atherstone

The governors of the Atherstone Grammar School have decided to erect new school buildings in the near future.

Town-Planning at Llandudno

A conference has been held at Llandudno with a view to the preparation of a town-planning scheme for the peninsula.

Two New Schools

It has been decided to erect a school at Aberlady, costing £4,000 (exclusive of site), and a school, costing £6,000 (exclusive of site), at Longniddry.

Two New Churches for Yorkshire

Two new Roman Catholic churches, one at Horsforth, the other at Holbeck, are to be erected from the designs of Messrs. E. Simpson and Son, of Bradford.

Housing at Totnes

The Totnes Town Council has decided to proceed with a building scheme on part of the Borough Park, involving the erection of twenty or more workmen's dwellings.

An M.P.'s Gift of Free Bricks

Mr. David Davies, M.P., has given free bricks for the Newton (Montgomery) Town Council's housing scheme to the value of nearly £3,000.

A Memorial to G. F. Watts

The Guildford Town Council has approved the design of a memorial to the late G. F. Watts, R.A., to be erected at Guildford at a cost of between £400 and £500.

A New Wing for Ardingly College

The foundation-stone of the new wing which, at a cost of £20,000, is to be added to Ardingly College, Sussex, will be laid on May 8.

Hotel Extensions at Bridlington

The Alexandra Hotel, Bridlington, is to be completely remodelled and extended from the designs of Mr. C. L. Waite, of Bridlington and London.

Flats for the City

A large block of flats is to be built for the London City Corporation in Wenlock Street, Shepherdess Walk. The scheme will cost about £100,000.

Building Progress in Scotland

The Scottish Under-Secretary for Health recently stated that between 13,000 and 14,000 houses had been sanctioned for construction in Scotland.

Sheffield Public Hall

The Sheffield Finance Consultative Committee has decided to recommend the City Council to proceed with the erection of a city public hall. The cost is estimated at about £200,000.

A Working-men's Club for Leeds

A proposal has been put forward for the erection of a new working-men's club at Kirkstall, Leeds. Plans are being prepared by Messrs. Fred Mitchell and Sons, architects.

L.C.C. Housing Scheme

At an estimated cost of £147,750 the London County Council proposes to erect 2,178 houses and flats as part of their housing scheme on the Bromley Road (No. 1) section of Downham.

Cardiff Improvements

A meeting of the special sub-committee of the Cardiff Corporation was held recently to consider the proposals for new offices for the tramways department and new offices and showrooms for the electricity department. The scheme will involve the construction of a new road with a new bridge across the canal, and the demolition of thirty-five cottages. The capital expenditure will be £75,000.

Building at Falkirk

The Falkirk Dean of Guild Court has granted warrant to erect a £1,500 double bungalow at Weir Street, Falkirk, and two flatted houses, to cost £1,450, at Major's Place and Gartcows Road, Falkirk.

A Housing Scheme for Aberdeen

The Housing Committee of the Aberdeen Town Council has instructed Mr. A. B. Gardner, director of housing, to prepare a report upon a scheme for the erection of houses for sale by the Town Council.

Greenock Hospital Extension

At the annual meeting of the Greenock Royal Infirmary it was reported that steps were being taken to acquire ground for the erection of an auxiliary hospital. Towards this scheme Mr. Matthew Rankin has donated £20,000.

A New Methodist Church for Bradford

The members of the United Methodist Church at Banner Cross, Sheffield, propose to erect a new building at an estimated cost of about £8,000. The designs are being prepared by Mr. W. J. Hale, architect and surveyor, of Sheffield.

School Building Activity at Belfast

The Belfast Education Committee is engaged in carrying out a large programme of school building. Two new schools are being built at Templemore Avenue and Euston Street, and half a dozen more at a cost of some £30,000 each will be commenced very soon.

School Proposals in Yorkshire

The West Riding Education Committee has agreed to the provision of a technical school at a cost of £30,000, a combined elementary and middle school also at a cost of £30,000, and to the extension of Heckmondwike Secondary School at a cost of £13,162.

Edinburgh Housing Proposals

It was recently stated by the Edinburgh City Chamberlain that the number of houses which the Edinburgh Corporation had authorized to be erected was approximately 2,078, and the number of houses which the Scottish National Housing Company proposed to build was understood to be 350.

Wolverhampton Education Proposals

The following are among some important schemes which the Wolverhampton Education Committee propose to carry out in their building programme for the coming three years: An open-air school (£9,400); grammar school extensions (£12,000); the completion of the technical college (£112,614); a contemplated expenditure of £11,324 on extensions to existing school buildings, and £12,575 on new elementary schools in the Pond Lane area.

READERS' QUERIES

Chestnut Wood for Floors and Joinery

C. H. M. "*A retired architect has asked me to put him up a house in Sussex. He talks of the possibility of using chestnut for his internal joinery, also for his floors, in the latter case using fairly short lengths of board laid herringbone fashion. I do not happen to have used chestnut for these purposes, and need advice as to its suitability, and also its cost as compared with the more generally accepted materials.*"

The timber of the sweet chestnut, *Castanea Vesca*, is still used for constructional carpentry in England and America, and has been used in joinery and furniture-making from the earliest times. It is obtainable in large and wide boards, and was considered a suitable wood for the backing of panel pictures by some of the great Italian painters. *Chambers' Cyclopædua*, published in 1786, describes chestnut wood as "being of equal value with the best oak, and for many purposes far exceeding it. It is particularly good for vessels for all kinds of liquor having a property, when once thoroughly seasoned, of maintaining its bulk constantly without shrinking or swelling, as other timber is apt to do; and it is said that all the large casks for their wines in Italy are made of this timber; it is for this and many other purposes in greater esteem among the Italians than any other timber whatever."

The hardness of chestnut is intermediately between that of pine and of oak, and in appearance resembles oak without its characteristic silver grain. It is almost indistinguishable from an oak board cut tangentially to the annual rings of the trunk. A chestnut board maintains a smooth surface and wears well, even when used for the draining-board of a sink where it is subjected to alternate wetting and drying, and to periodical vigorous scrubbing. It swells considerably when wet, but this characteristic it shares with most other timbers in general use. It does not seem to have any very great tendency to "warp" or "cast," in which it is superior to both oak and elm.

A good quality which chestnut wood is reputed to possess is that of driving away noxious insects, but for this the evidence is not always satisfactory, since old chestnut is often confounded with old oak timber, both taking a tawny tint with extreme age, and the presence or absence of insects is not always verified by careful inspection. The splendid arched hammer-beam roof of Westminster Hall has thus been quoted as an instance of the freedom of chestnut wood from wood-borers, whereas, as is now well known, the timbers are of English oak, and had become terribly hollowed by the Death Watch beetle, *Xestobium Tessellatum*.

In this connection it should be noted that the timber of *Quercus Sessiflora*, the brown oak, is also known as "chestnut," or "chestnut oak."

Chestnut wood does not generally command so high a price as oak, its cost ranging from five-sixths the cost of plain oak to one-half the cost of finely-figured oak. It is, however, not unusual to specify that certain details, such as draining-boards or window-sills, shall be in "home-grown oak or chestnut," without any question of difference of price, since it is understood that the qualities of chestnut make it at least equally serviceable in these positions.

Chestnut wood weighs 40 lb. per cubic foot, and has an ultimate strength of 9,000 lb. per sq. in. in tension. It crushes at 5,000 lb. to the sq. in. with the grain, or at 900 lb. per sq. in. across the grain. This valuable timber would probably be used more generally for both constructional and decorative purposes if oak were not available. The somewhat greater strength and hardness of oak commends it for carpentry, and its specific silver grain gives it an artistic quality not possessed by chestnut, which is, however, eminently well suited for the purposes mentioned. W. H.

Materials for a Small Kiln

S. B. writes: "*A small kiln, for burning sulphur, was built of stone with ordinary mortar joints. The fumes from the sulphur have acted upon the mortar, causing it to expand and open the joints, with the result that the building has collapsed? What materials would you suggest for jointing the stonework? Can you suggest a better material for the construction of the kiln than stonework?*"

Masonry built of stone and mortar will seldom stand severe heat or prolonged contact with fire. Lime-kilns are often constructed of stone, but the inner linings are expected to burn away and to need renewal in the normal course of things, and a very substantial outer backing is provided to maintain stability. In other cases the kiln is purposely made of limestone in a conical pit dug in the earth, and the lining of the kiln as well as its contents becomes converted into quicklime.

Other factors may have been at work beside the sulphur fumes. Expansion of the moisture contained in the mortar would suffice to burst the kiln if the firing-up was done before the work had dried out. Insufficient strength of backing, or the neglect to provide for expansion would have similar effects. Materials suitable for withstanding heat are ordinary hard burnt firebricks set in fireclay, or, for very high temperatures, firebricks rich in silica are used and set in a mixture of ordinary fireclay and silica fireclay.

Where water is liable to play upon the exterior of the kiln a mortar made of lime, sand, and fireclay is used for the parts affected.

Drying out must be slow and gradual, and the temperature should be increased very slowly when the kiln is first fired. The expansion of each joint is sometimes provided against by bedding thin wooden laths in the joints. These burn out as the work heats and gives more room for the increased size of the heated firebricks. In any case the design must be arranged to provide rigid support where support is necessary, and room for expansion in other directions. W. H.

Concrete Slabs: Non-slip Treads

J. E. writes: "*In a bacon store built some years ago the solid concrete stairs were not treated in any way to render the treads 'non-slip,' and they are now most unsatisfactory. It does not appear possible to score the surface as the 'floating' is not dependable, and is liable to come off in large pieces, which also seems to preclude the fixing of a metal nosing. Could you suggest anything which would reliably adhere, if possible, with approximate cost? There are twenty-one steps, each 3 ft. 6 in. wide, with 9 in. treads and 6¾ in. risers.*"

If the floating is liable to flake off it seems to indicate the advisability of hacking it out and replacing the treads with cement mixed with carborundum. The experiment may be made of laying the new treads by local labour, though Messrs. James Bennett and Son, Putney Bridge Road, Putney, London, S.W.15, undertake work of this character.

Various patent treads, made in steel, iron, or bronze with grooves filled with lead or carborundum insertions, are also procurable, with or without a deep nosing.

Another method is to employ non-slipping corrugated indiarubber with a brass nosing fixed by means of metal plugs cemented into holes drilled in the substance of the steps. Indiarubber may be obtained in mat form to cover any size of step. In fixing any patent tread the manufacturer's instructions should be scrupulously followed. Firms supplying patent stair-treads will quote prices for treads to fit the stairs in question. W. H.

The Term Architect

P. J. writes: "*Can you tell me when the term 'architect' was first used?*"

It is difficult to say, but the term appears very seldom, either in literature or in documents previous to the seventeenth century. Shakespeare uses the word only once, and in contracts of Elizabeth's time it occurs seldom, if at all, although the documents refer to the provision of designs as well as workmanship. Now and then the word appears in the title-pages of books published for the guidance of designers in the reigns of Elizabeth and James, but primarily they were addressed to artificers.

The Marble of the Parthenon

A. L. writes: "*Can you, or any of your readers tell me of what marble the Parthenon was built, and whether the quarries are still worked?*"

The Parthenon is built of White Pentelikon, and the quarries were discovered and opened again about a hundred years ago. There are one or two examples of its use in London. At the present time, however, no marble is being exported from these quarries owing to the necessity of using it for the restoration of the Parthenon and other buildings on the Acropolis.

RATES OF WAGES

			I	II
			s. d.	s. d.
A	ABERDARE	S. Wales & M.	1 8	1 3½
A₁	Abergavenny	Do.	1 7½	1 2½
B	Abingdon ..	S. Counties	1 6	1 1½
A	Accrington	N.W.Counties	1 8	1 3½
A₃	Addlestone	S. Counties	1 6½	1 2
A	Adlington ..	N.W.Counties	1 8	1 3½
A	Airdrie ..	Scotland	*1 8	1 3½
C₁	Aldeburgh	E. Counties	1 4	1 0½
A	Altrincham	N.W.Counties	1 8	1 3½
B₃	Appleby ..	N.W. Counties	1 4½	1 0½
A	Ashton-under-Lyne	N.W.Counties	1 8	1 3½
A₃	Atherstone	Mid. Counties	1 6½	1 2
B₃	Aylesbury ..	S. Counties	1 4½	1 0½
B	BATH ..	S.W.Counties	1 6	1 1½
B₃	Banbury ..	S. Counties	1 4½	1 0½
B₂	Bangor ..	N.W. Counties	1 5	1 1
A	BarnardCastle	N.E. Coast	1 8	1 3½
A	Barnsley ..	Yorkshire	1 8	1 3½
B₁	Barnstaple	S.W. Counties	1 5½	1 1½
A	Barrow ..	N.W.Counties	1 8	1 3½
A	Barry ..	S. Wales & M.	1 8	1 3½
B₃	Basingstoke	S.W. Counties	1 4½	1 0½
A	Batley ..	Yorkshire	1 8	1 3½
B	Bedford ..	E. Counties	1 6	1 1½
A₂	Berwick-on-Tweed	N.E. Coast	1 7	1 2½
A₃	Bewdley ..	Mid.Counties	1 6½	1 2
B₃	Bicester ..	Mid. Counties	1 4½	1 0½
A	Birkenhead	N.W.Counties	†1 9	1 3½
A	Birmingham	Mid. Counties	1 8	1 3½
A	Bishop Auckland	N.E. Coast	1 8	1 3½
A	Blackburn	N.W.Counties	1 8	1 3½
A	Blackpool	N.W.Counties	1 8	1 3½
A	Blyth ..	N.E. Coast	1 8	1 3½
B₃	Bognor ..	S. Counties	1 4½	1 0½
A	Bolton ..	N.W.Counties	1 8	1 3½
A₃	Boston ..	Mid. Counties	1 6½	1 2
B₁	Bournemouth	S. Counties	1 6	1 1½
A	Bradford ..	Yorkshire	1 8	1 3½
A₃	Brentwood	E. Counties	1 6½	1 2
A	Bridgend ..	S. Wales & M.	1 8	1 3½
B₂	Bridgwater	S.W. Counties	1 5	1 1
A₁	Bridlington	Yorkshire	1 7½	1 2½
A	Brighouse ..	Yorkshire	1 8	1 3½
B₁	Brighton ..	S. Counties	1 6	1 1½
A	Bristol ..	S.W. Counties	1 8	1 3½
B₃	Brixham ..	S.W. Counties	1 4½	1 0½
A₃	Bromsgrove	Mid. Counties	1 6½	1 2
C	Bromyard ..	Mid. Counties	1 4	1 0½
A	Burnley ..	N.W.Counties	1 8	1 3½
A	Burslem ..	Mid. Counties	1 8	1 3½
A₂	Burton-on-Trent	Mid. Counties	1 7	1 2½
A	Bury ..	N.W.Counties	1 8	1 3½
A₃	Buxton ..	N.W.Counties	1 6½	1 2
B	CAMBRIDGE	E. Counties	1 6	1 1½
B₃	Canterbury	S. Counties	1 4½	1 0½
A	Cardiff ..	S. Wales & M.	1 8	1 3½
A	Carlisle ..	N.W.Counties	1 8	1 3½
B	Carmarthen	S. Wales & M.	1 6	1 1½
B₂	Carnarvon ..	N.W.Counties	1 5	1 1
A₁	Carnforth ..	N.W. Counties	1 7½	1 2½
A₁	Castleford ..	Yorkshire	1 8	1 3½
B₁	Chatham ..	S. Counties	1 5½	1 1½
B₁	Chelmsford	E. Counties	1 5½	1 1½
B	Cheltenham	S.W. Counties	1 6	1 1½
A	Chester ..	N.W.Counties	1 8	1 3½
A	Chesterfield	Mid. Counties	‡1 8	1 3½
B₃	Chichester ..	S. Counties	1 4½	1 0½
A	Chorley ..	N.W.Counties	1 8	1 3½
B₂	Cirencester	S. Counties	1 5	1 1
A	Clitheroe ..	N.W.Counties	1 8	1 3½
A	Clydebank	Scotland	1 8	1 3½
A	Coalville ..	Mid. Counties	1 8	1 3½
B₁	Colchester ..	E. Counties	1 5½	1 1½
A	Colne ..	N.W.Counties	1 8	1 3½
B₁	Colwyn Bay	N.W.Counties	1 5½	1 1½
A	Consett ..	N.E. Coast	1 8	1 3½
B₁	Conway ..	N.W. Counties	1 5½	1 1½
A	Coventry ..	Mid. Counties	1 8	1 3½
A₃	Crewe ..	N.W.Counties	1 6½	1 2
A₃	Cumberland	.....	1 6½	1 2
A	DARLINGTON	N.E. Coast	1 8	1 3½
A	Darwen ..	N.W.Counties	1 8	1 3½
B₃	Deal ..	S. Counties	1 4½	1 0½
B₁	Denbigh ..	N.W.Counties	1 5½	1 1½
A	Derby ..	Mid. Counties	1 8	1 3½
A	Dewsbury ..	Yorkshire	1 8	1 3½
B	Didcot ..	S. Counties	1 6	1 1½
A	Doncaster ..	Yorkshire	1 8	1 3½
C₁	Dorchester	S.W.Counties	1 4	1 0½
A	Driffield ..	Yorks	1 6½	1 2
A₃	Droitwich ..	Mid. Counties	1 6½	1 2
A	Dudley ..	Mid. Counties	1 7	1 2½
A	Dundee ..	Scotland	1 8	1 3½
A	Durham ..	N.E. Coast	1 8	1 3½
B₁	EASTBOURNE	S. Counties	1 6	1 1½
A	Ebbw Vale	S. Wales & M.	1 8	1 3½
A	Edinburgh	Scotland	1 8	1 3½
A	E. Glamorganshire & Mon. Valley	S. Wales & M.	1 8	1 3½
B	Exeter ..	S.W. Counties	§1 7	1 2½
B₂	Exmouth ..	S.W. Counties	1 5	1 1
B	FELIXSTOWE	E. Counties	1 6	1 1½
A₃	Filey ..	Yorks	1 6½	1 2
A	Fleetwood ..	N.W.Counties	1 8	1 3½
B₃	Folkestone	S. Counties	1 4½	1 0½
A	Frodsham ..	N.W.Counties	1 8	1 3½
B₃	Frome ..	S.W.Counties	1 4½	1 0½
A	GATESHEAD	N.E. Coast	1 8	1 3½
B₁	Gillingham	S. Counties	1 5½	1 1½
B	Gloucester ..	S.W.Counties	1 6	1 1½
A₂	Goole ..	Yorkshire	1 7	1 2½
B₁	Gosport ..	S. Counties	1 5½	1 1½
A₃	Grantham ..	Mid. Counties	1 6½	1 2
A₂	Gravesend ..	S. Counties	1 7	1 2½
A	Greenock ..	Scotland	*1 8	1 3½
A	Grimsby ..	Yorkshire	1 8	1 3½
B₁	Guildford ..	S. Counties	1 5½	1 1½
A	HALIFAX ..	Yorkshire	1 8	1 3½
A₁	Hanley ..	Mid. Counties	1 7½	1 2½
A	Harrogate ..	Yorkshire	1 8	1 3½
A	Hartlepools	N.E. Coast	1 8	1 3½
B₂	Harwich ..	E. Counties	1 5	1 1
B₃	Hastings ..	S. Counties	1 4½	1 0½
B₁	Hatfield ..	S. Counties	1 5½	1 1½
B	Hereford ..	S.W.Counties	1 6	1 1½
B	Hertford ..	E. Counties	1 5½	1 1½
A₁	Heysham ..	N.W.Counties	1 7½	1 2½
A	Howden ..	N.E. Coast	1 8	1 3½
A	Huddersfield	Yorkshire	1 8	1 3½
A	Hull ..	Yorkshire	1 8	1 3½

The initial letter opposite each entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; column II for labourers; the rate for craftsmen working at trades in which a separate rate maintains, is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II
			s. d.	s. d.
A	ILKLEY ..	Yorkshire	1 8	1 3½
A	Immingham	Mid. Counties	1 8	1 3½
B	Ipswich ..	E. Counties	1 6	1 1½
C₁	Isle of Wight	S. Counties	1 4	1 0½
A	JARROW ..	N.E. Coast	1 8	1 3½
A	KEIGHLEY	Yorkshire	1 8	1 3½
B₂	Kendal ..	N.W. Counties	1 5	1 1
B₂	Keswick ..	N.W.Counties	1 5	1 1
B	Kettering ..	Mid. Counties	1 6	1 1½
A₃	Kidderminster	Mid. Counties	1 6½	1 2
B₂	King's Lynn	E. Counties	1 5	1 1
A₁	LANCASTER	N.W.Counties	1 7½	1 2
A₃	Leamington	Mid. Counties	1 6½	1 2½
A	Leeds ..	Yorkshire	1 8	1 3½
A	Leek ..	Mid. Counties	1 8	1 3½
A	Leicester ..	Mid. Counties	1 8	1 3½
A	Leigh ..	N.W. Counties	1 8	1 3½
B₃	Lewes ..	S. Counties	1 4½	1 0½
A₃	Lichfield ..	Mid. Counties	1 6½	1 2
A	Lincoln ..	Mid. Counties	1 8	1 3½
A	Liverpool ..	N.W.Counties	†1 9	1 3½
B	Llandudno	N.W.Counties	1 6	1 1½
A	Llanelly ..	S. Wales & M.	1 8	1 3½
	London (12 miles radius)		1 9½	1 4½
	Do. (12–15 miles radius)		1 9	1 4
·A	Long Eaton	Mid. Counties	1 8	1 3½
A	Loughborough	Mid. Counties	1 8	1 3½
B	Luton ..	E. Counties	1 6	1 1½
A	Lytham ..	N.W. Counties	1 8	1 3½
A₁	MACCLESFIELD	N.W.Counties	1 7½	1 2½
B	Maidstone ..	S. Counties	1 5½	1 1½
A₃	Malvern ..	Mid. Counties	1 6½	1 2
A	Manchester	N.W.Counties	1 8	1 3½
A	Mansfield ..	Mid. Counties	1 8	1 3½
B₃	Margate ..	S. Counties	1 4½	1 0½
A₃	Matlock ..	Mid. Counties	1 6½	1 2
A	Merthyr ..	S. Wales & M.	1 8	1 3½
A	Middlesbrough	N.E. Coast	1 8	1 3½
A₃	Middlewich	N.W. Counties	1 6½	1 2
A	Monmouth	S. Wales & M.	1 8	1 3½
	S. and E. Glamorganshire			
A₁	Morecambe	N.W. Counties	1 7½	1 2½
A₃	NANTWICH	N.W.Counties	1 6½	1 2
A	Neath ..	S. Wales & M.	1 8	1 3½
A	Nelson ..	N.W. Counties	1 8	1 3½
A	Newcastle ..	N.E.Coast	1 8	1 3½
A	Newport ..	S. Wales & M.	1 8	1 3½
A	Normanton	Yorkshire	1 8	1 3½
A₂	Northampton	Mid. Counties	1 7	1 2½
A	North Staffs.	Mid. Counties	1 8	1 3½
A	North Shields	N.E. Coast	1 8	1 3½
B	Norwich ..	E. Counties	1 6	1 1½
A	Nottingham	Mid. Counties	1 8	1 3½
A	Nuneaton ..	Mid. Counties	1 8	1 3½
B	OAKHAM ..	Mid. Counties	1 5½	1 1½
A	Oldham ..	N.W.Counties	1 8	1 3½
A₃	Oswestry ..	Mid. Counties	1 6½	1 2
B	Oxford ..	S. Counties	1 6	1 1½
A	PAISLEY ..	Scotland	*1 8	1 3½
C	Pembroke	S. Wales & M.	1 4½	1 0½
A	Perth ..	Scotland	*1 8	1 3
A₃	Peterborough	Mid. Counties	1 6½	1 2
A	Plymouth	S.W. Counties	¶1 8	1 3½
A	Pontefract ..	Yorkshire	1 8	1 3½
A	Pontypridd	S. Wales & M.	1 8	1 3½
B	Portsmouth	S. Counties	1 6	1 1½
A	Preston ..	N.W.Counties	1 8	1 3½
A	QUEENSFERRY	N.W.Counties	1 8	1 3½
B	READING ..	S. Counties	1 6	1 1½
B	Reigate ..	S. Counties	1 5½	1 1½
A₃	Retford ..	Mid. Counties	1 6½	1 2
A	Rhondda Valley	S. Wales & M.	1 8	1 3½
A₃	Ripon ..	Yorkshire	1 6½	1 2
A	Rochdale ..	N.W.Counties	1 8	1 3½
B	Rochester ..	S. Counties	1 5½	1 1½
A₁	Ruabon ..	N.W.Counties	1 7½	1 2½
A₂	Rugby ..	Mid. Counties	1 8	1 3½
A₃	Rugeley ..	Mid. Counties	1 6½	1 2
A	Runcorn ..	N.W. Counties	1 8	1 3½
A₃	ST. ALBANS	E. Counties	1 6½	1 2
A	St. Helens ..	N.W.Counties	1 8	1 3½
A₁	Scarborough	Yorkshire	1 7½	1 2½
A	Scunthorpe	Mid. Counties	1 8	1 3½
A	Sheffield ..	Yorkshire	1 8	1 3½
A	Shipley ..	Yorkshire	1 8	1 3½
A₃	Shrewsbury	Mid. Counties	1 6½	1 2
A₂	Skipton ..	Yorkshire	1 7	1 2½
B	Slough ..	S. Counties	1 5½	1 1½
A₂	Solihull ..	Mid. Counties	1 7	1 2½
B	South'pton	E. Counties	1 6	1 1½
B₁	Southend-on-Sea	E. Counties	1 5½	1 1½
A	Southport ..	N.W.Counties	1 8	1 3½
A	S. Shields ..	N.E. Coast	1 8	1 3½
A₂	Stafford ..	Mid. Counties	1 7	1 2½
A	Stockport ..	N.W.Counties	1 8	1 3½
A	Stockton-on Tees	N.E. Coast	1 8	1 3½
A	Stoke-on-Trent	Mid. Counties	1 8	1 3½
B	Stroud ..	S.W.Counties	1 5½	1 1½
A	Sunderland	N.E. Coast	1 8	1 3½
A	Swansea ..	S. Wales & M.	1 8	1 3½
B	Swindon ..	S.W. Counties	1 6	1 1½
A₁	TAMWORTH	N.W.Counties	1 7½	1 2½
B₁	Taunton ..	S.W. Counties	1 5½	1 1½
A	Teeside Dist.	N.E. Counties	1 8	1 3½
A	Todmorden	Yorkshire	1 8	1 3½
A₂	Torquay ..	S.W.Counties	1 7	1 2½
B₁	Tunbridge Wells	S. Counties	1 4½	1 1½
A	Tunstall ..	Mid. Counties	1 8	1 3½
A	Tyne District	N.E. Coast	1 8	1 3½
A	WAKEFIELD	Yorkshire	1 8	1 3½
A₂	Walsall ..	Mid. Counties	1 7	1 2½
A	Warrington	N.W.Counties	1 8	1 3½
A₃	Warwick ..	Mid. Counties	1 6½	1 2
B	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 8	1 3½
B	Weston-S-Mare	S.W. Counties	1 6	1 1½
A₃	Whitby ..	Yorkshire	1 6½	1 2
A	Widnes ..	N.W.Counties	1 8	1 3½
A	Wigan ..	N.W.Counties	1 8	1 3½
B₂	Winchester	S. Counties	1 5	1 1
B	Windsor ..	S. Counties	1 6	1 1½
A	Wolverhampton	Mid. Counties	1 8	1 3½
A₃	Worcester ..	Mid. Counties	1 6½	1 2
A	Worksop ..	Yorkshire	1 8	1 3½
A₁	Wrexham ..	N.W. Counties	1 7½	1 2½
B	Wycombe ..	S. Counties	1 6	1 1½
B₁	YARMOUTH	E. Counties	1 5½	1 1½
B₂	Yeovil ..	S.W. Counties	1 5	1 1
A	York ..	Yorkshire	1 8	1 3½

* Plasterers, 1s. 9d.
† Carpenters and Painters, 1s. 8½d.
‡ Plumbers, 1s. 9d.
§ Painters, 1s. 6d.
‖ Carpenters and Plasterers, 1s. 8½d.
¶ Painters, 1s. 7d.

PRICES CURRENT

EXCAVATOR AND CONCRETOR

EXCAVATOR, 1s. 4½d. *per hour;* LABOURER, 1s. 4½d. *per hour;* NAVVY, 1s. 4½d. *per hour;* TIMBERMAN, 1s. 6d. *per hour;* SCAFFOLDER, 1s. 5½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Broken brick or stone, 2 in., per yd.	£0 10 0
Thames ballast, per yd.	0 13 0
Pit gravel, per yd.	0 18 0
Pit sand, per yd.	0 14 6
Washed sand	0 16 6
Screened ballast or gravel, add 10 per cent. per yd.	
Clinker, breeze, etc., prices according to locality.	
Portland cement, per ton	£2 19 0
Lias lime, per ton	2 5 0
Sacks charged extra at 1s. 9d. each and credited when returned at 1s. 6d.	
Transport hire per day:	
Cart and horse £1 3 0	*Trailer* £0 15 0
3-ton motor lorry 3 15 0	*Steam roller* 4 5 0
Steam lorry, 5-ton 4 0 0	*Water cart* 1 5 0

EXCAVATING and throwing out in ordinary earth not exceeding 6 ft. deep, basis price, per yd. cube . 0 3 0

Exceeding 6 ft., but under 12 ft., add 30 per cent.

In stiff clay, add 30 per cent.

In underpinning, add 100 per cent.

In rock, including blasting, add 225 per cent.

If basketed out, add 80 per cent. to 150 per cent.

Headings, including timbering, add 400 per cent.

RETURN, fill, and ram, ordinary earth, per yd.	£0 2 4
SPREAD and level, including wheeling, per yd.	0 2 4
PLANKING, per ft. sup.	0 0 5
DO. over 10 ft. deep, add for each 5 ft. depth	30 per cent.
HARDCORE, 2 in. ring, filled and rammed, 4 in. thick, per yd. sup.	£0 2 1
DO. 6 in. thick, per yd. sup.	0 2 10
PUDDLING, per yd. cube	1 10 0
CEMENT CONCRETE, 4-2-1, per yd. cube	2 3 0
DO. 6-2-1, per yd. cube.	1 18 0
DO. in upper floors, add 15 per cent.	
DO. in reinforced-concrete work, add 20 per cent.	
DO. in underpinning, add 60 per cent.	
LIAS LIME CONCRETE, per yd. cube	£1 16 0
BREEZE CONCRETE, per yd. cube	1 7 0
DO. in lintols, etc., per ft. cube	0 1 6

DRAINER

LABOURER, 1s. 4½d. *per hour;* TIMBERMAN, 1s. 6d. *per hour;* BRICKLAYER, 1s. 9½d. *per hour;* PLUMBER, 1s. 9½d. *per hour;* WATCHMAN, 7s. 6d. *per shift.*

Stoneware pipes, tested quality, 4 in., per yd.	£0 1 3
DO. *6 in., per yd.*	0 2 8
DO. *9 in., per yd.*	0 3 6
Cast-iron pipes, coated, 9 ft. lengths, 4 in., per yd.	0 6 9
DO. *6 in., per yd.*	0 9 2
Portland cement and sand, see "Excavator" above.	
Lead for caulking, per cwt.	£2 7 6
Gaskin, per lb.	0 0 5½

STONEWARE DRAINS, jointed in cement, tested pipes, 4 in., per ft. 0 4 3

DO. 6 in., per ft.	0 5 0
DO. 9 in., per ft.	0 7 9
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.	0 9 0
DO. 6 in., per ft.	0 11 0

Note.—These prices include digging and filling for normal depths, and are average prices.

Fittings in Stoneware and Iron according to type. *See* Trade Lists.

BRICKLAYER

BRICKLAYER, 1s. 9½d. *per hour;* LABOURER, 1s. 4½d. *per hour;* SCAFFOLDER, 1s. 5½d. *per hour.*

London stocks, per M.	£4 7 0
Flettons, per M.	3 6 0
Staffordshire blue, per M.	9 12 0
Firebricks, 2½ in., per M.	11 3 0
Glazed salt, white, and ivory stretchers, per M.	22 0 0
DO. *headers, per M.*	21 10 0
Colours, extra, per M.	£5 10 0
Seconds, less, per M.	1 0 0
Cement and sand, see "Excavator" above.	
Lime, grey stone, per ton	£2 12 0
Mixed lime mortar, per yd.	1 6 0
Damp course, in rolls of 4½ in., per roll	0 2 6
DO. *9 in. per roll*	0 4 9
DO. *14 in. per roll.*	0 7 6
DO. *18 in. per roll*	0 9 6

BRICKWORK in stone lime mortar, Flettons or equal, per rod	35 0 0
DO. in cement do., per rod	37 0 0
DO. in stocks, add 25 per cent. per rod.	
DO. in blues, add 100 per cent. per rod.	
DO. circular on plan, add 12½ per cent. per rod.	
FACINGS, FAIR, per ft. sup. extra	£0 0 2
DO. Red Rubbers, gauged and set in putty, per ft. extra	0 4 6
DO. salt, white or ivory glazed, per ft. sup. extra	0 5 6
TUCK POINTING, per ft. sup. extra	0 0 10
WEATHER POINTING, per ft. sup. extra	0 0 3
GRANOLITHIC PAVING, 1 in., per yd. sup.	0 5 0
DO. 1½ in., per yd. sup.	0 6 0
DO. 2 in., per yd. sup.	0 7 0
BITUMINOUS DAMP COURSE, ex rolls, per ft. sup.	0 0 7
ASPHALT (MASTIC) DAMP COURSE, ½ in., per yd. sup.	0 8 0
DO. vertical, per yd. sup.	0 11 6
SLATE DAMP COURSE, per ft. sup.	0 0 10
ASPHALT ROOFING (MASTIC) in two thicknesses, ¾ in., per yd	0 8 6
DO. SKIRTING, 6 in.	0 0 11
BREEZE PARTITION BLOCKS, set in Cement, 1½ in. per yd. sup.	0 5 3
DO. DO. 3 in.	0 6 6

THE wages are the Union rates current in London at the time of publication. The prices are for good quality material, and are intended to cover delivery at works, wharf, station, or yard as customary, but will vary according to quality and quantity. The measured prices are based upon the foregoing, and include usual builders' profits. Though every care has been taken in its compilation it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade enquiry.

MASON

MASON, 1s. 9½d. *per hour;* DO. *fixer,* 1s. 10½d. *per hour;* LABOURER, 1s. 4½d. *per hour;* SCAFFOLDER, 1s. 5½d. *per hour.*

Portland Stone:	
Whithed, per ft. cube	£0 4 4
Basebed, per ft. cube	0 4 7
Bath stone, per ft. cube	0 2 9½
Usual trade extras for large blocks.	
York paving, av. 2½ in., per yd. super.	0 6 6
York templates sawn, per ft. cube	0 6 9
Slate shelves, rubbed, 1 in., per ft. sup.	0 2 6
Cement and sand, see "Excavator," etc., above.	

HOISTING and setting stone, per ft. cube	£0 2 2
DO. for every 10 ft. above 30 ft., add 15 per cent.	
PLAIN face Portland basis, per ft. sup.	£0 2 8
DO. circular, per ft. sup.	0 4 0
SUNK FACE, per ft. sup.	0 3 9
DO. circular, per ft. sup.	0 4 10
JOINTS, arch, per ft. sup.	0 2 6
DO. sunk, per ft. sup.	0 2 7
DO. DO. circular, per ft. sup.	0 4 6
CIRCULAR-CIRCULAR work, per ft. sup.	1 2 0
PLAIN MOULDING, straight, per inch of girth, per ft. run	0 1 1
DO. circular, do. per ft. run	0 1 4
HALF SAWING, per ft. sup.	£0 1 0

Add to the foregoing prices if in York stone 35 per cent.

DO. Mansfield, 12½ per cent.

Deduct for Bath, 33⅓ per cent.

DO. for Chilmark, 5 per cent.

SETTING 1 in. slate shelving in cement, per ft. sup.	£0 0 6
RUBBED round nosing to do., per ft. lin.	0 0 6
YORK STEPS, rubbed T. & R., ft. cub. fixed	1 9 0
YORK SILLS, W. & T., ft. cub. fixed.	1 13 0

SLATER AND TILER

SLATER, 1s. 9½d. *per hour;* TILER, 1s. 9½d. *per hour;* SCAFFOLDER, 1s. 5½d. *per hour;* LABOURER, 1s. 4½d. *per hour.*

N.B.—Tiling is often executed as piecework.

Slates, 1st quality, per M:	
Portmadoc Ladies	£14 0 0
Countess	27 0 0
Duchess	32 0 0
Clips, lead, per lb.	0 0 4
Clips, copper, per lb.	0 2 0
Nails, compo, per cwt.	1 6 0
Nails, copper, per lb.	0 1 10
Cement and sand, see EXCAVATOR, *etc., above.*	
Hand-made tiles, per M.	£5 18 0
Machine-made tiles, per M.	5 8 0
Westmorland slates, large, per ton	9 0 0
DO. *Peggies, per ton*	7 5 0

SLATING, 3 in. gauge, compo nails, Portmadoc or equal:	
Ladies, per square	£4 0 0
Countess, per square	4 5 0
Duchess, per square	4 10 0
WESTMORLAND, in diminishing courses, per square	6 5 0
CORNISH DO., per square	6 3 0
Add, if vertical, per square approx.	0 13 0
Add, if with copper nails, per square approx.	0 2 6
Double course at eaves, per ft. approx.	0 1 0
TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square	5 6 0
DO. machine-made DO., per square	4 17 0
Vertical Tiling, including pointing, add 18s. 0d. per square.	
FIXING lead soakers, per dozen	£0 0 10
STRIPPING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	0 10 0
LABOUR only in laying slates, but including nails, per square	1 0 0

See "Sundries for Asbestos Tiling."

CARPENTER AND JOINER

CARPENTER, 1s. 9½d. *per hour;* JOINER, 1s. 9½d. *per hour;* LABOURER, 1s. 4½d. *per hour.*

Timber, average prices at Docks, London Standard, Scandinavian, etc. (equal to 2nds):	
7 × 3, per std.	£23 0 0
11 × 4, per std.	33 0 0
Memel or Equal. Slightly less than foregoing.	
Flooring, P.E., 1-in., per sq.	£1 8 0
DO. *T. and G., 1 in., per sq.*	1 8 0
Planed Boards, 1 in. × 11 in., per std.	36 0 0
Wainscot oak, per ft. sup. of 1 in.	0 2 0
Mahogany, per ft. sup. of 1 in.	0 2 0
DO. *Cuba, per ft. sup. of 1 in.*	0 3 0
Teak, per ft. sup. of 1 in.	0 3 0
DO., *ft. cube*	0 15 0
FIR fixed in wall plates, lintels, sleepers, etc., per ft. cube	0 5 9
DO. framed in floors, roofs, etc., per ft. cube	0 6 3
DO., framed in trusses, etc., including ironwork, per ft. cube	0 7 3
PITCH PINE, add 33⅓ per cent.	
FIXING only boarding in floors, roofs, etc., per sq.	0 13 6
SARKING FELT laid, 1-ply, per yd.	0 1 6
DO., 3-ply, per yd.	0 1 9
CENTERING for concrete, etc., including horsing and striking, per sq.	3 16 0
SLATE BATTENING, per sq.	0 18 6

PRICES CURRENT; *continued.*

CARPENTER AND JOINER; *continued.*

DEAL GUTTER BOARD, 1 in., on firring, per sq	£3	6	0
MOULDED CASEMENTS, 1¼ in., in 4 sqs., glazing beads and hung, per ft. sup.	0	3	0
DO., DO., 2 in., per ft. sup.	0	3	3
DEAL cased frames, oak sills, 2 in. d.h. sashes, brass-faced pulleys, etc., per ft. sup.	0	4	0
DOORS, 4 pan. sq. b.s., 2 in., per ft. sup.	0	3	6
DO., DO., DO., 1¼ in., per ft. sup.	0	3	0
DO., DO., moulded b.s., 2 in., per ft. sup.	0	3	9
DO., DO., DO., 1¼ in., per ft. sup.	0	3	3
If in oak multiply 6 times.			
If in mahogany multiply 6 times.			
If in teak multiply 7 times.			
WOOD BLOCK FLOORING, standard blocks, laid in mastic herringbone :			
Deal, 1 in., per yd. sup., average	0	10	0
DO., 1¼ in., per yd., sup., average	0	12	0
DO., DO., 1½ in. maple blocks	0	15	0
STAIRCASE WORK, DEAL :			
1 in. riser, 1¼ in. tread, fixed, per ft. sup.	0	3	6
2 in. deal strings, fixed, per ft. sup.	0	3	9

PLUMBER

PLUMBER, 1*s.* 9½*d. per hour;* MATE OR LABOURER, 1*s.* 4½*d. per hour.*

Lead, milled sheet, per cwt.	£2	7	6
DO. *drawn pipes, per cwt.*	2	8	0
DO. *soil pipe, per cwt.*	2	11	0
DO. *scrap, per cwt.*	1	4	0
Copper, sheet, per lb.	0	1	5
Solder, plumber's, per lb.	0	1	3
DO. *fine, per lb.*	0	1	7
Cast-iron pipes, etc. :			
L.C.C. soil, 3 in., per yd.	0	4	2
DO. *4 in. per yd.*	0	5	1
R.W.P., 2½ in., per yd.	0	1	10
DO. *3 in., per yd.*	0	2	2
DO. *4 in., per yd.*	0	3	0
Gutter, 4 in. H.R., per yd.	0	1	10
DO. *4 in. O.G., per yd.*	0	2	0
MILLED LEAD and labour in gutters, flashings, etc.	3	16	0
LEAD PIPE, fixed, including running joints, bends, and tacks, ½ in., per ft.	0	2	1
DO., ¾ in., per ft.	0	2	5
DO. 1 in., per ft.	0	3	3
DO. 1¼ in., per ft.	0	4	6
LEAD WASTE or soil, fixed as above, complete, 2½ in., per ft.	0	6	0
DO. 3 in., per ft.	0	7	0
DO. 4 in., per ft.	0	9	9
CAST-IRON R.W. PIPE, at 24 lb. per length, jointed in red lead, 2½ in., per ft.	0	2	3
DO. 3 in., per ft.	0	2	8
DO. 4 in., per ft.	0	3	0
CAST-IRON H.R. GUTTER, fixed, with all clips, etc., 4 in., per ft.	0	2	7
DO. O.G. 4 in., per ft.	0	2	10
CAST-IRON SOIL PIPE, fixed with caulked joints and all ears, etc., 4 in., per ft.	0	7	0
DO. 3 in., per ft.	0	6	0
Fixing only :			
W.C. PANS and all joints, P. or S., and including joints to water waste preventers, each	2	5	0
BATHS only, with all joints	1	18	0
LAVATORY BASINS only, with all joints, on brackets, each	1	10	0

PLASTERER

PLASTERER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4½*d. per hour.*

Chalk lime, per ton	£2	12	6
Hair, per cwt.	0	18	0
Sand and cement see EXCAVATOR, *etc., above.*			
Lime putty, per cwt.	£0	2	8
Hair mortar, per yd.	1	7	0
Fine stuff, per yd.	1	14	0
Sawn laths, per bdl.	0	2	4
Keene's cement, per ton	5	15	0
Sirapite, per ton	3	10	0
DO. *fine, per ton*	3	18	0
Plaster, per ton	3	0	0
DO. *per ton*	3	12	6
DO. *fine, per ton*	5	12	0
Thistle plaster, per ton	£3	9	0
Lath nails, per lb.	0	0	4
LATHING with sawn laths, per yd.	0	1	7
METAL LATHING, per yd.	0	2	3
FLOATING in Cement or Sand, 1 to 3, for tiling or woodblock, ¾ in., per yd.	0	2	4
DO. vertical, per yd.	0	2	7
RENDER, on brickwork, 1 to 3, per yd.	0	2	7
RENDER in Portland and set in fine stuff, per yd.	0	3	3
RENDER. float, and set, trowelled. per yd.	0	2	9
RENDER and set in Sirapite, per yd.	0	2	5
DO. in Thistle plaster, per yd.	0	2	5
EXTRA, if on but not including lathing, any of foregoing, per yd.	0	0	5
EXTRA, if on ceilings, per yd.	0	0	5
ANGLES, rounded Keene's on Portland, per ft. lin.	0	0	6
PLAIN CORNICES, in plaster, per inch girth, including dubbing out, etc., per ft. lin.	0	0	5
WHITE glazed tiling set in Portland and jointed in Parian, per yd. and up	1	11	6
FIBROUS PLASTER SLABS, per yd.	0	1	10

GLAZIER

GLAZIER, 1*s.* 8½*d. per hour.*

Glass : 4ths in crates :			
Clear, 21 oz.	£0	0	5
DO. 26 oz.	0	0	6
Cathedral white, per ft.	0	0	5½
Polished plate, British ¼ in., up to 2 ft. sup.	0	2	5
DO. *3ft. sup.*	0	3	2
DO. *7 ft. sup.*	0	3	9
DO. *25 ft. sup.*	0	4	3
DO. *100 ft. sup.*	0	5	1
Rough plate, ⅛ in.	0	0	5½
DO. *¼ in., per ft.*	0	0	6
Linseed oil putty, per cwt.	0	16	0
GLAZING in putty, clear sheet, 21 oz.	0	0	10
DO. 26 oz.	0	0	11
GLAZING in beads, 21 oz., per ft.	0	1	0
DO. 26 oz., per ft.	0	1	3

Small sizes slightly less (under 3 ft. sup.).
Patent glazing in rough plate, normal span 1*s.* 5*d.* to 2*s.* per ft.

LEAD LIGHTS, plain, med. sqs. 21 oz., usual domestic sizes, fixed, and up, per ft. sup.	£0	3	6

Glazing only, polished plate, 6½*d.* to 8*d.* per ft., according to size.

DECORATOR

PAINTER, 1*s.* 8½*d. per hour;* LABOURER, 1*s.* 4½*d. per hour;* FRENCH POLISHER, 1*s.* 9*d. per hour;* PAPERHANGER, 1*s.* 8½*d. per hour.*

Genuine white lead, per cwt.	£3	0	0
Linseed oil, raw, per gall.	0	4	2
DO., *boiled, per gall.*	0	4	5
Turpentine, per gall.	0	7	2
Liquid driers, per gall.	0	9	6
Knotting, per gall.	1	5	0
Distemper, washable, in ordinary colours, per cwt., and up	2	0	0
Double size, per firkin	0	3	6
Pumice stone, per lb.	0	0	4
Single gold leaf (transferable), per book	0	1	10
Varnish copal, per gall. and up	0	18	0
DO., *flat, per gall.*	1	2	0
DO., *paper, per gall.*	1	0	0
French polish, per gall.	0	19	0
Ready mixed paints, per gall. and up	0	10	6
LIME WHITING, per yd. sup.	0	0	3
WASH, stop, and whiten, per yd. sup.	0	0	6
DO., and 2 coats distemper with proprietary distemper, per yd. sup.	0	0	9
KNOT, stop, and prime, per yd. sup.	0	0	7
PLAIN PAINTING, including mouldings, and on plaster or joinery, 1st coat, per yd. sup.	0	0	10
DO., subsequent coats, per yd. sup.	0	0	9
DO., enamel coat, per yd. sup.	0	1	2½
BRUSH-GRAIN, and 2 coats varnish, per yd. sup.	0	3	8
FIGURED DO., DO., per yd. sup.	£0	5	6
FRENCH POLISHING, per ft. sup.	0	1	2
STRIPPING old paper and preparing, per piece	0	1	7
HANGING PAPER, ordinary, per piece	0	1	10
DO., fine, per piece, and upwards	4	0	2
VARNISHING PAPER, 1 coat, per piece	0	9	0
CANVAS, strained and fixed, per yd. sup.	0	3	0
VARNISHING, hard oak, 1st coat, yd. sup.	0	1	2
DO., each subsequent coat, per yd. sup.	0	0	11

SMITH

SMITH, *weekly rate equals* 1*s.* 9½*d. per hour;* MATE, *do.* 1*s.* 4*d. per hour;* ERECTOR, 1*s.* 9½*d. per hour;* FITTER, 1*s.* 9½*d. per hour;* LABOURER, 1*s.* 4*d. per hour.*

Mild steel in British standard sections, per ton	£11	0	0
Sheet steel :			
Flat sheets, black, per ton	18	0	0
Do., Galvd., per ton	27	0	0
Corrugated sheets, galvd., per ton	26	0	0
Driving screws, galvd., per grs.	0	1	10
Washers, galvd., per grs.	0	1	1
Bolts and nuts, per cwt. and up	1	18	0
MILD STEEL in trusses, etc., erected, per ton	27	0	0
DO., in small sections as reinforcement, per ton	17	0	0
DO., in compounds, per ton	18	0	0
DO., in bar or rod reinforcement, per ton	20	10	0
WROT. IRON in chimney bars, etc., including building in, per cwt.	2	0	0
DO., in light railings and balusters, per cwt.	2	5	0
FIXING only corrugated sheeting, including washers and driving screws, per yd.	0	2	0

SUNDRIES

Fibre or wood pulp boardings, according to quality and quantity. The measured work price is on the same basis . . . per ft. sup.	£0	0	2½
FIBRE BOARDINGS, fixed on, but not including studs or grounds, per ft. sup.	0	0	6
Plaster board, per yd. sup. . from	0	1	7
PLASTER BOARD, fixed as last, per yd. sup. . from	0	2	8
Asbestos sheeting, 5/32 in., grey flat, per yd. sup.	0	2	3
DO., *corrugated, per yd. sup.*	0	3	3
ASBESTOS SHEETING, fixed as last, flat, per yd. sup.	0	4	0
DO., corrugated, per yd. sup.	0	5	0
ASBESTOS slating or tiling on, but not including battens, or boards, plain "diamond" per square, grey	2	15	0
DO., red	3	0	0
Asbestos cement slates or tiles. 5/32 in. punched per M. grey	17	0	0
DO., *red*	19	0	0
ASBESTOS COMPOSITION FLOORING : Laid in two coats, average ¾ in. thick, in plain colour, per yd. sup.	0	7	0
DO., ½ in. thick, suitable for domestic work, unpolished, per yd.	0	6	6
Metal casements for wood frames, domestic sizes, per ft. sup.	0	1	6
DO., *in metal frames, per ft. sup.*	0	1	9
HANGING only metal casement in, but not including wood frames, each	0	2	10
BUILDING in metal casement frames, per ft. sup.	0	0	7

Waterproofing compounds for cement.
Add about 75 per cent. to 100 per cent. to the cost of cement used.

Plywood			
3 m/m alder, per ft. sup.	0	0	2
4½ m/m amer. white, per ft. sup.	0	0	3¾
⅜ m/m figured ash, per ft. sup.	0	0	5
4½ m/m 3rd quality, composite birch, per ft. sup.	0	0	1½