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# THE ARCHITECTS' JOURNAL & Architectural Engineer

*With which is incorporated "The Builders' Journal."*

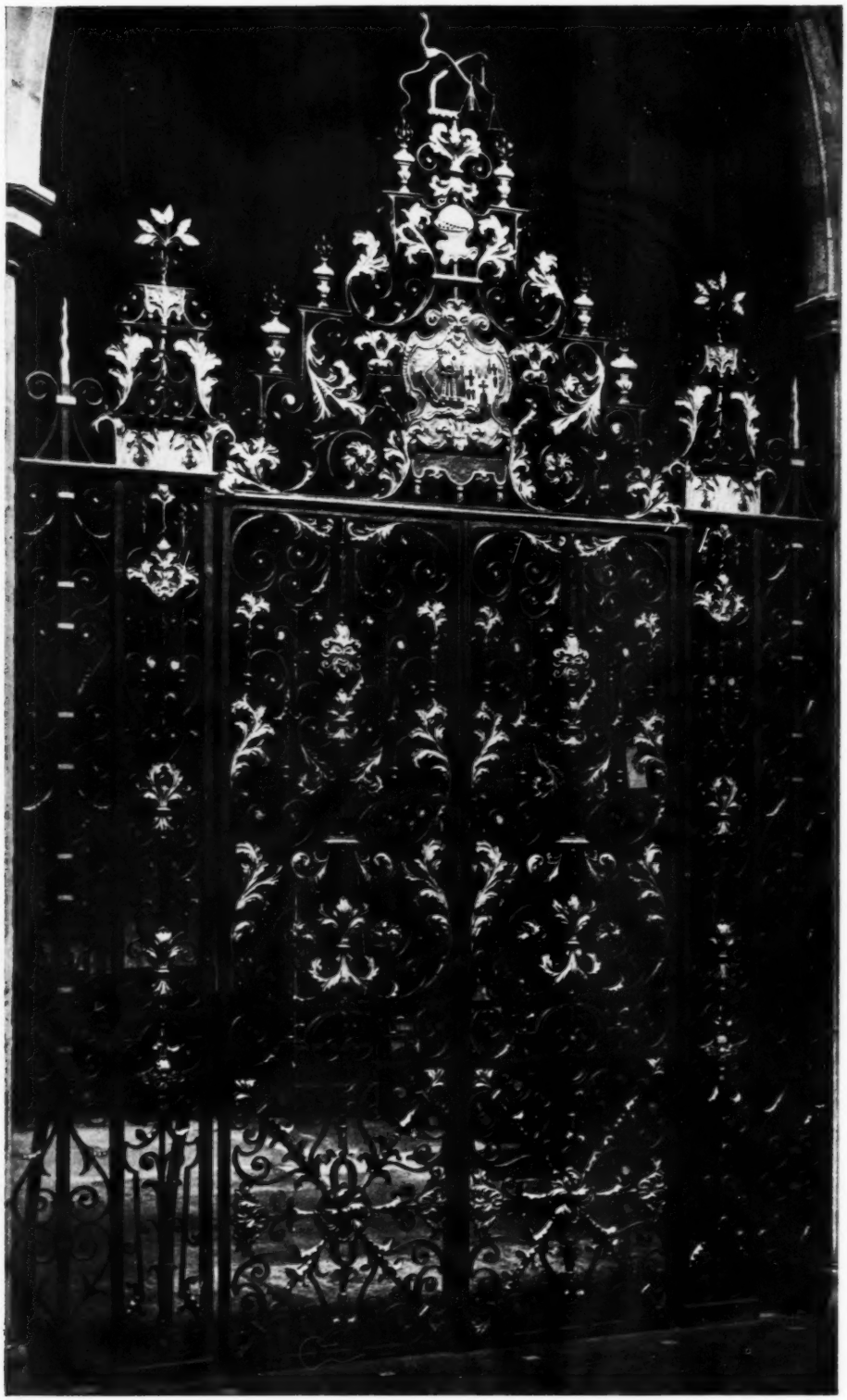

*FROM AN ARCHITECT'S NOTEBOOK.*

*"The northern light in at the dore shone,*
*For window on the wall ne was ther none*
*Thurgh which men mighten any light discerne.*
*The dore was all of athamant eterne,*
*Yclenched overthwart and endelong*
*With yren tough, and, for to make it strong*
*Every piler the temple to sustene*
*Was tonne-gret, of yren bright and shene."*

CHAUCER:
*"The Knight's Tale."*

27-29 Tothill Street, Westminster, S.W.1.

# Details of Craftsmanship. 28.—Wrought-iron Gates, St. Mary Redcliffe, Bristol



As the spire of Redcliffe Church is the most conspicuous architectural object in Bristol, so are these gates, wrought by Tijou, in the same church, the finest piece of craftsmanship in the city. Chatterton refers to the spire, though not to the gates, in his curious "Rowley" imitations.

THE

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# Architects' Fees for Housing Schemes

## Pigott *v.* Wandsworth Borough Council. Elkington *v.* Wandsworth Borough Council

THOUGH many architects were appointed to act for local authorities in connection with State-aided and similar housing schemes as far back as 1919 and early in 1920, there are not a few to-day —four or five years subsequent to their appointment—who are still striving to obtain a settlement of accounts—their own included—in connection with their appointments. Resulting from the delay and its consequent disagreements, two cases have recently been tried in the High Court of Justice, which will be considered later in detail.

The delay in the settlement of architects' accounts for fees has been due largely, if not entirely, to the issue on this subject of the various memoranda by the Ministry of Health, and to the interpretations put upon these memoranda by the Ministry, which have often resulted in conflict between architects and their clients the local authorities. In order clearly to appreciate the position we must pause, and take a retrospect of our subject.

As early as September, 1919, the R.I.B.A. published a scale of fees to be applied to housing work, and this scale received the approval of the Ministry of Health, the Board of Agriculture—controlling small holdings, etc.—and the Scottish Ministry of Health. The scale is still published in the R.I.B.A. Kalendar. The committee who drew up this scale, the Council who ultimately put it forward to the general body, and the members of the R.I.B.A. who were present at the meetings which adopted and ratified it, considered (1) that if cottages were to be erected all over the country under the ægis of the Government in such large numbers as were then contemplated, architects were by their training best qualified to design them; and (2) that the considerable degree of repetition of designs, which it was foreseen would be inevitable, justified a lower scale of fees for this work than the long-established R.I.B.A. scale of charges. Looking back, I think, broadly, that both these points of view were justified. My intimate connection with the matter has, however, disclosed some glaring exceptions under both heads.

Soon after the publication of this R.I.B.A. scale, the Government Housing (Addison) Scheme was fully launched, and the Ministry of Health sent to all local authorities their General Housing Memorandum No. 4, setting forth a scale of charges for architects appointed by them—the local authorities—in connection with assisted housing schemes. This memorandum was agreed upon between the Ministry and the R.I.B.A., and followed the general lines of the R.I.B.A. scale, but was slightly modified in wording and other unimportant details, this being necessary to make it appear as a Government publication especially applicable to housing schemes.

In the light of experience gained, the Ministry of Health issued in July, 1920, and sent to local authorities, another memorandum on housing fees known as G.H.M. No. 31. This document was a revision of, and was to be substituted for, G.H.M. No. 4, for all appointments subsequent to its date. In certain cases local authorities went further, and arrived at an agreement with architects already appointed to accept the terms of No. 31 in lieu of No. 4. In the main the two documents agree, but the following clause, which appeared for the first time in G.H.M. 31, is a clear indication that at that early date difficulties had arisen regarding the proper meaning of the word "scheme" in regard to fees payable where two or more architects were appointed by a local authority:—

"The scales will apply to every scheme, although two or more architects may be employed. In any case, however, of a scheme for over 250 houses in which the local authority or public utility society proposes to employ a single architect or firm of architects, the Ministry should be consulted before any arrangements as to fees are made."

It should be mentioned that the Ministry called into consultation members of the R.I.B.A. and the Society of Architects, who co-operated in the drawing up of the above memoranda, and who approved them prior to issue.

So far as architects' fees were concerned these were the only documents issued up to the time the Addison scheme was abandoned by the Government, who then gave instructions to local authorities all over the country seriously to curtail or entirely abandon their schemes.

Soon afterwards it was discovered that neither G.H.M.'s 4 or 31 contained any specific reference to fees for abandoned work!

G.H.M. 4, however, contained the following important clauses:—

"The above scales of fees are intended to include all necessary duties of an architect and surveyor incidental to the carrying out of the work, including such duties as are involved in complying with the requirements of the Ministry of Health."

"The conditions of engagement of architects and surveyors shall be those which are customary in the respective professions; for example, generally, such as the conditions prescribed by the Royal Institute of British Architects in the case of the engagement of architects."

These clauses were considered by many architects to mean, or at least to imply, that their fees for abandoned work would be based upon two-thirds of the scale fees set down in G.H.M.'s 4 and 31. It is reasonable to suppose that the architects who negotiated with the Ministry G.H.M.'s 4 and 31 were under the same impression, or they would surely have dealt specifically with abandoned work in those memoranda.

The Ministry entirely disagreed, and forthwith again called into consultation members of the R.I.B.A. and the Society of Architects to assist in the preparation of a further memorandum dealing only with abandoned work on assisted housing schemes. This resulted in the publication and issue, by the Ministry, of G.H.M. 52. Unfortunately, for all parties concerned, this document was issued by the Ministry prior to its consideration by the members of the

R.I.B.A. or the Society of Architects at a meeting convened for the purpose. Meetings subsequently called to consider this memorandum resulted in both of the general bodies refusing to adopt it. Further representatives of the R.I.B.A. were then elected to confer further with the Ministry on the subject, and were given the power of plenipotentiaries to agree on behalf of the R.I.B.A. to an amended scale for abandoned work. This conference resulted in the issue by the Ministry of G.H.M. No. 61 as an amendment of G.H.M. 52.

A point of first-rate importance in all the above memoranda is that the architects in all cases were to be appointed by the local authority and not by the Ministry. The contract, therefore, in all cases was between the architect and the local authority, the Ministry being no party to it. It was, however, an interested party in the scheme so far as the local authority was concerned, whose scheme it was financing. For this reason the Ministry has taken a hand indirectly in the defence of both of the cases under review.

Regarding the case of Pigott *v.* the Wandsworth Borough Council. Mr. Pigott was appointed by the Wandsworth Borough Council in October, 1919, as its architect for the Magdalen Park Estate Housing Scheme, G.H.M. No. 4 being part of the contract between the parties. The number of houses in the scheme approved by the Ministry was 376, all of which were carried to execution. In addition to this scheme the Borough Council undertook two other schemes on different sites in their district, for which they appointed other architects.

Mr. Pigott, in due course, submitted to the Borough Council for payment his account in accordance with what he considered to be the true meaning and intent of G.H.M. No. 4, showing a balance of fees due to him amounting to £1,270. This account the Borough Council considered and recommended for payment, and in due course applied to the Ministry for a loan for the purpose. The Ministry, however, considered the amount to be excessive, and stated that it considered a sum of £139 only to be due (which sum was arrived at apparently on the basis of "pooling" the fees set down in G.H.M. No. 4 over the whole of the sites dealt with by the Borough Council through its various architects), stating the word "scheme" contained in the memorandum was considered to mean the whole of the scheme of any local authority.

The court held that such was not the true construction of the document, and that if it had been it would certainly have been an exceedingly misleading document to put before the architect. Mr. Pigott was, therefore, given judgment for the whole amount of his claim, with costs.

The point of view expressed by the Ministry has frequently been considered by architects, who have contended that as no such reference to "pooling" was made in G.H.M. No. 4 it was an unfair and unjust interpretation; and further that any reference to the matter in memoranda subsequently issued by the Ministry (see clause above quoted from G.H.M. No. 31)—even with the approval of architects as a body—did not make such a reference retrospective in effect, and could not, therefore, be binding on those architects who had entered into contracts under G.H.M. No. 4 unless, of course, an architect having a contract under G.H.M. No. 4, subsequently agreed to substitute for that memorandum a subsequent memorandum, and by so doing contracted himself out of the original document.

The case of Elkington *v.* the Wandsworth Borough Council involved entirely different matters of disagreement. Mr. Elkington sued the Council for the balance of fees amounting to £3,215 10s., which he considered to be due to him in connection with professional services rendered for the Council on the Furzedown Housing Scheme. This scheme had the approval of the Ministry to the extent of the provision of 400 houses, of which number, 153 only were erected, and the remainder were abandoned.

The original contract between the architect and the Council set down that the fees to be paid were to be in accordance with the R.I.B.A. scale. This was subsequently varied, in agreement with the architect, by substituting the scale of fees set down in G.H.M. No. 4, which memorandum, as I have previously pointed out, contained no specific reference to fees for abandoned work.

Mr. Elkington contended (1) that he was entitled to payment for abandoned work on the basis of two-thirds fees calculated in accordance with the scale set forth in G.H.M. No. 4, and (2) that in arriving at the fees due for services rendered he was entitled to charge 5 per cent. on the cost of the first twelve houses erected—which were more costly than the houses subsequently erected—instead of taking the cost of the first twelve houses as the average cost per house of all the houses erected, and so on to the end of the scale set forth in G.H.M. No. 4.

The Council contended with regard to (1) that the R.I.B.A. scale of two-thirds did not apply, and that the fees for abandoned work should be calculated on a *quantum meruit* basis; and with regard to (2) that the fees payable should be based upon the average cost per house of all the houses erected.

Judgment was given for the Council in principle on both counts, the judge stating that if the parties were unable to agree on the figures, the matter would be sent to an official referee.

The case at this stage was adjourned *sine die*, counsel for the plaintiff stating that he would like to consider whether or not he should seek the opinion of the Court of Appeal on the question of construction of documents in the case.

A scale of fees for housing work has for some time past been under the consideration of the R.I.B.A., and is at present before the Council for consideration. If approved by the profession generally, it is hoped that this scale will be approved by the Ministry of Health, and will take the place of all previous memoranda on this subject.

HERBERT A. WELCH.

## The City Churches Again

Approval has just been given by the Church Assembly to the Union of Benefices and Disposal of Churches Measure. The Bishop of London explained that "the primary object of the measure was not to pull down churches, but to make as much use as possible of the great endowments in the City." No reference, be it observed, to that unfortunate second part of the title—"and *Disposal of Churches* Measure." He asked them (continued the Bishop) to think of the forty-nine men who were bound by law to have a statutory service in a church every Sunday, and not a soul present. No reference, be it noted, to the week-day services and organ recitals, when the churches are crowded with people. This suggestion that nobody goes into the City churches will not do. Actually they attract, during the week, congregations greatly in excess of those that attend suburban churches on Sundays. From the point of view of usefulness alone the churches should be retained, while on historical and architectural grounds the case for preservation is overwhelming. This measure will have to be strenuously opposed when it comes before Parliament.

## The G.P.O. Site

Many big sites have achieved, by remaining empty, a distinction that they would not otherwise have had. There is the classic instance of the Piccadilly site in Manchester (part of which, by the way, is to be occupied by the new art gallery over which many architects are furrowing their brows just now). Then there is the Aldwych site, which has lately taken on a new lease of emptiness. A third example is the old G.P.O. site in the City, which lay derelict about a dozen years before anybody attempted to build upon it. At last a new building is going up upon the centre part of the site, and it is now announced that arrangements have been completed for the erection, upon the Cheapside end, of a composite block of offices, shops, and warehouses, from the designs of Messrs. Gunton and Gunton, at a cost of about £250,000.

# Suburbanity

By F. R. JELLEY, A.R.I.B.A.

IT is a well-known characteristic of apparitions that besides being of a very sensitive disposition, they are also extremely conservative in their habits. No one, for example, has ever encountered the Hampton Court ghost, except at Hampton Court Palace. And residents of Merthyr Tydvil are never likely to be favoured by visitations from The Little Old Brown Lady of Raynham Hall, except through the medium of the cinematograph.

Some years ago Mr. Goodhart-Rendel gave the readers of the JOURNAL a very entertaining narrative of his encounter with an apparition, well versed in the evolution and growth of London's suburban architecture, and possessing a comprehensive knowledge of its diversities. Unfortunately, Mr. Goodhart-Rendel's ethereal acquaintance appears to have belonged to an old-established family of North London spooks. It is unlikely, therefore, that it will ever be encountered south of the Thames. And although there are, doubtless, apparitions versed in architectural criticism who haunt the outer suburbs on the Surrey side, I must confess that I have never met any of them. So in a mood of gay adventure, and purely as an experiment, I selected a district that might reasonably be expected to harbour apparitions skilled in architectural matters, and doomed for some misdemeanour to haunt a countryside calculated to cause them occasional pangs of intense grief. For, at a time when great prominence is given to the discussion of such a subject as urbanity in its relation to architecture, it seemed a pity that the study of suburbanity should be so sadly neglected.

The road strayed in a casual manner out of the northern end of a residential suburb in Surrey. It turned aside with a sort of shudder from the vicinity of a railway line, and, darting straight up a long incline, disappeared on the brow of a hill fringed with cabbages. It was a well-cambered road, edged on each side with a wide grass border between footway and cartway, punctuated by occasional gas-lamps and telephone posts, and embellished at the end nearest the town with a magnificent cast-iron sewer vent crowned by a weathervane. Scattered at odd intervals along the road were sundry new detached residences, lightly chained by aerials to second-hand scaffold poles, and the last rays of the setting sun ricochetted off the lids of one or two highly galvanized hygienic dustbins and lit up the distant towers of the Crystal Palace. A gasometer, and the boiler-house chimney-stacks and water-towers of several lunatic asylums impinged upon the clear-cut sky-line, and in place of a curfew the warning bell of a remote tramcar jangled spasmodically.

"Here," thought I, "is a possible haunting-ground for restless and unhappy apparitions: disembodied spirits, perchance, of quick and accurate draughtsmen with some knowledge of design and town planning, but careless in life of the requirements of the Public Health Act, 1894. Here, without doubt, is displayed a concise record of suburban architectural achievement complete with all accessories since the years of the Great War. Here, surely, if at all, it will be permissible to emulate Owen Glendower and proceed to call spirits from the vasty deep." And, taking up a strategic position to the windward of the awe-inspiring vent-pipe, I was about to do so when a lamplighter approached, bearing his staff of office, and I promptly forgot all about apparitions.

"Evenings drawing in," said the lamplighter, "and all these new roads rampaging about here mean longer hours for the likes of me. Especially," continued the lamplighter, morosely, after a pause, "especially these half-baked roads. Pudden bags, I call 'em. Up one side and then back down the other I go every evening turning 'em on, and then up one side and back down the other again every morning turning 'em off."

"I expect you go up and down a road like this so often that eventually you get to know pretty nearly everything there is to know about it, and the houses along it, and the people who live in it," I remarked.

The lighter of lamps ignited a portion of cigarette from the end of his luminous pole, and inhaled deeply. "Everything," said he, in a solemn and impressive tone. "Everything. I remember when these was all lavender fields; when the road was made; when the drains was laid; when the gas was laid; and when every house was built, right on from the time when 'Chatsworth' was started."

"Chatsworth," I explained in amazement, "but surely you cannot be so old as that. And, besides, this is still Surrey, and not Derbyshire, isn't it?"

"Young man," retorted the lamplighter coldly, "when gas was connected up for 'Chatsworth'—fourth house on the left going up, you can't miss it—Roman coins was found in the roadway. Also oyster shells, and bones, probably 'uman. If you got nothing better to do with yourself walk up along of me, and I'll show you the exact spot."

I recollected suddenly the reason for my presence in the neighbourhood, and there and then decided definitely to abandon the quest of apparitions versed in architectural criticism, and to accept as a more congenial substitute the invitation of one with so profound a knowledge of local topography as this lighter of lamps appeared to possess. So I trotted along beside the lamplighter, and we approached the first house in the road. It was apparently a small-scale reversion to the type of design produced by those conscientious souls who faithfully adhered to the conditions when participating in pre-war open competitions for week-end cottages to cost £100. A mica flap ventilator sprouted up in the middle of the close-cropped front lawn, and flapped vigorously in the evening breeze.

"'The 'Omestead,'" said the lamplighter. "Oller walls and pebble dashing. Ex-orficer, R.E.'s, designed it hisself, but personally I can't say I care for it. If they'd built it a bit higher they wouldn't need to object to our lamp shining in their bedroom winders." He made a dash at the offending lamp and kindled it, and we forged ahead.

Several houses loomed into view on the right-hand side of the road. "One of Muntin's," observed the lamplighter with a certain pride of speech, nodding in the direction of the nearest edifice. "One of who?" I inquired, running rapidly over the names of our most prominent domestic architects in my mind. "One of who?"

"Muntin," shouted the lamplighter. "Muntin." "Ah, yes. Yes, quite. Yes. Mr. Muntin," I murmured apologetically and also deceitfully. "Oh, yes!" "Builds more 'ouses around here than anybody I know of," continued the lamplighter sternly. "Started putting that one up for hisself, he did, and then sold it before it was joist high, and started to build the next one for hisself, and sold that before the footings was in. . . ." The lamplighter walked so very rapidly, and spoke so very fluently in praise of Muntin, that little opportunity arose for a careful study of the actual examples of the work of this redoubtable local master-craftsman. From the remarks of the lamplighter, however, I learnt that the creations of Mr. Muntin enjoyed a certain reputation among residents in the district: that the name of Muntin displayed on a notice-board attached to any scaffolding was a guarantee that tar-paper damp-proof courses and cardboard ceilings were not to be found in that structure, and that the great man was withal a kindly man, who prospered in spite of his benefactions, and even threw an occasional commission to some small struggling architect. For it appeared that although Mr. Muntin did not work under the supervision of architects, he had been known to employ architects to work for him. And with the exception of "The Homestead," "Chats-

worth" and "Humpy Bung," the whole of the houses in the road were the work of Muntin in various phases. There was Muntin in brick and Muntin in rough-cast. There was Muntin in a kind of brick and rough-cast shandygaff. There was Muntin assisted by an architect, and Muntin unassisted by anybody. There was Muntin harassed by a very old lady client who had once attended the Royal Academy Schools. And, near the brow of the hill, were two Muntins in embryo gradually taking shape in the middle of a field and surrounded at the present time by derelict cabbages. The road was obviously an apotheosis of Muntin, and it seemed that any attempt at a comprehensive review of the work of this dominant personality was now impossible in the gathering dusk, and would necessitate a special visit on another occasion.

So I hastened on with the lamplighter, absorbing for future reference the intimate information that he seemed to be so well qualified to supply. We had long since passed the latter-day "Chatsworth"—a large brick-built oasis sprawling in a desert of crazy paving—and, during a brief pause in the lamplighter's panegyric of Muntin, I had betrayed an intelligent interest in the exact spot where gas-mains had displaced bones (probably human), coins, and oyster shells. The incomplete Muntins on the brow of the hill were quite close, and between them and ourselves was the end of the unfinished road, the last gas-lamp, and "Humpy Bung." There was barely time to realize the fact that "Humpy Bung" was a modern bungalow, and not an ancient earthwork, before the lamplighter made a vindictive dash at the last lamp in the road, lit it, executed a revolving movement, and started to retrace his steps.

"Why do the houses in this road of yours possess such inappropriate names?" I inquired of the lamplighter as we returned. "We will agree, for the sake of argument, that 'The Homestead' is undoubtedly a homestead. But are there really many ferns at 'The Ferns,' and if so, will nothing more important grow there? You yourself have already informed me that the name of the householder at 'Chatsworth' is one Snooks, an agent for the importation of coffee-beans in bulk. Is it likely, therefore, that he can delude even the dustman into the belief that he is the Duke of Devonshire? Who, what, or where was, or is, 'Humpy Bung'? And when a house is not situated on the ridge of a hill, why is it called 'Windyridge'?"

"My lad," replied the lamplighter, "in this country a man can't do as he likes, or live where he likes. He lives where he 'as to, and does what he 'as to, and if he likes to call his 'ouse after the sort of place he'd like to live in if he 'ad the opportunity, neither you nor I nor anybody else can stop 'im, although when this road's finished and took over the Post Orfis may try to. They'll come along and give 'em all a number like a lot of convicks, but that'll never stop 'Windyridge' from being 'Windyridge' first, and Number Umpteen a bad second. That's 'uman nature, that is, and there's still a bit of it left in these parts in spite of all this motor-bus and charabang business, not to mention aeroplanes and tramcars and such like. So good-night to you. . . ."

And the lighter of lamps plodded off in the direction of the bridge over the railway and was lost to view, leaving a trail of coal-gas Hesperides twinkling behind him in the suburban firmament.

The philosophy of lamplighters is a subject alien to the columns of a professional journal. As a substitute for the philosophy of apparitions it has obvious disadvantages, but in the present instance its inclusion may seem to direct attention to the change that has undoubtedly occurred since the Great War in the attitude of the average individual towards the speculative builder and his exploits.

The ordinary citizen when depressed by the perpetual postponement of Utopia can always find a certain relaxation by indulgence in satirical observations at the expense of other perfectly respectable members of the community. In the "good old days" the exploits of speculative builders were recognized subjects on which it was always permissible for anybody to indulge in jocularity. And a conventional conception of the speculative builder as a sort of comic Shylock was gradually evolved in the mind of the public.

The speculative builder might easily have appealed to popular opinion after the manner of his supposed prototype. He might have said, "If you prick us, do we not bleed? If you tickle us, do we not laugh? If you poison us, do not we die? And if you wrong us, shall we not revenge?" But, like Brer Rabbit, "he lay low and said

A SELECTION OF DESIGNS BY MUNTIN.

ECCENTRICITY (ABOVE) AND UTILITY (BELOW).

nuffin." He simply went on building. He covered acre upon acre with houses: detached, semi-detached, demi-semi-detached, and not detached at all. He studied the fashion in houses with far greater success than betting-men study form in racehorses. For example, if people demanded half-timbered gables, he gave them what they believed were half-timbered gables, and accepted as half-timbered gables, without using more than half the timber that is generally used in any bona-fide half-timbered gable. And all the time the people who were laughing at the shoddy vulgarity of the speculative builder were really laughing at their own shoddy vulgarity. For the speculative builder was merely giving the public what it wanted. As a professional builder of houses for prospective purchasers, he would have been a fool to build anything that had little or no prospect of attracting a prompt purchaser.

Now that the supply of houses is insufficient to meet the demand, the speculative builder is taking his revenge in a manner both unconventional and undramatic. For, at a time when anything enclosed by four walls and a roof is accepted with acclamation by a nation of house-hunters, the speculative builder is producing structures that are neither shoddy nor particularly vulgar, thereby throwing the onus of his perpetrations of the past on to the public that demanded and accepted them, and proving that his work as a free agent must be placed in a somewhat different category to the type of edifice he evolved in the days when the supply exceeded the demand.

This fact is appreciated by lamplighters, but has escaped the notice of politicians who are busily engaged in theoretical arguments concerning such matters as minimum floor areas for sitting-rooms. On the other hand, it is true that in the road patrolled by the lamplighter the only houses that express individuality in any marked manner are the three houses not erected under the auspices of Mr. Muntin. A small house, a large house, and a bungalow, their names are respectively "The Homestead," "Chatsworth," and "Humpy Bung," and they may perhaps be reclassified as Utility, Pomposity, and Eccentricity.

Utility (see above) is certainly rather a pathetic little abode. It offended the critical eye of the lamplighter, but, in the year of disgrace 1920, only the boldest of souls could contemplate without apprehension the building of anything. Here, therefore, is frugality in construction, and with it truth unadulterated. The headroom is pared down to the minimum allowed by the local authorities. Rigid economy in walling keeps the ground floor at a level below that of the road. Chimney-stacks reaching barely to the ridge of the roof are capped with tall chimney-pots to make up the deficiency. There is no garage, and the installation of waterbutts has helped to decrease the initial cost of drainage.

Æsthetes may count this little home lacking in most of the attributes they are always looking for but rarely find. In whatever respect it is found wanting however, the Recording Angel will doubtless have been moved to treat it as he treated the oath of My Uncle Toby, and in writing down the deficiency, dropped a tear upon the word and blotted it out for ever.

There is nothing pathetic about Pomposity. It has a distinct flavour of Excess Profits, and is rather out of place in the road of the lamplighter. No illustration of Pomposity is appended, for its general features may safely be left to the imagination of the reader, who is doubtless acquainted with its innumerable prototypes in the mushroom suburbs of the great industrial centres of South Wales and the Midlands.

Here (on the oath of the lamplighter) are marble-lined bathrooms. Here, to judge by the number and variety of pipes with which the elevations are diversified, is a lavatory basin in every bedroom. A magnificent oak-panelled lounge hall, too, in which the agent for the importation of coffee beans in bulk may lounge with impunity after the heat and burden of the day, and a staircase of easy going, up which he may retire to rest without loss of breath. A garage, ample in size to accommodate the largest of cars. Main entrance gates, garage entrance gates, and a small wicket gate marked "Tradesmen," and enriched with an enamelled tin plate bearing the legend "No Hawkers—No Bottles—No Circulars." Miles of crazy paving, two cement statues of stout amorini both standing on one leg, and a wireless pole like the mainmast of an East Indiaman. No one would feel disposed to deny the rumour that this latter-day "Chatsworth" contains five grandfather clocks and the loudest loud-speaker in the district.

Eccentricity (see, again, above) stands near the brow of the hill, a kind of beacon of revolt against the traditional conception of the Englishman's home as a place on the ground floor with the bedrooms upstairs, and a reversion to the ancient precedent set by Diogenes and other dwellers in a single-story abode. It has standard steel casements fitted with easy-cleaning hinges to wood frames, and the storm-shutters are constructed of wide and wobbly elm-boards with massive iron strap hinges and wall hooks. The entrance door is also of elm, studded with iron nails, and equipped with a Brobdingnagian Norfolk latch and a lion's-head knocker. The walls are finished with the roughest of rough-cast, the roof is of pantiles, and one of the chimneys smokes badly if the galvanized iron embellishment recently added is to be believed. With the exception of the door and window furniture (which is oiled) all external ironwork is painted a cheery blue colour. Internally, it is said, the beams in the ceilings are wrought with an adze. Wherever possible wooden pegs have been used instead of nails, and the crudity of electric light bulbs is disguised by horn stable lanterns. In the gentlest breeze dark-blue curtains blow out horizontally from each casement, and doors bang loudly. Ducks and dogs promenade freely in the house and grounds at "Humpy Bung," and are constantly being ejected from the bedrooms.

In the road of the lamplighter the marked characteristics to be found in Utility, Pomposity, and Eccentricity are lacking in the works of Muntin, which express little individuality, and although the names of the latter are certainly of infinite variety, the structures themselves may all be reclassified under the heading of suburbanity. Indeed, it would not be surprising to learn that they reflect to a marked degree the lack of individuality among their respective occupants, and that from each entrance gate there emerges at 8.50 a.m. on each day of the week, except Saturday and Sunday, a male figure, clean-shaven, unobtrusively but carefully attired, and bearing a tightly rolled

umbrella, a pair of gloves, and a neat, small leather attaché case.

The works of Muntin stand up along the road of the lamplighter with an air of conscious rectitude as who should say: "Like our owners we are of sound and substantial stock, springing from good foundations, and reasonably free from physical disabilities. On occasion we may betray slight traces of vulgarity, but to err is human. We differ slightly in height, build, and appearance, but that also is very human. Like the position of our owners in life, our own position is also a shade above the level of the public thoroughfare. Each of us contains four bedrooms, and although 'Demerara' claims five, the fifth is a mere attic lit by glazed tiles inserted in the roof, and does not count. From the windows of all our best bedrooms an uninterrupted view of the Crystal Palace is easily obtainable, and although our fourth or maids' bedrooms are not equipped with fireplaces, the requirements of the local authorities as to ventilation have been met by the insertion of cast-iron air-gratings, a fact which is apparent to anybody who cares to inspect our side elevations. Each of us possesses a lounge hall with fireplace, and a tiled bathroom equipped with a porcelain-enamelled bath fitted with easy-cleaning taps. In the vicinity of the trades or kitchen entrance the presence of a large and almost undented galvanized dustbin, and 100 ft. super. of impervious paving on which to stand it, should be sufficiently obvious to convince everybody that a high standard of hygiene is maintained by the occupants of each of us. All our woodwork is properly primed, knotted, stopped, and painted four coats of plain oil colour in selected tints. The slight diversity in the sizes and shapes of our garages and wireless aerials is accounted for by the unfortunate fact that the sizes and shapes of motor-cars and wireless installations have not been standardized in this country. We stand on chalk soil, 30 ft. back from the footway, and possess frontages 50 ft. in width by 195 ft. in depth. We are assessed at £50 per annum, and, in addition to the usual rates and taxes, our owners pay a yearly surcharge of thirty shillings for supplies of water for garden use." Such is the message of the works of Muntin as they look down from their slight eminence, two steps above the public footway. Some, it is true, will prefer the utility of "The Homestead" or the eccentricity of "Humpy Bung." It is even credible that others may be attracted by the pomposity of the latter-day "Chatsworth." But from the preponderance of suburbanity it is perfectly obvious that the majority favour the works of Muntin. This is an age when standardization is rampant. And in the meantime Muntin is setting up a new standard of suburbanity. It is not a low standard, and it is not at present an inflexible standard. If you require a rough-cast finish instead of a brick finish, you may have it. If you are not quite certain what you want, Muntin will take your measurements, and you may then safely leave it to him to produce something that will fit fairly well and stand a good deal of hard wear. Or, alternatively, you may save yourself any trouble whatever by investing in one of Muntin's ready-to-wear 1924 models, with or without garage, absolutely waterproof throughout, in fast colours, and unshrinkable material, and cut with the dining-room a trifle wider than last year. It is perhaps only to be expected that in the Muntinian scheme for the standardization of suburbanity, the stock of patterns should be rather limited. There is, for example, a tendency to overdo the Broseley tile and cannon-end chimney-pot cut. There is a suggestion of boniness about the hips, and of fullness about the bay windows. And there is an undue accentuation of soil pipe and vent pipe and lavatory waste and puff pipe on side and back elevations.

Muntin is busily engaged in evolving the standardized home for the new generation of standardized citizens, the Babbitts of Great Britain. And should you ask him for something in the Elizabethan, or the Queen Anne, or the Late Georgian style, he will adopt very much the same attitude as your tailor would adopt if you desired him to make you a toga or a doublet. For speculative builders, like tailors, do not care to work in styles that are old fashioned or out of date. They care, even less, to work on second-hand material. And if it were left to Muntin and Snip, there would be no second-hand houses, and no second-hand suits. All old houses would be razed to the ground, and the bricks churned into new concrete.

The general public are unaware that a very useful organization, skilled in the art of cleaning, turning inside out, and renovating old buildings, has been in existence in this country for the past hundred years or so. It is known as the architectural profession. In the past it has also dabbled in a quiet and unobtrusive manner with the creation of new structures, but owing to the impending standardization of suburbanity, it is probable that in the near future its services in the latter connection will be almost superfluous.

The Chinese have a romantic tradition that in order to meet death in the most heroic fashion, it is necessary to commit suicide on the doorstep of one's adversary. By the time the standardization of homes and human beings has become law in this country it is possible that this quaint old Oriental custom will have spread westward. In which case the standardized doorsteps of suburbia will undoubtedly be littered with deceased architects!

# Architects' Own Homes.—9

## Mr. C. F. W. Dening's House at Stoke Bishop

IN most houses—unless the architect be a very masterful architect—there are usually two ideas, one emanating from the brain of its legitimate designer, the other from the client herself.

The architect will be found to have insisted on glazing-bars, but the client has got her own back by having them picked out in pink and green. The architect has managed to overcome his client's liking for a Tudor fireplace surmounted by an Adam overmantel, but the client has asserted her womanhood by having a built-in fumed-oak bookcase with ground-glass doors. Also, she has had her fling, with a vengeance, in installing the furniture, and there are cheap bamboo side-tables, fretwork china-brackets, and turned wood what-nots loaded with presents from Blackpool and curios that could only have been intended as gifts to the blind.

In Mr. Dening's house, near Bristol—a house designed and built for his own occupation—there is one idea only, and that is his own. And so the house is one with the garden, the furniture and decoration one with the house. Short of carrying the grand piano into the garden, it would be difficult to find two things which are not in accord.

Mr. Dening's house stands in the country, and can be reached in twenty minutes from the centre of Bristol. The accommodation includes a small hall, a music-room (20 ft. by 14 ft.) connected with double doors leading to the dining-room (14 ft. 6 in. by 14 ft.), a small study, a second hall with staircase, a garden entrance, four bedrooms, dressing-room, box-room, etc. A tennis court is also provided.

The house has 11 in. cavity walls, cement wood floated on the exterior for creeper, and the roof is covered with dun-coloured pantiles. The exterior woodwork is painted white, and the shutters are green.

All the interior woodwork is finished in grey, and the door and window fittings are in black.

The staircase is treated in a Chinese Chippendale manner, with temple tops to newels with gilded roofs. The lantern in the staircase view is an old Chinese one, with original glass and beaded chains, and the silk curtain has figures of varied colours upon a scarlet ground. J.

# Modern Domestic Architecture. 100.—The Spinney, Stoke Bishop, near Bristol

C. F. W. Dening, F.R.I.B.A., R.W.A., Architect



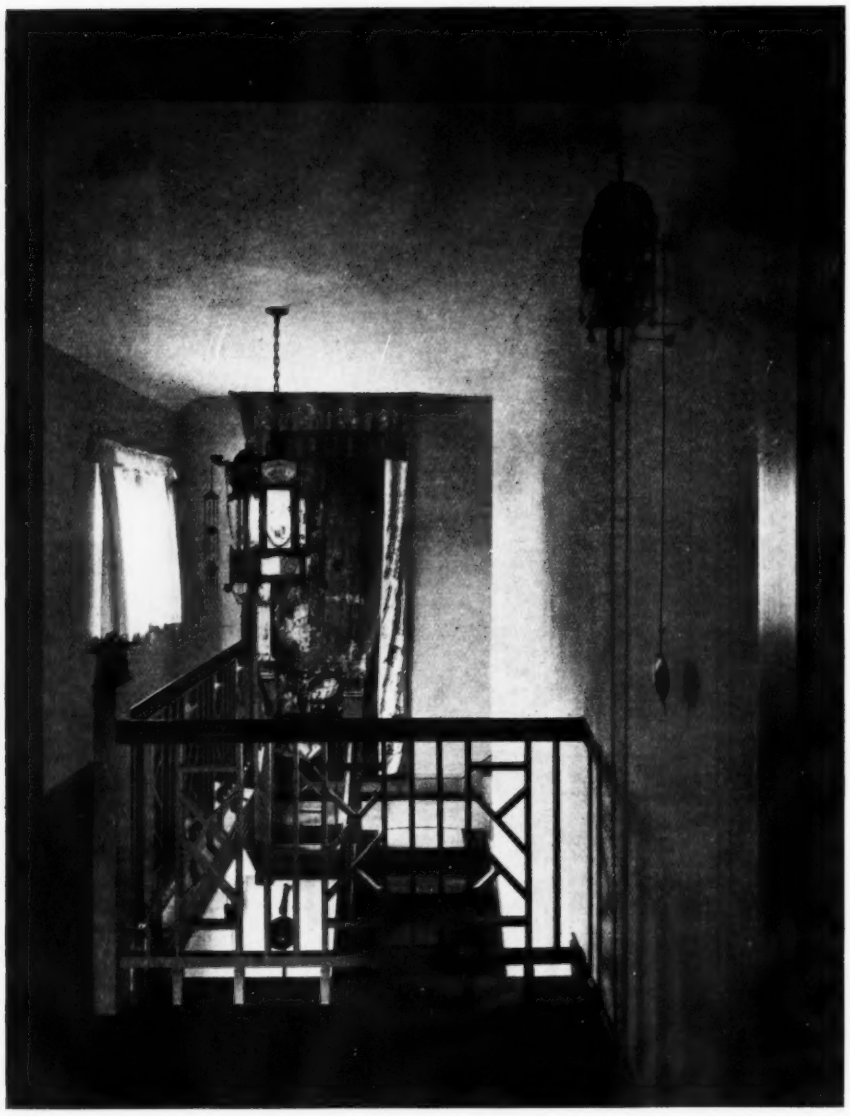
This is a house built by an architect for his own occupation. It is only twenty minutes from the business centre of Bristol, and yet is surrounded by pleasant country. The house has 11 in. cavity walls, cement wood floated for creeper. The roof is covered with dun-coloured tiles.

# Modern Domestic Architecture. 101.—The Spinney, Stoke Bishop, near Bristol

C. F. W. Dening, F.R.I.B.A., R.W.A., Architect

All the interior woodwork of this house, including that in the dining-room, shown above, is finished in grey, and the door and window fittings are black.

THE SPINNEY, STOKE BISHOP: THE MUSIC ROOM. C. F. W. DENING, F.R.I.B.A., R.W.A., ARCHITECT.



THE SPINNEY, STOKE BISHOP, NEAR BRISTOL: THE STAIRCASE.
C. F. W. DENING, F.R.I.B.A., R.W.A., ARCHITECT.

# Loud-speakers in Cathedrals

## A Recent Development

For a variety of reasons the great cathedral has always been a difficult place to hear in; perhaps the acoustics are bad; perhaps the preacher has an insufficiently penetrating voice; some members of the congregation are bound to be hard of hearing; and when all three defects are found in combination, the result, from the aural point of view, is, to say the least, distressing. Is this difficulty of hearing in a vast auditorium to be solved by the loud-speaker? This piece of apparatus has been used recently with great success at many huge gatherings—in the open air as well as within doors. The speeches of the King and the Prince of Wales at the opening of the Wembley Exhibition were heard perfectly by every one of the vast audience within the Stadium. Loud-speakers, or amplifiers, have been fitted in Liverpool Cathedral, with success, as Mr. Maurice Webb mentioned in the discussion on Mr. Hope Bagenal's paper on "Acoustics" at the last meeting of the R.I.B.A. Could they be successfully installed in St. Paul's Cathedral—that graveyard of the hopes of all ecclesiastical orators—and in other buildings with defective acoustics? Presumably not. Apparently if the acoustics are bad, loud-speakers will merely magnify an already unintelligible noise. Where, however, acoustics are good, though the auditorium is too vast for a single voice to make itself distinctly heard, it would seem that the loud-speaker could be introduced very effectively. The makers of this apparatus might well turn their attention to improving the tone of the instrument, which is extremely harsh to the sensitive ear.

# Dorland House, Regent Street

J. J. JOASS, F.R.I.B.A., Architect

THIS is a modern, fully-equipped office building of fireproof construction. The exterior is of Portland stone, and the floors of hollow-tile reinforced construction. Special attention has been given to the lighting and access to every part of the building, and the floors have been designed so that they can be used as one apartment or divided up into separate rooms.

There is a main staircase at either end of the building, with lift and marble-lined entrance hall, and the heating and ventilating apparatus and stores are all arranged in the lower basement, leaving the lower ground floor to be used as offices. This floor is particularly well lit, heated, and ventilated, with easy access at either end so that it forms one of the most valuable portions in the building.

The lower floors are occupied by the United States shipping lines, and the upper part mainly by the Dorland Agency, the owners of the building. The top floor contains a well-appointed residential flat, with housekeeper's quarters, etc. *Continued on page* 809.


A DETAIL OF THE ENTRANCE TO UPPER FLOORS.

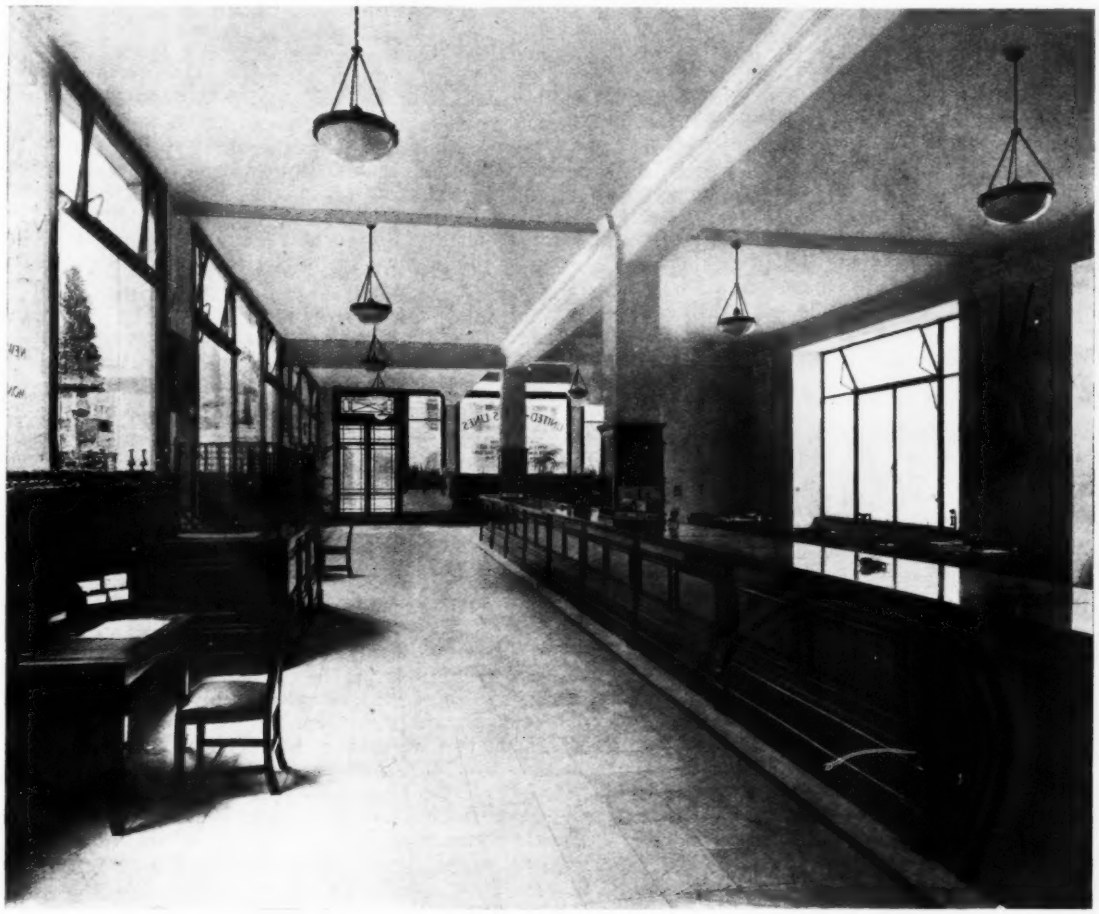

DORLAND HOUSE, REGENT STREET: DETAIL OF THE PRINCIPAL ELEVATION.
J. J. JOASS, F.R.I.B.A., ARCHITECT.

# Current Architecture. 254.—Dorland House, Regent Street : A General View

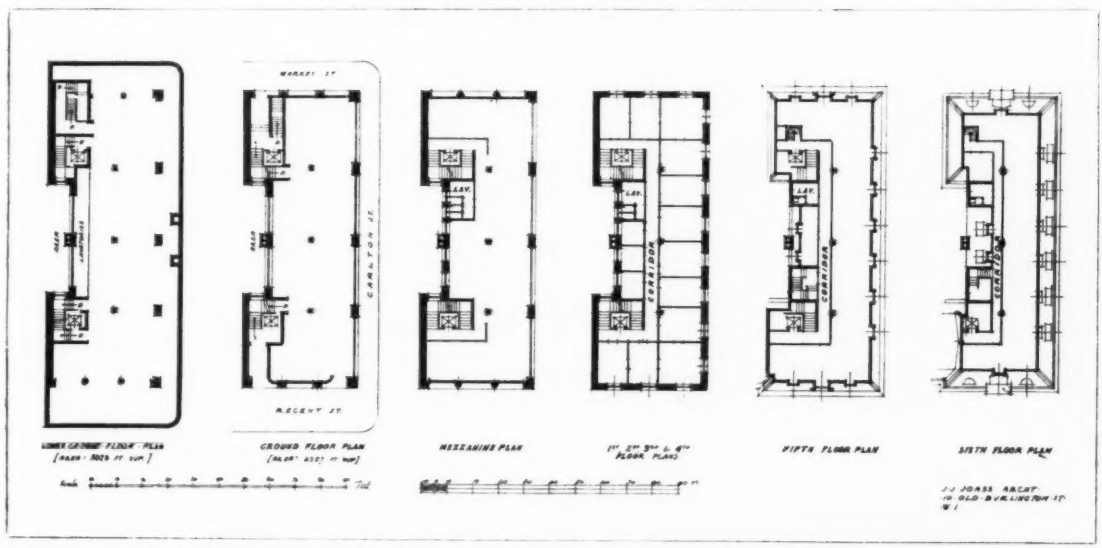
J. J. Joass, F.R.I.B.A., Architect

Dorland House is a modern, fully-equipped office building of fireproof construction. The exterior is of Portland stone. The building occupies part of the site of John Nash's old house, of which a wing and the forecourt still remain.

The general contractor was Mr. F. G. Minter, who was also responsible for the stonework, plumbing and sanitary work, plasterwork, special woodwork, and shop fitting. The sub-contractors were as follows: Lawford & Co. (asphalt); Shaws Glazed Brick Co. (glazed bricks); E. J. and A. T. Bradford & Co. (carved stone work); J. A. King & Co. (concrete blocks); Moreland, Hayne & Co., Ltd. (steelwork); Kleine Patent Fire-Resisting Flooring Syndicate, Ltd. (fireproof floors); Carter & Co., Poole (wall tiles); Roberts, Adlard & Co. (slates); The Crittall Manufacturing Co. (casements and casement fittings, gates, railings, handrails, balusters, etc.); Shanks & Co., Ltd. (sanitary ware and fittings); Roger L. Lowe & Co. (woodblock flooring); J. Whitehead and Sons, Ltd. (marble floors, decoration, and stair treads); Berkeley Engineering Co. (electric wiring and lifts); Carter and Aynsley, Ltd. (door furniture—locks, electric bell plates, etc.); Rosser and Russell, Ltd. (heating and ventilating); R. Anderson & Co. (lightning conductors).



THE GROUND FLOOR OFFICE.




DORLAND HOUSE, REGENT STREET. J. J. JOASS, F.R.I.B.A., ARCHITECT.

# Planning for Good Acoustics*

By HOPE BAGENAL, A.R.I.B.A.

OUR past president, Mr. Paul Waterhouse, in his address of November, 1922, referred to the problem of acoustics in the following words: "But, after all, the best buildings for sound seem to be those in which echo is made our friend and not our foe; buildings in which, as in old Exeter Hall, echo was timed to reinforce every syllable instead of fighting for dear life with the succeeding one, or possibly the next word."

I would like to carry forward the idea behind his thoughtful words and suggest how to regulate our dealings with *echo*. There is no reason, indeed, why that nymph, when given a good home, should answer back as is her habit near woods and on the edge of moist river lawns. Within four walls she can be tamed and instead of striving with her companion can readily be induced to reinforce his words in a well-timed assent. But much depends on the distance she sits from her looking-glass. She will use walls, floor, and ceiling if she is permitted, and dearly likes a good dome. But the art of the designer lies in confining her glances to certain surfaces.

This can perhaps be made clearer if we define echo simply as the image of a sound, and her mirror as any hard, smooth, rigid surface occurring anywhere in the building. Let us consider these mirrors in three main types of buildings. I propose to refer only occasionally to the theoretical side. Mr. G. A. Sutherland has dealt very clearly with the elements of the subject in his excellent papers published in the "R.I.B.A. Journal" in 1923. I want to apply the principles enunciated by him to some historical and modern types:—

*Open-air Theatres.*—The classic theatre has many vital lessons in acoustic planning. The Greek type was a very highly developed acoustic instrument, the Roman was less excellent. The excellence of the Greek theatre was due to three contributing factors:—

1. The sound was intensified near the source by a number of useful reflections.

2. The passage from speaker to listener was kept clear and free from obstacles.

3. The sound had a clear passage from speaker to listener, and reached the listener at a wide angle.

A hard rear wall some 10 ft. behind the speaker may make considerable difference to audibility in the case of a large hall or in the case of a pulpit. The usefulness of the stage floor as a reflector is one of the factors which make the difference between the opera house and the concert room. The upper galleries of Covent Garden rely greatly upon the stage floor, and it is well known that the speaking voice can be heard well there. A concert room would be improved by a clear, hard floor space round the singer or solo instrument. It is bad design to bring orchestral instruments or platform seats close up to solo performers.

The lesson of the classic theatre remains, however. It is this: that reflecting plus resonating surfaces *near the source of sound* will work wonders.

The mediæval church was the antithesis, in acoustics, of the Greek theatre. The enclosing masonry walls and vault acted as bright mirrors to all sounds. The congregation occupied only a fraction of the enclosing surfaces. The priests, like the classic players, chanted or intoned their words, but for a very different reason. The inter-reflections from all surfaces caused what is known as *reverberation*. The result was that intoning was rendered inevitable by the duration of each syllable. Also the intoning on a *certain note*, or in a certain tonality, reinforced by the church, was likewise rendered necessary. These acoustic conditions produced their own characteristic results in choral music and in intoned liturgy. The speaking voice from the pulpit never was and never can be easy under such conditions. In modern church design a compromise is necessary. It is possible to preach slowly with a reverberation of three seconds, yet this very slowness is often a matter of complaint by popular preachers. It is difficult to apostrophize or denounce clearly where there is a long reverberation. On the other hand, the choral Eucharist sounds well. The compromise is best effected by placing the pulpit with a back wall behind it and a reflector above at an angle of 45 deg. and extending, if possible, some feet over the pulpit, and by treating walls and vault with an absorbent plaster.

The best Anglican auditory is the City Church. Wren must have thought a great deal about acoustics.

The lesson of the mediæval church is that a long reverberation is necessary for the finest choral (unaccompanied) music, but that requirements for choral music and for the speaking voice are *mutually conflicting*.

In England we have developed a type of auditory as characteristic in its way as either the Greek theatre or the mediæval church, namely, the national committee-room or "House of Commons." Like the other two main types it has in course of time produced its own style of utterance, and it illustrates better than any other one important aspect of acoustic design.

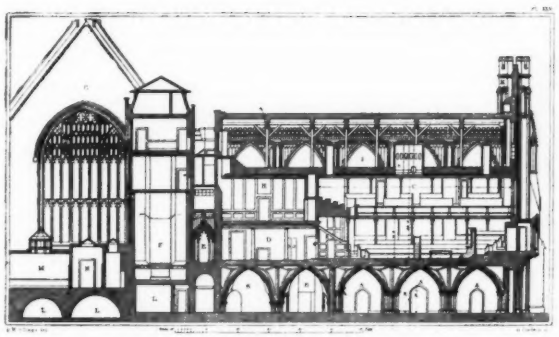
Its basic principle is debate; and debate has requirements very different to the requirements of stage plays or intoned liturgy. The finest and most characteristic English oratory I take to be those passages where a member of parliament is in the middle of a dialectical combat, the method of which is strictly defined by tradition, and in which he picks his way through a close argument as with drawn sword and the sharp eyes of enemies upon him. This quality of rapid debate distinguishes English oratory from the continental.

Now the nature of this kind of oratory is bound up with the building in which it took place. It was necessarily a small building. Burke spoke in St. Stephen's Chapel, which was, as fitted up for the House of Commons, some 60 ft. by 32 ft., or less, in area, and only 26 ft. 6 in. high. Also he spoke from where he stood when he had jumped to his feet. But he had half his audience behind his back.

The St. Stephen's Chamber admitted an extra forty-five members from Scotland after the Act of Union of 1705, but apparently it was not until the year 1800, when a hundred Irish members had to be accommodated, that plans for a new chamber were called for by a select committee in 1831. Soane, Savage, Decimus Burton, Blore and others submitted schemes. But after the fire of 1834 all these schemes were forgotten. The old Painted Chamber was fitted up for the Lords and the old Court of Requests, previously occupied by the Lords, was prepared for the Commons. Both these buildings were gutted by the fire, and the first temporary fitting seems to have been carried out by Sir Robert Smirke. Now this chamber in the old Court of Requests was larger than the chamber in the St. Stephen's Chapel. It was 80 ft. by 38 ft., and in the engraved view given by Brayley and Britton in 1836 † it looks some 40 ft. in height. This would have meant a longer reverberation, and acoustic complaints must have occurred, for alterations were undertaken. The view of the interior of the House of Commons, published in 1841 in a volume called "London

* Extracts from a paper read before the R.I.B.A.

† Brayley and Britton. The Palace of Westminster.



SECTION OF ST. STEPHEN'S CHAPEL AND CRYPT. 1834.
(*From Brayley and Britton's Westminster.*)

Interiors," shows what appears to be the same room lined with wood and with a low ceiling of a special shape. This is known as "the temporary House," and became famous for its good acoustic qualities. The lowness of the ceiling was apparently due to the ideas of Dr. Reid, the ventilation expert, in whose opinion "the cubic content to be filled by the voice should be as small as was consistent with the necessary accommodation. For that reason he had the ceiling of the temporary House made very low so that there should be not much space to be filled." (Evidence before the Select Committee, 1868.)

Since St. Stephen's Chapel had a chamber beneath it it was apparently necessary also that all succeeding Houses should have the same. The chamber beneath the temporary House was made to communicate with the chamber above by means of holes drilled in the wooden floor. This arrangement was used by Dr. Reid for ventilating. The fame of the House for good acoustics reached Jenny Lind, who on a visit to England insisted on visiting it and singing a song within it.

The acoustic excellence of this room, *thus transformed* (long remembered by members), undoubtedly caused the adverse criticism that immediately occurred when the Parliament assembled in 1848 in Sir Charles Barry's new House. Sir Charles Barry's biographer says: "It was conceived that there was difficulty in hearing, and members accustomed to the lowness of the temporary House immediately concluded that it was the height of the present building which was at fault. It was imperatively ordered that the ceiling should be lowered, and the only way in which this could be done was by the introduction of an inner ceiling with sloping sides cutting the side windows in half and ruining the proportion of the room."

The conclusions of members, however, were quite right. What was at stake was that facility for rapid debate which cannot exist with a long reverberation. Now reverberation (other factors being equal) varies directly with volume, and volume with height of ceiling. In 1850 a new ceiling similar in shape to Smirke's (though the effect of the shape was probably not understood) was inserted and the result was a great improvement. Barry's House of Lords maintains its original ceiling. Tradition says that the House of Commons, before the new ceiling was inserted, was worse than the House of Lords. After the alteration to the Commons all were agreed and are still agreed that the Commons is good, whereas the Lords is bad.

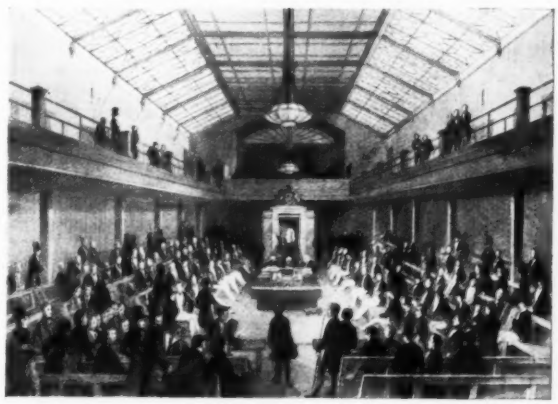
In the Commons the old habit of rapid debate at conversational pitch was rendered easy by the new ceiling. Complaints, however, arose, and still arise, from members in the back benches. The effect of the splayed ceiling is to concentrate sound on front benches, and since the important business of the House is carried on there, this is an advantage; but it does not help members in the back benches. This ceiling is constructed of wood and of glass, and is, therefore, not as efficient a reflector as if it were of hard plaster. If this were the case, and if the slopes of the ceiling were adjusted, the room could be made nearly perfect. Thus by thorough British methods of trial and error a very interesting and effective acoustic instrument has been evolved.

E. M. Barry, son of Sir Charles, designed a new House of Commons at the request of the Select Committee of 1868. The evidence of that committee was not lost upon him. He preserved the shape of the ceiling and actually lowered its height. The action of the splay in E. M. Barry's design is more valuable than in the existing House. It provides useful beams of sound from front benches to seats in their rear. If at any time the House of Commons is to be rebuilt, this excellent design should be carefully studied.

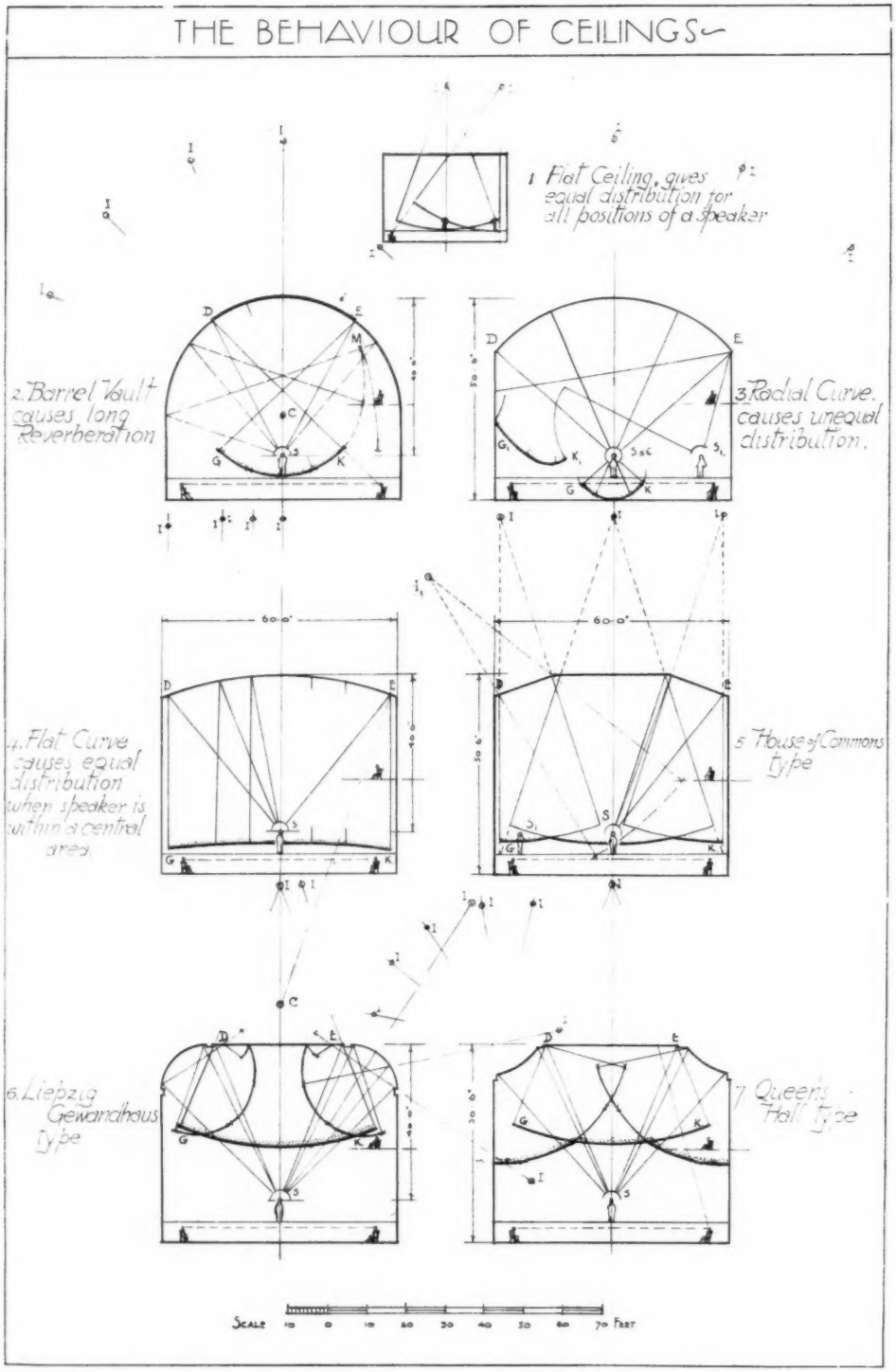
The lesson of the House of Commons is that a right acoustic tradition for buildings of this kind exists in England and should be followed. It is a useful tradition, both for hearing well and for doing business.

*Behaviour of Ceilings.*—On page 812 seven common types of ceiling are shown in cross-section, including the House of Commons type. (The rooms are 60 ft. wide, and the maximum ceiling height 40 ft. above the speaker's head.) The reflections from each are plotted for various positions of a speaker S, showing the amount of useful sound distribution by each upon the floor. Where there are curves their centres are shown marked C, and the position of these centres play an important part in the efficiency of the ceiling. The positions of listeners at floor and gallery levels are also shown. Fig. 1 (on drawing) is the flat ceiling, showing an equal distribution of sound over the floor, no matter what the position of the speaker. Fig. 2 is a barrel vault with centre C some 10 ft. above the speaker's head. The crown of the barrel transmits sound usefully upon the floor after it has passed through a focal area. The effective ceiling area is represented by the arc DE, which causes the wave-front GK. Sounds striking the lower portions of the barrel transmit wave-fronts represented by the arc KM, which strike the side walls and vault opposite, and are in their turn reflected back. This means that barrel vaults cause inter-reflections, and, therefore, make for reverberation, while only the crown reflects usefully upon the floor. Barrel vaults, therefore, are often useful where choral music and a long reverberation is required. They are invariably bad for the speaking voice.

In Fig. 3 a segmental ceiling is shown with the centre of the curve at the level of the speaker. S and C take up the same position. This form concentrates sound along the centre of the hall, and is bad for any purpose whatever. If the speaker moves to S, the beam is concentrated opposite him, as shown. The gallery level gets no sound. At least four cases I have recently had owe their trouble, or the aggravation of their trouble, to a ceiling of this kind. A ceiling should distribute sound evenly over the greatest area of seats, and if it concentrates sound in certain localities, it will necessarily weaken it in others. In this case,



THE TEMPORARY HOUSE OF COMMONS, 1841.
(*From London Interiors.*)




ACOUSTIC DIAGRAMS DRAWN BY HOPE BAGENAL, A.R.I.B.A.

Fig. 3, the great arc of the ceiling DE concentrates sound on the little arc GK. Therefore, the sound is intense in the centre of the hall and along a corresponding line on plan.

In Fig. 4 a segmental ceiling having a centre C 33 ft. below floor level is shown. Here the curve of the ceiling sends down a beam of sound evenly distributed over the whole cross-section. This form is safe and useful for all purposes where a platform position is used. The radius of the curve should not be less in relation to the height of the room than is shown here. The flatter the curve the more even the distribution.

Fig. 5 is the House of Commons ceiling slightly adjusted. It has much the same effect as the flat curve, Fig. 4. But both these types have this disadvantage, that if a speaker moves to S, near the wall, the beam is given a direction towards the opposite side, and does not cover seats on the near side.

Figs. 6 and 7 show a flat ceiling having respectively concave and convex coves, as in the case of the Leipzig Gewandhaus and the Queen's Hall. Both are useful when a platform position is used, and the extremities of the ceiling are, therefore, useless for reflecting. In the case of a concave cove the sound touching it, after passing through a focus, is widely diffused, and thus rendered harmless; in the case of the convex cove it is directly diffused, and by the shape of the curve can be given either a very wide diffusion or, as in this case, a diffusion just sufficient to be of use to the galleries.

*Modern Parliament Chambers.*—In the designing of modern parliament chambers the problem is to provide a plan semi-circular or semi-octagonal in shape to meet modern states of opinion, and yet still able to dispense with a tribune position for the speaker. The advantage of a tribune is twofold: Firstly, a speaker has all his audience in front of him, and, therefore, useful reflecting surfaces can be designed to his right and left; and, secondly, a single direction is given to his voice, to which he becomes accustomed. The large Continental Parliament houses, all of great height, are, indeed, acoustically workable, mainly because a central tribune position is used. Since without a tribune front bench speakers have a large number of listeners at their back, the ceiling should always be used as a reflector normal to every seat in the house; that is to say, flat, and not more than 35 ft. in height. A semi-circular or semi-octagonal plan can be made to supply also reflecting surfaces along the diameter behind the chairman.

Above all, it is necessary to design for the reverberation.

What are the sound-absorbing materials suitable for modern buildings and likely to be approved by architects?

*Absorbing Materials.*—We have seen that there exists a valuable British tradition in one class of auditory, namely, that for debate. But the important evidence placed before the 1868 Commission remained undeveloped except for E. M. Barry's design for a new chamber. Until the recent experiments, carried out under the B.R.B. of the Department of Scientific and Industrial Research, the American co-efficients of absorption were all that the architect had to go upon if he should desire to embody the House of Commons tradition in a building and to do his work with some precision.

The requirements for a good absorbing material are: 1. Cleanliness. 2. Durability.—The absorbents available for architects at present fall into two classes. First, the soft materials requiring a canvas screen, and, secondly, the plasters and tiles. Although I yield to none in my admiration of the American results, it must be clear to architects that direct experiment upon English materials and fittings is most important. American methods are not the same as ours, and all kinds of factors connected with building practice enter into the problem. The results of the Building Research Board experiments upon British materials *fixed exactly as an architect would have them fixed*, have already been most valuable. These experiments were undertaken at the request of the Indian Government on the suggestion of Mr. Herbert Baker on account of the work at Delhi. The experiments were carried out by Mr. P. W. Barnett, A.R.I.B.A., assisted by Mr. W. H. Glanville, B.Sc., and other members of the staff of the Building Research Station under the direction at first of Mr. H. O. Weller, M.I.C.E., Hon. A.R.I.B.A. (late director of Building Research), and now by Dr. R. E. Stradling, M.C., Ph.D., the new director. A room was found and treated in order that it might give in its initial state a very long reverberation. Into this room the materials to be tested were brought and their effect on the reverberation was noted. The first result was that an architect could enter the test chamber and hear for himself the result on the energy condition of the room of introducing the material suggested. The experiments were necessarily empirical, since a comprehensive investigation was not possible in the time available, but very great care was taken in calibrating the room and in taking readings. The tests were made to cover the musical scale at octave intervals. Some of the many results obtained can be stated roughly as follows:—

The most powerful absorbent of all (for pitch C4) which an architect can use is slag wool behind wire netting. The efficiency of this absorbent declines rapidly above C5, that is, for higher notes.

The next most efficient absorbent for C4 is Cabot quilt. This material is easy to apply, and is hygienic, and not harmful to the touch like slag wool. It is slightly resonant. (The brown paper envelope and the enclosed volume of air probably causes this resonance.) It improves the speaking voice conditions, but will not give the best results for chamber music owing to unequal reinforcing of tones. It was fixed in two layers on 2 in. by 1½ in. battens, 2 ft. 8 in. apart, and had thus a 1½ in. air space behind it.

The next most efficient absorbent is 1 in. hair felt. Felt is a material used very widely in America, and was found at Harlesden to make, in conjunction with wood, the best conditions for chamber music. But if felt is to be widely used in England it must be made really moth-proof and fireproof. The felt was also fixed on 2 in. by 1½ in. battens.

All these three materials require canvas screening. Of the wall panellings cork 1 in. thick framed in wood with an air space behind gives fairly high absorption for C4.

Celotex board was found to be an efficient absorbent and to give excellent results for chamber music.

Of the permanent flooring materials rubber carpet $\frac{3}{16}$ in. thick was found to be the most efficient.

Owing to the courtesy of Professor Paul Sabine, of the Geneva Laboratory, Illinois, experiments were undertaken upon an acoustic plaster using his recipe as a basis. These experiments produced interesting and useful results and are still in progress. An acoustic plaster was developed causing for C4 at least 20 per cent. reduction in the reverberation of the room. (This figure must not be taken to represent a Sabine co-efficient.) A surprising result of the experiments in this class was the efficiency of coke breeze blocks 2 in. thick. It is shown by the experiments that coke-breeze slabs having a finishing coat of acoustic plaster would make a very efficient absorber. In designing a building like a modern church or council chamber, where the audience factor is small compared to the volume, and where a short reverberation is essential, it may be necessary to cover all the wall area above a certain level with an absorbent plaster. In such a case an absorbent of this kind would be most useful.

In addition to the experiments at Harlesden some interesting experiments have been carried out by Major Tucker, of the Signals Experimental Establishment, Woolwich, upon various samples of acoustic plaster supplied by the Building Research Station. Experiments on sound transmission and on analysing by means of the ripple tank are also in progress at the National Physical Laboratory. The physicists are now interested in our problems, and it is for the architects to place their conundrums before them. Formative research will come in response only to a real demand formulated by architects. We spend our lives in experiencing the shapes and materials of buildings, and

we are the first to hear acoustic complaints. If we listen in buildings as well as look at them, we can make valuable acoustic observations, we can keep records of results, and if we are in touch with the physicists we can suggest the lines of research by which we ourselves are to be the first to benefit.

## Discussion

Dr. R. E. Stradling, the Director of Building Research, Department of Scientific and Industrial Research, in moving a vote of thanks, said that the work of the Board mentioned by the lecturer in connection with his department was very largely due to Mr. Bagenal himself. Mr. Bagenal assisted them during the experiments, and they were very much indebted to him for the work he had put in. He referred to the interest taken by the R.I.B.A. Science Committee in their work, and hoped there would be closer co-operation between the Royal Institute and the Board.

Dr. Alex. Wood, in seconding the vote of thanks, paid a high tribute to the acoustical researches of the lecturer.

Mr. G. A. Sutherland appealed to architects to make use of the information on acoustics which was now available. In architectural competitions assessors should lay down some simple acoustic properties that the building should possess. What we suffered from was not too little sound, but too long a sound.

Dr. G. W. C. Kaye said that it was the intention of the Board, with the support of the Institute, to throw themselves into the work with the utmost vigour.

Mr. Maurice Webb said that the lecturer's advice had been sought in connection with the building of classrooms with remarkable results. The classrooms were treated with canvas and cabot quilting, and the masters entering the classrooms from the noisy corridors were astounded at the quietness. This reflected great credit upon Mr. Bagenal. With regard to large buildings, he thought that amplifiers and wireless would solve half their acoustical troubles. Amplifiers had been fixed in the ceilings of Liverpool Cathedral, with the result that acoustical troubles were easily overcome.

Mr. Raymond Unwin said that he had heard public speaking from an amplifier at the League of Nations, and it was very difficult to tell whether the sound was coming from the speaker or the amplifier.

Major W. S. Tucker said that the lecturer had referred to an acoustical plaster which caused for C4 at least 20 per cent. reduction in the reverberation of the room. The speaker pointed out that during the experiments upon samples of acoustical plaster at the Signals Experimental Station at Woolwich they had found in some cases a reduction of as much as 40 per cent.

Mr. P. W. Barnett, referred to the work being carried out at Harlesden, and to a number of materials which he thought promising. He thanked the lecturer for his enthusiastic help.

Mr. H. M. Fletcher said that it was gratifying to hear the testimony of all the speakers to the work Mr. Bagenal was doing. One of the best evidences of this work was the room in which they were seated, in the acoustics of which he had helped Mr. Keen, and the result was very good indeed. The Institute would benefit if Mr. Bagenal would do something to the Council Chamber.

Mr. Bagenal, in replying to the discussion, said that the Institute would be glad to co-operate with the Building Research Board as they would mutually benefit by it. With regard to amplifiers he had an open mind. It should be remembered, however, that amplifiers simply increased loudness, and did not make for greater distinctness.

Before reading his paper Mr. Bagenal referred to the pronunciation of the word acoustics. He said that he was unable to give any definite ruling on the point, but quoted one authority, who said it was pronounced a-coo-stics in Scotland, and a-cow-stics in England. During the discussion both pronunciations were used. Mr. G. A. Sutherland, who favoured the coo pronunciation, said that both pronunciations were given in the New English Dictionary.


MR. HOPE BAGENAL.

*(From a caricature by H. de C.)*

## Science and Building

Dr. Stradling, in an interview, stated: "Some of the foremost scientists in this country are now at work. There is, for example, the committee that investigates the structure of building. Under modern conditions of heavy road transport, and therefore of increased vibration, the problems of the loading and strength of buildings need scientific investigation. The chairman of the committee is Professor C. F. Jenkin, who is Professor of Engineering Science at Oxford. Other members are Dr. Stanton, of the National Physical Laboratory, one of the most experienced engineering scientists in the country, Professor A. Robertson, from Bristol University, who did extensive work in the testing of timbers during the war, and Professor A. J. S. Pippard, of Cardiff, a specialist on the analysis of stresses in structure.

"This team of scientists are already applying their experience to meet certain exceptional difficulties in the building industry, an industry in which science has never played a large part, and which mainly works on certain somewhat vague rules handed down from past generations.

"Another problem of house construction is 'weathering.' In order to assist on the chemical and geological aspects of this problem, among others, a second committee of five scientists, four of whom are Fellows of the Royal Society, has been appointed by the Government. The chairman is Sir H. Jackson, formerly professor of chemistry in the University of London. The members are Professor C. H. Desch, professor of metallurgy at Sheffield University, Dr. A. Scott, the director of the Research Laboratory at the British Museum, Mr. J. A. Howe, of the Geological Survey, and Professor J. W. McBain, professor of physical chemistry at Bristol."

# Magazines of the Month*

## A Literary and Pictorial Digest

THE Athiot monasteries and Mount Athos—the Holy Mountain—forms the subject of an article of unique interest in the November issue of THE ARCHITECTURAL REVIEW. The author quotes the remark of a French writer, that a trip to Mount Athos is "a journey into the past." So, too, is the reading about it. "About all these structures there is an air of hoary antiquity. . . . So permeated is it with the spirit of the past that one's imagination carries one back many centuries, to the age of the Comneni and the Palæologi. . . .

"There being no roads on the Holy Mountain (says Mr. R. Baker, the writer of the article), all travelling has to be done on muleback, over very rough and stony bridle-paths. A trip along the coast of the peninsula in a boat is a pleasant change from such weary rides. The monasteries nearest to the southern extremity of the peninsula—St. Paul, Dionysiou, Gregoriou, Simopetra—are built on lofty cliffs rising straight up from the sea and, with their crenelated walls and battlemented parapets, resemble castles of romance. The sites they occupy being too cramped to allow of their expanding horizontally, they have made up for this deficiency by growing in height. The proportions of the churches have the same character of verticality: the *katholika* of Simopetra and Dionysiou are pillar-like in form.

"In these desolate regions, so difficult of access, amongst the rugged, storm-beaten cliffs which mark the extremity of the peninsula, one can here and there distinguish solitary cells perched high above the level of the sea. These are the abodes of hermits. One can only reach them in a basket, which the occupant of the cell lets down by a rope from the rocks. The life he leads hardly differs from that of his early Christian predecessors in the deserts of Egypt."

By the courtesy of the editor we reproduce a view of the Serbian Monastery on the mountain.

The War Memorial Chapel, Mount St. Mary's College, Chesterfield, designed by Mr. A. Gilbert Scott, is also illustrated. The exterior is faced with small grey bricks, with Portland stone dressings and special Italian tiled roofs, the dome being covered in copper. Old Dutch glass was used throughout the chapel. The exterior is at present incomplete, as the side chapels, sacristies, and ante-chapel are yet to be built. Brown Hornton stone was used throughout the interior, and the panelling is in Indian greywood, which matches the stone almost exactly. The benches are of teak, and are entirely the work of one man, being made by Mr. Tom Rushton, the college carpenter, without any assistance whatever. The decorative frieze was gilt solid, with the ground darkened a deep brown, and the figures, etc., picked out in parchment white and gold. The colouring of the dome frieze is reversed, the ground being a toned white, with brown and gold cherubs.

The remarkable MASK magazine, which comes to us regularly from Florence, contains an article on "The Use of Gas in Theatres," by Wilkie Collins. In a foreword, by John Balance, we are shown how lighting affected the performance. "As the light grew strange, the audience wondered why it was that these actors were making such exaggerated faces; why so much paint was used on the faces; why such exorbitant gestures; why such loud voices. But the faces, gestures, and voices were no larger and no louder; it was merely that we spectators saw everything about five times as clearly. The old acting was being killed by the light. And as the light grew in force so did it force the

* All the above magazines and many others may be seen in the Reading Room at 29 Tothill Street, Westminster.

THE COURT OF THE SERBIAN MONASTERY OF CHILANDARI.

*(From "The Architectural Review.")*

FUR STORAGE WAREHOUSE FOR REVILLON FRÈRES, NEW YORK. CROSS AND CROSS, ARCHITECTS.

*(From the "American Architect.")*

old actor to curb himself; gesture became more and more 'natural,' dwindling till it ceased altogether; no more faces were made, and the art of suppression took the place of expression; reserved force was the thing."

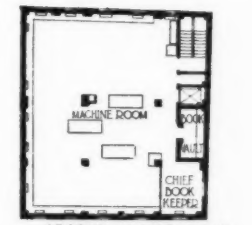
What is also of interest in the October number is the announcement that the MASK is going to issue reduced facsimiles of plans of three or four large cities in the eighteenth century. The first plan will consist of thirty full-page plates showing the City of Rome in 1748.

THE AMERICAN ARCHITECT AND THE ARCHITECTURAL REVIEW gives illustrations of the fur-storage warehouse of Revillon Frères, New York City.

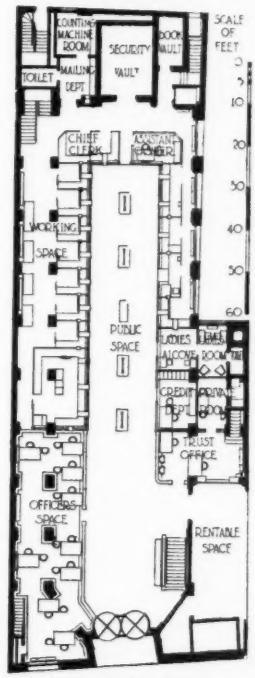
To design a storage warehouse may appear to some as a rather prosaic undertaking, but in fact it is one that challenges the skill of the designer as completely as the designing of any other kind of structure. Warehouses are divided broadly into two classes; those used for dry storage and those used for cold storage. A dry storage warehouse usually consists of lofts with windows in the exterior walls of a size and number dictated by the particular kind of contents to be stored. Some dry storage, however, such as furniture, does not require any exterior windows for the introduction of daylight. Cold storage warehouses, such as are used for the storage of furs or perishable goods, do not have any windows for the reason that the admission of daylight is not necessary, and for the further reason that the use of windows greatly decreases the effectiveness of the insulation of the outside walls. The peculiarity of this type of building is the entire absence of windows which naturally requires an architectural treatment vastly different from that of the ordinary building. The absence of openings in the exterior wall offers no reason for the

MOUNT ST. MARY'S COLLEGE CHAPEL, FROM THE SOUTH-EAST. A. GILBERT SCOTT, ARCHITECT.

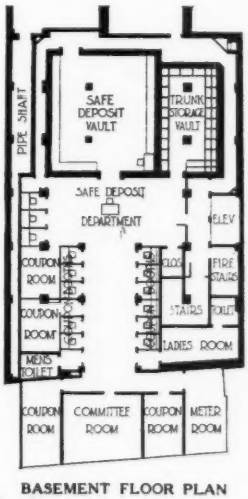
*(From "The Architectural Review.")*



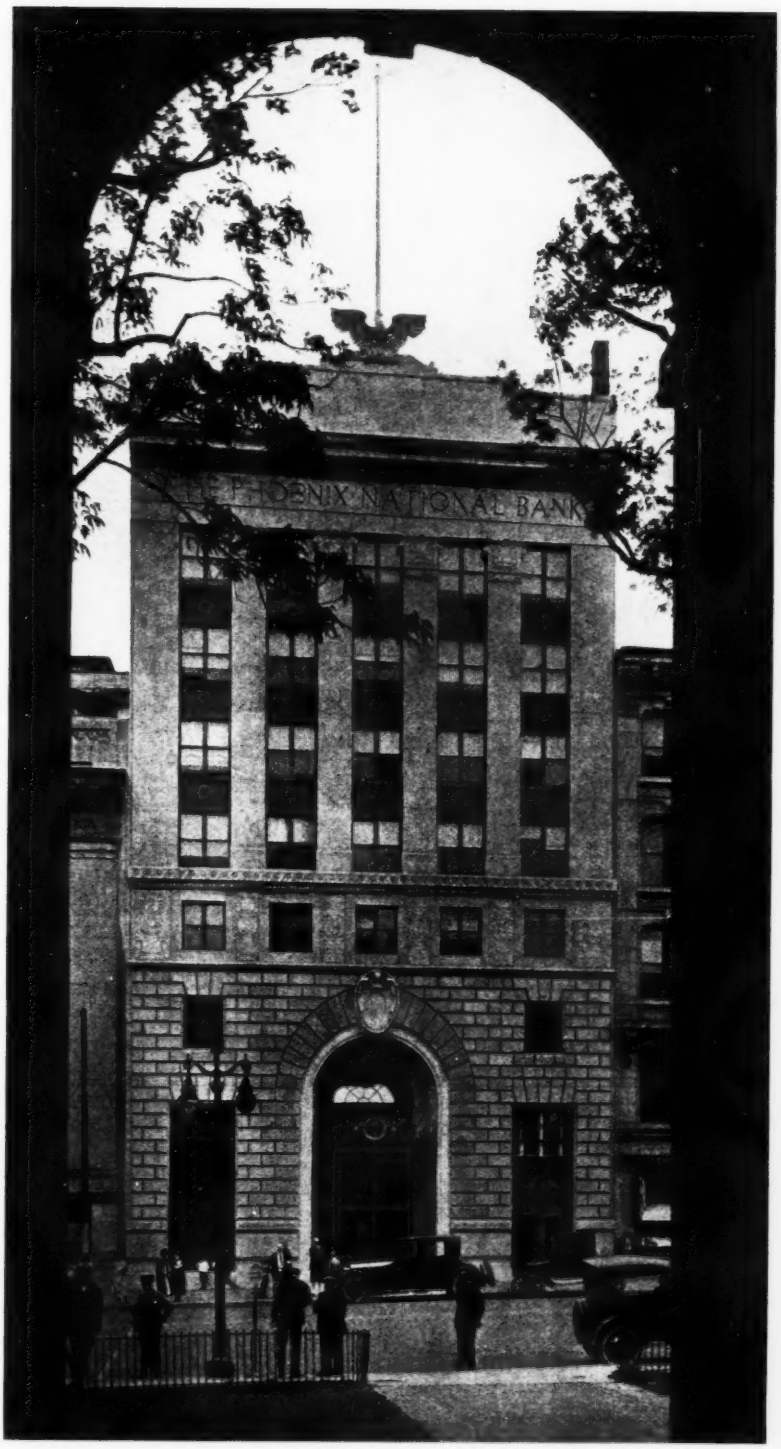

SECOND FLOOR PLAN




MAIN FLOOR PLAN



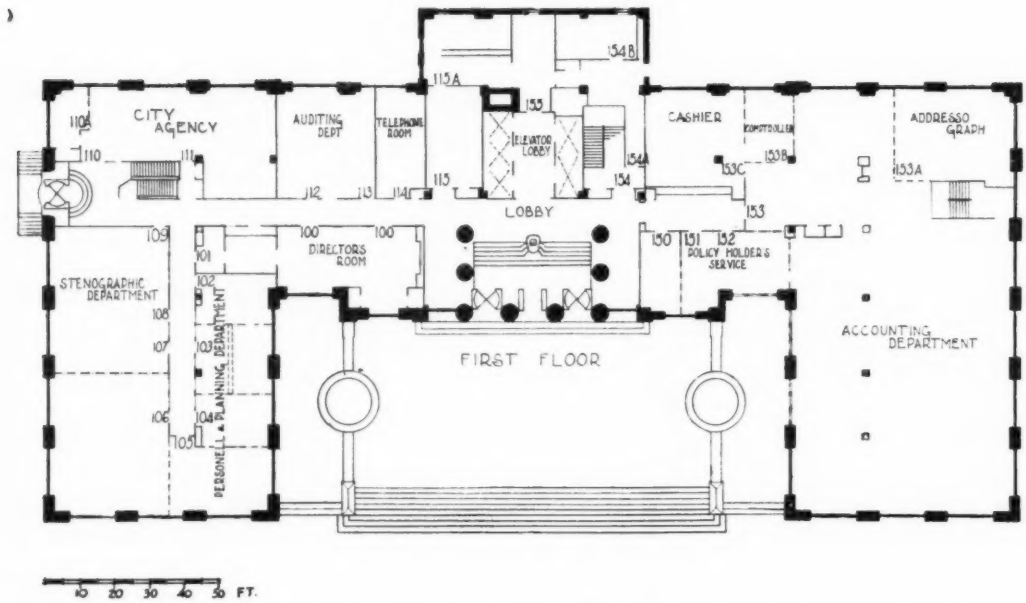

BASEMENT FLOOR PLAN




THE PHOENIX NATIONAL BANK, HARTFORD, U.S.A. DENNISON AND HIRONS, ARCHITECTS.

(*From "The Architectural Forum."*)

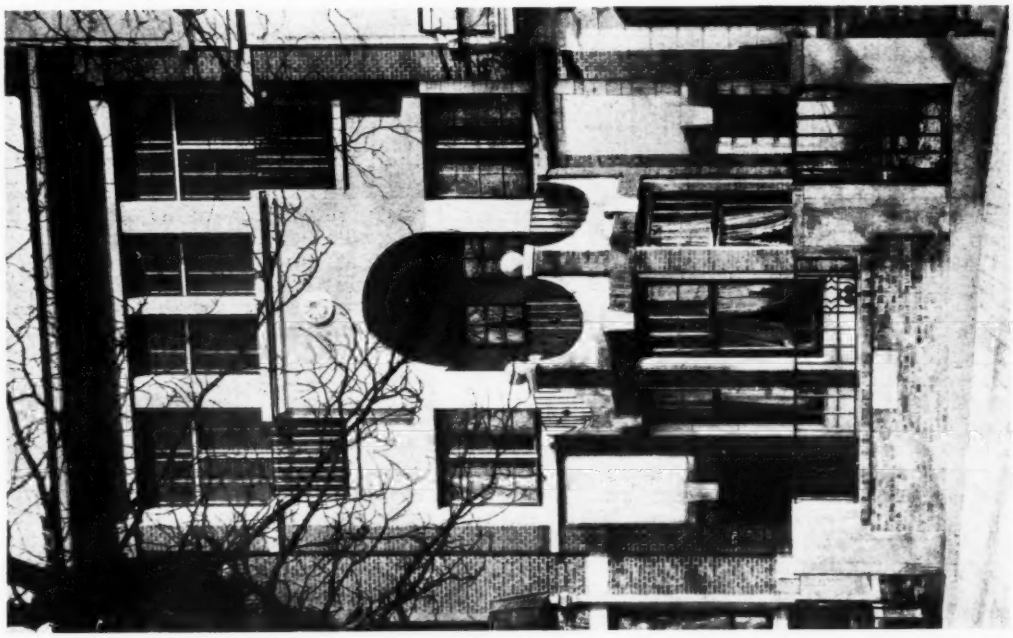
THE ENTRANCE FAÇADE.




LINCOLN NATIONAL LIFE INSURANCE BUILDING, FORT WAYNE, INDIANA.

BENJAMIN W. MORRIS, ARCHITECT, THOMAS H. ELLETT, ASSOCIATED ARCHITECT (DESIGN), JOHN F. BACON, ASSOCIATED ARCHITECT (CONSTRUCTION).

(*From "The Architectural Record."*)



NO. 370 MAISON AVENUE BRUGMANN, UCCLE.
F. VAN MEULECOM, ARCHITECT.

NO. 61 MAISON RUE EDITH CAVELL, UCCLE: DETAIL OF THE FAÇADE.
MARIO KNAUER, ARCHITECT.

(*From "L'Emulation."*)

employment of belt courses, ornamental panels, columns, pilasters, or other ornaments which are customarily used in connection with a windowed wall. The treatment of a blank wall, such as is found in this type of building, is reduced to two elements: colour and texture. The outlines of the building, involving proportion, are generally fixed by the conditions over which the designer has usually no control.

A problem of this kind, which has been very successfully solved by Messrs. Cross and Cross, the architects, is that of the new storage warehouse of Revillon Frères located at Thirtieth Street and Eighth Avenue, New York. Approximately square in plan, this building is eight stories and a basement in height. The two lower stories are built of Indiana limestone without embellishment except at the main and only entrance on Thirtieth Street. The exterior wall above the second story is built of a buff brick and is diapered by lines formed by slightly projected headers. In the third and eighth stories there are large window openings and the wall spaces in the other stories are entirely blank except for certain small openings which are designed for a purpose which is explained later. This building, in respect to its colour, is most satisfactory, and its simple lines and the sturdy character of its construction create a sense of security and protection which is so essential to a place where valuable things are stored. The reason for the particular planning of the building is apparent when the various processes and the work carried on therein, are explained.

The cold storage rooms are located in the several stories between the third and eighth floors. They are arranged in large compartments. Entrance to the cold rooms is made through a vestibule and a corridor, which interposes several fireproof, refrigerator doors. Each room can be individually surveyed through a peep hole by means of which the condition of the room can be observed without opening the door and thereby raising the temperature. The air in these rooms is constantly maintained at the proper temperature found to be best adapted for the storage of furs. This temperature is secured by circulating cold air through the storage rooms. The air is cooled by passing it through an enclosure in which are installed brine coils through which the air is blown. The moisture in the air is removed by passing it about the brine coils upon which it is deposited in the form of frost. In this way, perfectly dry, cold air is circulated through the storage rooms without any possibility of ammonia or other deleterious gases being introduced which might possibly injure the garments. An air-cooling apparatus is installed on each floor where the cold storage rooms are located, and the cold air is constantly re-circulated. At the end of the season, as soon as a cold room has been emptied, a supply of fresh air can be obtained through the small openings which are placed in the exterior walls of the cold storage portion of the building.

A complete electrical burglar alarm system is connected to every door and window throughout the building. The fire tower doors are similarly equipped, so that the only possible way for a person to pass out of the building without causing an alarm is through the main entrance, at which a man is stationed who examines every package that is carried out.

The October number of THE ARCHITECTURAL FORUM illustrates the Phœnix National Bank, Hartford (Messrs. Dennison and Hirons, architects). Erected upon the site which this bank has occupied since it was founded in 1814, and in the very heart and centre of the business district of one of New England's historic cities, the building is, first of all, the home of an old and famous financial institution, and only incidentally a structure in which other forms of business may be conducted. This strong emphasis upon the building's character is expressed in the design of its façade, rather simply planned in the style of the Italian Renaissance, a great portal at the middle of the façade leading from the sidewalk through a vestibule, protected by massive bronze grilles of Renaissance design, into the great banking room, three full stories in height, which occupies the greater part of the area of the plot. To the left of this main entrance to the bank is a large window protected by a bronze grille which lights certain of the bank's departments, while to the right and balancing this window is the entrance to the elevators, which gives access to the upper floors of the building. Above this lower part of the façade, a massively designed basement of rusticated limestone upon a granite base, extend six additional stories, the windows arranged in bays and the walls between treated as pilasters which support a cornice. The entire exterior is simple and dignified, luxury being suggested by the excellence of materials and restraint of design rather than by lavish use of mere ornament.

The visitor enters directly into a great room, floored with marble, the walls faced with travertine, and having a coved ceiling decorated with ornament in relief, the ceiling incorporating a skylight which, with the windows facing the street, gives excellent daylighting to the banking room. Various departments are so arranged about three sides of a square and upon a mezzanine at each side that the centre of the large area is left open for public use, the marble counters or balustrades and the bronze grilles upon marble bases which separate these departments from the public area not interfering with the effect of space and openness which a room of such dignity should possess.

Upon the main banking floor are placed the departments with which the public comes into frequent and direct contact, such as receiving and paying tellers, the credit department, quarters of trust officers, etc., and a special department is provided for women patrons. Upon one mezzanine floor are placed the filing rooms, which it is desirable should be easily accessible from the working departments, and the large basement area is well arranged to provide spacious storage and safe deposit vaults, various committee rooms, coupon rooms, and booths for the use of patrons, and toilet facilities for men and women depositors. A part of the second floor is taken up by the machinery, which in most buildings is placed in a basement, where space is of small value.

The LONDON MERCURY November number is a notable one. Mr. Thomas Hardy contributes two poems.

## Housing with State Assistance

The following statement, just issued by the Ministry of Health, shows the position of housing schemes under the Housing, etc., Act, 1923, and the Housing (Financial Provisions) Act, 1924, on the undermentioned dates :—

I. Houses authorized by the Minister of Health up to November, 1924 :—

| | |
|---|---|
| To be erected by local authorities .. .. .. | 62,045 |
| To be erected by private enterprise .. .. | 109,513 |
| Total .. .. .. | 171,558 |

II. Houses included in Definite Arrangements, on or before November 1, 1924 :—

| | |
|---|---|
| Schemes of local authorities— | |
| Number of houses included in contracts or in approved direct labour schemes .. .. | 46,806 |
| Private enterprise— | |
| Number of houses included in undertakings given by the local authorities under section 2 (3) of the Act of 1923 and section 2 of the Act of 1924 .. .. .. .. .. .. | 77,645 |
| Number of houses approved by the Minister under section 3 of the Act of 1923 and section 2 of the Act of 1924 and included in contracts | 4,602 |
| Total (included in Table I) .. | 129,053 |

III. Building progress, at November 1, 1924 :—

| | Foundations completed. | Roofed in. | Total under construction. | Completed. |
|---|---|---|---|---|
| Schemes of local authorities .. .. .. | 10,025 | 8,875 | 18,900 | 11,567 |
| Private enterprise .. | 15,703 | 18,242 | 33,945 | 26,784 |
| Total houses (included in Table II) .. .. | 25,728 | 27,117 | 52,845 | 38,351 |

NOTE.—Tables II and III. For forty-five local authorities, from whom returns for November 1, 1924, have not yet been received, the numbers included above are taken from the previous month's returns.

# Contemporary Art

*"The Most Eminent French Painters of To-day."*

It would be a mistake to fasten on to Giotto and other earlier masters the responsibility for the strange riot of modernity now taking place at the Lefèvre Galleries; it is much nearer the truth to attribute it to after-war conditions, in spite of the fact that it began before the war. But the beginnings promised something less than what is now offered; they are here for examination, together with the results. There are canvases dating twenty years back, and there is one dated this year, which may be regarded as typical of the final development, for two decades are enough to establish a school. This type-work is called "L'Enlèvement D'Europe" in the catalogue, which notes that it is signed "Dufresne." It is 65 by 75 in., and is crowded with men and women and ships in a strange and unreal landscape. Even the masters, Matisse and Picasso, come out less than well, although the latter is not represented by a late work. A comparison inevitably forces itself, on studying these works, between these and the English school of the same period. It is heartening to know that the young English school of painting is so far ahead of the young French school, but it is disappointing to find so little wool after the great cry of *les fauves*. I do not doubt the sincerity of their work; it is the accomplishment as authoritatively stated in this exhibition that is disappointing. There are, without doubt, beautiful things in the show, for where there are pictures by Marie Laurencin, Marchand, Derain, and Utrillo there cannot be an entire absence of capable work; it is the net result of nearly fifty works that is less than satisfactory. There is an exquisite "Tête de Jeune Fille" in bronze, by Charles Despiau, but what is it doing in this gallery?

*Modern British Paintings.*

The forty pictures at the Grosvenor Gallery are not modern in the same sense as the French at Lefèvre's. They state no problems and attempt no experiments. They are the work of artists content with statements of the orthodox in the current fashion of work. This show cannot be compared with the riotous canvases in the other place; it has no point of approach with them; it does not, in fact, represent the modern outlook of British art in the slightest degree; it is completely traditional, wholly calm, and immensely charming. But I should like to see fifty canvases by the really sound British rebels exhibited here to show what they can do. Here we have in the meantime

STEYNING CHURCH BY BERTRAM NICHOLLS.

MAIDSTONE. BY BERTRAM NICHOLLS.

a suave "Youth looking Upwards," by Glyn Philpot; "A Triana Gypsy," by Gerald Kelly, and a very good portrait indeed, number 31, by William Nicholson; and a little interior, "The First Day at School," by Grace Wheatley. All these are thoroughly English and sound, and there are others in that way, too; architectural things that please while they instruct. "The Regent's Canal at Camden Town," by Algernon Newton, is delightful with its very calm statement of low-toned shadows against subdued sunlight on common London houses, investing them with charm. There is the contrasting brightness and busyness of Fairlie Harmar's "Chelsea Creek," with its scattered buildings and bridges, and there is a further contrast in Oliver Hall's "Shores of the Tagus." All these pictures are so good that their virtues almost amount to unctuousness.

*Architectural Paintings in Oils and Water-colours.*

There is fine fat comfort, too, in the work of Bertram Nicholls at the Barbizon Gallery. At a first glance round it is abundantly evident that the artist loves architecture, and on careful examination, that his love is not only deep, but refined and respectful. His pictures are not ostensibly architectural, nor ostensibly decorative, but they have the essentials of both these qualities. I cannot think of a more satisfying scheme for the walls of a panelled room than half a dozen of these pleasant-toned, simply-designed, forcibly-expressed buildings taking their due place in nature, though nature adapted by a fine sense of composition and a subtle knowledge of the modifications of atmosphere. "Blythburgh Church" is a portrait with a sky background adapted for the subject; "Steyning Church" is a study in the massing of contrasted low tones, and it is only in "San Stephano, Volterra," that a near approach to naturalistic light on houses is made. Another Volterra subject, "The Houses of the Alabaster Workers," shows the welding of houses in formal landscape, while still another, "Vicolo degli Abbandonati," is all buildings projected in simple but imposing masses, also illustrated in the Cotmanesque study of "Maidstone."

Romilly Fedden, at Walker's Gallery, shows in his sixty drawings a very different idea of architecture. Instead of a steady building up of the subject, he dashes off a sketch of any building or group he comes across, in any style, and in any mood of the moment. In this exhibition he shows many moods, some more effective and some more careful and pleasing than others. Obviously he is a wanderer, and takes a delight in everything he sees, caring little for selection; working at random and hoping for a happy issue out of all his addictions. His "Paris" is the nicest architectural drawing, but a "Paris Quay," "The Canal, Carcasonne," and two or three drawings at Cette are also good.

At the Sloane Gallery is a fine collection of etchings and dry-points of birds and animals by E. J. Detmold, which provide an excellent occasion for the study of this accomplished artist's authentic work. In the same gallery are a number of small, delicate, and very charming dry-points of Burma and Mesopotamia by Charles W. Cain. KINETON PARKES.

# Correspondence

## How to Find Riceyman Steps

*To the Editor of* THE ARCHITECTS' JOURNAL.

SIR,—I had occasion to visit a factory in Cromer Street, King's Cross. Having read Mr. Arnold Bennett's delightful book, and seen Mr. Percy May's clever sketch in your issue for November 12, I decided, despite the rain and fog, to visit the historic spot.

As I was leaving the factory I asked the owner, "How do I get to Riceyman Steps?" "Riceyman Steps? Never heard of them, but I will call the chief clerk." He not only called this gentleman, but also the lady typist, the office boy, and the caretaker, each of whom was woefully ignorant as to the whereabouts of the place in question. I explained that they were the steps Arnold Bennett had immortalized. "Arnold Bennett, who's he?" I gracefully retired, and wandered towards King's Cross Station, where I met a police officer and repeated my question to him. "Riceyman Steps? Don't know them, but perhaps the constable on point duty over there might tell you." I journeyed "over there," and, although I strongly object, on principle, to interrupting anyone in such an important duty as regulating traffic, again asked the question. "Riceyman Steps? Do you mean—— Look out!" I "looked out," and narrowly escaped being run over by a motor-hearse.

I then wended my way towards King's Cross Road, and met a postman, who, I felt confident, would know the district. "Riceyman Steps? Never heard of them, the only big steps I know are *them*." "Them" were steps leading down to a place owned by the borough council, at the top of which was a plate "Gentlemen only."

I next inquired of a taxi-cab driver, who assured me that there was no such place as Riceyman Steps. "You mean the Duke of York's Steps," he said, and it was only by physical force that I resisted being pushed into the taxi and driven to St. James's Park.

I had almost given up hope when another constable appeared. "Yes, I know the steps you mean, but I cannot tell you where they are; but you ask that chap on point duty." "The chap on point duty" had heard of the place, and thought it was near the police station. Having arrived there, I met a lady, and again proffered my inquiry. "Ici, monsieur," she said, pointing across the road. And thus I was directed *by a foreigner* to my destination.

It was decidedly annoying to ascertain that this spot was merely a quarter of a mile from my starting place in Cromer Street, yet it had taken me an hour to reach it. For the benefit of any of your readers who may wish to visit this delightful little piece of old London, Riceyman Steps (now Granville Place) is next to No. 34 King's Cross Road—about half a mile from King's Cross Station.

R. STEPHEN AYLING, F.R.I.B.A.

London.

## Engineering Problems in Architectural Competitions

*To the Editor of* THE ARCHITECTS' JOURNAL.

SIR,—In a recent competition for a swimming bath a number of the competitors most carefully, but unsuccessfully, considered the engineering problems involved, and one naturally wonders if the assessor attached any importance to this side of the scheme.

In some designs the engineering details seem to have been guessed at by the competitors. Let me illustrate. The chimney stacks shown in various competition designs varied from 90 ft. high and 2 ft. 9 in. internal diameter to 38 ft. high and 2 ft. diameter, and one design shows a chimney 4 ft. internal diameter and 7 ft. outside at the top!

Then the size of the boilers varied from a quite small boiler to two 28 ft. by 7 ft. 6 in. Lancashires! The winning design omitted to show the brickwork on the drawing, which, perhaps, was all for the best, for had he shown it he would find that the entrances to the pump-house and filter-room were stopped up! The second winning design showed the boiler buried in a hole, and the third showed the flues abutting on the bath sides.

Does the assessor attach no importance to plant lay-out in these cases?

Anything from a quarter to one-third the cost of a swimming bath goes in the engineering plant, and it is surely deserving of more attention on that ground alone. Furthermore, the whole object of a bath is nullified if the user is not given a well-filtered and well-sterilized bath-*water*. Give me a bath with really clean water in a wooden tub to a swim in a bath made of solid gold with germ-infected water! How can one ensure that the water is clean if full attention is not given by the assessor to the engineering side? Will a room 16 ft. by 9 ft. house an efficient and adequate filter plant?

In the terms of the competition referred to stress was laid on the importance of running costs, but this seems to have been completely ignored in the reports submitted by the three winners.

Space does not permit me to discuss all the points—laundry, heaters, softeners, and the like, but enough has been said to make my meaning clear. In a case of public competitions it seems only fair that the assessor's report should be published, as it would be most interesting to see if he has any comments to make.

"ENGINEER."

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## Architecture in Town Planning

In his seventh lecture on town planning at Birmingham University, Mr. William Haywood, F.R.I.B.A., said that the appearance of city buildings was much affected by the character of the roads upon which they stood. The formal planning of the Place de la Carriere and its adjuncts at Nancy, and the free curves of the High Street, Oxford, were well-known examples of formal and informal road planning which were favourable to architectural expression. The interminable straight streets of cities arranged in chessboard fashion established one of many conditions unfavourable to the effective combination of roads and buildings.

An infinite range of nuances in design was made possible by the right association of roads and buildings. The setting of the Paris Opera House, for instance, was not without some dramatic effect; yet we knew that its designer, Garnier, bitterly resented its insufficiency; and without doubt a setting of different proportion and shape would vastly improve its values. On the other hand, the citizens of Ulm felt that the full effect of their beautiful cathedral was obstructed by adjoining buildings which, on removal, were found to be so necessary a foil to the scale and character of the church that they were at once replaced.

All people were affected directly or indirectly by their environment, and since the quality of buildings was so large a part of environment in town life, it was worth while to note that this quality was determined chiefly by the predominant character of architectural patronage, and less directly by the actual designers of buildings than was usually supposed. The magnificence of ancient Rome was a reflex of the political force of its dictators; the adventurous and soaring architecture of our old cathedrals was due to the religious fervour of the middle ages; the splendour of Renaissance architecture originated in the stately outlook of old aristocracies; and much of the present architectural force of Paris came from Napoleon III's appreciation of the great political significance of national architecture. Out of such patronage as this fine building was almost inevitable.

We lived in a democratic and commercial age, and the education of democracy to an appreciation of something more than mere existence had been a necessary precedent to any demand for great architecture. But commercial and democratic America now asked for fine building and were getting it; England, too, showed some signs of awakening, and wherever people had come to an appreciation of fine living, an adequate architectural expression in town structure would not be lacking.

# Book Reviews

*West Middlesex Regional Plan.*

Earlier in the year we reviewed the preliminary report upon the regional survey of West Middlesex. The final report has now been issued, and the recommendations contained therein have been passed by the committee. The fruition of the authors' labours now rests with the various authorities within the region, although the joint town-planning committee is to continue to act as an advisory body.

The report is divided into six parts, followed by an appendix and summary of recommendations; of these the most important deal with zoning, civic and shopping centres, and communications. Four main zoning characters are suggested: residential, special business, special industrial, and general business and industrial. The practice of zoning is, as yet, accepted in England with suspicion, but it is interesting to note how it is regarded with ever more favour in New York, where it has been in operation for seven years. During that period applications have been made to the Board of Appeals for alterations. At first the applications were in the direction of relaxation, latterly they have been in the direction of strengthening, and the latter have increased from 19 per cent. in 1917, to 336 per cent. in 1922 of the former. This indicates that in New York the property owners realize that zoning is an aid, rather than a hindrance, to increasing land values. It is essential, of course, that zoning restrictions, in the main, should not be too inflexible, for it is impossible to foresee what changes a district may undergo, and even natural conditions, which at one time seem to favour one sort of development, may later favour another. Thus, whereas at one time the presence of flowing water was the essential for factory development, now it is the presence of good railway facilities and cheap electricity. In West Middlesex the industrial area will naturally develop, at any rate for the present, along the Great Western Railway and the Grand Junction Canal.

We are glad to note that regulations of a somewhat stringent nature are suggested with regard to public garages. The undesirability of the erection of public garages at road crossings is emphasized on account of the inevitable traffic congestion caused thereby. On æsthetic grounds, too, objections might be urged. A public garage is an untidy building, although there is perhaps no inherent reason why this should be so, and town planning must aim at achieving order and street tidiness. The growing and convenient practice of installing petrol pumps adds to the confusion, and the suggestion that petrol-filling stations should be so arranged that the cars using them should stand on private property is a wise one. Petrol pumps at once suggest a new train of thought, and one which, although certainly comprehended by the term town planning, is rarely dealt with. In the egregious ugliness of these pumps is perhaps epitomized the *laisser faire* attitude towards public amenities which is, alas, so prevalent to-day. The pillar-box is, we suppose, the earliest of these public street erections, and it is still the pleasantest. The petrol pump is the latest and the ugliest. There is no reason why it should be ugly, but it is nobody's business to see that it is beautiful, and only a minority seem to care. Under the circumstances, therefore, is the minority justified in making a protest? We think it undoubtedly is, and that town-planning committees should do all in their power to support such protests.

We are glad to see that the report contains suggestions for the control of the design of contiguous shops. The individualistic ideas of shopkeepers are a potent source of street ugliness and, incidentally, if the shopkeepers but knew it, are detrimental to their own interests. We think that the authors are optimistic when they state that there should be no great difficulty in securing harmonious architectural treatment for adjacent shops where one large owner is concerned. We have both the L.C.C. in Kingsway and the Crown in Regent Street as evidence to the contrary. Is it to be expected that private individuals will succeed where such powerful bodies have failed? Nevertheless, the attempt should be made.

Those who travel in and out of London by road will know that its western approaches are among the best. The area included in this survey is particularly well served with arterial roads. The Basingstoke, the Bath, and the Oxford roads are all good, and now, in addition to these, there is the Chertsey, the Great West Road, and the Western Avenue. The Chertsey Road comes up from the south-west, cleaving a passage through Sunbury, Hanworth, Twickenham, Richmond, and Chiswick. This road is, moreover, to be a parkway, and will thus form a worthy approach to London. The Great West Road leaves the Basingstoke Road a little east of the Staines reservoir, crosses the Bath Road, and, passing north of Hounslow, rejoins it east of Brentford High Street, thus avoiding two areas of congestion. This road is now completed. The Western Avenue leaves the Oxford Road north-west of Uxbridge, and passing near Northolt and Greenford, joins up in North Hammersmith, thus avoiding Uxbridge, Southall, Hanwell, and Ealing. This road is 120 ft. wide, the others 100 ft. between fences, while the Uxbridge Road itself is being widened to 110 ft. The chief need of the district seems to be north and south communication, and this matter is very fully dealt with, and a schedule of roads has been drawn up.

We hope that those for whose guidance this report has been prepared will not omit to give due consideration to the suggestions contained under the heading miscellaneous, for here will be found reference to the desirability of promoting facilities for generating cheap electricity, to the desirability of controlling the untidiness of allotment grounds by the indiscriminate erection of unsightly huts, to the desirability of utilizing to the full the powers under the 1907 Advertisement Regulation Act, to the desirability of affording protection to buildings and places of historic interest, a matter in which lately public authorities have been earning for themselves a bad reputation, and the like.

With the report is included a large-scale coloured map of the district, and various diagrams. Finally, it must be remembered that the report is but a means to an end, and not an end in itself. We hope the end will eventually be realized, and that West Middlesex will develop along the practical, orderly, healthy, and beautiful lines which the report suggests.

H. J. B.

"West Middlesex Joint Town Planning Committee Final Report upon The Regional Planning Scheme." By Thomas Adams and Longstreth Thompson. Price 10s. 6d. net. West Middlesex Joint Town Planning Committee, Guildhall, Westminster, S.W.1.

*John Francis Bentley and His Work.*

John Francis Bentley and his work forms the subject of the seventh volume of the "Masters of Architecture" series, the author of the present monograph being Mr. W. W. Scott-Moncrieff. Quite properly, in a series which aims at educating as well as interesting the layman, the author has dealt not only with his subject, but the lessons to be drawn from Bentley's work and the conditions which affected it. In a few rapid strokes he sketches the growing materialism of the era of Victoria and the Prince Consort; the advent of the machine, and the modern mechanical copying from the model which replaces the individual invention and expression of the mediæval craftsman.

Mr. Scott-Moncrieff has definite beliefs: "Of one thing we may be certain, that where there is machinery there can never be true beauty," and again, "neither shall we ever achieve any real beauty out of a cinematograph theatre. . . ." This is all rather discouraging, and one feels that the writer by such statements has opened wide the door to controversy.

Looking at much of Bentley's work, one readily recognizes its sincerity and honesty, and the sensibility of which Mr. Scott-Moncrieff speaks. But, in all but his greatest work, are we not often face to face with the failure to achieve which often so cruelly accompanies the fervent wish? There are things in Beaumont College, and even at Holyrood, at Watford, which are not only not very good, but actually very bad. One cannot help thinking of Ruskin and Viollet le Duc, earnest followers of a fine movement, but unable to create in the image of the things they so earnestly loved. In the Gothic work of Bentley there seems to be something vital missing, and, as so often happens when "craft" is consciously introduced in the flesh but not the spirit, there creep into the detail little sentimental touches and a feeling of what one regretfully describes as "artiness."

There is no disrespect to the memory of Bentley in such criticisms. As Mr. Scott-Moncrieff suggests, he suffered under the handicap of his epoch, and in any case the giant conception of Westminster Cathedral lifts him clear of any suggestion of limited achievements. "If this work," says Mr. Scott-Moncrieff, "has not found favour with the general public, this is the greatest praise which can be bestowed upon it." He points out its two great outstanding qualities —its structural generosity and sincerity, and "a strange and unearthly suggestion of that beauty whose echo we can so rarely hear."

If, as the writer says, "men, more often those said to be uneducated, will instinctively take off their hats before the true spirit of man," we cannot believe that the great public remains untouched by the beauty of the Westminster Cathedral interior. Externally we must admit that the great structure is marred by excess of enthusiasm, and nearly every stretch of its wall surfaces is overwrought. But the interior, for all its new and unwanted mosaics, is Bentley's real monument, a hall of great and solemn impressions.

The production of the book, including the photographs by Mr. F. R. Yerbury, maintains the previous excellent standard of the series.

"Masters of Architecture Series," edited by Stanley C. Ramsey. Bentley, by W. W. Scott-Moncrieff. Ernest Benn, Limited. Price 10s. 6d. net.

## Publications Received

"The Story of Architecture Throughout the Ages." By P. Leslie Waterhouse, M.A., F.R.I.B.A. Price 6s. net. B. T. Batsford, Ltd., 94 High Holborn, London, W.C.1.

"The Cathedral Churches of England." By Helen Marshall Pratt. Price £1 net. B. T. Batsford, Ltd., 94 High Holborn, London, W.C.1.

"Structural Design in Steel-frame Buildings." By Percy J. Waldram. Price 12s. 6d. net. B. T. Batsford, Ltd., 94 High Holborn, London.

"Colour and Comfort." By John Gloag. Illustrated by Palmer-Jones. Price 7s. 6d. net. Duckworth & Co., 3 Henrietta Street, Covent Garden, W.C.2.

"Modern Practical Joinery." By George Ellis. Fifth edition. Price £2 5s. (postage 1s. extra). B. T. Batsford, Ltd., 94 High Holborn, London.

"Polychromy: Architectural and Structural Theory and Practice." By Leon V. Solon, with introduction by Ralph Adams Cram. The Architectural Record, New York.

## R.I.B.A. Council Meeting

Following are notes from the minutes of the last meeting of the Council of the R.I.B.A. :—

Architecture and Craftsmanship.—The following recommendations passed by the Art Standing Committee were approved by the Council :—

1. That an additional committee be formed, the purpose of which shall be to foster the best interests of the crafts connected with the construction, decoration, and equipment of buildings.

2. That the allied societies be invited to form local committees with a similar object in their districts.

3. That one evening in each Institute session be devoted to the reading of papers and discussion on subjects relating to craftsmanship.

4. That short lectures of a popular kind be arranged for, from time to time, at Conduit Street, and locally by allied societies.

5. That the Board of Architectural Education be invited to consider whether more can suitably be done to assist the understanding of craft processes and the right use of material in the education of students.

R.I.B.A. Visiting Board.—The reports of the following recognized schools were approved and ordered to be transmitted to the authorities of the schools: The School of Architecture, the Royal West of England Academy, Bristol; the School of Architecture of the University of Cambridge; the School of Architecture of the University of Liverpool; and the School of Architecture of the University of Manchester.

R.I.B.A. Examinations.—On the recommendation of the Board of Architectural Education a revised syllabus was adopted for the intermediate and final examinations.

Recognized Schools Medal.—On the recommendation of the Board of Architectural Education the medal for the best set of designs submitted at the annual exhibition of designs of students of recognized schools exempted from the final examination was awarded to Miss Elsie Rogers (School of Architecture, Manchester).

Archibald Dawnay Scholarship.—On the recommendation of the Board of Architectural Education the following awards were made: Messrs. R. H. Turner (Liverpool), £50 scholarship; A. C. Cameron (A.A.), £25 scholarship. Messrs. G. A. Burnett (Leeds), I. R. Erith (A.A.), A. C. Todd (Liverpool), grants of £20 each.

R.I.B.A. Scholarships at the School of Architecture, Cambridge.—The scholarships were awarded as follows: First year, Miss Norah Aiton, Girton (£35); second year, Mr. Edward Le Bas, Pembroke (£35).

The University of Leeds.—Mr. W. Alban Jones, president of the Leeds and West Yorkshire Architectural Society, and Mr. H. S. Chorley (F.R.I.B.A.) have been appointed as delegates of the R.I.B.A. at the coming-of-age celebrations of the University of Leeds.

The London Survey Committee.—A special grant of ten guineas was made in aid of the work carried on by the London Survey Committee.

The Architects' Benevolent Society.—The usual annual grant of £1 was made to the funds of the Architects' Benevolent Society.

R.I.B.A. Visits.—The members of the Architecture Club were invited to take part in the R.I.B.A. visits to buildings, etc.

Boards and Committees.—The following appointments were made: Messrs. L. Sylvester Sullivan and George Drysdale, Board of Architectural Education; E. J. Sadgrove, Royal Gold Medal Committee; L. H. Bucknell, Competitions Committee; and T. Taliesin Rees, Housing Committee.

Registration.—The following were invited to serve on the Registration Committee: Major Harry Barnes, and Messrs. Arthur Keen, G. C. Lawrence, Percy Thomas, W. Gillbee Scott, and J. Alan Slater, representing the R.I.B.A.; and Messrs. A. J. Taylor, Noel D. Sheffield, C. F. Skipper, L. Sylvester Sullivan, E. J. Partridge, and Thomas Wallis, representing the Society of Architects. The committee was given power to appoint, at their own discretion, a number of advisory members as representatives of the allied societies and of other bodies and interests affected.

Alleged Overcrowding of the Profession.—The following members were appointed to serve on a joint committee (with representatives of the Architects' and Surveyors' Assistants' Professional Union) to inquire into the alleged overcrowding of the profession: Messrs. Arthur Keen, Maurice E. Webb, and Francis Jones.

Retired Fellowship.—Mr. F. H. Tulloch (elected Associate 1889, Fellow 1902) was transferred to the retired Fellowship.

Fellowship.—Mr. H. S. Rogers, M.A., F.S.A., of Oxford, was elected to the Fellowship.

The Allied Societies.—The new draft by-laws of the Devon and Exeter Architectural Society were approved; the affiliation of the Burnley District Society of Architects with the Manchester Society of Architects was approved.

Pupils in Offices.—On the recommendation of the Board of Architectural Education the Council decided to recommend Members and Licentiates of the Royal Institute not to accept pupils until they have been registered as probationers, R.I.B.A.

# Societies and Institutions

*Sir R. Blomfield on Post-war Art.*

Pointed criticisms on post-war art were offered at Birmingham by Sir Reginald Blomfield, R.A., in his presidential address to the Midland Institute. He suggested that the hierophants of art were seriously off the track. Unkind people regarded the movements which succeeded each other with such startling rapidity, impressionism, cubism, significant form, non-representationism, and the deliberate avoidance of form of any significance whatever, as simply so much advertisement. He believed they sprang in the first instance from impatience with accepted methods, and from legitimate ambition to advance, but the pendulum of reaction had swung too far.

Jack was as good as his master, and his idea of showing it was to turn his back on accredited methods and shout his crude ideas in some unintelligible jargon of his own. Surely this was hardly the way to repair the enormous intellectual ravages of the war.

There was no rigid formula of art or canon of beauty, yet beauty differed from ugliness as light differed from darkness. No one knew better than the artist how far his work fell short of his inner vision, yet the work of interpretation was surely a noble one. It was not for the artist to cut capers for pit or gallery. It was his privilege to give the finest expression he could to the thought and emotion in him, and, in doing so, let him think of an audience beyond the reach of advertisement and intrigue.

*The Romance of London.*

A lecture on the growth of London and its Bridges was given by Mr. W. R. Davidge, member of the Council of the London Society, at the English-Speaking Union's rooms at Charing Cross. Brigadier-General Sir Henry Maybury, Director-General of Roads, Ministry of Transport, presided.

The gradual development of London from Roman times was illustrated on the screen with old picture maps, beginning with the earliest extant, i.e., that appearing in Geoffrey of Monmouth's Chronicles, and it was shown how London formed round the intersection of the old Roman roads and near the most convenient fords of the Thames and its tributaries, whence the names Old Ford, Ilford, Stratford, Romford, Brentford, and so on. Among the many interesting points made by the lecturer were the following :

The old West Bourne river was banked up to make the Serpentine.

In 1561 the spire of St. Paul's Cathedral, which stood 100 ft. higher than the top of the present dome, was destroyed by lightning.

London has had its Building Acts since 1189. In 1212 it was decreed that there should be no projection on newly built houses of more than 2 ft. 6 in., presumably in order not to interfere with passing knights. The fine was 40s. The prohibition and fine are still retained in Building Acts, showing the continuity of tradition.

After the Great Fire it was decreed that there should be three classes of buildings of varying sizes and heights, according to the zone.

London Bridge was for centuries London's only bridge, with houses and later without houses. Old Westminster Bridge was the second (1750), and twice as much Portland stone was used in it as in the whole of St. Paul's Cathedral. Old Blackfriars Bridge followed in 1760.

*American Architecture as I Saw It.*

Lecturing before the Sheffield Society of Architects and Surveyors, on "American Architecture as I Saw It," Mr. E.W.B. Scott, A.R.I.B.A., said that the position of architecture in America was a peculiarly interesting one. Perhaps for the first time in history we had a wealthy and highly complex civilization in a new country almost without a past, but possessing and venerating the traditions of past ages in other lands. As a result, we found them able and willing to build extensively, selecting the best from the traditions of Europe, while themselves unhampered by any archæological dead hand. The American cities, like ours, were full of uninspired buildings of the last century; and they were pulled down ruthlessly to be replaced by better, while their cities were extending at a rate undreamed of over here.

The five weeks he had spent in the States had not left on his mind the picture the late Mr. Bertram Goodhue drew at the R.I.B.A., when he described American architecture as undisciplined, aimless, chaotic, and altogether inferior. The lecturer's impression was rather that of an art that knew most definitely what it was about; one that, making the fullest and frankest use of the work of other ages, was working out a manner in architecture which would interpret this complex civilization. It seemed to him that sincerity and singleness of aim were teaching them to use the new materials and methods, and to meet the new demands of this age better than was the case anywhere else. Their vast wealth and opportunity had helped, so undoubtedly had the Beaux-Arts, but it was the realizing of new conditions and the simple faith that they ought to be met in a rational manner that was their strength. Of course, that meant experiment; they were bound to cut new tracks in many directions in this pioneer work, and much work would be in the wrong direction. The men who never made a mistake never made anything.

Take Goodhue's own work. The lecturer supposed he was best known for his Gothic churches, in which he had approached nearer to the spirit of the old mediæval builders, perhaps, than any man since the Renaissance, but he ventured to say, lovely as it was, that it was not the work by which he would be longest remembered. He had another mood, a mood in which he broke away from tradition and reached forward into the future; disencumbering himself of Corinthian columns and perpendicular windows, he attempted to get right down to the bones of architecture—to begin from the needs and requirements of the particular case and build, relying for his effect on almost stark simplicity and beauty of proportion. Of course, he made mistakes, but he was one of the very greatest of the architects of this age; he was a pioneer, and his work was of immense significance.

*The South Wales Institute of Architects' Annual Report.*

Mr. Percy Thomas, O.B.E., F.R.I.B.A., the president of the South Wales Institute of Architects, writing on "Unity" in the thirty-fourth annual report of the institute says : "We as a Society are allied to the R.I.B.A., but out of a total membership of 250 only forty are corporate members of the parent society, and, although the R.I.B.A. has had no more loyal supporters during the last few years than the members of our institute who are also members of the Society of Architects, they have had no voice in the affairs of the R.I.B.A., and even if one of them had been elected to the presidency of our society, he could not have taken his seat on the R.I.B.A. Council. Now, however, they become corporate members of the R.I.B.A., according to their previous status in the Society of Architects, and the number of such members in the South Wales Institute is increased to seventy-six. Another great concession to Wales is that our institute will have a permanent representative on the Council of the R.I.B.A., for even if the president does not happen to be a Fellow of the Royal Institute, he will be able, under the new charter, to nominate another member who is so qualified to represent the South Wales Institute on the Council."

The South Wales Institute was founded in 1890, and following are the names of the present officers and Council : President—Mr. Percy Thomas, O.B.E., F.R.I.B.A.; vice-presidents—Messrs. C. F. Ward, F.R.I.B.A., and H. C. Portsmouth, F.S.Arc.; hon. treasurer—Mr. H. Teather, F.R.I.B.A.; hon. auditor—Mr. C. S. Thomas, F.S.Arc.; hon. librarian—Mr. C. H. Kempthorne, Licentiate R.I.B.A. Members of Council (central branch)—Messrs. A. G. Edwards, M.S.A., J. P. D. Grant, A.R.I.B.A., W. S. Purchon, M.A., A.R.I.B.A., R. H. Winder, M.A., A.R.I.B.A., F. H. Heaven, A.R.I.B.A., T. Alwyn Lloyd, F.R.I.B.A., J. B. Wride, C. F. Jones, A.R.I.B.A., and J. Williamson, A.R.I.B.A.; western branch—Messrs. J. Herbert Jones, F.S.Arc., G. R. H. Rogers, E. E. Morgan, A.R.I.B.A., O. S. Portsmouth, A.R.I.B.A., and Glendinning Moxham, F.R.I.B.A.; eastern branch—Messrs. Walter Rosser, F.S.Arc., R. Fisher, Horace Jones, M.S.A., and F. Swash, F.R.I.B.A.; northern branch—Messrs. G. Vincent Evans, Licentiate R.I.B.A., J. Llewellin Smith, Licentiate R.I.B.A., Jacob Rees, M.S.A. Associates' representatives—Messrs. L. S. Hatchard (central branch) G. L. Crocker; (western branch); J. E. Lenton (eastern branch); and B. T. Jones (northern branch). The hon. secretary is Mr. Ivor P. Jones, A.R.I.B.A. A portrait of the president forms the frontispiece of the report.

# R.I.B.A. Intermediate Examination

TESTIMONIES OF STUDY.

The Council have approved the following revised regulations for the Testimonies of Study to be submitted by candidates for admission to the examination :—

*A.—The Orders.*

A façade or part of a façade of a building of recognized importance, showing the application of one or more of the Greek, Roman, or Renaissance Orders of Architecture. The student must state his authority for the Order and the building which should not be of recent design.

Sheet 1 : A general drawing of the building, sufficient to illustrate the application of the Order or Orders, with section of the façade wall, and plans of the façade wall in the stories where the Orders occur.

Sheet 2 : Details of the Order or Orders.

*B.—Freehand Drawing.*

Sheet 3 : Classic ornament or Mediæval ornament. Freehand drawing from the round.

*C.—Measured Drawings.*

Sheets 4 and 5 : Measured drawings of an existing building or portion of a building not of recent construction to be selected by the candidate. His plottings and sketches are also to be submitted.

*D.—Construction Applied to Elementary Design.*

Working drawings of a domestic building of moderate dimensions, showing clearly the construction of floors, roofs, joinery, etc.

The quality of design will be considered and work not reaching a reasonable standard of simple design will be disqualified on that ground.

Sheet 6 : General drawings to a scale of 8 ft. to 1 in.

Sheet 7 : A comprehensive $\frac{1}{2}$ in. detail.

Sheet 8 : Some full size details.

SYLLABUS FOR THE EXAMINATION.

The following revised syllabus is also approved :—

*Friday.*

The title only of the design subject will be announced to candidates on Friday morning at the beginning of the examination.

10 a.m. to 1 p.m.—A1. A paper on the general history of Architecture.

2.30 p.m. to 5.30 p.m.—A2. A specialized paper on the history of Architecture of *one* of the following periods, to be selected by the candidate : (a) Greek and Roman ; (b) Byzantine and Romanesque; (c) French and English Gothic; (d) Italian, French, and English Renaissance.

*Saturday.*

10 a.m. to 1 p.m.—A paper on the calculations of simple structures.

*Monday.*

10 a.m. to 1 p.m., 2.30 p.m. to 5.30 p.m.—B. Design.

*Tuesday.*

10 a.m. to 1 p.m.—*C. Part 1. Constructional design and the properties and uses of building materials.

2.30 p.m. to 5.30 p.m.—Part 2.

*Thursday.*

Viva voce examination, etc.

* Some of the questions in the papers on construction may have reference to portions of the subject for design.

# R.I.B.A. Final Examination

The following revised syllabus has been approved :—

*Wednesday.*

10 a.m. to 5.30 p.m.—A. Design for a building of moderate dimensions or a portion of a more important edifice, to be made from particulars given. The drawings to comprise plans, elevation and section, to a small scale with some details to a large scale. Candidates may be required in the oral examination to explain the construction of any part of their design, though construction need not be shown in the drawings presented. The manner of completing the drawings is left to the discretion of the candidates.

The subject will be communicated in general terms to the candidates some days before the examination. Before leaving the building on the first day, the candidate must hand in a tracing of his design, indicating its main lines, which must not be materially departed from in the subsequent development of his scheme. On the first day luncheon will be available in the building.

*Thursday.*

10 a.m. to 1.30 p.m.—Design (continued). 1.30 p.m. to 2.30 p.m.—Interval. 2.30 p.m. to 5.30 p.m.—Design (continued).

*Friday.*

10 a.m. to 1.30 p.m.—Design (continued). 1.30 p.m. to 2.30 p.m.—Interval. 2.30 p.m. to 5.30 p.m.—Design (continued).

*Saturday.*

10 a.m. to 1.30 p.m.—Design (continued). 1.30 p.m. to 2.30 p.m.—Interval. 2.30 p.m. to 5.30 p.m.—Design (continued).

*Monday.*

10 a.m. to 1.30 p.m.—*B1. General construction, including shoring and underpinning. 1.30 p.m. to 2.30 p.m.—Interval. 2.30 p.m. to 5.30 p.m.—*B2. Iron and steel construction, reinforced concrete.

*Tuesday.*

10 a.m. to 12.30 p.m.—*C. Hygiene, including drainage, ventilation, heating, lighting and water supply. 12.30 p.m. to 1.30 p.m.—Interval. 1.30 p.m. to 4 p.m.—*D. Specifications and the properties and uses of building materials. 4.30 p.m. to 5.30 p.m.—†E. Professional practice : (1) Professional conduct, duties and liabilities of client, architect, and builder, architect as agent of client, architect as arbitrator; (2) Forms of contract and contract documents, including general clauses in specifications; (3) Law of easements, rights of landlord and tenant, including dilapidations; (4) Building Acts and by-laws.

* Some of the questions in the papers on construction and other subjects may have reference to the subject for design.

† This paper is also taken by students of recognized schools exempted from the final examination.

These revised regulations and syllabus will come into operation for the examinations, which will be held in June of next year, i.e., 1925.

# List of Competitions Open

| Date of Delivery. | COMPETITION. |
|---|---|
| Dec. 1 | New church and Sunday school for the First Church of Christ Scientist, Southport. Premiums £75, £50, £30. Apply the Assessors, Messrs. J. E. Sanders and Son, A.R.I.B.A., 219a Lord Street, Southport, accompanied by a payment of 10s., returnable only to those who send in designs. |
| Dec. 10 | New Senior Elementary (Intermediate) School at Westcliff. Premiums : one hundred, seventy-five, and fifty guineas respectively. Assessor, Mr. J. W. Fisher, F.R.I.B.A., of Wellingborough. Apply Education Offices, 20 Warrior Square, Southend-on-Sea. |
| Dec. 31 | International competition open to landscape architects, etc., for plans for the elaboration of the general plan of the Toptchider Park, near Belgrade. Premiums : 1st, £400; 2nd, £300; 3rd, £200; 4th, £150; 5th, £100. In addition the sum of £250 is set aside for the purchase of designs failing to secure prizes. Apply Minister of Agriculture and Water, rue Prole Mateie 62, Belgrade. |
| Dec. 31 | Designs are invited for a wall tablet to be placed in the large hall of the King Henry VIII School, Coventry. Apply Headmaster. |
| Feb. 28, 1925 | Art gallery and museum of art for the City of Manchester. Assessors, Mr. Paul Waterhouse, Professor C. H. Reilly, and Mr. Percy S. Worthington. Premiums £500, £300, £200, £100. Apply with payment of 5s., which is not returnable, to Mr. P. M. Heath, Town Clerk. |
| Feb. 28 | Competitive designs are invited from qualified architects, being British subjects, for proposed New Railway Offices to be erected in Nairobi, Kenya Colony. Assessor, Mr. William Dunn, F.R.I.B.A. Premiums £200 and £100. Designs must be received at the Offices of the General Manager, Uganda Railway, Nairobi, Kenya Colony, not later than February 28, 1925. Apply, with deposit of £1 1s., to The Crown Agents for the Colonies, 4 Millbank, Westminster, S.W.1. |
| Mar. 31 | Bethune War Memorial. Assessor, Sir Aston Webb, P.R.A. Apply Secretary, Imperial War Graves Commission, 82 Baker Street, W.1. |
| May 1 | The United Grand Lodge of England invite designs for rebuilding the Freemasons' Hall in Great Queen Street, Kingsway, London. The date by which applications for conditions had to be made has now passed. |
| June 30 | Lay-out of open spaces and fortifications between Valletta and Floriana and those encircling Floriana. Premiums £1,000 and £500. An indemnity of £100 will be awarded to three other designs showing conspicuous merit. Assessors, Mr. E. P. Warren, F.S.A., and Professor Patrick Abercrombie, A.R.I.B.A. Apply, with a deposit of £5, to the Minister of Public Works, Public Works Office, Valletta, Malta, not later than December 1. Copies of the conditions only may be obtained free of charge from the Crown Agents for the Colonies, 4 Millbank, Westminster, S.W.1. |
| No date | The Argentine Government offer prizes of 10,000, 5,000, 4,000, 3,000, and 2,000 Argentine gold pesos for the best architectural designs for a National Institute for the Blind. Apply Enquiry Room, Department of Overseas Trade, 35 Old Queen Street, Westminster, S.W.1. |
| No date | Designs are invited for a library to be erected at the Compton Road estate, Leeds. Assessor, Mr. Percy S. Worthington, F.R.I.B.A. Premiums of £35, £20, and £15. |