Wednesday, April 23, 1924. Vol. LIX. No. 1529.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

FROM AN ARCHITECT'S NOTEBOOK.

"I build for eternity."

SIR CHRISTOPHER WREN.

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

Old Houses, Amsterdam

Photo: F. R. Yerbury.

As a last duty, coming from my beloved Amsterdam, I have to bring you the greetings of those old houses you see here that still form the principal beauty of the town. The love for these houses has not gone: we of the younger generation like to look into the future, but we also have love for the beautiful old face of our town.—Mr. D. F. Slothouwer, at the R.I.B.A.

THE

ARCHITECTS' JOURNAL

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

Wednesday, April 23, 1924. Volume LIX. No. 1529

Unity Within Reach

SINCE the last Council election we have said nothing in these columns to embarrass the present Council, who have had a difficult task to frame a policy which will meet the divergent views expressed at the last two elections. They have, we think, steered a middle course between the Scylla of wholesale unification and the Charybdis of no unification at all.

They have, as is evident from the proposals now published, given a great deal of time and thought to the problem, and they have come forward with a comprehensive scheme, which has been worked out in detail and agreed to without any dissentient voice by the Councils of the R.I.B.A., the Society of Architects, and by the conference of the allied societies.

The salient points in the proposals are :—

1. The R.I.B.A. to be the supreme registration authority within the profession.

2. The absorption of the Society of Architects by the R.I.B.A.—no further admission to the ranks of the R.I.B.A. without examination, and no creation of a new class of members.

3. The fuller use of the R.I.B.A. Charter in future to the extent of permitting corporate members of the R.I.B.A. to use the title "Chartered Architects."

4. Full voting and corporate powers to be given to the Licentiate members of the Institute.

5. Certain alterations in the Charter to facilitate the working of the machinery of the R.I.B.A.

There are other details with which we need not concern ourselves here, as they are printed in full elsewhere in this issue.

From the public point of view, there can be little doubt that such an amalgamation is a wise thing; as long as two societies exist doing much the same work, there is bound to be confusion in the public mind as to which is which, and, in the case of their members, who is who.

From the Parliamentary point of view, as the Rt. Hon. Edward Shortt, K.C., explains in his opinion, there will be immense advantages to the profession if they can go to Parliament with proposals for registration with a united voice, instead of with two voices. His opinion seems to us to express shortly and accurately the common-sense view of the position—"But if the Society of Architects dissolve . . . . and the members are admitted into the R.I.B.A., the hands of the R.I.B.A. would be immensely strengthened."

From the architect's point of view, there are obviously pros and cons. Some will say (and it is really the old parable of the labourers in the vineyard in modern guise): "We have passed examinations; we have borne the heat and burden of the day; no one else shall reap the reward." When that is said against the scheme, all is said.

This proposal means, of course, some measure of dilution, but it also means, if the members of the R.I.B.A. and the Society of Architects agree to their Councils' proposals, a great strengthening of the whole organization of the profession. It means, possibly, a little sacrifice now on the part of the workers in the vineyard for a great harvest later on. It means that the architectural profession will possess what, we believe, no other profession of its importance possesses, namely, one institute recognized all over the Empire as the supreme head of a great profession.

The present Council have put before their members a great ideal. As far as we can judge, this is the last opportunity of realizing that ideal, and if it is lost now, as it well may be lost by apathy on the part of members who have votes, it will be lost for ever.

In future, if this opportunity slips by, the profession must make up its mind to organize itself on new lines. In any public action, be it registration, education, the conduct of public competitions, or anything else, it will not be the R.I.B.A. which controls, but some composite body, such as the medical profession possesses in the General Medical Council. There is, as far as we can see, no other alternative. In the case of the architectural profession, this body would take the form of a board or committee, such as the "Defence League" proposed in connection with registration last year, upon which the R.I.B.A., the Society of Architects, and others would be represented.

We, as onlookers, cannot help thinking that members of the R.I.B.A. cannot be too strongly urged to take the opportunity which presents itself now, and assume the supreme command which is offered to them.

The Councils of both societies recommend this course; so does the conference of allied societies. The "Defence League" are, as far as we know, the only opponents. They oppose on grounds which appear to us to be falsely founded and selfish, and which we cannot believe will appeal to those who really consider the problem in the wider aspects which we have indicated. The public and the profession are what matter in the long run. The individual practitioners benefit, first by their own efforts, and, secondly, by the support which a really first-class and united organization can give them.

We have spoken plainly because we believe that plain speaking alone is of any use in crises of this kind. That a crisis has arisen in the organization of the profession is undoubted. The Council of the R.I.B.A. recognize this and, by putting the question to the vote at the Council election, have done all they can to ensure proper consideration of the subject. Other forms of referendum have, we believe, been suggested, but the good old English way of voting for or against a Government seems to us to be the honest and best one, and should be decisive.

The essential point is for the members of the R.I.B.A. to decide whether or not they will take the Society of Architects back into membership now that both are agreed upon the desirability of registration.

If they do, it is equally essential that an Institute Council

should be elected who are whole-heartedly in favour of doing so, and determined to see this vitally important proposal through.

We are sure, in all the discussion which is bound to follow, that it will be generally recognized that the Council of the Society of Architects, in agreeing to the dissolution of their society, are acting in the best and truest interests of the profession, and we congratulate them on so public-spirited an action. If the members of both bodies will, as we hope, act in the same spirit, there will be an end of an unhappy controversy which has handicapped the profession for many years.

Bromhead *v.* Kirbymoorside Rural District Council

A decision has been made by one of our most able judges in favour of an architect, who sued for £927 for professional services in relation to an abandoned housing scheme. Some time ago we showed that no action by an architect or surveyor, for his fees, would lie against an urban authority unless the contract to employ him was in writing and under seal, except in cases where the total amount of the obligation was under £50.

Bromhead's case was a claim against a rural district authority for fees as architect and surveyor in preparing, at the request of the local authority, plans and specifications for the erection of houses under a State-aided housing scheme, which was afterwards abandoned.

In course of argument before the judge, two matters were referred to. These are immaterial to the present consideration of the case, and we mention them only to show that they have been taken into account. One was that the defendant council had determined that the employment of the plaintiff should be subject to an agreement in writing; and the other was that the council had decided to pay the plaintiff's fees on the basis of "houses erected." The judge found that neither of these two decisions of the council were communicated to the architect, therefore, he was not bound by them, and the judge could not consider them. In his judgment it was stated that the broad justice of the case was that the plaintiff must be paid for the work he had done, but to some substantial extent the total amount of the claim must be reduced. Judgment was given against the authority with costs.

The defendants pleaded that any contract by them, on which they were liable to be sued, must be in writing and sealed with their common seal. That could not be shown here, so the plaintiff could not recover. The statutory provision on which they relied was subsection (9) of section 3 of the Local Government Act, 1894, and is as follows: "Every parish council shall be a body corporate . . . and any act of the Council may be signified by an instrument executed at a meeting of the Council, and under the hands or, if an instrument under seal is required, under the hands and seals of the chairman presiding at the meeting and two other members of the council."

The judge said that the defendants were a rural, and not an urban, council and were not limited by the section in the Public Health Act, 1875, which enacts that an urban authority cannot pay any demand (exceeding £50) unless bound by a contract in writing under their common seal. He decided that it was not encumbent on the plaintiff to show anything more than work honestly and efficiently done at the request, and for the benefit, of his employer, the local authority. Rural councils, the judge said, are not limited by the section of the Public Health Act to which we have referred.

The judgment in this case does not, in our view, absolve architects, surveyors, builders, and contractors from an obligation, wherever reasonably possible, obtaining definite and written contracts under the seal of the board as the necessary authority for works; whether the employer be an urban or a rural district council. It may not be absolutely necessary in endeavouring to comply with the wishes of a rural district council to request a written and sealed order, but it is desirable. The Acts of Parliament affecting such questions as those which we have been discussing contain precise and definite provisions for the protection of ratepayers, and it is easy for an unguarded contractor to omit to observe the terms of a statutory provision. It is possible that some further reference to the case of Bromhead *v.* Kirbymoorside Rural District Council may take place in the Court of Appeal, and their lordships may feel some doubt upon the general subject of what is required by law to enable a contracting party to maintain an action against a rural authority. But whether there be an appeal or not it is in our opinion undesirable for architects, surveyors, builders, or contractors to undertake considerable obligations in relation to contracts not in writing. Membership of the authority may alter in successive elections, and it is imprudent to rely upon verbal contracts, however honestly intended by the employer and acted upon by an individual who must be paid by a public body representing ratepayers.

National Housing: The Position of the Architect.

The report to the Government of the building industries on the carrying out of a "full housing programme," with particular reference to the means of providing an adequate supply of labour and materials, has been issued as a White Paper. It is a notable document, because it analyses with knowledge of the industry, all aspects of the problem as they present themselves to builders and their operatives, as well as to the builders' merchants responsible for the supply of material. The scheme contemplates the erection, as a maximum, of 2,500,000 houses in the ensuing fifteen years, including, of course, those now building under the Act of last year, introduced by Mr. Neville Chamberlain. It is admitted that neither labour nor material is at present available in sufficient supply for an ambitious scheme. Whether that number can be reached in any circumstances many men of wide experience in the industry will doubt. A considerable amount of work has still to be done before Mr. Wheatley will be in a position to submit the Government's housing scheme to Parliament. For one thing, this report will have to be weighed in the most careful manner in order to determine to what extent the conclusions reached by the Committee are to be embodied in the Government's plans. The statement made by Mr. Wheatley in the House last Wednesday was in the nature of a general review of the housing problem, coupled with an explanation of the voluminous report of the National Committee, and not a declaration of the policy to be presented in the Government Bill.

The Committee place great reliance on the setting up of a National House-Building Committee. This body is evidently considered the corner-stone of any scheme. It is suggested that this body—to be presided over by a member of the building industry—should be given a status, and a permanency "which would enable it to deal with everything arising within the industry connected with the exercise of its functions under the housing scheme," and suggests its ability to act in an advisory capacity in all matters as they arise, not excluding even design "as affecting economy of construction."

The proposal is an entirely novel one. From the beginning of the report to the end of the report, the name "architect" is not mentioned, and from this last it would appear that the Committee did not intend that it should.

The richer man is able to employ an architect if he will—the poorer man's house is to be left undesigned and, probably, unplanned. If the two-and-a-half million houses to be erected are not to be slums, if they are to have any beauty of appearance and individuality at all, we trust Mr. Wheatley will appreciate the need for the provision of architects in this huge scheme.

Modern Dutch Architecture

Mr. D. F. Slothouwer at the R.I.B.A.

THE influence of the architecture of our countries has been reciprocal and, as Mr. Arthur Stratton pointed out so clearly when hewas lecturing in Holland, we certainly are indebted the one to the other. By experience I can tell you that the influence of the English domestic architecture in the beginning of this century in Holland was so strong that we younger Dutch architects feel indebted to you for all our life. When I began to study architecture at the technical high-school at Delft, in 1901, the periodicals in the library were mostly English, and beside the lessons of our professors, whom we, of course, did not believe very much, we studied and sketched ourselves, and the names of many an English architect, for example, those of Ernest Newton, Edwin Lutyens, C. F. A. Voysey, and Baillie Scott were dearer to us than the glorious Dutch names of the past. And in 1905 we came, most of us, as full-fledged architects, to London, and made an excursion to Surrey, that sweet and lovely Surrey, and we saw in reality some of the houses that we knew so well from the pictures, *i.e.*, Orchards, by Lutyens; and the house of Methuen, by Voysey (New Place).

These beautiful houses, lying there on the hills of Surrey, surrounded by their flower gardens and incomparable grass lawns, in their simple forms, good materials and well-chosen colours going so well with the beauty of the landscape, were the proofs of the noble and healthy ideas of a people, that with all its richness and refinement has so admirably kept the sense for natural beauty.

Of monumental buildings we were most struck by the Westminster Cathedral, then in construction, the grand work of John Francis Bentley. We had no eyes for the so-called Classic style.

The neo-Classic was dead in Holland since about 1880. Most of us have come now to the conclusion it had never been really alive. I could not name you one building in that style of any importance for the development of architecture in my country. The revival of the Catholic Church and the romantic feelings of the last period of the past century caused a revival of the Gothic, that is to say, of the forms used in Gothic times, and this movement is for the greater part due to an architect of undoubted genius, Dr. P. J. H. Cuypers, who created the Ryks Museum at Amsterdam, built during the years 1877–1885. If you look it up in a guide-book you will find that the style of this building is called Early Renaissance.

But that was only a name. We can now quite well understand that the building where Rembrandt's paintings had to be kept should remind us of that glorious seventeenth century that until these days makes it possible to forgive us the faults that we commit now. And because it was a sort of competition the architect had given in his details many a form used by the great Dutch Renaissance architects. But the spirit of the building is Gothic. I need not explain to you why. No Renaissance architect would have made the roofs in this way. And for the details you have only to look at the way the vaults are supported by the pillars or columns.

It was about 1900 that the young architect, Berlage, who was born in 1856, was commissioned by the Town Council of Amsterdam to build the new Exchange. He was shown in some smaller work to be an architect of talent, but before all to be a real renewer. It is interesting to know that he got the inspiration by the influence of the younger democratic party, and that the plans of the building were not published. Even when the foundations were laid the public of Amsterdam did not know what the building would look like.

The effort made by the architect, Berlage, in creating this building full of a new character is certainly difficult to understand in all its greatness. But some of its qualities can certainly be defined. Before all, we have to understand that the principal axiom of the architect was, and still is, that the purpose of the building must be expressed in its form, and that, if only good materials are used in the right way, the fulfilment of this condition is enough to create a work of art. If this were the whole truth it is certainly illogical to ornament this building with a tower. The great impression that this building makes is certainly due more to the talent of the architect than to his theories. Specially the front is of a pure and simple beauty, reminding us of the old Romanesque buildings of Northern Italy. The whole treatment of the building is of an honesty that has the danger of getting tiresome. And a mistake in the total composition has certainly been that the large exchange halls do not come to expression on the exterior, because they have been built in by the offices.

A contemporary of Berlage has been the—in Holland—very much admired de Bazel, who died last November, just when he had completed his first monumental building, a large office building in Amsterdam. He was in many ways the contrast to Berlage; he loved the complicated detail, and having begun as a furniture-maker, he showed that feeling in all his buildings by the utmost care with which the detail is treated. But in common with Berlage, his composition was determined by the practical use of the building, and he, before all, respected the beauty of the material. But certainly he was not as radical as Berlage, for he used the pilaster and entablature although it was in a simplified form. The charm of his highly distinguished and refined architecture is unmistakeable, and he has made remarkable things in decoration and furniture.

In the years from 1900 to 1910 it seemed as if the general lines of the future Dutch architecture had been traced by these two men and that we were waiting for the young architects of talent who would build further on these principles to bring in the new architecture.

The reaction has been intense, and it came already in 1910 with the creation of the new head office of the centralized shipping societies, the so-called Shipping House. It was planned by the architect, Van der Mey, in collaboration with two younger artists of talent, De Klerck and Kramer.

This certainly is one of the most interesting buildings of the later years, it does not only show new ideas in architecture, but it even shows new techniques. It is, as well as the Exchange of Berlage, a milestone in the development of our architecture.

In order to appreciate the brick technique of this building it must be understood that the architects have wanted to show that the brick surface is only a decorative curtain hung over a construction of concrete. The consequence of this theory is that the most illogical brick construction is the most honest, because it shows clearly that it cannot exist in itself, so there must be some construction behind. The severe and critical mind of the English architect will certainly at once feel the danger of such a theory. But in this case the theory was not very important, it was made because it was asked for; what need has phantasy for theories?

The most admirable quality of this building is the unity of the whole, although many artists have collaborated. This unity is the more remarkable because the spirit was quite new for the Holland of these days.

The influence of this building has been enormous, and this way of building has been imitated in many ways. Not only have the architects who have collaborated at this shipping building made important work for themselves, but also an enormous number of satellites have tried to follow in their lead.

(* Summary of a paper read before the R.I.B.A. last week by Mr. D. F. Slothouwer of Holland.)

Moving the Hive

THE writer recently had occasion to set out with a camera in search of bad villa architecture. There was no dearth of material in the town that had been selected; in fact, it presented a dazzling array of suitable subjects. Various friends whom he met on the route were politely interested in the project, and offered much advice and many suggestions. It took him some time to realize that the examples that were most strongly recommended were as a rule the few specimens of good work in the neighbourhood, while conversely the really bad work was referred to with some degree of enthusiasm.

This episode is cited only as one of many symptoms which force one to conclude that architects are wrong if they think that the intelligent and educated public prefers the good modern work to the bad. Our citizens, including every class, with the exception of the very few who have interested themselves in architecture, are completely blind. The new Regent Street is to them a highway with a hazy background of "pillars" (they know this because they have struck matches on them); they notice nothing when they are surrounded with the usual ugly buildings, but when they find themselves in an atmosphere of sound new minor architecture they have an uncomfortable feeling that something is wrong.

If you ask a barrister, chartered accountant, or captain to admire a piece of good brickwork he thinks you are joking. He is convinced that brickwork is brickwork, a structural necessity that anyone with an eye to effect must try to cover up or avoid. All the arts, architecture included, are commonly regarded as pleasant vehicles for emotion, but of no further significance. It is true that such a fatal misconception does allow of a partial appreciation of old Gothic work, and of any other work that is ancient and romantic looking, but it has the unfortunate effect of inducing the pointed window, the crocket, and the gable-spike of Lewisham and Croydon. This misunderstanding of the purpose of art is the real reason why work of a simplicity that would appear to be elemental in its appeal fails to carry conviction to our emotional and romantic fellows, and is even rejected as dull and uninteresting.

A better type of architecture is doubtless making headway, but the process is exceedingly slow, and it is unfortunate that tenants of simple and dignified new houses should be made the objects of commiseration by neighbours who live across the way in owlish extravagances. Few architects can have addressed an audience containing a mixed assortment of laymen without realizing that one has to ask them to discard suddenly the beliefs of a lifetime, and that this is easier said than done. It is true that everyone will agree that our suburbs are dreadful, but it takes more than the mere statement and a few lantern slides to persuade the ordinary man that our new designs are not terribly dull. One must realize that to him all bricks and all tiles are alike. The easy confidence with which our friends tell us that they passed through the most frightful new housing scheme at Winchester, or that an offensive suburb has arisen at Hammersmith, is disconcerting. The distinctive dress adopted by ministers of religion acts to some extent as a warning to the laity to be careful in speech; may there not after all be a use for the architectural biretta? How often does the architect find that he has been talking at cross purposes, and that his hearers are under the impression that he is praising the very type of structure he is trying to condemn? It is certain that were a census taken in this country as to the respective merits of good and bad work, the bad would receive 90 per cent. of the votes, not because people like it, but because they are used to living with it.

If it were the other way round the cause of architecture would be won. Even if our most highly intellectual citizens could be relied on we should be in a strong position, but most of these have confined their attention to old work and do not know that the new can have any merit whatever. The strong hope for the future lies in the force of an almost unanimous professional opinion. There has probably never been a time, since the architectural profession, as we know it, came into existence, when all that was best and most vigorous in architectural expression was animated by a more common ideal. A contribution of differences can exist within it, but the ideal is so strong that it must carry conviction and ultimately force the acceptance of right principles, until they in turn become a habit. At the same time we should realize that the battle is far more uphill than most of us know. We are not fighting definite architectural opinions, but we are trying to stem the inertia that carries the public along the path followed during the last century. We are in the position of the bee-keeper who moves the hive a few yards and then wonders why the bees are such fools as to keep on buzzing round the original spot; they learn in time, but only if the keeper resolutely refuses to pander to them by moving the hive back again.

If all those who design houses co-operated in the movement, success must be assured, because the public would have no choice, but what if some designers find that people still expect vulgarity and are prepared to reap a momentary advantage by giving it to them? What if many of those who design the houses are themselves ignorant of architectural fundamentals? If one travels about the country one must conclude that the bad stuff we are putting up is at least equal in quantity to the good. Lord Curzon, the other day, mentioned with some scorn the attitude adopted by politicians towards architecture. Until quite recently they have certainly been astonishingly inept; they have not even indulged in their pet pastimes by making architectural gestures or exploring architectural avenues. Even now there must be very few in the House of Commons who know or care one pin about the subject. MANNING ROBERTSON.

The Southport War Memorial

Grayson and Barnish, FF.R.I.B.A., and A. L. McMillan, A.R.I.B.A., Architects

A competition for designs for the Southport War Memorial was held as far back as 1920, but for various reasons the memorial was only opened last November. It consists of two colonnades, 80 ft. long and 200 ft. apart, with an obelisk 66 ft. high between them. Each colonnade forms an approach to a pair of cenotaphs, containing Meuriel marble panels, on which are incised about 1,200 names. The whole of the masonry is Portland stone.

The square on which the memorial stands flanks Lord Street, one of the finest boulevards in Great Britain. Lord Street is 200 ft. wide at this point, 80 ft. being occupied by gardens. These gardens once belonged to private owners, but were taken over by the municipality many years ago. The memorial is placed on the axis of the gardens. The colonnades form a boundary between the square and the gardens, and yet allow a delightful vista from one garden to the other.

The architects were commissioned by the Corporation to design the electroliers in the square and the lily ponds in the gardens. The general contractors were Messrs. Wm. Moss and Sons, Ltd. The Bromsgrove Guild cast the lamps by the colonnades, and Messrs. Hardy and Padmore those in the square. Mr. H. Tyson Smith was the sculptor.

War Memorials. 41.—Southport

Grayson and Barnish, FF.R.I.B.A., and A. L. McMillan, A.R.I.B.A., Joint Architects. H. Tyson Smith, Sculptor.

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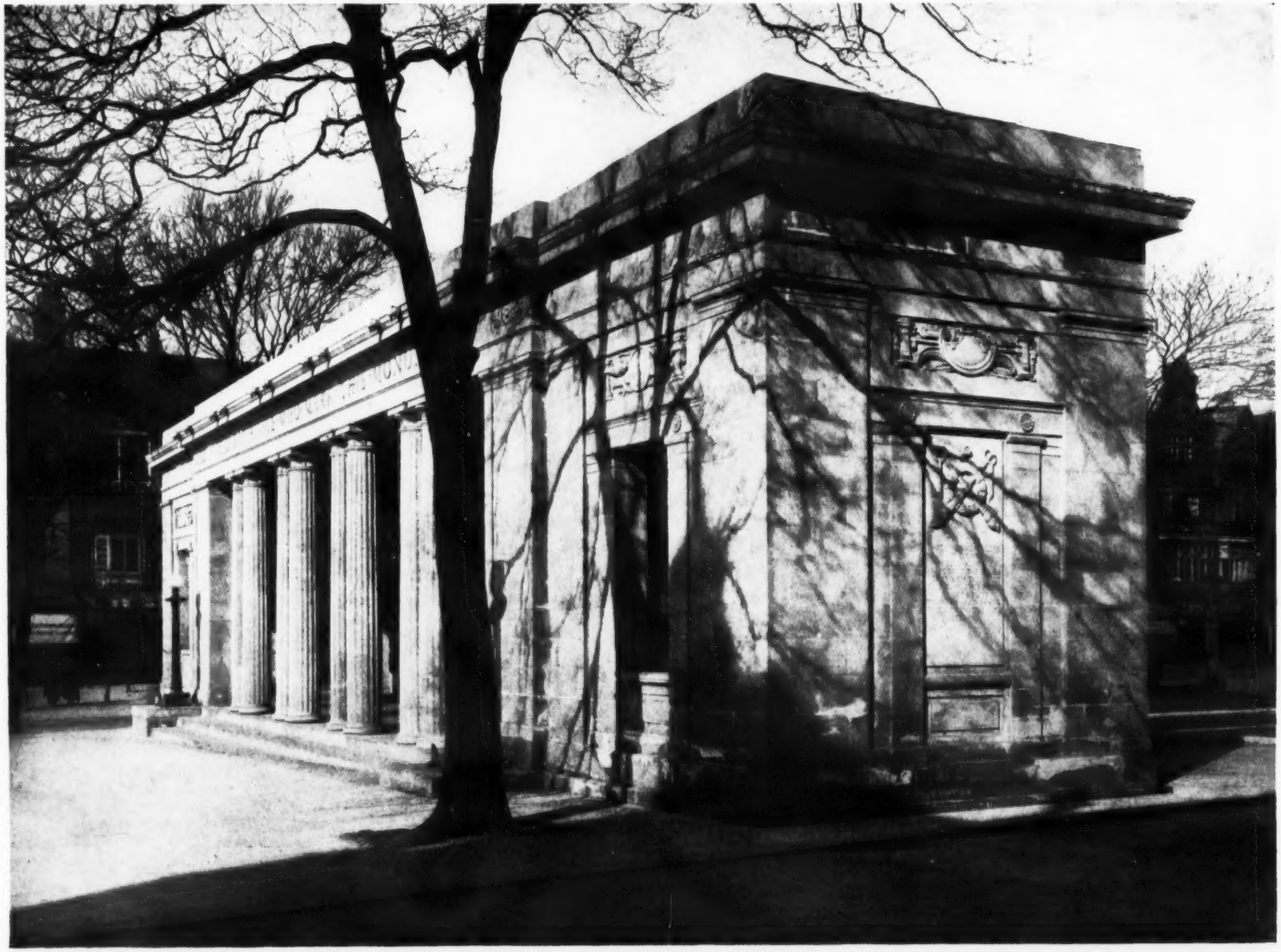
War Memorials. 42.—Southport

Grayson and Barnish, FF.R.I.B.A., and A. L. McMillan, A.R.I.B.A., Joint Architects. H. Tyson Smith, Sculptor



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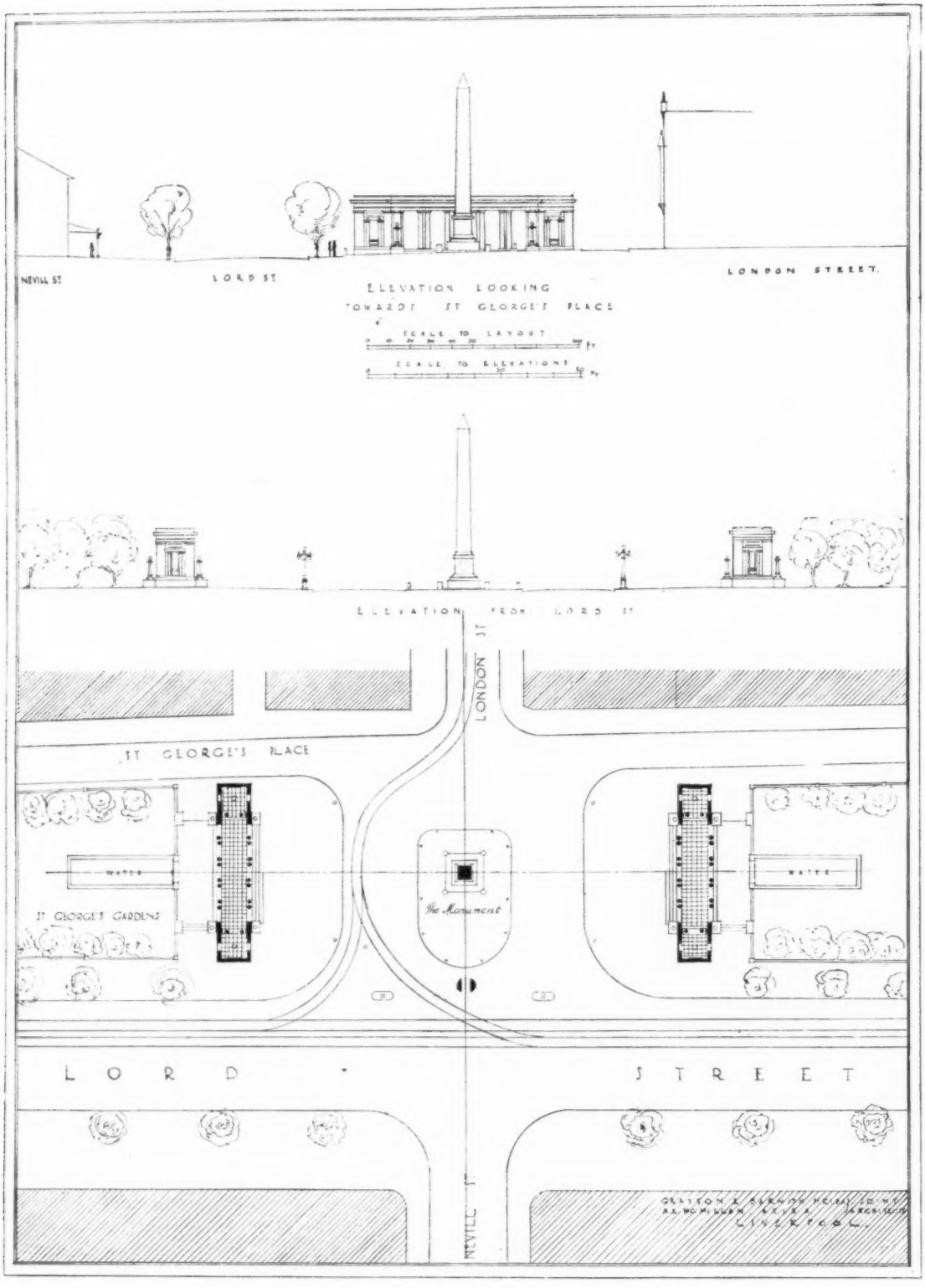
SOUTHPORT WAR MEMORIAL. GRAYSON AND BARNISH, FF.R.I.B.A., AND A. L. McMILLAN A.R.I.B.A., JOINT ARCHITECTS.

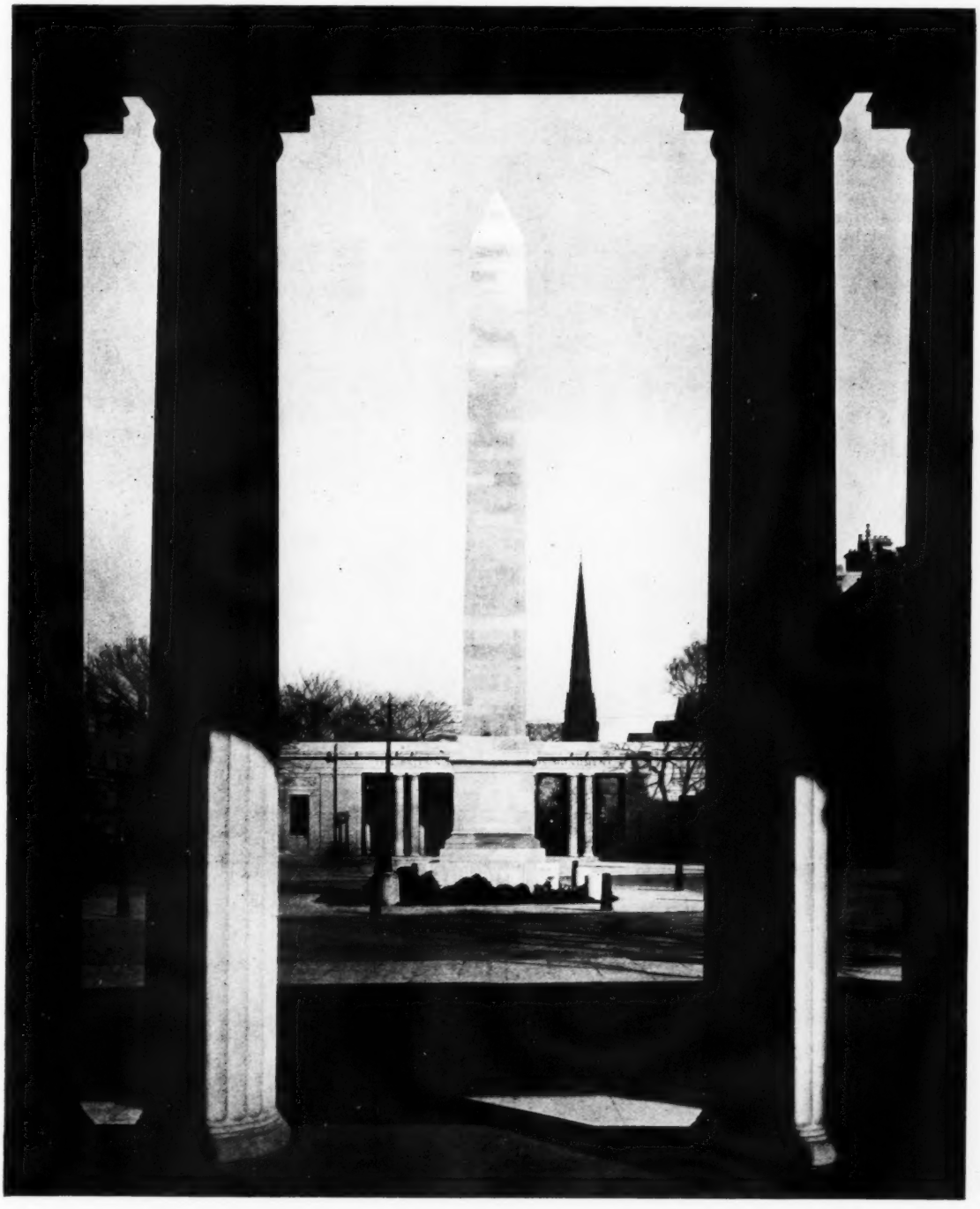


SOUTHPORT WAR MEMORIAL: THE LAY OUT

GRAYSON AND BARNISH, FF.R.I.B.A., AND A. L. McMILLAN, A.R.I.B.A., JOINT ARCHITECTS

War Memorials. 43.—Southport

Grayson & Barnish, FF.R.I.B.A., and A. C. McMillan, A.R.I.B.A., Joint Architects
H. Tyson Smith, Sculptor



The square on which the memorial stands flanks Lord Street, which is 200 feet wide at this point, 80 feet being occupied by gardens. These gardens were once privately owned, but were taken over by the municipality many years ago. The memorial is placed on the axis of the gardens. The colonnades form a boundary between the square and the gardens, and yet allow a delightful vista from one garden to the other.

A House at Harborne, Birmingham

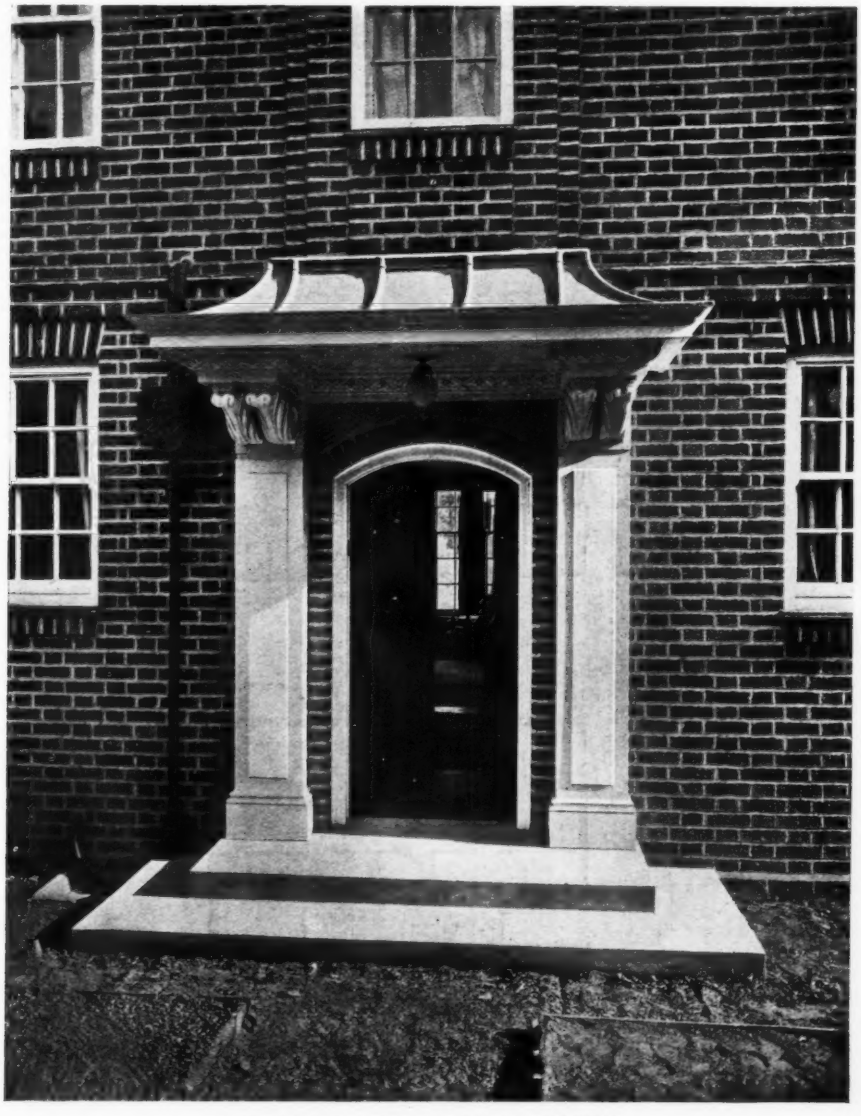
BUCKLAND and HAYWOOD, FF.R.I.B.A., Architects

THIS house, situated in a pleasant residential district, is built on a site sloping away from the south or garden front, the main entrance being on the north front, which faces the roadway. Its materials are, for the walls, 2½ in. "Oldstyle" bricks of varied colour and of rustic appearance, set in cement mortar with ½ in. white joints, selected dark bricks forming quoins to angles and reveals; and for the roof, best green and variegated Welsh (Llandilo) slates.

The ground floor includes dining-room, drawing-room, kitchen, hall, servery, lavatory, larder and boots, all very compactly arranged, a special feature of the plan being a sun parlour, entered from the dining-room. Accommodation is provided externally for ashes and fuel. There are five bedrooms upstairs, with the usual offices. Architecturally the house is of a quiet Georgian character, with some pleasant detail, notably in the consoles supporting the hood to the entrance doorway.

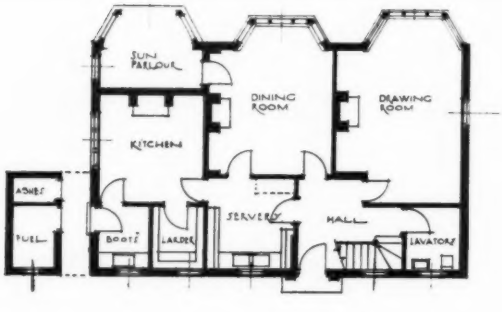
The principal bedrooms overlook the garden, facing south. The architects have concentrated their interest on this garden front, which is a very charming one, the three bays of the ground floor combining with the broad, well-spaced windows above to make a composition that is full of the English domestic spirit. A low roof of pleasant outline spreads out into wide eaves.

The grates and mantels were designed by the architects and carried out by the general contractors, G. and H. Marshall, Smethwick, Birmingham. The following were sub-contractors: Griffin Foundry, Ltd., Birmingham (grates); Ernest E. Hubball, Birmingham (carved woodwork); County Engineering and Lighting Co., Ltd., Birmingham (electric lighting and fittings); William Pearce, Ltd., Birmingham (sanitary fittings); Wormells, Coventry (slaters). Plastering, plumbing, woodwork, etc., were done by the general contractors.

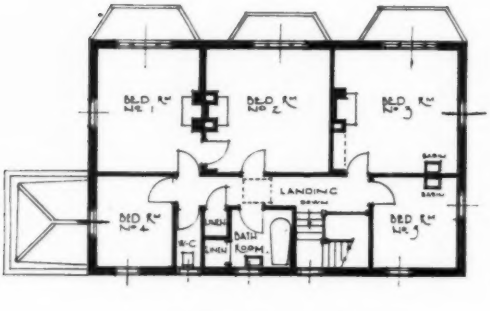


A DETAIL OF THE ENTRANCE DOORWAY.

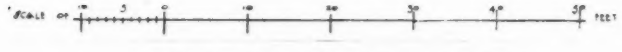
THE ENTRANCE FRONT.



GROUND FLOOR PLAN



FIRST FLOOR PLAN



A HOUSE AT HARBORNE, BIRMINGHAM.
BUCKLAND AND HAYWOOD, FF.R.I.B.A., ARCHITECTS.

Modern Domestic Architecture. 82.—A House at Harborne, Birmingham : The Garden Front

Buckland and Haywood, FF.R.I.B.A., Architects

This house is pleasantly situated in a residential suburb about two or three miles from Birmingham. It is built of bricks of varied colours, and is roofed with green and variegated Welsh slates. The bay on the right contains a sun-parlour.

THE DRAWING ROOM.

THE HALL.

A HOUSE AT HARBORNE, BIRMINGHAM.
BUCKLAND AND HAYWOOD, FF.R.I.B.A., ARCHITECTS.

Little Things that Matter—28

Country Methods of Sewage Disposal

By WILLIAM HARVEY

IT may be taken for granted that a public scheme of sewerage on the water carriage system has proved its high value and efficiency, and the description of alternative methods of sewage disposal does not imply that individual and primitive measures are always to be preferred to collective action and civilized usages.

It is, however, generally found to be impracticable to construct public sewers to provide for new houses or even groups of houses in remote districts, and the demand for dwelling-houses will continue to result in the development of building estates in open country, where the disposal of sewage must be managed upon an individualistic basis. The responsibility for several important decisions will rest with the building owner and his architect under the supervision, perhaps, of a surveyor in certain particular districts. Under these circumstances the choice of a site without consideration of what may be possible in the way of sewage disposal will almost certainly result in needless inconvenience both to the designer and the occupier of the house.

Modern habits of town life have made the dry earth method of sewage disposal repugnant to most English home builders, and its use involves restrictions upon planning that increase the first cost of the building by necessitating the provision of either a separate earth closet in the grounds or of an additional access lobby where the earth closet is incorporated in a part of the house.

The discomfort and labour of the housekeeping is also seriously increased by the use of the dry earth as compared with the water-carriage system.

But, for a site where the soil is absorbent and the water supply poor, the dry earth process naturally commends itself, and there is no real reason why the standard of comfort and cleanliness should be so low as is usually the case. A condition of success is that the site must be sufficiently large to dispose of the sewage by burial at a reasonable distance from the house to avoid unpleasant smells in the dwelling and in those parts of the garden which are to be devoted to recreation. Width of frontage is important in that it makes it possible to choose a position for the house at some distance from the points at which operations of sewage disposal will be conducted by the neighbours. The contamination of water supply in wells and springs has also to be avoided by the provision of an effective distance between them and these sources of possible infection.

The by-laws of different districts give figures, varying from 40 ft. upwards, as the minimum distance between privies and the source of water supply, and of 60 ft. between cesspools and wells and streams whose water is used for drinking purposes. These figures point to the necessity of thinking of means of sewage disposal before the site is determined.

For earth closets built adjoining houses it is usual for the by-laws to specify that a movable receptacle be provided of a capacity of not more than 2 cub. ft. The limitation in size is doubtless designed to compel frequent removal of the contents, but even 2 cub. ft. is far too great a load unless special provision is made for withdrawing and handling the receptacle.

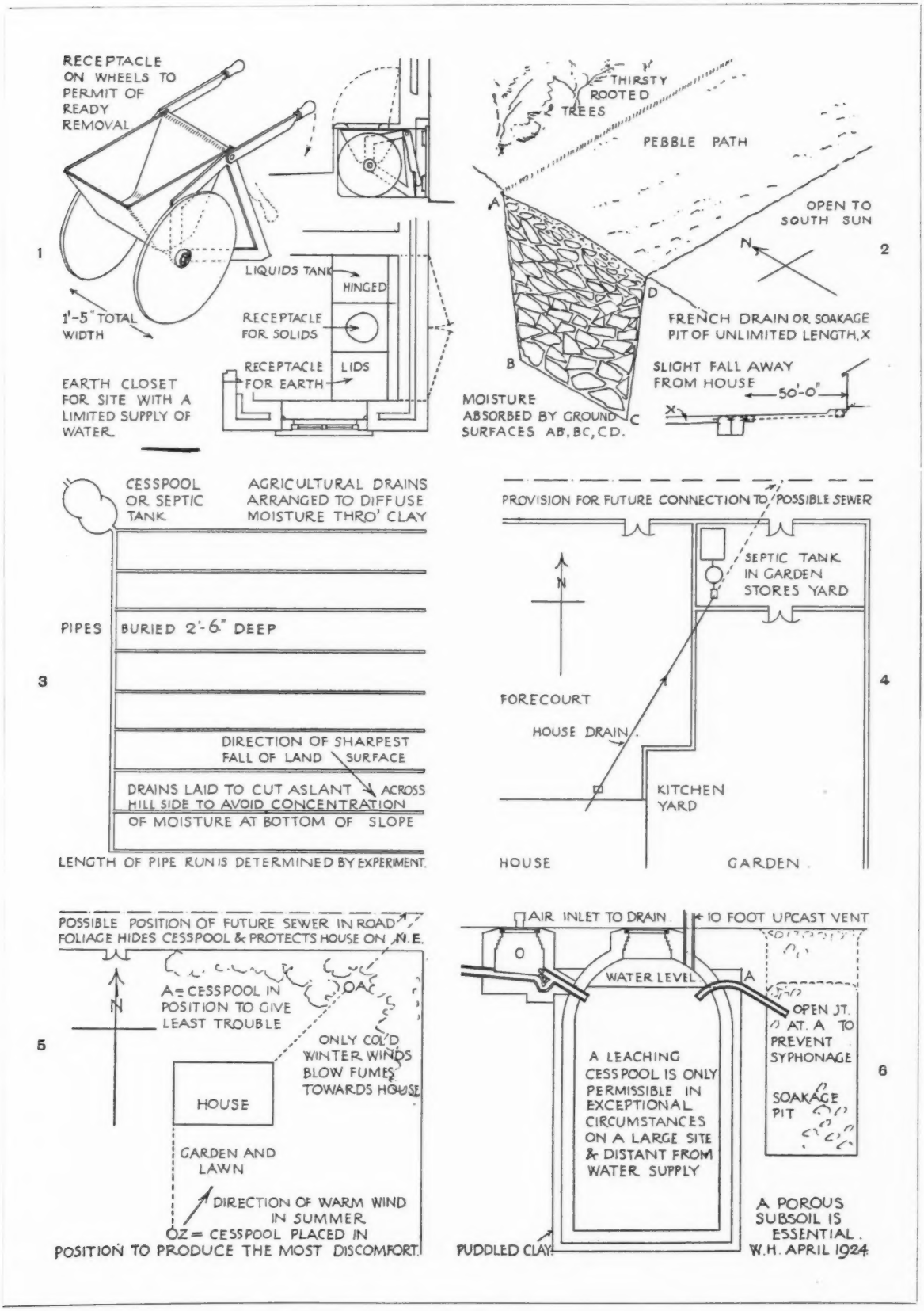
As the comfort of the household is seriously affected by inattention to this point, it would be desirable to install a receptacle on wheels that could be drawn in and out without any great expenditure of force and which would not necessitate calling in assistance to deal with the lifting and carrying of a heavy mass of unpleasant material (see Fig. 1).

A properly designed trolley on the lines of a miniature tip-wagon would remove one of the worst inconveniences of the dry earth system. The trolley should be run in under the seat through a door at the side or back of the closet, and definite stops should be provided to guide it into the exact position below the opening in the seat. The store of dry earth or other deodorant should be brought in a somewhat similar fashion as it is not always practicable to employ only persons of superior strength to lift it into position.

A primary defect of the dry earth system is that it makes no provision for liquid waste, and neglect to provide arrangements for carrying waste material easily to a distance naturally leads to its deposition at points much too near the house either for the comfort or health of the inhabitants. It has been argued in favour of the dry earth system that it enriches the soil, and where the soil is light and absorbent this is probably the case, but ample room is needed if the danger of over-manuring is to be avoided.

The septic tank system of sewage disposal possesses very great advantages in that it makes possible the use of many well-designed sanitary appliances to which custom has affixed our approval. Where a good and plentiful water supply is available any reasonable number of baths and lavatories can be fitted, provided that the waste products can be dealt with. Ample space must be provided on the site for the tank and its aeration or filter bed, and means must be found for disposing of the overflow without creating a quagmire. Under ideal conditions of installation, and given reasonable attention in accordance with the instructions of any competent sanitary engineer, who may be employed to provide the tank, the effluent after passing through the filter bed is supposed to be innocuous and fit for discharge into ditches or over fields. This does not always prove to be the case in practice, for it is always possible to overcharge, and so to overwork, a small installation and produce a rate of flow incompatible with adequate natural bacteriological treatment. The effluent, whether pure, or not quite pure, is still so much water to be disposed of or stored for gardening.

It is not likely that the expert who supplied the tank has also had the privilege of choosing a site with a subsoil of naturally porous character, and, failing this, the effluent must be distributed over a wide area of land by means of a network of field drains arranged herringbone fashion (see Fig. 3) or by means of what has sometimes been called a "French drain." This is a trench of indefinite length loosely filled with clinker, broken brick or stone, and is, in fact, an elongated soakage or leaching pit which operates by distributing the liquid over a large area of subsoil during a considerable period of time. In hot dry climates the surface of the French drain is left exposed to permit evaporation to assist the absorption of the soil, but it is doubtful whether much would be gained in England by systematically exposing the tops of soakage pits. In the absence of an absorbent subsoil the French drain must be made deep and long enough to contain large quantities of moisture, but where an absorbent stratum can be reached by digging, a pit should be cut well down into it so as to expose as much absorbent material as possible. The hard core, stones, and clinker should be dry and free from small stuff and dust, and be placed in position in the pit as soon as it is complete. A slight fall of tenacious garden mould down the sides and into the bottom of the pit may interpose an almost impervious layer between the liquids that will fill it and the surface that has been cut on purpose to absorb them. Care must be taken, therefore, to clear out any such matter and to avoid trampling the bottom of the pit to an imper-



"LITTLE THINGS THAT MATTER": DIAGRAMS.
DRAWN BY WILLIAM HARVEY.

vious state. This precaution is particularly necessary in chalk, the porosity of which is considerably reduced when the surface becomes slimy (see Fig. 2).

On more limited sites the effluent may have to be collected in a tank and pumped and carted off periodically for discharge on to fields or into any available sewerage system. The objection to the septic tank is the unsightly arrangement of open channels across the surface of the aeration bed, with its unpleasant suggestion of possibilities of overflow and imperfect purification. On a small site it is not always easy to provide enough ground for efficiently screening the apparatus with an evergreen shrubbery, and perhaps the most sightly treatment is to enclose the septic tank in a small walled yard large enough to contain the manure pile and other bulky garden stores, such as bean sticks and the roller (see Fig. 4).

The septic tank has been described as a link in the chain of development of modern sewage disposal from the old-fashioned cesspool, and the latter may exemplify many of the virtues of the septic tank or may be an unmitigated nuisance, according to different circumstances of construction and management. The amateur gardener who insists upon pumping up and using the crude sewage from his cesspool as manure for his plants brings into prominence the worst of its features.

As limited by the by-laws of many rural districts the cesspool is merely a nominally watertight underground tank for the collection and temporary storage of sewage. Ventilation by means of a 4 in. cast-iron pipe 10 ft. high is generally insisted upon, as instances have been known of accumulations of sewer gas exploding and blowing off the manhole cover of the cesspool. A minimum distance, generally set down as 50 ft., must be provided between the cesspool and the house. An objection to the cesspool is the liability of the ventilating pipe to discharge sewer gas of highly objectionable odour. This is particularly noticeable when the cesspool is new or has been recently emptied and is in the process of refilling, and it is aggravated by the habit of using only a minimum of water to flush the drains and leaving the cesspool poorly supplied with this most valuable deodorant.

In districts where no public provision is made for the removal of sewage, and the cost of emptying cesspools is borne by the householders as private persons, the temptation to economize unduly in this manner is liable to create a nuisance that need not arise and which may be considerably diminished by rational planning and systematic treatment.

The necessity of pumping out the contents of the cesspool when full is also costly and unpleasant, and in view of the offensive nature of this operation the distance of 50 ft. from cesspool to house may wisely be increased, particularly if it is necessary to place the cesspool to the south-west of the house. This position should be avoided as far as is practicable, especially in districts where the south-west wind prevails during the hottest months of the year. An architect who knows "which way the wind blows" will arrange for the fumes to be carried away from the house and not towards it at such times.

Cold winds from the north-east are not so likely to carry objectionable odours, so that a cesspool placed on the north-east side of the house will generally be preferable to one on the south-west (see Fig. 5.)

The prospect of connecting the house drain direct to some sewer to be provided in future may make it desirable to place the cesspool at a point near the road at the front of the site, and this position is most convenient for its periodical cleansing by means of pump and hose, and a tank cart in the road (see Figs. 4 and 5.)

Cesspools should be amply large in relation to the number of persons provided for. With a large cesspool the temptation to economize flushing water is not so acute, and the longer period between times of emptying permits of a certain amount of natural bacteriological treatment of the sewage before it is disturbed. The importance of this action is recognized in the design of the septic tank, and proves valuable in the leaching cesspool where conditions permit of this method of sewage disposal.

Although nominally water-tight, cesspools are not by any means always so in fact, for a country builder generally manages to "accidentally" knock a hole in the bottom or side so that fluids can escape into the soil in defiance of regulations and of any considerations of public health. This selfish and reckless proceeding not only contaminates the surrounding ground, but leaves the solids to accumulate without the deodorizing effects of the water, and though it permits of the cesspool remaining undisturbed for a considerable period, its cleansing, when this can be no longer delayed, becomes a highly objectionable process.

The action of the hole as a means of escape for liquids is highly uncertain as it may get blocked up and become inoperative and, in an impervious subsoil, the level of the liquid in the cesspool mounts as soon as the layer of soil immediately surrounding it has become saturated.

A cesspool provided with a properly designed overflow and leaching pit is suitable under certain conditions on a site possessed of absorbent subsoil, and is even passed by some surveyors as a rough-and-ready substitute for the septic tank.

The cesspool (see Fig. 6) is constructed in accordance with the by-laws as an impervious tank, but is provided with an overflow pipe at the top by means of which liquids may pass into an adjoining pit filled with hard coke.

The end of the overflow pipe in the cesspool is given a downward bend so that the liquid is drawn off from beneath the surface without disturbing the scum or stimulating the production and escape of sewer gas. The liquid passing through the overflow percolates downward through the coke and is absorbed by the subsoil surrounding the pit without giving any sign of its presence to sight or scent. The ground in the immediate neighbourhood of the leaching pit is, admittedly, contaminated, and the whole apparatus would be objectionable in the vicinity of an open supply of drinking water, though far less so than a breached cesspool or a privy from which the sewage escapes in a cruder form. On the other hand, where company's water is laid on this form of cesspool is less offensive than others since it is practicable to use bath water freely to dilute the sewage. The size of the leaching pit varies in proportion to the duty it will be required to perform and also in relation to the nature of the subsoil as has been mentioned above in connection with French drains.

Lambeth Bridge

That keen critic, Mr. Beresford Pite, has written to "The Times" expressing surprise that Lambeth Bridge is to be rebuilt with steel arches faced with granite. "Why this useless waste of granite?" he asks.

Sir Reginald Blomfield, who is responsible for the architectural treatment of the new bridge (an illustration of his design appeared in last week's JOURNAL), states that Mr. Pite is mistaken. The construction is to be a composite one, consisting of steel girders under the roadway, with reinforced concrete semi-elliptical arches under the pathways on either side. "The reinforced concrete arches will be faced with large granite voussoirs specially designed for the position they occupy, and, apart from the architectural effect, this has the practical purpose of protecting the bridge from erratic navigation." From this it seems that Mr. Pite is mistaken only in asserting that steel arches were to be faced with granite, instead of steel reinforced arches, which affects not at all Mr. Pite's point: that the material used for facing should be consistent with structure and form. And if heavy and expensive stonework is to be added, "specially designed for the position," the chief purpose of which will be to protect the structure from careless navigators, perhaps a trimming of cork would be better and cheaper. What means will the erratic navigators provide to protect their boats from the stonework?

The Proposed Amalgamation of the R.I.B.A. and the Society of Architects

The Terms of Agreement

We publish below the text of the documents relating to the proposed amalgamation of the Royal Institute of British Architects and the Society of Architects. These critical proposals are commented on in our leading article.

The R.I.B.A. Letter

Following is the text of the letter issued to members of the R.I.B.A. :—

9 Conduit Street, Regent Street,
London, W.1.
14 April, 1924.

DEAR SIR,

We, the Council of the R.I.B.A. and Members of the Allied Societies' Conference, have much pleasure in enclosing a full statement of the Council's proposals for dealing with the question of registration and consolidation of the profession.

It is proposed that the R.I.B.A. should absorb the Society of Architects. The proposal is supported by most of the leaders of the profession, because of its immense value in dealing with all matters on which it is desired to influence public action, apart from and in addition to the question of Registration. Upon the latter aspect of the proposal we have, on the advice of our Parliamentary Agents, consulted Mr. Edward Shortt, K.C. (late Home Secretary), and his opinion is that the dissolution of the Society of Architects and the admission of its members into the R.I.B.A. would immensely strengthen the hands of the R.I.B.A. in the promotion of a Registration Bill. "Coming to Parliament," he says, "as they would, for the protection of the public as well as for their own better regulation, they would speak with the united and unanimous voice of the whole profession. I am of opinion that their chances of success would be infinitely greater than they would be in present circumstances." [See Appendix.]

In order that members may fully realize the position, the following statement is given of the facts upon which the Council's policy is based :—

(1) As a Council we declined, in the interests of the R.I.B.A., to consider a registration policy which does not leave the R.I.B.A. supreme as the registration authority.

(2) The Council of the Society of Architects could not see their way to support an R.I.B.A. Bill on these terms, but offered to consider the dissolution of their society and the absorption of their members by the R.I.B.A. as an alternative.

(3) As it was obvious that no success could be achieved if an organized body of architects, such as the Society, numbering some 1,700 members, were not in agreement with our proposals, we agreed to consider absorption, providing the position of our examined classes could be secured and no new class of members created.

(4) The terms now submitted embody these vital principles. The R.I.B.A. will then occupy the undisputed position of being (with its Allied Societies) the only organized body of architects in Great Britain, the Associate class still retaining its distinction of being composed solely of men who have passed our examinations.

(5) The class which will be mainly increased in numbers is the Licentiate class. This is a dying class, and by the effluxion of time will cease to exist altogether, leaving the R.I.B.A. with Fellows and Associates only, and no further admittances to membership without examination.

If returned to office the Council will at once submit to the General Body proposals for confirmation, including provision in our Charter and By-laws for the holding of a referendum on occasions, for the more adequate representation of the Allied Societies on the R.I.B.A. Council, and a reform in the procedure for the Council election which will tend to secure greater continuity of policy from year to year.

In order not only that every member may have an opportunity of expressing his opinion upon them, but that the Institute may have, in addition to an agreed policy, a Council in entire sympathy with it, the proposals are put forward as the definite policy of this Council at the forthcoming election and the Council will abide by the result of the voting.

The Licentiates who have no vote will be invited to express their opinion because their class is the one chiefly affected.

Thus a referendum in the only form at present available under the R.I.B.A. Charter and By-laws will in effect be held, and the real feeling of the members obtained.

In January last the body known as the "Defence League" issued to members a circular purporting to contain the gist of these proposals. At that date negotiations were in progress with the Society of Architects, and the President of the R.I.B.A. asked members to suspend judgment until these were completed and our proposals formulated.

As will now be seen, the circular, being based on hearsay, was inaccurate in many particulars, and any judgment formed on it requires to be revised in view of the complete and full information it is now possible to furnish.

Finally, we desire to add our tribute to the generous and friendly spirit which the Society of Architects have met us in the prolonged negotiations which have resulted in so favourable an arrangement. Their President has further assured us that no special efforts shall be made to increase their membership during the progress of these negotiations.

That Members of the Royal Institute will support these proposals and take a broad and statesmanlike view of the situation is the earnest wish of the Council and of the members of the Allied Societies' Conference whose signatures are appended to this letter.

Yours very truly,

President : J. Alfred Gotch.
Vice-Presidents : Harry Barnes, Herbert T. Buckland, E. Guy Dawber, W. Curtis Green.
Honorary Secretary : Arthur Keen.
Members of Council : Henry V. Ashley, Robert Atkinson, John J. Burnet, Walter Cave, Edwin Cooper, H. C. Corlette, Banister Fletcher, Henry M. Fletcher, Gilbert Fraser, John Keppie, Edwin L. Lutyens, Thomas R. Milburn, G. Gilbert Scott, Walter Tapper, A. Brumwell Thomas, Percy E. Thomas, Edward P. Warren, Maurice E. Webb.
Associate Members of Council : H. Chalton Bradshaw, G. C. Lawrence, W. G. Newton, Michael Waterhouse, Herbert A. Welch, J. Hubert Worthington.
Past Presidents : John W. Simpson, Paul Waterhouse.
Representatives of Allied Societies : S. F. Harris (Northamptonshire), Francis Jones (Manchester), W. T. Jones (Northern), James Lochhead (Glasgow), Eric Morley (Leeds and West Yorkshire), W. S. Skinner (Bristol), C. G. Soutar (Dundee), Stephen Wilkinson (York), R. G. Wilson, Junr. (Aberdeen).
Representative of the Architectural Association (London) : E. Stanley Hall.
W. Galt Millar, Chairman, Reading Branch, Berks, Bucks, and Oxon Architectura Association.
W. R. Howell, Past Chairman, Reading Branch, Berks, Bucks, and Oxon Architectural Association.
Harold S. Rogers, Chairman, Oxford Branch, Berks, Bucks, and Oxon Architectural Association.
G. H. Williams, Chairman, Slough Branch, Berks, Bucks, and Oxon Architectural Association.
C. S. Kimpton, Past Chairman, Slough Branch, Berks, Bucks, and Oxon Architectural Association.
Rupert Savage, President, Birmingham Architectural Association.
Percy Morris, Past President, Devon and Exeter Architectural Society.
A. G. Bewes, Past President, Devon and Exeter Architectural Society.
G. P. Milnes, President, Gloucestershire Architectural Association.
William Portal, President, Hampshire and Isle of Wight Association of Architects.
J. A. Smith, Chairman, Hampshire and Isle of Wight Association of Architects.
G. P. Sheridan, President, Royal Institute of the Architects of Ireland.
W. Alban Jones, President, Leeds and West Yorkshire Architectural Society.
J. C. Procter, Past President, Leeds and West Yorkshire Architectural Society.
J. Stockdale Harrison, President, Leicester and Leicestershire Society of Architects.
Wm. Keay, Past President, Leicester and Leicestershire Society of Architects.
E. Bertram Kirby, President, Liverpool Architectural Society.
W. Glen Dobie, Past President, Liverpool Architectural Society.
Arthur J. Hope, President, Manchester Society of Architects.
A. W. Hennings, Past President, Manchester Society of Architects.
E. T. Boardman, President, Norfolk and Norwich Association of Architects.
C. F. Burton, Chairman, Tees-side Branch, Northern Architectural Association.
E. H. Heazell, President, Nottingham and Derby Architectural Society.
A. Eaton, Past President, Nottingham and Derby Architectural Society.
T. P. Marwick, President, Incorporation of Architects in Scotland.
A. N. Paterson, Past President, Incorporation of Architects in Scotland.
Geo. Bennett Mitchell, Past President, Aberdeen Chapter, Incorporation of Architects in Scotland.
A. Granger Heiton, Past President, Dundee Chapter, Incorporation of Architects in Scotland.
J. Inch Morrison, President, Edinburgh Chapter, Incorporation of Architects in Scotland.
T. Aikman Swan, Past President, Edinburgh Chapter, Incorporation of Architects in Scotland.
G. A. Paterson, President, Glasgow Chapter, Incorporation of Architects in Scotland.
Wm. B. White, Past President, Glasgow Chapter, Incorporation of Architects in Scotland.
Alexander Grant, President, Inverness Chapter, Incorporation of Architects in Scotland.
John Wittet, Past President, Inverness Chapter, Incorporation of Architects in Scotland.
H. C. Portsmouth, Past President, South Wales Institute of Architects.
E. C. M. Willmott, Chairman, Central Branch, South Wales Institute of Architects.
C. S. Thomas, Chairman, Western Branch, South Wales Institute of Architects.

E. W. G. Richards, Chairman, Northern Branch, South Wales Institute of Architects.
R. M. Young, President, Ulster Society of Architects.
T. W. Henry, Past President, Ulster Society of Architects.
Alan E. Munby, Past President, York and East Yorkshire Architectural Society.
Stanley Hamp, Past President, The Architectural Association, London.
Herbert Baker, C. D. St. Leger } Representing the Cape Institute of Architects.
R. N. Vanes, Representing the New Zealand Institute of Architects.

The Society of Architects' Letter

Following is the text of the letter issued to Members of the Society of Architects :—

28 Bedford Square, W.C.1.

To MEMBERS OF THE SOCIETY OF ARCHITECTS.

The enclosed is a précis of the main lines of the agreement come to by the Councils of the Institute and the Society on Registration and Amalgamation. It is being issued to the Members of the R.I.B.A. and also to those of the Society for their information only, and not for the purpose of discussion at this stage of the proceedings. It has been arranged with the R.I.B.A. Council that after the forthcoming election in June next, particulars of the scheme in detail will be submitted first of all to the general body of Members of the Institute by the Council of that body. If the scheme is approved and subsequently confirmed by the general body of the R.I.B.A., it will afterwards be presented to the general body of the Society of Architects, with whom, therefore, the final decision will rest.

It is earnestly hoped by the Council of the Society that until the scheme in detail is placed before the Members for final consideration, they will refrain from Press criticism of the proposals or from taking any other steps which may tend to prejudge the issue or in any other way to embarrass the R.I.B.A. or prejudice the consideration by that body of the scheme on its merits. The Council of the Society realizes that this request may put a severe strain upon the loyalty of the general body of Members, but it has every reason to suppose that Members will continue to demonstrate the confidence which they have hitherto reposed in the Council, by acquiescing in this request made in the interests of all concerned. The Council undertakes that if and when the time arrives, Members of the Society will be invited to express their views on the subject and to record their votes personally and by proxy as provided under the regulations.

There are indications that any criticism by Members may be directed chiefly to the proposal to transfer them to a class of "Licentiates" within the Institute, but this class of "Licentiates" must not be confounded with the present one, the Members of which have no corporate existence within the Institute. The new class of "Licentiates" are to have full corporate membership of the R.I.B.A., and voting powers on all subjects, including the Charter and Bye-laws, and the right to describe themselves as Chartered Architects and to use the affix "L.R.I.B.A." The Society's proposal was for the new class to be described as "Members" of the Institute, but inasmuch as the term "Member" in a general sense would include Fellows, Associates and Licentiates of the R.I.B.A., its use could not be restricted to one class of membership. There are some who consider the designation "Licentiate" as suggestive of higher qualifications than that implied by "Member."

It must be borne in mind by Members of the Society that the one and only object of the Council of the Society in agreeing in principle to amalgamation with the Institute is for the purpose of accomplishing the main object for which the Society was founded and is being carried on, viz., the attainment of Statutory Registration of Architects. The Council of the Society is of the opinion that such amalgamation is a necessary preliminary to Registration, and that the chance of obtaining Statutory Registration will be enormously strengthened and increased by amalgamation with the Institute, which is itself pledged to pursue the same object and has given an undertaking to the Society, in the event of the amalgamation taking place, to promote a Registration Bill and to pursue it until it becomes an Act.

In this connection the attention of Members of the Society is called to the appendix on page 6 of the enclosed particulars, giving the opinion of the eminent K.C., Mr. Shortt, on the question.

The Council trusts that if and when the time comes that the Members of the Society are called upon to make a decision in regard to amalgamation, they will regard the process of absorption merely as a means to an end, and that any who for personal reasons might, in normal circumstances, have felt disinclined to accept the proposed terms of transfer will realize that they are the Members who, if they are far-seeing and generous enough to put aside personal feelings and support the Council, will be amongst those without whose aid it would have been impossible for the Society to take advantage of the opportunity now afforded it of accomplishing the main object for which it was founded.

It is hoped that the Members of the Society will realize that during the long and protracted negotiations with the R.I.B.A. Council on the subject, every question on points of detail which it seems possible could be raised by Members of the Society has been exhaustively discussed and the matter considered from every conceivable point of view. In these circumstances, and at this stage of the proceedings, they will be rendering a great service to the Society if they will refrain as far as possible from criticisms and enquiries which would involve the Society in explanations on points of detail which may, after all, not arise.

E. J. PARTRIDGE, *President.*

April 14, 1924.

Terms of Amalgamation

Following is a précis of the Proposals between the Council of the Royal Institute of British Architects and the Council of The Society of Architects for the Amalgamation of the two bodies.

The Councils of the Royal Institute and the Society of Architects are agreed after a careful review of the situation from all sides that the interests of the profession, as a whole, will be best served by the amalgamation of the two societies and a return to the position of forty years ago, when the Society broke away from the R.I.B.A. on the Registration question.

They are further agreed that if terms satisfactory to Members of both societies can be settled, such an amalgamation will undoubtedly strengthen the hands of the profession in dealing through one representative society instead of two, with such questions as :—

(1) Registration.
(2) Education and the very complete system of schools which has grown up throughout the Empire.
(3) The control of Public Competitions.
(4) Professional Practice.
(5) Negotiations with Government and Public Bodies.
(6) Questions which continually arise between the profession and the public which it serves.

Both Councils realize that no terms can be arranged which will be equally agreeable to everyone, and that the members of each society must make some concession to the common good.

Such an arrangement could only be suggested if, as both Councils believe, it is for the ultimate good of the profession and the public.

With this object in view the following terms have been agreed upon by the two Councils after much anxious consideration, and in due course will be recommended to the Members of both Societies for acceptance.

The terms of amalgamation conveniently group themselves under three main headings, and are to be embodied in a document agreed to by both Councils and circulated to the Members of both bodies.

(A) Membership.
(B) Action for Amalgamation.
(C) Finance.

(A) MEMBERSHIP.

1. (*a*) *Fellows of the Society*, approximately 170,* to become *Fellows of the R.I.B.A.*
   (*b*) *Members of the Society*, approximately 980,* to become Licentiates of the R.I.B.A., with full corporate powers and the power of voting on all subjects, and the right to use the affix L.R.I.B.A. and the title "Chartered Architect."
   (*c*) *Licentiates of the Society*, approximately 180,* to become Students of the R.I.B.A., with privilege of becoming Licentiates of the R.I.B.A. as and when they are qualified to do so. (See para. 3.)
   (*d*) *Students of the Society*, approximately 130, to become Probationers of the R.I.B.A.
   NOTE.—Provision to be made for Members of the Society who have passed the Society's Membership

*The remainder of the Fellows, Members, and Licentiates of the Society are already Members or Licentiates of the R.I.B.A.

Examination, some 150 in all, to qualify for Associateship of the R.I.B.A. if they wish to do so, on passing a special examination in design and in those subjects which are not included in the Society's examination.

2. The names of the Retired Members of the Society to be printed in a separate list in the R.I.B.A. Calendar, and they are to enjoy the privileges of Retired Members of the R.I.B.A.

3. The qualifications to enable Licentiates of the Society to pass from the class of Students of the R.I.B.A. to the class of Licentiates of the R.I.B.A. to be drafted by the Council of the Society to correspond with the qualifications now in force to enable them to become Members of the Society.

4. Licentiates of the R.I.B.A. to be granted full corporate powers with full voting powers on all subjects with the use of the affix L.R.I.B.A.

5. All Fellows, Associates, and Licentiates to be entitled to use the title "Chartered Architect" if they wish to do so, in addition to the appropriate R.I.B.A. affix.

6. The Society undertakes to cease approving candidates for membership as soon as the two general bodies have ratified the terms of the amalgamation.

7. Further, as these proposals entail alterations to the R.I.B.A. Charter and Bye-laws, it is intended to ask the Privy Council to authorize the following additional alterations at the same time, which, it is believed, will facilitate the working of the Institute machinery—*i.e.*, proposals :—

(*a*) To ensure a more adequate representation upon the Council of each corporate class.

(*b*) To effect continuity of a Council's policy by limiting the number of its Members put up for re-election annually.

(*c*) To increase the representation of the Allied Societies, including those overseas, on the R.I.B.A. Council.

(*d*) To enable important questions of Institute policy to be submitted to a referendum of all Members in lieu of a General Meeting in London only.

NOTE.—The following information is given to enable Members to see the effect of these proposals upon the Membership of the R.I.B.A. :—

BEFORE AMALGAMATION.				AFTER AMALGAMATION.	
Approximate Membership of the R.I.B.A.		Approximate Membership of the Society of Architects (October, 1923).			
Fellows	960	Fellows	200*	F.R.I.B.A. ..	1,130
Associates ..	2,350	Members ..	1,137	A.R.I.B.A. ..	2,350
Licentiates ..	1,380	Licentiates ..	167	L.R.I.B.A. ..	2,347
Students ..	293	Students ..	130	Students, R.I.B.A.	455
Probationers ..	500			Probationers, R.I.B.A. ..	630
Total	5,483	Total	1,634	Total	6,912

* These figures include a certain number who are already Members of the R.I.B.A.

It is estimated that at the end of 10 years, at the normal rate of increase of the Associates and decrease of the Licentiates by wastage, the figures will be approximately :—

Associates	3,000
Licentiates	1,500

No provision is made for the admission to the R.I.B.A. of any unattached architects other than the above, except through the ordinary channels, but it is hoped that many may be induced to join their local Societies allied to the R.I.B.A., and thereby assist towards the complete unity of the profession.

(B) *Action after Amalgamation.*

1. The R.I.B.A. undertakes, immediately upon the ratification of the terms of amalgamation, to appoint a Registration Committee upon which the Society shall be equally represented with the R.I.B.A. to draft and carry through its various stages the Registration Bill until it becomes an Act.

2. The Society undertakes, when the amalgamation is completed and the transfer of members effected, to begin to take the necessary steps for the winding-up and dissolution of the Society.

(C) *Finance.*

1. The Members of The Society of Architects joining the R.I.B.A. will not be required to pay entrance fees. The subscriptions for all Members of the various classes of the R.I.B.A. to be as follows :—

Fellows	£5 5*s.* 0*d.* per annum.
Associates and Licentiates ..	£3 3*s.* 0*d.* per annum.
Students	£1 1*s.* 0*d.* per annum.

2. The surplus of assets over liabilities of the Society was estimated at the last audit in October 1923, at £7,000. It is estimated that if the scheme is carried through the R.I.B.A. will have an additional income of between £5,000 and £6,000 a year.

APPENDIX.

The Opinion of Mr. Edward Shortt, K.C.

On the advice of the Parliamentary Agents of the R.I.B.A., the opinion of Mr. Edward Shortt, K.C. (late Home Secretary) was obtained.

The case submitted to Mr. Shortt and his opinion upon it are appended

ROYAL INSTITUTE OF BRITISH ARCHITECTS

Memorandum for Opinion of Counsel.

1. The architectural profession demand that a serious attempt should be made to obtain the Statutory Registration of Qualified Architects.

2. At present there are two independent professional organizations in this country :—

(*a*) The Royal Institute of British Architects, with over 5,000 members and students and a network of "Allied Societies" and Branches (37 in number), covering the whole country, and embracing several thousand additional members. The R.I.B.A. is the Royal and Chartered body founded 90 years ago to foster the art of architecture and protect the interests of the profession.

(*b*) The Society of Architects, founded 40 years ago, an unchartered body of some 1,600 professional members and students, completely independent of the R.I.B.A. and endeavouring to discharge similar functions to those of the R.I.B.A.

3. The Society of Architects have declined to support and would almost certainly oppose a Registration Bill promoted by the R.I.B.A. on the only lines which are acceptable to the Council of the R.I.B.A., but would support a Bill which provided for the establishment of a new federal organization to control the whole profession.

4. The R.I.B.A. will not promote or acquiesce in a Bill which hands over the control of the profession to a new body independent of the R.I.B.A., and will only support a Bill which confirms the chartered position of the R.I.B.A. as the supreme governing body of the profession.

5. As a way out of this *impasse*, the Council of The Society of Architects propose to dissolve their Society on condition that their members are admitted into the R.I.B.A., so leaving the R.I.B.A. with its network of "Allied Societies" as the sole and supreme professional organization of Architects in the Kingdom.

6. If this solution is accepted, there is no obstacle to the drafting of a Registration Bill on the lines desired by the R.I.B.A.

The Opinion of Counsel is desired on the following Question :

"Has the R.I.B.A. a better chance of success with its Registration Bill if it absorbs The Society of Architects as suggested in paragraph 5, or if it leaves the Society in its present independent state ?"

OPINION.

Having regard to paragraphs 3 and 4 of these instructions, I do not think that any Bill could succeed in present circumstances. But if The Society of Architects dissolve, as suggested in paragraph 5 of these instructions, and the Members are admitted into the R.I.B.A., the hands of the R.I.B.A. would be immensely strengthened. Coming to Parliament, as they would, for the protection of the public as well as for their own better regulation, they would speak with the united and unanimous voice of the whole profession. I am of opinion that their chances of success would be infinitely greater than they would be in present circumstances.

E. SHORTT.

3 Hare Court, Temple, E.C.1.
9 April, 1924.

The South Moor Colliery Cottage Hospital Competition

A Criticism of the Designs

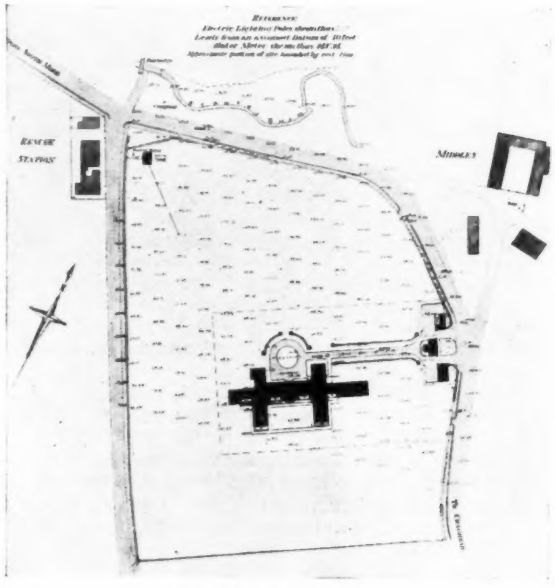
THE committee of the Welfare Scheme of South Moor Colliery Co., Ltd., must feel gratified with the response made by the architectural profession to their competition for a cottage hospital, the maximum cost of which was not to exceed £12,500. No less than 107 firms of architects applied for the conditions of the competition, and 77 designs were sent in. The total productive cost of these designs must have been at least one-third of the total amount to be expended on the proposed building.

Architects are great sportsmen in their quest for a living. Given good conditions and a judge of professional standing, there seems to be no limit to the numbers that will enter a competition. In this case practically all competitors would start scratch, as it is doubtful if any of them would visit the site before preparing their schemes, in view of its geographical situation. The conditions and general information, however, being admirably clear gave everyone the same chance, and the assessor, Mr. T. R. Milburn, F.R.I.B.A., has selected the best scheme submitted for the premier position.

This design, No. 68, by Messrs. Buckland and Haywood, of Birmingham, is so well conceived that it is difficult to criticize. The wards, sanitary arrangements, duty room, and other apartments are all grouped and balanced with skill, and the arrangement of the nurses' and maids' quarters is a particularly smart piece of planning. The sanitary work has not been dissociated from the building, and the ventilation and lighting of the lobbies seems very efficient. The annexe for the six-bed wards is too far from the latter. There is no mess-room for maids, as this was not asked for in the conditions. Coals * in this part of the country are led to stores in carts, not in bags, and a slight modification will be necessary to meet this. The elevations are simple and well proportioned. The cubic price on which the cost is based is 1*s.* per cub. ft. How it is going to done in "these parts" I don't know.

The cubic rates given for the first three designs are 1*s.*, 1*s.* 3½*d.*, and 1*s.* 6*d.*, and one of the commended designs 1*s.* 10*d.* Would it not be better in all competitions to have cube contents only, or a definite price per cub. ft. given to competitors? Reviewing the designs generally one can see that all competitors realized the cubic contents must come down, and to meet this most of them pushed their wards into the building to the detriment of their schemes.

The design placed second, No. 42, by Messrs. Shannon and Sons, Malton, is on similar lines to No. 68, but the six-bed wards suffer for the foregoing reason. It is a very compact scheme, and the garage, laundry, ambulance, and heating are under the main building. The buildings are placed too low on the site, and the central entrance drive is too steep.



PLAN OF SITE.

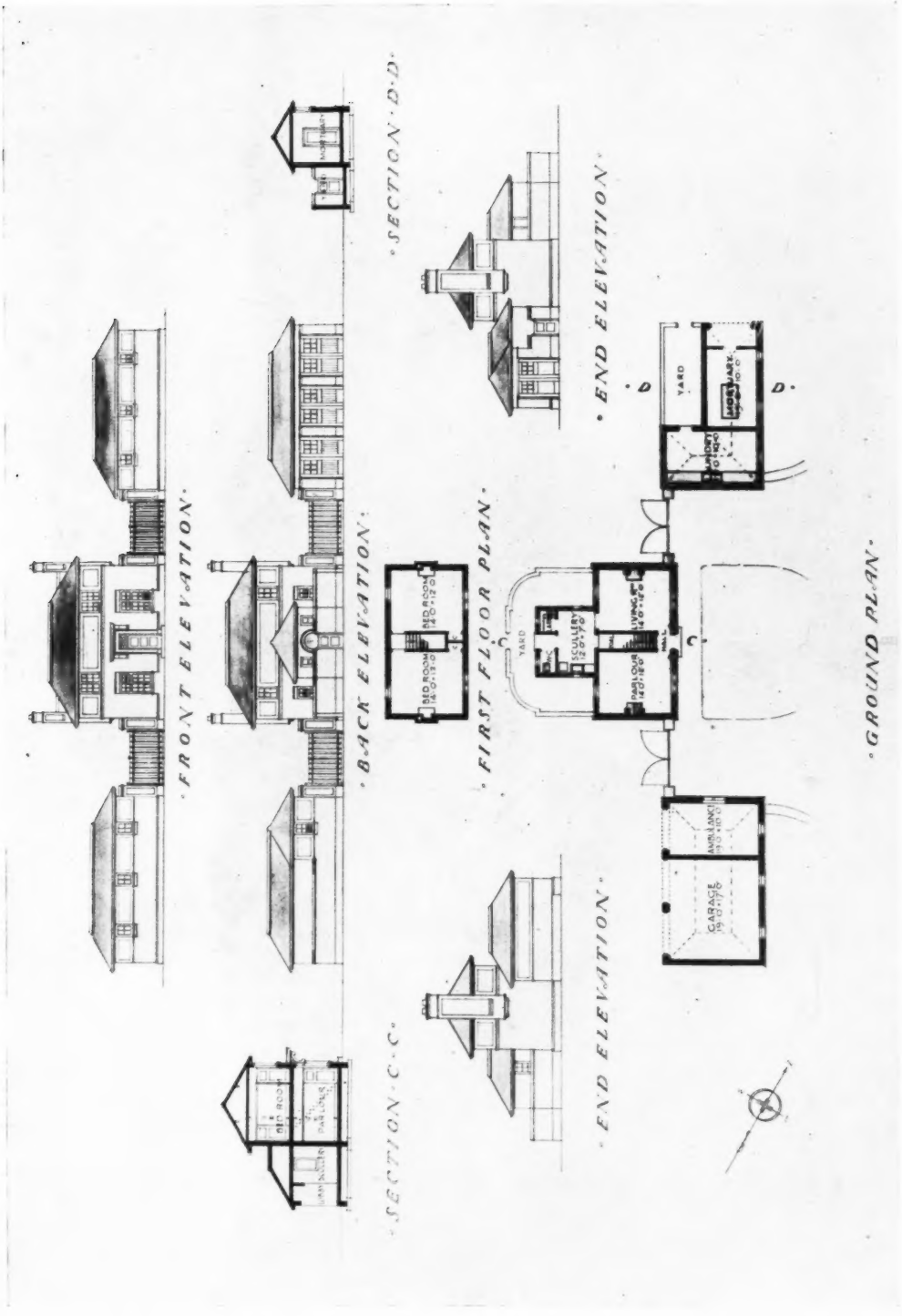
The third design, No. 39, by Mr. Graham R. Dawbarn, London, does not look so well on plan; the entrance court and outbuildings look ragged. Practically it works very well, and the sanitary arrangements are more convenient than the designs previously mentioned. The matron's office is too small. The elevations lack study. The cube rate quoted is about right.

The following eight designs have been commended by the assessor:—

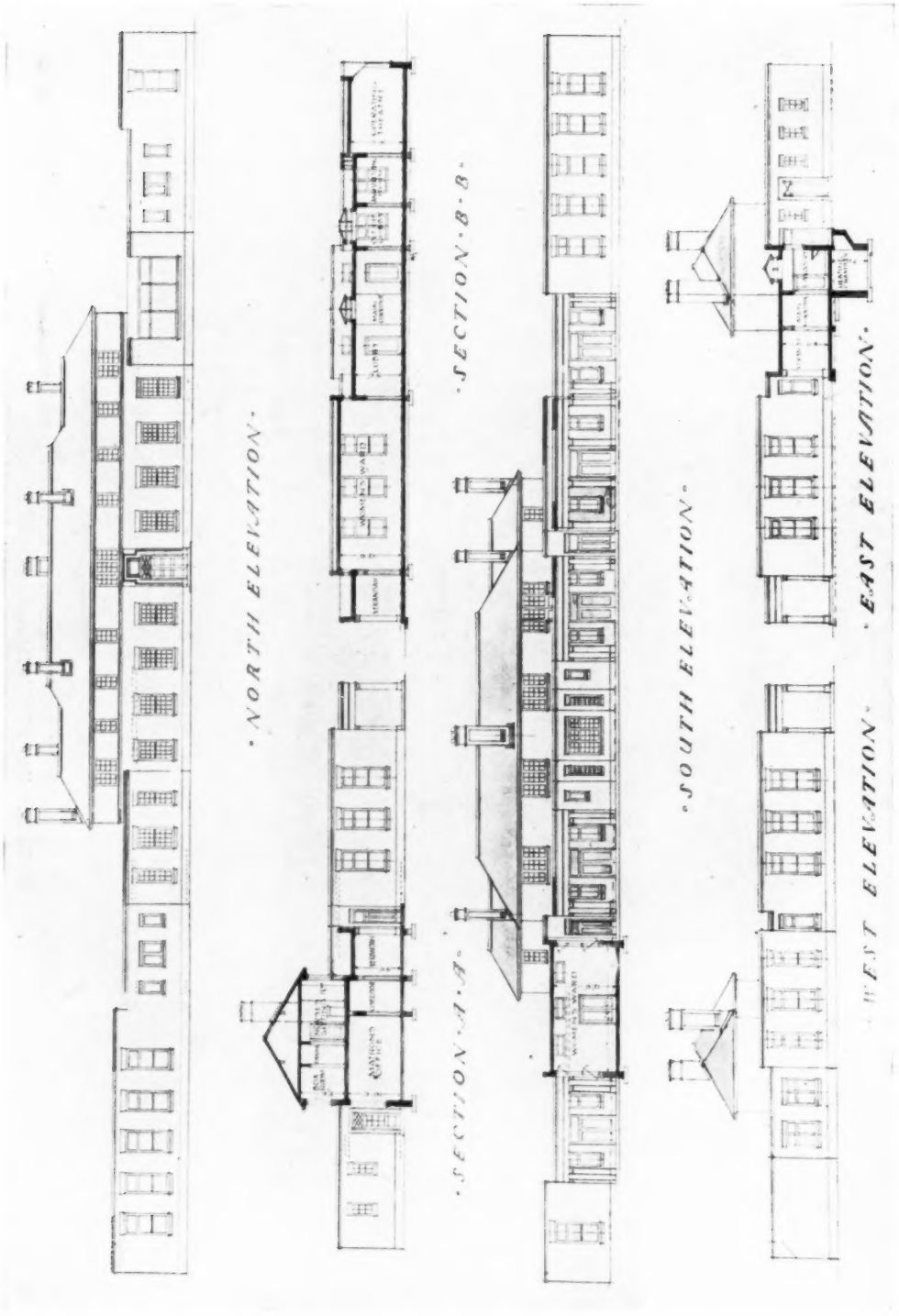
No. 6, by Mr. Wm. Kidd, London. In this design the corridors are too narrow, being only 4 ft. wide. There is no light to the service room in the centre of the main building, and the corridor at the children's ward is not good. The elevations lack character.

* There is no space provided for a trolley to stand.

A PERSPECTIVE OF THE FIRST PREMIATED DESIGN. BUCKLAND AND HAYWOOD, FF.R.I.B.A., ARCHITECTS.



THE SOUTH MOOR COLLIERY (CO. DURHAM) COTTAGE HOSPITAL COMPETITION: THE FIRST PREMIATED DESIGN
BUCKLAND AND HAYWOOD, FF.R.I.B.A., ARCHITECTS.



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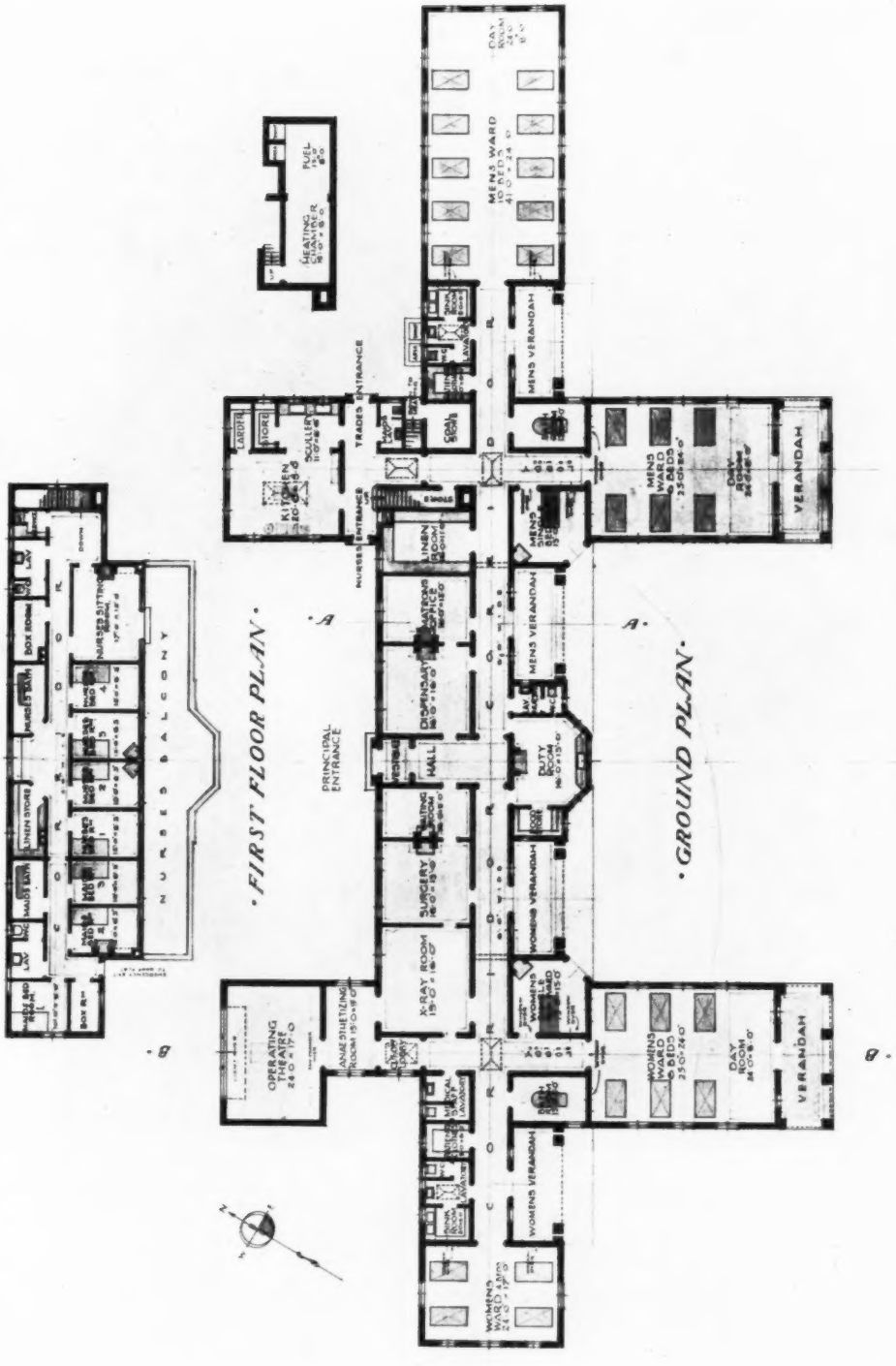

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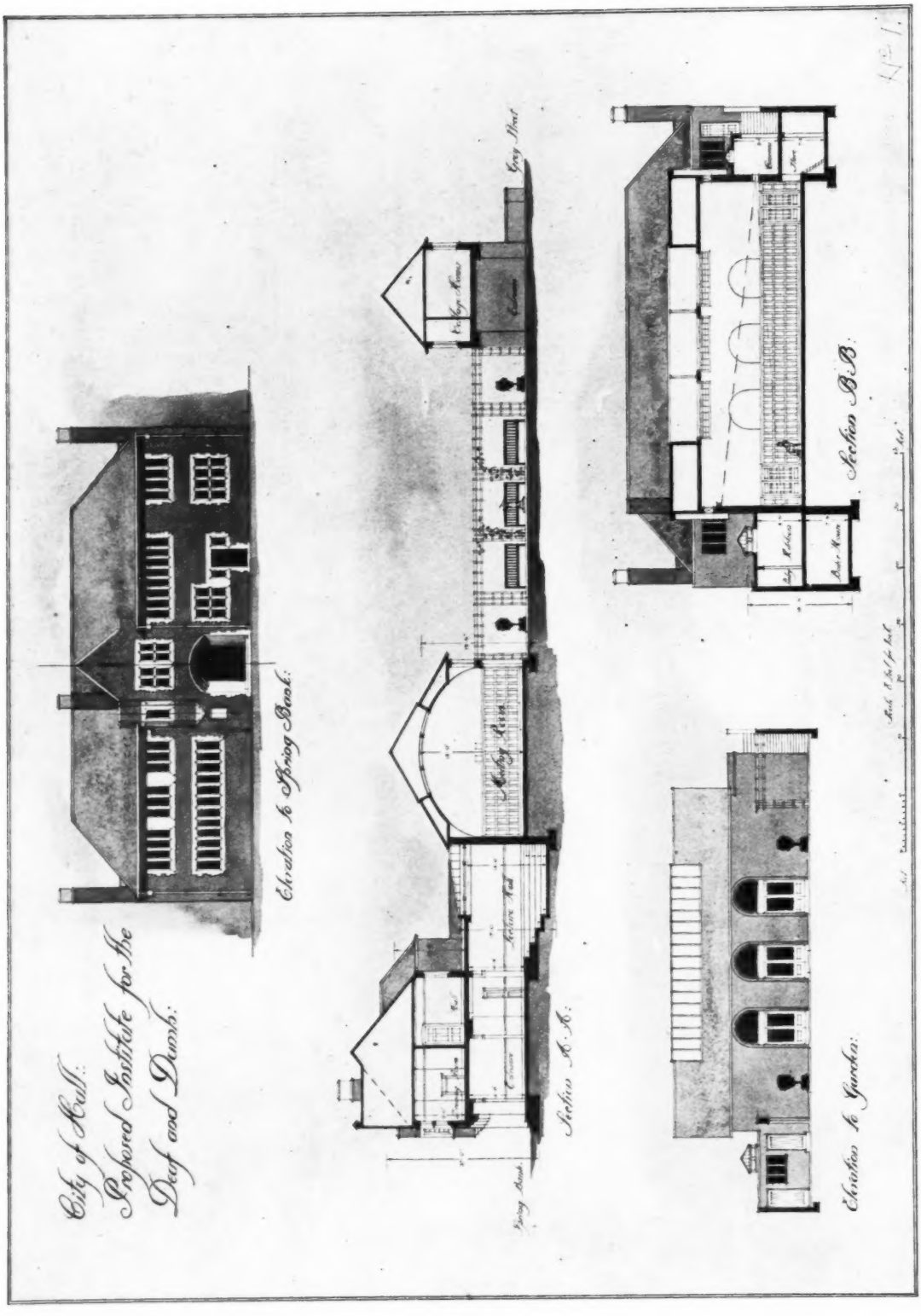
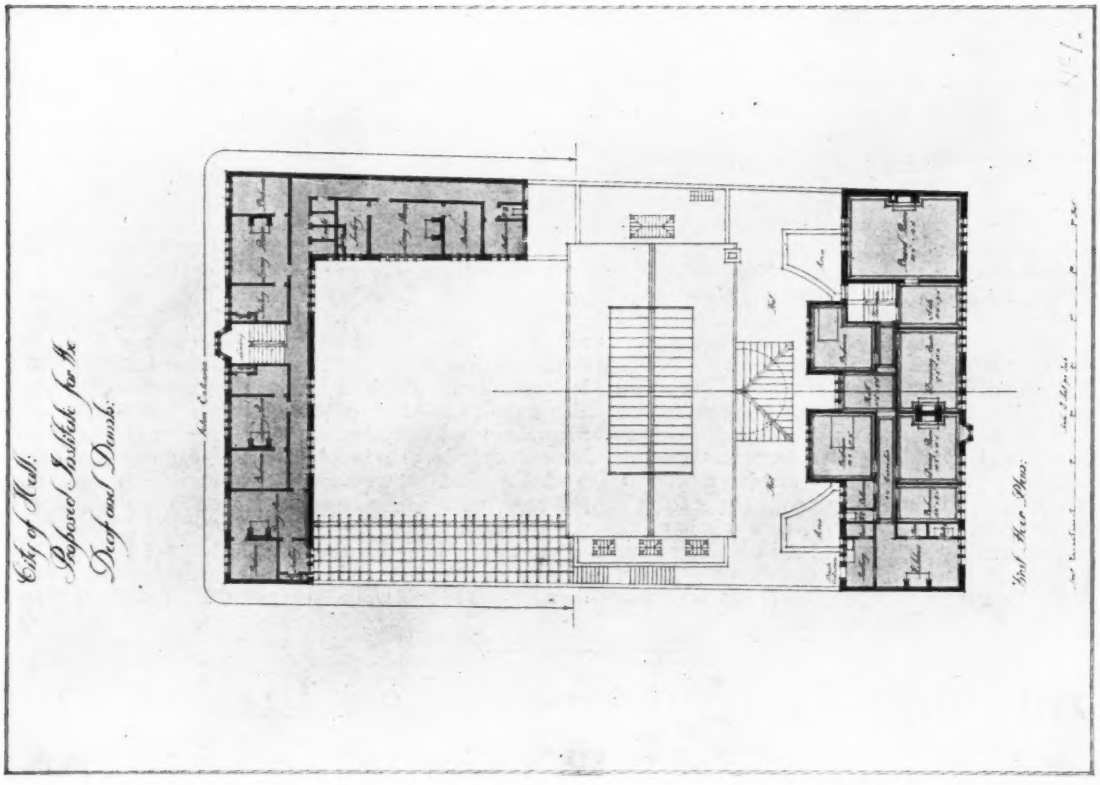
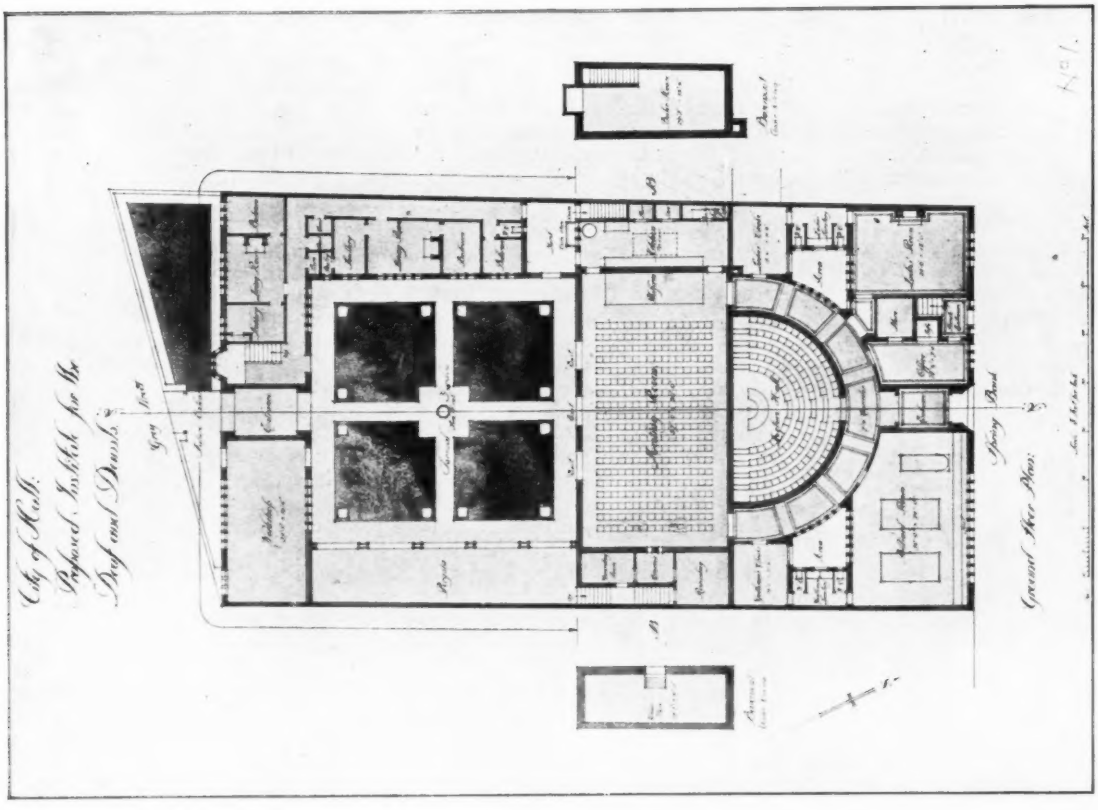


THE HULL DEAF AND DUMB INSTITUTION COMPETITION: THE WINNING DESIGN.
F. J. HORTH AND H. ANDREWS, AA.R.I.B.A., ARCHITECTS.





THE HULL DEAF AND DUMB INSTITUTION COMPETITION. THE WINNING DESIGN.
F. J. HORTH AND H. ANDREWS, AA.R.I.B.A., ARCHITECTS.

No. 7, by Messrs. Hays and Gray, North Shields, is a very simple and pleasing-looking plan. The scheme is well placed on site, and the elevations are very appropriate. The ten-bed ward gets east and west light only. The cubic contents are high, but this seems to be due to the steep roofs.

No. 15, by Mr. F. R. Stobart, Newcastle. The six-bed wards are not well lighted. The annexes are well planned in relation to wards. The waiting-room and matron's office are too small, also the main entrance, but the hall is very generous.

No. 20, by Mr. A. G. MacFarlane, Herts. In this scheme the kitchen and porters' quarters are on the first floor, which does not strike one as being a good arrangement. The lighting of the ground-floor corridor is not very good.

No. 24, by Mr. J. A. Woodgate, Maidstone. This design has a good general plan, but the main corridor is not lighted adequately. Two wards have east and west aspects only. The sanitary arrangements are good.

No. 38, Mr. Alfred Saxon Snell, London. The main entrance is at one end of the building. The matron's office is not in a very good position. Two of the wards are not well lighted, and the end fireplaces in the bays on the south front are not happy. Stores and pantry are generous.

No. 48, by Mr. Arthur Kenyon, London. The scheme is well placed on the site. The aspect of the wards is good, and all are well lighted. The whole of the buildings have been grouped in one block and arranged very skilfully. The entrance stair seems an effort, and there is some waste space on the upper floor on this account.

No. 52, Mr. W. N. Scaife, Newcastle. This is a well thought out scheme, but the sanitary arrangements are too generous. The day-rooms, on the other hand, are too small and face north.

New Premises for Hull Deaf and Dumb Institution

On pages 724–725 we illustrate the design of Messrs. F. J. Horth and H. Andrew, AA.R.I.B.A., which has been placed first in the competition promoted by the Hull, East Yorkshire and Lincolnshire Institution for the Deaf and Dumb, for new premises on the Spring Bank. A number of local architects were invited to submit competitive plans, and Mr. L. Kitchen, F.R.I.B.A., was appointed assessor. Instructions have now been given by the Committee for the preparation of working drawings.

The scheme consists of billiard and reading rooms, a lecture hall with provision for cinema and teas, a demonstration room planned on the amphitheatre principle, a board room, and a superintendent's residence. The architects have designed the scheme to enable future extensions—workshops and cottage homes—to be carried out, and space has been provided for a pergola for use in connection with garden parties.

The façade is designed in the Tudor style, and will be faced with coloured sand stocks, with Bolton Wood stone dressings. The roof will be covered with green Westmorland slates.

The Building Exhibition: A Last Look Round

"The Houses We Live In"

AT a well-attended meeting at the Building Exhibition, Olympia, held under the auspices of the Architects' and Surveyors' Assistants' Professional Union, Mr. Raymond Unwin, F.R.I.B.A., chief architect to the Ministry of Health, and Mr. Alfred Clifford, the well-known sociologist and guildsman, discussed the problems facing the Government in its endeavour to solve the housing problem, from the point of view of the architect and client, or in modern phraseology the producer and the consumer respectively.

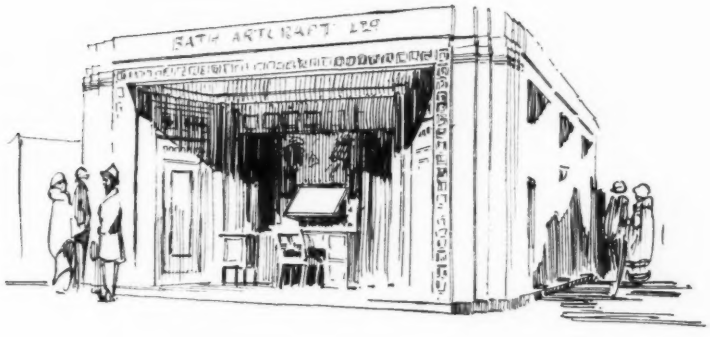
Mr. Clifford said that one essential which an enlightened public would demand was increased lighting with a better use of the southern aspect of the house in the scullery, bathroom, lavatory, coal-cellar, etc., the places where dirt collected, and which only light could bring to view. Of all the difficulties to be faced, cost was the greatest, and the question ultimately was not "Can we afford good houses," but "Can we afford not to have them."

Mr. Raymond Unwin, in the course of his remarks, said a badly-designed house is an almost certain method of spelling unhappiness, and it daunts the spirit of those who live in it. To attain bodily health one demands from the home four things—shelter, pure air, sunlight, and convenience. The house plays just as large a part in the mental health of the individual, and requires, first, privacy for family life, implying a sufficiency of accommodation; secondly, personal privacy; thirdly, suitable surroundings for meditation; and, fourthly, a sufficiency of amenity, comfort, and pleasantness, which implies a garden designed to bring happiness and health, mentally and physically, to the occupiers.

It is now proposed by the building industry itself that it can, and ought, to build 2,500,000 houses during the next fifteen years. To realize how far-reaching for good or bad will be the results, consider that if each house changes hands only once in fifteen years, and the average family per house numbered only four, and taking sixty years as being the life of the house, by simple calculation we find that 40,000,000 people will have lived in them for an average of fifteen years each. This is a number approximately equal to our present population. To embark on such a programme of house-building to encompass this result is immense, and affords a great and glorious opportunity for the nation to house the people well. On the architect and the builder the task we are faced with will fall. On them may fall the responsibility for much bad language, as, e.g., planning the scullery door to bang the chair of someone sitting at the kitchen fire warming their toes; on the other hand, their ears will burn continuously for the nice things said about the houses if they are convenient and well planned. It is no easy matter to plan small houses for the people.

The space allotted for the subsidized house is 950 sq. ft., and when that is divided up between the living-room, parlour, scullery, three bedrooms, bathroom, larder, and coal-cellar, you are left with 190 sq. ft. for stairs, lobbies, thickness of partition walls, and such planning requires the greatest care and attention. Some allow 104 sq. ft. for scullery, larder, and coals, and say they are too small; others allow only 45 sq. ft. for the lot. The architect must study closely the allotment of every foot of space and its apportionment between the garden, the green for drying clothes, play garden, walk, etc., never forgetting that the garden should be a place of escape from the worries and troubles of the day, a place restful to the eye and soothing to the temper, and the greatest attention must be paid to the variety of temperaments included in the family. The greatest asset which the young architect and builder can possess is imagination. Its possession would unconsciously enable him to see the woman at work in the scullery cooking a dinner and having to open and close two doors and walk a distance to lay down a saucepan, or a door opening on the wrong side and knocking against the chair of someone sitting at a fire, and so prevent such happenings.

Our aim must be to seize upon this glorious opportunity to build houses which will be worthy of our day and generation, and in which we shall be proud to live ourselves, and pass on to our children in the years to come.



The Stands Architecturally Considered

By FREDK. CHATTERTON, F.R.I.B A.

AMONGST the countless beneficial influences which the British Empire Exhibition at Wembley may be expected to exercise on the public mind, those affecting the popular appreciation of industrial art are certain to become prominent, and—one hopes—permanent.

In one particular respect, however, these anticipated results will have been deliberately induced—instead of being allowed to happen or not, as chance might dictate—by the wise decision of the authorities strongly to recommend every exhibitor to employ an architect to design his stand. Is it too much to hope that in due course the example set by the Imperial Government may be followed by the promoters of future building exhibitions at Olympia?

With regard to the general lay-out, a commencement might have been made by collecting together some of the best brick and tile exhibits. There are several excellent stands under this head, which, if they had been architecturally grouped, would have combined to form a centre of very great interest.

As to the stands themselves, while a great many of them reveal a deplorable æsthetic insensibility, it is gratifying to note that in the present year of grace the really good stands show a slight increase in number as compared with former exhibitions.

There is still great need for convincing exhibitors that the architect is more inclined to become interested in building specialities which are worthily housed, than if they are not.

In offering a few comments upon some of them it will be understood that the limits of space imposed by the Editor may lead to some omissions. For any such, the writer trusts that no one will impute an intention to discriminate.

It will be convenient, perhaps, if, by way of commencement, a reference is made to the white pavilion erected by the Bath Artcraft Co., Ltd., from the designs of Mr. C. A. Richter. This stand is certain to attract a great deal of attention among the discerning for its unusual reticence, and the monumental effect which has been obtained solely by receding planes. The structure itself is entirely devoid of relief ornament, and its only decoration—in black paint—is confined to a few horizontal lines at the angles, and the Greek fret on the wide architraves bordering the square openings. No better foil for the enhancement of the furniture and decorations exhibited within it could have been devised than this severely-treated stand.

Another highly appropriate and successful stand is that of Messrs. Drytone, Ltd., which was designed by Mr. Malcolm Sparkes. Particularly noticeable is the method of suggesting flutes to the Roman Doric columns by applying tapering laths of slightly convex cross-section to the circular drum. The abacus, too, is merely a block, but the groove in its upper part casts just enough shadow to imply the traditional, though absent, moulding.

Messrs. S. and E. Collier, Ltd., of Reading, are to be congratulated on their garden house or tea-room, for which Mr. A. J. Thomas, M.S.A., Licentiate R.I.B.A., was the architect. It is a most artistic effort, in which the company's well-known multi-coloured, silver-grey, and thin red sand-faced bricks combine in no small measure to its general picturesqueness. Some will think the eaves soffit, which consists of three courses of tiles—each projecting beyond the other—strikes an unfamiliar note. The interior is ceiled with a semi-circular barrel vault in plaster, and contains a remarkably fine cast-brick niche in the end wall facing the recessed-arched entrance.

On a somewhat smaller scale than the last, is the charming brick pavilion designed by Mr. Lionel Littlewood, Licentiate R.I.B.A., for Messrs. W. T. Lamb and Sons. It has a brick-paved threshold in front, and a little rock garden along the side, complete with cascade! Most effective are the lozenge-shaped panels in tilework, each dotted in the centre with a pebble. There is a fireplace inside, and the leaded windows are made to slide vertically downwards, so that the building could be used as an open-air sleeping apartment.

Entirely logical for the purposes of display is the rather unusual stand designed by Mr. Walter Brand, A.R.I.B.A., for Messrs. W. T. Wright & Co., Ltd. It is really a cottage roof—with side dormers and a brick gable end—cut off 2 ft. or 3 ft. below the eaves and set on the ground. Access to the interior is provided through a very acutely-pointed arched doorway, which ordinarily would give place to a bedroom window. Such a structure as this certainly enables one to study the tiled roof slopes without climbing a ladder, and the various pleasant bits of hip and valley detail are consequently seen under most comfortable conditions. The brickwork is excellent in every respect.

Mr. Reginald Fry, Licentiate R.I.B.A., who is responsible for the stand of Messrs. Thos. Lawrence and Sons, has produced an attractive piece of work, which is not easily described. Its main element is a length of walling—pierced in the centre with an imposing gauged arched opening having rusticated jambs—on either side of which there are very charming angle fireplaces of distinctive and varied design, protected with tiled pent roofs. There is much here to interest brick enthusiasts.

The individuality which characterizes the stand of Messrs. Samuel Haskins and Bros., Ltd., not only indicates capacity on the designer's part, but a high standard of technical skill in its execution. This is conspicuously the case with the bronze work, which forms so notable a part of the design. Very striking effects of coloured lighting have been introduced, internally from the coffered ceiling, and externally

from the soffit of the cornice. In both cases the illumination is artistically diffused.

The small garden pavilion erected by the Leckhampton Quarries Co., Ltd., from the designs of Mr. Leonard Barnard, F.R.I.B.A., is a thoroughly artistic piece of work. Built of rock-faced squared rubble and ashlar dressings, it reveals the charm of the Cotswold tradition in a marked degree, the suggestion being carried still further by the inherent beauty of the Eyford stone slates with which it is roofed.

Messrs. Mander Bros. have built a most imposing stand in the Classic manner, which is as noteworthy for its scheme of colour as for its architectural distinction. Architects will especially appreciate the uncommon beauty of the cobalt violet panels and the semi-lustre black ebony finish to the pilasters and architrave.

A word of commendation is justly due to the designer, whoever he was, of the small kiosk which occupies the centre of the stand devoted to the exhibits of the Leeds Fireclay Co., Ltd. It possesses very distinct architectural qualities, and the detail is refined. The material—known as "Texture Marmo"—is neutral blue in colour and has a matt glaze surface of pleasing character. Attention is drawn by skilful handling of the capitals to the triple columns at the angles, and the satisfactory manner in which the voussoirs are arranged.

Albeit of modest proportions, the temple-like stand of Messrs. Fassio Products, Ltd., calls for a word of comment —if only for the almost uncanny resemblance to natural antique Sienna Brocatella, which has been attained in the artificial marble columns flanking the entrance. Both externally and internally the walls are divided into well-proportioned vertical panels, for the display of various other examples of the company's imitated marbles.

The pavilion of the Burlington Slate Quarries—designed by Mr. T. J. Taylor, F.S.I.—will be found to possess unusual interest. It is a rectangular structure supported on square piers, which, together with the low wall occupying some of the intervals between them, are built respectively of squared slate stone in varying thicknesses and squared random rubble of the same material. Full of charm as the lower part of the pavilion is, it is the roof which particularly captivates. The blind dormers—partly slate-hung and partly hipped—are an inspiration which will linger gratefully in the memory.

Concrete Machinery and Plant

By EWART S. ANDREWS, B.Sc., A.M.Inst.C.E., M.I.Struct.E.

ANYONE who has visited the Building Exhibition several times in succession in recent years, and who has a good memory, must be struck by the real progress which has been made in the past ten years in machinery and plant for concrete constructions. In the present exhibition are a number of exhibits of plant and apparatus, particularly of the smaller type that builders employ on their ordinary work in contradistinction to the more elaborate machinery employed by public works contractors.

One of the most ingenious devices is the "Fircrete" clip, exhibited by the Builders' and Contractors' Plant, Ltd. This is a toggle device for clamping together the timbers employed in concrete formwork, and it is as effective as it is simple. The same firm show a number of examples of sand washers, concrete mixers, concrete hoists and other forms of apparatus employed in concrete construction.

The sand washer exhibited is of the cylindrical drum type, driven by trunnions. The material tumbles as the drum revolves, and the water is fed so that clean water is continually running through, over and under the dirty material. With the increasing knowledge we are now acquiring on the strength of concrete, and the effect upon it of the variations in the materials employed, washing plants for the materials are becoming of much greater importance than they were when concrete was employed principally in large masses, and was not called upon to exhibit the great strength that is now expected from it.

I still see occasionally specifications for concrete work in which the use of concrete mixers is prohibited, and hand-mixing is made essential. Although hand-mixing can be excellent, the chances under modern conditions are about ten to one against its being as good as machine-mixing. To obtain as good results with hand-mixing as with machine-mixing one must expend on labour much more than it will cost for machine-mixing. I hope that the clause causing hand-mixing will not continue to be copied from specifications that should now be given a timely funeral.

The mixer exhibited by the Builders' and Contractors' Plant, Ltd., is known as the "Roll" mixer, and comprises a rotary mixing drum consisting of two pressed steel cups. The materials for the batch are fed into a changer, which is lifted up and tilted to feed the material into the mixing drum, which is mounted about an horizontal axis. For feeding the material the two cups forming the drum are separated axially; they are then closed, and the mixing is effected by a tumbling action, there being no paddles in the drums. For discharge after mixing, the two parts of the drum are again separated axially, and the whole batch is discharged simultaneously below the machine. Water charging is effected automatically with each batch, the volume fed being regulated in a simple manner.

The Standard Concrete Machine Co., Ltd., exhibit a rotary mixer, provided with spade-like stirrers. It is stated to produce mechanically the time-honoured method of turning over with the spade "three times dry and three times wet."

Another business-like looking mixer is exhibited by Mr. Frederick Palmer. It is a portable batch mixer with a self-contained engine driving unit. This mixer is of the rotary drum type. It is rotated about a nearly vertical axis and is slewed about a horizontal axis for discharging. The machine is made in a number of sizes, and is capable of mixing one batch per minute.

Some new machines for making concrete blocks and slabs are also exhibited. One shown by the Triangular Construction Co., Ltd., impressed me very favourably as being what we call an "engineering job." This machine is distinguished by the fact that pressure is applied simultaneously at both ends of the block by means of a toggle contraption operated by a single toggle lever. The pressure is released automatically from the top plunger prior to its release, whereupon it moves away, and a second toggle mechanism causes the block to be extruded from the mould by a sliding action, which gives the effect of a trowelled finish. Machines are exhibited for making rectangular slabs as well as the hollow triangular blocks upon which this firm specializes. I was also much impressed by a very simple machine by means of which this firm makes excellent roofing tiles.

Another slab-making machine, which attracted my attention, was a turnover moulding machine, exhibited by the Liner Concrete Machinery Co., Ltd. In this machine the slabs are moulded by hand, in moulds, and the table is then turned over about a horizontal axis to deposit the moulded slab upon a truck.

A general utility moulding machine, which can be employed for a wide range of concrete articles, from lintels to sundial pillars, is also exhibited by the Standard Concrete Machine Co., Ltd. It comprises a number of sliding parts,

movable in different directions, and can be readily adapted to deal with moulds of varying forms.

The Australia Concrete Machinery and Engineering Co., Ltd., are exhibiting a hand-machine for making the T-shaped blocks in which they specialize, and also the Tonkin mixer in addition to other apparatus.

I did not see anything which was new to me in the way of shuttering, but had another look at the climbing steel shuttering made by the company of that name. This confirmed my previous favourable view of this device for cottage walling.

Messrs. A. A. Byrd & Co., are exhibiting the "Metaform" interlocking steel forms for moulding concrete in situ. This type of metal sheet form has the advantage possessed by all metal forms of leaving a much smoother face to the concrete than can be obtained with wooden formwork. In my experience, where the "Metaforms" have been employed, the work has been very satisfactory, and contractors preferred them to timber forms.

Architects and engineers who are interested in concrete machinery and plant, will find many exhibits worth their consideration.

Sanitary Equipment

By NANDY HOSKINS

ALTHOUGH very few novelties are displayed at the Building Exhibition, there are numerous examples of the progress made in the manufacture and finish of materials required for the efficient construction of buildings and their sanitary equipment.

It is now generally recognized that a good damp-proof course pays in the long run. Even the speculating builder, if he has a reputation to consider, will agree with this. A double course of slates laid in Portland cement is undoubtedly the best, but a genuine "lake" asphalt sheeting is an excellent substitute. Many materials for use as damp-proof courses are exhibited by the best known makers, some excellent, but others the reverse.

The removal of waste liquids from the vicinity of a building is an important consideration, and judging from the superior quality of the salt-glazed pipes, gulleys, and fittings on view at several of the stands, nothing need be feared in this respect provided they are properly used.

Although it is not the general practice in London, as it is in other parts of the country, to construct brick-built houses with hollow walls, the hygienic value of the cavity in rendering the building more congenial to health both as regards temperature and humidity must not be overlooked. Specimens of this class of work are represented.

There is a good display of all classes of timber, bricks, tiles, slates, and other roof coverings, and generally they are of excellent quality. Among the many exhibits the chief claim to attention in this respect belongs to Stanley Bros., Ltd. The stand of this firm is very tastefully arranged to show the various patterns and the great variety in colour of their enamel bricks. The front entrance and the basement of their stand are of glazed terra-cotta, and a well-chosen selection of the firm's manufactures are on view, including sanitary pipes, gulleys, air bricks, roofing tiles, blue bricks, etc.

It is essential that the water-closet should be of simple construction, and fitted with an efficient water-waste preventer. The first water-closet on record appears to be that patented in 1775 by Alexander Cumming. The basin of this apparatus was closed by a sliding valve, actuated by a handle which also controlled the supply of water. The valve closet (not represented at the exhibition) passed through many stages before the modern "wash-down" pedestal was reached. The advantages of the latter are well recognized. It dispenses with the old-fashioned and almost obsolete wood casing, which frequently gave rise to very insanitary conditions; it has no intricate valves to keep in repair, and no mechanism to harbour dust. The "wash-down" pedestal, when well shaped and properly fitted, leaves little to be desired in this respect.

Many of the well-known manufacturers of sanitary earthenware are not exhibiting, but there is a good display of w.c. basins, and the exhibits are to be commended for their simplicity of design and lack of ornamentation.

Some excellent baths are on view. Porcelain enamelled baths have been brought to a high state of perfection, and the price is now such that it is not economy to use paint enamel baths. The bath should be fitted with legs to facilitate cleaning under and behind the bath. The Leeds Fireclay Co. show, among many other high-class exhibits, a white-glazed fireclay bath. This bath is excellent where there is a plentiful supply of hot water, but it is very heavy, and requires a special support when fixed on upper floors.

The covering, or impervious construction, of bathroom walls must not be overlooked, and there is a general assortment of suitable material exhibited.

Many of the moderate-sized houses which have been constructed recently have lavatory basins, provided with hot and cold water, fitted in the bedrooms. These basins, on a score of labour-saving and convenience, are an advantage, but it is frequently necessary to have long lengths of waste pipes, taking tortuous routes to an outside gully, and unless the rooms are well ventilated, the convenience may become a source of ill-health. Some excellent lavatory basins, superimposed on pedestals of plain white glaze earthenware, are exhibited. The easy-clean porcelain enamelled valves for baths and lavatories are great labour-savers, and quite in keeping with the white glazed ware.

In latter years the old sandstone scullery sink has been almost completely replaced by the glazed fireclay sink, and some good specimens are to be seen on several of the stands.

Earth-closets are shown in a variety of forms by Moule's Patent Earth-Closet Co. These have been much improved since their introduction nearly sixty years ago.

The disposal plant for sewage from country houses is represented by Tuke and Bell, Ltd., who exhibit a "baby" installation, which is capable of dealing with the sewage from an eight-person house.

Jones and Attwood, Ltd., have a working model of their Fiddian distributor for bacteria beds.

Much ignorance exists with respect to sewage disposal appliances, and works, even when properly designed, are often left to inexperienced men, with disastrous results. As an instance of this, the writer recently inspected a plant, which comprised a covered collecting tank and a bacteria bed of coke. The sewage, after passing through the tank, flowed *under* the coke and thence over a railway embankment. Naturally it was giving rise to nuisance. It was considered that the coke had lost its power for absorbing the obnoxious gases and required renewal. Much more coke, however, was ordered than necessary for the purpose, and what remained was deposited in the collecting tank. The efficiency of the plant as found will be obvious.

The progress in sanitation is evinced in small things as well as great, and there are many other exhibits which are of more than passing interest. Drains should be tested and cleansed periodically, and appliances necessary for these purposes are well represented by the best makers. Labour-saving fitments for the bathroom and home, automatic disinfectors for lavatories, all have their useful purpose, and generally, a visit to the exhibition will be time well spent.

The Exhibition from a Woman's Point of View

By JULIA CHATTERTON

THE woman of to-day views the activities of the building world with a more than superficial interest. She has, in so many cases, to face the problem of how to extract the greatest amount of comfort out of life in these days of post-war restiveness, when the world has not yet swung back to normal thought and action, and the corresponding lack of cohesion in mundane matters require that she shall not only possess a grip of domestic situations as they arise, but shall be able to deal in a level-headed manner with emergencies of graver import.

The questions of how to deal with the kitchenless flat, the house minus a bathroom, and the cottage with crooked walls are all known to the possessors of incomes which are restricted to the three figure category. Such deficiencies have been grappled with during the past few years by women of the middle classes who, not possessing the wherewithal to expend upon necessary structural alterations, have nevertheless contrived to secure a very adequate equivalent by means of an intelligent application of home labour.

It is not surprising, therefore, to find that so many women of to-day have a house built. It may not be as easy to have one's house erected as it used to be, but at all events when it is completed, it remains the property of the owner, and therefore stands some chance of being converted into a thing of beauty and a joy for ever.

Such were my reflections as I wended my way through the avenues of exhibits at Olympia last week, where I observed so many members of my own sex devoting considerable time and care to the examination of materials and workmanship as applied to the art of building.

Our great-grandmothers would indeed have opened their eyes at the banishment of all their hideous interior appointments in favour of the logically designed and artistically satisfying furnishings which have so happily superseded them.

Gone are the restless and over elaborate door fittings, which were so difficult to manipulate with ease. In their place we view with joy such a development in door handles and finger plates as are produced by Messrs. Roanoid. These are to be seen in plain highly polished examples, made of a non-inflammable composition intended to take the place of metal. I have seen nothing more delightful than these fittings, in their soft artistic colourings in some eighteen different shades. They possess another merit, too, which should not be overlooked in considering the decoration of a room, and that is to make the completion of a decorative scheme possible to the last detail. Thus, a room carried out in a blue colour effect could have all its miniature appurtenances *en suite*, such as blue door handles, finger plates, slip bolts, switch and bell covers, curtain brackets, rods, and rings. Even stair rods and eyes are produced in this material, which never requires cleaning and does not corrode or tarnish.

As each exhibition has come along, changes have crept, almost imperceptibly, into the style and character of the exhibits. Possibly the movement which will have the greatest and most desirable effect æsthetically, is the one which takes simplicity as its keynote.

So marked is the leaning towards beautiful colouring in wall decoration, that it is not remarkable to find that furniture and pictures have fallen into line, so to speak, being only introduced sparingly and with intentional effect as items of an entire scheme. There is a Chinese room shown by the Walpamur Company, which immediately attracts the eye. Intended primarily as a small tea-room, it would be equally effective in a modern dwelling-house, particularly in a room with a north aspect. The colouring is carried out in shades of yellow and orange, being shaded from pale canary yellow at the skirting board, to a deep glowing tangerine hue underneath the frieze rail. Flat black paint work gives the requisite relief to the eye, and the sole decoration is a quite amiable dragon in stencil occupying the centre panel of the wall. Small pieces of Chinese lacquer supply the correct note in furniture, none other being permissible.

Exceedingly restful is the atmosphere within the precincts of the Bath Cabinet Makers' Company's stand. There is an air of real well-being in the dining-room panelled in oak with its Grinling Gibbons style of carving in lime tree. Here, also, was something original in window furnishing. Purple and cerise threads interwoven formed the material for the curtains, over which a striking pelmet of conventional design displayed a distinctive effect in tones of purple, red, dull gold, and black.

Several good suggestions for treating walls and ceilings were noticeable at the stand devoted to Stather decorations. The "Raynham" scheme of panelling with soft pastel tints in borderings has the merit of being equally applicable to the design of ceilings. Another cleverly conceived treatment, described as the "bird and flower plaque," revealed a somewhat daring production in primary colours, which nevertheless proved unexpectedly attractive on account of its clean bold outline, freshness, and cheerfulness.

One of the most notable features in the whole exhibition is the highly desirable "Esavian" window, which justly attracts considerable attention. The model on view at present depicts a bow window which, when closed, appears as an ordinary casement. At the turn of a fastener, six windows, hinged together, folded back completely in the manner of a road-map, leaving the entire aperture free to the air, without any obstruction, such as a post or support, to mar the view.

We have become so accustomed to the sight of marble nowadays in churches, hotels, theatres, and restaurants, that its claims are often overlooked. In passing the extremely fine marble exhibits of Messrs. Anselm Odling and Sons, Ltd., I was particularly struck by the appearance of a marble staircase, carried out in soft tones of grey. Standing on the balustrade were two Brazilian-green onyx vases, which gave to the whole that note of romance which the dexterous manipulation of so beautiful a material always carries in association with it.

The appeal of the garden is common to all classes of English people, and although it is true that the luxurious gardens of the sunny South and the Eastern climes can vie with any to be found on a similar scale in these Islands, the cult of the small garden is more thoroughly understood in England than anywhere on the Continent. Even the modern town garden belonging to an imaginative owner has a story to tell. No longer is a little London garden a tired and dusty spot with little to rest the jaded eye. It can have rockeries, flagged paths, sundials, and garden statuary. To the last-mentioned category belong the very charming figures made by Leckhampton Quarries Co., Ltd., which really possess that indefinable quality of expression. There is an owl which might in time become a lovable possession, in a setting of verdure and moss. For a rose garden, the breathless little "Eros," shown as if he were running against the wind, would keep good company with the flowers and bees.

In a wilder section of the garden, where the woodland beyond comes into view, would lurk the figure of Pan with his pipes—and in the half-light one could quite imagine that the figure was moving, so subtle a texture has it been given. The sundial is always sure of a welcome, and the one which adapts itself either to a stately formal setting, or a humble "back yard" town garden is worth looking upon with more than usual interest, especially when it has been adorned with a delicate acanthus decoration. This is one of the most satisfactory products of cast stone to be found at Olympia, being indistinguishable in colour and texture from natural stone.

Some Decorative and Practical Materials

By H. V. MILNES EMERSON, A.R.I.B.A.

THE Building Exhibition of 1924 is greatly improved by the additional floor space that is now available, and does more justice to the varied and interesting exhibits which embrace many new features.

A new material for partitions, etc., has been introduced, consisting of wood wool or vegetable fibre compressed into slabs from 1 1/8 in. to 2 3/4 in. in thickness, and rendered fireproof. The general size of the slabs is 4 ft. by 2 ft., but can be made in other sizes if required. The material is extremely light, and is suitable for floors, partitions, and ceilings; forms a good key for plastering, and being a non-conductor of heat and sound, should form an ideal material for hotels and similar buildings.

For wall decorations there is a good colouring material that could be used when mixing up plaster. I understand that lime will have no adverse action upon it, and as it has been successfully used in colouring rough cast it should be equally suitable for internal decoration. The walls can be finished to a smooth surface, and the decoration would be permanent, taking the place of our present method of distempering or papering the walls. Some very fine effects in wallpapers can be seen on a stand in the annexe. These are something out of the common, and open up a new field of wall decoration where one's purse is not limited. Door and other furniture is also being introduced in new designs and varied colours to match the general scheme, and not being made of metal, will always retain their lustre and freshness.

Other wall decorations consist of panelling with three-ply woods, and some charming effects are obtained by the use of many beautifully figured woods, which can be used in this manner without fear of shrinkage or warping. One firm from Bath show what can be done with some beautiful wood from India, and the time should not be far distant when greater use will be made of the many fine decorative timbers to be found in our various Dominions and Colonies. Some effective doors are shown by another firm in the new building. The figure in the panels is delightful, and the absence of knots enables one to have these doors stained and flat varnished, or treated with "Solignum" or similar material with very satisfactory results at a far less cost than the ordinary priming and painting. The price is quite reasonable, a 6 ft. 8 in. by 2 ft. 8 in. by 1 1/2 in. six-panel door costing 21s. 9d.

Locks and fasteners are shown in endless variety. One firm has introduced a "Reliable" latch guard. Any live bolt latch from the cheapest to the most expensive can be opened by a wire except where this guard has been fixed.

Various kinds of materials for floors are exhibited. The jointless floor is coming into favour a lot, the earlier trouble of cracking appears to have been overcome. It takes a good polish and is quite a labour-saving material. Where floors are composed of granolithic or cement various permanent colours can now be introduced by the use of the colouring material previously mentioned in plastering. This material is also used in the coloured filling in terrazzo flooring. The ground floors of many domestic buildings are now being constructed in a solid form, i.e., concrete with a covering of wood blocks, boarding, jointless and other forms of cement flooring. It is a good safeguard to make the concrete waterproof, especially where wood is used, and this can now be satisfactorily and quickly accomplished by the use of one of the many cement waterproofing materials that are exhibited.

One firm shows a novel and simple method of forming a curved roof in timber, short lengths being used in a diamond pattern. Another firm have steel trusses in stock sizes, all ready to be bolted together on the job. Many roof coverings are shown, and a Dutch firm have produced a glazed roofing tile in practically any colour required. A garden pavilion in the new building is erected in random squared blocks of slates of various shades with effective results. Could not some cheap method be found of utilizing the waste slate at the quarries for building purposes?

A craft which has been in existence for more than 4,000 years is shown for the first time at this exhibition. I refer to the manufacture of gold leaf. Visitors can see the various stages through which the gold passes in preparing the gold leaf, and the final operation of trimming the leaf and making it up in the familiar book form is demonstrated. From earliest times gold leaf has been used in the decoration of buildings, and the method of manufacture is practically the same to-day as in the days of the Pharaohs. Customers of the firm are always welcome to pay a visit to the factory.

One cannot help noticing the great improvement that has taken place in heating and cooking appliances, both coal and gas. At one stand I noticed gas cookers that are all white enamelled, and another well-known firm have introduced a portable coal cooker, which can be enamelled in practically any shade. The model on exhibition is enamelled blue and set in a tiled recess, which is effective and labour-saving. Other firms show a variety of fitments for heating and cooking by gas, which is attaining an important position in the modern labour-saving house.

The sanitary goods on exhibition still maintain their high standard of workmanship and material. A very useful adjunct has been introduced in the form of a disinfecting appliance attached to the flush pipe. It is so arranged that a given quantity of disinfectant is discharged down the pipe after the flush has taken place and forms a film on the water in the pan. The action is quite automatic, and the construction is so simple that it is practically impossible to get out of order.

Another firm are exhibiting a semi-septic tank, which should prove interesting to those who are erecting country houses.

In the paint and colour section one observes that H.M.S. "Endelline" has not been placed upon the retired list, rather it seems to improve with age. The high-class twenty coat work exhibits have passed away, and makers of paints and varnishes now exhibit their goods as they would appear when executed by the ordinary painter. If the materials are used as received from the manufacturers the results should be equal to the exhibits at the exhibition, and you have also the satisfaction of knowing that the composition of the paints, etc., can be vouched for as to purity. Even the old-fashioned glue pot is giving way to the modern cold water glue, which sticks tighter than a Scotsman is alleged to stick to his money. Whilst the paper-hanger is not overlooked regarding his paste.

There are many interesting joinery exhibits dealing with all classes of work. Two magnificent columns for a building in progress are worth inspection, also the English oak panelling to a room on an adjoining stand. Upon this same stand will be seen a rather unique effect of a door-surround which has been painted and then rubbed off.

On the whole the exhibition is full of interesting exhibits to which due justice cannot be given in this article, and it will well repay a visit by those who are interested in the building trades.

Paints and Painting

By C. A. KLEIN

NOT the least important feature of trade exhibitions is the fact that they provide an historical record of the progress of industry. New materials and processes are exhibited, and, although many fail to stand the test of time, some become firmly established and, in the course of a few years, cease to be regarded as novel.

The fundamental problems of the manufacture and use of paints and varnishes are essentially chemical and physical in character, and the future development of the industries depends largely on the application of these sciences to the many and varied problems which are ever present. Dissatisfaction is frequently expressed in regard to the life of modern paints and varnishes, without any appreciation of the fact that these materials are often used in unfavourable circumstances, and, in ordinary circumstances, too much is often expected from them. The increased application of scientific method in the production and development of paint and varnish products during the last twenty years has been entirely justified by the results which have been obtained, as can be seen from casual examination of some of the developments which have taken place.

The white pigments are by far the most important of all pigments, not only because of their use in white paints, but because they serve as the bases for many coloured paints. Until ten years ago only four white pigments were in general use for oil-paints, viz., white lead, zinc oxide, basic sulphate of lead and lithopone. Since that time two new white pigments have been introduced, viz., antimony oxide and titanium oxide, and both appear likely to be permanent members of the restricted group of white pigments which can be used as bases in oil-paints.

The development in oil mediums is not so striking, yet steady progress is maintained, as is also the case in regard to driers, compounds of certain of the rarer metals being now employed for this purpose. In America the paint manufacturer employs a much wider range of drying oils than is at present used in England, and it is difficult to say whether ultimately we shall be able to follow present American practice.

English varnishes, which have always been held in high esteem, have been the subject of numerous careful studies, particularly in regard to waterproofing properties, and for a variety of purposes a number of excellent waterproof varnishes have been developed. China wood oil has become one of the most important varnish oils, its peculiar properties having led to valuable and desirable developments in the varnish industry. The rapid progress of aeronautics during the war made it necessary to produce a special class of varnish for aeroplane wings, and modifications of these products are now sold for a variety of general purposes.

The impossibility of anticipating the value of the discoveries of chemistry to industry is well illustrated in the recent developments in connection with the solvents or paint thinners, used in paints and varnishes. Before the war the thinners in use were limited to turpentine and its "white spirit" substitutes, and it appeared unlikely that any other thinner would be produced which could compete with them. During the war the Germans, who were unable to obtain turpentine or white spirits, prepared two paint and varnish thinners, now known as "Dekalin" and "Tetralin," from naphthalene, and these products are among the few war substitutes which will continue to be used in times of peace.

The extensive use of aniline dyestuffs in the preparation of paint pigments is not generally realized, because it is over-shadowed by the more extensive demands for these materials in the dyeing of cotton, wool, and silk. Prior to the war we were dependent almost entirely on Germany for the necessary materials, but to-day the English dyestuff makers produce many of the colours required, and it is hoped that before long all the dyestuffs required will be obtainable from British sources.

The perennial problem of the hygiene of lead-paints has been much to the fore lately, and public attention has been directed to the Convention of the International Labour Conference of 1921, in regard to the prohibition, with certain exceptions, of the use of paint containing carbonate or sulphate of lead for the interior painting of buildings.

The position is, that whilst the necessity for white lead paint for outside work is generally agreed, the advisability of its continued use for the internal painting of buildings is disputed. The advocates of white lead assert that the use of substitutes for white lead for internal painting will result in increased cost, and that the dangers to health attending its use can be overcome by a process of damp rubbing down. In this process wa erproof abrasive paper is used to rub down painted surfaces which have been moistened with water, and this prevents the formation of dust which is the chief cause of lead-poisoning in the painter. The damp rubbing-down process is applicable to both new and old painted surfaces, and it is stated that better results are obtained than with the dry process.

The advocates of prohibition do not seriously dispute the efficiency of the new method, but consider that its general adoption will be slow; they maintain that adequate substitutes for white lead are now available for interior painting. The main fact which emerges from the discussions which have taken place appears to be that painters have a definite prejudice in favour of white lead as a pigment for general purposes, despite its poisonous properties: whether this prejudice is founded on experience of the life of the paint or in respect to the ease with which it can be applied is a point on which the disputants are by no means agreed. The convention has not yet been ratified in this country.

Many large paint users have long recognized the need of standard specifications for paint and varnish materials, and recently a sub-committee of the British Engineering Standards Association has been set up to deal with this matter. Standard specifications, reasonable in character, are most valuable aids to industry, and it is certain that such specifications, when applied to the paint and varnish industry, will lead to a more intelligent use of these materials than hitherto.

Although painted surfaces, after exposure for four or five years, are not so attractive in appearance as the many wonderful painted effects shown at exhibitions, they represent something of more importance to the average user. Exhibitors cannot be blamed for showing their products to the best advantage, but it is an open question as to whether it is wise to exhibit only perfect specimens of work, prepared by the best craftsmen, without, at the same time, showing what an average worker under average conditions can produce.

Although it has become customary for exhibitors to afford facilities for their technical staff to be available to discuss matters of mutual importance with users of paint and varnish, there is a great need for more co-operation between the architect, the paint manufacturer, and the painter. Each have their own associations where matters of technical importance are discussed, but these associations seldom come together for a joint discussion, and it is suggested that such a meeting would be invaluable, because it would afford an opportunity for specialists in each branch to look at their problems from the angle of others concerned.

Some Further Notices of Exhibits

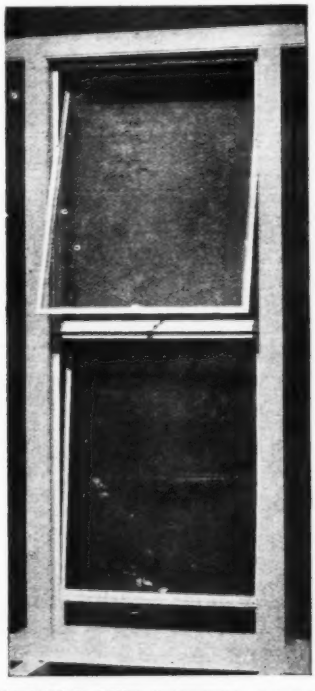
THE BATH CABINET MAKERS CO., LTD.
Row H, Stand 162.

Part of the stand comprises a portion of a dining-room panelled in oak, with Grinling Gibbons style of carvings in lime tree. Another portion of the stand represents part of a room panelled in mahogany. One end of the stand is fitted with a bay window, and at the sides are displayed hardwood doors in oak, walnut, and teak. Some of them are flush doors, suitable for office and hospital use, and others are framed, panelled, and moulded. Some of the recesses are fitted with wood mantelpieces and various styles of wood panelling. Part of the floor is in oak and parquetry, and part is covered with "Velvuto" rubber flooring, a new special floor material produced by an associated firm, the Bath Rubber Mills, Ltd. Some modern furniture is displayed in the rooms.

Address: Bath.

THE CRITTALL MANUFACTURING CO., LTD.
Row G, Stand 153.

Metal windows of every description are shown on this stand. An outstanding novelty is the new "Zincspra" process, which is applied to metal windows to make them permanently



CRITTALL'S NEW HOSPITAL WINDOW.

rustproof. Another novelty is a new range of standard windows, produced for use in tropical countries. A new type of hospital window is also shown. Examples of architectural bronzework are shown, as well as a complete range of the various standard metal windows and doors for modern houses.

Address: 246 High Holborn, London, W.C.1.

JOSEPH FREEMAN, SONS, & CO., LTD.
Row R, Stand 312.

This exhibit indicates the possibilities of decorative work in cement, concrete, plaster, roughcast, etc., by the use of "Cementone." Examples are shown in panels of roughcast, tinted in various shades by the incorporation of No. 1 "Cementone" colours with the roughcasting materials. Coloured concrete scullery and kitchen floors, wall dados, steps, garden paths, rockeries, tiles, etc., down to buttons, are also illustrated. Freeman's No. 7 "Cementone" Coloured Glazes as applied to all types of wall materials are also shown. The company's manufactures in enamels, varnishes, paints, dry colours, "Woodsava" wood preservative, etc., are also well in evidence.

Address: Wandsworth, S.W.18.

WALPAMUR CO., LTD.
Row G, Stand 133.

The inside of the stand is divided into three rooms, each representing a portion of a decorative scheme for a different type of interior. One half suggests a simple treatment for a cinema theatre, the colour-scheme being grey and jade-green, with gold decorations. The walls are painted with Walpamur water-paint, and woodwork is in "Muromatte" flat oil-paint. The remaining half shows two schemes: one is for a Chinese café, in orange, black, and gold, with decorative panels, carried out in "Muromatte," and the other part, a portion of a lady's boudoir, has a panelled dado, painted with glossy white "Mirabol," pale blue walls, painted "Muromatte" and lined out with gold. The exterior is a mauve-grey "Duradio" picked out with silver. The columns are painted with white and pale yellow "Mirabol" with black and silver caps, and the pedestals are in black "Duradio." One end represents the exterior of a small town house, painted in white "Amorol," with door and window-boxes in drop-black and varnished with "Hall Door" varnish.

Address: Hollins Road, Darwen.

FRANCIS MORTON, JUNIOR, & CO.
Row J Stand 195.

This firm show the "Valtor" system of steel springs and girders for floors of ballrooms, assembly rooms, racquet courts, badminton rooms, gymnasia, covered lawn tennis courts, roller skating rinks, etc. The timberwork of the floor is supported on light steel joists in short lengths, bolted to fitments containing steel springs. Morton's automatic locking gear for rendering "Valtor" floors rigid or resilient, as required, is also shown. The locking gear consists of small iron wedges on steel bars, which can be drawn in under the "Valtor" girders, thus supporting them off the springs and rendering the floor rigid when required. The operation of changing from a rigid to a resilient floor, or *vice versa*, is effected by a key inserted through a small aperture in the floor at one end of each set of the locking gear.

Address: 22 Laurence Pountney Lane, London, E.C.4.

THE KENT BUILDING CO., LTD.
Row C, Stand 28.

This exhibit demonstrates the "Kent" system of walling in reinforced concrete piers with concrete panels. The piers and slabs can be made in wooden moulds, on the site of the house, and the piers, when set, are up-ended into position by a tripod and tackle, and set in pockets left in the plinth course, when they are grouted in, the reinforcing rods projecting well at the lower end. At the top the rods can project and be threaded for securing the roof trusses. Horizontal bolts are cast in the columns and the slabs are nutted to these at their corners, the outer and inner skins being spaced apart by "distance blocks." Any width of air-space desired can be given, and no skilled labour is required for fixing the slabs to the piers.

Address: 34 Victoria Street, London, S.W.1.

HAUNCHWOOD BRICK AND TILE CO., LTD., AND G. W. LEWIS' TILERIES, LTD.
Row D, Stand 62.

The exhibits of the former include blue and brindle bricks, amongst them being samples of 3 in. blue pressed bricks without frog so largely supplied for L.C.C. sewer contract for many years, and 2½ in. and 3 in. blue bricks with frog, for bank strong-rooms and work of similar character. Other samples of the company include blue stable and path pavers; kerbings and channellings; wall and platform copings; garden edgings in various colours; red and blue flooring quarries; red, blue, and buff ridges and finials; red, blue, buff, and salt-glazed chimney-pots; firebricks and fire quarries; sanitary pipes and fittings; garden vases, land drain pipes; hollow blocks for floors and walls, and sand-faced fireplace bricks. The latter firm's exhibit contains examples of the famous "Rosemary" roofing tiles, of which they are the sole manufacturers. These are made in a numerous variety of shades, and they can be supplied either hand-made or machine-made.

Address: Nuneaton.

JENNINGS, LTD.
Row G, Stand 137.

This exhibit includes doors, windows, and other woodwork suitable for dwelling-houses and other types of buildings. The firm specialize in all kinds of joinery in softwood and hardwood and other wood goods, including stairs, shop fronts, mouldings, huts and portable buildings, block flooring, electric light casings, fencing, turnery, and wheelbarrows. They also offer wallboard, plywood, asbestos cement sheets, and tiles, etc., etc.

Address : Pennywell Road, Bristol.

MAJOR & COMPANY, LTD. Row F, Stand 110.

This firm are the sole manufacturers of " Solignum " wood preservative. They exhibit a two-roomed wooden building and fencing, illustrating the uses of their preparation as a preservative, as a decorative agent for external woodwork, and as a decorative stain for interiors. One of the sections of the stand forms a panelled lounge hall in oak, etc., showing the rich fumed effect that can be obtained by using " Solignum." The other section shows a cottage living-room finished to comply with the Government housing scheme requirements. This feature is shown so that architects may judge the difference between real " Solignum " and the inferior substitutes frequently passed off as " Solignum " by unscrupulous people. The company have found it necessary during the past few months to take several cases of substitution into the Courts.

Address : 205 Borough High Street, London, S.E.1.

THE HOPTON-WOOD STONE FIRMS, LTD.
Row N, Stand 246.

The front of the stand has a Hopton Wood stone balustrade and step. The base course, caps, and bases to the pedestals and the handrail are in dark Hopton-Wood stone. Balusters and die stones to the pedestals are in light Hopton-Wood stone. The outside portion of the back wall is in Hopton-Wood stone, rustic finish. The inner side (right hand) of this wall has a dado, consisting of Derbyshire black bird's-eye marble capping and plinth. Grey bird's-eye marble styles and light Hopton-Wood stone panels. The inner side (left side) has a Derbyshire black bird's-eye marble moulded capping and plinth, light Hopton-Wood stone bands and styles, and Derbyshire fossil marble panels. The inner side of right-hand wall is in Hopton-Wood stone, rustic finish. The outer side has a dado, with Hopton-Wood stone plinth, styles, and capping, with reconstructed light Hopton-Wood stone panels. The entrance step is of Hopton-Wood stone. The floor of the stand is in Hopton-Wood stone, Derbyshire black bird's-eye and grey bird's-eye marble paving in various designs.

Address : Wirksworth, Derbyshire.

THE FALKIRK IRON CO., LTD.
Row L, Stand 228.

This firm show a complete series of their " Smoothtop " gas ranges. A height that eliminates backache, a closed top of perfect smoothness, and a general compactness of arrangement are among the features claimed to save labour and ensure satisfaction. The heat supply arrangements are ingenious, and are claimed to ensure the utmost economy in gas in combination with the maximum heating advantage. With one burner alight two vessels can be boiled, with two burners on three vessels can be kept boiling and one simmering, and with three burners on four or five vessels can be kept boiling. In each model automatic lighters for all the hot-plate burners are fitted in combination with a pilot light. The heat regulators can be adjusted to suit any required pressure. Each " Smoothtop " oven is double cased and packed with a non-conducting material, making it possible to maintain heat in the oven for a long time after the burners are turned off. A baffle plate is fitted at the bottom of the oven over the burners, and the articles being cooked are thus not exposed to a naked flame.

A. A. BYRD & CO. Row N, Stand 239.

On this stand are the " Metaform " interlocking steel forms for moulding any shape or form in concrete " in situ." A single course 2 ft. high, composed mainly of standard forms 24 in. by 24 in., with an assortment of fractional widths of plates, inside and outside, right-angle corner units and hinged corner units are set up around the entire stand, forming a wall 2 ft. high, with various projections and recesses to illustrate how easy it is to follow any form with the standard units.

Address : 11 Queen Victoria Street, London, E.C.4.

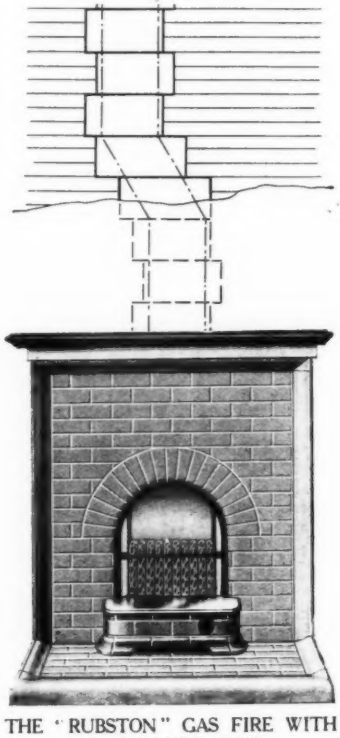
THE LEEDS FIRECLAY COMPANY, LTD.
Row E, Stand 101.

The Burmantofts terra-cottas are displayed in a central architectural feature, the construction of which is carried out in several types and finishes. The plinth is in glazed terra-cotta of a dark, neutral blue shade, the piers and arches are in " Texture Marmo," and the caps are picked out in gold. This " Texture " finish is a new application of permanent colour to architectural treatment. The chequered superstructure is crowned by a lettered frieze in golden-crimson. A display is made of the Burmantofts " Lefco " terra-cotta fireplaces. The sanitary exhibit comprises examples of " Imperial Porcelain " white glazed fireclay ware in the form of a bath and the " New Carlton " lavatory. Glazed bricks, tiles, Claridge's asphalte (of which the company are now the proprietors) are other important exhibits of this interesting stand.

Address : Wortley, Leeds.

THE DAVIS GAS STOVE CO., LTD.
Row H, Stand 154.

On this page we illustrate one of the firm's new " Rubston " gas fireplaces used in conjunction with the " Nautilus " cast-concrete gas flue blocks. While most designs of gas fires can be used with these flues, the " Rubston " is specially recommended, since it has been designed for this purpose. It consists of a Davis gas stove, fitted with a surround of " Rubston," a material which resembles rubbed stone, and is easily cleaned with a wet cloth. The " Rubston " gas fireplaces are eminently suitable for use in conjunction with the " Nautilus " cast-concrete gas flue blocks, by means of which, in new houses, very considerable structural and financial economies can be effected in the elimination of foundation concrete, projecting chimney breasts, brick footings, trimmers, skew-back arches, concrete hearths, and large brick chimney-stacks. " Nautilus " gas flue blocks are approved by the Ministry of Health, and are used largely by the London County Council.



THE " RUBSTON " GAS FIRE WITH "NAUTILUS " FLUE.

Address : 60 Oxford Street, London, W.1.

SOOLE AND SON, LTD.

This firm exhibit specimens of their joinery. Among the exhibits are oak panelling, staircase work, teak and oak window frames, glazed with lead lights with steel casement for opening lights, doors, a hospital door, dresser, and chimneypieces.

Address : Dunstable Works, Richmond, Surrey.

Contemporary Art

Drawings of Architecture.

In no less than four of the exhibitions opened in April the main interest is expressed in architectural subjects. At the Goupil Gallery Richard Wyndham provides a new outlook on this particular study, a baroque point of view which is in accord with many of the subjects he treats. He gives them a new air, and so extends his feeling regarding them that they take on a pagoda-like aspect, which, however, does not disguise their essential character. The effect is produced by the conversion of straight lines into curves, sometimes violent curves, and the strange thing about the process is that they produce no sense of arbitrariness. As drawings they are so clever that even if some architectural obscurity were noticeable they would still count. "La Guglia del Gesu," at Naples, is the most characteristic of the artist's style, but the two studies of the Latomia, at Syracuse, and those of Amalfi are also good, though less individualistic.

At the same galleries W. Arnold-Forster shows a series of well-drawn pastels and oil-paintings, many of which have very pleasing, wide, blue-grey sky effects.

At Walker's Galleries Margaret Bernard proves herself a sympathetic observer of buildings, and reproduces both English and French subjects in her water-colour work quite admirably. Her best effects are atmospheric, and the best example is "The Front: Littlehampton." This is undoubtedly a most felicitous rendering of the essential clean, clear, greenish wind and water effect that makes Littlehampton on a fortunate day one of the most exhilarating sensations on the English coast.

At the St. George's Gallery there is the second exhibition of the Modern English Water-colour Society: a pure joy to all lovers of England, water-colour drawings, and modern style, or styles rather, for there are as many styles as there are members showing, and yet but one style—that of the traditional English school. The exhibits are all true drawings; nowhere on the walls is there an attempt at picture-making. It is here the society scores. Here there are examples of the broad draughtsmanship of John Nash and Ethelbert White; the restrained pictorial representation of Randolph Schwabe and Robert Bevan; the slack yet truthful facility of Maresco Pearce—somewhat departing from his tighter method—and Malcolm Milne, and the concentrated naturalistic expressionism of Charles Ginner. In many of the items shown the humblest buildings are treated with respect; in Ginner's with something approaching worship.

Architectural Studies.

Architecture brings out the best in the art of Lilah Fellowes. There is a group of some half-dozen "Relics of Roman Splendour," in which there is actual revelation made with the least possible effort in the direction of exact representation. It is the spirit of the splendour that is shown and not the pieces of stone of which the actual objects are constructed. These sketches and studies of Rome and the Campagna, of Amalfi and Naples, of "Green Umbria," are, however, mostly seascape and landscape, accomplished in workmanship, sincere in observation, and very pleasant in the result. There are some ninety of them now in Walker's large gallery, making a striking and exceptional show.

Sculpture.

Here, too, is a display of bronzes by the Italian artist Riccardo Assanti, who achieves in his "Javelin Thrower" classicism, and in "A Tiller of the Soil" a realism akin to that of Meunier. Both manners, however, are brought together by the simple character of the modelling adopted. There is no undue detail, but character is achieved without it. There are sketches of a "Piper of the Abruzzi," and two shepherds, which are admirable for their direct expression. A good study is the "St. Francis with the Birds," and two small bronzes of "Baptism" (a mother and child), and a woman and lioness, for a fountain, are excellent.

Boudin Again.

At Tooth's Gallery there are twenty-five oil paintings by Boudin, including the splendid "Market and Ferry at Trouville," and two fine open harbour scenes at Dordrecht as good as anything he painted. This is a representative show that should not be missed.

KINETON PARKES.

Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

The Cost of Housing.

Mr. Wheatley, the Minister of Health, informed Mr. Gould that the average cost per house of houses in contracts let by local authorities up to March 1, excluding cost of land and development, was £368 for non-parlour houses, and £421 for parlour houses.

The Cost of Land for Housing.

Mr. Greenwood, Parliamentary Secretary to the Ministry of Health, informed Mr. E. Brown, that the average capital cost of land purchased by local authorities for purposes of their assisted housing schemes under the Housing, Town Planning, etc., Act, 1919, was as follows:—

Areas of Local Authorities.	Average Price per Acre.
London (L.C.C., City of London, and Metropolitan boroughs)	£286
County boroughs	234
Non-county boroughs	206
Urban Districts	209
Rural districts	126
All districts	£206

Labour for Housing.

Mr. Greenwood, in answer to Mr. Simon, said that the question of how many men in each of the sections of building-trade labour were estimated to be required to build 200,000 A3 houses per annum had been under consideration by the Committee of Representatives of the building industry, and he hoped shortly to be able to make a statement. Information was not available as to the number of men in each section of the building trade in 1903 and 1913, but the following table gave particulars for 1901, 1911, and 1923:—

OCCUPATION.	Number of Men employed in the Building Trade in England and Wales.		
	Census 1901.	Census 1911.	Estimates for 1923.
Bricklayers	109,160	92,312	53,630
Carpenters and Joiners ..	243,075	176,978	106,880
Plasterers	27,544	21,230	13,910
Slaters	8,461	6,946	2,880
Others	445,904	444,390	454,700
Total ..	834,144	741,856	632,000

The Building Subsidy.

Mr. D. G. Somerville asked the Minister of Health in how many cases the subsidy under the Housing Act, 1923, had been refused, firstly, to requests by local authorities in respect of their own buildings, and, secondly, to applications from private builders put forward through those local authorities?

Mr. Greenwood said that so far as local authorities' schemes for building houses themselves were concerned, it had been found necessary in a number of cases, in view of the amount of work in hand or the lack of essential skilled labour in the locality, to limit immediate approvals to an instalment of the proposals the principle being to get houses actually built as quickly as possible. In the case of private enterprise individual applications for subsidy were dealt with by the local authorities, and when the Minister of Health had approved a general scheme he did not receive details of the approvals or disapprovals in particular cases. On March 1 local authorities had issued certificates of approval under the scheme covering 41,060 houses.

Private Enterprise and Housing.

Mr. Greenwood informed Mr. J. D. Gilbert that during 1921, 1922, and 1923 the numbers of working-class houses erected by private enterprise with State assistance were 1,027 in the County of London, and 6,630 in Greater London (including the County). During the year ended September 30 last, the numbers of houses erected by private enterprise of a rateable value not exceeding £35, were, in the County of London, 994; and in Greater London, 6,794.

Scottish Housing.

Mr. Stewart, Under-Secretary for Health, Scotland, informed Sir G. McCrae that the Scottish Board of Health had approved, under the 1923 Act, the erection by local authorities of 6,820 houses, for 1,943 of which tenders had been accepted; 611 were under construction, and eight had been completed. As regarded private enterprise, the number of houses for which certificates "A" had been issued, was 1,779; 865 were under construction, and 29 had been completed. The number of workmen employed on local authorities' housing schemes in Scotland during the month of March, 1922, was 12,701; and during March, 1923, 4,438. The figure for March, 1924, was not yet available, but for February, 1924, it was 4,403.

Law Reports

Trespass—"Rights of Way"

Thompson v. *Bennett.*

April 3. Chancery Division. Before Mr. Justice Astbury.

The plaintiff, Mr. J. E. Thompson, of Woodsmoor, Stockport, brought an action against Mr. J. W. Bennett, of Middlewood, Stockport, seeking an injunction to restrain the defendant from trespassing on the plaintiff's land and house, Rose Cottage, Middlewood.

Mr. Archer, K.C., for the plaintiff, in detailing the facts of the case, stated that the defendant held his property under a conveyance which purported to grant to him all rights of way which were used when he took the property, and the question turned on the construction of the words "rights of way." Defendant's property included a wood to the south or south-west of plaintiff's premises, and it was alleged that on many occasions since April, 1922, defendant had trespassed on plaintiff's premises by carting and hauling timbers and red ash or other materials across his land and immediately in front of Rose Cottage. Plaintiff also said that defendant had pulled down a fence erected for the purpose of preventing the alleged trespass. The defence was that the wood in question formed part of the fifty-seven acres conveyed to defendant in 1920, and which extended all round plaintiff's cottage, and that defendant's conveyance gave him all rights of way or other easements then enjoyed by the occupiers of the premises conveyed, and he alleged that at the date of the conveyance there was a clearly-defined roadway leading from his land to a public roadway, Buxton Road, which proceeded in front of Rose Cottage and across defendant's land. He said that a right of way over the roadway on plaintiff's land had been enjoyed for upwards of twenty years, for the purpose of carting timber, coal, and shale. He further alleged that the plaintiff had wrongfully erected the fence he had broken down.

Mr. C. H. Clark, an estate agent, of Newton-le-Willows, gave evidence for the plaintiff.

Mr. Luxmoore, K.C., was about to open defendant's case when his lordship suggested that the parties might possibly adjust their difference and save further expensive litigation.

The result of a conference was that the parties arrived at a settlement, it being agreed that the plaintiff should purchase defendant's cottage and garden for £100, each party to pay their own costs.

Alleged Building Scheme

Hele and Weaver v. *Aman and Pink.*

March 24. Chancery Division. Before Mr. Justice Astbury.

The plaintiff in this action, Mrs. F. E. Hele, of Totland Bay, Isle of Wight, and Mrs. R. M. Weaver, of Fleet, sought an injunction against Mr. F. G. Aman, of the Totland Bay estate, and Messrs. A. F. and A. Pink, of Granville Road, Totland Bay, to restrain them from carrying on the business of a motor garage on premises of which the defendant Aman was assignee or lessor, the other defendants being his tenants.

The full facts appear from the judgment.

His lordship said in his view the only question for his decision was whether there was such a building scheme embracing the properties in question as entitled one set of lessees to sue another set. Plaintiffs alleged that the properties were comprised in a building scheme which originated in an agreement of November, 1877, and in an indenture of lease of February 20, 1885. Under the agreement of 1877 the two owners of property at Totland Bay named Ward agreed to grant a long lease to three persons, named Norton, Harvey, and Fox, of a considerable number of acres, and the agreement appeared to be one in which the owners of the estate desired to have it developed for their own purposes. He could find no sign in the document of the laying out by the vendor or the lessor of a building estate with the intention that certain restrictive obligations should be entered by himself and his purchasers or lessees with the object that they should be binding and enforceable *inter se* on everyone. It seemed to be simply an agreement under which the owners provided for the development of their property on terms suitable to themselves. There was no plotting of the land as a building estate, and the necessary ingredient to enable owners to acquire the right *inter se* to enforce building restrictions was entirely absent. In February, 1885, a lease was granted by the surviving owner (Ward) to the two surviving lessees under the building agreement, Norton and Fox, under which the latter agreement was merged. The covenants under this lease were for the convenience of the landlords and not for the benefit *inter se* of people who might become under lessees of part of the land. He was unable to find within the meaning of the authorities any building scheme in that case which entitled plaintiffs as lessees or under lessees of part of the property to sue another lessee of another part of the property on the covenants entered into by the original lessees with the owners. The action failed as far as it sought to enforce the alleged building scheme, and must be dismissed with costs. This finished all interest by Aman in the matters in dispute, but he had given plaintiffs leave to amend the statement of claim by alleging as against the defendants Pink, independently of the alleged building scheme, the commission by them of a common law nuisance in respect of the garage they occupied, and for which plaintiffs claimed an injunction and damages. He gave that liberty to amend on the terms that plaintiffs would in any event pay to defendants Pink all such costs as they had been put to by reason of the present statement of claim. The action would be dismissed with costs as against Aman, and it would also be dismissed with costs as against the defendants Pink, in so far as the building scheme claim had been made. Plaintiffs could apply to restore the action against defendants Pink on the amended statement of claim. The costs in that matter he reserved.

Ancient Light Dispute

Chaplin v. *Bottoms.*

April 10. King's Bench Division. Before Mr. Justice Bailhache.

This was an action by Mr. C. A. Chaplin, of Finchley Road, N., claiming against Mrs. Bottoms, of Gloucester Crescent, Regent's Park, an injunction for alleged interference with a house in Gloucester Crescent or in the alternative for damages.

Mr. Craig Henderson, K.C., appeared for the plaintiff, and Mr. G. C. Hutchinson, for the defendant.

Mr. Craig Henderson stated that the defendant was owner of a house next to plaintiff's house in Gloucester Crescent. The premises were not joined together. A wall about 6 ft. high separated the gardens, and for all time since the house was built there had been uninterrupted access of sunlight and air to the back of plaintiff's premises. In November last year defendant sent builders, who demolished the 6 ft. wall, which was entirely on her property, and erected a new building projecting out at the rear of her house, and as a result the sunlight and air to the two bottom flats of plaintiff's house had been obstructed. The house, originally a private residence, had been converted into separate flats. The immediate result of the new erection was that a tenant, who found the alterations a nuisance, asked to be relieved of his tenancy. More artificial light had now to be used in the lower floor rooms, and the rental value of two flats was affected by the obstruction.

Defendant denied that the lights were ancient lights, and it was submitted that the plaintiff had failed to prove that they were. Defendant's evidence showed that the light to the rooms complained of was quite good, and defendant said plaintiff had suffered no damage.

The experts called on behalf of the plaintiff were Mr. John M. Sheppard, architect, of Messrs. Sheppard and Harris, of Bloomsbury Square; Mr. David Isaacs, of Messrs. Davis & Co., surveyors, of Berners Street, Oxford Street; and Mr. Horace Joyce, of Messrs. Horace Joyce & Co., surveyors, Buckingham Gate, S.W.; and for the defence: Sir Banister Fletcher, architect and surveyor; Mr. William Woodward, architect and surveyor, senior partner of Messrs. William Woodward and Sons, of Great James Street, W.C.; and Mr. Arthur N. Werrett, assistant to Mr. John B. Thorp, architect, Gray's Inn Road.

His lordship, in dismissing the action with costs, said the plaintiff had not proved that a window, the obstruction of whose light he complained, was, in fact, an ancient light, and as that was an essential part of his case, plaintiff's action failed.

The Inspection and Testing of Structural Materials

MR. H. J. DAVEY, M.B.E., M.I.Struct.E., in reading a paper before the Institution of Structural Engineers, made a number of striking observations on the British standard specification for the testing of structural steel. He said: Thanks to the labours of the British Engineering Standards Association, consulting engineers and architects on the professional side, and steel makers on the commercial side, have a common ground of authoritative reference. The numbers and natures of quality tests are defined, and sufficient time has elapsed since their inception to demonstrate the need, or otherwise, of revision, modification or expansion. The elaboration of mechanical tests, or the introduction of what may be described as "freak" tests cannot be too strongly deprecated.

Considerable space is devoted in the B.S.S. structural steel to the selection, preparation, and testing of bend test pieces, and although bend tests are not included in the "freak" category their usefulness is not apparent.

Presumably bend tests are regarded as an index of ductility in structural steel, additional to that afforded by percentage elongation, yet the test is not required for rivet bars where ductility is of even greater importance than tensile strength. Severe bend and flattening tests are called for in the finished rivet, but it would appear desirable to know the bar ductility before risking rejection after all the work of manufacturing rivets had been carried out; provided the bend tests afford such indication.

Circumstances sometimes arise where careless or inexperienced handling of bend tests render perfectly satisfactory steel liable to rejection. One personal experience is given as an illustration.

At a German steel fabricating works tensile tests had been carried out with satisfactory strength and ductility results. Cold bend test pieces, previously stamped, had been sent to the smithy and all came back broken under the test. Investigation disclosed that not only were the test pieces not sufficiently cleaned up from the effects of shearing out, but that they had been brought down with one blow with a steam hammer; and, of course, the steel would not stand up to that sort of treatment.

New pieces were selected, adequately dressed, and bent through 180 deg. by a series of light blows with perfectly satisfactory results. The plates represented were accepted and no trouble was experienced either in fabrication, or since. In fact, they are doing service to-day in London.

Unless the existing bend test serves some purpose unknown to the author after thirty-five years of continuous inspection and testing of all descriptions of structural steel, no reason is apparent for its retention; it might be eliminated, and the number of permissible tensile tests doubled so as to provide something approaching an average over, say, 25 tons of rolled steel sections at present represented by one piece from one web of one length in the case of joists.

The importance of percentage contraction of area at fracture in tensile testing as an indication of ductility appears to be sacrificed to percentage elongation; in fact, contraction is not mentioned in the British standard specification. Yet in order to correlate percentage elongation between test pieces of thicknesses varying between 0.37 in. and 0·88 in. three different widths of test piece are found to be necessary; and despite these elaborate precautions the ultimate percentage is largely dependent upon the position of the fracture in relation to the gauge dots.

Contraction of area is neither influenced by the thickness or width of test piece, nor by position of fracture. Practically every test-house printed test sheet in Great Britain and abroad provides columns for recording contractions, but these are usually issued blank. It is curious that provision so universally made is hardly ever utilized unless specially asked for. In so many instances where fracture takes place in such position as to influence percentage elongation the contraction would afford a reliable guide to ductility, and so save the delay involved by the preparation and testing of additional pieces to determine the most favourable percentage elongation.

The method of selecting test pieces from rolled sectional steel is not altogether on a satisfactory basis from the purchaser's point of view. It is customary to find sections banked on the mill according to cast or "blow" number, certain lengths being hot sawn partly through to facilitate parting off for test pieces to be prepared. These are usually crop ends.

This practice is subversive of the first principle of inspection, i.e., independent selection of the test length. It is in effect not distinguishable from a selection by the maker.

Such position is foreseen and provided against by the current B.S.S. (clause 4b), but where part sawn bars are refused, and other lengths demanded necessitating replace lengths from the same cast, it is more frequently than not found that none is available, and no definite promise can be given of another rolling of the particular section.

Where material is urgently wanted, and building owners are clamouring for progress, few consulting engineers or architects will support the principle of independent selection even if an inspector raises it. Works' selected pieces are taken as being the easiest way out of threatened delay.

No cogent reason may exist for suspecting a variation between the quality of the lengths so selected and any other lengths from the cast, but material variation is possible, as the following incident which came under the author's personal observation, will illustrate:—

Very heavy beams were being rolled on a Continental mill. In the final pass one ingot became what is technically known as a "sticker," i.e., a section which would not enter the rolls. Attempt after attempt was made, and finally, after several minutes' delay, during which the heat passed from bright to dullish red, the beam passed through.

The finishing heat was clearly much lower than that of the beam immediately preceding, and considerably more pressure must have been exerted to force the metal through the rolls to its final shape.

Now the effect of such "semi-cold" working on soft or mild steel is to raise the yield point and ultimate tensile strength in a marked degree. Discussing the point at the time with the German engineer in charge, it was mutually agreed that a difference of as much as 7 kilos per sq. mm. (4.5 tons per sq. in.) might be expected in favour of the "sticker," as compared with his more docile brethren.

The selection of test lengths from round or square bars of moderate dimensions can be quite independent; shearing off is simple, and a few odd lengths are readily replaced.

Further objection is taken to the common practice of testing pieces from the webs only of rolled steel joists. Difficulties are invariably raised by works when flanged tests are demanded. Flanges, particularly flanges of beams possibly have to perform more important work than webs. Consequently it is reasonable to assume that the tensile strength and ductility of the metal in flanges is of greater interest to those responsible for the quality of material used in structures under their supervision. Fairly wide differences, amounting sometimes to 3 tons per sq. in., are frequently found between flange and web tensile tests taken from one section.

No guidance on the point is afforded by the B.S.S., which merely requires one tensile test from every cast of not more than 25 tons in any constant section. The position of test pieces not being defined, the maker uses the web presumably because such are simpler to cut out and machine for testing.

Instances occasionally arise where the British standard specification has to be disregarded and steel rejected despite compliance with the inspection and testing clauses.

Societies and Institutions

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. :—

Restriction of General Building in favour of Housing.—It was decided to approach the Ministry of Health and protest against any steps being taken to restrict general building operations in favour of house-building.

R.I.B.A. Street Architecture Jury.—Sir John J. Burnet, A.R.A., and Mr. Walter Tapper were appointed in place of Sir Aston Webb, P.R.A., and Sir Reginald Blomfield, R.A., on the Street Architecture Jury.

The Professional Classes Aid Council.—Mr. Paul Waterhouse (past president) was appointed to represent the R.I.B.A. on the Council of the Professional Classes Aid Council.

The International Garden Cities and Town Planning Federation Conference, Amsterdam, July, 1924.—Mr. Raymond Unwin was appointed to represent the R.I.B.A. at the conference.

The R.I.B.A. Prizes and Studentships.

The R.I.B.A. prizes pamphlet for the current year, just issued, contains particulars of the following prizes: The Royal Institute silver medal for essays; Royal Institute medal for measured drawings; Tite prize; Pugin studentship; Godwin bursary and Wimperis bequest; Owen Jones travelling studentship at the British school at Rome; R.I.B.A. (Henry Jarvis) studentship at the Architectural Association; R.I.B.A. (Henry Jarvis) ex-Service travelling studentships at the recognized schools; R.I.B.A. (Alfred Bossom) travelling studentship; R.I.B.A. (Howard Colls) studentship at the Architectural Association; Grissell gold medal; Arthur Cates prize; R.I.B.A. (Archibald Dawnay) scholarships; Ashpitel prize; and the R.I.B.A. silver medal for recognized schools.

Attention is drawn to the fact that candidates who have entered for the Soane medallion or the Tite prize are permitted to submit their drawings in place of the usual problems in design required for the final examination; and that candidates who have been awarded the Soane medallion, or who have received a certificate of hon. mention in either of these competitions, receive exemption from the design portion of the final examination. The age limits of all prizes where an age limit is stated has been raised by five years. The value of the essay prize and the Arthur Cates prize has been raised to £50 each. The subject for the Tite prize is a design for a small museum, and a dance hall has been set for the subject of the Grissell gold medal. Copies of the pamphlet, in which the conditions, regulations, etc., are fully set forth, may be obtained at the R.I.B.A. Price 1s. net.

The Northern Polytechnic Institute.

The annual speech night of the Department of Architecture, Surveying, and Building, was held under the chairmanship of Sir Lulham Pound, Bart., vice-chairman of the Governing Body, and chairman of the Finance Committee of the Northern Polytechnic. After Dr. Reginald S Clay, B.A., D.Sc., had outlined the curriculum of the junior school of building crafts, and given particulars of the method of training, Mr. T. P. Bennett, F.R.I.B.A., hon. F.I.O.B., head of the department, gave a brief resumé of the activities of the department during the past twelve months. He said that several important bodies had consulted the Institute in connection with educational schemes of national importance, which was an indication of the standing of the school in the public estimation.

Mr. J. Alfred Gotch, P.R.I.B.A., referred to the importance of the building crafts in the execution of building work.

Dr. Sir Sydney Russell Wells, M.P., then distributed the prizes gained by the students during the year. In addition to the ordinary prizes, the following special prizes were awarded: the "Bradel" prize for architectural design, £2 2s.; the "Bertram Hellyer" prize for plumbing or sanitation, £1 1s.; the "Kearney" prizes for lettering, masonry, and attendance, £5 5s.; the "Deacon" prizes for painting and decorating, £5 5s.; the "Heaton" prize for structural engineering, £1 1s.; the "Associated Master Plumbers'" prize for craftwork, £1 1s.

The Chairman (Sir Lulham Pound, Bart.) announced that the Owen Jones studentship was won in 1923 by a member of the staff of the department, and in 1924 by an old student of the Institute. He also announced that the following special prizes had been offered for competition during the session 1924–25: A prize of £10 10s. to students in the brickwork classes, by Mr. H. R. Selley, President of the National Federation of House Builders; one of £5 5s. to craft students, by the London Master Builders' Association; one of £2 2s. for architectural design with full-size details, by Mr. Arthur J. Davis, F.R.I.B.A.; and one silver and one bronze medal for competition amongst students studying theoretical and practical subjects as part of their training as master builders, offered by the Institute of Builders.

A Glorious Tradition.

In his last lecture of this session's course on ancient architecture at the Central School of Arts and Crafts, London, Sir Banister Fletcher followed the course of Byzantine architecture in its later developments as it travelled from Constantinople in the East to the prosperous city of Venice farther West, and to other art centres in Western Europe, where it has survived sporadically down to the present day. Venice, at the head of the Adriatic, rose and was beautified by the devotion of her sons, who were not satisfied with a distant cathedral at Torcello. Like the Romans, they built their place of worship close to the ordinary place of congregation, in their case the Great Piazza of St. Mark's. There arose the great Byzantine cathedral, like Venice herself, proud, dominating, and magnificent, in a blaze of colour, with its five gilded domes glittering in the blue of the sky. Sir Banister also referred to the chief monuments of Byzantine art in other lands—Greece, France, and even England, and concluded by giving vivid glimpses of the great Byzantine cathedral of Westminster.

Mr. W. G. Newton on Architecture.

Mr. W. G. Newton's lectures, in the Ashmolean Museum, Oxford, continue to attract senior members of the University as well as a very large number of undergraduates. Mr. Newton considers that "Early English" architecture ought to have its true origin indicated by being called "French." Speaking of the cusp, as a characteristic of the Gothic style, he showed, in a recent lecture, Moorish examples from Spain dating from as early as the ninth century, and pronounced this feature to be distinctly Oriental. The "Decorated" period, with its extreme assertion of the individual taste of the craftsman, was described as an "interlude" in the development of the great problems of construction. The "consummation of the vault" in the Perpendicular period was dwelt upon, and a comparison was made between the Norman and Tudor solution of both structural problems and wall enrichment by panelling. Another lecture by Mr. Newton was devoted to vaults, and the ancestry of the mediæval system of roofing was traced from the Egyptian covering of immense flat stone slabs to the Greek rafters of timbers, and downwards to the Roman vault of brick ribs and concrete (out of which grew the later barrel vault and the cross vault). It was shown how the Gothic system was evolved partly from the Roman practice, and partly from the dome and barrel vault, of pure masonry, of the early Christian churches of Armenia and the Eastern Mediterranean. Mr. Newton expressed his debt on this subject to Professor Strzygowski's work on the "Origin of Christian Church Art," recently published.

A third element was found in the timber churches of Scandinavia, and illustrations were given of what may be considered as the timber prototype of a characteristic Norman nave, with aisles and clerestory.

The transept was explained as a growth out of an Eastern variation of roofing by a series of transverse barrel vaults, rather than as a conscious adoption of the form of the cross in the plan. Mr. Newton closed the lecture with a demonstration of the reason for the general introduction of the pointed arch, showing it to be the only device by which the vaulting of square or oblong bays could be carried out in a perfectly satisfactory manner. All the important points were illustrated by excellent lantern slides.

Correspondence

The Coatbridge Memorial Competition.

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—I have recently perused the instruction issued by the R.I.B.A. for the guidance of assessors, and the general conduct of competitions, and it appears to me that these instructions have been somewhat ignored by the Coatbridge Memorial Committee. Designs were submitted on December 10, 1923, but so far no official intimation of the result has been issued, although, personally, as a regular reader of the JOURNAL, I saw a report of the award in your issue for January 23. I think, however, that the drawings have been retained for an unreasonable time, and the unsuccessful designs, which may possibly be of value, and even useful for other work, should have been returned to the authors together with the deposit. It may not be unreasonable also to believe that amongst the fifty-three unplaced schemes some few might be deemed sufficiently worthy at least of some passing comment. "A COMPETITOR."

The Timber Supply of North America

Lecturing before the Royal Society of Arts, Mr. R. L. Robinson said that in North America over 90 per cent. of the houses were of wood. In this and in other ways the forest resources of that continent had helped the rapid development that had taken place there. The area of forest remaining was estimated as about double that of Europe, but great deductions had to be made from this when considering timber supply. Of 770 million acres of forest in Canada only 292 million were reckoned to carry merchantable timber: the effective forest area of Canada, the United States, and Mexico taken together was considered to be 750 million acres. For use, it was calculated that 28 million cub. ft. of wood were removed annually from the forest, while 4 million cub. ft. were destroyed by fire, insects, and fungi. Cutting was carried on in a wasteful manner—a very important part of the saw-milling plant was the destructor. A single mill might use up sixty acres of forest daily. In the United States it was estimated that soft-wood sawtimber was being cut eight and a half times as fast as it grew, while the corresponding figure for hard-wood sawtimber was three and a half. Hardly anything was done as yet to make good this enormous drain; the total amount of tree planting in North America was only about 40,000 acres per annum. It was fairly clear that within the next twenty or thirty years that continent would absorb all its forest products; the present considerable excess of exports over imports shrinking to negligible proportions, or even being replaced by an excess of imports over exports. It was quite possible, in fact, for the Eastern States to become competitors with the United Kingdom and Western Europe generally for the soft-woods of Northern Europe.

In the discussion that followed, the Chairman (Lord Clinton) said it might affect estimates very largely if it could be shown that economies, which it was possible to employ in the use of timber, might result in the life of forests being longer than was now anticipated. In this country we had to consider the effect upon ourselves of this drain on the timber resources of the world: it was desperately important for us to form some real idea of what was to be done here and elsewhere when they were exhausted, or at that much earlier period when the countries which produced forests required the whole production for internal use. In this country, at all events, the State was bound to look forward and see what could be done. In the matter of oak we were working upon timber planted from 100 to 150 years ago; there had been little or none planted for the last seventy years. A private individual could hardly be expected to plant oak, but the State should take a longer view, and should endeavour to supply coming generations with this necessity for their industrial work.

Among other speakers was Mr. G. R. Courthope, M.P., who said we must not expect to get any timber from North America in a few years' time. In Europe the consumption of soft-wood timber exceeded production by something like 3,500 million cub. ft. a year, and at that rate of consumption there would be nothing left at all in seventy years. It was easy to say we should come to a stage when countries would get frightened, begin to cultivate their forests and reduce waste, and that then things would improve. It took generations after a country began to cultivate its forests before it could supply commercial demands for timber, and, in the interval, for two or three generations, the world was going to suffer acutely owing to the shortage. Most of those present at the meeting would see the time when commercial soft-woods would not only become very expensive, but would be almost unobtainable in this country, because when exporting countries realized the danger of the present rate of exhaustion, they would place restrictions on export.

The lecturer, replying to the chairman's point about possible economies, said that in this country the *per capita* consumption was at the rate of 12 or 13 cub. ft. per annum. In the United States it was 26 cub. ft.; if we could live at our figure it was probable the United States could live at less than their present one.

Late Exhibition Notice

On the stand of Eastwoods, Ltd., and G. H. Smith, Row R, Stand 310, prominence is given to "Sika" materials. These have been used for the past fifteen years to prevent dampness and water arising from subsoil, etc. Official tests prove that by the addition of "Sika" the quality of concrete is improved, and during and after the time of setting the action of sulphate, carbonic and humic acids, etc., is prevented. The use of "Sika" is also claimed to show an increase of 10 to 80 per cent. of compressive and tensile strength as compared with ordinary cement or concrete. Absorption tests up to 15 atm. (the maximum pressure of the testing apparatus) showed that no water percolated through, and there is no contraction of the volume where "Sika" is used. Practical demonstrations are given daily at 11 a.m. and 3 p.m. of the method of waterproofing a concrete block against leaking water without removing the pressure. Among other exhibits are cement, chalk, plaster renderings, tiles, bricks, and stones. The sole selling agents of "Sika" for England and Wales south of Bedford are Messrs. Eastwoods, Ltd., of 47 Belvedere Road, London, S.E.1, and the sole general agent for Great Britain, Ireland, and Colonies, except above district, is Mr. G. H. Smith, 25 Stratford Place, London, N.W.1.

The New Premises for Messrs. Peter Robinson

In our last issue we omitted to mention that Messrs. G. Jackson and Sons, Ltd., of 49 Rathbone Place, W., carried out the whole of the modelled and decorated fibrous plaster work to the ground-floor showroom of the new corner west block in Peter Robinson's new premises. They also carried out all the coffered ceilings in the entrances, the domed and coffered ceilings on all the lift landings, and the cornice and ceilings up the main staircase. Messrs. Jacksons have also been entrusted with the fibrous plaster work in the large main restaurant and adjoining room on the top floor of the building.

List of Competitions Open

Date of Delivery.	COMPETITION
April 26	At the instance of the British Drama League the proprietors of "Country Life" have promoted a competition for designs for a national theatre. The proprietors of that journal will bear the cost of building a complete large-scale model of the first prize design, to be shown at the British Empire Exhibition. Jury of Award: Mr. J. Alfred Gotch, President R.I.B.A.; Sir Edwin Lutyens, R.A., F.R.I.B.A.; Sir Lawrence Weaver, K.B.E., F.S.A.; Professor C. H. Reilly, F.R.I.B.A.; Professor Hubert Worthington, A.R.I.B.A.; Mr. Harley Granville-Barker; Mr. Albert Rutherston. Mr. Geoffrey Whitworth, Hon. Secretary. First prize, £250; second prize, £100; for the best model sent in with a design, £25; for the best perspective view of the interior of the larger auditorium, £25. Apply Editor, "Country Life," 20 Tavistock Street, Covent Garden, London, W.C.2
June 30	The Bradford Masonic Association invite designs and estimates for a masonic temple, to be erected at Bradford. Premiums £200, £150, £100. Apply The Bradford Masonic Association.
July 4	The Glasgow Corporation invite competitive plans of a public hall to be erected on a site near Bridgeton Cross. Estimated cost £25,000. Premiums £150, £100, £75 and £50. Apply Office of Public Works, City Chambers, 64 Cochrane Street.
Sept. 30	Designs are invited for a statue in bronze and a pedestal (at a cost of about £5,000) in honour of the late Sir Ross Smith, K.B.E. Apply The Agent-General for South Australia, Australia House, London.

The Week's News

Frome War Memorial Hall.

A war memorial hall is to be erected at Frome at an estimated cost of £4,000.

Rugby Infirmary Extensions.

The Rugby Board of Guardians have sanctioned the expenditure of £7,500 on extensions and alterations to the Infirmary.

More Houses for Carlisle.

The Ministry of Health have sanctioned the erection of 100 additional brick houses and fifty concrete bungalows.

Proposed New Baths for Bradford.

The city architect of Bradford is preparing plans for new district baths at Five Lane Ends, Idle.

More Houses for Longbenton.

The Ministry of Health have sanctioned the erection by the Longbenton Urban District Council of forty houses.

£150,000 Women's Club for London.

At a cost estimated at more than £150,000 a social Y.W.C.A. centre for women is to be built shortly near Oxford Circus.

The Eastbourne Music Garden.

The Eastbourne Corporation have decided to secure the services of an expert to report on the most favourable position on the front for their £50,000 music garden.

A New Secondary School for Somerset.

The Somerset County Council have resolved to purchase land at Long Ashton at a cost of £3,500 as a site for a secondary school for 200 pupils.

A New School for Crompton.

Plans for the new central school to be erected in Manor Road, Shaw, have been passed by the Crompton Urban District Council.

New Bridge Over the Derwent.

A new bridge is to be erected, at an approximate cost of £60,000, over the river Derwent, by the Durham County Council.

Big Nottingham Clearance Scheme.

The Nottingham Corporation are considering a £500,000 scheme for clearing the Exchange Hall site in the market place and erecting thereon business arcades and offices.

Edinburgh's £386,000 Slum Clearance Scheme.

The Edinburgh Town Council have approved an improvement and slum-clearance scheme in the Cables Wynd district. The cost is over £386,000.

Poole Housing.

Plans for 32 dwelling-houses have been approved. The Council have also decided to apply to the Public Works Loan Commissioners for a loan of £20,339 for housing purposes under the sanction of the Ministry of Health.

New Swimming Bath for Nottingham.

The Nottingham City Council have approved the installation of a filtration plant at Radford baths, and passed the scheme for new baths on Forest Fields. The cost of the work is estimated at £29,000.

R.I.B.A. Intermediate Examination.

The centres for this examination will be London and Leeds. At both centres the examination will be held on May 23, 26, and 27. At the London centre the oral examination will be held on May 29, and at the Leeds centre it will be held on May 28.

The Incorporated Institute of British Decorators.

Councillor John R. Chappell, of Leeds, has been elected President of the Incorporated Institute of British Decorators. He has held important offices in the National Federation of Master House Painters and Decorators, including that of vice-president.

Dover's Big Development Scheme.

A Ministry of Transport inquiry was held at Dover concerning the application of the Dover Corporation to borrow £45,000 for the construction of a road on the eastern cliffs. The chairman of the Harbour Board gave details of the new proposals of the Harbour Board for building a large dock at the eastern end of the former Admiralty harbour.

New Director of Research Building Materials.

Dr. R. E. Stradling, M.C., M.Sc., Ph.D., Assoc.M.Inst.C.E., A.M.Am.Soc.C.E., head of the department of civil engineering, architecture, and building in the Technical College, Bradford, has been appointed Director of Research of the Building Materials and Construction Research Board of the Government Department of Scientific and Industrial Research, London.

Winchester Diocesan Architect.

At the invitation of the Bishop of Winchester, Sir Charles Nicholson has accepted the post of Diocesan Consulting Architect. Sir Charles is already consulting architect for Lincoln, Wells, Lichfield, and Norwich Cathedrals, and Diocesan architect for Wakefield and Chelmsford. He was educated at Rugby and New College, Oxford, and was a pupil of J. D. Sedding.

The Institution of Heating and Ventilating Engineers.

"The best hospital kitchens I have ever seen are the two at the London Hospital which are very lofty and cool, very clean, and splendidly fitted up," was the statement of Mr. Stanley J. Benham, at a meeting of the Institution of Heating and Ventilating Engineers at the Engineers' Club, London, W.C. None of the hospitals he had seen in America, he said, could compare either with the London Hospital or a hundred others in this country, except with regard to dish-washing, cold storage monel metal tables and, in two cases, trolleys.

Housing in Bradford.

Sanction has been received by the Bradford Corporation from the Ministry of Health for loans for the following housing proposals: 200 concrete houses on the Bierley House estate, cost £83,800; 22 houses on the Lower Grange estate, cost £8,535; 10 houses Swan House estate, cost £4,596; and 48 houses at Scholemoor, cost £18,236. The Ministry has also approved the borrowing of £27,046 and £4,285 for the construction of streets and sewers respectively on the Thornton housing site, where forty-six houses are to be built.

The late Mr. T. F. Tickner, F.R.I.B.A.

We regret to record the death of Mr. Thomas Francis Tickner, a well-known Coventry architect, at the age of fifty-nine. Articled in 1878, he was elected a member of the Society of Architects in 1888 and a fellow of the R.I.B.A. in 1907. He was also a member of the Birmingham Architectural Association. As architect to the Coventry Board of Guardians, he designed the present infirmary and Nurses' Home. Numerous modern buildings in Coventry were erected to his plans, and included in his latest work were the plans for the Church of St. Mary Magdalen to be erected at the corner of Sir Thomas White Road and a girls' school now in course of erection. He made a special study of ecclesiastical architecture.

The A. and S.A.P.U. Benevolent Fund.

The Architects' and Surveyors' Assistants' Professional Union have launched a benevolent fund for the benefit of members and their dependents. The objects of the fund are: (1) Temporary relief to members in cases of distress, illness, accident, or sudden emergency; (2) temporary loans to assist younger members in following up the profession; (3) grants to widows and orphans; (4) To acquire, endow, or partially endow and maintain rest homes for members; (5) to secure for members any benefits obtainable from sanatoria, convalescent homes, and similar institutions by the payment of subscription from the fund. Full particulars can be obtained from the Secretary, 36 Victoria Street, London, S.W.1.

The Supply of Building Materials for Housing.

Arising out of the presentation of the reports on the housing problem which have just been made by representatives of the Building and Building Materials Industries, the Minister of Health had a conference with the Committee of Manufacturers and Suppliers of building materials. The committee assured the Minister of their hearty co-operation and of their desire to take every practicable step within their industry to assist in the solution of the present housing difficulties. Among the various points discussed the committee drew special attention to the difficulties created by the present shortage of railway wagons. A number of instances were given of serious delays on housing work arising from this cause, even at the present time, and the great importance of this matter in any extended housing scheme was emphasized.