THE ARCHITECTS' JOURNAL

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

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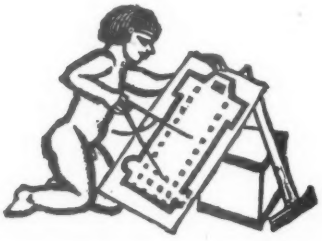
The fact that goods made of raw materials in short supply owing to war conditions are advertised in this JOURNAL *should not be taken as an indication that they are necessarily available for export.*

Owing to the paper shortage the JOURNAL, *in common with all other papers, is now only supplied to newsagents on a "firm order" basis. This means that newsagents are now unable to supply the* JOURNAL *except to a client's definite order.*

In common with every other periodical and newspaper in the country, this JOURNAL *is rationed to a small proportion of its peace-time requirements of paper. This means that it is no longer a free agent printing as many pages as it thinks fit and selling to as many readers as wish to buy it. Instead a balance has to be struck between circulation and number of pages. A batch of new readers may mean that a page has to be struck off, and conversely a page added may mean that a number of readers have to go short of their copy. Thus in everyone's interest, including the reader's, it is important that the utmost economy of paper should be practised, and unless a reader is a subscriber he cannot be sure of getting a copy of the* JOURNAL. *We are sorry for this but it is a necessity imposed by the war on all newspapers. The subscription is £1 3s. 10d. per annum.*



from AN ARCHITECT'S *Commonplace Book*

" When I think of your responsibility I tremble for you. The mistakes of the lawyer can be overruled, the mistakes of the painter can be put aside, the mistakes of the doctor can be buried, but the mistakes of the architect remain with us and endure. On the other hand, the glory of the lawyer may be out-moded by circumstance, that of the musician may be dependent on future executants, the glory of the singer, the orator and the actor fade into mere tradition, but the glory of the architect endures, and your privilege is that your imagination enriches all."

Sir Josiah Stamp.

NEWS

★ *A committee on Post-War Reconstruction policy has been formed by the Building Societies Association* *page* 369

★ *Conditions of an open competition for a model housing estate are now available* *page* 372

★ *It is probable that the R.I.B.A. Committee set up to safeguard the interest of members in the Forces will issue a report in the near future* *page* 376

LEVY IMPOSED ON BRICKS

The Treasury, at the request of the Minister of Works and Planning, has made an Order (S.R. & O. 1942, No. 915), imposing a levy of 3s. per thousand on all bricks manufactured and sold or otherwise disposed of.

The levy will be chargeable on all bricks delivered on and after May 18, except bricks broken up and sold for hardcore. The levy is payable to the Ministry of Works and Planning, and will be used to provide for the care and maintenance of brickworks closed compulsorily or in agreement with the Ministry of Works and Planning since January 1, 1942.

This Order implements the recommendation of the Simmonds Committee to the Minister of Works and Planning that a scheme should be established for contribution (by manufacturers) towards the care and maintenance of works closed under compulsory Order, or with approval of the Minister.

The Committee's recommendation that the current total national output of bricks should be decreased by 12½ per cent. and 4 per cent., by the closure of specified brick works or reduction of productivity, has already been implemented by S.R. & O. 1942, No. 675, which provides that " No person shall produce building bricks except at such premises in such quantities and subject to such conditions as may be imposed in a licence granted by, or on behalf, of the Minister of Works and Planning."

APPOINTMENT

Professor Vere Gordon Childe, D.LITT., D.SC., has been appointed a member of the Royal Commission on Ancient and Historical Monuments and Constructions in Scotland.

SOFT SOLDER

A war emergency revision of B.S.219 for soft solders has just been issued by the British Standards Institution. This revision has been undertaken at the request of the Non-Ferrous Metals Control in order to effect economy in tin. As a war emergency soft solders are being restricted to five grades, which it is considered should be adequate under present conditions to meet the great majority of needs. The foreword states that it is realized that changing the type of solder used may cause some initial inconvenience to users, but the hope is expressed that all users and manufacturers will in the national interest co-operate in this rationalization to conserve supplies.

The specification is accompanied by a memorandum which makes recommendations as to the manner in which economy in the use of solder may be effected. These economies are grouped under four headings as follows :—

1. The use of solder may be omitted entirely as in automobile body patching or alternative methods of construction adopted—e.g., welding can be used to replace soldered joints. Similarly where solder baths are used for protective coverings, some other method such as varnish, should be used.

2. The use of substitute solders which have little or no tin. Silver lead solders are being developed which can be used for a variety of purposes and where high temperature applications are concerned, lead solder with a very low tin content can be used.

3. Use of low tin solder. Where it is essential to continue the use of solder, the solder should have the minimum tin content that can be

Arthur J. Davis, F.R.I.B.A., who was recently elected to the rank of Royal Academician.

acting-secretary, a.a.s.t.a.

The fighting spirit of the Association of Architects, Surveyors and Technical Assistants is due in no small measure to an American journalist—Mrs. E. V. Penn, the acting secretary. Mrs. Penn was born at Fort Russell, Wyoming, educated at Wellesby College, University of California, and worked as a teacher and journalist. On her arrival in England in 1930, Mrs. Penn took over the job of editing technical publications; in 1938 she joined the staff of the A.A.S.T.A., and became acting secretary when Mr. A. V. Barr, the permanent secretary, volunteered for the R.A.F., in 1939. Mrs. Penn has played a large part in the development of trade union work among building technicians, particularly in the negotiation of salary scales and working conditions. She married Mr. Colin Penn, President of the A.A.S.T.A., in New York in 1930.

used satisfactorily for the purpose. For example, the solder used for dipping baths should contain no more than 20 per cent. tin in place of the 50 per cent. now frequently adopted.

4. Salvage. Every possible means of avoiding waste and reclaiming scrap and metal from dross should be adopted.

Copies of this specification may be obtained from the British Standards Institution, 28, Victoria Street, London, S.W.1. Price 2s. 3d. post free.

EXHIBITION

The fixture list of the Living In Cities Exhibition is as follows. *Southampton*, Art Block, Civic Centre, May 28—June 5. Lecturer: G. Grey Wornum, F.R.I.B.A. May 29, at 3 p.m. *West Ham*, Social Services Hall, West Ham Lane, London, E.13, May 28—June 7. Lecturer: G. Bath, A.R.I.B.A. May 30, at 7 p.m. *Liverpool*, Radiant House, June 20—July 4. *Deptford*, Central Library, Lewisham Way, London, S.E.14, June 13—27. *Guildford*, School of Art and Crafts, Stoke Park, June 13—27. Lecturer: Elizabeth Denby, June 17, at 7.30 p.m. **London Regional Committee*, School of Hygiene, Keppal Street, London, W.C.1, June 1—July 1. Lecture (if any) to be arranged by the Army.

(* Denotes small copy of this exhibition.)

P.O. MACALISTER

Pilot-Officer Donald MacAlister, second son of Sir Ian and Lady MacAlister, who was reported missing last July, is presumed to have been killed in air operations.

A.A.S.T.A.

A.A.S.T.A. London Branch and Ministry of Works and Planning House Branch are to hold a joint meeting on May 29, at 7 p.m., at the Alliance Hall, Palmer Street, S.W.1 (near St. James' Park Tube Station). Subject: "Winning the War at Home: A Challenge to Building and Civil Engineering Technicians," followed by technical films and discussion. Chairman: Mr. David Percival, A.R.I.B.A.

WASTE PAPER

Most local authorities in the country—borough, urban and rural councils—have entered the new £10,000 National Contest sponsored by the Waste Paper Recovery Association. The prizes will be awarded to the local authorities who recover the greatest tonnage of waste paper, on a *per capita* basis during the months of May, June and July. It is hoped that those few authorities which have not yet sent in their entry forms will do so as soon as possible.

MEMORANDUM

A memorandum has been prepared for the National Gas Council by the Post-War Planning Committee, for submission to the

Lord Justice Scott Committee. This Committee was set up to enquire into the development of building and construction in country areas consistent with the maintenance of agriculture, and, in particular, factors affecting the location of industry.

The gas industry has been able to make a valuable contribution to the evidence which is being collected by their report covering all aspects of industrial and domestic gas supply in rural areas, together with trends of development.

BETTER HOUSING

The Building Societies' Association announces the appointment of a Committee on Post-War Reconstruction Policy, whose composition and terms of reference show that the Association is fully alive to post-war responsibilities, and indicates its desire to give an authoritative lead to the movement at large.

The lines on which Building Societies can participate in post-war housing development and assist in securing improved housing standards for the people are among the matters to be examined.

Viscount Sankey, President of the Association, a former Lord Chancellor, is Chairman of the Committee whose members are mainly Building Society leaders, reinforced by men from outside. In view of the wide terms of reference the Committee will be sub-divided.

One sub-committee will enquire into Building Society practice and procedure, giving consideration to such changes in practice and procedure as appear desirable and practicable, and in so far as these would be suitable for general adoption by member societies, with due regard to the importance of internal administration, basic financial stability and public appreciation. Attention will also be called to any consequential modifications (whether in building society controlling legislation, in the Association's rules, etc.), which the recommendations may involve.

The other sub-committee will examine the general relationship of Building Societies to post-war reconstruction, with particular reference to the lines on which they may usefully and prudently participate in post-war housing developments, and at the same time assist in any way possible in securing improved housing standards, and whether such improvement would be facilitated by co-operation with any other bodies having the same objective. It will also consider whether any reforms (and if so, what) in building society controlling legislation and structure (and in any other directions) may be necessary to make development on these lines effective; and any other questions relative to building societies in their wider relationship to their probable post-war environment, especially having regard throughout to building societies in relation to public opinion.

The following are members of the Committee:—Mr. A. D. Carmichael (Director, Leicester Permanent Building Society); Mr. T. R. Chandler, F.I.A. (General Manager and Director, Woolwich Equitable Building Society); Sir Charles Davies (General Manager and Director, Leeds Permanent Building Society); Mr. L. Gaughan (General Manager and Secretary, Borough Building Society); Mr. W. S. Heatley (General Manager, Coventry Permanent Economic Building Society); Mr. Arthur Hollis, F.S.I., F.A.I. (for consultation if unable to serve on the Committee); Mr. Hubert Newton, F.C.I.S. (General Manager, Leek and Moorlands Building Society); Sir William McLintock, Bart, G.B.E. (Senior Partner, Thomson McLintock & Co.); Mr. Stanley C. Ramsey, F.R.I.B.A. (Chairman, National Building Society); Mr. Sydney A. Smith, F.S.I., F.A.I. (Member, Royal Commission on Distribution of Industrial Population); Dr. L. Dudley Stamp (Reader in Economic Geography, University of London); Mr. Andrew Stewart, C.A., F.C.I.S. (General Manager and Director, Huddersfield Building Society); Mr. Mowbray Thompson, J.P. (Chairman of the Grainger Building Society); Mr. Arthur Webb, J.P., F.C.I.S. (Chairman, Co-operative Permanent Building Society); Brig.-Gen. Sir Edward N. Whitley, K.C.B., C.M.G., D.S.O., D.L. (President of the Halifax Building Society); Mr. F. M. Wright, A.C.A. (Manager and Secretary, Shern Hall (Methodist) Building Society).

Members of the Emergency Committee of the Building Societies' Association are *ex-officio* members of the Committee; Mr. David W. Smith, J.P., F.C.I.S. (Chairman); Mr. W. McKinnell, F.F.A. and Mr. R. Bruse Wycherley, M.C., F.C.I.S. (Deputy Chairmen); Sir Harold Bellman, LL.D., J.P.; Mr. Lewis H. Pratt, F.C.I.S.

CRIPPS, EDEN AND LYTTELTON

TWO speeches made recently do something to allay misgivings caused by the unaccountable disappearance of Lord Reith. In the leading article for March 12, the JOURNAL pointed out that his removal might mean the end even of propaganda for planning after the war, but that other changes in the Cabinet gave grounds for hoping that it might mark the beginning of a completely new and much more positive approach to the subject than anybody had yet dared to hope for. In the absence of any statement to this effect, however, it was difficult to take an optimistic view. Lord Portal himself has since given us no reason to hope but speeches by Sir Stafford Cripps and Mr. Lyttelton encourage confidence.

Sir Stafford, after defining our war aim as freedom—political freedom for those who have not got it yet, economic freedom for ourselves ("an economic democracy where the power of vested interest and finance would give way to the right of the common people")—and referring to the new spirit of equality and comradeship that has already been created by the war, went on to say that "this new spirit must find practical expression and that we must therefore begin to work out its implications coolly and scientifically so that we may apply it in action when the time for reconstruction comes." He also said that there was a sense in which reconstruction was actively in progress here and now, and that this was all the more reason why we *must not wait but must continuously work towards the end we had in view.* Sir Stafford has committed the Government to the view that normal growth cannot be interrupted and resumed again after the war at the point where we left off, and that we need therefore to have a clear idea now of what we are aiming to realize then. The biggest barrier that

has so far stood in the way of planning in wartime is down.

When Sir Stafford says reconstruction he seems to mean only social and economic reconstruction, but one kind of planning begets the other, and if the connection wasn't stressed by Sir Stafford, Mr. Lyttelton could scarcely have made it plainer. "I believe," he said, "that there are three things which we all want. The first is to make this a truly cheerful country—a country in which we can laugh when we want and put out our tongues at the people we don't like—a spacious, active, enterprising country. The second is to see that we are never again faced with the horror of mass unemployment. The third is to modernize the capital equipment—by which I mean the transport, the roads, ports, towns, houses and amenities of our country, and the curious thing is that in reaching for the third of these objectives we shall be going a long way towards attaining the first two."

Mr. Lyttelton doesn't use the word reconstruction at all. He talks instead of modernizing our capital equipment. He goes on to say that the efficiency of our workmen is our biggest industrial asset, more important to us even than good transport facilities and good machines. Once this idea takes root, logic will surely compel us all to see that we plan the arrangement of our homes and towns at least as carefully as the layout of plant and machinery is planned inside a factory, because there is no doubt that a vast amount of human energy could be saved if domestic buildings and service industries were planned to facilitate the business of living which now occupies so much of every adult's time. It can't be long now before town and country planning comes to be regarded as a necessary part of our industrial organization—a process to be insisted upon when and wherever any kind of complicated social life takes place.

Mr. Eden has also taken up the cry. Speaking recently at the Usher Hall, Edinburgh he began by condemning the Nazi system because, by its disregard for law and for the rights of the individual, it makes peace impossible and, with it, the opportunity of social advancement. But he went on to add: "it is equally true that you will not get peace without social improvement. If there are 3,000,000 unemployed here and countless millions of unemployed in Europe, America and Asia you will not get peace. If, then, unemployment and malnutrition and animal standards of life and poverty that can be remedied are not remedied in any part of the world you will jeopardise peace." In other words, Mr. Eden says we must plan not merely because we may like the result but because we have no option. If we refuse to carry out one kind of planning designed to raise standards of living we shall find ourselves instead involved in another kind of planning. We shall find ourselves again at war.

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NOTES & TOPICS

CLELAND HOUSE

Not long ago the control of civil building was tightened up and anybody wanting to spend more than £100 on a single property inside twelve months was told to apply for a licence. MOWP's licensing department is in Cleland House, Westminster, and a stream of applicants now find their way there hoping to persuade the authorities that in their case there are very special grounds for making an exception to the rule.

★

Cleland House once had a one-storey vestibule connecting the entrances to the three blocks into which the building is divided. It was demolished during the blitz by a direct hit but for months work went on in the building without anybody being seriously inconvenienced by the fact that three doors which once opened into the vestibule now opened directly on to the street.

★

Now that Cleland House is so much in the public eye, the Ministry have chosen to rebuild it. Gentlemen applying for licences to build pick their way through piles of materials previously thought by them to be unobtainable, draw their own conclusions, and proceed to keep their appointments with cheerful faces and rising hopes.

★

It would be interesting to hear the conversations that take place

before they re-emerge, their applications finally rejected.

ARTHUR J. DAVIS, R.A.

Just before the opening of the R.A. Exhibition there were six architect Royal Academicians. Now by the election of Arthur J. Davis (Mewès and Davis) there are seven. Born in 1878 and educated at the Ecole des Beaux Arts, Paris, and the Atelier Pascal, he has been an A.R.A. since 1933.

★

It was about 1906 that Mewès and Davis dropped a bombshell in the heart of London by the erection of the *Morning Post*: probably their most influential building. Designed in what was then known as Louis quinze and built in granite, the *Morning Post* and the Ritz are perhaps the only really distinguished examples of the "French manner" in this country. Mewès died just before the last war. A French-Alsatian, he was, like Davis, a man of excellent taste.

★

In 1930, with Charles H. Gage (also of Mewès and Davis), Davis was awarded the R.I.B.A. London Architecture Bronze Medal for Westminster Bank, Threadneedle Street, an academic and scholarly building in the great tradition of the Royal Academy. If such buildings were typical of the work of R.A.s, Roger Fry's question: "What does the Royal Academy stand for? What tradition does it uphold?" wouldn't have much point.

MR. FITZMAURICE SPEAKS OUT

It is cheering to hear that research workers are now setting out to prove that a great many things we have known to be uncomfortable for years are, in fact, uncomfortable. Sensitive British householders —there are a few of them—have been far too long in the position of the unfortunate faith healer of Deal who could only protest "I dislike what I fancy I feel." Without statistics or exact analysis they have been helpless in the face of our popular superstitions.

★

As a race we believe that coal fires, small windows and howling draughts guarantee physical vigour and robust health. Critics who have in the past pointed out that coal fires are not warm, that small windows admit little light and that draughts are very uncomfortable, have been floored by the argument that coal fires provide constant ventilation and small windows are warm, while draughts can easily be prevented by keeping what windows there are wide open. Draughts, they say, can no longer be called draughts if they blow through a sufficiently large opening; they then become fresh air which is healthy.

★

Mr. Fitzmaurice's paper on Lighting, Heating and Ventilation,* suggests that the day is in sight when it will no longer be considered unreasonable to expect each part of a building to stick to its own job and be judged in relation to that only. Of ventilation he says, "What is wanted is a system which will change the air sufficiently for health at all times when the windows are shut tightly." B.R.S. it seems is working on a system of inlets and outlets to give constant ventilation under all weather conditions. When this is perfected the coal fire will have to justify itself as a heating apparatus.

★

Considered from this point of view it has disadvantages. It doesn't generate as much heat as it might do but produces instead a by-product that nobody wants. Most of the heat it does produce is carried up the chimney by a "torrent of air" which makes the room through which it passes chilly. In bad cases it is said the air in a room is changed six times an hour in this way, though one change would be enough to keep it fresh. It's no good objecting that fires burn with doors and windows shut: this merely proves how badly the building leaks.

★

Mr. Fitzmaurice says "the survival of the open fire is astonishing if one considers only efficiency." The answer is of course that nobody yet does. They have fires because they like the look of them. In such curious ways do Englishmen prove that they have æsthetic sensibility. Unlike Mr. Fitzmaurice, however, I believe that as soon as they are made aware of these motives they will be in a hurry to find a new kind of heating system.

★

In the meantime, it seems the open fire may be made quite a harmless affair and limits set to the amount of smoke and air it blows up the chimney.

ASTRAGAL

R. Fitzmaurice, author of the paper on "Lighting, Heating and Ventilation," read before a recent meeting of the Royal Society of Arts. It is discussed by Astragal on this page.

* Page 364, A.J. for May 21.

Conditions of the I.A.A.S. open competition for a small model housing estate are now ready; they may be obtained on application to the General Secretary, 75 Eaton Place, S.W. 1. Extracts from the conditions are printed below.

COMPETITION

The object of this, the fifth open competition to be held by the I.A.A.S., is to encourage architectural skill in the design and economic planning of housing for the wage-earning classes, and others of moderate means. The present competition carries the housing campaign of the I.A.A.S. a stage further, in that it introduces new features and sets a problem in housing on progressive lines.

No one can forecast with any degree of accuracy the probable length of hostilities or the economic conditions which will obtain when hostilities end and conditions permit or—perhaps more to the point—enforce rebuilding (especially in the field of small housing) of a magnitude never before contemplated. That economic conditions will be revolutionized there can be no shadow of doubt, and that there will be an urgent and insistent demand by men and women, now on war service, for new homes, may be taken for granted. Before, the nation failed to fulfil its grandiose promise of " Homes fit for heroes to live in." Now, let us at least try to provide good and proper accommodation for our greatly enduring decent men and women.

It may also be assumed that the changes in the people's method of living brought about as a natural corollary of war-conditions will remain; indeed it may be anticipated that these innovations will be extended and developed on more practical lines.

For some time before the war the I.A.A.S. encouraged research into better housing and housing conditions. In the course of its investigations the Association and its officers refuted beyond all question the claim sometimes made for the jerry-builder that at least, he met a demand; for it was clear to them, and it must now be clear to all, that in addition to erecting defective structures, the jerry builder —and particularly the financial syndicates that ran him—were the real enemies of progress in domestic building. The lack of proper planning and efficient equipment was often disguised by a number of spurious " gadgets " and eye-catching labour-saving devices of dubious efficacy, while such important services as an efficient kitchen with adequate storage space and appropriate equipment, properly placed, were completely neglected. Most kitchens were not even satisfactory sculleries, and it is small wonder that in such inadequate "workshops" few housewives were encouraged to attain proficiency in domestic science and the art of cookery. The description " jerry builder " is used advisedly; he is not to be confused with the reputable " speculative builder," many of whom have fulfilled a useful contribution to housing and against whom no aspersions are made.

The I.A.A.S., as a progressive body, is looking ahead. In looking ahead, however, it refuses to indulge in idealistic dreams of a new world of housing created, as it were, by the touch of a magician's wand. Post-war housing will have to proceed at a rapid pace; there will be a dearth of several of the pre-war building materials, a considerable measure of standardization must be brought into being. Yet the I.A.A.S. insists that there is no need to perpetuate the ugliness, the impracticability and the prodigal waste inherent in much, if not most, of the 1919-39 housing for the masses. Nor does the I.A.A.S. believe that it is beyond the wit of British architects and surveyors to utilize with ingenuity whatever materials may be available and to make the best use of the land (whether existing sites or, as ought often to be the case, new and more suitable sites) in the layout of housing estates, and the design of individual units, pleasing to the eye and comfortable to the body.

It is not enough to avoid the mistakes of the past. Those who design for the future must be able to show those for whom they build how to make the best of their conditions. They must take the lead in providing for the changing social conditions, for the greater degree of communal life and communal facilities which, initiated by war conditions, will, if the opportunity is given, become a permanent part of the life of our people. No more must citizens be segregated into classes and man shut off from his neighbour.

In this competition the I.A.A.S. seeks to anticipate the future, to make a little more concrete the ideals that already exist in the minds of those who have vision and imagination—in other words, to give, so far as building is concerned, some fixity to the notion of good and neighbourly housing conditions that should be available to all our people. Such is the problem that is set for competitors to solve.

The competition is open for some months to enable service men to compete.

Subject.—The subject of the competition is the design of a model housing estate complete with standardized housing and communal buildings. The site, its locality, and reason for development are all fully described below. The problem is two-fold: First, competitors are asked to design a model layout on progressive lines as indicated in these conditions. Secondly, each type of building is to be designed on standardized lines.

Prizes.—First: One Hundred Guineas; Second: Twenty-five Guineas; Third: Fifteen Guineas. Other awards may also be made on the advice of the assessors, or at the discretion of the Council of the Association.

Style, Material, Cost, etc.—Competitors are not bound in any way in the choice of style or material, but should bear in mind the importance of standardization as affecting their use. The competitor must decide whether the buildings will each be an inflexible standard product or if each is to be built up from standard units, allowing elasticity of planning in multiples of standard unit dimensions.

Site and Layout.—The site, *an entirely imaginary one*, depicted on block plan (provided with the conditions) is to be regarded as practically level, and should be considered as in, or adjacent to, an established town, where main sewers and all the usual urban facilities exist, i.e. shopping, entertainment, education, etc., and where there are undertakings for the public supply of electricity, gas, water, etc. The site area is approximately sixty acres, and in regard to density it is suggested, purely for guidance, that it should be twelve units to the acre—a housing unit being taken as a single house of three bedrooms or more, or two two-bedroomed dwellings.

Apportionment of Dwelling.—40 per cent. having three bedrooms (two double and one single). 30 per cent. having four bedrooms (two double and two single). 10 per cent. having five bedrooms (two double and three single). 20 per cent. having two bedrooms (one double and one single).

The individual or combined planning of two-bedroomed units is left to the competitor.

Accommodation of Units.—In addition to bedrooms, the units must include bath and lavatory accommodation, and suitable living quarters.

Inter-communal Facilities.—On the estate itself, provision must be made for communal buildings, i.e. (*a*) kitchen; (*b*) restaurant; (*c*) laundry; (*d*) creche; (*e*) garages; and provision must be made in regard to accommodation for physical and cultural recreation and allotments.

Building Acts and By-Laws.—Competitors are not to adhere rigidly to the by-laws of any particular authority; designs, however, are to be such as will be structurally possible and would, in all general cases, meet with the reasonable approval of the local government (building) authorities.

Drawings, etc., Required.—1. Layout plan to same scale as block plan provided. 2. Plans. All elevations and adequate sections all to scale of 8 ft. to 1 in. 3. Typical ½ in. details to explain method of standardized construction used and to illustrate detailed design of dwelling only. All drawings to be of Imperial size.

Persons Eligible.—The competition is open to all members of the Association (including overseas members), and to anyone practising architecture, whether as principal or assistant, in the United Kingdom, Northern Ireland and Eire, including those now serving in the Forces (or on National Service) wherever they may be.

Sending-in Date.—Every design must be delivered to: The Secretary, The Incorporated Association of Architects and Surveyors, 75, Eaton Place, London, S.W.1, not later than January 1, 1943.

Intending Competitors and Queries.—No deposit is required, but intending competitors must apply for a copy of the site plan and on receipt of this should notify the General Secretary of the I.A.A.S. of their decision to compete: they should at the same time or not later than August 31, 1942, forward any queries they desire to raise. Answer to such queries will be circulated at the earliest possible date. A copy of the site plan will be forwarded to members of the Association, and to any potential competitor (member or non-member) serving in the ranks of H.M.'s Armed Forces (i.e. not holding commissioned rank) on receipt of a 2½d. stamp. All other competitors must forward a P.O. for 1s. for a copy of the site plan.

Assessors.—Mr. W. A. Allen, B.ARCH., A.R.I.B.A.; Mr. Gilbert Bayes, President of the Royal Society of British Sculptors; Mr. R. Steuart Bowers, F.R.I.B.A., F.I.A.A.; Mr. Frederick Gibberd, F.R.I.B.A., A.I.A.A.; Mr. Arthur W. Kenyon, P.-A.A., F.R.I.B.A., M.T.P.I.; Mr. Clyde Young, F.R.I.B.A., F.I.A.A.

General Conditions.—A brief report being a description of proposals and materials to be used, to be submitted with designs, and should be typewritten if possible. At the end of the report is to be given the cube of each house type: the height being taken from the top of the foundations to 2 ft. above flat or half-way up pitched roofs; together with a schedule of the total area of the roads, the footpaths, and public open spaces. No limitation is placed on the number of entries to be submitted by competitors.

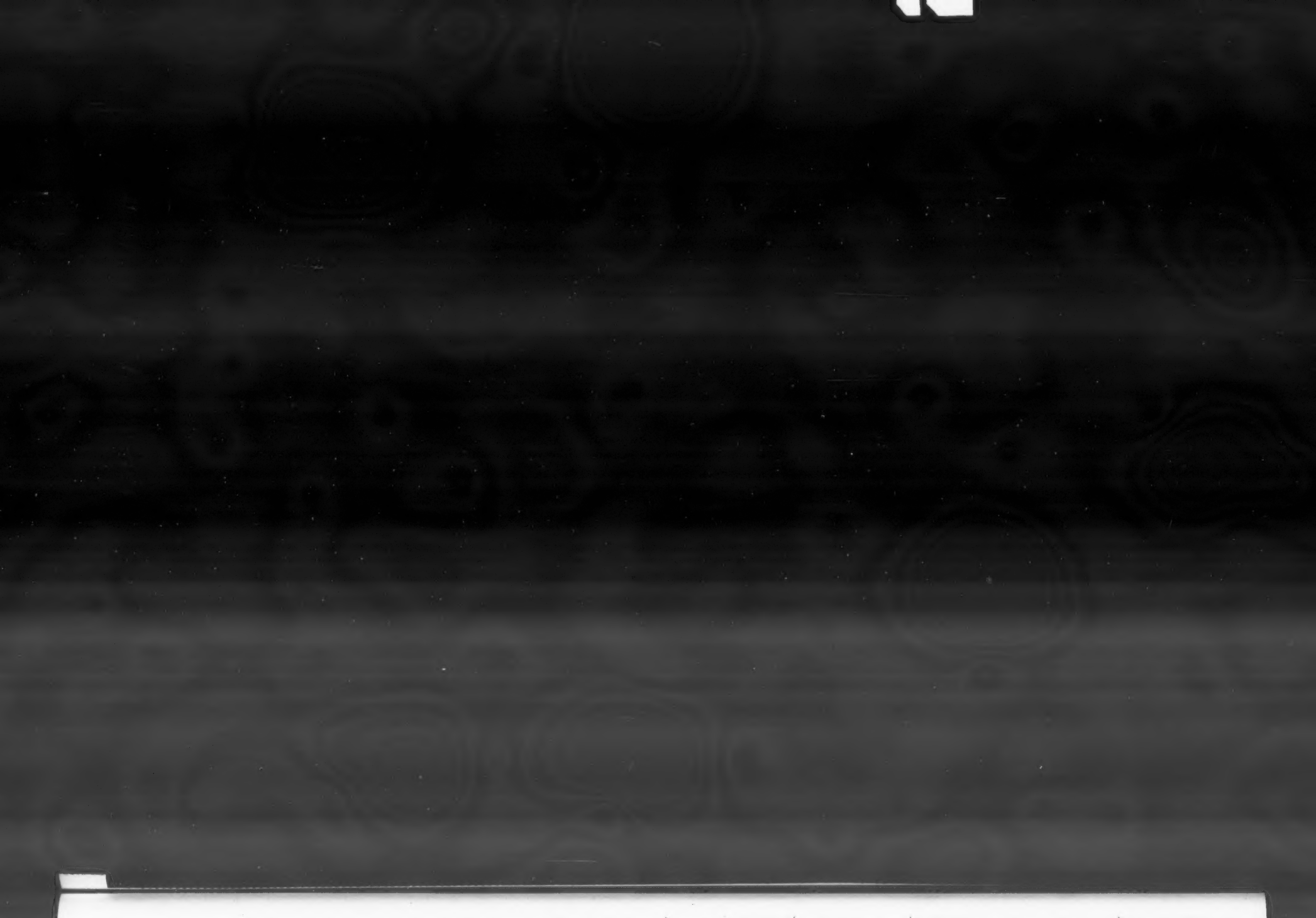
FACTORIES

Bulletin C.14, just issued by the Ministry of Home Security, is concerned mainly with methods of heightening and strengthening protective walls built in single-storey factory buildings before the effective design of such walls had been developed, and which may, therefore, fall short of the standard shown by full-scale tests and experience to be desirable. An appendix is included describing an alternative brick bond for use in post cantilever panel walls, and a method of building slab cantilever walls in reinforced brick.

The principles of protective wall design are discussed in papers which those responsible for factories engaged on war production can obtain through the Ministry for which they work.

Blast alone is seldom a cause of casualties or of damage to plant: hence the term " blast wall " is a misnomer. The chief function of a protective wall is to limit the effects of bomb fragments and other objects projected violently by the explosion, and in doing this the wall must neither disintegrate nor otherwise become a source of danger in itself.

Unfortunately it is seldom that the normal



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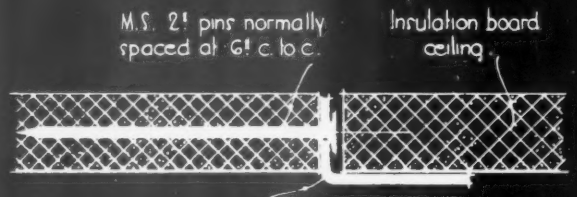
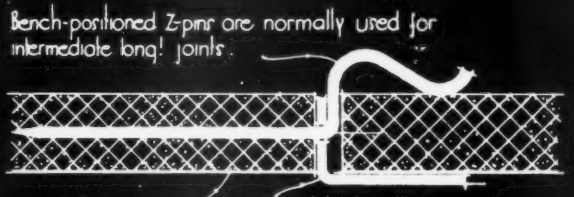
THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

• PIMCO • SYSTEMS : EDGE-PINNED INSULATION BOARD CEILINGS

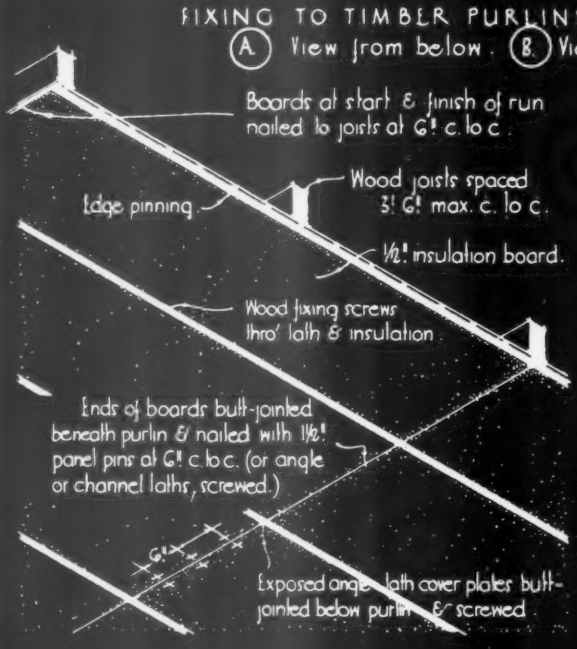


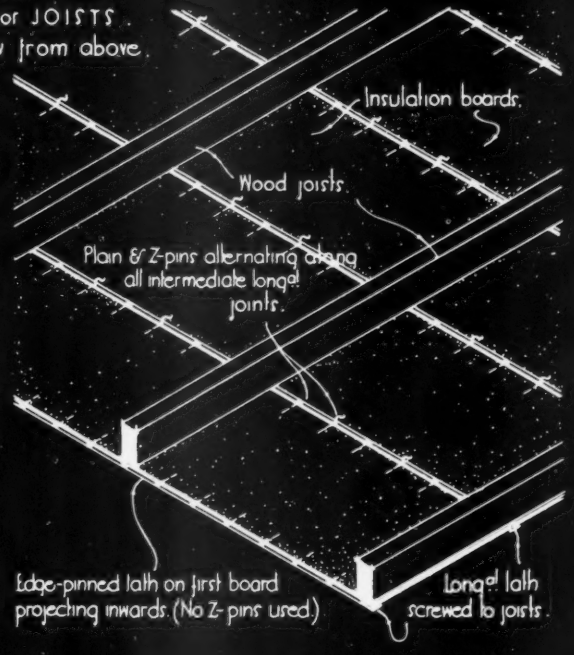
EDGE-PINNED LONGITUDINAL JOINTING LATH.

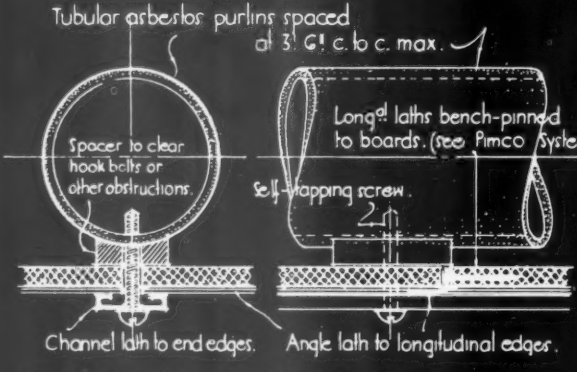


Z-PINS FOR RETAINING BOARDS BETWEEN JOISTS.

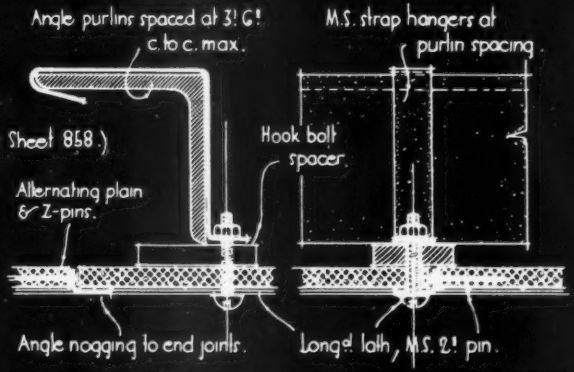
FIXING TO TIMBER PURLINS or JOISTS.
(A) View from below. (B) View from above.







FIXING TO TUBULAR ASBESTOS JOISTS or PURLINS.
End joints of insulation board must occur beneath a joist.



FIXING TO STEEL JOISTS OR PURLINS.
End joints of boards to be 3' min. clear of purlin leg.

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INFORMATION SHEET : INSULATION BOARD CEILINGS :
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET

• 864 •

CEILINGS

Product :

Pimco Systems Edge-Pinned Angle-Laths. (British Patent No. 525413).

Description :

Edge-pinning, by substituting a series of pins for one of the flanges normally used as a support for insulation board, effects a saving in steel in addition to providing a joint finish of half the usual width. This method is applicable under or over purlins. A description of the latter was given in Information Sheet No. 858.

The present Sheet deals with ceilings to the *underside* of timber purlins or joists, and to tubular asbestos and steel purlins. In the two latter applications the structural members are used only for point suspension of the laths, cover-plates or angle noggings being necessary to support the ends of the boards. Such cover-plates or angle noggings may be used in the case of timber purlins but, if desired, the ends of the boards may be nailed direct to the timber, thus allowing a butt-joint finish in one direction, the completed ceiling presenting cover-plates of $\frac{7}{8}$ in. width in the other direction.

The edge-pinned laths, used in the manner illustrated, not only dispense with the need for timber noggings, but also obviate the necessity for cover-plates or other applied finish to the longitudinal joints.

While applicable to ceilings in any type of building, edge-pinning, due to the relatively narrow joint finish, will be found of particular advantage on low ceilings or in rooms of small area.

The description and illustrations relate to ceilings fixed to structural members at centres not exceeding 3 ft. 6 in. Laths of deeper section are available for greater spans.

While the illustrations show fixing to structural members only, the system may be easily adapted for fixing direct to concrete floors and roofs.

Erection :

(*a*) Pinning : Place lath adjacent to edge of board on flat surface. Using special guide plate, insert pins by thumb pressure, taking care to insert Z-pins alternately with plain pins, except on those laths to be used adjacent to walls or truss, i.e., at first and last board.

(*b*) Fixing : The boards having been reinforced with angle sections may now be offered up and fixed to the structural members in accordance with the details overleaf.

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Telegrams : Sprufibre, Estrand, London.

13½ in. thick brick wall, built off the factory floor to a height level with the top of the plant, can satisfy the requirements, usually being deficient in height, strength and stability. Since this type of wall is the most common, various methods of heightening and strengthening it have been evolved and subjected to full-scale tests. The heightening and strengthening of existing walls may often be difficult owing to restriction of floor space; but one or other of the methods described below may be feasible for the particular conditions and prove more economical than dismantling the existing walls and building new ones.

Throughout, the existing wall is assumed to be of 13½ in. thick brickwork, with or without reinforcement. Existing brickwork in lime mortar need not be condemned out of hand, because in a wall strengthened by the insertion of supports and heightened in horizontally reinforced brick-work, the resulting panels are able to develop considerable arching strength. Portland cement, however, should be used in all new work.

The presence of reinforcement in the existing wall, such as that recommended for the walls of brick surface shelters, is advantageous, whether the bars are carried into the floor slab or not. Plain brick walls, however, though likely to sustain greater damage to the panels, can be incorporated in the reconstruction provided a horizontally reinforced extension of not less than half the height of the original wall is added with, of course, appropriate buttresses or other means of support. The addition of supports to plain brick walls without heightening is not recommended because, in the absence of what amounts to a reinforced capping beam and tie, the panel cannot develop sufficient arching strength.

1. *Addition of in situ reinforced concrete skins, buttresses and upward extension.* This method provides a very strong wall, and is recommended where the highest degree of protection is essential. The addition of the 3 in. thick reinforced concrete skins, keyed to the brickwork, not only increases the bending and shear strength of the panels but also, owing to the added thickness, enhances the resistance to mass attack by bomb fragments at close range. Moreover, by increasing the reinforcement in the skins and the upward extension, the buttresses may be placed further apart, up to a maximum of 12 ft., thus:

Buttress spacing, centre to centre.	*⅜ in. dia. horizontal reinforcement spacing.*
7 ft. 6 in.	12 in.
9 ft. 0 in.	9 in.
10 ft. 6 in.	6 in.
12 ft. 0 in.	4½ in.

If the reinforced concrete skins are omitted, the thickness of the upward extension being reduced accordingly, the strength of the wall will be not less than that of walls strengthened and heightened by reinforced brickwork, as described in (2) below; but the buttress spacing should then be limited to 7 ft. 6 in.

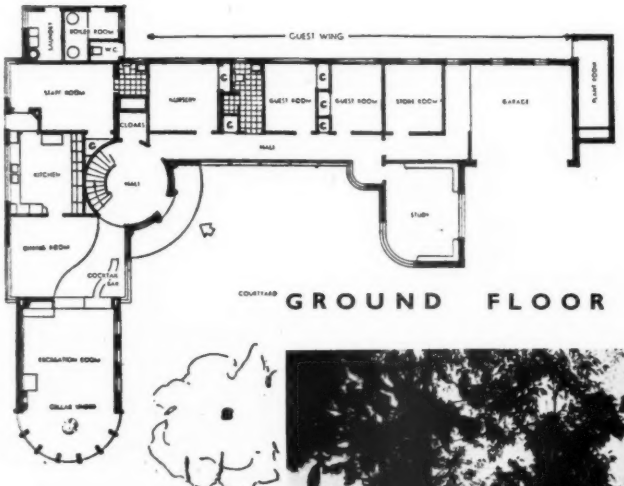
2. *Addition of reinforced brick buttresses and upward extension.* Existing 13½ in. thick brick walls, plain or reinforced, irrespective of whether existing vertical reinforcement (if any) has been bonded into the floor, may be heightened and strengthened. Minimum buttress base widths recommended are the same as in the above table, adjusted to suit brick sizes. If the existing wall has been built with vertical reinforcement it is advantageous to remove the top four course of brickwork so that the vertical distribution reinforcement in the upward extension may overlap the existing vertical reinforcement.

3. *Conversion to steel spreader cantilever panel type, and heightening.* This method of strengthening and heightening an existing brick wall is illustrated in the Bulletin. The conversion results in a very satisfactory type of protective wall having the advantage of leaving the floor space unrestricted right up to the face of the wall. The work involves cutting gaps through the existing wall, and chases in the floor, for the reception of the structural steel spreader cantilevers, and afterwards making good with concrete.

HOUSE

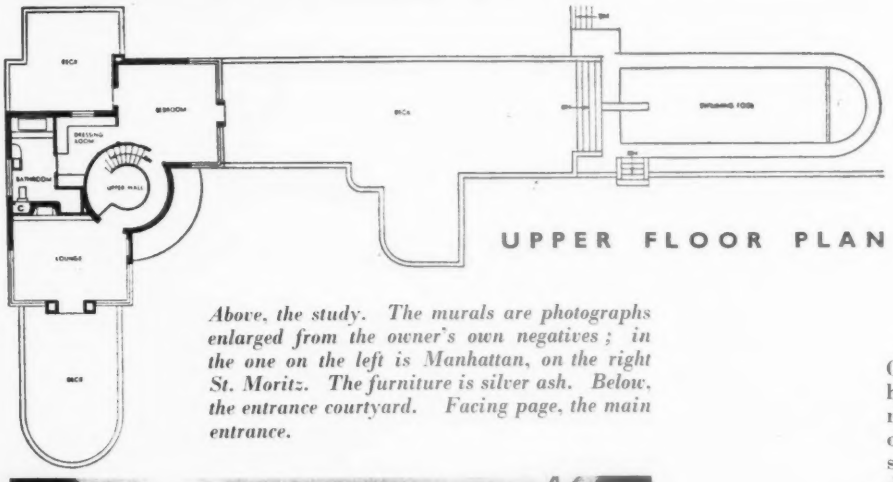
AT BAYVIEW, NEW SOUTH WALES

DESIGNED BY W. WATSON SHARP



GROUND FLOOR PLAN

Top, the staircase in the circular entrance hall, showing one of the murals. Right, general view, looking towards the recreation room wing.



UPPER FLOOR PLAN

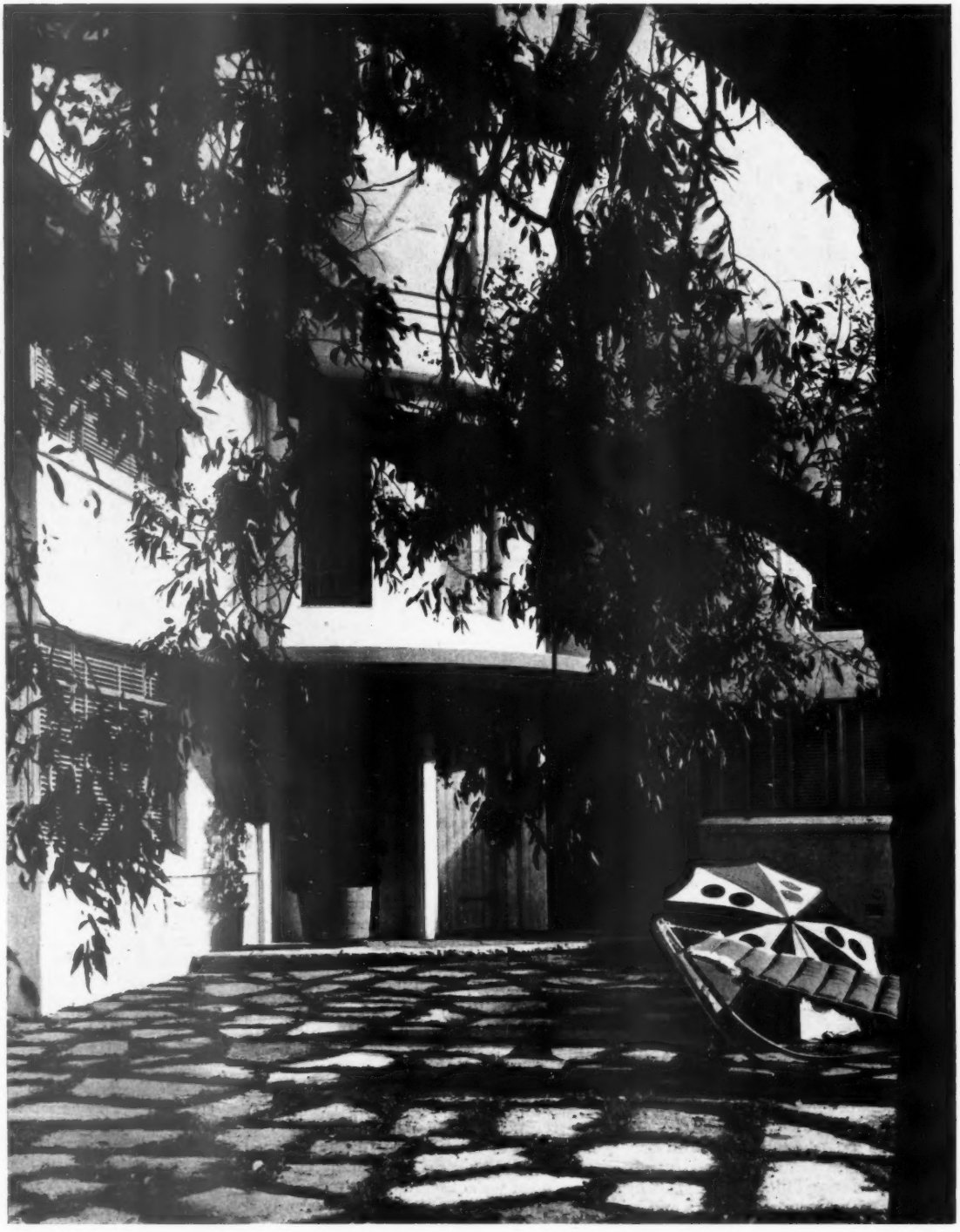
Above, the study. The murals are photographs enlarged from the owner's own negatives; in the one on the left is Manhattan, on the right St. Moritz. The furniture is silver ash. Below, the entrance courtyard. Facing page, the main entrance.

HOUSE, BAYVIEW, NEW SOUTH WALES.

GENERAL—The house lies on a hillside at Bayview, about twenty miles from the city of Sydney. It overlooks a golf course, with a small tidal lagoon in the middle distance.

PLAN—The house is designed in three wings, surrounding a paved entrance court. The fourth side is enclosed by two gum trees. The drive from the entrance gates passes right through the eastern wing into the court. The plan is grouped with the living rooms in the western wing, the entrance hall at the intersection of the western and northern wings, service rooms immediately behind it, nursery and guest accommodation in the northern wing, with the study and dressing rooms for the swimming pool in the eastern wing.

CONSTRUCTION AND EXTERNAL FINISHES—11-inch cavity brick walls, which is standard Australian practice, finished



in cement off-white smooth. Floors and decks are of timber construction, the latter being finished with bituminous waterproof covering, gravelled. Windows are metal casements, painted lime colour. The stair and cantilevered hood over the entrance porch are reinforced concrete. Glass bricks are extensively used for lighting.

INTERNAL FINISHES—Walls and ceilings are painted in pastel shades, with satin finish. On the walls of the entrance hall, owner's bedroom, nursery and over the stone fireplace in the living room, murals are important factors in the decorative treatment. In the study the lower portion of the walls is taken up with built-in bookcases in silver ash, while the upper portion is covered with photo-murals.

SERVICES—The house is centrally heated. Radio equipment is built-in, the four speaker outlets being incorporated in ceiling light fittings in most instances. Electric clocks, on mirror backgrounds, are in all the main rooms.

DESIGNED BY W. WATSON SHARP

LETTERS

T. ALWYN LLOYD, F.R.I.B.A.

BASIL M. SULLIVAN, F.R.I.B.A.
(Chairman, R.I.B.A. Demoblization Committee)

JOHN GLOAG

Planning for Change

Sir,—May one who comes, apparently, within the category of "Old Guard" planners designated therein, make a few comments on your leading article in your issue for April 30? I fear that in your efforts to debunk the said "Guard" you have got your dates all wrong! The Society for the Protection of Ancient Buildings was founded by William Morris in 1878. The Council for the Preservation of Rural England was founded, not "shortly afterwards," but about 1925. The former, therefore, cannot be said to have started the modern movement for planning early in this century, which was well under way before the C.P.R.E. arose to give invaluable help on the rural side. Nor is there justification for your statement that the Garden Cities Association set out in 1898 to preserve a traditional way of living; it was rather, as your subsequent paragraph added, an unmistakable reaction against that tradition. Ebenezer Howard's ideas were thought to be revolutionary and few expected the favourable reception they were to receive within a decade. The Garden City principle, which some of the "New Guard" are now inclined to sniff at, is a complete break with the discredited practice of permitting overcrowded towns to sprawl anyhow, accentuated by the continual drift of population from the country. This principle is that towns should be planned as complete communities, limited in size and surrounded by land zoned for permanent agriculture. This is the antithesis of the "ribbon" development and sporadic building on the fringes of existing towns, wrongly attributed to the influence of Howard and the pioneers of the movement.

As for your gibe that walking was intended to be the principal method of locomotion in the Garden City, one does not have to be a very "Old Guard" to realize that railway transport and electric tramcars were in use 40 years ago. Proposals for the development of both these were given prominence in Howard's first book. Neither he nor anyone else at that time could foresee the immense growth of road transport by motor vehicles.

Our preparation for post-war planning must, of course, take into account, as you so rightly stress, all the newer tendencies and facilities of our day. In doing this and avoiding the mere repetition of traditional modes for their own sake, there is surely no reason to belittle the work of great pioneers like Howard, whose principles, adapted to the conditions of the 1940's are still valid.

T. ALWYN LLOYD

Cardiff.

[The sentence which offends Mr. Lloyd's sense of history linked the S.P.A.B. and C.P.R.E. together with a purpose, which was: to emphasize the P for Preservation common to the titles of both societies. We do not dispute the fact that Ebenezer Howard was a great man. He launched the idea of planning in this country and he approached the subject in the only way possible if it was to be made a popular issue, i.e., he drew a picture of the way people *at that time* might be expected to want to live, a picture which *in those days* might be expected to appeal to their imagination. The quarrel is with Ebenezer Howard's literal but not spiritual heirs, who seem to think the practical proposals he made are valid for all time as laying down a way of living that is final and absolute.

The case for planning has already been won—up to a point—but the idea, though accepted in principle, is unlikely to miss being coupled in the mind of the public with its antithesis, *Restriction*, unless we can make it clear that planning doesn't tie us down to any stereotyped way of living. Methods of production are continually changing; ways of living are also changing to keep pace with them. The industrial revolution, far from being over, is only just beginning to work itself out. Its effects are cumulative; the tempo is still increasing. That is in fact what makes planning so essential. If changes are not planned, we lose nearly as much as we gain by them, and the waste of effort involved is colossal. In spite of this, however, most people are probably adventurous enough to prefer unregulated change to planning, if they imagine that planning means little more than organized restriction. It needs to be made clear that planning is no more and no less than a *method of facilitating* socially profitable change.—ED., A.J.]

R.I.B.A. Elections

Sir,—My attention has been drawn to the letter on post-war planning and reconstruction signed by Fellows, Associates and Licentiates of the Institute and published in your issue for May 7.

Your correspondents will, I think, be glad to learn that a special committee consisting of Members, most of whom served in the last war or are doing so in this, has been at work for a long time past in efforts to safeguard the interests of Members in the Forces. It is probable that the committee's report will be made public in the near future.

As to Members at present serving in the Forces taking part now on any appreciable scale in the work of the Reconstruction Committee, it is difficult to see how this can be possible, so long as they are on active service. It is, presumably, not advocated that no action should be taken in the way of reconstruction until serving members return, particularly as the work is largely being done in their interests. Of course, everyone hopes and expects that the new Council elected after the war will contain a large number of ex-Service men.

BASIL M. SULLIVAN.
(Chairman, R.I.B.A.
Demobilization Committee.)

Mr. Gloag and the Bricklayers

SIR,—Astragal's letter in your issue for May 21 demands that I should apologise for omitting to say that in addition to his remarks about bricklayers' trade unions and architects and building contractors being libellous and silly, that they were also untrue. Of course, there are crooks in every walk of life; and the readiness with which semi-intellectuals of the Astragal type are prepared to assume that anything connected with business and trade must be crooked, forcibly suggests that if they were engaged in business of any kind themselves, that crookedness would have a peculiar attraction for them.

Now, in the legal profession there may be some crooks; but nobody with any pretensions to intelligence dreams of saying that in general lawyers and barristers are crooks; there are, probably, one or two doctors whose habits are unworthy of their great calling, but the medical profession is not judged by their peculiarities. Now and again a village blacksmith overcharges or underworks, but who would condemn blacksmiths as a class because of a rare backslider?

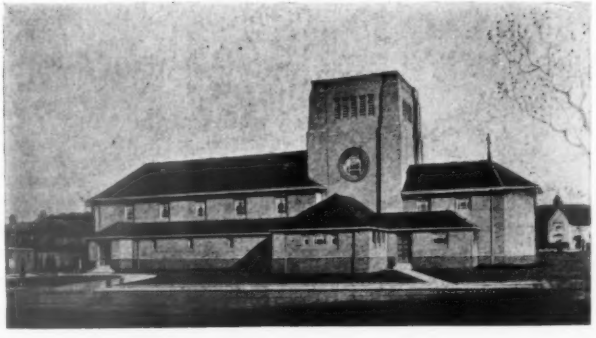
I am sorry about Astragal; I regret that he is symptomatic of the shoddy thinking which prompts so many statements to-day that are intended to sound superior but which, upon analysis, merely prove to be ridiculous.

JOHN GLOAG

CHURCH

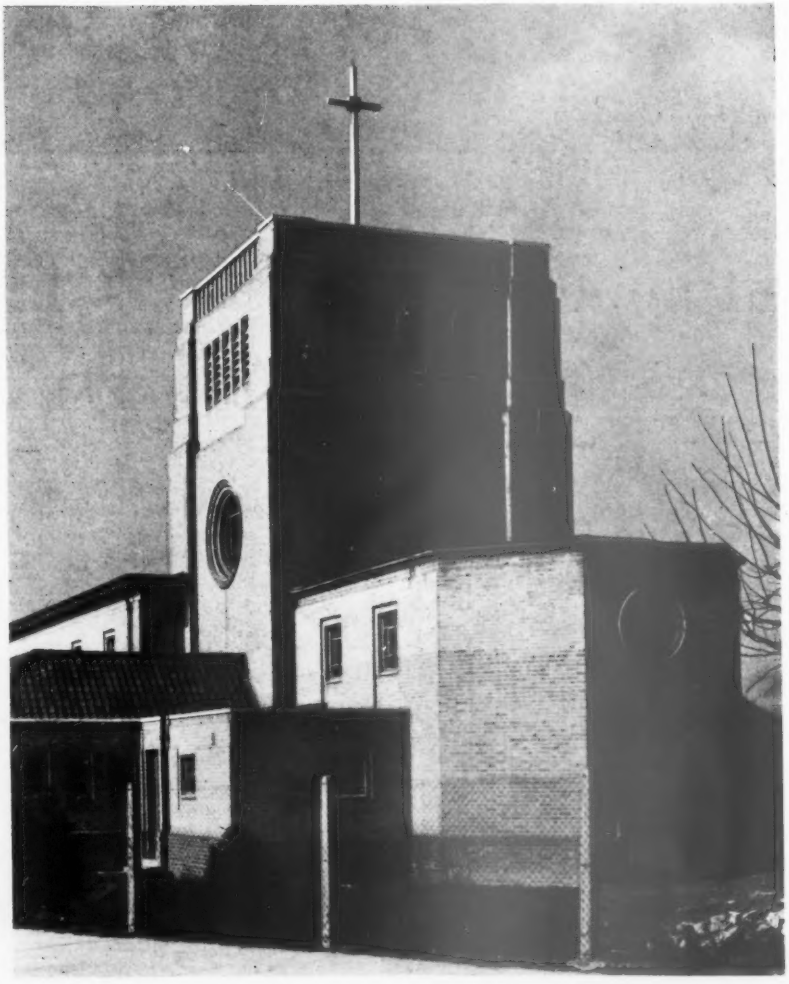
NORTH GREENFORD, MIDDLESEX

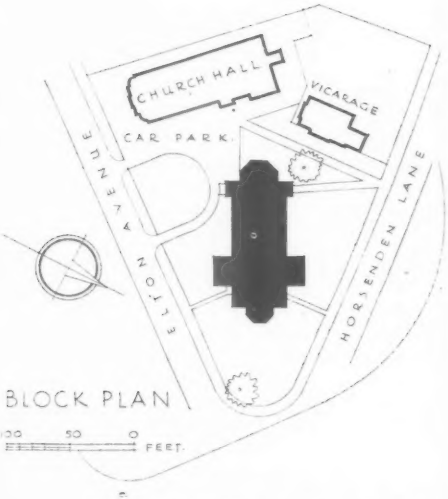
DESIGNED BY CYRIL A. FAREY



Plans for this church were started in 1939 but, owing to the outbreak of war, the scheme was put on one side. Early in 1940 the London Diocese decided to build six churches and All Hallows, North Greenford, Middlesex, here illustrated, was included in these. Originally, the building was designed with an open timber roof but, owing to timber shortage, the design was altered by having a flat concrete roof over part of the structure. On the left is a perspective, by the architect, which was hung in last year's Royal Academy.

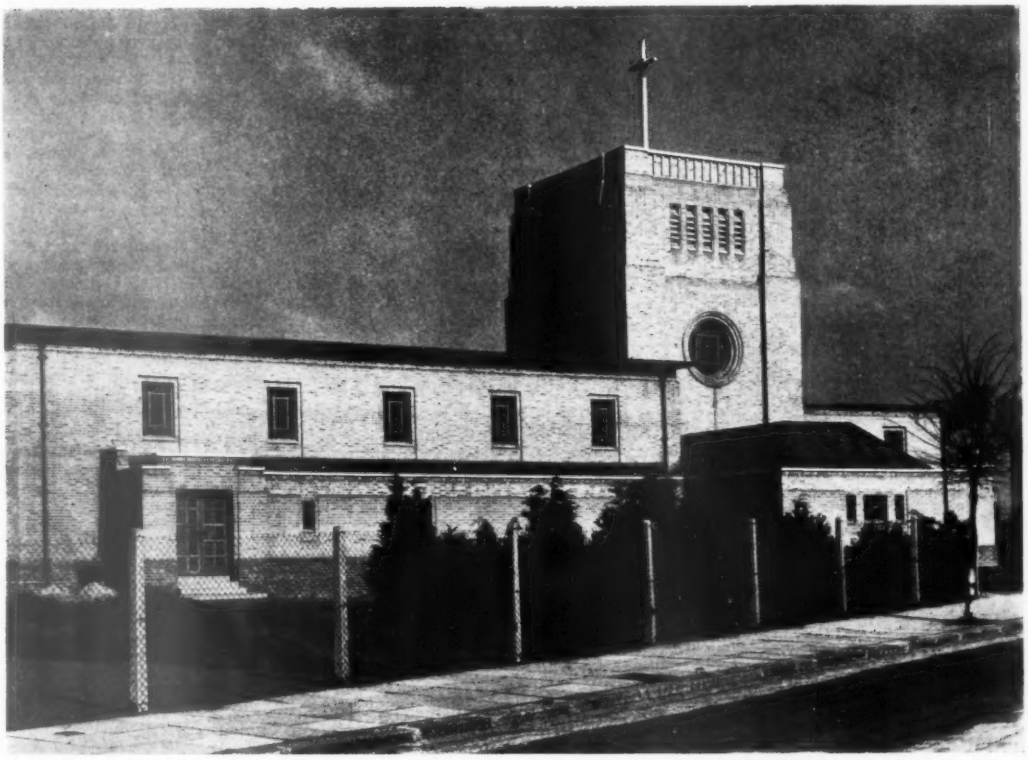
CHURCH AT NO





GENERAL—The plans of this church were started in 1939, but the scheme was put on one side after the outbreak of war. In the beginning of 1940 the London Diocese decided to erect six churches and All Hallows, North Greenford, was included in these. The building was commenced in April and the foundation stone was laid on July 6, 1940. Originally the building was designed with an open timber roof, but owing to the impossibility of obtaining sufficient timber the design was altered by having a flat concrete roof over the nave and Lady Chapel, but the aisles and transepts were built as originally designed. The licence to complete the work was granted for the whole building with the

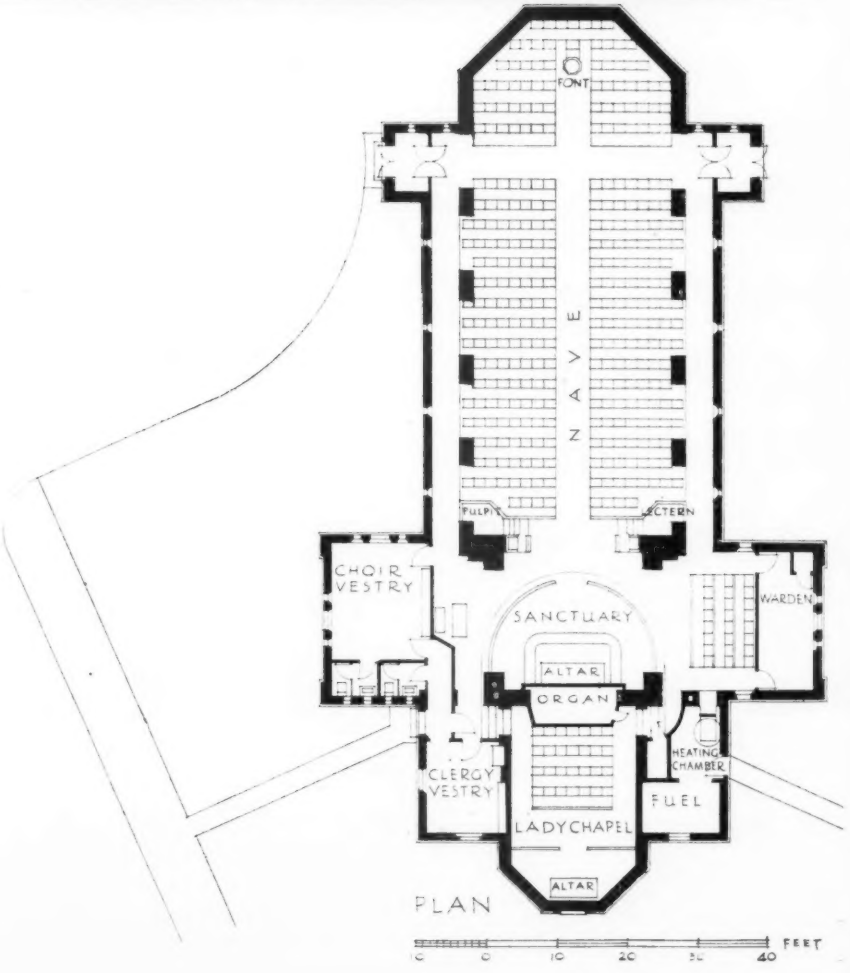
NORTH GREENFORD. *BY CYRIL A. FAREY*



exception of the roof and internal finishing of the Lady Chapel.

The church was consecrated by the Bishop of London on December 20, 1941. The organ chamber is situated in a sunk pit between the altar and the Lady Chapel and is invisible to the congregation. When the Lady Chapel is completed it will be open to the nave through the altar arch, which is now temporarily blocked up.

FINISHES—The external walls are faced with buff-coloured Colwood bricks and the vestries and aisle roofs are covered with dark brown pantiles. The seating capacity is 360, and the amount of the contract was £9,234. The font was transferred from All Hallows Church, Poplar, which was badly damaged by enemy action. The choir stalls were brought from St. Catherine's Church, Hammersmith, which was destroyed by bombs.



Facing page: top, the high altar; bottom, the north-east end; the projecting wing houses the Lady Chapel. Above, view from the south; one of the two entrances is shown on the right.

The eleventh of the Royal Society of Arts series of twelve lectures on "The Post-War Home—Its Interior and Equipment" was given recently by Miss HELEN MASTERS, *Head of the Domestic Science Training College, Battersea Polytechnic. The title of her lecture, printed below, was*

Domestic Offices: EQUIPMENT and Maintenance

Generally speaking, the policy which seems to have been most widely adopted might be described as one of scaling down; that is, an attempt has been made to supply in the smaller houses, as far as space and cost would allow, domestic offices and equipment modelled on, and bearing in the main, a general resemblance to those of the larger houses.

It is only in the case of some owner-built houses, and houses such as farmhouses, which still have to combine to some extent the function of work-place and home, that a more definite attempt appears to have been made to approach the question primarily from the point of view of how the needs of a household living in that type of house could be met most effectively.

Up to a point, there would appear to have been some measure of tacit agreement between the builder and the housewife with regard to the kind of thing which was to be provided, but when results have been proved by experience to be unsatisfactory, each has been inclined to blame the other for a lack of understanding of practical requirements.

Have they not both failed to realise that they have unwittingly been caught up and become entangled in a confusion of aims and ideas, the root cause of which is the relationship which has grown up and is now firmly established in people's minds between domestic work and social status? Can it be said that the housewife has always understood clearly "the things which belonged to her own happiness"? To what extent, it might be asked, have her ideas and demands in relation to the lay-out and equipment of the domestic offices been based on a practical and personal consciousness of what she needed for the efficient running of the house, and how much on the desire for the possession of what was considered, according to the fashion of the day, to be the correct thing and the feeling that its possession, like that of the parlour, would be looked upon as a hallmark that a certain level of society had been reached?

The urge towards gentility, which the builder has thought it politic to try to satisfy, might well be held accountable for much faulty planning in the past. The haphazard huddling into the back premises of kitchen, scullery, coalshed and larder; the casual scattering round of equipment and fittings, and the inclusion of many unnecessary and inconvenient doors, are redolent of an attitude which seeks not so much to simplify the labour of domestic work, but to mitigate by apeing the arrangements of more pretentious establishments and shutting away the domestic offices behind the scenes, the sense of social inferiority popularly supposed to be induced by having to do your own household work. The housewife, finding these arrangements unsatisfactory, but failing to grasp where the source of her troubles really lay, has been searching round in many directions for ways and means of lightening her work and meeting the increasing shortage of domestic help.

The widespread distribution and supply, at a moderate cost, of gas and electricity have not only made possible the replacement in many areas of the coal fired range by the easily cleaned and easily controlled gas or electric cooker, and the introduction of the domestic infrigerator, but have given rise to the production of an extensive assortment of household appliances designed to save time and labour in the carrying out of a large variety of domestic operations. These appliances have been well and extensively advertised, attractively displayed and exhibited, and have been eagerly seized on by the housewife, when she has been able, often assisted by the hire-purchase system, to afford them, as a means of easing her burden. She has been led on by the lure that by the accumulation of them in sufficient number she might achieve the ideal home.

Of recent years, however, she has begun to see the light and to realise that her salvation does not lie in the acquiring of a miscellaneous collection of time- and labour-saving devices, however efficiently designed these may be for the purpose for which they are intended. There is undoubtedly a growing awareness that household management is a subject which must be approached in a scientific manner; that the fundamental principles underlying it must be formulated, grasped and accepted before any real headway can be made. In the first instance it is necessary to analyse the nature of the operations to be performed; to decide on the most efficient method of performing them and on the apparatus and equipment needed for performing them; then, to plan out the work-place, group and co-ordinate the apparatus and fittings, and arrange the lighting, so that the operations can be carried out in a methodical and rational sequence, with the minimum expenditure of time and labour.

Much attention has been given to and widespread interest has been aroused in the subject of kitchen planning. Prior to the outbreak of war numerous bodies of experts and housewives' organisations all over the world were at work drawing up schemes, making investigations and planning and carrying out research. This subject formed the main theme of papers submitted by women of many nationalities, and of the discussions which took place in the Domestic Science Section of the International Congress of Scientific Management which was held in London in 1935.

Looking back on those discussions, the point which stands out most clearly in my mind and which is of special interest in relation to these talks on the post-war home is the importance which was attached to standardisation. The need for standardisation, both in respect of the lay-out of the domestic offices and of their equipment, was stressed by speaker after speaker, and it was widely advocated, not only on economic grounds, but also as the most practical means of ensuring that the planning out, selection, grouping and co-ordinating of equipment and fittings should be effectively carried out in the manner desired.

Provided, therefore—and this is, of course, an essential proviso—the standardisation is based on specifications which have been drawn up by those who have a sound knowledge and practical understanding of her requirements, the way would seem to be clear as far as the housewife is concerned, for the introduction of the standard kitchen and scullery components, wall-sections and shelving, built-in hot water and heating units and other fitments suggested by Mr. Howard Robertson and also by Mr. Yerbury.

The housewife should be credited with having enough sense to realise that some limitation of her personal choice of equipment and fittings is likely to be more than compensated for by having domestic offices and equipment planned, designed and fitted as an integral part of the house. Limitation of her personal choice of equipment need not mean limitation of her opportunities to display her originality and prowess as a housewife. More particularly is the housewife likely to welcome standardisation if it would mean that she could count not only on good lay-out and design, but also on good and durable materials, good workmanship and finish and a good supply of hot water, as well as being saved the pinpricks of daily annoyance caused by equipment so fitted that dust-traps are formed in places inaccessible to cleaning, or by unnecessary festoons in the piping; by cold-water pipes laid in too close proximity to the hot-water pipes or to the larder, and so exposed that trouble is likely to arise every time there is a frost; sinks fixed at the wrong height or in a bad light—to mention only a few of the more common bugbears with which she often has to contend owing to lack of attention to practical detail and an inadequate supervision of the plumber's work.

If the policy of the standardisation of the lay-out and equipment of domestic offices is to be developed on an extensive scale, is it not in connection with commercial and industrial interests rather than with the housewife and occupier that controversy and difficulties will be likely to arise and opposition may possibly have to be met?

Taking, for example, the cooker. Since this is a key point in the planning of the kitchen, in relation to which other fittings and equipment will have to be orientated, it may be found necessary to fix not only its position but also its type and dimensions.

In the case of the coal fired range, which it is customary to supply as a landlord's fixture, no difficulty need be anticipated. But in the interests of smoke abatement, domestic hygiene and labour-saving, it is likely to be generally agreed that the coal fired range should be abandoned. What, then, will be the position when extensive housing, and, we hope, kitchen-planning schemes, are to be carried out in districts where both gas and electricity are available at a low cost? How is the decision as to which form of cooker should be installed to be made, and how is the cost to be met? Will not the utility companies be opposed to schemes which do not allow those whom they regard as their prospective customers freedom to make their own choice of equipment and their own arrangements for its hire or purchase?

A very valuable contribution towards the solution of this problem could be made if, when the production of cookers starts again after the war, the manufacturers and the utility companies concerned could be persuaded to concentrate on the production of a limited number of types of cooker of good design, well constructed, having a low fuel consumption and selected with a view to meeting a reasonable variety of needs, instead of indulging in a competitive rivalry to turn out a constant succession of new models fitted with novel, sale-catching gadgets and devices of minor importance. If, in addition, both gas and electric cookers could be made to standard dimensions and specifications to conform to the requirements of kitchen-planning schemes, it might then be feasible, at any rate in some areas, to allow the occupier to choose which supply he would use. Similar difficulties, though of less serious character, may have to be met in relation to other fittings, and it is, of course, necessary to take into account that the more completely and in detail the fitting up of the domestic offices is carried out, the greater is likely to be the divergence in views with regard to what should be provided and the greater the difficulty of trying to forecast and meet variations in the needs of different types of household. Success, in my opinion, is likely to be largely dependent on keeping

essential aims and principles clearly in view; meeting and applying these in a practical, simple and commonsense manner; avoiding unnecessary and undesirable elaboration and curbing the display of too much ingenuity.

Judging by some of the films which have been shown to illustrate kitchen planning on scientific lines, the enthusiasts are a little liable to overlook the point that it is unlikely that the housewife will be in a position to give to her cooking the undivided attention and concentration of a chef working in his kitchen; or to carry out her housework with the routine precision of a factory worker. If a home is to remain a home, it is to be hoped that she never will be. It would be disastrous if the development of kitchen planning were to encourage the idea that the running of the home should be carried out according to a rigid and inelastic routine to which the family would be expected to adjust themselves and their activities.

Whilst the work of the housewife should be methodically planned and punctually carried out, she must be prepared if need arises to modify her plans at short notice, to make allowance for unexpected interruptions and demands, and to save or cut down time on less essential tasks. Efficiency must not be allowed to oust comfort.

There has been some speculating during the course of the discussions as to who will do the housework in the post-war home and how the functions of wage earner and housewife are going to be adjusted.

Women are now being expected to, and are showing that they can, combine full-time work in a factory with the running of their own homes. The claim which the wage earner has been allowed to make up till now, to be exempted from household duties in his free time because he is the wage earner, and which has resulted, generally speaking, in household duties becoming as far as men are concerned, a thing apart and women's whole existence, is hardly likely to remain unchallenged.

From such comments as have been made by the speakers about the juveniles, I have formed a picture of them amusing themselves playing in the living-room and garden, or busy in study-bedrooms—their activities being interrupted only when they are notified that meals are ready or it may be necessary to disturb them in order to lay the table. This also will not do.

The educational schemes of the future envisage a much closer link between school and home life. Every child should be taught that wholesome, well-cooked food and personal cleanliness are essential to healthy living. Conditions in the home should be such that the preparing and serving of meals and regular bathing can form a normal part of and be fitted in naturally into the scheme of home life.

The youth service movement aims at instilling into the rising generation the ideal of service and a sense of obligation to the community. Surely, it is in the home that the seed should be sown, and in family life that the ideal of service to others should be fostered and cultivated.

Let us have, then, the kitchen-dining-room advocated by Miss Denby, where the juveniles, boys as well as girls, can, under the direction of their seniors, take their part in the preparing, setting out and clearing of the meal. Let us have also Mr. Robertson's easily accessible, utility bathroom, and, if possible, an outhouse or shed where odd jobs and repairs can be done, so that the family will have room to spread themselves in carrying out a variety of household activities.

Would it be too much to hope that we might after the war see the opening of a new era in home life, based on the realisation that the running of the house and the home should be a co-operative family affair in which all must have a share, and to which all must make a contribution?

Much, I suggest, might be achieved if, when the re-united family takes possession of the post-war home we have been planning for them, they could bring to their home life the spirit of the enthusiastic, energetic, helpful and happy co-operation which animated the members of Swiss Family Robinson when they started to make a home for themselves after the shipwreck. There should, to my mind, be no passengers only in the family, except the infants, and even in their case, the infant and nursery schools have shown how much can be done at a very early age in training in orderly habits and self help, and this does make a contribution towards avoiding the making of unnecessary work. The young folk need to be encouraged to feel not merely that they are helping mother, but that they have a definite part to play and are doing something which is of real importance to the well-being of the family. Their interest in their home must be engaged and their sense of responsibility developed.

Above all, it is essential if the post-war home is to have any prospect of fulfilling the ideals and aims we have in view that schools, colleges, youth services, and the community as a whole, should combine in a concerted effort to eradicate all suggestion that domestic work is menial and household duties a form of uncongenial drudgery, and to break down the attitude of social and intellectual snobbery adopted towards those whose work and interests lie in the domestic sphere.

Arthur Brady, an 18 year old apprentice, is the only workman engaged on the building of the Roman Catholic Cathedral at Liverpool; all the other men have been called up for work of national importance. Mr. Brady is seen above with Archbishop Downey.

LITERATURE

PLYWOOD

[*By E. H. B. BOULTON*]

Plywoods: (their development, manufacture and application.) *By Andrew Dick Wood and Thomas Gray Linn. Published by W. and A. K. Johnston, Ltd., Edinburgh and London,* 1942.

If one studies the remarkable craftsmanship throughout the ages, there appears to be no age of veneer and sham, for as summarized in Chapter I of this book on plywoods, a historical survey shows the art of cross bending and veneering of woods dating as far back as 2000 B.C. During the excavations in Egypt under the late Mr. Howard Carter, many articles of furniture of historical interest were brought to the light of day. Of particular interest, from the plywood enthusiast's point of view, is a bedstead discovered in the tomb of Iouya and Touya, the grandparents of the wife of Tutankhamen. The headpiece, which is clearly built on the plywood principle, is veneered with Laburnum wood, and inlaid with gold and jewels. How the wood was sawn or cut, how the glue has managed to hold the face veneers to the solid core for some thirty-five centuries, must ever remain a wonder to the modern woodworker.

In a simple straightforward manner, the authors have tackled their subject in a thorough way, describing the general classifications of Plywood, composite boards, laminated board, blockboard, and battenboard. Whilst some portions of the book are not of direct use to the architect, it is a work that is well worth the study of both the student and the fully-qualified man, and should be used both as a book of good reading and also for constant reference.

The knowledge of the structure and physical characteristics of wood is essential to all those who specify or use this material, and Part II, Chapters 1, 2, and 3, should be carefully studied. The process of manufacture is covered in 116 pages, and dry-cementing and wet glueing, adhesives, and their appli-

cation open fresh fields for both indoor and outdoor use.

The outstanding feature of the book is found in Part VII, which gives, in tabulated form, a description of the various woods manufactured into plywood. The principal centres of manufacture, a brief description, thicknesses and construction, sizes, packing, qualities, availability, and a description and uses, complete a very concise, and the most valuable source of information ever collected together in such a clear and understandable manner on plywoods. The choice of veneer is vast, and some of the most attractive woods are described and it would pay architects to have samples of these veneers to enable them to be fully acquainted with the beautiful results that can be obtained both in furniture and design. The development of decorative panelling of modern design is well illustrated in such famous ships as the "Queen Mary" and "Queen Elizabeth"; both these ships being floating museums of wonderful woods and the clever use of plywood for decoration.

Much thought should be given to the use of plywood in built-in fitments and kitchen cabinets, for in flat or house, the kitchen can be planned to simplify the housework.

Resin-bonded plywood is frequently referred to as "exterior" plywood, and experiments prove that this kind of plywood gives the architect and engineer a material of considerable structural value. An example of such construction is the new cubicle hut designed by the Ministry of Works and Planning. In the United States, plywood has been used for the exterior sheathing of barracks and houses where millions of square feet have been used.

The constructional details of internal and external corners, joints, curves, etc. complete a very useful manual on plywoods, and all architects or students of design, planning and building construction will do well to study this book so that the material can be given the place that it deserves in reconstruction and rebuilding and, used in the right way, plywood must play an important part.

With the research work that has been done on plywoods in recent years, the days of veneer and sham have passed, if ever they existed in one age more than another.

PUBLICATIONS RECEIVED

Catholic Art and Culture: An Essay on Catholic Culture. By E. I. Watkin. London: Burns Oates. Price 9s.

The American Nation. By John Gloag. London: Cassell and Co. Price 7s. 6d.

Shakespeare's Country. By John Russell. London: Batsford. Price 10s. 6d.

★ *I SHOULD appreciate your opinion as to whether a schedule of dilapidations to-day should be served on the basis of to-day's prices?* - - - Q 912

★ *IN forming roads on water-logged or other soft ground, it is common first to lay a mat of hedge cuttings or saplings. Can you tell me the correct method of laying?* - - - - - Q 913

THE ARCHITECTS' JOURNAL

INFORMATION CENTRE

THE Information Centre answers any question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry.

Enquirers do not have to wait for an answer until their question is published in the JOURNAL. Answers are sent direct to enquirers as soon as they have been prepared. The service is confidential; and in no case is the identity of an enquirer disclosed to a third party.

Questions should be sent to—
THE ARCHITECTS' JOURNAL
45 THE AVENUE,
CHEAM, SURREY.
Telephone: VIGILANT 0087

Q 911

STUDENT, SURREY. — *I started my studies for a building career rather late, with the result that I am just completing the First Year's course for the City and Guilds of London Institute's Examination at the age of nearly* 21.

I have many times wondered what advantages I would gain by becoming a probationary member of one of the Institutes (e.g., Institute of Builders). I believe I should have to become a PROBATIONER in order to sit for their examination. Is this correct? How can I become a probationer, and how should I get the preparatory study for their examination? Do you think I should complete the two-year study for the rest of the City and Guilds of London Institute's examination?

The lowest grade of membership to the Institute of Builders is that of Licentiate. Membership as a Probationer, though referred to in the Institute's brochure, has not yet been introduced.

To become a Licentiate you must either pass the Institute's examination for Licentiates or the First Final of the City and Guilds of London Institute examination, Group 4. Which examination you sit for is a matter of personal preference, and we cannot advise you. We would suggest, however, that you obtain the syllabus of both examinations and compare them.

If you are already studying at a recognised school it is probable that you can take a course there for the Institute's examination, otherwise any good technical school or course of correspondence lessons would be suitable. The nearest school is the Kingston Technical College.

For a correspondence course we should suggest the International Correspondence Schools Ltd., 71, Kingsway, London, W.C.2.

The Institute of Builders will, of course, send you full particulars of membership and of their examinations, on request.

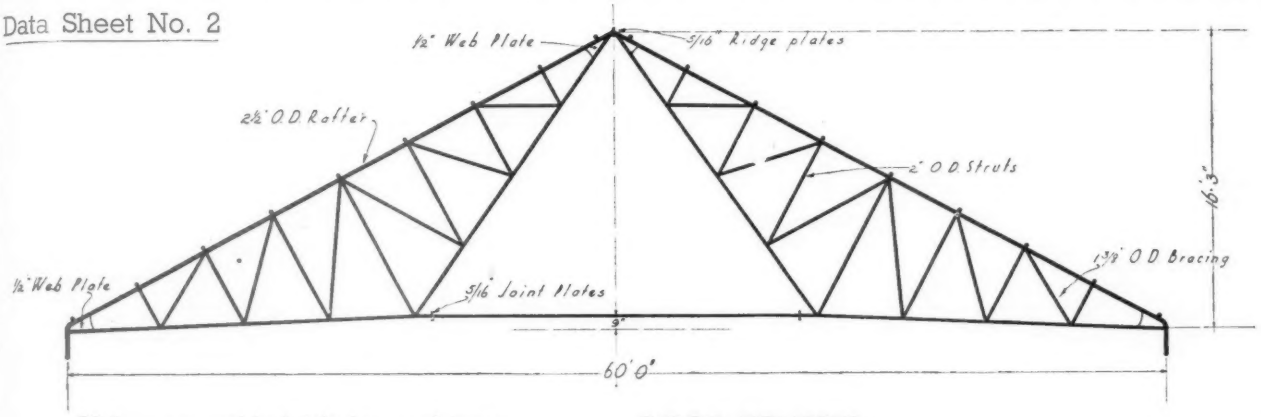
Q 912

ARCHITECT, LONDON. — *I should appreciate your opinion as to whether a SCHEDULE OF DILAPIDATIONS to-day should be served on the basis of to-day's prices. The case is a Public House and dwelling which has not suffered war damage. It is doubtful whether the Schedule can be complied with under present conditions, but the question may arise in negotiating for a monetary settlement.*

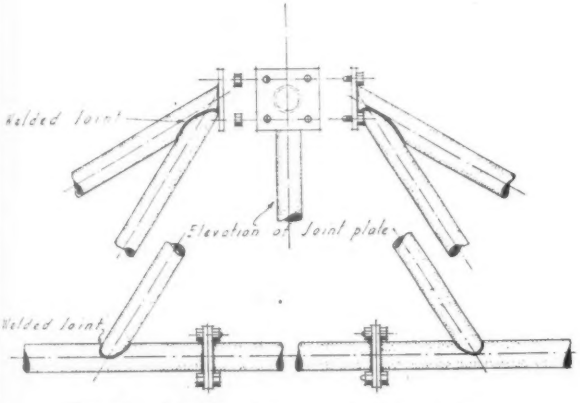
There seems no doubt that any monetary settlement should be based on present-day prices, as it is quite impossible to estimate the prices which may be ruling at the time when it is possible to carry out the work. At the same time we should point out that the normal tenancy agreement does not stipulate that the tenant is to pay a sum of money in respect of dilapidations which have been allowed to occur, it merely states that he is to repair or keep in repair, and if

PATENT WELDED TUBULAR CONSTRUCTION

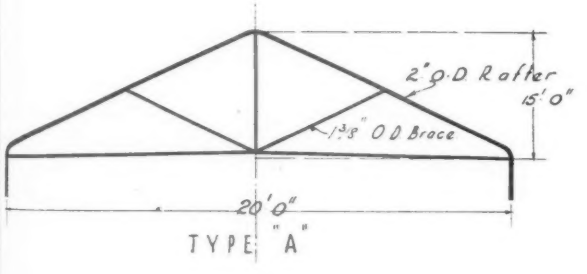
Data Sheet No. 2

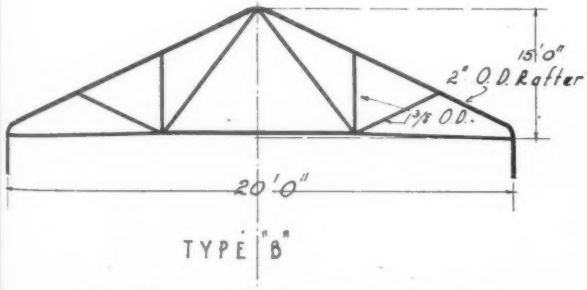


60 ft. span welded tubular roof truss



Detail of joint plates and ridge plates.





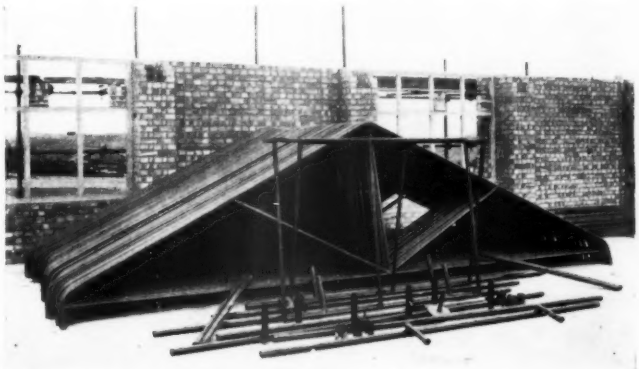
Two types of 20 ft. span roof trusses. The photograph on the right shows a number of these trusses ready on the site for assembly.

ROOF TRUSSES

The standard series of welded tubular roof trusses available range from 15 ft. span, rising by multiples of 5 ft. to 60 ft. span. They can be fully fabricated and welded at the factory and delivered to the site ready for assembly, or, as is often advantageous where the larger trusses are to be used and where long distances in transport are involved, sections of the trusses can be factory fabricated and welded together after delivery to the site. A special mobile welding plant and a mobile unit of skilled welders is available for this purpose. The truss sections, or complete trusses, are easily stacked for transport and are exceptionally light.

The hollow circle is recognised by structural engineers to be a most economical section and in construction it uses the least material for the greatest resistance to stress. The roof trusses are singularly neat and light in appearance, and with the circular section there is a marked absence of dirt-retaining angles and corners; where protection against chemical attack or corrosion is specially necessary anti-corrosive paints are most simply applied. The trusses have great strength and it is a feature in this form of construction that the joints, usually the weakest parts in a structure, are the strongest parts.

This is the second of a series of informative data sheets outlining the principles of welded tubular construction and planned to give (1) *An analysis of the various sections that comprise the system—roof trusses, sectional wall frames and door frames, etc.*; (2) *Typical details of war-time construction*; (3) *Factory fabrication and/or site welding*; (4) *Permanent and post-war construction—details showing how the system is used with brick construction and with concrete construction. As the completion of this series will be spread over a period of approximately twelve months, it is believed that some readers of* THE ARCHITECTS' JOURNAL *might like to have the information in advance of publication, in which case would they send to us, on their business notepaper, requests to this effect.* Scaffolding (Great Britain) Ltd., 77, Easton Street, High Wycombe, Bucks.



legislation makes it impossible for him to fulfil his obligations he may refuse to agree to a settlement based on present-day prices and undertake to carry out the repairs as soon as legislation permits.

In view of the difficulty of discriminating between dilapidations which occurred up to the end of the tenancy and dilapidations which have occurred since that date, most tenants would agree to a settlement based on present-day prices.

Q 913

ENQUIRER, BUCKS.—*In FORMING ROADS on water-logged or other soft ground, it is common first to lay a mat of hedge cuttings or saplings. Can you tell me (a) the most suitable trees, (b) the correct method of laying; should they be wired together?*

Any type of wood will serve the purpose, providing it is not dead. Different methods are adopted in different parts of the country, but a usual and satisfactory method is to form a matting (similar to a roughly constructed hurdle) of hedge cuttings about one inch in diameter; the cuttings are interlaced and not actually wired together. This mat is laid on the prepared surface after vegetation, etc., has been removed, and finally twigs are laid on to a depth of about six inches. The facines should be rolled before the actual road is laid upon it.

Q 914

ENQUIRER, YORKS.—*I shall be pleased if you can advise me of one or two of the best types of SOUND ABSORPTIVE MATERIALS which can be obtained to-day suitable for use in a Church where all walls and ceilings are plaster finished.*

Without knowing the exact requirements, the construction and the expenditure envisaged, it is impossible for us to give you any definite advice.

We suggest that you get in touch with the following firms who specialise in acoustic materials, and who will be in a position to give you a full list of the products which are now available, when you have explained your requirements to them.

Messrs. Celotex Ltd., North Circular Road, Stonebridge Park, London, N.W.10.

Messrs. Gyproc Products Ltd., "Westfield," Upper Singlewell Road, Gravesend, Kent.

Messrs. Honeywell & Stein Ltd., 21, St. James Square, London, S.W.1.

Messrs. Huntley & Sparkes Ltd., De Burgh Road, London, S.W.19.

Messrs. Marley Tile (Aveley) Co., Ltd., Stifford Road, Grays, Essex.

Messrs. May Acoustics Ltd., De Burgh Road, London, S.W.19.

Messrs. Newalls Insulation Co., Washington Station, Co. Durham.

Messrs. Thermacoust Products Ltd., 32, Victoria Street, London, S.W.1.

THE BUILDINGS ILLUSTRATED

CHURCH, NORTH GREENFORD, MIDDLESEX (pages 377-379). Architect: Cyril A. Farey. Consultants—foundations, B. L. Hurst; acoustics, Hope Bagenal; quantity surveyor, William C. Inman. General contractors were: William Lacey (Hounslow), Ltd. Subcontractors and suppliers included: acoustic treatment and insulation, Gyproc Products, Ltd.; carved lettering, Newbery Trent; facing bricks, Brickmakers and Factors, Ltd.; hollow block flat roofs, Kleine Floors; asphalt, Field & Palmer Ltd.; pantile roofing, Stirling & Johnson; wood block flooring, Acme Flooring and Paving Co.; windows, Crittall Manufacturing Co.; marble paving, Walter W. Jenkins & Co.; furniture, Charles R. Price; pipeless central heating, McClary; electrical installation, G. W. Franklin Son; electrical fittings and altar rails, Tudor Art Metal Co., Ltd.; lightning conductors, J. W. Gray & Son, Ltd.; wall safes, Chubb; ironmongery, Yannedis & Co., Ltd.; sanitary fittings, Tylors, Ltd.; organ, Kingsgate, Davidson & Co., Ltd.