

THE ARCHITECTS' JOURNAL



standard contents

every issue does not necessarily contain all these contents, but they are the regular features which continually recur.

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Wanted and Vacant

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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to H one week, I to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 3158
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers. 1, Grosvenor Place, S.W.1.	Sloane 8606
IHVE	Institution of Heating and Ventilating Engineers. 72/74, Victoria Street, S.W.1.	Victoria 0146/7
IIBD	Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects. 12, Gower Street, W.C.1.	Museum 1783
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128-29
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MARS	MARS Group (English Branch of CIAM). 46, Sheffield Terrace, W.8.	Park 7678
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Belgrave Square, S.W.1.	Sloane 4522
MOH	Ministry of Health. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service. St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Abbey 7711
MOTCP	Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1.	Whitehall 8411
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council. 94, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 5277/8
NBR	National Buildings Record. 37, Onslow Gardens, S.W.7.	Kensington 8161
NCBMP	National Council of Building Material Producers. 2, Caxton Street, S.W.1.	Abbey 5111
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041
NFBTO	National Federation of Building Trades Operatives. 8, Rosebery Houses, Breams Buildings, E.C.4.	Holborn 1881
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 2881/2/3
NHBRC	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4041
NHTPC	National Housing and Town Planning Council. 41, Russell Square, W.C.1.	Museum 1264
NPL	National Physical Laboratory. Head Office, Teddington.	Molesley 1380
NRIAD	National Register of Industrial Art Designers. National Gallery, Trafalgar Square, W.C.2.	Whitehall 2415
NSAS	National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1.	Abbey 1359
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211/2
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
PWB	Post War Building, Directorate of. Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 7611
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Whitehall 9936
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Edinburgh 20396
RICS	Royal Institution of Chartered Surveyors. 12, Great George Street, S.W.1.	Whitehall 5322
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.9.	Wimbledon 5101
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
RFAC	Royal Fine Art Commission. 6, Burlington Gardens, W.1.	Regent 1446
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Temple Bar 8274
RSI	Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
SCR	Society for Cultural Relations with the USSR. 98 Gower Street, W.C.1.	Euston 6272/3
SFMA	School Furniture Manufacturers' Association. 13, New Square, Lincoln's Inn, W.C.	Chancery 5313
SIA	Society of Industrial Artists. Room 243, Empire House, St. Martin's-le-Grand, E.C.1.	Metropolitan 8344
SNTPC	Scottish National Town Planning Council. 11, Drumsheugh Gardens, Edinburgh, 3	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 75, Cannon Street, E.C.4.	City 6146 (3 lines)
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 81, Cannon Street, E.C.4.	City 1476
WDC	War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1.	Mayfair 8866
WEDA	Welfare Equipment Development Association. 61, St. Paul's Churchyard, E.C.4.	City 4263/4
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	Oxford 47988



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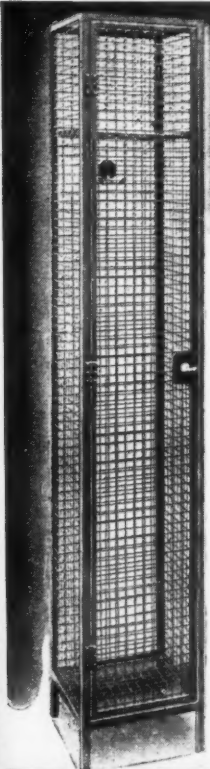
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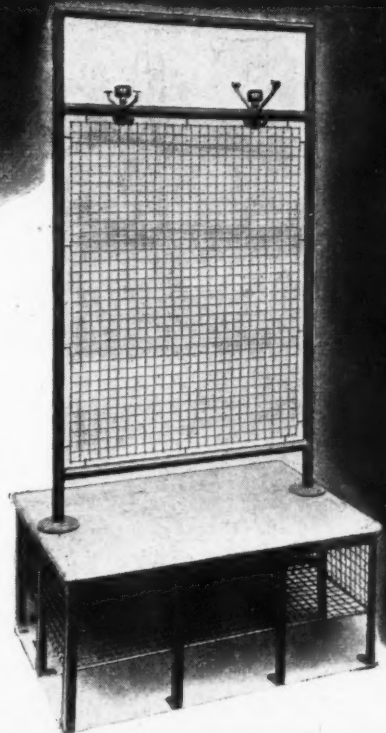
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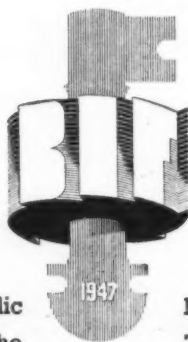
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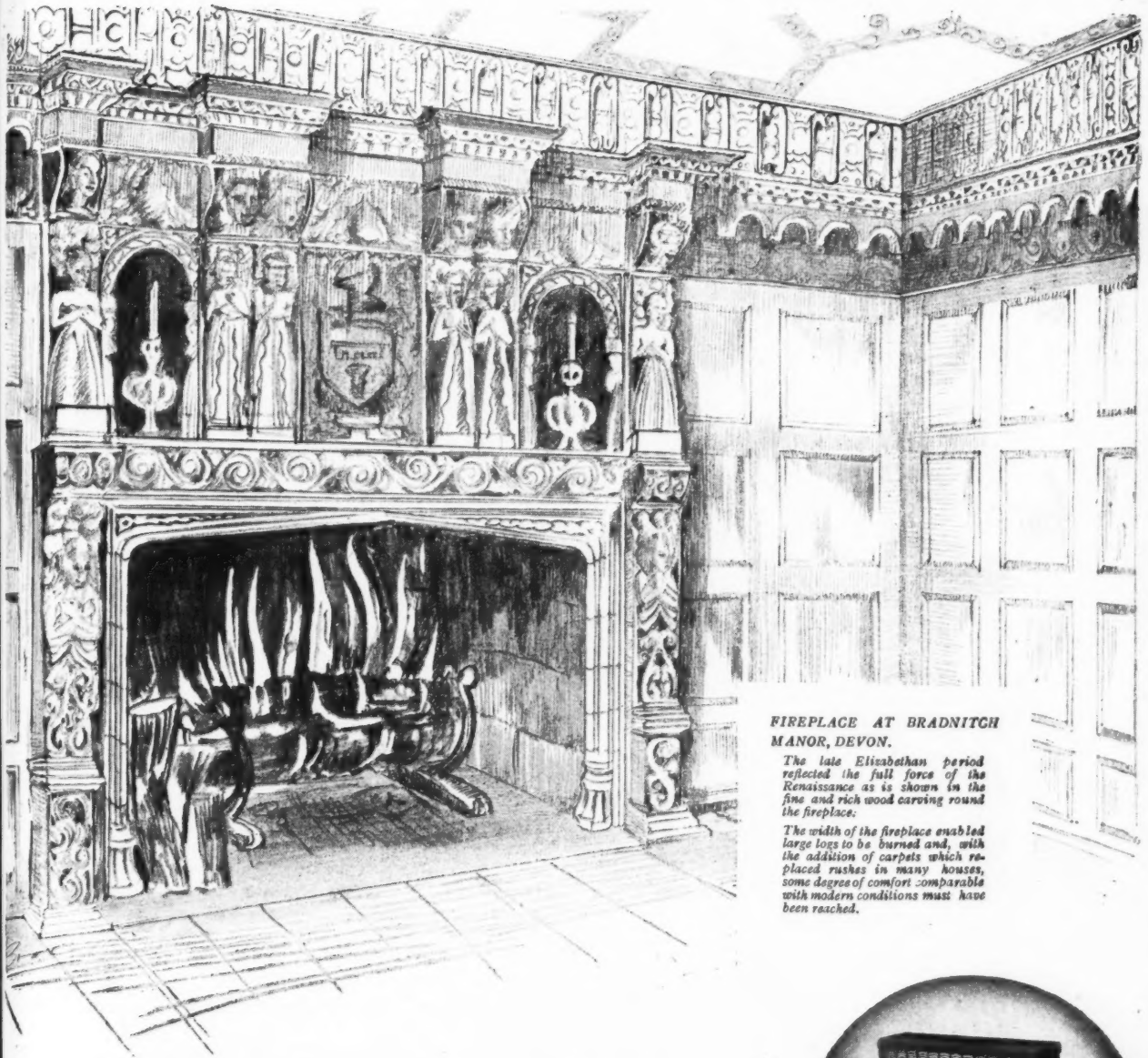
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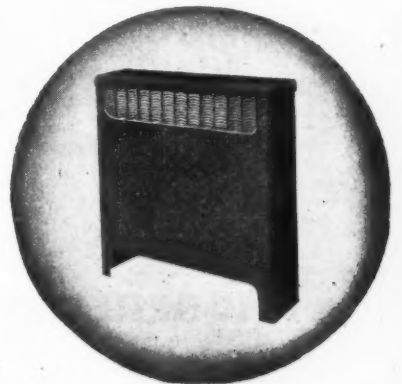
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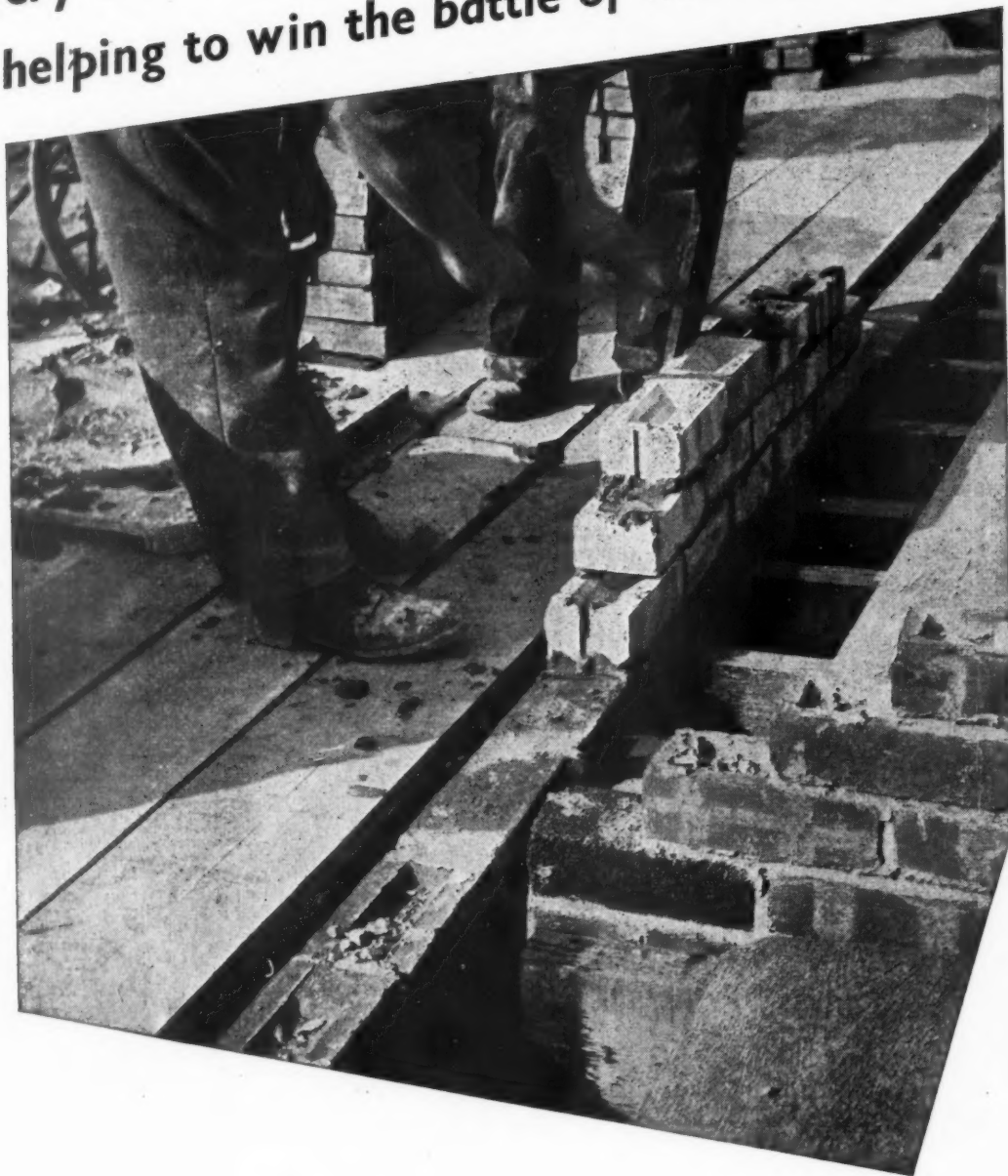
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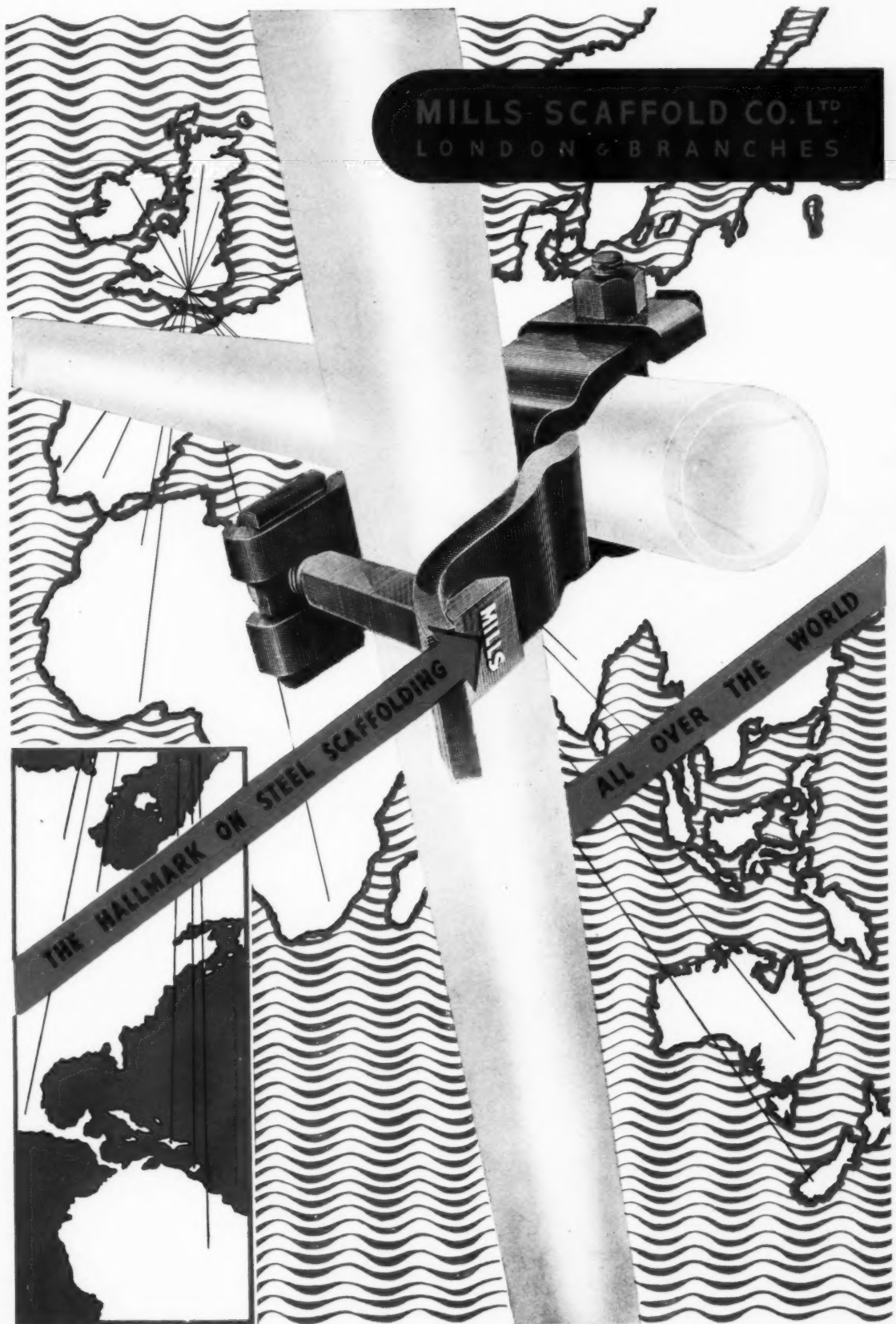


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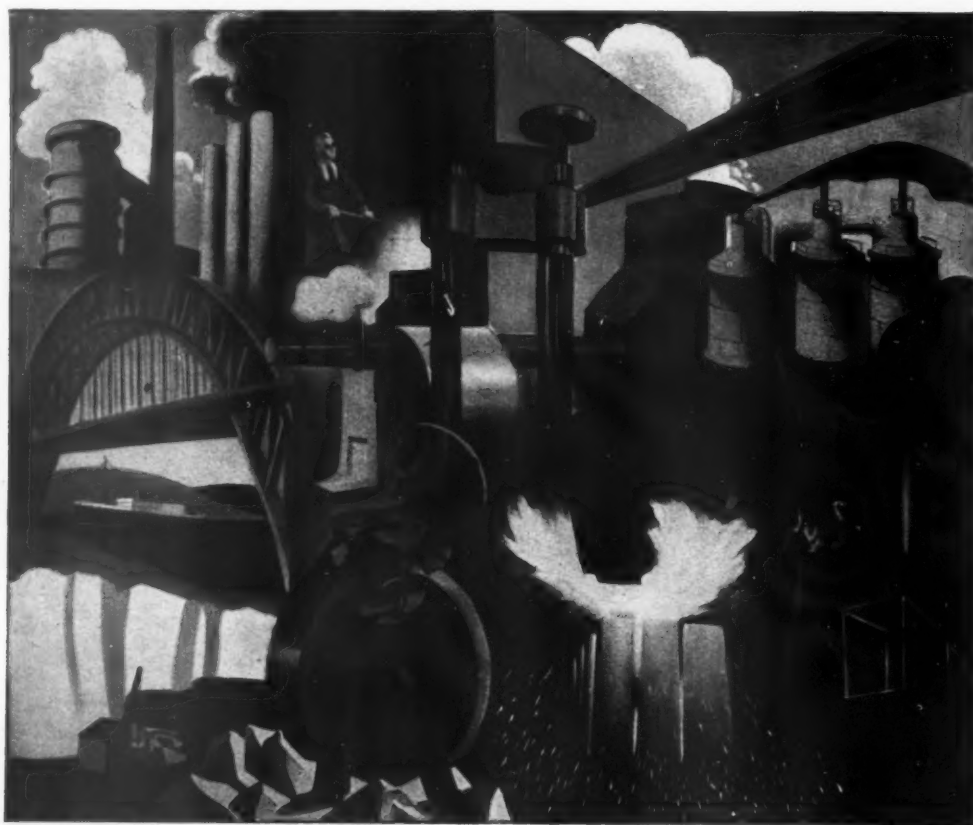


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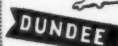
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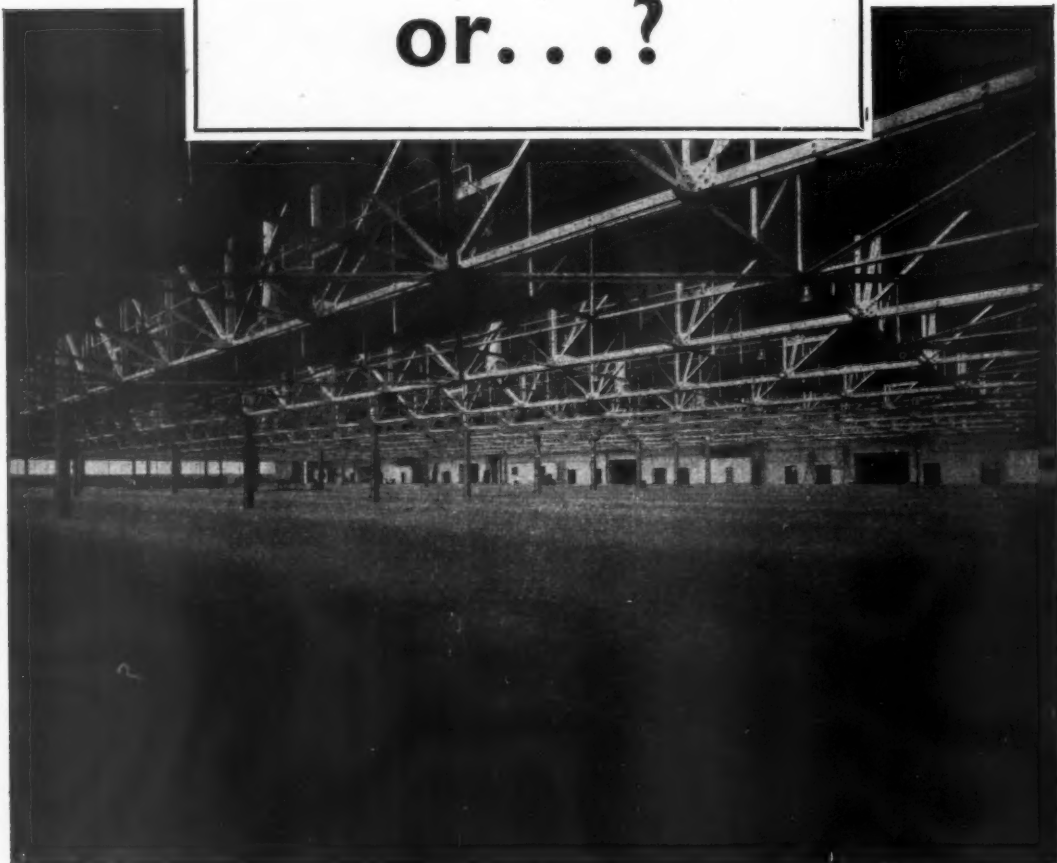
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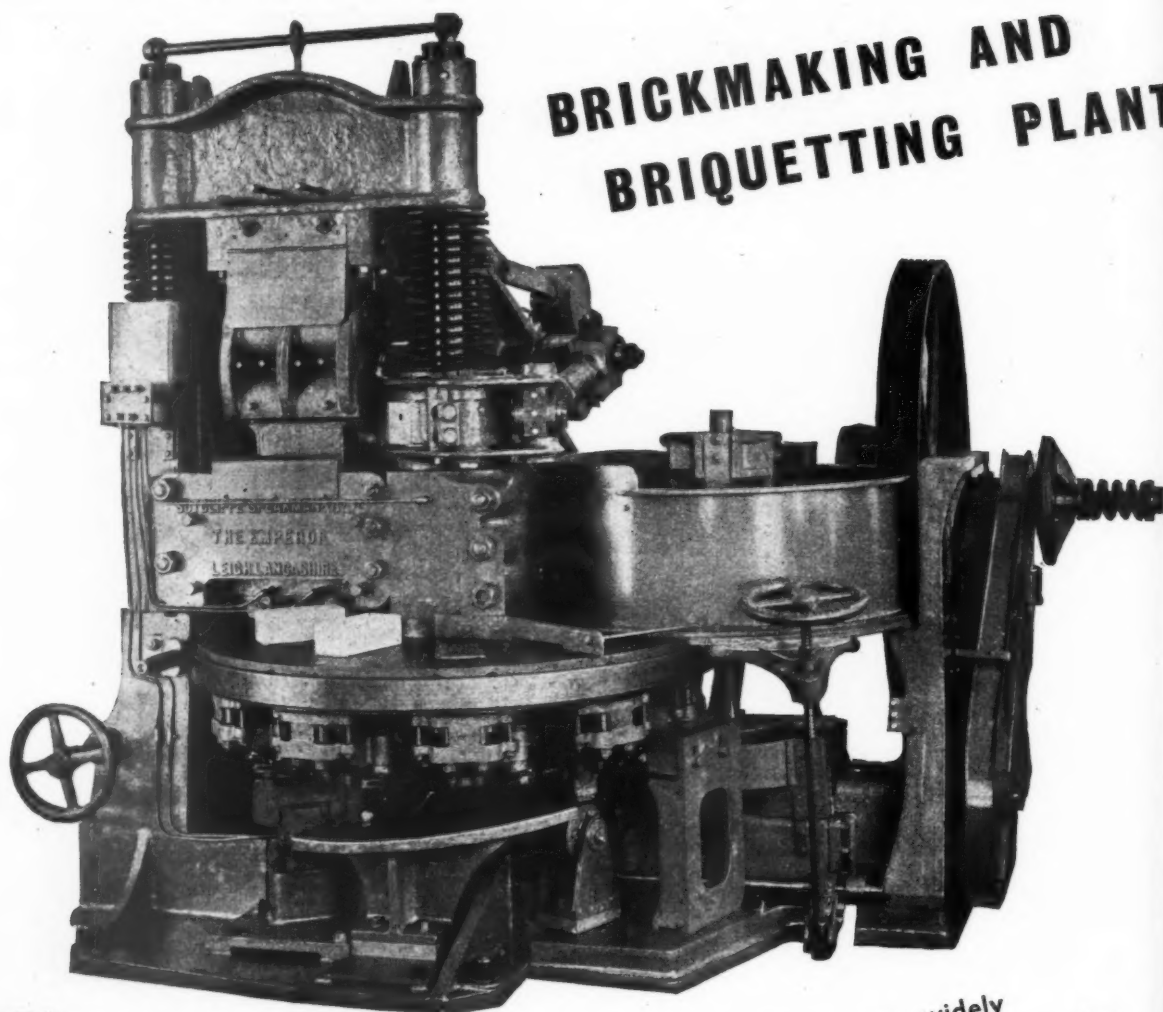
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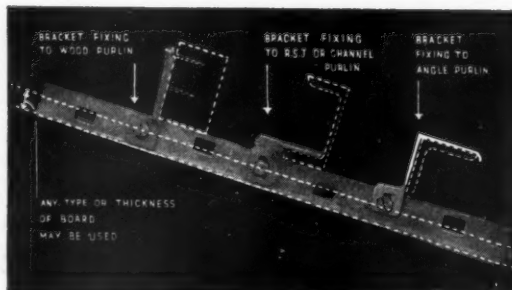
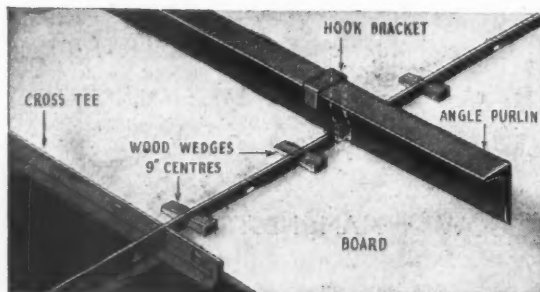
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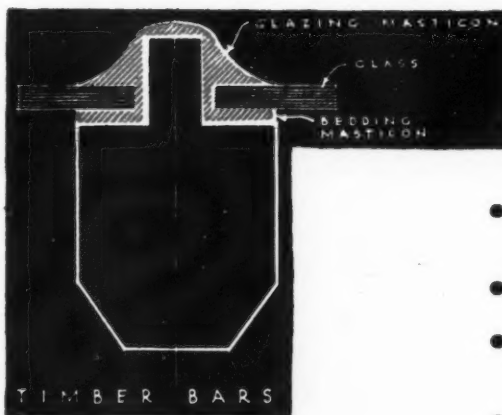
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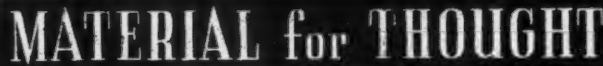
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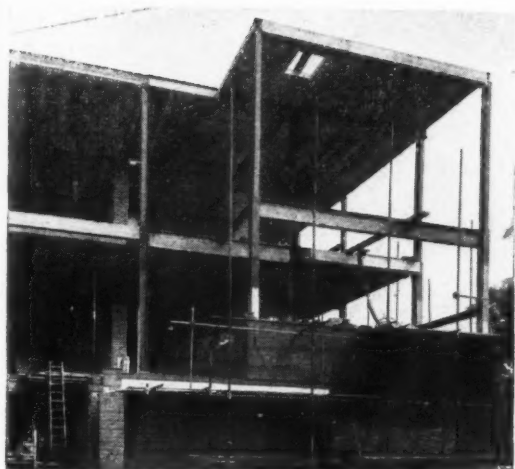
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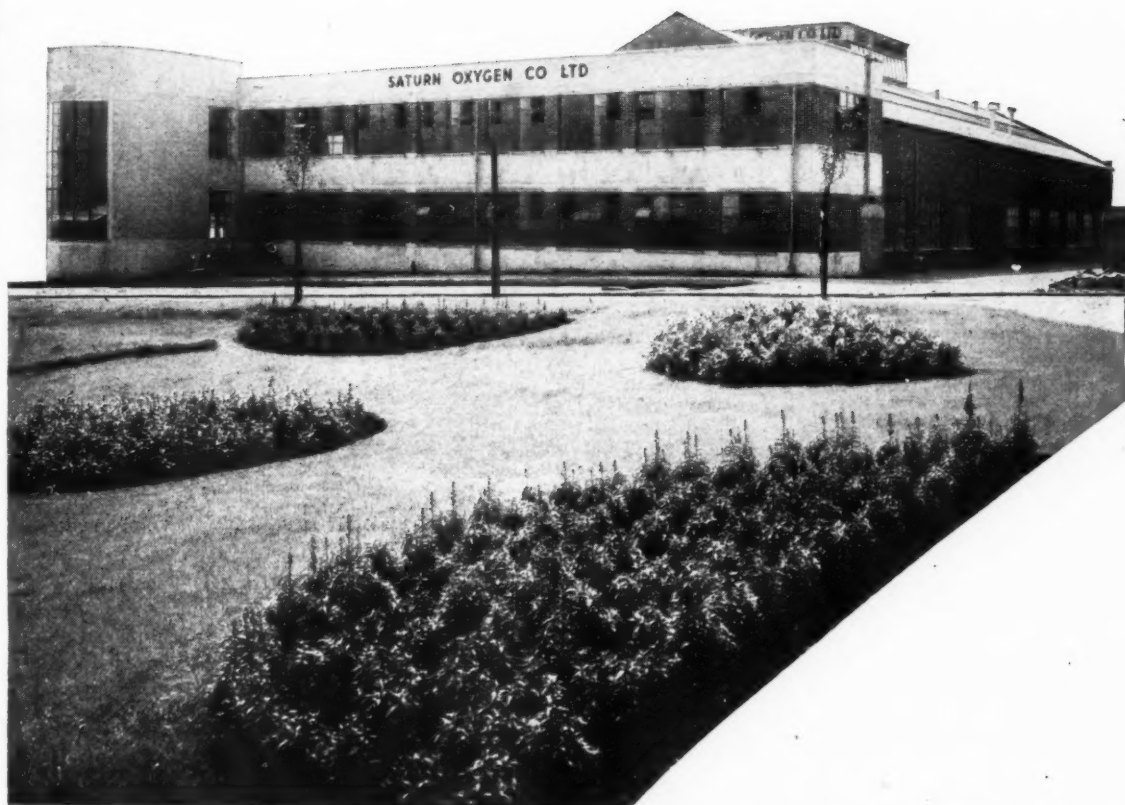


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★ Left. This photograph shows the absence of props and centering and the clear working space below for other trades.

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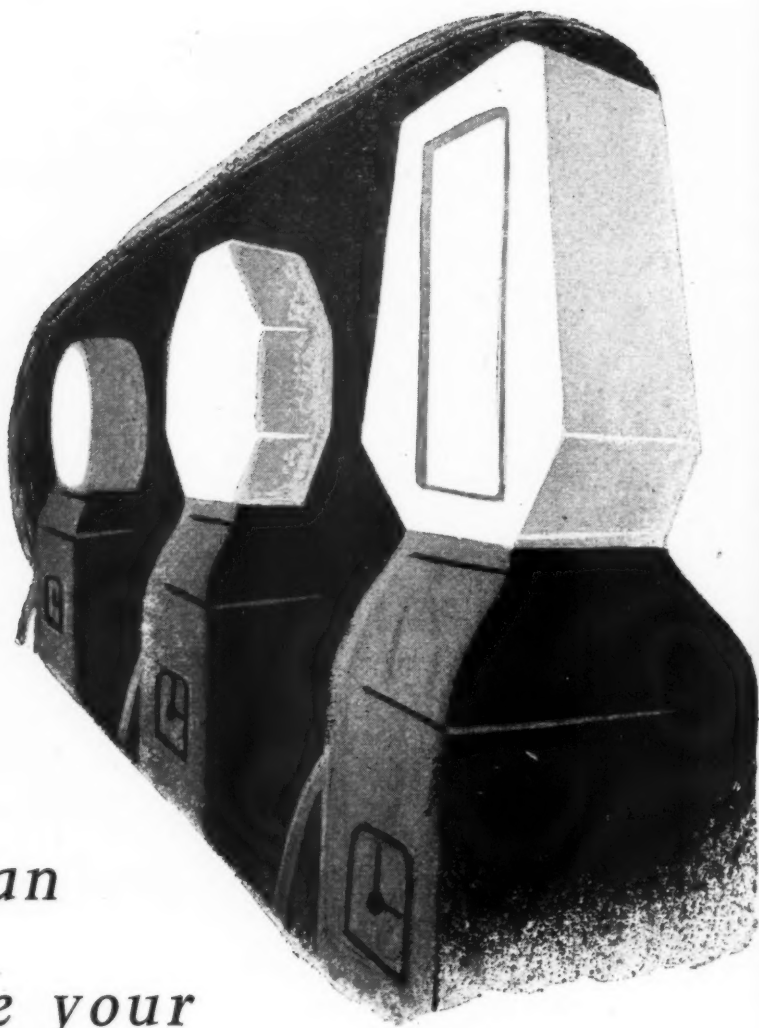
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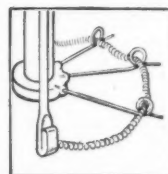
COMPONENTS

The lamp consists of a pear-shaped glass bulb fitted with a brass cap and contacts for connecting the mains. The filament wire is supported in the centre of the bulb. This filament is made of tungsten, the only metal capable of withstanding the high temperature necessary for the economic generation of light.

DEVELOPMENT

In the presence of air, even a tungsten filament will oxidise and fail at such a high temperature, so early lamps had a vacuum created inside the bulb to eliminate oxidation. However, this caused a slow evaporation of the filament, blackening the bulb and shortening the life of the lamp.

Later, more efficient lamps were produced by introducing into the bulb an inert gas, such as neon or argon, which does not oxidise the filament and retards evaporation. These are termed gas-filled lamps. The cooling effect of the gas was obviated by coiling the filament closely, so preventing free movement of the gas between the coils. In Coiled Coil lamps, this tight filament

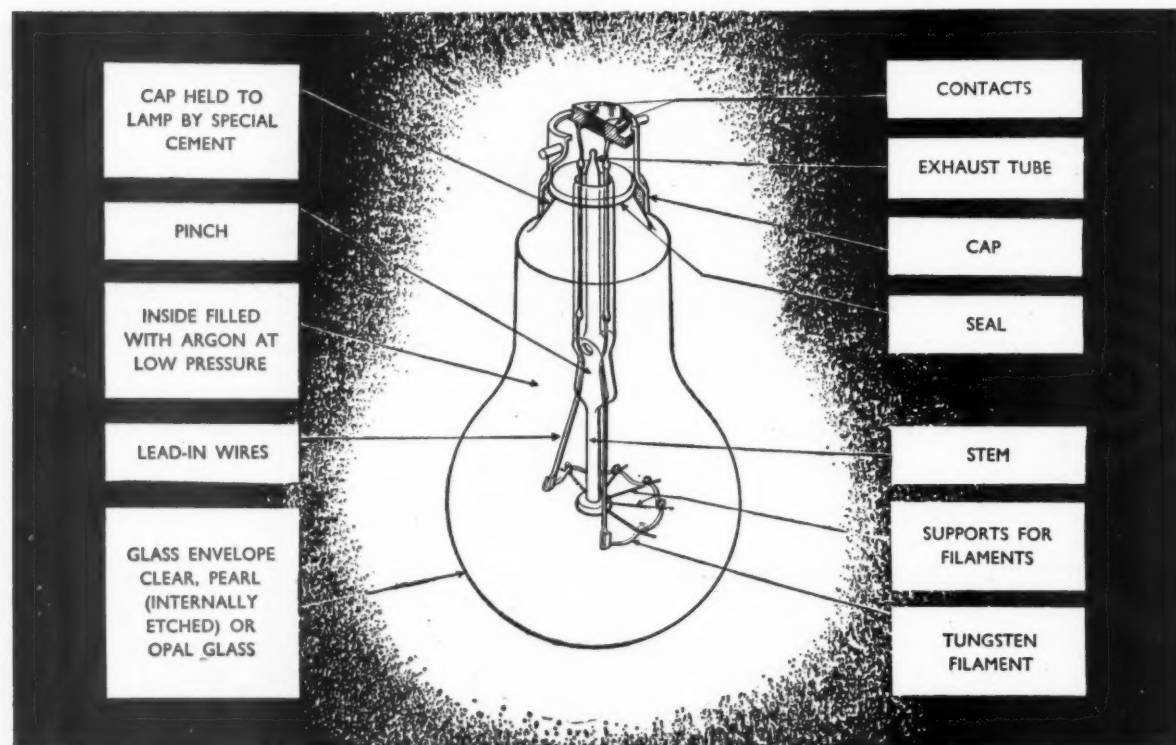


spiral is coiled a second time, bringing a further increase in efficiency.

TYPES

There are two main types for general service: Clear, having transparent bulbs suitable for use with reflectors and enclosed fittings; Pearl, in which

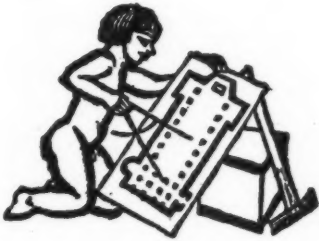
the internal bulb surface is treated with acid to provide effective diffusion and reduce glare.



Expert advice on specialised electrical subjects is always available from your local Electricity Authority.
Issued by the British Electrical Development Association, 2 Savoy Hill, London, W.C.2

In common with every other periodical this JOURNAL is rationed to a small part of its pre-war needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the JOURNAL. Newsagents now cannot supply the JOURNAL except to a "firm order."

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DIARY FOR APRIL MAY AND JUNE

Titles of exhibitions, lectures and papers are printed in italics. In the case of papers and lectures the authors' names come first. Sponsors are represented by the initials as given in the glossary of abbreviations on the front cover.

ASCOT. *Building and Allied Trades Golfing Association: Spring Meeting.* At the Berkshire Golf Club, on Tuesday, April 29. Singles (Medal Play) competition in the morning, which will also be the qualifying round for the Dyke Cup; Fourball Foursomes competition in the afternoon. Those wishing to attend are asked to communicate with Hubert H. Hill, Monument Station Buildings, King William Street, E.C.4, as early as possible and not later than April 17. **APRIL 17**

BILSTON. *History of the British Playhouse.* At the Art Gallery. (Sponsor, the Arts Council.) **Until APRIL 16**

BRIGHTON. *Architectural Students' Association Congress.* (Sponsor, Arch. SA.) **Until APRIL 14**

CUPAR. *Industrial and Planning Exhibition.* At the County Buildings, Cupar, Fife. The exhibition shows existing industries in Fife and samples of their manufactured products, together with evidence of the suitability of Fife for extension of industrial undertakings. Mondays to Fridays, 10 a.m. to 4.30 p.m., Saturdays, 9 a.m. to 12 noon. **Until APRIL 17**

LONDON. *Steel Door Frames.* Exhibition at Henry Hope and Sons, Ltd., 17, Berners Street, W.1. The object of the exhibition is to overcome any practical difficulties that architects may foresee or experience in fitting steel door frames to the various types of walls and floors in use to-day. (Sponsor, Henry Hope and Sons, Ltd.) **APRIL**

Daily Herald Modern Homes Exhibition. At Dorland Hall, Regent Street, S.W.1. (Sponsor, *Daily Herald*.) **Until MAY**

R. T. Kennedy, of the Ministry of Town and Country Planning. *Orientation and Natural Lighting.* At the Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, H.C.) 12.45 p.m. Buffet lunch, 2s. 6d., 1.15 p.m. Talk and discussion. **APRIL 15**

John Summerson. *How We Began—The Early History of the A.A.* At the A.A., 34-36, Bedford Square, W.C.1. (Sponsor, A.A.) 7.45 p.m. **APRIL 16**

Rt. Hon. Oliver Lyttelton, M.P. *Production.* At the Royal Society of Arts, 6-8, John Adam Street, Adelphi, W.C.2. (Sponsor, RSA.) 5 p.m. **APRIL 16**

G. T. Pound. *Planning for Daylight.* At Livingstone Hall, Broadway, Westminster, S.W.1. (Sponsor, TPI.) 5.30 p.m. **APRIL 17**

Visit to the London Brick Company's works at Stewarby, near Bedford. The party will depart from No. 36, Bedford

Square at 10 a.m. and return at approximately 6.30 p.m. Transport (coach) and luncheon will be provided free of charge. As the numbers are strictly limited, members are urged to send their names to the Secretary of the AA as soon as possible. (Sponsor, AA.) **APRIL 17**

P. W. Macfarlane. *Planning for Industry.* At the Livingstone Hall, Broadway, Westminster, S.W.1. (Sponsor, TPI.) 5.30 p.m. **APRIL 17**

I. J. O'Hea. *Canadian Red Cedar Shingles.* At the Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, H.C.) 12.45 p.m. Buffet lunch, 2s. 6d., 1.15 p.m. Talk and discussion. **APRIL 22**

Drawings of English Parks and Gardens by Gregorio Prieto. At the Batsford Gallery, 15, North Audley Street, W.1. (Sponsor, B. T. Batsford, Ltd.) 10 a.m. to 5.30 p.m.; Saturdays, 10 a.m. to 12.30 p.m. **Until APRIL 23**

Miss Caroline Haslett, Director, Electrical Association for Women. *Electricity in the Home.* At the Royal Society of Arts, John Adam Street, Adelphi, W.C.2. (Sponsor, RSA.) 5 p.m. **APRIL 23**

G. Hitchings, member of Council of the Amalgamated Engineering Union and of the recent AEU delegation to USSR. *An Engineer looks at the USSR.* An address to members of the SCR Architecture and Planning Group and their guests, at the RIBA 66, Portland Place, W.1. Sir Charles Reilly will preside. Admission by ticket (members of the Group free of charge, others 1s.), obtainable from the SCR, 98, Gower Street, London, W.C.1. 7 p.m. **APRIL 29**

NEWCASTLE-UPON-TYNE. *Danish Domestic Design.* Exhibition at Laing Art Gallery. (Sponsor, the Arts Council.) **Until APRIL 13**

SHEFFIELD. J. S. Pickles and W. H. Wills. *Rural Electrification. The Use of the Single-Phase System of Supply.* At the Royal Victoria Station Hotel. (Sponsor, IEE, Sheffield Sub Centre.) 6.15 p.m. **APRIL 30**

ST. IVES. *Designs for Ballet and Theatre* by Leslie Hurry. Exhibition in the New Gallery Crypt. (Sponsor, the Arts Council.) **Until APRIL 14**

THE HAGUE. *Fuel Economy Conference.* Particulars from the British National Committee World Power Conference, 201-2, Grand Buildings, Trafalgar Square, London, W.C.2. **SEPT. 2-9**

WATFORD. *Housing Exhibition.* At the Town Hall. (Sponsor, Watford Corporation.) **APRIL 16-19**

NEWS

THURSDAY, April 10, 1947
No. 2722 Vol. 105

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Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis. The JOURNAL's starring system is designed to give this emphasis, but without prejudice to the unstarred items which are often no less important.

★ means spare a second for this, it will probably be worth it.

★★ means important news, for reasons which may or may not be obvious.

Any feature marked with more than two stars is very big building news indeed.

★
Captain Crowder asked the Minister of Works, in the House of Commons, if he is aware that builders are unable to obtain permits for PLASTERBOARD and are told they must use insulation board as a substitute, but that builders' merchants are unable to supply insulation board although they have supplies of plasterboard available; and if he will amend these regulations which are causing delays to building contracts.
Mr. Key: Permits are issued up to the limited amount of plasterboard available and I am not aware that merchants have any surplus stock. In cases where permits for plasterboard cannot be issued, suggestions are made for the use of alternative materials including insulation board, which is in easier supply and for which permits can usually be obtained for essential work. The present arrangements are designed to ensure that limited supplies are used for the most urgent work and to avoid the delay that would otherwise arise in its progress. I should be glad to inquire into any specific instance that the hon. and gallant Member has in mind where the arrangements are not working satisfactorily.

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From AN ARCHITECT'S Commonplace Book

ON SIMPLICITY. [From An Autobiography by Frank Lloyd Wright (Faber and Faber).] This is, I believe, the single secret of simplicity: that we may truly regard nothing at all as simple in itself. I believe that no one thing in itself is ever so, but must achieve simplicity—as an artist should use the term—as a perfectly realized part of some organic whole. Only as a feature or any part becomes harmonious element in the harmonious whole does it arrive at the state of simplicity. Any wild flower is truly simple, but double the same wild flower by cultivation and it ceases to be so. The scheme of the original is no longer clear . . . Five lines where three are enough is always stupidity. Nine pounds where three are sufficient is obesity. But to eliminate expressive words in speaking or writing: words that intensify or vivify meaning is not simplicity. Nor is similar elimination in architecture simplicity. It may be, and usually is, stupidity. In architecture, expressive changes of surface, emphasis of line and especially textures of material or imaginative pattern, may go to make facts more eloquent, forms more significant. Elimination, therefore, may be just as meaningless as elaboration, perhaps more often is so. To know what to leave out and what to put in; just where and just how, oh, that is to have been educated in knowledge of simplicity—toward ultimate freedom of expression.

The Timber Development Association makes the following suggestions to householders whose homes have suffered by the recent FLOODS:

(1) All floor coverings, particularly linoleum, soaked by the water, should be immediately removed and dried. Coverings should not be replaced until the wood is thoroughly dry. Where practicable one or two floor boards where they run alongside the skirting should be taken up to assist drying out of the timber and to permit any water remaining in the cavity below the ground floor joists to be removed. This should not be very difficult where floors of square edged boards are concerned. The surface of the floor should be mopped up with cloths, and floor boards dried as much as possible. Newspapers will absorb much moisture. Fires should be kept on to the extent permitted by fuel regulations. (2) Ventilating bricks under the ground floor should be cleared of debris and the apertures opened out if clogged, so as to promote a through draught. (3) Any debris above the level of the damp-proof course should be removed. (4) Windows, especially those in the lower storey, should be left open in fine weather. (5) Careful watch for at least a year should be kept on the timbers for any sign of fungus. The object of these precautions is to ensure that all timber is thoroughly dried, as dry rot can only attack timber when its moisture content rises above a danger point (about 20 per cent.). If these simple measures are taken at the earliest possible opportunity, there should be no danger of dry rot.

From June 1, the award of the RIBA DISTINCTION IN TOWN PLANNING will be by conferment instead of by examination and will be limited to Fellows, Associates and Licentiates of the RIBA.

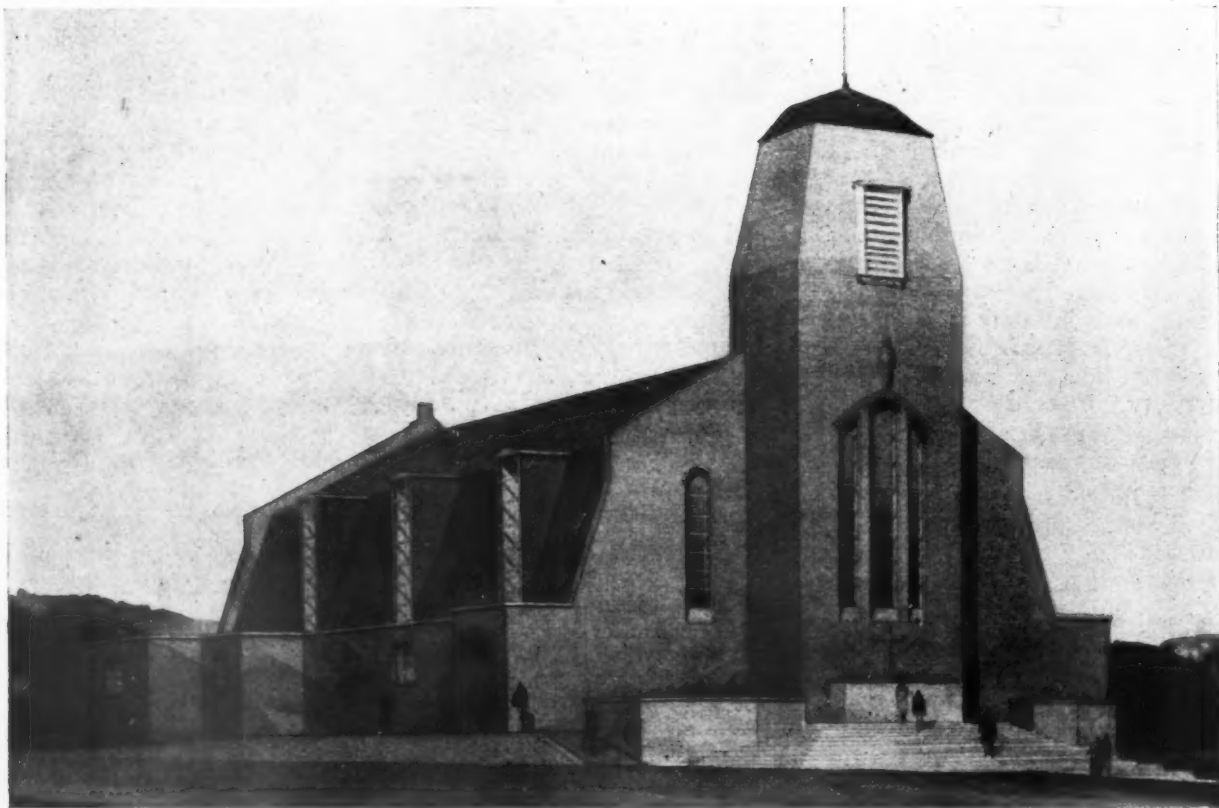
The Distinction is the highest award in Town and Country Planning that the RIBA can bestow. It is primarily for members of the RIBA who have made some contribution in the field of large scale planning, especially in visual and three-dimensional planning, which is so vital in the development schemes that will take place throughout the country. Recommendations will be submitted to the Council by a standing committee to be set up for that purpose. The title of the award and the affix

denoting it will remain unchanged. Personal applications by candidates will not be entertained. The name of a candidate must be submitted by three sponsors, themselves members of the RIBA, who will be required to submit the following particulars on behalf of the candidate:—(a) details of professional qualifications and experience; (b) evidence of his work and achievements in the field of town and country planning, including three-dimensional planning; such evidence to consist of a list of the candi-

date's work together with references to professional journals in which the works have been illustrated; and such other evidence as may assist the committee in making their recommendation to the Council. No fee will be required from the candidate. Those members who have already been awarded the Distinction will retain it and any present candidates for the examination for the Distinction under the previous procedure will be dealt with by the panel of examiners under that procedure.



The Children's Room by Maxwell Fry and Jane Drew at the Daily Herald Modern Homes Exhibition now being held at Dorland Hall, Regent Street, London. It has been designed to offer as great a variety of experience and occupation as possible to two children, and to aid their character development. Early learning is mostly of a practical nature and, by intelligent planning of a child's surroundings, much can be done to assist the learning process. All materials required to furnish the nursery are available now. Bedroom and playroom have been combined, and the room is constructed so as to be freely adaptable to the changing needs of growing children. Cupboards and adjustable shelves are all placed well within the children's reach save the parent's cupboard which is situated above the wardrobe. Beds have been arranged as bunks, partly for convenience and space-saving, and partly to suggest an element of adventure and fun which should be present in a nursery. The bunks pull out so that the bedding is easy to re-make. The fire is protected so that the children can be safely left alone for long periods. The bedroom floor is covered with bright red felt, and that of the playroom section is in cork tiles. (See page 302).



Jobs in the Making: Church at Ewell

This church by A. B. Knapp-Fisher was partly completed just before the war. The tower and west front have yet to be built. It is the Church of St. Francis of Assisi at Ewell, Surrey, of which further illustrations appear on pages 295 and 296. Another Surrey church designed by Mr. Knapp-Fisher—St. John's, Stoneleigh—also in an

unfinished state, is shown on pages 297 and 298. The completed parts of each church seat about 250 people, and when finished each will hold another 150. Both churches are of brown-red brickwork, with pantile roof supported by light steel trusses. A special feature will be the outside altar at the west end of each church.

*Mr. Howard Robertson has been
NOMINATED PRESIDENT
FOR THE AA Centenary
year starting on June 1.*

★

*Sir Stafford Cripps: The
1951 EXHIBITION
IS NOT PRACTICABLE.*

In the House of Commons, the President of the Board of Trade, Sir Stafford Cripps, said he had most reluctantly concluded that it will be impossible to stage in 1951 an exhibition involving large-scale demands on labour and material without impeding the progress of urgent reconstruction. The country will derive many advantages from such an exhibition, however, and the proposal will be reviewed in a few years. The centenary of the Great Exhibition of 1851 should, however, be marked by some national display. Methods could be found involving little new construction work outside the programme already being planned. They might include a cultural festival, as well as a design display on the lines of the *Britain Can Make It* exhibition. State-

ments will be made later. I have, he said, not overlooked the Ramsden Committee's recommendation that a permanent centre for the British Industries Fair should be erected as soon as practicable, but the diversion of labour is a difficulty. I am having examined the possibility of advancing the project as part of the recognition of the centenary of the 1851 exhibition.

The Council of the Royal Sanitary Institute has announced that prizes will be offered during 1947 for COMPETITIONS on (1) practical improvement of appliances or inventions for dwelling houses, and (2) atmospheric pollution or the ventilation of buildings and its effect upon human health.

For the first of these essay competitions, the John Edward Worth Prize of £40 is offered. The second competition, which gives a choice of subject this year, will be for the John S. Owens Prize of £25. The general conditions applicable to the competitions can be obtained from the

Secretary of the Royal Sanitary Institute, 90, Buckingham Palace Road, London, S.W.1.

★

One of the largest private houses in England, KNOLE HOUSE, Sevenoaks, Kent, has been given by Lord Sackville to the National Trust for permanent preservation for the public.

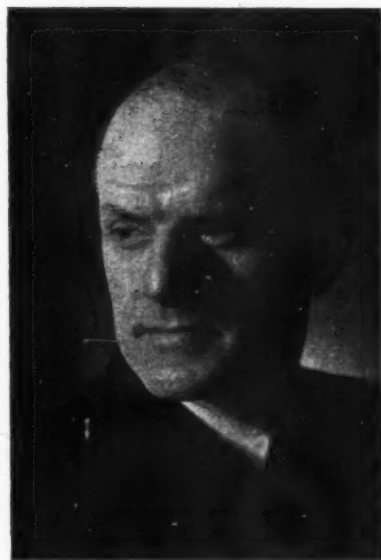
The gift is the consequence, first, of the passing in 1939 of a special Act of Parliament and, then, of several years of negotiation between Lord Sackville's lawyers and the trust. Under the terms of the transfer Lord Sackville and his family have a lease of a part of the house. The state-rooms and galleries, which contain some very fine examples of early English furniture, silver, and pictures, are known to connoisseurs and collectors the world over. The galleries include the Venetian Ambassador's rooms; the King's room, in which can be seen the exquisite silver furniture and state bed; the Reynolds room; the ball room, the Cartoon, Brown, and Leicester galleries. Besides furniture, these rooms contain rugs and tapestries dating from the early seventeenth to the late eighteenth centuries.

*
Opposing the erection of working-class flats at Blackheath, Mr. W. R. Davidge, chairman of the Preservation Society said any injury to Blackheath would be **AN IRREPARABLE LOSS TO LONDON.**

A public inquiry has been held at Catford in connection with the proposed compulsory purchase by Lewisham Borough Council of South Row, Pond End, and Paragon Place, Blackheath for the erection of working-class flats. One of the chief objectors was Mr. W. R. Davidge, chairman of Blackheath Preservation Trust, who said Blackheath was one of the very few districts in London which retained its Georgian characteristics and simple architectural designs. Any injury to it would be an irreparable loss to London. It was an area of historical value.

In the House of Commons Mr. Ellis Smith asked the Minister of Works if he will institute an investigation into the costs of all MATERIALS used in the building industry and the profits made by the material merchants and builders.

Mr. Key: It is already the practice to conduct investigations into the costs of the main building materials in connection with the operation of Government price control. The whole question of distribution of the materials is at present being considered by a Committee of Inquiry under the Chairmanship of Lord Simon.



Mr. Philip Smallwood, Senior Vice-President, has been elected President of the London Master Builders' Association. He is a director of Frederick Smith and Co. (Builders) Ltd., a firm established in the City of London more than 100 years ago. Educated at Friends School, Ackworth, the Borough Polytechnic and the City of London School of Building, he was elected to the Council of the London Master Builders' Association in 1931, to the Administrative Committee in 1939, and to the Council of the National Federation in 1941.

NEW DEAL FOR TRAFFIC

THE development of new roads in this country has not kept pace with the growth in the number of motor vehicles. The insane congestion increases daily; from formerly quiet country districts the roaring crescendo rises through towns to the traffic misery of London.

This is, of course, familiar ground. From the moment that the motor vehicle had securely established itself, many different proposals for dealing with the new Frankenstein have been advanced, argued about and pigeon-holed. Basically, the situation remains as before, except for some road construction in rural and suburban areas.

What is the result? First, there is a tremendous amount of time and man-power wasted in traffic congestion, commerce is restricted at a time when it needs all the encouragement it can get. Estimates of the cost of traffic delay in London are already so high as to be hardly credible. Some startling figures can be found in the County of London Plan, 1943. The economic argument for radical change is so powerful that there is little need to bring forward the most vital factor of all—the infinite exhaustion of human minds and spirit, which is not susceptible to an estimate in terms of hard cash. The road proposals in the County of London Plan and the Greater London Plan do not offer much hope. A new road here, a bit of widening there, a better designed round-about, with an occasional fly-over crossing, although designed as part of a coherent scheme with some degree of traffic classification, are at best palliatives and are not likely to bring a permanent solution. A more radical diagnosis and a major operation are required; homeopathic doses are useless here. The idea that a comparison of the present congestion and the estimated increase in the number of motor vehicles over the next ten, fifteen or twenty years, will provide data to enlarge or modify on existing road network on the ring-radial-cross system is erroneous.

We hoped that in the Report of the Advisory Committee for London Regional Planning, which was discussed generally in this column on December 12, some consideration would be given to the recasting of the traffic network. In fact, the Technical Sub-Committee joined in the general chorus of acceptance of the ring-radial idea and contented itself with analysing the proposals of the Abercrombie plan in detail within the accepted framework. As a result of this examination, some of the arterial roads were rejected and others reduced in size, in fact the committee recommends a general whittling down of the suggested provisions. Such a conclusion arrived at by the many eminent authorities is disappointing. Certainly, the harrassed holder of the purse-strings may sometimes be forgiven for choosing to allocate his limited funds elsewhere when presented with such shaky reasoning as that which so often backs road proposals.

The fact is that we cannot afford to continue with the present defects in our road system; this is common sense, but the

solution still needs to be proved in a manner which will enable roads to take their proper place when competing with other needs for a share of the limited funds available.

We believe that a completely defensible case can be made for a radical change in our ideas of road patterns both from the point of view of traffic circulation and town-planning. Such a case must, however, be based on a technical study of the problem. This study must produce quantitative answers to the following questions: "What is the estimated future volume of traffic? What is the most logical and economic transport network to meet the needs of this traffic? What improvements must be made to achieve such a network? How much traffic will use such improvements? What reduction in traffic delays will result? and, What effect is all this likely to have on safety?"

Armed with the answers to these questions, town planners could for the first time have an irresistible case that even the most timid administrator would have to concede.



The Architects' Journal

9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1

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N O T E S & T O P I C S

BED PLANS

Whether the male architects now know where the cupboards ought to go or not, most of them have learned something about the technique of dish-washing through bitter war-time experience. Perhaps also something about bed-making, even up to the brilliant standard set by the late Robert Benchley of Hollywood. Many must have learned, for instance, that when making a bed it is a good thing to be able to get at the bedclothes at each side if a balanced philosophy is to be retained.

*

They must therefore be wondering why so many continental house plans

show beds tucked into corners and sometimes even surmounted on three sides by walls. (See, for example, Hans Elte's plans in the A.J. for March 13). It may even have occurred to them that here in the frenzied frustration caused by trying to make beds in corners lies one of the most fertile seeds of Nazism.

*

But there is a good reason for this Continental bed planning which I have discovered from a German lady. Over a large part of Europe they do not make beds in our way. They do not go in for all that tight tucking-in business. Sheets and blankets are buttoned together and the whole complex is slung over the bed in one unit where force of gravity keeps it in place.

*

This is really a very serious topic. If we adopted the Continental way of bed-making, house planning would become greatly simplified and architects who forget to design their bedrooms to take beds might be able to retain a little self-respect.

A MAN'S BEST FRIEND IS HIS RUBBER

Official war histories take time to write. The last volume recording the 1914-1918 war is only just, I believe, completed, and the historian for this war has but recently been appointed—unofficial histories, however, abound already—many of them, like *The Battle of Britain*, *Target Germany*, *Front Line*, *By Air to Battle*, and their enthralling companions bearing the

MOI stamp of authenticity, others like *Horned Pigeon* or *The Steep Atlantic Stream* being the less ambitious, but equally exciting records of fighting men. The Services have had their go, even the BBC and the GPO have published their war stories, and it is now the turn of industry.

*

First of the civvy-street war books to come my way is *Dunlop in War and Peace* (Hutchinson, 8s. 6d. net), in which the author, Sir Ronald Storrs, traces the early history of Dunlops and describes its switchover from peace to war, and its struggles with the rubber crisis after the loss of Malaya, with the air raids, and with all the strange devices which had to be invented and produced at the shortest notice.

*

Bomber wheels and rubber dinghies, decoy tanks and wave controllers, uniforms for frogmen and midget submarines, boots and cushions, adhesives and hoses, balloons, and hot-water bottles, were designed and made in their thousands. All this is a tremendous technical achievement, well worth recording, and extremely well recorded.

*

One may smile perhaps at the opening sentence of Sir George Beharrell's preface—"When Britain faced the crisis of her survival in 1939, the nation expected Dunlop to be prepared." But one should remember that Dunlop was prepared (even to the organisation of a private pigeon post for emergency use) and be thankful. Sir Ronald, although he calls himself a "technical outsider," is an enthusiastic and informative guide and by the end of the book—which is well illustrated—you are no longer surprised that throughout the world the word Dunlop is practically synonymous with the word rubber, and that in Arabia its house flag is flown quite naturally with the official consular flags.

*

Second of the civvy street records is *Serving a Nation at War*—an illustrated account of the achievements of John Laing and Son, Ltd., in the field of building and civil engineering. Factories and aerodromes, open-cast mining and Mulberry, soil-compaction, and Bomber Harris' hide-out in High Wycombe, were among the tasks entrusted to Laings, and though its

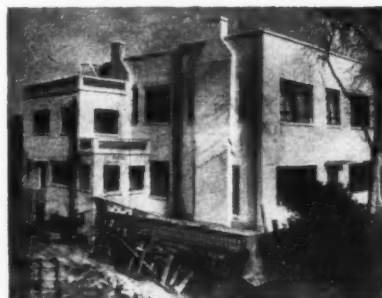
staff was depleted by something like 50 per cent., the firm calculates that it successfully completed between 1939 and 1945 1/500th part of the total national expenditure on the three services and all Government manufacture and construction. This is indeed something to be proud of, and Messrs. Laing are to be congratulated both on their wartime service and on this handsome production which records it.

THE DWEK OF THE HEADLANDS

The death watch beetle, according to Professor Richardson, may be a bit of a menace, but it used to be a wonderful raiser of funds for restoration work. The very sound of its name was enough to send us all digging nervously into our pockets. The same can be said to-day of dry rot—always an unwelcome visitor but often a marvellous and popular excuse for over-spending a licence. Eradication of dry rot was in fact the defence of Alfred Joe Dwek, of West Didsbury, who was recently fined £1,750 and sent to prison for a year for exceeding his licence in the reconstruction of his Manchester home, "The Headlands."



The Headlands: Before.



The Headlands: After.

The results of his labours—described by the prosecution as "a complete pantomime transformation"—are illustrated below, and I can promise you that the Before and After captions have not been transposed.

"A ragged maid," said prosecuting counsel, "has been transformed into a fairy princess." At the risk of discouraging Mr. Dwek still further, this may be challenged as an overstatement. Ragged maybe, maid almost certainly (look at the window drapery), but no fairy princess has been put on record as liking soil pipes draped over her turrets or horizontal bars in her glass coffin. It may be that in his pursuit of the current mode—in which evidently he is still a straggler—Mr. Dwek may soon be faced with a similar transformation—only this time in reverse. And it won't be dry rot, Mr. Dwek, it will be that even deadlier disease—unfashionableness.

PUBLICATIONS RECEIVED

Deprived of the normal flood of weeklies—and what a chance this has been to catch up—I have managed to clear my desk of a few of the old steadies.

The Annual Report of the ARCUK you have all presumably seen. Do you turn first, as I do, to the disciplinary cases? This year case 30 with its tale of dishonoured cheques, unpaid hotel bills, and overcharging, was much more gripping than the usual petty little stories of advertising and estate agencies—I look forward to another instalment, Pembroke, of this wicked lady's adventures.

This month's *MKR's Art Outlook* is in waspish mood. "Why should housewives' opinions," asks a cross critic, "affect the design of a kitchen chair, when none of them have learned to sit in reasonable postures?" *The N. Yorkshire Society of Architects Journal*, less contentious, carries an article on fire insurance and a questionnaire on the rebuilding of Fountains Abbey, while the *Annual Report of the Society for Cultural Relations with the USSR*, beaming all over its earnest homely face, records its impressive list of activities for 1946, and appeals for more members.

ASTRAGAL



LETTERS

John Smith

Elstan Gray,
(Industrial Film Unit, V. Siviter Smith
and Co., Ltd.)

Registration

SIR.—Further to the views expressed regarding registration for assistants who lost time during the war, I don't think those who dislike the idea fully appreciate the suggestion. I think the idea was to give these unfortunate gentlemen some form of recognition, not necessarily full Registration as can now only be obtained by qualification. When one considers the number of people who are allowed to call themselves architects simply because they are registered but have had no architectural training, it does seem unfair not to give recognition to these assistants.

The unfortunate thing about the profession is the number of camps and sides, which instead of making for unity are a cause of weakness, hence the reason why the salary scales for the younger assistants are so scandalously low for a body of people who have such a highly skilled and experienced knowledge.

There is the RIBA, Inst. RA, IAAS, AA, ABT, ARCUK, FAS, all of whom demand our membership in some form or other if we intend to become architects. Thousands of buildings are being put up without any architects being involved, principally housing, yet none of these organisations appear to be doing a thing about it or the salary scales question. If they are, let us know something about it.

Newcastle

JOHN SMITH

Films

SIR.—I read with interest the article *Films and their Use in Architecture and Building* and also your editorial comments on this very important subject.

I certainly agree that the full scope of the film has not yet been realised by the profession and that some form of co-ordination between architect, builder and film producer is vital if the facilities of the film, as applied to the urgent problems of planning and post-war reconstruction, are to be fully exploited.

I am hopeful that in making this need apparent the article in your Journal will go a long way towards the inception and furtherance of just such a co-ordination.

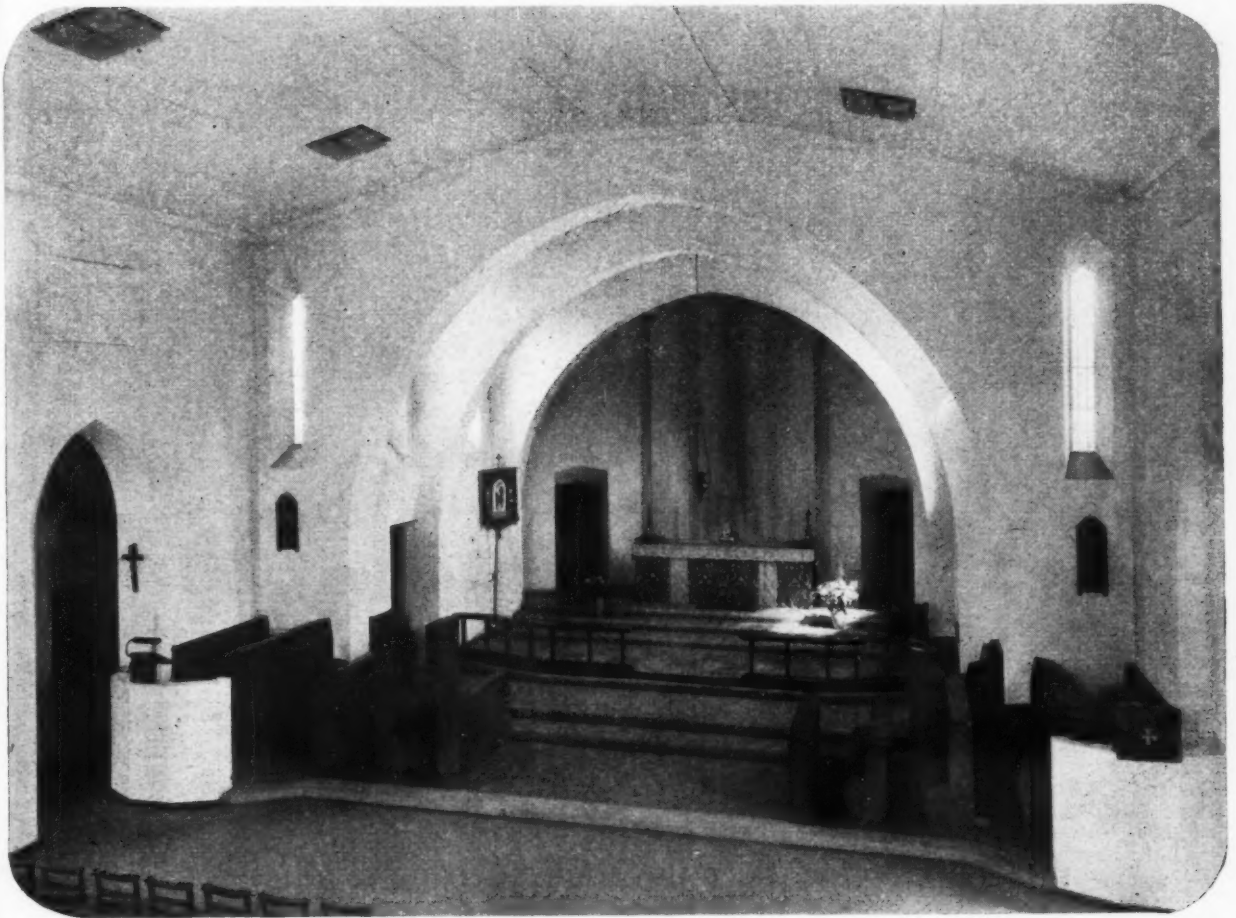
ELSTAN GRAY,
Industrial Film Unit,
V. Siviter Smith and Co. Ltd.

Birmingham

SIX CENTURIES OF TAPESTRY



The art of tapestry weaving has recently been revived at Aubusson in France largely by the contemporary painter, Jean Lurçat, who is thus continuing a French tradition of some six hundred years. These illustrations are of tapestries which can be seen at the Victoria and Albert Museum, where the Arts Council has arranged an exhibition of French Tapestries which is open until May 31. At the top on the left is a part of Scenes from the Apocalypse, showing an angel handing a rod to St. John to measure the temple, woven between 1375 and 1384. Top, right, two details from a series called *La Dame à la Licorne* between 1509 and 1513. Bottom, left, a detail of *The Building of Les Invalides* woven in Les Gobelins factory between 1716 and 1724. Above, a detail from a tapestry designed by Jean Lurçat, woven at Aubusson in 1945. These photographs are taken from the illustrated catalogue to the exhibition.



St. Francis of Assisi, Ewell. Top, the interior looking towards the choir and sanctuary from the nave. Bottom, left, the exterior of the completed portion from the south-east.

SURREY CHURCHES

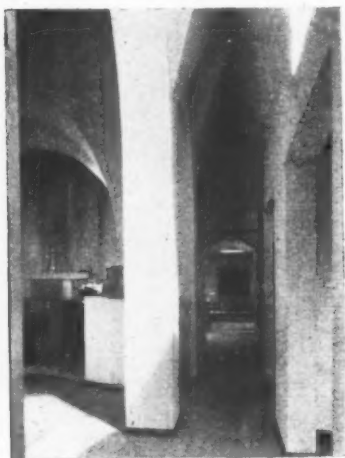
BY A. B. KNAPP-FISHER



GENERAL.—The two churches illustrated here, designed by Knapp-Fisher, of Messrs. Knapp-Fisher, Powell and Russell, are to be completed as soon as conditions allow. They are the churches of St. Francis of Assisi, Ruxley Lane, Ewell, and St. John's, Stoneleigh. The aim has been to provide simple surroundings inside both

churches, which are for the Church of England. The walls are white-washed and the eye is focussed on rich furnishings and fabrics in the sanctuary. Lightness and freshness, with colour at certain focal points, is the key note.

PLANNING.—The plans are arranged so that all can see and hear. The sanctuary in both



The south aisle looking east towards the chapel.

churches is broad. The long altar is brought as near to the nave as possible and the choir, so often a tiresome obstruction between the congregation and the east end, is merged into the nave; in this way the service becomes more congregational.

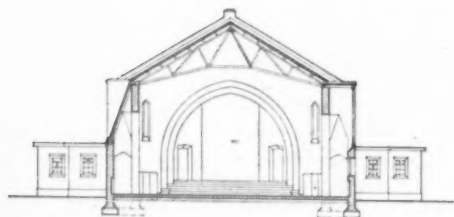
The children's corner and side chapel are arranged near entrances, and the vestries planned conveniently near to the sanctuary, choir and side chapel.

There are no east windows in either church; ample light is obtained from the north and south. In each case the nave windows are recessed, giving a bright light without glare.

A special feature is to be the outside altar at the west end of each church.

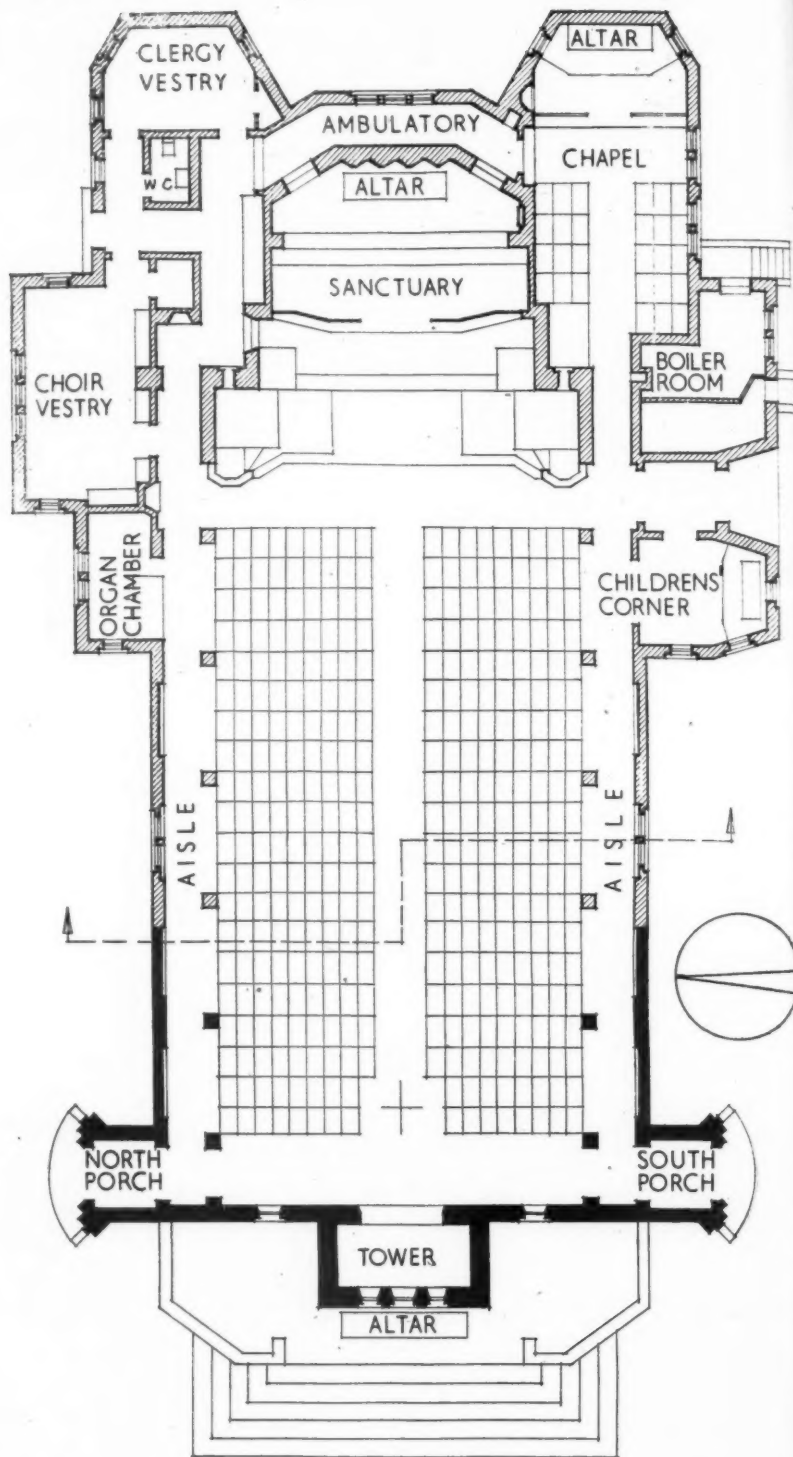
The completed parts of each church hold approximately 250 people with another 150 when completed.

CONSTRUCTION.—The walls are in brown-red facing bricks and the roofs are covered with pantiles. The main roofs are supported by light steel frame trusses. Floors are covered with Cellulin. Ceilings are of painted fibreboard.



CROSS SECTION

[Scale: 1/4" = 1'0"]

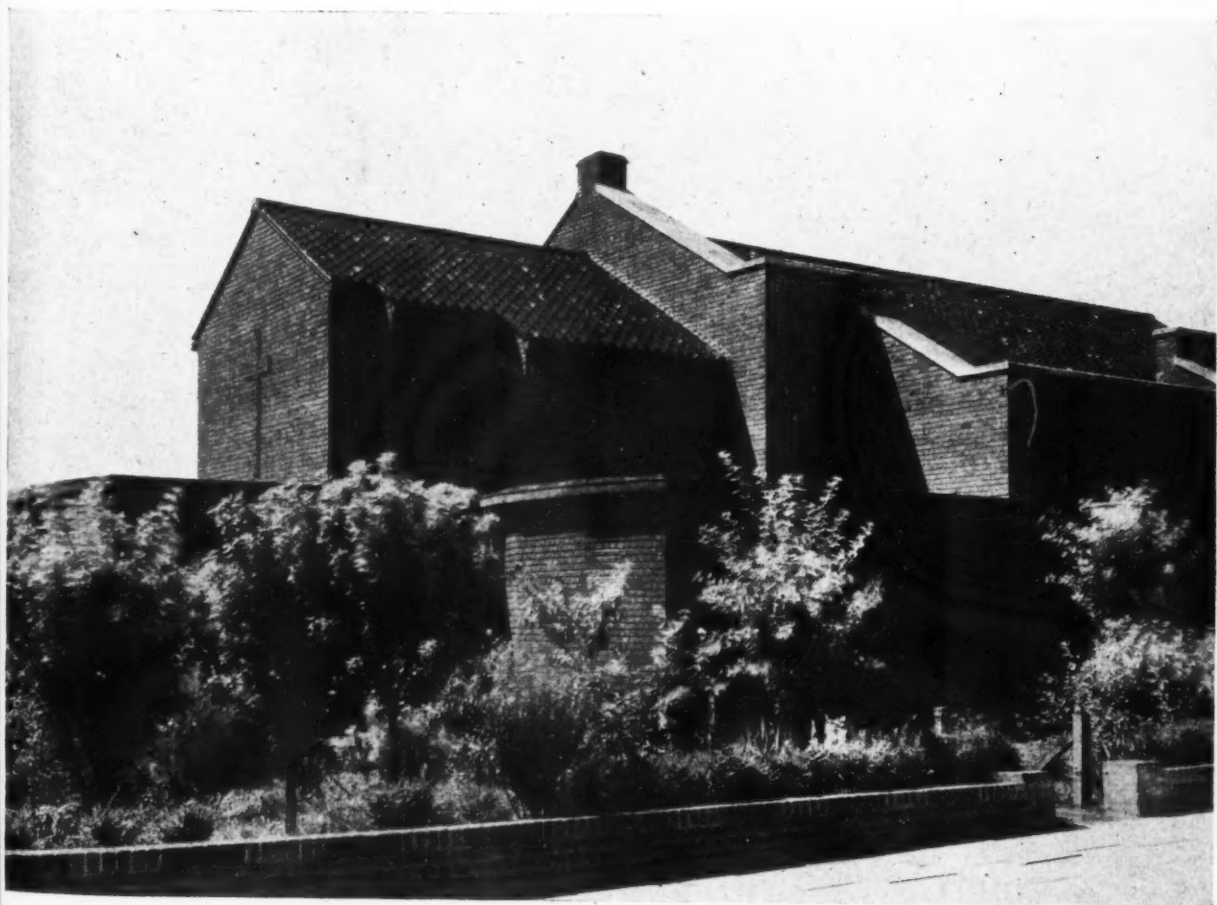
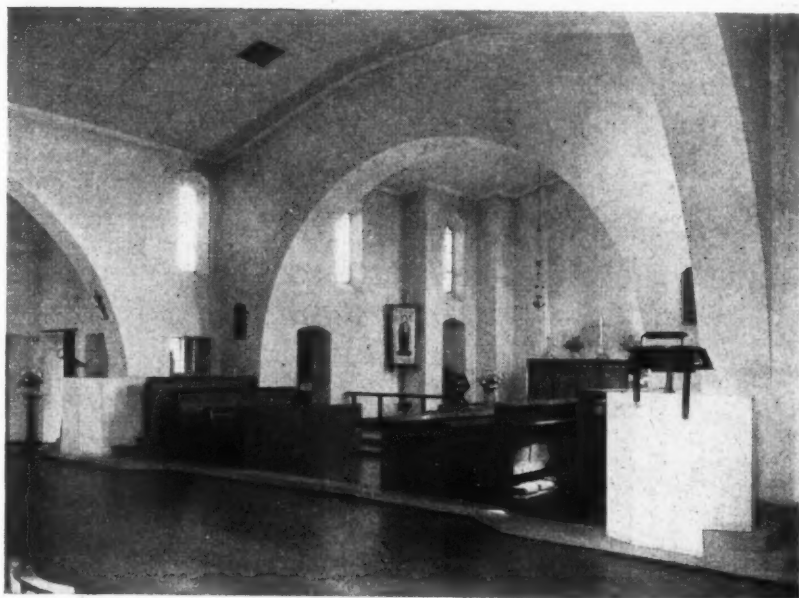


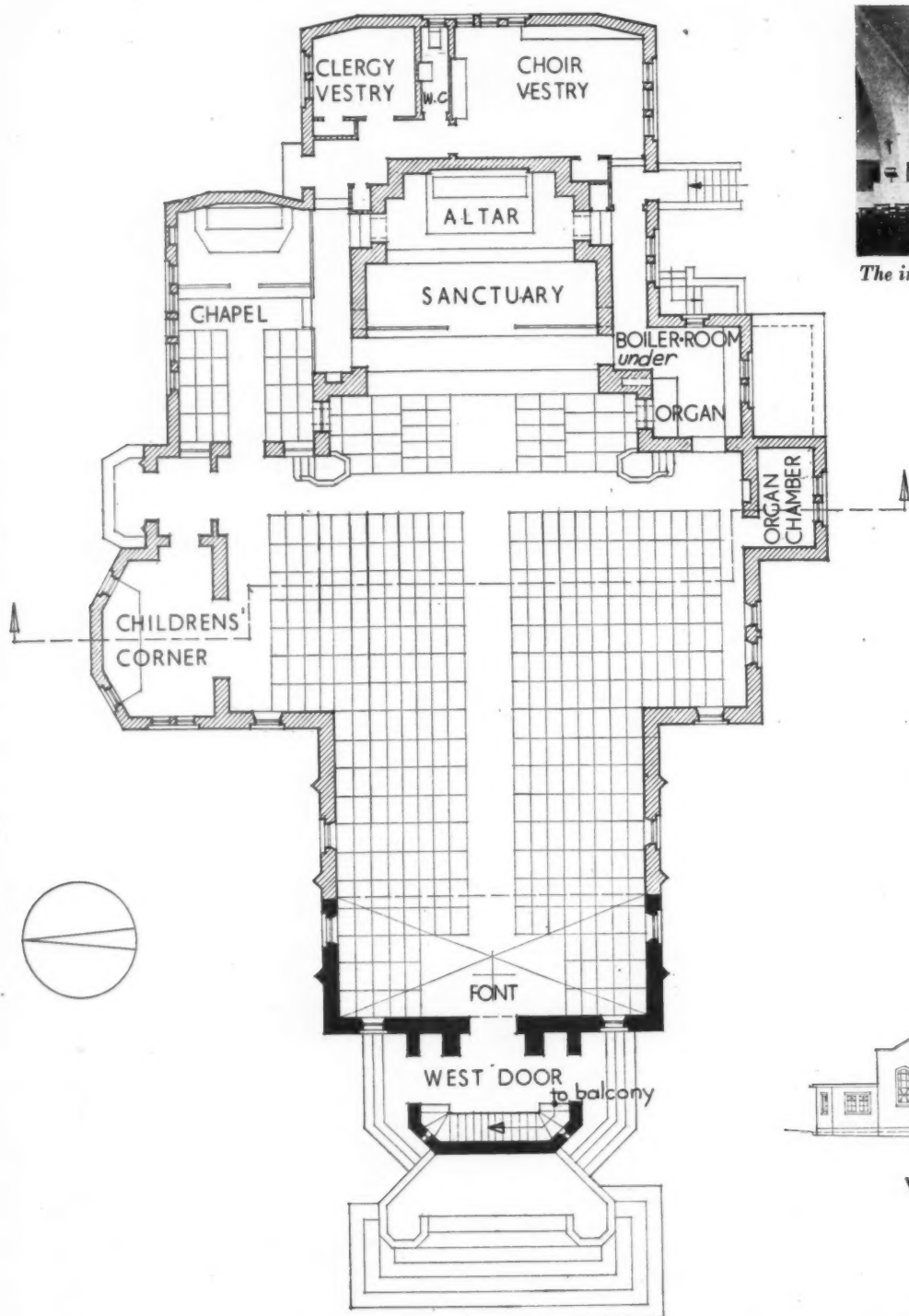
PLAN: Walls of completed work shown hatched.

[Scale: 1/4" = 1'0"]

Right
the ch
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east.

Right, the interior looking towards the choir and sanctuary from the nave. Bottom, the exterior of the completed portion from the north-east.



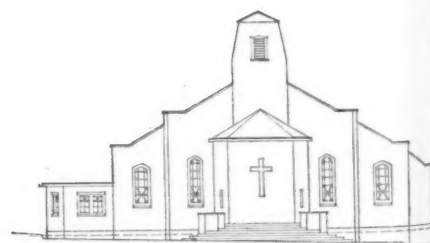


PLAN : Walls of completed work shown hatched.

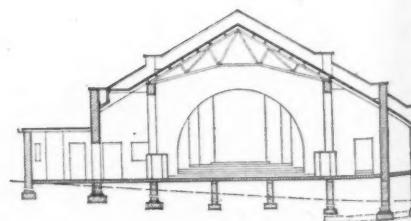
[Scale : $\frac{1}{8}" = 1'0"$]



The interior looking towards the altar



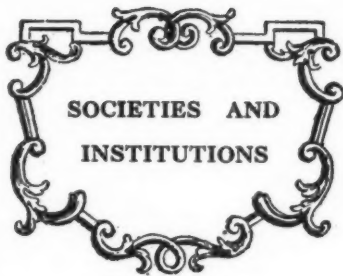
WEST ELEVATION



CROSS SECTION

[Scale : $\frac{1}{4}" = 1'0"$]

ST. JOHN'S CHURCH, STONELEIGH



Speeches and lectures delivered before societies as well as reports of their activities, are dealt with under this title, which includes trade associations, Government departments, Parliament and professional societies. To economize space the bodies concerned are represented by their initials, but a glossary of abbreviations will be found on the front cover. Except where inverted commas are used, the reports are summaries, and not verbatim.

ABT AScW The Size of Dwellings

A MEMORANDUM prepared by RUTH GLASS for the Joint Housing Committee of the ABT and the Association of Scientific Workers.

I.—THE PREDOMINANCE OF THE THREE-BEDROOM DWELLING

Inter-war housing has been widely and justifiably criticised on the grounds that the distribution of dwellings by type and size was not adjusted to the distribution of households by type and size. But current housing programmes, both on the national and on the local scale, appear to suffer from precisely the same defect. The vast majority of municipal houses built before the war had three bedrooms. For the vast majority of households who lived in them these houses were either too large or too small.

On one municipal estate in Liverpool, for example, where 98.0 per cent. of all dwellings had three bedrooms, there were empty rooms in many houses, while in many others there was considerable overcrowding. The same maladjustment existed on most municipal estates in England and Wales. The Dudley Report¹ criticised the inter-war policy of building predominantly three-bedroom houses and yet failed to advocate a substantial change. "For the present we recommend that local authorities should continue in general to concentrate on the provision of the three-bedroom house inter-

persed with a proportion of other types." (Par. 29.)

This recommendation is, in fact, being followed closely. The size distribution of the 230,000 permanent dwellings for which plans had been approved by the Ministry of Health up to September 30, 1946, does not vary greatly from that of a representative sample of municipal dwellings built in the inter-war period.²

Dwellings with:	Sample of inter-war municipal dwellings.	Post-war permanent dwellings approved up to September 30, 1946.
Less than 3 bedrooms	Per cent. 14.0	Per cent. 22.6
3 bedrooms	83.0	69.5
More than 3 bedrooms	3.0	7.9
Total	100.0	100.0

Thus no attempt has yet been made to adjust dwelling sizes to household sizes. But the need for such adjustment is urgent as is evident when the present distribution of dwellings is considered, both for the whole of England and Wales, and also for particular localities.

II.—LACK OF ADJUSTMENT BETWEEN DWELLING SIZES AND HOUSEHOLD SIZES

In the absence of detailed up-to-date information on the composition of households, the current distribution of dwellings among existing households can be most conveniently considered by adopting the standard of one room per person. (That is, one habitable room per person regardless of sex and age.) If the results of recent sample surveys are analysed on that basis, and if all existing dwellings, that is, flats as well as houses, are taken into account, irrespective of obsolescence, three conclusions emerge consistently.

1.—There are, at present, far too many medium sized and large dwellings of five rooms or more, i.e., there is no overall shortage of these types, though there is a shortage of large working class dwellings.

2.—There is a considerable overall shortage of small dwellings of three rooms or less.

3.—Apart from the striking maladjustment between dwelling sizes and household sizes, there is a striking maldistribution of dwellings. There are many more "undercrowded" than "overcrowded" households, but the incidence of undercrowding and overcrowding respectively varies in different income groups. Theoretically, if all existing dwellings were used, the present maladjustment could be eased, and the immediate housing shortage could be considerably mitigated, through re-distribution and conversion of houses. There are many more small families, especially those in the middle and upper income brackets, who live in large houses, than there are large families, predominantly in the lower income brackets, who live in small houses.

These facts are plain if some of the recent figures are consulted. As national and local surveys show substantially the same picture, a local example, that of Middlesbrough, might be considered together with the national results.

These figures show, first of all, that there is no relation between the distribution of households and of dwellings by size.

England and Wales, 1945
(Sample enquiry by The Social Survey)³

Households by size. ⁴		Dwellings by size.	
Number of persons per household.	Proportion of households in each group.	Number of rooms per dwelling.	Proportion of dwellings in each group.
Up to 3	Per cent. 55.0	Up to 3	Per cent. 27.0
4	20.0	4	27.0
5 and more	25.0	5 and more	46.0
Total	100.0	Total	100.0

Middlesbrough, 1944
(Sample enquiry by The Social Survey)

Households by size.		Dwellings by size.	
Number of persons per household.	Proportion of households in each group.	Number of rooms per dwelling.	Proportion of dwellings in each group.
Up to 3	49.0	Up to 3	18.0
4	20.0	4	34.0
5 and more	31.0	5 and more	48.0
Total	100.0	Total	100.0

Secondly, comparatively few households have appropriate dwellings. The small households, of which there are many, have usually more rooms than they need, while the majority of the large households, of which there are comparatively few, do not usually have a sufficient number of rooms. Altogether there is, therefore, far more waste of space than lack of space.

All households.	England and Wales, Sample enquiry, 1945.	Middlesbrough, Sample enquiry, 1944.
Households with:	Per cent.	Per cent.
More than one room per person	56.0	57.0
One room per person	21.0	18.0
Less than one room per person	23.0	25.0
Total	100.0	100.0

The detailed figures show this maladjustment even more strikingly. In Middlesbrough, for instance, four-fifths of all households of one to three persons have more than three rooms, in fact, one in six of these small households have six or more rooms. On the other hand, four-fifths of all households of six or more persons have less than six rooms, one seventh of all these large households have one to three rooms only. (See Appendix Tables.) But the group which is seriously "undercrowded" (i.e., small households in dwellings with six or more rooms) is considerably larger than the group which is seriously overcrowded (i.e., large households in dwellings with three or less rooms). In Middlesbrough, the first group was three times as large as the second; in England and Wales, five times as large. Hence, in Middlesbrough, for instance, the needs of the most overcrowded group could be satisfied if only a third of the most undercrowded group exchanged their houses with them.

But, of course, the economic differences between these two groups are great. Only 16.0 per cent. of the chief wage earners in the most overcrowded households of England and Wales had weekly incomes of

³"The Social Survey" is a Government Research Unit, attached to the Central Office of Information.

⁴Household members who were temporarily absent, e.g., in the Forces, have been included in presenting the number of persons per household in this table, as well as in the subsequent tables.

¹Report on the Design of Dwellings, HMSO, 1944.

²The details concerning the sample of inter-war municipal dwellings are derived from the forthcoming book of M. J. Elsas: *Housing and the Family*.

£5 10s. or more, as compared with 40.0 per cent. of those in the most undercrowded households. Hardly any of the higher income families are seriously overcrowded. At the same time, there is undercrowding even among the poorer families, simply because of the general acute lack of small dwellings.

This lack also implies that many families are forced to double up. Thus one in six of all Middlesbrough households contained "concealed" households, which did not yet have, but which required, separate dwellings of their own. The splitting up of these doubled-up households, which is often desperately needed, would result, first of all, in a considerable overall deficiency of dwellings. It would also accentuate the existing maladjustment between dwelling sizes and household sizes. For the splitting up of existing households would increase the present proportion of small households and decrease the present proportion of the larger households. Therefore, even a moderate estimate of immediate housing demand in Middlesbrough, which allows only for the splitting up of the most complex "multiple households," and which does not take potential new marriages into account, shows an enormous deficiency of small dwellings. At the same time, there are too many of the larger types of dwellings. In particular, there is a considerable surplus of the "average" four and five room houses.

Middlesbrough's Immediate Housing Demand
(Estimated on the basis of the 1944 sample survey)

Dwellings with the following number of rooms.	Existing (irrespective of obsolescence).	Needed.	Excess or deficiency.
1 to 3	6,200	21,700	-15,500
4	11,800	7,800	+ 4,000
5	10,700	4,600	+ 6,100
6 or more ..	5,800	4,600	+ 1,200
Total	34,500	38,200	- 3,700

Using the same standard of one room per person, an estimate of housing demand in Luton, where a comparable survey was made in 1945, showed a very similar pattern.

Housing deficiency, as considered so far, is derived from the fact that not all households have a separate dwelling of their own. In addition, of course, there is the factor of obsolescence, as a result of which the total housing shortage is enormously increased. In Middlesbrough, for instance, the overall deficiency is almost trebled if obsolescence is taken into account as well. When obsolete houses are excluded from the total housing pool, the lack of small dwellings is even more acute, since it is chiefly the small houses that are blighted. A minor proportion of four room houses in Middlesbrough are also obsolete, but hardly any of those with five rooms or more.

III—PROPORTION OF DWELLINGS OF DIFFERENT SIZES REQUIRED

Thus all the facts which have been collected, both in England and Wales as a whole, and in particular localities, reveal the same extensive immediate deficiency of small dwellings. However, these facts do not imply that the vast majority of the new dwellings should be small, i.e., that the small dwelling should be substituted for the three bedroom house. If that were done, we would simply create a new and different kind of maladjustment. These facts show that, in future, dwelling types and sizes must be adjusted to household types and sizes. Hence the housing programme must be varied. It should provide a considerably greater proportion of small dwellings, and also an increased proportion of large working class dwellings, than are at

present being planned or built. Wherever small patches of existing housing areas are reconstructed, the opportunity might be used to build a particularly high proportion of dwellings with one to three rooms. But wherever large-scale reconstruction or new development takes place, where neighbourhoods or new towns are created, there should be a balanced distribution of dwelling types, so that a balanced and stable population can settle there.

The actual proportions of dwellings of different sizes required will vary between different areas and towns and also within towns. In order to estimate these proportions in each case, it is necessary, first, to know the existing local pattern of household size and composition.

Second, housing needs as reflected by the present pattern have to be adjusted, if we assume that a replacement birthrate should be achieved. In other words, in order to stimulate replacement, we have to assume that there will be a higher proportion of the larger families with three children or more than exist now, and that, therefore, the proportion of appropriate dwellings has to be correspondingly higher than is indicated by the present incidence of large families.

Third, present housing demand has to be interpreted in terms of potential future housing demand for yet another reason. The size of a household does not remain static during its lifetime. A major change in family size and composition necessitates a change of dwelling. Mobility is thus inevitable, but short distance mobility is usually preferable to long distance mobility. People prefer to move house, and wherever possible they do move house, within the same neighbourhood. In fact, new neighbourhoods or towns can only become communities if their populations are fairly stable. Hence, the distribution of dwellings by size within each of the larger units of settlement has to reflect the successive stages of family life within a given population.

Taking these factors into account, a rough calculation, applied to Middlesbrough, shows that the actual distribution of dwellings of different sizes, which are required for housing a cross-section of the local population, should be as follows:—⁵

Estimated Housing Programme for Middlesbrough
Distribution of Dwellings by Size
(Based on adjusted results of 1944 Sample survey)

Dwellings required with:	Per cent.
Less than 3 bedrooms (i.e., with 1 to 3 rooms)	45.0
3 bedrooms (i.e., with 4 and 5 rooms)	30.0
More than 3 bedrooms (i.e., with 6 or more rooms)	25.0
Total	100.0

The same calculation applied to England and Wales (based on the results of the 1945 Sample Survey) shows that the almost identical distribution of dwelling sizes is required for a cross-section of the national population. There is no doubt that a complete revision of the current housing programme is indicated.

IV—REASONS FOR CONTINUED LACK OF ADJUSTMENT

Such a revision has been far too long delayed, principally for two reasons. First, there is still a lack of information; second, there is a controversy on policy. For most

⁵In order to allow both for a potential increase in family size and also for flexibility, the general standard of one room per person has been slightly increased for the existing medium sized and large households, with the result that 112 rooms would be provided for 100 persons instead of 100 rooms.

localities, and also for the country as a whole, information both on the size distribution of dwellings and of households is still inadequate and out-of-date. A few sample surveys have recently been made, from the results of which approximate general conclusions can be drawn, but their relevance for housing policy has not been sufficiently appreciated. Few local authorities know the proportion of dwellings of different sizes in their area, although all are, of course, aware of the size distribution of municipal houses. The 1931 Census, which showed the variations in the number of persons per households, is out-of-date. In any case, census information on this subject is misleading. No distinction was made between "voluntary" and "compulsory" households, that is, between households consisting of one family and those which have been forced to double up through lack of separate accommodation, of income, or for other reasons. An existing household of father, mother, child, and uncle, aunt and their child, was enumerated as one household of six persons, though, in fact, for the purpose of estimating housing needs, this group contained two potential households of three persons each. Consequently, the total number of separate dwellings required has been consistently underestimated. Moreover, from the point of view of considering housing needs, the size distribution of households has been incorrectly presented. There is no doubt, that if "concealed" households had been tabulated separately, it would have been found that there were, even in 1931, fewer large households and far more small households in the country than was indicated by the Census figures.

Second, while this lack of information is only too often used as an excuse for continuing to build a standard house for a fictitious "average" family, other and more serious reasons for this policy are advanced as well. It is argued that the three bedroom dwelling is satisfactory for the vast majority of households, chiefly because families wish to be "married" to houses. That is, the young couple move into a house, they furnish and equip it; they make their garden; they rear their family, and there they wish to remain long after the children have grown up, perhaps to the end of their days. It is a pretty picture, but it is not a realistic one. There are few young and old childless couples who can afford the additional rent, labour and equipment which is necessary for the maintenance of too large a house. Different types of dwellings are required at different stages of family life. Hence the policy of building a standard house in a particular neighbourhood, far from discouraging mobility, merely causes serious instability: people have to leave the neighbourhood altogether whenever there is a substantial change in the composition of their family. The new housing estates of the inter-war period were so dreary precisely for this reason; as dwelling types lacked variety, there was a continuous enforced turnover of tenants. For instance, the average annual turnover of all LCC housing estates between 1927 and 1936 inclusive was about 20.0 per cent., that is, on the average, one-fifth of all tenant households on a particular estate left each year. In particular, small dwellings were lacking on the inter-war estates, so that neither young nor old childless couples were able to live there. In the older working class areas of towns, where dwellings were far more varied in size, people also moved quite frequently before the war, but they often moved to another house or flat within the same neighbourhood. In these areas, therefore, moving house did not imply uprooting people.

Even when these facts are recognised, it is still often argued that it is inadvisable, from the point of view of population policy, to house young childless couples in small one

or two bedroom dwellings, and that, therefore, comparatively few of these dwellings are required. In other words, it is again assumed that people are "wedded" to houses and that, consequently, young couples have to move at once into a proper family home if they are to be encouraged to have children. Unnecessarily high expenditure on the upkeep of too large a home in the first years of married life is, of course, likely to defeat this purpose. It is, therefore, utopian to assume that the large scale provision of standard three room dwellings will stimulate family growth. The general satisfaction of housing demand, and in particular, of the demand for varied types of dwellings, is a far more appropriate element of a positive population policy.

Moreover, the pro-natalist advocates of the three bedroom house appear to forget that young growing families are a comparatively minor proportion of all households. Consequently, general housing policy cannot possibly be based only on the demands of those particular types of households. It was estimated that in 1931 almost two-thirds of all households in England and Wales contained no children under ten years of age,⁴ and it is probable that the current proportion is rather similar.

Before the war, it was generally assumed that the three bedroom house would be suitable for any household from 3 to 7 persons and thus for the vast majority of all households. Though our standards have improved and only households up to 5 persons are now supposed to be housed in three bedroom dwellings, the current standards are still clearly unrealistic. The size and type of dwellings should be conditioned not merely by the size of households, but also by household composition. Father, mother, and three young children may live happily in a three bedroom house, but when the children are grown up, as is the case in a considerable proportion of five persons households, such a house would be too small for them. It was estimated that in 1931 almost half of all five person households in England and Wales contained no children under ten at all. Although a detailed picture of household composition in the whole country is still lacking, it is well known that household composition varies much more greatly than household size, that is, there is far more differentiation of households by type than by size.

V—SUMMARY

1. The experience of the inter-war housing programme has proved that the building of uniform dwelling types, that is, of three bedroom houses, causes serious maladjustment. It results in the simultaneous appearance of waste of space, which is uneconomical both from the point of view of housing producers and consumers, and of lack of space, which implies serious overcrowding. Moreover, it results in a considerable turnover of residents in areas of new housing development, and this instability, in turn, hinders the growth of new communities.

2. Although it is, therefore, clear that in every new housing development the distribution of dwellings by type and size should be adjusted to the distribution of households by type and size, pre-war policy is at present being continued, first, because there is still a lack of sufficiently detailed information, second, because even existing information, derived from current sample surveys, is not utilised, and third, because policy on this issue has not yet been clarified. However, the advocates of the "standard" three bedroom house fail to be convincing.

3. Recent sample surveys show that:—

(a) There is at present no overall shortage of medium sized and large dwellings, in fact, there are far too many of these types, though there is a shortage of large working class dwellings.

(b) There is a considerable overall deficiency of small dwellings.

(c) There is not only maladjustment between dwelling sizes and household sizes, but there is also a striking maldistribution of dwellings. Small households live in large dwellings, while large households live in small dwellings. But as the first group is considerably more numerous than the second, there is altogether far more undercrowding than overcrowding. As long as the enormous overall deficiency of small dwellings, and the specific deficiency of large working-class dwellings persists, this maldistribution is bound to be perpetuated.

(d) Moreover, because of the acute lack of small dwellings, many households are now forced to double-up, and do not yet have a separate home of their own.

4. It is evident, therefore, that the continued concentration on the building of three bedroom houses would be fatal. Nor can matters be adjusted in the long run if instead chiefly small dwellings were now to be built. Every neighbourhood, new estate, or new town should contain a balanced distribution of dwelling types, representing successive stages of family life, so that families can remain there when a marked change in their size and composition necessitates a change of dwelling.

5.—The actual distribution of dwelling types required will vary from place to place. It can be estimated by considering the existing proportions of households of different types and sizes in the locality, and by applying

an overall standard of one room per person. But in interpreting these figures, adjustments have then to be made to provide for mobility of families at successive stages within the area of housing development, and also to allow for a potential increase in average family size, if a replacement birthrate is to be achieved. As a result of these adjustments, the proportion of large dwellings required will usually be seen to be greater than is indicated by immediate demand, and thus the overall standard of one room per person will be slightly raised.

6.—A rough calculation along these lines shows that the distribution of dwellings of different sizes in the current housing programme bears no relation to actual requirements. It appears that, approximately, the proportion of dwellings with less than three bedrooms should be doubled; that of dwellings with three bedrooms should be more than halved; and that of dwellings with more than three bedrooms should be trebled. While in the absence of more detailed and extensive information for the country as a whole, this estimate is necessarily tentative, there can yet be no doubt that a revision of the current housing programme is urgently required.

7.—The following conclusions are evident:

(a) The policy of adjusting dwelling types to household types should be adopted for the current housing programme.

(b) The information which is necessary for this purpose should be obtained both on the national and on the local scale. This can be done most conveniently through the established method of sample surveys.

(c) Local housing programmes should be watched, both for the purpose of ensuring that this information is obtained and that this policy is carried out.

APPENDIX

TABLE I
THE DISTRIBUTION OF DWELLINGS AMONG HOUSEHOLDS IN ENGLAND AND WALES, 1945.

(Sample Enquiry by The Social Survey.)

Dwellings with the following number of rooms :	Households with the Following Number of Persons (including absent household members)				
	1 to 3 %	4 %	5 %	6 or more %	Grand Total %
1 to 3	36.0	19.0	16.0	11.0	27.0
4	26.0	29.0	28.0	25.0	27.0
5	24.0	32.0	35.0	34.0	28.0
6 or more	14.0	20.0	21.0	30.0	18.0
Total Per cent	100.0	100.0	100.0	100.0	100.0
Total Number	6127	2244	1379	1494	11244

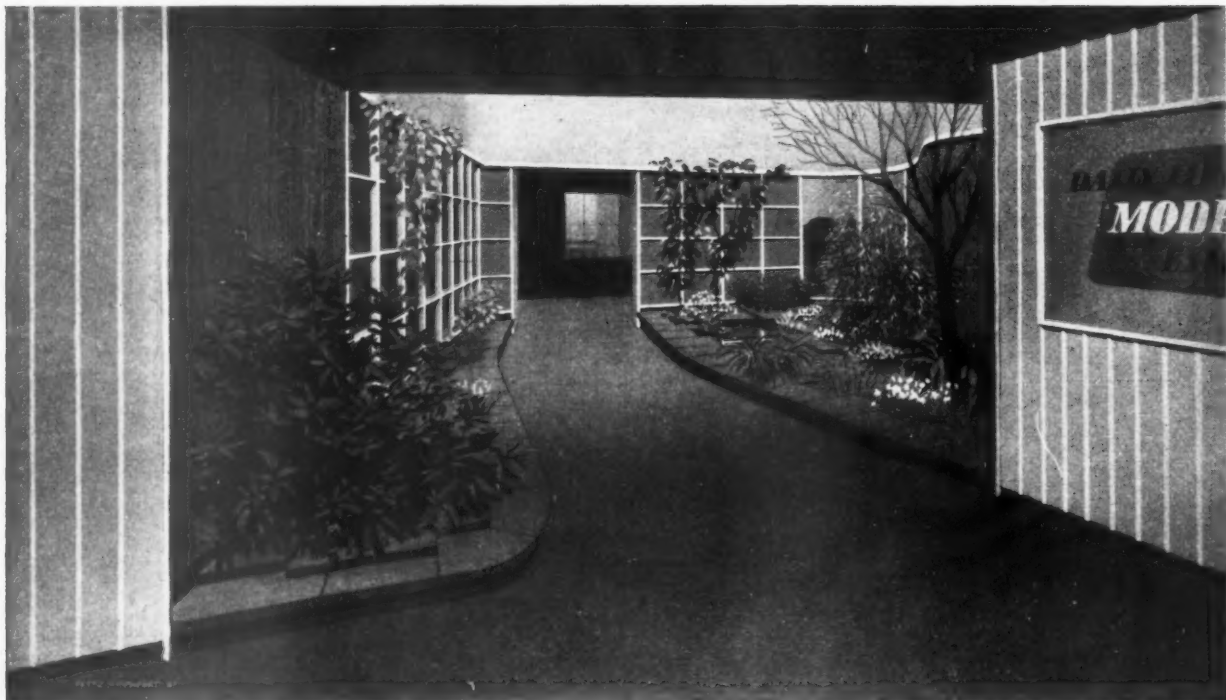
TABLE II
THE DISTRIBUTION OF DWELLINGS AMONG HOUSEHOLDS IN MIDDLESBROUGH, 1944.

(Sample Enquiry by The Social Survey.)

Dwellings with the following number of rooms :	Households with the Following Number of Persons (including absent household members)				
	1 to 3 %	4 %	5 %	6 or more %	Grand Total %
1 to 3	19.0	17.0	22.0	14.0	18.0
4	36.0	33.0	31.0	30.0	34.0
5	28.0	35.0	32.0	36.0	31.0
6 or more	17.0	15.0	15.0	20.0	17.0
Total Per cent	100.0	100.0	100.0	100.0	100.0
Total Number	668	269	199	223	1359

The figures within the diagonal on each table show the proportions of households of each size living in dwellings which match their requirements. Households above the diagonal are overcrowded, i.e. have less than one room per person. Households below the diagonal are undercrowded, i.e. have more than one room per person.

⁴This estimate, which is included in the 1931 Census Housing Report, is based on a detailed census tabulation of types of households in two sample areas.



A GARDEN

AT THE MODERN HOMES EXHIBITION

DESIGNED BY PETER SHEPHEARD

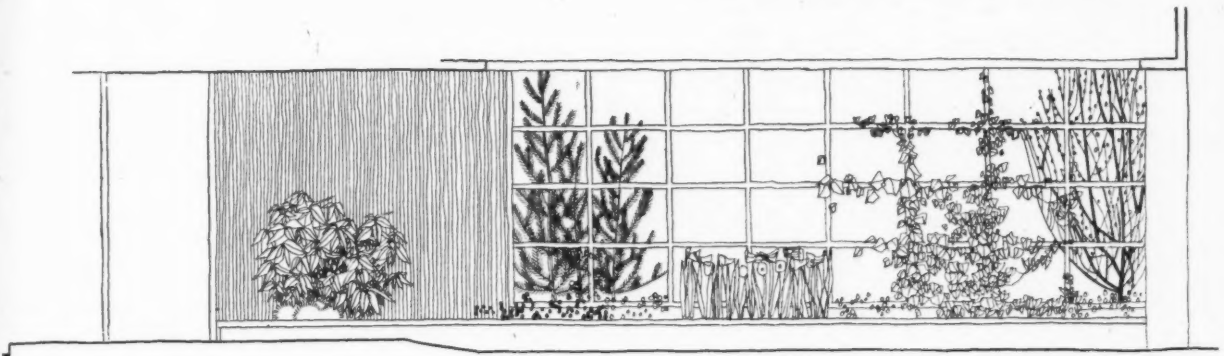


This garden forms an entrance to the *Daily Herald* Modern Homes Exhibition at Dorland Hall, Regent Street. The paybox and wooden entrance screens were designed by the exhibition architect, Bronek Katz, the garden itself being designed by Peter Shephard. The plants are placed in pits in a wood staging carrying York-shire paving, which forms a border to the beds. A layer of shingle is arranged over the tops of the pots in which the plants are growing, as shown in the section below. The pond in which water plants are growing, is a steel tank 9 in. deep. The garden is enclosed, partly by a wooden trellis, and partly by wall board covered with reed matting. Through the trellis in the corner

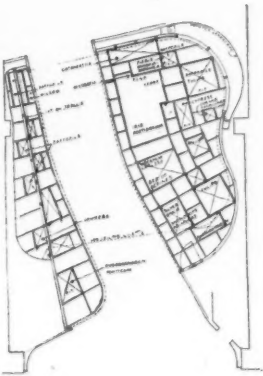
is a landscape view painted on the wall. The choice of plants, already limited by the indoor conditions was further restricted by the February frosts which killed almost all the specimens originally selected. The plan on the facing page shows the final arrangement of the planting. The lighting of the garden has also had to be reduced owing to the current restrictions in the use of electricity. The garden was built by Beck and Pollitzer and the plants are provided and maintained by Garden Makers Ltd., Elstead.

At the top of the page is the architect's perspective of the garden with the original planting arrangement.

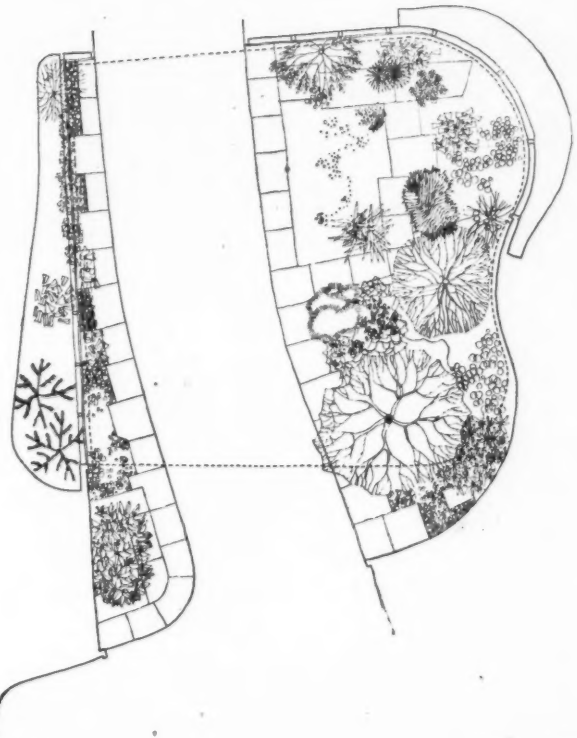




Elevation of the wall to the left on entering the Exhibition.

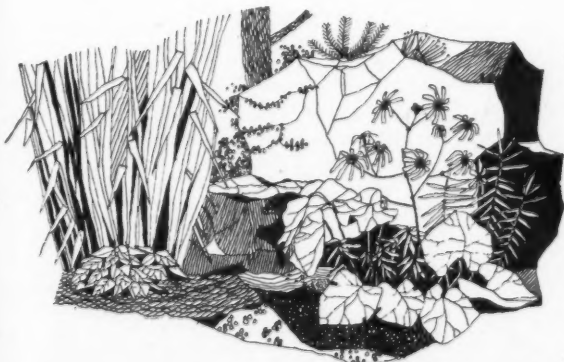


Plan showing the arrangement of the pits for the flower pots, and the planting scheme.



Lay-out plan.

[Scale : $\frac{1}{8}'' = 1' 0''$]



Right, a view from the entrance showing the planting arrangements finally adopted.



TECHNICAL SECTION

The function of this feature is to supply a digest of, and commentary on, current information of interest to architects as recorded in technical publications and statements of every kind throughout the world. Items are prepared by specialists of the highest authority who are not on the permanent staff of the Journal, and views expressed are disinterested and objective. Items are printed on one side of the paper only to permit of cutting out and pasting up in classified order in readers' files. The Editors welcome information on all developments from any source.

INFORMATION CENTRE

To enable items to be filed all information is classified under the following headings:

1 SOCIOLOGY. 2 PLANNING: General. 3 PLANNING: Regional and National. 4 PLANNING: Urban and Rural. 5 PLANNING: Public Utilities. 6 PLANNING: Social and Recreational. 7 PRACTICE. 8 SURVEYING. SPECIFICATION. 9 DESIGN: General. 10 DESIGN: Building Types. 11 MATERIALS: General. 12 MATERIALS: Metal. 13 MATERIALS: Timber. 14 MATERIALS: Concrete. 15 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: Miscellaneous. 17 CONSTRUCTION: General. 18 CONSTRUCTION: Theory. 19 CONSTRUCTION: Details. 20 CONSTRUCTION: Complete Structures. 21 CONSTRUCTION: Miscellaneous. 22 SOUND INSULATION, ACOUSTICS. 23 HEATING, VENTILATION. 24 LIGHTING. 25 WATER SUPPLY, SANITATION. 26 SERVICES, EQUIPMENT: Miscellaneous. 27 FURNITURE, FITTINGS. 28 MISCELLANEOUS.

2.8 planning: general

LOCATION OF INDUSTRY

Planning the Future Industrial Community. J. Forrester. (Industrial Welfare and Personnel Management, November-December, 1946, pp. 3-7.)

Concise and clear statement of physical requirements of industry to be sited in new areas: climate; essential piped and cabled services; community facilities; site selection. Need for new forms of outward architectural expression. Industrial nuisance factors: ugliness of appearance; unnecessary industrial noise; solid wastes of industry; liquid-borne wastes; fumes, grits, gases and smells; mishandling of traffic problems. Human needs in relation to industrial siting; adequate supply of labour; variety of labour in all requisite groupings of age and skill; adequate housing, shopping, educational, recreational and health facilities; easy journey to and from work; balance of industry. Factors in long-term planning: need for social and economic surveys of each area; study of existing sources of employment; plan to provide for wide variety of employments and products; grouped industrial sites instead of trading estates; considered action to maintain full employment.

3.3 practice

MODEL MAKING

Architectural Models. Robert Forman. (The Studio. "Make it Yourself Series," 1946. 3s.)

Small well illustrated book; describes techniques and is illustrated by clear and

helpful diagrams of good examples; a higher standard than frequently reached on this subject.

5.4 planning: public utilities

CAR PARKING

Car Parking Facilities: A Review of the Various Methods: British and Foreign Examples. R. Bruce. (The Surveyor and Municipal Engineer and County Engineer, February 7, 1947, pp. 95-97.)

City Engineer's Report on parking facilities in central area of Glasgow together with useful general survey of forms of parking, financial considerations, siting, and legal aspects. No illustrations.

Before describing the actual proposals for parking in the central area of Glasgow, the report reviews in general the following forms of parking:—

(a) *Surface Parking on Vacant Land* which is still the most general form of car parking. Beyond the acquisition of the necessary ground space little additional expenditure is usually required. However, where such parking facilities are located in densely built-up areas they may be considered uneconomical in view of high site values in such areas and the impossibility to make the fullest use of the land.

(b) *Underground Single or Multi-storey Car Parking Structures* which have been built in some cities under public parks, open spaces and squares. The use of this type of car park may be extended to basements of buildings in which adequate precautions against fire can be provided. Objections against the use of basements, however, might arise through an increase in fire insurance rates or because of the cost of making provision for additional fire precaution measures. As an example of successful underground parking the report describes the Union-Square Garage, San Francisco, USA, which has a capacity for parking 1,700 cars in four storeys extending down into the ground to a depth of 50 feet, and roofed over by a public park.

(c) *Above-ground Single or Multi-storey Car Parking Structures*, which in their simplest form consist only of a ground floor, and two or more floors above, access to the various floors being provided by ramps. Some more elaborate systems of this type are mentioned.

(d) *Mechanical Parking* by means of which a more efficient use of floor space can be obtained than with other systems where considerable areas of floor space must be left clear to allow for access, turning and withdrawal, and where only 40 per cent. of the available floor area is occupied by parking vehicles. The report describes several examples of mechanical parking.

1. The Westinghouse vertical garage, USA, uses a system consisting of a number of cradles carried on an endless chain, and operating in the vertical plane.

2. A method involving horizontal movements is the twin belt system in which slat conveyors move the cars sideways from the gangway to the parking bay. The turning circle is thus eliminated, and cars move only in a straight line.

3. A further example of mechanical parking is the Baldwin-Auger system by which cars are moved on platforms on a horizontal plane. This system, which is described in detail, is said to permit twice as many cars to be parked in a given floor area than would be possible with other orthodox non-mechanical methods.

4. The rotary table system has been designed for use in underground circular car parks. It consists of a central lift for entrance surrounded by a large rotary table on to which cars are manoeuvred by automatic control. Exit is by means of a ramp. This system does not result in an appreciable economy of floor space.

(e) *Parking Meters* which have been used for some years in several cities in America. These meters are instruments fixed to standards at the kerbside in connection with a marked-off space, allowing the motorist to park his car for a specified time after inserting a coin in the parking meter. Although revenue-earning and setting a time-limit to parking, these meters do not solve the problem as ordinary street parking is thereby continued.

(f) *Street Parks* which make use of certain quiet streets for parking purposes.

Other general aspects dealt with in the report include financial considerations in connection with the provision of parking facilities; the most efficient siting of parking structures from the point of view of the user; and bye-laws and regulations governing the use of parking places and the charges to be made for services rendered. The report concludes with a number of proposals for parking within the Glasgow central area.

6.3 planning: social and recreational

RECREATION

Planning for Recreation Areas and Facilities in Small Towns and Cities. J. Lee Brown: Federal Security Agency, Office of Community War Services, Recreation Division. (US Government Printing Office, Washington, D.C., 1945, 20 cents.)

Recreation programme and planning procedure to meet needs of communities up to 25,000 in population. Suggestions for survey technique. Comprehensive and useful study. Illustrated. Bibliography.

The pamphlet begins with a summary of steps in long range community planning for recreation areas and facilities. They are followed up by standards for planning and design conforming to those prepared by the National Recreation Association on the basis of nation-wide experience in community recreation. Aspects covered include gross recreation acreage; neighbourhood playing fields for children and adults; natural park areas; and specialized facilities such as golf courses, tennis courts, swimming baths, stadia and recreational buildings, the latter being the equivalent of the British conception of community centres.

In analysing the functional requirements of a community recreation system it is necessary to examine the extent and growth of interest of the individual in a specific activity; to study the work and leisure time pattern of the population as a whole and the mobility by age groups. Detailed recommendations are given for a survey of existing community factors together with a number of actual survey documents to be used by field workers.



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Appendix I gives a plan and analysis of a typical playing field area which provides for a major community centre, a general sports ground, a children's playground, a multiple-use area, tennis courts, outdoor theatre and parking space.

Appendix II describes the design of a municipal community centre with a floor area of 9,500 square feet, followed by a bibliography which, however, deals with American publications only.

The value of the pamphlet lies not so much in the actual planning and design of community facilities which are based entirely on American experience, but in the detailed recommendations provided for undertaking a survey to ascertain recreational needs.

10.4 design: building types GARAGE PLANNING

Garage Planning. W. C. Stoddart. (Motor Commerce Limited, London, 1946, 20s.)

Manual written mainly for motor trade covering layout and equipment of various departments of large servicing garages. Chapters devoted to repair, general service, and paint shops; to valeting service; to layout of stores and specialised maintenance department; to showroom location, structure and furnishings; to offices; filling station; and to complete plan layout. Much useful information for architects on organisation of work and route of operations; on liaison between various departments; and on dimensions and location of equipment. Amply illustrated by means of fully dimensioned plans and some very clear and detailed perspectives showing every piece of equipment together with most comprehensive keys to symbols.

12.3 materials: metal ZINC: DATA AND USES

Zinc Bulletin: (New Series). (Zinc Development Association. pp. 4.)

Revised Bulletin to be issued quarterly. To deal generally with uses and properties of zinc. Data sheets. Illustrations. Construction details.

This is the first of a new series of bulletins to be issued quarterly containing topical information about developments in the use of zinc. It will include a data sheet giving construction details together with notes on, and photographs of, the particular use of zinc illustrated in the sheet.

While not restricted only to its architectural uses, the information to be given should prove interesting and useful to architects.

This first number which deals with coatings for window frames, zinc pigments in exterior paints, zinc in post-war Germany and Italy, roll cap roofing zinc alloy die casting and information about literature on zinc, is authoritative and well set out.

14.4 materials: concrete PRECAST CONCRETE PRODUCTION

Developments in Precast Concrete. Modern Methods of Manufacture. (The Builder, January 10, 1947, pp. 60-61.)

Brief description of mass-production methods in two factories.

This brief article gives a picture of the extent of controlled mass-production

methods in two factories. One, Dow-Mac Products Ltd., making prestressed concrete sleepers, the other, Orlit Ltd., producing precast concrete wall slabs. Typical production figures are given; in the first case the daily output being 500 sleepers, and in the second, the hourly output being 200 wall slabs.

The fact that high-grade concrete products can be produced at this rate is attributed to the use of batching plant, giving accurate proportioning, and to vibratory consolidation and the proper layout of production lines.

The article is of interest to architects chiefly because it indicates the degree of control which can and should be, but is not always, exercised by firms manufacturing concrete products.

23.14 heating and ventilation HEATING AND HEAT INSULATION

Heat Conservation in Small Houses. A. F. Dufton (J. RIBA, January 13, 1947, pp. 120, 126.)

Full report of research referred to in paper to Ministry of Fuel and Power Conference. Experiments at BRS on heat insulation and on comparison of continuous and intermittent heating. Tables and illustrations.

This is an extremely important paper giving the results of full scale tests on eight experimental houses. Four houses of similar plan were constructed to give four standards of insulation for walls, roof and ground floor. All were heated by similar methods. Details are given of the insulation standards of the construction used and of the heating equipment and the experimental arrangements. The results show the fuel consumptions varying according to insulation value, and the conclusions drawn are that the views expressed in the Egerton Committee Report on standards of insulation were fully justified.

Two houses with first and third grade standards of insulation were duplicated in order to compare two methods of heating in the living rooms. In one case the heating was continuous, while in the other it was by background heating plus topping up. The results of this experiment are interesting because they indicate that it is probably more economical to provide continuous heating than to have background heat and topping up.

There is a great deal for architects to study in this paper.

23.15 heating and ventilation RADIANT HEATING: SKIRTING

A Study of Radiant Baseboard Heating in IBR Research Home. Alonzo P. Kratz and Warren S. Harris. (University of Illinois, USA, 35 cents.)

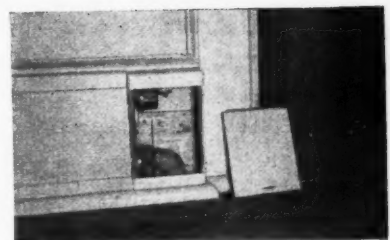
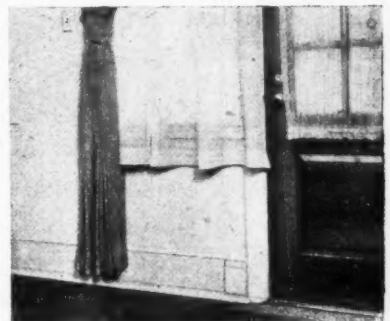
Result of test on heating by long low panels at skirting levels. Comparisons with heating by conventional small tube radiators.

The University of Illinois is well known for its research work on heating in two experimental houses. The Bulletin deals with the first full scale tests on Baseboard heating. The units consisted of 6 inch high cast iron fittings substituted for part of the normal skirting and were usually placed along external walls. A length of only 18 feet was required in a living room 24 feet by 13 feet under design conditions of 70 deg. F. indoors and minus 10 deg. F. outdoors. When working with an outdoor

temperature of 0 deg. F. and an indoor temperature of 72 deg. F. at 30 inches above floor level the average floor to ceiling temperature difference was about 2 deg. F. compared to 5½ deg. F. with conventional recessed radiators. The average temperature above the floor was 1.4 deg. F. higher with the baseboard heating, and in the case of solid concrete portions of the floor the floor surface temperature was raised by 6 deg. F. The temperature of the wall surface below about 5 feet in height was above that of the room air temperature at 30 inches above floor, whereas with ordinary heating the wall surface temperature was below room air temperature.

There was no material difference in fuel consumption from that with normal heating methods. Curtains remained clean for much longer and there was no wall marking over the heating units at the end of a complete heating season.

This authoritative report on a new and, in many ways attractive, system of heating is of considerable interest to architects.



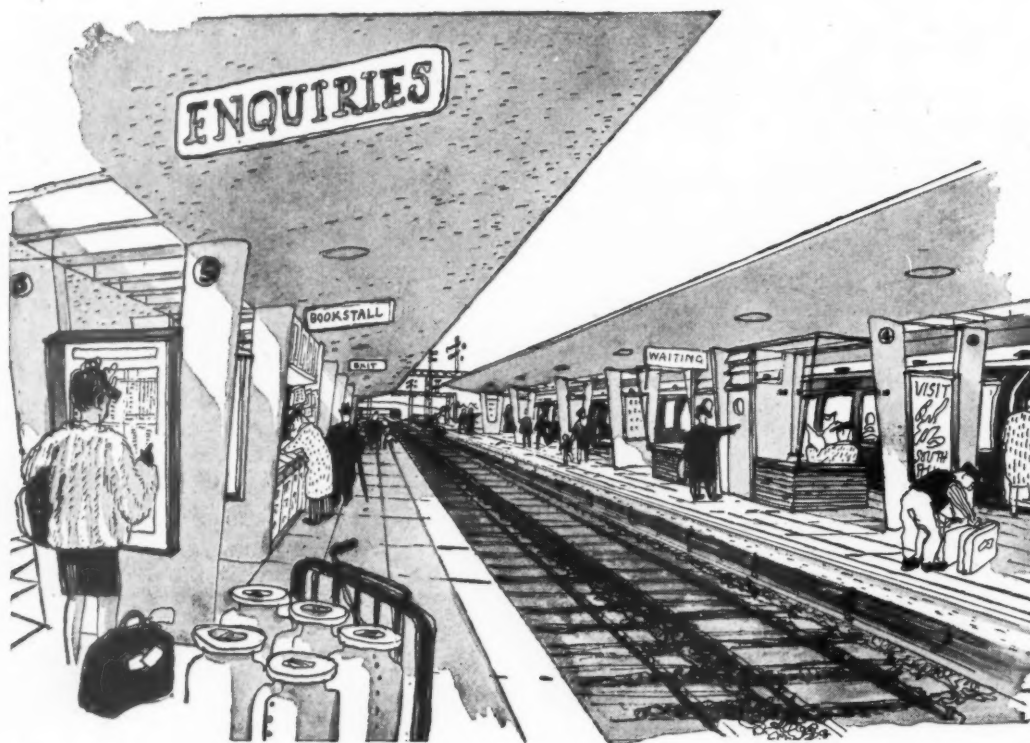
Typical installation, and close-up view of access box to radiant skirting. See No. 23.15.

23.16 heating and ventilation RADIATORS: COLOUR

Heat Emissions from Pipes and Radiators. The Editor. (Plumbing Trade Journal, January, 1947.)

Data on effect of different finishes on heat output from pipes and radiators. Two tables.

This brief note is accompanied by tables giving results of experimental work by Ideal Boilers and Radiators Ltd. It gives information about the relative emissivity of a large range of surface finishes and confirms other workers' results: that with normal paint finishes the colour has practically no effect, but that output efficiency falls appreciably with metallic finishes, and is especially to be noted with certain types of aluminium paint finish. In view of the frequency with which radiators are finished with aluminium paint, this is an important point for architects to note.



ZINC for Upper Booting

The railway extension has been opened and there's now a station at Upper Booting, which makes a trip to Town much easier. But its building set the architect many problems.

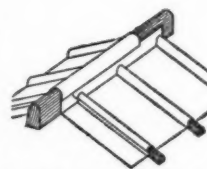
Take the roof, for instance What shall it be covered with? What material can stand up to the weather, and to the smoke and steam of trains? What will be long-lasting, easily handled, and yet economical, both in maintenance and in the initial cost of laying?

Zinc, said the architect. Zinc has all these advantages — resistance to corrosion, long life, economy and ease of handling. That is why zinc is used to roof the majority of stations throughout England. But what method of roofing shall be

adopted? In this case the architect decided on the Italianised method.

The diagrams on the right show details of Italianised zinc roofing. These are only glances at one method of zinc roofing. There are other ways, and other uses for zinc.

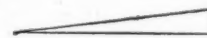
Have you any problems connected with zinc or any work in hand in which zinc might be useful? If so, write to us — Z.D.A. We are a non - trading information bureau publishing books, pamphlets and data sheets on every aspect of zinc. Send us your name and address so that we can put you on our mailing list for publications. We are delighted to advise on your problems, and we make no charge for any of our services.



Ridge, showing turn-up of sheets and half-round capping piece fixed to Ridge roll.



Italian Pattern, sheet supported on wood bearers spaced at 1'3" centres.



Minimum pitch of roof for Italian Pattern roofing 1 in 8.

ZINC DEVELOPMENT ASSOCIATION

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24.12 lighting**SCHOOL LIGHTING: ELECTRIC**

Installation of Electric Lighting in Schools. Draft BS Code of Practice, 3.6412. (British Standards Institution, 1946. 2s.)

Design considerations. Minimum lighting values. Combination with daylight. Work on site. Inspection and maintenance. Notes on individual room lighting.

Much of this information is similar to recommendations in the Post War Study Committee report on Lighting of Buildings and to Chapter VII (F) of the Code of Functional Requirements, but school architects will find this Code a valuable means of easy reference. Advice on the positioning of lights needs consideration early in the design stage as the lighting requirements are fairly rigid and may affect general interior design treatment.

24.13 lighting**LIGHTING: THE QUEEN ELIZABETH**

Decorative Lighting Featured in "Queen Elizabeth." Lighting and Lamps [USA], October, 1946, p. 32.)

Short descriptive article with illustrations. It is stated that the objective was "soft lighting, that would flatter American ladies, and produce an effect of ease and comfort." The sources of light are incandescent, with only one exception. Incandescent tubes are common, and concealed sources are also much used. Some of the main rooms are described.

24.14 lighting**DOMESTIC LIGHT FITTINGS: USA**

Lighting Performance Recommendations for Portable and Installed Residence Luminaires. A Report by the Committee on Residence Lighting of the Illuminating Engineering Society (America). (Illuminating Engineering [USA], July, 1946, p. 521.)

Detailed testing procedure and design criteria for domestic lighting fittings. Eleven figures and graphs.

The American Illuminating Engineering Society published some time ago its *Recommended Practice of Home Lighting*, and the present report carries this much further by going into details about the classification, efficiency, design and testing of fittings. It is a considerable contribution to the subject.

The Committee begins by drawing attention to what it describes as four major elements of lighting performance, viz.:—

- (a) Illumination.
- (b) Shielding and brightness.
- (c) Distribution.
- (d) Efficiency.

Discussions of each of these forms a main part of the Report.

Generally a distinction is drawn throughout between "decorative" and "utility" fittings, the former having low surface brightnesses but also low efficiencies, and the latter higher brightnesses and higher efficiencies; that is to say the utility types are less comfortable but you get more light. It is not our war-time interpretation of "utility" as a good-grade article, even if sometimes dull. One begs leave to doubt if the distinction should be drawn as the Committee has done.

In many respects the ideas of this Committee are in line with those of our own Post-War Study Committee, particularly in their recommendation of certain general levels of overall efficiency (though the American figures are below the English), and in the idea that manufacturers should indicate recommended lamp sizes, mounting

heights, etc., in the lamp.

The recommendations in respect of surface brightness and viewing angles are given in detail and show a creditable sensitivity to this important aspect. It has not been possible to evaluate brightness contrasts between fittings and background.

There are four appendices to the Report, as follows:—

- (a) Illumination values for the home.
- (b) Location of fittings.
- (c) Graphical design data.
- (d) A nomograph for determining certain mathematical quantities.

25.15 water supply and sanitation**REPAIRING WATER PIPES**

Repair of Water Service Pipes. (Municipal Engineering, January 3, 1947. Vol. CXIX, p. 3.)

New technique of forming ice-plug in water service pipes, permitting repair work without shutting off main supply from other consumers. Local freezing of pipe through clamp carrying refrigerant from portable unit. Claimed pipe remains undamaged. Extensive field trials at Sutton, Surrey.

There are about 17,500,000 water service pipes in Britain, upkeep of which is a constant preoccupation to water authorities. If a burst occurs, water in the main has to be turned off for repairs (for which statutory notice has to be given to other consumers affected), causing inconvenience and delay. To overcome this the present apparatus has been developed by Engineers of the Sutton District Water Company and Epsom Corporation. 2,000 successful repairs have been made using it since January, 1945.

25.16 water supply and sanitation**MODEL BYELAWS: WATER SUPPLY**

Model Byelaws, Series XXI. The Prevention of Waste, Undue Consumption, Misuse or Contamination of Water. Ministry of Health. (HMSO, February, 1947. 3d.)

Revised Model Byelaws for plumbing and water supply to buildings. As adopted by supply authorities will supersede byelaws made under Public Health Act, 1936. Ultimately to become uniform code covering whole country.

A major difficulty for plumbers, and hence for architects, has long been the variation of requirements between one supply authority and another. Thus a tap accepted in one area would not be permitted in another a few miles away; water heaters of a certain make would be passed by one authority but refused by another, and so on. Undertakers had obtained their powers under local Acts passed at different times, the provisions of which were mostly based on the *Waterworks Clauses Acts* of 1847 and 1863. This confused mass of legislation was largely removed by the Water Act of 1945, which applies to all statutory undertakers, and lays down that all byelaws or regulations made by them under any other enactment will cease to have effect after June 15, 1950. In other words, it is the intention that by that date a uniform series of byelaws should be in force over the whole country, saving such exceptions as may be required by special local circumstances. The present Series XXI is the model upon which these byelaws will be based.

This series supersedes the previous Series XXI issued by the Minister of Health under Section 132 of the Public Health Act, 1936, now repealed, and is made under the powers conferred on the Minister by the

new Water Act. In general, the wording is based on the earlier series, and important alterations have not been made. However, the principle then established of referring to BS for pipes and fittings has been much extended; it now seems to be the recognised conception that, where a BS exists, the byelaws should demand its adoption for the fittings concerned. Thus BS themselves are coming to possess legal force, further increasing their importance, and demanding the utmost care in their drafting and frequent revision to incorporate the results of progress in design. Presumably the principle will be accepted that the issue of a revision to a BS automatically revises the byelaws.

In so far as their provisions differ from those of byelaws and regulations now in force, this new model series will not have immediate effect; the procedure of their adoption by local authorities or water undertakers, and subsequent confirmation by the Ministry, has to be gone through. However, they will gradually come into force over the next three years. Their issue has been somewhat long delayed, and much intended bylaw revision has been held up pending their appearance. As they come into force, specification for the services of buildings in different parts of the country will be much simplified.

This feature answers any question connected with building confidentially and free of charge. Questions to the Technical Editor, The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1.

QUESTIONS AND ANSWERS

2889 REJECTION OF PLANS

Q On January 14 a "Notice to Build" on the usual form, with a sketch-plan, was sent to the Borough Surveyor of —. The form clearly stated that plans could only be completed after conference with his department.

On February 4 he wrote, agreeing to the first of these conferences on February 8, which duly took place.

On February 5 he submitted the incomplete application to the Works' Committee and obtained their disapproval to a plan which in fact did not exist. I was not invited to the Committee meeting and was consequently unable to make any representations. Your opinion please.

A Under Section 64 of the Public Health Act, 1936, a local authority must pass plans if they are in accordance with the byelaws and must reject them if they contravene the byelaws. The local authority has no discretion.

The notice of rejection must state the byelaw or Section of the above Act which is contravened, and there is an appeal by the applicant to a court of summary jurisdiction against the rejection.

By agreement between the applicant and the local authority the question of whether or not the plans contravene the byelaws can be referred to the Minister of Health, whose decision is final.

If the rejection of the application did not state the reason, you should ask for it before taking any further step.

The form printed below is to assist readers requiring up-to-date information on building products and services. If completed and posted to *The Architects' Journal*, 9, 11 and 13, Queen Anne's Gate, S.W.1, the advertisers mentioned will be asked to supply information direct.

ENQUIRY FORM

I am interested in the following advertisements appearing in this issue of "The Architects' Journal."

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Please ask manufacturers to send further particulars to:—

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Announcements

Mr. Richard Lonsdale-Hands, the British Industrial Designer, has been commissioned by the Bristol Aeroplane Company to industrially design the interior of the Brabazon I for the British Overseas Airways Corporation. Mr. Lonsdale-Hands will work in collaboration with Mr. A. E. Russell, F.R.Ae.S., the Chief Designer of the Bristol Aeroplane Company Ltd.

The Minister of Works has appointed Mr. E. Hughes-Jones, the Secretary of the Building Apprenticeship and Training Council, to be Regional Director for the North Midland Region in succession to Major General H. B. W. Hughes, C.B., D.S.O., O.B.E., who has been transferred to the South West Region.

Mr. S. Broughton, A.C.A., has been appointed Managing Director of Electrolux Ltd. He succeeds Mr. J. Scrivener, the present Vice-Chairman. The new Secretary of the company will be Mr. M. Aitken, F.C.I.S.

Mr. R. Tilsley Green, F.R.I.B.A., has been appointed Deputy County Architect of the Architect's Department, Kent County Council. Articled to Sir George Oatley and G. C. Lawrence, R.W.A., F.F.R.I.B.A., of Bristol, he studied at the Royal West of England Academy School of Architecture, of which he is a bronze and silver medallist in design, and at the Royal Academy Schools, London. He was for six years a member of the staff of the Architect's Department of the London County Council before he was appointed Senior Assistant in Kent in 1931 and Principal Assistant Architect in 1943.

The Board of Trade Regional Office (Wales) has moved to Imperial Buildings, Mount Stuart Square, Docks, Cardiff. Telephone: Cardiff 5920.

The Prime Minister of Northern Ireland has appointed the following to be members of a Building Committee set up for the purpose of conferring with and assisting the Government on matters relating to the supplies of labour and materials for the building industry, with special reference to housing and factory construction:—Major The Rt. Hon. J. Maynard Sinclair, M.P. (Chairman), The Rt. Hon. W. B. Maginness, L.L.B., K.G., M.P., R. R. Bowman, C.B.E., L. G. P. Freer, H. Wm. Gooding, M.B.E., F.S.I., James P. Graham, George Hughes, A. Jackson, Major J. W. McConnell, O.B.E., George Porter, M.B.E., E. M. Reid, R. B. Roe, J. H. Thompson, A.M.I.C.E. Mr. A. E. Goodbody of the Ministry of Labour and National Insurance and Mr. P. J. McKenna of the Ministry of Finance will act as Joint Secretaries to the Committee.

The resignations of Mr. B. E. Elford and Mr. B. R. Carter from the board of Carter and Co., Ltd., Poole, are announced in a letter to shareholders. The positions on the board held by Mr. Elford, who has been Joint Managing Director since 1928 and Chairman since 1934, are now taken over by Mr. Cyril Carter, who has been Joint Managing Director, with Mr. Elford, since 1928. Mr. Elford's long experience and accumulated knowledge will, however, continue to be available for consultation by the board, who express their deep appreciation of his work for the company during a service of over fifty years.

The Architects' Co-operative Partnership has now moved to 34, Gordon Square, London, W.C.1, Telephone Euston 2158-9, and would be pleased to receive trade catalogues, etc.

Alderman Charles W. Key, Minister of Works, has appointed Mr. B. O. B. Gidden to be his Private Secretary and Miss O. E. Cockett and Miss F. R. Wheelodon to be his Assistant Private Secretaries.

SMITH AND JONES ARE TALKING

'ROT'



Not nonsense, mark you, but fungal attack. For they both work with wood and the mere mention of fungus or termite puts them on common ground. But today they talk of rot, not with awe, but as they might of an enemy defeated or an aching tooth extracted. They have both turned to DRYMOL Wood Preservative. Drymol is freely available in green, black, brown and colourless — each with its own characteristics and uses. Drymol Colourless is suitable for inside and outside work, is odourless and on inside work will take any of the usual finishes. It penetrates deeply and the treated surface can be painted, varnished or polished, and the preservative effect is as near permanent as modern technology can make it.

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To Whom it may concern.

14th March, 1947

Dear Sir(s),

re: Wood Block Flooring for Housing.

We have received a letter from the Minister of Health,
which reads as follows:-

Ministry of Health,
Whitehall, S.W.1.
31st December, 1946.

"Gentlemen,

I am directed by the Minister of Health to refer to your
letter of the 17th December regarding the laying of wood block
floors in your houses, and to say that no objection will be raised
by this Department provided that the total timber used per house
does not exceed the 1.6 standards allowable.

I am, Gentlemen,
Your obedient Servant,
(Signed) S. WILKINSON."

In these circumstances, we shall be happy to submit
quotations for $\frac{3}{4}$ " Deal block flooring for any Housing Scheme
you may be contemplating. Living rooms and Hall will take
approximately one sixth of a standard of timber.

We have a large stock of 1" hardwood floorings, both in
block and strip, in oak, birch, etc., already manufactured
and will be happy to submit quotations for floorings to any
building as stated above, anywhere. Work can be commenced
at short notice.

Should you have floors that have been badly worn, we
can clean off, reface and wax polish; we have several
batteries of electrically and petrol driven surfacing
machines available.

Please send us your enquiries.

Yours faithfully,

The Philip Flooring Company,

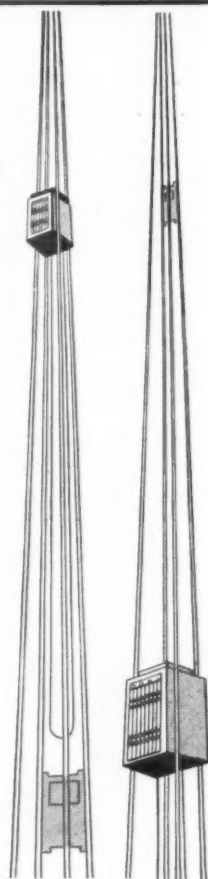
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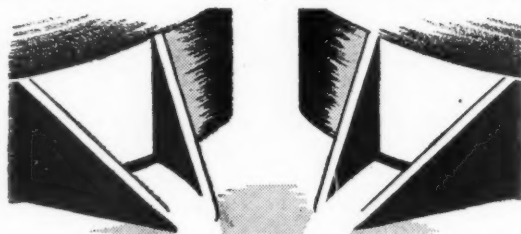
South Wales & West of England: E. C. Jones,
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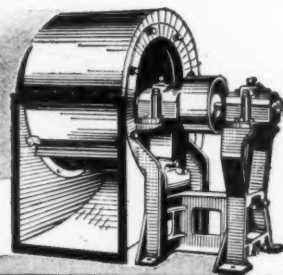
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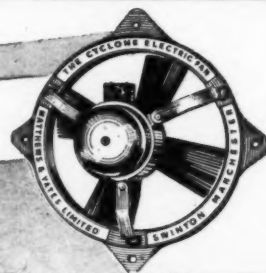
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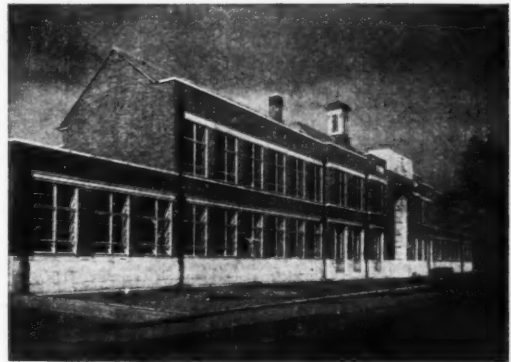
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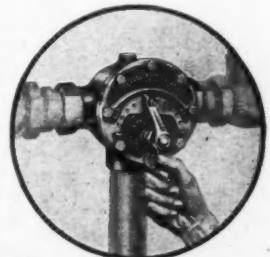


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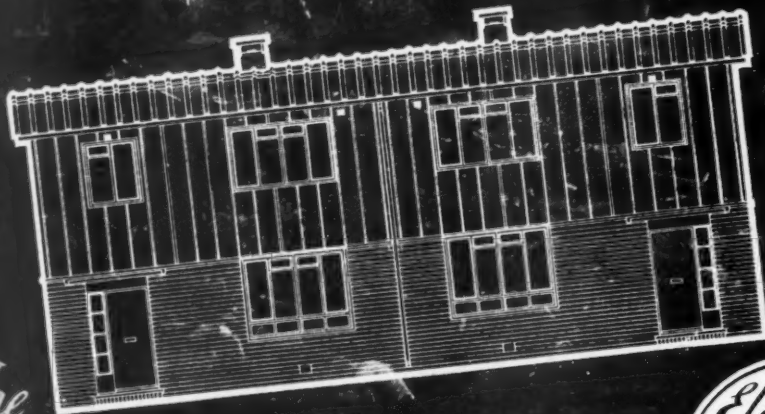
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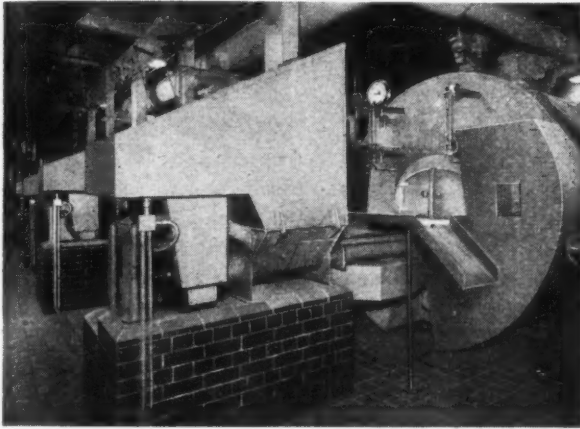
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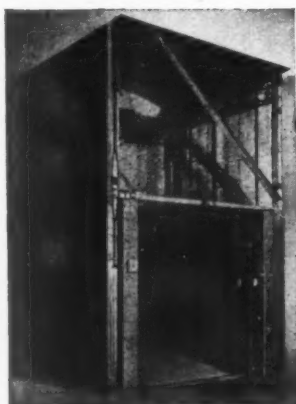
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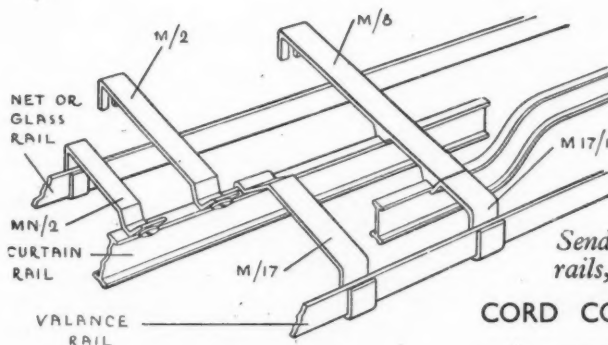
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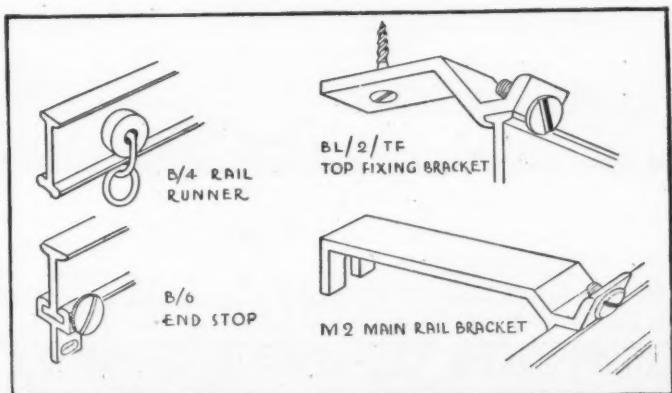
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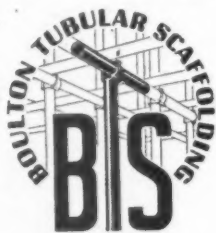
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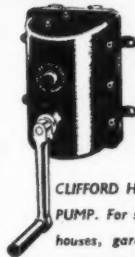
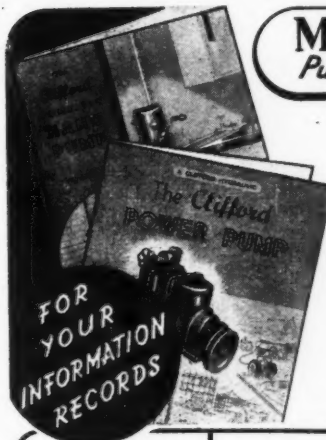
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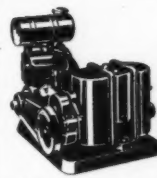
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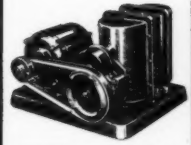
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CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

Public and Official Announcements

Six lines or under, 10s.; each additional line, 1s. 6d.

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. ADDRESS: 75, MATON PLACE, LONDON, S.W.1. TEL. BLOANS 5615. 991

**LONDON COUNTY COUNCIL.
QUANTITY SURVEYORS.**

Vacancies exist for Quantity Surveyors, in the Housing and Valuation Department, for work in connection with the development of cottage estates and the construction of multi-storey dwellings, at consolidated salaries of up to £700 a year, the commencing salary in each case being determined according to qualifications and experience. Successful candidates will be required to contribute to the Council's Superannuation and Provident Fund, and will be eligible for appointment to the Council's permanent staff and for advancement on the occurrence of vacancies.

Duties will include:—
(a) Measurement of work in construction of houses, roads and sewers, preparation of interim and final bills; measurement and adjustment of sub-contracts; preparation of cost statistics, estimates, etc.

(b) Management of housing contracts of considerable value; interim valuations for payments; measurement of variations and settlement of final accounts.

Forms of application may be obtained from the Director of Housing and Valuer, The County Hall, Westminster Bridge, S.E.1. (a stamped addressed foolscap envelope required). Completed forms must be returned not later than seven days after the appearance of this notice. Canvassing disqualifies. (632) 997

**CORPORATION OF LONDON.
CITY SURVEYOR'S OFFICE.**

APPOINTMENT OF TECHNICAL STAFF.
Applications are invited for the following appointments in the City Surveyor's Office:—

ARCHITECTURAL ASSISTANTS. Salary £450, inclusive of consolidated bonus.

Applicants should either have qualified or be about to qualify for Associate Membership of the Royal Institute of British Architects, or Associate Membership of the Royal Institution of Chartered Surveyors (Building Sub-division).

The appointments are for the present on a temporary basis, and will be concerned principally with the reinstatement of war damage to a variety of types of properties. There will be a possibility of establishment for suitable men, and temporary service will count for the purpose of superannuation. Such appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and applicants will be required to pass a medical examination.

Previous experience with a Municipal body is not essential.

Applications, endorsed "Technical Staff," to be made to George Holliday, F.S.I., The City Surveyor, 55-61, Moorgate, E.C.2, giving the following particulars: Service with Armed Forces, age, qualifications or intentions in connection therewith, previous training, positions and experience, date when available to commence duties if selected, together with copies of two testimonials. 579

MONMOUTHSHIRE COUNTY COUNCIL.

Applications are invited for SIX ARCHITECTURAL ASSISTANTS, in the County Architect's Department, at a salary in accordance with Grade V of the Administrative, Professional and Technical Division of the National Joint Council's Scheme, viz., £460 per annum, rising by two annual increments of £15 and one of £20 to a maximum of £510, plus cost-of-living bonus, at present £59 16s.

Candidates must have a knowledge of design and construction, particularly in relation to schools, public buildings, police stations, etc., and must be Associate Members of the Royal Institute of British Architects. The appointments will be subject to the Local Government Superannuation Act, 1937, and to the Regulations of the Council in force from time to time governing their Administrative, Technical and Clerical Staff, and will be determinable by one month's notice on either side. The successful candidates will be required to pass a medical examination.

Forms of application and conditions of service can be obtained from the undersigned. Applications, stating age, experience and qualifications, together with copies of three recent testimonials, must be delivered to Mr. Collin L. Jones, F.R.I.B.A., County Architect, Queens Hill, Newport, Mon., not later than Saturday, 19th April, 1947.

VERNON LAWRENCE,

Clerk of the Council.
County Hall, Newport, Mon. 685

MINERS' Welfare Commission Architects' Department requires ASSISTANTS; salary range, £328-£640 p.a., according to age, architectural qualifications and experience; vacancies in London and Provinces, but mainly London; staff pension scheme after one year's satisfactory service. Application forms from Establishment Section, Miners' Welfare Commission, Ashley Court, Ashted, Surrey. 619

**BOROUGH OF BRIDLINGTON.
BESSINGBY HOUSING ESTATE—ARCHITECTURAL COMPETITION.**

The Council invites Architects to submit designs for the layout of a Housing Estate of 114 acres and for 250 houses of 3 types, to be erected on part of the Estate.

Assessor: Mr. C. W. C. Needham, F.S.A., F.R.I.B.A., M.T.P.I.

Premiums: 100 gns., 50 gns., and 25 gns.

Last day for submitting designs is 14th July, 1947.

Last day for questions is 14th May, 1947. Conditions of the Competition and Survey Plan may be obtained upon application to the Borough Engineer, Town Hall, Bridlington, upon payment of a deposit of £2 2s., which will be returned upon receipt of a bona fide entry.

S. BRIGGS,
Town Clerk.

Town Hall, Bridlington.
9th April, 1947. 688

URBAN DISTRICT COUNCIL OF COULSDON AND PURLEY.

APPOINTMENT OF TWO ENGINEERING ASSISTANTS AND AN ARCHITECTURAL ASSISTANT.

Applications are invited for the following appointments, in the Surveyor's Department:—

(a) Two Engineering Assistants. A.P.T. Grade I (£330×£15-£375) per annum, or Grade II (£360×£15-£405), according to experience and qualifications, plus £20 per annum London area weighting, and war bonus, at present £59 16s. per annum. Candidates must have had experience in the office of an Engineer and Surveyor of a Local Authority, and be Associate Members of the Institute of Civil Engineers, or hold the Testamur of the Institute of Municipal and County Engineers.

(b) Architectural Assistant (Temporary). The commencing salary will be fixed according to the candidate's experience and qualifications. The commencing salary in Grade I of the A.P.T. Division is £330×£15-£375, and in Grade II £360×£15-£405, plus war bonus, etc. The successful candidate will be engaged solely on housing work, and applicants should possess a recognized Architectural qualification, and in addition be fully trained Architects, experienced in the preparation of plans, working drawings, details and specifications, and be capable of preparing estimates and making surveys and taking levels. Preference will be given to those having experience in housing.

The appointments will be subject to the National Scheme of Conditions of Service and to the Local Government Superannuation Acts. Successful candidates will be required to pass medical examinations. The appointments will be determinable by one month's written notice on either side.

Applications on forms to be obtained from the undersigned must be accompanied by copies of two recent testimonials, and delivered to me not later than the 23rd April, 1947. Canvassing in any form will be a disqualification, and a candidate who is related to any Member or to any Senior Officer of the Council must disclose the fact in the application.

ERIC F. J. FELIX,

Clerk of the Council.

Council Offices, Purley, Surrey.
31st March, 1947. 689

CIVIL SERVICE COMMISSION.

Applications are invited for two appointments as JUNIOR INVESTIGATOR, in the Royal Commission on Ancient Monuments in Wales and Monmouthshire.

The scales of salary will be £230×£18-£370×£25 to £545 for men (the rates for women are somewhat lower), with consolidation addition varying between £78 and £90 (men) and £63-£72 (women). There are prospects of appointment to higher posts. Starting salary will be increased by one increment above the minimum for each year of age over 24, subject to a maximum of six such increments. The appointment will carry the usual Civil Service conditions as to pension, holidays, etc.

Candidates must be British subjects between the ages of 21-35 years on 1st April, 1947. They must satisfy the Civil Service Commissioners that they have received such systematic education and possess such knowledge as to fit them for the post. Those holding a University degree or corresponding qualification will be given preference. There is one vacancy for a candidate with a knowledge of the history and practice of English Architecture, and one vacancy for a candidate with a knowledge of the prehistoric archaeology of the British Isles. Other things being equal, preference will be given to Welsh speaking candidates.

Forms of application, with further particulars of the appointments, may be obtained from the Secretary, Civil Service Commission, Burlington Gardens, London, W.1, quoting No. 1854. No application can be considered unless received on the prescribed form not later than the 15th May, 1947. Service candidates may apply without regard to the date of their release in Class A. 684

**MINERS' WELFARE COMMISSION.
ASSISTANT QUANTITY SURVEYORS.**

Applications are invited for appointments of Assistant Quantity Surveyors (a) in London, at a salary between £490×£25-£740 (inclusive of consolidated addition), and (b) in South Wales, at a salary between £471×£25-£725 (inclusive of consolidated addition).

Applicants should be Associates of the R.I.C.S. and be able to "take off" quantities from drawings, prepare approximate estimates and final accounts, and to write specifications and reports. Commencing salary will depend on age, qualifications and experience.

Staff Pension Scheme after one year's satisfactory service.

Application forms obtainable from Miners' Welfare Commission, Ashley Court, Ashted, Surrey. 619

LONDON COUNTY COUNCIL.

VACANCIES FOR PLANNING STAFF IN THE ARCHITECT'S DEPARTMENT FOR WORK ON THE COUNTY OF LONDON PLAN.

Applications are invited for a number of positions in the following grades:—
PLANNING OFFICER (Grade III), up to £700 a year.

TECHNICAL ASSISTANT, up to £580 a year. Commencing rate of pay will be according to qualifications and experience.

There will be opportunities for competing, on merit, in due course for permanent appointment and for positions in the higher grades on the occurrence of vacancies. Successful candidates will be subject to the Council's Superannuation and Provident Fund.

The planning work involved includes assistance in the detailed development of Reconstruction Area schemes, and the preparation of revised zoning plans.

A knowledge of current town planning legislation is desirable in all cases, and candidates for Grade III positions should possess architectural or surveying or town planning qualifications.

Other things being equal, preference will be given to candidates registered under the Disabled Persons (Employment) Act, 1944, and ex-Service men and women will also receive special consideration.

Application should be made to the Architect to the Council, County Hall, Westminster Bridge, S.E.1, for forms of application (enclosing stamped addressed envelope), returnable not later than ten days from this date.

Canvassing disqualifies. 983

METROPOLITAN BOROUGH OF POPLAR.

Appointments are:—

(1) CHIEF BUILDING SURVEYOR.
(2) ARCHITECTURAL ASSISTANT (Grade IV).

Applications are invited for the under-mentioned appointments, on the permanent staff of the Borough Engineer and Surveyor's Department of the Council.

(1) CHIEF BUILDING SURVEYOR.

The salary attaching to the post will be in accordance with Grade VI of the Administrative, Professional and Technical Division of the National Scales of Salaries, viz., £535 to £600 per annum, plus London "weighting" of £20 per annum, and cost-of-living bonus, at present £59 16s. per annum.

Applicants must either have held a similar appointment with another local authority or have had extensive experience with a large firm of building contractors, and be thoroughly experienced in building construction, estimating, and tendering for work by direct labour, the organizing and supervision of work, valuation, and measurement of work, costing systems, and purchase of materials and plant.

(2) ARCHITECTURAL ASSISTANT (Grade IV).

The salary attaching to the post will be in accordance with Grade IV of the Administrative, Professional and Technical Division of the National Scales of Salaries, viz., £420 to £465 per annum, plus London "weighting" of £20 per annum, and cost-of-living bonus, at present £59 16s. per annum.

Applicants must have had extensive experience in the planning and design of housing schemes, preferably under a local authority.

The persons appointed to the foregoing posts will be required to devote the whole of their time to the duties of the respective offices, and will not be allowed to engage in any other occupations.

The appointments will be subject to the provisions of the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, the provisions of the Poplar Borough Council (Superannuation) Acts, 1911 to 1937, and to satisfactory medical examination. Termination of the appointments will be subject to one month's notice on either side.

Applications, on forms which may be obtained from the undersigned, must be delivered, together with copies of three recent testimonials, in envelopes endorsed "Senior Building Surveyor" or "Architectural Assistant (Grade IV)," as the case may be, so as to reach me not later than the first post on Monday, 21st April, 1947.

Canvassing members or officers of the Council in any form will disqualify.

S. A. HAMILTON,

Town Clerk.

Poplar Town Hall, Bow Road, E.3.
24th March, 1947. 665

SURREY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of **ASSISTANT ARCHITECT, Grade V.** The commencing salary will be £460, rising by annual increments of £15-£20 to a maximum of £510, plus bonus, at present at the rate of £59 16s. per annum, and London allowance of £20.

Applications, giving full details of previous experience, training and present appointment, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-on-Thames, not later than Friday, the 18th April, 1947.

It is desirable that applications should be accompanied by a small example of the applicant's work.

Canvassing, either directly or indirectly, will disqualify.

DUDLEY AUKLAND,
Clerk of the Council.
County Hall, Kingston-on-Thames. 650

CROWN AGENTS FOR THE COLONIES.
Applications from qualified candidates are invited for the following post:—

QUANTITY SURVEYOR required by the Gold Coast Government Public Works Department, for one tour of 18 to 24 months, with prospect of permanency. Commencing salary up to £810 a year (in the scale £475, rising to £840 a year), according to qualifications and experience. Separation allowance for married men of between £48 and £204, according to salary and number of dependants. Outfit allowance £50. Free passages and quarters. Candidates must be proficient in taking off, abstracting and preparing bills of quantities for general building work (including reinforced concrete). Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/M/12810, on both letter and envelope. 658

CANNOCK URBAN DISTRICT COUNCIL.
APPOINTMENT OF ARCHITECTURAL DRAUGHTSMAN.

Applications are invited for the appointment of Architectural Draughtsman, at a salary in accordance with Grade II of the A.P.T. Division of the National Scale (£360-£405), plus cost-of-living bonus.

Applications for either post, giving full details of age, training, qualifications, present and previous appointments, nature of experience, and accompanied by copies of two recent testimonials, must be delivered to the undersigned not later than Saturday, 19th April, 1947.

Candidates are required when making application to disclose in writing to the undersigned whether to their knowledge they are related to any Member or the holder of any office under the Council. A candidate who fails so to do will be disqualified for the appointment and, if appointed, will be liable to dismissal without notice.

Canvassing Members of the Council or any Committee of the Council will also disqualify.

WM. C. SPEEDY,
Clerk of the Council.
Council House, The Green, Cannock, Staffs. 656

SHILDON URBAN DISTRICT COUNCIL.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the temporary appointment of an **ARCHITECTURAL ASSISTANT**, in the Surveyor's Department, to work under the direction of the Surveyor in the preparation of the Council's Development Scheme and Schemes leading to the erection of all future houses.

The salary for the appointment will be in accordance with Grade IV of the A.P.T. Division of the National Joint Council's Scheme, plus cost-of-living bonus, at present amounting to £59 16s. per annum.

Applicants must be experienced in land surveying, levelling, building inspection, supervision of erection of works and preparation of plans, working drawings, specifications, and bills of quantities for all architectural work, including housing.

Applicants must possess an architectural qualification, and preference will be given to those having passed the qualifying examination of the Royal Institute of British Architects.

The appointment will be for three years at least, and will be subject to the Local Government Superannuation Act, 1937, and to the successful candidate passing satisfactorily a medical examination. It will be determined by three months' notice on either side.

Applications, stating age, qualifications, past and present appointments and experience, and accompanied by copies of three recent testimonials, must reach the undersigned not later than 7th May, 1947, and endorsed "Temporary Architectural Assistant."

Canvassing, either directly or indirectly, will be a disqualification, and candidates must disclose in their application whether to their knowledge they are related to any member of the Council or to the holder of any senior office under the Council.

W. BURNIE, M.Inst.M. & Cy.E.,
Surveyor.
Council Offices, Burke Street, Shildon, County Durham.
March, 1947. 657

CITY OF LIVERPOOL.
ARCHITECTURAL AND HOUSING DEPARTMENT.

The Council of the City of Liverpool invite applications from qualified persons for the following appointments in the Architectural and Housing Department at the salaries shown, viz.:—

HOUSING ARCHITECTURAL SECTION:

(a) **ONE ASSISTANT ARCHITECT**, at a salary of £535 per annum, rising by annual increments to £600 per annum, plus war bonus.

(b) **THREE ASSISTANT ARCHITECTS**, at a salary of £465 per annum, rising by annual increments to £510 per annum, plus war bonus.

Applicants for these positions should have had previous Housing experience.

REDEVELOPMENT:

(c) **THREE ASSISTANT ARCHITECTS**, at a salary of £535 per annum, rising by annual increments to £600 per annum, plus war bonus.

(d) **TWO ASSISTANT ARCHITECTS**, at a salary of £345 per annum, rising by annual increments to £375 per annum, plus war bonus.

Applicants for the above positions must be members of the Royal Institute of British Architects, and have professional experience, preferably in Local or Central Government Service. Applicants for positions (c) and (d) must have Town Planning experience and aptitude for design, layouts and perspectives.

ARCHITECTURAL GENERAL (Schools, etc.):

(e) **FOUR JUNIOR ASSISTANT ARCHITECTS**, at a commencing salary of £360 to £405 per annum, according to qualifications, plus war bonus.

Applicants for these positions must have had previous experience in connection with design and erection of schools.

SURVEYING SECTION:

(f) **TWO ASSISTANT SURVEYORS**, at a salary of £535 per annum, rising by annual increments to £600 per annum, plus war bonus.

(g) **ONE ASSISTANT SURVEYOR**, at a salary of £465 per annum, rising by annual increments to £510 per annum, plus war bonus.

Applicants for position (f) must have passed the Final Examination of the R.I.C.S., or hold an equivalent professional qualification.

Those for position (g) must have passed the intermediate examination of the R.I.C.S., or have reached an equivalent standard.

QUANTITY SURVEYOR:

(h) **ONE ASSISTANT QUANTITY SURVEYOR**, at a salary of £535 per annum, rising by annual increments to £600 per annum, plus war bonus.

Applicants for this position must be members of the R.I.C.S. and have professional experience in Local or Central Government Service.

All the appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the Standing Orders of the City Council, which include requirements to pass a medical examination and to devote whole time to the duties of the appointment.

The appointments will be determinable by three calendar months' notice on either side.

Applications, on forms to be obtained from the City Architect and Director of Housing, Blackburn Chambers, Dale Street, Liverpool, 2, accompanied by copies of three recent testimonials, must be addressed to the City Architect and Director of Housing, endorsed with the description of the post applied for, e.g. ("Assistant Architects (a)"), and should be received on or before the 19th April, 1947.

Candidates serving with H.M. Forces abroad need not complete the official form of application, but may submit direct application on or before the date specified, giving particulars of age, education, qualifications and experience, and three names as references. The number of the applicant's release group and probable date of release should also be stated.

Canvassing members of the City Council, either directly or indirectly, will be a disqualification.

W. H. BAINES,
Town Clerk.
Liverpool, 2.
March, 1947. 679

COUNTY BOROUGH OF IPSWICH.
APPOINTMENT OF A SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of a Senior Architectural Assistant, in the Borough Surveyor's Department. Applicants must have had previous architectural experience, and be Associates of the R.I.B.A. or possess a similar qualification.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination.

Salary will be in accordance with Grade V of the A.P.T. Division of the National Scales (£460 to £510), plus cost-of-living bonus.

There is no form of application, but candidates must state age, experience, qualifications, and any other relevant details. Copies of not more than three recent testimonials must be supplied. Applications must be received by the Borough Surveyor, Town Hall, Ipswich, not later than Monday, 21st April, 1947.

Canvassing will disqualify. If the applicant is to his knowledge related to any member or any senior officer of the Council he must disclose that fact in writing when submitting his application.

J. G. BARR,
Town Clerk.
Town Hall, Ipswich.
27th March, 1947. 682

THE UNIVERSITY OF SHEFFIELD.

Applications are invited for the post of **ASSISTANT LECTURER IN ARCHITECTURE.** The appointment will be, in the first instance, probationary and on an annual basis.

Salary £450 per annum in the first year, rising by £25 to £500, with superannuation provision under the Federated Superannuation Scheme for Universities, and family allowance.

The successful candidate will be expected to undertake his duties as soon as possible.

Applications (three copies), with the names and addresses of three referees and, if possible, copies of two testimonials, should reach the undersigned (from whom further particulars may be obtained) as early as possible, but not later than 25th April, 1947.

A. W. CHAPMAN,
Registrar.
671

BOROUGH OF DOVER.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment in the Borough Engineer's Department, at a salary in accordance with A.P.T. Grade III, of the National Scales, viz., £390-£465 per annum (plus temporary bonus, at present £59 16s. per annum).

Applicants should possess recognized technical qualifications, and should have had considerable Local Government or other similar experience.

The Corporation is prepared to make a grant not exceeding 50 per cent. of approved expenditure incurred for the removal of the household furniture of the person appointed.

The appointment, which is terminable by one month's notice on either side, is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, stating age, details of qualifications and experience, together with three recent testimonials, are to be delivered to the Borough Engineer and Surveyor, Maison Dieu House, Dover, not later than first post Monday, 21st April, 1947, in a suitable endorsed sealed envelope.

Canvassing, directly or indirectly, will disqualify.

JAMES A. JOHNSON,
Town Clerk.
Brook House, Dover.
1st April, 1947. 676

EAST SUFFOLK COUNTY COUNCIL.
APPOINTMENT OF ASSISTANT COUNTY PLANNING OFFICER.

Applications are invited from suitably qualified persons for the appointment of Assistant County Planning Officer, in the County Planning Officers' Department.

The salary will be within the A.P. & T. Divisions, V and VI, of the National Joint Council's Scale, viz., £460 per annum, rising by annual increments of £60 per annum, plus cost-of-living bonus (at present £59 17s. per annum), with scale allowance for use of motor car; the commencing salary will be fixed having regard to the qualifications and experience of the successful candidate.

Applicants must have passed the Associate Membership Examination of the Town Planning Institute or equivalent, and preference will be given to those persons possessing qualifications in engineering, surveying, or architecture.

The appointment will be determinable by three months' notice on either side, and will be subject to the provisions of the Local Government Superannuation Act, 1937.

Candidates should have had wide experience of all aspects of Town and Country Planning, Interim Development Control, and the preparation of factual surveys.

The person appointed will be required to reside in the Lowestoft district.

Applications, endorsed "Assistant County Planning Officer," stating age, experience, present position and qualifications, giving the names of not more than three persons from whom references can be obtained, to be delivered to the undersigned not later than the first post Monday morning, the 21st April, 1947.

CECIL OAKES,
Clerk of the County Council.
County Hall, Ipswich.
25th March, 1947. 675

COUNTY BOROUGH OF DARLINGTON.
BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(i) **TWO ARCHITECTURAL ASSISTANTS** A.P.T. Grade V (£460-£510).

(ii) **ONE ARCHITECTURAL ASSISTANT** A.P.T. Grade IV (£420-£465).

(iii) **ONE ASSISTANT QUANTITY SURVEYOR** A.P.T. Grade IV (£420-£465).

A cost-of-living bonus of £59 19s. 3d. per annum will be paid in addition to the above salaries.

Preference will be given to candidates with experience on Housing or Education work, and for appointment (i) to candidates who have passed the Associateship Examination of the Royal Institute of British Architects.

Forms of application to be obtained from E. Tornbohm, A.R.I.B.A., A.M.T.P.I., Borough Architect, Town Hall, Darlington, and should be delivered to the Town Clerk, 11, Houndgate, Darlington, on or before Monday, 21st April, 1947.

Canvassing, directly or indirectly, will disqualify. 674

HOLLAND JOINT PLANNING COMMITTEE.
ASSISTANT PLANNING OFFICER.

Applications are invited for the above position, at a salary of £535 per annum, rising by three annual increments of £600 per annum, plus cost-of-living bonus of £59 16s. per annum, in accordance with Grade VI (A.P.T.) of the National Conditions of Service. Candidates must have had considerable experience in all aspects of statutory planning, interim development control, the preparation of factual surveys, reports, and of planning procedure and legislation in general.

Applicants must be Associated Members of the Town Planning Institute, and an additional qualification in Architecture, Surveying or Engineering will be an advantage. Applicants will be required to provide a motor car, for which a suitable allowance is made.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and will be terminable by one month's notice on either side. The successful candidate will be required to pass a medical examination.

Applications, endorsed "Assistant Planning Officer," stating age, experience, present position and salary, qualifications, and copies of not more than three recent testimonials, must reach the undersigned not later than 22nd April, 1947.

RAYMOND W. HASTINGS,

Clerk of the Joint Planning Committee.
11, Market Place, Spalding, Lincs. 673

METROPOLITAN BOROUGH OF FULHAM.
TEMPORARY ARCHITECTURAL ASSISTANTS.

Applications are invited from Registered Architects with housing experience for positions as Temporary Architectural Assistants, in the War Damage Department of the Council, for work in connection with the adaptation of requisitioned property and rebuilding of demolished houses. Candidates should be Associates of the Royal Institute of British Architects or hold equivalent qualifications.

The salary scale is £440 × £15-£485 per annum, plus cost-of-living bonus, which at present is £59 16s. per annum, and the commencing salary will be fixed within the scale according to the qualifications and experience of the successful candidate.

Applications, on a form which can be obtained from me by sending a stamped addressed foolscap envelope, must be required to reach me not later than 19th April, 1947.

CYRIL F. THATCHER,

Town Clerk.
Town Hall, Fulham, S.W.6. 672
March, 1947.

CORPORATION OF LONDON.
PUBLIC HEALTH DEPARTMENT.
CITY ENGINEER'S OFFICE: TEMPORARY PLANNING ASSISTANT.

Applications are invited for the appointment of a Temporary Town Planning Assistant, in the City Engineer's Office, to deal with the preparation of drawings and data, examination of applications for development, and other work associated with town planning and reconstruction. Applicants should have passed the final examination of the Town Planning Joint Examination Board, and additional recognized professional qualifications will be deemed an advantage. Previous experience of statutory planning is desirable, but not essential.

The salary offered is up to £610 per annum, inclusive of cost-of-living bonus, according to qualifications and experience.

The selected candidate will be required to pass a medical examination and to contribute to the Corporation's Superannuation Scheme.

Applications, giving full information as to age, qualifications and experience, accompanied by copies of not more than three recent testimonials, and endorsed "Temporary Town Planning Assistant," must be received not later than Monday, 8th May, 1947, addressed to the City Engineer, Corporation of London, 55/61, Moorgate, London, E.C.2.

PICKFORD.

March, 1947. 670

CORPORATION OF LONDON.
PUBLIC HEALTH DEPARTMENT.
CITY ENGINEER'S OFFICE: TEMPORARY ARCHITECTURAL ASSISTANTS (HOUSING).

Applications are invited for Temporary Architectural Assistants, in the City Engineer's Office, to be engaged on the preparation of surveys, design, and working drawings, specifications, supervision of work on site, etc., in connection with permanent housing, including flats in built-up area, and other work. Applicants should have passed the final examination of the Royal Institute of British Architects (or other equivalent), and additional recognized professional qualifications will be deemed an advantage.

The salary offered is up to £650 per annum, inclusive of cost-of-living bonus, according to qualifications and experience.

The selected candidates will be required to pass a medical examination, and subscribe to the Corporation's Superannuation Scheme.

Applications, giving full information as to age, qualifications, and experience, accompanied by copies of not more than three recent testimonials, and endorsed "Temporary Architectural Assistant," must be received not later than Monday, 8th May, 1947, addressed to the City Engineer, Corporation of London, 55/61, Moorgate, London, E.C.2.

PICKFORD.

March, 1947. 669

NORTHUMBERLAND JOINT PLANNING COMMITTEE.

APPOINTMENT OF PLANNING ASSISTANTS.
Applications are invited from persons with the necessary qualifications for the following appointments:

(a) **TWO SENIOR PLANNING ASSISTANTS,** at salaries in accordance with A.P.T. Grade VI, of the National Scale of Salaries, £535-£600 per annum, plus cost-of-living bonus.

Applicants should have wide experience in the administration of Interim Development Orders, the general work of a Planning Department, and knowledge of the research work necessary in the preparation of a Planning Scheme.

Applicants must also be Associate Members of the Town Planning Institute and be Associates or Members of one of the following institutions:—The Royal Institute of British Architects, the Royal Institute of Chartered Surveyors, the Institution of Civil Engineers, or the Institution of Municipal and County Engineers.

(b) **THREE PLANNING ASSISTANTS,** at salaries in accordance with A.P.T. Grade III (£390-£435), or IV (£420-£465) of the National Scale of Salaries, plus cost-of-living bonus, according to experience and qualifications.

Applicants should have a good knowledge of the general work of a Planning Department.

Preference will be given to applicants who are Associate Members of the Town Planning Institute and/or are Associates or Members of one of the following institutions: The Royal Institute of British Architects, the Royal Institute of Chartered Surveyors, the Institution of Civil Engineers, or the Institution of Municipal and County Engineers.

The bonus for each appointment at present amounts to £59 16s. per annum, and the appointments are subject to (a) the provisions of the Local Government Superannuation Act, 1937, (b) the National Scheme of Conditions of Service, (c) the passing of the prescribed medical examination, (d) two months' notice in writing on either side.

Applications, stating age, experience and qualifications, together with copies of three recent testimonials, should be sent to E. P. Harvey, Esq., Clerk of the Joint Planning Committee, County Hall, Newcastle-upon-Tyne, 1, not later than the 19th April, 1947.

Canvassing will be a disqualification.

E. P. HARVEY,

Clerk of the Joint Planning Committee.
County Hall, Newcastle-upon-Tyne, 1. 693

BOROUGH OF COLCHESTER.
BOROUGH ENGINEER'S DEPARTMENT.
ARCHITECTURAL SECTION.

Applications are invited for the following temporary appointment:—

QUANTITY SURVEYOR. Salary, Grade VI, £335 to £600 per annum. In addition to salary, cost-of-living bonus £59 16s. per annum.

Applicants should hold appropriate professional qualifications, and be accustomed to the preparation of Bills of Quantities, Specifications, Estimates, and settlement of final measurements in connection with housing and other building works.

Applications, stating age, qualifications, and full details of experience, together with copies of two recent testimonials, should be sent to me, the undersigned, as soon as possible.

HAROLD COLLINS, Assoc. M.Inst.C.E.,

Borough Engineer.

Town Hall, Colchester. 694

Amended Advertisement.

EAST ELLOE RURAL DISTRICT COUNCIL.
APPOINTMENT OF ARCHITECT.

Applications are invited from duly qualified persons for the permanent appointment of Architect to the Council, at a salary of £600 per annum, within Grade VI of the A.P.T. Division of the National Scheme of Conditions of Service, plus cost-of-living bonus, at present £59 16s. per annum.

The person appointed will not be allowed to engage in private practice, and will be required to devote the whole of his time to the duties of his office. He will be required to provide and maintain a car for the purposes of his duties, for which a travelling allowance will be paid in accordance with the County Council scale.

Applicants must be qualified to advise the Council on their post-war housing programme, and to prepare all plans, quantities, specifications, estimates, etc., and to supervise construction. Previous Local Government administrative experience in a position of responsibility will be an additional recommendation.

The appointment will be subject to:—

(a) The National Scheme of Conditions of Service.

(b) The provisions of the Local Government Superannuation Act, 1937.

(c) The successful applicant passing a medical examination.

(d) Termination by one month's notice on either side.

Candidates should state in their applications whether or not they are related to any member or senior official of the Council, and canvassing in any form will disqualify.

Applicants, endorsed "Architect," stating age, qualifications and details of experience, and accompanied by copies of three recent testimonials, to be delivered to the undersigned not later than the 16th April, 1947.

J. C. PYWELL,

Clerk to the Council.

Council Offices, Holbeach, Spalding, Lincolnshire. 695

27th March, 1947.

BOROUGH OF WEYMOUTH AND MELCOMBE REGIS.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited from suitably qualified applicants for the appointment of an Architectural Assistant, Grade II, Technical £360-£415-£405 per annum, plus cost-of-living bonus, at present £59 16s. per annum.

Applicants should have experience in general Architectural work, house planning and design, including the preparation of working drawings and specifications.

The appointment will be subject to one month's notice on either side, and to the provisions of the Local Government Superannuation Act, 1937, in connection with which the successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications and experience, together with the names and addresses of two persons to whom reference can be made, to be forwarded to the Borough Surveyor, 6, Pulteney Buildings, Weymouth, not later than 9 a.m. Monday, 21st April, 1947.

PERCY SMALLMAN,

Town Clerk.

Municipal Offices, Weymouth. 692

29th March, 1947.

CITY OF LEEDS.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) **ASSISTANT QUANTITY SURVEYORS** (Class 1). The commencing salary will be £460 per annum, rising by annual increments to a maximum of £600 per annum.

Applicants should be suitably qualified, and have had pre-war experience in "taking off," preferably on large contracts, i.e., Schools, Hospitals, etc.

(b) **ASSISTANT QUANTITY SURVEYORS** (Class 2). The commencing salary will be £390 per annum, rising by annual increments to a maximum of £435 per annum.

Measuring Surveyors, with extensive experience on large contracts.

"Workers up," with pre-war experience, preferably of Local Government contracts.

Applicants should be suitably qualified, and have had pre-war experience in "taking off," preferably on large contracts, i.e., Schools, Hospitals, etc.

(c) **ASSISTANT ARCHITECTS.** The commencing salary will be £535 per annum, rising by annual increments to a maximum of £600 per annum.

(d) **ASSISTANT ARCHITECTS.** The commencing salary will be £420 per annum, rising by annual increments to a maximum of £465 per annum.

(e) **ASSISTANT ARCHITECTS.** The commencing salary will be £390 per annum, rising by annual increments to a maximum of £435 per annum.

(f) **ASSISTANT ARCHITECTS.** The commencing salary will be £330 per annum, rising by annual increments to a maximum of £375 per annum.

Candidates must be Registered Architects, and have had a thorough training and experience in Architectural design and construction of Schools and School Buildings, or Public Buildings.

(g) **MATERIALS CLERK.** The commencing salary will be £315 per annum, rising by annual increments to a maximum of £360 per annum.

Candidates must have had a wide experience of the Building Trade and the supply of Building Materials.

(h) **DRAUGHTSMAN** (Male or Female). The commencing salary will be £255 per annum, rising by annual increments to a maximum of £300 per annum.

(i) **TRACERS** (Male or Female). The commencing salary will be according to age, rising to a maximum of £240 per annum in the case of females, and a maximum of £300 in the case of males.

(k) **CLERK OF WORKS (ELECTRICAL)** The commencing salary will be £330 per annum, rising by annual increments to a maximum of £375 per annum.

Cost-of-living bonus, which is additional to the above scales, is at present at the rate of £59 16s. per annum in the case of adult male officers and £48 2s. in the case of adult female officers.

In each case the payment of salary increments will be subject to satisfactory service, and will be granted normally with effect from the 1st April following the completion of six months' service, except in the case of appointment (j), when birthday increments will be payable.

Sympathetic consideration will be given to married applicants regarding housing accommodation.

The appointments will be subject to the Local Government Superannuation Act, 1937, and the successful applicants will be required to pass a medical examination.

Applications, on forms to be obtained from the undersigned, accompanied by copies of not more than three recent testimonials (not returnable), must be received by me in the envelope applied, therefor not later than 10 a.m. on Saturday, the 19th April, 1947.

Canvassing in any form, either directly or indirectly, will be a disqualification.

R. A. H. LIVETT, O.B.E., A.R.I.B.A.,

City Architect.

Priestley House, Quarry Hill, Leeds, 9. 700

March, 1947.

**COUNTY BOROUGH OF GRIMSBY.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.**

Applications are invited for the following appointments, in the Architectural and Planning Sections of the Department respectively.

The appointments are subject to the Conditions of Service and Scales of Salaries of the National Joint Council given below.

(d) TWO GENERAL ARCHITECTURAL ASSISTANTS (Grade II), £360, rising to £405 per annum.

(e) ONE ASSISTANT QUANTITY SURVEYOR (Grade III), £390, rising to £435 per annum.

(f) ONE CHIEF PLANNING ASSISTANT (Grade VI), £535, rising to £600 per annum.

(g) ONE SENIOR PLANNING ASSISTANT (Grade II), £360, rising to £405 per annum.

Plus war bonus, at present £59 16s. per annum. Preference will be given to candidates holding appropriate qualifications to the appointments, which are terminable by one month's notice on either side, and are also subject to the provisions of the Local Government Superannuation Act, 1937.

The successful candidate will be required to pass a medical examination.

Applications, giving details of age, qualifications and experience, together with copies of two recent testimonials, must be suitably endorsed and delivered to the undersigned not later than Saturday, 19th April, 1947.

J. V. OLDFIELD.

Borough Engineer and Surveyor.
Municipal Offices, Town Hall Square,
Grimsby.

March, 1947. 683

ARCHITECTURAL ASSISTANTS required by MINISTRY OF WORKS. Applications are invited to fill vacancies for Drawing Office duties in London. Gross emoluments up to £550 per annum, according to qualifications and experience.

The appointments, which offer good opportunities for advancement, are in the first place in an unestablished capacity, with possibility of permanent appointment. Work is varied, giving ample scope to those seeking further experience in the design of all types of buildings. Applicants should have had a recognized full period of training and experience with a practising Architect or Local Authority, etc.

Apply in writing, giving age, details of training and experience, to Chief Architect, W.G.10, Ministry of Works, Abell House, John Islip Street, London, S.W.1.

BOROUGH OF HARWICH.

SENIOR ARCHITECTURAL ASSISTANT. Applications are invited to fill the above-mentioned appointment, in the department of the Borough Architect and Planning Officer, at a salary of £360 per annum, rising by annual increments of £15 to £405 per annum, plus cost-of-living bonus, at present £59 16s. per annum.

Further particulars and forms of application will be supplied on request, and applications should be addressed to the undersigned in an envelope endorsed "Senior Architectural Assistant."

Closing date for applications is 3rd May, 1947. Dated this 3rd day of April, 1947.

G. F. CONDAGON.

Town Clerk. 703

**EASINGTON RURAL DISTRICT COUNCIL.
ENGINEER AND SURVEYOR'S DEPARTMENT.**

Applications are invited for the following appointment on the permanent staff, in accordance with the National Scale of Salaries:—

SECOND ARCHITECTURAL ASSISTANT. Grade I, A.P. & T. Division. Commencing salary £330, rising by annual increments, subject to satisfactory service, to £375 per annum.

Cost-of-living bonus, at present £59 16s. (male), is payable in addition to the above salary.

Candidates must have served articles as an Architect or Architectural Assistant, and preferably had experience in the office of a Municipal Engineer or Architect on the design and layout of large housing schemes.

The appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Service may be terminated by one month's notice on either side.

Applications, stating age, details of qualifications and experience, on a form obtainable from the undersigned, together with two copies of recent testimonials, are to be delivered to the undersigned not later than 26th April, 1947, in a sealed envelope, endorsed "Architectural Assistant."

Canvassing, directly or indirectly, will disqualify.

J. W. GRAY.

Clerk of the Council.
Council Offices, Easington, Co. Durham.

31st March, 1947. 704

**BOROUGH OF SOUTHALE.
APPOINTMENT OF TOWN PLANNING
ASSISTANT.**

Applications are invited for the following permanent appointment in the Department of the Borough Engineer.

Town Planning Assistant (or Planning Draughtsman). Salary in accordance with Miscellaneous, Grade II, commencing £335 per annum, rising by annual increments of £15 to £380 (both salaries being inclusive of London weighting), to which is added a cost-of-living bonus, at present £59 16s. per annum (at age 21).

Applicants must be neat draughtsmen, and

have a knowledge of Town Planning and previous experience in the Planning Section of a Corporation is desirable. The person appointed will also be expected to assist in the engineering or architectural work of the Department.

The appointment is subject to one month's notice on either side, and to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, on forms to be obtained from the Borough Engineer, Town Hall, Southale, must be returned within ten days of the appearance of this advertisement.

Canvassing any Member of the Council or any Committee thereof, directly or indirectly, will disqualify.

M. LINDSAY TAYLOR.

Town Clerk's Offices, Southale.
28th March, 1947. 690

**CITY OF MANCHESTER EDUCATION
COMMITTEE.**

MUNICIPAL SCHOOL OF ART.

Principal: JOHN M. HOLMES, Dip. Fine Art (Lond.).

DEPARTMENT OF ARCHITECTURE.

Applications are invited from suitably qualified men for the position of HEAD OF THE DEPARTMENT OF ARCHITECTURE.

Applicants should be Fellows or Associates of the R.I.B.A., should preferably hold a Degree or Diploma of a recognized School of Architecture, and should have had appropriate teaching and organizing experience.

Salary in accordance with the Burnham Scale for Heads of Departments, Grade II, £750 × £25 = £850.

Application forms and conditions of appointment may be obtained from the Chief Education Officer, Education Offices, Deansgate, Manchester, 3, to whom the completed forms should be returned by not later than 10th May, 1947.

705

Architectural Appointments Vacant

Four lines or under, 5s.; each additional line, 1s. 6d.

HENRY C. SMART & PARTNERS, Architects, 120, Moorgate, E.C.2, require Assistant; working drawings, details, surveys, etc. Write, stating age, experience, and salary required. 913

SURVEYORS.—London Architects have vacancies for Surveyors, with experience of war damage work; salary, £500-£625 per annum. Write, stating age, experience, and when free. Box 645.

JUNIOR (14-16) required in Chartered Architect's office; general office work, with prospects in profession. Clark, 44, Gt. Russell Street, W.C.1. Museum 4400. 888

ARCHITECTURAL ASSISTANTS required; must be able to prepare working drawings houses from sketch plans; salary according to experience. Saunders & Reiss-Smith, Architects, 70, Hill Park Crescent, Plymouth. 643

EXPERIENCED ARCHITECTURAL DRAUGHTSMAN required in busy Architect's office in Birmingham (centrally situated), engaged mainly in Factory Construction. Write details of experience and salary required. Box 647.

ASSISTANTS required (20-23 years) capable as draughtsmen; surveys, working drawings, specifications, etc.; busy private practice. Clark, 44, Gt. Russell Street, W.C.1. Museum 4400. 660

ARCHITECTURAL ASSISTANT, R.I.B.A. (Inter.) Standard, or higher, required for busy Cambridge office, with large varied practice. Write for interview, with full details and salary required, to D. C. Denton-Smith, L.R.I.B.A., 40, Regent Street, Cambridge. 664

VICTOR KERR & COLBOURN, F.R.I.B.A., require Male ASSISTANT, of at least Inter. R.I.B.A. standard; surveys, working drawings, specifications; scope for initiative and responsibility; £300-£400 p.a., plus bonus. Write 7, Bedford Row, W.C.1. 666

ARCHITECTURAL ASSISTANT required immediately in busy office; general practice, including houses, factories, licensed premises, etc.; salary £350-£400. Apply, with usual particulars, to Kitching & Co., 21, Albert Road, Middlesbrough. 671

LONDON PASSENGER TRANSPORT BOARD.—Applications are invited for appointments on the temporary staff of the Architect's Office as follows:—ASSISTANT ARCHITECTS, ARCHITECTURAL ASSISTANTS, STRUCTURAL ENGINEERING ASSISTANTS. Salaries range from £250 to £465 per annum, according to ability, qualifications and experience, plus war advance, at present £72 10s. per annum. Applications, which should give a brief outline of training and experience, to be sent to the Staff Officer (ER/E.408), 55, Broadway, Westminster, S.W.1. Applicants may also telephone ABBey 1234, Extension 194. 977

ASSISTANTS required in Architect's Department of a Multiple Company in the Midlands; good prospects and permanency. Applicants are requested to give details of experience, age, and salary required, to Box 680.

APPLICATIONS are invited by a well-known firm of Building Contractors in N.W. London for an **ARCHITECTURAL ASSISTANT** in their Architect's Department; applicants should be to final R.I.B.A. standard, preferably with experience in house and factory design. Box 681.

A SENIOR ARCHITECTURAL ASSISTANT required in busy office; work mainly domestic, including business premises and hotels. Write, stating age, experience, and salary required, to S. G. Scales, A.R.I.B.A., National Provincial Bank Chambers, Eastbourne. 687

MEASURING SURVEYOR required; Municipal and M.O.W. Housing Contracts; excellent opportunity for advancement; permanent post for right applicant; salary £400-£500, according to experience and qualifications. Write with full particulars to Messrs. H. C. Leach, 8/12, Southfield Road, Waltham Cross, Herts. 701

JUNIOR ASSISTANT (male), about 16 years, required for Architect's office. Write, R.F., 16/17, Tavistock Place, W.C.1. 698

Architectural Appointments Wanted

STUDENT R.I.B.A. (23), 6 years' varied experience London and provinces, seeks job in Bristol area, with progressive firm; available mid-May. Box 288.

ARCHITECT'S ASSISTANT (25) seeks appointment in progressive Provincial office; 3 years' experience in London and provinces, plus 3½ years' experience in Army drawing office; capable of preparing working drawings and detailing; studying for R.I.B.A. examinations. Box 290.

A R.I.B.A. (36), ex-Serviceman, requires post, with prospect of progress; help in securing accommodation for self and wife in working area would be very helpful. Box 291.

ARCHITECT'S ASSISTANT (29) seeks appointment; intermediate R.I.B.A., except "Special History" and "Design"; 8 years' office experience. Box 292.

ARCHITECTURAL ASSISTANT, 8 years' varied experience, requires situation in or near to Birmingham. Box 293.

ARCHITECTURAL STUDENT, preparing for finals in December, desires position during summer vacation, August and September. Box 296.

BIRMINGHAM. — ARCHITECT'S ASSISTANT (Reg.) desires progressive post; general experience; housing, licensed premises, factory extensions, etc.; used to surveying existing buildings and preparation of schemes for alteration, adaptation; consider post with local brewery; free end of April. Box 295.

SENIOR ARCHITECTURAL ASSISTANT desires position in Liverpool area, where initiative and enterprise will be appreciated, in contrast to his temporary position in the Civil Service held since demobilisation; capable of carrying a job through from survey to P.S. details, including specifications and estimates; sitting R.I.B.A. final this year. Box 294.

Other Appointments Vacant

Four lines or under, 5s.; each additional line, 1s. 6d.

APPLICATIONS are invited from men with thorough practical experience of the Building Trades for the post of **BUILDING FOREMAN** in a large factory in the South-East; duties will include the supervision of permanent staff engaged in general alterations and maintenance work; some factory experience essential, and some knowledge of the duties of a Clerk of Works an advantage; apply in writing stating age, experience, and salary required. Box 678.

Other Appointments Wanted

Four lines or under, 2s. 6d.; each additional line, 1s.

TYPEWRITING undertaken at home; Bills of Quantities, Specifications, Stencils, etc.; neat accurate work. Write Advertiser, 61, Curzon Road, Ealing, W.5. 899

A R.I.B.A. (with Junior Assistant), 12 years' experience busy private practices, specialised large factories, schools, housing schemes, controlling four assistants, capital available, age 27, own car, desires introduction to Architect requiring Partner or commencing practice. Box 644.

LAND SURVEYS for housing schemes, factories, drainage, and other projects executed by expert with complete equipment, and car. Box 651.

SURVEYOR offers part-time assistance in own office; Quantities, Measuring, Final Accounts, Dilapidations, War Damage, Land and Building Surveys, Levelling, etc.; own car. Box 696.

ARCHITECT, A.R.I.B.A., offers competent assistance in own office (Greater London area); sketch designs, working drawings, war damage, surveys, etc.; 10 years' varied experience, chiefly housing, flats, and schools. Box 699.

CHARTERED ARCHITECT, with own offices in London, E.C., and wide experience in all branches, will undertake free lance work, including war damage. Box 702.

EXPERIENCED Private SECRETARY/SHORTHAND-TYPIST seeks re-engagement with Architect. Please write Box 691.

For Sale

Four lines or under, 5s.; each additional line, 1s. 6d.

CREOSOTE or Tar; 40 galls., 55s. delivered; free barrels. Frank Coopers, Canterbury. 609

LONDON Suburban Architects' and Surveyors' practice for sale owing to death of Principal; offers excellent opportunity to Architect desiring to take over sound business, old established and with work in hand, under management; lease on offices; in good condition; reasonable price will be accepted. Refer in first place to Selby, 6, Ingoldsby Mansions, Avonmore Road, London, W.14. 706

Miscellaneous

Four lines or under, 5s.; each additional line, 1s. 6d.

A. J. BINNS, LTD., specialists in the supply and fixing of all types of fencing, tubular guard rail, factory partitions and gates. 99-107, St. Pauls Road, N.1. Canonbury 2061.

WANTED—One set of "Arts Et Matiers Graphiques." Please reply to Box. 5.

"CAN I HELP YOU?" I have on my staff Architectural and Civil Engineering Draughtsmen, Building, Estimating, Land, Measuring and Quantity Surveyors. Write C. F. Rumble, 2/51, Whitehall, S.W.1. Tel.: Whitehall 8514.

WANTED—Complete set of "Typography." Box 487.

DUPLICATING—Shorthand—Typing. — Speedy and expert attention. Park Secretarial Services, 41a, Kentish Town Road, N.W.1. Gulliver 1275. 570

EXHIBITION OF SCULPTURE, by L. Peri; architecturally designed in concrete. Archer Gallery, 303, Westbourne Grove, W.11. Till 27th April, 10 a.m. to 6 p.m., including Sundays. 639

CENTRAL HEATING OIL BURNERS.—Insist on the British-made Parwinae—no smoking, clean, trouble free; no waiting for coal or coke deliveries; no embargo now. Write at once to Parker, Winder & Achurch, Ltd., Makers, 90, Broad Street, Birmingham, 1.

THE Commonwealth Experimental Building Station, Australia, would be glad to receive Manufacturer's Trade Catalogues and Literature on Building Materials, etc., which should be addressed to the above, at Room 608, Australia House, Strand, W.C.2. 707

WANTED—Whole series of separate bound volumes of "The Architects' Journal" Library of Planned Information. Bingham, Lloyds Bank House, Plympton, Plymouth. 697

Educational Announcements

Four lines or under, 5s.; each additional line, 1s. 6d.

R.I.B.A. QUALIFYING EXAMINATIONS. Mr. C. W. Box, F.R.I.B.A., M.R.San.I. Courses of Correspondence and Personal to Studio, 115, Gower St., London, W.C.1. (Tel.: Euston 3906)

R. I.B.A. and T.P. INST. EXAMS. Private Courses of Tuition by correspondence arranged by Mr. L. Stuart Stanley, M.A., F.R.I.B.A., M.T.P.I. Tutor, 212, Euston Road, N.W.1. Tel.: EUS. 7766.

AMERICAN ARCHITECTURE THE ARCHITECTURAL FORUM

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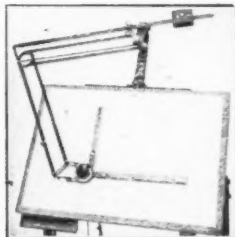
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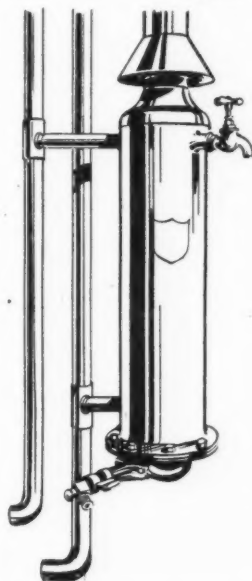
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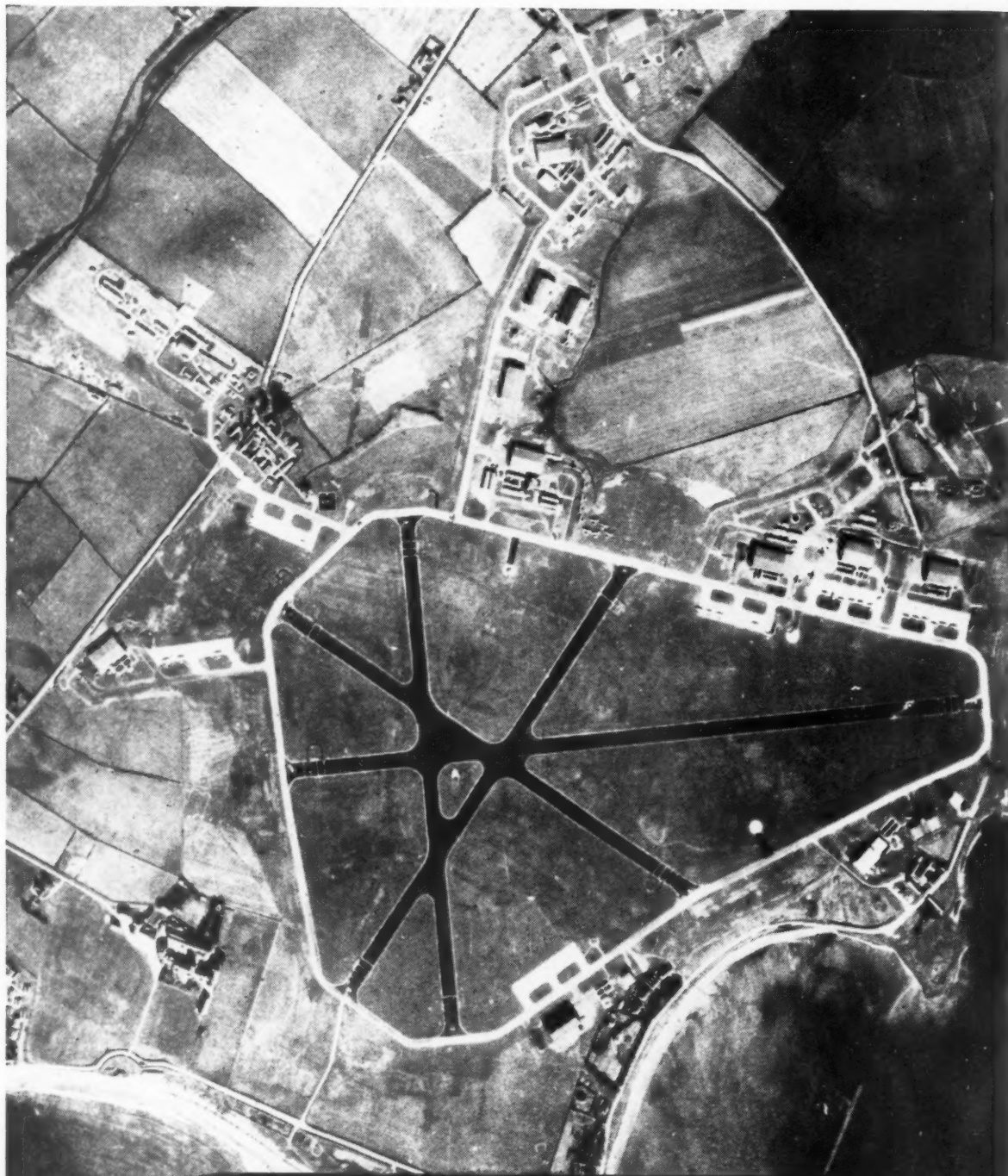
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