## ARCHI



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contents

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

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Architectural Appointments Wanted Vacant and

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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.

mentioned	the word LONDON is implicit in the address.
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.
ICE ICW IEE IES IGE IHVE	Institution of Civil Engineers. Great George Street, S.W.1.  Institute of Clayworkers. 4, Vernon Place, W.C.1.  Institution of Electrical Engineers. Savoy Place, W.C.2.  Institution of Electrical Engineers. Savoy Place, W.C.2.  Illuminating Engineering Society. 32, Victoria Street, S.W.1.  Institution of Gas Engineers. 1, Grosvenor Place, S.W.1.  Sloane 3158  Whitehall 4577  Chancery 6258  Temple Bar 7676  Abbey 5215  Institution of Heating and Ventilating Engineers. 72/74, Victoria Street, S.W.1.
IIBD	Victoria 0146/7 Incorporated Institute of British Decorators. Drayton House, Gordon Street,
ILA IOB IRA ISE LIDC	Institute of Landscape Architects. 12, Gower Street, W.C.1. Museum 1783 Institute of Builders. 48, Bedford Square, W.C.1. Museum 7197 Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172 Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128-29 Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1. Whitehall 7264
LMBA MARS MOA MOE MOH MOLNS MOS MOT MOTCP	London Master Builders' Association. 47, Bedford Square, W.C.1. Museum 3891 MARS Group (English Branch of CIAM). 46, Sheffield Terrace, W.8. Park 7678 Ministry of Agriculture and Fisheries, 55, Whitehall, S.W.1. Whitehall 3400 Ministry of Education. Belgrave Square, S.W.1. Whitehall 4300 Ministry of Labour and National Service. St. James's Square, S.W.1. Whitehall 6200 Ministry of Supply. Shell Mex House, Victoria Embankment, W.C. Gerrard 6933 Ministry of Transport. Berkeley Square House, Berkeley Square, W.1. Abbey 7711 Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1. Whitehall 8411
MOW NAMMC	Ministry of Works. Lambeth Bridge House, S.E.1. Reliance 7611 Natural Asphalte Mine-Owners and Manufacturers Council.  94, Petty France, S.W.1. Abbey 1010
NAS NBR NCBMP	National Association of Shopfitters. 9, Victoria Street, S.W.1. Abbey 5277/8 National Buildings Record. 37, Onslow Gardens, S.W.7. Kensington 8161 National Council of Building Material Producers. 2, Caxton Street, S.W.1.
NFBTE	National Federation of Building Trades Employers. 82, New Cavendias Street,
NFBTO	W.1. Langham 4041 National Federation of Building Trades Operatives, Federal House, 20A, Cedars Road, Clapham, S.W.4.
NFHS NHBRC	National Federation of Housing Societies. 13, Suffolk St., S.W.1. Whitehall 2881/2/3 National House Builders Registration Council. 82, New Cavendish Street, W.1.
NHTPC	National Housing and Town Planning Council. 41, Russell Square, W.C.1.  Museum 1264
NPL NRIAD	National Physical Laboratory. Head Office, Teddington. Molesey 1380 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.I. 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 PWB	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 7245 Post War Building, Directorate of. Ministry of Works, Lambeth Bridge House, S.E.1. Reliance 7611
RCA RIAS	Reinforced Concrete Association. 94, Petty France, S.W.1. Whitehall 9936 Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. Edinburgh 20396
RIBA RICS RFAC RS RSA RSI RIB SBPM SCR	Royal Institute of British Architects. 66, Portland Place, W.1.  Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1.Whitehall5322  Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1.  Royal Society. Burlington House, Piccadilly, W.1.  Royal Society of Arts. 6, John Adam Street, W.C.2.  Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.  Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.  Society of British Paint Manufacturers. 20, Piccadilly, London, W.1. Regent 6347  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 SIA	Structural Insulation Association. 14, Moorgate, London, E.C.2. Central 4444 Society of Industrial Artists. Room 243, Empire House, St. Martin's-le-Grand, E.C.1. Metropolitan 8344
SNTPC SPAB	Scottish National Town Planning Council. 11, Drumsheugh Gardens, Edinburgh, 3. Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.
TCPA	Holborn-2646 Town and Country Planning Association 28 King Street Covent Garden W.C.2

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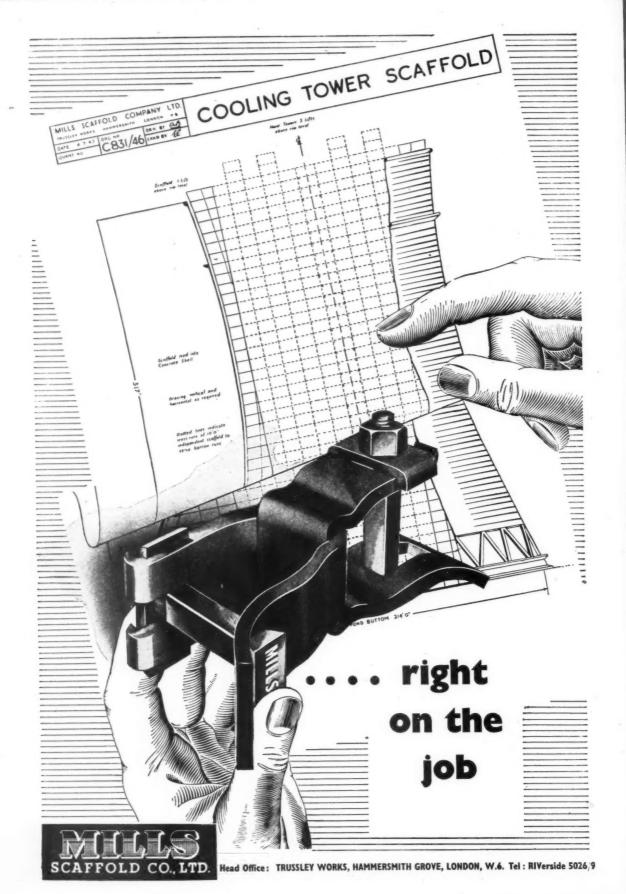
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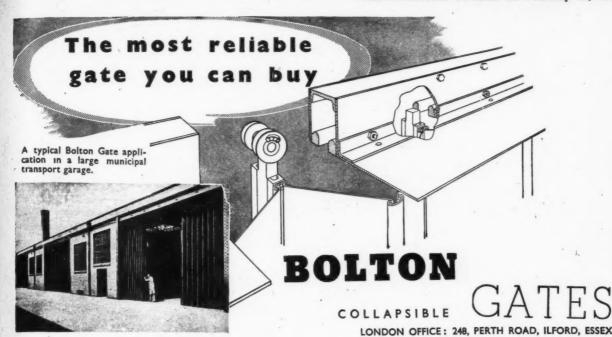
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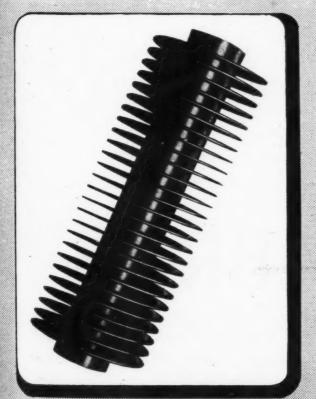
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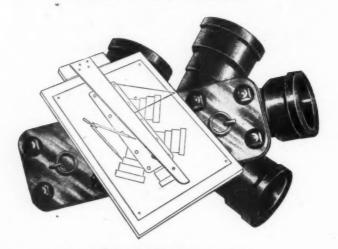
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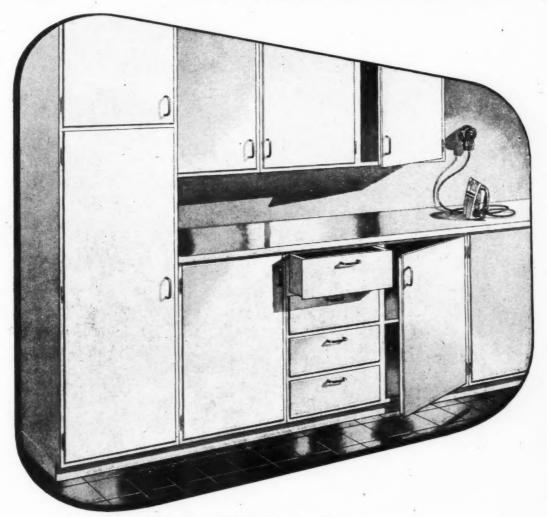
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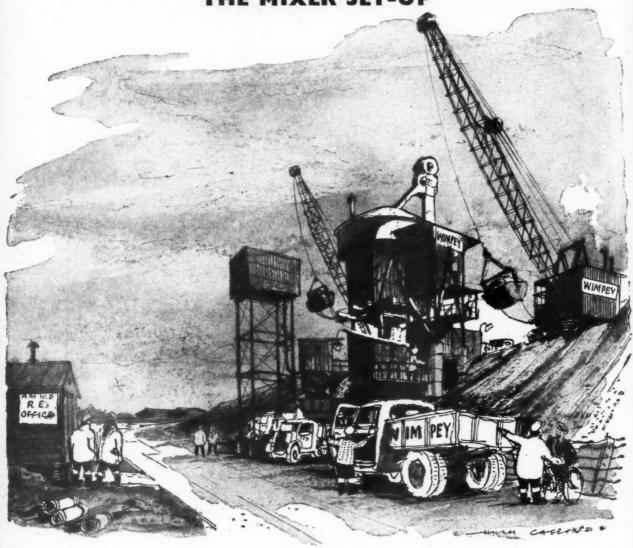
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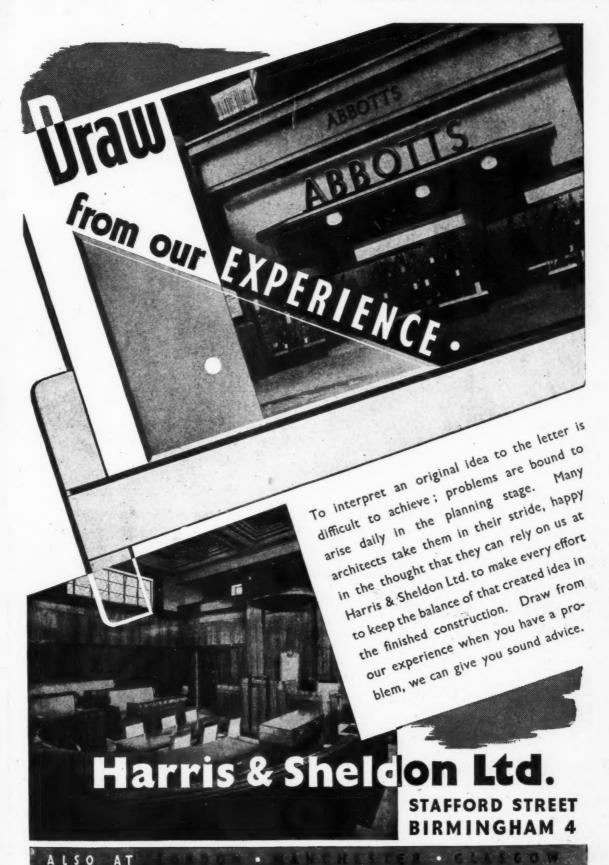


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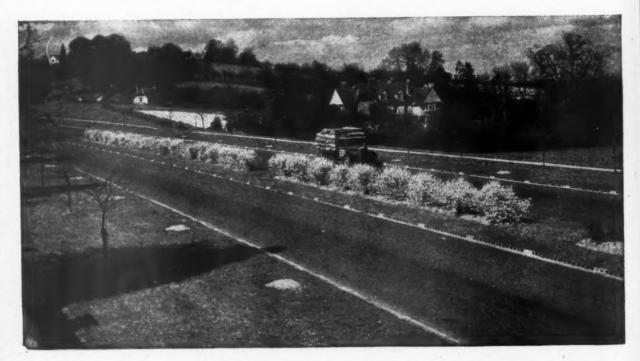
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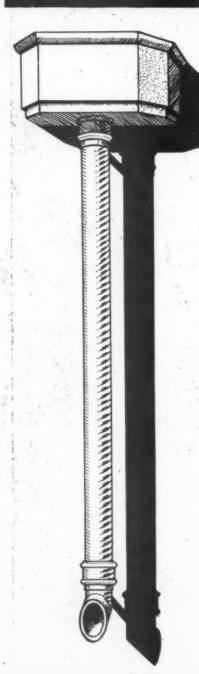
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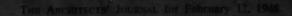


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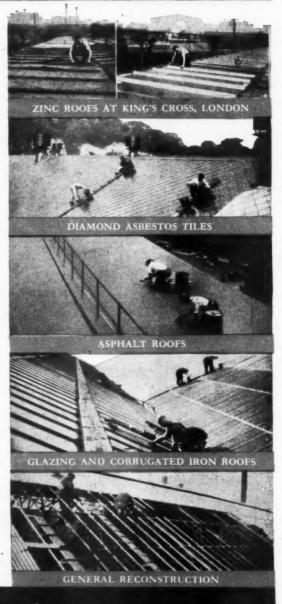
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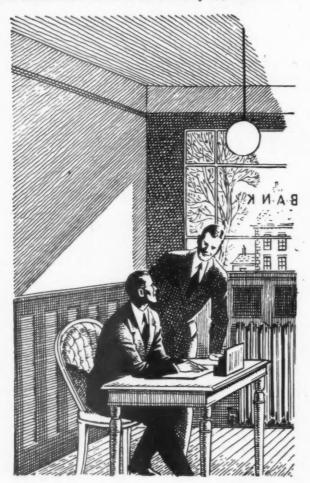
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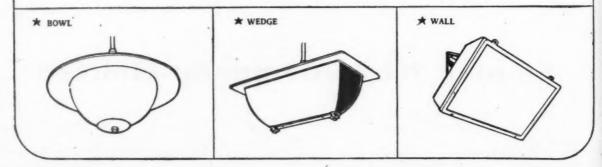
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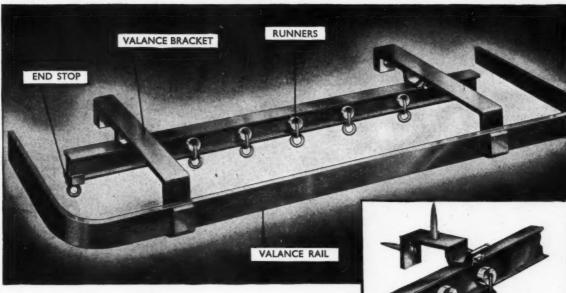
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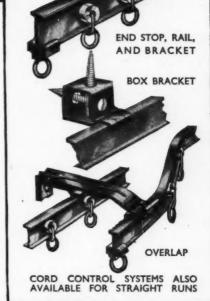
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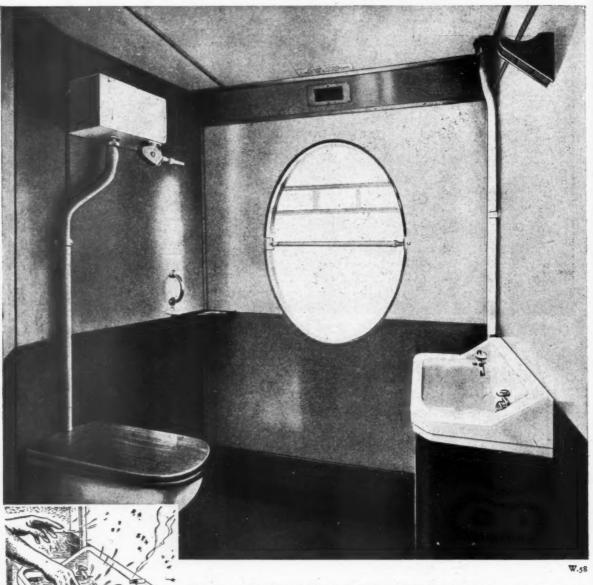
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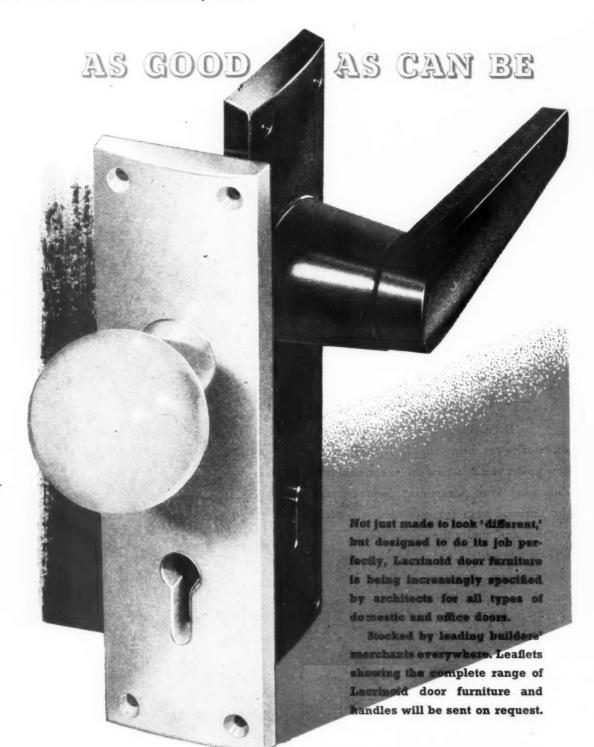
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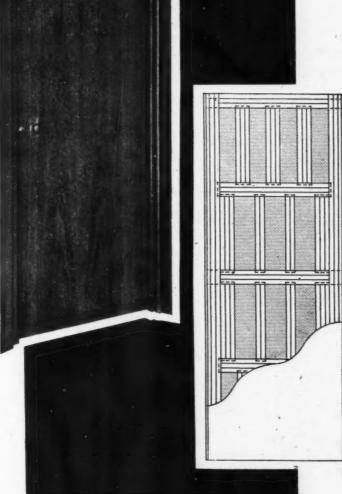
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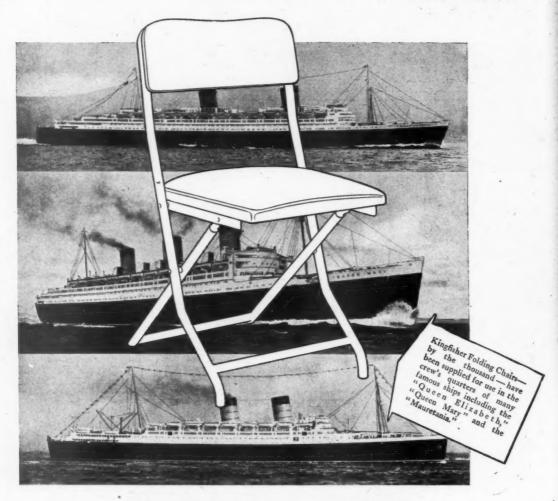
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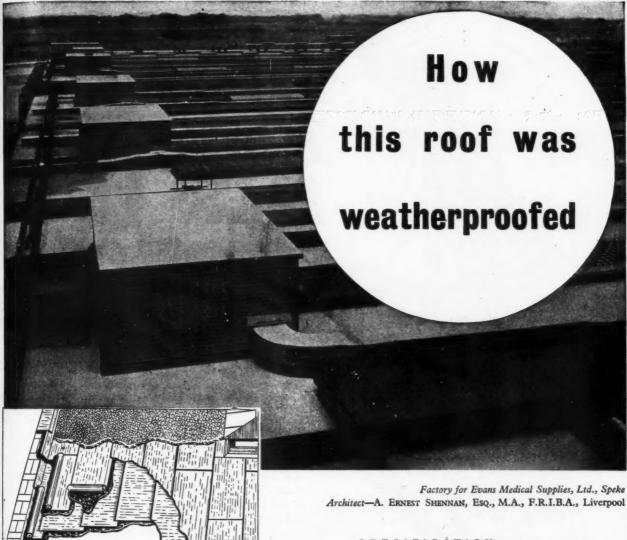


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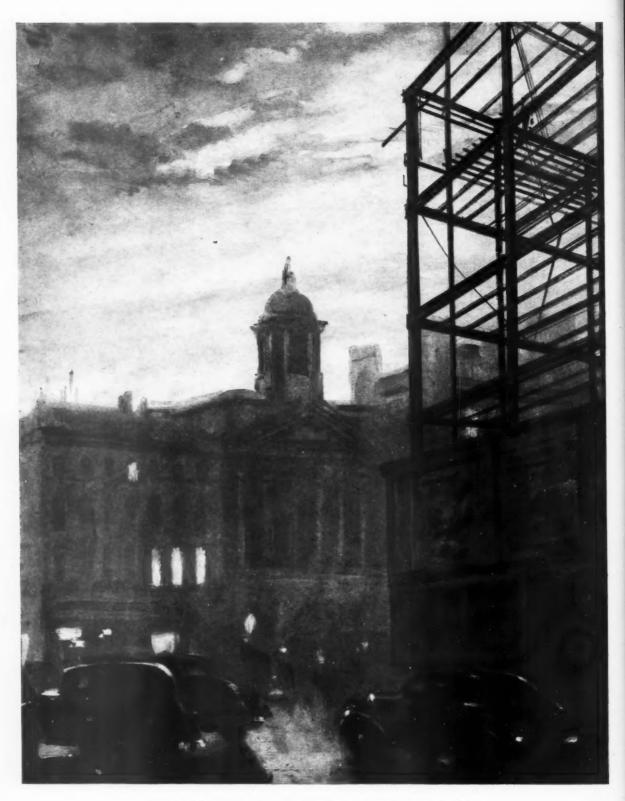


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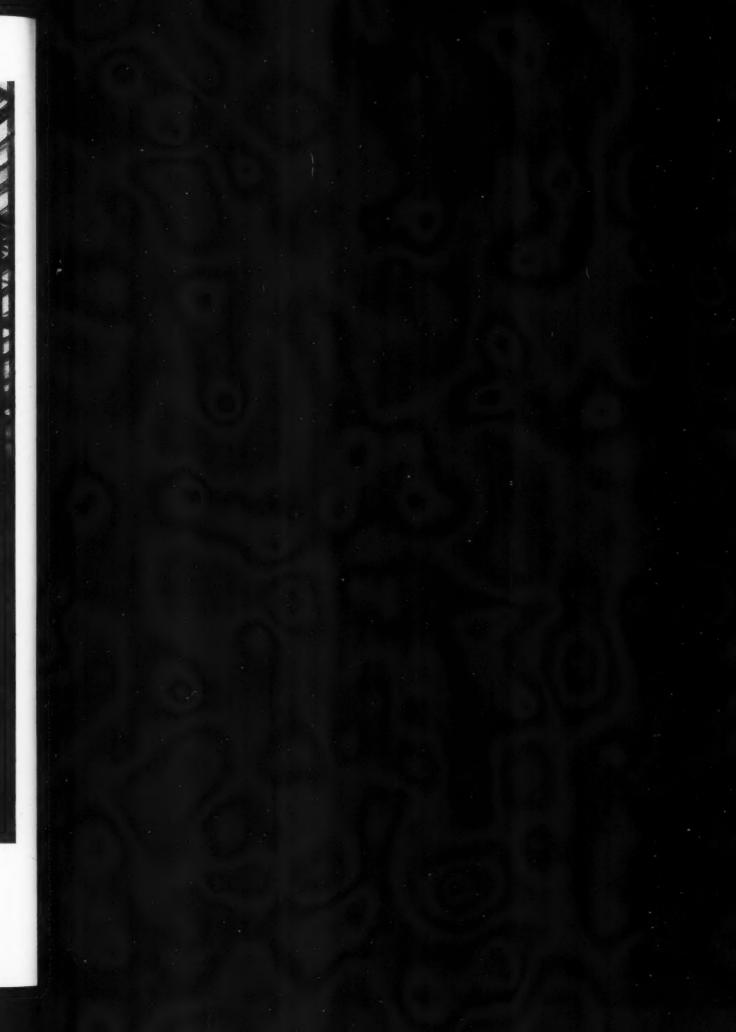
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order." Subscription rates: by post in the U.K. or abroad, £1 15s. od. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra. Goods advertised in the JOURNAL and made of raw material now in short supply, are not necessarily available for export.

# DIARY FOR FEBRUARY MARCH AND APRIL

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.

BLACKBURN. Inaugural Meeting, East Lancashire Branch, IRA. The Branch will cover the towns of Blackburn, Burnley, Preston, Accrington, Darwen and Bolton. At the White Bull Hotel, Blackburn. (Sponsor, IRA.)

LONDON. Exhibition of Soviet Architecture. At the RIBA, 66, Portland Place, W.1. (Sponsor, the Society for Cultural Relations with the USSR.) MAR. 3

Dr. F. G. Thomas. Structural Engineering Research at the Building Research Station. At the ISE, 11, Upper Belgrave Street, S.W.I. (Sponsor, ISE.) 6 p.m.

Industrial Design—Whose Responsibility? A Symposium. Speakers: The Hon. Josiah Wedgewood, F. C. Hooper, Miss M. Tennant, At the RSA, John Adam Street, W.C.2. (Sponsor, DIA.) Buffet Luncheon 3s. 12.30 p.m. to 2.30 p.m. Feb. 12

MOH Exhibition. Housing Design and Layout. Much of the material displayed at the Building Trades Exhibition at Olympia by MOH will be on view, including the plan for high density development. At the Housing Centre, 13, Suffolk Street, S.W.I. (Sponsor, MOH.)

Hemel Hempstead New Town Exhibition. At the Planning Centre, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 10 a.m. to 6.30 p.m., Mondays to Fridays. UNTIL FEB. 17

Sir Alfred Clapham. The Evolution of the Funeral Monument during the Middle Ages. The Courtauld Institute of Art. 20, Portman Square, W.1. (Sponsor, The Courtauld Institute.) 5.30 p.m. FEB. 17

B. Boxall. Airoh Aluminium Houses. At the Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, HC.) Buffet lunch, 12.45 p.m.-1.15 p.m., 2s. 6d.; lecture, 1.15 p.m.-2.15 p.m., 6d.

R. L. Reiss. The Town and Country Planning Act, 1947: The Effect of the Transfer of Powers. At the Planning Centre, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 6.15 p.m. FEB. 18

Design in Scandinavia. Travel reports by four prize-winners in the RSA's Industrial Art Bursaries Competition. At the RSA, John Adam Street, Adelphi, W.C.2. (Sponsor, RSA.) 2.30 p.m.

Town Heating (i) and (ii). A symposium of papers by engineers. At the RSA, John

Adam Street, Adelphi, W.C.2. (Sponsor, RSA.) 2.30 p.m. Feb. 18 and 25

Kenneth O. Male. Survey and the Development Plan Within Three Years. At the Livingstone Hall, Broadway, S.W.1. (Sponsor, TPI.) 5.30 p.m. FEB. 19

Exhibition of Art, Chiefly from the Dominions of India and Pakistan. At the Royal Academy Galleries, Piccadilly. An exhibition of sculpture, painting, textiles, jewellery, furniture. 10-7. Sundays 2-7. Admission 1s. 6d.

UNTIL FEB. 29

Building Contractors' Plant. The Problems Associated with Its Use. A course of lecture discussions. Feb. 18, Howard V. Lobb, The Architect's View. Feb. 25, Norman E. Wates, The Contractor's View (ii). March 3, H. E. Hodgson, The Plant Manager's View (ii). March 10, A. G. Buck, The General Foreman's View (ii). At the LCC Brixton School of Building, Ferndale Road, S.W.4. 7.0 p.m. Wednesday evenings. UNTIL MAR. 10

MANCHESTER. P. O. Reece. Timber as an Engineering Material. At the Institution of Constructional Engineers, (Sponsor, TDA.) 7 p.m. FEB. 13

Gordon Russell. Developments in Furnishing. At Manchester City Art Gallery. (Sponsor, DIA.) 1.15 p.m. FEB. 19

OXFORD. R. T. Walters. Recent Developments in the Design of Timber Structures. Oxfordshire Society of Architects. (Sponsor, TDA.) 7 p.m. FEB. 12

### COMPETITIONS

Art Competition and Exhibition of the XIV Olympiad, London, 1948. Designs eligible: (a) Town planning, (b) Architectural designs. Entries will be limited to designs for sports grounds and to buildings intended for use in connection with sport only, and must be received between May 1 and June 11, 1948. Full particulars from the Organising Committee for the XIV Olympiad, London, 1948, 105, Victoria Street, London, S.W.1.

Royal National Eisteddfod of Wales Architectural Competitions, 1948. Competition 192 for a county college. Competition 193 for a neighbourhood unit layout. Assessors: C. F. Bates and T. Alwyn Lloyd. Premiums: £50 in each case. Conditions and entry forms from Rev. W. J. Samuel, General Secretary, 38, Dunraven Place, Bridgend. Entries to be submitted between June 5 and 14.

# NEWS

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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.

The RIBA Council has decided to amend the competition for the TITE PRIZE. The revised arrangements will come into operation this year (1948) and are as follows: Instead of a Preliminary en-loge Competition and a Final en-loge Competition being conducted as in the past, only one en-loge Competition will be held. Competitors will be furnished with an outline programme for the Competition, one month before the enloge Competition is held, and at the opening of the en-loge Competition which will be held in July annually, they will be handed the complete programme. The enloge Competition will be of 12 hours' duration, at the conclusion of which competitors will be required to hand in their schemes prepared en-loge, retaining a tracing of their drawings for their own use.

prepared en-loge, retaining a tracing of their drawings for their own use.

Competitors will be notified within two weeks whether or not they will be permitted to proceed with their final drawings. Competitors who are permitted to proceed with their final drawings will be allowed a period of six weeks from the date of the receipt of this notification to develop their final drawings.

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## From AN ARCHITECT'S Commonplace Book

DESIGN FOR DINERS. [From The Trains We Loved, by Hamilton Ellis (Allen and Unwin).] But the most important contribution to dining-car services, after the original Pullman service on the Great Northern, was that of James Holden on the Great Eastern Railway in 1891. For its Harwich Continental service, this company put on a first and third-class dining-car train, which was also notable in that it was one of the first two sets of coaches in the country, apart from Pullmans, to be interconnected by covered gangways. There was a four-compartment first-class side-corridor coach, then a dining-saloon to seat eighteen with a kitchen at one end, and to complete the set, a third-class side-corridor coach with five compartments, one of which had a table and tip-up seats. All were sixwheelers; the middle vehicle had the sides bulged out to give greater elbow room to the hungry diners who had survived the crossing from Holland without permanent prostration, and a clerestory roof. Cooking and lighting were by oil gas. If not an immensely imposing sort of train, it was nevertheless a very noteworthy one and provides a landmark in the history of passenger amenities. The short-bodied dining saloons were later greatly enlarged and mounted on six-wheel bogies, in which form they gave useful service for many years. A curiosity about the third class was that its "ladies only" compartment had lavatory access only, and was cut off from the main corridor.

The Ministry of Education has despatched by air to America a selection of over 100 drawings, plans and photographs of recent or contemplated SCHOOL BUILDINGS. They will form part of an exhibition on School Planning and Design which is to be a feature of this year's annual meeting of the American Association of School Administrators arranged for February 21-26, at Atlantic City. It is expected that 10,000 leading American educators will attend the meeting. Other countries have been invited to make similar contributions to the exhibition. The British selection was made from exhibits at the recent Conference on School Planning and Design at the RIBA in London.

that many of the Londoners who hope soon to be pioneer "settlers" in the New Towns will be able to see and discuss the plans. Lord Reith, Chairman of the Hemel Hempstead Development Corporation, made a speech of thanks to the Minister for opening the Exhibition, and the chair was taken by Lord Harmsworth, Chairman of the Town and Country Planning Association. Besides showing in detail the proposals of Mr. G. A. Jellicoe, F.R.I.B.A., M.T.P.I., P.I.L.A., for the new town both in plan and model form, the exhibition contains a wealth of pictorial material on the historical growth of Hemel Hempstead, on the nature of the present community, and on the problems attendant on the creation of a New Town. The Exhibition will be open from 10 a.m. to 6.30 p.m. every day except Saturday and Sunday, up to February 17.

The latest developments in PAINT SPRAYING which are designed to give a finish of good quality to a wide range of British exports, including ships, aircraft, motor cars, office and kitchen equipment and furniture, are shown in an exhibition which was opened by Mr. A. G. Bottomley, Secretary for Overseas Trade, at the Charing Cross Hotel. The exhibition will be taken on a tour of manufacturing centres.

Cornell University, New York, is offering a SCHOLARSHIP OF £375 to bring a foreign architectural student to the University for one year's study. Given by an anonymous donor, it is hoped that the scholarship will further international understanding. For further information letters should be addressed to the Dean, College of Architecture, Cornell University, lthaca, New York.

Mr. Lewis Silkin, Minister of Town and Country Planning, opened the HEMEL HEMP-STEAD EXHIBITION at the Planning Centre on Thursday, Feb. 5. This exhibition aroused widespread comment when it was shown locally at Hemel Hempstead. By arranging a further twelvedays showing at its headquarters, the Town and Country Planning Association hopes

The Ministry of Health has issued a revised and expanded list of RECOMMENDED SOLID FUEL APPLIANCES.

The supplies of improved types are now equal to the demand for new houses, and the Minister hopes that County Councils will specify recommended appliances, provided that manufacturers can quote a date for delivery convenient for the Council's schemes. Guidance on proper installation

is given in information sheets in a bulletin issued by the Ministry of Fuel and Power called "Gravity Warm Air System," price 1s. 6d. With further issues, information on performance and most suitable fuel will be given. This is to assist the choice of appliances in relation to the dwelling and area in which they are to be installed.

THE CITY AND BOROUGH ARCHITECTS' SOCIETY was inaugurated at a meeting held at the RIBA on January 30.

A Provisional Committee was established and the following officers were elected:—Chairman: Mr. Leonard C. Howitt, B.ARCH. (L'POOL), F.R.I.B.A., City Architect of Manchester. Vice-Chairman: Mr. R. A. H. Livett, O.B.E., A.R.I.B.A., City Architect of Leeds. Secretary: Mr. Johnson Biackett, F.R.I.B.A., Borough Architect of Newport, Mon. Assistant Secretary: Mr. Denis Winston, M.A., B.ARCH. (L'POOL), F.R.I.B.A., Borough Architect of Southampton. Treasurer: Mr. George Kenyon, DIP.ARCH. (L'POOL), A.R.I.B.A., City Architect of Newcastle-upon-Tyne. The Society consists of whole-time chief officers designated as City Architects or Borough Architects and whose predominant duties are in either of those capacities. It will fulfil for Municipal chief architects the functions already per-



Students of the Glasgow School of Architecture who were awarded RIBA prizes: left, H. A. Wheeler, the Grissell Gold Medal; centre, J. E. Murray, A.R.I.B.A., the Soane Medallion; right, R. De Ath, Hon. Mention for the Tite Prize. The Tite Prize was won by P. G. Beresford, a student of the School last year.



# Professor Reilly's Favourite Work

Sir Charles Reilly, whose death was recorded in the JOURNAL last week, referred in his autobiography to the Church of St. Barnabas, Dalston, built in 1910, as "the

building I should like to be remembered by, if any." Above is the simple, dignified brick interior. More illustrations of Sir Charles Reilly's early work are on page 148.

formed for their County colleagues by the County Architects' Society with which it will co-operate on all matters of mutual concern. Its objects, which are similar to those of the County Architects' Society, are as follows:—(a) To discuss all architectural and allied matters affecting. County Borough allied matters affecting County Borough Councils and Borough Councils served by

members of the Society. (b) To arrange for the collation of information and to provide a means whereby the knowledge and experience of its members can be made available to its own members and/or their Councils. (c) To promote discussion on professional, administrative, technical, and other matters of concern to the Society, and to afford help to members in their duties and problems. The Society will collaborate with the RIBA to the maximum degree, and one of its aims is to extend the influence of the profession into important circles concerned with local government in which the interest of architecture death interest have highered of architects and architecture have hitherto been without representation.

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At the annual general meeting of the NATIONAL FEDERATION OF BUILDING TRADES EMPLOYERS on Jan. 29, MR. FRANKLIN M. SLEEMAN, director of M. T. Sleeman & Sons of Exeter, was elected President in succession to Mr. E. J. Smith. Mr. W. E. Fishburn (Newcastle-on-Tyne), Mr. J. S. Galbraith (London), Mr. R. O. Lloyd, O.B.E. (Liverpool) and Mr. Norman Longley (Crawley) were elected Vice-Presidents, and Mr. G. W. Buchanan, C.B.E., was re-elected Honorary Treasurer. Mr. F. M. Sleeman is a member of the Council of the Exeter Chamber of Commerce, and associated with two building firms who have care ated with two building firms who have carried out many important contracts in the West Country.

Following the completion of a new dock at CAPE TOWN, an area of 500 ACRES has been reclaimed from the Atlantic Ocean. These 500 acres are a welcome addition to the city centre which suffers from congestion between the narrow confines of the sea and table mountain. A model of the fore-shore plan has been prepared, and is on display to the public at South Africa House, Trafalgar Square.

AIR PHOTOGRAPHY is being used to assist Town Planning in Toronto, Canada. Two converted Anson trainer aircraft were used to photograph an area of 250 square miles. The photographs are being enlarged to a scale of 400 feet to one inch, and the completed aerial picture of the town will be 529 square feet. The Toronto City Planning Board greatly value this technique owing to the up-to-date knowledge it provides of the exact location and extent of wooded areas and topographical details.



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Mr. Franklin M. Sleeman, who has been President the NFBTE. of

### BUILDING FOR TRAVELLERS

C INCE the British railway system came under public ownership on New Year's Day, nothing has been announced about the future of the architectural departments of the former Big Four companies. The five members of the British Transport Commission, who will control the railway on behalf of the State, are said to have taken over "a very poor bag of physical assets." It is true that much of the equipment and buildings is in urgent need of replacement, but some of the railway companies have already taken the first steps to ensure that re-equipment, at least in so far as it concerns buildings, is on proper lines. In particular, the LMS railway has shown a great willingness to allow its architects to investigate new paths and develop new solutions for the building requirements of rail transport.

There is no doubt that as labour and materials are made available a great deal of the railways' "built domain" will be replaced. The advice of those who have already worked so successfully towards the solution of railway architectural problems should be given great weight and it is to be hoped that under the new regime architects will have a proper status. It is also to be hoped that flexibility will be maintained in handling so vast a building programme, and that State control will not mean an undesirable degree of centralization.

While there is much that must inevitably be torn down and replaced, there is much in our railway architecture that is worthy of preservation.\* The comfort and ease of the passenger and the facility with which the railway employees can carry out their tasks are primary needs, and in many cases the satisfaction of these needs can only be accomplished by a clean sweep, accompanied by the disappearance of many favourite landmarks. But some of our stations are architectural monuments of the first importance, and every effort should be made to retain their character. It is the smaller provincial stations in particular that a new broom may be tempted to sweep somewhat too clean. There is no need for the market town to emulate the solemn grandeur of Milan, nor, indeed, the flash smartness of a Charing Cross Road snack bar. The present gloomy waiting rooms, with their horse-hair stuffed seats, smoking grates and grimy windows, are certainly lacking in comfort and are undoubtedly unhygienic. Cleaning them can do nothing but good. But they and the buildings containing them often have a human quality which inevitably eludes the designer who thinks in terms of replacing them by coloured glass and chromium plate.

The English pub has lost much of its individual character; let not the railway station be deprived of it too. Good vigorous lettering, for example, is one of the glories of the traditional railway station which must not be swept away; nor must the fretted fringes of platform awnings, and there is even a case

See Christian Barnan's sensible remarks on improvement and preservation in his paper to the Institute of Transport, extracts from which are given on pages 153 to 155.

for the three-cylindered urns in the refreshment-rooms which, before rationing upset the balance, produced many a good strong brew. While the stale buns and leather sandwich have become a byword, the hard plaster and limed oak picked out in green, with jazz-patterned linoleum and green glazed counter-front, favoured by the improver are no fit substitute for the characterful architectural setting to which the railway traveller has been accustomed for a century. Preserving the latter need not handicap efficiency. Let us have trains that keep time, and separate circulation for incoming and outgoing passengers on platforms organized to prevent passengers being run down by porters' barrows, but let us keep what is good and valid in the architecture of railways and not destroy the irreplaceable in our enthusiasm for a new deal.



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

"THE PROF"

Personality is today a word discoloured and tasteless from misuse, but there is no other, I think, which can be used more aptly to describe the genius of Charles Reilly. Of those who knew him-and few men have treasured such a multitude of friends-there are none who have not been warmed by the glow of his enthusiasms nor stimulated by the vigour of his ideas. It was this warmth in personal contact which contributed so largely to his success as a teacher. At Liverpool he was always in the studios, energetic, ruthless, stormy, lighting sparks of imagination at every desk he passed, while even those who could not remember a word of his lectures will never forget the excitement those words aroused. Always a lover of drama both inside the theatre and out (he was one of the founders of the Liverpool Repertory Company and delighted equally in the more theatrical escapades of his students) he infected any activity in which he was concerned with the urgency and glamour of the footlights. In any walk of life such tireless enthusiasm is valuable. In the teaching of architecture it is beyond price.

Of the facts of his life the official obituaries have already told: of his first in Mechanical Sciences at Cambridge, taken in the intervals of talking politics with Keir Hardie; of his first view of Liverpool from the top of a lorry loaded with his competition drawings for the cathedral; of how he built the school up from 20 students to 200 and set up the first whole-time day course in the country; of how he won the support of Lord Leverhulme for his architectural projects and how he succeeded even in altering the unimaginative laws of America in favour of Liverpool students. No wonder every "Liverpool boy " carries with him his own treasury of Reilly memories: the famous Monday sketch designs-one was set for a courtesan's bed-which always found the Professor on the top of his merciless form; the occasion when all the staff resigned in protest at a Reilly decision, had their resignations calmly accepted, and then returned en masse, exasperated still but unable to resist the Professor's magnetism; the celebrated ceremonial procession to the Roman Catholic Cathedral with the Archbishop blessing the crowds from one window of the car and Reilly from the other—or does this story belong to Lutyens? It does not really matter; it might have been true of either, for each had the vivid personality that makes stories like these credible.

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There are hundreds of Reilly stories. some true, some legendary, most of them well known. One of my favourites is, I think, specially characteristic. When, two or three years before the war, Sir Stafford Cripps was forming his Socialist League in opposition to Mosley's blackshirts, the Professor supported him with his unfailing enthusiasm. A meeting was to be held in Brighton, but the local authorities would not allow it to be advertised. So the Professor set out for an evening walk, an eminently respectable figure in a wide-brimmed black hat, carrying an umbrella. To the tip of the umbrella was fixed a piece of chalk, and next day pavements and walls all over the town were found to bear the advice: "Come to Cripps's Meeting."

Most characteristic of all, perhaps, was the tireless support Reilly gave throughout his life to the cause of international friendship. A true world citizen, racial prejudice in any form was anathema to him, and many hundreds of refugees from political oppression found him an unfailing source of advice and practical help. He was never discouraged by the apathy of others in supporting what he believed to be right. As an example, as President of the Architectural Division of the SCR he worked hard in the uphill task of improving Anglo-Soviet relations, and his figure will be sadly



One of Sir Charles Reilly's own works; the 1914-18 War Memorial outside the transept entrance of Durham Cathedral.

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ks; the transept missed from the opening of the RIBA exhibition of Russian architecture next month, over which he was to have presided.

Those who visited him during the last few weeks in hospital found him as usual the centre of events. Propped up on the pillows, his faithful amanuensis on one side, a telephone on the other, the blankets covered with letters, newspapers, cuttings of notes, a sky blue knitted skull-cap on his head, he looked like some mediæval prelate-was it Maxwell Fry who once called him the St. Peter of the Architectural heaven? He phoned, he dictated, he wrote, he was interviewed, he received his constant stream of visitors. Clearly he had, as always, his finger on every pulse and in every pie. It was difficult to remember in the midst of such energetic activity, that he was a very sick man of 73.

A Memorial Service is to be held next Wednesday, February 18, at 12.30 p.m., at St. Martin in the Fields. It will be conducted by his old friend the Bishop of Chichester and will be a memorable and, I am sure, crowded occasion. Architects will, I know, like to be reminded of the Reilly Memorial and Medal Fund (contributions to A. G. S. Fidler, c/o Barclays Bank Ltd., 170, Fenchurch Street, E.C.3) which was a cause he had particularly at heart and which will commemorate so admirably his contributions to architecture.

### CONTEMPORARY ARTS

The organizing committee of the proposed Institute of Contemporary Arts were unfortunate in having to launch their appeal for funds to establish a British equivalent of New York's Museum of Modern Art at a time when few people have money to spare. But though for this reason it may be some while before the Institute is in being to the full extent visualized, things are not standing still. The committee is arranging quite a number of activities for the coming months, designed to raise money for the Institute and to arouse the interest of future members.

The first of these activities, an admirably chosen exhibition of painting and

sculpture entitled "Forty Years of Modern Art" opened this week at the new Academy Hall, underneath the Academy Cinema in Oxford Street. The pictures are all from British private collections and some of the leading collectors have lent important works. The quality maintained speaks well for the Institute's future and, to emphasize the Institute's simultaneous interest in all the arts, a couple of concerts are to be given in the hall during the exhibition (at one of which the audience will hear a piece by Stravinsky, never before performed) and a couple of poetry readings (at one of which T. S. Eliot will read his own work). Do not miss the welldesigned display illustrating the purpose of the Institute near the entrance.

### ANARCH HOLDS THE CURTAIN

I came away from the newly-opened Leyton - Harlow Town Planning Exhibition at Leyton Town Hall more encouraged by its good intentions than inspired by its contents. Leyton's interest in Harlow is, of course, that of the nucleus for the future satellite. It is admirable that an exhibition should have been planned for the Leyton public. It is admirable, too, that the Town Planning Committee should have set about their task with such evident determination and enthusiasm, and that a competent plan should have been evolved and is about to be pushed for-

But a good cake is more than the sum of the right ingredients mixed in the right quantities, and in contrast to Gibberd's Harlow plan the Leyton plan did not seem to be the work of the lightest or most imaginative of hands.

The attitude to the plan of the local public was, it appeared, akin to that of visitors to Madame Tussaud's—if there's one thing more remote than 50 years ago it is 50 years ahead—but the film show of planning documentaries, which formed the second half of the afternoon's programme, was received in that rapt silence which indicates that a strange and large idea is being newly absorbed.

ASTRAGAL

# LETTERS

Brian G. W. Blackwood, F.R.S.A.

A. E. Rogers, B.Arch., A.R.I.B.A.

Norman J. Wigley

### Sir Charles Reilly and LCC Housing

SIR,—The Chairman of the LCC Housing Committee writing to the JOURNAL on Prof. Sir Charles Reilly's article will surely not gain much sympathy from the architectural profession.

Whether, as he claims, the designs were prepared under the direction of the Architect to the LCC before h.s replacement by a Valuer, is to my mind immaterial. Professor Reilly's remarks concerning the designs hold good, whoever the person responsible for them may be. To anyone with even the slightest amount of asthetic sense, they are obviously what the Professor said: "long cliffs of artificial stone," and it makes one wonder if the LCC Housing Committee has ever even heard of such places as Highpoint flats. Highgate, or Kensal House, Ladbroke Grove, erected way back in the 1930's.

Reigate

BRIAN G. W. BLACKWOOD

### Canteen for a Cardiff Factory

SIR,—Although the owners of the Cardiff factory, illustrated in your issue for January 29, seem to have instructed their architects to ignore the present tendency for levelling up (or down) the classes, by providing four separate rooms for works canteen, staff canteen, senior staff dining room and private dining room, I am glad to see that the architects have attempted to redress the balance by placing dustbins under the private dining room window and a flower border in front of the works canteen.

Haslemere

A. E. ROGERS

### Aluminium Schools

Sir.—The cessation of prefabrication for housing purposes not only reflects lack of Government confidence in the long term public acceptance of any alternative form of construction to brick—but also the impossibility of sustaining such alternatives in face of the substantial disparity in first cost conclusively proved to be heavily in favour of traditional building methods. In these circumstances one felt assured that experiments on similar lines had ceased and that the Government has accepted, belatedly, the wisdom of dispensing with prefabrication on its proved merits and demerits.

It is disturbing, therefore, to read of the Minister of Education's interest (and of Local Authorities) in the possible provision of Aluminium Schools, prototypes of which could hardly have reached their present stage without the knowledge and approbation of his department.

"Capital Investment 1948" took account of the necessary increase in the Educational Building Programme without mention of the need for prefabrication, and it is to be hoped that the proposed further application of engineering facilities (surely with alternative export possibilities) to Aluminium Schools will undergo reconsideration as unnecessary, and a prejudicial duplication of services and material already—available to cover requirements in traditional form.

It is not generally appreciated that the favourable picture presented in the White Paper of post war Capital Investment over

### BUILDINGS BY SIR CHARLES REILLY





The late Professor Reilly is known more for the principles he taught than for his buildings, but in his early days he was active as a designer and on this page some illustrations are given of his less known earlier works. How well he was able to move with the times is shown by the contrast between these and his best known London work, the Peter Jones store, which he helped to design as consultant architect to the John Lewis Partnership. Top: the elevation

facing Belvedere Road of the design which Professor Reilly entered for the London County Hall Competition in 1907. Centre: a design dated 1910 for the building of a new chancel for Wavertree Church, Liverpool. Below, left: Professor Reilly's first scheme for The Students Union, University of Liverpool. This design was considerably modified, and the next illustration shows the lobby of the completed huilding. building.





pre-war does not apply (even after adjusting prices) to the volume of permanent brick construction, as the following figures construction, show:

Pre War 1947

Total Capital
Investment £300 millions £1300 millions
Bricks consumed 8,000 millions 4,000 millions 4,500 millions

The Government's policy in deflating this part of the Capital Programme is dangerous in that contraction of activity indiscrimin-ately distributed and effected by withdrawal and refusal of licences may disrupt the present labour structure of the traditional Building Industry as well as its attendant Material Suppliers—further it must retard by many years its final recovery to pre-war capacity which on comparative brick concapacity winch on comparative blick con-sumption was nearly twice the volume achieved in 1946 or 1947. Any added diver-sions, therefore, from brick construction merely accentuate the ultimate ill effects of present Government Policy in relation thereto.

NORMAN J. WIGLEY Secretary, Midland Federation of Brick and Tile Manufacturers. Birmingham

### Parliament In

Illuminating remark by Mr. Emrys-Hughes (Lab., S. Ayrshire) during the debate in the Commons last week on the British film industry:

"Some people in Scotland go to the cinema for shelter. The housing conditions and amenities are bad. . . . it's either the pub or the cinema.

Underlining the acute and tragic shortage of housing accommodation which, of course is countrywide and not confined to Scotland, members were busy at question time, tackling the responsible Ministers on various aspects of the problem.

Mr. J. H. Hoy, another Scots' member, was concerned about a bottleneck in materials which was holding up the construction of

which was holding up the construction of a considerable number of houses in Edinburgh. An acute shortage of sheet glass and plaster was the trouble, he explained.

The Minister of Works, Mr. C. W. Key, said that supplies of sheet glass had been increased during the past two months and had arranged for a further increase. The shortage of plaster was due to a temporary breakdown in a Glasgow plaster factory. English manufacturers were sending additional supplies to Scotland.

An English member, Sir Wavell Wakefield.

An English member, Sir Wavell Wakefield (Con., Marylebone) wanted to know for what purpose the Great Central Hotel in his constituency was now being used and whether accommodation was being pro

vided in the building for railway workers.
The Minister of Transport, Mr. Alfred Barnes, said that he was informed by the British Transport Commission that rooms of the second and third floors were being use as offices by the Railway Executive, but n

as offices by the Railway Executive, but narilway workers were living there.

The reply did not satisfy Sir Wavell, who demanded: "Is the Minister aware the owing to the grave housing shortage! Marylebone there is very great resentment at this building being used for offices and the satisfies the satisfies of the satisf not for housing accommodation, as it was originally stated it would be?"

Mr. Barnes: "Steps are being taken already and other premises had been acquired, but

it was very desirable that these executive should be sitting in existing requisitions properties so that other buildings did no have to be requisitioned."

Finally, some news from Wales, when industrial building, at least, appears to have

been prospering.

Mr. Harold Wilson, President of the Boar of Trade, told a questioner that 74 new factories and extensions of 5,000 sq. ft. an over were completed during the period Jun. 30, 1945, to December 31, 1947.

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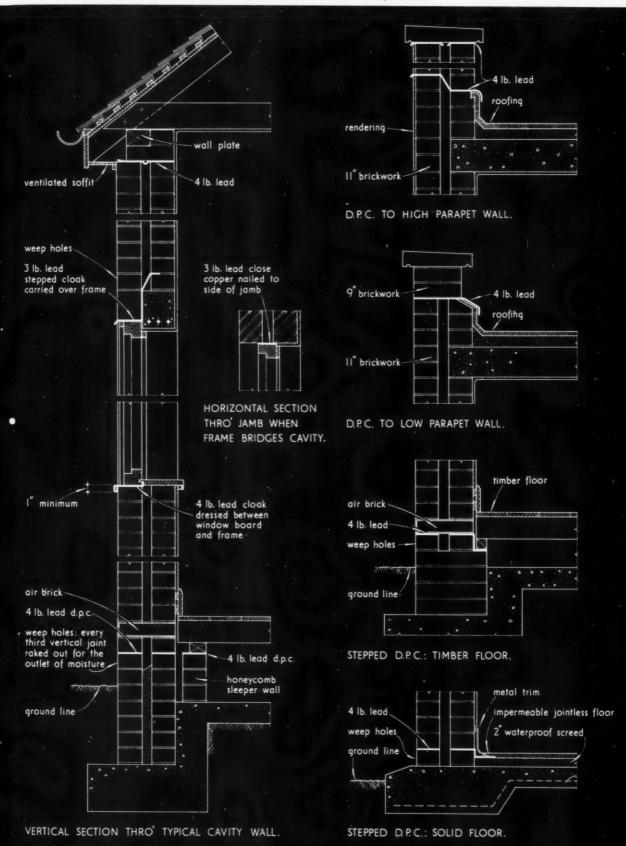
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The Architects' Journal Library of Information Sheets 39. Editor: Cotterell Butler, A.R.I.B.A.



DETAILS OF LEAD D.P.C.'S AND CLOAKS TO II" CAVITY WALLS. (scale  $\frac{34}{4} \cdot 1^{\prime} \cdot 0^{\prime}$ ) Compiled from information supplied by The Lead Industries Development Council.

### 26.A1 LEAD D.P.C.'S AND CLOAKS TO CAVITY WALLS

This Sheet deals with the use of lead for d.p.c.'s and cloaks at various points in cavity walls. The details shown are typical and although in practice variations in construction will arise, treatment along the lines indicated will produce satisfactory results.

### Material

Lead possesses the following suitable characteristics for the construction of d.p.c.'s and cloaks:—

Flexibility: The flexibility of lead prevents the risk of fracture due to the movement of brickwork or masonry.

Malleability: Lead may be easily dressed into any shape and laid or tucked into parts of a structure at any level even when sections of the work are completed at different times. Changes of direction can be arranged easily.

Impermeability: Provided that reasonable precautions are taken lead remains impermeable indefinitely. Coefficient of friction: A high coefficient of friction provides a great resistance to side-thrust.

### Details

The details described below are illustrated on the face of this Sheet.

Eaves: At this point the wall is built solid and a d.p.c. carried right through at the junction of the 9 in. and 11 in. brickwork.

Window and door heads: All openings in cavity work must be provided with a cloak which should run not less than 6 in. beyond the opening at either side to ensure clearance for drips in the cavity. The exact formation of the opening head will vary in many cases, and this will affect the position of the cloak. Adequate weep holes should be left in the vertical joints in the outer wall.

Jamb: Where the jamb of a window bridges the cavity a strip of 3 lb. lead close copper nailed to the back of the jamb provides a permanent method of preventing damp passing, via the jamb, between the inner and outer leaves of the wall. It allows the frame to be placed in any position in relation to the cavity.

Sill: The detail shows a method of preventing the entry of water at a sill when the window frame is contained in the outer leaf of a wall.

Footings: Three details of d.p.c.'s are shown on the face of this Sheet. Lead is a particularly suitable material where it is required to provide a step in the d.p.c.

High parapet wall: D.p.c,'s are laid between the coping and the inner and outer leaves of the cavity wall. The lower stepped d.p.c. is carried through the wall to form a cover flashing to the skirting of the

roof covering. When the external face is rendered it is good practice to take the d.p.c. through the rendering.

Low parapet wall: In this case the 11-in. brickwork finishes two or three courses above roof level and the wall is carried on up in 9 in. brickwork. The d.p.c. is carried through the wall at the junction of the 9 in. and 11 in. brickwork to form a cover flashing to the skirting of the roof covering.

### Gable Walls and Solid First Floors

In the case of solid first floors it is recommended that the floor should not bridge the cavity. If it is necessary for it to do so, then the end of the floor should be protected similarly to the lintel detail illustrated. Gable walls should be carried up full height in 11 in. brickwork. If the gable wall is built in 9 in. brickwork it is necessary to insert a d.p.c. between the solid and cavity brickwork.

### Weight of Lead

The weight of lead used depends largely upon the amount of dressing which will be required. 4 lb. lead is adequate for all practical considerations, 3 lb. lead is commonly used for cloaks, but where there is considerable dressing not less than 5 lb. lead should be used.

### Protection

All lime or cement mortar is alkaline during and shortly after the setting period. This may cause corrosion of the lead if it is built in or fixed in close contact with fresh mortar. In such cases the lead should be coated on both sides with a good quality bituminous paint.

### **Further Information**

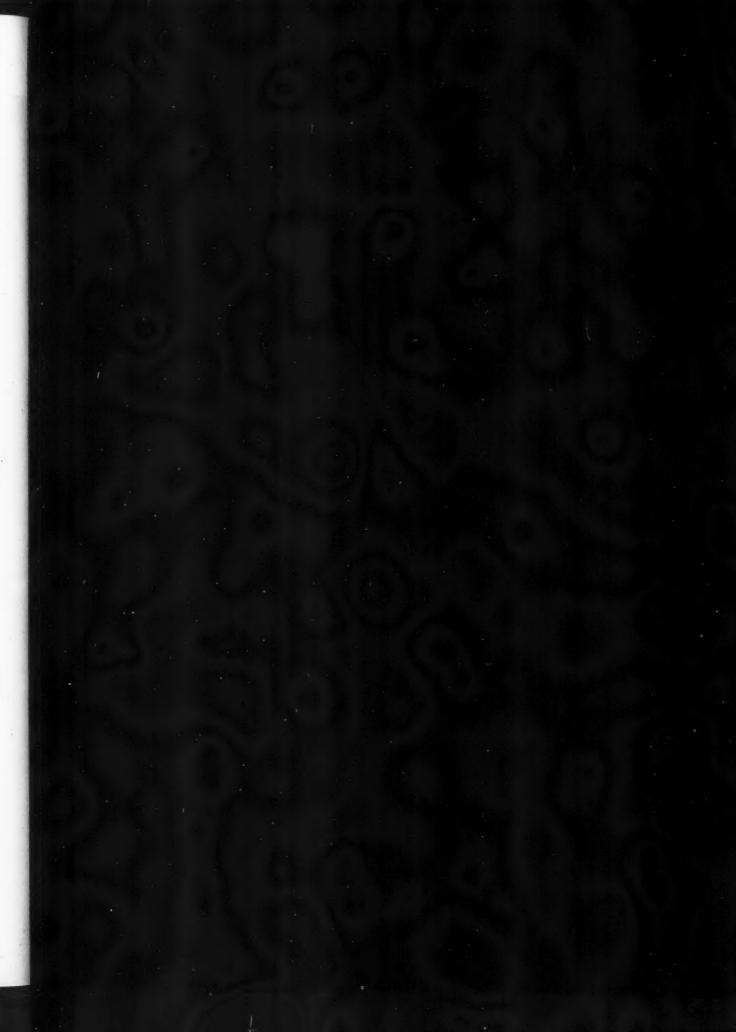
The Lead Industries Development Council maintains a Technical Information Bureau which is available to answer questions and advise on technical problems dealing with this subject generally.

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The Lead Industries Development Council.

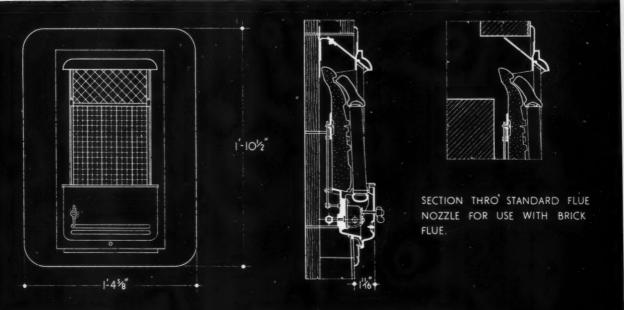
Address: Eagle House, Jermyn Street, London, S.W.1.
Telephone: Whitehall 7264.

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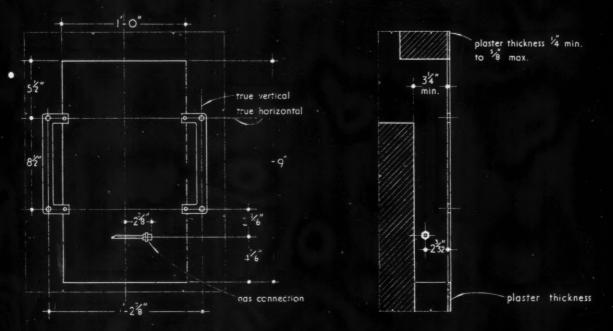


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ELEVATION OF FIRE.

DECTION THRO' FIRE SHOWING SPECIAL FLUE NOZZLE FOR USE WITH NAUTILUS FLUE.



ELEVATION AND SECTION OF RECESS WITH WALL BRACKETS IN POSITION.



LAN OF RECESS.

DETAIL OF ADJUSTMENT FOR PLASTER THICKNESS.

wall plaster

### 29.C2 NEW WORLD HIGH BEAM BUILD-IN GAS FIRE No. SP755/756

This Sheet describes the New World High Beam Build-in Gas Fire.

The fire has an overall size of 1 ft.  $4\frac{5}{8}$  in. wide by 1 ft.  $10\frac{1}{2}$  in, high and is installed direct to a wall or prefabricated structure prior to the plaster being applied. It is available in either the five or six radiant size (SP755 and SP756, respectively). An alternative design, the New World Silent Beam Buildin Gas Fire is described on Sheet 29.C1. The method of fixing precludes its use where there is a tiled or other surround or where a prefabricated structure wall exceeds  $\frac{1}{2}$  in. in thickness. It may be used with a brick flue with the standard flue nozzle fitted, or with a pre-cast concrete (Nautilus) flue with the special flue nozzle fitted. They are interchangeable. The special nozzle is supplied unless otherwise specified.

### Components

Front: This is of cast iron resting against a sheet iron plaque which is adjustable forwards to compensate for unevenness of wall plaster. The plaque serves to mask the edge of the opening and the gas connection.

Radiants: These are of vertical bar design and white in colour. "Scrubber" radiants rest across the tops of these and screen the horizontal retaining rod.

Burner: Aerated flames are used in the burner. An injector tap with aeration and pressure controls is provided for regulating the size and form of flame. The normal consumption of the fire is 1,750, 2,000, or 2,250 B.Th.U./hr./rad., according to the locality in which it is to be fitted. On fires of the two higher ratings brass radiant supports are provided.

Tap: The control tap forms an integral part of the injector and is situated at the bottom left-hand side.

Back Brick: This is highly refractory and of low thermal conductivity.

Dress Guard: A guard of the open mesh type is available if required.

Finish: The fire may be obtained finished hammered brass or hammered copper.

### Fixing

Recess: This may be located at any convenient height above floor level. The opening, 1 ft. 9 in. by 1 ft. may be formed in the brick wall itself or by means of a Nautilus flue building-in set, an appropriate flue-way of minimum cross sectional area 20 square inches being provided. In the case of a prefabricated wall structure the opening may be reduced in height to 1 ft. 7½ in. minimum and increased in width to 1 ft. 1½ in. maximum.

Brackets: These should be fixed direct to the wall as shown on the face of this Sheet.

Gas Connection: This must be made to the 1 in. B.S.P. elbow union provided. Connection may be made from left or right as required.

### Ventilation

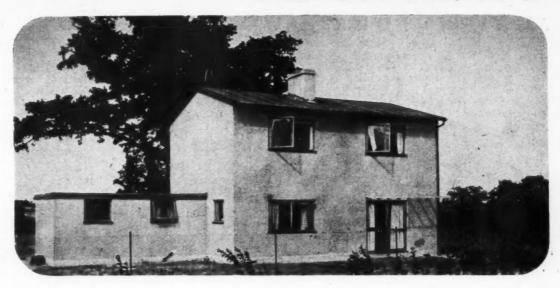
The gaps in the return edges of the front casting at either side provide means for carrying ventilated air to the flue and should not be obstructed.

Compiled from information supplied by:

### Radiation Ltd.

Address: 7, Stratford Place, London, W.1. Telephone: Mayfair 6462.

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# AGRICULTURAL WORKERS' COTTAGES

DESIGNED BY JUNE PARK

Essex for agricultural workers, Roydon.

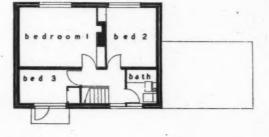
Harlow stands in the grounds of,

GENERAL. - Two cottages in with outbuildings surrounded by a fruit farm. The site is narrow one near Harlow, the other near and sloping, and the steep drive leading to the larger house had to be diverted to leave a small HARLOW .- The cottage near open space in front of the main elevation. It was possible to and is adjacent to, a larger house, retain two Hazel trees as a screen. The cottage has an area of 948 sq. ft., excluding outbuildings. It has three bedrooms, a living kitchen, sitting room and scullery. There is an open fire with back boiler for heating water and adjacent oven and a separate open fire in the sitting room.

ROYDON.-The site of the cot-

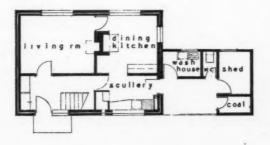
tage at Roydon is an open field being developed as a fruit farm. The cottage is for an agricultural worker, who will be on the spot to keep an eye on the valuable fruit crop. The open site here made it possible to plan more economically. The area is 1,000 sq. ft. There are three bedrooms, living room and dining kitchen, the scullery end of the latter being partly screened off. There is an open fire with back boiler for water

FIRST FLOOR PLAN OF





[Scale: #" - 1' 0"]





Top, back elevation of the cottage at Roydon. Bottom, the entrance, front.

### WORKERS' COTTAGES AGRICULTURAL

heating and oven and a separate fireplace in the living room.

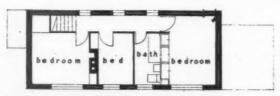
CONSTRUCTION AND FINISH. —Both cottages are constructed and finished as follows: 11 in. cavity brick walls; first floor

timber joists; roof light timber trusses covered with 1-in. tongued and grooved boarding and a copper finish. The brickwork externally is rendered and finished grey and there is a pitch mastic floor finish to the ground floor

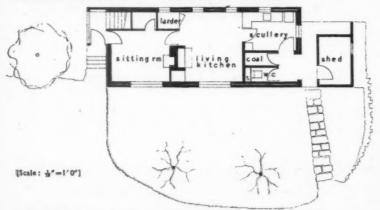
concrete. Walls are plastered internally and the timber windows are painted externally in two shades of grey.

The general contractors were Messrs. Cowlin and Sons. For

sub-contractors, see page 162.



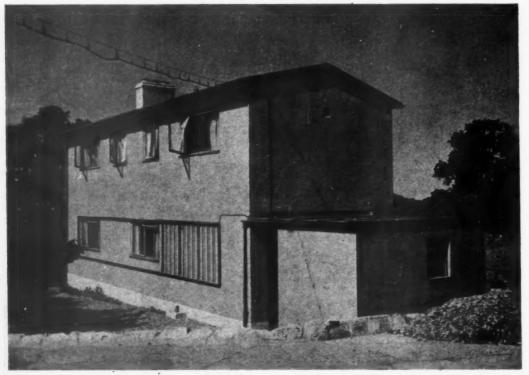
FIRST FLOOR PLAN OF COTTAGE AT HARLOW



GROUND FLOOR PLAN OF COTTAGE AT HARLOW



Top and bottom: two views of the cottage at Harlow.

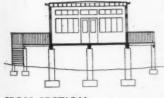


JUNE PARK. DESIGNED BY

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[Scale:  $\frac{1}{16}$  = 1' 0"]

Right, piers at ground floor level and the balustrade of the veranda to the wards above.

# HOSPITAL EXTENSION IN DUBLIN

DESIGNED BY
MICHAEL SCOTT

GENERAL.—The extension to St. Ulstone Hospital, built to meet the urgent need for temporary accommodation for T.B. children, joins an existing small T.B. ward on the first floor. Its form and position was dictated by the position of the existing buildings.

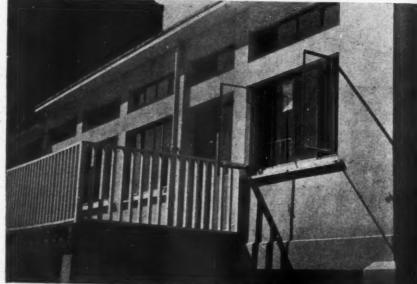
Maximum sunlight was a primary consideration. Part of the balcony had to be covered to give protection from rain.

CONSTRUCTION.—Concrete piers, and concrete block walls, plastered externally and

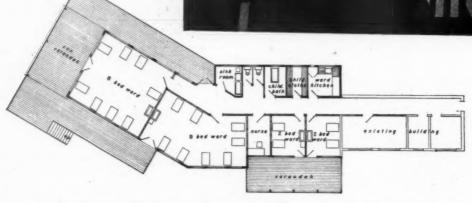
# HOSPITAL EXTENSION IN DUBLIN

internally. Floors and beams are timber; the flat roof is of timber construction, and partitions are of timber stud wall board, plastered. There are glazed partitions for easy supervision. Timber floors are covered with lino. In the wards and corridors, etc., the plastered walls are finished flat oil paint.





Top, right, a view of the hospital extension from the street; bottom, a close-up of the ward windows and veranda.



PLAN

[Scale: 1' 0']

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**ELEVATION** 

DESIGNED BY MICHAEL SCOTT



Speeches and lectures delivered before well societies 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 Except where inverted commas are used, the reports are summaries, and not verbatim.

### IT

# Living with Transport

January 19. In the Lecture Theatre of the IEE, Savoy Place, W.C.2. A paper jointly composed and delivered Christian Barman and M. C. Bennett on LIVING WITH TRANSPORT. The President of the Institute of Transport, Mr. T. W. Royal, was in the chair.

A railway journey starts at the moment when a passenger steps from the street pave-ment across the threshold of the station. The first and last laps of that journey are made on foot. Since both laps take place under the auspices of a trans-port undertaking, and since a transport undertaking is assumed to understand the science of movement, the passenger will expect his journeys on foot to be as smooth and easy as his journey by rail.

A passenger will know where to go if his path is easy and natural, and if he can see clearly where it has a see the state of the seed of the

clearly where it leads. The first is a matter of planning; the second is a matter of guidance. In planning paths for passengers we learn from the movement of trains on a track and from the movement of gases through a duct. Trains do not like sharp curves; a sharp curve is liable to confuse there are the sharp curve is liable to confuse there are the statement of the sharp curve is liable to confuse there are the statement of the st them and make them take a wrong direction. When air in a duct meets a sharp corner it stops and eddies around anxiously before proceeding slowly on its way. Why were station walls, partitions, passages and staircases built at right angles to each other like the masonry structures of the ancient Greeks and Romans? It is the inside of the station rather than the outside of the locomotive that is in need of streamlining. St. Paul's Underground station in London, where the ticket hall is treated as a funnel-shaped extension of the escalator shaft mouth, is a small-scale illustration of what can be done by the study of crowd dynamics in architectural planning.

### PEDESTRIAN MOVEMENT

During recent years important advances have been made in the scientific appraisal of dimensional requirements in stations. typical example is a recent statistical investigation bearing upon the design of platforms. The investigation covered the speed of movement of passengers in and out of trains, up and down arrival and departure platforms, and past ticket barriers. The characteristics of different trains were plotted in such a way as to show the frequency with which various loadings are liable to occur, and on this basis studies were made of passenger movement and passenger concentration for various types of platform. Thus, as far as arrival platforms are concerned, the figures enable constructive comparisons to be made between end and centre exits, between platforms with and without train concourses, and between platforms having different numbers of ticket collectors and exit stairs of different widths. Similar methods were applied to other parts of stations. The modern architect and engineer are as interested in accurate timing as the operating departments have been since rail-ways first began. But their interest in timing is more concerned with the "pilingup" effect of delays than with the delays themselves. They know that a minute lost in a jostling crowd may be more unpleasant than five minutes lost in a comfortable

The crossing of a stream of passengers by another traffic flow may occur when two passenger paths intersect, when arriving and departing passengers are allowed to mix, and when passengers in the pursuit of tickets, train indicators, tobacco and other necessities have to turn and retrace their steps. It also occurs when passenger streams collide with trucks bearing parcels, luggage, or mail bags. The movements of pedestrians and trucks have become immensely complicated since the majority of stations were built, and, generally speaking, the obsolescence of a station may be most accurately estimated by the frequency of this kind of interruption. The difficulty is fundamental and there is no easy cure; possible here and there to provide enough additional space to ease a bottleneck.

We used to think in terms of bridges and

We used to think in terms of bridges and subways. The modern designer is inclined to take a broader view; instead of planning in two dimensions with occasional excur-sions into the third he treats the entire station as a three-dimensional system. Two-level stations like Cardiff and Leicester have shown how circulation may benefit from such methods; the use of three levels has been found well worth while at such different places as Charing Cross Underground and Montreal.

The passenger's first contact with transport, however, is with the station entrance. Station entrances to-day are apt to be distressingly evasive. Often they are so artfully concealed that passengers have great difficulty in finding them. The modern cinema entrance may be vulgar and extrava-gant, but at least it has the merit of announcing itself properly. A strong, simple label for station entrances is badly needed.

### CIVILITY

Civility depends on being sensitive to other people's thoughts and feelings. A good example of this kind of sensitiveness is the railways' treatment of commercial advertising. There are many people in this country who are apt to look on outdoor advertising as a kind of nuisance comparable to disturbing noises and unwholesome smells.

Persistent agitation has resulted in the setting up of Government control under Town and Country Planning Acts. Railway undertakings have for some time been fully alive to the state of public feeling in this matter, and the work of removing commercial advertis-ing displays from station exteriors and bridges has now made considerable progress. In the same way, advertising on other exterior wall surfaces, like retaining walls, is being carefully arranged under general But conschemes for planned decoration. trolled outdoor advertising is only one of the many forms of civility in buildings. This quality of civility goes very deep; it may influence not only the design of the building but also its placing on the site and even the selection of the site itself.

### DESIGN AND HOUSEKEEPING

So great is the value of a general atmosphere of good design that the railways have begun to take an active interest not only in the appearance of their own buildings but the appearance of their own buildings but in that of their neighbours. They are aware that in many big towns the station neighbourhood is hopelessly out of keeping with the best conception of what a railway station should be. And so the modern rebuilding plan as a rule provides for the railway to build its own shopping arcades, or to lease surplus lands to neighbours whose architectural manners it can effectively control

surplus lands to ne.ghbours whose architectural manners it can effectively control.

Once order has been established through good design, the next thing is to maintain it through good housekeeping.

Good housekeeping is just as important with old buildings as it is with new. The railways have inherited from the last century a large assortment of well-designed structures, some of which deserve to be better appreciated than they are. Many of the smaller stations, especially those in the West country and in the area served by the old North Eastern and Highland Railways, are fine examples of regional architecture of which their owners have reason to be proud. Future improvement schemes should these stations with great respect. The same these stations with great respect. The same is true of many engineering structures. The early railway builders knew that good architecture is not confined to habitable buildings with windows and doors. The educated public has always responded to a well-designed engineering structure just as readily as it has to a relaction. to a palace or a cathedral.

### INTELLIGENCE MADE VISIBLE

Does good design really matter? Its value derives in the first place from the fact that it is the outward expression of efficiency. It is often said by lawyers that it is not enough for justice to be done; justice must manifestly be seen to have been done. And every engineer knows in his heart that it is not enough for a tool or a building to be efficient; it must be manifestly seen to be efficient. "Design," said the late Frank Pick, "is intelligence made visible." The Spitfire, the King class boiler and firebox, the prefabricated platform canopy of the London Midland Region, show, each in its own way, how a new kind of efficiency can be expressed in good design. Well-designed equipment inspires confidence in those who use it as well as in those for whose benefit it is used. That is why it will always be a better asset than equipment having the same enough for a tool or a building to be efficibetter asset than equipment having the same performance that fails to "look the part." Secondly, good design is important because Secondly, good design is important occuse it pays. Are the railways interested in developing more business? Any undertaking using costly capital equipment must necessarily want to employ that equipment so far as possible on a full and steady load. Work must be found for it at those times when work is not naturally forthcoming. The sheer commercial value of good design is too

well appreciated to-day to need special emphasis. New crack trains in all parts of the world depend on good design to "sell" them. It usually does.

them. It usually does. Finally, design is a general social responsibility. It is now accepted by most experts that good des.gn in the things we see around us is an essential amenity that contributes to human health and happiness. Bernard Shaw has referred to the influence of design as an unexplored region of biological science. It is not likely to remain unexplored much longer.

### CLEANLINESS

Of all the essential conditions for efficient cleaning, the first and greatest is a good surface. Cleaners are like other workers in that they will not give of their best if their labour does not produce a visible result. The second condition of efficient cleaning

The second condition of efficient cleaning is light. It certainly must be of enormous assistance in cleaning.

Next to good lighting comes good design. In his planning, in the design of his equip-ment, the designer can make the cleaner's job either possible or impossible. Any space that is used for dirty traffic will soon make itself unfit for passengers. The railmake itself unfit for passengers. ways have elaborate plans for segregating parcels traffic so that passenger spaces may be kept not only clear of obstructing traffic but free from dirt and pollution too. piece of waste space is a potential rubbish tip. Any congested area will gather dirt from the concentrated human traffic. piece of space that is not clearly visible or readily accessible attracts rubbish as a mag-net attracts iron filings. Any sharp internal corner will fill itself quickly with dirt. counter front comes down to the floor the corner should be well rounded; but need it come down to the floor at all? Walls, sills and copings need proper weathering everywhere to prevent unsightly weather stains.

Cleanliness is a difficult art, and yet it is the cheapest and most elementary of all amenities. It is, therefore, the great amenity of the poor, and England to-day is a very poor country. The more the uniform grows frayed and tattered, the greater the importance of keeping the buttons bright.

### COMFORT FACTORS

It is true that the length of human bones is one of the first things to be taken into account in designing a seat, but if discomfort and fatigue are to be abolished it is not enough merely to get the main dimensions right. The full scientific data for sound seating have still to be collected.

Comfort in sitting and standing depends not only on proper furniture but also on the release of the seating and standing depends not only on proper furniture but also on

Comfort in sitting and standing depends not only on proper furniture but also on the planning and arrangement of the vehicle itself. The space under compartment seats is notoriously difficult to keep clean.

### LIGHTING

To define ideal lighting qualitatively is easier than to provide it. It should be non-glaring, of a colour kind to the complexion and not too far removed from daylight and adequate in intensity. Extreme shadows should be avoided.

Lighting can have a marked psychological effect which should be used to ease the passenger's journey. The problem is rather similar to the heating and ventilation problem of reconciling different tastes. Can travellers look forward to the days when there will not only be segregation of smokers from non-smokers, but compartments for toilers, for dreamers, for talkers and for readers, each one with the seats, the heat and the light adapted for its particular purpose?

### HEATING AND VENTILATION

The problems involved in enclosing some parts of passenger stations, such as booking halls, so as to heat them, are discussed elsewhere in this paper, and there are many instances where frequent changes of air by

opening of doors makes any method of heating by warming the air very expensive. In these cases high temperature radiation can be very useful. Beams of radiant heat at strategic points, where people must pause in their progress to and from trains, might give a welcoming and grateful atmosphere which would be specially appreciated during a cold spelt.

### SERVICES AND INSTALLATIONS

In the provision of shelter for waiting passengers it is useful to remember that a short wait at a suburban station is in no sense different from a wait by the roadside. The free-standing roadside shelter used in London suburbs screens against winds from all directions; similar protection is provided on railway platforms by screens having some form of return end. Yet the railways to-day are handicapped by being the owners of many hundreds of suburban waiting rooms requiring attention, in the form of supervision, heating, cleaning and maintenance, that they lack the means to provide.

In smaller main line stations it is possible to let the passenger move towards his platform by way of a comfortable well-heated room with self-closing doors. The most successful small ticket halls to-day are those which combine the functions of ticket hall, waiting room and inquiry office in a single room of good proportions.

To-day, it is generally accepted that the value of all such special facilities depends on a sufficiency of space.

Railway stations were designed at a time when the only passengers who mattered descended from private carriages while servants took all portable belongings in their charge. To-day the railways have to think again from the beginning. What, for example, happens to luggage in a waiting room? As a rule the passengers arrange it on the floor and seats in such a way as to cause a maximum of inconvenience to other passengers.

### FOOD AND DRINK

The consumption of food and drink in compartments may constitute a higher or a lower standard of catering according to the point of view. If the passenger is a British Cabinet Minister carrying his own luncheon basket or an American business man having a restaurant car dinner brought into him, it is usually regarded as being in the former class. What we may describe as the mess room method of catering on trains has so far received only superficial attention. pantry services in the Southern Region are designed for this purpose; they are the equivalent of the samovar which is standard equipment in every coach on a Russian main line train. The Western Region has under construction an automatic buffet car which is likely to lead to more general eating and drinking in ordinary passenger seats. If it is intended to extend and encourage this practice, the provision of some elementary equipment will have to be considered. Anyone who has tried to balance a tray on his knees while pouring out tea for other passengers will know something of this problem. The latest types of seats used in air liners have bracket fittings for trays that engage in the arm rests so that the passenger at least has his legs free as he has when in bed with an invalid tray. On the Continent, shelves and little hinged tables under the windows are common. Sometimes there is a litter basket just below. Long distance trains are happier places if they provide a decent resting place for apple and sandwich wrappings.

Station restaurants, like station hotels, originated from the interesting and useful arrangement whereby horse-drawn stage coach services started from well-known inns. Is there any justification for continuing to serve meals of several courses within the station precincts? Only proper research can give the final answer to this question. The

continuous flow of traffic rather suggests the snack bar with counter seats. By far the pleasantest type is that in which an attendant works inside a horse-shoe counter seating a maximum of about twenty customers. If the floor on the service side is sunk eight or nine inches below the level of the floor used by the public, the counter and seats can be low like ordinary tables and chairs. This has proved a popular arrangement in many places.

artangement in many places.

If the greatest number of passengers are to be satisfied, time is the crucial factor, and the buffet car certainly is efficient in this respect. Possibly even more interesting is the small buffet bar installed in an ordinary open coach. Coaches of this type have been in service for some years in the diesel car units running between the Midlands and South Wales where they have proved immensely popular. Good food, scrupulous cleanliness and attractive presentation would bring an immediate response. The Americans have brought back our old word "tavern" on their trains, and the restaurant car steward is known as "the host." Some of their station cars and buffets have names and inn signs. The Sloop would remind passengers for Devon and Cornwall of the delights in store for them and a touch of humanity would be brought to Liverpool Street by the Sign of the Blue Boar.

### TOILETS

The ladies' waiting room too often is simply a place where a passenger waits not for a train but for a vacant toilet. The railways are making a careful study of requirements so that this particular form of queueing may so that this particular form of queueing may be avoided in future. This study, incidentally, would probably show that 1,000 square feet of waiting room at Reading and 1,300 at Birmingham (Snow Hill) is more than is really needed. There is a great deal to be said for replacing the term "waiting room" by something like the American "retiring room," and for designing and furnishing the room for use rather than for mere waiting. room for use rather than for mere waiting. Long distance travellers now need make-up cubicles each with a looking glass and a dressing table shelf. The average woman does not look her best after half a day in a train, and leaning over a seated passenger in a compartment is not the most comfortable posture in which to powder one's nose. one would begrudge a charge of even as much as sixpence for this facility. Soft lighting, a drinking water bottle, a couple of pictures, are trifles that would earn a return worth many times their cost. The lack of any special provision for small children is a strange omission which no doubt will be rectified in future schemes.

### SHOPPING

The modern traveller when passing through a railway station wants to be able to buy newspapers, periodicals, books, postage stamps, cigarettes, tobacco, fruit, flowers, safety pins, aspirins and a number of other odds and ends which he may either use or consume on his journey or take with him to his destination.

This shopping is seen to fall into three well-defined categories. There are those elementary necessities for all travellers, reading matter and tobacco. Next there are, at the big stations, the fruit shops, sweet shops and chemists shops that cater largely for long-distance family travel and that are of special importance at holiday times. And lastly there are the shops that enable the urban worker to make a last-minute purchase on the way home. This is the kind of business that flourishes especially on London's Underground.

The travelling public is interested in information about shopping as well as in the act of shopping itself. The Swiss railways have simplified their problem by standardizing one single size of commercial poster. Another interesting device is the London Midland Region scheme for concentrating all advertising in a continuous high-level frieze.

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 The station of the future will either be with-out any advertising, or it will have its ad-vertising laid out as carefully as it is to-day in the pages of a high-class women's maga-

### ENTERTAINMENT

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and d imulous would The first and best of all entertainments in a modern station is the railway itself. Trans-port people, like so many other experts, find it very difficult to appreciate the enormous and fascinated interest with which the public regard their work. The London Under-ground has done a little to gratify this interest by its display of train recording clocks. terest by its display of train recording clocks. But there are many more things to be done. Waiting and refreshment rooms with large observation windows overlooking the concourses are being seriously considered for our stations of the future. There is all the material at hand for making a visit to a railway station at least as interesting and instructive as a visit to the Science Museum or the Zoo.

or the Zoo.

The unfortunate thing about exhibitions is that they take up a considerable amount of space, and most railway stations are short of space and liable to overcrowding. Yet the small Underground station at Charing Cross has shown what can be done by setting aside an area of roundly 1,000 square feet for this purpose. If the public have not as a rule taken kindly to these innovations, it is no doubt because they are liable to init is no doubt because they are liable to in-terfere with the most popular entertainment of all, looking out at interesting scenery.

### CONCLUSION

At this present moment, public criticism of the railways is mainly concerned with two the railways is mainly concerned with two things, punctuality and cleanliness. But cleanliness where and when? Whenever a commodity is in short supply, a clear choice must be made between dispersal and concentration. Cleanliness is such a commodity. The authors would plead for the boldest application of this second policy in the line with the extension of cleanliness. dealing with the restoration of cleanliness They would advocate the improvement of ten carefully selected amenities by one thousand per cent. rather than the improvement of one thousand amenities by ten per cent. Above all, a general policy for ameni-ties would enable the railways to form clear and distinct ideas of what they want to do about the whole of the physical things that affect the human situation, and in their par-ticular business the human situation has never been more important than it is to-day.

### MARS

REAFFIRMATION OF THE AIMS OF CIAM January, 1948. One of the tasks of the CIAM Congress held at Bridgwater last September was to restate the aims of the organization in view of the changed post-war circumstances in which it is now operating and of the time that has elapsed since CIAM's aims were first formulated. The following statement has been issued from CIAM headquarters in Zurich.

### 1. Preamble.

We, the CIAM architects from many countries, in Europe, America, Asia and Africa, have met at Bridgwater after an interval of ten years.

terval of ten years.

These have been years of struggle and separation during which, as a consequence of the threat of Fascist domination, political, economic and social questions have taken on a new significance for everyone. At the same time technical progress has been accelerated by intensive scientific research and the needs of war production. The technique of planning has also moved forward

as a result of the experience some countries have gained in socialist organisation.

These factors are together responsible for a new conception of integrated planning which is now emerging. Allied with this is a new contemporary consciousness that finds

its definite expression in the arts.

We are faced with an enormous task in rebuilding the territories devastated by the war, as well as in raising the standard of life in undeveloped countries where great changes are now taking place. We there-fore feel that this, our sixth congress, is an occasion when we must review our past activities, examine our present situation and determine our policy for the future.

### Background.

Our earlier declarations—that of La Sarraz in 1928 and the Athens Charter of 1933— reflected the architect's growing sense of his responsibilities toward society. They were drawn up with reference to a particular time and a particular situation, but we consider many of the statements made in them to be fundamental and we now reaffirm the following points from these declarations.

"We emphasise that to build is a primal activity in man, intimately associated with the evolution and development of human

"Our intention . . . is to re-establish the place of architecture in its proper social and economic sphere. . . ."
"We affirm to-day the necessity for a new conception of architecture satisfying the spiritual, intellectual and material needs of present day life. Conscious of the effects on social structure brought about by industrialisation, we recognise

the effects on social structure brought about by industrialisation, we recognise the necessity of a corresponding transformation of architecture itself. . ."
"Planning is the organisation of the functional conditions of community life; it applies equally to town and country, and operates within the divisions; (a) dwelling; (b) places of work, and (c) of recreation; (d) circulation, connecting these three. . ."

"The aims of CIAM are:-

(a) to formulate the architectural prob-

(a) to formulate the architectural prob-lem of to-day;
(b) to represent the idea of a contem-porary architecture;
(c) to instil this idea into technical, economic and social thought;

(d) to watch over the contemporary development of architecture."

The Declaration of La Sarraz was primarily an attempt to express some of the realities of the contemporary situation and to recognise the inevitable emergence of new forms from the application of new means to meeting human needs.

means to meeting human needs.

Many of the ideas for which we were then working are now widely accepted, and the subsequent Athens Charter has laid a similar foundation in the field of physical and social planning. Among the achievements of recent years are:

A general acceptance of the idea of social planning and, in many countries, the adoption of planning legislation—including legislation for land reform which will assist the realisation of this idea.

A growing recognition of the important part played by scientific method in the development of architecture, which has resulted in the advance of building technique.

A trend towards the reintegration of the plastic arts—architecture, sculpture and painting—and thereby towards a clearer understanding of contemporary forms of artistic expression.

### The Aims of CIAM.

The progress that has been made in the last ten years and the confidence in the ideals of CIAM expressed by the younger generation convince us that the continuation of the CIAM congresses is fully justified. The sixth congress redefines the aims of CIAM as follows: --

To work for the creation of a physical environment that will satisfy man's emotional and material needs and stimulate his spiritual growth.

To achieve an environment of this quality, To achieve an environment of this quality, we must combine social idealism, scientific planning and the fullest use of available building techniques. In so doing we must enlarge and enrich the æsthetic language of architecture in order to provide a contemporary means whereby people's emotional needs can find expression in the design of their environment. We believe that thus a more balanced life can be produced for the individual and for the community.

### 4. The Tasks Ahead.

Having members in so many countries, CIAM is in a strong position to put the experience gained in one part of the world at the disposal of another. The social concepts and legislative experiments of countries that have made progress in these fields can give direction to the technical development of highly industrialised countries. velopment of highly industrialised countries, and technical experience from elsewhere can be brought to the assistance of countries

that are still in process of industrialisation. An urgent task for CIAM is to ensure that the highest human and technical standards are attained in community planning of whatever scale, from the region to the single dwelling. CIAM also feels called upon to examine the implications of the process of industrialisation that is now being applied to building, in order to ensure that such necessary technical developments are controlled by a sense of human values.

### 5. Future Policy.

With the purpose of fulfilling the aims outlined above, CIAM intends to pursue a policy that will:—

Popularise its principles as widely as possible, by means of books, periodicals, exhibitions, films, the radio and other means of addressing the people of all

Formulate the principles that should govern the education of architects and take all possible measures for the reform of existing educational methods.

Support in every way the activities of the local and national groups of CIAM, especially by establishing contacts with official authorities, national and international, and by promoting beneficial legislation and other effective measures.

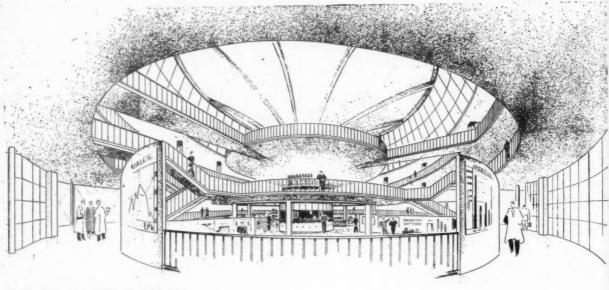
Encourage CIAM groups to keep in touch with public needs and observe the progress of the public's understanding of CIAM principles, with the object of assisting modern architecture to develop in sympathy with the aspirations of the people it serves.

# Publications Received

Oxford Stone, by W. J. Arkell. Faber, 25s.
Revisions to the Standard Method of
Measurement of Building Works—A Summary. Arthur J. Willis. Crosby Lockwood & Son, 2s. 6d.

The Neighbourhood Unit, Plan. Compiled by James Dahir. Russell Sage Foundation,

\$1.0.
The Small House, Today and Tomorrow.
Arnold Whittick in collaboration with
Johannes Schreiner. Crosby Lockwood, 15s.
City of Birmingham Handbook. Compiled
and edited by F. W. Bradnock. City of Birmingham Information Dept.
The Church and Art. Tenth report of Central Council for Care of Churches. Board
of Church Assembly, 3s. 6d.
The Story of Furniture, Gordon Russell and
Jacques Groag. Penguin Books.
Cornwall, Peggy Pollard. Paul Elek, 9s. 6d.
County Palatine—a Plan for Cheshire.
Country Life, £1 1s.



SKETCH OF THE INTERIOR

# BUILDING CENTRE

# ROTTERDAM, HOLLAND

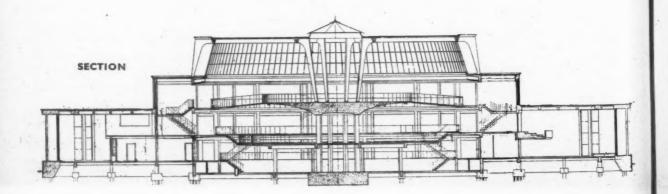
GENERAL.—One of the first sites to be allocated under the new planning scheme for the devastated area in Rotterdam was for the new Building Centre. This step was taken because it was felt that the Building Centre was an essential need for the vast building programme to be carried out in Rotterdam and other parts of Holland. The Building Centre will be controlled by a Board consisting of representatives of the Dutch Government, practically every professional and building body, and the Trade Unions. Like the London Building Centre it is to be a non-

profit distributing organisation carried on solely in the interests of the building industry and the engineering profession. The London Building Centre will be closely connected with the new Rotterdam Building Centre and it is expected that many British manufacturers will be represented by exhibits. In Rotterdam it is felt that the importance of the City as a Port and its easy access to Europe will result in the Centre becoming a focal point for all interested in the building world generally. It is hoped to open the new Building Centre on May 18, 1948, the anni-

versary of Reconstruction Day, schemes for the reconstruction of Rotterdam being commenced on May 18 shortly after the German bombing of Rotterdam and during the German occupation.

SITE.—The site of the Rotterdam Building Centre is of sufficient size to allow for future expansion, and the portion of the land not for immediate use will be laid out as a garden to exhibit garden furniture and horticultural exhibits.

CONSTRUCTION.—Work on the new building has already



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SKETCH OF MAIN FRONT

commenced. The builders are faced with a problem common to most sites in Holland but little known in England—that of piling. In the foundation are 1,750 reinforced concrete piles 50 ft. long. The demand for piles for the general rebuilding of the city will be so enormous that the municipality is entering on a scheme of mass production. Roughly speaking piles cost about £40 each and another £10 for handling and driving. Incidentally, Mr. F. R. Yerbury, who attended a conference in Rotterdam on the question of the Building Centre states that many of the old wooden piles driven in Rotterdam some 200 or 300 years ago are being extracted and found to be in excellent condition.

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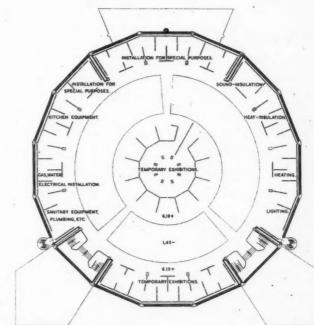
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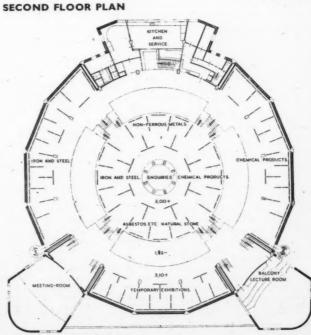
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INFORMATION CENTRE . QUESTIONS AND ANSWERS · CURRENT TECHNIQUE THE INDUSTRY . PRICES . TECHNICAL ARTICLES

INFORMATION SHEETS

### TECHNICAL SECTION

A digest of current information prepared by independent specialists; printed on one side of the paper only, to allow readers to cut out the items for filing and paste them up in classified order. Headings below.

### INFORMATION CENTRE

I SOCIOLOGY. 2 PLANNING: General. 3 PLAN-NING: Regional and National. 4 PLANNING: Urban and Rural. 5 PLANNING: Public Utilities. 6 PLAN-NING: Social and Recreational. 7 PRACTICE. I 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: Matterials: Timber. 14 MATERIALS: Concrete. 15 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: 20 CONSTRUCTION: General. 18 CONSTRUCTION: Theory. 19 CONSTRUCTION: Details. 20 CONSTRUCTION: Complete Structures. 21 CONSTRUCTION: CONSTRUCTION: ACOUNTION: ACOUNTICS. 23 HEATING, VENTILATION. 24 LIGHTING. 25 WATER SUPPLY, SANITATION. 26 SERVICES, EQUIPMENT: Miscellaneous. 27 FURNITURE, FITTINGS. 28 MISCELLANEOUS.

### 3.9 planning: regional and national

### RURAL LIFE, NORTHERN IRELAND

Rural Life in Northern Ireland: Five Regional Studies made for the Northern Ireland Council of Social Service (Inc.). J. M. Mogey. (Oxford University Press, 1947. 15s.)

Report on findings of five regional surveys undertaken to study reasons for drift away from countryside in Ulster. factual information on types of land, houses, family sizes, occupational groups, and standards of living. Illustrated. Glossary of terms. Bibliography.

This book presents a very thorough and interesting account of the social background interesting account of the social background to the chronic and serious problem of unemployment in Northern Ireland. It is the result of an enquiry initiated by the Northern Ireland Council of Social Service in 1940 for the purpose of studying the reaction of the rural population to its environment, and of discovering the causes which led to "the drift away from the countryide". countryside.

The survey is based on intensive studies of selected local areas, considering the country dweller not as an isolated individual but as a member of a local comvidual but as a member of a local com-munity group. No random samples of selected families or individuals were under-taken, but every house in each area was included. The areas were chosen to represent certain features of life in the province in order to obtain a picture of the whole of the province once the results from the sample regions were available.

A detailed account is given of the survey

A detailed account is given of the survey technique adopted, together with the household questionnaire used. The type of information collected—and fully presented in -covers the following six aspects: the book-

 The nature of the countryside and the soils, and the way in which these geo-graphic influences have affected settlement and living conditions.

2. The number of inhabitants, the types of

work, and the level of wages.

3. The number of households, their composition, and the relationship between the various households.

4. The movement of individuals or households both within the survey zone and into and out of the survey zone.

 The influence of group activities and of the State and local authorities on human life in the area studied.

Changes in social groupings and in manners, customs, etc., both from the memory of the older inhabitants and

from local newspapers as well as from more general historical works.

It should be noted that no attempt has been made to draw conclusions from the survey's findings, as this was not within the terms of reference.

### 8.8 surveying and specification

### MEASUREMENT OF BUILDING WORKS

Revisions to the Standard Method of Measurement of Building Works, A. J. Willis. (Crosby Lockwood & Sons, Ltd. January, 1948. 2s. 6d.)

Summary of changes.

The Standard Method of Measurement is of vital interest to surveyors and contractors, and the new edition, however neces sary, will undoubtedly cause some head-aches until the departures from the old system have been traced and memorised.

As the name of this booklet implies, Mr. Willis has summarised the changes, so that anyone can see at a glance where the alterations occur. This does not mean that the booklet entirely replaces the new standard method; reference to the full text is advised. One of the major revisions is that brickwork will, in future, be measured in yards superficial, reduced to one brick thick. This a change that nearly everyone welcome.

### 14.11 materials: concrete

### WORKABILITY OF CONCRETE

The Grading of Aggregate and Workability of Concrete. Road Research Technical Paper No. 5 2nd Edition. 1947. (HMSO,

Technical report on investigation into workability of various concrete mixes. Effect of type and grading of aggregate on qualities of concrete. Limitations of slump test. New laboratory apparatus for testing workability described. 38 pp. illustrated.

This is a scientific report upon investiga-tions made at the Road Research Labora-tory of the DSIR, but it contains information of considerable importance to all users of concrete.

The investigation was concerned with determining the effects of the grading of the aggregate upon the strength and workability of concrete. The term "workability" is of concrete. The term "workability" is defined, and a new type of test which has been developed is described. The very considerable limitations of the common "slump" test are described and illustrated. The real importance of this paper to archi-

tects appears to be the information which it gives about grading and shape of aggregate as these affect strength and workability of concrete. It is well known of course that the water/cement ratio is a vital factor in determining strength. It is less appreciated that the shape and grading of the aggregate that the shape and grading of the aggregate will affect the amount of water required to give a "workable" mix, and will therefore affect the strength. These points are brought out in the paper, with the result that one finds that a round shaped aggregate may give the best results, including strength, under quite ordinary conditions. Also one finds that under some conditions a proportion of dust in the aggregate may not proportion of dust in the aggregate may not be of any significance.

There is therefore much of interest to architects in this paper, but the effort to abstract it from the detailed technical report is con-A brief review of its findings and an indication of the practical implications for architects would be most useful.

### 17.20 construction : general

### MODERN BUILDING CONSTRUCTION

Modern Building Construction. Edited by R. Greenhalgh. 3 volumes. (Pitman, 1947,

Comprehensive guide for all engaged in the building industry.

The three volumes, comprising 1,723 pages, contain sections by about forty different contributors, each a specialist of reputation on his particular subject. whole work deals with all important aspects of the various building trades and also gives preliminary scientific instruction. It has been designed to include all relevant subjects without gaps and overlapping, and with such emphasis on the many sections as their practical value demand. First come the basic subjects, such as elementary mathematics, geometry and building science. Next the individual crafts are explained. These subjects occupy about half the complete work and are followed by contributions on builders' office practice, book-keeping, accounting and costing, estimating, preliminary operations, superintendence, drainage and santitation, heating, ventilation; a long section is devoted to the history of archi-

### INFORMATION CENTRE INDEX

An alphabetical index covering items published during the twelve months ended December 31, 1947, is being prepared. Readers who wish to have a copy—it is free of charge-should write to the Technical Editor, or complete the form below and post it to THE ARCHITECTS' JOURNAL, not later than February 19, 1948.

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tecture and is followed by detailed instructions on architectural drawing, architectural design, acoustics, architect's office practice. The sections on structural engineering, steel, concrete and reinforced concrete, are also fairly comprehensive. The last sections cover subjects like surveying, specifications and bills of quantities, building laws and professional institutions.

The language is clear and simple throughout and the illustrations are good.

The work is of great practical value to students, apprentices, craftsmen, builders and also for the drawing office of architects.

### 20.52 construction: complete structures

The Rhine: How its Bridges and Barges are being Restored. W. G. Bowman (Engineering News-Record [USA], October 30th, 1947, pp. 588-601.)'

Present condition of Rhine bridges. Problem of salvage. Different policy of rebuilding in the three zones. Types of temporary and semi-permanent bridges built after the occupation. Some permanent bridges to be built in the near future.

# 20.53 construction: complete structures TIMBER DESIGN

War Experience Accelerated Standardisation of Timber Design and Construction Procedures. (Civil Engineering [USA], November, 1947, pp. 30-35.)

War-time development of timber design illustrated by examples of large span roofs and bridges up to 160 ft. span. Application of timber connectors and glued laminated wood. Experience obtained from research and faulty structures. (See also No. 18.11, 1.1.48.)



140-ft. bowstring truss. See 20.53

# 20.54 construction: complete structures COMBINED PRE-CAST, IN SITU RC

Concrete Deck Forms are Precast Slabs. (Engineering News-Record [USA], November 13, 1947, pp. 646-649.)

Concrete wharf deck of 250,000 sq. ft. area combines precast and in-situ construction. 5½-in. precast reinforced slabs with projecting trussed reinforcement span between pilecaps and form permanent shuttering to the cast in situ top portion, thus avoiding expensive over-water formwork. Complete monolithic action proved by laboratory tests.

# 24.61 lighting GENERAL TEXTBOOK

Textbook of Illuminating Engineering. J. W. T. Walsh. (Pitman and Sons. 1947. 17s, 6d.)

Nature of light, eyesight, light measurement, daylight, sources, distribution and design; examples. Good standard text; pp. 191, figs. 135.

Architects will not find this book meets all their requirements; it is designed, in fact, specifically for the syllabus of the City and Guilds of London Institute. But its author's command of theory and practice is uniquely broad, and one can confidently recommend it as a general reference of illuminating engineering. The schools or architecture, in particular, should find it extremely useful, though they would have to supplement it on the daylighting aspects. The most extensive discussions naturally relate to artificial lighting.

The book falls into four natural parts. It

The book falls into four natural parts. It begins with the general theory of light, describes what happens when it meets various types of surface, and then examines the mechanism of seeing light. The second part concerns measurement, and the third the different sources—the sky, combustion, and electricity. Finally there are the different aspects of practice—the control of distribution, the principles of design, and examples, ranging from domestic premises to streets. This part also includes the supply of power.

supply of power.

Explanations throughout are lucid, simple, and nicely related to a wide variety of examples, reaching well into the common experience of everyone.

### 24.62 lighting

### CHURCHES, COMMUNITY CENTRES

Churches and Community Centres for the Deaf and Dumb, from notes by J. S. Stedman. (J. RIBA, October, 1947, p. 583.)

Design in terms of lighting for deaf and dumb. Good note, 9 diagrams.

The deaf and dumb depend above all upon their sense of sight, and these notes describe how the irrelevance of hearing and the extreme importance of good vision alter the approach to design.

The deaf and dumb depend on lip reading, finger spelling or hand signs, depending largely on their date of training. To embrace a whole congregation or meeting, a "speaker" may have to use all three. This means that people must be as near as possible to him, and that he must be well lighted in the sense that all three forms of "speech" are clearly brought out. Long plans must be avoided, but the fact that signs have to be read from in front dictates a limited width also. Lines of sight are recommended not to be more than 90° divergent and it follows that the fanshaped plan is best. Ramped seating is recommended, even for churches, and the chancel and pulpit should not be so high as to make people tired by craning their necks.

No windows should be behind a speaker, nor should they be visible to the audience, and light should fall on the speaker rather than on his background. Sunbeams are disastrous, but north light roofs are very useful.

Artificial lighting does not supplant natural, but is equally important. Mixture of diffuse and point-sources is desirable.

In respect of community centres, there is no single "speaker" and uniform lighting is pecsesary. Figg.craft ceilings for artificial

no single "speaker" and uniform lighting is necessary. Egg-crate ceilings for artificial and natural lighting are recommended for badminton and billiards.

The author has provided a very useful note on a special application of principles which he seems to have grasped clearly.

# 25.48 water supply and sanitation AMERICAN PLUMBING

Some Notes on American Plumbing. F. L. Barrow (J. Royal Sanitary Institute. January, 1948.)

Comparison of USA and English methods with reasons for differences. Critical and useful.

This article results from a visit of the author, who is a member of the BRS staff. A number of interesting differences in methods in USA are discussed, and it is important to note that there are certain fundamental reasons for these which make it necessary to be careful when considering the importation of American ideas to this country.

The author makes critical comment on practice in both countries and suggests that each has something to learn from the other. He has an interesting comment on the cost of one pipe plumbing to the effect that because it greatly simplifies drainage lay-out it should be costed, for comparison purposes, not on its own but as a combined plumbing and drainage item.

### REFERENCE BACK

24.49. 18.12.47. We have been asked by the GEC to point out that the article was prepared by the staff of the English General Electric Company, and not by the Lighting Laboratories of the GEC of America.

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

### 2929 PATENT RIGHTS

Q I hold patent rights that were granted to me in 1933 for an invention connected with the building industry. Could you tell me how frequently this must be renewed?

A The period for which a patent is granted is 16 years, after which it cannot be renewed—the invention then becomes public property.

### 2930 EQUIPMENT FOR SCHOOLS

Q I am preparing plans for a school and would like to know of any recent publications giving particulars of equipment for schools as required by the Ministry of Education.

A Post-war Building Studies No. 24.
School Furniture and Equipment.

(HMSO, 6d.)
The following from British Standards Institution:—

BS/MOE 1-7: 1947. Sanitary Equipment for Schools. (Fireclay). (7s. 6d.)
BS/MOE 25: 1947. Gymnasium Equipment for Schools. (Including also an appendix containing a suggested list of requirements for a gymnasium measuring 70 ft. by

ments for a gymnasium measuring 70 ft. by 40 ft.) (7s. 6d.)
BS/MOE 26-29: 1947. Cloakroom Equipment for Schools. (Including w.c. and Shower Partitions. (7s. 6d.)



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N.7

The illustration of the Rotterdam Building Centre in this Journal coincides with the announcement over here that the London Building Centre, the parent of them all, is now rejuvenated and back again to pre-war standard, with further plans for future expansion. During the war years the Centre never closed for longer than was necessary to clear the rubble off the exhibits, but it seemed at times as though the Luftwaffe had made it a special target. Three disasters at the Bond Street Grafton Galleries site, then a temporary move to the Polytechnic, and then more damage at the present Conduit Street premises. For the last eighteen months or more the Building Centre has been carrying on at Conduit Street, and has held a number of specialised exhibitions there, as well as the usual permanent displays. The re-decoration of the building is now more or less complete, and one is glad to see that the ground floor windows, which, if memory serves, had plate glass in RIBA days, have now been given their proper glazing bars. So far as the displays of individual manufacturers are concerned, one may justifiably feel that some of them are not all that they wish the words of the proper than the proper than the proper proper than the proper proper than the proper proper than the proper proper proper than the proper proper

So far as the displays of individual manufacturers are concerned, one may justifiably feel that some of them are not all that they might be. When a manufacturer has paid for his space he presumably feels entitled to use it in his own way, and it is therefore a little awkward for the Building Centre to do more than offer suggestions about the best way to use it. But although the Centre is used a good deal by the general public, it is intended mainly for the building industry, and the exhibits, one would assume, should be technical and instructive, rather than of the type which the advertising people call "prestige." Nor would it be an altogether bad idea if manufacturers could be persuaded to change their exhibits every six months

or so.
But in spite of the minor criticisms, which are all too easy to make, it is obvious that the idea of the Building Centre is essentially sound. As well as the Rotterdam Centre, to be opened about the middle of this year, there are others in Stockholm, Zurich, Lausanne, Copenhagen, and Paris, not forgetting the Centre's own Scottish branch in Glasgow, all of them based on the experience of the first Bond Street edition. The word "Centre," too, which originally popped out of Mr. Yerbury's fertile brain, has passed into common English usage to denote almost any piece of group publicity. Just how many centres there now are nobody seems quite to know, but they are always cropping up, and deal with everything from wallboards and lighting to religious books and tea.

Future plans for Conduit Street include a series of specialised exhibitions on the same lines as the recent ones devoted to schools, solid fuel, and gas. Visits by students, apprentices and others are to increase, and there is to be a slide collection devoted to technical subjects, a feature which may well become as useful to lecturers as the purely architectural collection which the AA has run so successfully for many years. (9, Conduit Street, London, W.1.)

#### ELECTRIC WATER HEATING

All too often one hears entirely contradictory opinions about the cost of heating water supplies by electricity. One must, of course, make allowances for the variations in what BRS calls the "thermal habits" of different families, but the fact remains that users seem either to be quite satisfied with the cost and convenience of their systems, or else condemn them as wildly extravagant.

Nine times out of ten one finds that the extravagant systems are either insufficiently insulated, or the pipework is badly laid out, allowing electrically heated water to circulate in the system, or back through an unlighted boiler. Water heaters bought as complete units are, of course, always adequately insulated, but all too often a user buys an immersion heater for use with a poorly insulated cylinder, and he may even try to dispense with a thermostat and rely on hand switching.

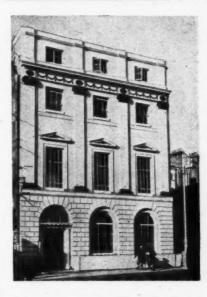
To draw attention to the various ways in which heat may be lost from electric systems, the EDA have just issued an extremely useful 16-page booklet shewing how the more obvious mistakes can be easily avoided. Starting with the right position for heater and thermostat, the booklet goes on to recommend a storage temperature of 140° F. in hard water districts, 160° F. in seft. The latter figure should be looked upon as a maximum, as standing losses become uneconomically large unless extra insulation is provided.

is provided.

Troubles are probably more likely to arise where an electrically heated cylinder is provided for summer use and is fitted to an existing solid fuel system. Surplus heat from the boiler is useful for space warming, and is not normally regarded as being "waste," but it is expensive electrically if the cylinder is not properly lagged, or if it is used for heating towel rails or airing cupboards. Careless installation will also allow heated water to circulate backwards through an uplighted boiler, which then becomes an unwanted radiator surface. These and other mistakes pessible in pipework are fully dealt with by means of clear and informative "right and wrong" diagrams. A useful publication from which almost everyone should be able to learn quite a lot. (The British Electrical Development Association, 2, Savoy Hill, London, W.C.2.)

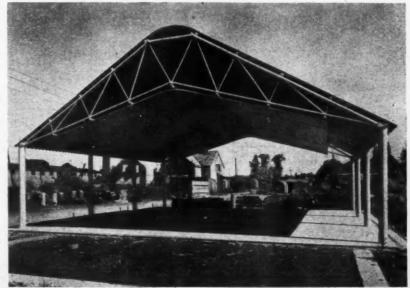
#### ASBESTOS CEMENT

Turners have just produced quite an interesting series of suggestions under the





Above, the exterior and the entrance hall to the Building Centre.



The Arcon Tropical Roof.

general title of Designs with Asbestos Cement. A booklet of illustrations demonstrates the possibilities of walling with different types of sheeting used in conjunction with each other. Trafford tile, Bigsix, and the standard corrugated sheet can all be used together, and the booklet has sketches of various interesting arrangements, in some of which the corrugations are used horizon-Since the whole question is one of appearance rather than of technique it is not a matter which need be considered at any great length here, but it is interesting to find a manufacturer interested (and prepared to be co-operative) in the architectural use of a material, and not content to regard it as merely so many super yards of walling. Full By the way, does anyone these days ever think of using asbestos cement as a purpose made material? Special shapes are by no means difficult to make in small quantities, and one would have thought there were endless design possibilities here. (Turners Asbestos Cement Co. Ltd., Trafford Park, Manchester 17.)

#### TROPICAL ROOFING

The illustration (page 161) shows the Arcon tropical roof, a standardised product recently introduced by the firms responsible for the house. It is reported that in most tropical countries, wall and floor materials are generally available, but roofs are a problem. The Arcon roof consists of tubular columns, to be set in concrete foundations, and these support welded tubular trusses covered above and below with corrugated asbestos cement sheeting, the space between the two layers

giving ventilation and cooling.

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are Taylor Woodrow Construction Ltd. (25, Wilton Road, London, S.W.1.)

#### Announcements

The retirement is announced Leonard Harper, a Director of Horseley Bridge & Thomas Piggott, Ltd., since 1938, and London Manager for twenty-three years, after forty-three years' service with the company.

The partnership between Mr. Erno Goldfinger, D.P.L.G., and Mr. Colin Penn, A.R.L.B.A., Architects and Town Planning Consultants, has been dissolved by mutual consent. Mr. Goldfinger will continue to practise from 69, Piccadilly, W.1. (Regent 5210 and 5617), and Mr. Penn will practise from 62, Parliament Hill, N.W.3 (Hamp-stead 3416).

Mr. Colin William Glendinning, L.R.I.B.A., can now be located at P.O. Box No. 137, Public Works Department, Lusaka, Northern

### Buildings Illustrated

Two Cottages in Essex for Agricultural Workers: One at Netteswell Hall, near Harlow, the other at Eastend Roydon (pages 149-150). Architect: June Park, A.R.I.B.A. General Contractor: Messrs. Cowlin & Sons. Sub-Contractors: F. Braby & Co., Ltd., copper sheet roofings; Bratt Colbran, Ltd., grates; Stitsons Sanitary Fittings, Ltd., sanitary fittings; Comyn Ching & Co., Ltd., door furniture; Linden Doors, Ltd., casements and joinery.

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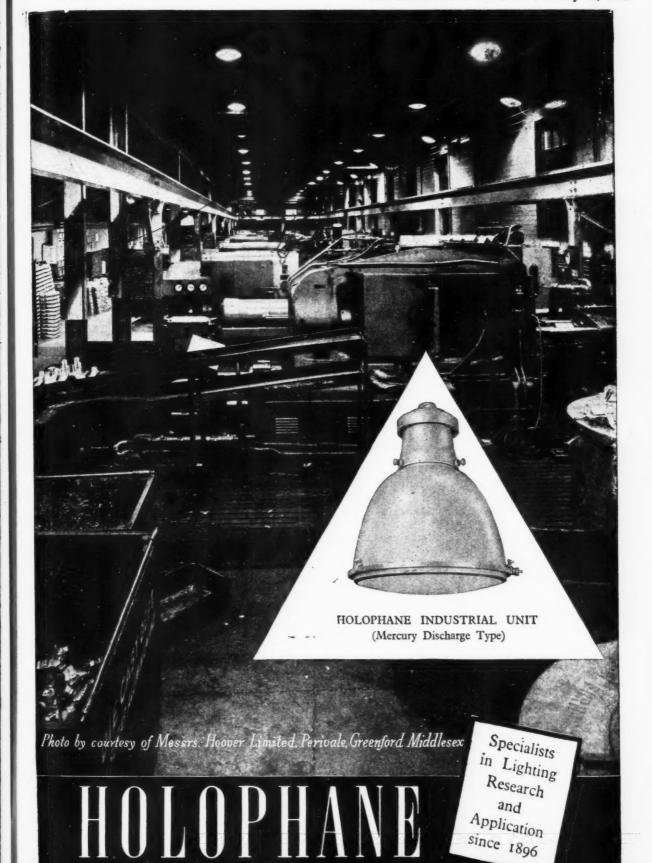
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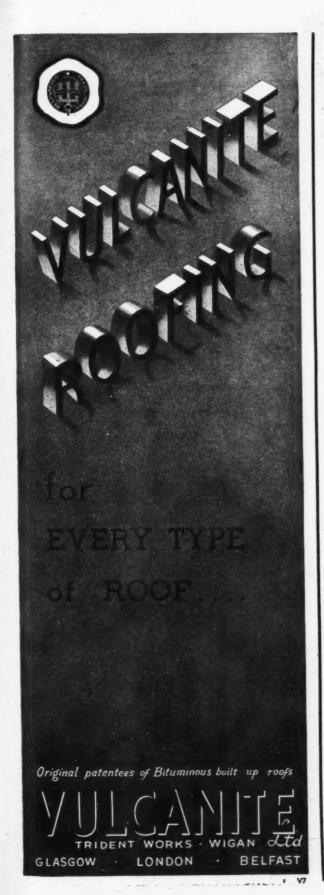
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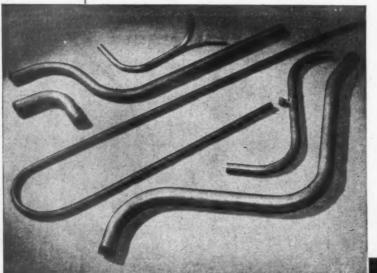
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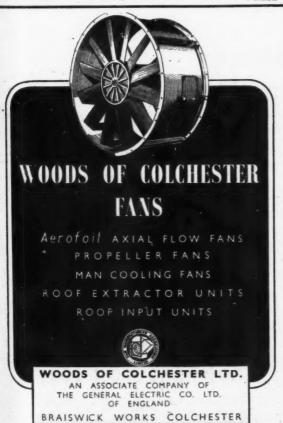
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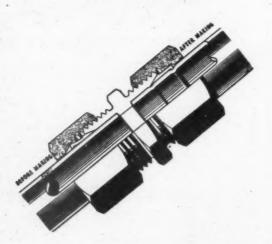
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#### CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Adv Senager. "The Architects' Journal," 9, 11 an Queen Anne's Gate, Westminster, S.W.1, an should reach there by first post on Frida-merning for inclusion in the following Thursday

aper.
Replies to Box Numbers should be addressed
are of "The Architects' Journal," at the address

esse of "The Architects' Journal," at the address given above.

None of the vacancies in these columns relates a man between the age of 18 and 50, inclusive, unless he or she is excepted from the positions of the Control of Engagement Order.

1817, or the vacancy is for employment excepted from the provisions of that Order.

#### Public and Official Announcements 6 lines or under, 1Gs.; each additional line, 1s. 6d.

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SERVINGES maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners keying 6.4 m vacancies. Address: 75, Raton Place London, S.W.1. Tel. Stoams 5615.

COUNTY BOROUGH OF DERBY.

BOROUGH ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointment, on the permanent staff, in accordance with the National Scale of Salaries:

CHIEF QUANTITY SURVEYOR. Grade VIII.
AP, and T. Division, salary £625-£700, plus cost-diving bonus, at present £59 16s. (male).
Applicants must be Chartered Quantity Surveyors, with extensive experience of all classes of work undertaken by a Local Authority.

The appointment will be subject to one month's notice in writing on either side, and to the terms of the National Joint Council's Scheme of Conditions of Service, and the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination.

Forms of application may be obtained from Thos. W. East, F.R.I.B.A., Borough Architect, the Council House, Corporation Street, Derby, and abould be returned when completed, together with oppies of three testimonials, to arrive not later than Friday, 20th February, 1948.

Canvassing, directly or indirectly, will be a diqualification.

C. ASHTON, Town Clerk

Market Place, Derby.

UNIVERSITY OF SYDNEY.

CHAIR OF ARCHITECTURAL DESIGN AND
HISTORY.

The Senate will shortly proceed to the appointment to the Chair of Architectural Design and History. A Chair of Architectural Design and History. A Chair of Architectural Construction and Practice is already established in the University. The Senate will be glad to hear before 18th May, 1948, from anyone who would like to be considered for the appointment.

The Professor will be allowed, subject to the consent of the Senate in each case, to engage in a limited amount of higher consultative practice; he will not be allowed to engage in edinary private practice or tuition.

The salary will be at the rate of £1.500 (Australian) per annum. To this salary the University adds a yearly sum equal to 10 per cent, by way of contribution to the Sydney University Professorial Superanuation System, under which there is a retirement provision on the lines of F.S.BU; the Professor's own contribution to the system will be at the rate of per cent, of his salary. In addition, the Professor will be entitled to receive a pension of £400 per annum upon retirement after attain intent standards of teaching in his Departian the standards of teaching in his Departian the standards of teaching in his Departice.

ing the age of 60 years.

In order to encourage research and to maintain the standards of teaching in his Department, one year's sabbatical leave may be granted on full pay every seven years or thereabouts.

Travelling expenses will be paid as arranged at time of appointment; generally speaking, they will cover first-class steamer fare in the case of a successful applicant coming from abroad.

G. DALE.

Registrar.

WEST SUSSEX COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
ADDICATIONS ARCHITECTURAL AND TOWN
ADDICATIONS ARCHITECTURAL AND TOWN
HANNING ARCHITECTURAL AND TOWN
BLANNING ARCHITECTURAL AND TOWN
BLANNING ARSISTANT, at a commencing
salary of £555 per annum, rising by two annual
increments of £20 and orp of £25 to £600 per
annum, in accordance with Grade VI (A.P.T.
Division) of the National Scales of Salaries. A
Cost-of-living bonus. at present £59 16s. per
annum, will be payable in addition to the salary
stated.

lated.
Further particulars should be obtained from R. Steele. F.R.I.B.A., F.R.I.C.S.. M.T.P.I., county Architect, County Hall, Chichester, to hom detailed applications must be submitted of later than the 25th February, 1948. F. R. County

T. C. HAYWARD.

County Hall, Chichester.

30th January, 1948.

DURHAM COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the follow Applications

GOUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments:
A.P.T., Grade VII, salary £578-£650.
A.P.T., Grade VI, salary £538-£600.
A.P.T., Grade VI, salary £538-£600.
A.P.T., Grade VI, salary £308-£455.
A.P.T., Grade II, salary £308-£455.
A.P.T., Grade III, salary £308-£456.
A.P.T., Grade II, salary £308-£466.
A.P.T., Grade II, salary £308-£466.
A.P.T., Grade II, salary £308-£466.
A.P.T., Grade VI, salary £408-£510.
A.P.T., Grade IV, salary £408-£510.
A.P.T., Grade III, salary £308-£405.
A.P.T., Grade III, salary £358-£300.
All the above salaries are subject to the addition of cost-of-living bonus, at present amounting to £59 19s. 3d. p.a.
The appointments are subject to the Local Government Superannuation Act, 1937, and successful applicants will be required to pass a medical examination.
Canvassing will disqualify, and a candidate who

medical examination.

medical examination.

Canvassing will disqualify, and a candidate who is related to a member or a senior officer of the Council must disclose this fact in his application. Applications, giving particulars of age, experience, qualifications, previous and present appointments, and enclosing copies of not more than three recent testimonials, should be forwarded to reach Mr. G. R. Clayton, F.R.I.B.A., County Architect, Court Lane, Durham, not later than Friday, 20th February, 1948.

Envelopes should indicate the post for which application is made.

J. K. HOPE, Clerk of the County Council. Shire Hall, Durham. 19th January, 1948.

CAMBRIDGESHIRE COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT. Applications are invited for the following

Applications are invited for the lollowing appointments:

(a) QUANTITY SURVEYOR (TEMPORARY).

Grade VII, A.P.T. Division, £575.

(b) TWO ASSISTANT ARCHITECTS (TEMPORARY).

Grade VI, A.P.T. Division, £535.

(c) ONE ENGINEERING ASSISTANT (TEMPORARY).

Grade VI, A.P.T. Division, £535.

All the above scales of salaries are plus a variable cost-of-living bonus, at present £59 16s.

variable cost-of-living bonus, at present £59 16s. per annum.
Candidates for (a) should have passed at least the Intermediate examination of the Royal Institute of British Surveyors (Quantities Sub-Division), and be capable of writing specifications, the preparation of detailed estimates, taking off quantities, abstracting and billing, and checking and agreeing final accounts.
Candidates for (b) should be fully qualified Architects and Members of the Royal Institute of British Architects, and have had experience in design, construction, and of all types of public buildings.

in design, construction, and of all types of public buildings.

Candidates for (c) should be fully qualified Heating, Ventilating and Electrical Engineers, and have had experience in the preparation of schemes, including writing specifications and preparation estimates of costs.

Applications stating age, qualifications and

preparation estimates of costs.

Applications, stating age, qualifications and experience, accompanied by one recent testimonial and the names and addresses of two referees, should be sent to the Clerk of the County Council, Shire Hall, Cambridge, not later than 21st February, 1948.

The appointment to be subject to one month's notice on either side, and the selected candidates will be required to pass a medical examination. CHARLES PHYTHIAN.

Clerk of the County Council.

Shire Hall, Cambridge 26th January, 1948.

IONDON 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, £550 to

£700 a year.
TECHNICAL ASSISTANT. 55s. a week to TECHNICAL ASSISTANT.

E580 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.

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, surveying, or town planning qualifications.

Apolication forms may be obtained from the Architect to the Council (P), County Hall. Westminster Bridge, S.E.1 (enclosing stamped addressed foolscap envelope). Returnable not later than ten days from this date.

Canvassing disqualifies. (340) 868 zoning plans.

LONDON COUNTY COUNCIL.

VACANCIES FOR QUANTITY SURVEYORS.
Applications are invited for a number of positions as Quantity Surveyor, in the Architect's Department, on salary scale 240 to £50 a year.
Commencing rates 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 higher grades on the occurrence of vacancies. Successful candidates will be subject to the Council's Superannuation and Provident Fund. Details of work will include :—Measurement of work in construction of Council buildings, preparation of interim and final bills, measurement and adjustment of sub-contractors; preparation of cost statistics, estimates, etc.; interim valuations for payments, measurement of variations and settlement of final accounts.
Application forms may be obtained from the Architect to the Council (Q), County Hall, Westminster Bridge, S.E.1 (enclosing stamped addrgssed foolscap envelope).
Canvassing disqualifies. (343) 869

WESTMORLAND COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments:

(a) DEPUTY COUNTY ARCHITECT. Salary,

(a) DEPUTY COUNTY ARCHITECT. Salary, 2700—250—2800.

Applicants must be well qualified, have had good and extensive experience of contemporary architectural design and construction, and be capable of assuming full responsibility for the organisation and supervision of the day-to-day work of the Department, which is concerned mainly with new school and police building work and general maintenance of County buildings. work and general matter ings. (b) BUILDING INSPECTOR, Grade III.

ings.
(b) BUILDING INSPECTOR, Grade III.
Salary, 2390-2435.
Applicants must have a wide experience of all branches of the building trade, and be capable of supervising new building work. Experience of carrying out maintenance work of all kinds and ability to prepare accurate reports and reasonable estimates is essential.

COUNTY PLANNING DEPARTMENT.
The following appointments will be the first to be made to a new Planning Department:
(c) DEPUTY COUNTY PLANNING Applicants must be well qualified, have had a wide experience in all matters appertaining to planning a large Rural Area, and be capable of assuming responsibility for supervision of staff and the running of the Department. The County area includes a considerable part of a suggested National Park and two suggested conservation areas. An appreciation of the special planning problems resulting, with some good experience of architectural building control, is desirable.
(d) PLANNING ASSISTANT, Grade IV.
Salary, £420-£465.
Applicants must be fully conversant with the

(d) PLANNING ASSISTANT, Grade Salary, £420-£465.
Applicants must be fully conversant with the Planning Acts, Orders and Circulars, and have lad experience in the preparation of schemes and control of interim development.

Preference will be given to applicants who are Corporate Members of the Town Flanning Institute and/or hold another recognised professional qualification.

qualification.

Keenness and an intelligent approach to the planning problems of an area with bigh amenity value are essential.

(e) JUNIOR PLANNING ASSISTANT (DRAUGHTSMAN), Grade I. Salary, 2330-2375. Applicants must be neat and expeditions draughtsmen, capable of making surveys and revising Ordnance Sheets (experience of Ordnance Survey work would be considered an advantage). Planning experience though desirable is not essential.

draughtsmen, capable of making surveys and revising Ordnance Sheets (experience of Ordnance Survey work would be considered an advantage). Planning experience though desirable is not essential.

All appointments will be subject to the terms and conditions of service of the National Joint Council. the appropriate cost-of-living bonus (£59 16s. males, £48 2s. females) being payable in addition to the salaries menticned, and to the Local Government Superannuation Act, 1937. Successful candidates must pass a medical examination.

Posts (a) and (c) will be subject to two months' notice on either side, and posts (b), (d) and (e) to one month's notice.

Applications, stating clearly which post is applied for, and giving particulars of age, education, technical training, qualifications, present and previous appointments, and full details of experience, should be accompanied by one recent testimonial and the names of two other people to whom reference can be made. They should be sent to R. H. Crompton, A.R.I.B.A., A.M.T.P.I., County Architect, County Hall, Kendal, to reach him not later than 27th February, 1448.

H. B. GREENWOOD.

H. B. GREENWOOD,

Clerk of the County Council.

County Hall. Kendal.

31st January, 1948.

853

QUANTITY SURVEYORS. qualified, are urgently required by several Government Departments for non-established posts, at salaries ranging from £400 p.a. upwards, according to qualifications and experience. Applications from unqualified men will be considered providing they have had at least 5 years' practical experience of quantity surveying.

Apply Ministry of Labour and National Service, Technical and Scientific Register, Room 377, York House, Kingsway, London, W.C.2, quoting ref. J/Q.S.

CUMBERLAND COUNTY COUNCIL.
Applications are invited for the following appointments, in the County Architect's Department, in accordance with the grades of the A.P. and T. Division of the National Scales of Salaries, as follows:—

(a) ASSISTANT ARCHITECTS (2). Grade V, 6460, 8510

£460-£510. (b) JUNIOR ASSISTANT ARCHITECT (1).

(b) JUNIOR ASSISTANT ARCHITECT (1).
Grade III, £390-£435.
(c) ARCHITECTURAL ASSISTANTS (6).
Grade II. £360-£405.
Cost-of-living bonus, at present £59 16s. per annum, is payable in addition.
The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the persons appointed will be required to pass a medical examination.
Applicants for appointments (c) and (b) must be registered Architects, and preference will be given to those applicants who are Associates of the R.I.B.A. and who have had experience in the Architectural Department of a Local Authority.

be registered Arentsens.

given to those applicants who are Associates of the R.I.B.A. and who have had experience in the Architectural Department of a Local Atthority.

Applications must be made on a form obtainable from the County Architect, 4, Alfred Street North, Carlisle, and should be returned completed to him, together with copies of not more than three recent testimonials, not later than Saturday, 6th March, 1948.

G. N. C. SWIFT.

G. N. C. SWIFT.

G. N. C. SWIFT.
Clerk of the County Council.

January, 1948.

METROPOLITAN BOROUGH OF HACKNEY.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL
Applications are invited for the appointment on the permanent establishment of an Architectural Assistant, at a salary in accordance with Grade VI, A.P. and T. Division (2536 p.a., rising to £600 p.a.) of, and subject to, the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional. Technical and Clerical Services, plus £30 p.a. London weighting allowance and current cost-of-living bonus.
Candidates must be registered Architects and Corporate Members of the Royal Institute of British Architects, and must have had good architectural experience.
The successful candidate will be required to undertake the preparation of drawings and specifications for housing and other work and the supervision of buildings erected by direct labour. Preference will be given to applicants with previous local government experience and with a knowledge of direct labour organisation.

Applicants are advised that the Council is unable to provide any housing accommodation for the successful candidate.
The appointment will be subject to the pro-

knowledge of direct labour organisation.
Applicants are advised that the Council is unable to provide any housing accommodation for the successful candidate.

The appointment will be subject to the provisions of the Council's Superannuation Acts, to the successful candidate passing a medical examination, to the Council's regulstions relating to staff appointments, and to termination by one month's notice on either side.

Applications in writing, on forms to be obtained from the undersigned, upon the receipt of a stamped addressed envelope, must be received not later than first post on the 27th February, 1948, endorsed "Architectural Assistant—Borough Engineer and Surveyor's Dept."

DUDLEY SORRELL,

Town Clerk.

Town Hall, Hackney, E.S. 28th January, 1948.

CITY AND COUNTY OF KINGSTON-UPON-HULL.
CITY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments, on the staff of the City Architect:—
(a) ASSISTANT ARCHITECT. A.P.T., Grade V (2460-5510).

(a) ASSISTANT ARCHITECT. A.P.T., Grade V (£460-£510).

(b) ASSISTANT ARCHITECT. A.P.T., Grade III (£390-£435).

(c) ARCHITECTURAL ASSISTANT. A.P.T., Grade I (£330-£375), plus, in each case, bonus, at present £59 16s. per annum.

The appointments are subject to the Local Government Superanuation Act, 1937, terminable by one month's written notice on either side, and subject also to the successful candidates passing satisfactorily a medical examination.

Applicants should not be over 40 years of age (except in the case of those who are serving or have served in the Forces).

Candidates for (a) should be Associates of the Royal Institute of British, Architects, and thoroughly experienced in the design and preparation of working drawings for modern School buildines.

paration of working drawings for modern School briddines. Candidates for (b) should preferably be Associates of the Royal Institute of British Architectural experience and he capable of preparing working drawings for School buildings. Candidates for (c) should have had a good training in Architecture, and preference will be given to those who have passed the Intermediate examination of the Royal Institute of British Architects.

Application forms, which can be obtained from the understand, should be returned complete on or before 6th March, 1948.

ANDREW RANKINE, A.R.I.B.A..

City Architect.

Guildhall, Kingston-upon-Hull.

BOROUGH OF CHELMSFORD.
ENGINEER AND SURVEYOR'S DEPARTMENT.
Applications are invited for the following permanent appointments within the scale stated:—
(a) SENIOR QUANTITY SURVEYOR.
Salary, £595-£660 per annum.
(b) ARCHITECTURAL ASSISTANT. Salary,
£480,£560 per annum.

Salary, £595-£660 per annum.

(b) ARCHITECTURAL ASSISTANT. Salary, £480-£540 per annum.

All candidates for appointment (a) must be Professional Associates of the Surveyor's Institute, or possess equivalent qualifications; and for (b) must be Registered Architects, and preference will be given to Corporate Members of the R.I.B.A. The above appointments are subject to the provisions and conditions of service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, and will be terminable by one month's notice on either side. Applications, stating age, qualifications, present and previous appointments and general experience, together with copies of three recent testimonials, should be forwarded to reach the undersigned by not later than Tuesday, 24th February, 1948. Canvassing in any form will disqualify.

\*\*Notent J. WILLIS, M.I.Mun.E., Borough Engineer, Surveyor and Architect.\*\*

Municipal Offices, Chelmsford.

6th February, 1948. 892

COUNTY OF GLOUCESTER.

APPOINTMENT OF BUILDING INSPECTOR.
Applications are invited for the above-mentioned appointment in the County Architect's Department, at a salary of £360 p.a., rising to £465 p.a. (A.P. and T.. Grade II. of the National Joint Councils' Scheme of Conditions of Service). plus cost-of-living bonus, at present £50 per annum.

National Joint Councils Scheme or Conditions of Service), plus cost-of-living bonus, at present 250 per annum.
Candidates must have had a sound experience of the building trade, be competent to carry out inspections of buildings, their furnishing and equipment, prepare Specifications and Estimates of costs of repairs required, set out works, supervise their execution, measure up on completion, and check accounts.
The apprintment is terminable by one month's notice on either side, and is subject to the previsions of the Local Government Superannation Act, 1937, and to the passing satisfactorily of a medical examination.
Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect. Shire Hall, Gloucester, not later than the 21st February, 1948.

GUY H. DAVIS,

Clerk of the County Council.
Shire Hall, Gloucester. 289

THE HARLOW DEVELOPMENT CORPORA-TION invites applications for the following

(a) ARCHITECT. Salary £1,150 gross. (b) ARCHITECT. Salary range, £750-£1,000

ASSISTANT ARCHITECTS. Salary range, 520-£660 gross.
(d) ARCHITECTURAL ASSISTANTS. Salary

2520-2660 gross.

(d) ARCHITFCTURAL ASSISTANTS. Salary range. £450-£252 gross.

No bonus is payable in addition to the above salaries. Commencing salary for appointments (b) to (d) will be determined in the light of qualifications and experience.

The New Towns Act. 1946. enables the provisions of the Local Government Service Act. 1937. to be applied to staffs of Development Corporations. and arrangements are now being made to enable officers of the Corporation previously serving with Local Authorities to be admitted under the latter Act.

The above appointments are required to fill vacancies remaining in the first design unit now being formed to implement the Master Plan for the New Town under the direction of Mr.

N. Tweddell, A.R.I.B.A., Chief Architect, in association with Mr. Frederick Gibberd, FR.I.B.A., A.M.T.P.I., Consultant Architect and Town Planner.

Applicants for appointment (a) and (b) must

association with Mr. Frederick Gibberd. F.R.I.B.A., A.M.T.P.I., Consultant Architect and Town Planner.

Applicants for appointment (a) and (b) must have had first-class training in contemporary architectural design, supported by organising ability and experience in the management of building contracts. Town planning training is not essential for these posts.

Applicants for appointment (c) should have had first-class experience on recent housing and public buildings. Town planning experience will be essential for one of these posts.

Applicants for appointment (d) should have attained R.I.B.A. Intermediate exam. standard, and should be familiar with details in the above class of work.

Officers will be required to work at the Corporation Headquarters at Harlow. Applications should be made in writing by Monday, 23rd February, 1948, to the General Manager, Harlow Development Corporation. 13, Gosvenor Square, London. W.1, stating the salary, full details of architectural training and experience, town planning training and experience, (if any), war service with rank on release. The names of three references should be supplied, and applicants should state whether they are propared to live in the Harlow district if and when accommodation can be provided for them.

COUNTY BOROUGH OF BURNLEY BOROUGH ENGINEER AND SURVEYORS DEPARTMENT.

Applications are invited for the under-mentioned appointments:—
(1) CHIEF PLANNING ASSISTANT. Grade VII, £575-£650 per annum, plus bonus. Caned dates must have had considerable experience in all aspects of statutory planning, interime in the control, and planning procedure in general. Candidates should be Associated Members of the Town Planning Institute, and in addition should be a qualified civil engineer or architect. Administrative experience will be an advantage.

in addition should be a three experience will be an advantage.

(2) SENIOR PLANNING ASSISTANT Grade V. £460-£510 per annum, plus bona Candidates for this appointment should be Associate Members of the Town Planning Institute and the holding of other qualifications will be an advantage. Experience in a similar capacity in a Planning Office is essential.

The bonus applicable to both the abon appointments is at present £59 16s. per annum. Conditions of service are those formulated by the National Joint Council, and the appointments are on the established staff and subject to the provisions of the Local Government Superannuation Act, 1937. The successful applicant will be required to pass a medical examination. Forms of application may be obtained from the Borough Engineer and Surveyor, Town Hall Burnley, to whom applications should be returned in the envelope provided not later than noon on Saturday, 28th February, 1948.

C. V. THORNLEY,

Town Hall, Burnley. February, 1948.

February, 1948.

LONDON COUNTY COUNCIL.

VACANCIES FOR TECHNICAL ASSISTANTS
IN THE ARCHITECT'S DEPARTMENT.
Applications are invited for positions of
Architect's Department. Salary: Section (a), 2440–220–2590 a
year; Section (b), 55s. to 167s. 6d. a week.
Required for the preparation of drawings, specifications and estimates for works at schools and
other buildings.

Successful candidates may be required to castribute to the Council's Superannuation and
Provident Fund, and be eligible for permanent
appointment and for advancement to higher
positions according to merit.

Application forms may be obtained from the
Architect to the Council (A), County Hall, Weininster Bridge. London, S.E.I., explosing stamped
addressed foolscap envelope.
Canvassing disqualifies. (341)

addressed foolscap envelope.

Canvassing disqualifies. (341)

COUNTY BOROUGH OF ROTHERHAM.

ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant, in the office of the Borough Engineer, at a commencing salary of £460 per annum, rising by annual increments to a maximum of £510 per annum, plus cost-of-living bonus (at present £59 16s. per annum).

Applicants must be Associate Members of the Royal Institute of British Architects, and presently with experience in the service of a Lozal Authority.

The post is superannuable, and the candidate selected for appointment will be required to pan a medical examination. The appointment will be subject to the conditions of service adopted by the Council, and based on the National Scheme of Conditions of Service. It will be determinable by one month's notice on either side.

Applicants must state whether they are related to any member or officer of the Rotherham County Borough Council. Deliberate omission to disclose any such relationship will disqualify.

Applications (endorsed "Architectural Assitants"), stating age, qualifications, and experience, accompanied by copies of three recent testimonials, should be delivered to the undersigned not later than Tuesday. 2nd March, 1948.

Municipal Offices, Rotherham, Yorks.

Municipal Offices, Rotherham, Yorks.

Municipal Offices, Rotherham, Yorks.

CUDWORTH URBAN DISTRICT COUNCIL ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL ASSISTANT (GRADE IV).

Applications are invited for the above temporary appointment, in the office of the Engineer and Surveyor to the Council, at a salary is accordance with A.P. and T. Division. Grade IV, of the National Scale of Salaries, £420-£468. The person appointed will be responsible for the preparation of plans, specifications, and bills of quantities for housing schemes, and for checking of Interim Valuations and settling up of final accounts for same.

Candidates should have considerable experience in this work. Applications, stating age, details of qualifications and experience, together with copies of three recent testimonials, should be sent to the undersigned, endorsed "Temporary Architectural Assistant," not later than Monday. 23rd February, 1948.

C. M. PRATT (Solicitor).

Clerk of the Council.

Regent Street. Barnsley. 30th January, 1948.

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BOROUGH OF LUTON.
BOROUGH ENGINEER'S DEPARTMENT.
TECHNICAL STAFF.
Applications are invited for the following

appointments:

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TANT. Grade VI, salary £95-£20-£25-£560.

(b) ARCHITECTURAL ASSISTANT. Grade IV, salary £480-£25-£525.
Applicants must be A.R.I.B.A., and have had extensive experience in the design and construction of public buildings, schools and houses, and in particular have had recent experience in the design and development of housing schemes. In the case of appointment (a) every endeavour will be made to provide housing accommedation within a reasonable time.

Appointments will be subject to the Local Government Superannuation Act, 1937, to the equitions of service as laid down by the Council, to a satisfactory medical examination, and to one month's notice.

Applications, suitably endorsed, giving particulars of age, qualifications, eyerience, and present appointment and salary, together with copies of not more than three recent testimonials, should be delivered to the Borough Engineer, Town Hall, Luton, not later than Friday, the 5th March, 1948. Canvassing will disqualify.

W. H. ROBINSON,

W. H. ROBINSON, Town Clerk.

disquality.

W. H. ROBINSON,
Town Clerk.

Town Hall, Luton.
Sth February, 1948.

CITY OF MANCHESTER.
HOUSING COMMITTEE.
Applications are invited for the appointment,
under the Housing Committee, of the following
established posts for Assistant Architects:
FIRST ASSISTANT ARCHITECT (who acts
as Deputy to the Chief Assistant Architect).
Grade A.P.T., VII, of the N.J.C. Scales, £675£656 per annum, plus bonus.
ONE ASSISTANT ARCHITECT.
A.P.T., v, of the N.J.C. Scales, £660-£510 per
annum, plus bonus. The qualification of
Associate of the Royal Institute of British
architects will be considered an advantage.
After six months' service the successful candidates will be required to contribute to the Corporation's Superannuation Fund, and if under
the age of 30 years will be required to contibute to the Manchester Municipal Officers',
Widows' and Orphans' Pensions Fund.
Applications. stating age, qualifications and
experience, together with copies of two testimonials must be submitted to Mr. A. Mackenzie,
LR.I.B.A. Director of Housing, Town Hall,
Manchester, 2, endorsed as to the position
applied for not later than Saturday, the 28th
February, 1948.

Canvassing in any form, oral or written,
direct or indirect, is prohibited.

PHILIP B. DINGLE,
Town Clerk.

PHILIP B. DINGLE,
Town Clerk.

February. 1948.

COUNTY BOROUGH OF ROCHDALE.

BOROUGH SURVEYOR'S DEPARTMENT.

APPOINTMENT OF SENIOR HEATING AND VENTILATING ASSISTANT

Applications are invited for the above appointment, in the Department of the Borongh Surveyor, on Grade V of the A.P.T. Division of the National Joint Councils' Scales, at a salary of 2460 per annum, rising to 2510, plus cost-of-living bonus of 259 168, per annum. Applicants must be Members or Associate Members of the Institution of Heating and Ventilating Engineers, and have had considerable experience in mechanical engineering, with particular reward to the design and installation of heating and ventilating systems of all types. The appointment will be subject to the provisions of the Local Government Superannuation Acts and to the selected candidate passing a medical examination. Applications, stating are, qualifications and experience together with the names of three persons to whom reference can be made, should be sent to the Borough Surveyor, Town Hall. Rochdale, not later than 20th March, 1948. Envelopes should be endorsed "Senior Heating Assistant." Relationship to any member of the Council or Senior Officer of the Corporation must be disclosed, and canvassing will dismalify.

BOROUGH OF SWINDON.

BOROUGH OF SWINDON.

BOROUGH ARCHITECTS DEPARTMENT.

APPOINTMENT OF ASSISTANT ARCHITECT.

Applications are invited for the permanent post of Assistant Architect, on the staff of the Borough Architect, at a salary in accordance with A.P.T. Grade V. of the National Scales.

£450 to £510 per annum, plus such cost-of-living bonus as may from time to time be paid by the Corporation (at present £59 16s. per annum).

Applicants must have had experience in housing and the general architectural work of a Local Authority, and must be Associate Members of the Royal Institute of British Architects.

Forms of application may be obtained from the undersigned, and applications must be delivered to me not later than the £8th February, 1948.

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D. MURRAY JOHN, Town Clerk.

Civic Offices, Swindon. 5th February, 1948.

METROPOLITAN BOROUGH OF POPLAR.
TWO ARCHITECTURAL ASSISTANTS
(A.P.T., IV).
Applications are invited from suitably qualified persons for the above appointments, on the permanent establishment of the Borough Engineer and Surveyor's Department.
Full details and forms of application may be obtained from the Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.3, to whom completed applications—must be delivered not later than first post on 23rd February, 1948.

BOROUGH OF LEYTON.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.
Applications are invited for the following appointments, in the Department of the Borough Engineer and Surveyor:
TWO GENERAL ARCHITECTURAL ASSISTANTS.
The salary will be £535 per annum, rising by two annual increments of £20 and one of £25 per annum to a maximum of £600 per annum (Grade VI of the National Joint Council's Scheme of Conditions of Service for Local Authorities, Administrative, Professional, Technical and Clerical Services), plus £20 per annum, candidates should possess the recognized architectural qualifications (preferably A.R.I.B.A.), and have had good Municipal experience.
TOWN PLANMING ASSISTANT.
The salary will be £460 per annum, rising by two annual increments of £15 and one of £20 per annum, to a maximum of £510 per annum (Grade VI of the National Joint Council's Scheme of Conditions of Service for Local Authorities' Administrative, Professional, Technical and Clerical Services), plus £20 per annum weighting allowance and cost-of-living bonus, at present £60 per annum.
Candidates must have had good experience in the preparation and administration of Town Planning.
The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, to the successful candidate, satisfying the Medical Officer as to their fitness, to the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, of the Local Government Superannuation Act, 1937, to the successful candidate, satisfying the Medical Officer as to their fitness, to the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, and to the general conditions laid down from time to time by the Council, including membership of a trade union.
Canvassing, directly or indirectly, will be a disqualification, and candidates must disclose in their application whether they are related to any

Town Hall, Leyton, E.10. 4th February, 1948.



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

ARCHITECTURAL DRAUGHTSMEN required by Kenya Government, Public Works Department, for three years in first instance. Commencing salary according to experience in scale 2500 to £650, plus cost-of-living allowance up to £215. Outfit allowance £30. Free passages. Candidates should be accurate and rapid draughtsmen, with a sound knowledge of building construction and architect's office experience. Knowledge of water supply, drainage, sanitation, steam installation and air conditioning layouts an advantage. 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 M4N15411 on both letter and envelope. 859

ROROUGH OF MACCLESFIELD.

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.
Applications are invited for the appointments of Architectural Assistants, at salaries in accordance with Grade A.P.T., III, of the National Scales (£359, rising to £435 per annum), plus cost-of-living bonus (at present £69 16s. per annum).

Scales (2000, 1881).

Scales (2001, 1881).

Candidates should be Associates of the R.I.B.A., and must have had a thorough training and experience in Architectural work. Preference will be given to applicants who have had experience in Municipal housing.

The post will be subject to the provisions of the Local Government Superannuation Act, 1937, and the National Conditions of Service, and the successful candidate will be required to pass a medical examination.

Applications, stating age, experience and qualifications, and accompanied by a copy of a recent testimonial and giving the names, etc., of two referees, should reach the undersigned not later than Wednesday, 18th February, 1948.

WALTER ISAAC,

Town Hall. Macclesfield.

WALTER ISAAC,
Town Hall. Macclesfield.
2nd February, 1948.

MIDDLESEX COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Six AREA ARCHITECT'S DEPARTMENT.
Six AREA ARCHITECT'S required, commencing at £900 per annum, by £30 to £1.050 per annum, plus any cost-of-living bonus (now £60 per annum). Established and pensionable staff subject to medical examination.
Application forms and details of appointment from C. G. Stillman, Eso., F.R.I.B.A. County Architect, 20, Vauxhall Bridge Road, Westminster (send stamped addressed envelope), to whom completed forms must be returned by 1st March, 1948, Canvassing disqualifies.
(Quoting D575 A.J.)
C. W. RADCLIFFE.
Clerk of the County Council.
Guildhall, Westminster, S.W.1.

901

#### Tenders

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

DURHAM COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

TENDERS.

Quotations are invited from paint manufacturers and merchants for the supply of gloss paints, undercoating, semi-prepared flat oil paint, oil bound water paint, water paint, pastes in oil, varnishes, etc., etc., for the County Council of Durham.

All manufactures must be of British Standards Institution specification.

The contract will be of one year's duration, from 1st April, 1948, to J1st March, 1949.

Quotations are to be submitted in duplicate, and may be for the whole or part, of the materials required, and should be nett and devoid of any discount, either trade or cash.

Prices are to be inclusive of delivery to any building in the County of Durham, and deliveries to be at such times as the materials are required. Materials should be supplied in free, non-returnable packages, but where this is not possible the quotations are to include for the return of the empties carriage paid, and proper arrangements are to be made with the Railway Authorities to accept empties under these conditions.

Full specifications of the materials quoted for

Authorities to accept any control of the materials quoted for are to accompany the quotations, and the time required for delivery after the receipt of an order in every case is to be stated.

Forms of tender with lists of materials required may be obtained from the undersigned.

G. R. CLAYTON, F.R.I.B.A.,

County Architect.

County Architect's Office Court Lane, Durham. 4th February, 1948.

Architectural Appointments Vacant

K EEN JUNIOR ASSISTANT required for Mrchitect's country practice in Oxfordshire; must be capable of doing working drawings from Architect's rough sketches, surveying and leveling, must be neat and accurate; salary according to age and experience. Box 319.

I ONDON TRANSPORT.—Applications are invited for appointments on the temporary staff of the Architect as follows: Assistant Architects, Architectural Assistants. Structural Engineering Designers: commencing salary from £500 to £600 per annum, according to ability, qualifications and experience. Applications, which should give a brief quitine of training and experience, to be sent to the Staff Officer, ER/E451. London Passenger Transport Executive, 55. Broadway, S.W.1.

ARCHITECTURAL ASSISTANT, for London office, with experience of exhibition stand construction, designing and detailing. Box 792.

A RCHITECTURAL ASSISTANT wanted in ability, up to £350 per annum. Full details to Box 800.

A RCHITECT, preferably 35-4e years of age, required for the Property Department of a commercial company in Leeds; applicants must be registered architects, and have passed the Associateship examinations of the R.I.B.A.; previous experience in commercial property maintenance an advantage; the post, which is a permanent one, offers promotion prospects and pensions. Applications, stating age, qualifications and salary required (maximum commencing salary £750 per annum), should be addressed to Box 833.

EXPERIENCED ARCHITECT'S ASSISTANT wanted immediately for general practice; salary, £400-£500. State qualifications, age, and experience, Kitching & Co., 21, Albert Road, Middlesbrough.

TWO ARCHITECTURAL ASSISTANTS quired, with good experience in Building Architecture; the positions are temporary, but there is a possibility of permanency to the right men. Apply in writing to Personnel Manager, Richard Costain, Ltd.. Dolphin Square, London, S.W.1.

JUNIOR ARCHITECTURAL ASSISTANT required in London office of firm specialising in industrial projects; salary, £300 to £400 p.a., according to experience. Box 877.

TWO SENIOR ASSISTANTS required by London Architects; one for surveys and reports on churches and old buildings, and to supervise repairs and alterations; the other for normal work in a varied practice. Please reply, giving experience and salary required, to Rox 887. iving lox 887.

#### Architectural Appointments Wanted

B.I.B.A., 20 years' experience industrial, domestic work, including housing for local authorities, surveys for estate layouts, sewerage, etc., requires responsible senior position; Colchester, Ipswich district preferred. tion; Box 31.

SCHOOL-TRAINED ASSISTANT (27), awaiting result R.I.B.A. final, requires progressive position, mid-April; any locality; experienced in design of licensed premises; some office experience. Box 33.

A RCHITECTURAL ASSISTANT available; 10 years' site and office experience in busy practice, London and Home Counties; responsible position required; own survey and office equip-ment. Box 35.

R.I.B.A., 18 months' office experience since A • qualifying, requires position in London office; to commence after Easter, Box 34.

#### Other Appointments Vacant

4 lines or under, 5s.; euch additional line, 1s. 6d.

REQUIRED.—DESIGNERS and DRAUGHTS-men DETAILERS, for a firm of Re-inforced Concrete Engineers in Birmingham; only men with several years' experience in re-inforced concrete need apply. Write, giving full details, to Box 294, at 191, Gresham House, E.C.2.

A RCHITECTURAL MODEL MAKER required; full or part time. Box 802.

IMPERIAL CHEMICAL INDUSTRIES, LTD., Wilton Works, pear Redcar, Yorks, require DRAUGHTSMEN, to assist with the design and detailing of an extensive new works. The organisation is an expanding one, in which there are opportunities for advancement, and all appointments made will be to the Established Staff of the Company.

DRAUGHTSMEN—ARCHITECTURAL: Design of offices, laboratories, houses, welfare, and general industrial buildings. Order No. D.31.

CIVIL: Design of roads, railways, drains, and water services. Order No. D.27.

STRUCTURAL: Design of buildings and structures, and design and detailing of reinforced concrete work for industrial buildings. Order No. D.28.

inforced concrete work for industrial buildings. Order No. D.28.

It is desirable that the Draughtsmen for the above orders should have experience in taking off and billing quantities.

MECHANICAL: Design of pipework for steam, gas and water, compressed air stations, layout of chemical plant, etc. Order No. D.29.

POWER STATION: Design and layout of modern H.P. Boiler and Power Plant, having an initial capacity of over 60,000 K.W. Order No. D.27.

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No. D.227.

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Applications, giving full details and quoting advertisement reference ICI/X/38/F and the Order No., should be addressed to the Personnel Manager. Imperial Chemical Industries; Ltd., Wilton Works, P.O. Box No. 54, Middlesbrough, Vorka.

886

HORTHAND TYPIST for Consulting Engineer's office, Westminster; salary, £275-239 per annum; 5-day week. Write Liversedge, Ja John Adam Street, Adelphi, or 'phone Temp Bar 8947.

DRAUGHTSMEN, DETAILERS and TRACERS, experienced in reinforced concrete work; 5-day week. Write, giving ful details and salary required, Liversedge, 3a John Adam Street, Adelphi, or phone Temps Bar 8947.

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A SSISTANTS, with at least 5 years' experence, required for permanent positions in Architect's Department of British Home Stora, Ltd.; salary according to experience and quasifications; good working conditions; staff canses and pension scheme provided. Apply, in fire instance in writing, to A. Walker, L.R.I.B.A. A.I.A.A., British Home Stores, Ltd., Marylebose House, 129/137, Marylebone Road, N.W.1.

ARCHITECTURAL DRAUGHTSMAN wanted for Firm of British Engineers in Nakun. Kenya Colony; salary, £500 p.a.; passage pais state qualifications, age, references, and specimes of work by air mail; applicants cannot be interviewed, and full details are essential; 3 year contract under usual clauses. Write Frank A.C. Pearce (Eng.), Ltd., P.O. Box 178, Nakun. Kenya Colony.

SECRETARY/SHORTHAND TYPIST required by busy firm of Architects; Bloomabury area; five-day week; applicant with experience in Architect's office preferred. Write, stating age experience, and salary required, to Box 425, 667, Coptic Street, W.C.1.

JUNIOR TECHNICAL CLERK, of good education, required to assist Architect engaged on War Damage and other contracts; London area. Send details of experience, against required, to Box 882.

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DRAUGHTSMAN available for work in 8. available for work in exhibition work; available immediately. Box 874.

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CITY STUDY.—Sociologist (interested in Varchitecture and Planning) desires co-operation of young woman with similar interests in voluntary spare-time Field Work of professional value. Write Box 865.

MPERIAL Plan Chest for Sale; wood; good condition; £20, or offer; seen Golders Green, N.W.11. Box 867.

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