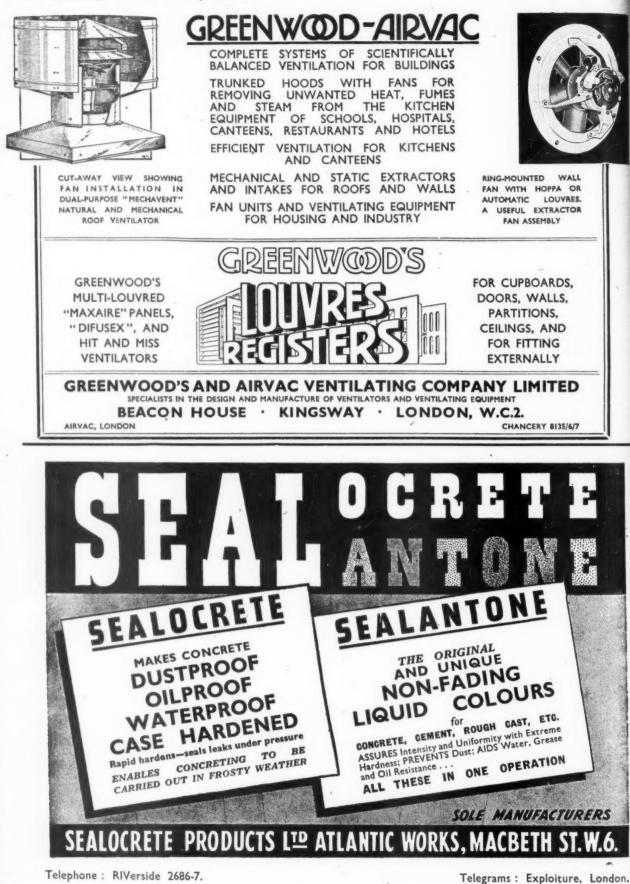
TINE ARTS DEPARTMENT		The Architects' JOURNAL for July 28, 1949
THE A	R	CHITEBLICTBTS'
STACK	<b>I</b> (	DUR NIRAL
	of all kind lished in ty mentioned IEE IES	sary of abbreviations of Government Departments and Societies and Committees s, together with their full address and telephone numbers. The glossary is pub- vo parts—A to Ic one week, Ie to Z the next. In all cases where the town is not the word LONDON is implicit in the address. Institution of Electrical Engineers. Savoy Place, W.C.2. Illuminating Engineering Society. 32, Victoria Street, S.W.1. Abbey 5215
	IGE IHVE IIBD	Institution of Gas Engineers. 1, Grosvenor Place, S.W.1. Sloane 8606 Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1. Sloane 3158 Incorporated Institute of British Decorators. Drayton House, Gordon Street,
standard contents	ILA I of Arb,	Institute of Landscape Architects. 12, Gower Street, W.C.1. Euston 2450 Institute of Arbitrators, 35/37, Hastings House, 10, Norfolk Street,
every issue does not necessarily contain all these contents, but they are	IOB IR	Strand, W.C.2. Temple Bar 4071 Institute of Builders. 48, Bedford Square, W.C.1. Museum 7197 Institute of Refrigeration. Empire House, St. Martin's-le-Grand, E.C.1.
the regular features which continually recur.	IRA ISE IWA LIDC	Institute of Registered Architects. 47, Victoria Street, S.W.1. Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128-29 Inland Waterways Association. 11, Gower Street, W.C.1. Museum 9200 Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.
NEWS and COMMENT Diary	LMBA MARS	London Master Builders' Association. 47, Bedford Square, W.C.1. Marken Master Builders' Association. 47, Bedford Square, W.C.1. Marken Marken
News Architects' Commonplace Book Astragal's Notes and Topics	MOA MOE MOH MOLNS MOS MOT MOTCP	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1. Ministry of Education. Curzon Street House, Curzon Street, W.1. Ministry of Health. Whitehall, S.W.1. Ministry of Labour and National Service. St. James's Square, S.W.1. Ministry of Supply. Shell Mex House, Victoria Embankment, W.C. Gerrard 6933 Ministry of Transport. Berkeley Square House, Berkeley Square, S.W.1. Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1.
Letters Societies and Institutions	MOW	Ministry of Vorks. Lambeth Bridge House, S.E.1. Reliance 7611 Natural Asphalte Mine-Owners and Manufacturers Council.
TECHNICAL SECTION	NAS NBR	94, Petty France, S.W.1. Abbey 1010 National Association of Shopfitters. 9, Victoria Street, S.W.1. Abbey 5277/8 National Buildings Record. 37, Onslow Gardens, S.W.7. Kensington 8161
Information Sheets	NCBMP NFBTE	National Council of Building Material Producers. 2, Caxton Street, S.W.1. Abbey5111 National Federation of Building Trades Employers. 82, New Cavendish Street,
Information Centre	NFBTO -	National Federation of Building Trades Operatives, Federal House, Cedars Road, Clapham, S.W.4. Macaulay 4451
Current Technique Ouestions and Answers	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.
Prices	NPL NSAS	National Physical Laboratory. Head Office, Teddington. Kolesey 1380 National Smoke Abatement Society. Chandos House, Buckingham Gate,
The Industry	NT	S.W.1. Abbey 1359 National Trust for Places of Historic Interest or Natural Beauty.
PHYSICAL PLANNING	PEP RCA RIAS	42, Queen Anne's Gate, S.W.1. Whitehall 0211/2 Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 7245 Reinforced Concrete Association. 94, Petty France, S.W.1. Whitehall 9936 Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.
SUPPLEMENT	RIBA	Edinburgh 20396 Royal Institute of British Architects. 66, Portland Place, W.1. Welbeck 5721
CURRENT BUILDINGS	RICS RFAC RS	Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1. WhitehallRoyal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1.Whitehall 3935Royal Society. Burlington House, Piccadilly, W.1.Regent 3335
HOUSING STATISTICS	RSA RSI RIB SBPM	Royal Society of Arts. 6, John Adam Street, W.C.2. Temple Bar 8274 Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1. Sloane 5134 Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. Wimbledon 5101 Society of British Paint Manufacturers. 20, Piccadilly, London, W.1. Regent 6347 Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8.
Architectural Appointments Wanted and Vacant	SCR	Society of Engineers. 17, Victoria Street, Westminster, S.W.1. Western 1571 Abbey 7244
wanted and vacant	SFMA SIA SIA	School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3. Mansion House 3921 Structural Insulation Association. 14, Moorgate, London, E.C.2. Central 4444 Society of Industrial Artists. Room 243, Empire House, St. Martin's-le-Grand,
	SNHTPC	E.C.1. Metropolitan 8344
	SPAB	Hon. sec., Robert Pollock, Town Clerk, Rutherglen. Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.
Sta 19401	ТСРА	Holborn 2646 Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.
No. 2842] [Vol. 110 THE ARCHITECTURAL PRESS 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1. 'Phone: Whitehall 0611	TDA TPI TTF WDC	Timber Development Association. 75, Cannon Street, E.C.4. Town Planning Institute. 18, Ashley Place, S.W.1. Timber Trades Federation. 81, Cannon Street, E.C.4. War Damage Commission. Devonshire House, Mayfair Place, Piccaadilly, W.1. Mayfair 2006
Price 9d.	WEDA	Mayfair 8866 Welfare Equipment Development Association. 61, St. Paul's Churchyard, E.C.4. City 4263/4
Registered as a Newspaper.	ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford. Oxford 47988

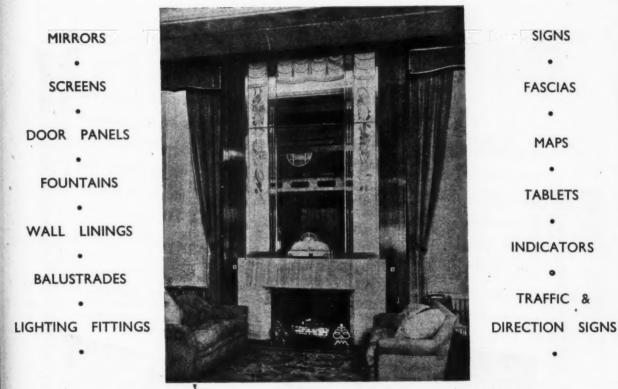


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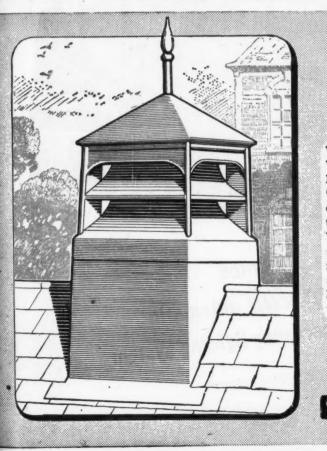




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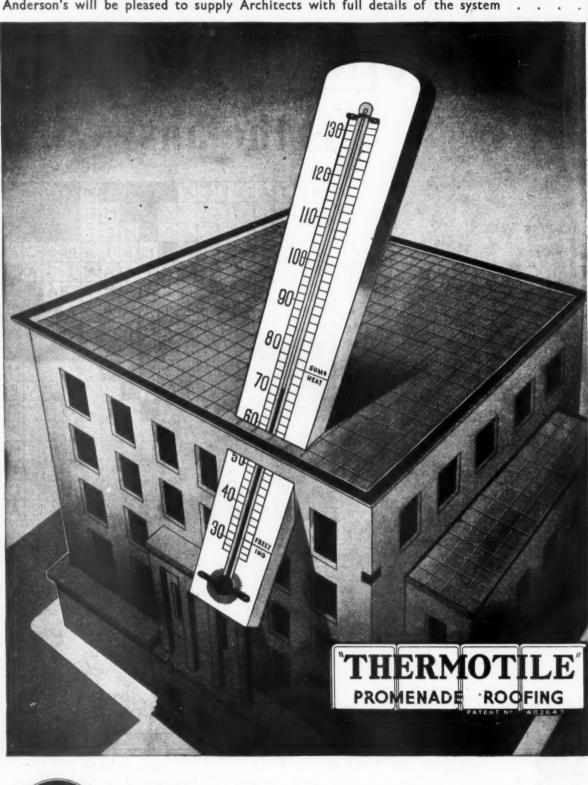
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Unfortunately, though this was a period rich in technical advancement, the æsthetic properties of many of its great achievements were striking examples of how *not* to do it.

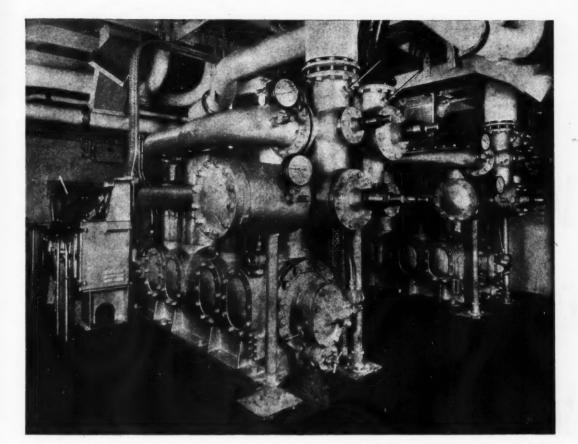
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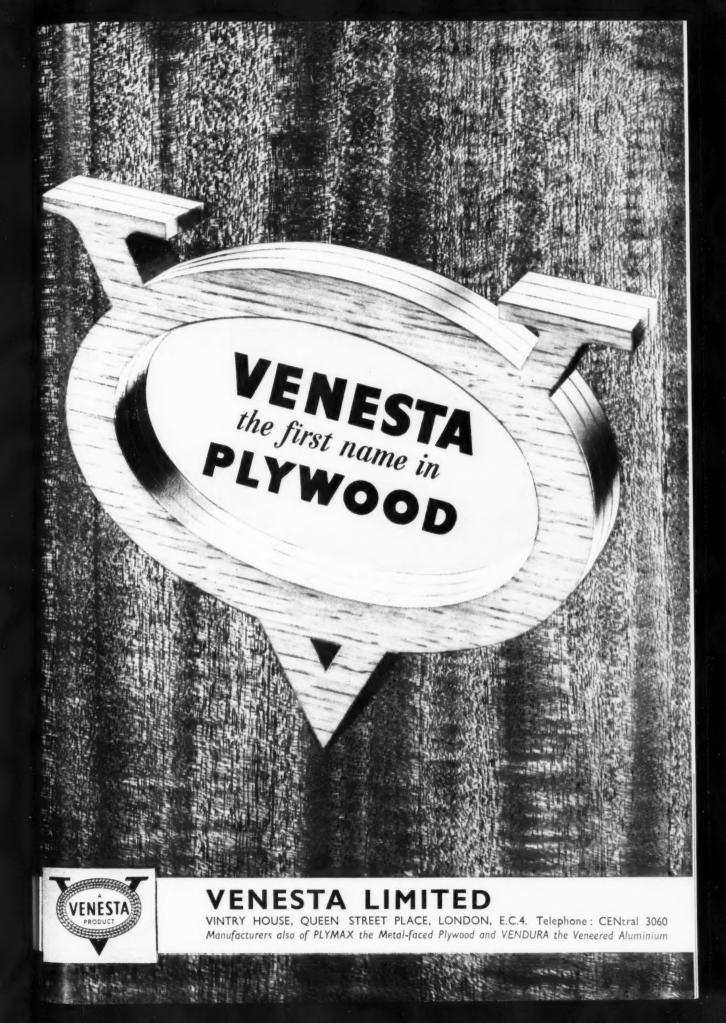
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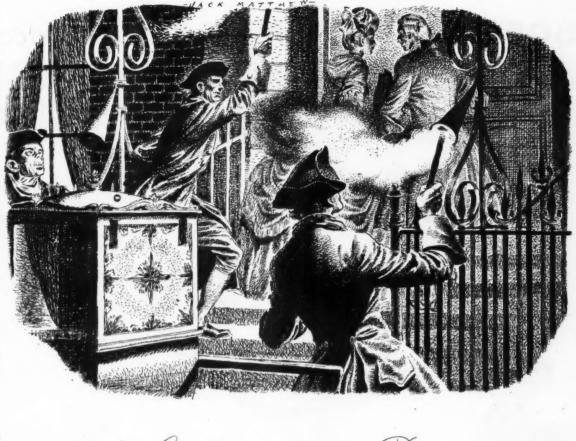
THE ARCHITECTS' JOURNAL for July 28, 1949

### A new roof structure without disturbing the old one

Here is another example of the versatility of steelwork in overcoming difficulties. A new and higher roof was needed, with the least disturbance of work being conducted in the building. In contrast with the method used in a previous example, the steel members were erected by this expedient, necessitated by the congested situation. The stanchions were first set up and guyed, then the lattice girder was built out from them in situ, member by member being lifted by block and tackle to a runner on a cable slung between guyed derricks.

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BRITISH CONSTRUCTIONAL STEELWORK ASSOCIATION ARTILLERY HOUSE, WESTMINSTER, S.W.1



Link with the Past

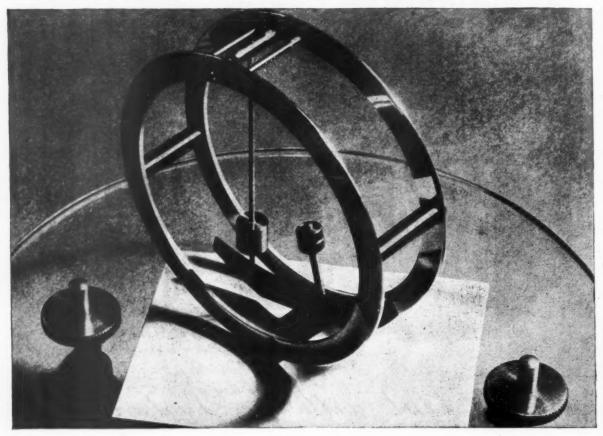
AND A LESSON FOR THE FUTURE

Today, the linkman's snuffer can still be seen . . . preserved on ancient railings—a reminder of the danger of fire . . . fire made possible and prevalent by the use of a naked flame and a complete absence of fire fighting appliances. Happily, today the world is more fire conscious. Flame is controlled and buildings are constructed of fireproof material. Yet despite all this, fire still takes appalling toll of life and property. It is in the initial planning of a building that the architect can do so much to thwart the fire danger and the Pyrene Company will gladly cooperate with expert and impartial advice as well as in the provision of all types of fire appliances to meet every risk. Technical data and architects' drawings relating to Hose Reels and all classes of fire extinguishers and appliances will be forwarded on application to Dept. A.J. The Pyrene Company Ltd., 9, Grosvenor Gardens, London, S.W.1. Telephone: Victoria 3401. Head Office & Works, Great West Road, Brentford, Middlesex. Telephone: Ealing 3444.

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> ★ BOFFINSTRUMENTS. Instruments used by Boffins (R.A.F. slang for scientists . . . etymology unknown) to make sure that finishes are up to standard and prevent them being got at by Gremlins.

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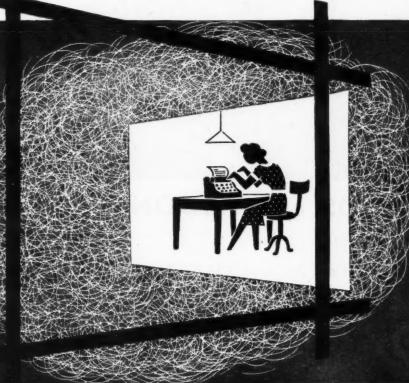
When a local authority or a private company needs a new building, heating systems are discussed. But the most efficient system in the world for *producing* heat is little more than a pleasant thought if nothing is done about *retaining* heat. It doesn't matter whether the building in question is a hospital or a cold storage plant—the passage of heat through walls, roof and floors is a factor which can't be ignored.

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Left: Recent reproduction of an elaborate Georgian Stair in a West End house. Below: Bottom of a stair in a small country house, showing unusual type of curtail step.

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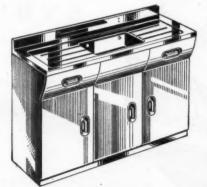
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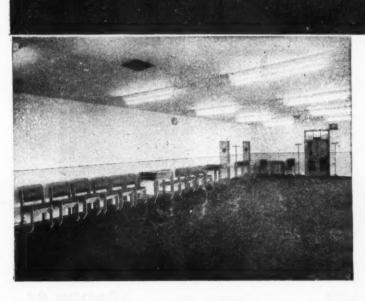


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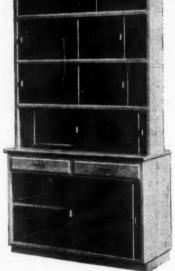
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THE ARCHITECTS' JOURNAL for July 28, 1949



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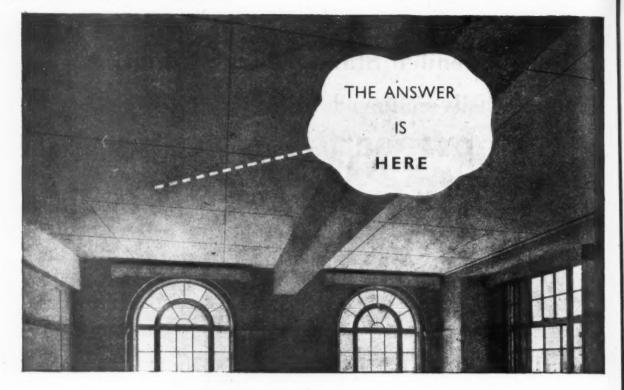
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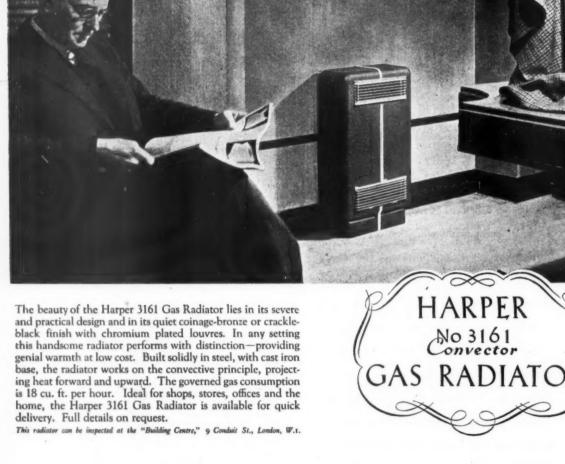
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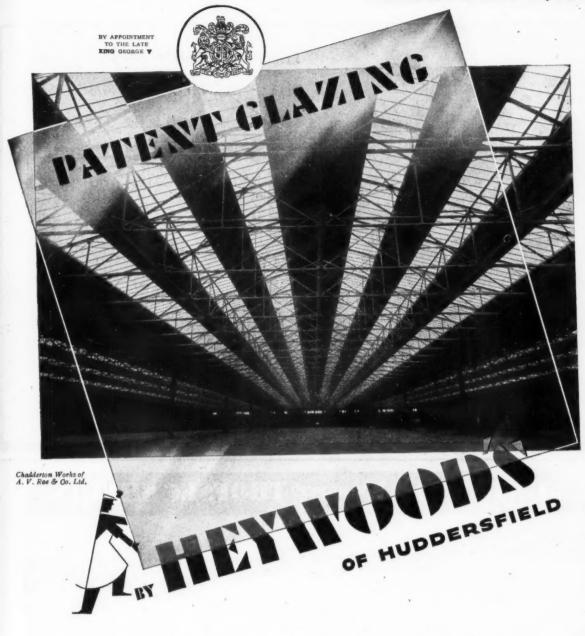


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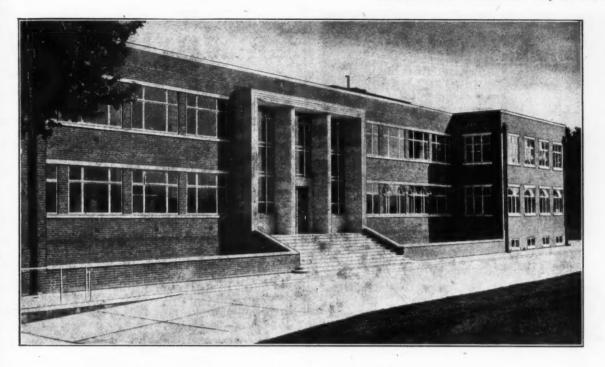
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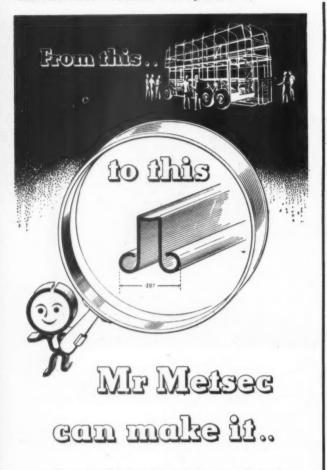
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THE ARCHITECTS' JOURNAL for July 28, 1949



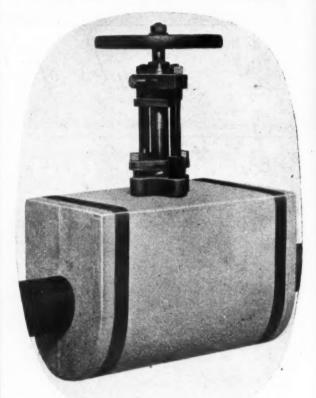
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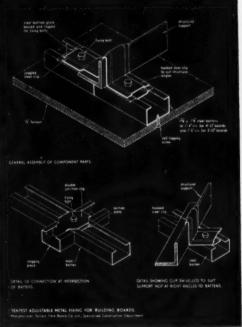
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Our book "STRUCTURAL INSULATION" has been reprinted and copies are now available on request to architects and students dealing with the increasingly important subject of thermal insulation of buildings.



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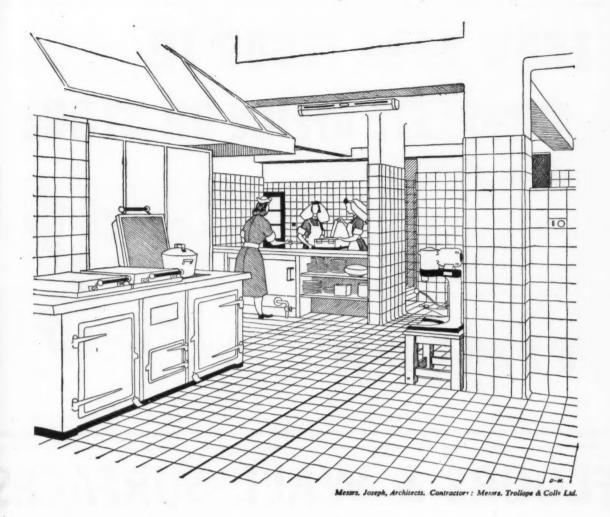
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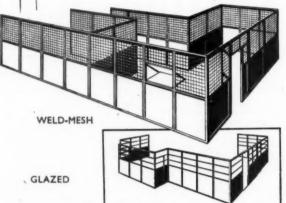
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be added to the subscription list as soon as possible. Subscription rates : by post in the U.K. or abroad, £1 155. Od. per annum. Single copies, 9d. ; post free, 11d. Special numbers are included in subscription ; single copies, 15. 6d. ; post free, 15. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 175. 6d. each ; carriage 15. extra.

# DIARY FOR JULY AUGUST AND SEPTEMBER

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 given in the glossary of abbreviations on the front cover.

BRADFORD. Design Week organized by the Council of Industrial Design. Demils to be announced locally. SEPT. 12-17

HARLECH. Residential Summer School on Ari, to be held at Coleg Harlech, Harlech, Merionethshire. Details from the secretary of the College. (Sponsor, Coleg Harlech.)

LONDON. The Royal Academy Summer Exhibition. At Burlington House, Freeadilly, W.1. UNTIL AUG. 7

Exhibition of Work of School of Archiecture, Polish University College. 21, rinces Gate, S.W.7. 10 a.m. 10 6 p.m. UNTIL JULY 28

Exhibition of photographs of Old London, by W. A. Clark. At the City of London Guildhall, E.C.2. Weekdays 10 a.m. to § p.m., Saturday 10 a.m. to 1 p.m. UNTIL JULY 30

ST. ANDREWS. Town and Country Planning Summer School. At the University of St. Andrews, Fife. (Sponsor, TPL) AUGUST 20-27

YORK. Summer School of Architectural History and Measured Drawing. Sponsor, York Civic Trust.) AUGUST 13-27

#### COMPETITIONS

The Trustees of the Victorian National War Memorial invite competitive designs for the 1939/1945 War Memorial which is to take he form of a great forecourt on the north uide of the existing Shrine of Remembrance. The competition is open to architects who erved in His Majesty's Forces during the 1914/1918 or 1939/1945 wars and who are members of the RAIA or RIBA or who are gally registcred in Australia or New Zealand. Every intending competitor is required to register his name in writing with the Secretary, The Royal Victorian Institute of Architects, 55, Collins Place, Melbourne, Australia, not later than 12 noon. Monday, August 1, 1949. Assessors: Robert S. Demaine, F.R.ALA., Marcus W. Martin, IXA.LA., W. Balcombe Griffiths, M.C., R.A.I.A. Premiums: £1,000, £500, £250. The estimated cost of the memorial tust not exceed £90,000, exclusive of architects' fees. Last day for submitting designs: Monday, October 31, 1949. Designs may be sent to the Agent General for Victoria, Victoria House, Melbourne Place, Strand, London, W.C.2, from whom conditions of the competition may be obtained.

Competition for Design of Strip Carpet. IAAS competition open to architects and architectural students in the United Kingdom and the Commonwealth. Divided into three sections: hotels, cinemas and theatres and ships. In each section a first prize of 75 guineas and a second prize of 25 guineas will be awarded. Closing date, October 31, 1949. The last day for questions, September 1, 1949. Assessors, Kenneth J. Lindy, E. C. Leach, and Hurley Robinson. Technical Advisers, John Anderson and J. P. Glass. Details from the General Secretary, 75, Eaton Place, Belgrave Square, S.W.I.

Industrial Art Bursaries Competition. The Royal Society of Arts. Competition divided into sections for the design of carpets; domestic solid - fuel - burning appliances; dress textiles; electric-light fittings; footwear; furnishing textiles; leather goods; wallpaper. A Bursary of £150 in value is offered for each section. (Two Bursaries in the dress textiles section). Open to full-time, part-time and eveningclass students, between 17 and 30 on October 1, who intend to take up industrial design as a career and have studied for not less than one term since. July 1, 1948, at an art, architectural, technical, or other college or school approved by the Society for the purpose of the competition. Entry in the domestic solid-fuel-burning appliance section is also open to any draughtsman, clerk, or similar person, within the same age limits, already engaged in the solid-fuelburning appliances industry, provided that this application is sponsored by the Coal Utilization Joint Council.

Utilization Joint Council. Particulars and entry forms may be obtained from the Secretary, Royal Society of Arts, the principals of the schools and colleges concerned, and the Secretary, Coal Utilization Joint Council. The closing date for the receipt of entry forms is August 1.

Design of Community Centre.' The Incorporated Association of Architects and Surveyors. Two prizes, £150 and £75, for Urban Design. Two prizes, £100 and £50, for Rural Design. Open to all architect members of the IAAS, and to any architect, whether principal or assistant, in the United Kingdom, Northern Ireland and Eire. Closing date, February 1, 1950. Applications to General Secretary, 75, Eaton Place, Belgrave Square, S.W.1.

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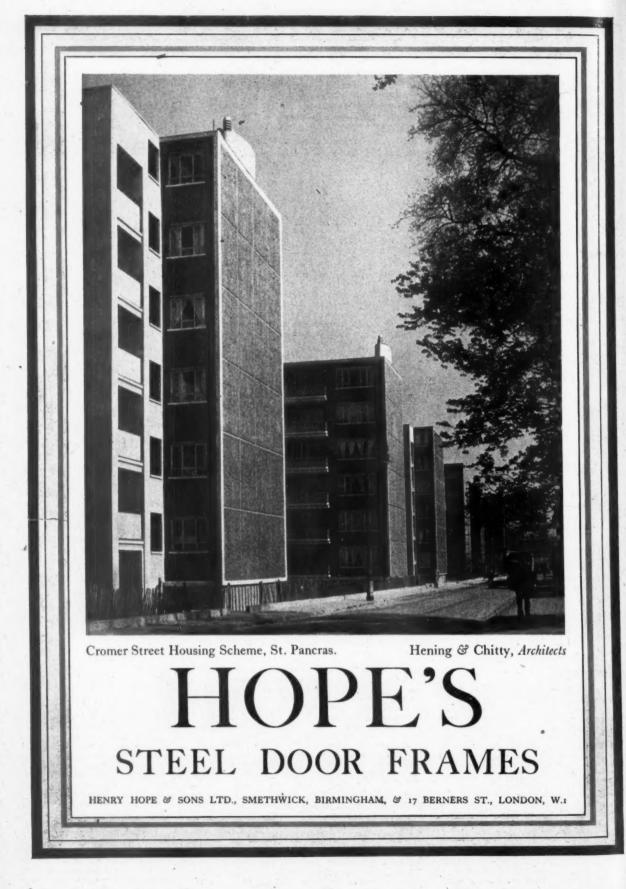
Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis.

 $\star$  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 TDA is preparing a series of STANDARD TIMBER TRUSS DESIGNS suitable for Industrial Buildings. Design sheets dealing with the roofs of domestic buildings have already been published. The new series of industrial trusses will extend the TDA's policy of providing economical designs for the guidance of architects, engineers and building contractors. The industrial truss designs are being prepared by the Research and Design Department for spans between 18 ft. and 60 ft. to carry corrugated asbestos cement sheeting. There will be k variety of spans of trusses so that the nearest design may be adapted to individual requirements without undue loss of efficiency. A programme of tests on full size trusses will be carried out at the Forest Products Research Laboratory and the designs sheets at a later date.



#### AN ARCHITECT'S Commonplace Book From

FUNCTION AND DESIGN. [From The Freedom of Necessity, by J. D. Bernal (Routledge & Kegan Paul, Ltd.)] It is now a commonplace of architecture that the function of a building should play a decisive part in the consideration of its design. Nevertheless, the determination of necessary functions and of the means for carrying out these functions is not an easy task, and requires the intimate collaboration of the architect with a number of different kinds of scientists. The essential point is that the function of all buildings is pre-eminently social, rather than simply biological, utility. A church has the recognised function of being the background for complicated ritual observances, but so, almost to the same degree, has every building. It is, in fact, this essential ritual aspect of architecture that has, until recently, saved the architect from having recourse to the scientist. Because people's lives and their buildings form so closely a part of one tradition, all the architect was required to do was to provide pleasant, though minor, alterations on well-known themes. Now, however, social forms are changing with a rapidity that quite outstrips the possibility of traditional architectural development, and the architect by himself necessarily proves inadequate to the task, as so many pseudo-modern buildings show. For not only are social demands changing; they are becoming at the same time more rational and definite. The architect is no longer building for the individual taste of a patron but for the requirements of a trust or a town-planning authority. For these purposes it is necessary, in the first place, to have much more definite views as to the function of buildings.

TOWN PLANNING AND which it was recommended that Austria be COM-ARCHITECTURAL POSITION are considered unsuitable subjects for international standardization by the International Organization for Standardization. This decision was reached at the first meet-ing of Technical Committee 59, "Building Construction," of the International Organi-zation for Standardization, which was held recently in Paris. The main purpose of the recently in Paris. The main purpose of the meeting was to agree the general scope of the work of the Committee. It was agreed that building documentation and termino-logy was of great importance and that liaison should be arranged between the Committee and the other international organizations interested in this subject. The Committee agreed that town planning was a subject unsuitable for international standardization although terminology for this subject would probably enter into the discussions on documentation. It was also agreed that architectural composition was a subject unsuited to standardization.

The Committee considered the subject of drawing office practice and agreed that, since so many engineering services were involved in building, it would be desirable to have to both engineering and building purposes. It was agreed that Technical Committee 10 of the Organization, which was responsible for drawing office practice, should be asked to study the problems of drawings for building work.

With regard to materials, the Committee agreed that international unification of methods of test was the most important work of the committee and should be given first priority, particularly in relation to those materials which were the subject of international trade. A further session was devoted to a discus-

sion on modular planning. It appeared that most of the countries represented had adopted a module of 10 cm. to serve as a basis for their standardization of materials, components and equipment. It was agreed that the subject should be further examined and that Belgium should undertake the Secretariat of this sub-committee.

A fourth session of the Committee was devoted to a discussion on concrete construction. The Committee asked the Council of the Organization to set up two com-nittees, one to dcal with hydraulic binders, such as cement, for which it was recom-mended that France should be appointed as Secretariat, and the other a committee for concrete and reinforced concrete, for

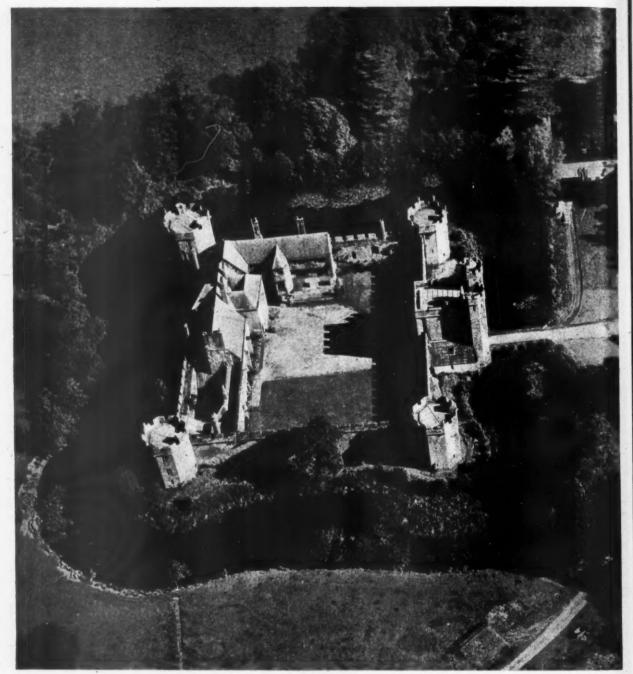
appointed Secretariat. It was agreed that these two committees should be asked to deal first of all with terminology and testing methods.

The LCC has approved a report on the DRAFT DEVELOP-MENT PLAN FOR THE COUNTY OF LONDON. When the County of London Plan was first submitted to the LCC in 1945, it was recogsubmitted to the LCC in 1945, it was recog-nized that any plan made then must be tenta-tive and flexible. Under the Town and Country Planning Act, 1947, the Council has to submit to the Minister of Town and Country Planning, in 1951, a development plan showing the proposals it is expected can be carried out within a period of about twenty years. As a basis for the prepara-tion of this plan, the Council is now to open discussions with the Metropolitan

Borough Councils, the City Corporation, Government departments, the public utility undertakings and other bodies. While the broad conception of the original density zones are to be maintained, a number of changes in the density proposed for par-ticular areas are foreshadowed. In the distant future, when the redevelopment of London is in its final stages, these changes may result in a small reduction in the population figure envisaged in the County of London Plan. A report made by the Town Planning Committee of the LCC emphasizes the need for decentralization of people and industry from London, if the open space and other proposals in the County of London Plan are to become capable of realization. The report proposes that where post-war housing development has been permitted at densities above the averages recommended in the County of London Plan to meet urgent housing needs, adjacent areas shall be developed in the future at densities lower than the average for the zone, so that the post-war development as a whole will average out to the recommended density standards.



Work in progress on the United Nations site, New York. The building under construction in the background is the United Nations Secretariat.



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## An Englishman's Home

An exhibition of air photographs of castles and religious houses, which is being held at the Kodak Gallery, 184, Regent Street, W.1, until August 6, demonstrates the value of aerial photography as a means of revealing the character

The 1949 edition of the RIBA pamphlet "MEMBERSHIP OF THE RIBA" has been published.

Copies may be obtained from the secretary, price 2s. each, exclusive of postage. The pamphlet, in addition to containing information regarding the examinations and membership of the RIBA, contains full information regarding architectural training. Maps and schedules showing the local distribution of facilities available for architectural education in the British Empire are an important feature of the pamphlet.

The LMBA has made a PLEA FOR GREATER FREEDOM IN HOUSE BUILDING. This plea appears in the half-yearly report of the LMBA. The record of houses built

of great buildings and their relationship to their surroundings. This photograph from the exhibition shows Maxstoke Castle, built in the 14th century—a time when the English castle was becoming the Englishman's home.

> by the industry is extremely good, says the report, but the problem of housing will not be solved until greater freedom is allowed in the building of houses in a way which, with the assurance of continuity, will enable research and new techniques to be developed on something more akin to mass-production lines. And there is no logical reason why those in serious need of houses, who are able to pay for them, should not be allowed the service which is made available to others at heavy expense to the country.

NEW HOUSING ALLOC-ATIONS have been made in Scotland. Local authorities in Scotland have had their allocation of 17,000 new permanent houses made in January increased by a further 20,100 houses by the Rt. Hon. Arthur Woodburn, M.P., Secretary of State for Scotland. This decision has been made possible because of the progress which the building trade has made during the past 18 months in accelerating the completion of houses under construction.

### NEWS IN BRIEF

Mr. Brian Peake has been appointed the RIBA representative on the Ministry of Education's National Advisory Committee on the administration of Art Examinations.

Mr. Ronald Sims has been awarded the Building Centre Scholarship for 1949, value £100.

Serious damage to the central spire of Lichfield Cathedral will necessitate pulling down and rebuilding the top 20 ft. at a cost of many thousands of pounds.





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Top: a group of personalities at a ceremony at the Building Centre, Conduit Street, W.1. on July 18, when Mr. Kenneth Hall, president of the Aluminium Development Association, opened the new aluminium doors, presented to the Building Centre by the Association, with the aluminium key shown beneath. Left to right: Sir Alfred Hurst, (Chairman, executive committee of Building Centre), Mr. Kenneth Hall, Mr. Henry Braddock (president, AA) and Mr. F. R. Yerbury (director, Building Centre). (See also page 107)

## CHANGES IN TECHNIQUE

MUCH has been written in recent years about new forms of construction which involve marked departures from old-established methods. Examples of some of these forms, as, for instance, shell concrete, are already to be seen in a small number of new buildings. Special studies have also been made of various types of light frame construction, and of the use of prefabricated units, which have made an immediate contribution towards satisfying the urgent demand for new houses and schools. All of these developments are comparatively new, and while they may, in time, become established practice they must, as yet, be regarded as experimental.

At the same time, however, that these more spectacular changes have been receiving wide publicity, certain less obvious alterations in technique have been taking place which are gradually becoming normal building practice. It is such slow alterations of method which, in course of time, become absorbed by the building industry as part of the tradition, and just because these changes are slow they may pass unnoticed. It is valuable, therefore, from time to time, to review them and assess their permanent significance.

Three examples immediately come to mind-the use of the cavity wall, the use of a solid ground floor in small buildings and the general lowering of the pitch of domestic roofs. Cavity walls for small houses have been regarded as normal for some years, but the implication of the change from solid walls is perhaps insufficiently realized. It was really an early move towards the analysis of function which is now regarded as a normal method of constructional design, and the first appreciation of two separate requirements of a wall, namely, stability and weather resistance. From that beginning has developed a much more widespread understanding of the analytical method which sees the outer skin of a wall as a weatherproof membrane and the inner one as a heat insulator. Once this approach is accepted the whole idea of walling begins to change ; large framed structures are seen as a framework supporting light "functional" panel fillings, and the same principle is now applied to domestic work in the many varieties of light structure house.

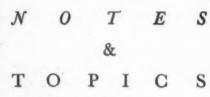
Solid ground floors were used before the late war in large buildings but only to a very limited extent in houses. The shortage of timber has resulted in almost universal application of this method of construction. It has disadvantages and certainly raises new problems, but on the other hand some of the benefits, notably the marked improvement in heat insulation, are such that it may well have come to stay. An interesting development of the idea is the extension of the floor slab to form a cheap raft foundation for small buildings.

The lowering of the pitch of the roof is possibly less noteworthy from the point of view of technique, and may be only a temporary change due to the scarcity of timber. Its consequences, however, are important as it affects the choice of roofing material, and may thus produce marked changes in the appearance of the small house, in addition to the change of silhouette.

It may be thought that these examples are not of great importance. It is as well, however, to take stock occasionally of those things which, although individually of small account, when added together affect not only technique but general design as well.



9, II and I3, Queen Anne's Gate, Westminster, S.W.I Phone : Whitehall 0611



BEDFORD SQUARE NEWS

Last week I wrote about the AA prizegiving but I had not had time to examine the exhibition of students' work as carefully as it deserved. I have since revisited the exhibition and I found the standard of design as high as ever.

Of course for most school shows it is easy enough to choose a tasty display of the extra mentions, and all too often one finds the same names cropping up time after time. The AA has done this, but to confound the carpers who always suggest that the average in any school is not really so hot, they have arranged a full show of all the schemes prepared on one subject, top, middle and bottom, in the same way that all competition drawing are shown, and not only the premiated designs. I've never seen this sort of thing at any school show before, but it is a good idea and it does give you a reasonable impression of the general level of the work going on in the school.

A group of AA students, not content with merely providing material for their

end of term exhibition, also attempted the formidable task of presenting a play. They chose a play by Vanbrugh, another exponent, like themselves, of the arts of drama, soldiering, dress and architecture.

The play was "The Provok'd Wife," a neater play than "The Relapse," but just about as bawdy. Those who, like myself, approach amateur dramatics prepared to suffer agonies of embarrassment at seeing likeable people make fools of themselves in public, were agreeably surprised at the competence of the production.

The conventional set, with its occupied stage boxes, was changed only by what can best be described as a sliding backcloth-an admirable device, which worked without a hitch. On this were depicted Covent Garden, St. James' Park, and other spots suitable for the scenes of drunken farce and amorous dalliance of which, in true Vanbrugh manner, the play largely consists. The acting was of a high standard, and it is not possible to pick out any of the cast for special mention here-all the principal characters were excellent, but special mention should be made of Denys Hinton, the producer. I trust the AA will give him every opportunity to produce another show as creditable as this.

Oddly enough, the names of the players were as striking as those of the characters they portrayed. What theatre in town can boast as pretty a run of names as: Jane Leapingwell, John Roebuck, Charmian Lacey, Francis Pym, Julian St, Leger, Sylvia Serne, and Roderick Ham?

Before leaving Bedford Square I must protest at the suggestion, coming, I believe, from the Duke of Bedford, that all front doors should be painted black. One of the pleasantest foils to the uni-

formity of the façade is the contrasting colours on the doors. If uniformity of colour is required it should be confined to the paint on the stucco of the houses on the axes of the Square.

#### THE LCC CONCERT HALL

Because I had comments to make on the design for the LCC Concert Hall when it was published a couple of months ago, I have been shown the letter on the subject which appears elsewhere in this issue. Letters of this kind are always worth having, as there is far too little constructive criticism of current architecture printed, but in this instance I find myself almost wholly in disagreement with the writer, if he will forgive my saying so. であるというないである。

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He objects to the use of Portland stone to face a reinforced concrete structure and likens it to the "sugar-icing exteriors" of large banks and other buildings. But surely it is as legitimate to use thin stone slabs as any other facing material, as long as they are treated frankly as a skin and do not, as with the banks, ape the form of buildings constructed in stone? Whatever has been done on the continent, I cannot accept his suggestion in favour of concrete as a facing material in London. Have we not learnt from past experience that it soon becomes grimy, and in any case would it give the right character of finish for a public building?

Mr. Harrison is right in saying that the Concert Hall and the National Theatre will be part of one architectural composition, but I think he is giving the LCC too little credit in assuming they have not thought of them as such. The layout has been considered, as a whole all along, and the LCC architects, in designing the Concert Hall, worked in close consultation with Brian O'Rorke, architect of the National Theatre.

O'Rorke's appointment was, of course, made some years ago. I think a competition for the Concert Hall was thought of, but was turned down on grounds of time.

#### FORM AND SENSE

It is surprising that so few sculptors have succeeded in making use of technical developments in processes and ting y of ned uses

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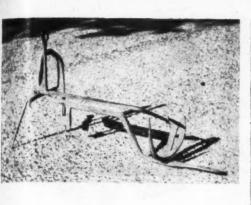
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Two of the iron sculptures exhibited at the Hanover Gallery by Reg Butler. Above, Figure Reclining (length, 36 in.) Right, Waman, (height, 7 ft. 3 in.)

materials to explore new regions of formal expression. There are of course some examples of concrete sculpture, but on the whole, this material, which is essentially a poured material has been used merely as a sort of artificial stone without specific character. Brancusi has produced sculpture in turned metal but the range of expression is extremely limited and is probably over-intellectualised for our times. There is little in new techniques to take its place beside that, for example, of Rodin.

Architects have, for the last thirty years, searched for an expressive contemporary sculpture appropriate to the buildings of today. They have searched almost in vain. The exhibition of sculptures in iron and steel by Reg Butler at the Hanover Galleries will give them hope that here is an expressive medium, as handled by Butler, that may give life to their architecture and embellish their gardens. One of the problems of sculpture is the static nature of the materials hitherto used by sculptors. The forms are at the best moments of arrested movement, and not expressive of movement itself. By the use of high tensile steel Butler is able to place the centre of gravity of his figures well outside the bearing points, thus immensely widening the range of formal possibilities. The standing figure, illustrated on this page, is a good example.

ROSE TO THE OPPORTUNITY

Those who were lucky enough to see the furnishings for a bedroom commission by an anonymous American lady and designed by Sir Francis Rose were, I hope, suitably impressed, not only by the skill of the British craftsmen who executed the work which is probably by now on its way to its American home, but also by the good fortune of the client able to indulge her whims on such a luxurious scale.

I was unfortunately unable to see the designs myself, but an advertising agency has kindly sent me four pages of typescript of enthusiastic descriptions. On second thoughts, perhaps it is better not to have seen the work but to let one's imagination range on the vision conjured up by a "decorative style . . . closely related to six of Francis Rose's watercolours that were inspired by the life and character of Gertrude Stein."

The whole thing is, of course, thoroughly up to date. "It is dominated by the tall, four-poster bed," no "Beautility" for Mrs. or Miss X. The mirror particularly will be a pleasure to look into. It is sand-blasted "in a formal pattern" while on the back is a "portrait of Gertrude Stein in a characteristic attitude." Is further comment necessary?

ASTRAGAL

# LETTER

## E. J. Harrison F.R.I.B.A.

## LCC Concert Hall

SIR,—Now that the Royal Fine Art Commission has approved in principle the design of the South Bank Concert Hall one may expect that with this assurance no further occasion will arise for uninformed lay criticism, and that the resultant building will eventually take its place as a good neighbour in the sculpture gallery of our national capital.

Judging from the lack of comments in the professional press on this design one must possibly accept the fact that it is beyond reproach.

In my view, there are three factors which should determine the æsthetic expression of the New Concert Hall. These are:

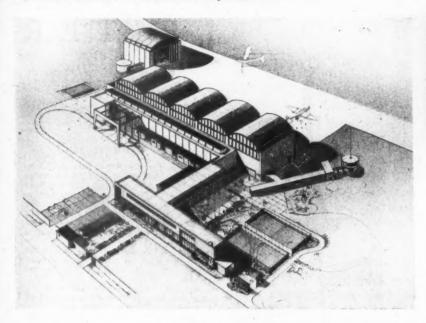
should determine the æstnetic expression of the New Concert Hall. These are: (1) The requirements of the building. (2) The relation of the building to its setting. (3) The building materials and the expression which should result from the communal and technical requirements of the present time.

The new hall is to be built in reinforced concrete, faced externally with portland stone. Ferro-concrete can bridge long spans and carry the walls of a building as it were on finger tips, elegantly, and with combined grace and power. These qualities naturally lead to a marked horizontal expression. But stone is quite unsuitable for bridging long spans and we do not therefore appear to be departing from the stone-faced sugaricing exteriors of some of the large banks and other buildings erected within the last two or three decades

If the plan requirements and the difficulties in regard to steel supply call for a reinforced concrete structure why cannot the external stone facing be omitted? Monolithic and precast concrete walling have been extensively used, especially in Germany, Switzerland and France. There are, of course, the well-known technical difficulties with concrete construction. The coalescing of engineer and architect, as will inevitably take place in time, will resolve many drawbacks to the more extensive use of reinforced concrete as a combined structural and facing material.

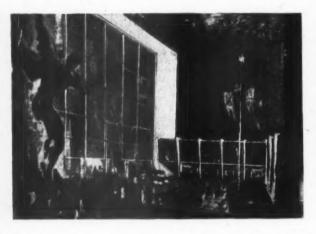
From the point of view of the relation of the building to its setting, there is, historically, ample evidence of the unity of architectural composition with the use of different materials over several centuries. The fine architectural ensemble of the Basilica of St. Mark, the Campanile, the Ducal Palace, Library and Courts at Venice built over a period of 750 years is evidence of how a fine architectural composition and, at the same time, a fine example of civic design can evolve and become an integral part of the continuing world sculptor gallery. Any attempt to maintain harmonious civic composition by the device of clothing a building in similar material to that of its neighbours is contrary to the best principles of civic design; variety is essential in material and colour. One has only to envisage, in comparison, the monotony of being too long in a place where the buildings are all stone or stone faced.

being too long in a place where the buildings are all stone or stone faced. There is one further point of criticism I should like to put forward. When the National Theatre is built, presumably the external appearance will be somewhat similar to that of the new Concert Hall because of a similarity in accommodation. The two buildings sited as they will be





Illustrated are projects by students of the School of Architecture of the College of Arts and Crafts, Nottingham, which were recently ex-hibited in the City Art Gallery. Left, an air research station by G. Calvin Taylor (5th year). Above, sketch design for a setting for a masque at Chiswick House, by A. B. Fuller (4th year). Bottom, left, an Arts Centre for Nottingham, by J. O. Knight (4th year). Below, a doctor's house, by June Lodge (2nd year).





#### OTTINGHAM SCHOOL OF A RCHITECTURE

between Charing Cross and Waterloo Bridges will form an unresolved duality. How can a design be made in advance for one building which forms part of a larger com-position unless the other building is de-signed at the same time?

Here was a splendid opportunity for the London County Council as architectural and Planning Authority to consider the layout as a whole. Why should they not have been the promoters of the best post-war architectural and town planning competi-tion? If they had done this they would have proved themselves real pioneers in the realm of architecture, particularly if they had made the competition international and so removed themselves from the sphere of national as well as party politics. Rotherham. E. J. HARRISON, F.R.I.B.A.

#### Parliament In

At question time in the Commons the Presi-dent of the Board of Trade was asked by

Sir Wavell Wakefield (Con., Marylebone) if he proposed to set up his own architectural and quantity surveyors staff for carrying out orchitectural and quantity surveying work required for the trading estates in the development areas.

Mr. Harold Wilson replied: "No, sir. Arrangements for such work will continue to be a matter for individual trading estate companies who employ outside consultants and, in some cases, have their own small architectural and quantity surveyors department.

Mr. D. L. Lipson (Ind., Cheltenham) asked the Minister of Health if it was his practice to grant a building licence to an applicant willing to build a house for his own occupa-tion by his own labour provided that it was recommended by the local housing authority and plans approved.

Mr. Bevan said he would send the Member a copy of the circular issued to local authorities which set out the present arrangements for granting licences for private house building. No general instruction was made in favour of the class of applicants mentioned by Mr. Lipson.

When Mr. Lipson pressed the matter, Mr. Bevan commented: "I did make some con-cessions a little while ago, which were widely abused. Of course, at the moment the limitation upon house building is soft wood timber. Even if the house were built by the person himself it would still require the same

Asked by Mr. F. Beswick (Lab., Uxbridge) if he was satisfied that the production of bricks was sufficient to meet current requiremeats, Mr. C. W. Key, Minister of Works, said brick production during May was over 451 million.

There are indications that the improve-

"There are indications that the improve-ment in output which has taken place this year is being maintained," he added. "I am not aware of any failure to meet require-ments in the country generally." Mr. Key told another Member that the estimated value of all building projects in Wales, costing more than £2,000, which were in progress or were known to be coming forward in the near future, was now about £102 million. About 32,700 men were em-ployed on this work, and at the present rate of progress it was sufficient to keep them occupied for at least  $3\frac{1}{2}$  years. occupied for at least 31 years.

## VANBRUGH AT THE AA

The Architectural Association's Dramatic Society recently presented " The Provok'd Wife," the Restoration comedy by Sir John Vanbrugh. The setting for the production was a Restoration stage formed with a false proscenium and an apron flanked by proscenium doors and stage boxes. Owing to the limitations of the existing stage, this permanent set was made to stand independently, supported by a framework of aluminium scaffolding. For changes of scene the painted flats behind the false proscenium opening were drawn on and off, the front curtain being only drawn at the end of each act. The designers of the set were the prize-winners of a competition organised by the Dramatic Society, who also constructed and operated the sets. The incidental music, some being specially written and some drawn from the works of Purcell and Lully, was played and recorded by students of the Guildhall School of Music and Drama. The play was produced by Denys Hinton. Above, right, a scene in St. James's Park from Act One, showing, left, Heartfree (Michael Cain), and, right, Constant (Martin Platt), two gentlemen of the town. Right, Heartfree with Patricia Bowden as Belinda. Extreme right, Lady Brute (Charmian Lacey) with Constant.

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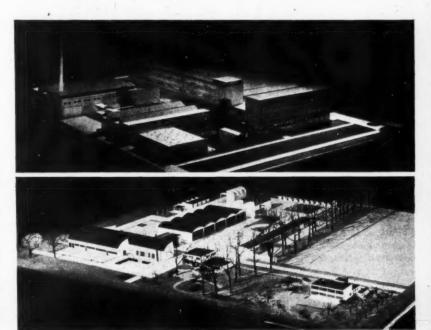
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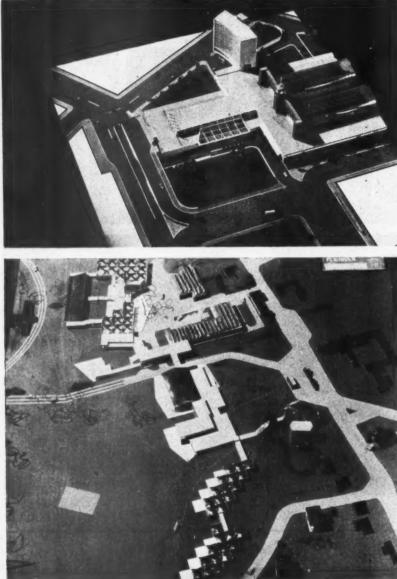
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## STUDENTS' EXHIBITION

The annual exhibition of the work of students of the Architectural Association School of Architecture closes today. The exhibition was opened by Mr. Clement Attlee, the Prime Minister (see last week's JOURNAL). On this and the following page are shown models of some of the schemes on view. Right: top, a carpet factory for Crawley, designed by Fourth Year students B. N. Atkinson, B. L. Capes, M. Knapp-Fisher, J. D. Layton, C. A Saunders, and W. White; bottom, a thesis design for a farm by John Harris. (Continued on page 92).





## **STUDENTS' EXHIBITION** (continued)

#### 1. School

- 2. Theatre and school hall 3. Community centre, with cafeteria, swimming pool, gymnasium, dancing and games space
- 4. Textile factory
- 5. Joinery works
- 6. Matal shop 7. Builders' yard
- **B.** Health clinic
- 9. Design studio
- 10. Creche 11. Playing fields
- 12. Family dwelling



Above: top, a thesis design for the replanning of Kings Cross, by Michael Lyell; bottom, a model of the communal buildings for a village of 2,000, designed by A. Derbyshire, J. Keable, T. Moore and J. Ollis of the second year. It is proposed that this community will be working in textiles joinery and agriculture, and will be developed from an existing village of 175 people in southwest Hertfordshire. To ensure that the buildings

can be adapted or enlarged, according to the constantly changing needs of the population, they have been planned on a module, and are built of standardised, mass-produced structural elements. The houses, not shown in the model, are in groups of about fifteen, each with a central green and peripheral service tracks. The shopping area lies to the north of the buildings shown on the model.



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Speeches and lectures delivered before societies as well as reports of their activities, are dealt with under this title, which includes professional societies, trade associations and government departments. To save space they are represented by their initials-see front cover. Lectures cannot usually be reported in full.

## AA

Mr. R. Furneaux Jordan and the

Rt. Hon. C. R. Attlee

July 15. A A School Annual Prize-Giving. Bedford Square, W.C.1. The speakers were introduced by Mr. Henry Braddock, president.

R. Furneaux Jordan : I have been asked to report on the past academic year of the AA School. For three reasons I do so with real diffidence. First, because the AA year, whatever else it may be, is always full to the Whatever else it may be, is always full to the brim and overflowing, and to do it justice I should have to talk for a long time. Secondly, though my link with the AA is more than twenty years old, and my love for it as long, it is only for the last five months that I can speak to you officially. Thirdly, like most members of this school Thirdly, like most members of this school, I am more interested in the future than in the past. The past for us will always be the place where we measure our failures. while in the future is the vision that must be made real.

It can be made real. One teaches and learns as an act of faith, believing that in this country men will be needed who can build in the manner of their own time and using all the resources of their own time, but not less gloriously than men built a thousand years ago. That is the vision. The scientists and engineers of the last hun-

dred years have now given us techniques of building such as men never had before. The social revolution that we have lived through is creating needs and opportunities such as men never had before. In using fully, as an artist, those resources to meet those opportunities, the architect may again find himself in the place that is his, when architecture is the supreme art. In this cen-tury and the last it has not been even a great not as history understands the termartbut it can become so, at least for those who are young.

Once again, however, we may have to examine the very basis of architectural education. I am always very humbly aware of the work done in the last fifty years at the Ecole des Beaux Arts, by Professor Reilly in Liverpool, by Robert Atkinson, Howard Robertson and others here in Bedford Square, and by Professor Gropius at Weimar. Nevertheless, the AA may now have to go further still-further fom the drawing-board and nearer to technical realities. The evil done in the industrial revolution, the evil that William Morris saw so clearly, when the architect became a professional gentleman and when he and the engineer each went their own different roads, is an evil which haunts us still. We have to bring education back to the realities of building, and the modern building industry that we may be concerned with is likely to be as much in the factory as on the site.

#### PRACTICAL EDUCATION

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With half an eye on the vision we have been launching some very little boats upon a very big sea. We are going to try to get senior students more and more on to buildings and into factories. There is great human virtue in being a navvy, but the real point is, of course, that to see all the implications, human and technical, of a big job you must live with it for at least a few weeks, and one way is as good as another. During the next year, there will always be some AA students at work in some capacity on, for instance, the big LCC concert hall and elsewhere. The only limit to this kind of thing is the large number of students and the strict proviso that the job itself must be technically and æsthetically worthy of such special study. That is for senior students.

From next spring onwards, our third year students will build a youth hostel to a fifth year design. You will agree that we owe a great deal to the Youth Hostels Association for subjecting itself to this experiment. For the junior students we now have, on a very small scale, the tools and machinery for making furniture, sculpture, pottery and other things. The main driving force in getting this workshop started rather sooner than I had dared to hope was second year enthusiastn. There can be no question of doing there the kind of things that are done at the Royal College of Art or in the big art schools; that is not our job. But the people who are going to spend their lives designing things in two dimensions must sometimes make them in three. These are all mere straws, showing which

Inese are all mere straws, showing which way we want the breeze to blow. One day not in our time, perhaps, but one day—if architecture is to get back in a modern context to the standards of Florentine workshops, that kind of breeze must become a great gale from the sea.

Meanwhile the main job of training the architect as artist, planner and builder goes on in our overcrowded studios and lecture halls. The exhibition which the Prime Minister will declare open can, in itself, explain all that better than I can. Let me remind you, however, that this exhibition shows rather less than a hundredth part of the year's work, and there are some aspects of the training, such as site works visited. travel, and a quite incredible amount of discussion, organised and disorganised, that, perhaps fortunately, cannot be exhibited at all.

If one wants to plan the AA School's future and, what is so much more difficult, turn this plan into day-to-day realities, one must know that, somewhere behind one, this business of running the present school is going on, not smoothly but with that impetuosity and vitality which are even better than smoothness; and here I want to thank all the staff, administrative and library as well as teaching, and above all the fifth year masters and their colleagues, for keeping the wheels turning and co-operating with

#### all the whims of a new Principal.

This thanks is not a formal gesture. Some of our staff are practising architects — we should be a very much poorer school if they were not—and to run a practice and teach at the AA is in many cases a genuine sacrifice. I hope that one day the more progressive public authorities may be able to make the same sacrifice and allow some of their more able staff to come here and teach.

We finish the academic year with five hundred odd students—some of them very odd —and to them above all I owe thanks. I have had a very strong suspicion that they are allowing me to settle down. I can assure them that I hope for a more polemical future. Family life in London "digs" on an ex-Service man's further education and training grant is emphatically not a bed of roses. However, people do scrape through, and I want to say here, in the presence of the head of His Majesty's Government and of officials of the Ministry of Education, that that great scheme is, in our experience, sympathetically administered, with a very marked absence of unnecessary red tape. There is, however, another class of student

There is, however, another class of student for whom life is difficult and almost impossible. It will remain so until local education authorities bring their grants and awards more into line with the State grants. There are still nearly a hundred such authorities who are not playing the game and not doing what the Ministry of Education has asked them to do.

One other word about the students at the AA. The AA was founded by students, or at least by a handful of young men in revolt against the pupillage system and the Peck-sniffs of the 1840s. The chain has never been broken. There is still the curious democracy of students, staff and council; still that curious mixture of school and club. The Martin Chuzzlewits of 1847 have become a student body of over 500. The spiritual descendants of the founders of the school, they are still the motive force behind the mysterious vitality of the school.

#### The Rt. Hon. C. R. Attlee:

I am very glad to be here this afternoon and to have the privilege of declaring the exhibition open. I have had a rather short run round the exhibition. I should have liked to spend a much longer time there, because it was to me a fascinating thing to see the work of the students and to see their ideas. I am, as a matter of fact, an honorary FRIBA, but that is not due to my architectural knowledge ! I remember, however, that many years ago my elder bother was a student here, and sometimes when he went round measuring I was allowed to hold the other end of the tape, and I watched him doing his drawings.

In those days we used to read together a good deal on the subject of architecture. We were great followers of William Morris and readers of Ruskin. We read the lectures and books of Professor Lethaby. I always had, therefore, an interest in architecture, the Mistress Art, and I remember that in those days he used to emphasise the importance, as was said just now, of the architect not being just a professional man, but also a craftsman and an artist. I have seen something of the work of the Association, and this School has a long

I have seen something of the work of the Association, and this School has a long history. The Association goes back over a hundred years. I imagine that it had its difficult times. I imagine that in those days or at least I hope so—there were a great many people who rebelled against the kind of buildings which were being put up, because, looking back on those hundred years, what a terrible period of waste it was, a period in which this country acquired some of the most deplorable buildings that the world has ever known. It is a terrible thing, when we look back on it, to see how we have defiled some of this land of England. We owe a great grudge against our forefathers for the years of lost opportunity. Now we have come into a modern age, and somehow or other into that modern age we have to bring, avoiding the bad years, all that is best of the past. I sometimes see modern buildings go up that rather puzzle me, but then I am getting old. I do not appreciate quite a lot of modern paintings; I do not understand certain writings that are called poetry that are produced today, and I do not always understand the modern buildings. Perhaps I may come to appreciate them in time.

What I do see, however, is an awful lot of good buildings going up, and I do think that the work of the AA has borne fruit in a better appreciation of our duty to this country in the kind of buildings we put up and the kind of layout that we have for buildings.

#### IMPROVEMENTS IN BUILDING

In my time I can remember the beginnings of modern town planning and the beginnings of garden cities. Today we do see beautiful plans growing up, fine buildings in fice settings, and we see that applied beyond the narrow range to which it used to be applied. It used to be just certain public buildings only; other buildings seemed to have no architectural pretensions whatever. We had what I used to call the Poor Law school of architecture and the barrack school of architecture and the barrack school of architecture. They must have been extraordinarily powerful, because their influence spread quite a long way. There is not so much difference between the productions of that school and those of the people who built the "dark, satanic mills," of which we still have a lot. But today we see most delightful factories going up, and we see good layouts and beautiful buildings.

beautiful buildings. I think that the architect today has a better chance than had his predecessors. I do not think that he will get the chance, even if he wants it, to build another Blenheim. I do not think that many Blenheims will go up in this country in the future; but I think he will have a great chance of doing fine public buildings, fine industrial buildings, fine municipal buildings, and plenty of opportunity for building fine-looking and good houses for ordinary citizens.

We are living in a day when there are new ideas and new techniques. I know something of the difficulties that everybody has with regard to buildings, because in the Government we find terrific programmes of buildings that ought to go up, and we know the limitations of the three Ms—Men, Money and Materials. We have, therefore, to allocate our resources. But I have a great faith in this country, and I believe that there will be plenty of work for those who are now students of the AA in the years that are coming

what I want to see are fine buildings in fine settings, and fine buildings adapted for their proper uses, not a facade of something entirely different put on to conceal what goes on inside. I think that our buildings must express somehow or other some connection at all events with what they are doing, and I think that our buildings ought to express something of the soul of the nation. I think that our soul was a bit grimy at one time, but it is getting better.

I was very pleased to see your exhibition and your studies, which are, I know, only a small part of your activities. I know that one part of your activities—and that part, I always think, is extremely valuable—is the good comradeship and the discussion. I was pleased to hear, too, how close is the connection between the School and the practising architect, because there is always a danger that schools may become too academic and too divorced from those who are actually practising their profession.



Perspective view from Grafton Street

# FLATS IN NOTTINGHAM DESIGNED BY J. W. M. DUDDING



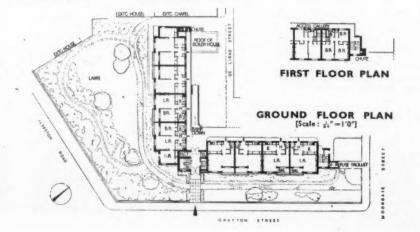
TYPICAL MAISONETTE : GROUND FLOOR:





FIRST FLOOR

Rochdale Court, designed for the East Midlands Housing Association, is the first state-aided multistorey housing scheme in the City of Nottingham. The flats are to be built on a site in part of a central area zoned for high density development at 250 persons per acre. This first block houses 146 persons.





The site, seen from the south.

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# HOUSING FOR LODDON RDC, NORFOLK

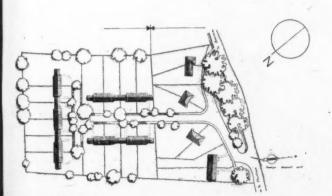
DESIGNED BY TAYLER AND GREEN





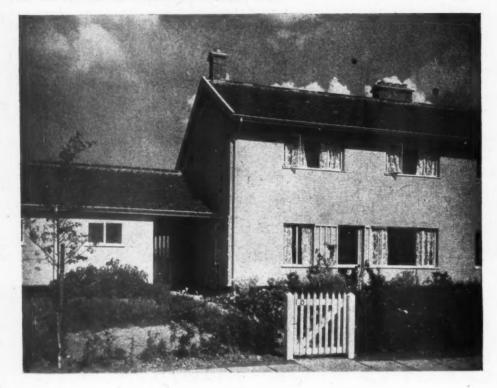
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FIRST FLOOR PLAN



SITE PLAN Existing houses are cross-hatched, new houses single-hatched.

GENERAL .- Four-room houses for agricultural workers, designed in pairs, with improved means of entry permitting flexibility of siting with no consequent impairment of aspect from any one room. A single side entrance replaces the usual back and front doors, ensuring covered entry in privacy. The architects advised on sites to be acquired, and emphasis is placed on the retention of existing trees and hedges, and on new planting. CONSTRUCTION .- External walls are plain fletton brick, 11 in. cavity, colour-washed, and with the plinth tarred black. The outside paintwork is white, with coloured doors. Roofs are wood construction, with Norfolk pantiles (bright red or "smut"). All plumbing is inside and concealed in ducts. The exceptions are rainwater pipes and one waste stack. Internal walls are 41 in. brick or hollow tile partition block, distempered off-white on rough finish lime plaster. Paintwork is pale grey. The main contractors are Messrs. J. Moore (Builders) Ltd. For list of sub-contractors see page 108.



Front entrance of one pair of houses, showing the store attached to the house, and approached under cover.



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The living, room with rough - textured plaster walls distempered ivory. The paintwork is white, except for pale grey doors. The floors are brown quarry tiles.

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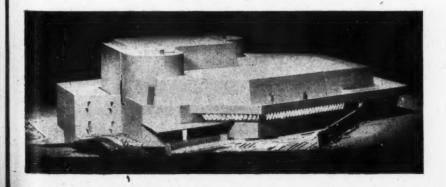
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# THEATRE AT HARTFORD, CONNECTICUT

DESIGNED BY FRANK LLOYD WRIGHT

GENERAL.—Designed to seat between 850 and 1,000 people, this theatre is to be built by the end of this year. In 1932, Frank Lloyd Wright designed a small theatre which was later incorporated in the Broadacre City project, and it is upon this design that the latest theatre is based. Preliminary drawings for

Side elevation. Above, the model with roof removed.



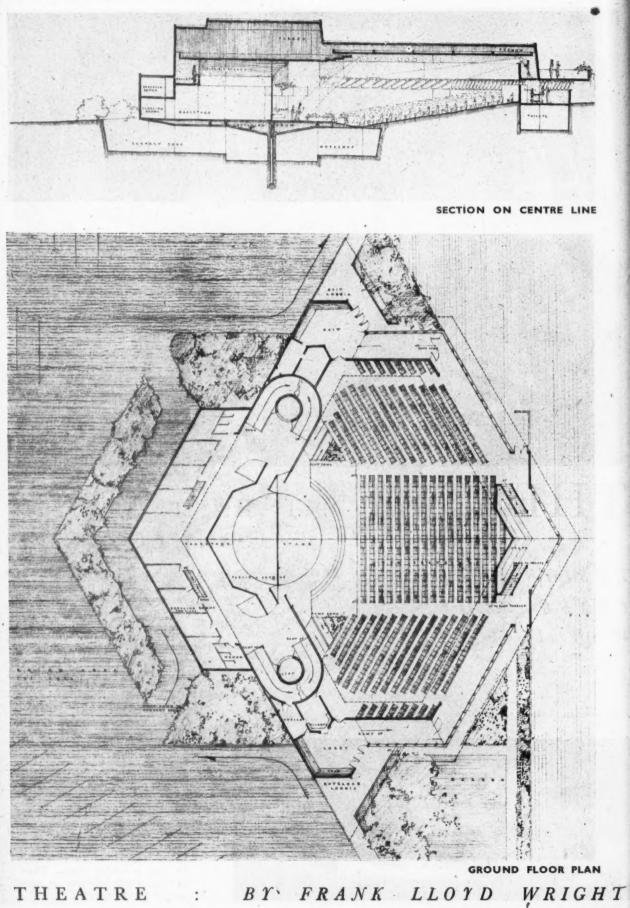
GENERAL.—Designed to seat a theatre in Los Angeles were also between 850 and 1,000 people, made in 1920.

> PLAN.-This is hexagonal in shape and has been designed to relieve the problem of aisle and lobby congestion by providing two lobbies for entrance and egress, one on each side of the building. A terrace encircles the building at balcony height for the use of the audience during intervals in the performance. A similar terrace runs above the dressing rooms. The floor of the auditorium is raked. The stage has an apron stage with no proscenium arch, although a false arch can be erected when required. The tower for flying scenery has been omitted. All scenery is to be assembled, demounted and stored either in the back-stage area or in the workshops beneath the stage. Two lifts and ramps enable the scenery to be moved from the workshops to the revolving stage. There are two small balconies on each side of the forestage.

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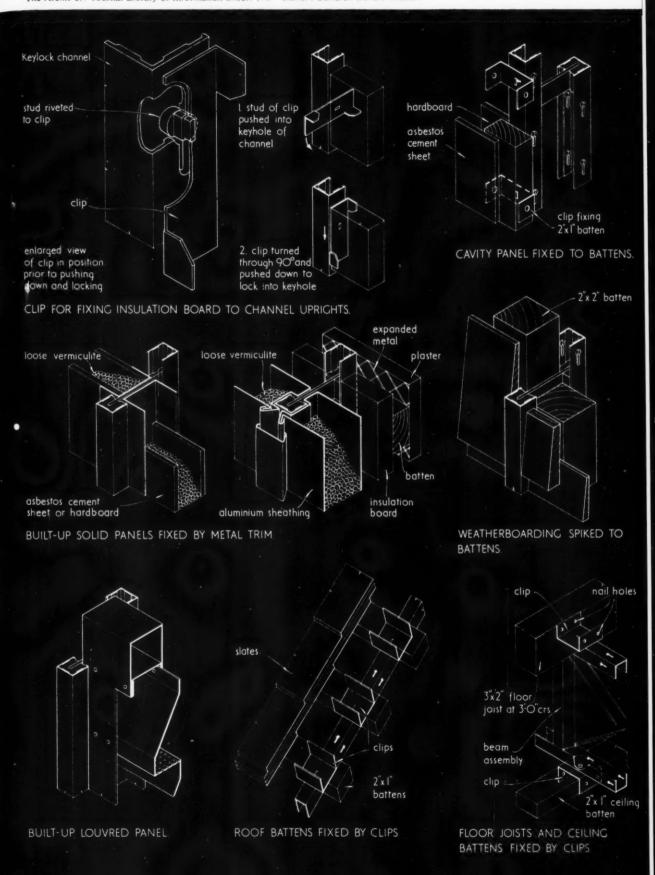






## COMPLETE STRUCTURES PREFABRICATED LIGHT ALLOY

The Architects' Journal Library of Information Sheets 191. Editor: Cotterell Butler. A.R.I.B.A



KEYLOCK SYSTEM OF CONSTRUCTION: METHODS OF FIXING CLADDING.

#### 25.A4 • KEYLOCK • SYSTEM OF CONSTRUCTION : METHODS OF FIXING CLADDING

This Sheet is the fourth of a group describing the Keylock system of connecting standard structural elements to form a flexible range of building components. It illustrates different types of cladding and shows methods of fixing them to the standard components.

#### Clip for Fixing Insulation Board to Channel Uprights

An aluminium clip is used to which is riveted a stud, slightly smaller in diameter than the standard keyhole. The stud is pushed into one of the keyholes with the clip kept at right angles to the channel while a board is radiused into position between the channel frames. The clip in its horizontal position enables the board to be slipped between its turned-up ends. When the clip is rotated to position 2 the width between the ends becomes that of the board thus holding the board firmly in position. When the clip has been rotated and pushed down into the lower part of the keyhole, the straight portion at the back of the stud forms a positive lock and prevents any further rotation.

The joint between the channel and the board should be sealed with mastic and a cover strip or other finish applied.

#### **Cavity Panel Fixed to Battens**

U-shaped metal clips are fixed to the channel uprights by means of studs in the same way as described above. Grounds formed of 2 in. by 1 in. battens are positioned in the clips and fixed by nails through the holes in the sides of the clips. An asbestos cement sheet or expanded metal or other suitable material is fixed to the battens in the usual way and a skim or rendering coat applied.

Hardboard may be fixed to the back of the battens or insulation board clipped to one or both channels and by similar battening on the second channel a three cavity wall may be formed.

#### Built-up Solid Panels Fixed by Metal Trim

In the first example separate U-shaped metal trim is pop-riveted to asbestos cement or hardboard sheets and then inserted downwards behind the flanges. The cavity between the sheets is filled with a loose insulator sucl as exfoliated vermiculite, etc. In the second example the insulation is completely enclosed in a pre-made aluminium sheath grooved to take a standard channel. This section slides into position around the outside Keylock channel and the joint between adjacent sheathed panels held with a continuous vertical spring clip cover strip.

#### Weatherboarding Spiked to Battens

2 in. by 2 in. battens are simply inserted between the Keylock posts and the weatherboarding spiked to them as shown. The joint between the channel upright and the batten and between the channel and the weatherboarding should be filled with a waterproof mastic. It should be noted that when the Keylock channel is exposed to view, perforations only occur at the joints.

#### Louvred Panel

In this case a built-up louvred panel of sheet metal is slid between the Keylock posts. The joint between the posts and the panel is filled with a waterproof mastic.

#### **Roof Battens Fixed by Clips**

The drawing illustrates a method of using simple clips in conjunction with studs as described above to form an economical method of supporting roof coverings.

#### Floor Joists and Ceiling Battens Fixed by Clips

Clips are used in the same way as before to fix floor joists and ceiling battens to the Keylock beam.

This Series of Sheets covers the principles of the system, details of the locking system adopted, typical examples of structural and cladding details for domestic and similar single- and double-storey buildings, large-span single-storey buildings, such as warehouses and assembly halls and loading tests on typical structural assemblies.

Compiled from information supplied by :

Packaged Buildings (Robert Building Inventions Limited). Head Office : Indio House, Bovey Tracey, South

Telephone : Bovey Tracey 2261. Registered Office : 63-65, Piccadilly, W.1. Telephone : Regent 6580.

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### FLOOR FINISHES LINOLEUM

The Architects Journal Library of Information Sheets 192, Editor: Cotterell Butler, A.R.I.B.A

### SPECIFICATIONS FOR THE INSTALLATION OF LINOLEUM

**This Sheet**, the third of a group on linoleum, gives typical specifications for laying and fixing to old and new floors for both timber and concrete and should be read in conjunction with the drawings on the face of Sheet 19.G2.

Sheet 19.G1 gives information on the gauges and types of linoleum available and 19.G4 deals with specialised applications, such as to furniture and fittings.

#### **Preparation of Surfaces**

New solid concrete floors :<sup>1</sup> All surfaces to be covered with a  $\frac{1}{2}$  in minimum screed<sup>2</sup> (or any greater thickness required) the proportion of the mix to be Portland cement and sand 1 : 3.

The screed to be dense textured, trowelled hard and smooth,<sup>3</sup> free from all foreign matter.

All expansion joints in the top concrete or screeding to be filled in with a non-shrinking filler of the Ciment Fondu-sand-latex type.

Surfaces to be free from all dust and foreign matter, dry, and swept clean immediately before the linoleum is laid.

*Existing solid concrete floors and similar paving*.<sup>4</sup> Carry out the measures specified under (the appropriate section of the general specification) for damp-proofing (if this applies).

Fill up any unevenness with a non-shrinking filler of the Ciment Fondusand-latex type.<sup>5</sup>

Treat all surfaces where they are "dusting" with one application of silicate of soda-water solution in the proportion 1:4, or other approved hardening treatment.

Surfaces to be free from all dust and foreign matter, dry, and swept clean immediately before the linoleum is laid.

#### Suspended Concrete Floors (Old and New)

Fill up any unevenness with a non-shrinking filler of the Ciment Fondusand-latex type.<sup>5</sup>

Treat all surfaces where they are "dusting" with one application of silicate of soda-water solution in the proportion 1:4, or other approved hardening treatment.

Surfaces to be free from all dust and foreign matter, dry, and swept clean immediately before the linoleum is laid.

#### New Wood Floors<sup>4</sup> (Tongued and Grooved)

The boarding<sup>7</sup> to be closely driven up, nailed through the feather. All surface irregularities to be smoothed off.

The boarding to be covered with dry felt paper, carefully cut to fit against vertical surfaces and with close butt fit at seams; the paper to be completely stuck to the boards with the adhesive specified and to be rolled from the centre of the sheet outwards with a 150 lb. roller.

(Alternative for greater resilience) The boarding is to be covered with ... mm. gauge cork underlay in a similar manner to that described for felt paper.

#### New Wood Floors (Rough Boarding, Plywood or Hardboard Faced)

The boarding to be (.. in. minimum thickness) end nailed, with all nail heads punched in and with all surface irregularities smoothed off. .. in. plywood (alternative .. in. hardboard) to be nailed to the floor boarding with taper headed nails  $1\frac{1}{2}$  in. long, spaced 6 in. on all edges and 12 in. throughout the body of the plywood (or hardboard) in staggered rows. Joints in succeeding rows to be staggered. All edges to be close fitting in a manner to leave the surface free from irregularities. The boarding to be covered with dry felt paper, carefully cut to fit against vertical surfaces and with close but fit at seams ; the paper to be completely stuck to the boards with the adhesive specified and to be rolled from the centre of the sheet outwards with a 150 lb. roller.

#### Existing Wood Floors<sup>8</sup>

All loose boards are to be securely fixed, all exposed nail heads are to be punched in and all surface irregularities are to be removed, if necessary with a sanding machine.

The boarding to be covered with dry felt paper, carefully cut to fit against vertical surfaces and with close butt fit at seams; the paper to be completely stuck to the boards with the adhesive specified and to be rolled from the centre of the sheet outwards with a 150 lb. roller.

1. New solid concrete floors should be designed with a sandwich membrane of bitumen or pitch, minimum thickness  $\frac{1}{2}$  in., tanked up all vertical surfaces. Concrete and screed,  $2\frac{1}{2}$  in. minimum thickness, should be laid on top of the membrane. An alternative construction consists of solid concrete laid direct on hardcore finished with  $\frac{1}{2}$  in. minimum asphalt screeding. Linoleum is laid direct on to this screed with adhesives of the bitumen-emulsion or resin-alcohol type.

2. If the surface of the concrete is smooth and level screeding may not be required, but usually concrete is not finished smooth enough and requires the addition of a screed to obtain a level linoleum finish.

3. Irregular surfaces give a poor bond with adhesive.

4. Existing solid concrete floors should be tested for dampness by the anhydrous copper sulphate test as follows:

Sprinkle a small quantity of a.c.s. powder on suspected damp floor, in position where dampness might be most concentrated. Surround a.c.s. with bead of putty approximately 12 in. square, place piece of glass also about 12 in. square over putty, press to seal and exclude outside atmosphere.

Anhydrous copper sulphate when in good condition is a white powder. If powder turns green within six hours, floor contains too much moisture to lay linoleum.

If found to be damp, suitable measures should be taken to prevent penetration. Appropriate measures will depend upon severity of moisture penetration, but under most circumstances a  $\frac{1}{2}$  in. thickness of asphalt will be found adequate. A  $\frac{1}{2}$  in. asphalt screed should be applied to existing bricks, tiles or stone slabs if damp is present or likely to occur. If no damp is present or likely to occur a cement screed would be quite adequate.

5. Where unevenness is considerable it may be more economical to apply a complete screed rather than to attempt to fill up unevenness. If so, specify new screed as for new work.

6. N.B.—Specify ventilation as necessary to prevent dry rot.

7. Boards should be narrow and of equal width. Boards of very unequal widths have various degrees of shrinkage. The wider the board, if the linoleum is stuck, the greater the risk of splitting. The ideal for a linoleum floor is an absolutely level surface.

8. The condition of the surface will determine whether or not it can be made sufficiently smooth without surfacing other than felt.

9. Cork slabbing from  $\frac{1}{16}$  in. to  $\frac{3}{6}$  in. (inclusive) should be stuck to the subfloor with linoleum adhesive. For slabbing from  $\frac{1}{2}$  in. to 2 in. (inclusive) bitumen, hot or cold should be used to stick the slabbing to the sub-floor. This is to prevent cork slabbing moving or prevent water getting between sub-floor and cork slabs.

10. Where heavy wear is required, as well as sound insulation, cork slabbing

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### **19.G3 SPECIFICATIONS FOR THE INSTALLATION OF LINOLEUM**

(Alternative)... in. plywood (alternative ... in. hardboard) to be nailed to the floor boarding with taper headed nails  $1\frac{1}{4}$  in. long, spaced 6 in. on all edges and 12 in. throughout the body of the plywood (or hardboard) in staggered rows. Joints in succeeding rows to be staggered. All edges to be close fitting in a manner to leave the surface free from irregularities.

#### Insulation<sup>10</sup> (on Wood or Concrete Sub-Floors)

The surface is to be covered with ... in. cork slabbing and carefully fitted, with alternate rows staggered so that no joints run continuously. The slabbing should be laid in bitumen.<sup>9</sup>

(Alternative, stuck with linoleum adhesive.)9

#### Floor Finish

The whole of the floor surfaces are to be covered with the linoleum (or cork carpet) specified; neatly cut and fitted with the fewest possible seams, to the architect's approval. It is to be rolled into the adhesive specified, from the centre of the sheet outwards, with a 150 lb. roller, to obtain complete adhesion and to remove air bubbles. The seams of the linoleum or cork carpet (on wood floors) are to run at right angles to the run of the boards and care is to be taken to avoid any seams in the underlay coinciding with those of the surface material.

#### Skirtings<sup>11</sup>

Carefully trim the floor finish for and provide and fix the prefabricated linoleum skirting specified with the fewest possible joints. All joints (and mitres if not prefabricated) to be carefully executed and the skirting to be pressed well into the adhesive specified, working from the centre towards the joints. The skirting to be weighted and held in position with sand bags, or other suitable weights, until the adhesive has set.

(Alternative) Form skirting<sup>12</sup> on site with standard sheet linoleum, ...mm. gauge. The wood core to be fixed in position before forming cove.<sup>13</sup>

Carefully trim the floor finish .. in. back from walls and form border and coved skirting .. in. high, of similar material. All joints (and mitres if not prefabricated) to be carefully executed and the skirting to be pressed well into the adhesive specified, working from the centre towards the joints. The skirting to be weighted and held in position with sand bags, or other suitable weights, until the adhesive has set.

#### Materials

Felt paper : The felt paper is to be that recommended by the suppliers of the linoleum.<sup>14</sup>

Cork underlay:<sup>15</sup> The cork underlay to be .. mm. gauge cork slabbing or cork carpet.

Linoleum or cork carpet : The linoleum or cork carpet is to be ... mm. gauge of ....... colour and to be similar in all respects to the sample deposited with the architect. All linoleum or cork carpet is to be kept in an atmosphere of  $65^{\circ}$  F. for at least 24 hours before unrolling.

#### Adhesives<sup>18</sup>

The adhesives for felt paper, cork underlay, linoleum or cork carpet are to be ......<sup>16</sup> and are to be used strictly in accordance with the manufacturers' instructions. They are to be spread upon the sub-floor with a notched steel trowel to provide a sufficient key and even coating.<sup>17</sup>

#### **British Standard Codes of Practice**

Linoleum and cork carpet 203.101: 1946. Cork tile flooring 203.102: 1948. covered with plywood or hardboard may be specified. This should be fixed to the cork slabbing as follows:

Apply a thin coating of bitumen tosurface of cork slab and bed plywood or hardboard into bitumen. Use linoleum adhesive to stick linoleum to plywood or harboard surface.

11. Skirtings can be applied to cement, plaster or wood finishes: a wood cove is supplied fixed in position on prefabricated linoleum cove. See Sheet 19.G2.

12. See Sheet 19.G2. Linoleum up to 3.50 mm. gauge may be used.

13. Unless cove is preformed on site of cement, plaster or other material.

14. Felt paper should be supplied in 6-ft. widths and 1.10 mm. in thickness.

15. Thickness dictated by the degree of resilence or insulation required.

16. According to the type of sub-floor.

17. Unless stated otherwise in manufacturers' instructions.

18. Linoleum adhesives are supplied by linoleum manufacturers also by a number of special adhesive manufacturers. Appropriate adhesives for specified installations can be recommended by linoleum manufacturer and also by laying contractors. Linoleum adhesives are manufactured under the following broad headings and marketed under a number of trade names.

(a) Vegetable starch and casein glues.

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(b) Asphalt or bitumen base adhesives with water emulsions or spirit solvents.(c) Resin adhesives with spirit solvents.

Linoleum adhesives vary in price, application and performance. Vegetable starch and casein glues are strong in bond, but subject to deterioration under conditions of dampness.

Asphalt or bitumen based adhesives and resin adhesives are strong in bond, quick setting and have long life. They are also proof against surface water. Linoleum adhesive cannot be used as a damp-proof layer.

Compiled from information supplied by :

The Linoleum Manufacturers' Association. Address : Roxburghe House, 273-287 Regent Street, London, W.1. Telephone : Regent 6140 & 6149

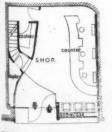
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The main front of the BEA shop in the Avenue de l'Opera, Paris.

# SHOP FOR BEA, PARIS

CONSULTANT TO BEA: THE LATE CHRISTOPHER NICHOLSON ARCHITECT: HUGH CASSON



GROUND FLOOR PLAN [Sale: 赤" - 1'0"]



KST FLOOR PLAN

GENERAL.—A ticket and enquiry office with administrative offices for a small staff. The following accommodation was required by the BEA:—basement; stores, staff cloaks and car fuel:. ground floor; public ticket office and cashier: first floor; administrative offices with waiting room. The shop taken over was half of a larger shop designed with a unified treatment. It was decided, therefore, to leave undisturbed, as far as

possible, the existing fascia and surround, and an existing column had to be retained.

PLAN.—The existing shop front with its narrow door was removed and replaced by a smaller show window and greatly enlarged entrance doors set back from the building line. The staircase was altered to discharge more obliquely into the ground floor office, and cased in to provide 100] THE ARCHITECTS' JOURNAL for July 28, 1949



a cashier's office. A counter was set against the opposite wall.

CONSTRUCTION AND FINISHES. — External shop front: — Existing glass bricks with wood painted white. Column sheathed in metal and painted grey. Recessed beam painted red carrying metal lettering in standard BEA type. Sofit over show window and doors : metal slats painted white. Doors and frames of metal with polished beechwood

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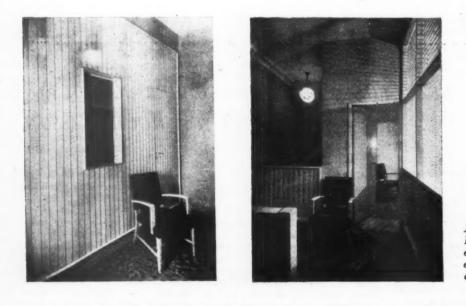
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handles. A sliding metal grille is placed across door. The main shop sign is temporary and is placed to cover area from which glass bricks were removed to alter façade. Interior:—Ground floor: the ceiling light fittings are temporary. Two walls are lined with polished beech vertical boarding with a white trim. The remaining wall is pale grey. The ceiling is white. The curved stair wall carries "poster-wall" through to outside and leaves space for show case. Counter, lino top and grey plaster front with white recesses. Mural by F. H. K. Henrion. First floor: walls, grey and white. Partitions are of ribbed glass over a polished beech dado surrounded by a white trim.

SERVICES.—Heating by electricity. Furniture : Standard BEA. Indirect light fittings. The assistant architect was L. Martin. The main contractor was Messrs Siegel, of Paris.



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Above, the counter in the main shop. Extreme left, the grille to the cashier's office. Left, the waiting space on the first floor. [Photographs by courtesy of the BEA]

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The living room.

# IN KENSINGTON BY TAYLER AND GREEN

GENERAL.—This flat is for a single professional man, and much of the furniture is by the architects, as most of the standard products available were unsuitable. To increase the effect of spaciousness, all doors were rehung to fold against walls.

PLANNING AND FINISHES.— In the living room, enlargement of the existing window was not permitted, but the wood casements were replaced by a horizontally pivoted single-pane window. On one wall is a fitting consisting of eight separate removable pinewood units with adjustable shelves —containing bookshelves, writing desk, etc. The adjustable dining table is in maple, sycamore, rosewood and mahogany, with a

Below, two views of the living room wall fitment.





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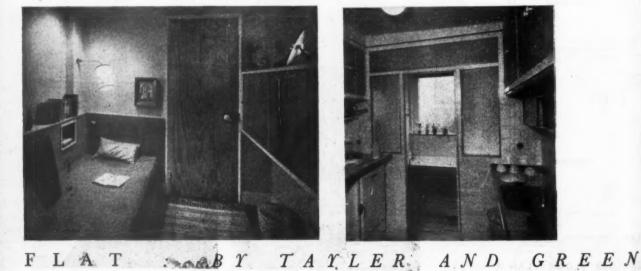
GROUND FLOOR PLAN [Scale : 1" - 1'0"]

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polished brass base, and the chairs are made of beech and birch. The settee-bed is Cuban mahogany and bamboo. The upholstery is mainly green, and the wallpaper white and rough textured. Metalwork is brass and paintwork is white throughout. Except for kitchen, bathroom and workroom, all floors are covered with fitted grey carpet. In the hall, the wallpaper is white, with a pattern of red, brown and yellow. The linen cupboard and the balustrade are of polished mahogany and Swedish pine. The bedroom has a daytime use as a sittingroom. Clothes cupboards of mahogany and pine are built in on either side of the window, and a small wall cupboard serves as a dressing table. The walls are covered with a rough-textured white paper. Grey tweed is used for the bed cover, and the cushion is brown and white. The workroom has a secondary use as a guest room; a wardrobe and washbasin are fitted. The walls are covered partly with a roughtextured white paper, and partly with polished dark brown cork tiles; these tiles serve for pinning up drawings and as a sound absorbent material when the piano is used. The linoleum is speckled grey and white; the blinds are striped green and white; the rug is red and yellow. Table tops are covered with terra-cotta linoleum, edged with mahogany; cupboards and drawers are polished pine; the piano is rosewood. In the kitchen the floor is covered

with terra-cotta linoleum; the sink is stainless steel and the electric cooker grey vitreous enamel. The general contractors were Messrs. Simmonds Brothers and Son, Ltd. For list of sub-contractors see page 108.



The top of the entrance staircase [in the hall, showing the fitted cupboards.Below: left, the bedroom; right, the kitchen.



The main entrance. Below, right, the banking hall.

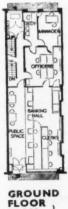
# BANK IN MOORGATE, E.C.2 DESIGNED BY SHAW AND LLOYD

GENERAL.—The building is the first branch of the Exchange Bank of India and Africa, providing general banking facilities.

general banking facilities. PLANNING.—The premises are long and narrow and have frontages on both Moorgate and Moorfields. The main frontage and public entrance is in Moorgate, and the back door is in Moorfields. For security reasons, and to allow more effective sub-division of the rear premises into offices, the damaged Moorfields shop-front has been removed and the elevation treated in sand lime brick.

ELEVATIONAL TREATMENT. —Materials employed are Burma teak for the doors, stallboard and fascia, with bronze fittings. Windows are in etched glass, fitted in vertical bronze glazing bars at 1-ft. centres. The Roman lettering is of cream-filled bronze.

The main contractors were Poolman Builders, Ltd. For subcontractors see page 108.



FLOOR , PLAN [Scale: 3,"=1'0"]



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

# 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

J 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. 8 SURVEYING, SPECIFICATION. 9 DESIGN : General 10 DESIGN : Building Types. 11 MATERIALS : General. 12 MATERIALS : Metal. 13 MATERIALS : Timber. 14 MATERIALS : Metal. 13 MATERIALS : Applied Finishes, Treatments. 16 MATERIALS : Miscellaneous. 17 CONSTRUCTION : General. 18 CONSTRUCTION : Theory. 19 CONSTRUCTION : Details. 20 CON-STRUCTION : Complete Structures. 21 CONSTRUCTION : TION : Miscellaneous. 22 SOUND INSULATION-ACOUSTICS. 23 HEATING, VENTILATION. 24 LIGHT-ING. 25 WATER SUPPLY, SANITATION. 26 SERVICES. EQUIPMENT : Miscellaneous. 27 FURNITURE, FIT-TINGS. 28 MISCELLANEOUS.

# 2.89 planning: general

PLANNING LAW

An Outline of the New Planning Law. Desmond Heap. (Sweet & Maxwell. Price 15s.)

A concise and not too solidly packed guide to the framework and current practice of planning under the Act. 160 pages and index.

The first flow of books on the Planning Act of 1947 that were not much more than reprints of the Act itself is dying away now that there has been time to produce a digested version of Act, Regulations and MOTCP circulars. This is such a digest, and a good one. Mr. Heap is City Solicitor to the Corporation of London and a specialist in the Act. That gives his book the reliability and comprehensiveness that it should have. He is also used to lecturing on the Act, which has helped him to know, and to be able to clarify, those points of major difficulty to the layman. The book is predominantly legal. It cannot hope to deal with the other professional tasks, surveying and valuing, imposed by the Act. But it provides a means of acquiring an essential understanding of the Act itself, and experience has already taught one important lesson; the extraordinary wide range of interests and people upon which the influence of the Act is already making itself felt.

# 8.16 surveying and specification HOUSING

Specification for Houses and Flats. No. 1 Relating to Brick Construction. (National House-Builders Registration Council. 4th Ed. July, 1949. 55.)

Minimum specification for houses to conform to requirements for certification by the Council. This specification undoubtedly serves a useful purpose in setting minimum standards for houses to be built for certification by the National House-Builders Registration Council and, when builders are again allowed to build houses for sale, it should materially improve standards. Generally it is a sound document but rather

Generally it is a sound document but rather lacking in suggestions for enterprise in the way of new ideas except in useful references to the latest work on heat and sound insulation.

The whole specification is inevitably rather influenced by the necessity for keeping it general enough for application to varying localities and conditions. The result of this is a tendency to weakness in a number of the recommendations.

In a few cases clauses appear to conflict with accepted good practice. Generally, however, the document is useful for its purpose though probably not of great interest to most architects.

### 10.55 design : building types MODERN SCHOOLS

The Modern School. C. G. Stillman and R. Castle Cleary. (The Architectural Press, 1949. 21s.)

A specialists' up-to-date and comprehensive study of school building, design and construction, and of the educational and administrative background to it. Fully illustrated.

The book opens with a historical survey tracing the development of school building and educational evolution up to the passing of the Education Act of 1944, which is dis-cussed in a separate chapter. No attempt has been made to explain the Act in detail, but those features which have a direct bearing on the architectural aspect are referred to in a review of the main provisions showing how the Act is intended to work. This review is followed by an important chapter stating problems involved in translating the legislative measures into practice. It refers to the need for flexible planning of the various units of the contemporary school building in order to allow for alterations and future additions. This can only be and future additions. This can only be achieved by applying flexibility of construc-tion at the same time. The rigidity of the compact plan as used in the past is strongly compact plan as used in the past is strongly discouraged, even in the case of the new multi-lateral Secondary Schools and the pro-jected County Colleges where large concen-trations of children in one building or in a group of buildings will be required. The authors state that "when it is realized that the average life of a school covers about two generations, it will be seen how impera-tive is the necessity for adaptable planning." Another important aspect to be considered in this connection is the need for exceptional speed and economy in the production of building materials to overcome the present deficiencies in accommodation. The essential problem of single-storey versus multi-storey school is also noted in this chapter.

Sections devoted to the school building proper begin with a discussion on the importance of environment to the child both within the building and outside, and are followed by detailed studies of the classroom



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ing cases, is available, price 45s.0d. The 182 Sheets without binding cases are available at 36s.0d., individual Sheets 3d., binding cases 4s. 6d. each.

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unit, the special instruction rooms, the communal rooms, facilities for physical educa-tion and, lastly, constructional design. Technological aspects referred to in these studies include short notes on noise interference, heating and ventilation, and a detailed account of classroom lighting requirements with particular reference to daylighting.

As the book is not intended to be a textbook the chapter on constructional design does not provide technical details regarding different materials and forms of construc-tion. It rather gives a critical comment on standard methods of construction officially recommended and draws attention onleany recommended and draws attention to the fact that due to present-day variations and fluctuations in the materials and man-power supply position, constant variations in structural design are called for. The implementation of the projected school build-ing programme, owing to the disregard of practical considerations by educationalists, may take double the time estimated for securing the improvements under the 1944 Act. Therefore, a framed constructional system using alternative materials as they system using alternative materials as they are available seems to offer the most promis-ing results. "It enables the different departments of a school to be treated inde-pendently, and it encourages one-storey building with an open and flexible plan allowing latitude for the use of standardized components as and where considered expe-dient.... It is equally applicable to large-scale production, but does not make the assembly line its first and ultimate end." Some sketches of prefab. construction systems are shown. The book is extremely well illustrated by

means of photographs and diagrams but has, unfortunately, no index. Its treatment of a particular building type is a model of its kind and shows the definite need for similar and and shows the definite free for similar contemporary monographs in English on other selected building types such as hos-pitals, industrial buildings, theatres, etc. It should be noted that a number of such studies have been published on the Continent in recent years providing, however, no summaries in English.

### 12.33 materials: metal PROTECTION OF ALUMINIUM

The Protection of Aluminium. John Hurst. (Building Topics, April, 1949.)

A useful short article giving practical advice on methods of protecting aluminium from corrosion under different conditions of use. Problems associated with the placing of other metals in contact with aluminium also discussed

### 15.57 meterials : applied finishes and treatments PLASTERING

Internal Plastering. BS C. of P. 211:1949. (British Standards Institution. 10s.)

The earlier draft codes on plastering have now been revised and issued in collected form. The result is a comprehensive and valuable description of terms, most materials, characteristics and workmanship for internal plastering.

Modern plastering is a very different affair from that of comparatively recent times. Not only is the range of plastering materials greatly increased but the range of backing materials is also much larger. The result materials is also much larger. The result is that the whole subject is rather complex and few, outside the specialists, can hope to memorize all the knowledge on the sub-Reference is essential and this code lect. provides the most comprehensive and authoritative source of information. Even those who think they are fairly knowledge-able on this subject will learn something from it and all should use it for constant reference.

ad.

Although there is a lengthy table of contents there is no index. This is an omission which at times makes reference somewhat tedious. It would be helpful if all the larger codes-or groups of codes published under one cover-could have a reliable index added

### 15.58 materials: applied finishes and treatments FLOOR TILING

The Lifting of Clay and Concrete Floor Tiles. (Building Research Station Digest No. 7. June, 1949.)

Illustrated description of floor failures due to the arching and lifting of tile finishes. Recommendations for preventive measures.

The reason for floor tiles coming up is nearly always the shrinkage of the sub-floor. This may occur during initial drying outin which case failure of the tiling usually occurs fairly early in the life of a building. Alternatively, preferential shrinkage of the sub floor may occur from thermal contraction during very cold weather. This can happen at any time in the life of a building. Any treatment which improves the adhesion between tiles and sub-floor is advantageous but cannot be certain of success if the stresses set up by differential movement are large. For this reason the recommendations now given are to isolate the tiles from the sub-floor. Two methods are described in the digest. One relies upon a layer of sand and the other upon a layer of paper or felt. The former is almost standard practice on the Continent, and the latter is common in the USA. Neither method has been in regular use in this country but either might be adopted as a new technique as they do not seem to raise any serious difficulties.

### 15.59 materials : applied finishes and treat TERRAZZO

Terrazzo Flooring. Draft BS C. of P. 204.102:1949. (British Standards Institution. of P 2s. 6d.)

Materials and workmanship for terrazzo floor finishes. Includes two methods, (a) with terrazzo and screed bonded to sub-floor, (b) with a sand layer separating the finish from the sub-floor.

## 24.115 lighting LOUVRED CEILING LIGHTING

Louverall Lighting Techniques. B. S. Benson. (Illum. Engineering [USA], Feb.,: 1949. p. 89.)

Cut-off, materials, efficiency, appearance of louvered ceilings, Good review. Illus. photographs and diagrams.

photographs and diagrams. Lighting installations consisting of egg-crate louvers over the whole ceiling, with light sources just above the louvers, have been successful and have an established posi-tion in American practice. Their essential usefulness is in providing high intensities without the trouble high brightness gives on fittings. This review gives the main conclu-sions from trials with different louver materials and arrangements. Shielding—Cut-offs should be equal in each

Shielding-Cut-offs should be equal in each direction, at not less than  $45^{\circ}$  and prefer-ably higher, up to  $60^{\circ}$ . Cells 2 in. square are found generally to provide a good pat-tern which does not catch the eye too strongly.

Materials-Trials were made with plaster, painted wood and steel, etched and patinated painted wood and steel, etched and patinated aluminium, and a plastic (vinyl chloride acetate). The plastic proved to be best. It was used colourless, with a fine-grain ser-vice (not the same as etching or sand-blasting) to give translucency. *Efficiency*—Fluorescent tubes with down-ward reflectors were used, fixed 18 in. above louvers. The translucent louvers (with 45"

TECHNICAL SECTION [105

cut-off) gave an efficiency about 80 per cent. of the tubes without louvers. This was higher than any other material tried, and yet the brightness of the ceiling was lower than with some of the less efficient materials. At 60° cut-off, efficiency is markedly lower (but presumably comfort will be higher). If reflectors are not used with tubes, the ceilings must be kept white, and not too high above

the tubes. If incandescent lamps are used, shadow patterns (*stride*) occur on the wall. This is worse with opaque materials and with clear lamps.

Appearance-The pattern of individual cells should be apparent, but patches of cells must not be appreciably darker than other If lamps go too far apart this occurs, areas. and if they go too close the cell pattern is lost and the ceiling looks dull. Best spacing was about twice the height from louvers to lamps.

An ambiguous statement about brightness concludes the note. All that can be sum-marized is that in a classroom with over 100 f.c. the brightness of the ceiling louvers was within comfortable limits.

The discussion emphasized the desirability of 60° cut-offs, and mentioned that some people like larger cells and shapes like hexagonals and sine-curves. Cleaning, firerisks and the use of spot-lamps were dis-cussed.

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

# OUESTIONS AND ANSWERS

### 2994 LIMEWASH

We understand that a mixture of lime, tallow and alum is recommended for whitening brickwork, and we should be glad if you would give us the proportions of these materials, together with mixing instructions. Is it satisfactory to use hydraline or must quicklime be used, and what is the function of the alum?

A The desirability of using limewash should be carefully considered before a final decision is made because of the diffi-culties in connection with the difficulties in connection with its use: having once used it one is more or less committed to using it for ever as it is difficult entirely to eliminate the lime from the brickwork to allow distempering to be done. A method of using limewashing is to place 80 lb. of quicklime in a pan and break 5 lb. of tallow into small pieces over the quicklime as the water is being added, stir thoroughly and add water until a smooth paste is formed. The heating up of the quicklime absorbs the tallow and makes the mixture usable. It should be thinned very considerably for the first coat. Subsequent coats should be put on at about the consistency of ordinary distemper.

Experiments have so far given no indica-tion that there is an advantage in using alum or other chemicals of a similar nature. In fact under some conditions mixtures containing these chemicals have been found to give inferior results to the mixture specified above.

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# On timber, plaster and brick surfaces



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### THE INDUSTRY

### By Brian Grant

### ALUMINIUM AT BUILDING CENTRE

Formally accepted at the beginning of last week, the new doors to the Building Centre have been presented by the Aluminium De-velopment Association, who have also staged quite a large exhibit in the entrance hall. The outer doors are constructed of alu-minium plate on a core built up of extruded due the standard of the start door the start. sections, and, when open, they form side panels to the vestibule.

The inner doors are of standard armour-plate glass with double action floor springs. The uprights to the inner doors are built up from extruded metal and bent aluminium plate to form a rebate for the main doors. All exposed surfaces have been given a natural satin finish.

For the aluminium exhibit proper a wall For the aluminium exhibit proper a wall surface of aluminium has been equipped with various devices for the easy fixing of various building components. The present display shows roofing, rainwater goods, glazing bars and windows in aluminium, and the ADA intends to change the display at regular intervals, a point about which I know the Building Centre authorities are narticularly keen. particularly keen.

The opening ceremony was made particu-larly enjoyable by Sir Alfred Hurst's speech. Evidently worried about corrosion, he said Evidently worried about corrosion, he said how glad he was to meet all the people responsible for "this doubtful material," a jest which could never have been made if the aluminium industry itself had not been for so long fussing about the various failures which can hardly ever happen in practice. So far only Colonel Devereux has been practical enough to say that aluminium hardly ever corrodes, but it will be some time before the damage done by early fears can be repaired. The aluminium industry should take heart from the copper interests who, when pushing copper pipe for water services, maintained firmly that there was no such thing as copper poisoning anyway, and that if there was it probably did you more good than harm. (*The Aluminium De-*velopment Association, 33, Grosvenor velopment Association, Street, London, W.1.)

EMERGENCY LIGHTING For places of public entertainment it is compulsory to have some form of secondary lighting so that people can at least move about if the mains supply should fail, but a similar system, even if not prescribed by law, is obviously most desirable for hospi-tals or any large building open to the public, and it has, of course, been fairly standard practice to employ devices of this kind. A recent leaflet from Ediswan sets out the essential information about their standard

Ensur-a-lite system and the possible varia-tions to suit different types of building. In the standard system the emergency lights at strategic points are alight all the time, but are normally fed from the mains at a low voltage vig a standard to the time. low voltage via a step-down transformer which, at the same time, provides a trickle charge for the accumulators which take over the load automatically if the mains supply should fail. If the mains failure is prolonged the accumulator will become discharged, but the transformer is arranged for two charging rates, so that when the supply is restored the high charging rate is used to bring the accumulators back to full charge with a minimum of delay. The capa-city of the accumulators must naturally vary with the length of time during which an emergency supply might be required, and the leaflet sets out the dimensions of the

appropriate accumulators. Various alternative systems are possible. If, for instance, the emergency lights need not be on all the time, then the step-down

7



The new doors, right, designed by Arcon, and the exhibit, above, which were presented last week by the Aluminium Development Association to the Building Centre.

transformer can be omitted and a charging unit only supplied, and it may also some-times be desirable to operate the emergency lights at full mains voltage. Any reason-able variation of the standard system can be fairly easily arranged and the space oc-cupied by the equipment need not be large unless the accumulators are to carry the load for several hours. (The Edison Swan Elec-tric Co., Ltd., 155, Charing Cross Road, London, W.C.2.)

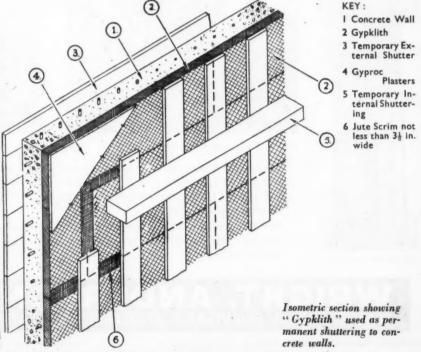
### **GYPROC**

Gyproc Products have just issued a large Gyproc Products have just issued a large handbook covering all their products, which have now reached a formidable total. Wall and ceiling board, lath plaster base, 2 in. solid partitions, Gypstele and Plaxstele sys-tems for partitions, ceilings and wall linings, laminated partition slabs, Gypklith light-weight building slabs, high temperature lag-ging and various other insulating and acous-tic materials—to mention only the main materials-to mention only the main dings. The handbook contains 150-odd 190 headings.



well-illustrated pages and provides full information about the various products and the appropriate methods of using them. This is certainly a publication to keep for reference. Issued free to architects, either complete or in sections, it has been expensive to produce and architects are therefore very reasonably asked not to apply for it unless they feel it is likely to be useful. (Gyproc Products, Ltd., Morris House, Jermyn Street, London, S.W.1.)

HARDBOARD FACED FLUSH DOORS In this country it was the shortage and difficult licensing position of plywood that turned manufacturers to hardboard as a facing for flush doors. This, however, was not the position in Canada, America or the Scandinavian countries, where hardboard was welcomed as a facing for flush doors for its own special qualities and reasonable cost. However, in spite of the difficulties with plywood, this country, owing to its traditional conservatism in the acceptance



TECHNICAL SECTION [107 1081

### TECHNICAL SECTION

of new materials, was in no haste to accept hardboard faced doors. To a degree this was due to the fact that official recognition was not forthcoming, nor was hardboard as a facing for doors accepted under B.S.S. 459 Part II : 1945. The Flush Door Manufacturers' Associa-

The Flush Door Manufacturers' Association was the first to sponsor the hardboard door, and its members evolved a standard core using the smallest satisfactory quantity of softwood. Again, after careful tests the Association decided that hardboard was an eminently suitable material for facing flush doors, and that such doors manufactured to the Association's approved core could be recommended for all general purposes with absolute confidence. It must be admitted, however, that architects place considerable reliance on the British Standards Institution and its recommendations, and many were no doubt a little chary of specifying hardboard flush doors until official approval had been given.

Here again the natural conservatism and care in approval of new materials delayed official sanction for some time. A panel of experts visited blocks of flats and houses where hardboard-faced doors had been in use for a satisfactory length of time, and after careful investigation this inspection panel gave its unanimous approval of hardboard as a facing. A technical committee of the BSI, having approved the recommendations of this investigating panel, have now agreed an Addendum to BSS 459 Part II Flush Wood Doors as follows:--

"As an interim measure, pending a revision of BSS 459 Part II to include performance tests, the use of Hardboard in lieu of Plywood in Internal Doors is permitted subject to the construction of the core being agreed between the purchaser and supplier." THE ARCHITECTS' JOURNAL for July 28, 1949

It cannot be emphasized too strongly that the buyer of flush doors should pay most particular attention to the construction of the core; after all, the surface, whether it be hardboard or plywood, can be seen and examined, but the core of the door remains a mystery. It is, therefore, all the more essential that purchasers should ensure that the doors are manufactured by firms of repute, using cores of sound technique, and construction, and any doors bearing the registered trademark of the Flush Door Manufacturers' Association can be accepted as being of the soundest construction and the best materials possible under the present Government controlled conditions. (The Flush Door Manufacturers' Association, Trowell, Nottingham.)

# Buildings Illustrated

Housing for Loddon RDC, Norfolk ). Architects, 05 96). An General (Pages and Green. Tayler and Con-(Builders), tractors: J. Moore (Builders), Ltd. Ironmongery, sanitary fittings: R. J. Pryce & Co. Metal windows: Rustproof Metal Window Co., Ltd. Concrete gates, posts: Crotch & Son, Ltd. Sewage disposal equip-ment: Tuke & Bell, Ltd. Wood doors: The Adamite Co., Ltd. Electrical installations: Lowestoft Electrical Co., Ltd. Hedging plants and trees: R. C. Notcutt, Ltd. Trees: Lowestoft Corporation Nurseries. Plumb-ions: W. 4 & E. Taylor, Ltd. tractors : Ltd. I. Moore ing: W. J. & F. Taylor, Ltd.

Flat in Kensington. (Pages 101-102.) Architects, Tayler and Green. General Contractors: Simmonds Brothers & Sons, Ltd. Sub-contractors: Door furniture, Dry Metal Works, Evered & Co.; joinery and fittings, E. A. Higginson & Co.; metal windows, Henry Hope & Sons; towel rails, Ideal Boilers & Radiators, Ltd.; sink, A. Johnson & Co., Ltd.; teir handrail, Kingsmill Metal Co., Ltd.; electrical tubular heating, Wardle Engineering Co., Ltd.; furnishing items, special loose furmiture, R. Mills, Betula, Ltd.; light fittings, Best & Lloyd, Ltd., Osward Hollman, Royley Gallery; carpets, fabrics, upholstery, furniture, kitchen equipment, Heal & Son, Fortnum & Mason, Peter Jones, Gordon Russell, Waring & Gillow; wallpaper, John Line, Gordon Russell.

The Exchange Bank of India & Africa, Ltd., Moorgate Hall. (Page 103.) Architect, Shaw and Lloyd, F./A.R.I.B.A. General Contractor: Poolman Builders, Ltd. Subcontractors: Structural steel, Dawnays, Ltd.; special roofings, Lenscrete, Ltd.; woodblock flooring, British Doloment Co.; central heating, Duttons & Co., Ltd.; electric wiring, Davis Myer & Co., electric light fixtures, EKCO (E. K. Cole, Ltd.); electric heating, Thermovent; door furniture, James Gibbons; rolling shutters, Fireproof Shutter & Door Co.; metal work, Thos. Harrington & Sons; joinery, Hibberd Bros.; furniture, E. N. Mason & Sons, Ltd.; safes, John Tann, Ltd.

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The flat-top has a transparent sheath under which is a long slip of "graphed" paper on which goes your data. At the left, for instance, could be the job number, name of client, site involved, etc. On the right are a series of ready-printed numbers used for "coding" each step in the series of activities (I to 12 and I to 3I).

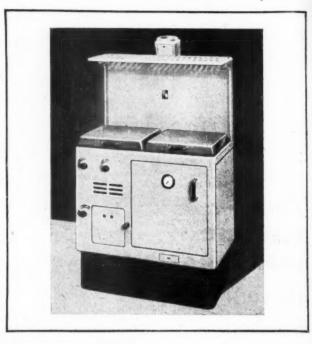
As an example, these numbers could be coded thus: I = Enquiry; 2 = Site surveyed; 3 = Site plans prepared; 4 = Sketch planssent to client for approval; 5 = Client's approval received; 6 = Plans sent to Local Authorities for approval under Bye-laws, Town Planning, etc.; 7 = Approval received; 8 = Specificationand Bills of Quantity-written up; 9 = Drawing, specification and Bills of Quantity sent to Contractors for Tender; 10 = Tenderaccepted; 11 = Building licence obtained; 12 = Work commenced.

And so on. . . . If you wish, narrower sub-files could be opened up for each contractor, where the project is sufficiently large to warrant this. A slotted-in record card (on the front of each file) provides room for detailed data, thus eliminating crossreference.

But let us send you full details of the scheme. . . Just write "Architects' Special System" on your notepaper and you will receive them by return.



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COOKING. Ample hotplate and oven space with easily regulated oven heat to cook for six to ten people. CONTINUOUS BURNING. Daily fire lighting is eliminated and the range is always warm.

HOT WATER. Supplies forty gallons a day at a temperature of 140° F. ECONOMY. Only three tons of fuel a year are needed and any type of solid fuel may be used.

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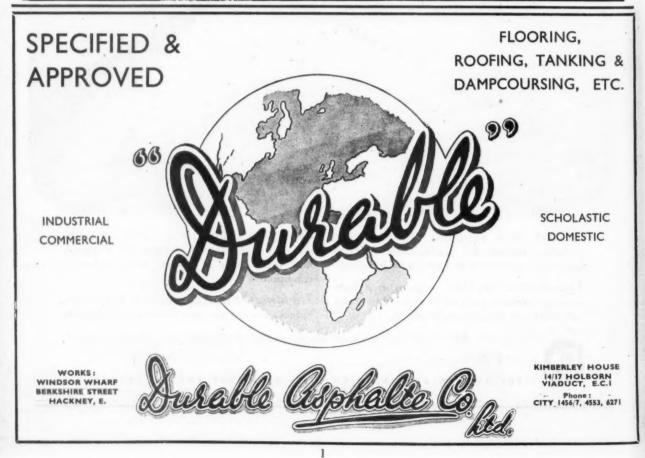


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Remains sufficiently plastic to accommodate any normal expansion or contraction of a joint.

Will not harden, crack or craze, or fail through shrinkage. Adheres tenaciously to all building materials.

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Forms a smooth protective skin within 48 hours, which can be painted.

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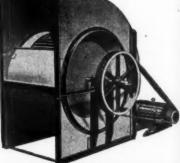




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given above. Available only to applicants excepted from the Control of Engagement Order, 1947.

# Public and Official Announcements

Public and Official Announcements Its per inch; each additional line, 2s. THE INCORPORTE ASSOCIATION OF ABCHTRETS AND STRUCTURES maintains a register of qualified architects and surveyors (including assistants) re-guirag posts, and invites applications from public subortises and private practitioners having staff reacacles. ADDENS: ENFLOYMENT REGISTR. WHEN PART, WHYTRLEYS. Tel.: Uplands 0935. 991 INNOON COUNTY COUNCIL. Applications are invited for unestablished posi-tions of (i) ABCHTPETC, Grade III (salaries up be 2700 a year) and (ii) ABCHTPETC, TORAGE III (salaries up to 2500 a year) and (ii) ABCHTPETC, Grade III (salaries up assistants) to description of the county of the descrip-and Valantion Department. Com-menting salaries in either grade will be deter-mined according to qualifications and experi-medidates will be subject to the Local deverment Superannation Acts, and successful addistes will be eligible for consideration for spointment to the permanent staff on the courrence of vacancies. Buccessful candidates holding a recognized pro-mention of Application may be obtained from the strides, and will be recoursed into the strides boilding a recognized pro-mention of Application may be obtained from the strides. BL (stamped addressed envelope required, and quote Ref. G.R.3). Canvassing dis-antifice. (226) 10

(Grade A.P.T., VI). Salary £595 to £666 per amum. ARCHITECTURAL ASSISTANT (Grade A.P.T., IV). Salary £480 to £525 per annum. ARCHITECTURAL ASSISTANT (Grade A.P.T., D. Salary £300 to £435 per annum. ENGINEERING ASSISTANT (Grade A.P.T., 7). Salary £520 to £570 per annum. ENGINEERING ASSISTANT (Grade A.P.T., 7). Salary £480 to £525 per annum. ENGINEERING ASSISTANT (Grade A.P.T., 70). Salary £480 to £525 per annum. The appropriate London weighting is paid in addition to the above salaries, and salaries in stress of the minima of the grades may be paid according to the qualifications and experience of successful candidates. The Council have in course of preparation a large and varied programme of interesting works which it is anticipated will not be affected by the proposed reductions in capital expendi-tion.

are. The Council will be prepared to consider appli-ations for a subsistence allowance in appro-rists cases from persons appointed should they e unable to obtain suitable housing accommocations priate

dation. Full particulars of the duties, terms and con-ditions of appointment and form of application (which must be returned by Monday, 18th August, 1949, may be obtained from the undersigned. Canvassing in any form will disqualify. H. A. EDWARDS, Town Clerk.

Town Hall, East Ham, E.6. July, 1949.

1594

Grade

rade VI. £595-£660. (b) ARCHITECTURAL ASSISTANT. Salary

(a) ARCHITECT CHARACTER (1990)
 (c) QUANTITY SURVEYOR. Salary Grade VI,

(c) QUANTITY SURVETOR. Shary Grace VI, 2595-£660. Applicants for (a) must be A.R.I.B.A., with good general Architectural experience, and for (c) A.R.I.C.S. (Quantities Sub-Division). The appointments, which may be made within the appropriate scale, will be subject to (i) the Scheme of Conditions of Service of the National Joint Council for Local Anthorities' Administrative. Professional, Technical and Clerical Services, and (ii) the provisions of the Local Government Superannuation Act. 1937, and any amendmentmy thereof. Relected candidates will be required to pass a medical examination. Applications, giving full details of age, qualifications, giving full details of age, discussion and experience, abould be forwarded, together with copies of three recent testimonials, to reach the undersigned by Thursday, 4tr August, 1949. Conditions, public tate whether or not they

together with council and an and a signed by the council of the council canvassing will be disqualification. R. O. HARRIS, F.B.I.B.A... County Architect.

Park Street, Taunton. 1st July, 1949.

COUNTY OF LINCOLN—PARTS OF LINDER. Applications are invited for a TEMPOBARY of new Police Buildings and Magistrates' Courts of new Police Buildings and Magistrates' Courts of new Police Buildings and Magistrates' Courts of new Police Buildings trade and be ar-perior of the Building Trade and be ar-perior of the appointment is expected to a approximately 18 to 24 months. The work is expected to start september-October, 194. The supointment will be terminable by one month's to a approximately 18 to 24 months. The work is expected to start september-October, 194. The supointment will be terminable by one month's to a approximately 18 to 24 months. The work is expected to start september-October, 194. The supointment will be terminable by one month's to a approximately 18 to 24 months. The work is expected to start september-October, 194. The to a approximately 18 to 24 months. The work is expected to start september-October, 194. The to a approximately 18 to 24 months. The work is expected to start september-October, 194. The to a approximately 18 to 24 months. The work is expected to start september-October, 194. The to a september of the approximately to a part of the approximately to a september of the approximately to a part of the approximately to a september of the approximately to a set of the approximately to a setting the approximately to a set of the approximately to a setting to a s HERBERT COPLAND, County Offices, Lincoln. 1st July, 1949.

County Offices, Lincoln. 1st July, 1949. LONDON COUNTY COUNCIL. VACANCIES FOR QUANTITY SURVEYORS' ASSISTANTS IN THE ARCHITECT'S DEPART-(a) TEMPORARY TECHNICAL ASSISTANT. 2440×220-2580 a year. (b) TEMPORARY TECHNICAL ASSISTANT. De to 1675. 6d. a week. Candidates for (a) should be experienced on interim valuations for payments on account. measuring, adjusting, pricing and agreeing final accounts. Applicants for (b) should be capable of abstracting and billing, and should have had previous experience in a quantity surveyor's office. Applications are also invited under (a) for a BUILDING WORKS ESTIMATOR, with up-to-date knowledge of all types of construction and experience in pricing Bills of Quantities Appointments will be on a temporary basis in the first instance, with opportunities to compete on merit for permanent appointments and pro-motion on the occurrence of vacancies. Successful candidates will be required to contribute to the Superannuation and Provident Fund. Application forms from the Architect (AR/P/Q). County Hall, Westminster Bridge, S E.1, enclosing stamped addressed foolscap envelope. Canvassing disqualifies. (847) 1503

C. E. VIVIAN ROWE, Town Clerk.

Guildhall, Northampton.

(1) SENIOR ASSISTANT ARCHITECT. A.P.T., Grades V-VA. Salary £520 to £610 per

A.P.T., Grades V-VA. Salary 2520 to 2010 per annum.
 (2) ASSISTANT ARCHITECTS. A.P.T., Grades III-III. Salary 2420 to 2495 per annum. The appointments will be subject to one month's notice in writing on either side; to the terms of the National Joint Council's Scheme of Conditions of Service, and to the provisions of the Local Government Superannuation Act, 1937. The successful applicants will be required to pass a medical examination.

Application forms may be obtained from the County Architect, A. G. Chant, F.B.I.B.A., S. Belmont, Shrewshnry, to whom they must be returned, accompanied by copies of not more than three recent testimonials, not later than Friday, 12th August, 1949.

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Shrewsbury. July, 1949.

G. C. GODBER, Clerk of the Council.

1693

THE SOUTH WALES ELECTRICITY BOARD. Applications are invited for the position of the HITECTURAL ASSISTANT in the Civil Busineering Department of the Board at St. Mellons, Cardiff. Applicants will be required to undertake the design, layout and preparation of working draw-ings for Showrooms, Offices and Sub-Stations, including alterations to existing buildings. The salary will be in the provisional range of Scoor Stoor per annum, according to qualifications, and experience. Applications, stating age, present position, present salary, qualifications and experience, to-gether with the names and addresses of three referees, should be addressed to the Socretary (Establishments Section). The South Wales Elec-tivity Board, St. Mellons, Cardiff, so as to reach him not later than the 3rd August, 1949. 1556 CUMBERLAND COUNTY COUNCIL.

bin not later than the 3rd August, 1949. 1556
 CUMBERLAND COUNTY COUNCIL.
 Applications are invited for the following appointments on the permanent establishment of the Architect's Department:—

 (a) ENIOR ASSISTANT ARCHITECT. Grade
 VIII, A.P.T. Division (£685-2760 p.a.).
 (b) ARCHITECTURAL ASSISTANT. Grade
 IV, A.P.T. Division (£685-2760 p.a.).
 (c) JUNOR ARCHITECTURAL ASSISTANT. Grade
 III, A.P.T. Division (£480-2525 p.a.).
 (c) JUNOR ARCHITECTURAL ASSISTANT.

 Grade III, A.P.T. Division (£480-2625 p.a.).
 (c) JUNOR ARCHITECTURAL ASSISTANT.
 Grade III, A.P.T. Division (£480-2626 p.a.).

 Applicants for post (a) are required to be Associate Members of the R.I.B.A. and capable of a high standard of design. Preference will be given to those candidates who have had experience in the control of staff.

 Applicants for post (b) should have passed, or attained the equivalent standard of the R.I.B.A.
 Applicants for post (c) should have passed, or be preparing to take the R.I.B.A. Intermediate Hamination.
 Applicants for post (c) should have passed, or be preparing to take the R.I.B.A.

**B**xamination

be preparing to take the R.J.B.A. Intermediate Hxamination. The appointments will be terminable by one month's notice on either side, and will be subject to the provisions of the Local Government Super-annuation Act, 1937, and to the passing of a medical examination. Applications, on forms obtainable from John H. Haughan, F.R.I.B.A. County Architect, 15, Portland Square. Carlisle, should be delivered to him not later than Tuesday. 2nd August, 1949, together with copies of not more than three recent testimonials. G. N. C. SWIFT, Clerk of the County Council. July, 1949.

July, 1949. July, 1949. BOBERT GORDON'S TECHNICAL COLLEGE, ABERDEEN. SCHOOL OF ARCHITECTURE AND DEPARTMENT OF BUILDING. Head: E. F. DAVIES, B.Arch.(Lvpl.), F.B.I.B.A., Applications are invited for the following page.

posta (a) JUNIOR ASSISTANT (Lecturer and Studio Instructor) in Architectural Design and Construc-

 (a) JUNIOR ASSISTANT (Lecturer and Studio Instructor) in Architectural Design and Construc-tion.
 (b) JUNIOR ASSISTANT (Lecturer and Studio Instructor) in Constructional Subjects.
 Salary scale for both posts £375 by £15 to \$610, with placing according to qualifications and experience.
 The School of Architecture is recognized for purposes of exemption from the R.I.B.A. Inter-mediate and Final Examinations.
 Candidates must be Associates of the Royal Institute of British Architects, and should possess the Degree or Diploma of a Recognized School of Architecture.
 Members of the siaff of the School of Architecture.
 Members of appointments and forms of appli-cation may be obtained from the undersigned, to whom completed applications, together with copies of three recent testimonials and names of three referees, should be sent not later than Monday, 15th August, 1949.
 A. O. WEST. A. C. WEST, Director. 1549

ANGLESEY EDUCATION COMMITTEE. NEW COUNTY PRIMARY SCHOOL AT BEAUMARIS. Applications are invited from suitably qualified candidates for the appointment of a resident CLERK OF WORKS to supervise the construction of a new County Primary School at Beaumaris, Anglesey.

of a new County Primary School at Beaumaris, Anglesey. The inclusive salary will be 2500 per annum. The appointment will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act. 1937, and to the successful candidate passing a medical examination. Candidates should have a practical knowledge of all branches of the building trade and be experienced in the supervision of the erection of large buildings, including setting out, levelling. measuring up and keeping records. Membership of the Incorporated Clerks of Works Association of Great Britain will be an advantage.

Memberahip of the Incorporated Clerks of Works Association of Great Britain will be an advantage. Applications, stating age, qualifications and ex-perience, and giving mames of two persons to whom reference can be made, and accompanied by copy of one testimonial, should be sent to the undersigned not later than Monday. 3th August, 1940 E. O. HUMPHREYS. Director of Education.

Education Offices, Shire Hall, Liangefni, Anglesey, 14th July, 1949.

ARCHARTEOUS JOURNAL FOR JULY 2 EASTERN REGIONAL HOSPITAL BOARD. SCOTLAND. ARCHITECT'S DEPARTMENT. ARCHITECT'S DEPARTM

need not be renewed. 19th July, 1949. COUNTY OF ESSEX. ILFORD COMMITTEE FOR EDUCATION. The Easex County Council invite applications for a SECTIONAL ASSISTANT ARCHITECT in the Office of the Borough Engineer of Ilford. Applicants should be Members of the Boyal institute of British Architects and have had con-siderable experience in the planning, designing, construction and supervision of School buildings and have had administrative experience. The scale of galary will be in accordance with the National Joint Council, A.P.T. Division. Grade VII, £635-£25 to £710, plus the appro-priate London area allowance. There will also be paid such travelling and subsistence allow-ances as may from time to time be determined by the Council. Applications should be made on a form to be obtained from, and returned to, the Borough Rducation Officer, Education Offices, Town Hall, Ilford, together with copies of not more than three recent testimonials, within 14 days of the appearance of this advertissement. CITY OF MANCHESETER.

Inford, together with courses of not indice than three recent testimonials, within 14 days of the appearance of this advertisement. 1603
 CITY OF MANCHESTER.
 CITY OF MANCHESTER.
 APPOINTMENT OF SENIOR ASSISTANT PLANNING OFFICER.
 Applications are invited for the permanent appointment of a Senior Assistant Planning Officer (Architecture), at a salary of 2730 per annum, rlsing by annual increments of 230 to 2820 per annum.
 Candidates should be qualified professionally in Architecture or Civil Engineering, and membership of the Town Planning Institute would be an advantage.
 The appointment is subject to the Standing Orders of the Council, and the National Joint Council's Scheme of Service Conditions. The successful candidate will be required to pass a medical examination and to contribute to the Cannot sup form, cr failare to disclose relationship to any member of the Council or senior officer will disquality, and it should be clearly understood that the Corporation cannot provide housing accommodation.
 Applications, stating age, fall details of experience, qualifications, etc. together with the name of three persons from whom references can be obtained, must be returned to me not later than 8th August, 1949.
 HILIP B. DINGLE.
 Town Hall, Manchester 2.
 1640

# Town Hall, Manchester, 2. 16th July, 1949.

Town Hall, Manchester, 2. 16th July, 1949. URBAN DISTRICT OF FELTHAM. APPOINTMENT OF TECHNICAL ASSISTANT. Applications are invited for the temporary appointment of Technical Assistant, in the Engineer and Surveyor's Department, at a salary at the rate of £570 per annum. Applicants minst be good draughtsmen and should have had experience of housing and con-struction of roads and sewers. Preference will be given to applicants who have had previous ex-perience in the Department of an Engineer and Surveyor to a Local Authority. The appoint-ment will be subject to the National Scheme of Conditions of Service and to one month's notice in writing on either side. Forms of application may be obtained from the undersigned, to whom they ahould be re-turated, accompanied by copies of not more than there testimonials, not later than Sitt August, 1949. Canvassing will disquality, and applicants must disclose in writing whether, to their knowledge. they are related to any member of, or the holder of any senior office under the Council. M. W. COUPE. Council Offices. Feltham, Middlescx. 20th July, 1949. DEPARTMENT OF LEEDS. DEPARTMENT OF CLYLENGINEED

20th July, 1949. UNIVERSITY OF LEEDS. DEPARTMENT OF CIVIL ENGINEERING. Applications are invited for appointment, with effect on ist October, 1949, to a LECTURESHIP IN CIVIL ENGINEERING, on the salary may be above the minimum, according to qualifications and ex-perience. Good Honours degree and practical experience essential. Applications (six copies) should reach the Registrar. The University. Leeds, 2 (from whom further particulars may be obtained, not later than 18th August. 1598

ANTEIM COUNTY COUNCIL. APPOINTMENT OF PLANNING ASSISTANT. Applications are invited for the post of Plan-ing tasistant, in the County Planning Depart-ment, at a salary of 2500 per annum, rising by annal increments of £15 to £45 per annum. The appointment is of interest to persons intend-ing to make a career in town and country plan-ing, and candidates will be required to be Members of the Koyal Institute of British Archi-tests or poseess an equivalent qualification. Membership of the Town Planning Institute Will be an additional advantage. The discess will be connected will be prepara-mit be connected of development. The discess will be connected and sur-veying and levelling, in the design of buildings too of the Planning Scheme for the Country, and with the control of development. The successful candidate will be required to provide and maintain a motor car. for which an diversite Scale. The frence will be made in accordance with the civil Serie Scale. The frence will be nease that such candidates cand, or within a reasonable that such candidates cand, or within a reasonable that such candidates cand, or within a reasonable that such candidates cand experience, together with copies of two recent development, such as the forwarded to the undersigned so as to be received not later than develoce noon as the required to the desting of the counter of the origon and experience, together with copies of two recent development, the Argent with a forwarded to the undersigned so as to be received not later than develoce moon on startagy, 18th August, 1940. We MEMDERSON Member 1960

12 o'clock noon on Saturday, 13th August, 1949. W. S. HENDERSON, Secretary. Connty Courthouse, Crumlin Road, Belfast. 13th July, 1949. NORFOLK EDUCATION COMMITTEE. APPOINTMENT OF ARCHITECTUBAL ASSISTANT, GRADE A.P.T., V. Applications are invited for the post of Archi-tectural Assistant, at a salary of .6520 per annum, rising by two annual increments of £15 and one of £20 to a maximum of £570 per annum. Applicants should have had good architectural experience. Knowledge of school design and con-struction would be an advantage. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, the successful candidate being required to pass a medical examination. Form of application may be obtained from the undersigned on receipt of a stamped addressed envelope, and should be returned within 14 days of the date of this advertisement. All communi-cations with regard to this matter should be marked "Architectural Assistant, Grade V." W. G. BELL, County Education Office.

W. O. BELL, W. O. BELL, Chief Education Officer. Stracey Road, Norwich. 1666 BURGH OF MUSSELBURGH. APPOINTMENT OF ARCHITECTURAL ASSISTANT. Applications are invited for the post of Archi-tectural Assistant in the department of the Burgh Surveyor and Housing Director. Applicants should be registered Architects and have had ex-perience of Local Authority housing (including preparation of layout plans, house desirns and details). The scale of salary is J.I.C. Scale. Grade III, 2450×215-2495 per annum. The Council are prepared to let a house, if required, to the candidate selected. The appointment is subject to the provisions of the Local Government Super-annuation (Scotland) Act, 1937, and the candidate selected will require to pass a medical examina-tion. Applications, giving particulars of age. qualifications, and experience, and accompanied by copies of three recent testimonials, should be lodged with the undersigned within 14 days of the first appearance of this advertisement. DAVID TAYLOOR. Municipal Offices, Musselburgh. Town Clerk.

Municipal Offices, Musselburgh.

# Town Clerk

DAVID TAYLOR. DAVID TAYLOR. Town Clerk. 13th July, 1949. COUNTY BOROUGH OF MERTHYR COUNTY BOROUGH OF MERTHYR APPOINTMENT OF PLANNING ASSISTANTS. Applications are invited in respect of two vacancies for JUNIOR PLANNING ASSISTANTS. Applications are invited in respect of the Borough Engineer's Department, at a salary in accordance with A.P.T.. Grade II, commencing salary 420 p.a. (rising by three annual incre-ments of £15 p.a.) to £455 p.a. Applications should have the Intermediate gnali-faction of the Examination of the Town Plan-ning Institute and/or an Engineering of Archi-tectural Intermediate qualification and experience in a Town Planning Department. The two successful applicants will be engaged of the Local Government Superannuation Acts and cardigraphy. The appointments are subject to the Local Government Superannuation Acts and the Corporation's Staf Conditions of Service. Successful candidates will be required to pass a medical examination and the appointments will be subject to one month's notice on either side. Applications, setting out age, anafifications, past in the two there into while deemed a dia-medical examination and the appointments will be denter with copies of not more than there recent to de later than the 17th Aurent 1949. Canvasing in any form will be deemed a dia-matification, and the denter the Aurent 1949. Canvasing in any form will be deemed a dia-matification and the Convertions. EDWARD ROPERTE Town Clerk.

Clerk. Town

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Town Hall, Merthyr Tydfil. 15th July, 1949.

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accounts.

Accounts. Forms of application may be obtained from the Director of Housing and Valuer. The County Hall, Westminster Bridge, S.E.1 (a stamped addressed foolscap envelope required), quoting Canvassing disqualifies. (2140) The Canvassing disqualifies. (2140) The Canvassing disqualifies (2140) The Canvassing dis

COUNTY BOROUGH OF HALIFAX. BOROUGH ENGINEER'S DEPARTMENT. Applications are invited for the following appointments:-(1) ARCHITECTURAL ASSISTANT (General). Salary in accordance with Scale V, A.P.T. (ESSP. (570).

£570) 2570). (2) ARCHITECTURAL ASSISTANT (Schoold). Salary in accordance with Scale III, A.P.T. (£450-£495).

Castidiates should possess appropriate technical qualifications, and will be required to pass a medical examination. The appointments will be subject to the conditions of service adopted by the Corporation and to the Local Government Superannuation Act, 1937. Applications, stating age, qualifications, present position, salary and experience, accompanied by copies of three recent testimonials, appropriately endorsed, should be delivered to the undersigned not later than Saturday, 30th July.

RICHARD DE Z. HALL. Town Clerk.

Town Hall, Halifax. Town Clerk. Th July. 1949. CITY OF PETERBOROUGH. CITY ENGINEER AND SURVEYOR'S DEPARTMENT. APPOINTMENT OF ASSISTANT QUANTITI SURVEYOR. Applications are invited for the appointment of Assistant Quantity Surveyor, A.P.T., Grade III, £450×£15-£495 per annum. Applicants should have had experience in a Quantity Surveyor's office and should be capable of abstracting, billing and measurement of works on mite.

of abstracting, billing and measurement of works on site. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination. Applications, stating age, qualifications and experience, accom-panied by copies of not more than three recent testimonials and suitably endorsed, must be delivered to the undersigned not later than 4th August, 1949. Candidates should state whether they are re-lated to any member or senior officer of the Canvassing, either directly or indirectly will

Canvassir isqualify. Housing assing, either directly or indirectly, will di

Housing accommodation is not immediately available, but the Council will, if necessary, asist so far as they are able the successful applicant to obtain accommodation, but it must be distinctly understood that the Council do not guarantee to find either a house or living accommodation.

ARTHUR J. REEVES, Town Clerk.

Town Hall, Peterborough. July, 1949.

1911 BOROUGH OF WEEXHAM. ENGINEER AND SURVEYOR'S DEPARTMENT (HOUSING SECTION). Applications are invited for the following appointments in the Borough Surveyor's Depart-ment, mainly for dufles relating to the Corpora-tion's Housing Schemes... (a) SENIOR ASSISTANT ARCHITECT. A.P.T.. VII. £635-£710 per annum... (b) SENIOR ASSISTANT ENGINEER. A.P.T., Va. £556-£610 per annum...

Va.

(b) SENIOR ASSISTANT ENGINEER. A.P.T., Va. £550-£610 per annum. (c) ARCHITECTURAL ASSISTANT. A.P.T., II. £420-£465 per annum. Particulars and Conditions of Appointment (which includes the provision of housing accommodation and payment of removal expenses if appropriate), with Form of Application. may be obtained from the Borough Surveysr. J. Chester Street, Wrexham. Applications, accompanied by copies of twe recent testimonials, to be forwarded to me in envelopes endorsed with the description of the appropriate appointment. So as to be received not later than Monday, 15th August. 1949. PHILIP J. WALTERS.

PHILIP J. WALTERS. Town Clerk Guildhall, Wrexham. 18th July, 1949.

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BRANDON AND BYSHOTTLES URBAN DISTRICT COUNCIL. ARCHITECTURAL ASSISTANTS. Applications are invited for the appointment of Architectural Assistants, in the Architect's De-pariment of the above Authority: at a salary in accordance with Grade IV (2490-525+515), or Grade V (2530-2570+215 (2)+220), according to qualifications and experience, of the A.F.T. Di-vision of the Scale of Salaries of the National Joint Council for Local Authorities' Administra-tive, etc., Services.

vision of the Scale of Salaries of the National Joint Conncil for Local Authorities' Administrative, etc., Services. Applicants must have a knowledge of design and construction of modern buildings and unit development, and should have had several years' experience in an Architect's office. The appointment is temporary, will be terminable by one month's notice on either side, and will be subject to the provisions of the Local Corrament Superannuation Act, 1937. Canvassing, either directly or indirectly, will disguify, and applicants must disclose in vertice of their knowledge they are related to any member or to the holder of any senior position under the Council. Patient and salary, qualifications and experience. Use the makes and addresses of two persons to whom reference may be made, should be made to the undersigned, to be received not later than Monday, 29th August, 1949

Architect's Department, Council Offices. Langley Moor, Durham. 19th July, 1949. WARWICKSHIRE COUNTY COUNCIL. OUNTY ARCHITECT'S DEPARTMENT. Applications are invited for the under-mentioned appointments on the established

(2665-£760). ASSISTANT ARCHITECT, A.P.T., VI (£595-ASSISTANT ARCHITECT. A.P.T., V (£520-

ASSISTANT ARCHITECT. A.P.T., V (£520-6370). The appointments are subject to the provisions of the Local Government Superannuation Act, 1377, and the successful candidates will be required to pass a medical examination. Application forms can be obtained from C. H. Biking, F.R.I.B.A., A.R.I.C.S., County Architect, Shire Hall, Warwick.

Clerk of the Council. IST3 BIRMINGHAM CITY TRANSPORT. Applications are invited for the appointment of a SENIOR ARCHITECTURAL ASSISTANT in the Civil Engineering Department of Birmingham City Transport. Applicants must have had experience in design, paration and maintenance of buildings, pre-paration of specifications, estimates and guantities.

construction and maintenance of buildings, pre-paration of specifications, estimates and mitties. The salary will be in accordance with the National Joint Council, A.P.T. Division, Grade IV, 2460-2525 per annum. The appointment is subject to one month's notice on either side and the provisions of the Local Government Superannuation Act, 1957. The successful applicant will be required to pass a medical examination. Applications, endorsed "Senior Architectural Assistant," stating age, qualifications and experi-monials, must reach the undersigned not later than 6th August, 1949. A. C. BAKER. General Manager. The Council House, Birmingham, 3. BORDUGCH OF CHATHAM.

ROWLAND NEWNES, Town Clerk.

1649

L. EDGAR STEPHENS, Clerk of the Council

ASSISTANT ARCHITECT. A.P.T.,

F. HEDLEY, A.R.I.B.A., Architect.

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<text><text><section-header><text><text><text><text><text> Town Hall, Chatham. , 20th July, 1949.

BOROUGH OF COLWYN BAY. APPOINTMENT OF ABCHITBOTURAL ASSISTANT. Applications are invited for the appointment of an Architectural Assistant in the Borough Engineer's Department. Salary, Grade A.P.T., IV (2460-2525 per annum). Candidates must be registered Architects. The appointment will be subject to :--(1) The National Scheme of Conditions of Service

The National Scheme of Country Service.
 The provisions of the Local Government Superannuation Act, 1930.
 The prassing of a medical examination. Applications on forms obtained from the Borough Engineer, Town Hall, Colwyn Bay, to be delivered to the Town Clerk not later than 20th August, 1949. Canvassing will be a disqualification.

1551

HAROLD E. BRAITHWAITE, Town Clerk.

Town Hall, Colwyn Bay. 14th July, 1949.

DERBYSHIRE COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT. Applications are invited for the under-mentioned appointments on the permanent staff — Conditions of service and salaries are in accord-ance with the National Joint Council Scheme for Local Authorities, as adopted by the County Council

accounts

Applicants for (e) and (f) must also be in ossession of an appropriate professional quali-

Applicants of an appropriate professional quan-fication. Applicants for (h) must be capable draughts-men and competent to prepare site surveys and take levels. The appointments will be terminable by one month's notice on either side, and subject to the provisions of the Local Government Superannua-tion Acts, and the successful candidates will be required to pass a medical examination. The appointments are such as could be under-taken by suitable registered disabled persons. Canvassing members of the Council, directly or indirectly, will be a disqualification for appointment.

or indirectly, will be a unsummer of indirectly, will be a unsummer appointment. Applications to be made on a form to be obtained from the undersigned, to whom it must be returned, accompanied by copies of three recont testimonials, not later than 12th August, 1949. Envelopes and applications must be endorsed stating clearly the vacancy for which the application is made. F. HAMEE CROSSLEY, Dipl.Arch., A.R.I.B.A., County Architect.

St. Mary's Gate, Derby. 28th July, 1949.

C. E. VIVIAN ROWE, Town Clerk.

Guildhall, Northampton.

HIS MAJESTY'S COLONIAL SERVICE. A vacancy exists for an ARCHITECT in the Public Works Department, Jamaica. Salary in the scale 2750×250-2850 per annum, plus a tem-porary non-pensionable carrying on allowance of 2100 per annum and temporary cost-of-living allowance of 282 5s, 10d. per annum. Salaries in Jamaica are at present under revision, and the above-mentioned allowances will be withdrawn when the salaries revision is approved. The astabilizent is to the permanent and pensionable establishment.

when the salaries revision is approved. The appointment is to the permanent and pensionable Candidates must be Associates of the Royaf Institute of British Architects or hold equivalent qualifications. The officer selected will be required to advise on the selection of sites and to prepare designs, estimates, etc., for Government buildings and other works of a kindred nature, to supervise the construction of works in progress, and to advise on the architectural design of works to be done by other Government or quasi-Government Departments. Terms of appointment include free passages for the officer, his wile and children not exceeding five in all, on first appointment, and for the officer himself on leave which is granted on full pay after a minimum tour of two years at the rate of 14 months for each year of resident service. Quarters are not wrowided. Income tax at local rates. Intending candidates should write at once for Form of application and further particulars, giving brief details of age, qualifications and experience, to The Director of Recruitment (Colonial Service), Sanctuary Buildings, Great Smith Street, London, S.W.1, quoting the refer-ence No. 37301/24. BOROUGH OF HESTON AND ISLEWORTH.

Colonial Service, Sanchary Buildings, Great Applications are invited for the appointment of Chief Architectural Assistant. in the Borough engineer and Surveyor's Department, at a salary within Greades VII and VIII of A.P.T. Division of the National Scale, viz. 653-6760, with the addition of £30 per annum London weighting. The commencing salary will be fixed according to the Antional Scale, viz. 653-6760, with the addition of £30 per annum London weighting. The commencing salary will be fixed according to the ability and experience of the person appointed. Candidates must have attained a high standard fixed as the ability and experience of the person appointed. Candidates must have attained a high standard footh have passed the examination qualifying of the Associateship of the Royal Institute of British Architects, or hold a University Degree or diploma recognized by that body. The second supervision of technical staff. Experience in avoind supervision of technical staff. Experience in housing and other local government work will be considered as an advatange. The selected candi-tectural practice, in the control of the archi-tectural greatice, and in the administration abousing and other local government of the Borough surveyor and be responsible to him for all work. Methods be responsible to him for all work and the required to take control of the archi-tectural section. The bediating form the subject to the provisions of the Local Govern-the Attinable by one month's notice on either attinable by one month's notice on either the terminable by one month's not

ualify. HAROLD SWANN, Town Clerk. 1629

IARCID SWANN, Town Cirk. Town Cirk. Town Cirk. Concil House, Hounslow, Middx. URBAN DISTRICT COUNCIL OF HAYES AND HARLINGTON. BURNER AND SURVEYOR'S DEPARTMENT. AMENDED ADVERTISEMENT. AMENDED ADVERTISEMENT. AMENDED ADVERTISEMENT. ADJICATION OF SENIOR ARCHITECTURAL ASSISTANT (two vacancies), in the permanent of SENIOR ARCHITECTURAL ASSISTANT (two vacancies), in the permanent of SENIOR ARCHITECTURAL ASSISTANT (two vacancies), in the permanent of the department, on A.P.T. Dista appropriate Londo, "weighting". The appointment will be in the Architectural Section under the Architect. A considerable housing programme to include flats, maisonnettes, shops with living accommodation, as well as two proposed. Schemes of general building are de-trading housing accommodation, as mell as two build to assist the successful applicants in due to the same be required, the Council may be able to assist the successful applicants in during housing accommodation. Manuel to assist the successful applicants in during housing accommodation. Manuel to assist the successful applicants in during housing accommodation. Manuel to assist the successful applicants in during housing accommodation. Manuel to assist the successful applicants in during housing accommodation. Manuel to assist the successful applicants in during housing accommodation. Manuel to assist the successful applicants in during housing accommodation. Manuel to assist the successful applicants in during housing accommodation. Manuel to assist the successful applicants in during housing accommodation. Manuel to assist the successful applicants in during housing accommodation. Manuel to a successful applicants in during housing housing the successful applicants in during housing accommodation. Manuel to a successful applicants in during housing ho

A. E. HIGGINS, Clerk of the Council

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BRITISH ELECTRICITY AUTHORITY. SOUTH WALES DIVISION. Applications are invited for the appointment of CLEBK OF WORKS, at Uskmouth Generating Station site, at a salary of £480×£15-£525 per

annum. The above salary is provisional and subject to negotiation through the appropriate National

negotiation through the appropriate National machinery. Applicants should have been engaged on large civil engineering works involving pile driving, bulk excavations, heavy foundation and super structure work, including the sinking of a caisson with the use of compressed air. Forms of application may be obtained from the Divisional Secretary at the address below, to whom completed applications should be returned within 14 days from the date of this advertise-ment, in sealed envelope endorsed "Clerk of Works, Uskmouth." H. V. PUGH.

Cardiff (Pengam Moors) Airport, Cardiff.

 18th July, 1949.
 1628

 Itel July, 1949.

 CITY OF CARDIFF.

 ARCHITECTURAL ASSISTANT.

 ARCHITECTURAL ASSISTANT.

 ARCHITECT in accordance with the National Scales of Salaries, A.P.T., Grade VII.

 Preference will be given to candidates with the Sational Scales of the R.I.B.A.

 The Council will endeavour to assist if so required in finding housing accommodation for successful applicants who are married and have children.

 Details of conditions and duties may be obtained from the City Surveyor, City Hall, Cardiff.

 Applications, endorsed "Assistant Architect," Applications, endorsed "Assistant Architect," Applications, endorsed "Assistant Architect," Signed) 8. TAPPEB JONES.

 City Hull, Cardiff.

 Towas Cierk.

Town Clerk.

# City Hall, Cardiff. July, 1949.

1664

July, 1949. CORPORATION OF LONDON. APPOINTMENT OF ARCHITECTURAL ASSISTANTS. Applications are invited for the appointment of TWO ARCHITECTURAL ASSISTANTS, to be emgaged on the preparation of drawings for the Reconstruction of the Central Criminal Court, Old Bailey. A good knowledge of high-class archi-tectural design and detailing is required. Salary from £400 to £625, according to age and experi-ence.

ence. Applicants should either have qualified, or be about to qualify, as Associates of the Boyal Institute of British Architects. The appointments are for the present on a temporary basis, but in the event of establishment to the permanent staff, temporary service will count for the purpose of superannuation. Appointments are anbject to the provisions of Local Government Superannuation, and applicants w'll be required to pass a medical examination.

provisions of Local Governments superannastion, and applicants will be required to pass a medical examination. Applications endorsed "Architectural Assis-tant," to be made to George Holliday, F.R.I.C.S. City Surveyor, 55-61, Moorgate, E.C.2, not later than 12th August, giving details of service with armed forces, age, qualifications and experience, and the names of two persons to whom reference may be made 1632 THE COUNCIL OF INDUSTRIAL DESIGN requires an Officer concerned with RAILWAY OPERATING EQUIPMENT AND PASSENGER AMENITIES to assist in a survey of well-designed goods for exhibition in the Festival of Britain, 1961. Essential qualifications: good general education, preferably with university degree: ability to make easy contacts at senior manage-ment level; an appreciation of the qualifies of good industrial design, including the functional, æthetic and engineering qualifies; extensive through long-standing interest in railways. Star-ing selary 2560-2670, according to qualifications. Temporary post. Write, giving particulars of ase, education, qualifications and posts held with favs. to Recruitment Officer, The Council of Invastrial Design. Tilbury House, Petty France, London, S.W.I., marking envelope B.O., and eaclosing addressed envelope for acknowledgment.

SALOP COUNTY COUNCIL COUNTY ABCHITECTS DEPARTMENT Applications are invited for the appointment of a SENIOR ASSISTANT ARCHITECT to act as a Senior Section Head, on A.P.T. Grades VII-VIII (2635 to 2760 per annum). Applicants must be Registered Architects and Members of the R.I.B.A. The appointment of the section of the s

R.I.B.A. The appointment will be subject to one month's notice in writing on either side; to the terms of the National Joint Council's Scheme of Conditions of Service, and the provisions of the Local Government Superannustion Act, 1937. The suc-censful applicant will be required to pass a medical examination. Application forms may be obtained from the County Architect, A. G. Chant, F.B.I.B.A., 5, Belmont, Shrewsbury, to whom they must be returned, accompanied by copies of not more than three recent testimonials, not later than Tnes-day, 16th August, 1949. G. C. GODBER, Clerk of the Council. Shrewsbury.

1662

Shrewsbury. July, 1949.

METROPOLITAN BOROUGH OF WOOLWICH. APPOINTMENT OF ARCHITECTUBAL ASSISTANTS. Applications are invited for the following appointments in the Borough Engineer and Sur-veyor's Department :--(a) SENIOR ARCHITECTURAL ASSISTANT, Grade VIII. Selary £685 per annum, rising to 2760 per annum, pilas London weighting. (b) ARCHITECTURAL ASSISTANT, Grade VI. Salary £565 per annum, rising to £660 per annum. pina London weighting. The appointments will be subject to the Council's Conditions of Service in force from time to time, to the provisions of the Local Govern-ment Superannuation Act, 1937, and will be ter-minable by one month's notice on either side. The selected candidates will be required to pass a medical examination. Candidates for each appointment should have paseed the Final Examination of the R.I.B.A., or have an equivalent qualification. For appointment (a) applicants should have had experience in al types of architecture under-taken by a local authority and have had ad-ministrative experience, especially in dealing with outracts.

contracts. For appointment (b) housing experience is essential.

Application appropriate (b) nousing experience is assential. Applicants should apply to the Borough Engineer, Town Hall, Woolwich, for the form of application appropriate to the appointment for which they desire to apply. Completed forms of application should be returned to the undersigned not later than 13th August, 1949. Candidates must disclose in writing if they are related to any member or senior officer of the Council. Canvassing members of the Council, either directly or indirectly, will disqualify. DAVID JENKINS, Town Clerk. Town Clerk.

Town Hall, Woolwich, S.E.18.

Town Hall, Woolwich, S.E.13. July, 1949. NORTHUMBERLAND COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT. Applications are invited from persons with suit-able qualifications for the following appointents

ments:-(a) TWO SENIOR PLANNING OFFICERS. at salaries in accordance with Grade VIII (A.P.T.) of the National Joint Council's Scale of Salaries

(£685-£760 a year). (b) ONE SENIOR PLANNING ASSISTANT, at a salary in accordance with Grade VI (£596-£660).

at a salary in accordance with Grade VI (£596-£660). TWO PLANNING ASSISTANTS, at salaries in coordance with Grade III (£450-£495). (d) FOUR PLANNING ASSISTANTS, at salaries in accordance with Grade II (£450-£465). Candidates for appointments (a) should be Members of the Royal Institute of British Archi-tects, the Royal Institute of Chartered Surveyors, or the Institute of Civil Engineers, and should preferably be Corporate Members of the Town Planning Institute and possess recent practical experience either in the preparation of a de-velopment plan or in the control of development; each of the successful candidates will be required to take charge of one or other of two sections dealing with these matters. Candidates for appointment (b) should be Members of the Town Planning Institute or hold a professional quali-fication of the Royal Institute of Chritered Sur-veyors. Candidates for appointments (c) and (d) should have had training or experience in plan-ing work. The appointments (which are whole-time ones.

should have had training of experience in the should have had training of experience in the appointments (which are whole-time ones, at offices in Newcastle-apon-Tyne), will be subject to the National Scheme of Conditions of Service, to the provisions of the Local Government Suer-annuation Act, 1337, and to three moghts notice on either side, and each of the successful candidates will be required to pass a medical examina-tion to the Conncil's satisfaction. Applications, on forms to be obtained from the undersigned, must be submitted not later than the 25th August, 1949.

the 25th August, 1949. E. P. HARVEY, Clerk of the County Council. County Hall, Newcastle-upon-Tyne, 1. 1640 BURGH OF KILMARNOCK. SENIOR ARCHITECTURAL ASSISTANT. Applications are invited from persons who have had previous Municipal and housing experience for the post of Senior Architectural Assistant, in the department of the Burgh Architect and Town Planning Officer.

the department of the Burgh Architect and Town Planning Officer. The salary to be paid will be the maximum (2570, inclusive of war bonus) of Grade A.P.T., Y. Preference will be given to candidates with professional qualifications. Applicants must not exceed 6 forears of age unless they are already contributory employees under the Local Govern-ment and Other Officers' Superannuation (Soci-land) Act, 1937. War service may be deducted from present age to satisfy this condition. The person selected for appointment will require to pass a medical examination, and on satisfying this conditions, alcompanied by one copy of each

ployee under the above-mentioned Act. Applications, accompanied by one copy of each of three recent testimonials, stating age, quali-fications and experience, should be lodged with N. S. Sutherland, F.I.A.A. and S. Burgh Architect and Town Planning Officer, 64, Bank Street, Kilmarnock, within ten days of the appearance of this advertisement.

W. L. WALKER, Town Clerk. Council Chambers, Kilmarnock 28th July, 1949. 1636

BOROUGH OF WIMBLEDON. BOROUGH ENGINEER'S DEPARTMENT. Applications are invited for the following appointments to Posts (F), (G) and (H) on the established staff:--(F) ONE ARCHITECTURAL ASSISTANT, on Grade A.P.T., IV, at a commencing salary of £480 per annum, rising by three annual incre-ments of £15 to a maximum of £525 per annum. Applicants must have passed intermediate Ex-amination of R.I.B.A. and must have had ex-perience in Municipal architectural atd housing work.

perience in Municipal architectural and housing work. (G) ONE ARCHITECTURAL ASSISTANT, on Grade A.P.T., III at a commencing salary of 2460 per annum, rising by three annual incre-ments of £15 to a maximum of £465 per annum. Applicants must be up to the standard of the Intermediate Examination of R.I.B.A. and should have had experience in Municipal architectural and housing work. (H) ONE JUNIOR ARCHITECTURAL ASSIS-TANT, on Grade A.P.T., I, at a commencing salary of £15 to a maximum of £455 per annum. Preference will be given to Probationers of the R.I.B.A., and applicants must be good draughtsmen, and previous experience in Muni-cipal architectural work would be an advantage. Generally : London weighting according to age is paid in addition to the above salarises. The appointments are subject to :--(a) The National Scheme of Conditions of Service.

are subject to :--(a) The National Scheme of Conditions of Service, (b) the National Scheme of Conditions of Superannuation Acts, and (c) Satisfactory medical examination. . Applications, endorsed "F, Architectural Assistant, III," "H, Junior Architectural Assistant, "It staing age, qualifications, experience in detail, all former Local Government Service, present and previous appointments, length of notice required to terminate present appointments, and the names and addresses of three persons as references, must be forwarded to the Borough Fugineer and Surveyor, Town Hall, Wimbledon, S.W.19, by 22rd August, 1949. Senior officer of the Council. BDWIN M. NEAVE. Town Clerk. Town Hall, Wimbledon, S.W.19. 165

### Town Hall, Wimbledon, S.W.19.

Town Hall, Wimbledon, S.W.19. 1865 BOROUGH OF NELSON, APPOINTMENT OF ARCHITECTURAL ASSISTANT, MENDED ADVERTISEMENT. AMENDED ADVERTISEMENT. AMENDED ADVERTISEMENT. AMENDED ADVERTISEMENT. AMENDED ADVERTISEMENT. ADVERTISE AND ADVERTISEMENT. ADVENTOR ADVERTISEMENT. ADVENTOR ADVERTISEMENT. ADVENTOR ADVERTISEMENT. ADVENTOR ADVENTISE ADVENTOR ADVENTISE ADVENTISE

F. W. ROBERTS. Clerk

Town Hall, Nelson. 19th July, 1949.

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 19th July, 1949.
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 UNIVERSITY OF DUBHAM.

 KING'T COLLEGE, NEWCASTLE-UPON-TYNE.

 The Conneil of King's College invite applications for a LECTURER IN TOW AND

 COUNTRY PLANNING, Candidates should be Members, of the Town

 Tho salary scale orises by annual increments of 550 to a maximum of £1,100, subject to a review at £900, and the commencing salary of the accessful applicant will be fixed at a point on that scale in accordance with his qualifications.

 Del salar be and the commencing salary of the accessful applicant will be fixed at a point on that scale in accordance.

 Data 1950, F.S.U. and family allowance.

 Data 2500, F.S.U. and family allowance.

 Data 5500, F.S.U. and family allowance.

 Data boold be submitted not later than 27th August to the undersigned, from whom further particulars may be obtained.

 Magnet to the undersigned, from whom further particulars may be obtained.

 Registrar of King's College.

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 BUCKE COUNTY COUNCIL.

2 1653 BUCKS COUNTY COUNCIL. The County Architect is seeking qualified ASSISTANT ARCHITECTS who possess a keen and energetic enthusiasm for their profession. Candidates should preferably have been trained at a recognized School of Architecture and have a fiair for design. Salary, Grade V, 2520-£570 p.s.; Grade VI. £555-£660 p.s. Vacancies also exist for:— ONE ASSISTANT QUANTITY SURVEYOR, Grade VI. Salary £635-£710 p.s. ONE ASSISTANT QUANTITY SURVEYOR, Grade VI. Salary £480-£255 p.s. Further particulars and forms of application may be obtained from the County Architet, County Offices, Aylesbury, to whom they musi be delivered by 13th August, 1949. 1623

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H. BAILEY CHAPMAN. Town Clerk. Town Hall, Burton-upon-Trent. Town Clerk. Machanic Construction of the source of the coronal BOROUGH OF SOUTHALL. ADDRUGH OF SOUTHALL. PORTMENT OF SENIOR TOWN FLANNING ASSISTANT (GRADE Va). Additions are invited for the above appoint-ment on the permanent staff of the Corona-tion, at a salary in accordance with Grado AP.T., Va, of the National Scheme (2550×220-260), plus appropriate London weighting. Candicase must hold a recognized Town Baining qualification. By the construction will be given to the provision of housing accommodation for the coresent candidate. Brough candidate. Brough candidate. Brough candidate. Brough candidate. Brough candidate. Brough the fugineer, fown Hall, Southil, must be totaget, 1949. J. S. STERT.

ade, ade, Applications, in scaled envelopes endorsed "Architectural Assistant-Grade VI," stating age, gailfications and experience, and accompanied by copies of not more than three recent testi-monials, must be delivered to me not later than 10 a.m. on Monday, the 8th August, 1949. Canvassing, directly or indirectly, will be deemed a disqualification. H. BAILEY CHAPMAN. Town Clerk. Town Hall. Burton-upon-Trent.

OUNTY BOROUGH OF BURTON-UPON-TRENT. MPOINTMENT OF TWO ARCHITECTURAL ASSISTANTS. Dications are invited for the appointment, in the Borough Surveyor's Department, of two Architectural Assistants; in Grade V1 of the Architectural Assistants; in Beaded envelopes, endored Means and Architectural and Architectural and Architectural Means and Architectural and Maintenance of the Architectural assistants of the Local Govern-ments and architectural and the Architectural and Heath to the provisions of the Local Govern-ments and architectural and Conter of Heath applicants written notice on either and and architectural and architectural and architectural and Heath applicants written notice on either and and architectural and architectural and architectural and Heath applicants written notice on either and and architectural and architectural and architectural and Heath applicants written notice on either and and architectural and architectural and architectural and Heath applicants written notice on either and and architectural architectural and architectural and architectural architectural and architectural and architectural an

J. S. SYRETT, Town Clerk.

 August, 1949.
 J. S. SYRET, Town Clerk.

 Main Clerk's Office, Southall.
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and have experience to the local The appointments are subject to the Local Government Superannuation (Scotland) Act, 1937, Applications, stating age, full particulars of qualifications and experience, together with copies of recent testimonials, should be sent to the undersigned not later than 10 days after the appearance of this advertisement. Canvassing, directly or indirectly, will dis-qualify. J. WOOLER.

J. WOOLER, Town Clerk

J. WODLER. Town Clerk. Town Clerk. The State of Cleasers. The State of Cleasers. The State of Cleasers. The State of Cleasers and State of Cleasers Th

H. V. PUGH, Divisional Controller. Cardiff (Pengam Moors) Airport, Cardiff.

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 BOROUGH OF BARNES.

 APPOINTMENT OF PERMANENT ARCHI.

 TECTURAL ASSISTANT, GRADEII.

 Appoint and the second problem in the Borough Engineer and Surveyors of peartment, at a commencing salary of 2480, the second draughtsmen and be capable to the should be good draughtsmen and be capable to the should be good draughtsmen and be capable to the should be good draughtsmen and be capable to the should be good draughtsmen and be capable to the should be good draughtsmen and be capable to the should be good draughtsmen and be capable to the should be good draughtsmen and be capable to the should be commencing salary of 2480, the should be good draughtsmen and be capable to the should be capable to the undersigned and taket should be down the should be the undersigned and taket should be down the should be the undersigned and taket should be down the should be the undersigned and taket should be down the should be the undersigned and taket should be down the should be the undersigned and taket should be down the should be the undersigned and taket should be down the should be the undersigned and taket should be down the show

Knolles, B.Sc., M.L.C.B., ham, Middlesex, not later than Monday, em-August, 1949. The successful applicant will be required to pass a medical examination, and the appoint-ment will be subject to the Local Government Superannuation Act, 1937, and to one month's notice on either side. Canvassing will disguality, and an applicant who is related to a member of or a senior officer of the Council should disclose the fact in his application. Housing accommodation will be made available for the successful applicant, if required. W. H. JONES. Town Clerk.

Municipal Offices, Twickenham. 16th July, 1949. 1665

 Municipal Offices, Twickenham.
 16th July, 1949.
 1666

 Ith MAJESTY'S COLONIAL SERVICE.
 Vacancies exist for ASSISTANT ARCHITECTS in Aden. Salary in the scale £650-£1,560 per annum; point of entry depending on age, qualifications and approved war service.
 Candidates must be registered Architects and Associates of the Royal Institute of British Architects, and should be capable designers and be able to take charge of works from scale plans to completion. Specialized experience in hospital and school buildings would be an advantage.

 The appointment is on contract/gratuity terms for three years in the first instance. Terms of appointment include free first-class passages for the officer and his wife and children up to a maximum of four; partly furnished Government quarters, if available, will be provided at a rent not exceeding 10 per cent. of salary; leave on full salary after tours of from 18 to 24 months at the rate of 7 days per month of resident service. Income tax at local rates.

 Intending candidates should write at once for Form of Application and further, particulars, giving brief details of age, qualifications and experience, to The Director of Recruitment (Colonial Service), Sanctuary Buildings. Great Smith Street, London, S.W.I, quoting the reference No 27301/1.

 HIS MAJESTY'S COLONIAL SERVICE.

HIS MAJESTY'S COLONIAL SERVICE.' A vacancy exists for the post of ARCHITECT to the Government of Mauritius. Salary Rs.14,000 per annum (R.1 = 1s. 6d.) plus a cost-of-living allowance amounting at present to Rs.660 per annum. The appointment is on agreement for three years in the first instance, with possi-bilities of permanent and pensionable employ-ment.

bilities of permanent and pensionable employ-ment. Candidates must be Associate Members of the Royal Institute of British Architects or posseas an equivalent qualification, and in addition must hold a degree or diploma of a recognized School of Architecture. Previous experience in the Architectural department of a public authority would be an advantage, but is not essential. Pre-ference will be given to candidates with Town Planning experience. The officer selected will be in charge of the newly created Architectural branch of the Development and Welfare Organization and will be responsible for all architectural work undertaken by the Govern-ment.

Organization and will be responsible for all architectural work undertaken by the Govern-ment. Terms of service include free passages for the officer and, if married, for his wife and children up to a maximum of three, once each way each out of a days for each month of resident service. A gratuity is payable on satisfactory completion of the period of contract if the officer is not selected for transfer to the permanent estab-lishment. Outfit allowance of £30 on first appointment. Free quarters are not provided. Thrending candidates should write at once for form of Application and further particulars, griving brief details of age, qualifications and qg (Colonial Service), Sanctuary Buildings, Great Smith Street, London, S.W.1, quoting the refor-ence No. 27301/31.

RCHITECTS' JOURNAL for July 28, 1949 RCHITECTS' JOURNAL for July 28, 1949 CROWN AGENTS FOR THE COLONIES. Buf Agents, with prospect of permanence, Com-necting salary, including expatriation pay, according to qualifications and experience in the ha addition a cost-of-living allowance of up to provide the second state of the second state of exchange is at present 16 dollars to the 2, of exchange is at present 16 dollars to the 2, according to qualifications, and have had at least of exchange is at present 16 dollars to the 2, of exchange is at present 16 dollars to the 2, according to qualifications, and have had at least of exchange is at present 16 dollars to the 2, of exchange is at present 16 dollars to the 2, according the present 16 dollars to the 2, of exchange is at present 16 dollars to the 2, of exchange is at present 16 dollars to the 2, according the present 16 dollars to the 2, of exchange is at present 16 dollars to the 2, of exchange is at present 16 dollars to the 2, of exchange is at present 16 dollars to the 2, and the present 16 dollars of a sublications and of exchange the the approval of plans for inforced concrete framed structures. Apply at an exchange the the colonies, 4, Millbank, band the particulars of qualifications and the construction of building (1/22704/30 mobil and the present 10 at 10/22704/30 mobil and the present 10 at 10/22704/30 mobil and the present 10 at 10/22704/30 mobil and the construction and presents cannot and the construction of posts of Agents cannot band the present of the Colonies, 4, Millbank, band the present 10 at 10/22704/30 mobil and the construction of posts of Agents cannot band the construction of posts of Agents cannot band the construction of the Ministry of the present of the applications and qualifications and the cancestific candidates and qualifications and the correst floated design and creation to and the correst floated design and creation of and the correst floated design and creation of and the correst

office. Preference will be given to ex-Service candi-dates of the 1914-1918 or 1939-45 war, provided the Ministry is satisfied that such candidates can or within a reasonable time will be able to discharge the duties efficiently. Applications, giving date of birth. full details of training and qualifications, and stating salary required, should be sent immediately to the Director of Establishments, Ministry of Finance, Stormont. HUNTINGDON COUNTY COUNTY

required, should be sent immediately to the Director of Establishments, Ministry of Finance. Stormont. 1008 HUNTINGDON COUNTY COUNCIL COUNTY ARCHITECT'S DEPARTMENT. TECHNICAL ASSISTANT (GRADE IV). ARCHITECTURAL ASSISTANT (GRADE IV). Applications are invited for the appointment of (a) Technical Assistant, salary Grade IV, A.P.T., 2480×215 to £255 per annum, and (b) Archi-tectural Assistant, salary Grade III, A.P.T., 2480×215 to £495 per annum, and (c) Archi-tectural Assistant, salary Grade III, A.P.T., 2480×215 to £495 per annum. Applications for (a) will be required to have experience in the preparation of schemes and specifications for Heating and Domesic Hot Water Installations, and a knowledge of Elec-trical Installations is desirable. The appointments are subject to the provisions of the Local Government Superannuation Act. 1937, and the successful candidates will be re-quired to pass a medical examination. Applications endical examination. Architectural Assistant should be sent to S.J. Hands. A.R.I.B.A., County Architect, County Buildings, Huntingdon, to be received not later than first post on Monday, 15th August, 1949, stating (1) age; (2) qualifications; (3) education seneral and technical; (4) present position and salary and date of appointment; (5) previous positions; (6) particulars of experience, and should be accompanied by two recent testimonials or the names of two persons to whom reference may be made. JOHN KELLY, Clerk of the County Council. County Buildings, Huntingdon. 28th July, 1949. 1671

Tenders for Contracts 6 lines or under. 10s.; each additional line, Is. 6d.

6 lines or under, 10s.; each additional line, Ia. 6d. COUNTY BOROUGH OF READING TO BUILDERS AND CONTRACTORS The Corporation of Reading invite tenders for the works of conversion of "Wychcotes," St. Peter's Avenue, Caversham, into a Hostel for Aged Persona. The General Conditions and Drawings may be inspected at the office of the Borough Architect, Town Hall, Reading, and copy of the Bills of Quantities, Form of Tender and endorsed enve-lope obtained on application to him, accom-panied by a cheque (made payable to the Borough Treasurer, Reading) for two guineas, which will be refunded upon the receipt of a bona fide tender. Tenders must be delivered to me at my office not later than 10 a.m. on Monday, the 22nd August.

not later than 10 a.m. on monory, the August. No tender will be considered unless enclosed in the endorsed envelope provided and sealed but not bearing any name or mark indicating the sender. The Corporation do not bind themselves to accept the lowest or any tender. G. F. DARLOW, Town Clerk

Town Hall, Reading. July, 1949.

1650

### Financial

6 lines or under. 10s.: each additional line, 1s. 6d. CAPITAL required to develop new system of Monolithic Reinforced Concrete Construc-tion. Will any firms or individuals interested please write in confidence to Box 1621.

## Architectural Appointments Vacant

4 lines or under, 5e.; each additional line, 1s. 6d. A ECHITECTURAL ASSISTANT of Inter-mediate standard, required immediately by Firm of Architects in West End of London; salary according to experience and qualifications. Box 1068.

Seconding to experience and qualifications. Box 1088.
Example and the experience of the example of th

be sent to U.K. Representative, 55, Kingaway, Luton, Beds. Bio ReLIABLE ASSISTANT required; able to detail and assist with design and super-group of Architects, to work under supervision of resident Partner; every opportunity and good salary for good keen man. Saunders & Partners, 14, Mercer Row, Louth, Lincs. 194 RECHITECT to Maldstone Brewery has vacancy for qualified and experienced SENIOE ASSISTANT; experience of licensed premises an advantage, but not essential; accommodation available in Maldstone; staff pension scheme; salary according to age and experience. Box 1294. WEST RIDING Architects require ASSIS-trail, Hospital and Housing work; excellent prospects for reliable man. Box 1493. C ENERAL ASSISTANT required immediately; cases of architectural work, including survey-ing and levelling; West Riding of Yorkshire town. Apply, giving experience, redurences, and alary required, Box 1523.

RCHITECTURAL ASSISTANTS required 'm A RCHITECTURAL ASSISTANTS required 'm-mediately: London office; good salary and prospects. Write, with particulars of age, quali-factions, experience, and salary required, to Box 705, c/o 7, Coptic Skreek, W.C.1. 1496 SENIOR ASSISTANT ARCHITECT required for appointment is staff of Development and Research Department; applicants must hold Associateship of R.I.B.A., and be interested and experienced in industrial construction. Applica-tions in writing stating age, experience, and salary required, to Chief Staff Architet, Hiford, Ltd., Romford, Essez. 1586 A

alary required, to Chief Staff Architect, Hord, Ltd., Romford, Eases. 1589 SENIOR ARCHITECTURAL ASSISTANT re-quired in the Architect's Dept., F. W. Woolworth & Co., Ltd., Head Office, 1-5, New Bond Street, London W.1. Applicants should write in giving full details of training, qualifica-tions, experience and salary required, to H. Planning experience, required urgently; alary according to experience. Gotch, Sanders 5 Surridge, Bank Ohanbers, Kettering. Tele phone : Kettering 3165/6. 1561 Quanter & Burridge, Bank Chambers, Kettering. Telephone : Kettering 3165/6. 1562 THE COOPERATIVE WHOLESA.E

Telephone: Kettering 3165/6. 1552 THE CO-OPERATIVE WHOLESALB SOCIETY, LTD., invite applications for the following appointments on the Staff of the Manchester Architect's Department:— ASSISTANT QUANTITY SUEVEYORS. Salary range £510 to £625 per annum. Applicants must have a sound experience in the preparation of Bills of Quantities, measuring and adjusting variations for large commercial buildings, and able to undertake work with a minimum of super-vision.

able to underlake work with a minimum of super-vision. The above appointments are permanent and offer prospects of up-grading to competent Assis-tants. Successful candidates will be required to undergo a medical examination for entry into compulsory Superannuation Scheme. Applications, stating age, experience, qualifica-tions, and commencing salary required, to be addressed to The Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Man-chester, 4.

VACANCIES occur for ARCHITECTS' ASSIS-TANTS (Intermediate standard or above) in a busy Architect's Department of a Multiple Firm (Midland office); salary according to quali-fications and experience. Full particulars to Roy 1659 Box 1639

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A SSISTANT ARCHITECT required for general practice; state age, qualifications, experience, and salary required. Edmund Kirby & Sons, Chartered Architects, 5, Cook Street, Liverpool, 2, Telephone: Central 4377. 1641 A RCHITECTURAL DRAUGHTSMAN re-practice; good drawing and lettering more im-portant than experience; state age, qualifications, and salary required. Edmund Kirby & Sons, Chartered Architects, 5, Cook Street, Liverpool, 2, Telephone: Central 4377. 1642 S ENIOR ARCHITECTURAL ASSISTANT re-quired; knowledge of general practice; industrial work, war damage, etc.; salary accord-ing to capabilities. Applications to Mackintoch, Beecroft & Partners, 11, Orchard Street, Bristol, 1. 1643

REQUIRED at once ASSISTANT; interested in contemporary school and flat design; salary £500-£600 p.a., according to ability, plus bonus. Clifford E. Culpin, F.R.I.B.A., Culpin & Son, 3, Sonthampton Place, W.C.1. Holborn 0163.

QUALIFIED ARCHITECTURAL ASSIS, wanted for office in Exhibition Designing, wanted for office in Richmond; experienced appli-cants, also conversant with interior design. Write to Box 1601.

Write to Box 1601. SENIOR and JUNIOR ASSISTANTS wanted in busy London office of the Architects' De-partment in a retail organization. Apply, stating experience and salary required and when free, to Box AJ 188, L.P.E., 110, St. Martin's Lane, W.C.2. 1624

W.U.2. 1624 A RCHITECTURAL ASSISTANTS required, with office experience and at least R.I.B.A. Intermediate standard, Welch & Lander, F./F.R.I.B.A., 38, Gloucester Place, W.L. Welbeck 651.

Welbeck 651. Welbeck 651. Status 1 and supervision, preferably in Industrial or Com-mercial work; good prospects for suitable man; salary in neighbourhood of £550. Apply, with full particulars, to Box 1652. ABCHTECTURAL ASSISTANT, about Inter-mediate standard, required immediately for buildings and domestic work. Smith-Wolley & Co., Architects, Collingham, Newark, Notts. 1647 ARCHTECTURA SASISTANT required, E.I.B.A. AINTECTURA SASISTANT required, E.I.B.A. AINTECTURA SASISTANT required, E.I.B.A.

A RCHITECT'S ASSISTANT required; R.I.B.A. Intermediate standard, in Slough office Write, stating usual details, Box 1656. A RCHITECT, 20 miles West London, requires trial work. Box 1657. A SSISTANT; preferably experienced indus-trial work. Box 1657. A SISTANT required for Staff Architect of England; Intermediate R.I.B.A. or equivalent standard. Write fully, age, training, experience, Box 1638. Box

Box 1638. BUILDING SURVEYOR required by Survey Department of well-established South-East London firm of Surveyors and General Practi-tioners to prepare Specifications and Schedules of building work, including measured Bills, War Damage Agreements, etc., also designs for small domestic and industrial buildings; salary 2520 per annum. Apply Box 1625. SENIOR ASSISTANT, £10-£12, according to ex-perionce; JUNIOR ASSISTANT, £6-£8; varied work-busy office. F. J. Lenton & Partners, Chartered Architects, Stamford. 1631 THE PETER DUNHAM GROUP. Chartered

varied work-busy office. F. J. Lenton & Fartners, Chartered Architects, Stamford. 1631 THE PETER DUNHAM GROUP, Chartered Architects, require ASSISTANTS, of R.I.B.A. Inter, and Final standard, for interesting and varied work, Reply, with details, to 42.44, Hastings Street, Luton, Reds. 1634 Archart required for a South-West London office, to be engaged on general work, including war damage claims, specifications, and working Gravings. Box 1635. SENIOB ARCHITECTURAL ASSISTANT, The Deposite of partnership to suitable Parade, Leamington Spa. 169 (Senite Constitution Spa. 169) A fast is offered by architect in East Anglia to a competent Architectural Assistant, office trained, experienced in domestic work, alterations, surveys, etc.; car driver. Reply with full details to Box 1635. A RCHITECTURAL ASSISTANTS required

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CHARTERED ARCHITECT, with 25 years' varied experience, seeks permanent and re-sponsible appointment in London; accustomed to complete charge of large building contracts and staff supervision; salary £850 p.a. Box 329. A RCHITECTURAL ASSISTANT, young, un-attached, requires position with Property, Estate Developing or similar concern; experience conversions, alterations, and domestic work, sur-veying and knowledge of quantities; present salary 2375. Box 330.

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Balary £375. Box 330. **P**OST sought on friendly footing with qualified Architect by M.A. (Architecture), Cambridge; interested in domestic work and village planning; also in writing and music. Box 1597. Construction (2010) recently.

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Box 1359. DRAUGHTSMEN (Junior and Senior) required in W. London area; must be neat and accurate workers; knowledge of building constru-tion useful; five-day week. Write, stating age, experience, present position and salary, when available, to Box 1350.

available, to Box 1350. **EXPERIENCED MEASURING SURVEYOR** required by Messra. Holloway Brothers (London), Ltd., for a large Building and Civil Engineering Contract, in South of England; must be capable of measuring for interim payments, measuring and agreening work on schedule rates, and preparing final account; opportunity for sui-able applicant to join permanent staff. Apply in writing, giving full particulars of age, experience, and salary required, to the Secretary, 157, Mil-bank, S.W.1. **EXPENDING** 

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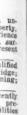
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Essex. 157 TWO FOREMAN CARPENTERS required for service in Nigeria by large Building and Civil Engineering Company; experience in shuttering and concreting essential; age prefer-ably between 32-45; good salary payable to selected applicants. Apply in writing, giving full details of age, qualifications, experience, etc., to Box 1614.

Belected applicants. Apply in writing, giving full details of age, qualifications, experience, etc., to Box 164.
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 MIGR FOREMAN requires dual for all of a selected applicant; age preferably between 32-45. Apply in writing, giving full details of age, qualifications, experience, etc., to Box 1610.
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Box 1611. **CIVIL ENGINEER** (preferably qualified) re-caring Company for work in West Africa; ex-perience of reservoir construction desirable; age preferably between 32-45; good salary payable to selected applicant. Apply in writing, giving full details of age, qualifications, experience, etc., to Box 1612.

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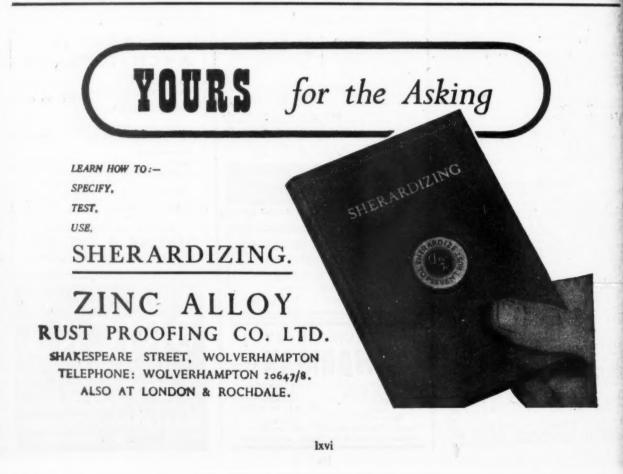
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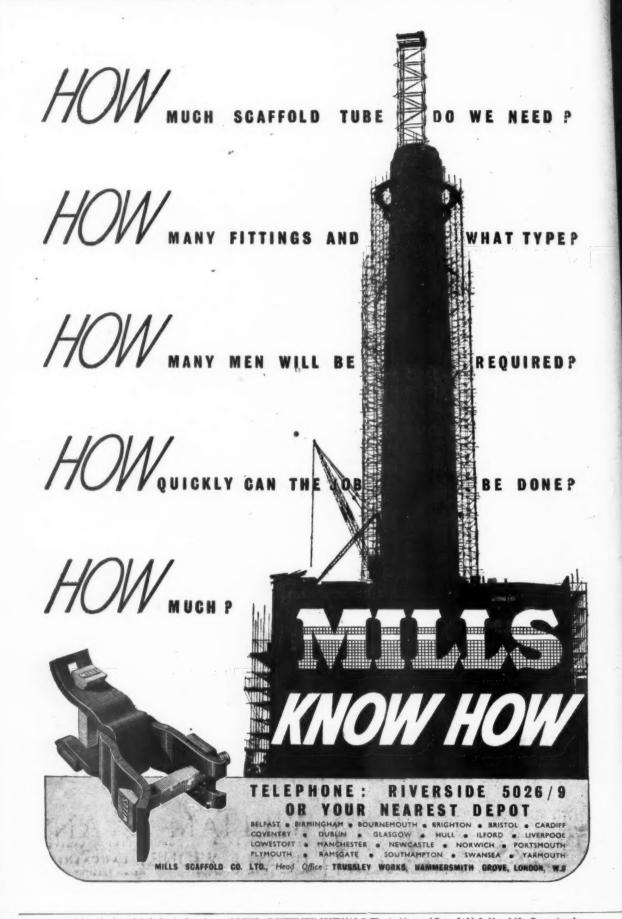
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