## THE ARCHITECTS' JOURNAL for August 12, 1948 THE ARCHITECTS'

INE ARTS DEPT.



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

#### NEWS and COMMENT

Diary News Architects' Commonplace Book Astragal's Notes and Topics Letters Societies and Institutions TECHNICAL SECTION Information Sheets Information Sheets Information Centre Current Technique Questions and Answers Prices The Industry

PHYSICAL PLANNING SUPPLEMENT CURRENT BUILDINGS HOUSING STATISTICS

Architectural Appointments Wanted and Vacant

No. 2792] [Vol. 108 THE ARCHITECTURAL PRESS 9,11 and 13, Queen Anne's Gate, Westminster, S.W.1. 'Phone : Whitehall 0611

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	lished in tw	stary of abbreviations of Government Benariments and Societies and Commit s, together with their full address and telephone admoters. The glossary is p to parts—A to Ic one week, Ic to Z the next. In all cases where the town is the word LONDON is Amplicio in the address.	pub- not
I	AA	Architectural Association, 34 6. Bedford Square, W.C.1. Museum Association of Art Institutions, Secy 4: W. Marlborough Whitehead, "Dyneley	
	ABS ABT ACGB ADA	Castle Hill Avenue, Berkhampstead, Herts.Architects' Benevolent Society.66, Portland Place, W.1.Welbeck IAssociation of Building Technicians.5, Ashley Place, S.W.1.Victoria 04Arts Council of Great Britain.4, St. James' Square, S.W.1.WhitehallAluminium Development Association.33, Grosvenor Street, W.1.Mayfair 75Association for Planning and Regional Reconstruction.34, Gordon	5721 147-8 9737 101/8
	ArchSA ARCUK ASB	Square, W.C.1. Euston 21 Architectural Students' Association. School of Architecture, Manchester Municipal School of Art, All Saints, Manchester, 15. Ardwick Architects' Registration Council. 68, Portland Place, W.1. Welbeck Architectural Science Board of the Royal Institute of British Architects. 66, Portland Place, W.1. Welbeck	3480 9738
	AScW	66, Portland Place, W.I. Welbeck Association of Scientific Workers. 15, Half Moon Street, Piccadilly, W.I. Grosvenor	
	BAE BATC	Board of Architectural Education. 66, Portland Place, W 1. Welbeck Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1. Reliance 7611, Ext.	5721
	BC BCCF BCCF BCIRA BDA BEDA BGC BGF BIA	Building Centre.       9, Conduit Street, W.1.       Mayfair 86         British Colour Council.       28, Sackville Street, W.1.       Regent         British Cast Concrete Federation.       17, Amherst Road, Ealing, W.13.       Perivale         British Cast Iron Research Association.       Alvechurch, Birmingham.       Redditch         British Door Association.       25, Victoria Street, S.W.1.       Abbey 54         British Gas Council.       1, Grosvenor Place, S.W.1.       Sloane         British Gas Federation.       1, Grosvenor Place, S.W.1.       Sloane         British Ironfounders' Association.       145, Vincent Street, Glasgow, C.2.       Street	541/6 3613 6869 h 716 422-3 9434 4554 8266
	BIAE BID BINC BOT BRS BSA	Glasgow Central British Institute of Adult Education. 29, Tavistock Square, W.C.1. Euston Building Industries Distributors. 52, High Holborn, W.C.1. Chancery Building Industries National Council. 11, Weymouth Street, W.1. Langham Board of Trade. Millbank, S.W.1. Whitehall Building Research Station. Bucknalls Lane, Watford Garston Building Societies Association. 14, Park Street, W.1. Mayfair	5385 7772 2785 5140 2246
	BSI CAS	British Standards Institution. 28, Victoria Street, S.W.1. Abbey County Architects Society. C/o A. Guy Chant, F.R.I.B.A.	3333
	CCA CDA CIAD	Salop County Council, 5, Belmont, Shrewsbury. Shrewsbury Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1. Sloane Copper Development Association. Kendals Hall, Radlett Herts. Radlett Central Institute of Art and Design. 41, 42, Dover Street, W.1.	5255
	CIAM CID CPC	Regent Congrès Internationaux d'Architecture Moderne. Doldertal, 7. Zurich, Switze Council of Industrial Design. Tilbury House, Petty France, S.W.1. Whitehall Codes of Practice Committee. MOW, 42, Onslow Gardens, S.W.7.	erland   6322
	CPRE CUJC	Kensington Council for the Preservation of Rural England. 4, Hobart Place, S.W. Sloane Coal Utilization Joint Council. 13, Grosvenor Gardens, London, S.W.1.	e 4280
	DIA DOT EC EJMA	Design and Industries Association. 9, Conduit Street, W.1. Mayfair Department of Overseas Trade. 35, Old Queen Street, S.W.1. Victoria Electricity Commission. Savoy Court, Strand, W.C.2. Temple Bai English Joinery Manufacturers Association (Incorporated). Sackville House,	r 5432 a 9040 r 7565
	EPNS FAS	40, Piccadilly, W.1. Regent English Place-Name Society. 7, Selwyn Gardens, Cambridge. Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.	
	FASSC	Federation of Association of Specialists and Sub Contractors.	e 2837
5	FBI FC FCMI	21, Tothill Street, S.W.1. Whitehal Federation of British Industries. 21, Tothill Street, S.W.1. Whitehal Forestry Commission. 25, Savile Row, W.1. Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	6711
	FDMA FLD	The Flush Door Manufacturers Association Ltd. Trowell, Nottingham. Ilkesto Friends of the Lake District. Pennington House, Nr. Ulverston, Lancs.	
	FMB	Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1.	
	FRHB	Chancer Federation of Registered House Builders. 82, New Cavendish Street, W.1.	
	FS (Eng.)		
	GG HC IAAS	Georgian Group.       27, Grosvenor Place, S.W.1.       Sloan         Housing Centre.       13, Suffolk Street, Pall Mall, S.W.1.       Whitehal         Incorporated Association of Architects and Surveyors.       75, Eaton Place, S.W.	
	ICE ICW	Institution of Civil Engineers. Great George Street, S.W.1. Whiteha Institute of Clayworkers. 4, Vernon Place, W.C.1. Chancer	11 4577



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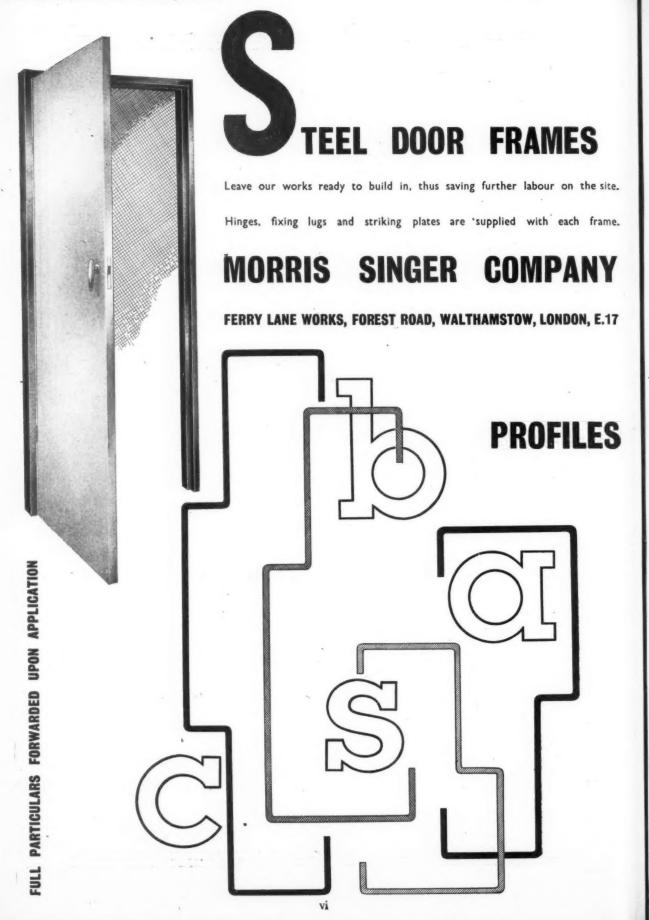
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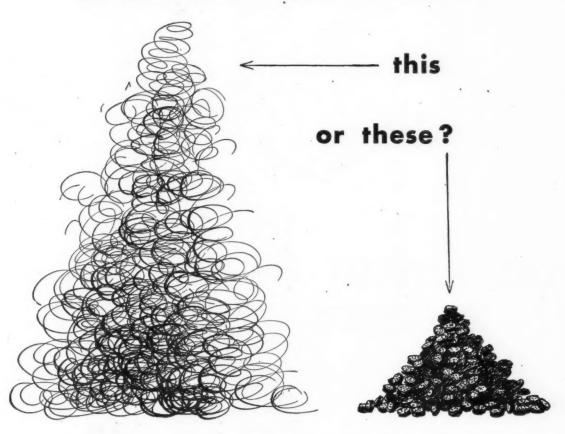
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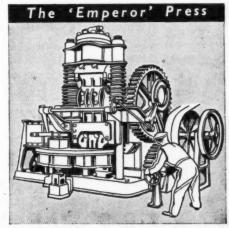
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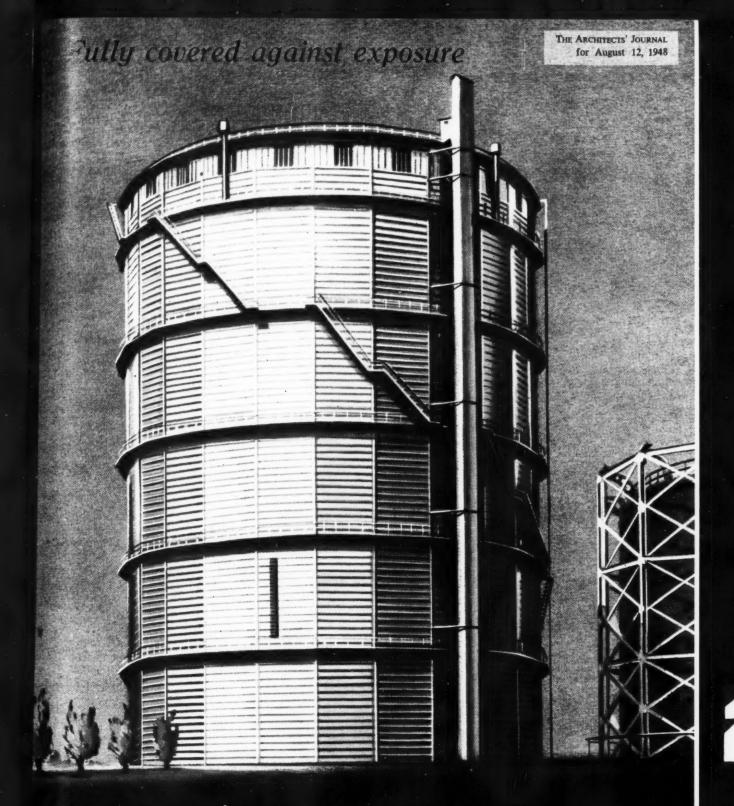
**U** View of Structural Steelwork erected by Cargo Fleet at Wilton for Imperial Chemical Industries Limited.

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Painting by Gordon Nicoll, R.I., F.R.S.A.

#### THE LEGEND OF THE TIN ISLANDS

For centuries before the Christian era it is known that tin was mined in Cornwall and exported to reach eventually the distant Phoenician ports of Tyre and Sidon.

The enterprise of the Phoenicians over a period of many generations enabled them to develop and maintain a vast and diverse trade, which not only took them to many strange and distant lands, but brought prosperity to their own country. They were a maritime nation whose stout seaworthy craft were constructed from the fir trees of Senir; the famous cedars of Lebanon provided the masts whilst the oars were fashioned from the oaks of Bashan.

They were fearless and skilled navigators, venturing out from Mediterranean waters into the broad Atlantic to establish trading posts along the seaboards of North Africa and South West Spain,

Amongst other valuable cargoes, tin was a treasured metal, but in order to preserve such

monopolies, the Phoenicians shrouded their voyages in mystery. The trade routes they used, with an unrivalled knowledge of the most favourable winds and tides, were jealously guarded secrets. Thus there arose the legend of the Cassiterides, the Tin Islands, possibly a shrewd invention devised and perpetuated in order to protect their unique enterprise.

Many writers, both ancient and modern, have sought to identify the legendary Tin Islands, but no real evidence exists to show that the Phoenicians ever reached Cornwall itself. Other speculations have named the Scillies, groups of islands off either Gaul or the coast of Galicia in Spain, with concrete proof singularly lacking in all these cases. So it is that even though the mystery of the legendary Cassiterides is still unsolved, no doubt exists as to the resource, skill and initiative displayed by the Phoenicians, in their profitable international trading ventures.



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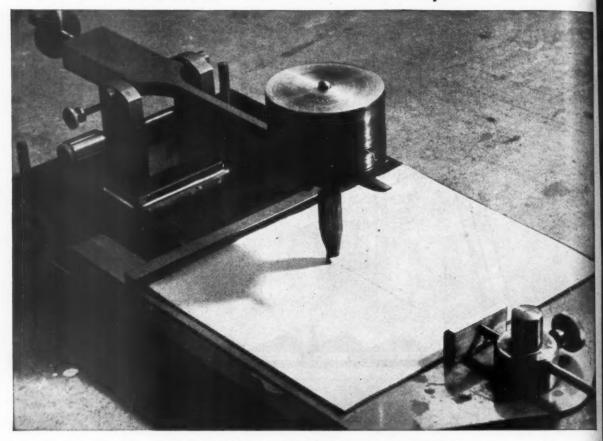
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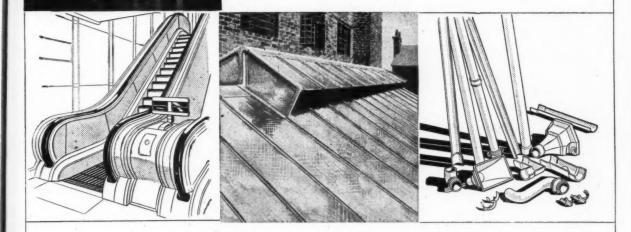
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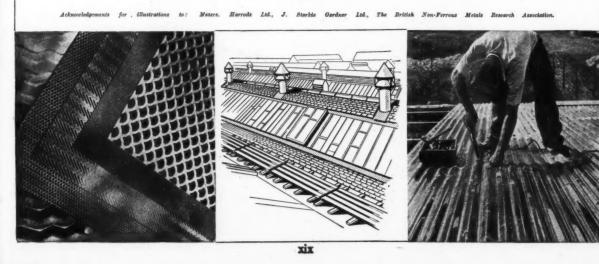
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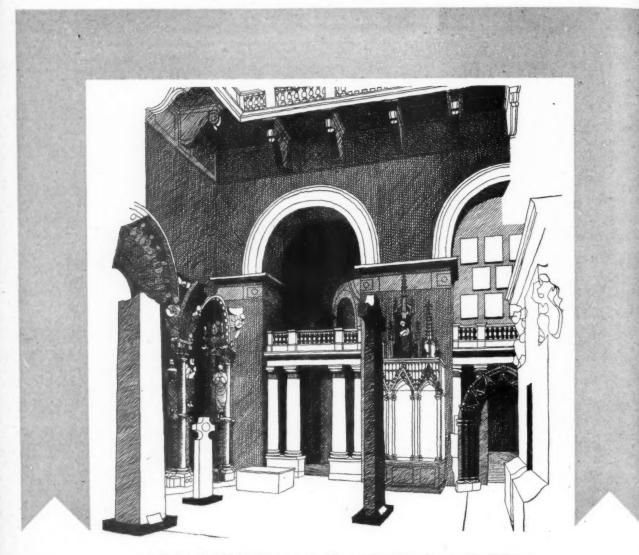
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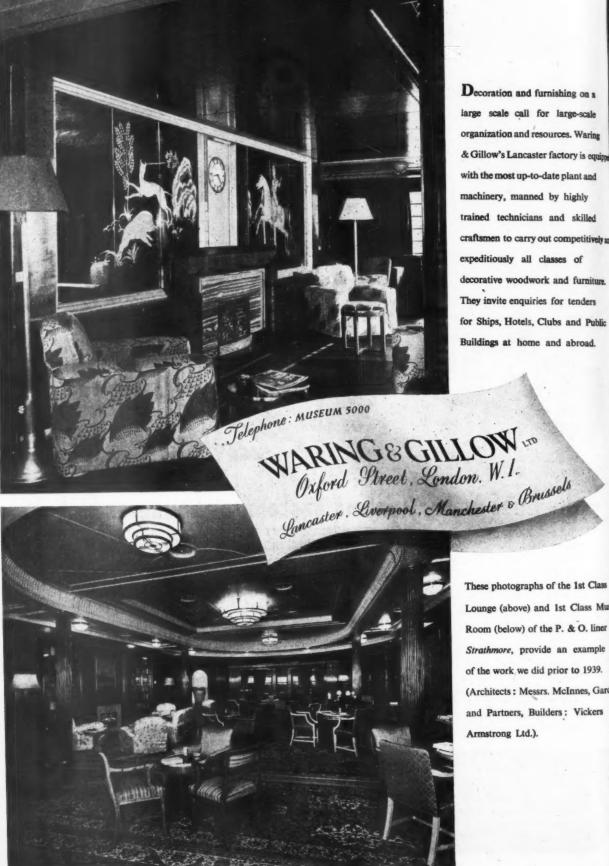
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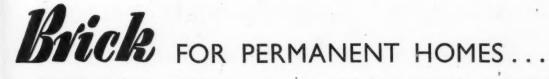
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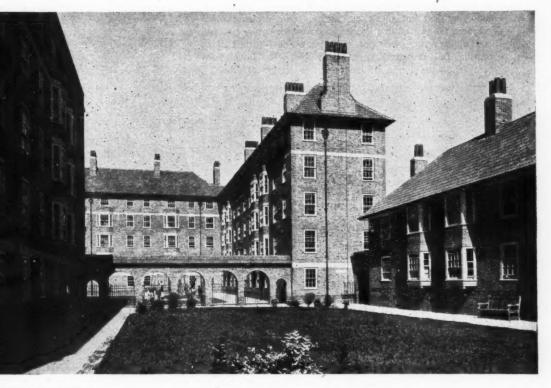


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Flats, Speke Road Gardens, Liverpool. Sir Lancelot Keay, K.B.E., M.Arch. (L'pool), P.R.I.B.A., City Architect & Director of Housing.

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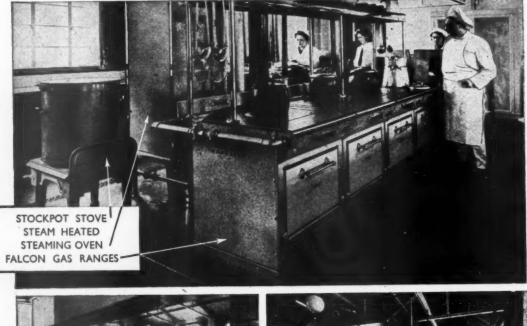
#### BUILD FOR THE PRESENT AND THE FUTURE .... IN

Issued by The National Federation of Clay Industries, London, W.C.1



# How 'Falkirk' designed and equipped

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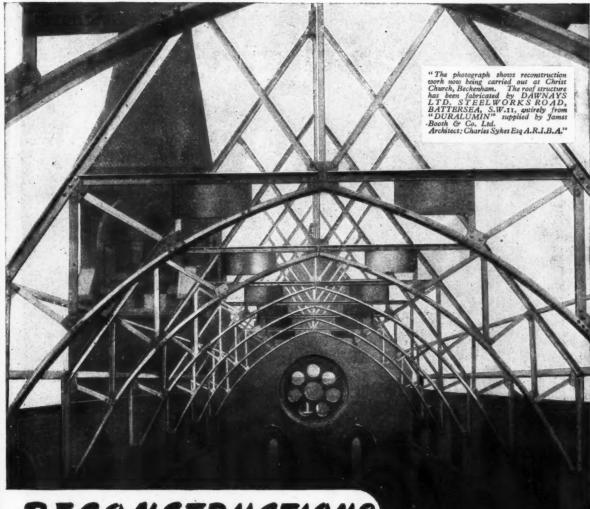
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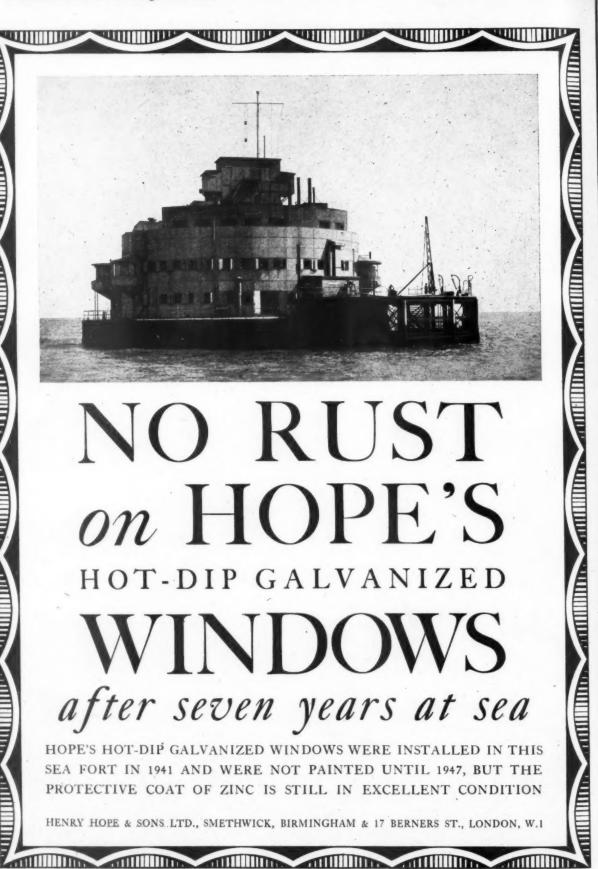
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THE ARCHITECTS' JOURNAL for August 12, 1948



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THE ARCHITECTS' JOURNAL for August 12, 1948 [147

NEW

In common with every other periodical, this JOURNAL is rationed to a small part of its pre-war consumption of paper. Circulation is therefore temporarily restricted but would-be subscribers are advised to have their names put on the waiting-list. Their names will then



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, 1s. 6d. ; fost free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each ; carriage 1s. extra.

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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.

BIRMINGHAM. Design Week. (Sponsor, CID.) Oct. 11-16

CAMBRIDGE. Town and Country Plan*ning Summer School.* At Cambridge. The main lectures and discussion groups will be held in the Mill Lane Lecture Theatres. *Aug.* 23. Morning and after-Theatres. Aug. 23. Morning and after-noon: Discussion Groups; 8.0 p.m.: Formal opening of the School at the Guildhall. Aug. 24. 10.0 a.m. Desmond Heap. Legal and Administrative Aspects of the Town and Country Planning Act. 1947, and its Regulations and Orders; Afternoon: Dis-cussion Groups. Aug. 25. 10.0 a.m. Sir Robert Fraser. The Central Land Board. Afternoon: Discussion Groups. Aug. 26. 10.0 a.m. Geoffrey Clark. Planning Prob-lems of the Countryside; Afternoon, Dis-cussion Groups. Aug. 27. 10.0 a.m. Denis Chapman. Social Aspects of Town Plan-ning. Afternoon: Discussion Groups: 8.0 p.m. Annual General Meeting. Aug. 28. 10.0 a.m. Debate. (Sponsor, TPI.) AUG. 23-28 AUG. 23-28

LONDON. Darkness into Daylight Exhibition. At the Science Museum, South Kensington. (Sponsor, Science Museum.) UNTIL SEPTEMBER 30

Display of Domestic Solid Fuel Burning Appliances. At the Building Centre, 9, Conduit Street, W.1. (Sponsor, CUJC.) This display is changed at approximately e-monthly intervel. 4-monthly intervals.

PERMANENT EXHIBITION

Gas in the Design for Living. Exhibition of gas cookers, space and water heaters, laundry equipment and portable cooking and heating appliances. At the Building Centre, 9, Conduit Street, W.1. (Sponsor, RCC) BGC.)

#### PERMANENT EXHIBITION

Sport in Art Exhibition. At the Victoria and Albert Museum. (Sponsor, Olympic Games Exhibition Committee.) UNTIL AUG. 14

International Exhiption. At County on Landscape Architecture. At County Hall, S.E.1. (Sponsor, ILA.) UNTIL AUG, 12

Prof. S. Giedion. The Relation of Paint-ing, Sculpture and Architecture. At the School of Hygiene and Tropical Medicine, At the Keppel Street, W.C.1. (Sponsor, MARS and Institute of Contemporary Arts.) 6 p.m. Aug. 18

Exhibition of Original Textile Designs. In Murray Hall, Tilbury House, Petty France, S.W.I. (Sponsor, CID.) UNTIL AUG. 26 Exhibition of Photographs and Models of Windmills. At the Victoria and Albert Windmills.

Museum, South Kensington. (Sponsor, V. & A. Museum.) UNTIL AUG. 26

Memorial Building Competition: Exhibition of Premiated Designs. At the Building Centre, 9, Conduit Street, W.1. (Sponsors, BC and TUC.)

UNTIL AUG. 27

Machine Tool and Engineering Exhibition. At Olympia. (Sponsor, Machine Tool Frades Association.) AUG. 26-SEPT. 11 At Trades Association.)

TCPA Dutch Tour. (Sponsor, TCPA.) FROM SEPTEMBER 11

Biology and Civil Engineering Conference. September 21. Morning: Causes, Effect and Prevention of Soil Erosion. Afternoon: and Prevention of Soil Erosion. Afternoon: The Effect of Vegetation on Drainage and Floods. September 22. Morning: The Effect of Vegetation in Stabilizing Artificial Slopes. Afternoon: The Use of Vegetation to Stabilize Sand Dunes. September 23. Morning: The Effect of Vegetation on the Settlement of Roads and The Effect of Vegetation on The Settlement of Structures. Afternoon: Algal Growth and Engineering Design. At the ICE, Great George Street, Westminster, S.W.1. (Sponsor, ICE.) SEPT. 21-23 SEPT. 21-23

MARGATE. Exhibition of British Book. Designs, 1948. At the Public Library. Margate. (Sponsor, ACGB.) UNTIL AUG. 13

PRESTON. Design Fair. At the Harris Museum and Art Gallery, Preston. (Sponsor, CID.) UNTIL AUG. 14

#### COMPETITIONS

RIBA Prizes for Public and Secondary Schools: A total of 10 guineas in prizes is offered for: 1, The best original illustrated essay dealing with a building or group of buildings with which the competitor is per-sonally acquainted; 2, the best sketches or scale drawings of a building or part of a building in pencil, ink or colour, maximum size 30 in. by 22 in. Assessors: H. T. Cad-bury Brown, Hugh Casson, E. R. Jarrett. Further information from the Secretary, RIBA, 66, Portland Place, London, W.I. Entries by October 7. Entries by October 7.

RSI Prize Competitions: John Edward RSI Prize Competitions: John Edward Worth Prize (£40) for an essay on Practical Improvements of Appliances or Inventions in or about Dwelling-Houses, and John S. Owens Prize (£15) for an essay on Aimo-spheric Pollution. Apply Secretary, Royal Sanitary Institute, 90, Buckingham Palace Road, London, S.W.1, for general condi-tions. Entries by December 31.

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without value for someone, there are often good reasons why certain news calls for special emphasis.

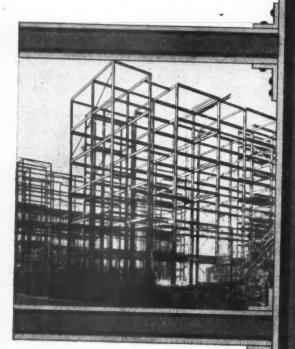
 $\star$  means spare a second for this, it will probably be worth it.

\*\* 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 Committee on the QUALIFI-CATIONS OF PLANNERS invite written evidence from interested bodies or persons. The Chairman of the Committee is Sir George Schuster. The Committee's terms of reference are: "To take account of the present and prospective scope of town and country planning and to consider and report what qualifications are necessary or desirable for persons engaged in it, and to make any recommendations affecting those persons which appear to be relevant." Memoranda of evidence from Scotland, as well as from England and Wales, will be received by Mr. H. R. Pollitzer, the Secre-tary of the Committee, at the Ministry of Town and Country Planning, 32, St. James's Square, London, S.W.1.







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#### THE ARCHITECTS' JOURNAL for August 12, 1948 [149

#### AN ARCHITECT'S From Commonplace Book

ROCAILLE. [From Mechanization Takes Command, by S. Giedion (Oxford University Press, New York).] With the certainty and sureness of accumulated experience, seemingly improvised shapes are instilled with that unique fusion of discipline and flexibility which runs through the operas of Mozart. For this union of discipline with flexibility, wherein objects are formed as if eternally in flux, the late Baroque invented a symbol in which all these qualities are gathered : the Rocaille. The shell-form, with which a boneless organism surrounds itself and in which are joined the eternity of stone and the flux of living waters, seems as if created to express the will of this late period. The early phases, dating back to the Renaissance, are well known. Now a radical transformation takes place. The shell is transmuted to seaweed, lace, or other forms. It swells, becomes membrane-like, is broken up, or indentated, until the naturalistic form is changed into a sign or, as the modern painters say, transformed into an object. These signs appear singly or strung in C or S shapes, contrasting with or supporting other elements. Here fantasy freely plays amid the flexibility, finesse, and generosity of this late period. The search for comprehensiveness appears everywhere, using the curve to embrace individual parts; in urbanism, in the layout and inter-relation of squares and places, in the rounded corners of the interiors. This unique meeting of reason with the richness of organic form is nowhere more marked than in furniture, always so difficult of development. In furniture it is as if the store of experience accumulated since the late Gothic were suddenly bursting forth : the curved commodes, the mobile cylinder tops of the desks, and the finely modelled sitting or reclining furniture.

#### CRAFTS CENTRE A FOR GREAT BRITAIN

has now been created. Its main object is: "The preservation, promotion, and improvement of fine craftsmanship in Great Britain." The promotion, and improvement of fine craftsmanship in Great Britain.". The centre is organized by the Arts and Crafts Exhibition Society, the Red Rose Guild of Craftsmen, the Senefelder Club, the Society of Scribes and Illumin-ators, and the Society of Wood-Engravers. Officers of the centre are:—*Chairman*: John Farleigh, R.E., R.B.A.; *Council*: Edward Barnsley, C.B.E.; Heber Mathews, A.R.C.A.; Hebe Cox; Stanley W. Davies, M.A.; Edwin Ia Dell, A.R.C.A.; Claire C. M. Evans; lain Macnab, R.O.I., R.E.; Harry Morris; John O'Connor, A.R.E., A.R.C.A.; M. C. Oliver; Margaret Pilkington, M.A.; Russell Reeve, A.R.E., R.B.A.; Francis Spear, A.R.C.A.; Noel Carrington, Council of Industrial Design; Sir Charles Tennyson, Chairman, CIAD; Philip James, Arts Council; Cosmo Clark, Rural Industries Bureau; G. R. Hughes, Worshipful Company of Goldsmiths, *Trustees*: Sir Charles Tennyson; Professor A. E. Richardson, R.A.; Sir Leigh Ashton, Victoria and Albert Museum. The centre's temporary address is 6, Queen Square, London, W.C.I. To pay for proper premises and the running of the centre, 46,000 a year will be required. Up to half of this will be donated by the Government on a basis of f1 for f1, provided that a

of this will be donated by the Government on a basis of £1 for £1, provided that a minimum of  $\pounds 2,500$  a year can be assured from other sources.

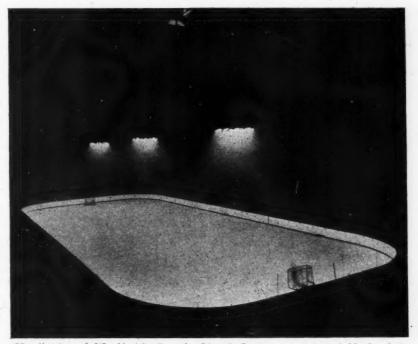
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A New Town at BRACKNELL, BERKS., has been proposed, and a Draft Designation Order made for the New Town of BASILDON. The proposal to establish a New Town at Bracknell, Berks., was discussed at a meeting between the Minister of Town and Country Planning and the local authorities concerned at the Ministry's headquarters at 32, St. James's Square, London, on August 4. General agreement in principle was reached. A letter sent by the Minister to local authorities stated that the Minister had had in mind for some time the urgent need to find an outlet for the excess population and industry of the overcrowded districts of West London. No surplus land to assist the West London authorities is available in neighbouring districts, while large scale development in outer Middlesex would

encroach on the Green Belt and valuable market garden land, and interfere with the working of essential gravel and sand deposits. The Minister is convinced thereaeposits. The Minister is convinced there-fore that the only solution is to find an outlet further to the west. Among other possibilities the expansion of Bracknell has been examined, and the Minister pro-posed that the town should be expanded from its present population of some 5.000 people to approximately 25,000. He thinks that considering the size of the present community it would be in the national interest that this task should be undertaken by a Development Corporation under the New Towns Act. The Minister has made a draft order

designating as the site of a proposed New Town 7,850 acres at Pitsea and Laindon,

Essex, to be known as Basildon, and which will ultimately house about 50,000 people. The Minister explains in a memorandum obtainable at the Ministry or the local authority offices concerned, the purpose and history of the proposal, together with the reacone for wishing to employ the machinery reasons for wishing to employ the machinery of the New Town's Act. The creation of Basildon will relieve the congestion in East London, and will help remedy the situation in parts of the area where accommodation is below modern standards and lacking in below modern standards and lacking in amenity. Industry will also move out from London, so that homes and workplaces will be close to each other. Basildon will not become a dormitory town. If any objection is made to the proposed order on or before August 28, 1948, a public local inquiry will be held.



The lighting of Wembley Stadium for Olympic Games events that are held after dark presents special problems which vary with the type of event and the area to be lit. The photograph above shows the lighting over the Empire Pool Ice Rink. It consists of banks of blended tungsten and mercury lamps with a restricted cut-off to prevent an excessive spill of light over the seating area. The lighting is the work of Metropolitan-Vickers Electrical Co. Ltd., in co-operation with the stadium engineers.



## London Scene

The fine weather at the end of last month turned London's attention to its open spaces, and the parks were crowded. There are many who feel that a fuller use could be made of the parks with which London is exceptionally well provided if there were better amenities in the way of cafés and the like. Lessons can be learned from many European examples. In London it is encouraging to see that

with the proposal to provide a swimming pool and cafeteria on the shore of Regent's Park Lake (illustrated in last week's JOURNAL), MOW is considering the use of the Royal parks for recreation in the fullest sense of the word. The LCC have also shown signs of enterprise in the parks in their charge. The photograph above shows the site of the new project in Regent's Park. the Cannound SINGL

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The Central Land Board have announced the arrangements affecting SINGLE PLOT OWNERS under the 1947 Town and Country Planning Act. Many people who bought plots of land at "building-site" prices before the Town and Country Planning Bill was introduced in January, 1947, have asked the Central Land Board if they will have to pay a develop-ment charge when they build. The Board now announce arrangements which affect private owners who owned single plots before January 7, 1947. They will be entitled, if they start to build a house on the plot for their own occupation on or before January 7, 1952, to a pay-ment from the £300,000.0000 fund equal to the development value in the land for the SINGLE PLOT OWNERS the development value in the land for the erection of a house. This should mean, in the absence of any marked change in market values, that the payment from the fund will broadly cover the development charge. the development charge. This payment will not be available until after the Scheme for payments has been made and approved by Parliament, but these owners will be able to set off their development charge against it. They must put in a claim for a payment before March 31 next, and the Board advise them to do so as soon as possible. These arrangements, which the as possible. Central Land Board are now authorized to make, give effect to statements made by Ministers in Parliament during the passage of the Bill.

A further announcement by the Board is to the effect that many people believe that if planning permission was obtained before July 1 (the "Appointed Day" under the Act), a charge is not payable for development begun after that date. This is not by itself a qualification for exemption. Land can only be certified as "ripe for development" (and therefore exempt from charge) if a building contract made within ten years before January 7, 1947, was in force on July 1, 1948, or if a by-law submission or a building application was made within the same ten-year period. Before development on such land is exempt from charge a ceruficate must be obtained from the Minister of Town and Country Planning. Application for such a certificate should be made before July 1, 1949, or within such extended period as the Minister may allow in any puticular case.

#### NEWS IN BRIEF

The death of Mr. Leonard Gray Ekins has been announced. From 1916 to September, 1942, Mr. Ekins, who was a Fellow of the RIBA, was chief architect to the Cooperative Wholesale Society, Ltd., and before coming to London worked in the Society's Newcastle office. Upon his retirement in 1942 he went to live at Hunstanton, Norfolk, where he became a councillor and chairman of the gas and water committee, and acting architect for the L'Etrange Arms Estate. He was responsible for a great variety of buildings for the CWS, among the most recent and important being the Society's new administrative offices in London and the flour mills at Royal Victoria Docks which is one of the largest flour milling projects in Britain. Mr. Ekins was born in 1877.

Mr. P. Elton Longmorehas been appointed by the Minister of Town and Country Planning to be a member of the Welwyn Garden City and Hatfield Development Corporation which was set up in June. Mr. Longmore was until recently clerk to Hertfordshire County Council.

## INCENTIVES IN THE BUILDING INDUSTRY

D ESPITE the reluctance with which employers and operatives came to an understanding on an incentives scheme for the building industry, the actual working of the scheme has so far been broadly satisfactory to both sides. There are, of course, four "sides" to an industry, if the Government and the public at large are included. It was the Government that forced the industry to accept an incentives scheme in 1941, and which pressed the employers' and operatives to agree a new scheme in 1948 (the war-time scheme having lapsed); as for the public, it will hardly be content until it sees that the new scheme has resulted in an effective, reduction in building costs.

The president of the NFBTE, in a recent statement, emphasised that the two main objects of an incentives scheme were the reduction of costs and the increase of production. On the whole, some increase of production seems to have been secured. This has been suggested by the results of a questionnaire to its members sent out by the NFBTE, but the results of the enquiry are not yet complete. (In view of the fate of so many of these questionnaire enquiries, it is to be hoped that the results will soon be published in some detail, whether they are complete or not.) Apart from the questionnaire, common knowledge and statistical results of building progress, especially of new housing, support the view that productivity has risen since its post-war slump. On the second point, reduction of costs, there is as yet no evidence to suggest that much has been accomplished.

The application of payment by results seems to be following in 1948 the same course as in 1942. This is not surprising ; though it is surprising that the industry is surprised by it. The old discovery is being made that there is a wide *range* of productivity as between gangs and between individual workers. Some make 25 per cent. or more over the standard rate of wages ; others hardly anything at all.

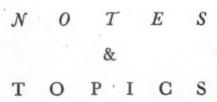
Payment by results in some cases leads to improved siteorganisation. This, too, was known before, and received detailed consideration in the official reports issued on the earlier It is, however, difficult to apply to mainteofficial scheme. nance and repair work-again, this was the common experience in the war. But the most significant point about payment by results, as it now works, is that the workers are welcoming it. Once they are accustomed to the principle of gaining extra payments with output, it will become embodied in the accepted ideas of the industry. It is a most valuable principle. It can only survive, however, in an age of full employment. The least sign of chronic unemployment among building workers would arouse all the old suspicions, and wipe out the enormous advantage won in persuading the operatives to see that they could gain from a system of high productivity. Thus, the present experiment can only succeed if building 152] THE ARCHITECTS' JOURNAL for August 12, 1948

unemployment is avoided, and if the "capital cuts" are not too ruthlessly applied.

The technical problems of applying payment by results can gradually be overcome so long as the employers and the operatives remain persuaded that their own interests are well served. The Federations are now concerning themselves with the application of the principle to maintenance and repair work, in which output is reported to be specially low. Any workable system for increasing productivity here would very shortly repay the cost of research and administration. At the same time, the mere extension of the principle would be valueless if the gains secured could not be consolidated. There must be a large programme of new works (apart from housing) where payment by results could be fairly easily adopted, and possibly the first endeavour should be to include this work, and the second effort only reserved for the difficult maintenance field. In the latter case, possibly something quite different from the measured work target needs to be adopted-some form of sub-contracting, organized however on a large scale. Payment by results is no panacea; it will not of itself obviate the need for a drastic overhaul of the structure of the industry; now it has come into being, the important thing is that it should be given a chance to prove itself over a reasonable period.



The Architects' Journal 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1 Phone : Whitehall 0611



LANDSCAPE IN THE NEWS

My congratulations to Brian Hackett (at one time editor of the AJ's Planning Supplements) on his appointment as Lecturer in Landscape at Durham University. His lectureship is the first of its kind in the country, and as Durham was also the first university in the Empire to have a degree course in town and country planning, it can claim (along with Liverpool) to be a real pioneer in this field. It is significant that in American universities there are already eight fully established chairs of landscape architecture, to say nothing of dozens of chairs of town-planning (of which Britain's Christopher Tunnard holds one), so this country has a long way to catch up. A beginning has now been made, however—and not only at Durham, but in London, too. London University is also to have a Lectureship in Landscape, starting in the autumn. The appointment has yet to be made.

The two lectureships have been made possible by funds provided jointly by ICI and the Associated Portland Cement Manufacturers. The funds will be administered by the Institute of Landscape Architects, whose efforts have largely been responsible for this new step forward. The Institute, though very young compared with other professional bodies, has made itself increasingly respected under the direction of its energetic president, Geoffrey Jellicoe. Its latest and most ambitious enterprise is this week's conference at County Hall, London; 110 landscape architects from 14 countries met and discussed landscape in relation to industry, housing, and so on, for four days. During the week-end they will

be touring Cambridge, the Cotswolds, Kent and the Thames Valley.

The exhibition at County Hall (which is open to the public) shows work from all the countries that have sent delegates. It has rather a scrappy look, perhaps because different ideas about what is a landscape architect. Belgium sends garden designs of the most conventional kind, while America sends air views illustrating city planning, impressive as pictures, but remarkable in most cases for the absence of green spaces of any kind—or that was my impression.

But there is plenty of interesting material, and the exhibition is valuable if only because it shows how urgent and various are the problems landscape architects have to face. Personally, I hope the Institute will soon turn its attention to wider issues than those of tree-planting round factories and the lay-out of municipal parks-wider even than the landscaping of the new towns. The whole face of Britain needs saving, and someone has got to do it-saving from the military, who plough it up with tanks, and the electrifiers, who tangle it up with wires, and not only with the object of protecting what is left of our old landscape from such attacks but of building up a new, live landscape tradition.

One subject I particularly recommend for their attention: the need for planting new forest trees. The latest townplanning legislation protects old buildings and controls the disposition of new ones, and there are now regulations to prevent the wholesale destruction of woodlands. But though the Forestry Commission's coniferous plantations are doing a lot to renew the supply of usable timber, it seems to be no one's responsibility to see that the trees in our hedgerows and spinneys are systematically replaced. We are now reaping the benefit of our grandparents' altruism and foresight, but what will our grandchildren think of ours?

#### DR. GIEDION TAKES COMMAND

Readers will have seen in last week's JOURNAL an announcement that Dr. Giedion of Zurich is visiting England

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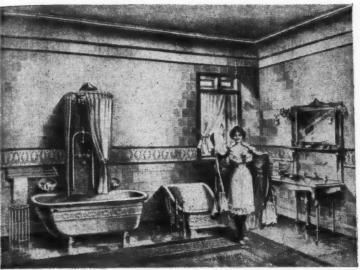
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An illustration from Sigfried Giedion's book Mechanization Takes Command. [See Astragal's note.] It shows an English bathroom of about 1901. Emerging from its nomadic and semi-nomadic phases the bathroom has become a permanent part of the well-to-do English household. It is a large windowed room, on which luxury is not spared. One such bathroom usually served the entire household. It is conceived as a room with furniture, not as a mere annexe to the bedroom.

next week and is to give a lecture on August 18 at the London School of Tropical Medicine. The lecture is being organized jointly by the MARS Group and the Institute of Contemporary Arts, whose inaugural exhibition of modern paintings in Oxford Street last winter is still talked about in art circles. Dr. Giedion is to speak on architecture in relation to the other arts, and is certain to attract a crowded house. Sir Leigh Ashton will be in the chair.

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It is a pity the English edition of Giedion's new book cannot be brought out in time to coincide with his visit. His earlier book, Space, Time and Architecture, has become a classic. Its sequel, which is called Mechanization Takes Command, published in America a few weeks ago by the Oxford University Press, is obviously destined to become a classic too, and in a much wider field than the architectural. It is a monumental work (760 pages, quarto), and discusses in a most illuminating way the impact of machines -and ideas about design and production deriving from machines-on all aspects of Western civilization.

The wide range of the book's material (and the wide range, incidentally, of Giedion's knowledge) is suggested by a glance through the contents pages.

From the six pages of chapter titles and sub-titles I pick out the following, more or less at random: "The Beginnings of the Assembly Line," "The Safe and Burglar-Proof Bank Locks," "The Rediscovery of Nature in the 18th Century," " The Middle West and Mechanized Agriculture," " Movability in Gothic Furniture," " Napoleon and the Devaluation of Symbols," " Posture in the 19th Century," "The Sleeping Car in Europe," "The Cast Iron Range," "The Mechanization of Meat Production," "The People's Bath in the 'Eighties."

#### HAIL, BORAX

Several new words have recently been added to the architect's vocabulary through the agency of The Architectural Review. Examples are Sharawaggi and The New Empiricism. A new one is likely to be Borax, which occurs in print, I imagine for the first time in England, in this month's number of the Review. An article by Edgar Kaufmann on the phenomenon of American stream-lining explains in a footnote that it is the trade term for "flashy, bulbous modernistic design."

Its correct use is well illustrated by the Review's quotations from the report of a discussion on industrial design recently held at the Museum of

Modern Art. Mr. Ray Patten (design director of GEC): "One person likes a borax job, another a simple one. Of course that depends on location, national or local; in Boston it is conservative; in Brooklyn it is borax." I prophesy that this useful word will be quickly taken up in this country. ASTRAGAL

## LETTERS

F. Moate, A.R.I.B.A. S. E. Cooper, A.R.I.B.A. Dex Harrison, A.R.I.B.A., A.M.P.T.I. R. Hardy, A.R.I.B.A. W. Crabtree, F.R.I.B.A. A. G. S. Fidler, A.R.I.B.A. N. J. Aslan, A.R.I.B.A.

#### Round the Table.

SIR,-Your recent "Round the Table" discussion on Public versus Private Practice

discussion on Public versus Private Practice omits an important point. We note Mr. de Syllas's outline of a pro-gressive climb up the ladder until the stage of County Architect is reached. The imof County Architect is reached. The im-portant point is, however, that there exists a stage in the public office beyond which less and less direct responsibility for the actual design and carrying out of work is accepted by the architect. Surely to design a building and control and direct its erection until it takes the form of his original con-ception is the arbition of the true archite until it takes the form of his original con-ception, is the ambition of the true archi-tect? But in actual fact, in many public offices more and more time has to be de-voted to the committee than to the drawing board, and if he wishes to devote his time to the drawing board and not to the com-mittee, our architect must rest content with a salary of about £800 per annum. There-fore it seems that he must sacrifice any im-provement in salary or status if he is to achieve what he believes to be his ambition achieve what he believes to be his ambition. Is not some form of group practice, run on co-operative lines, the means whereby the individual architect is best able to express himself?

#### Meriden

F. MOATE. S. E. COOPER

.

SIR,—The letter from the County Archi-tect for Bucks raises in an acute form a fundamental problem with which the archifundamental problem with which the says tectural profession must grapple. He says "the overall cost to the Council of the architectural work carried out in my depart-architectural work carried out in my depart-

architectural work carried out in my depart-ment is approximately half of what it would cost them in architects' fees if the work were put out." Claims of this sort are not infrequently made on behalf of such departments, and, if substantiated, then they imply that one section of the profession is undercutting the rest, and that, if the minimum scale of fees to which private architects must adhere is reasonable, then the salaries paid to archi-tects in official capacities are too low. Such a situation may well mean the complete liquidation of the private practitioner, and in the process the overall payment to archi-tects for their services may be very seriously tects for their services may be very seriously reduced—it may even be halved. This in turn may seriously impair the quality of architecture in that the best brains will tend to seek employment in other more lucrative work. Is it not already being urged that

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#### INTERNATIONAL LANDSCAPE ARCHITECTURE





An International Landscape Architecture Exhi-bition, sponsored by the Institute of Landscape Architects, is being held at County Hall, S.E.1 until August 21. (See AJ for June 24.) Examples of historic and modern landscape architecture are on show from fourteen countries. Top, a Swedish example: the Recreation Ground of the Chocolate Factory of Marabow, laid out by Sven A. Hermelin and Inger Wedborm. Centre, two photographs from the historical section showing views of the



gardens of the Villa Medici at Rome. Left, the vista from the portico showing the gardens in their present state; right, a seventeenth from their present state; right, a seventeenth century painting of the same part of the garden from the outside of the villa. Below, a modern American landscape: an aerial view from the west of Jones Beach Park on the South Shore of Long Island built in very his the Lore of Long Island, built in 1931 by the Long Island State Park Commission. This vast artificial layout may properly be called landscape engineering rather than landscape architecture.



the best brains are not going into salaried service?

Before we can take any effective action, however, we need to be quite sure as to what the costs of official departments, taken over a long period and bearing all proper overheads, actually work out to be, for did overheads, actually work out to be, for did not the County Architect for Kent, who employs private architects on some of his work, claim recently that it actually paid him to do so? It would not seem to be a very difficult undertaking to get a few inde-pendent audits of typical establishments, and this is a work that I feel should be put in head by our facture. in hand by our Institute. It is in the inter-ests of *all* architects that the whole issue should be investigated in an amicable and unembittered spirit. London.

DEX HARRISON.

I :

BY

A R

CO

SIR.—Mr. Maunder the County Architect of Bucks, in his letter published in your issue of July 29, defends an accusation that his department is run on uneconomical lines by the statement that the overall cost to the Council of architectural work is approxi-mately half of what it would cost in fees paid to outside architects. If this statement is correct, and Mr. Maunder must substan-tiate this by producing the necessary figures,

thate this by producing the necessary ngures, the fundamental reason for the rapid rise of architectural bureaucracy has at last been publicly exposed. As the proverbial Field Marshal's baton is in the knapsack of every British soldier, so the chance of a successful architectural career should be open to every architect. Each and every architect however, on guali-Each and every architect, however, on quali-fication, solemnly undertakes to abide by the Code of Professional Practice, of which

"An Architect must not attempt to supplant another Architect, nor must he compete with another Architect by means of a reduction in fees or by other inducement.

ment." The official architect cannot be accused of unprofessional conduct because he is in-structed by his employers to increase the executive staff of his department, in order to reduce the cost of outside professional fees; nor can the official architect be blamed for wiring the opportunity of his career. rees, hor can the official architect be blaned for seizing the opportunity of his career, whereby he has the chance of producing architecture without the financial commit-ments or the legal obligations of the private practitioner. The situation is rapidly de-veloping, however, whereby the official architect is supplanting the private architect by what is tantamount to a reduction of fees, and one is led to creaculate on how long it and one is led to speculate on how long it will be before other official bodies will dis-

will be before other official bodies will dis-cover the loophole whereby they can obtain "wholesale" architecture. Mr. Maunder's analogy hits hard at his less fortunate brother architects bound by the Scale of Professional Fees. It is very doubtful if any "official" office could com-pete either in efficiency or in the standard of architecture with the "private" office, working on the same terms and with the working on the same terms and with the same financial and professional freedom. Kew. R. HARDY.

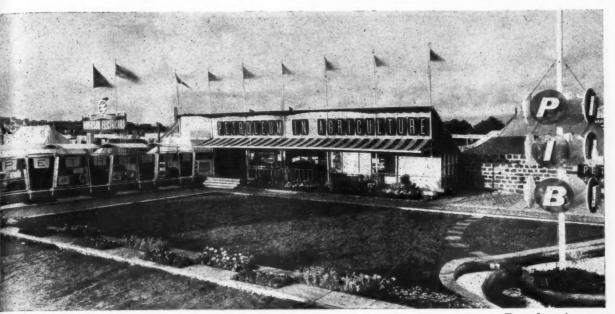
### Reilly Scholarship and Medal Fund

SIR.—The Committee of the "Reilly Scholarship & Medal Fund" would now like to close the Fund so that the Medal may be prepared and the Scholarship initiated. The Committee would, therefore, be grate-ful if old students and friends of Professor Sir Charles Reilly who have not yet sub-scribeal and would like to do so, would send their contributions as soon as possible to their contributions as soon as possible to the Hon. Secretary, A. G. S. Fidler, 19, Ailsa Road, St. Margarets, Twickenham.

W. CRABTREE A. G. S. FIDLER N. J. ASLAN (Chairman)

London

THE ARCHITECTS' JOURNAL for August 12, 1948 [155



From the main avenue

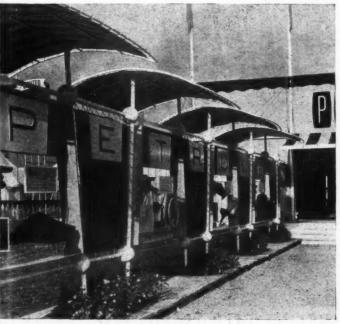
## TWO EXHIBITION STANDS I: AT ROYAL AGRICULTURAL SHOW, YORK

BY DESIGN RESEARCH UNIT

[A R C H I T E C T: BRIAN PEAKE

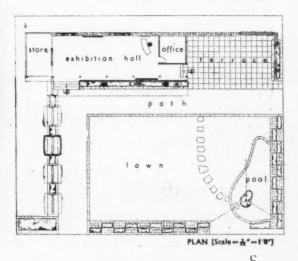
CONSULTANT: MISHA BLACK]

Below, the entrance



T do

GENERAL.—The main requirement was to provide a centre at which farmers interested in the use of petroleum in agriculture could obtain information and discuss problems. The site of 100 ft. by 80 ft. faced the main avenue, with a secondary frontage on a subsidiary avenue. Standard sizes of tent structural members were incorporated in the design. Canvas colours were : gable ends, chocolate brown; fascia, pale green; blinds, chocolate and buff stripes; laced awnings in pale green and white stripes. The main lettering is in lime green on dark blue panels.



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Above: the exhibition hall Below: the stand and the terrace

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STAND AT ROYAL AGRICULTURAL SHOW, YORK



From the north

#### STAND AT ROYAL AGRICULTURAL SHOW, LINCOLN 2:

### BY DESIGN RESEARCH UNIT

ace

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[ARCHITECT : BRIAN PEAKE CONSULTANTS: MISHA BLACK, STIRLINC CRAIG]

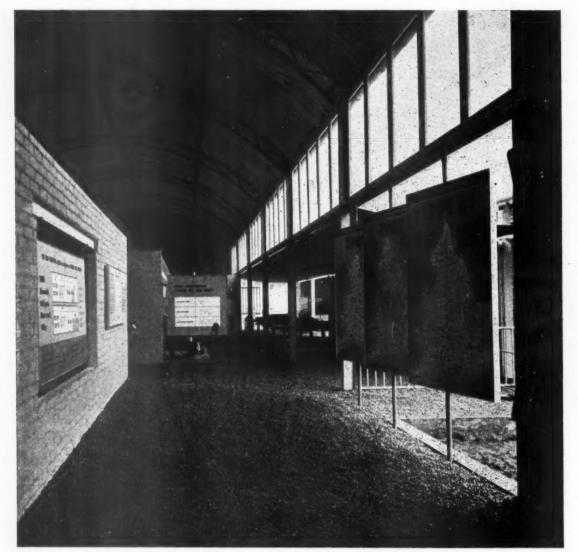
This stand was designed to show the work of the Milk Marketing Board. The laboratory was in full use during the show. The building was a standard steel dutch barn with timber clerestory windows, with end walls and roof in corrugated iron. The floors

were precast concrete paving or granite chips. The dairy and laboratory, behind the main building, were of standard precast concrete posts with concrete block walls. The roof was of corrugated asbestos with perspex panels.



BOILER STERI MILK ORE OBBY ABORATO MILKIN PARLOUR QUALITY MILK PRODUCTION ARTIFICIAL INSEMINATION TRANSPOR ECHANICAL ACCOUNT MAIN AVENUE PLAN [Scale #"-1'0"]

The transport section



Above : looking towards the dairy machinery section from the artificial insemination section. Below : from the south east.



Top one count part hall, the Left Reg

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## B.E.A. BOOKING OFFICE AT DORLAND HALL REGENT STREET

### DESIGNED BY A. F. WATSON

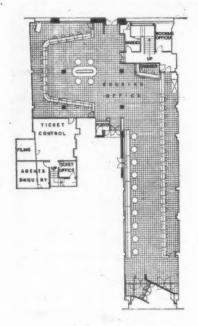
Top left, the rear of one of the booking counters. Centre left, part of the booking hall. Above right, the display window. Left, the elevation to Regent Street.

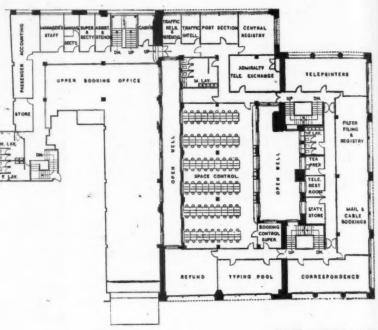


GENERAL.—The problem was to provide in the centre of London within a period of four months a complete booking organisation for British European Airways Internal and Overseas Traffic Department. The plan provides a large booking hall with public enquiry counters, capable of being staffed by 35 clerks and handling up to 4,000 enquiries a day, it also provides booking facilities by 'phone, mail and agents, and with teleprinter link-up to airports and capitals throughout Europe.

SITE.—Dorland Hall was chosen as the only suitable site available in the central London area, capable of being modified and adjusted to suit these special requirements.

PLAN.—The lay-out of the hall was chosen to provide the maximum length of counter available under the existing site conditions





GROUND FLOOR PLAN [Scale : 4"=1'0"]

and to allow easy access to 35 booking clerks working at one time if required, with cashier facilities, public telephones and general enquiries all in the same area. The clear vision through the entrance was made to give an inviting appearance to the public, and the shop front was evolved with an asymmetrical entrance to overcome the difficulty of the centre line of the hall being offset to the centre line of the external stone reveals by a matter of more than 2 ft. The present elevation

Below, the main booking hall.



BEA

BOOKING C

OFFICE

is a temporary measure and will be

modified after a period, when it is

hoped labour and materials will

allow for a more permanent front.

CONSTRUCTION .- In order to

eliminate the undesirable existing

conditions of having two steps

separating the rear and the front

parts of the hall, which, in turn,

would necessitate the counter level

being at varying heights, the whole

of the floor of the main hall was

raised by the use of precast foam-

slag slabs to a height of approxi-

FIRST FLOOR PLAN

mately 12 in. The sub-division of the mezzanine for use as offices was governed by the lack of space and the necessity to accommodate a large number of office staff and for this reason laminated plastic partitions were used extensively on the mezzanine balcony in order to economise in timber, and at the same time providing units capable of being re-used as partitions elsewhere.

ELEVATIONAL TREATMENT. -The treatment of the elevation to the main entrance was controlled largely by the existence of heavy steel sections at inconvenient heights supporting a canopy erected pre-war which it was found impossible to alter under present circumstances. The main fascia, therefore, was designed in fibrous plaster and wholly supported from above, thereby screening the beams and providing suitable advertising space both internal and external. The door frames, shop window, and glass screens, were manufactured in imported oak, glazing to the front being in  $\frac{1}{4}$  in. polished plate glass bedded in wash leather.

INTERNAL FINISH.—Shortage of time and building difficulties prevented any attempt at redesigning the internal wall faces in the hall to provide flush finished wall faces, existing conditions being the result of numerous

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Above: the space control office ; below: the telephone booths, which are backed with acoustic board

alterations and variations carried out under previous owner-ships, and the heating system being by panel heaters seriously curtailed any attempt at unifying the wall treatment.

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The Board of Directors commissioned Miss Primrose Harley to paint murals embodying scenes of the temperate Mediterranean and tropical climates on the one side and large maps depicting routes operated by British Airways on the other. The floor of the main booking hall was surfaced with 12 in. by 12 in. by # in. tongued and grooved high density cork tiles finished in a warm brown. The whole of the counter was manufactured in laminated plastic, veneered in a natural chestnut with extruded polished aluminium facing strips. The space control room on the mezzanine floor, which is the centre of the whole booking system, was provided with specially constructed furniture to accommodate 108 operatives, this being split up into 27 ft. 0 in. long unit desks with 18 operatives facing each other about a central track on which is mounted movable ledger trolleys. These desks incorporated many intricate features necessitated by the requirements of the G.P.O. and Standard Telephones in providing telephone services to so many, each operative being capable of answering any of nine incoming calls per position. All wiring, distribution and indicator panels are concealed in specially designed ducts easily accessible for maintenance. As 90 per cent. of the operatives in this room might be using the telephone simultaneously the whole of the ceiling has been treated with sprayed asbestos in order to minimise the noise factor.

SERVICES. - Lifts, heating, ventilation plant, and hot water services are part of the original building and have not been modified in any way.

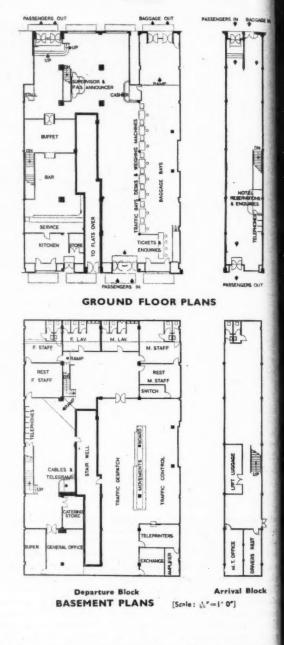
The general contractors were Cubitt Group Co-ordinated Ser-vices Section. The furniture was made by Heals Contracts Ltd. For list of sub-contractors, see page 167.



STREET: DESIGNED BY

A: F. WATSON





Top: the elevation to Kensington High Street ; above: the luggage weighing and cashier's office

## AIR STATION IN KENSINGTON

*F* .

BY A.

GENERAL.—This station deals with passengers to and from all parts of Europe. There are two separate premises on the ground floor of an existing block of flats in Kensington High Street, one for departures, advance booking and baggage handling, with a buffet and waiting room for 1,000 passengers per hour. The other is for the reception of arriving passengers, with luggage depository, and hotel booking and enquiry office.

B.E.A.

SITE.—The site has an access road at the rear and facilities near for parking coaches, both essential for the smooth flow of passenger traffic.

PLAN.—This was largely dictated by the existing building. The complete separation, but close proximity of, departure and arrival offices was essential.

INTERNAL FINISH.—All wall and ceiling surfaces are finished in matt oil paint. Floors are of bitumastic cement tiles. Balustradings to staircases, counters and desks are in 1-in. laminated plastic with a special chestnut veneer. Cork has been used for desk tops.

WATSON

SERVICES.—Water heating is by electricity. The basement is heated by means of unit heaters placed within the air-conditioning plant. This plant, together with heat units, are housed in the casings forming part of the elevational treatment. The general contractors were Holloway Brothers. For list. of sub-contractors see page 167.

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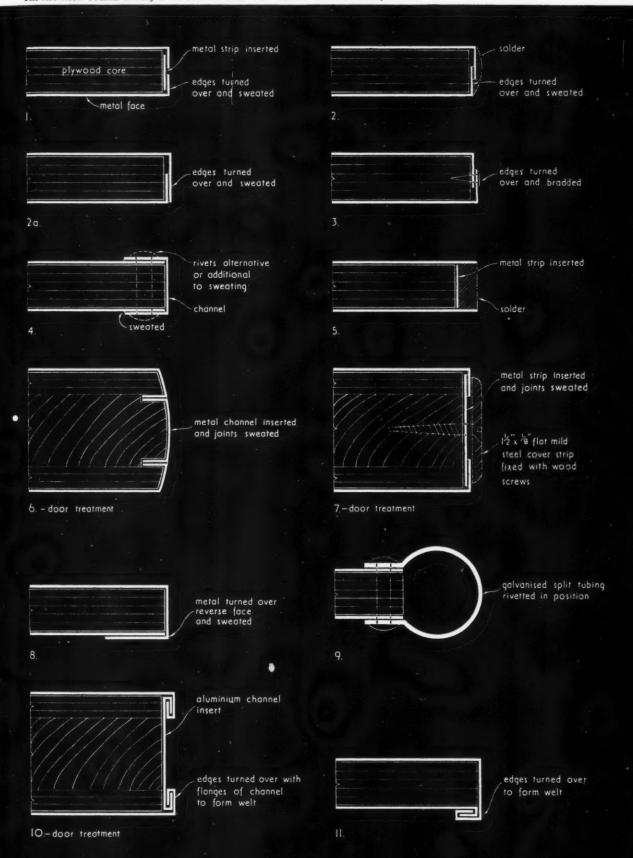




Architects' Journal 12.8.48

#### SHEET MATERIALS METAL-FACED PLYWOOD

The Architects' Journal Library of Information Sheets 91. Editor: Cotterell Butler, A.R.I.B.A.



FLEXOMETAL STANDARD TYPES OF SEALED EDGES: CLASSIFIED ACCORDING TO MANUFACTURER'S TYPE NUMBERS. Manufacturer: Flexo Plywood Industries Ltd.

#### **15.Z1 FLEXOMETAL: STANDARD TYPES OF SEALED EDGES**

This Sheet describes Flexometal (metal-faced plywood) and illustrates standard types of edge finish for doors and free-standing panels. Sheet 15.Z2 gives examples of panel jointing and built-up sections.

#### Material

The material consists of a plywood core with thin sheets of metal cemented to one or both faces with a special adhesive under hydraulic pressure. Metal facings available include galvanised steel, aluminium, copper, bronze (gilding metal), stainless steel, monel metal, anodised aluminium, zinc, brass, lead and tinned copper.

#### Weights

The standard weights of panels available for different metal faces are given in the following table. Thicknesses available range from  $\frac{1}{8}$  in. to 1 in. Panels over 1 in. thick can be made to suit requirements. Unlimited areas may be obtained in any metal facing by the use of welted and sweated joints.

	Weight per sq. ft. (lb.)					
Overall thickness	Galvani: fac	sed steel	Aluminium facings			
	Single sided	Double sided	Single sided	Double sided		
3mm. (‡in. nom.) 4mm. ( ½in. nom.)	1.08 1.16	1.70 1.79	0.66 0.74	0·86 0·95		
6mm. (lin. nom.)	1.47	2.09	1.05	1.26		

#### **Thermal Conductivity**

The thermal conductivity of Flexometal is almost the same as that of wood.  $\pm in$ . Flexometal has 2,000

times the thermal insulation value of 22 gauge mild steel.

Although the conductivity of the metal facings is high the fact that the greater proportion of the material is timber and is protected from moisture ensures its maintaining a maximum resistance.

For comparative purposes the thermal conductivity of mild steel is 348'36, and timber 1.0 B.Th.U. per sq. ft. per hour per deg. F. difference per inch thickness.

#### **Stiffness Factor**

The stiffness factor (EI) of  $\frac{1}{2}$  in. Flexometal with galvanised steel on both faces is 14,000.

#### **Edge Finishes**

The illustrations show standard edge finishes for double-sided Flexometal. With single-sided Flexometal the metal is left overhanging and folded over  $\frac{1}{4}$  in. on to the back.

#### Finish

Steel facings are zinc-coated to resist rusting and the zinc coating is treated to hold paint. Other metals are matt or bright polished.

Compiled from information supplied by :

#### Flexo Plywood Industries Ltd.

Address :	Flexo Works, S. Chingford, London, E.4.
Telephone :	Silverthorn 2666 (8 lines).
Telegrams :	Flexoply, Phone, London.

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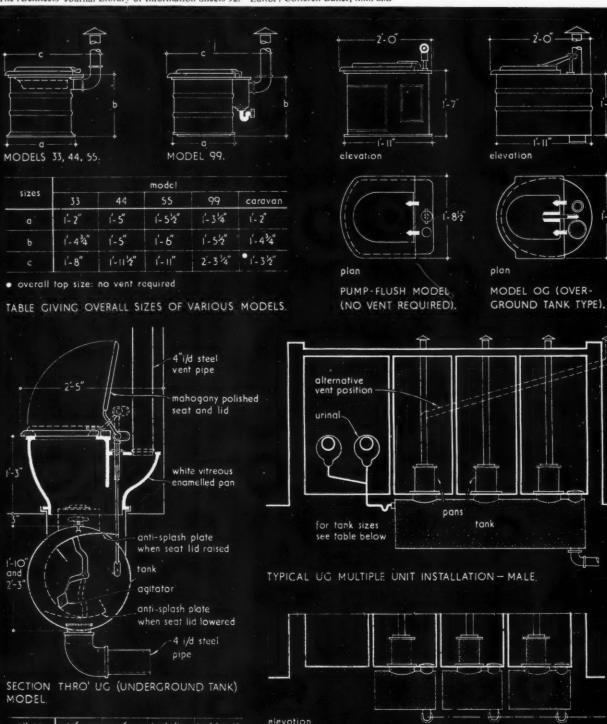




#### Architects' Journal 12.8.48

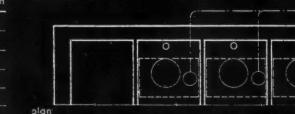
#### SANITATION EQUIPMENT CHEMICAL CLOSETS

The Architects' Journal Library of Information Sheets 92. Editor: Cotterell Butler, A.R.I B.A.



unit no. no of pans crs. of pans tank dia. tank length UG 30 1-10 2'-11" 1 UG 60 2'-3" 2'-11" UG 100 2'-3" 4'-3" 3'-0" UG 130 2'-3" 6-0" 2 UG 200 3-0" 2'-3" 9-0" 3

SIZES OF STANDARD UG TANKS.



TYPICAL UG SINGLE UNIT INSTALLATION - FEMALE

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33.QI

ELSAN CHEMICAL CLOSETS.

#### 33.Q1 · ELSAN · CHEMICAL CLOSETS

This Sheet describes Elsan chemical closets. The closets are designed for use where no main drainage system is available. The sewage is resolved by a chemical process (involving the addition of Elsanol or Elkol) into a harmless odourless effluent which requires disposal only when the container is filled.

#### Models 55, 44, 33

These are portable open container types consisting of ventilation chamber, sewage container, urinal guard, ventilation piping, seat and lid. Models 55 and 44 are for general convenience suitable for the average small family, model 33 is for the smaller family in cottage, weekend bungalow, etc.

Operation: The sewage container is charged with one gallon of water and one pint of Elsanol chemical, no further attention being necessary until the sewage container is full.

Capacity and service life: 55-6 gal., guaranteed service life 10 years; 44-6 gal., guaranteed service life 5 years; 33-5 gal., guaranteed service life 2 years. Construction : All steel with Bakelite seat and lid.

Disposal: The container is removed and emptied approximately every two to three weeks, according to the number of users.

Finish: All metal parts Bonderised. Seat and lid black Bakelite with chromium-plated fittings.

55-Outer casing, ventilation piping and urinal guard stove enamelled eau-de-nil. Sewage container double process vitreous enamelled.

44—Outer casing ventilation piping and urinal guard stove enamelled green. Sewage container vitreous enamelled.

33-Outer casing and ventilation piping enamelled olive green. Sewage container and urinal guard galvanised.

#### Model 99

This is a fixed open container type with overflow system for use in sports clubs, factories, camps, etc., where a large number of persons have to be catered for and where the main use is for urinal purposes.

Operation, capacity and service life: Operation as model 55. The container has a capacity of 6 gallons and a guaranteed service life of five years.

Construction: All steel with timber seat and lid. Disposal: A 1-in. internal diameter pipe connected to the outlet trap will automatically carry away the liquid waste either to a separate container placed outside the building or to a soakaway. Occasional manual emptying of inner container is also necessary. Finish: All metal parts Bonderised. Outer casing and ventilation piping enamelled Swedish green. Sewage container galvanised. Seat and lid timber polished mahogany finish.

#### **Caravan** Model

This is a similar design to the portable open container types but needs no ventilation piping and is in addition fitted with an anti-spill plate. Lugs fitted at the base allow for fixing to the floor. Finished in enamelled Swedish green with gold bands. Suitable for caravan, trailer, or water craft.

#### Flush-Pump Model

This portable self-contained type consists of outer casing (with opening front), bowl, sewage container, pump, seat and lid. It is for general convenience, suitable for the average family.

Operation: The sewage container is charged with gallon of water and 1 pint of Elsanol chemical. The tank is charged with 3½ gallons of water and ‡ pint of Elsanol No. 2.

Construction : All steel with timber seat and lid. Disposal: After use the pump handle is operated flushing the bowl with the No. 2 solution. A hinged plate at the bottom of the bowl is automatically depressed, discharging the contents into the container. Finish: All metal parts Bonderised. Outer casing enamelled eau-de-nil, sewage container vitreous enamelled, pump chromium plated, seat and lid timber mahogany polished.

#### UG Model (Underground)

This is a permanent self-contained self-emptying sanitary system consisting of one or more pans, together with an underground sewage tank. It is available with tanks of various capacities as shown in the following table.

Special tanks are made to suit individual requirements.

		No. of Users for				
Model	Bowis	Homes	Schools	Factories	Camp	
UG 30 UG 60	1 1	3-4 4-5	8-10 10-15	6-8 8-12	3-6 6-9 10-13	
UG 100 .	: 12	5-6	15-20 20-30 30-40	12-16 18-24 24-32	10-15 15-20 22-30	

The table is approximate and based on the capacity of the tanks which require emptying about every three to four months in normal daily use.

Operation: The underground tank is charged with a solution of Elkol chemical amounting in the case of type UG 30 to one 10-lb. charge in 6 gallons of water. Construction : All steel with timber seat and lid.

Disposal: The outlet valve is periodically opened and the contents run into a soakaway pit.

Finish: The bowl is of white vitreous enamelled steel, the ventilation piping being finished in green enamel; seat and lid timber mahogany polished.

#### OG Model (Overground)

This model is similar in principle to the UG model except that no tank is fitted, the sewage container being integral with the appliance. This enables it to be fitted on upper floors.

Soakaway Dimensions for UG and OG Models

	Dimensions of soakaway			
Model	Length	Depth	Width	
OG (Overground)	 3 ft.	2 ft.	2 12.	
UG 30 (Underground)	 3 ft.	3 ft.	3 ft. 6 in	
UG 60	 3 ft.	4 ft.	4 ft.	
UG 100	 4 ft.	4 ft.	5 ft.	
UG 130	 4 ft.	5 ft.	5 ft.	
UG 200 ,,	 6 ft.	5 ft.	5 ft. 6 in	

Compiled from information supplied by :

Elsan Manufacturing Company.

Address : 51, Clapham Road, London, S.W.9. Telephone : Reliance 2801.

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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, but the extracts given are in the speaker's own words.

## ILA Ferdinand Duprat

August 9. A report presented by M. Ferdinand Duprat, Chairman of the French Society of Landscape Architecture, at the International Conference on Landscape Architecture. Evolu-TION OF THE LANDSCAPE.

Ferdinand Duprat: We are Ferdinand Duprat: we are living in troubled, economically unstable, and pre-carious times. Now, the Art of Gardening has only shone forth in splendour in times of wealth and prosperity, which mark the perith of civilizations. has only shone forth in splendour in turnes of wealth and prosperity, which mark the zenith of civilizations. Without going as far back as antiquity for evidence of this, we can establish in Europe itself that the gardens which stimulate our admiration are, first and foremost, in chronological order, first and foremost in chronological order, those from the 13th to the 15th century in Spain, those of the 16th century in Italy, and those of the 17th century in France. All of these gardens were regular and con-All of these gardens were regular and con-formed with characteristics and require-ments peculiar to method, hierarchy, and discipline. They were at their height in France under Louis XIV with Le Notre, particularly in Versailles, where they ad-mitted of five thousand people walking round them every day. Already sacrifices were being made, and with what genius, to social obligations.

In England, however, under the influence of Milton, then with Kent, Brown, and Repton in the 18th century, the taste for liberty reveals itself in the creation of natural scenes which characterize what we term English gardens. The natural land-scape, favoured by the climate of Great Britain, was skilfully handled by the great landscape architects of this country, who during the 18th and 19th centuries gave Europe the example for the layout of parks and gardene. If the that time these parks and gardens. Up to that time, these parks and these gardens were private and reserved for the pleasure of kings and lords. It was only in the 19th century that democracy placed the royal gardens entirely at the dis-posal of the public, and undertook the con-version of free spaces into landscape or

natural gardens which were more suitable for the pleasure of the people taken collec-tively. This industrial century saw the birth, to the benefit of the workers, of the city-garden at one and the same time in England (Saltaire, Port Sunlight, Bourne-ville) and in France (Le Vésinet).

#### PRESENT-DAY GARDENS, 1940-1950

The last world war aggravated the depression from which our art has been suffering since 1930. During hostilities gardening of course was out of the question, apart from the field of intellectual speculation. One may in addition say that in this order of ideas the war is still continuing. Rationing of every kind, the shortage of materials, and more serious preoccupations bring it about that gardening, like many other things in general, is still in a deep sleep. It seems that the large estate has gone for good. Yet a few persons favoured by fortune-among them some wealthy foreigners-still keep sumptuous gardens, on the Côte d'Azur for example. But the ever-increasing fiscal dues on what the State regards as a luxury, the cost of labour, social costs, and the high the cost of labour, social costs, and the high cost of manufactures and equipment pre-vent the majority of proprietors from en-visaging such expenses. On the other hand, the extension of social relations and the multiplication of travelling promote an increase in collective gardens: hotel gardens, spas, bathing and health resorts. At last the residential towns, whether commercial or industrial, seem to be preoccupied with the utilization of their green spaces. The private garden now becomes the small family urban, suburban, or rural garden, and especially the week-end garden which receives the attention of the towns-man on Sundays and on a few days during

man on Sundays and on a few days during his vacation. These very small enclosures seem to offer little scope for the activity of landscape architects, as their owners, of mediocre means and insufficiently informed, appeal more easily to the limited means of some gardener or other than to a specialist who always makes an impression on them once they know of his existence. But it seems that once economic circumstances are more favourable, numerous groups of people will no doubt call on us for the creation of gardens answering new requirements. It is especially these who are of interest to us, as they represent the future.

#### FUTURE PROSPECTS

FUTURE PROSPECTS The fashion seems to be developing towards pseudo-natural scenes, with a pool of water for water plants, ferns and borders of perennials, which give less trouble and are easy to look after, while pavements and Japanese paths are replacing gravelled walks and terraces. Composition, where it exists, is asymmetrical, this more supple form admitting of a maximum exploitation of the small surfaces. In short, every means is being sought to reduce the cost of mainof the small surfaces. In short, every means is being sought to reduce the cost of main-tenance. Building architecture will cer-tainly maintain its influence on external decoration. Modern buildings with bare surfaces and monotonous facades will be tempered by the varied silhouettes of plants

whose natural beauty is unchangeable. It might be that large estates are halting their disappearance, or at any rate are modifying their function, for economically they cannot be brought back to life. Certainly, cannot be brought back to life. Certainly, some will subsist as historical monuments: Versailles, Champs, Vaux-le-Vicomte, Chan-tilly, Rambouillet. Villandry; but many will be and shall have to be transformed and adapted to their new functions. Pur-chased by public authorities, syndicates, co-operatives, social services of all kinds, they will become preventoria, sanatoria, popular holiday homes, retirement homes popular holiday homes, retirement homes, schools, hotels, and research stations. It is believed that the best to be wished for with a view to preserving in them a maximum of character and beauty, would be to transform them in an intelligent manner so as to adapt them to the new requirements which they will have to meet, without thereby degrading them.

It appears to us that the problem put to landscape architects, in the years to come, will be the very immense question of colwith oc the very immense question of col-lective green spaces, a very important part of town-planning, which will need to be given careful consideration if we wish to prevent our reconstruction from being un-inhabitable. It is therefore a question of the safeguarding of natural wealth, to which are related the development of touring and the improvement of rural districts. Touring is taking a more and more impor-Touring is taking a more and more important place in our customs. Holidays with pay encourage a mass exodus covering seven or eight months of the year, if one takes into account—as one must—the winter sports. account as one must use while sports. In a parallel way the means of transport are developing. It is really a question of the servicing of the country. And in this connection a National Board and county committees have just been created in France for the restortion of size and landscopes for the protection of sites and landscapes. First of all, therefore, the protection of existing green preserves, and then their care. This latter work will be able to be under-taken within the framework of large works of a general interest, such as the creation of electricity producing dams, the construction of motor roads, the organization of the seafront, the development of airports, etc. The American example of the maintenance of the valley of Tennessee or of the Alaska road is there to encourage public authorities to unite economically the useful and the pleasant.

It will be appropriate to attribute great importance to the distribution of verdure in towns. The trees of the avenues, giving beauty and repose to the eyes, com-pensate partly for the rare occurrence of large isolated parks among the masses of mournful, black buildings. Don't let us ever forget that the trees, the lawns, and the flowers are indispensable to our physical health, that the æsthetic quality of the milieu in which individuals live contributes to their good upbringing, and in conse-quence to their happiness. To this end, the plans of future towns should be not to put gardens in the town, but rather to put the town in a garden. It is the duty of land-scape architects to relieve and to assert the character of our epoch by adapting the art of gardening to new requirements. It will be appropriate to attribute great mportance to the distribution of verdure

#### Report Law

Court of Appeal, July 19. Before Lord Justice Scott, Lord Justice Asquith and Mr. Justice Jenkins. The Court held that a building licence must be a written document, and that an oral licence given over the telephone by an officer of a local authority was invalid. Mr. Justice Jenkins dissented. Lord Justice Scott, in the course of his judgment, criticized the system by which the judgment, criticized the system by which the Ministry of Works, through the Ministry of Health, employed officers of local authorities to issue building licences. Al-though the system was convenient and practical it was open to criticism because of both its secrecy and its doubtful legality. MOH and MOW had circulated instructions about the issue of licences to local authori-ties, but the public had no right of access ties, but the public had no right of access to these documents. As to the legality of the system the instructions to local authorities contained sub-delegated legislation in two respects: the instructions were elabor-ated and authority to use discretionary powers in the issue of licences was delegated to the local authorities. Regulation 56A of the Defence (General) Regulations, 1939, had entrusted those functions to the Minister of Works and to no other authority. The regulation authorized the Minister of Works to choose his own servants for the detailed tasks involved in the issue of licences, but it did not authorize him to transfer his function either to the Minister of Health or to the local authorities: delegatus non potest delegare.

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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 enly, to allow readers to cut out the items for filing and paste them up in classified order. Headings below.

### INFORMATION CENTRE

I SOCIOLOGY. 2 PLANNING : General. 3 PLAN-NING : Regional and National. 4 PLANNING : Urban and Rural. 5 PLANNING : Public Utilities. 6 PLAN-NING : Social and Recreational. 7 PRACTICE. 8 SURVEYING, SPECIFICATION. 9 DESIGN : General. 10 DESIGN : Building Types. 11 MATERIALS : General. 12 MATERIALS : MATERIALS : Imber-14 MATERIALS : Concrese. 15 MATERIALS : Applied Rnibhes, Treatments. 16 MATERIALS : Miscilanaous. 17 CONSTRUCTION : General. 18 CONSTRUCTION : Theory. 19 CONSTRUCTION : Details. 20 COM-STRUCTION : Complete Structures. 21 CONSTRUC-TION : Miscollanaous. 22 SOUND INSULATION, ACOUSTICS. 23 HEATING. VENTILATION. 24 LIGHT-ING. 25 WATER SUPPLY, SANITATION 26 SERVICES, EQUIPMENT : Miscilanaous. 27 FURNITURE, FT-TINGS. 28 MISCELLANEOUS.

#### ADDENDA

This is the first of three issues to be devoted to the inclusion, in brief, of Information Centre items previously omitted owing to shortage of space.

#### 1.7 sociology

#### HOUSING : SOCIOLOGICAL RESEARCH

Housing as a Field of Sociological Research. L. Wirth. (American Sociological Review, Apr., 1947, pp. 137-143.)

Paper discussing three selected approaches to analysis of housing problem from sociological point of view. General outline of those aspects of sociological housing research which have not received sufficiently detailed attention so far. Concise and clear statement based on experience in America but relevant in other countries as well.

#### 1.8 sociology HOUSING : SOCIOLOGICAL RESEARCH

New Methods of Sociological Research on Housing Problems. F. Stuart Chapin. (American Sociological Review, Apr., 1947, pp. 143-149.)

Paper describing in detail two methods of surveying sociological aspects of housing. (1) Observational studies using questionnaire methods and sociometric scales to obtain quantitative records of observation. (2) Observational studies under conditions of control using a projected experimental design and an *ex post facto* experimental design. Scientific compilation of important

research data of value in relation to housing survey technique, giving critical comments on limitations of methods.

#### 2.47 planning : general

#### LEGISLATION AND ADMINISTRATION

Town and Country Planning. Reference Division. (Central Office of Information, London, No. R.7062, May, 1946.)

Development of control of land use since 1909. Description of problems facing successive Governments and of measures taken in regard to distribution of industry, protection of agricultural land, and preservation of amenities in both town and countryside. Most valuable source of factual information.

#### 2.48 planning: general URBAN FIELDS: DELIMITATION

The Analysis and Delimitation of Urban Fields. A. E. Smailes. (Geography, Dec., 1947, pp. 151-161.)

Valuable contribution to important aspect of planning survey technique, discussing geographical and social interdependence of town and surrounding area and drawing attention to problem of determining as precisely as possible nature and extent of urban fields, *i.e.*, territory functionally linked with town.

#### 2.49 planning: general

#### MAPPING TECHNIQUE: GERMANY

The Stadtplaene (Town Plans). A.J.M. (British Zone Review, Mar. 20, 1948, p. 16.) Interesting article depicting new patent method of producing maps of town plans, invented by German engineer. Illustrated.

#### 4.38 planning: urban and rural

NEW TOWN IN BRAZIL

Brazil Builds a New City: Citade Dos Motores. P. Lester Wiener & J. L. Sert, Town Planners, and O. Da Rocha E Silva, Architect. (Progressive Architecture: Pencil Points [USA], Sept., 1946, pp. 52-74, and Architectural Design and Construction, Dec., 1946, pp. 323-334.)

New town utilizing experiences in scientific planning and aiming at creating physical and spiritual background to modern Brazilian way of living. Fully illustrated and detailed review of city plan.

#### 5.23p la nning: public utilities ROAD TRANSPORT: SWEDEN

Report of the British Road Federation Delegation to Sweden. (British Road Federation, Nov., 1946.)

Study report on modern methods of road layout and design in Sweden. Important and informative document showing where

Swedish road development is in advance of British development.

#### 10.34 design: building type HOUSING : GENERAL

Housing and the Outline Plan. T. T. Hewitson. (The Planning Officer, J. Town Planning Officers' Section of the Town Planning Institute, Dec., 1947, pp. 88-95.) Paper discussing housing in relation to town planning, confined to general outline of developments only.

#### 10.35 design : building types REBUILDING BLIGHTED CITY AREA

Stuyvesant Town. (Eng. News-Record [USA], Feb. 5, 1948, pp. 185-208.) Series of eight articles describing various aspects of the redevelopment of a New York City slum.

#### 11.8 materials, general BRICKWORK : THERMAL PROPERTIES

Thermal Properties of Brickwork. (British Clayworker, Feb., 1947, 47 pp., 214-215.) General discussion on the thermal insulation of walls with special reference to the properties of brickwork in this respect.

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

#### QUESTIONS AND ANSWERS

#### 2954 BASIC PRICES

Q I would appreciate your opinion on just how binding is the Basic Price Schedule incorporated in the RIBA Form of Contract for the use of Local Authorities (Revised 1947).

In the particular contract I have in mind, the contractor submitted in his basic price list a price for bricks which, it is now discovered, was below the market price at the time of tender for the bricks specified in the bill of quantities and was, probably, for an inferior grade of brick to that specified. The contractor has been instructed to use the bricks specified, and the question now arises as to whether the contractor is entitled to be paid the extra cost for supplying the bricks specified or should he bear the cost? The crux of the matter really is this. If the basic price list includes materials of an inferior or superior grade or quality to those specified in the bill of quantities and this fact is not discovered until after the contract is signed, who has to bear the difference in cost when the architect insists upon the materials as specified being used—the employer or the contractor?

A In our opinion the basic price inserted by the contractor under clause 25A of the RIBA Contract is for the specified bricks, and the contractor must supply those bricks and cannot substitute an inferior brick. The tender having been accepted with the basic prices, they have, in our opinion, become part of the contract, and are subject to adjustment as provided in clause 25A. In the event of dispute the matter would go to arbitration under the contract. 45 YEARS PERSONAL EXPERIENCE OF THE FLOORING TRADE

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To Whom it may concern.

Dear Sir(s),

#### SCHOOLS-WOOD BLOCK FLOORING.

Hitherto the Ministry of Education, owing to their comparatively small allocation of hardwoods, have been able to authorize the use of hardwood block or strip floorings only for Assembly Halls, using other types of flooring for classrooms. Inasmuch as, in our opinion, the only really serviceable and hard-wearing floor suitable for classrooms is a wood block floor, and having been able to secure a fairly large quantity of reclaimed hardwoods and slabs and off cuts (which Timber Control agrees as outside allocation), we have pointed out to the Ministry that this material is available for their use. The Department has now agreed to withdraw the ban on the use of hardwood block flooring for classrooms, and circulars to this effect have been issued to Local Authorities. We invite enquiries for these floors from the Home Counties and the South and orders will be accepted and executed in rotation until supplies are exhausted. The thickness of the hardwoods referred to in either strip or block is 1 inch nominal, finishing # inch.

Blocks manufactured from reclaimed hardwoods can also be laid in Buildings other than Schools. Timber Control (Consumers) licenses are readily granted and we can assist in this respect.

Should you have wooden floors that are badly worn, we can clean off, reface and wax-polish, using electrically- or petrol-driven surfacing machines.

Hitherto we have not tendered for composition floorings, as we did not consider the synthetic magnesite (manufactured from sea-water) suitable for this class of flooring. Now, however, that we can obtain the genuine imported mineral magnesite, we are able to give the 100 per cent. guarantee that clients are entitled to, and shall be happy to submit quotations for this type of flooring. It is obtainable in red, brown and/or buff.

Yours faithfully,

The Philip Flooring Company.

oPhilip.

(For 39 years connected with Messrs. Jos. F. Ebner, Ltd.)

P.S. HOUSING. We have been fortunate enough to secure a large parcel of reclaimed softwood from which we have manufactured some thousands of yards of and above the statutory I.6 standards of softwood. per house, and we have the permission of the Ministry of Health to lay such floors. We shall be glad to submit quotations for these floorings laid complete and orders will be executed in rotation until the materials are exhausted.



**T**ODAY in Britain at their Tynemouth factory, De La Rue's are producing FORMICA\* in a range of attractive colours and finishes . . . This is great news of the Write today for full details.

highest import to all Designers, Architects and Interior Decorators.

\*FORMICA. A decorative Laminated Plastic of great beauty possessing physical properties which give it a wide field of usefulness in every type and sphere of modern interior decoration. It is also produced in a 'Cigarette-proof' grade which is the final answer to the cigarette burn menace.



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This feature covers both the production and marketing of new materials and designs of equipment, as well as the general of developments within trend the building industry.

#### INDUSTRY THE

#### LAMINATED PLASTICS

Some months ago De La Rue Insulation, Ltd., announced that they would start the manufacture of Formica laminated plastic sheet in their new factory at West Chirton, North Shields. Formica was originally developed in America, where it has been widely used in the decoration of hotels and restaurants, particularly of the higher class type, and De La Rue have acquired the Eastern hemisphere rights.

At a small reception held at the beginning of this month a number of sample products were on view, including an interesting proposal for a railway coach interior (illustrated on this page) and a table top taken from the on this page) and a table top taken from the *Queen Mary*, one of the original fittings which had survived six war years' use when the vessel was a troopship. As the sales manager remarked, "What troops can't destroy nothing can." Examination in a bright light showed that parts of the sur-face had lost their high initial gloss, but there was no visible staining or scratching and the top could not be considered even remotely in need of replacement.

The material seems to have a harder sur-face than any other plastic. Due to the incorporation of a special resin, it is virtu-ally impossible to burn or scratch it, or stain it with acid or oil. One special cigarette-proof grade is manufactured which the final answer to the menace of the careless smoker, and tests at a recent exhibition showed that Formica withstood the stubbing of 20,000 cigarettes without leaving a trace of burn, blister or stain; a of plywood, similarly maltreated, d an extremely badly charred piece showed charred surface.

Apart from its use in sheet form it will be possible, as soon as machinery is avail-able, to use Formica for a wide range of range of pressed and shaped articles, while lettering, designs, drawings, paintings, diagrams can all be pressed into the actual material clearly and indestructibly. In the near future it will also be possible to manufacture Formica with realwood veneer finishes and in a variety of solid colours.

The base of Formica is paper and resin. Reels of paper 50 to 100 in. wide are mounted on mandrels and fixed at the entry of a 90-ft. drying chamber, which is capable of being steam-heated up to 130 deg. C. Just before entering this chamber the paper passes through a bath of varnish, which is composed of the resin dissolved in a suitable solvent. On its passage through the varnish bath the paper picks up about twice its weight of varnish and, as the varnish is made up of equal parts of resin and solvent, the paper will contain its own weight of resin when the solvent has been driven off on the journey through the drying chamber. This impregnated paper is wound off at the far end of the chamber and is cut into lengths ready for pressing. According to

material the required surface. The completed packs are then cured under heat and pressure in a press with steam-heated platens and then trimmed to final size. The De La Rue Company makes several

other plastics as well:-

Traffolyte, a laminated plastic in sandwich form similar in many ways to Formica. It is widely used for the production of engraved signs, and is made in plain sur-face colours only.

Delaron, an industrial laminated plastic made in five paper and three linen grades. It can be drilled, stamped, turned and machined, and is largely used for silent gear wheels and machine parts. It has excellent electrical insulation qualities.

Delaforce, a reinforced laminated plastic with a core of wire and cotton mesh. This can be used where strength and lightness are required, and successful experiments have proved its value for the construction of such things as railway goods wagons. (De La Rue Insulation, Ltd., Imperial House, 88, Regent Street, London, W.1.)

## STANDARD DOORS FOR THE FARMER

Ouite a number of firms are now producing standard units in concrete, timber or metal for the erection of farm buildings. The scheme has been sponsored by the Ministry of Agriculture and Fisheries, and involves the production of every component necessary for the buildings, all of which are to be stocked in 16 centres throughout the country, so that farmers can buy the parts and erect permanent buildings quickly and easily.

One of the major difficulties has been with the doors, as the buildings must be used for a variety of purposes and the heights and widths of doors must vary.

Some time ago EJMA formed a sub-com-

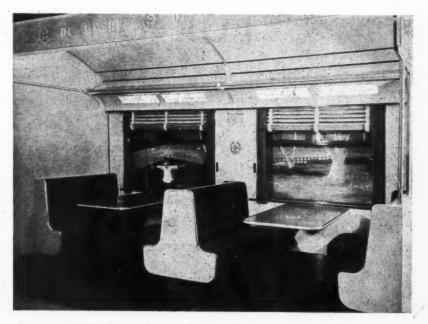
mittee to deal with the problem, and succeeded in solving it with the aid of Mr. Frederick MacManus, their architect. They have designed a door which can be mass produced and used in units of one or more. This overcame the problem of width, as the doors can be used hinged together or on the sliding principle. The question of height was more difficult, but this has also been solved. The greatest door height required would be 7 ft. 7 in., and the new door will meet this requirement; but farmers will be able to alter the door on the site to fit any height down to the minimum of 7 ft. 1 in.

This has been achieved by extending the stiles, so that the finished door, as a com-ponent is left with two protruding "legs." These extended pieces are easily cut to the required length and a U-shaped steel shoe required length and a U-shaped steel shoe fitted to cover the gap. The shoe also serves another useful purpose by prevent-ing rats gnawing through the bottom of the door. Farmers will shortly be able to obtain supplies of these doors from the stockists. (The English Joinery Manufac-turers Association, Sackville House, 40, Piccadilly, London, W.1.)

#### FLUSH COORS

The Flush Door Manufacturers Association announces that, after representation made in association with the English Joinery Manufacturers Association and the British Door Association, the British Standards Institution has accepted the FDMA standard core construction as the basis for a BSS for the manufacture of hardboard-faced flush doors. The specification will be known as No. 459, Part IV, 1948, and will be available in the next few weeks. Ministry of Health has approved the use of hardboard-faced flush doors manufactured to this specification for all housing schemes, and local Housing Authorities have been so informed by the Ministry. MOH circular No. 136 announced that

BMSH forms for hardboard are no longer required for the purchase of hardboardfaced flush doors, and the installation of these doors means that the whole plywood allocation can be used for other building purposes. (The Flush Door Manufacturers Association, Ltd., Trowell, Nottingham.)



A suggested design for a railway coach interior in Formica laminated plastic. [De La Rue Ltd.]





versally accepted fixing for use with all sizes of screws. Invaluable for fixing electric, gas or sanitary fittings, cables, fuse boxes, machinery, piping, wiring etc. The No. 28 size will withstand a direct pull of 4 tons.

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are a secon greate Worle 20,37 pleter for c such. non-t HOU The ing rema (11.8this a of h or si fallir well. priva this a ye targe reach must the high num abou half targe FAC In in th "fac milli Apr of seen least main Ev Dev und have as Now that the Government's housing programme is making steady progress Professor Ian Bowen's monthly analysis of progress will no longer concentrate on housing. Instead, he will contribute a monthly article on "Building Progress," the second of which appears below. In these articles he will survey building activity generally, drawing attention each month to whatever current developments seem to be of the greatest interest.

# BUILDING PROGRESS

[By Ian Bowen]

## BUILDING PROGRESS UP TO THE END OF MAY, 1948

END OF MAT, 1946 Building work completed in the late spring and early summer of this year has been very considerable; when final figures are available, it is quite likely that the second quarter of the year will show the greatest activity recorded since the end of World War II. In May, for example, 20,372 permanent new houses were completed in Great Britain. This was a record for one month, and has been claimed as such. 1,168 of these houses were of the non-traditional aluminium type.

### HOUSES BEGUN

The number of permanent houses (excluding aluminium) begun each month still remained well below the numbers finished (11,840 against 19,204). For the present, this means a continuing fall in the number of houses under construction; but in five or six months' time there is certain to be a falling-off in the rate of completions as well. The concessions recently made to private builders will to some extent mitigate this position. A figure of 200,000 houses a year now seems to be the Government's target (*i.e.*, 16,666 houses a month), but to reach stability at this figure commencements must be stepped up from under 12,000 to the 17,000 odd figure—and, indeed, rather higher than this for a short time. The number of new contracts in May, 1948, was about 9,000, which was not much more than half the rate required to establish the new target.-

### FACTORIES

In April there was an enormous increase in the value of building licences issued; for "factories, etc.," the increase was from  $\pounds74$ millions in March to  $\pounds154$  millions in April. Without any formal announcement of a change of policy, the Government seems administratively to have released (at least temporarily) its tight hold on licensing maintained for the five previous months.

seems administratively to have released (at least temporarily) its tight hold on licensing maintained for the five previous months. Even some of the factory schemes in the Development Areas and elsewhere deferred under the capital cuts' scheme appear to have been allowed to re-start. However, as in the case of housing, the delayed-

action effort of the cuts is that the total value of work under construction is still declining from month to month.

### HOSPITALS & SCHOOLS

There is a rising trend in the value of work licensed under these headings. In all, the work licensed amounts to only about 5 per cent, of the "factories, etc," item in the Ministry of Works' table. It must be remembered, however, that Government work is directly authorised, and does not come into the licensing figures. In the case of education and hospitals this figure was undoubtedly very high. Government work as a whole appears to have increased substantially from March of this year onwards. The spring has thus seen a honeymoon fling of the licensing system, before it became radically altered by the change in the £10 limit. As far as the licensing figures go, new work increased by almost 142 per cent. But the new limit will favour an increasing volume of major repairs.

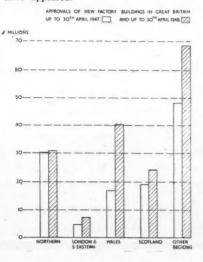
New housing has lost 25,000 of its labour force since October of last year. Industrial and agricultural building has so far been the main beneficiary of this loss, the total employed in the industry remaining fairly constant. But over the next year it is likely that repairs, minor alterations and decorations will go ahead faster than any other types of work.

### BUILDING MATERIALS & COMPONENTS

There has been considerable easing in the supply position of such items as cookers and baths. The big rise in the production of these items confirms the view that work for architects over the next year will be increased in the direction of conversion and improvement of existing property, rather than in increased new building.

### COSTS & PRICES

No official data on the finished costs of permanent houses has yet been released. This shows an appalling disregard for the need to educate the public, the technicians, the local authorities, and the Government itself in the basic facts which must be understood for their responsibilities to be properly assumed. Official spokesmen still take refuge in figures of tender prices, which in England and Wales are said to be 13 per cent. above their level in 1945. But, as Mr. Marples pointed out in the House of Commons, tender prices are in current conditions meaningless as a basis of comparison, since extras on permanent houses are a substantial but varying figure. It does seem almost unbelievable that after 250,000 new houses have been completed, no official figures of the finished costs of any schemes have appeared.



# Buildings Illustrated

British European Airways, Dorland Hall House, 14-20, Regent Street, S.W.1 (pages 159-161). Architect, A. F. Watson, A.R.I.B.A. General Contractor, Cubitt Group Coordinated Services Section. Sub-contractors: Partitions, Holoplast Ltd.; Glass, Clarke Eaton; Patent Flooring, Armstrong Cork Co.; Electric Wiring Higgins & Cattle Ltd.; Sanitary Fittings, W. M. Froy & Sons; Door Furniture, Dryad Metal Works Ltd.; Telephones, GPO and Standard; Metalwork, Heals Contracts Ltd.; Shop fittings, Beck & PolMizer; Cloakroom fittings, Stonehouse Steel Equipments Ltd.; Signs, Nelton Ltd.; Clocks, Synchronome.

Steel Equipments Ltd.; Signs, Nelton Ltd.; Clocks, Synchronome. Kensington Air Station, British European Airways, High Street, Kensington (page 162). Architect, A. F. Watson, A.R.I.B.A. General Contractor, Holloway Brothers. Sub-contractors: Glass, James Praedy; Patent Glazing, Pilkington Prismatic; Patent Flooring, Uni-Seco Ltd.; Electric Wiring, Higgins & Cattle; Electric Heating, Fenton, Byrn & Co. Ltd.; Ventilation, Hadens Ltd. & Ductwork Ltd.; Sanitary fittings, Assoc. Clay Industries; Stair-treads, Ferodo Ltd.; Door Furniture, Froys; Telephones, GPO and Standard; Plaster, George Rome & Co.; Metalwork, H. H. Martyn & Co. Ltd.; Furniture, Ernest Race Ltd.; Cloakroom fittings, Stonehouse Steel Equipment; Clocks, Synchronome; Signs, Daymonds Ltd. (The Lettering Centre).

The form printed below is to assist readers requiring up-to-date information on building products and services. Complete and post it to The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.I, and the advertisers listed will be asked to supply information direct.

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PRICES

This regular feature, prepared by Davis, Belfield and Everest, Chartered Quantity Surveyors, summarises basic prices for materials and gives labour rates for the London District and Grade Classifications outside

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London. In the past, prices for materials have been expressed as a percentage over pre-war rates. This practice is no longer being continued as it is felt that pricing by references to pre-war standards can now be considered obsolete. Detail prices of materials are given quarterly.

ND RATES (	OF WAGES,	1948	
April	May	June	July
60/6 11/- 14/5 73/-	60/6 11/- 14/5 73/-	60/6 11/- 14/5 73/-	60/6 11/- 14/5 73/-
42½% 90/-+ 110% £17 13s. 84/9 £107 10s. 70% 42/9	$\begin{array}{c} 42\frac{1}{2}\%\\ 90/-+\\ 110\%\\ \pounds 17\ 13s.\\ 84/9\\ \pounds 107\ 10s.\\ 70\%\\ 42/9\end{array}$	$\begin{array}{c} 42\frac{1}{2}\%\\ 90/-+\\ 110\%\\ \pounds 17\ 13s.\\ 84/9\\ \pounds 107\ 10s.\\ 70\%\\ 42/9\end{array}$	42½% 90/-+ 110% £17 13s. 84/9 £107 10s. 70% 42/9
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THE ARCHITECTS' JOURNAL for August 12, 1948



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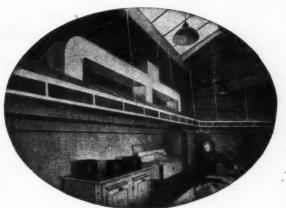
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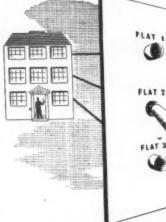


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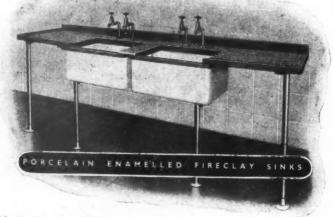
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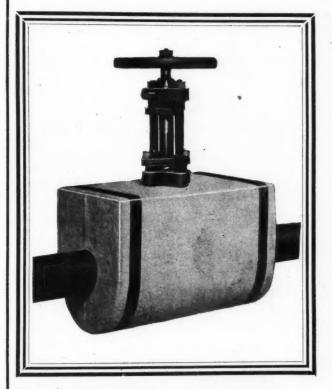
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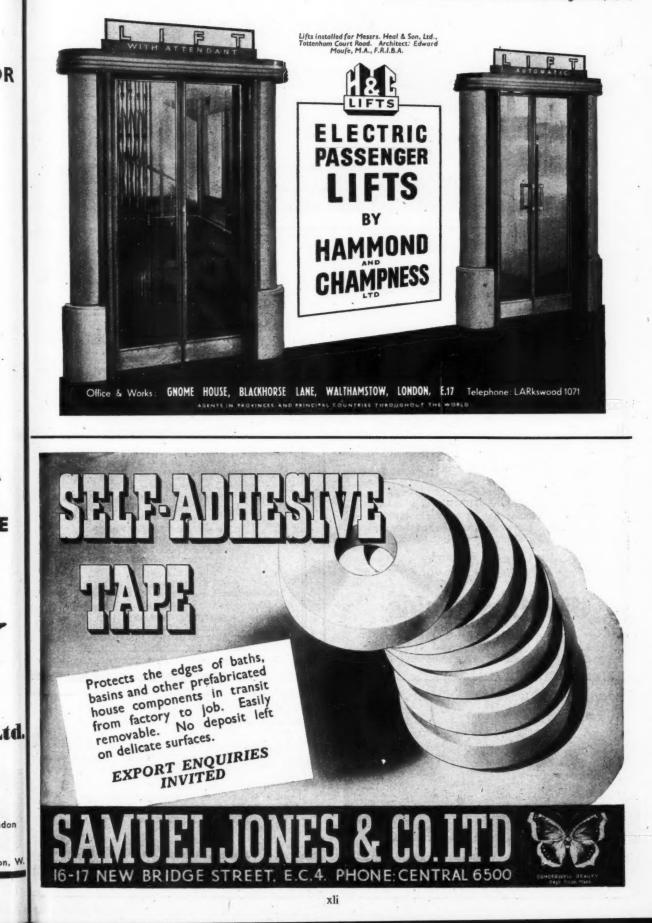
Special enquiries are welcome at all times. Our experimental department is available for consultation and will co-operate with architects and technicians on any special project. Please address communications to Versil Ltd., Rayner Mills, Liversedge, Yorks. Telephone : Cleckheaton 640.

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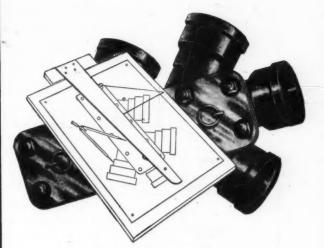
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paper. Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address

care of "The Architects' Journal," at the address stem above. None of the vacancies in these columns relater to a man between the age of 10 and 50, incusave or a woman between the age of 18 and 40, inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

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of salary. Successful candidates will be required to under-take the design, layout, and proparation of work-ing drawings for housing schemes (cottages and milti-story flats), and will be employed in the Housing Architect's division. Forms of application may be obtained from the Director of Housing, The County Hall, West-minster Bridge, S.E.1 (stamped addressed scolars envelope required). Canvassing 1032 (1970) 1032

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 CITY OF PETERBOROUGH.
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 Applications are invited for the appointment of TWO ARCHITECTURAL ASSISTANTS, on the staff of the City Engineer and Surveyor, at a salary in accordance with Grade III. A.P.T., i.e., 2450, rising by annual increments to £495 per annum.

2400, raking by annual increments to 2700 per Applicants should be good draughtamen, pesseas a sound knowledge of building construction, and be capable of preparing working drawings under

be capable of preparing working drawings under supervision. The CRy Council have adopted the National Scheme of Conditions of Service. The appoint ments are subject to the provisions of the Local Government Superannuation Act, 1932, and successful applicants will be required to pass medical examination. Applications, stating acc, qualifications and experience, accompanied by copies of not more than three recent testing and suitably endorsed, must be delivered to the and suitably endorsed proting the subject of the Applicants must disclose whether they are Authority.

# ARTHUR J. REEVES. Town Clerk.

Town Hall. Peterborough. July, 1948.

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CITY OF BATH. SENIOR PLANNING ASSISTANT. Applications are invited for the appointment of Senior Planning Assistant, on the permanent staff of the City Planning Officer, at a salary in accordance with A.F., Grade IV (£490-£255 ere annum). Applicants should possess a recognized qualification in town planning. and preference will be given to those with previous experience in a Town Planning Office. The appointment will be subject to the provisions of the Local Govern-ment Superannation Act, 1937, and the successful candidate will be required to base a medical ex-amination. Applications, sisting are, qualifica-tions and experience, together with opies of not more than three recent testimonials, should be sent to the City Planning Office. 2 Princes Buildings, Bath, not later than the 28th August, 1948.

J. BASIL OGDEN. Town Clerk.

Guildhall, Bath. 3rd August, 1948.

Schemes, preparation of such schemes, and Interim Development Control and administra-ion. Applicants should submit full details of age, specific nationality, health, marital status, pre-vious experience, qualifications, military service, present appointment, and should submit certified copies of testimonials from past employers. The successful applicant will be required to serve a probationary period of six months, there-after he will be eligible for appointment to the fixed establishment, and if so appointed he will be required to contribute to the Council's Super-annuation Fund. Applicants are advised that their present Superannuation Contributions are not transfer-able to the Council's Superannuation Fund. The successful applicant is married a Mani-cipal house will be available on a rental basis. The Council will contribute the following amounts towards the cost of sea passages ex-United Kingdom :--Man and wife, £50 each. Children under 16 years is the child, £20; re-maning children, £10 each. Should the successful applicant resign within a period of three years from date of appointment erfundable to the Council. Balary will be admissible from the actual date of embarkation, although the date of appointment will be held for all other purposes to be the date upon which duties are actively assumed. A satisfactory medical certificate on the Council's prescribed form must be produced before the commencement of day. In regard to any points not mentioned in this advertisement the successful applicant will be bound by the Council's Service Regulations and any amendments which may be made thereto from time to time. Canvassing, directly cr indirectly, will be a dis-manification.

any amendments which may be made thereto from time to time. Canvassing, directly or indirectly, will be a dis-gualification. G. F. CLARK,

 qualification.
 G. F. CLARK.

 Town House, Umtali, Southern Rhodesia.
 Town Clerk.

 5th August, 1948.
 1438

 CARMARTHENSHIRE COUNTY COUNCIL.
 COUNTY ARCHITK(T'S DEPARTMENT.

 Applications are invited for the following appointments in the County Architect's Depart

ONE ASSISTANT QUANTITY SUR-DR. A.P.T., Grade V (£520-£570 per VEYOR annum). (b) ONE VEYOR. ASSISTANT QUANTITY SUR-A.P.T., Grade III (£450-£495 per

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Applicants for post (a) should be suitably qualified and be experienced in the preparation of Bills of Quantiles, approximate estimates, measurement of variations, settlement of final accounts and interim valuations for payment on

accounts and interim valuations for payment on account. Applicants for post (b) must be capable of abstracting and billing, measuring works on site, and have had some experience in taking-off on small works and the settlement of accounts. The appointments will be subject to the pro-visions of the Local Government Superannuation Act, 1397, and will be terminable by one month's notice on either side. The conditions of service are those of the National Scheme for Local Government Officers. The successful candidates, will be required to pass a medical examination. Applications, stating age, qualifications and full details of experience, together with three recent testimonials, should be enclosed in envelopes endorsed 'Assistant Quantity Surveyor.'' Grade III or Grade V respectively, and delivered to Mr. W. T. Lloyd. A.B.T.B.A., County Architect, County Hall. Carmarthen, not later than Saturday, 28th Angust, 1948. *Clerk of the County Council.* Foonnty Offices, Spilman Street, Carmarthen. 1455

CITY OF OXFORD. THE ACCHITECT'S DEPUTY CITY ARCHITECT'S DEPUTY CITY ARCHITECT' The Architect's of the above per-tection of the the above per-tection of the tection of the above above per-tection of the tection of the above abov

Town Hall, Oxford.

Town Hall, Oxford. Town Clerk, 399 PENARTH URBAN DISTRICT COUNCIL. APPOINTMENT OF ARCHITECTURAL ASSISTANT. Applications are invited for the permaneni against in accordance with A.P.T. Grade V (2520-2570) of the National Scale of Salaries. Applicants should be Associates of the Royal Institute of British Architects or hold an equivalent qualification, and have had experience in the general architectural and housing work of working Drawings. Specifications and Quantities. The appointment will be subject to the Local Government Superannuation Act. 1937, and the successful candidate will be required to pass a modical examination. Applications, endorsed "Archifectural Assis-tion of working Drawings, Specifications, present and previous appointments and experience together with copies of not more than three recent testimonials, should reach the undersigned noi lister than the 30th August, 1948. Canvasing will disqualify. Canvasing will disqualify. Multister and Surveyor. Council Offices, "West House." Stanwell Road, Penarth. 1039 COUNTY BOROUGH OF CROYDON-EDUCA-TION DEPARTMENT.

COUNTY BOROUGH OF CROYDON-EDUCA-TION DEPARTMENT. Applications are invited for the following

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SURVEYING ASSISTANT (A.P.T., IV, £460 p.a. to £525 p.a.). Candidates should be suitably qualified, with wide experience in estimating, valuations for certificates, and settlement of final accounts. JUNIOR SURVEYING ASSISTANT (A.P.T., II, £420 p.a. to £465 p.a.). Candidates should be of Inter. R.I.C.S. (Build-ing) standard, with good general experience. The appointments are superannuable, subject to medical examination. London weighting of £30 p.a. (£20 p.a. if under 26 years of age) is paid in addition to the salaries shown above.

London weighting bid in addition to the shown above. Forms of application may be obtained from the Chief Education Officer. Katharine Street, Croydon (by sending a stamped, addressed envelope) and must be returned to him not later than 28th August, 1948. Canvassing will disqualify. E. TABERNER. Town Clerk.

# E. TABERNER. Town Clerk.

27th July, 1948.

27th July, 1948. COUNTY BOROUGH OF OLDHAM. APPOINTMENT OF GENERAL ARCHITEC TURAL ASSISTANT. Applications are invited for the appointment of a General Architectural Assistant in my Depart-The salary will be at the rate of £420 per annum, rising to £465 per annum, being Grade II of the National Scale of Salaries. Mousing accommodation will be provided if necessary. Applicants are requested to give full informa-tion regarding their qualifications and experience. The appointment will be subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Conditions relating to the appointment may be obtained from the under-andications stating ase and previous appoint

Applications, stating age and previous appoint-ments, in addition to qualifications and experi-ence, and copies of three recent testimonials, must reach the undersigned not later than Saturday, the 28th August, 1948, in envelopes endorsed "General Architectural Assistant." A. L. HOBSON, Borough Engineer and Surveyor. Municipal Buildings, 75, Union Street, Oldham. 29th July, 1948.

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BOROUGH OF CHESTERFIELD. BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT. ARCHITECTURAL SECTION. Applications are invited for the appointment of OLANTITY SURVEYOR, in the Architectural Section of the Borough Engineer and Surveyor's Department. The appointment is subject to the Conditions of Service and Scale of Salary of the National Joint Conncil. on Grade A.P.T., V (£520-£570, con-olidated). Prederence will be given to candidates helding

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Connell, off Grade A.F.T., V (£2520-2570, con-solidated). Preference will be given to candidates holding the appropriate qualifications. The appointment is terminable by one month's notice on either side and subject to the pro-visions of the Local Government Superannuation Act of 1337. The successful candidate will be required to pass a medical examination. Applications, stating age, qualifications, and details of experience, together with copies of two recent testimonials, to be suitably endorsed and delivered to the Borough Engineer and Sarveyor, Town Hall, Chesterfield, not ister than Monday, 6th September. Town Hall, Calification September.

# RICHARD CLEGG, Town Clerk

Town Hall, Chesterfield. 1477 DEVON COUNTY COUNCIL. Applications are invited for the following appointments in the County Planning Depart-

appointments in the County Planning Depart-ment:-(a) SENIOR ASSISTANT (RESEARCH), in the Central Office at Zxeter. The person appointed will be engaged on Survey and Research work in connection with the pre-paration of the Development Plan. Candidates should have had experience in the collection, analysis and graphical representation of research data and be familiar with the Ministry's require-ments in connection with Survey for the Develop-ment Plan. Preference will be given to those holding a University degree in Geography or Economics and with previous experience in a planning office. Salary in accordance with A.P.T., Grade VI, of

Salary in accordance with A.P.T., Grade VI, of the National Joint Council Scales. £595×£20/£25

Salary in accordance with A.P.T. wrate -, on the National Joint Council Scales, £230×£15/£20 -£570. In the case of both appointments applicants will be required to provide a car, for the use of which allowances will be paid in accordance with the National Joint Council's Scale. Both appointments will be subject to the National Joint Council's Conditions of Service; to the provisions of the Local Government Super-annuation Act, 1937; the passing of a medical examination, and to one month's notice on either side.

Canvassing, directly or indirectly, is prohibited, and candidates must state if they are related to any member or senior officer of the Council. Applications, giving full details of training, qualifications and experience, together with the names of three persons to whom roference may be made, must be forwarded to the Director of Planuing, New North Road, Excter, so as to reach him not later than 23rd August, 1948. Preference will be given to disabled persons. The Council are unable to assist in the pro-vision of housing accommodation. H. A DAVIS.

The Castle, Excter.

# H. A. DAVIS, Clerk of the Council. 1475

The Castle, Excter. 1475 CITY AND COUNTY OF BRISTOL. CITY AND COUNTY OF BRISTOL. CITY ARCHITECT'S DEPARTMENT. Applications are invited for the following tem-porary and permanent staff appointments :--(a) SENIOR ASSISTANT ACHITECTS (Housing and Education Sections). A.P.T., Grade VI (2595-2660). PERMANENT STAFF. (b) SENIOH ASSISTANT ARCHITECTS (Housing and Education Sections). A.P.T., Grade VI (2595-2660). (c) SENIOH ASSISTANT ARCHITECTS (Housing and Education Sections). A.P.T., Grade VI (2520-2570). (c) SENIOH ASSISTANT ARCHITECT (Educa-tion Section). A.P.T., Grade IV (2430-2435). (d) ASSISTANT ARCHITECTS (Housing Sec-tion). A.P.T., Grade II (2430-2435). (e) ASSISTANT ARCHITECTS (Education Section). A.P.T., Grade II (2420-2455). Preference will be given to Associates R.I.B.A. in respect of (a) and (b). Permanent appointments subject provisions of Local Government Superannuation Acts, 1937 and 1939. and successful applicants required to pass medical examination. All appointments deter-mined by one month's notice in writing on either side. Applications must indicate specific appointment

side by one month indicate specific appointment Applieations must indicate specific appointment applied for, full details of age, ounlifications, ex-perience, present position and sulary, and names of two persons to whom reference may be made, and should be delivered to the undersigned by Salurday. 28th August, 1942. Although not com-pulsory, it is desirable that successful applicants shall live within the City. J. NELSON MEREDITH, F.R.I.B.A., City Architect. Eagle House, Colston Avenue, Bristol. 1. 1484

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LONDON COUNTY COUNCIL. Required at Brixton School of Building, Ferndale Road, S.W.4, to commence in January, 1949 (or earlier), TWO SENIOR ASSISTANTS, one in Architecture and one in Surveying Applicants for the Architectural post should be desree or Giploma of a recorguized school would be a recommendation. Those for the Surveying post should be members of the B.I.C.S. Burnham scale salary. C700-225-2800, with London allowance, and training and graduate allowances as appropriate. Application forms (stamped addressed foolscap envelope necessary) and further details from the Principal at the School, returnable by 30th September. 1948. (1730)

School, returnable by 30th September. 1948. (1730)
 CITY OF ST. ALBANS.
 CITY ENGINEER AND SURVEYOR'S DEPARTMENT.
 Applications are invited for the appointment of JUNIOR ENGINEERING ASSISTANT, in the Department of the City Engineer and Surveyor, at a salary in accordance with the General Division (commencing salary according to age and qualifications). Preference will be given to candidates who have passed the Intermediate examination of the Institution of Municipal Engineers or those holding equivalent qualifications.
 The appointment will be terminated by one month's notice on either side, is subject to the scheme and conditions of service of the National Joint Council of Local Authorities' Administrative, Professional, Technical and Clerical Services, to the provisions of the Local Government Superannation Act, and to the successful passing of a medical examination.
 Applications, stating age, qualifications, experience, etc., together with the undersigned in envelopes marked "Junior Engineering Assistant," not later than Monday, 30th August, 1948.
 M. B. MURGATROYD.
 St. Peter's Street, St. Albans.
 Angust, 1948.

38, St. Peter's Street, St. Albans. August, 1948.

August, 1948. 1481 METROPOLITAN BOROUGH OF LEWISHAM. Applications are invited for the appointment of TWO TEMPORARY CLERKS OF WORKS for the erection of blocks of fasts. The inclusive salary in each case will be £480, rising to £525 per annum (A.P.T. Division, Grade IV), plus London "weighting" (age 26 and over -£30 per annum). The appointments will be embled to the univ

1481

London "weighting" (age 25 and over-£30 per annum). The appointments will be subject to the rules and regulations of the Council from time to time in force relating to temporary officers, to termina-tion by one month's notice on either side, and to the successful candidates passing a medical examination satisfactorily. The persons appointed will be required to devote their whole time to the duties of the posts. Applications in writing, stating age, qualifica-tions and experience, should be addressed to the Borough Architect, Municipal Offices, Canadian Avenue, S.E.6. in envelopes endorsed "Appoint-ment of Clerk of Works." Canvassing, either directly or indirectly, will be a disqualification. ALAN MILNER SMITH. Lewisham Town Hall, Catford, S.E.6.

Lewisham Town Hall, Catford, S.E.6. July, 1948. 1456

COUNTY OF LINCOLN-PARTS OF LINDSEY. COUNTY ARCHITECT'S DEPARTMENT. Applications are invited for the appointment of SENIOR ARCHITECT, Grade VII, £635 per annum, rising by £25 to £710. Candidates must have passed the qualifying examination for A.R.I.B.A. be proficient in de-sign and have had experience in the control of staff. The person appointed will be responsible for the architectural work, other than Educa-tional, including Fire and Police Services, and work which may be carried out by the County Council under the Health Service and National Assistance Acts, etc. Applications, stating age, training, experience and qualifications, together with copies of two fereent testimonials, and the rames of two persons to whom reference can be made, should be sent to A. R. Clark, A.R.I.B.A., M.T.F.I., County Architect, County Offices, Lincoln, not later than Wednesday, 18th August, 1948. MANCHESTER REGIONAL HOSPITAL

Wednesday, 18th August, 1948. 1454 MANCHESTER REGIONAL HOSPITAL BOARD. APPOINTMENT OF ARCHITECT. Applications are invited from suitably qualified persons for, the appointment of Architect to the above-mentioned Board. Sulary £1,350×250-£1,550. The post is superannuable under the National Health Service (Superannuation) Regula-tions, 1947, and is terminable by three months' notice on either side. Conditions of appointment may be obtained from the undersigned, to whom applications, stating age, qualifications and experience, together with the names of three referees, should be sent so as to be received not later than the 31st August, 1948. J. GIBBON,

be sent so as to be received not later than the Slet August, 1948. J. GIBBON, Secretary of the Board. Sunlight House, Quay Street, Manchester, 3. 1457 METROPOLITAN BOROUGH OF LEWISHAM. Applications are invited for the appointment of Builder's Clerk in the Borough Architect's De-partment. Salary scale. A.P.T. Division, Grade II (2420), rising to 2465 per annum, plus London "weighting," varying between £10 and £30 per annum, according to aslary, of the successful candidate will be fixed in the grade according to him qualifications and experience. The commencing salary of the successful to the popointment will be subject to the pro-visions of the Local dovernment Superannuation det, by7, to the attionation by one month's metice on either side. Candidates for the appointment must have had experience with a Direct Labour Orranization of a local authority engaged in new building and maintenance works, and be thoroughly conversant with the wages and conditions of service of workpeople, including the formulation and appli-cation of neentive payment schemes. Forms of application may be obtained for me, and should be returned, accompanied by copies of not more than three recent testimonials addressed to me, in as envelope endorsed "Builder's Clerk," so as to be a canvasing, either directly or indirectly, will be a disqualification. ALAN MILNER SMIT. Town Clerk. Envy. 1948.

Lewisham Town Hall, Catford, S.E.6. July, 1948. 1455

J. G. DREW

# Town Clerk.

Town Hall, Brighton. 26th July, 1948. 1447 BOROUGH OF EDMONTON. ARCHITFCTURAL STAFF.

ARCHITFCTURAL STAFF. The council reourire:-(1) ARCHITECTURAL ASSISTANT (PER-MANENT) Grade A.P.T., VI. 5652× 520 (2) and 525 (1) to 2690 per annum. Candidates should preferably be Associates of the R.I.B.A. or equivalent. (2) ARCHITECTURAL ASSISTANT (TEM-PORARY). T., V. 5550× 615 (2) and £20 (1) to 2600 per annum. Candidates must have passed the Intermediate examination of the R.I.B.A. or equivalent. equivalent

equivalent. In both cases, experience in housing and general huilding work is essential. The Council cannot undertake to provide housing accommodation for the successful

The Council commodation for the housing accommodation for the candidates. Fall particulars, forms of application and con-ditions of service from the undersigned, to whom completed applications must be returned not later than first post, 24th August, 1948. H. BACKHOUSE. Town Clerk. 1471

METROPOLITAN BOROUGH OF ADDINGTON HOUSING DEPARTMENT. Applications are invited for the following appointments on the permanent establishment of the Housing Department (which also deals with all Council's building work). (a) ASSISTANT AICHITET A.P.T. Grades V and VI. salary £530-£660, plus London "weight-ing." commencing at a point within the Grades commensurate with experience and qualifications. Applicants should be associates of the K.I.B.A. And have had extensive experience in contem-porary architectural design and construction, be progressive in outlook, and able to supervise works in course of erection. (b) QUANTITY SURVEYOR'S ASSISTANT, A.T. Grades I and II, salary £330-466, plus London "weighting," commencing at a point within the Grades commensurate with experience and qualifications. — Mplicants should have experience in all branches of building work and should be in the direct

Applications, and to be able to measure up for interim and final certificates and the state of t

W. H. BENTLEY, Town Clerk.

Town Hall, Paddington, London, W.2. 6th August, 1948.

Paddington, London, W.2. 6th August, 1949. CITY OF PORTSMOUTH. CITY PLANNING OFFICER'S DEPARTMENT. Applications are invited for the following per-manent appointments in the Department of the City Planning Officer. (a) TWO PLANNING ASSISTANTS. Grade V (520-E570 per annum). The appointments are in connection with the preparation of the Development Plan under the Town and Country Planning Act, 1947, and for work on the reconstruction of the Contral Area of the town. Candidates should have experience in drawing up practical proposals for urban re-development; they shoul' be qualified for Associate Memberahip of the Town Planning Institute, and preference will be given to appli-cants possessing in addition a recognized qualified in architecture, engineering or surveying. In respect of one of the posts, applicants should also be experienced in Development administra-tion.

PLANNING ASSISTANT. Grade IV (£480-(b) per annum). GENERAL A98ISTANT. Grade I (£390-\$526

£435

£436 per annum). Applicants for these posts must be competent draughtsmeen, and preference will be given to the huiders of the appropriate professional qualifica-tions.

holders of the appointments will be subject to :--f(a) The National Scheme of Conditions of Service. (b) The provisions of the Local Government Conservation Act, 1937.

service. Conditions of the Local Government (b) The provisions of the Local Government Superannuation Act, 1937. (c) The successful candidates passing satis-factorily a medical examination by the Corpora-tion's Medical Referee. (d) Termination by one month's notice on either side.

Applications, stating age, present position, Applications and experience, together with the names of three responsible persons to whom refer-ence may be made, must be delivered to the under-signed, clearly marked "City Planning Appoint-ment," not later than 31st August, 1948. Canvassing will disquality. V. BLANCHARD. Town Clerk.

### own Clerk

City Council Chambers, Southsea. 3rd August, 1948.

The Grant Chambers, southes. 3rd August, 1946. THE GLASGOW SCHOOL OF ABCHITECTURE. The Governors of the Glasgow School of Art in the Department of Architecture. Previous teaching experience, though desirable, is not essential. Salary scale 2450×215 to 2600 per anrum, with placing according to qualifications and experience. These scales are at present under revision and the successful candidate will benefit by any increase which may be decided on. The successful candidate will be considered for a senior post. which may be obtained from the undersigned. W. H. Masson, Secretary and Treasurer. The Glasgow School of Art, 157, Renfrew Street. Glasgow, C.3. 1466

CITY OF PLYMOUTH. CITY ARCHITECT'S DEPARTMENT. Applications are invited for the following subject to the Local Government Superannuation Act. 1937, a satisfactory medical examination, and a month's notice on either side for termination. ASSISTANT ARCHITECT. A.P.T., Grade V. Consolidated salary £520-£570. "Applicants should be Registered Architects, Members of the R.I.B.A., and preferably have some Municipal experience. Candidates must not be over 40 years of age, but this condition may be relaxed in the case of a person up to 45 years of age employed by another Local Authority. Applications, on forms obtainable from the than three recent testimonials, atd/or names of persons to whom reference may be made, must be returned not later than Saturday, the 28th August, 1984. HOUSING ACCOMMODATION WILL BE

1948. HOUSING ACCOMMODATION WILL BE MADE AVAILABLE TO SUCCESSFUL MARRIED APPLICANTS WHO REQUIRE IT. E. G. CATCHPOLE, A.R.I.B.A. City Architect's Dept., Seymour Road, Plymouth. 1493

1493 NEWCASTLE-UPON-TYNE REGIONAL HOSPITAL BOARD. Applications are invited for the permanent appointment of SENICE QUANTITY SUR-VEYOR, on the Headquarters Staff of the Board. Candidates must be members of the Royal Insti-tate of Chartered Surveyors, and should have had wide experience of the preparation of Estimates. Specifications and Bills of Quantities, of measuring variations and of the checking of final accounts. Salary will be in accordance with Grade VIII of the A.P.T. Scales, i.e., 2685 per annum, rising by annual increments of £25 to 2760 per annum.

annum, rising by annual increments of 220 to 2760 per annum. Applications, marked "Senior Surveyor," should state: (1) Name and address; (2) age, and whether married; (3) professional qualifications; (4) past appointments (5) present appointment and salary; (6) experience; (7) war service; (8) date available if appointment. Mame and addresses of three referees should be given, and applications should be received not later than 25th August, 1948, addressed to the Secretary to the Board, "Dunita," Oxborne Road, Newcastle-upon-Tyne, 2.

Tyne, 2. 1498 Tyne, 2. 1498 KENT EDUCATION COMMITTEE. MEDWAY COLLEGE OF ART. ROCHESTER. DEPARTMENT OF ARCHITECTURE. Applications are invited for the post of Full-time STUDIO MASTER. in the Department of Archi-tecture is necessary. Daties to commence on 1st September, 1948, or as soon after as possible. Salary, Burnham (Technical) Scale, 2948, with additional allowances where appropriate for train-ing, graduation, previous professional or teaching experience, and service with H.M. Forces. Letters of application, giving full particulars of training and experience, should be sent to the Principal, Medway College of Art, Eastsgate. Rochester, within fourteen lays of this advertise-ment. 1853

Rochester, within fourteen lays of this advertise-ment. 1453 NEWCASTLE-UPON-TYNE REGIONAL HOSPITAL BOARD. Applications are invited for the permanent spointment of SENIOR CLERK, in the Archi-tect's Section of the Headquarters Staff. Appli-cants must have had considerable experience of oracedure in the Architectural Department of a local Authority will be considered an advantage. Salary, according to age and experience, on Grade VI-VII of the A.F.T. Scales (£596, rising by annual increments of 220-225 to a maximum of £710). Applications, marked "Senior Clerk, stating age, previous appointments, present appointment and salary, and full classified details of reperience, and accompanied by the names of three referees, should be sent by not later than 25th August, 1948, to the Secretary to the Board, "Danira," Osborne Boad, Newcastle-upon-Tyne, 2. 1499 FLINTSHIRE COUNTY COUNCIL.

Dinnira, Osborne Roša, Newcastle-upon-Tyne, 2. 1499 FLINTSHIRE COUNTY COUNCIL. APPOINTMENT OF TEMPORARY CLERK OF WORKS. Applications are invited for the appointment of Temporary Clerk of Works in the Architect's De-partment. Salary A.P.T. 11. of the National Scheme of Conditions of Service (2420-2465). Candidates should have a practical knowledge of all branches of the building trade, and be experionced in the supervision of the erection of all classes of buildings and be capable of setting ont, measuring up. Keeping records and making reports. Experience in the maintenance and repair of education buildings would be an ad-vantage. The appointment will be subject to (a) the National Scheme of Conditions of Service, as modified by the County Council: (b) the pro-visions of the Local Government Superannuation Act, 1397, and (c) a satisfactory medical examina-tion.

Applications will be considered from registered

Applications will be considered from registered disabled persons. Applications, on a form to be obtained from the undersigned, accompanied by a copy of one recent testimonial and the names and addresses of two persons willing to repuly further test-monials, are to be returned so as to be received not later than the Jask August, 1948. Clerk of the County Council. County Buildings, Mold.

BOROUGH OF MALDEN AND COOMEE. BOROUGH ENGINEER'S DEPARTMENT. TEMPORARY TOWN PLANNING ASSISTANT (MALE OR FEMALE). Applications are invited for the above appoint-ment, at a salary in accordance with Grade III, A.P.T., of the National Scale (2460-215-2480 p.a.) plus London weighting. Applicants must be nest and expeditious draughtsmen and had previous planning, engin-gering or architectural experience, and should possess a knowledge of the Lasic survey work required in the preparation of Town Planning Schemes.

Applications, stating age, qualifications and ex-perience, accompanied by copies of not more than three recent testimonials, should be submitted in scaled envelopes, endorsed "Town Planning Assistant," and should be sent to the Borough Engineer, Municipal Offices, New Malden, not later than 1st September, 1948. Canvassing, directly or indirectly, will be deemed a disqualification, and candidates must disclose in writing whether to their knowledge they are related to any member or senior officer of the Council. HAROLD E. BARRETT,

# HAROLD E. BARRETT Town

HAROLD E. BARRETT. Town Clerk. Town Clerk. WEST SUSSEX COUNTY COUNCIL. COUNTY PEANNING DEPARTMENT. PLANNING ASSISTANT (DRAUGHTSMAN). Applications are invited for the under-mentioned post in the County Planning Department:----ONE PLANNING ASSISTANT (DRAUGHTSMAN). Male or female. Miscellaneous Division. Grade II. Salary 2375 p.a., rising by annual increments of 215 to 2429 p.a. Applicants should be experienced draughtsmen and should be exparised desirable. Is not relaming experience, though desirable, is not comments.

Planning experience, though desirable, is not essential. The appointment will be subject to the Local Government Superannuation Act, and the success-ful applicant passing a medical examination. Applications, stating age, education, qualifica-tions, experience, present employment and salary, together with the names of three persons to whom reference could be made, must be sent in sealed envelopes and addressed to the County Planning Officer, County Hall, Chichester, Sussex, to reach him by Monday, the 23rd August, 1348. Applicants must state if to their knowledge they are related to any member of the County Council or to any senior official of the County Canvassing will disquality. Clerk of the County Council. County Hall, Chichester. 1494 COUNTY BOROUGH OF WALLASEY.

County Hall, Chichester. 149 COUNTY BOROUGH OF WALLASEY. Applications are invited for the permanent appointment of two ARCHITECTURAL ASSISTANTS (Grade V) 2520-2570. Applicants must be registered architects or students of the Royal Institute of British Architects. Forms of application may be obtained from the Borough Bingineer, Town Hall, Wallasey, and returned to him not later than Thursday, the 9th Septem-ber, 1948.

EMRYS EVANS. Town Clerk

somerser county council. Somerser county council. County Architect's DEPARTMENT. Applications are invited for the spointment of ARCHITECTURAL ASSISTANT in the above Department. The post will be in Grade V of the A.P. & T. Division of the National Scale of Salaries, viz., ES20 per annum, rising to 2570 per annum. The appointment will be sub-ject to the Council's Conditions of Service in force from time to time and to the provisions of the Local Government Superannuation Act, 1937. The selected candidate will be required to pass a medical examination. Candidates must have pased the final examination. Candidates must have pased the final examination. Candidates must have pased the final examination of the R.I.B.A. and preferably have had synchronized together with copies of three testimonials, to reached the undersigned by the 23rd August, 1948. Candidates must disclose in writing if they are related to any member or senior official of the Council. Canvassing members of the Council either directly or indirectly, will disqualify. R. O. HABRIS, F.R.I.B.A. County Architect. Park Street. Tanton.

Park Street. Taunton. 6th August, 1948.

\*WARWICKSHIRE COUNTY COUNCIL. ARCHITECT'S DEPARTMENT. Applications are invited for posts on the estab-lished staff of :--ASSISTANT ARCHITECTS grade A.P.T., V., Salary £20 to £570. Applicants must be regis-tered Architects with at least four years' office entrefere

The appointments will be subject to the con-ditions of the Local Government Superannuation Act, 1937, and to a satisfactory medical ex-

Act, 1957, and 50 a mination. Application forms can be obtained from the County Architect. Shire Hall, Warwick, to whom they are returnable within 14 days of the appearance of this advertisement. L. EDGAR STEPHENS, Clerk of the Council.

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BURAL DISTRICT COUNCIL OF HATFIELD. APPOINTMENT OF JUNIOR ACCHITECTURAL ASSISTANT. Applications are invited for the above appoint-ment on the Staff of the Council's Architect. Salary, Grade 1 of the Miscellaneous Division (2315-250). Candidates must have attained a réasonable denderd in draughtsmanship and should be un

(2315-2560). (2 EDGAR F. CULL, Clerk to the Council.

16, St. Albans Road, Hatfield, Herts

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COUNTY OF ESSEX. COUNTY OF ESSEX. ILFORD COMMITTEE FOR EDUCATION. The Essex County Council invite applications for two ARCHITECTURAL ASSISTANTS. to work in the office of the Borough Engineer of Hord, to deal with work for the Committee for Education Education. Applicants should have had good general train-

The aslary will be in accordance with the pro-relations of the National Joint Council A.P.T. Division, Grade III (Salary scale A480 by £15 0, £525, which includes the London Area

Division, Grade III (Sairly Scale 2480 by 215 to 2535, which includes the London Area Allowance). There will also be paid such travelling and subsistance allowances as may from time to time be determined by the Council. In fixing the commencing salary, regard will be had to the qualifications and experience of the successful candidate. The appointment will be held at the pleasure of the County Council and may be terminated by the holder of the office by two months' notice. The successful applicant will be subject to the provisions of the Local Government Superannua-tion Act, 1937, and will be required to pass a medical examination to the satisfaction of the Council.

Applications must be made on a form to be obtained from the Borough Education Officer, and returned to him at the Town Hall, llford, together with copies of not more than three recent testimonials, within fourteen days of the appearance of this advertisement. Canvassing, either directly or indirectly, is forbidden. 1510

Canvassing, either directly or indirectly, is forbidden. 1510 BOROUGH OF ROWLEY REGIS. APPOINTMENT OF SECOND ARCHITECTURAL ASSISTANT. Applications are invited for the above tem-porary appointment in the Department of the Borough Engineer and Surveyor, at a salary in accordance with A.P.T., Grade V (5260-6570 per annum) of the National Scale of Salaries. The Council are prepared to consider the provision of uitable housing accommodation, if required. Candidates should be experienced in general didates should be experienced un general municipal work, including housing, be capable of preparing specifications, bills of quantities, working drawings and details, supervising con-struction on site and preparing final accounts. Candidates must be registered Architects and preference will normally be given to member of the R.I.B.A.\* by examination. The appointment will be terminable by one month's notice on either side, and will be sub-ject to the provisions of the Local Government Superannuation Act. 1937. The successful candi-date will be required to pass a medical examina-Applications, endorsed "2n: Architectural

date will be required to pass 2 means tion. Applications, endorsed "2n? Architectural Assistant "and accompanied by copies of three recent testimonials, should he addressed to S. G. Wood, Esq., M.I.Mun.E., M.R.San I., Borough Engineer and Surveyor, Muncipal Buildings, Old Hill, Staffs., so 2s to reach him not later than Thursday, the 2nd September. R. HEGAN. Toren Clerk.

Town

Clerk.

R. HEGAN. Town Clerk. Old Hill, Staffs. 9th August. 1948. ORPINGTON URBAN DISTRICT COUNCIL. APPOINTMENT OF SKNIOR ARCHITEC-TURAL ASSISTANT (A.P.T., GRADE VI). The above-named Council invite applications for the established appointment of Senior Archi-tectural Assistant (A.P.T., Grade VI) in the En-tectural Assistant (A.P.T., Grade VI) in the En-termines should preferably be members of the Applications and working drawings. Staff of plans and working drawings. Staffactory service, by two annual increments of 200 per annum) plus London area weighting (at present £20 per annum). The appointment is superannuble and the successful candidates will be required to pass a medical examination.

Applications, which must be completed by reference to the particulars and conditions of appointment to be obtained from me. should be received by me not later than 30th August. 1948. By the Conneil's direction, canvassing will be a disqualification.

a unquamoation.	STEPHEN KING.
Council Offices, Orpington, Ke 13th August, 1948.	Clerk and Solicitor.

COUNTY COUNCIL OF ANGUS. MASTER OF WORKS DEPARTMENT. Applications are invited for the appointment of an ARCHITECTURAL and PLANNING ASSISTANT on the staff of the Master of Works, who is also a County Architect and County Planning Officer, at aslary in accordance with A.P.T., Grade VIII (consolidated %685 to 2760 per annum) of the National Scales of Salaries for Local Anthorities Staffs. Preference will be given to candidates holding one or other of the following qualifications: A.R.I.B.A. or A.M.T.P.I. Full particulars and form of appli-ation may be obtained from the undersigned, with whom applications (on the prescribed form) must be lodged within fourteen days from the appearance of this advertisement. IAN A. MACKNIGHT. County Clerk.

County Buildings, Forfar. 7th August, 1948.

1513

1514

## **Tenders for Contracts**

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

COUNTY BOROUGH OF BRIGHTON. To Builders and Contractors :-Tenders are invited for the erection of 26 Per-manent Houses on the LOWER BEVENDEAN ESTATE, BRIGHTON. Bills of Quantities will be ready on and after the 3rd August, 1948. Contractors desiring to Tender should apply to the Borough Engineer and Surveyor, Mr. D. J. Howe, M.I.C.E., M.I.Mun.E., 26/30, King's Road, Brighton, and enclose a deposit of £2 2s. (made payable to the Borough Treasurer), which will be refunded on receipt of a bona-fide Tender or noti-fication of inability to Tender, providing such is received before the latest date of tendering. Plans may be viewed during the usual office hours. Sealed tenders, suitably endorzed, are to be delivered in the envelope provided, to the ander-signed, not later than 12 noon on Monday, the oth September, 1988. (Sgd.) J. G. DEREW.

(Sgd.) J. G. DREW, Town Clerk.

1448

1506

Town Hall, Brighton. July, 1948.

WILLENHALL URBAN DISTRICT COUNCIL. BRECTION OF 50 PERMANENT HOUSSES. Tenders are invited for the erection of 50 houses on Beacon Colliery Estate Contractors may tender for 10, 18, 22 or 50 houses. Bills of Quantities may be obtained from, and plans and conditions of contract may be inspected at the offices of Messre. Harvey & Wicks, FF.R.I.B.A., Architects, 117, Hagley Road, Edge baston, Birmingham, 16, on payment of a deposit of 2 2s. 0d., which will be returned on receipt of a bona fide tender and relevant documents. Tenders must be delivered to the undersized in a sealed envelope which will be provided, warked "Tender, Beacon Colliery Site Houses," by Ist September, 1948 The lowest, or any Tender will not necessarily be accepted. JOHN R. RIDING.

JOHN R. RIDING. Clerk of the Council.

Town Hall, Willenhall,

### Competitions

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

QUEEN ANNE LEGS... are the old look. Can you design a New Look in Furniture? Put it on paper and send it to the Palatial National Furniture Design Competition. 500 guineas in prizes for amateur and professional designers. Entry forms and defails from Palatial, Ltd., 616, Old Ford Road, E.3. 1452

# Architectural Appointments Vacant

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

A BOHITECTURAL ASSISTANTS required in A Offices at Tavistock, Newton Abbott, and Plymouth: applicants should have reached at least E. I.B.A. Intermediate standard, and be capable of working with a minimum of super-vision; salary according to experience and quali-fications. Reply to L. F. Vanstone & Parlners, Chartered Architects, Surveyors, National Pro-vincial Bank Chambers, Tavistock. 1263

A BCHITECT'S ASSISTANT, capable of pre-paring surveys, details, and specifications, required for general Country practice; knowledge et housing procedure an advantage; give full details, training, age. experience, etc.; good oppor-tunity for a keen young man. Apply Edwin H. Earp, L.R.I.B.A., Stratford-on-Avon. 1368

SENICE ASSISTANT ARCHITECT required in the Staff Architects' Department of a large West Riding Multiple concern; salary £500 p.a. Write, stating are and experience, with copies of testimonials, to Box 1386.

SENIOR ARCHITECTURAL ASSISTANT re-quired by Dublin City Office, Eire; must have 15 to 20 years' experience, expert know-ledge of working drawings, etc., and knowledge of hospital work; salary £750 to £1,006, accord-ing to experience. Also TWO SENIORS re-quired; expert knowledge of working drawings; salary £500 p.a. Box 1393.

A SSISTANT required; to work under Senior Assistant on measuring up, working draw-ings and details. Write, stating age, experience, salary required, and when available, S. G. Scales, A.R.I.B.A., National Provincial Bank Chambers, Eastbourne. 1469

SENIOR and JUNIOR ARCHITECTURAL ASSISTANTS required immediately; salary according to experience and qualifications. Write, stating age, qualifications, experience and train-ing, to H. & H. M. Lidbetter, F./A.R.I.B.A., 2, Verulam Buildings, Grays Inn, W.C.1. 1476

PART-TIME ASSISTANCE required; working drawings for small houses, country cottages, farm structures, industrial structures. R. D'Arcy Swainson, M.I.Struct.E., F.I.A.S., 76, Millthorpe Road, Horsham. 1458

A RCHITECT-QUANTITY SURVEYOR re-driver; final accounts and quantities; salary 2400-2500, depending on experience; one-bedroom furnished flat shortly available. Saunders & Partners, Architects, Castlegate, Newark-on-Trent. 1462

JUNIOR ARCHITECTURAL ASSISTANT re-quired; should be interested in contemporary design; ability to prepare constructional working drawings from sketch designs is essential; salary £6 to £8 per week, according to experience. Apply in writing, Misha Black, Design Research Unit, 37, Park Street, W.1. 1460

**EXPERIENCED SENIOR ARCHITECTURAL** ASSISTANTS required in busy Bloomsbury office engaged on commercial and general prac-tice. Telephone HOLborn 5108, or write with details, to Box 1459.

FIRM of Provincial Architects in Northern Ireland require a qualified and experienced SENIOR ASSISTANT, with a view to Partnership, and also an experienced ASSISTANT. Apply Box 1487.

A RCHITECTURAL ASSISTANT required; R.J.B.A. Intermediate standard; good draughtsman. Apply, stating are, experience, and salary required, to Farmer & Dark, Chartered Architects, Terminal House, Grosvenor Gardens, London, S.W.1. 1486

A RCHITECTURAL or SURVEYING ASSIST. ANT required for maintenance work by North Eastern Brewery, permanency for suitable man. Help given with housing accommodation. State salary required, age, experience, training and full particulars to Box 1502.

A SSISTANT required. Architect's busy office on South Coast. Capable man with sound experience, able to produce neat and accurate work. Salary according to ability. State age, experience, and salary, Box 1516.

## Architectural Appointments Wanted

A RCHITECTURAL ASSISTANT, 15 years' wide experience, desires progressive position; Southern England or abroad (South Africa pre-ferred). Eric A. Bates, F.F.S., Clopton Bridge House, Stratford-upon-Avon.

A RCHITECTURAL ASSISTANT (age 27), Dip.Arch.(Liverpool), recently passed Final examination, desires post with progressive oppor-tunities in Devon or Cornwall. Box 157,

A N Associate R.I.B.A., with 2 years' experi-ence in India and 15 months' experience in Central London, seeks suitable appointment in county of London. Write Box 156.

QUALIFIED Architect (female, 23) requires position as SENIOR ASSISTANT in Archi-tect's office, in London, W.; diploma of the University in Athens and 7 months' experience in Government office in Greece. Box 152.

A RCHITECTURAL ASSISTANT (30), N, Ireland, desires position offering scope in or near London. Salary 660 to 6700 p.a. accord-ing to nature of appointmort Box 159.

**Other Appointments Vacant** 

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

STRUCTURAL ENGINEERING ASSISTANTS. STRUCTURAL ENGINEERING ASSISTANTS. Applications are invited by the Co-operative Wholesale Society, Ltd., for appointment of Structural Engineering, Assistants, in their Man-chester Architects' Department. Applicants should have experience in the design and detailing of structural steel, reinforced concrete, and founda-tion works. Salary up to 2500 per sanaum, accord-ing to qualifications plus cost-of-living bonus. Good prospects of promotion for competent assistants. Successful candidates will be required to pass a medical examination for entry into the compulsory Superannuation Scheme. Applications, stating age, qualifications and ex-perience, to C.W.S., Ltd., Architect's Depart-ment, 1, Balloon Street, Manchester, 4. 1413

DUNLOP RUBBER CO. requires STRUC-TURAL ENGINEERING DRAUGHTS. MAN; must be experienced in detailing re-inforced concrete or steel work; knowledge of design advantageous, but not essential. Applica-tions in writing to Personnel Manager, Fort Dunlop, Erdington, Birmingham 24. 1443

DRAUGHTSMAN required immediately by London Consulting Engineer and Surveyor for setting down variety of site surveys; know-ledge of setting down essential, with some ex-perience reinforced concrete and steel; willing to join in outside survey work as necessary in any part country; must be accurate, conscientious, and eager to learn; only those seeking real work of an indoor/outdoor all-weather nature need apply; opportunity for right type. Write full particulars, with copies of testimonials, to Box 1461. parts 1461.

SECRETARY 8/T to Architects; 5-day week. plus 1. Saturday moning in 4; smallish office, pleasant atmosphere; holiday and Christmas bouks; good speeds essential; switchhoard, but no bookskeeping. Writs Kerr & Colbourn, 7, Bedford Row, W.C.L 1463

MAJOR MIDDLE EAST OIL CO. urgently Master a QUANTITY SURVEYOR'S ASSISTANT; should have had at least 7 years' experience in Quantity Surveyor's office and to be capable of taking off. betracting billing, prenaring estimates from Absolute to be capable of taking off, office and to be capable of taking off, abstracting, billing, proparing estimates from drawings for all types of building works, measuring work on site, settling accounts, and able to prepare small sub-contracts and write specifications; a man with some service survey experience, together with civil experience, would be considered; starting salary £540 per annum; age under 35. Write, giving brief details, etc., of experience, and quoting "K406," to Box No. "Z.G.," (J.J. W. Vickers & Co., Ltd., 7/8, Great Winchester Street, London, E.C.2.

MAJOR MIDDLE EAST OIL CO. urgently requires ASSISTANT SURVEYOR; to have experience of large triangulation surveys, and able to undertake same and precise levelling from start to finish; experience hydrographical survey work an advantage; starting salary up to £600 per annum; age under 35. Write, giving brief details, etc., of experience, and quoting "K.404," to Box No. "T.G.," c/o J. W. Vickers & Co., Ltd., 7/e, Great Winchester Street. London, E.C.2. 1422

QUANTITY SURVEYOR required, fully work and with thorough knowledge of building work and with thorough knowledge of present day prices. Preference will be given to appli-cant helding the R.I.C.S. Diploma. Avply Box 1515.

A VACANCY exists for a TECHNICAL ASSISTANT to develop the use of alu-minium and aluminium alloys for building applications. Applicants should not be over 30 years of age, and should possees architectural gualifications or equivalent practical experience. Rox 1895

S ENIOR SURVEYING ASSISTANT required, preferably Chartered Surveyor, with know-ledge of building construction and surveys. Salary, £600-£800, according to ability, Har-greaves & Reed, 17, Crook Log, Bexleyheath, Kent. 1503

VACANCY for experienced MODEL MAKER in Elstree district. Previous skilled ex-perience essential. Applications to Box 1504.

perience essential. Applications to Box 1504. **BRITISH** firm has vacancy for CLERK OF WORKS (preferably single) for service in Hong Kong and China. Candidates should have good experience in building and civil engineer-ing works of all kinds as General Foreman or Foreman Joiner, with ability to read accurately all types of plans and to make simple surveys and drawings; preferably with knowledge of re-inforced concrete and general building work. Salary, £450 to £550 p.a., according to ex-perience, plus cost of living allowance. A medical examination for fitness will be necessary before appointment. Application should state their age, trade, etc., and submit full details of work ex-perience and the capacity in which they were engaged, together with the names of their em-gloyers, to Box 1501.

DRAUGHTSMAN wanted by firm of country builders specialising in country cottages and farm buildings. Applicant should forward specimen drawing which will be returned im-mediately, and state salary required. Lions Green Works, Ltd., Horam, Sussex. 1492

### Services Offered

4 times or under, 20. 6d.: each additional line, 1s.

**CHNTLEMAN**, with extensive experience in personal connection with Architects, Barveyors and Local Authorities, seeks appointment with progressive company desiring experienced repre-sentation. Box 54.

**DERSPECTIVES.**—Water colour or line; pro-fessional; terms moderate. Write "New Services," 35, Heath Street, Birmingham. 18. 1079

HEATING, VENTILATING, AIR CON-DITIONING for Pactories, Public Build-ings, Private Houses, etc.; Consulting Specialists will be glad to collaborate with Architects in preparation of schemes, arranging and supervising contracts. W. H. Ross & Partners. Temporary address: 53, High Street, Harrow-on-the-Hill, Middlesox (c/o Electrical Safeguards, Ltd.). 1465

CHARTERED Architect, having wide experi-ence in England and overseas, desires re-sponsible appointment; administrative experience; able to take charge. Room 32, 4, Inverness Terrace, W.2. 1464

A RCHITECTURAL Models made to order; photographs of past work available. Box 1489. order;

YOUNG Man, recently completed military service, keen on studying Architecture, desires position in Architect's office, preferably in West Midlands. Box 1478.

QUALIFIED ARCHITECT would like to give part-time Assistance on War Damage Re-pairs, Cost of Works Robuilding, Surveys, Speci-fications, and Preparation of Drawings for other works. Box 1490.

QUALIFIED ARCHITECT is prepared to give services to any Large Business or Industrial Concern on a retaining fee basis, including Plans, Specifications, etc. Box 1491. QUALIFIED ARCHITECT offers part-time Assistance to members of the profession; Surveys,-Building, Working Drawings, Specifica-tions, etc.; fully experienced and with own equip-ment. Apply Box 1488.

## For Sale

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

FOR SALE.-" Practical Exemplar of English Architecture "; 4 vols. Box 1468.

### Miscellaneous

4 lines or under, 50.; each additional line, 10. 6d.

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99,107. 88. Pauls Road, N.1. Canonoury Son. OFFICE space wanted by Architect; West End or central area preferred; 200 to 400 sq. ft.; could share telephone. Box 1319. HEAVY Metal Windowframes for Factories etc., to your dimensions; in. thick web, i. wide flanges; prompt delivery.-PRODUCTOR PROMOTION, 94, Camden Road, N.W.1. GULliver 1356.

FENCING FOR ALL PURPOSES.-Supplied and erected; established 100 years. Parker, Winder & Achurch, Ltd., 20, Broad Street, Birmingham, 1.

Birmingham, 1. USED Antiquarian Plan Chest urgently re-quired at reasonable cost. Box 1479. GEORGE HIGGINSON, LTD., Bickenhil, I. Specialist Contractors, Land Clearing, Earth Moving and Levelling. Scrapers and bulldozers with skilled men available for large or small contracts in any districts. 1480

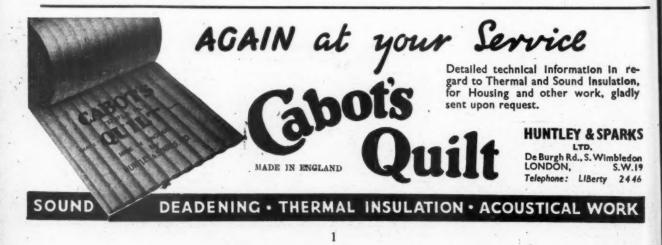
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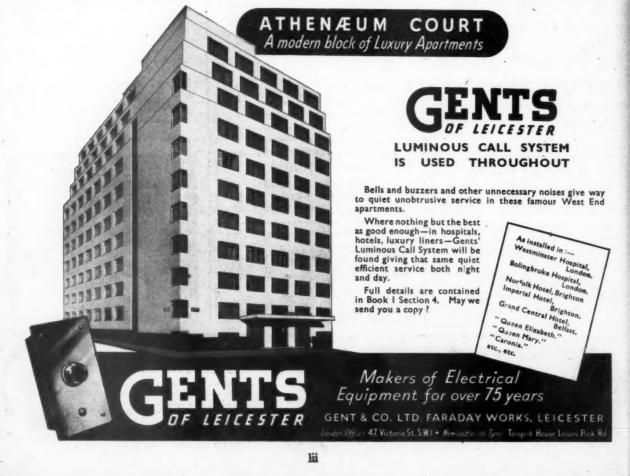




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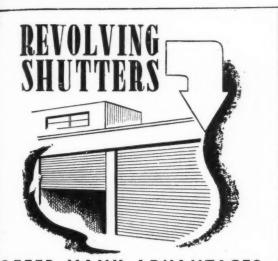
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Bindell Spence & Co., Ltd.       xxxvi       Griffiths Bros, & Co., Ltd.       Ruberoid Co., Ltd.         Booth, James, & Co., Ltd.       xxxiii       Harmeill Breike, Co., Ltd.       Sadcolock, Ltd.         Bouton & Paul, Ltd.       xxxiii       Harmeill Breike, Co., Ltd., The       Sadcolock, Ltd.         Brailshwalte & Co., Engineers, Ltd.       Harmeind Breike, Co., Ltd., The       Xiiii Scattering Great Breizan, Ltd.       xiiii Scattering Great Breizan, Ltd.       xiiiii Scattering Great Breizan, Ltd.       xiiiii Scattering Great Breizan, Ltd.       xiiiiiiiiii Scattering Great Breizan, Ltd.       xiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii		XXXVI				
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Boulton & Paul, Ltd.       xxxii       Halcrete (Precision) Panels. Ltd.       Scafiller, Thomas, Sons & Co.         Brox, C. W., F. R. L. A.       II       Hammond & Champness, Ltd.       xii       Scafilling (Great Birtlan), Ltd.       xx         British Aluminium, Co., Ltd.       II       Hampond & Champness, Ltd.       xii       Seconostic, Ltd.       xii         British Aluminium, Co., Ltd.       xix       Harper, John, & Co., Ltd.       xii       Seconostic, Ltd.       xii         British Aluminium, Co., Ltd.       xix       Harper, John, & Co., Ltd.       xii       Seconostic, Ltd.       xii         British Mouldex Rubber Co., Ltd.       xii       Henlynev, & Sons, Ltd.       xiii       Smith & Pearson, Ltd.       IIiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii						xl
Box, C. W., F. R.I.B.A.       II       Hammill Brick Co., Ltd., The       Scaffolding (Great Britsin), Ltd.       xx         Briggs, William, & Sons, Ltd.       Harper, John, & Co., Ltd.       Xii       Scaffolding (Great Britsin), Ltd.       xx         British Alumalatur Co., Ltd.       Xii       Harper, John, & Co., Ltd.       Xii       Scaffolding (Great Britsin), Ltd.       xx         British Gas Council       Harper, John, & Co., Ltd.       Xii       Scaffolding (Great Britsin), Ltd.       xx         British Gas Council       Harper, John, & Co., Ltd.       Will       Scaffolding (Great Britsin), Ltd.       xx         British Gas Council       Harper, John, & Co., Ltd.       Will       Scaffolding (Great Britsin), Ltd.       xx         British Mainalet Co., Ltd.       Mill       Harrery, G. A., & Co. (Ltd.       Xxx       Smith & Fearson, Ltd.						-
Braitsmaite & Co., Engineers, Ltd.       Hammond & Champness, Ltd.       xii       Sealocrete Products, Ltd.       xii         Britgs, William, & Sons, Ltd.       iiii Strike & Sons, Ltd.       Semetx, Ltd.       Semetx, Ltd.       Semetx, Ltd.         British Aluminium Co., Ltd.       xix       Harris & Sheldon, Ltd.       v       Semetx, Ltd.       Semetx, Ltd.       Semetx, Ltd.         British Insulated Callender's Cables Co.,       Holpe, Henry, & Sons, Ltd.       xxxxiii       Sharman, R. W., Ltd.       Iiii Scrice Electric Co., Ltd.       Iiii Scrice Electrice Co., Ltd.       Iiiii Scrice Electrice Co., Ltd.       Iiiii Scrice Electrice Co., Ltd.       Iiiii Scrice Electrice Co., Ltd.       Iiii Scrice Electrice Co., Ltd.       Iiiii Scrice Electrice Co., Ltd.       Iiiiiii Scrice Electrice Co., Ltd.       Iiiii Scrice Electrice Co., Ltd.       Iiiii Scrice Electrice Co., Ltd.       Iiiii Scrice Electrice Co., Ltd.       Iiiiii Scrice Electrice Co., Ltd.       Iiiiii Scrice Electrice	Box C W FRIRA					xxix
Birges, William, & Sons, Ltd.       Harper, John, & Co., Ltd.       Seconnastic, Ltd.       Harver, G. A., & Co. (London), Ltd.       W         British Gas Council       ix       Harver, G. A., & Co. (London), Ltd.       W       Service Electric Co., Ltd.       Service Ilender's Cables Co., Ltd.       Harver, G. A., & Co. (London), Ltd.       Strive Electric Co., Ltd.       Service Ilender's Cables Co., Ltd.       Hope, Henry, & Sons, Ltd.       Xxxvii       Smith, Henry (Constructional Elegineers), British Nouldex Rubber Co., Ltd.       Ilender's Cables Co., Ltd.       Inder Stripe Co., Ltd.       Ilender's Cables Co., Ltd.       Ile				×11		xly
Birlish Aluminium Co., Ltd.       xix       Harris & Sheldov, Ltd.       v       Semtex, Ltd.       memory       Semtex, Ltd.       Semtex, Ltd.       Memory       Semtex, Ltd.       Memory       Semtex, Ltd.       Memory       Semtex, Ltd.       Sentex, Ltd.       Memory       Service Electric Co., Ltd.       Memory       Semtex, Ltd.       Memory       Service Electric Co., Ltd.       Memory			Harper John & Co., Ltd.			AIV
Bittish Gas Council       Harvey, G. A., & Co., (Lod.       iii       Strick Insulated Callender's Cables Co., Ltd.       xxxvii         Bittish Insulated Callender's Cables Co., Ltd.       Hope, Henry, & Sons, Ltd.       xxxvii       Smith, Henry (Constructional Engineers), Ltd.         Bittish Mouldex Rubber Co., Ltd.       xiv       Horsley Bridge & Those, Piggett, Ltd.       Smith & Pearson, Ltd.       Itd.         Bittish Mouldex Rubber Co., Ltd.       xiv       Horsley Bridge & Those, Piggett, Ltd.       Smith & Rodger, Ltd.       Itd.         Bittish Nional Electrices, Ltd.       xxiii       International Correspondence Schools, Itd.       Nather & Midland Plastering, Ltd.       xiv         Building Centre, The Ltd.       International K Co., Ltd.       Itd.       Itd.       xiv       Southern & Midland Plastering, Ltd.       xiv         Calor Gast Toon Co., Ltd.       xiv       Jobeston Pack, & Co., Ltd.       xiii       Staines Kitchen Equipment Co., Ltd.       xiv         Calor Gast Toon Co., Ltd.       xiv       Laing, John, & Son, Ltd.       xiii       Staines Kitchen Equipment Co., Ltd.       xiv         Calor Gast Toon Co., Ltd.       xiv       Laing, John, & Son, Ltd.       xiv       Thorprohorough & Sons (Maachester), Ltd.		vir	Harris & Sheldon Ltd	v		
British Insulated Callender's Cables Co.,       Helliwell & Co., Ltd.       xxxvii       Sharman, R. W., Ltd.         British Ironfounders' Association       Hopton-Wood Stone Firms, Ltd.       xxx       Smith, Henry (Constructional Engineers),         British National Electrics, Ltd.       xxiii       Huntley & Sparks, Ltd.       Smith & Pearson, Ltd.       Industrial Engineering, Ltd.       Smith & Rodger, Ltd.       Industrial Engineering, Ltd.       Smith & Rodger, Ltd.       Industrial Engineering, Ltd.       Xxiii         Brown, Donald (Brownall), Ltd.       Industrial Engineering, Ltd.       Xiiii       Jerkins, Robt, & Co., Ltd.       Xiiii       Southern & Midland Plastering, Ltd.       Xiiii         Burn Bros, (London), Ltd.       Xiiii       Jerkins, Robt, & Co., Ltd.       Xiiii       Stalnes Kitchen Equipment Co., Ltd.       Xiiii         Carlor Gas " (Distributing) Co., Ltd.       Xiiii       Johnston Bros. (Contractors), Ltd.       Xiiii       Stales Ason, Ltd.       Xiiii         Carlor Gas " (Distributing Co., Ltd.       Xiiiii Johnston Bros. (Contractors), Ltd.       Xiiii       Sundeala Board Co., Ltd.       Xiiii         Carlor Gas " (Distributing Co., Ltd.       Xiiii       Johnston Bros. (Ltd.       Xiiii       Sundeala Board Co., Ltd.       Xiiii         Carlor Gas " (Distributing Co., Ltd.       Xiiii       Johns & Son, Ltd.       Xiiii       Sundeala Board Co., Lt	British Gas Council	A*A.	Harvey G A & Co (London) Ltd			_
Ltd.       Hope, Henry, & Sons, Ltd.       xxx       Smith, Henry (Constructional Engineers), Ltd.       Import-Wood Stone Firms, Ltd.       Ltd.       Import-Wood Stone Firms, Ltd.       Import-Wood Stone Firms, Ltd.       Smith & Rodger, Ltd.       Import-Wood Stone Firms, Ltd.       Import-Wood Stone Firms, Ltd.       Smith & Rodger, Ltd.       Import-Wood Stone Firms, Ltd.       Import-Stone Stone Firms, L	Dritish Insulated Callender's Cohles Co					1
British Ironfounders' Association       Hopton-Wood Stone Firms, Ltd.       Ltd.       Ltd.       Itidis Mational Electrics, Ltd.       Itidis Mational Electrics, Ltd.       Itidis Mational Electrics, Ltd.       Itidis Mational Electrics, Ltd.       Ismith & Pearson, Ltd.       Imperial Chemical Industries, Ltd.       Ismith & Pearson, Ltd.       Ismith & Pearson, Ltd.       Imperial Chemical Industries, Ltd.       Imperial Chemical Industries, Ltd.       Imperial Chemical Industries, Ltd.       Imperial Chemical Industries, Ltd.       Imperial Chemical Engineering, Ltd.       Imp			Hone Honer & Song Ltd			11
British Mouldex Rubber Co., Ltd.       xxiii       Horsley Bridge & Thos. Piggett, Ltd.       Smith & Pearson, Ltd.	Duitich Tranformdate' Accordition			AAA		1111
British National Electrics, Ltd.       xxiii       Huntley & Sparks, Ltd.       1       Smith & Rodger, Ltd.       1         British Pilmber, Ltd.       Imperial Chemical Industries, Ltd.       Southern & K. J., & A., Ltd.       1         British Pilmber, Ltd.       International Correspondence Schools,       Southern & Midland Plastering, Ltd.       1         Brond & Co.       Xxviii       International Correspondence Schools,       1       Southern & Midland Plastering, Ltd.       1         Brond & Co.       Xiii       Jeffxins, Robt., & Co., Ltd.       11       Stonerte Hone Co., Ltd.       11         Born Bros, (London), Ltd.       Xiii       Jones, Samuel, & Co., Ltd.       11       Stohart & Son, Ltd.       11         Caler Gas " (Distributing) Co., Ltd.       11       Jones, Samuel, & Co., Ltd.       11       Stohart & Son, Ltd.       12         Carled & Co.       Xii       Johnston Bros, (Contractors), Ltd.       11       Stohart & Son, Ltd.       12         Carled & Co.       Xii       Lead Iodustries Development Council.       10       Stohart & Son, Ltd.       11         Caltor & Co.       Xii       Lead Iodustries Development Council.       10       Thornborough & Sons, (Manchester), Ltd.       11         Callou, Ltd.       Yii       Lineaferinsh, Ltd.       11       Torns	Dritish Mouldor Dubbar Co. Ltd	wise				1111
Brittako Pilmber, Ltd.       Imperial Chemical Industries, Ltd.       Southern Line Association, Industrial Engineering, Ltd.       Xxi         Brown, Donald (Brownall), Ltd.       International Correspondence Schools, Ltd.       Xi       Southern & Midland Plastering, Ltd.       Southern & Midland Plastering, Ltd.       International Correspondence Schools, Southern & Midland Plastering, Ltd.       Xiii         Building Centre, The       II       Jerikins, Robt, & Co., Ltd.       Xiiii       Staines Kitchen Equipment Co., Ltd.       Xixxy         Building Centre, The       II       Jerikins, Robt, & Co., Ltd.       Xiiii       Staines Kitchen Equipment Co., Ltd.       Xixxy         Cable Makers' Association       Jones, Samuel, & Co., Ltd.       Xiiii       Stolaart & Son, Ltd.       Xiiii       Stolaart & Son, Ltd.       Xiiiii       Stolaart & Son, Ltd.       Xiiiiii       Xiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	British Mouldea Rubber Co., Ltd.			1		1111
Britmac Electrical Co., Ltd.       Industrial Engineering, Ltd.       xxviii         Broad & Co.       xxviii       International Correspondence Schools, Ltd.       Xxviii       Southern & Midland Plastering, Ltd.       xxxviii         Brown, Donald (Brownall), Ltd.       xviiii       International Correspondence Schools, Ltd.       Nilding Correspondence Schools, Ltd.       Nilding Correspondence Schools, Southern & Midland Plastering, Ltd.       Nilding Correspondence Schools, Nilding Correspondence Schools, Nilding Correspondence Schools, Ltd.       Nilding Correspondence Schools, Nilding Correspondence School, Nilding Correspondence Schools, Nilding Correspondence School, Nilding Correspondence School, Nilding Correspondence School, Nilding Correspondence School, Nilding Corespondence School, Nilding Correspondence Schol, Nilding Correspo	British Dilmbox I td	XXDI	Imparial Chamical Industrias Ltd	. 1		1111
Brown, Donald (Brownall), Ltd.       ttd.       Ltd.       Southern & Midland Plastering, Ltd.       International Correspondence Schools,       Southern & Midland Plastering, Ltd.       Image: Southern & Midland Plasteri	British Filmber, Ltu	the second second second				-14-
Brown, Donald (Brownall), Ltd.       Ltd.       II       Spooners         Building Centre, The       II       Jeffxins, Robt., & Co., Ltd.       Staines Kitchen Equipment Co., Ltd.       XXXX         Burn Bros. (London), Ltd.       Xilii       Jeffxins, Robt., & Co., Ltd.       Xilii       Steines Kitchen Equipment Co., Ltd.       XXXX         Cable Makers' Association       Jones, Samuel, & Co., Ltd.       Xili       Steloart & Son, Ltd.       Xili         Cargo Fleet Iron Co., Ltd.       Iiii       Johnston Bros. (Contractors), Ltd.       Xili       Stohart & Son, Ltd.       XXXX         Carlea & Co.       Xili       Leaderfluch, Ltd.       Xili       Stohart & Son, Ltd.       XXXX         Carlea & Co.       Xili       Leaderfluch, Ltd.       Xili       Stohart & Son. Mindows, Ltd., John       XXXX         Carlea & Co.       Xiliii       Leaderfluch, Ltd.       Xiliiii       Thornborough & Sons. (Manchester), Ltd.       Xiliiii         Carlea & Co.       Xiliiiii       Lowell & Hanson, Ltd.       Xiliiiiiii       Thorps, John B.       Sonos, Lock & Safe Co., Ltd.       Thorps, John B.         Carley & Koss. (Lad.       Litd.       Lowell & Hanson, Ltd.       Xiliiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	Britmac Electrical Co., Ltd		International Correspondence Schools	XXI	Southern Linne Association, The	XUV
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Burn Bros. (London), Ltd.       xilii       Jiewood, Ltd.       xilii       Steleon (Industrial Floor), Ltd.         Cable Makers' Association	Brown, Donald (Brownall), Ltd.	11		п	Spooners	241
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Carliele Electrical Manufacturing Co., Ltd.       Laing, John, & Son, Ltd.       Sutcliffe, Speakman & Co., Ltd.         Carter & Co.       xiv       Leaderfluxeh, Ltd.       xvi       Leaderfluxeh, Ltd.       xvi         Cellon, Ltd.       xvi       Leaderfluxeh, Ltd.       xvi       Thornborough & Sons (Manchester), Ltd.       Thornborough & Sons (Manchester), Ltd.       iii         Chubb & Sons, Lcd.       xvi       Lidaerfluxeh, Ltd.       iii       Thornborough & Sons (Manchester), Ltd.       Thornborough & Sons (Manchester), Ltd.       iii         Colt, W. H. (Lond(cn), Ltd.       Ltd.       Lysaght, John, & Co., Ltd.       iii       Thornseot Rescon Windows, Ltd., The       Thornes (Manufacturing Co., Ltd.       Thornes (Manufacturing Co., Ltd.       iii       United Steel Co., Ltd., The         Critical Manufacturing Co., Ltd.       Masson, Joseph, & Co., Ltd.       viii       Turners Absetsos Cement Co., Ltd       Thorneson Rescon Windows, Ltd				xm		
Ltd.       xiv       Lead Icolustries Development Council       xv       Thompson Beacon Windows, Ltd., John         Carter & Co.	Cargo Fleet Iron Co., Ltd.	x	King, George W., Ltd.			XXXVI
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Cement Marketing Co., Ltd.       Ltd.       Tilyard Tiles, Ltd.         Coubb & Sons, Lock & Safe Co., Ltd.       Lovell & Hanson, Ltd.       Tilyard Tiles, Ltd.         Cothy W. H. (Londen), Ltd.       Lysaght, John, & Co., Ltd.       Trussed Concrete Steel Co., Ltd.         Cottal Manufacturing Co., Ltd.       Marley Tile Co., Ltd.       Trussed Concrete Steel Co., Ltd.         Crittal Manufacturing Co., Ltd.       Mason, Joseph, & Co., Ltd.       Trussed Concrete Steel Co., Ltd.         Crittal, Richard, & Co., Ltd.       Mason, Joseph, & Co., Ltd.       Til United Paint Co., Ltd.         Davidson, C., & Sons, Ltd.       McKechnie Bros., Ltd.       Ii         Davidson, Ltd.       McKechnie Bros., Ltd.       Iii United Steel Companies, Ltd., The         De La Rue Insulation, Ltd.       Xxiv       McKechnie Bros., Ltd.       Xiv You de Travers Asphalte Paving Co., Ltd., The         Durnbik, Ltd.       Xili       Metropolitan-Vickers Electric Co., Ltd.       Xii Walker Crosweller Co., Ltd.       Xii         Durable Asphalte Co., Ltd.       Hi Mills Scaffold Co., Ltd.       Xiii Waring & Gillow, Ltd.       Xiii       Xiii Waring & Gillow, Ltd.       Xii         Durable Asphalte Co., Ltd.       Hi Mills Scaffold Co., Ltd.       Hiv Waring & Gillow, Ltd.       Xii       Xiii         Durable Asphalte Co., Ltd.       Hi Mills Scaffold Co., Ltd.       Hiv Waring & Gillow						111
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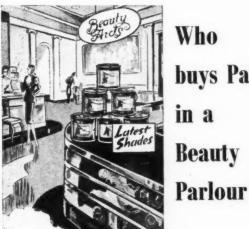


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