

THE ARCHITECTS' JOURNAL



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 Centre

Current Technique

Questions and Answers

Prices

The Industry

PHYSICAL PLANNING SUPPLEMENT

CURRENT BUILDINGS

HOUSING STATISTICS

Architectural Appointments
Wanted and Vacant

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

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. Marlborough Whitehead, "Dyneley," Castle Hill Avenue, Berkhamstead, Herts.	
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Welbeck 5721
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
APRR	Association for Planning and Regional Reconstruction. 34, Gordon Square, W.C.1.	Euston 2158-9
ArchSA	Architectural Students' Association. School of Architecture, Manchester Municipal School of Art, All Saints, Manchester, 15.	Ardwick 3480
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Welbeck 9738
ASB	Architectural Science Board of the Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
ASew	Association of Scientific Workers. 15, Half Moon Street, Piccadilly, W.1.	Grosvenor 4761
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Welbeck 5721
BATC	Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1.	Reliance 7611, Ext. 1706
BC	Building Centre. 9, Conduit Street, W.1.	Mayfair 8641/6
BCC	British Colour Council. 28, Sackville Street, W.1.	Regent 3613
BCCF	British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13.	Perivale 6869
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 43, George Street, Croydon	Croydon 5452
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Temple Bar 9434
BGC	British Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
BGF	British Gas Federation. 1, Grosvenor Place, S.W.1.	Sloane 8266
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140
BRS	Building Research Station. Bucknalls Lane, Watford	Garston 2246
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
BTE	Building Trades Exhibition. 4, Vernon Place, W.C.1.	Holborn 8146/7
CABAS	City and Borough Architects Society. C/o Johnson Blackett, F.R.I.B.A., Borough Architect, Town Hall, Newport, Mon.	Newport 3111
CAS	County Architects Society. C/o A. Guy Chant, F.R.I.B.A., Salop County Council, 5, Belmont, Shrewsbury.	Shrewsbury 3031
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CDA	Copper Development Association. Kendals Hall, Radlett Herts.	Radlett 5616
CIAD	Central Institute of Art and Design. 41, 42, Dover Street, W.1.	Regent 3074
CIAM	Congrès Internationaux d'Architecture Moderne. Dolderhof, 7, Zurich, Switzerland	
CID	Council of Industrial Design. Tilbury House, Petty France, S.W.1.	Whitehall 6322
CPC	Codes of Practice Committee. MOW, 42, Onslow Gardens, S.W.7.	Kensington 8161
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.	Sloane 4280
CUJC	Coal Utilization Joint Council. 13, Grosvenor Gardens, London, S.W.1.	Victoria 1534
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
DOT	Department of Overseas Trade. 35, Old Queen Street, S.W.1.	Victoria 9040
EC	Electricity Commission. Savoy Court, Strand, W.C.2.	Temple Bar 7565
EJMA	English Joinery Manufacturers Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FB 1951	Festival of Britain 1951. 2, Savoy Court, Strand, W.C.2.	Waterloo 1951
FASSC	Federation of Association of Specialists and Sub Contractors. 21, Tothill Street, S.W.1.	Whitehall 9606
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, Nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1.	Chancery 7583
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4041
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
GG	Georgian Group. 27, Grosvenor Place, S.W.1.	Sloane 2844
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 3158
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577

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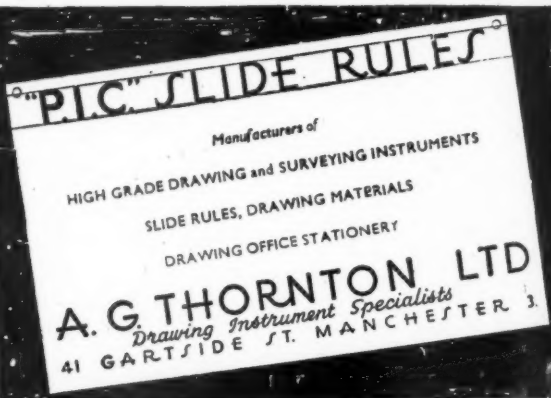
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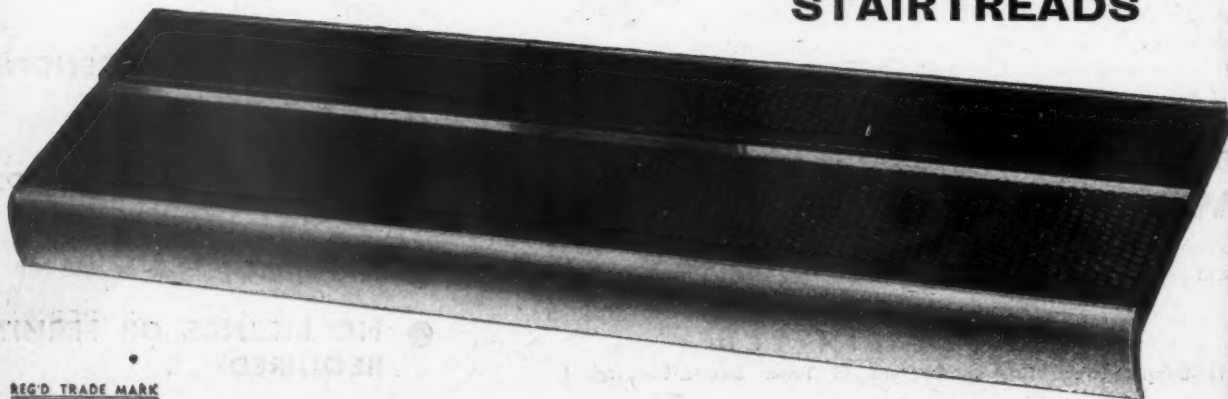
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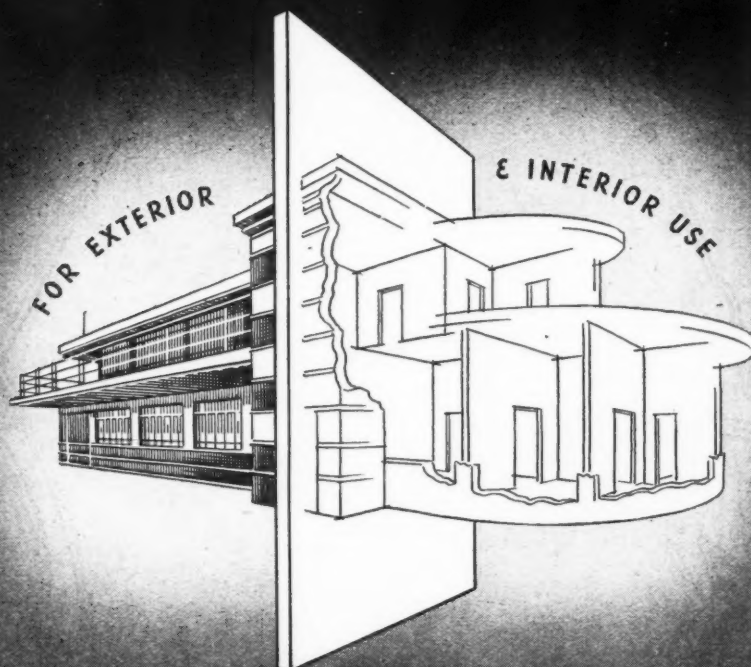
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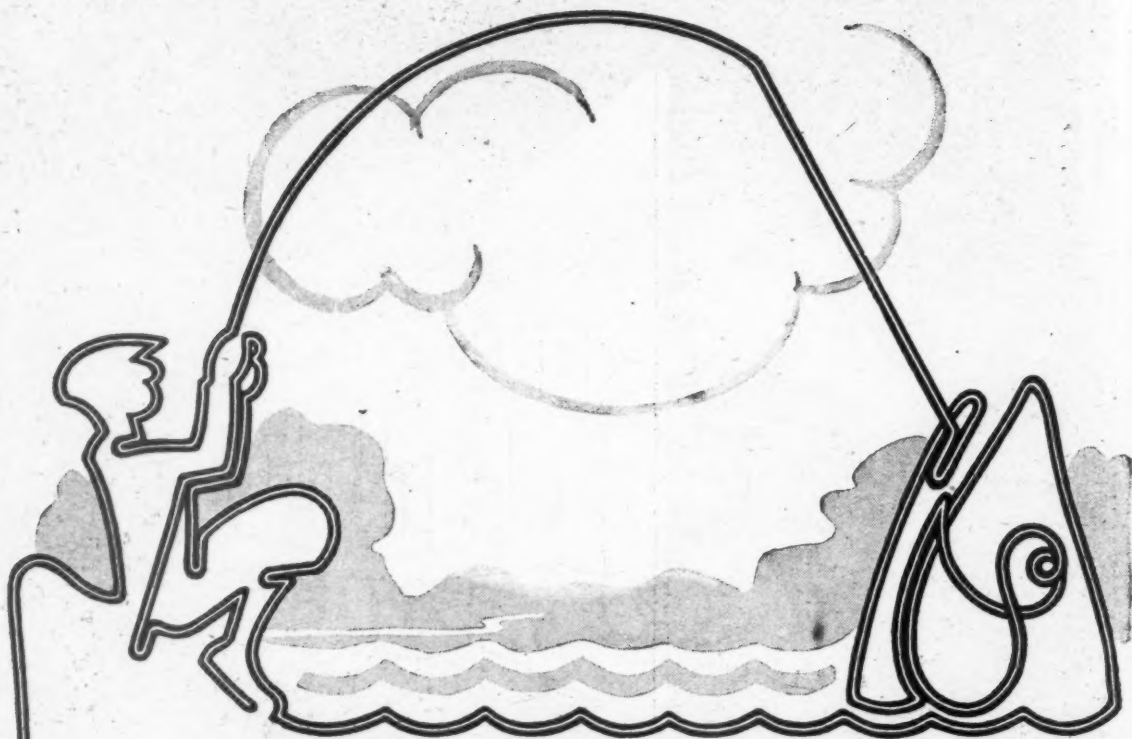
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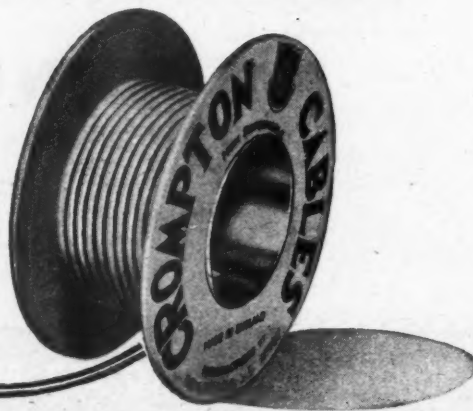
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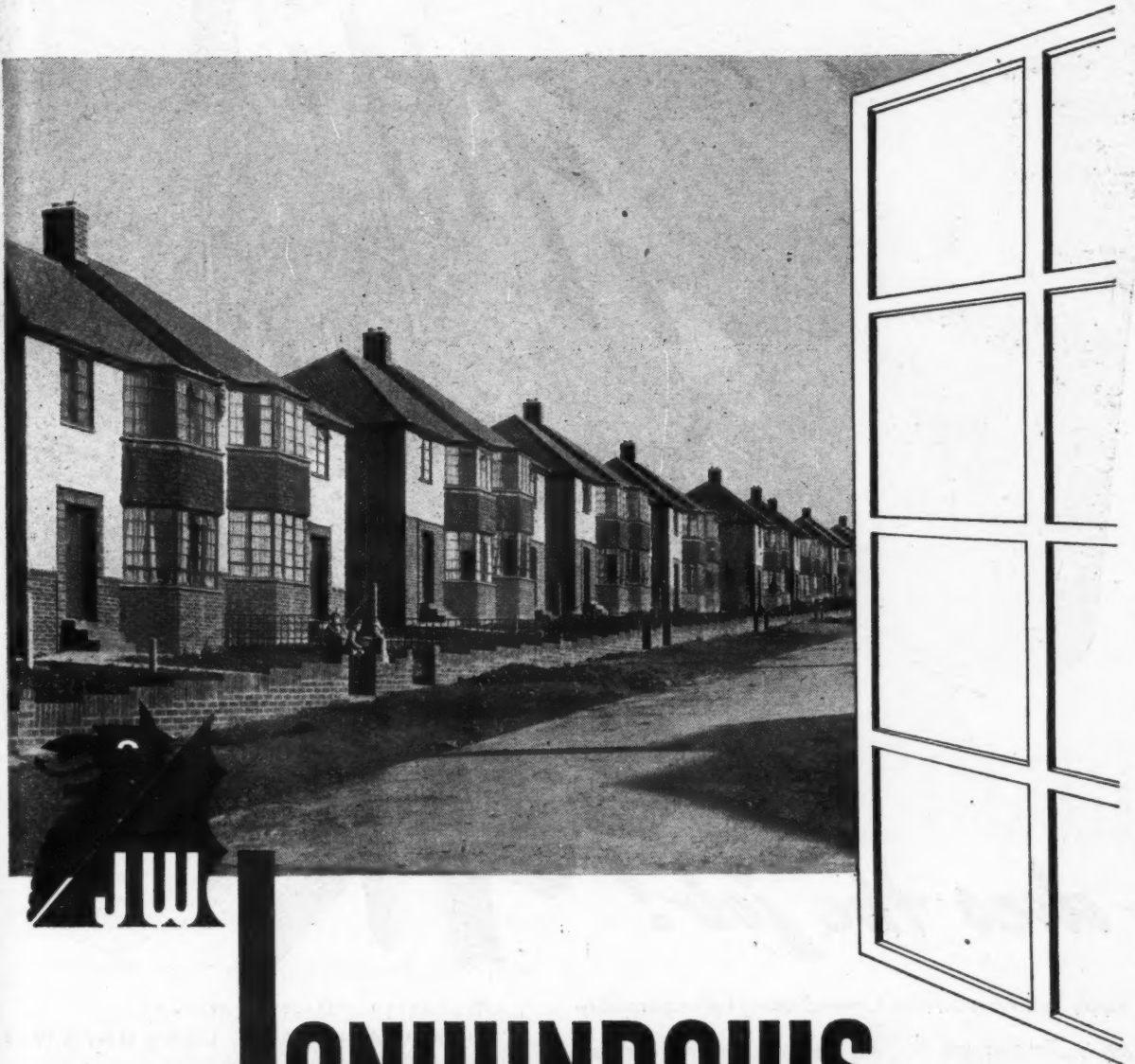
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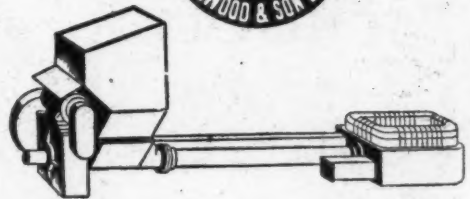


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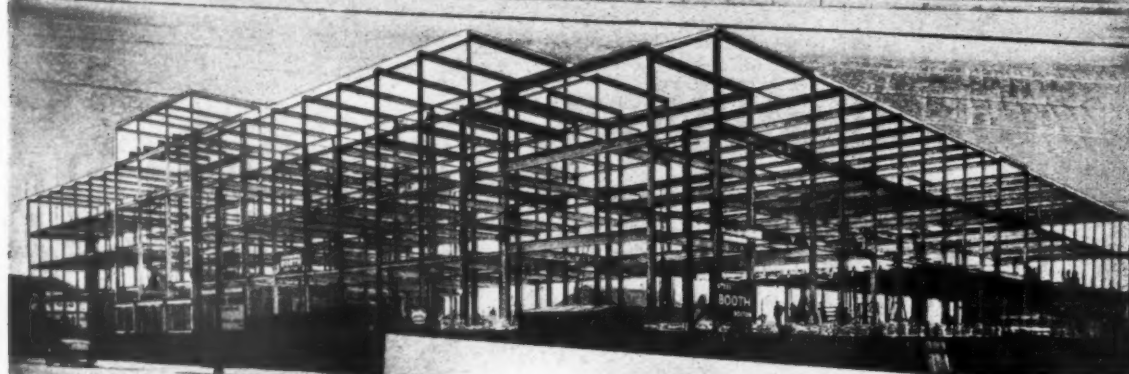


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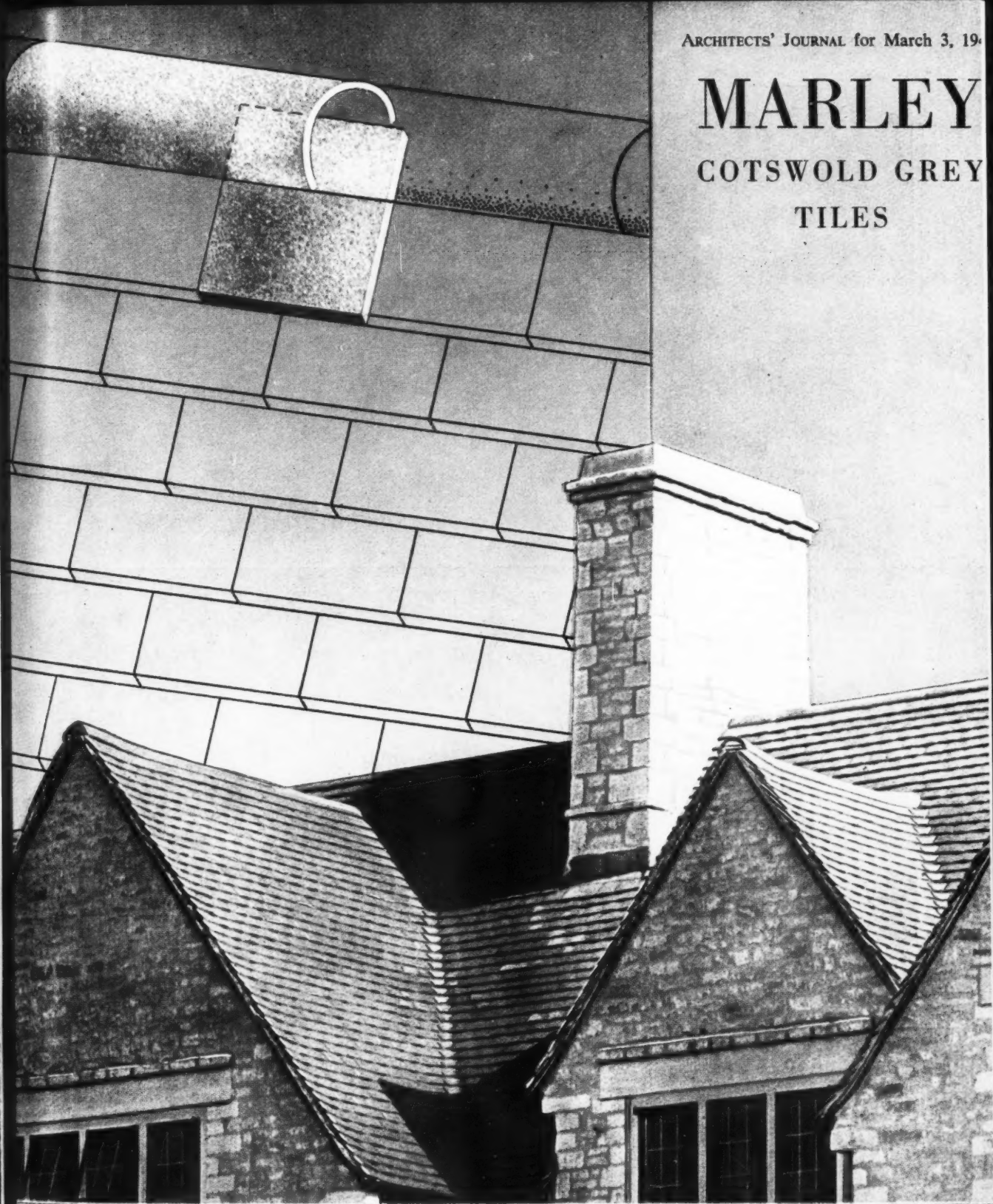
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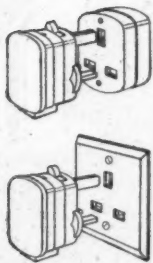
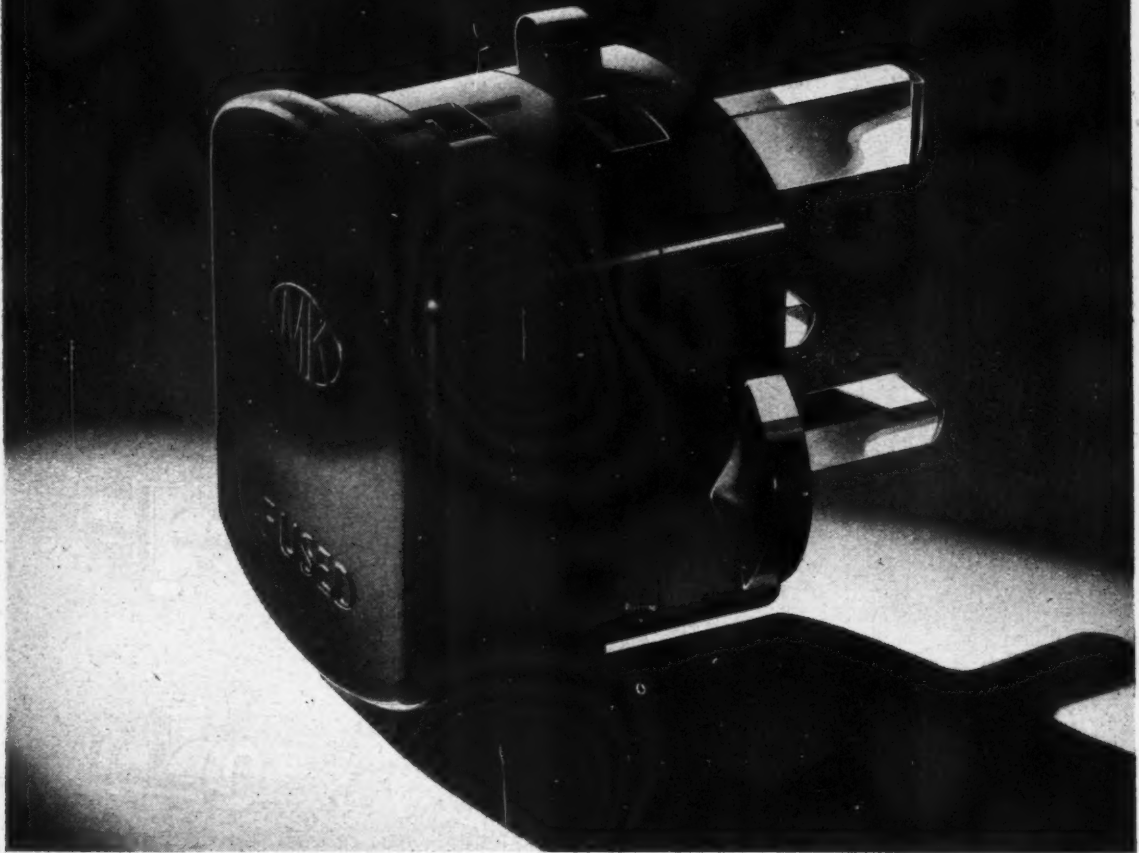
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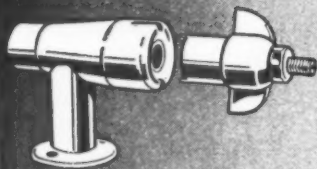


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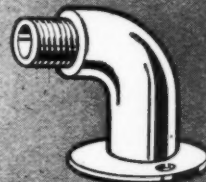
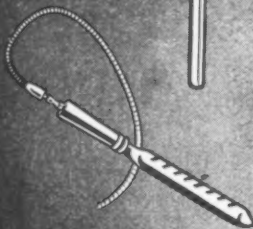
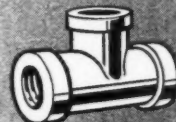
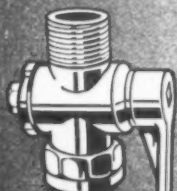
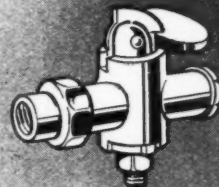
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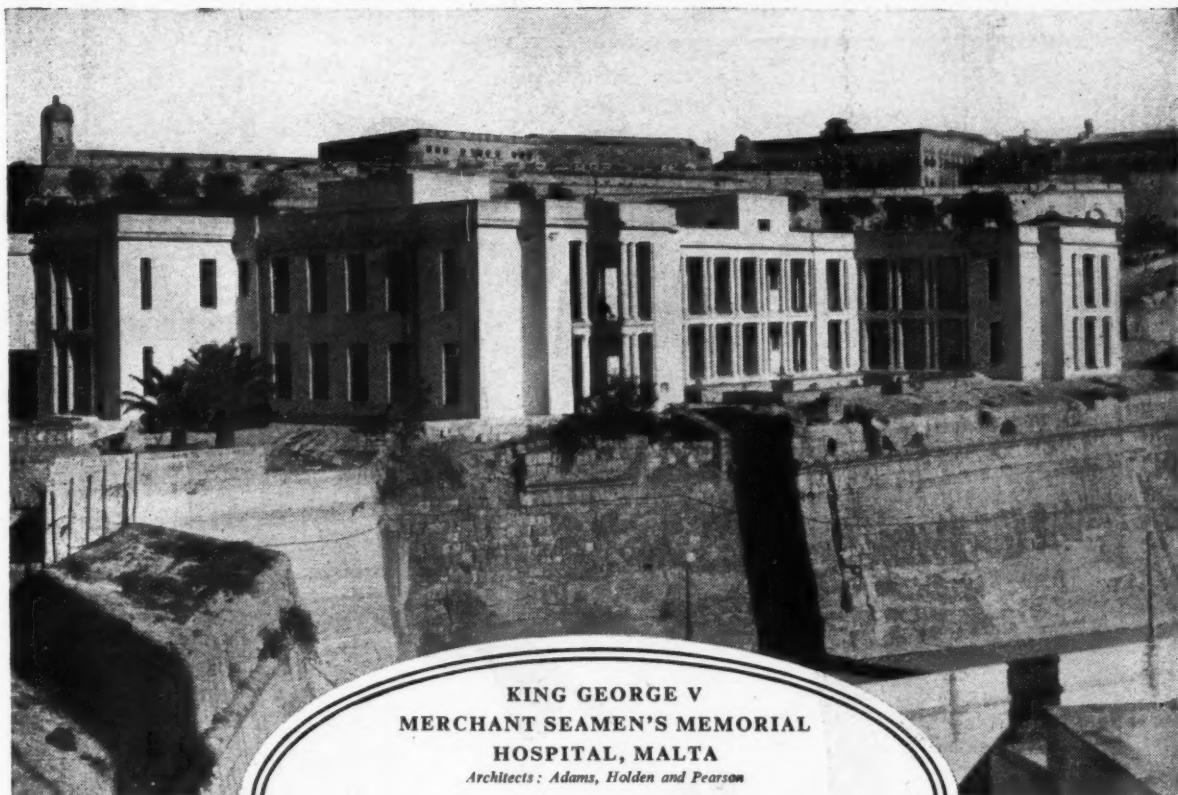
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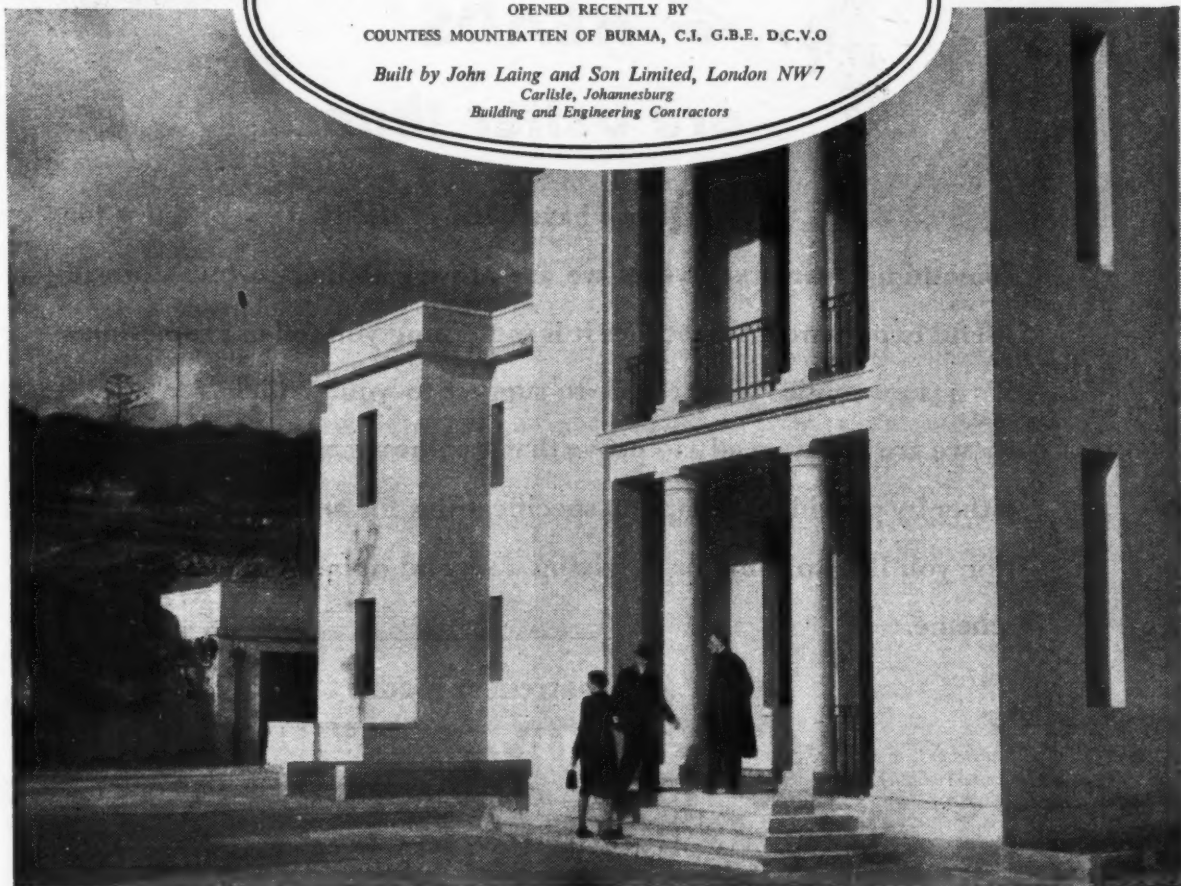


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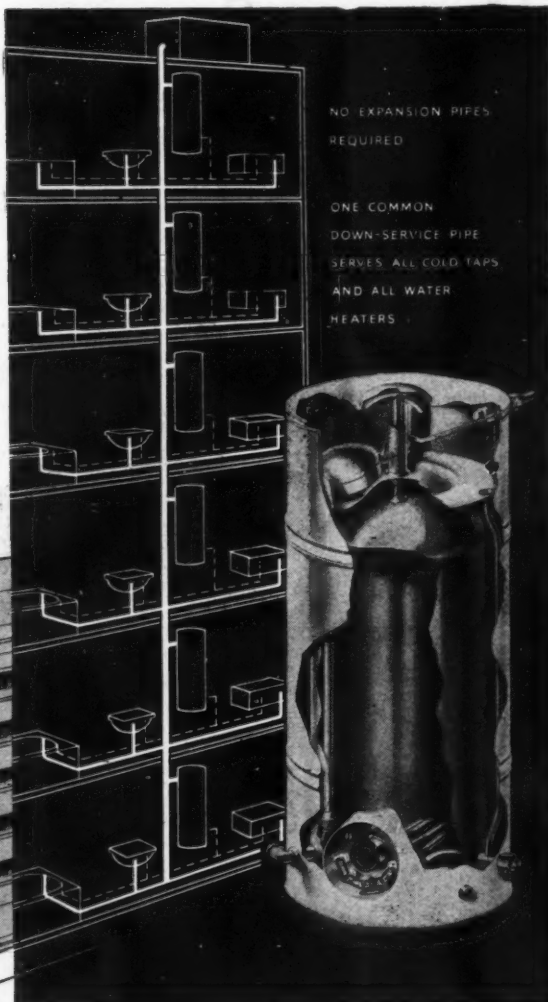
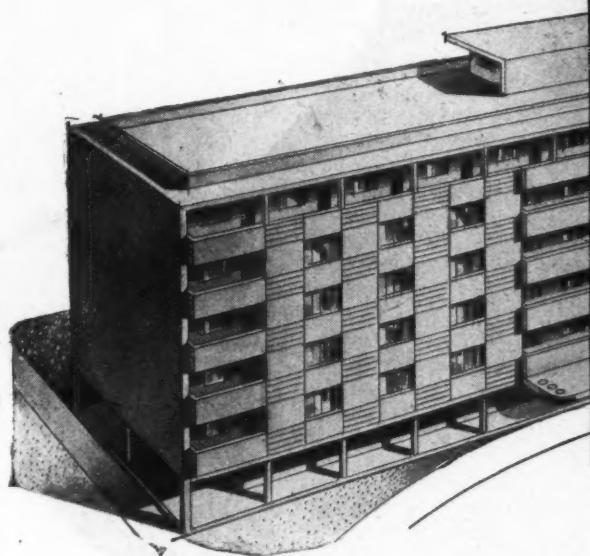
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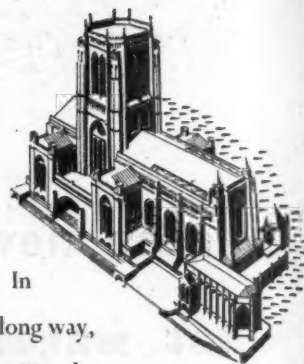
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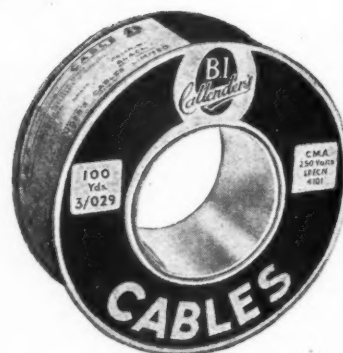
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TWO EXAMPLES OF THE NEW

VERSALITE LIGHTING FITTINGS

These wall brackets are two examples from the range of *Versalite* fittings that have been designed by our Director of Design A. B. Read, R.D.I., A.R.C.A., F.S.I.A. as a series to give maximum flexibility and adaptability for lighting the contemporary interior. The fittings can be used for direct or indirect, general or local lighting, and include — standard lamps, table lamps, wall brackets and pendants.

All *Versalite* fittings have shades or reflectors which may be turned at a touch to give directional lighting. The standard finish of the reflectors is egg-shell ivory white, but the outside surface may, by arrangement, be sprayed any colour, or given an anodised finish. All reflectors have a pierced star design in the domed end, and pierced holes along the edge. Shades are usually in ivory or pale peach plastic trimmed in self colour, but patterned material and nylon may be supplied when available. All fittings have 2-inch centre B.S.S. fixings.

ALL FITTINGS ARE SUITABLE

FOR 40, 60 or 100

WATT LAMPS

FV.2/S WALL BRACKET Adjustable arm. Shade. Metal finishes — back plate, ivory white; arm, satin brass or satin chrome. Shade, ivory or peach plastic. Complete with switch.

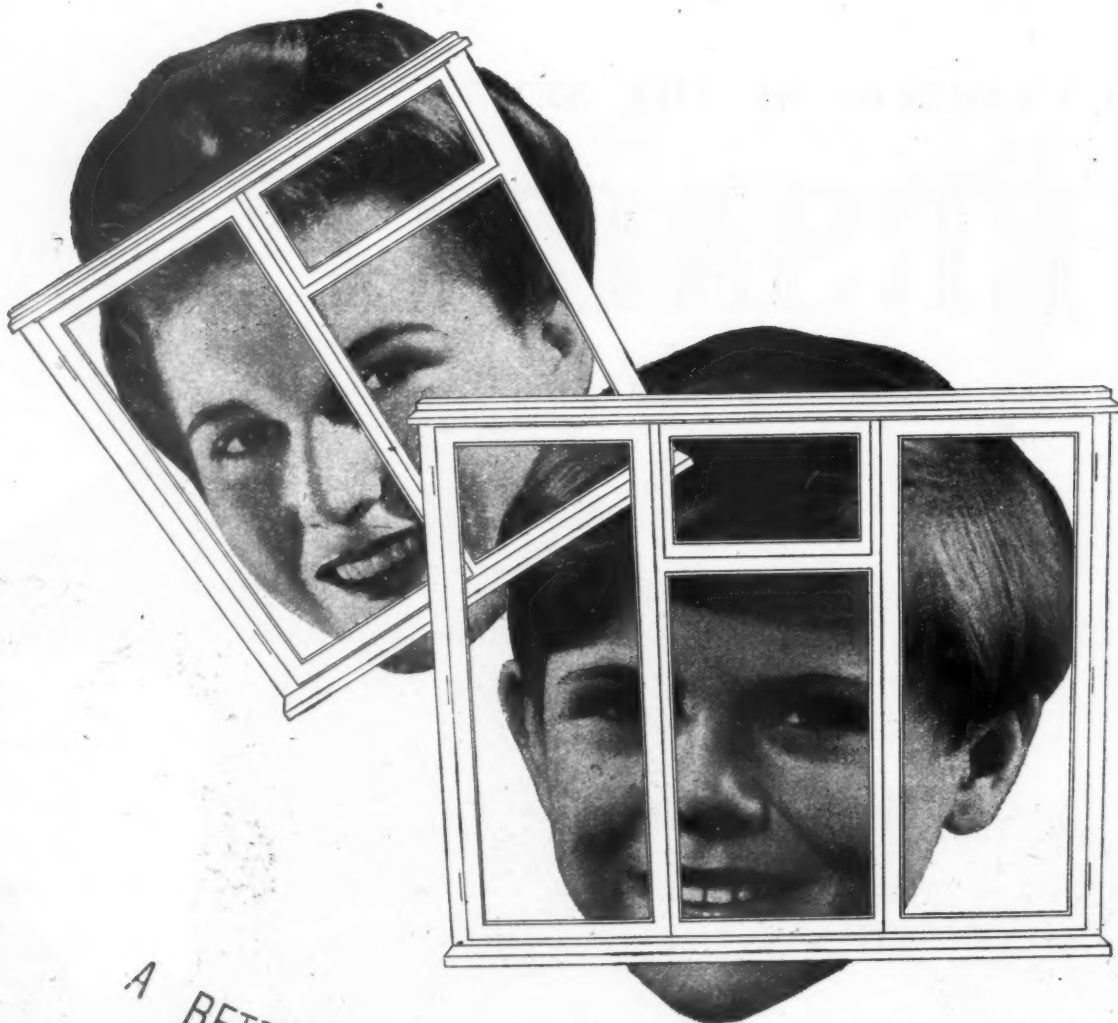
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Tygan

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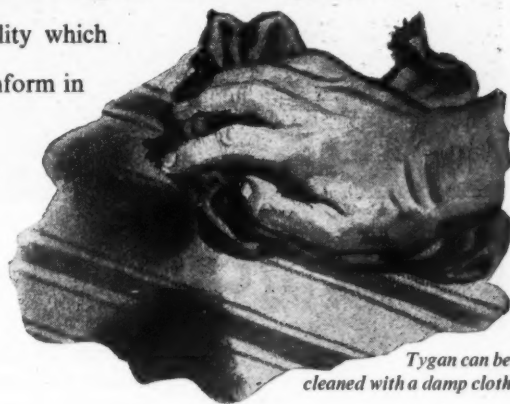
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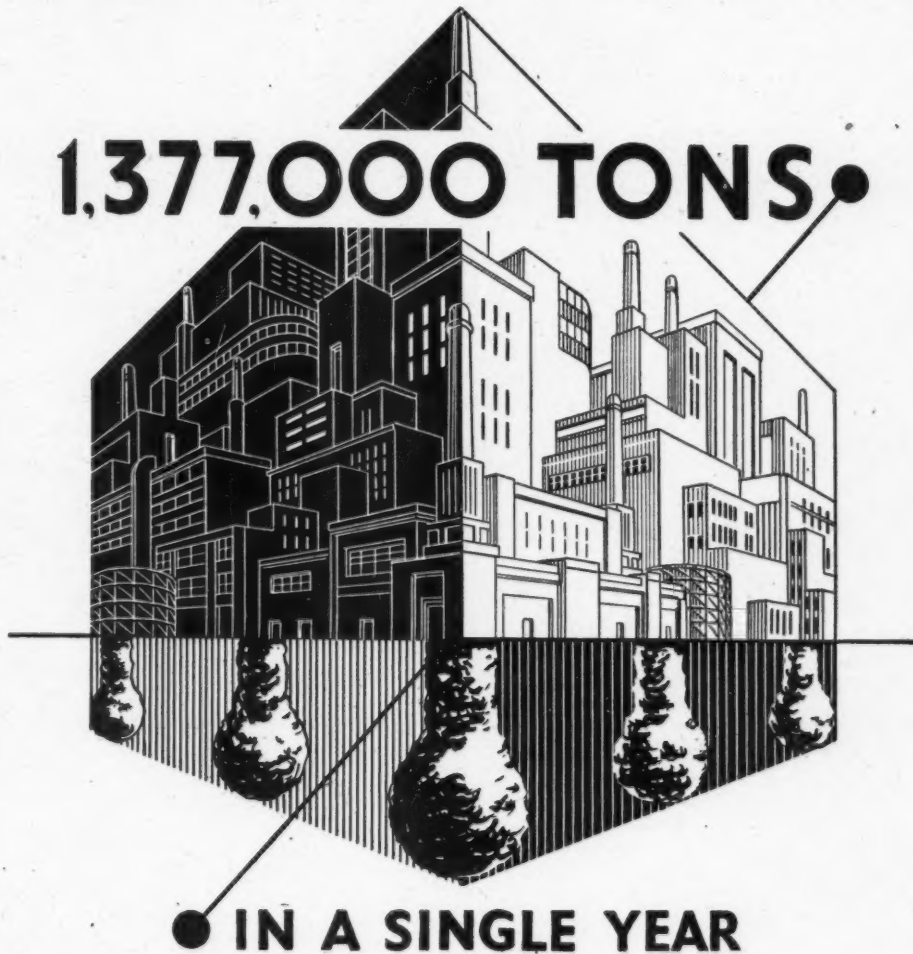
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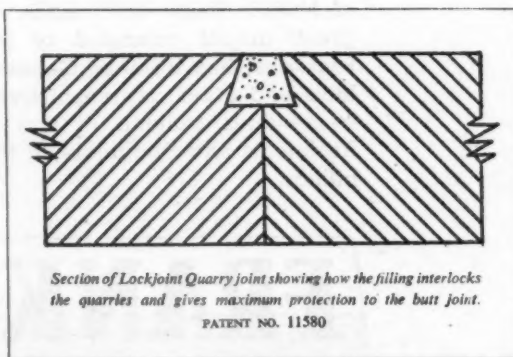
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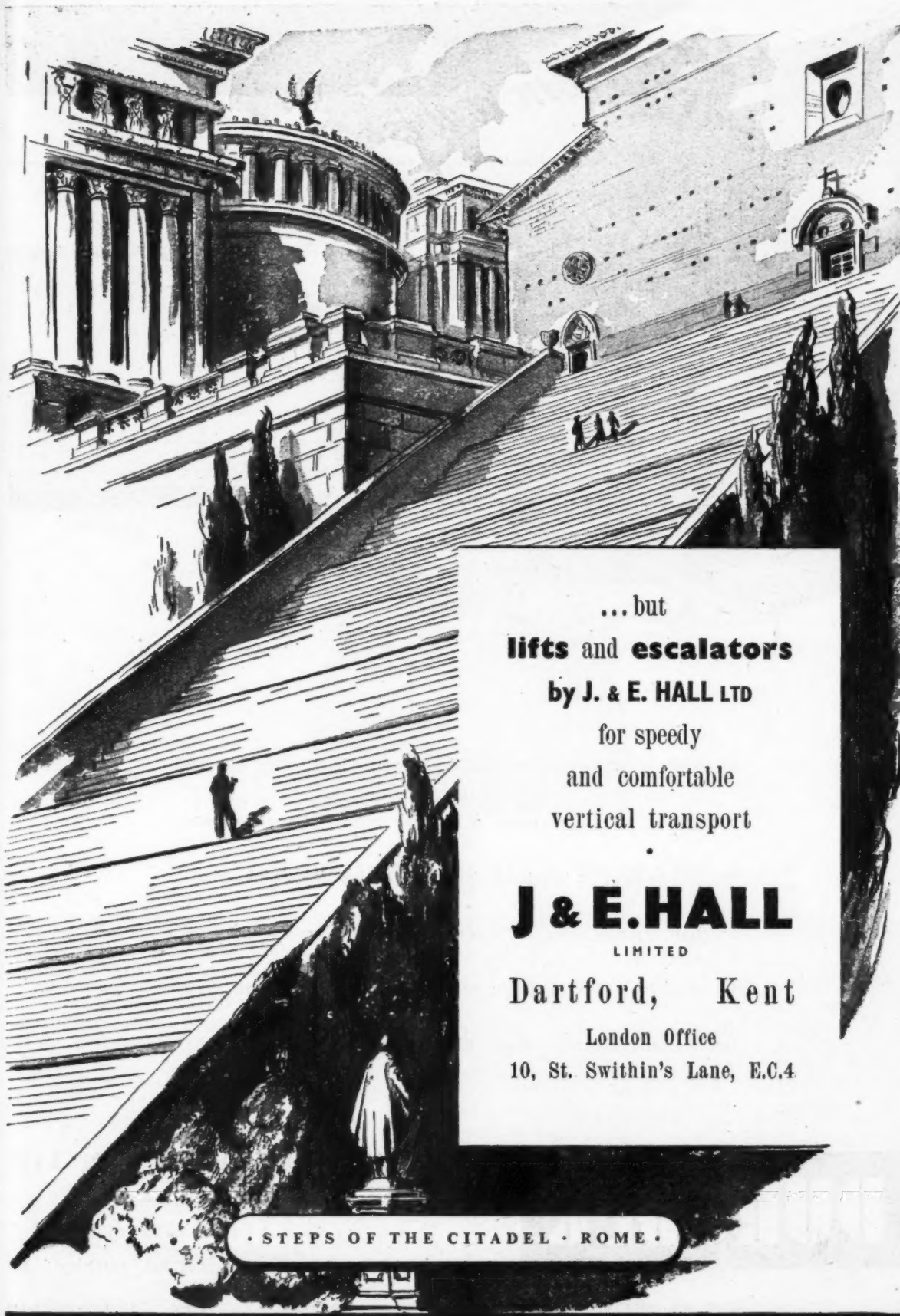
Section of Lockjoint Quarry joint showing how the filling interlocks the quarries and gives maximum protection to the butt joint.
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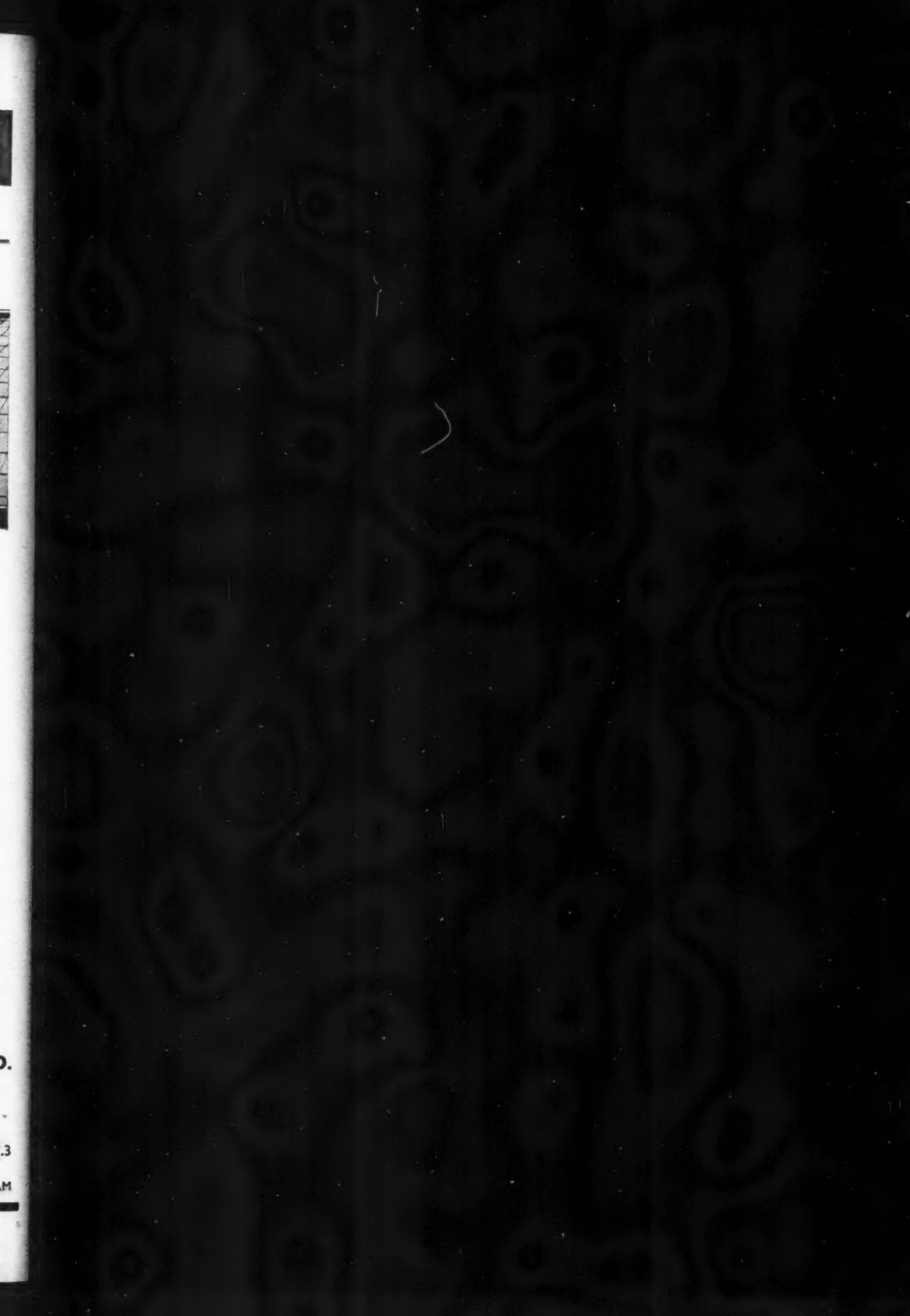
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invest in **CELOTEX** insulation

CONSTRUCTION	Uninsulated	Under-Purlin Insulation	Over-Purlin Insulation
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Corrugated Iron	220	220	220
Celotex Insulating Board	—	4"	1/2"
Air Space/Purlins	—	1/2"	1"
Celotex Insulating Board	—	1/2"	1"
Thermal Transmittance "U"	1.40	0.31	0.32
Fuel Consumption tons p.a.	7.7	8.3	1.7
Cost of Heating Plant. Cost £'s	88	94	19
Saving in Plant and Fuel due to Celotex insulation %	—	78	78

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Plymax, the metal-faced Plywood, is extremely light, rigid and does not 'drum' like sheet metal. It is hygienic, damp-proof, easy to decorate and saves space. These properties make Plymax the ideal material for the construction of Partitions and Doors, W.C. Compartments, Showers and Dressing Cubicles for Schools, Hospitals, Offices, Factories and Public Buildings. Ask for booklet "Plans and Detail Drawings".

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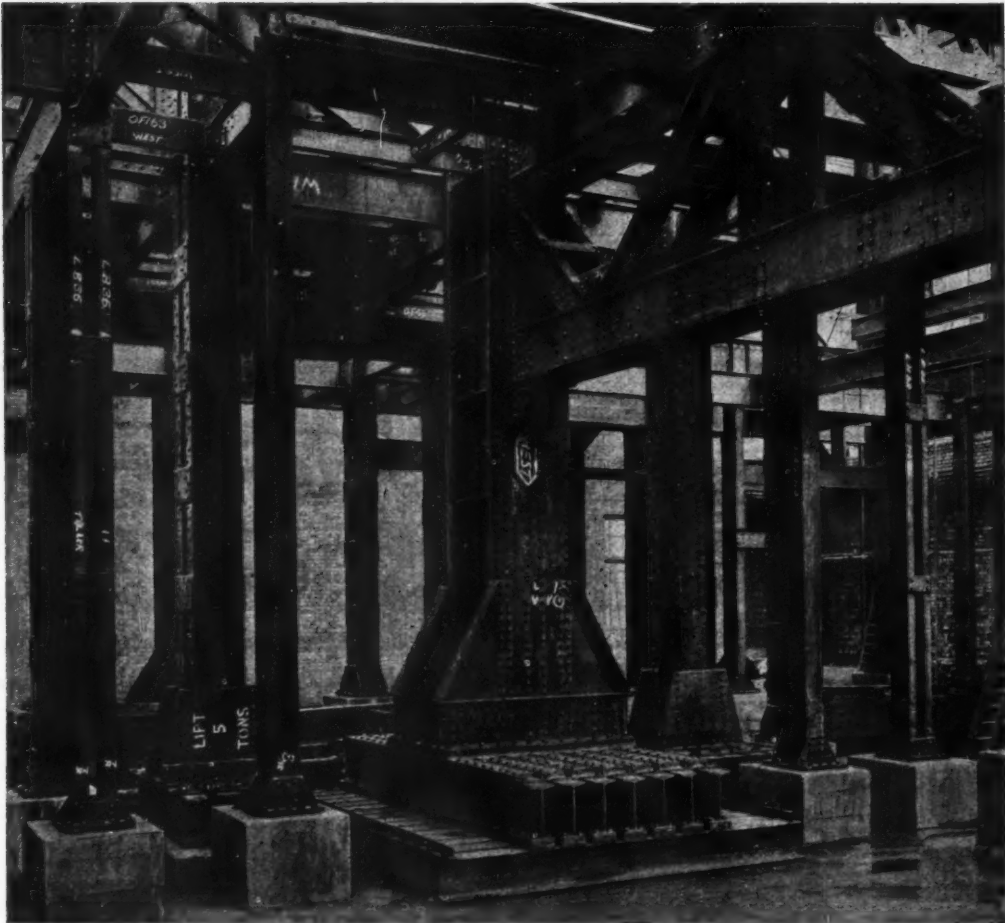
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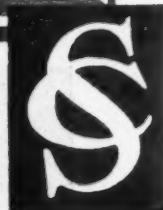
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Handmade Roof Tiles by



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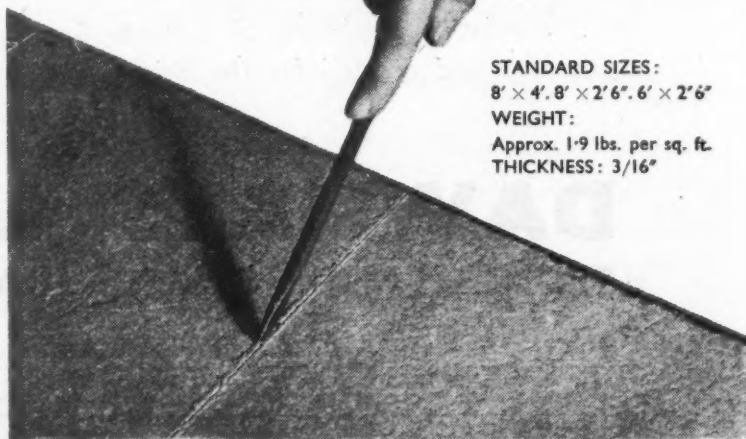
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STANDARD SIZES:
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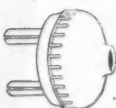
positively prevents the dangerous practice of a wire being wrapped around the contacts to make a temporary 'repair.' Although not specified, the 30-amp. switch has passed the following severe tests: B.S.S. 816, 124 and 861; a proportionate test based on 1299, and a flash-over test of 1,600 volts R.M.S. A subsequent development of the Unit will include the new 13-amp. flat-pin fused plug and socket to B.S.S. 1363.

The Clix Cooker Control Unit is described in an illustrated leaflet which will be sent free on request.

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- Foolproof cartridge fuse holder for auxiliary circuit.
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- Available in Black or Cream moulded finish.
- 30-amp. Change-over Switch available as a separate unit.



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List No. 4466
Clix 2-pin "M" Plug



List No. 2871
5-amp. Metal-clad
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List No. 3780
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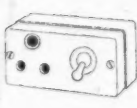
List No. 4485/6
Clix Ceiling Roses



List No. 4941
Clix Suspension Switches



List No. 3122
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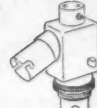
List No. 4343
3-pin Switch Socket
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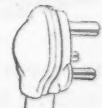
List No. 4092
5-amp. "Epic" Switches



List No. 4980
B.C. Lampholder, Cord-
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List No. 6011
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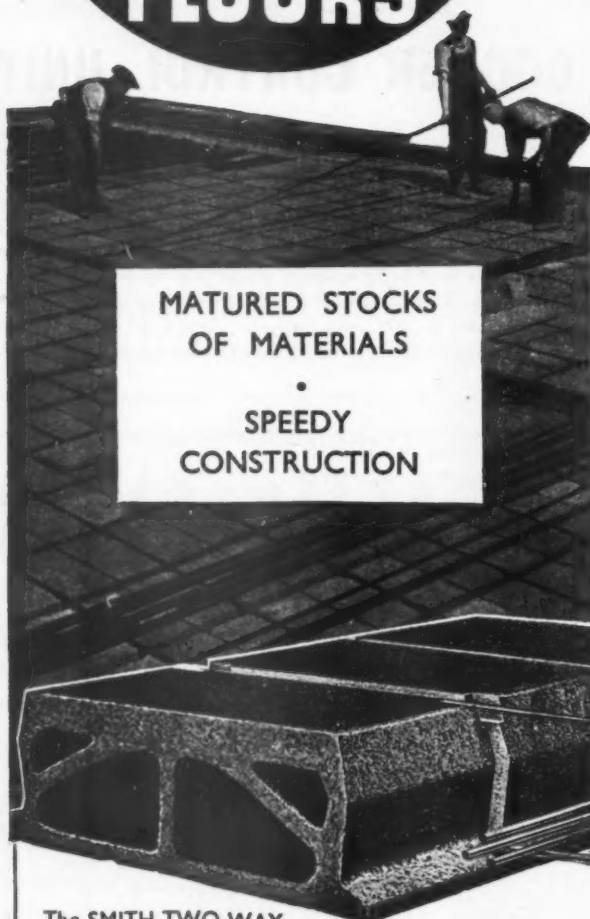


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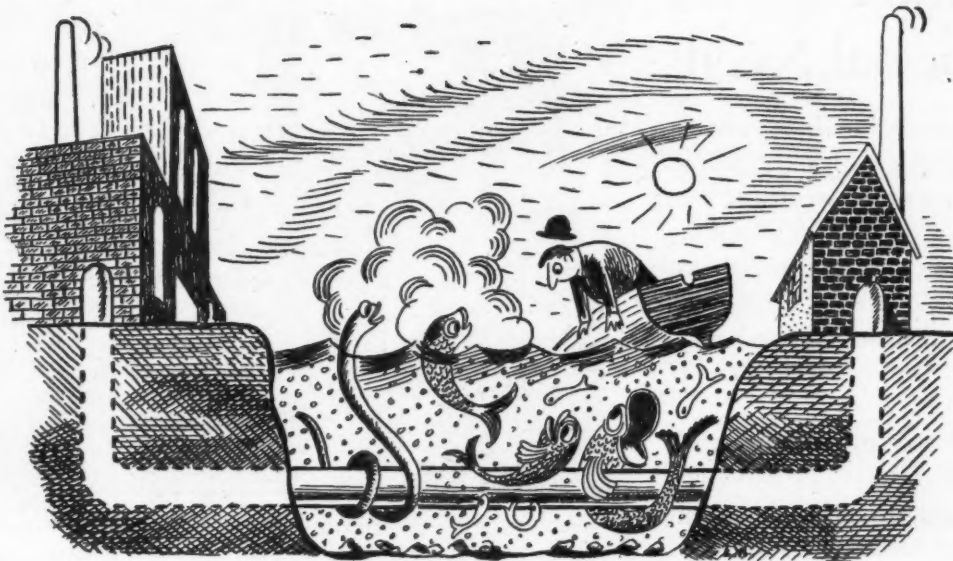
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THIS WOULDN'T HAPPEN TO YOU!

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Wouldn't you be wise to ask the Ministry's Fuel Engineer to pay you a visit—just in case? Not only is he rich in practical experience, but he can look at the job from a fresh point of view.

By the way, have you referred to "The Efficient Use of Steam" by Oliver Lyle? It can be ordered through any bookseller (886 pp., 15/- nett), or obtained from H.M. Stationery Office, 15/9 post free.

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We are always pleased to work either to architects' own designs or to prepare original schemes in our design office. Why not consult us?



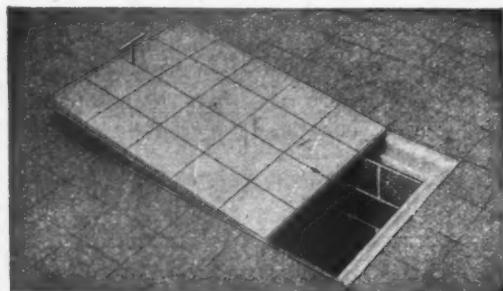
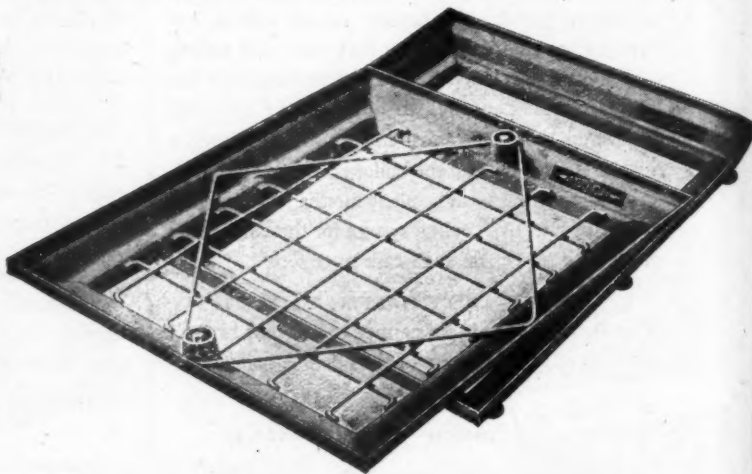
The Main Booking Hall of the British European Airways at Dorland Hall, Regent Street, W.1.—Architect A. F. Watson, A.R.I.B.A. The Main booking counter is 84 feet long and is of chestnut veneered plastic, with aluminium facings. The 60 feet long settee is covered in red hide. The "perspex" indicator boards have interchangeable name plaques and the table tops are covered in light blue heat resisting plastic material.

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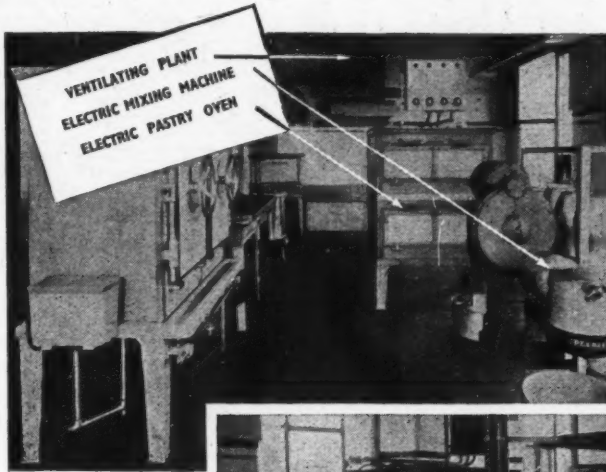
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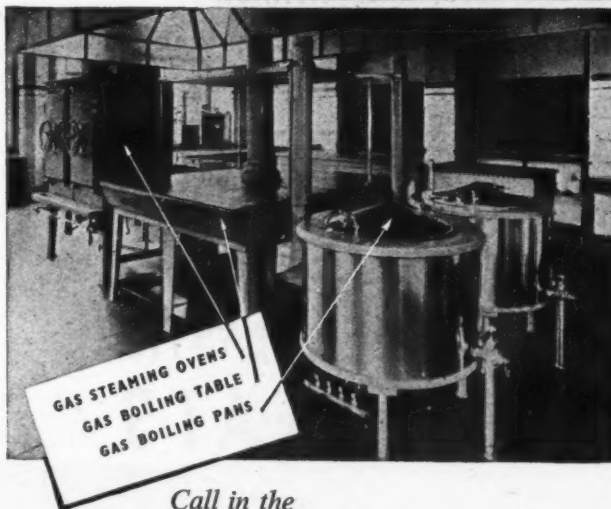
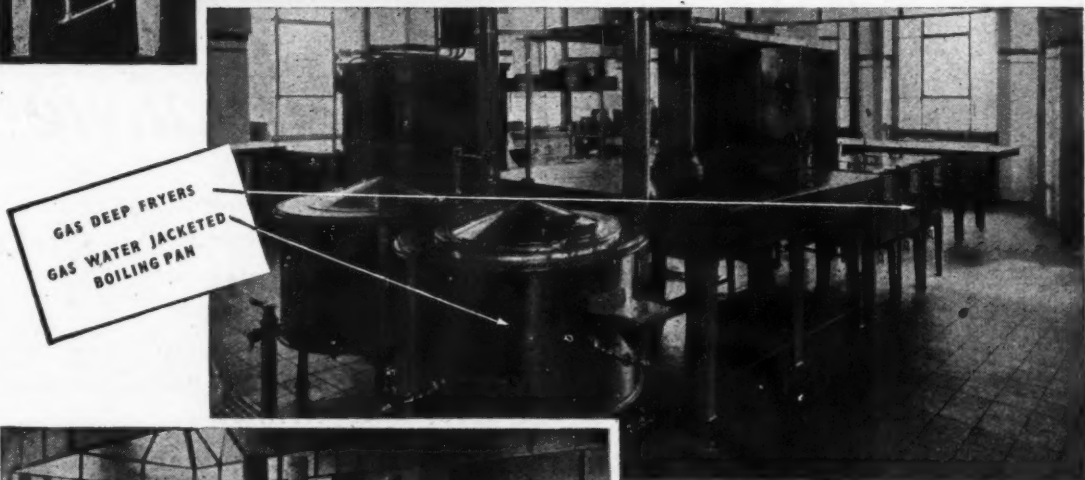
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How 'Falkirk' designed and equipped this College kitchen to serve up to 800 lunches per day



A GLASGOW TRAINING COLLEGE

A special problem of this installation was that the catering demand varied throughout the year. Falkirk found the answer by supplying gas and electrical equipment which operated efficiently and economically whether the demand was large or small. During the busy October term, the installation provides up to 800 lunches per day, while the separate, specially designed Servery prepares 1,200 afternoon teas within a very short time. The entire kitchen was planned, equipped and installed under the whole-time supervision of Falkirk engineers.



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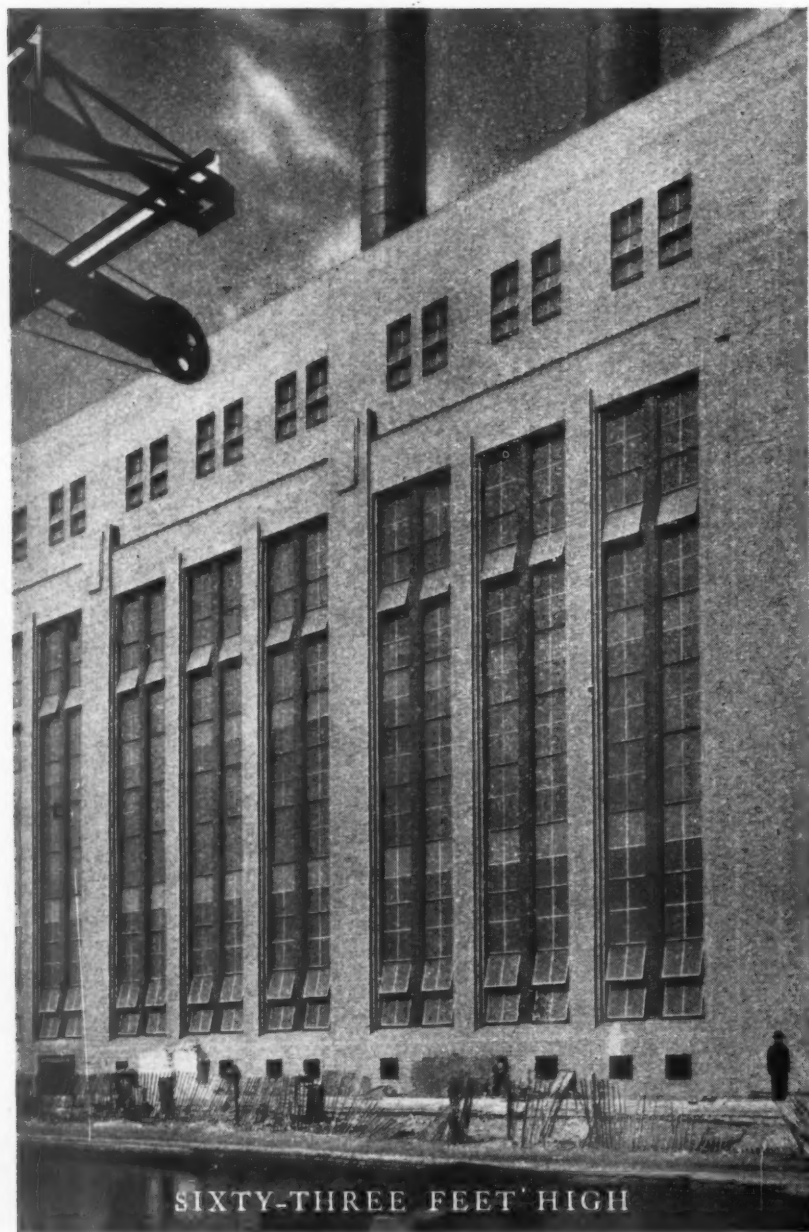
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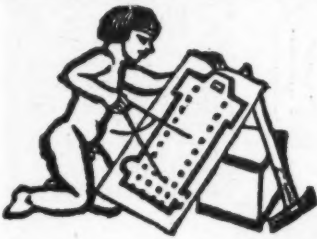
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In common with every other periodical, this JOURNAL is rationed to a small part of its pre-war consumption of paper. Circulation is therefore temporarily restricted but would-be subscribers are advised to have their names put on the waiting-list. Their names will then be added to the subscription list as soon as possible. Subscription rates: by post in the U.K. or abroad, £1 15s. od. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 17s. 6d. each; carriage 1s. extra.



DIARY FOR MARCH APRIL AND MAY

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.

COVENTRY. *Allied Ironfounders' Exhibition Train.* No. 16 Road in Goods Yards, Coventry Station. (Sponsor, Allied Ironfounders.) MARCH 7-12

LONDON. *A Course of Lectures on Timber.* D. A. Hubbard. *Modern Adhesives—Their Present and Future Application.* March 10. B. A. Jay. *New Woods for Old—Some Alternatives to Traditional Timbers.* March 21. Lectures begin at 7.15 p.m. and will be held in the Fyvie Hall at the Polytechnic, Regent Street, W.1. (Sponsor, TDA.) MARCH 10-21

Exhibition of Drawings of Architectural Subjects, by Helm-Pirgo, at The Cromwell Gallery, 114a, Cromwell Road, S.W.7. (Sponsor, The Cromwell Gallery.) 10 a.m. to 5 p.m., Sat. 10 to 12 noon. UNTIL MARCH 5

E. Prentice Mawson. *Design of Parks and Public Gardens.* At Caxton Hall, Westminster. (Sponsor, TPI.) 5.30 p.m. MARCH 3

R. C. White-Cooper. *Italian Renaissance Architecture.* In the Anatomy Theatre, Gower Street, W.C.1. (Sponsor, University College, London.) 1.15 p.m. MARCH 3

Sir Arnold Plant. *Land Planning and the Economic Functions of Ownership.* At the Chartered Auctioneers' and Estate Agents' Institute, 29, Lincoln's Inn Fields, W.C.2. (Sponsor, Chartered Auctioneers' Institute.) 6 p.m. MARCH 3

Conference on Industrial Architecture. At the RIBA, 66, Portland Place, W.1. MARCH 3-4

Exhibition of Industrial Architecture. At the RIBA, 66, Portland Place, W.1. Weekdays 10 a.m.-7 p.m. Saturday 10 a.m.-5 p.m. MARCH 3-26

Civic Exhibition, showing all sections of the work undertaken by Hammersmith and the LCC, at the Town Hall, King Street, W.6. (Sponsor, The Borough of Hammersmith.) Weekdays, 10 a.m. to 9 p.m. MARCH 5-12

H. S. Goodhart-Rendel. *Rogue Architects of the Victorian Era.* At the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m. MARCH 8

M. J. Bony. *Auguste Rodin.* At the Courtauld Institute of Art, 20, Portman Square, London, W.1. (Sponsor, The Courtauld Institute.) 5.30 p.m. MARCH 8

J. T. Phillips and F. J. Daniels. *Welded Steel Framed Buildings.* At the Institution of Structural Engineers, 11, Upper Belgrave Street, S.W.1. (Sponsor, Institution of Welding and ISE.) 6 p.m. MARCH 10

A. G. Sutton, Ministry of Fuel and Power. *The Thermal Insulation of Buildings.* At Caxton Hall, Westminster, S.W.1. (Sponsor, ABT.) 7.0 p.m. MARCH 10

Planning the New Nursery Schools—Exhibition. At the Nursery Schools Association, 1, Park Crescent, W.1. Weekdays 10 a.m.-5 p.m. Saturday 10 a.m.-12 noon. UNTIL MARCH 12

Exhibition of Interior Design. At the Building Centre, 9, Conduit Street, W.1. (Sponsor, LCC Central Schools of Art and Crafts.) UNTIL MARCH 19

Ideal Home Exhibition. At Olympia. (Sponsor, The Daily Mail.) UNTIL MARCH 26

MANCHESTER. *Georgian Architecture in Northern Ireland.* Exhibition at the Municipal School of Art, All Saints, Manchester 15. Open during school hours. MARCH 4-18

NOTTINGHAM. *Allied Ironfounders' Exhibition Train.* No. 2 Bay Platform, Nottingham Station. (Sponsor, Allied Ironfounders.) UNTIL MARCH 5

NEWS

THURSDAY,
No. 2821

March 3, 1949
Vol. 109

News	199
At The Industrial Architecture Exhibition	200
This Week's Leading Article ..	201
Astragal's Notes and Topics ..	202
Letters	203
Exhibition of Interior Design ..	204
In Parliament	204
Hospital in Malta. By Adams, Holden & Pearson	205
Flats at Stoke Newington ..	209
Societies and Institutions ..	210

Information Sheets :

26.E2 Pynford Method of Underpinning ..	To face page 212
37.H3 Staff Location Systems	

Technical Section :

Information Centre	214
The Industry. By Brian Grant	217

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

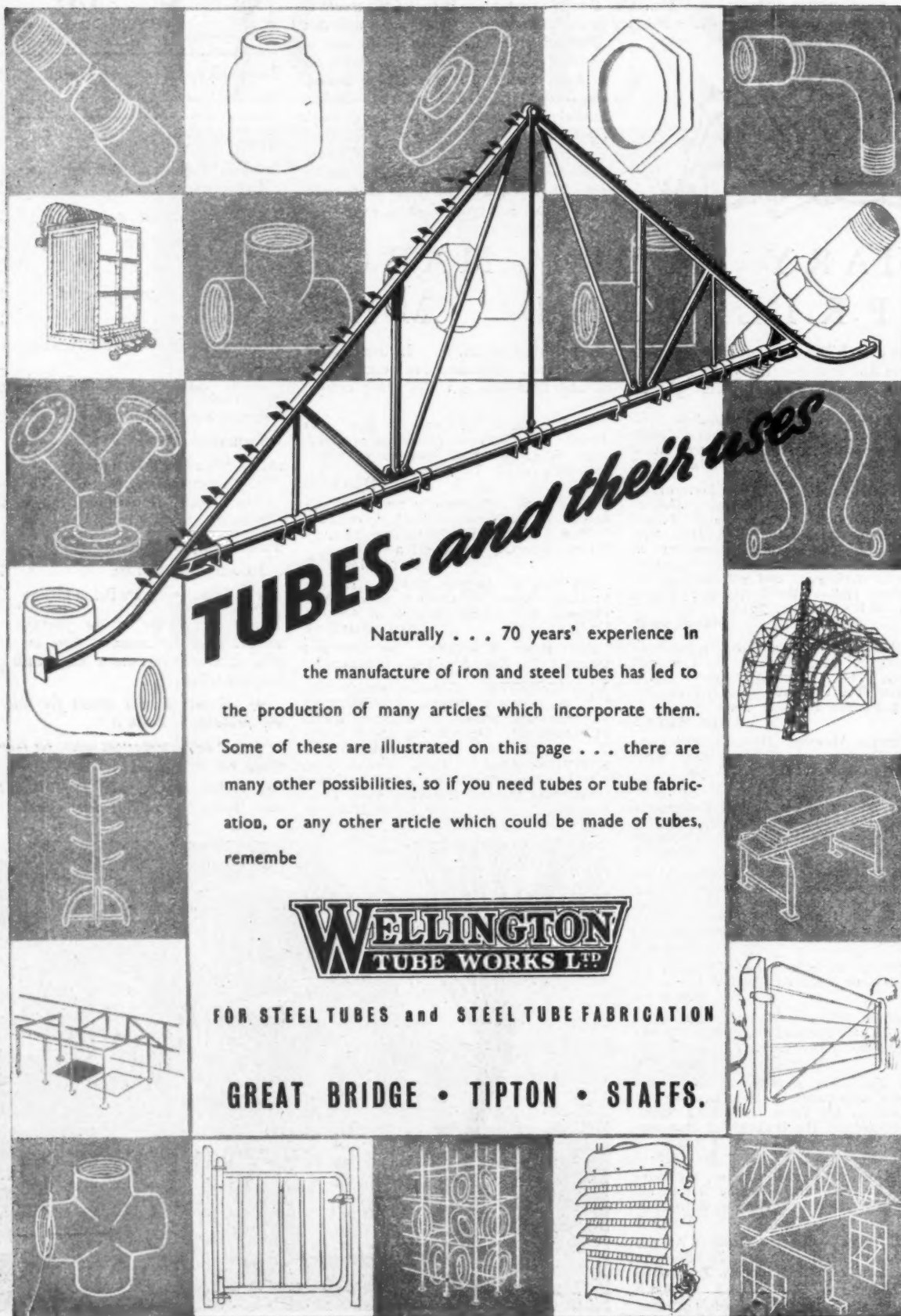
★ means spare a second for this, it will probably be worth it.

★★ 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.




Cochrane House, working class flats, nearing completion in St. John's Wood for the St. Marylebone Housing Association will be opened by the Queen on March 8. The architect is Louis de Soissons.



TUBES - and their uses

Naturally . . . 70 years' experience in the manufacture of iron and steel tubes has led to the production of many articles which incorporate them. Some of these are illustrated on this page . . . there are many other possibilities, so if you need tubes or tube fabrication, or any other article which could be made of tubes, remember



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From AN ARCHITECT'S Commonplace Book

THE WHITE HOUSE. [From *The Conscious Stone*, by Dudley Harbron (Latimer House, Ltd.).] None the less, the architectural example of the exquisite was still awaited, and this Whistler, Edward (Godwin) and his wife were nightly in conspiracy to create. Whistler had secured a site in Tite Street, adjoining the western boundary of Chelsea Hospital, and upon it he planned to build an ideal house. The building was to include a studio, a school for pupils, and a residence for the artist owner. The top floor was to hold a large studio forty-seven feet by thirty, a drawing-room studio thirty by twenty; five bedrooms, a dining-room and kitchen, and all the usual offices, completed the accommodation in the house. It was but small. The exterior was to be Edward's interpretation of modern architecture carried out in white brick capped by a green roof. Both Whistler and he were entranced in anticipation by the colour scheme. In architectural circles the building was rumoured to be "one of the surprises of next season." It was to be as plain as a pikestaff. Such relief or mouldings as were used were derived from Grecian precedents. The interior was to be as novel as the exterior, with mantelpieces that were to be distinct and entirely original varieties of that important feature. The stage was being set for an architectural revolution. There was not another architect in the world who could have satisfied Whistler.

A Statement on LCC HOUSING has been issued.

15,226 temporary houses had been built in London since the war, 7,865 by the LCC and 7,361 by the Metropolitan borough councils. Other figures of homes provided by the council since the war were: repair of seriously damaged houses, 7,465; rebuilding of war-damaged dwellings, 2,618; re-establishment of dwellings, 469; new permanent houses, 5,649; and new flats, 4,146.

★★

To secure maximum efficiency in the use of steel A COMMITTEE OF PROFESSIONAL INSTITUTIONS has been set up by the MOW

The committee has the following terms of reference: "To organize, through professional institutions, technical papers and discussions on steel economy, with a view to exercising the economies to be derived from high performance specifications and more scientific methods of design; and to arrange publicity to give effect to these measures."

On the committee, of which Dr. David Anderson will be chairman, there will be represented: The Royal Institute of British Architects, Institution of Civil Engineers, Institution of Structural Engineers, Institution of Mechanical Engineers, Institution of Municipal Engineers, Institute of Welding, Iron and Steel Institute, and British Iron and Steel Federation.

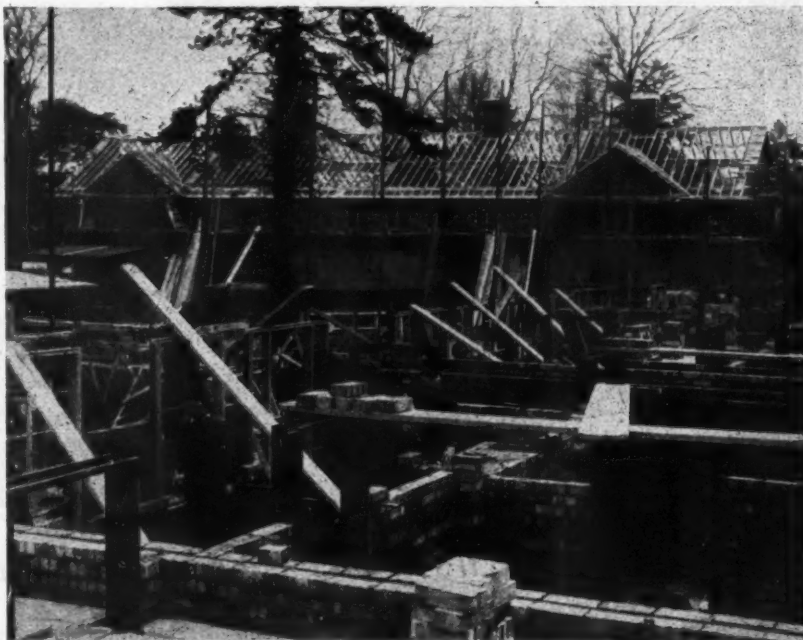
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The West Middlesex Planning Committee have issued a planning report on the MIDDLESEX BANK OF THE THAMES.

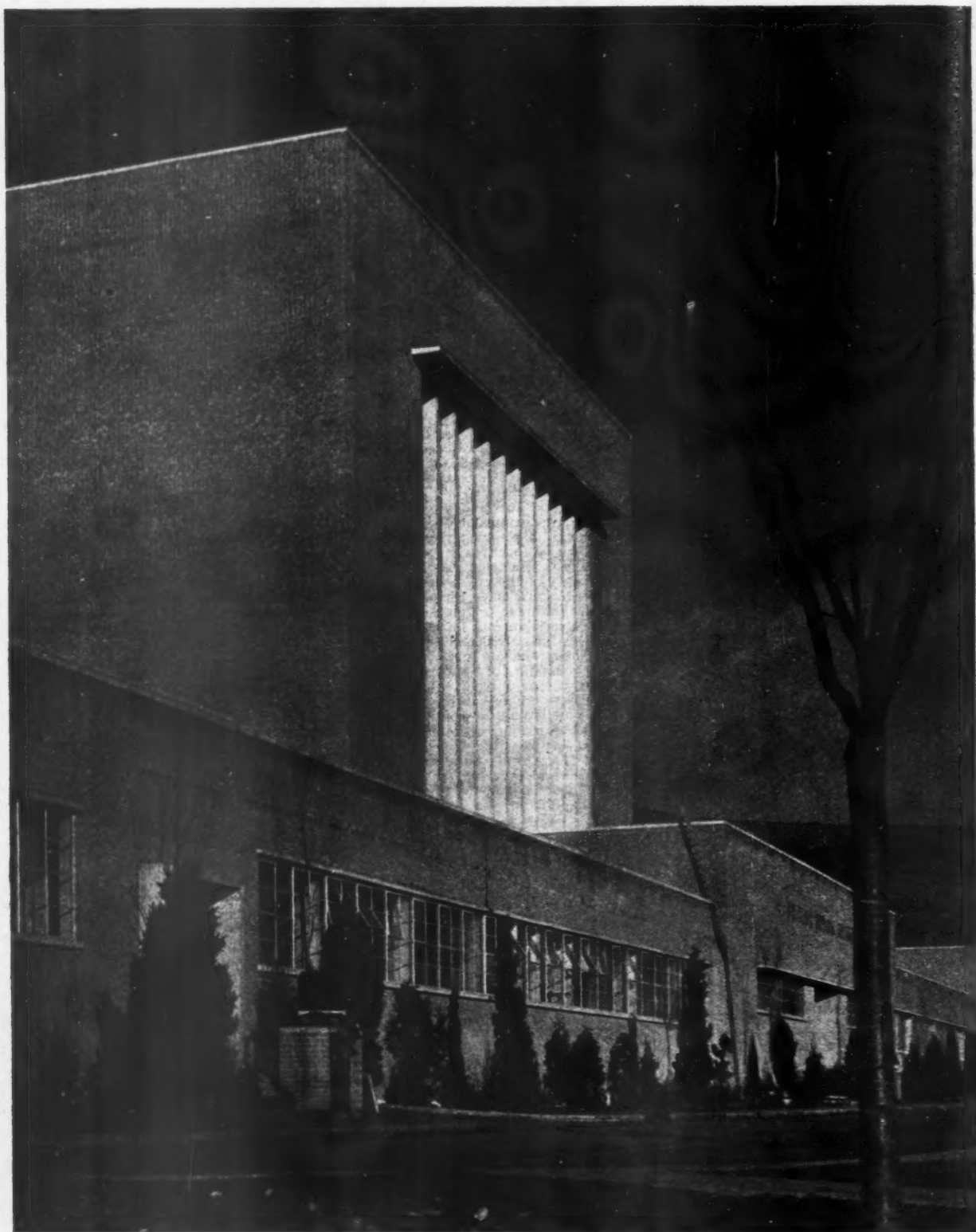
The planning of the Middlesex bank of the Thames is dealt with in a report of the West Middlesex Planning Committee. It states that, apart from boat building, the riverside industry is not increasing, and will probably decrease over a number of years. Redevelopment would improve the appearance of the remaining concentrations, and industry not tied to the river might with advantage be moved. Where the river banks were not built on they should remain so, with provision made for development, such as riverside camps, landing and mooring accommodation, and places of refreshment. Below Hampton Court Bridge improvements could be achieved only over a long period; upstream from the bridge there were several old riverside hamlets which had in between an almost continuous ribbon-type development, much

of it undesirable because of flood risk, lack of services, or shanty-like appearance. Recommendations for the clearance of this area and the strict control of advertisements are made in the Report. In special cases applications for development or redevelopment will be referred for consultation with the Royal Fine Art Commission. The four major considerations in planning the river were: risk of flood; its functions as a highway and a recreational asset; the preservation and improvement of the features which had made it a regional and national possession; and gradual clearance of unsatisfactory and unsightly development. In a detailed list of proposals it is stated that Chiswick Mall gardens should remain open in character and the question of public acquisition should be borne in mind. The preservation of Chiswick Eyot had been considered, but the cost would be considerable and render such work impracticable at present. The area between the High Street and Brentford Docks could be regarded as suitable for general industry, with preference given to undertakings tied to the river. Syon Park, the private residence of the

Duke of Northumberland, formed a valuable buffer between the industry at Brentford and Isleworth, and was such an outstanding and historic example of a Thames-side mansion in its typical setting that the committee felt it to be essential that ultimately it should be acquired as a public open space. The open nature of the frontage of the embankment at Twickenham must be preserved and a strict building line maintained. The importance of the approaches to Hampton Court Palace called for close architectural control and control of advertisements on either side of the Green fronting Hampton Court Road. Ash Island should be preserved as an amenity, and its appearance might be improved by the introduction of Lombardy poplars. Sunbury-on-Thames provided the first stretches of the river where redevelopment and clearance could make possible large-scale improvements on the banks. The river frontage at Lower Hampton Road, Sunbury, and the riverside north of Walton Bridge could be treated under both short- and long-term clearance schemes.



Work has begun on the 200 houses in the first neighbourhood unit of the new satellite town of Crawley, Sussex. The master plan for the town was drawn up by Anthony Minoprio. The houses shown above in the course of construction were designed by A. G. Sheppard Fidler, Chief Architect to the Crawley Development Corporation.



At The Industrial Architecture Exhibition

Today, the conference and exhibition on industrial architecture opens at the RIBA. The exhibition stresses the essentials of co-ordination between the industrialist, the architect and the various specialists, and shows buildings from the small factory to the trading estate. Among the

buildings shown in the factory building section is the main plant of the Pontypool factory of British Nylon Spinners, Ltd. (see above), designed by Sir Percy Thomas and Son. The conference closes tomorrow, but the exhibition will be open until March 26. *Architectural Review* photograph.

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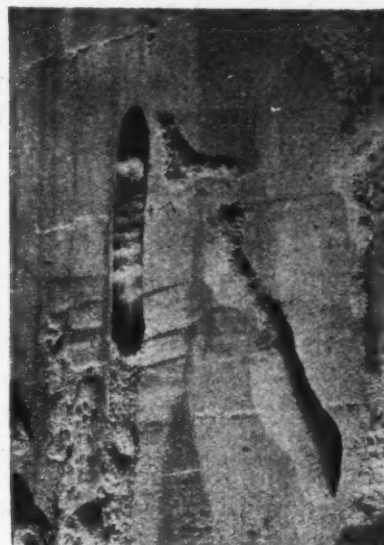
★★★

STEEL ECONOMY RECOMMENDATIONS issued by the *MOW Steel Economy Committee.*

Building Rules and Regulations: The adoption is recommended of the new design specifications for steel and reinforced concrete both for work done by Government Departments and by manufacturing industries. All construction involving the use of more than 25 tons of steel and licensed by the MOW must comply with the new BSS 449 relating to Structural Steel (which increases the basic permissible stress from 8 to 9 tons per square inch and the flexural stress to 10 tons per square inch), and the Codes of Practice 113 and F14 relating respectively to Structural Steel and Reinforced Concrete, or an acceptable explanation given why this has not been done. MOH have informed Local Authorities of the revised standard and have asked them to adopt it as their present guide in administering bye-laws. It is agreed that existing stocks of steel ordered to the old BS15 may be used with safety under the new BS449. **Welding:** Welding is of great importance as a method of economising in steel usage, and the following percentage weight economies are examples of the savings which have been made where welding has been used. **Structural steelwork:** Steel frame buildings, 14/16 per cent.; small and medium span plate, 15/25 per cent.; plate girders, crane girders, built up columns, roof structures and lattice girders, 15/20 per cent. There is considerable scope for the extended use of welding, and it does stimulate more scientific methods of structural design. **High Tensile Structural Steels:** The development of high tensile structural steels has been the subject of a great deal of research. The permissible working stress for high tensile steels of 13½ or 15 tons per square inch as against 10 tons to the square inch for mild steel reflects the theoretical saving in steel in structural steelwork. In practice the saving varies between 15 and 25 per cent. There is also an appreciable saving in cost of steel. **Cold Formed Steel Sections:** Cold formed steel fall into two main categories: (a) cold formed sections for use in many branches of manufacturing industry, and (b) cold formed sections for general building construction. Further development of (a) is important from a steel economy point of view. Development of (b) will be important in building up a new expert trade in building and housing components. Use of cold formed steel sections results in steel economies of from 30 to 50 per cent. over the heavier hot rolled sections. To furnish evidence of the value of these new products, the MOW is initiating suitable prototype work in connection with beams and rafters and roof trusses for building constructions using cold formed steel sections. The actual erection work will be carried out by the building industry itself under the supervision of the MOW.

The LCC SECOND OPEN-AIR SCULPTURE EXHIBITION*is to be held in 1951.*

The LCC has decided to hold its second open-air sculpture exhibition in 1951 as part of the Festival of Britain, and not next year, as was originally planned. A "working party" has again been set up to advise the council on arrangements. Its membership is the same as the last one, except in the section representing sculptors, where a change has been made "to widen the range of contribution and to avoid any suggestion that the exhibitions are being managed by too limited a circle." Mr. Frank Dobson, Mr. Henry Moore, and Mr. Charles Wheeler give way to Mr. Jacob Epstein, Miss Barbara Hepworth, and Mr. Gilbert Ledward.



DEADLY BEETLE ATTACKS BRITISH TIMBER

REPORTS of greater activity and extensive damage by the House Longhorn Beetle (illustrated above*) are disclosed by a recent press notice from the Department of Scientific and Industrial Research. Most beetle attack in this country is of three types, from the well-known Death Watch Beetle and the fairly common Furniture Beetle and the Powder Post Beetle (*Lyctus*). Reference books usually refer to the House Longhorn Beetle as being a type that is rarely found. If these reports, therefore, are accurate, it is a serious matter. Should this beetle become firmly established it would be extremely difficult, if not impossible, to eradicate it, as has been found in the Baltic countries, notably North Germany, Denmark, and Sweden.

It is most important, therefore, that any suspected attack should be dealt with promptly and effectively, and that information of the attack should be sent to the proper authorities in order that they may be able to judge whether the danger is growing in extent. Such information should be sent to the Entomology Section, Forest Products Research Laboratory, Princes Risborough, Bucks ('Phone : Princes Risborough 101). A leaflet, describing the House Longhorn Beetle and its grub, and the type of damage it causes, can be obtained free.

For immediate reference, we give some of the essential facts.

Appearance : The beetle is from $\frac{3}{8}$ inch to 1 inch long. It is brown or black in colour, with grey hairs. The grubs are fleshy and white, and about 1 inch long. Eggs are white, spindle shaped, and $\frac{1}{12}$ inch long.

Life Cycle : Young larvæ emerge from the eggs in 10 to 14 days and commence boring. They may feed for several years and then change to beetles which emerge from the wood in

* The photographs are Crown Copyright, and reproduced by permission of the Director, Forest Products Research Laboratory.

June, July, and August. The period from egg to beetle may be from 3 to 11 years.

Attacks: Seasoned softwood only, usually only the sapwood and especially timber in warm positions, such as near chimneys, though roof timbers also suffer considerably. Damage is not always easily noticed for the larvæ bore tunnels along the grain of the wood and leave a thin outer skin of wood intact. Testing by probing with a knife can reveal the damage. Sometimes the noise of beetles biting their way out can be heard. The beetles can perforate lead or other roofing materials in their efforts to emerge.

Treatment: The usual treatments are the removal of infected timber, treatment with an insecticide and sterilization of timber by dry heat.

In applying for information about a suspected attack by this beetle it is usually helpful to send a specimen of the damaged timber.



The Architects' Journal

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

Phone: Whitehall 0631

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

NEWER SARUM*

Under the above title, Thomas Sharp presents this week his proposals for preserving one of the most interesting of English country towns and at the same time making it possible to move through its streets on market days. By a process almost amounting to sleight of hand, Mr. Sharp demonstrates how Salisbury's streets, which appear to the visitor to be a confused jumble of impossibly narrow alleys, can by a few deft nicks here and there and one bold slash become a smoothly operating town centre.

As might be imagined, the planner has many ideas for dealing with detailed problems. As an example, his

proposals for dealing with the Old Mill, of which he says, "That building's use as an electricity station is not only incongruous, it is an untidy nuisance as well, since it involves turning that part of the riverside into a coal dump." He proposes that this pleasant old building should be used as a library and museum, where, spanning the river at the very centre of the city, it would reflect the past and stimulate the future. The reclamation of the river, at present well-nigh invisible, with wide stretches of open space on either side, will not only arouse enthusiastic comment from the transatlantic visitor, but will provide a valuable amenity for the townspeople.

One of the remarkable things about Salisbury, which it shares with Canterbury, is the large number of pleasant buildings of every period cheerfully jostling each other and giving both these cities their indefinable character. Mr. Sharp argues from this that to put contemporary buildings where new ones are required would, in fact, be to continue the Salisbury tradition, rather than any attempt to build milk and water versions of the old. I do not, however, agree with his strictures on the south side of the market place; true, none of the buildings have "architectural merit," but the whole effect is homely and infinitely preferable to the possible alternative, which, it is to be feared, might be something like "The Headrow" at Leeds.

DESIGN AND STYLE

The newly-qualified architect's prob-

lem in making known his name to possible clients is always a difficult one. I remember a fellow-student — an American called Bailey — solved it by the simple method of distributing his photograph which was peremptorily inscribed "Hire That Man Bailey."

Less succinct, but more insidiously informative, is a pamphlet I have received from Design & Style, Ltd., an industrial design outfit whose members are clearly unhampered by RIBA rules. This has been written by a girl called Phoebe Douglas, who can turn a phrase as well as the next man, and from it I learn that the chief designer is Walter Duschinsky, "who has studied mechanical science in Prague, Brno, Zurich and Vienna, hydraulics under Professor Kaplan, and aeronautics under Mittelholzer." ("The conditions of both a mobile and quiescent life," says Phoebe, "have always intrigued Walter Duschinsky.")

Head ad-man is Nigel Bruce, who served in Burma during the war and "studied the publicity requirements of Far East markets. . . . Only an artist with broad conceptions and vivid imagination," enthuses Phoebe, "can educate a public used to the ornate and second-class." Head of research is Doctor Adlington, "who developed the product known as Glo-crack as well as a method of fireproofing tarpaulins, and a system for detecting forged tote-tickets." Managing director and financier is A. E. G. Baring, "who will ensure that only the cream of British workmanship, dynamically restyled to conform to the needs of modern life, shall represent our trade in foreign markets."

Speaking as a member of the public used to the ornate and second-class (*The Architectural Review*, remember, is classed by the postal authorities as second-class matter, and goodness knows it's pretty ornate, too), I am impressed. Good luck to all you distinguished gentlemen and your educative mission. What a pity that among all your combined accomplishments is not included a faint sense of the ridiculous.

RESEARCH RUN RIOT

I have often thought that no age can match our own for the variety of opportunity it offers to persons of every con-

* NEWER ARUM, a plan for Salisbury by Thomas Sharp. The Architectural Press 10s.

LETTERS

John Murray Easton, F.R.I.B.A.

Unfair to Cambridge, Eng.

SIR,—Nothing could be neater or more intriguing than your publication, in the same issue, of the 1936 Gropius-Fry scheme for Christ's, Cambridge, Eng., and the 1949 Gropius and "Collaborative" project for Harvard, Cambridge, USA.

Your caption writer is wrong, however, in saying that the 1936 design had not hitherto been published. It is to be found complete with plans, elevations and perspective drawing in the AJ of February, 1938. I mention this not to score a trivial point but because I was then and am still interested in the circumstances that caused that design to be called for and rejected. I hope that enough time has elapsed to enable it to be discussed, without offence, in that spirit of speculation that historians in their lighter moments apply to such questions as "What would have happened if William had not been the Conqueror in 1066?"

In good round terms your commentator lets the older universities have it for having, like others, failed to offer those distinguished migrants (who, in the middle thirties, paused here a little before making their final flight to America) more inducement to remain. That other and more progressive Cambridge is by contrast patted on the back and may be expected to purr with satisfaction. But what about the time factor! What was Harvard doing in 1936? There was Frank Lloyd Wright on its doorstep, so to speak, with as many "a sequence of surprise effects in space" up his sleeve as anyone could wish. I do not think he was invited even to prepare designs for anything at Harvard let alone carry them out.

As late as 1940 the New York Museum of Modern Art published a very comprehensive guide to buildings of modern type executed in the NE States of the USA. No reference is made to Harvard, except perhaps indirectly under the heading of buildings *not* included, to wit, "Pseudo-Gothic colleges, Colonialoid high-schools, etc." By that time Cambridge, Eng., had at least got as far as inviting Gropius-Fry to design a building and had, in fact, permitted the erection of a number of buildings which, if not conscientiously "Bauhaus," were neither Italianate nor Pseudo-Gothic and aimed at doing and expressing their job.

But the really interesting question is—what effect did the Gropius-Fry scheme for Christ's have in furthering or otherwise the cause of modern architecture in the universities? I have always understood that three architects were invited to submit designs for the new buildings for Christ's. The selection, no doubt, represented left and right wing architectural tendencies among the Fellows, and obviously there was a deadlock.

Does your commentator *know* that the G-F design was rejected because of its "too frank modernity" or did he just guess? Of two equally "modern" (horrible word) designs one may like this and dislike that. Is the Gropius design for Harvard less modern because it is sedate, almost academic in tempo, and has far more wall and less glass? Might something like this not have been better strategy?

All the older colleges have their high spots—chapel, court, or library—that are the pride of the members. They do not want a newcomer to steal the party. He is expected, not unreasonably, to be a little self-effacing. "Let the new universities have the new bril-



The south side of Salisbury market place—criticized by Thomas Sharp in his book "Newer Sarum" published this week by The Architectural Press. See Astragal's note.

ceivable personal interest. No longer is choice of career confined to the Church, the State, the Services or Trade.

If John does not want to be a soldier, he can become a military correspondent; if Henry does not wish to make screws, he can become an export consultant; if Mary doesn't want to be bothered with a family, she can investigate family structure in relation to its economic background. Good luck to them. As a columnist myself, I can do nothing but wish them well. There are times, however, when even a columnist feels the steam bubbling in his gauges. Look, for instance, at a recent item in the *Observer*. . . "London and Birmingham universities," said the report, "are trying to evolve a scientific plan for the care of the average house."

Professor Solly Zuckerman, who is in charge of research, will use a specially designed apparatus which will be fitted over a woman's shoulder to measure strain on lungs and heart while she is working. He is also studying the average woman's measurements in relation to furniture and kitchen equipment. "When the results of the inquiry are published, it is hoped to tell the housewife when and how frequently she requires rest-breaks, how she should organize a day's work, and to describe the minimum equipment needed."

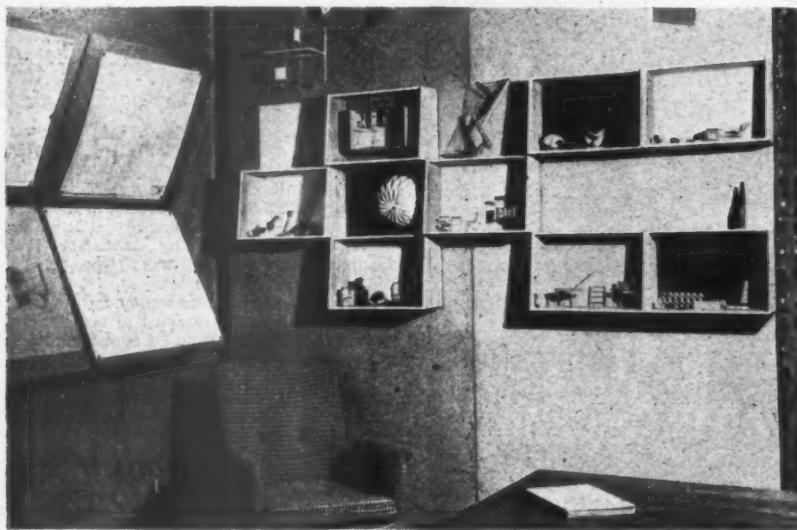
With all respect to Professor Zuckerman, his associated team of researchers and to the two universities who are paying for the inquiry, I suggest that the project seems to fulfil a long-felt non-want. If there is one thing which renders a housewife fatigued, it is having a specially-designed apparatus fitted over her shoulder. If there is one thing upon which enough facts have already been collected, it is upon the height of the kitchen sink. If there's one thing a housewife knows without the help of a professor it is how often she needs a rest-break. What she also knows far better than any professor is that, if she has any young children, it's quite impossible to take one, however scientifically organized the day's programme.

MORE LIGHT

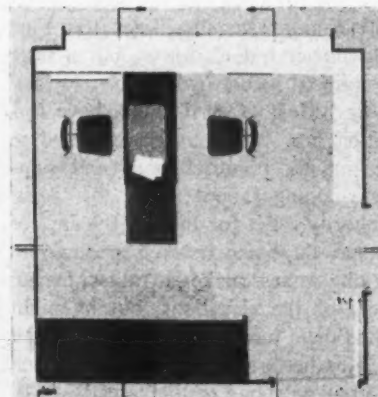
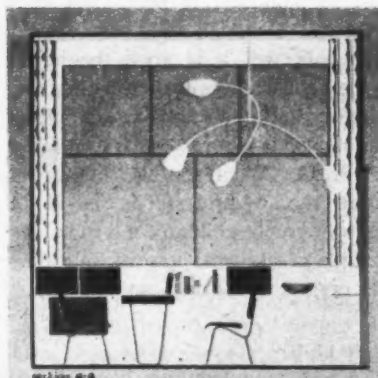
The sign manufacturers have started pleading for a few outdoor signs. What sort of an answer they'll get from Fuel and Power I don't know, but a little restrained gaiety would be no bad thing. Most of us, I think, have forgotten how bright the streets used to be, mainly because shops and signs were doing about half the local authority's job for them. By day, of course, the fixing brackets, wiring and writing tubes make a rather fearful mess of the elevations, but by night I find them fun, though I still feel (with G. K. Chesterton) that they'd be much nicer if only one couldn't read.

ASTRAGAL

EXHIBITION OF INTERIOR DESIGN



The work of the students of the Dept. of Interior Design, LCC Central School of Arts and Crafts is being exhibited at the Building Centre, London. The exhibition includes drawings and pieces of furniture made in the Department under the direction of D. F. Levensold. The exhibition remains open until March 19. Top: One of the display panels in the exhibition. Centre: Furniture constructed by the students. Below, left: Bookcase designed by Mr. Anstruther. Right: A study for the principal of an art school. Part of a design by R. G. Mabon.



liance (they might say), we have something they cannot have." That small atomic bomb dropped on Christ's College in 1936 seems to have given off radio-active emanations that persist and still seem powerful enough to inhibit organic growth.

This letter has nothing to do with the abstract merits or demerits of the projects discussed. It is purely a consideration of time and place and of the human element that must condition architectural practice until such time as an impersonal state tells people what they must have.

London JOHN MURRAY EASTON

[Mr. Easton most effectively puts the story into its proper historical perspective, and is quite right to point out that in 1936 American universities were being no more enlightened architecturally than English universities. It was definitely, we are informed, the modernity of the Gropius-Fry designs that caused their rejection by Christ's College, but we agree that simply to use the term "modern" over-simplifies the issue, which should not be one of style but of architectural quality. The two general assertions made by the JOURNAL's commentator, however, still remain valid: that the English universities tend to be too timid about the arts, and that Britain made too little use of Gropius's talents and experience while he was in this country.—EDITOR.]

In Parliament

Mr. Francis Noel-Baker (Lab., Brentford and Chiswick) asked the Lord President of the Council, at question time in the House of Commons, whether he had instructed the officials preparing plans for the Festival of Britain to consider proposals put forward by the *Architectural Review*, for a London pier on the south bank of the River Thames.

Mr. Herbert Morrison said the Festival of Britain South Bank Exhibition would include probably two piers for the use of passengers by water, and there would be permanent restaurants and other facilities provided by the LCC on the river front. "I do not think we can envisage anything beyond this in present circumstances," he observed.

Mr. Francis Noel-Baker then suggested that Mr. Morrison should ask the authorities planning the Festival of Britain to consider proposals for making Chiswick House and its grounds one of the centres of the festival in the Great London Area.

Mr. Morrison replied: The Festival of Britain have had submitted to them proposals for using Chiswick House in connection with the Festival, but I now understand from the Minister of Works, that very extensive repair work is involved and there seems to be very little chance that it would be possible to complete it in time.

The Minister of Education was asked by Mr. Kenneth Lindsay (Ind., English Universities) what steps he had taken to introduce new methods of building and new types of structure in State school architecture, in order to cheapen costs and increase production.

Mr. George Tomlinson replied: "I have circulated to all local education authorities, and recommended to their attention, the Report of the Technical Working Party which deals with forms of prefabricated construction for schools, and various new types of structure are now being used in a large number of projects."

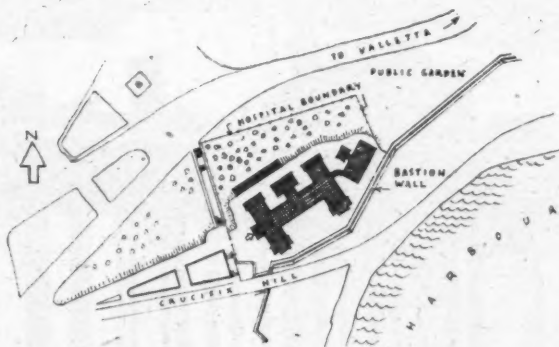
"I have also set up a development group in my Chief Architect's department to study, and advise local education authorities on, the practical application of the new principles, and to co-ordinate the efforts of manufacturers. I am trying to plan the building programme as far ahead as possible so that the full economies of prefabrication can be secured."



From the south-east.

HOSPITAL IN MALTA

BY ADAMS, HOLDEN
& PEARSON



GENERAL.—This building, the King George V Hospital at Floriana, Malta, replaces an old hospital which was completely destroyed by enemy action in 1941. The new buildings are to be a memorial to merchant seamen, and are also to provide accommodation for merchant seamen visiting the island. The hospital is for the wives and families of service personnel serving in Malta, and also for any other paying patients.

The clients required a separate Nurses' Home.

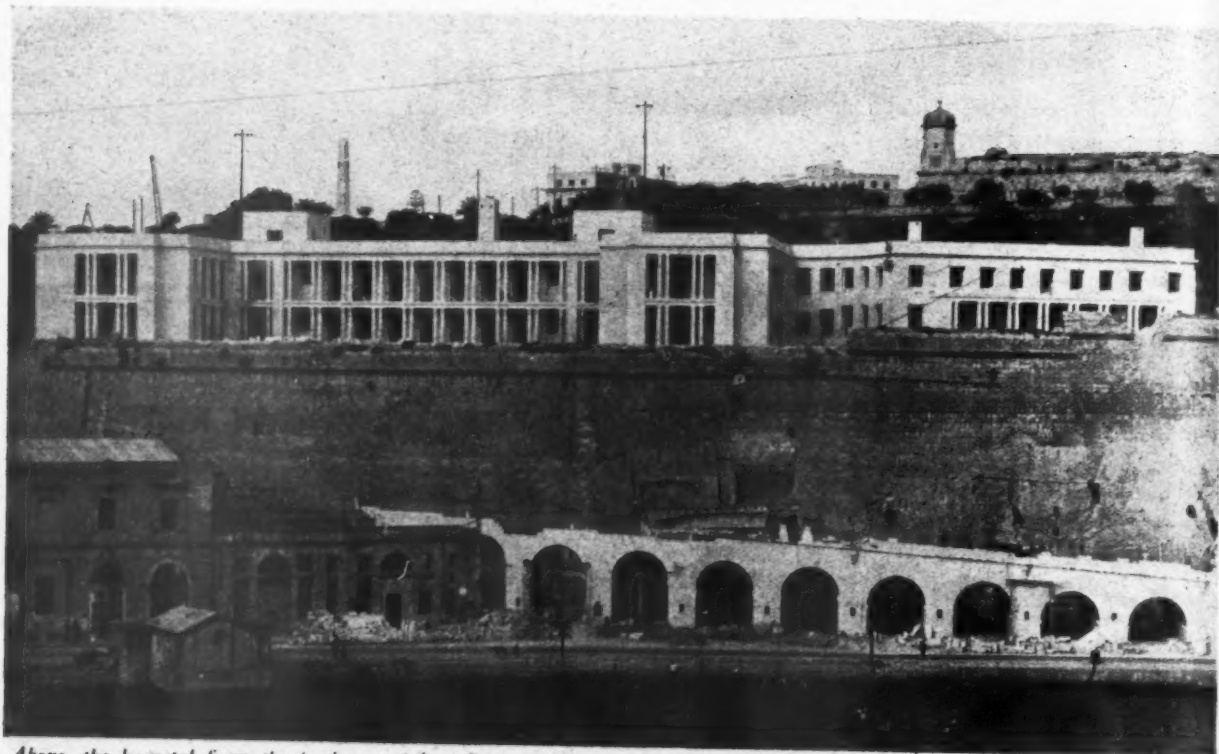
SITE.—The building was restricted to two storeys so as not to obstruct the views of the harbour from the road above the hospital site. All main wards and nurses' bedrooms have an uninterrupted view of the harbour and the Mediterranean beyond.

PLAN.—The plan form was dictated by the foundations of the old

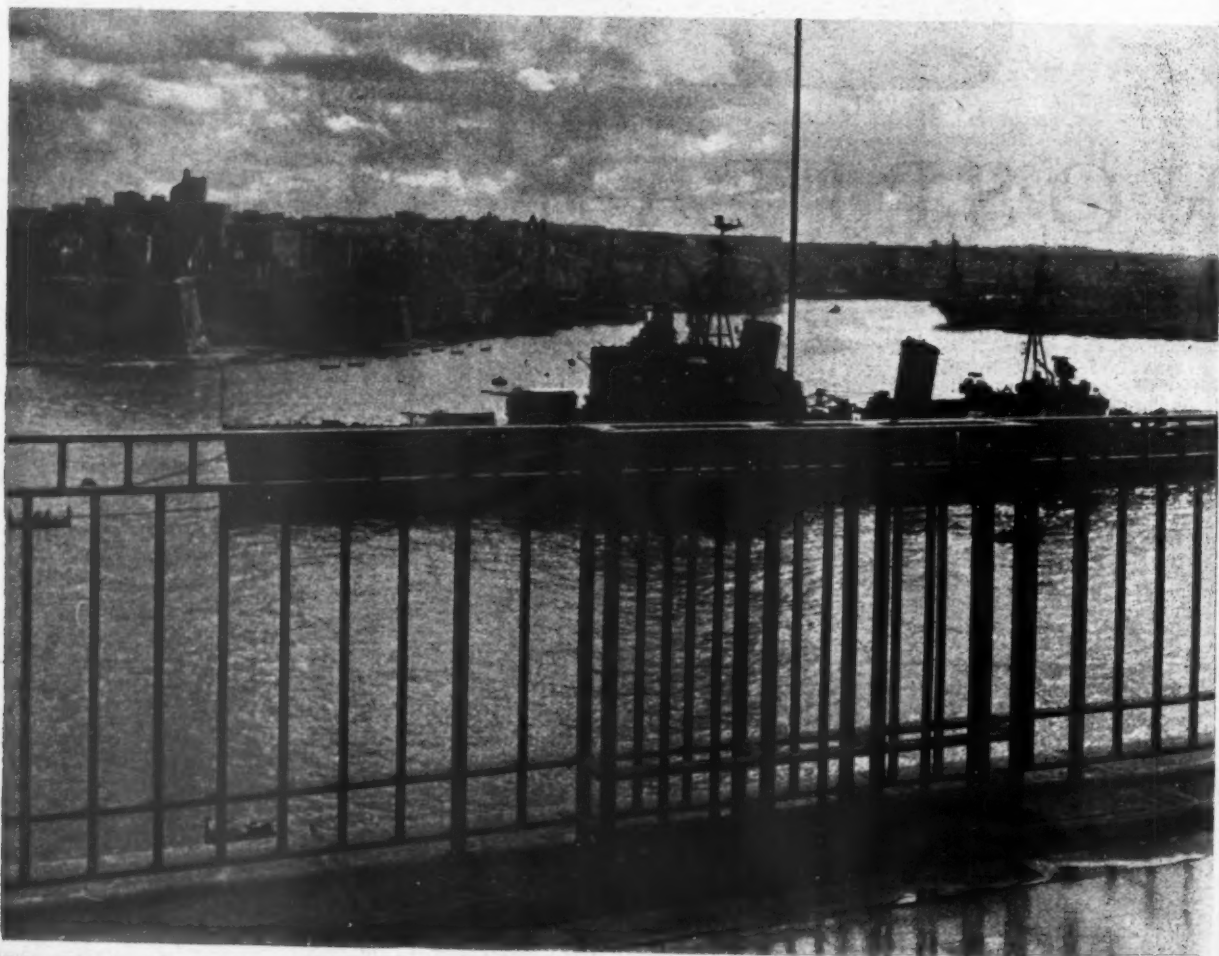
hospital which, for reasons of economy, were re-used wherever possible. The site of the old hospital was on made-up ground retained by a bastion wall. The old foundations are on rock, which, at the front of the site, is 20 ft. deep. Access to the site is from the west only.

CONSTRUCTION.—The external walls are of solid limestone 2 ft.

(Continued on page 208)

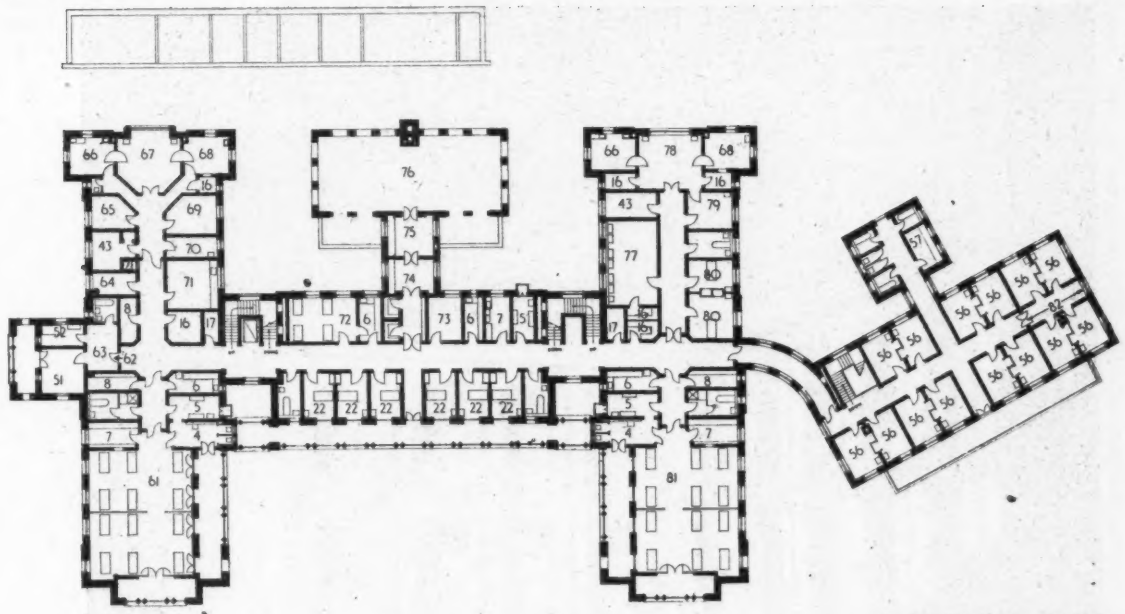


Above, the hospital from the harbour ; below, the view from the balconies.

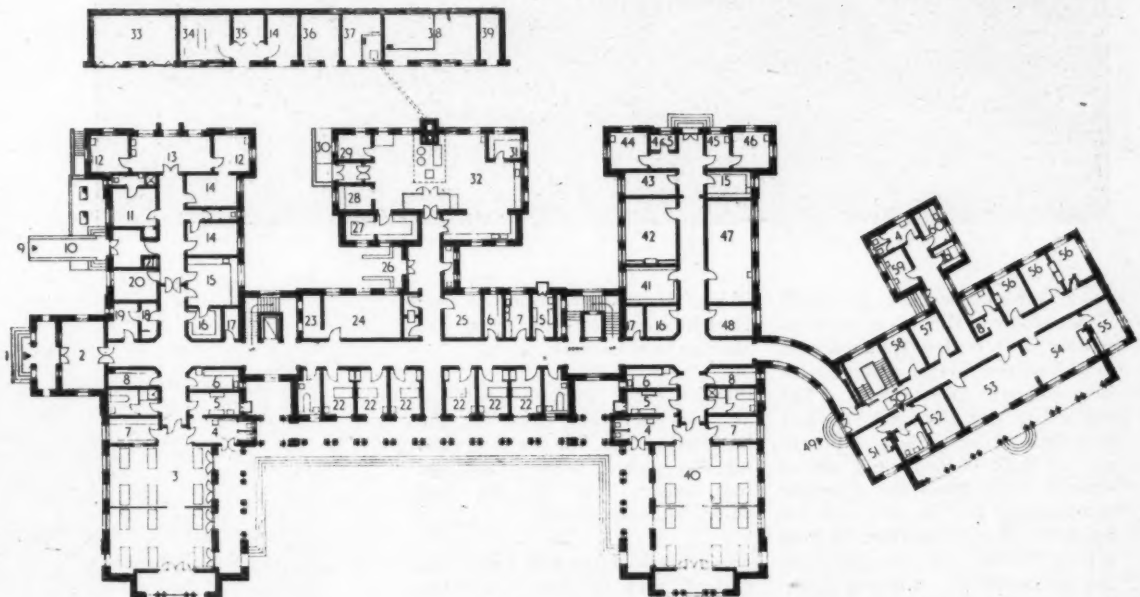


HOSPITAL IN MALTA: DESIGNED

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FIRST FLOOR PLAN

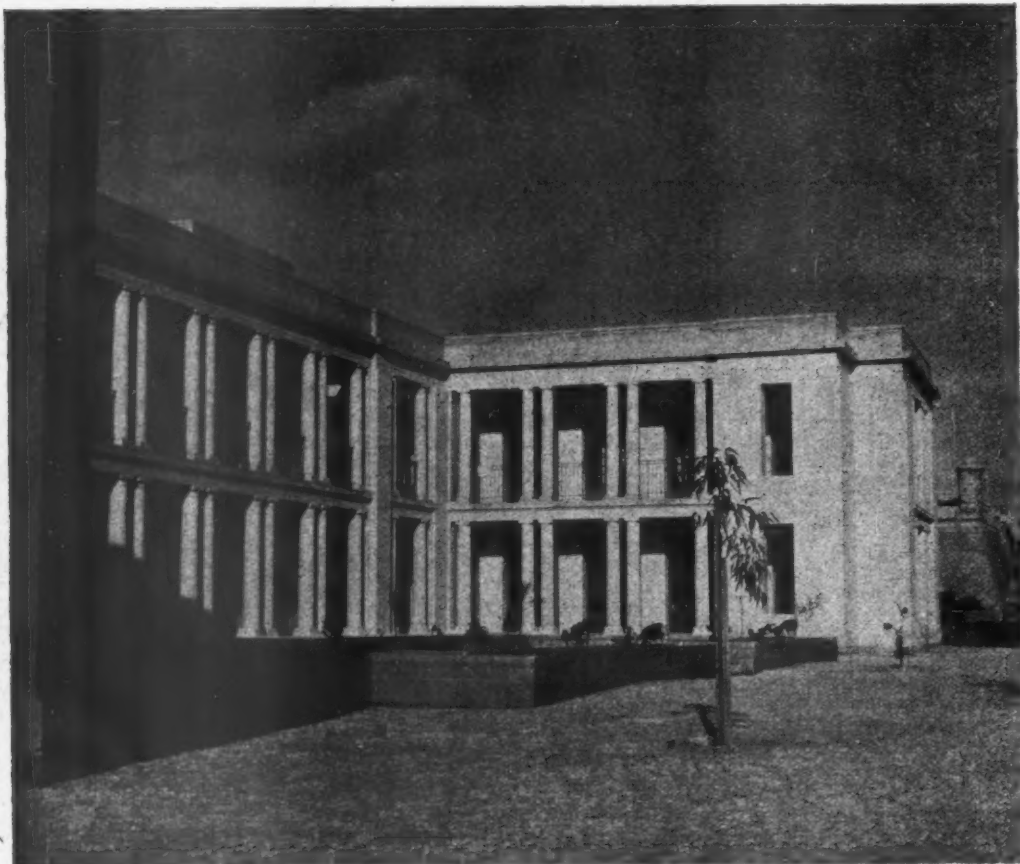


GROUND FLOOR PLAN

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

KEY TO PLANS

- | | | | | |
|----------------------------|---------------------------|-----------------------------|----------------------------|--------------------------|
| 1. Main Entrance. | 17. Patients' Clothes | 33. Garage | 49. Nurses' Entrance | 66. Sink Room. |
| 2. Entrance Hall. | 18. Telephone. | 34. Post Mortem. | 50. Matron's Flat. | 67. Operating Room. |
| 3. Men's Ward (12 beds). | 19. Porter | 35. Viewing. | 51. Sitting Room. | 68. Sterilizing Room. |
| 4. Lavatory | 20. Secretary | 36. Fuel Store : Oil | 52. Bedroom. | 69. Surgeon's Room |
| 5. Sluice | 21. Soiled Linen Chute | 37. Incinerator | 53. Dining Room. | 70. Changing Room. |
| 6. Ward Kitchen | 22. 1 Bed Ward | 38. Boiler House. | 54. Recreation Room. | 71. Clinical Laboratory. |
| 7. Duty Room. | 23. Dark Room. | 39. Coal. | 55. Quiet Room. | 72. Children's Ward |
| 8. Linen. | 24. X-Ray | 40. Women's Ward (12 beds). | 56. Nurse's Bedroom. | 73. Visitor's Room |
| 9. Outpatients' Entrance | 25. Matron's Staff Dining | 41. Library. | 57. Pantry. | 74. Sewing Room |
| 10. Stretcher Ramp. | 26. Staff Entrance. | 42. Chapel | 58. Changing and Rest Room | 75. Laundry |
| 11. Medical Superintendent | 27. Dry Goods | 43. Sister | 59. Shampoo Room. | 76. Covered Airing Space |
| 12. Examination | 28. Veg. Preparation | 44. Isolation. | 60. Cleaners. | 77. Nursery |
| 13. Consulting | 29. Housekeeper. | 45. V.D. Consulting. | 61. Surgical Ward (Men). | 78. Labour Room. |
| 14. Waiting. | 30. Goods Entrance. | 46. V.D. Examination | 62. R.M.O.'s Flat | 79. Ante-Natal Room. |
| 15. Dispensary | 31. Larder. | 47. Rehabilitation. | 63. Hall | 80. 1 Bed—Maternity |
| 16. Store | 32. Main Kitchen | 48. Matron's Office. | 64. Staff. | 81. Maternity Ward |
| | | | 65. Anæsthetic Room. | 82. Night Nurses |



thick, internal walls 1 ft. thick. The roofs are of R.S.J.'s at approximately 3 ft. centres spanned with 3-in. limestone slabs, covered with lime concrete laid to falls. The surface is finished with a local technique of fine pottery chippings run in milk of lime and ironed smooth. The floors are of similar construction to the roof but are finished with terrazzo tiles. A good supply of steel was salvaged from the old buildings, so it was therefore considered more economical to adopt the traditional method

of roof construction than to send British specialists to train the Maltese in R.C. work.

COST.—This worked out at 3s. 8½d. per foot cube for the hospital and 3s. 7d. per foot cube for the nurses' home. Cost per foot square: £3 9s. 0d. and £3 6s. 6d., respectively.

The general contractors were John Laing & Sons, Ltd. and N. Zammit & Son, Malta. For list of sub-contractors see page 218.



Above, from the south west; below, the entrance front.

H O S P I T A L I N M A L T A

Right, the south corner of Needwood House. Below, the main entrance front, taken from the south-east.



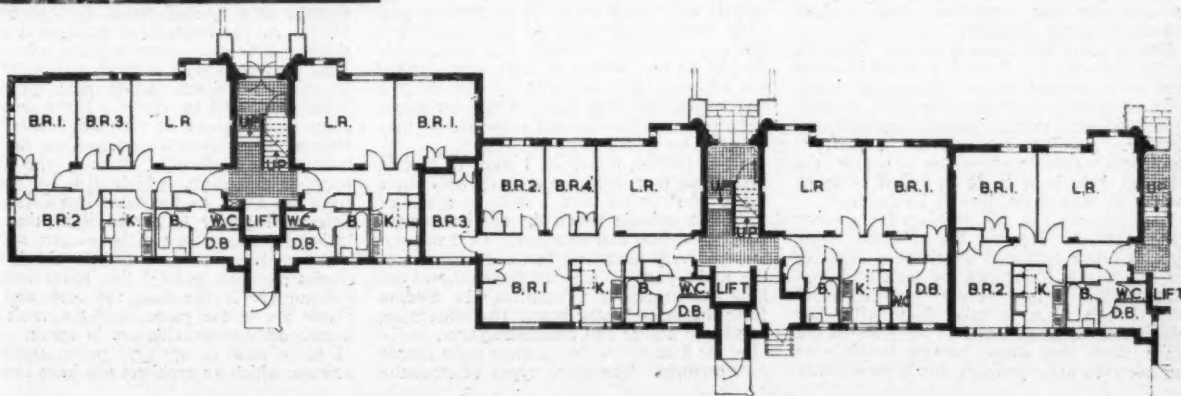
FLATS AT STOKE NEWINGTON

BY LCC HOUSING ARCHITECTS



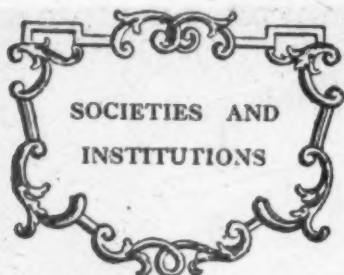
Needwood House is one of four eight-storey blocks being erected on the Woodberry Down Housing Estate, Stoke Newington. The blocks were originally designed as steel-framed brick-faced buildings, but are now being erected in monolithic concrete. The estate will eventually provide accommodation for 1,765 families in eight and five-storey blocks of flats, three-storey blocks with maisonnettes on ground and first floors, two-storey blocks mainly intended

for old people, and two-storey houses. Work began on the whole site in August, 1946, and at the end of January, 1949, 220 flats had been completed. Development of the estate is by the LCC Director of Housing and Valuer, Mr. C. H. Walker. Plans are based on layout and type plans prepared by the council's former architect, Mr. J. H. Forshaw. The contractors for the eight-storey blocks are Messrs. Holland, Hannen & Cubitts, Ltd.



HALF GROUND FLOOR PLAN OF EIGHT-STOREY BLOCK ON N.-S. AXIS

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



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.

RIBA

Felix Samuely

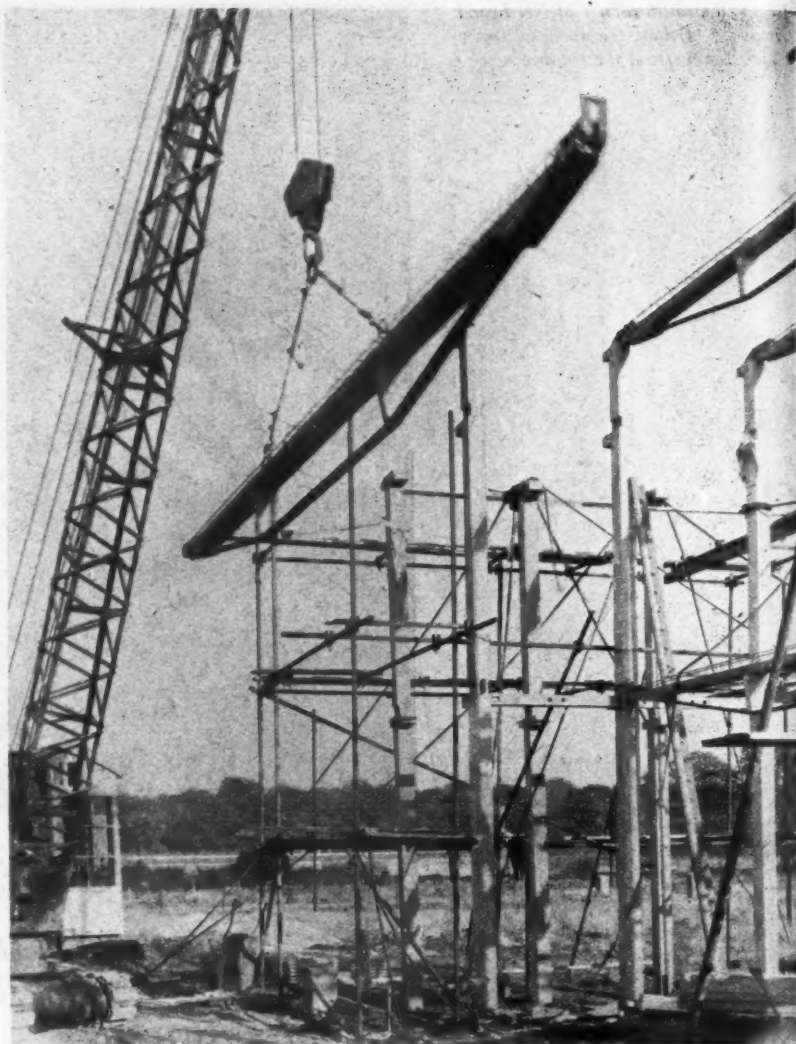
February 15. At the RIBA, 66 Portland Place, London. Talk given by Felix J. Samuely on FORCE AND FORM, THE AESTHETICS OF STRESS DISTRIBUTION.

Felix Samuely : It is a great honour for me to be allowed to speak to this audience, and I have collected sufficient courage to do so only because this is a theme in which I am extremely interested, and because for the last ten years, on and off, I have been trying to collect data on it, and have found that certain very interesting conclusions can be formed about how stress is expressed architecturally.

In the first instance, what interested me was the question: in what circumstances is one justified in showing the stresses, and, if we intend to show the stresses, or shall I say the structure, clearly, how can that be done? How can an observer who looks at a building be informed that there are stresses in the building without it being too obvious, without going to the extent of marking the stresses on the structure itself, which obviously is not possible?

Before going into these questions, there are a few remarks that I want to make in order not to be misunderstood. I have no intention of talking about functionalism or anti-functionalism; that is entirely outside my lecture. All that interests me is this: if someone wants to show the structure, the stresses, how is he to do it, and if someone wants to hide them, how is he to do that?

I am interested in this problem for another reason also. During the Middle Ages, certain forms appeared which were dictated, or at any rate influenced, by structural considerations. It took several hundred years for such a form to take shape after the materials, the labour, and so on, reached the stage when that shape became possible or useful; even after people's minds were ready



Ease of handling and freedom from breakages are two of the most important requirements of pre-cast construction. These beams, the upper member being concrete, the lower steel, possess these qualities to a remarkable degree. To facilitate lifting, special hooks have been cast in the upper member which are later concealed in the floor slab. The beams have been designed by Felix Samuely for the new Hatfield Technical College, architects: J. Murray Easton and Howard Robertson. The potential aesthetic qualities, apart from the technical aspect, of this type of structure is discussed by Mr. Samuely on these pages.

to accept a certain shape, it took quite a time to form it. That did not matter, because changes did not take place quickly, and what was right in the year A.D. 1100 was almost right in the year 1200.

Things are very different today. There are certain techniques today which make it possible to do a certain kind of architecture. Such a technique, however, is useful only for, let us say, twenty to forty years, and if the architect does not catch up with what is happening, and does not use that technique for his shapes in the early stages, he may never come to do so at all.

In this lecture, therefore, I want to explain first of all that there are actually only three types of structure, and I want to speak of the basic attitude which the architect might have to stresses and structure. That will not take me very long, and I shall then come to the main part of my talk, and show you how the stresses in a beam can be used to form the shape of the beam. The same thing applies to arches and other structures.

Let me first deal with the three main shapes of structures. The three types of structure

are (i) beams and columns, (ii) arches and frames, and (iii) vaults and domes.

The arch is a construction which, so to speak, combines the column with the beam. It is in a plane, and an arch, as you all know, is essentially a compressive member, formed to a line of thrust dictated by the loads. As the loads vary, bending is introduced, and still more bending occurs in rigid frames. With regard to vault construction, there are two shapes: the cylindrical vault and the dome. These forms of construction are old, but they have been reborn in reinforced concrete in the last twenty years. Finally, there is the mushroom construction, which can be derived from the vault, as the vault gets flatter and flatter. I prefer to regard it in that way rather than as a type of beam construction, because it is in space. I should like to emphasize that point: the beam and the column are in the line, the arch and the frame are in the plane, and the vault and mushroom construction are in space.

I come now to my next point, the basic attitude which an architect can have towards

these structures. I want to say at once that an architect may show the structure, or he may exaggerate the structure, or he may detract from the structure. All three attitudes are well known in history; but there is one interesting point which I should like to make here. If today the architect wants to detract from a structure, he usually hides it, but if three or four hundred years ago an architect wanted to detract from the structure, he had an entirely different means of doing so. He knew that certain lines and curves would do that, without the necessity of hiding the structure.

There is food for thought there. It may be that something which I mentioned earlier is responsible for this, namely that there is not enough knowledge about the structure, how to show it, how to hide it and how to detract from it; and so today, if the structure does not seem to be the right sort of thing to show, it is just hidden away behind a false ceiling or walling. It may be, on the other hand, that there is another reason, namely that we have much more involved buildings today than we had two hundred years ago, and these involved buildings do not allow the showing of structure so much. I keep an open mind on that point; I merely want to mention it.

Let me give you a few examples of emphasizing the structure. You all know the Roman arch with columns in front which are not really used. This is a case of emphasizing the structure. They put a structure in front of you so that you can see it clearly. It is not necessary structurally, but the actual structure does not create a sufficiently clear impression. To give another instance, very often, in early Gothic, the structure lines are so over-exaggerated that you cannot but think of structure all the time, and sometimes not even of the right structure.



1 The Doges' Palace, Venice.

The Palace of the Doges in Venice (Slide 1) is possibly the most "correct-structured" building that has ever been built. I know that that has not always been recognized, and sometimes people have considered it almost Baroque; but that is not so. The Doges' Palace has a great wall on top, a heavy load. It is a Gothic building, and, being a Gothic building, it has Gothic arches. I do not want to go into the question of whether a Gothic arch is the right thing for given loads, or whether it has been brought about by purely abstract movements of the mind; the point is that a Gothic structure is not suited for carrying a uniformly-distributed load, and so in this case the actual load is sitting on small arches, and these Roman arches provide point loads, which is the correct thing for a Gothic arch. These point loads sit on small Gothic arches, which provide another number of point loads which sit partly on piers and partly in the middle between piers of bigger Gothic arches. If somebody were asked to show the best way of bringing a heavy, uniformly-distributed load of this kind on to Gothic arches, this would be the most correct way. While I believe that whoever was responsible for the structure



2 Rochester Cathedral.

never thought of it, but did it by a sort of intuition, the fact remains that his intuition led him to do something which is very correct.

I come now to the possibility of hiding the structure. I have already said that in the Middle Ages they knew how to detract from the structure without hiding it. Slide 2 is an example of this from Rochester Cathedral, but you find the same technique in Norman churches generally. The columns are sitting on round Norman arches, which is definitely incorrect, but in that way the eye is somewhat distracted from the actual working of the stresses. A very subtle way of doing it is to show an incision into the outline of arches. Strictly speaking, if an arch is showing the line of stress, the last thing which should be allowed is any incision in the line, which should be continuous. I shall show you later how that was dealt with in late Gothic, when they did not want to over-emphasize the structure.

I now come to the main part of my lecture, to the question of what we can do about stresses and how we can show them. In every beam, in every structure, there are stresses, and these stresses are at every point in a certain direction. In actual fact stresses are in all directions, but we have what are called main stresses in a certain main direction at every point. This is nothing new; these stresses have often been plotted, and are called trajectories of stress. I am going to show you these trajectories, and I think that all the shapes can be based on these trajectories.

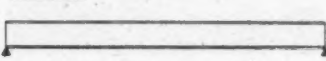
TRAJECTORY OF PRINCIPAL STRESSES

RECTANGULAR SECTION



SURVEY OF BEAM SHAPES

1. FLAT BEAM



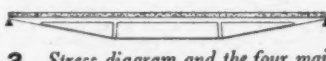
2. LATTICE GIRDER



3. GIRDER WITH CURVED BOOMS



4. TRUSSED BEAM



3 Stress diagram and the four main beam shapes.

I want to warn you that afterwards I am going to show you "anti-stresses," by which I mean the "wrongest" stress lines, which are, as I shall show, of great importance.

In Slide 3 there are several diagrams. At the top the stress lines are plotted, and are shown nearer together or thicker or both where the stresses are larger, and thinner or dotted where the stresses become smaller.

This shows what really happens in a beam. It is a very nice pattern, but it would be very difficult to show this pattern as such; you can, however, idealize it and show something of it in a beam. You can, for instance, take the parallel lines, and you get the type of construction shown in No. 1, which is an ordinary steel joist with two parallel lines, top and bottom, being more stressed. Again, you can take the motif of these trajectories crossing each other. They cross each other in all circumstances at 90 deg., and from that you get the shape of the lattice girder, No. 2. Finally, you can say: "The lines which we have here are not really parallel lines," and you can try to get away from the outside shape and show those lines by the fish-bellied truss, No. 3, which is thicker in the middle than at the ends, more or less in relation to the parabola; or you can have a compromise between No. 1 and No. 3 and have something which can be more like the one or the other, with one straight line and the other, which is very much emphasized, near the parabolic line, so getting the trussed beam, No. 4. These are the four main shapes.

CASE-IRON BEAM



2. COMPOUND PLATED GIRDER



3. REINFORCED CONCRETE TEE BEAM



4. COMPOUND GIRDER



4 Types of beam.

We can subdivide them, as shown in slides 4 to 7. You can bring vertical lines into it and vary their disposition, having them further apart in the middle than at the ends. There is also the reinforced concrete beam, but, while this gives a nice sort of shape, you will not be able to see it unless one day you use reinforced Perspex, in which case you might be able to see the steel. Finally, you have the compound girder, which has more stress in the middle than at the ends.

DOUBLE-BOX GIRDER



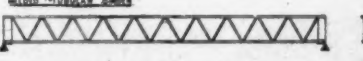
2. GIRDER



3. SPECIAL LATTICE GIRDER

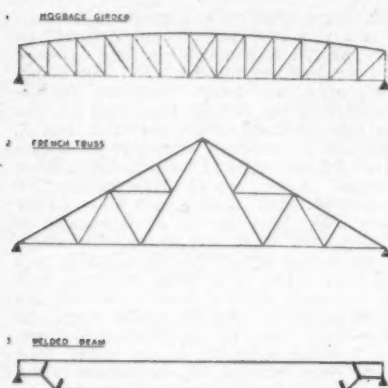


4. WELDED-TUBULAR GIRDER



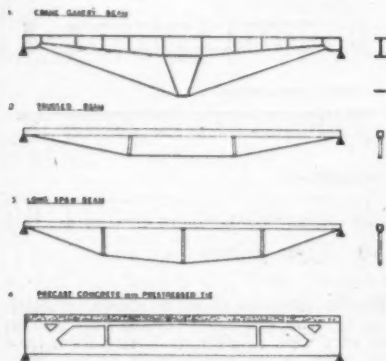
5 Types of lattice girder.

You can also get the shapes shown in Slide 5. I want to show you how pattern has become quite important. This shows the welded girder and the riveted girder, and you will see why I say that the welded beams give more opportunity to the architect. No. 3 is the cheapest type of truss of this sort, and can be made very easily.



6 Riveted and welded structures for roof construction.

In Slide 6 you see the parabolic shape. I do not want to go into a great many details, but you have the hogback girder and the French truss, shaped to fit the roof, and finally you have a plate girder shaped as shown, which can be done easily by welding. This gives the girder great stability, and is of advantage for crane and similar girders.



7 Types of trussed beam.

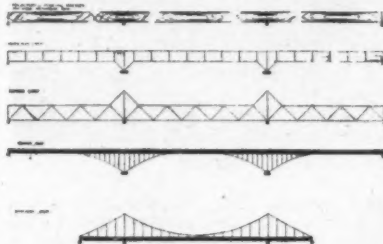
Finally, Slide 7, we have a type towards which I have, I am afraid, a certain bias, the trussed beam. I believe that much greater use will be made of this type in steel and concrete than before. I find them very useful, but other people may have different opinions about them. You get shapes like No. 1, which is particularly important because the centre part may take some of the bending, and this is very useful for very heavy loads on large spans. No. 2 is a variation of that, and there may be more points at the lower chord. No. 3 would not necessarily be a parabola; in many cases a different sort of shape may be found useful, and it can be shaped very much according to the loads, to give the minimum stresses. No. 4 is more or less on the same principle.

Slide 8 shows a practical example, the Saltash Bridge. I do not think that people



8 The Saltash Bridge, Cornwall.

dare to be so exact now as they were ninety years ago. This bridge is shaped to its exact function; it is exactly the same as one of the shapes which I showed you before, with the upper chord showing strongly, the lower chord being of secondary importance and the diagonals being so small that you scarcely see them.



9 Types of continuous beam.

Up to now I have talked about ordinary beams. Slide 9 shows continuous beams. I shall show examples of these later, and show that the same sort of problems occur again. In continuous beams you get multiple points where stresses are prevalent, and in particular the points over the supports. If you want to translate that, you may do so by an ordinary beam (No. 1) or into the type of construction shown in Nos. 2 and 3, or finally into the suspension bridge No. 4. In this diagram, of course, the suspension bridge is shown on an entirely different scale from the others.



10 Lincoln Cathedral.

Slide 10 is the last picture that I want to show of historical constructions which have been extremely correct. It is Lincoln Cathedral, which is early English. We find almost everywhere in early English churches that an attempt has been made to do something which is in conformity with the actual stresses, and so a considerable load is put on the points where there are arch shapes, with a smaller load, which more or less forms a pattern, in between, which indicates a uniformly distributed load. We find that in all the churches of that period. Towards the roof, right at the top, a keystone is usually placed, which indicates a load which I agree is not usually there, but which at least suggests itself to the observer.

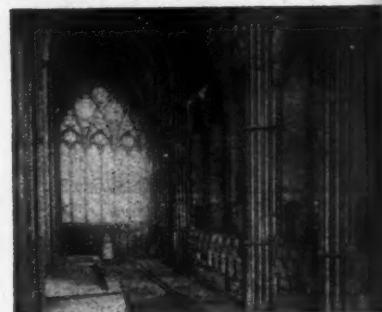
Slide 11 deals with anti-stress lines. They look very weird; I have taken a bending moment diagram and converted it into its reciprocal. Where the stresses are largest I have shown the lines as small or dotted or far apart, and where the stresses are smallest I have shown the lines as thick or near together, and so you get what I like



11 Anti-stress lines.

to call the anti-stresses. This is what should really be shown on a beam if you want, completely to distract attention from the stresses.

In the next diagram I have tried to do what I did before, and to idealize that sort of thing. You get more vertical stresses in the middle and less at the ends. It is something which I have never seen yet. You saw before the fish-bellied beam which had the greatest thickness in the middle. In this case we are going to contract it in the middle. What else can we do? We can express these rather harsh stresses that hit the circumference of the beam at the bottom of this slide. You will say that you have never seen that, but I think that you are wrong. Let us look at Slide 12, which is late Gothic and shows Durham Cathedral. You see this in all late Gothic and in almost all Decorated and Perpendicular Gothic cathedrals, namely that while the arch has a Gothic form, inside the arch something is added which is very similar to the sort of stress which I showed you a moment ago.



12 Durham Cathedral.

I do not imagine that anyone has had the idea of showing anti-stresses, but they have obviously had the idea of detracting from the structure. As Gothic went on we know that people more and more tended to detract from the structure, which they had emphasized so much at the beginning, and the shape which they got is very like the one which I showed you before. The Perpendicular style has gone away from the practice of showing the capital as something which increases towards the top, like a human being carrying a load on two hands; it shows parallel lines and is an anti-stress capital.

Slide 13 is the Henry VII chapel in Westminster Abbey, and here you see the same sort of effect. While the main arches are of Gothic shape, you get in between the stalactites which are very similar to the anti-stress lines which I showed you before,

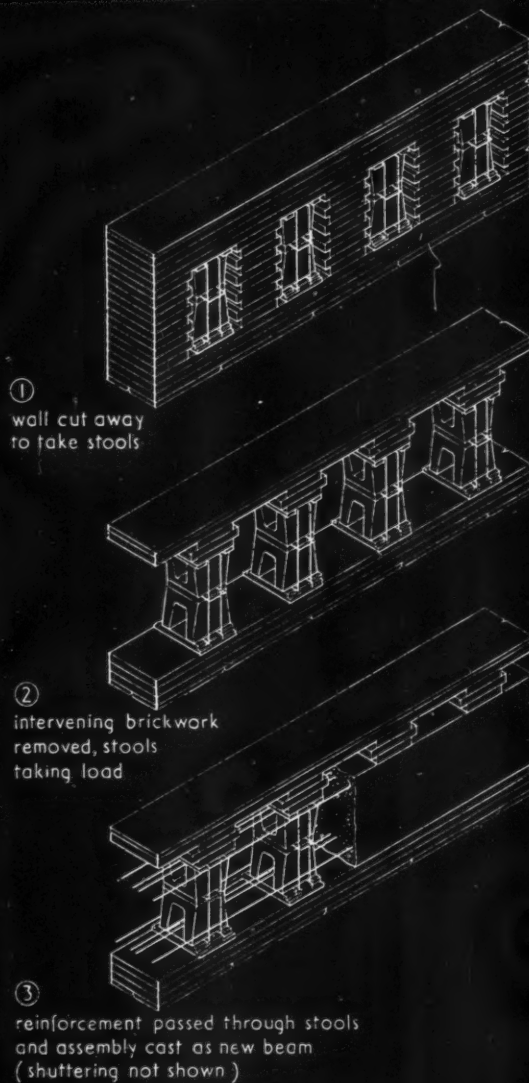
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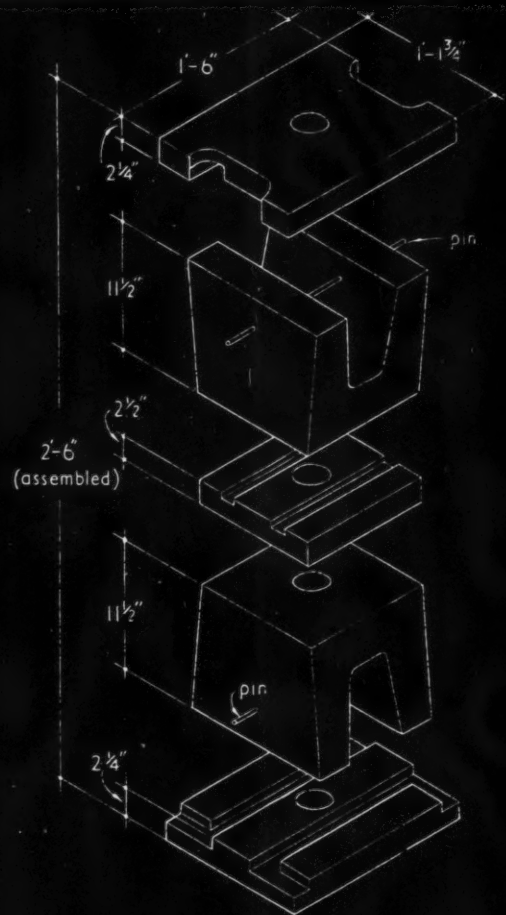
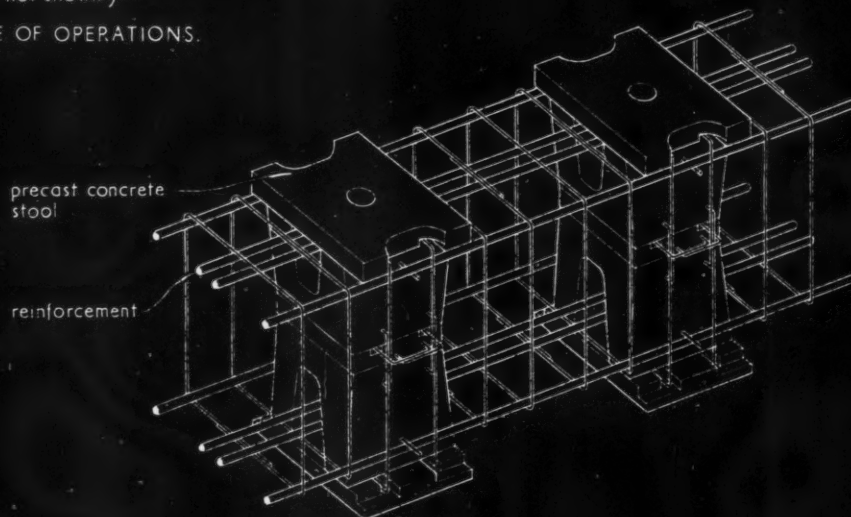
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PRODUCTS FOUNDATIONS AND PILING**26.E2**

The Architects' Journal Library of Information Sheets 149. Editor: Cotterell Butler, A.R.I.B.A.



SEQUENCE OF OPERATIONS.

EXPLODED VIEW OF PRECAST
CONCRETE STOOL FOR 1'-6" WALL.

REINFORCEMENT TO STOOLS AS READY FOR CASTING.

26.E2 · PYNFORD · METHOD OF UNDERPINNING

This Sheet describes the Pynford method of underpinning. The method enables walls to be underpinned in continuous runs without the use of needles and raking shores.

Description and Sequence of Operations

The brickwork should be cut away to take the precast concrete stools at intervals which vary with the weight to be carried and the type of stool used. All intervening brickwork is then removed leaving the wall supported only by the stooling. Reinforcement is then placed in position, formwork erected and concrete poured in. The stools remain in forming an integral part of the finished beam. When set, the spaces between the top of the beam and wall above are filled in with brickwork or masonry to match the existing structure.

Treatment at Corners of Heavy Buildings

In these cases the beams should be extended beyond the quoins in either or both directions and used as shoring until foundation bases have been formed. Where the beams occur above ground level or foul an adjoining structure the projecting ends are cut away either flush with the bases or the building quoins. When cast, the frame is carried on suitable bases or piling heads.

Sizes

Stools are available for 9 in., 11 in., 1 ft. 1½ in. and 1 ft. 6 in. walls, the overall sizes being as follows:—
9 in. walls .. 6 in. high by 9 in. wide by 9 in. deep.
11 in. walls .. 6 in. high by 9 in. wide by 11 in. deep.
1 ft. 1½ in. walls .. 6 in. high by 9 in. wide by 1 ft. 1½ in. deep.
1 ft. 6 in. walls .. 2 ft. 6 in. high by 1 ft. 1½ in. wide by 1 ft. 6 in. deep.

The beam space stooling for walls up to 1 ft. 1½ in. may be arranged from two castings and these two castings will allow sufficient space to be provided for any likely beams for supporting walls up to 1 ft. 1½ in. thick.

In the case of 1 ft. 6 in. thick walls it is necessary to use three different castings to construct the beam space for the majority of beams which will be necessary, although sometimes small beams will suffice when only two castings will again construct the beam space stooling.

In the case of all the smaller beams where the concrete will take shear stresses, the spacing of the stirrups or vertical loops may be nominal and the spacing between the stools will provide all that is necessary, but where shear stress has to be taken by steel it is often necessary to provide stirrups in the space taken by the stools and this is introduced into the stools while they are being built into position during the early stages of the job.

The even spacing of the stools along the wall to be underpinned provides opportunity to support the reinforcement and this is taken and rendered in the form of pins which pass through the stools at their tops and bottoms.

Further Information

The manufacturers are the patentees and are specialists in underpinning foundation work and soil testing.

Compiled from information supplied by:—

Pynford Limited.

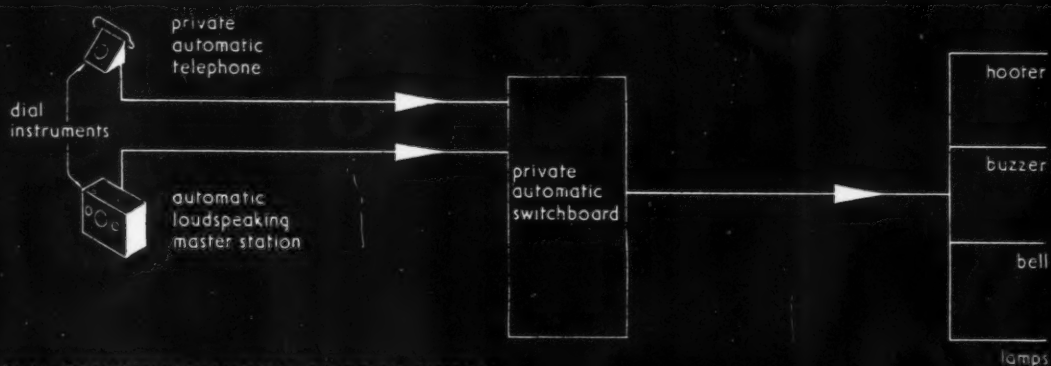
Address : 74, Lancaster Road, Stroud Green,
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Telephone : Archway 2372.

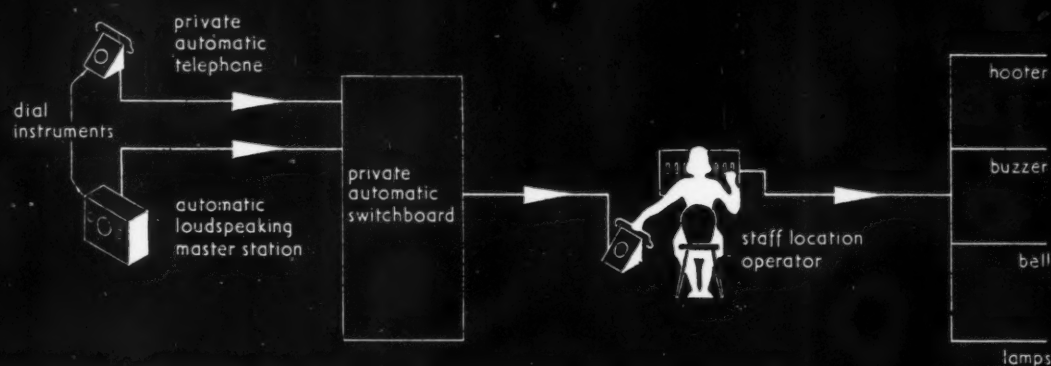
SERVICES AND EQUIPMENT | TELECOMMUNICATIONS

37.H3

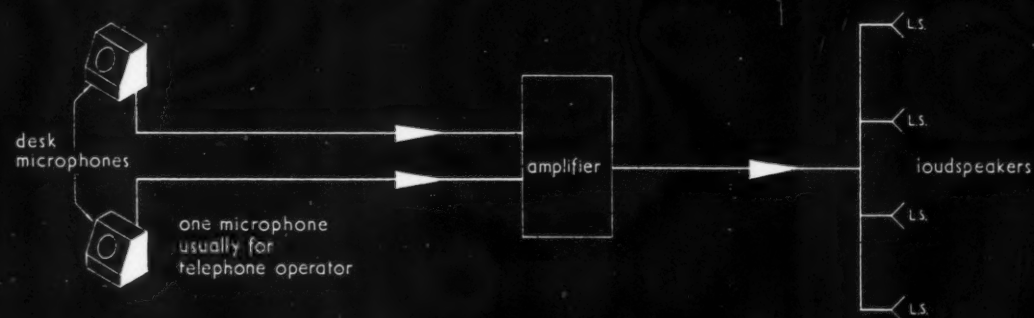
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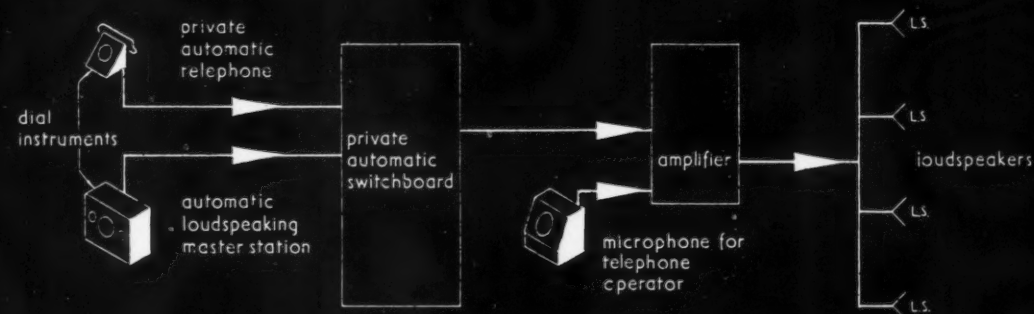
1. BY DIAL CONTROLLED AUDIBLE OR VISUAL SYSTEMS
(for audible and simple visual - 2 wire: for multiple visual - multiwire)



2. BY CENTRALLY CONTROLLED SIGNALS EMPLOYING STAFF LOCATION OPERATOR



3. BY SOUND DISTRIBUTION, USING MICROPHONE, AMPLIFIER AND LOUDSPEAKER SYSTEM.



4. COMBINATION DIAL AND SOUND DISTRIBUTION, AUTOMATIC SWITCHBOARD CONNECTING CALLER DIRECT TO SOUND DISTRIBUTION SYSTEM.

note: for return line communication
see notes on reverse

37.H3 STAFF LOCATION SYSTEMS

General

This is the third of a group of Sheets (excluding supplementary Sheet S37.H1) describing types of telecommunication system and deals with staff location systems.

These are based upon the following arrangements; a selection of the personnel is allotted individual codes which may be sounded or shown upon signal units disposed throughout the premises. On recognising his code the person called uses the internal telephone system to reply to the code, which is thereupon discontinued. The different types of code and the manner of controlling them are described below and the systems are summarised on the face of this Sheet.

1. Dial Controlled Audible or Visual Systems

Audible two-wire: The signal units consist of buzzers and/or hooters and/or bells and/or any other form of signal device selected with regard to their locations. The appropriate code, which in this system would be of a morse-like character, is sent out from any instrument of the private automatic telephone system by dialling a corresponding number, and can be answered from any other private automatic telephone by dialling a figure allotted as a reply number—which is always the same. This gives immediate telephone connection and stops the staff location signal: thus only one telephone call is necessary to effect staff location by this system. Two wires only connect all the audible devices to each other and to the automatic switch board. Wires in the multicore cables of a private automatic telephone system may be employed as part of the wiring for this staff location system.

Visual two-wire: This system is precisely similar to the above except that the signals are flashed upon lamps instead of sounded upon audible devices. It has the advantage of silence or of being practicable in very noisy conditions and may be combined with the system first described so as to provide silent signals in some parts of the premises and audible signals in others. Nevertheless this type of system cannot be fully recommended as the character of the signals may not be clear at first sight and it may be necessary to wait for them to be repeated.

Visual multi-lamp and multi-wire: This system employs combinations of coloured lights or illuminated stencils as signals but is otherwise controlled as previously described. The number of different codes that may be employed depends upon the number of lamps, but may be multiplied by using the same combinations twice over, e.g., one signal when the lamps show continuously and a different signal if they are flickered. It is not usual to employ signal units of more than four lamps. The system is silent in operation but buzzers or single stroke bells are sometimes employed to draw attention to a signal.

The system is somewhat expensive to install, partly because there must be 4 wires for a 3-lamp system or 5 wires for a 4-lamp system connecting all the signal units and also because it is usually operated on mains voltage, which normally necessitates all the wires being run in conduit. It is, however, particularly suitable for premises such as hospitals, etc.

2. Centrally Controlled Staff Location

Any of the above types may be operated from a suitable control device located with a given individual usually the telephone operator instead of from the dials of a private automatic telephone system. This, however, is somewhat slower in operation since three telephone calls are necessary before a staff location is effected, i.e., from the caller to the staff location operator, from the wanted person (after recognising his code) to the staff location operator, and from the wanted person to the caller—completing the operation.

3 and 4. Sound Distribution Systems

It is considered that a separate sound distribution system is by far the best, being the most flexible, method of effecting staff location, as the purpose of the staff location call can be directly conveyed through the loudspeakers and appropriate action taken at once by the wanted person. Under many circumstances, particularly in industrial organisations, a sound distribution system can be justified for staff location purposes alone, but it also carries the further advantages that it can be employed for public address and/or the distribution of radio or gramophone programmes and automatic time signals.

There are two methods of employing sound distribution for staff location:—

By microphones: Allocated to the telephone operator and in some cases to certain executives.

By direct speech: From any or all of the instruments of a private automatic telephone system, generally, though not necessarily, with a microphone for the telephone operator.

Staff location by direct speech from private automatic telephones is effected by dialling a selected number which gives the caller the use for the time being of the amplifier of the sound distribution system. By this means he is able to request the wanted person to contact him by telephone or personally. Alternatively, arrangements can be provided making it possible for the wanted person to contact the caller without knowing the latter's identity by dialling a reply number which automatically connects him to the caller and frees the amplifier of the sound distribution system.

The only provision which need be made for staff location systems is the selection of a suitable type of system with its signal units or loudspeakers and the disposition of cables and wires.

B.S. Codes of Practice

The installation, equipment and services dealt with in this group of Sheets comply with the recommendations of British Standard Codes of Practice (Telecommunications) where relevant.

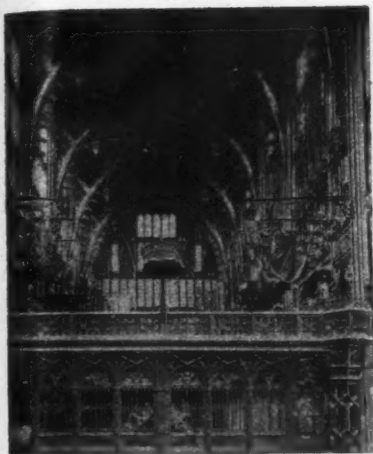
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Telephone Rentals, Ltd.

Address: Kent House, Rutland Gardens, London, S.W.7.

Telephone and

Telegrams: Kensington 9201.



13 Henry VII Chapel, Westminster Abbey.

the intention, being to draw attention away from the structure.

Going one step further, you get something which is Baroque. Slide 14 is not Baroque, but is one of the arches in the Alhambra, which is Saracen architecture, but the principle is exactly the same. There is nothing left of the arch but the anti-stress lines, and it is obvious from studies of that architecture that that is what is intended, that you should not think too much of structure.



14 The Alhambra.

Before I start showing you some modern architecture, I want you to look at Slide 15, which shows riveted steel construction, and Slide 16, which shows welded steel construction. I can quite appreciate that no architect could do much with the former, but I think it is perfectly feasible to use the latter and to make interesting shapes with it. That is why I feel sorry that these examples have not really been used very frequently; there are only a very few examples of where a shape of that kind has really been used.

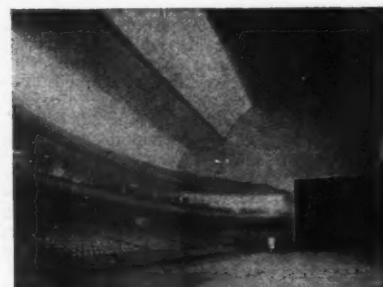


15 Example of riveted steel construction.



16 Example of welded construction.

A shell construction which I think is very attractive is in Madrid (Slide 17). I should like you to look particularly at the kind of lace-work in glass arranged in between the pieces of concrete. It is triangulated, and shows that a shell construction can be done with a considerable amount of glass in it. I come now to my last point. I have



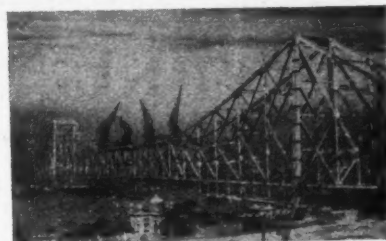
17 Example of shell concrete construction.

already said that I want to say something in favour of lattice construction. First of all, I want you to realize that lattice construction, using as it does more labour and less material, is very suited to these times. A curious thing has happened during the last hundred years; architects have, I think, become uninterested in lattice work, so uninterested that they are not very worried when they put up a building about how the members run; they just let the engineer do it. That may be right, but as the engineer is not being asked to give these members any particular shape you cannot expect a very beautiful building to result.

I think that there are three reasons why architects have not been interested. First of all, in perspective many lattice girders are overcut in such a way that it is not possible to see anything. Secondly, riveted girders may be made from angles and channels and do not clearly indicate where the strength lies; the weak and strong members look the same, and you do not get any differentiation. Thirdly, the triangulation in some cases is somewhat inhuman and results in lack of interest.

Slide 18 is an example of riveted construction which is so complicated that it should never be tolerated. It is the Howrah Bridge

at Calcutta, which was opened only a few months ago. By way of comparison, Slide 19 shows a welded steel construction from tubes and bars, and it shows that you obtain a differentiation in that case which is missing

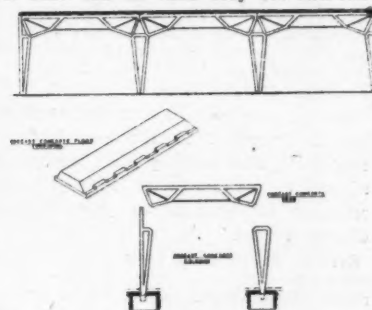


18 Riveted construction: Howrah Bridge, Calcutta.



19 Welded construction: Garage at Juxon Street, London.

from riveted construction. I am not maintaining that that is the last word in shaping a truss; I merely say that this is one way of getting towards something more interesting. The opinion has been expressed that precast units can be used only for non-con-



20 Precast concrete frame.

tinuous members. This is quite wrong, and the sort of shape shown in Slide 20 speaks for itself. You can see how it is composed out of single parts. The mere fact that the centre part is not completely triangulated—which is useful in concrete, which can take some bending—makes it more interesting than the ordinary truss construction. The tie member, when this was designed, was in steel, but it could be in pre-stressed concrete and would look approximately the same. It is possible in these members to make a clear distinction between compression and tension, with a thick compression member and a small tension member.

I want to show you here that again it is possible to get a lighter construction, to have something which is in a way lattice construction but is not completely lattice construction, which has a good stress distribution and a pleasant appearance.

I have talked too long already, and all that I want to do now is to thank you for listening so patiently and to express the hope that I may have induced one or two of you to take an interest in these matters, and possibly to carry the investigation further than I have been able to carry it.

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

TECHNICAL SECTION

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

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5.29 planning: public utilities

MOTORWAYS: ECONOMICS

Economics of Motorways: Report. Joint Committee of the British Road Federation, the Institution of Highway Engineers and the Society of Motor Manufacturers & Traders. (British Road Federation, 1948.)

Informative statement presented to Minister of Transport in October, 1948, on economic gains resulting from construction of system of motorways with particular reference to operation of goods vehicles. Charts. Tables.

Saving of operating costs on motorways compared with costs on existing all-purpose roads. Expenditure on building motorways related to improvement schemes for existing roads. Additional economic advantages from linking not only main industrial areas by means of single-purpose roads but also providing for them in heavily built-up areas. Summary of design standards. Tables setting out running costs of vehicles in motion; operating costs based on time and independent of mileage run; total operating cost per mile; and savings in cost of operation and time per person on motorways.

17.48 construction: general

PRESTRESSED CONCRETE

Recent Developments in the Precasting and Prestressing of Concrete. ASB lecture by L. W. Elliott. (The Architect and Building News, Nov. 19, 1948, pp. 426-431 and other journals.)

Brief survey, illustrated by examples, of recent developments in this country and abroad.

17.49 construction: general

ELEMENTARY CONSTRUCTION

Building Construction (Book II). E. G. Bartle. (Sir Isaac Pitman & Sons, Ltd. 1948. 6s.)

Elementary building construction intended for third year students in secondary technical schools. Better than most elementary construction books.

18.21 construction: theory

STRUCTURAL MECHANICS

The Principles of Structural Mechanics. Percy J. Waldram. (B. T. Batsford Ltd., 3rd edition, 1948. 18s. net.)

Elementary book on structural mechanics dealing with simple structures of homogeneous materials and principles of reinforced concrete design.

As the sub-title indicates, the subject is treated without the use of higher mathematics. The third edition, revised in January, 1948, includes a new chapter on reinforced concrete. In the chapters on statically indeterminate systems, e.g., beams with fixed ends and beams continuous over intermediate supports, one would have expected reference to the Hardy Cross method, developed since the publication of the 2nd edition (1930), but this method is not even mentioned although it is widely adopted because its use does not need the knowledge of higher mathematics.

In the introduction the author rightly warns his readers of the danger of superficial knowledge. Unfortunately, a reader who would attempt to design reinforced concrete on the basis of knowledge obtained from this book would not escape this danger. For example, the new section on reinforced concrete, full of formulae and diagrams relating to the depth of the neutral axis, lever arm, section modulus, etc., purposely excludes the problems arising in connection with shear. To give elaborate formulae, graphs and examples for the design of the tensile reinforcement of T-beams without emphasizing the necessity of dealing with shear stresses may have disastrous consequences. To quote from the introduction:—
"If a heavily loaded beam buckles at the ends under the action of horizontal shear, and not at the centre where failure was expected and provided against, it is no consolation to the widow and orphans of a workman who happened to be underneath that the designer's text book had never pointed out the object of web stiffeners. He ought to know about it ere he called himself a designer at all."

If in this sentence we substitute "fails" for "buckles" and "shear reinforcement" for "web stiffeners" the author's criticism of other text-books will be applicable to his own.

As against this omission it is only of minor importance that the permissible stresses on which all the graphs are based have been out of date not only since the publication of CP114:1948, but were superseded by higher stresses already by the first Code of Practice in 1934 and the LCC by-laws in 1938.

20.110 construction: complete structures

PRESTRESSED CONCRETE

Prestressed Concrete. Some British Examples. (The Builder, Jan. 14, 1949, pp. 75-6.)

Examples of bridges and buildings in prestressed concrete recently carried out in this country.

Among the examples described are the Adam Viaduct, Wigan (see No. 20.37), Nunn's Bridge, Lincs. (see No. 20.74), strengthening of St. Luke's Church, Silverdale (see No. 21.22), British Overseas Airways Corporation (see No. 20.107). New examples are: (1) A single storey factory extension at Tiverton, Devon, where prestressed precast girders of 54 ft. 7 in. in accordance with the Magnel-Blaton system were used. (2) Floor beams of 20 ft. span in a paint factory at Chadwell Heath, Essex. (3) Factory at Bristol with precast prestressed columns.

The article also refers to five over-line bridges now under construction on the line between Manchester and Wath, Eastern Region, British Railways.

20.111 construction: complete structures

FLATS IN POPLAR

Flats in the Abbot Road Area. For the Poplar Borough Council. W. J. Rankin, C. H. Weed. (The Builder, Dec. 3, 1948, pp. 652-5, and other journals.)

Six-storey blocks, steel framed, clad externally with precast concrete panel units. Cladding erected entirely from inside. Cladding and 2 in. thick wood-wool inner lining act as permanent shuttering for a 4 in. *in situ* concrete infilling between.

20.112 construction: complete structures

PODOLSKO BRIDGE

Contractor Meets Close Design Tolerances In Building Long-span Concrete Arch Bridge. J. J. Polivka. (Civil Eng. [USA], Jan. 1949, pp. 40-43, 73.)

Design and construction of longest reinforced concrete arch bridge in Central Europe.

The Podolsko bridge over the Vltava river, Czechoslovakia, is 1,680 ft. long. The central arch of 492 ft. clear span is of solid concrete of 6 ft. 6½ in. thickness, equal to 1/75th of the span. Its unique feature is that two spandrel arches are supported at the quarter-points of the main arch. This highly indeterminate structure was analysed by the photoelastic method. Great care was taken in the construction of the centering.

The article contains data of design and

INFORMATION CENTRE

INDEX, 1948

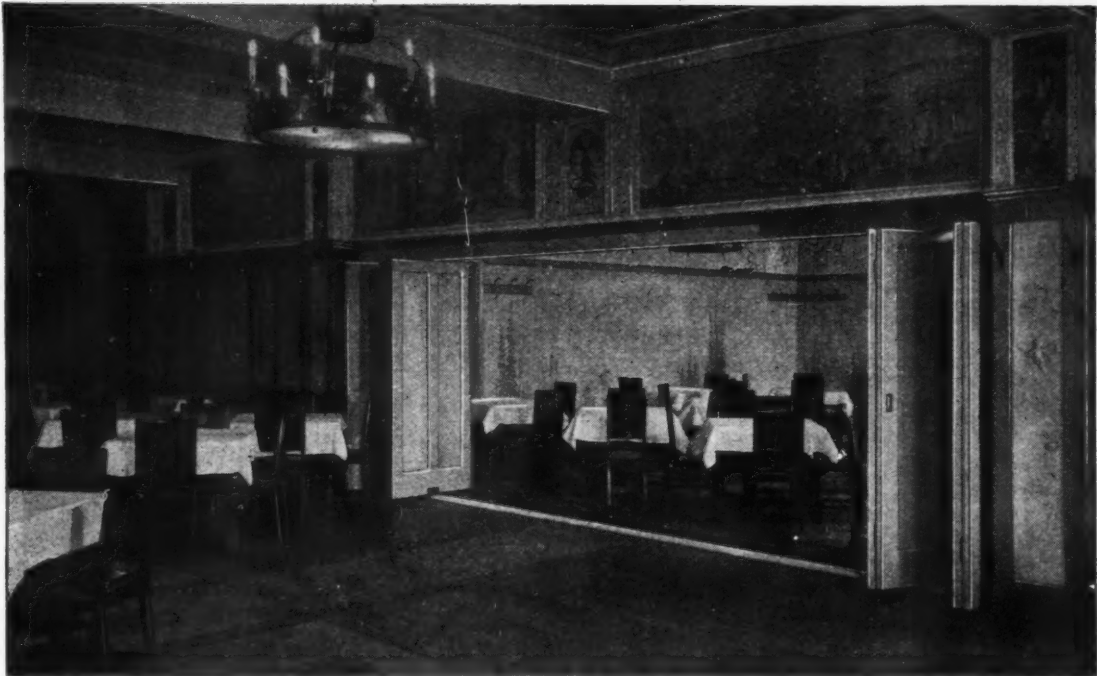
An alphabetical index covering items published during the twelve months ended December 31, 1948, is being prepared. Readers who wish to have a copy—it is free of charge—should complete the form below and post it to the Technical Editor, THE ARCHITECTS' JOURNAL, not later than March 3, 1949.

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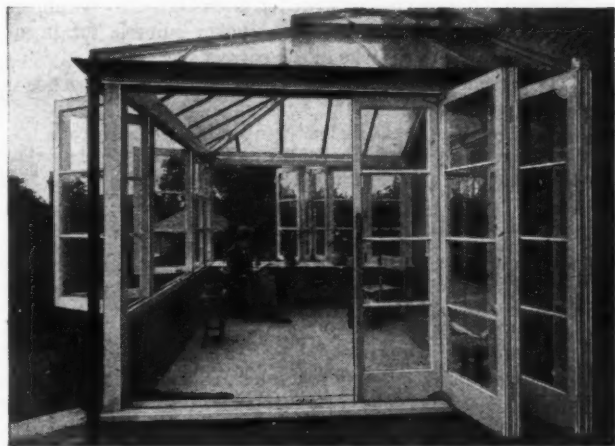
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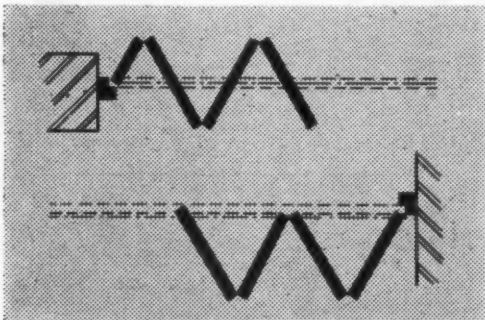
Restaurant Screen with weight taken on ground

ON THE GROUND—OR OVERHEAD?

There are four main types of Henderson Folding Partition and Window Gear, each designed to suit particular circumstances. In some cases the weight can be taken from above, in others it must be taken on the ground or cill. Every enquiry is carefully studied, and our Drawing Office service and trained technical representatives are freely available to ensure that the correct gear is accurately prepared for each job. Thus any competent joiner can then make and erect. Architects have specified Henderson Folding Partition Gear with confidence for over twenty-five years—with the result that it can be seen today in famous buildings throughout the country. *Catalogue No. 48 contains diagrams, photographs and complete specification data.*



Verandah doors and windows with weight taken overhead



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SLIDING DOOR GEAR



for any Door, Partition or Window that slides or folds

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H24

FUEL FOR AGA COOKERS IS IN PLENTIFUL SUPPLY

*ALL MODELS OF THE AGA COOKER
BURN EFFICIENTLY ON COKE...
AND SUPPLIES OF DOMESTIC COKE
ARE PLENTIFUL*

RECENT REPORTS about difficulty in obtaining suitable fuel for cookers of slow combustion or heat conserving types have been misleading.

Aga owners and prospective purchasers should not be concerned by these reports — the Aga burns coke!

THE AGA DESIGNED FOR COKE

In fact, all models of the Aga cooker have been designed specifically to burn coke—the cooker and water heater models for a minimum of 10 hours unattended, other models for a longer period.

Domestic coke is in plentiful supply. One ton of this fuel will last as long in an Aga as a ton of anthracite, and costs considerably less.

The special design and construction from high-duty chrome iron of the Aga firebox makes the Aga cooker suitable for burning all qualities of domestic coke of the correct size.

Many present Aga owners know from their own experience that coke is an efficient fuel for the Aga.

The Aga was designed, originally, in Sweden to burn coke.

With no natural coal resources of their own, the Swedes have always imported their fuel and they have always used coke for Aga cookers.

AUSTRALIANS USE COKE

The steady and increasing demand for Aga cookers in overseas markets substantiates still further the efficient performance of these cookers when fuelled with coke. In most of these countries, coke is the only available fuel.

In Australia, one of the best Aga export markets, Aga owners get satisfactory performance using coke even of inferior qualities. The increase in sales demands for the Aga proves further its success with this fuel.

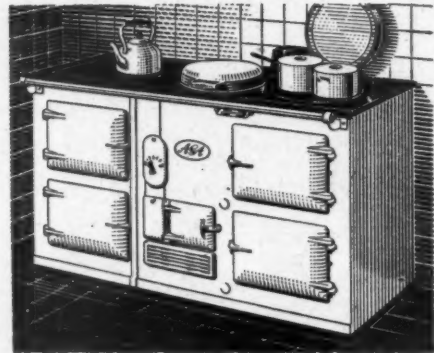
NO HARDSHIP FOR AGA OWNERS

It is in national interests that export demands for anthracite should be satisfied.

The export of this fuel, however, need not cause any hardship to present or prospective Aga owners.

Both in this country and abroad, the reputation of the Aga for efficiency and economy has been established by its performance as a coke-burning cooker.

The Aga saves fuel for the householder and the nation.



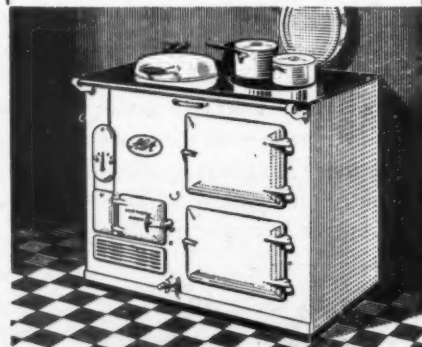
This is the Aga Model E Cooker for the larger household. Its guaranteed maximum fuel consumption per year is 3 tons using COKE or "Phurnacite".

ALL AGA MODELS BURN COKE

Night and day, the Aga is ready to cook. Using coke, its continuous burning fire needs fuel only twice in 24 hours, or 3 times for cookers with water heater and the heavy duty models.

Coke is the most economical smokeless fuel for all Aga models. It costs 20% less than anthracite. Any quality of the correct size is effective fuel for both domestic and heavy duty models in use in schools, hotels, hospitals, etc.

Domestic Aga models are priced from £85 to £115.



This is the Aga Model CB Cooker and Water Heater for the medium size family. Its guaranteed maximum fuel consumption per year is 3½ tons using COKE or "Phurnacite".

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Orchard House, Orchard St., London, W.1

(Proprietors: ALLIED IRONFOUNDERS LTD.)

details of construction. The bridge was commenced in 1938 and completed in 1941.

23.93 heating and ventilation HOT WATER, SCHOOLS

Domestic Hot Water Supply by Gas (Schools). BS C. of P. 332.202:1948. (British Standards Institution, 1948. 5s.)

Requirements, design and installation of gas-heated hot water supply in schools. Useful both on general points and details.

This code deals with systems of heating water for domestic use in schools, by means of gas appliances, including auxiliary heating for clothes-drying when the central heating is not in use. Neither cold water supply and storage, nor central heating, are discussed in the code.

Hot water is required at varying demand rates for many domestic purposes in schools; these points influence the selection of suitable installations. The design section of the code describes the systems available, their selection, and the types of appliance suitable for specified duties. There is also information on the temperatures generally accepted for particular purposes, and the provision of alternative heating by gas in central-heating systems using solid fuel. The code points out the desirability of temperature and time controls.

In the section: "Installation considerations which affect design," recommendations are given on a number of points, including gas supply, nature of water supply, cold water supply arrangements, length of non-circulatory draw-off pipes, insulation, venting, etc.

The efficiency of a water-heating system depends very much on the manner in which it is installed and the code makes extensive recommendations on the installation of the principal types of heaters. The "Work on Site" section contains advice on bending, cutting and jointing, fixing and supporting pipes; and on provision for expansion and contraction and protection from damage. Tables set out the recommended spacing of supports for pipes of different gauges and materials; the capacities, performance details and special features of various types of water heater; and hot-water storage requirements in schools.

The code is illustrated with fifteen diagrams, one of which is a nomogram linking pipe sizes to flow of water and loss of head.

24.104 lighting VISION RESEARCH

Muscular Tension as an Index of Visual Efficiency. M. E. Bitterman, T. A. Ryan

and C.-L. Cottrell. (Illum. Eng. [USA]. Nov., 1948, p. 1074.)

Measurement of strain resulting from glare. Important, but technical.

This note is important, not because of any direct architectural effect, but because it promises a measurement of the strain associated with glare. The authors describe what seems to be a fundamental method of study, in which the increased difficulty of doing work in the presence of glare is displayed in the measurement of changing electrical potential in various muscles over the body. If the work is carried to a successful conclusion, we may expect at last to be able to put figures on the effects of sky glare, and discomfort and disability from artificial sources. From this it would be possible to reach a much more advanced stage of control.

25.66 water supply and sanitation WATER SUPPLY

Water Supply. BS Draft C. of P. 310: 1948. (British Standards Institution. 6s.)

Part I—Supplies from Public Water Undertaking. Part II—Supplies from Wells, Boreholes, Rivers, etc. Part III—Conveyance. Lists of British Standards. General design of piping, including for hot water, methods of pipe jointing, etc.

Part I is a single page of more or less useless exhortation of the standard C. of P. type.

Part II deals with water supply from private sources and will be a useful source of reference to those who meet such problems only rarely.

Part III deals with matters of everyday occurrence and goes into great detail in places.

So many Codes of Practice are split up into several parts and issued separately when they could so much better be issued as one document, that it seems hard to criticize one for doing the reverse. In this case, however, the type of information in Part II is so different from Part III and the number of users of the different parts is likely to be so different that consideration might be given to publishing in the final form, Part III as a separate Code. The price would presumably be about half of the present draft and it would satisfy all the requirements for most architects or builders.

25.67 water supply and sanitation WASTE HEAT RECOVERY

The Conservation of Heat in Dwelling

Houses. H. Goddard (J. Royal Sanitary Inst., Jan., 1949.)

Brief reference to general conservation of heat. Main point is description of simple heat exchanger to regain heat from bath water. Forty per cent. saving of heat claimed.

The author was the winner of the John Edward Worth Prize Essay for 1947. Most of his essay is given to a description of a simple heat exchanger for regaining some of the considerable amount of heat which goes to waste from baths and basins in houses. An economizer is illustrated and described in detail. Calculations claim a saving of 40 per cent. of the total heat in bath water after making reasonable allowances for various losses. The practical aspects of cleaning the appliance are covered and the idea seems worthy of a full-scale trial.

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

QUESTIONS AND ANSWERS

2979 RURAL WATER SUPPLIES

Q I shall be obliged if you will let me know the statutory obligations of an owner of rural cottage property with regard to water supply, sanitation, etc. I have a client who owns cottages in a village to which a mains water supply has just been provided. Is he compelled to lay water on to the cottages individually? Also, what is the law governing the condemning of cottages; before a cottage is condemned has an owner the opportunity of improving it? I mention this as presumably the fact that water is not laid on to a cottage has some bearing as to whether it is condemned or not.

A Under Section 138 of the Public Health Act, 1936, the local authority can demand that an existing occupied house be supplied with water if a suitable supply is available.

Section 139 gives an owner the right to appeal against the requirement of the local authority on the grounds set out in the Section. The appeal is made to the Minister of Health within 28 days after a notice has been served on the owner by the local authority.

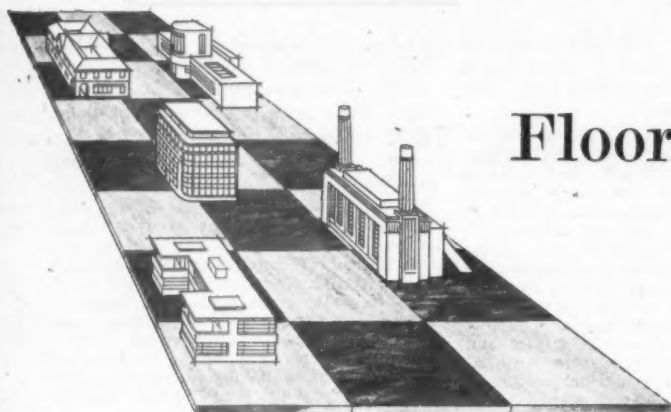
Under Section 39 of the Act the local authority can demand suitable drainage of an existing building. Section 290 gives the owner a right to appeal to a court of summary jurisdiction against the requirement of the local authority on the grounds set out in the Section.

Under Section 47 the local authority can demand that earth closets be converted to water closets if a sufficient water supply and sewer are available, but the local authority must pay half the cost of the work. An appeal by the owner is to a court of summary jurisdiction under Section 290.

Rainwater storage for human consumption is dealt with under Byelaws. A Memorandum has been published by the Ministry of Health dealing with rainwater for domestic supplies with particular reference to rural areas. The Memorandum is 183.W, issued in 1934.



Podolsko Bridge, Czechoslovakia. See 20.112.



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The illustration shows Semastic Decorative Tiles installed by Semtex Ltd. in the entrance foyer of Convoys Ltd., "News of the World" building, Bouverie Street. (Architect: Mr. Leslie Twigg, F.R.I.B.A.). Other recent examples of this type of flooring are to be found in the Administrative Building, B.O.A.C. at Brentford, British Nylon Spinners Ltd., Pontypool and I.C.I. Research Laboratories, Blackley, Manchester.

pressure. Pigment and 'marbling' pervade the full thickness of the tile. Made in two thicknesses— $\frac{1}{8}$ " and $\frac{3}{16}$ "—the latter for heavy duty—they give lasting service and remain pleasant to look at with a minimum of maintenance. They are highly resistant to staining, are not charred by lighted cigarette ends, and keep their original colour.

These tiles are sympathetic to the tread and provide a degree of warmth that makes them particularly comfortable to live with.

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For a list of the addresses of contractors approved to lay Semastic Decorative Tiles see page lviii of this issue

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

THE INDUSTRY

By Brian Grant

40-TON BITE

The illustration on this page shows a Bucyrus-Erie walking dragline excavator now being used by the Parkinson Strip Mining Co. at Ewart Hill Deep, near Newcastle-on-Tyne. The point about it is that the bucket capacity is 25 cubic yards, the largest in the country; only when you look at the men in the foreground do you get any idea of the size of this machine, which weighs over 1,000 tons and has a boom 180 feet long. It digs 40 tons of earth and rock (or about the volume of the small bedroom in a 3-bedroom house) and dumps it up to 360 feet away, all in less than a minute.

Open-cast coal winning is not, of course, the architect's business, but the building industry is doing most of the work and has already dug something like 50 million tons since 1942. At Ewart Hill there is about 3 million tons, covered by rock and clay overburden up to 160 feet deep. By trenching in the gardener's way, but in widths of 80 feet or so, and to the depth of the coal, the whole site is turned over, the coal extracted, and the site made good with the top soil in its right place so that the land may be put into re-cultivation as soon as possible.

The machine now working here was originally used on an open-cast site in Pennsylvania, but was bought by the Directorate of Open Cast Coal and re-erected in this country by Ruston Bucyrus, of Lincoln, a job which took nearly six months. The key machine on the site, it will be the job of this excavator to strip the majority of the 27 million or so yards of overburden.

Apart from the general interest which anyone feels in a very large machine of any kind, open cast and other work shows that our larger contractors are not necessarily the reactionary stick-in-the-muds that some would have us believe. Open cast has for years been a standard method of mining coal in America, where there is also a very large regular expenditure on roads, canals and river levée work. New work, too, hence the regular use of large bulldozers, scrapers and draglines of this type. Muck shifting of this type was never done on any scale over here until the wartime demand for vast acreages of aerodrome, and on similar jobs like open cast. Contractors here have always known of the American techniques, but it makes no sense to buy a machine capable of 50 or 100 men's work unless it can work steadily the year round. When the right sort of jobs appear in a reasonable quantity, the right machines generally appear too. (Sir Lindsay Parkinson and Co., Lindsay House, Shaftesbury Avenue, London, W.C.2.)

LIGHTING CALCULATIONS.

A new calculator has been introduced by Holophane to help those who have to work out the distribution of direct illumination from floodlights, street lighting installations, or other similar equipment. It is made as a 10-in. slide rule with scales for height or distance, intensity (candle power), illumination, and the angles in plan and elevation. Direct calculations can be made for illumination on the horizontal plane, on a plane

normal to the rays of light and on any vertical plane, and in this way the calculator eliminates much of the laborious arithmetic and trigonometry usual with calculations of this type.

The illumination on the walls and working plane of a room with one lighting fitting or under a large installation may be readily calculated and the same methods may be used for estimating the distribution of illumination given by floodlighting. For street lighting installations, calculations can be made of iso-foot-candle contours, depreciation losses, lumens per hundred feet and illumination of the test point.

The range of the scales covers most practical conditions, the intensity scale extending from 10 to 500,000 candles, the height or distance scale from 3 to 600 feet, the illumination scale from 0.002 to 100 lumens per sq. ft., while the accuracy anywhere in these ranges is about ± 0.2 per cent.

The calculator is sold with an instruction book which gives detailed descriptions of its application to a variety of problems, and contains clear statements of the formulae required for the problems and the ways of solving these formulae on the calculator. It sells at £3 3s. (Holophane, Ltd., Elverton Street, Vincent Square, London, S.W.1.)

LIGHTWEIGHT CONCRETE

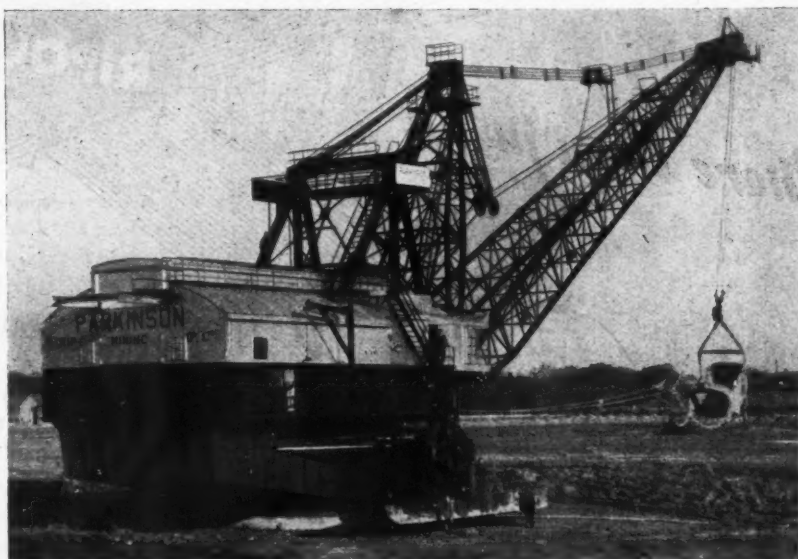
As a heat insulator, lightweight concrete is being increasingly used for the inner leaf in cavity walls and also to improve the sound insulation in party walls. Generally used in the form of pre-cast blocks, where the mix and density can be quite accurately controlled in the factory, it has been difficult, in the past, to obtain with certainty a concrete within 10 or 15 lb. per cubic foot of the desired figure. Since strength depends on density, it has thus often been necessary to aim at densities up to 15 lb. greater than required so as to be certain that the minimum structural strength is reached. The Pyrene Company have now introduced a process which, they claim, can with care achieve a density within 1 lb. of the required figure, while with normal methods of working the variation should not exceed 2 lb. a cubic foot. The company has, of course, been producing foam-making equipment for fire-fighting purposes for many years and has now evolved a material which can be used to produce concrete of any density down to the lightweight insulating fillers weighing no more than 20 lb. per cubic foot.



The new slide rule for working out the distribution of direct illumination from floodlights and street light's installations.

The concrete is produced by adding the finely bubbled foam to a rather dry concrete mix. The foaming agent is made up into a 2 per cent. solution with water, and the bubbles are produced in an aerating unit which needs a supply of compressed air. After the foam is added, mixing is continued for a short period and the concrete is ready for pouring. The foam is sufficiently stable to allow transport and pouring without collapse and the cellular structure seems, judging by micro-photographs, to remain unaltered during setting.

Cost naturally varies with the weight of the concrete produced, by far the greatest cost naturally being for the cement and aggregate. So far as the foam composition is concerned, the cost varies from about 0.6d. per cube foot for 100 lb. concrete to 1.5d.



The Bucyrus-Erie walking dragline excavator.

for a lightweight concrete weighing 30 lb., but although the cost of adding more lightness, or "air aggregate" increases with the decrease in weight, the overall cost of the concrete becomes progressively less. (*The Pyrene Company, Great West Road, Brentford, Middlesex.*)

A NEW MASTIC

Tretol, Ltd., manufacturers of building materials and paints, have applied for the Patent Rights of a new jointing, sealing and pointing mastic, Tretol Caulking Compound, which has great powers of adhesion. This material, which has high resistance to most acids, alkalis and other chemicals, withstands temperatures as high as 325° F., and can be overpainted if required. Its use is suggested in those industries, such as tanneries, chemical factories, etc., where the manufacturing process calls for the employment of chemicals. (*Tretol, Ltd., 12, North End Road, London, N.W.11.*)

Announcements

The telephone number of Mr. J. E. K. Harrison, F.R.I.B.A., of 82, York Way, London, N.1, has been changed to Terminus 5694.

The Council of the Royal Sanitary Institute have announced particulars of the prize essay competitions for 1949. Three prizes are offered: The John Edward Worth Prize of £40 for an essay on practical improvements or appliances or inventions used or proposed to be used in or about dwelling houses; the John S. Owens Prize of £15 for an essay on the ventilation of dwellings and its effect on human health; and the Henry Saxon Snell Prize of fifty guineas for an

essay describing suggested improvements in the construction or adaptation of sanitary appliances. Intending competitors should apply to the Royal Sanitary Institute, 90, Buckingham Palace Road, London, S.W.1, for a copy of the general conditions.

Messrs. Musgrave & Co. Ltd., St. Ann's Works, Belfast, announce that, due to the necessity of more commodious premises, their Bristol Branch Office has been transferred to 35, Broad Street, Bristol 1.

Buildings Illustrated

King George V Hospital and Queen Elizabeth Nurses' Home, Malta. (pages 205-208.)
Architects: Adams, Holden & Pearson.
General contractors: John Laing & Sons Ltd. and N. Zammit & Son, Malta. Sub-contractors: Malta Construction Co.; damp-courses, Pudlo Waterproofed Cement; reinforced concrete, B.R.C.; structural steel, Dorman, Long & Co.; floor tiles, Galea Bros.; glass, Pilkingtons Ltd.; central heating, G. N. Haden & Sons; oil-fired cooker, Allied Ironfounders; grates, Bratt Colbran Ltd.; gas fixtures, Malta & Mediterranean Gas Co.; hot water boilers, Ideal; steam boilers, Spencer Hopwood; electric wiring, Electrical Installations Ltd.; sanitary fittings, W. N. Froy & Sons; door furniture, James Gibbons Ltd.; casements, Crittall Manufacturing Co. Ltd.; bells, Electrical Installations Ltd.; wall tiling, H. & R. Johnson Ltd.; kitchen fittings, Smith & Wellstood; church fittings, G. Maile & Sons Ltd.; lifts, Express Lift Co. Ltd.; water-softening plant, Permutit Co.; signs, Lister Signs Ltd.

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.1, and the advertisers listed will be asked to supply information direct.

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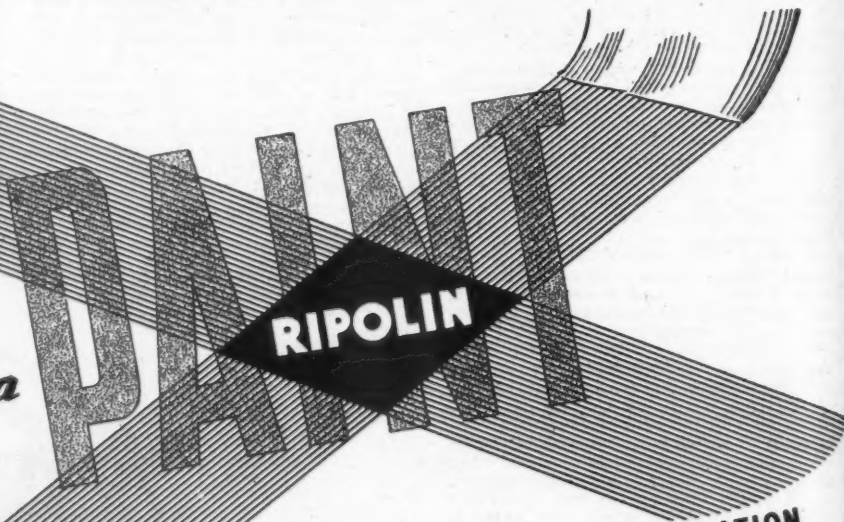
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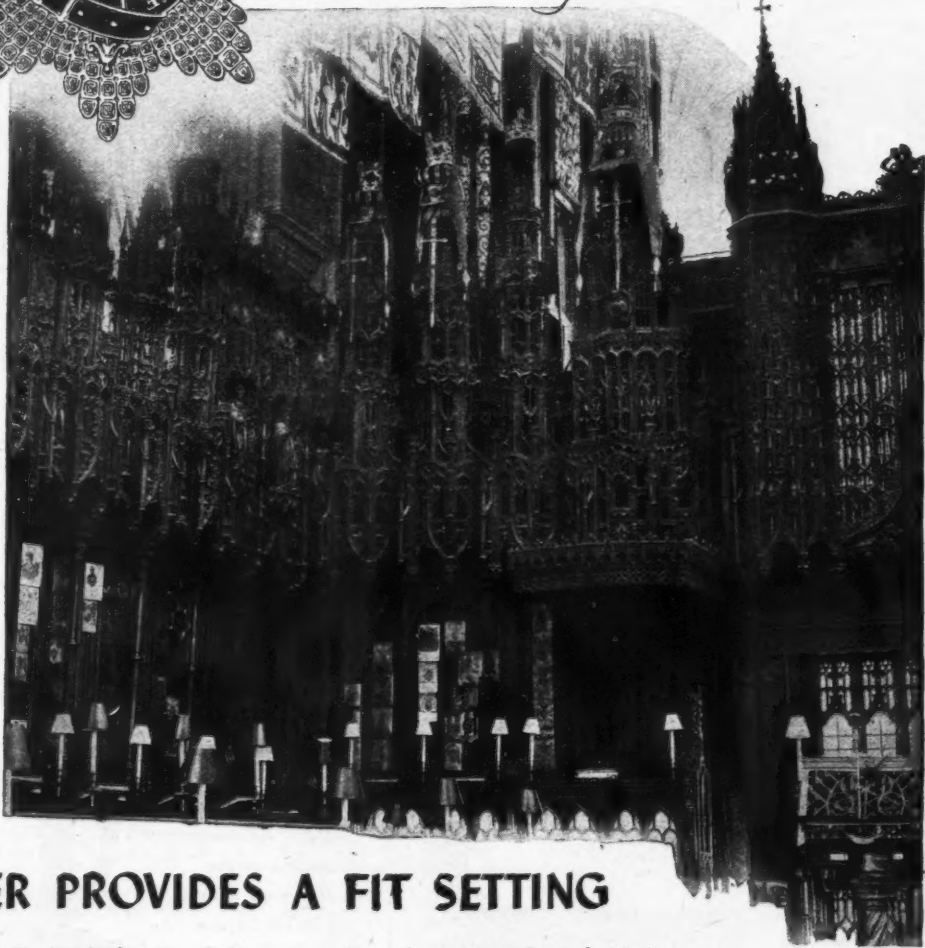
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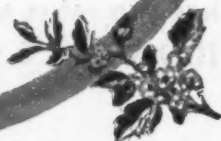
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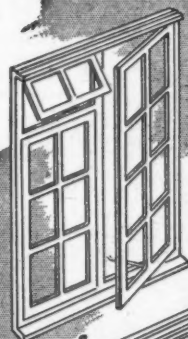
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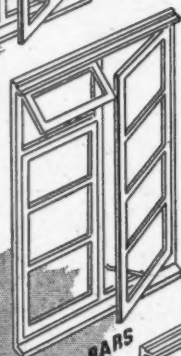
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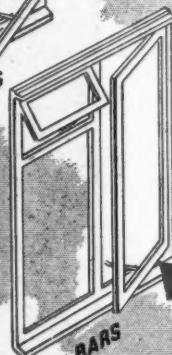
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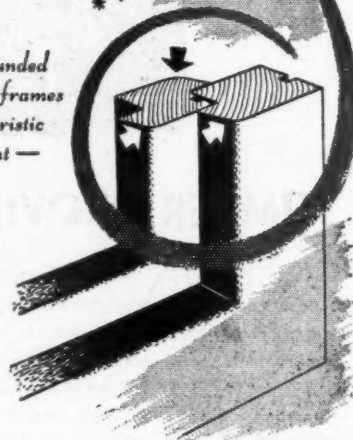
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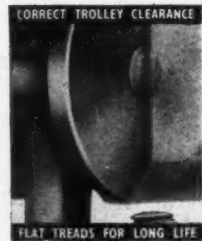
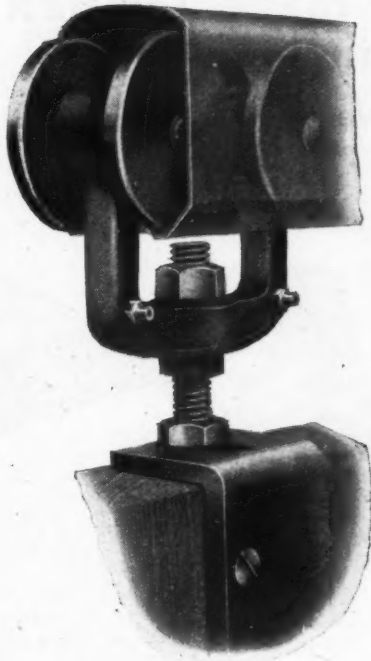
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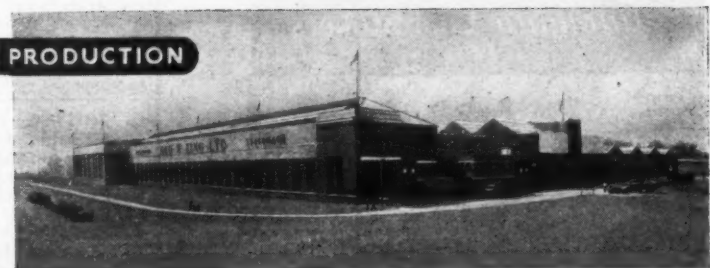


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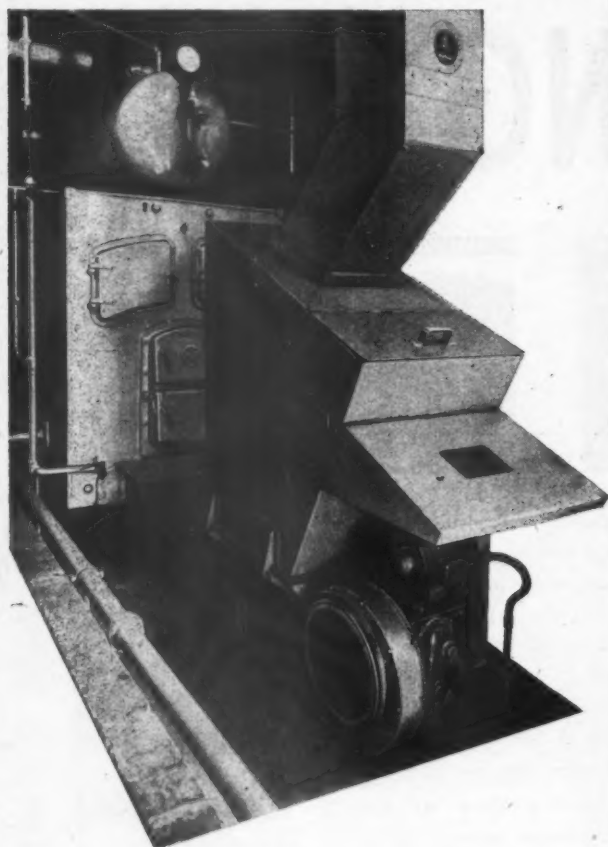
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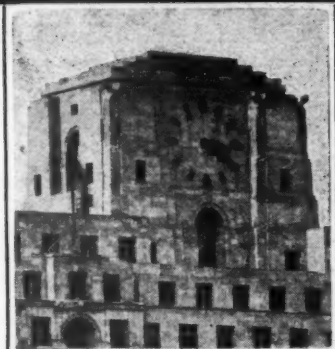
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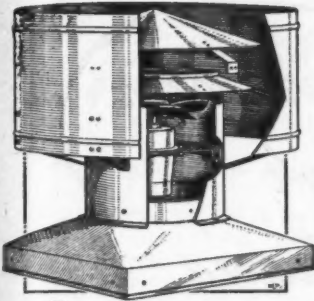
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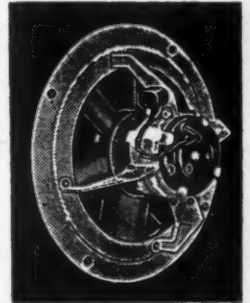


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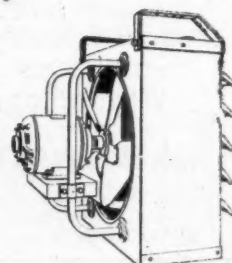
Telephone: Clerkenwell 6861 and 3826



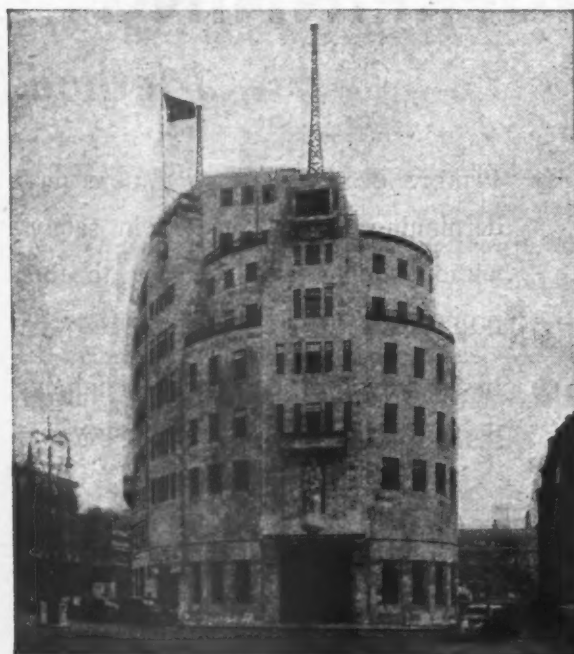
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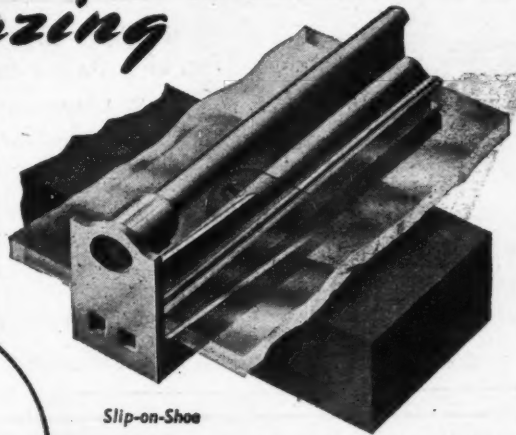
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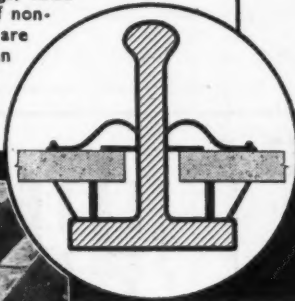
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BULB SECTION STEEL BAR

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WATCO Wood Floor Preserver makes Wood Floors last longer

Watco Wood Floor Preserver is a new non-slip, heavy duty plastic floor finish, which seals the pores, strengthens the fibres, and acts as a binding medium that solidifies and increases the resistance of the wood to heat, dampness, traffic, acids, and all surface influences.

**strengthens the Floor
checks Expansion and Contraction**

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Softwoods treated with Watco Wood Floor Preserver will last as long as the more expensive hardwoods. Regular sweeping will produce a good appearance without polishing, although Watco-treated floors may be washed or polished in the usual way if desired.

Explanatory Price List post free on request



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Renders concrete floors permanently 100% non-dusting.

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For protection of building timbers against Wood Borers.

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Cement waterproof and hardener for mass concrete and cement rendering.

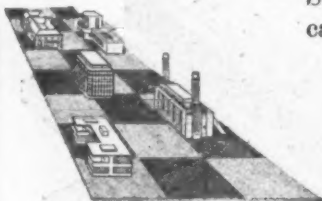
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can be installed only by the following contractors:—

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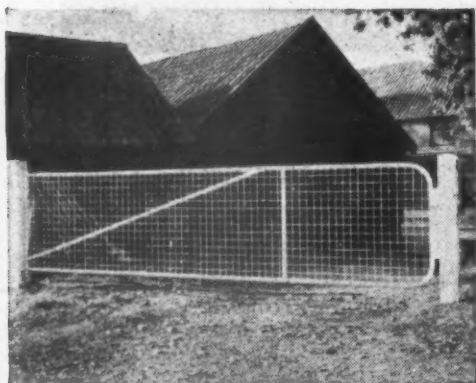
Semtex Ltd., 185, 187, 189 Finchley Road, London, N.W.3

The Limmer & Trinidad Lake Asphalt Co. Ltd., Steel House, Tothill Street,
Westminster, S.W.1

The Penmaenmawr & Trinidad Lake Asphalt Co. Ltd., National Bank Building,
Fenwick Street, Liverpool, 2

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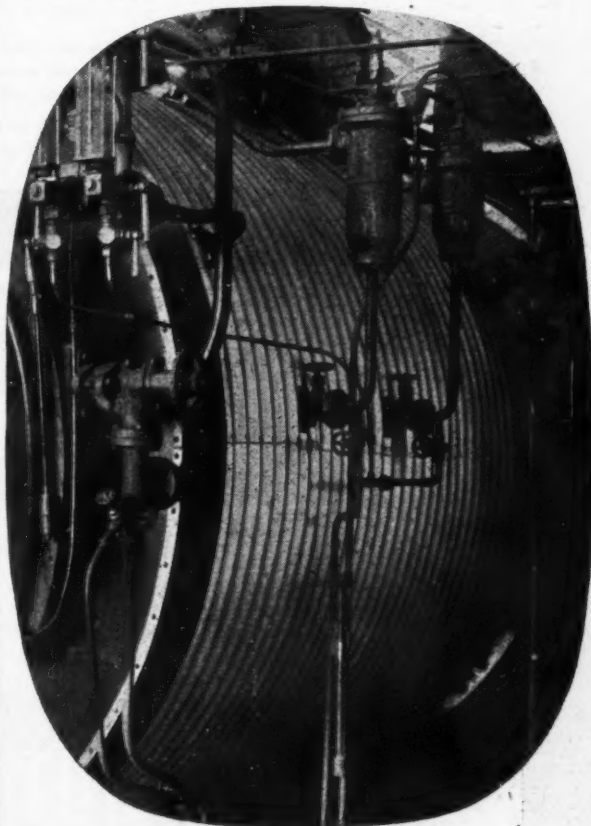
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VERSIL'S Corrugated Construction insulation on an *Economic* type boiler in a West Country factory.

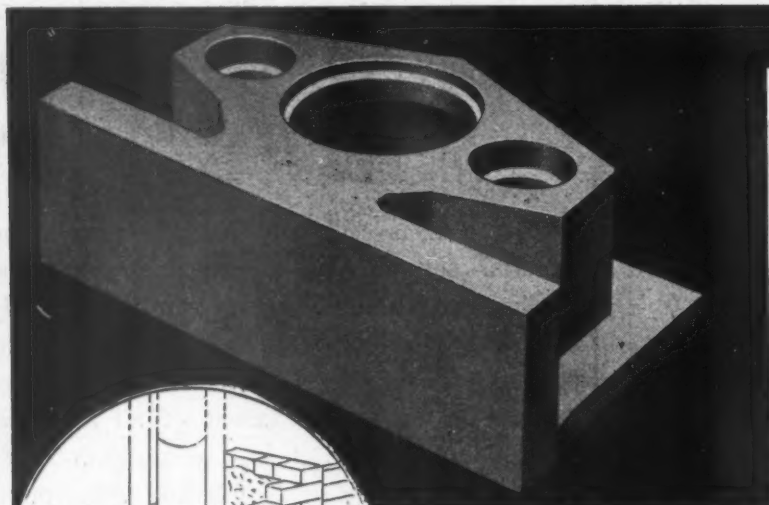
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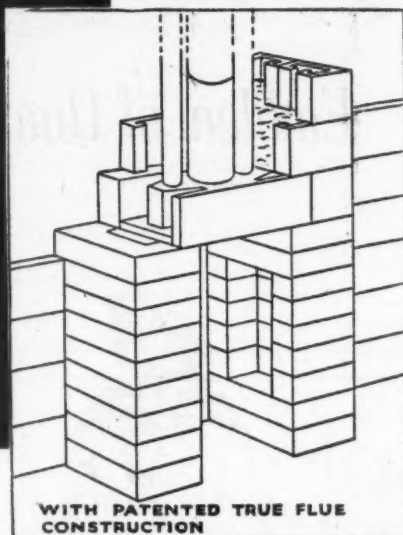
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LINTOL BLOCK**
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This lintol, now available for immediate delivery, has been designed for use with the majority of modern Convecter stoves. It has been proved the ideal unit for connecting these stoves to the flue and warm air ducts, and is being used extensively by the L.C.C. and many other local authorities.

For further details of this unit or of the complete "True Flue" patented system of flue construction apply to The Domestic Flue and Convecter Heating Specialists:—

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RITZIDE, the new leather plastic flooring, combines durability with a beautiful surface and a warm, quiet tread. It is specially suitable for schools, hotels, private houses, and wherever traffic is heavy and good appearance is important. The surface is dustless, damp-resisting and fireproof, and it will neither crack nor disintegrate.

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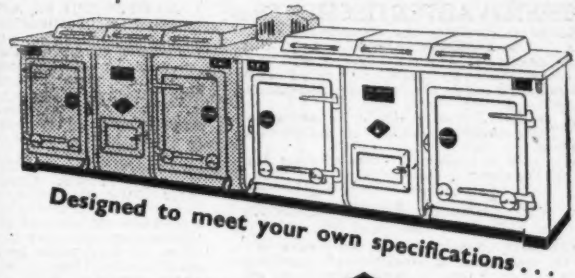
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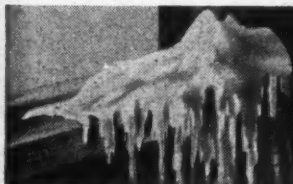


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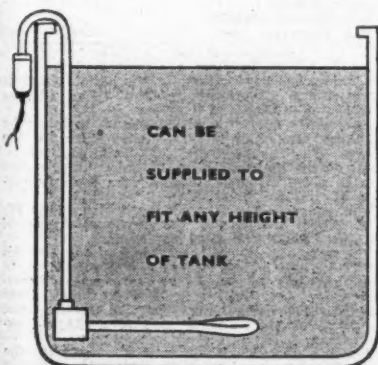
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CLASSIFIED ADVERTISEMENTS

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

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

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

Public and Official Announcements

2ls. per inch; each additional line, 2s.

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. ADDRESS: EMPLOYMENT REGISTER, WARR PARK, WHITELAKE. Tel.: Uplands 0935, 991

LONDON COUNTY COUNCIL

Applications are invited for unestablished positions of (i) ARCHITECT, Grade III (salaries up to £700 a year) and (ii) ARCHITECTURAL ASSISTANTS (salaries up to £380 a year), in the Housing and Valuation Department. Commencing salaries in either grade will be determined according to qualifications and experience. Engagement will be subject to the Local Government Superannuation Acts, and successful candidates will be eligible for consideration for appointment to the permanent staff on the occurrence of vacancies.

Successful candidates will be required to undertake the design, layout and preparation of working drawings for housing schemes (cottages and multi-story flats), and will be employed in the Housing Architect's Division. Preference will be given to candidates holding a recognised professional qualification.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.W.1 (stamped addressed envelope required, and quote Ref. G.R.3). Canvassing disallowed. (2269) 1046

HEATING, VENTILATING AND ELECTRICAL ENGINEERING DRAUGHTSMEN urgently required. The minimum qualifications, at age 21, are that the applicants shall have had, at least, four years' Heating and Ventilating and Electrical Engineering experience or apprenticeship in an industrial or Government undertaking, or alternatively with a reputable installation contractor, of which at least one year should have been spent on drawing office duties. Candidates will be required to produce evidence that they have undertaken or are undertaking a recognised course of study advancing to the standard of National Certificate or equivalent.

Applicants who have reached a higher standard and who are capable, without undue supervision, of initiation and design of moderate sized schemes, preparation of specifications and estimates, analysis of tenders and technical correspondence, and who have reached a level of study equivalent to Higher National Certificate Award, are preferred.

The commencing salary for these posts at age of 21 years is £283 per annum, rising to a maximum of £496 per annum. Entering salary is increased by £20 per annum for each year of age above 21 years, subject to a maximum commencing salary of £420 per annum. The posts are at Cambridge. Although these posts are not established posts, some of them have long-term possibilities, and competitions are held periodically to fill established vacancies.

Apply to Ministry of Works (R.D.1 Estab.), Shaftesbury Road, Brooklands Avenue, Cambridge. 1664

COUNTY BOROUGH OF GREAT YARMOUTH. TOWN PLANNING DEPARTMENT.

Applications are invited for the following appointments:—

(a) TOWN PLANNING OFFICER. At a salary commencing at £710, rising by annual increments of £30 to £860 per annum.

(b) TWO SENIOR TOWN PLANNING ASSISTANTS. A.P.T., Grade VI (£535 to £660 per annum).

Applicants must be Corporate Members of the Town Planning Institute, and must have had considerable experience in the carrying out of surveys, the preparation of development plans and reconstruction schemes and the control of development. They must also have a thorough knowledge of the various Acts and Orders relating to Town and Country Planning, and the Town Planning Officer must be competent to undertake the administration and supervision of the Town Planning Office.

The appointments will be subject to one month's notice, to the provisions of the Local Government Superannuation Act, 1937, the passing of a medical examination, and to the Council's local conditions of service.

Applications, endorsed "Town Planning Officer" or "Senior Town Planning Assistant," with copies of three recent testimonials, must reach me not later than the 10th March, 1949.

Canvassing will be deemed a disqualification, and candidates must disclose in writing any relationship to any member of, or the holder of any senior office under, the Council. Candidates failing to do so will be disqualified, and if appointed, liable to dismissal without notice.

FARRA CONWAY

Town Clerk.

Town Hall, Great Yarmouth.

15th February, 1949.

1785

ARCHITECTURAL ASSISTANTS urgently required. Qualifications: At least three years' Architectural training, and, preferably, some experience in an Architect's office. Ability to carry out and supervision working drawings of smaller works from prepared sketch plans, and elevations. Knowledge of subsidiary duties common to an Architect's office. Some testimonials already accepted and/or in a position to sit for the intermediate examination of the Royal Institute of British Architects.

STRUCTURAL ENGINEERING ASSISTANTS urgently required. Qualifications: Basic knowledge Static Mechanics, properties of materials, and structural detailing and design obtained over a period of not less than three years at a Technical College, plus one year in a Structural Engineer's office, or four years in a Structural Engineer's office supplemented by Technical Classes. Capable of site surveying, dealing with specifications, and making reliable reports.

SANITARY ENGINEERING ASSISTANT urgently required. Qualifications: Three years as an Apprenticed Pupil or Assistant in a Civil Engineer's Drawing office and three years' part-time study in Engineering subjects, including drainage and water supply; three years' full-time study in Engineering subjects, including drainage and water supply, and at least one year's experience in a Civil Engineer's Drawing office. At age above 21, corresponding advanced knowledge, experience, and drawing office technique are required. Preference given to candidates who have passed for Associate Membership of the Institution of Sanitary Engineers, the Intermediate examination or the Testamur examination of the Institution of Municipal Engineers, or equivalent.

The commencing salary for all these posts at age of 21 years is £283 per annum, rising to a maximum of £496 per annum. Entering salary is increased by £20 per annum for each year of age above 21 years, subject to a maximum commencing salary of £420 per annum. The posts are at Cambridge. Although these posts are not established posts, some of them have long-term possibilities, and competitions are held periodically to fill established vacancies.

Apply to Ministry of Works (R.D.1 Estab.), Shaftesbury Road, Brooklands Avenue, Cambridge. 1663

COUNTY BOROUGH OF CROYDON—EDUCATION COMMITTEE.

CROYDON SCHOOL OF ART AND CRAFTS. Principal: FREDERICK HINCHLIF, A.R.C.A. (Lond.). Applications are invited for the following post:—

DEPARTMENT OF ARCHITECTURE—FULL-TIME ASSISTANT.

A suitably qualified man, preferably under 35 years of age, is required to take up duties as soon as possible, to take charge of the Department of Architecture. The man appointed will be assisted, as necessary, by technical part-time staff and should have a broad approach to matters of Design and Decoration. Teaching experience desirable, but not essential; suitable applicants for part-time appointment would be considered.

Salary in accordance with London. Burnham Scales, with appropriate allowances. Forms of application may be obtained on receipt of a stamped addressed, foolscap envelope, from the undersigned, to whom they should be returned, completed, within two weeks of this advertisement.

HERBERT ROBERTS,

Chief Education Officer.

Education Office, Katharine Street, Croydon.

February, 1949. 1783

WEST SUFFOLK COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments in the County Architect's Department. Salaries as indicated in accordance with the National Joint Council Salary Scales, position on scales according to qualifications and experience, viz.:—

(a) QUANTITY SURVEYOR—A.P.T. Grade VI—VII (£595—£710).

(b) ASSISTANT ARCHITECT—A.P.T. Grade VI (£535—£660).

(c) ASSISTANT ARCHITECT—A.P.T. Grade V—Va (£520—£610).

Candidates in respect of (a) should have had experience in the preparation of Bills of Quantities, interim valuations, settlement of final accounts, and estimating for all classes of building work, including new works and improvements to existing County buildings. Preference will be given to those who are Associates of the Royal Institute of Chartered Surveyors (Quantity Division).

Candidates in respect of (b) and (c) appointments should have a sound knowledge of architectural design and construction, be quick and accurate draughtsmen, capable of preparing sketch plans, working drawings and specifications in respect of new school, police, health and other building work normally undertaken by a Local Authority. Applicants must be Registered Architects.

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

Forms of application may be obtained from the undersigned, by whom applications, together with the names of two referees, should be received not later than Tuesday, the 15th March, 1949.

L. G. H. MUNSEY,

Clerk of the County Council.

Shire Hall.

Bury St. Edmund's.

15th February, 1949.

1834

COUNTY BOROUGH OF HUDDERSFIELD. BOROUGH ARCHITECT'S DEPARTMENT. APPOINTMENT OF DEPUTY BOROUGH ARCHITECT.

Applications are invited for the appointment of Deputy Borough Architect, at a salary of £900, rising by annual increments of £50 to a maximum of £1,000 per annum.

If necessary, housing accommodation will be made available.

Candidates should be suitably qualified, and must have had professional and administrative experience in Local Government service.

Applications, stating age, qualifications, present and previous appointments, and present salary, together with full details of experience, and the degree of responsibility for the work described, should be submitted, along with the names of three referees, to the undersigned, not later than 14th March, 1949.

The appointment is terminable by one month's notice in writing by either side, and is subject to the provisions of the Local Government Superannuation Act, 1937 and 1939, and to the passing of a medical examination.

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

HARRY BANN,

Town Clerk.

Town Hall, Huddersfield.

1776

THE CRAWLEY DEVELOPMENT CORPORATION. TOWN CLERK.

Applications are invited for the following post:—

(a) An ARCHITECT with Landscape qualifications, with a salary range of £750-£1,000. For exceptional qualifications and experience advancement to a higher salary range might be considered. Applicants should have first-class experience in all types of building and practical experience of landscape architecture as well as design. They should be qualified architects and Members or Associate Members of the Institute of Landscape Architects.

(b) ASSISTANT ARCHITECTS, on the salary scale £550 x £30-£750. Applicants should have first-class general experience in design and construction, particularly of housing and house design, and must be fully qualified.

(c) JUNIOR ASSISTANT ARCHITECTS, on the salary scale £400 x £30-£525. Applicants should have attained the R.I.B.A. Intermediate examination standard.

Further particulars should be obtained from the Chief Architect, A. G. Sheppard Fidler, M.A., R.Arch., A.R.I.B.A., A.M.T.P.I., Broadfield, Crawley Sussex, to whom detailed applications must be submitted not later than 11th March, 1949.

C. A. C. TURNER,

Chief Executive.

1795

PEMBROKESHIRE COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the undermentioned appointments on the Permanent Staff:—

TWO SENIOR ARCHITECTS. Applicants should be Qualified Members of the Royal Institute of British Architects and should have experience in general architectural work, including Educational Buildings, Police Housing, Main tenance, etc. Salary, in each case A.P. and T. Division, Grade VII, £535-£710 per annum.

TWO ASSISTANT ARCHITECTS. Applicants should be members of the R.I.B.A. by examination and/or holding equivalent academic qualifications with experience of contemporary architectural and/or structural design. Salary scale Grade V A.P. and T. Division, £520-£570 per annum.

The appointments are superannuable and subject to satisfactory medical examination. Canvassing will be a disqualification. Forms of application can be obtained from the undersigned, to whom they should be returned, duly completed, not later than March 12th, 1949.

WALTER BARRETT, M.B.E., A.R.I.B.A.,

County Architect.

County Offices,

Haverfordwest.

15th February, 1949.

1815

BOROUGH OF BACUP. ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Architectural Assistant in the Office of the Borough Engineer and Surveyor.

Applicants must have had sound training by pupillage, and had previous experience in the design and construction of building works, particularly in relation to housing. Preference will be given to persons qualified by the examination of the R.I.B.A.

The salary will be in accordance with Grade IV, A.P. & T. Division, of the National Scales of Salaries (£480 x £15-£535 per annum).

The appointment will be subject to one month's notice in writing on either side at any time to the provisions of the Local Government Superannuation Act, 1937, and the National Joint Council's Scheme of Conditions of Service, and to the selected candidate passing a medical examination.

Housing accommodation will be found by the Council for the successful candidate, if a married man and coming from outside the Borough.

Applications, stating age, qualifications, past and present appointments, with details of experience, together with copies of two recent testimonials, should be sent to the undersigned not later than Friday, 11th March, 1949.

O. G. EVERATT,

Town Clerk.

Municipal Offices, Bacup.

15th February, 1949.

1791

BOROUGH OF NELSON. APPOINTMENT OF ARCHITECTURAL ASSISTANT.

AMENDED ADVERTISEMENT.
Applications are invited for the appointment of ARCHITECTURAL ASSISTANT in the Borough Surveyor's Department at a salary in accordance with Grade IV of the National Scales (£480-£515 inclusive) (consolidated).
Candidates should have experience in housing and general work and preference will be given to applicants who have passed the Final or Inter. R.I.B.A. examination. Applications, giving detailed particulars of experience and qualifications, endorsed "Architectural Assistant," with copies of three recent testimonials, to be delivered to the undersigned on or before Thursday, 10th March, 1949.

F. W. ROBERTS,
Town Clerk.

Town Hall, Nelson,
Lancashire.
18th February, 1949. 1201

SURREY COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the position of ASSISTANT QUANTITY SURVEYOR, Grade VIII at a commencing salary of £635, rising by annual increments of £25 to a maximum of £760 per annum, plus London allowance of £30 per annum.

Applicants should possess approved qualifications and experience, and preference will be given to those who are Members of the Royal Institution of Chartered Surveyors (Quantities Sub-Division). They should be capable of undertaking all stages of the work for the preparation of Bills of Quantities, including preliminary estimates, the preparation and settlement of final accounts, site measurement, and preparation of interim certificates.

The appointment will be subject to the provisions of the Local Government Act, 1937, and the successful applicant will be required to pass a medical examination.

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-upon-Thames, not later than the 12th March, 1949.

Canvassing, either directly or indirectly, will disqualify a candidate for consideration. The Council will be unable to provide any housing accommodation and the successful applicant will be expected to make his own arrangements in this direction.

DUDLEY AUKLAND.

Clerk of the Council.
County Hall, Kingston-upon-Thames. 1796

URBAN DISTRICT OF WOLVERTON. ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of BUILDING INSPECTOR/CLERK OF WORKS, in A.P.T. Division Grade III (£450-£495) or (in the case of suitably experienced and qualified candidates) in Grade IV (£480-£525).

A car allowance will be payable on the National scale.

Housing accommodation available.
Candidates must be experienced in inspecting and reporting on plans deposited by Byelaw and Town Planning consideration, and the supervision of (a) development under Byelaws; (b) new constructional works of a building or civil engineering character; and (c) maintenance work (by contract and direct labour) on Council owned buildings, etc.

Preference will be given to applicants holding the Building Inspector's Certificate of the Inst. Mun. Engrs. or equivalent qualification.

Applications stating age, qualifications, present and previous appointments and experience, together with the names and addresses of two referees, should be delivered to the undersigned by Friday, 11th March, 1949.

A. J. W. JEFFERY,
Clerk of the Council.

Council Offices,
Market Square,
Stony Stratford, Bucks.
17th February, 1949. 1847

CITY OF SALFORD.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT in the City Engineer's Department. Salary in accordance with Grade III, A.P.T. Division of the National Scale of Salaries—£460, rising by annual increments of £15 to a maximum of £495.

Preference will be given to applicants who have passed the Intermediate Examination of the R.I.B.A. and have had experience in general architectural work and be able to prepare working drawings.

The appointment will be subject to: (1) The provisions of the Local Government Superannuation Act, 1937; (2) the National Joint Council Scheme of Conditions of Service as adopted by the Council; and (3) the passing of a medical examination.

Applications, giving details of age, training and experience, together with copies of two recent testimonials, and endorsed "Architectural Assistant," to be addressed to the City Engineer, Town Hall, Salford, 3, and forwarded as to be received not later than Friday, 18th March, 1949.

Applicants must disclose in writing whether or not they are related to any member of the Council or an officer of the authority.

H. H. TOMSON,
Town Clerk. 1841

FLINTSHIRE COUNTY COUNCIL.

Applications are invited for the following appointments in the County Architect's Department:—
(a) QUANTITY SURVEYOR. Salary A.P.T., VI (£595, rising to £650 per annum).
(b) ASSISTANT ARCHITECT. Salary A.P.T., V (£520, rising to £570 per annum).
(c) ASSISTANT ARCHITECTS (two vacancies). Salary A.P.T., IV (£480, rising to £525 per annum).

Applicants for (a) must be Members of the Royal Institute of Chartered Surveyors (Quantities), and must be capable of preparing Bills of Quantities, Estimates, measuring up and dealing with Contractors' accounts for large contracts. Applicants for (b) must be Registered Architects and Associate Members of the Royal Institute of British Architects or possess similar qualifications, and should have had adequate professional experience in the preparation of surveys, designs, specifications and construction of modern buildings, particularly school buildings. Applicants for (c) should be Registered Architects, preferably Members of the Royal Institute of British Architects or possess similar qualifications, and should have had adequate professional experience in the preparation of surveys, plans, and details for schools or other buildings dealt with by Local Authorities, and have a sound knowledge of design, construction and specifications.

Applications, on forms to be obtained from the undersigned, accompanied by copy of one recent testimonial and the names and addresses of two other persons willing to supply further testimonials, are to be returned so as to be received not later than the 14th March, 1949.

W. HUGH JONES,
Clerk of the County Council.

County Buildings, Mold. 1201

BRECONSHIRE COUNTY COUNCIL. PLANNING DEPARTMENT.

Applications are invited for the permanent appointment of CHIEF ASSISTANT in the Planning Department.

Candidates should have passed or obtained exemption from the Final examination of the Town Planning Institute, and should have experience of development control and the preparation of planning schemes. Preference will be given to applicants who hold a qualification in Architecture.

The salary payable will be in accordance with A.P. and T. Grade V. of the National Joint Council's scale, viz., £520 per annum, rising by annual increments to £570 per annum.

The appointment will be subject to: (i) the National Scheme of Conditions of Service, (ii) the provisions of the Local Government Superannuation Act, 1937, (iii) the passing of a satisfactory medical examination, (iv) one month's written notice on either side.

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, must reach the undersigned not later than 19th March, 1949.

Canvassing, directly or indirectly, will definitely disqualify the candidate for the appointment.

C. M. S. WELLS,
Clerk of the County Council.

County Hall, Brecon. 1787

RAWMARSH URBAN DISTRICT COUNCIL.

Applications are invited for the appointment of CLERK OF WORKS, to supervise advance preparation of sites and the erection of permanent houses.

Applicants must have sound knowledge of building construction, roads and sewers, setting out and measuring up contracts. Wages £9 per week.

Applications, stating age, experience, present occupation and when available, and accompanied by two recent testimonials, must reach the undersigned not later than Monday, the 7th March, 1949.

J. R. S. CREIGHTON,
Surveyor.

Council Offices, Parkgate, Yorks., W.R. 1829
17th February, 1949.

WEST SUFFOLK COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT. APPOINTMENT OF DEPUTY COUNTY ARCHITECT.

Applications are invited for the appointment of DEPUTY COUNTY ARCHITECT at a salary on A.P.T. Grade VIII (£685-£760), commencing salary according to qualifications and experience.

Applicants should be fully qualified, preferably Associates of the Royal Institute of British Architects, and should have had considerable experience of architectural design and construction, and be capable of assuming full responsibility and supervision of the day-to-day work of the Department, which is mainly concerned with new school, police and health building work, and general maintenance and improvements of the County buildings; also possess organising ability and experience in the management of building contracts.

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

Forms of application may be obtained from the undersigned, by whom applications, together with the names of two referees, should be received not later than Tuesday, the 15th March, 1949.

G. H. MITCHELL,
Clerk of the County Council.

Shire Hall,
Bury St. Edmund's. 1823
17th February, 1949.

BOROUGH OF EALING. ARCHITECTURAL ASSISTANTS-BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following Permanent Appointments:—

(a) ARCHITECTURAL ASSISTANT, Grade VI, A.P.T. Division (£625-£690 inclusive, per annum).
(b) ARCHITECTURAL ASSISTANT, Grade V., A.P.T. Division (£550-£600 inclusive, per annum).

Applicants must either be Associate Members of the Royal Institute of British Architects or possess a recognised equivalent qualification. Preference will be given to candidates with municipal experience.

The Council is unable to provide housing accommodation for the successful candidate.

Forms of application, together with conditions of appointment, may be obtained from the Borough Engineer and Surveyor, Town Hall, Ealing, W.5, and must be returned to me not later than the 12th March, 1949.

R. J. COPE-BROWN,
Town Clerk.

Town Hall, Ealing, W.5. 1838

CITY OF STOKE-ON-TRENT. CITY ARCHITECT'S DEPARTMENT.

Applications are invited from suitably qualified persons, for the following appointments to the permanent staff:—
(a) ASSISTANT ARCHITECTS. Salary A.P.T. Div. Grade VI, £595-£660.
(b) ASSISTANT ARCHITECTS. Salary A.P.T. Div. Grade V, £520-£570.
(c) ASSISTANT ARCHITECTS. Salary A.P.T. Div. Grade III, £450-£495.
(d) ARCHITECTURAL ASSISTANTS. Salary A.P.T. Div. Grade I, £390-£435.

(e) ASSISTANT QUANTITY SURVEYORS. Salary A.P.T. Div. Grade III, £450-£495.

The selected applicants will be required to pass a medical examination and the appointments will be subject to the usual conditions applicable to Local Government service.

Previous experience of Local Government work is not essential.

Applications giving date of birth, particulars of training and experience, etc., with copies of two recent testimonials, should be received by J. R. PIGGOTT, F.R.I.B.A., City Architect, City Architect's Department, Kingsway, Stoke-on-Trent, endorsed with the title of the appointment applied for, not later than Friday, 18th March, 1949.

HARRY TAYLOR,
Town Clerk.

Town Hall, Stoke-on-Trent. 1878
22nd February, 1949.

BEDFORDSHIRE COUNTY COUNCIL. ASSISTANT ARCHITECTS.

Applications are invited for the following posts on the permanent staff of the County Architect.

ASSISTANT ARCHITECTS (A.P.T. Grade VI, £595-£660). Experience required in the design and construction of schools and/or other public buildings.

ASSISTANT ARCHITECTS (A.P.T. Grade IV, £480-£525). Ability required in the preparation of detail drawings and specifications.

ASSISTANT ARCHITECTS (A.P.T. Grade II, £420-£465). Good training and neat draughtsmanship required.

The appropriate R.I.B.A. qualification in the above posts will be an advantage.

Appointments are subject to the Local Government Superannuation Act, 1937, and to the Scheme of Conditions of Service of the National Joint Council.

A special allowance of 25s. per week is paid to any officer who is unable to find housing accommodation and is forced to maintain his family in another home.

Applications, on forms to be obtained from the County Architect, Shire Hall, Bedford, should be delivered to the undersigned on or before 14th March, 1949.

J. B. GRAHAM,
Clerk of the County Council.

Shire Hall, Bedford. 1876
19th February, 1949.

BRECONSHIRE COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following established posts in the County Architect's Department:—

(a) One ASSISTANT ARCHITECT A.P. & T. Grade IV, Salary Scale £480-£525 per annum.

(b) Two ARCHITECTURAL ASSISTANTS, A.P. & T. Grade I, Salary Scale £390-£435 per annum.

The appointments will be subject to: (i) the National Scheme of Conditions of Service, (ii) the provisions of the Local Government Superannuation Act, 1937, (iii) the passing of a satisfactory medical examination, and (iv) one month's written notice on either side.

Canvassing, directly or indirectly, will definitely disqualify the candidate for the appointment.

Applications are to be made on a form to be obtained from the County Architect, Mr. H. C. W. STRICKLAND, F.R.I.B.A., Watton Office, Brecon, South Wales, and must be returned to the undersigned not later than 19th March, 1949.

C. M. S. WELLS,
Clerk of the County Council.

County Hall, Brecon. 1874
17th February, 1949.

CAMBORNE-REDRUTH URBAN DISTRICT COUNCIL.
APPOINTMENT OF ASSISTANT ARCHITECTS AND ASSISTANT ENGINEER.

Applications are invited for the undermentioned appointments in the Department of the Engineer and Surveyor:—

ONE ASSISTANT ARCHITECT.—Salary Grade A.P.T. VI (£596 to £660 per annum).

Applicants must be Associate Members of the Royal Institute of British Architects, or hold equivalent qualifications, and have had experience in the design and supervision of Municipal Housing Works.

ONE ASSISTANT ARCHITECT.—Salary Grade A.P.T. III (£450 to £496 per annum).

Applicants should preferably have passed the Intermediate Examination of the Royal Institute of British Architects, and have had experience of Municipal Housing Works.

ONE ASSISTANT ENGINEER.—Salary Grade A.P.T. III (£450 to £496 per annum).

Applicants should be experienced in road and sewer development for housing estates, the preparation of Bills of Quantities, and the design of sewers. Preference will be given to applicants who have passed the examination for Associate Membership of the Institution of Civil Engineers, and/or the Testamur of the Institution of Municipal Engineers.

The appointment will be subject to the National Joint Council Scheme of Conditions of Service, and the Local Government Superannuation Act, 1937, and will be terminable by one month's notice on either side.

Applications, stating age, present and previous appointments held, together with copies of three recent testimonials, should be forwarded in envelopes, appropriately endorsed, addressed to Mr. N. Barrett, A.M.I.C.E., M.I.Mun.E., Engineer and Surveyor, Council Offices, Camborne, so as to be received not later than first post on Wednesday, 16th March, 1949.

Applicants must disclose, in writing, whether or not they are related to any Member or Serving Officer of the Council.

Canvassing will disqualify.

S. C. WILSON,
Clerk to the Council.

Council Offices,
Camborne, Cornwall.
19th February, 1949.

BOROUGH OF TORQUAY.

Applications are invited for the post of **JUNIOR ARCHITECTURAL ASSISTANT** in the Borough Surveyor's Department at a salary of £390-£415-£435 per annum.

Preference will be given to candidates possessing the R.I.B.A. Inter examination.

The appointment, terminable by one month's notice on either side, is subject to the National Scheme of Conditions of Service, and the provisions of the Local Government Superannuation Act, 1937.

The Council will endeavour to find living accommodation, if required, for the person appointed.

Applications, giving details of education, experience, age, etc., together with copies of two recent testimonials, should be sent to the Borough Surveyor, Town Hall, Torquay, not later than Saturday, 13th March, 1949.

T. ELVED WILLIAMS,
Town Clerk.

18th February, 1949.

NORTHAMPTONSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

APPOINTMENT OF ASSISTANT ARCHITECTS.

Applications are invited for the following appointments:—

(a) **ASSISTANT ARCHITECT.** APT Grade V (salary scale £520-£570). Candidates should be preparing for Associate Membership of the R.I.B.A. and have good general experience in the design and construction of public buildings, including schools.

(b) **ASSISTANT ARCHITECT.** A.P.T. III. (Salary scale, £450-£495).

Candidates should be at the Intermediate stage of the R.I.B.A. examinations.

The initial salary will be determined according to experience.

Training at one of the recognised schools of architecture will be an asset.

In the case of each appointment, if the selected candidate is married, is unable to obtain a house in or near Northampton, and is compelled to maintain his family elsewhere, his salary will be temporarily increased by 25s. per week, together with such sum as will reimburse him for the cost of a third-class return railway ticket to his family's home once every two months, his circumstances to be reviewed by the appropriate Committee of the Council every three months.

The appointments will be determinable by one month's notice on either side and will be subject to the provisions of the Local Government Superannuation Act.

Candidates should state for which post they wish to apply. Forms of application may be obtained from the County Architect, County Hall, Northampton, to whom applications, accompanied by a copy of one recent testimonial, must be delivered not later than 21st March, 1949.

J. ALAN TURNER,
Clerk of the County Council.

County Hall,
Northampton.
24th February, 1949.

COUNTY BOROUGH OF DERBY.
BOROUGH ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments on the permanent staff in accordance with the National Scale of Salaries:—

(1) **ONE SENIOR QUANTITY SURVEYOR.** Grade VI, A.P. & T. Division. Salary £895-£960.

Applicants should be Chartered Quantity Surveyors or prospective, and have had experience in the preparation of quantities, specifications, site measuring and estimates.

(2) **ONE JUNIOR QUANTITY SURVEYOR.** Grade IV, A.P. & T. Division. Salary £480-£525.

Applicants should be fully experienced in working-up, Final Accounts and the taking off of Minor Works.

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

Form of application may be obtained from Thos. W. East, F.R.I.B.A., Borough Architect, The Council House, Corporation Street, Derby, and should be returned when completed, together with copies of two testimonials, to arrive not later than Monday, 21st March, 1949.

Canvassing, directly or indirectly, will be a disqualification.

C. ASHTON,
Town Clerk.

The Council House,
Corporation Street, Derby.

19th February, 1949.

JOINT COUNTY COUNCIL OF PERTH AND KINROSS.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following posts:—

(a) **TWO ARCHITECTURAL ASSISTANTS** for work on school properties. Salary scale £480 rising to £570 per annum (Grades A.P.T. IV and V), with placing according to qualifications and experience.

(b) **ONE ARCHITECTURAL ASSISTANT** for work on Council properties generally. Salary scale and placing as in (a) above.

(c) **ONE ARCHITECTURAL ASSISTANT** for work on School properties. Salary scale £420 rising to £495 per annum (Grades A.P.T. II and III) with placing according to qualifications and experience.

(d) **ONE ARCHITECTURAL ASSISTANT** for work on Housing. Salary scale and placing as in (c) above.

Applicants for the posts under (a) should preferably have experience in the design and construction of school buildings, and it is desirable that applicants for the posts under (a) and (b) should have experience in the office of a Local Authority and be able to take charge of building projects.

A house can be made available to let. The appointments will be subject to the Local Government Superannuation (Scotland) Act, 1937, and the successful applicants will require to pass a medical examination.

Applications, stating post applied for, age, qualifications, experience and accompanied by copies of not more than three recent testimonials, should be lodged with the County Clerk, County Offices, York Place, Perth, not later than 26th March, 1949.

BOROUGH OF GROSBY.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointment on the temporary staff in the Department of the Borough Engineer and Surveyor:—

ARCHITECTURAL ASSISTANT. Salary at the rate of Grade III. £450-£495 per annum, or Grade IV. £480-£525 per annum, according to qualifications and experience.

Candidates should possess a recognised architectural qualification and have had considerable experience in general architectural work, housing and the conversion of large houses into flats, including the preparation of working drawings and specifications.

The appointment will be subject to one month's notice on either side.

Applications stating age, present and past appointments, qualifications and experience, must be delivered to the undersigned appropriately endorsed, not later than noon on Monday, 14th March, 1949.

Testimonials are not required, but applicants are required to submit the names of two referees.

Canvassing in any form will be a disqualification.

HAROLD O. ROBERTS,
Town Clerk.

Town Hall, Waterloo,
Liverpool, 22.
22nd February, 1949.

FIFE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the post of **ARCHITECTURAL DRAUGHTSMAN.** Applicants must have had experience in an Architectural drawing office and be quick and accurate Draughtsmen. Consolidated salary £330, rising to £430 per annum. Medical test under Superannuation Scheme. Applications stating age, experience and qualifications, to be lodged with the undersigned by 17th March, 1949.

J. M. MITCHELL,
County Clerk.

County Buildings,
Cupar-Fife.
24th February, 1949.

LIVERPOOL REGIONAL HOSPITAL BOARD.
Applications are invited for the following permanent appointments in the Regional Architect's Department, on the Headquarter's Staff of the Board:—

(a) **PRINCIPAL ASSISTANT ARCHITECT** at a salary of £800-£825 to £950 per annum.

Applicants must be Associates of the Royal Institute of British Architects, and preferably hold a University degree in Architecture, must possess wide experience of hospital design and construction, and good administrative ability, and be capable of deputising for the Regional Architect.

(b) **SENIOR ASSISTANT ARCHITECT.** at a salary in accordance with A.P.T. Grade VIII, £685-£725 to £760 per annum.

Applicants must be Associates of the Royal Institute of British Architects and preferably have had experience in the design and construction of hospitals and must be capable of carrying out and advising on large building contracts.

(c) **ASSISTANT ARCHITECT** at a salary in accordance with A.P.T. Grade VI, £596 to £660 per annum.

Applicants should be Associates of the Royal Institute of British Architects, and must have a good general experience, and ability in design and construction.

(d) **SENIOR QUANTITY SURVEYOR** at a salary of £750-£825 to £850 per annum.

Applicants must be members of the Royal Institute of Chartered Surveyors, and have had considerable experience in the preparation of estimates, specifications, bills of quantities, measuring variations and the checking of final accounts.

(e) **ADMINISTRATIVE ASSISTANT** at a salary in accordance with A.P.T. Grade II, £400-£415 to £465 per annum.

Applicants should have had experience in an Architect's Office, preferably with a Local Authority, and be thoroughly conversant with the routine administration of such a Department.

All the above appointments will be subject to the National Health Service (Superannuation) Regulations, 1947/48, and the successful candidates will be required to undergo a medical examination.

Applications, stating age, education, qualifications, experience, present and previous appointments, salary, war service, and clearly stating the post applied for, together with the names and addresses of three referees, should be sent to the undersigned at Alder Hey Hospital, Eaton Road, Liverpool, 12, to be received not later than the 16th March, 1949.

VINCENT COLLINGS,
Secretary to the Board.
19th

WARWICKSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the undermentioned appointments on the established staff:—

(a) **ASSISTANT ARCHITECT,** Deputy Section Leader Education. £810-£1,000.

(b) **SENIOR ASSISTANT ARCHITECTS,** Grade VIII, £635-£750 per annum.

(c) **SENIOR ASSISTANT ARCHITECTS,** Grade VII, £635-£710 per annum.

(d) **ASSISTANT ARCHITECTS,** Grade VI, £595-£660 per annum.

(e) **ASSISTANT ARCHITECTS,** Grade V, £520-£570 per annum.

(f) **ARCHITECTURAL ASSISTANTS,** Grade III, £450-£495 per annum.

(g) **ARCHITECTURAL ASSISTANTS,** Grade II, £420-£465 per annum.

Applicants for:—

(a) Must be Registered Architects with considerable experience in the planning, design and construction of educational buildings and used to supervising the work of other Architects.

(b) and (c) Must be Registered Architects with considerable general experience in architectural design and construction and the supervision of Assistants.

(d) and (e) Must be Registered Architects up to six years standing.

(f) and (g) Should have passed R.I.B.A. Intermediate examination with up to four years' office experience.

(h) **ASSISTANT LAND SURVEYOR,** Grade V, £520-£570 per annum, should be Associates of the R.I.C.S.

(i) **BUILDING INSPECTOR,** Grade VI, £595-£660 per annum, must have extensive knowledge of all building trades and general supervision, able to prepare specifications, concise reports and approximate estimates.

(j) **ASSISTANT QUANTITY SURVEYOR,** Grade V, £520-£570 per annum, should be A.R.I.C.S., with experience in measurement of variations and final accounts.

(k) **BUILDER'S SURVEYOR,** Grade III, £450-£495 per annum, must have experience in the preparation of schedules for obtaining quotations, measurement of variations, etc.

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

Application forms can be obtained from C. H. ELKINS, F.R.I.B.A., A.R.I.C.S., County Architect, Shire Hall, Warwick, to whom they should be returned not later than the 21st March, 1949.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall,
Warwick.
23rd February, 1949.

NORTH-EASTERN REGIONAL HOSPITAL BOARD, SCOTLAND.

REGIONAL ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments on the staff of the Regional Architect's Department, viz.:

SENIOR ASSISTANT ARCHITECT. Salary Scale A.P.T. Grade VII, £635-£710.
Applicants should preferably be members of the R.I.B.A. or hold equivalent qualification and should have had good general experience in design, construction and supervision of building work. A knowledge of hospital work will be considered an advantage.

ARCHITECTURAL ASSISTANT. Salary Scale A.P.T. Grade V, £520-£570.

Applicants should be suitably qualified and should have a good general architectural experience and a sound knowledge of building construction and contemporary design.

QUANTITY SURVEYOR. Salary Scale A.P.T. Grade VI, £595-£660.

Applicants should preferably be members of the R.I.B.A. or hold equivalent qualification and should have had good general experience in all stages of the work in the preparation of specifications and schedules of quantities, estimates of cost, etc.

The posts are subject to the provisions of the National Health Service (Scotland) (Superannuation) Regulations, 1948, and the successful candidates will be required to pass a medical examination.

Applications, stating age and giving full particulars of qualifications and experience and present and previous appointments, accompanied by copies of two recent testimonials, and the names and addresses of two referees to whom reference may be made, should be lodged with the Secretary, North-Eastern Regional Hospital Board, 1, Albany Place, Aberdeen, on or before 21st March, 1949. 1920

NORFOLK COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT.

Applications are invited for the following appointments:

1. **FIVE SENIOR PLANNING ASSISTANTS.** Salary A.P. & T. Grade Va (£550-£610). Applicants should have passed the final examination of the Town Planning Institute, the Institution of Civil Engineers, the Institution of Municipal Engineers, the Royal Institution of Chartered Surveyors or the Royal Institute of British Architects, or hold a University Degree in a suitable subject. They should also have had good general experience in the work of a planning department, including development control, survey, planning proposals and committee procedure. (Four positions in Norwich, 1 position in King's Lynn).

2. **FIVE INTERMEDIATE PLANNING ASSISTANTS.** Salary A.P. & T. Grade III (£450-£495). Applicants should have passed the intermediate examination of one of the professional bodies referred to in (1) above, and have had good general experience in the work of a planning department, including development control, survey and committee procedure. (Three positions in Norwich, 2 positions in King's Lynn).

3. **TWO JUNIOR PLANNING ASSISTANTS.** Salary A.P. & T. Grade II (£420-£465). Preference will be given to applicants with good drawing office experience and to those who are students of one of the professional bodies referred to in (1) above. Experience in field survey and in the revision of Ordnance Maps will also be an advantage. (Both positions in Norwich).

The persons appointed to (1) and (2) will be required to provide and maintain a motor car, for which an allowance is payable in accordance with the County Council's scale. The persons appointed to (3) may also, in certain circumstances, be similarly required to provide and maintain a motor car.

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

Forms of application may be obtained from the Clerk of the Norfolk County Council, County Offices, Thorpe Road, Norwich, and must be completed and returned to him not later than 10 a.m. on Friday, 18th March, 1949. 1915

CORPORATION OF LONDON. APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT to be employed exclusively on the reconstruction of the Central Criminal Courts, Old Bailey, E.C.4. Salary from £400 to £625 (inclusive of Consolidated Bonus) according to age and experience.

Applicants should either have qualified or be about to qualify as associates of the Royal Institute of British Architects. Previous experience in the planning of Law Courts is not essential. The appointments are for the present on a temporary basis, but, in the event of establishment to the permanent staff, temporary service will count for the purpose of superannuation. Appointments are subject to the provisions of Local Government Superannuation and applicants will be required to pass a Medical Examination.

Applications endorsed "Architectural Assistant" to be made to George Holliday, F.R.I.C.S., City Surveyor, 55/51, Moorgate, F.C.2, not later than Thursday, 17th March, giving details of service with Armed Forces, age, qualifications and experience, and the names of two persons to whom reference may be made. 1859

NEATH RURAL DISTRICT COUNCIL. APPOINTMENT OF TWO ENGINEERING ASSISTANTS. ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the above permanent appointments at salaries in accordance with Grade III of the A.P.T. Grade Division of the National Scales of Salaries (£240 per annum, rising by three annual increments of £15 to £295 per annum).

Applicants must be capable draughtsmen, surveyors and levellers, with experience either in the lay-out and setting-out of housing estates, or Sewerage and Water Supply Schemes. Preference will be given to Candidates possessing the Intermediate Examination Certificate of the Institution of Municipal Engineers.

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

Applications, stating age, qualifications and previous experience, together with copies of three recent testimonials (which will not be returned) should be enclosed in an envelope endorsed "Engineering Assistants," and must reach the undersigned not later than the 15th March, 1949.

T. D. WINDSOR WILLIAMS,
Clerk to the Council.

6, New Street, Neath. 1890

COUNTY OF ESSEX.

LEYTON COMMITTEE FOR EDUCATION.
The Essex County Council invite applications for an ARCHITECTURAL ASSISTANT to work in the office of the Borough Engineer and Surveyor of Leyton, to deal with work for the Committee for Education.

The salary will be £480 per annum, rising by three annual increments of £15 per annum to a maximum of £525 per annum. In addition, a London Weighting allowance of £30 if over 26 years of age, or £20 age 21 to 25, will be payable. The appointment will be permanent.

Candidates should hold members of the Royal Institute of British Architects, or hold other suitable qualifications. They must be good draughtsmen and possess a practical knowledge of building construction in connection with the maintenance, design and construction of educational buildings and be able to prepare working and detail drawings.

Canvassing, either directly or indirectly, will be deemed a disqualification.

Applications, stating age, details of qualifications and experience, together with copies of three recent testimonials, must be delivered to the Borough Engineer and Surveyor, Town Hall, Leyton, E.10, not later than Friday, 11th March, 1949, in a sealed envelope endorsed "Architectural Assistant (Education)."

D. J. OSBORNE,
Town Clerk.

Town Hall, Leyton, E.10. 1875

BOROUGH OF MALDEN AND COOMBE. ARCHITECTURAL ASSISTANT, GRADE IV, A.P.T.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT on the permanent staff of the Borough Engineer's Department, at a salary in Grade IV A.P.T. (£480-£515 -£525, plus London Weighting).

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

Preference will be given to Associate Members of the Royal Institute of British Architects, and applications giving age, qualifications and details of training, experience, present and previous appointments with salaries, accompanied by copies of two recent testimonials, should be addressed to the undersigned and be delivered not later than 19th March, 1949.

Canvassing, directly or indirectly, will be a disqualification.

Candidates, when making application, must disclose in writing whether to their knowledge they are related to any member of or holder of any office under the Council.

The Council will endeavour to provide the successful candidate with housing accommodation if deemed necessary.

HAROLD E. BARRETT,
Town Clerk.

Municipal Offices, New Malden, Surrey. 1889

COUNTY OF ESSEX.

ILFORD BOROUGH COUNCIL.

Applications are invited for the post of ARCHITECTURAL ASSISTANT, A.P.T. Division, Grade III, on the staff of the Essex County Council, to work in the office of the Borough Engineer of Ilford, to deal with Education Architectural work within the Borough. Applicants for this post should have had a good general training and experience.

Application must be made on a form to be obtained from the Borough Education Officer, and returned to him at the Town Hall, Ilford, together with copies of not more than three recent testimonials, within fourteen days of the appearance of this advertisement.

K. F. B. NICHOLLS,
Town Clerk.

Town Hall, Ilford. 1721

COUNTY BOROUGH OF GREAT YARMOUTH. BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the following permanent appointments:—

TWO GENERAL ARCHITECTURAL ASSISTANTS.

Salary, A.P.T. Grade IV (£480-£525).

Applicants for these posts should have passed the Intermediate Examination of the R.I.B.A. Forms and particulars can be obtained from the undersigned on receipt of a stamped/ addressed envelope, and applications should be submitted not later than Friday, 18th March, 1949.

FARRA CONWAY,
Town Clerk.

Town Hall, Great Yarmouth. 1938

19th February, 1949.

DBE/DAB. 1938

EAST SUFFOLK COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT.

Applications are invited for the appointment of a PLANNING ASSISTANT in the County Planning Officer's Department.

The salary will be within the A.P.T. Division Grade II (£420-£465 per annum) of the National Joint Council's scale, with scale allowance for the use of a motor car, and will be determinable by one month's notice on either side.

Preference will be given to those applicants who hold the Final Examination of the Town Planning Institute.

Applications endorsed "Planning Assistant," stating age, experience, qualifications, present position, and giving names and addresses of two referees, to be delivered to the undersigned not later than the first post 18th March, 1949.

G. C. LIGHTFOOT,
Clerk of the County Council.

County Hall, Ipswich. 1934

COUNTY BOROUGH OF ROTHERHAM. CHIEF ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointment of TWO CHIEF ARCHITECTURAL ASSISTANTS in the office of the Borough Engineer at salaries of £685 rising by annual increments to £760 per annum.

Applicants must be Associate Members of the R.I.B.A. and have high ability in design.

The Architectural work in the department is very varied and consists of Educational, Housing, Health and other types of Local Authority Buildings, and the volume of work is rapidly expanding.

The appointments will be subject to the Conditions of Service adopted by the Council and based on the National Scheme of Conditions of Service, and will be determinable by one month's notice on either side.

The posts are superannuable and the candidates selected for the appointment will be required to pass a Medical Examination.

HOUSING ACCOMMODATION will be made available for the successful applicants if required. Applicants must state whether they are related to any member or officer of the Rotherham County Borough Council, delib-rate omission to disclose any such relationship will disqualify any candidate.

Canvassing of Members of the Council, whether direct or indirect, will disqualify.

Applications endorsed "Chief Architectural Assistants," stating age, qualifications and details of experience, accompanied by copies of three recent testimonials, should be delivered to the undersigned not later than 25th March, 1949.

JOHN S. WALL,
Town Clerk.

Municipal Offices, Rotherham, Yorks. 1909

MANCHESTER REGIONAL HOSPITAL BOARD.

Applications are invited for the following appointments on the Board's Headquarters Staff:—

SENIOR QUANTITY SURVEYOR (Grade VIII, £685-£725-£760 per annum). Applicants must be members of the Royal Institute of Chartered Surveyors and should have had a wide experience in the preparation of estimates, specifications and bills of quantities, measuring of variations and checking of final accounts.

SENIOR LAND SURVEYOR (Grade VIII, £685-£725-£760 per annum). Applicants must be Associates of the Royal Institute of Chartered Surveyors, with wide experience in rating and valuation, preparation of surveys of lands and properties.

SENIOR ADMINISTRATIVE ASSISTANT (Grade VII, £635-£675-£710 per annum). Applicants must have had considerable experience in office administration, preferably in an Architectural Department.

ASSISTANT ARCHITECT (Grade VI, £595 rising to £660 per annum). Applicants must be Associates of the Royal Institute of British Architects, with experience in modern hospital design and construction.

Preference will be given in all cases to candidates with local or public authority experience. The appointments are subject to the National Health Superannuation Scheme. Applications, stating post applied for, age, qualifications and experience, together with the names and addresses of three referees, should be received by the undersigned not later than 12th March, 1949.

J. GIBBON,
Secretary of the Board.

1, North Parade, Parsonage Gardens, Manchester, 3. 1905

MERIONETH COUNTY COUNCIL.

Applications are invited for the following appointment in the County Planning Department:

SENIOR PLANNING ASSISTANT. Salary £450, rising by 3 annual increments of £15 to a maximum of £495.

Applicants should have experience in all matters appertaining to the planning of a large rural area. The County of Merioneth includes over 500 square miles of potential National Park and the work offers special opportunities in this field. An appreciation of the problems of such an area is desirable.

Preference will be given to candidates who have at least passed the Intermediate Examination of the Town Planning Institute and who have had previous planning experience in the Local Government Service.

The successful applicant should be prepared to run a motor car for official purposes, for which a traveling allowance will be paid.

The appointment is subject to the terms and conditions of service applying to the administrative, technical and clerical officers of the County Council. The appointment will be terminable at the end of any month by one month's notice in writing on either side.

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

Applications, stating age, qualifications, present position and salary, previous appointments held and full details of experience, accompanied by copies of two recent testimonials, are to be sent to the undersigned not later than Saturday, March 19th, 1949.

HUGH J. OWEN,
Clerk of the County Council.

County Offices,
Dolgellau, Merioneth.
21st February, 1949. 1871

CUMBERLAND COUNTY COUNCIL.

Applications are invited for the appointments of JUNIOR ASSISTANT ARCHITECTS, Grade III, £450-£495 of the A.P. & T. Division of the National Scales of Salaries.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the persons appointed will be required to pass a medical examination.

Applicants for appointments should have passed, or be preparing to take the R.I.B.A. Intermediate Examination, and should have had experience in an Architect's Office.

Applications must be made on a form obtainable from John H. Haughan, F.R.I.B.A., County Architect, 15, Portland Square, Carlisle, and should be returned completed to him, together with copies of not more than three recent testimonials, not later than Monday, the 14th March, 1949.

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

February, 1949. 1870

**CITY AND COUNTY OF BRISTOL.
CITY ARCHITECT'S DEPARTMENT.**

Applications invited from qualified ARCHITECTS for appointment of Section Head (Health).

Candidates must be Senior Members of the Royal Institute of British Architects with considerable experience in the planning of buildings of the type normally required by a Local Health Authority. Candidates must be capable of attending Committees, preparing reports and competent to take charge of the design and construction of such buildings, and should have had experience in the control of a number of Senior and Junior Architectural Staff engaged upon such work.

Salary offered is Grade K (£760-£950).

Appointment subject to the provisions of the Local Government Superannuation Act, 1937 and 1939, and the successful applicant be required to pass medical examination. Appointment also terminable by one month's notice in writing on either side.

Housing accommodation provided, if necessary, at an economic rent.

Applications stating age, training, qualifications, experience, present appointment and period held, and salary, together with the names of three referees, must be delivered to the undersigned by not later than 11th March, 1949.

J. NELSON MEREDITH, F.R.I.B.A.,
City Architect.

Maglo House, Colston Avenue,
Bristol, 1 1865

**CITY OF WAKEFIELD.
CITY ENGINEER'S DEPARTMENT.**

TOWN PLANNING ASSISTANT.

Applications are invited for the appointment of a SENIOR TOWN PLANNING ASSISTANT, Grade V (£530-£570). Applicants should be A.M.T.P.I. The appointment will be subject to the Local Government Superannuation Act, 1937, and to the passing of a medical examination.

Candidates must state in writing whether to their knowledge they are related to any member or senior officer of the Corporation. Canvassing will be a disqualification.

Applications endorsed "Town Planning Assistant" stating age, qualifications, present and previous appointments, and experience, should be sent, together with copies of two testimonials, to the undersigned not later than Saturday, 19th March, 1949.

The Council will give consideration to the provision of HOUSING ACCOMMODATION.

W. S. DES FORGES,
Town Clerk.

Town Hall,
Wakefield.
February, 1949. 1910

CITY OF COVENTRY.

Applications are invited for the following whole-time appointments on the permanent staff of the City Architectural Department:

(a) TWO ASSISTANT ARCHITECTS. Salary on Grade A.P.T. V, commencing at £530 per annum and rising to £570 per annum.

Candidates for the above appointments should be Associate Members of the Royal Institute of British Architects, or hold equivalent qualifications.

(b) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T. IV, commencing at £480 per annum and rising to £525 per annum.

(c) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T. II, commencing at £420 per annum and rising to £465 per annum.

Salary increments are subject to satisfactory service.

The posts are subject to one month's notice on either side, and to the provisions of the Local Government Superannuation Act, as amended in regard to annuities to widows by the Coventry Corporation Act, 1936, and a satisfactory certificate will be requisite from the Council's medical referee. The successful male applicants will be required to contribute to the Coventry Municipal Officers' Widows' and Orphans' Pension Fund.

Applications for the above appointments must be made on the forms obtainable from the undersigned, and should be returned completed, together with copies of not more than two recent testimonials, or names of two persons to whom reference may be made, not later than Wednesday, 23rd March, 1949.

Canvassing, directly or indirectly, will be a disqualification.

D. E. E. GIBSON,
City Architect.

1a, Warwick Row,
Coventry.
3rd March, 1949. 1853

CITY AND COUNTY OF KINGSTON-UPON-HULL.

Applications are invited for the following appointments on the staff of the City Architect:

(a) ASSISTANT ARCHITECTS, A.P.T. Grade III (£450-£495 per annum).

(b) ARCHITECTURAL ASSISTANTS, A.P.T. Grade I (£335-£435 per annum).

Applicants should have good general architectural ability and experience.

The office is an up-to-date and progressive one and the work passing through the Department is varied and of great interest. Members of the staff are not confined to one Section of the Department, but are given every opportunity of assisting with and gaining valuable experience in all classes of architectural work.

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

The appointments will be subject to one month's notice on either side, to the National Scheme of Conditions of Service, and the Local Government Superannuation Act, 1937.

Application forms, obtainable from the undersigned, should be returned completed on or before 19th March, 1949.

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

Guildhall,
Kingston-upon-Hull. 1858

**LANCASHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointments on the permanent staff:

(a) SENIOR ASSISTANT ARCHITECTS, Grade VI. Salary £595-£650 per annum.

(b) ASSISTANT ARCHITECTS, Grade V. Salary £520-£570 per annum.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937; to a satisfactory medical examination, and to the termination of each appointment by one month's notice in writing on either side.

Applications should be forwarded on the forms to be obtained from the County Architect, G. Noel Hill, F.R.I.B.A., M.T.P.I., County Offices, Preston, to whom they should be returned, accompanied by copies of three recent testimonials, to arrive not later than Saturday, 12th March.

R. H. ADCOCK,
Clerk of the County Council.

County Offices,
Preston.
21st February, 1949. 1884

**BOROUGH OF WREXHAM.
HOUSING ARCHITECT'S DEPARTMENT.**

Applications are invited for the appointment of ASSISTANT QUANTITY SURVEYOR in connection with the Council's Housing Programme. The work of the Department at present comprises the development of a large housing estate and the eventual erection of shopping centres, community centres and other buildings. The appointment offers wide scope in the design, detailing and supervision of multi storey flats and other ancillary buildings.

The appointment is temporary and carries a salary of £420 per annum. Applicants should have practical experience in the preparation of Bills of Quantities for housing work and should be capable of site measurement, checking of accounts, etc.

Further particulars and conditions of appointment may be obtained from the undersigned, to whom applications are to be delivered by not later than noon on Saturday, the 19th March, 1949.

PHILIP J. WALTERS,
Town Clerk.

1881

BERKSHIRE COUNTY COUNCIL.

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

(a) TWO ASSISTANT COUNTY ARCHITECTS. Salary £750-£825-£860. Candidates must be Members of the Royal Institute of British Architects. They must be capable of taking complete charge of Architectural Work in part of the County, must have high ability in planning, design and construction, and be able to supervise and control staff.

(b) ASSISTANT COUNTY ARCHITECT (ADMINISTRATIVE). Salary Grade VIII £685-£760. Candidates must be members of the Royal Institute of British Architects with considerable professional experience of Local Authority administration and organisation of contracts, and must have had experience in negotiating approval under the various recent Acts and be fully conversant with their requirements.

(c) ASSISTANT ARCHITECT. Salary Grade VI, £595 to £660. Candidates must be members of the Royal Institute of British Architects, with considerable experience in the design and construction of modern buildings and be capable of taking charge of large contracts.

(d) TWO ARCHITECTURAL ASSISTANTS. Salary Grade III, £450-£495. Candidates must be of Intermediate R.I.B.A. standard and be thoroughly experienced in the preparation of working and detail drawings, and specifications for both new buildings and alterations to existing buildings.

(e) PRINCIPAL ENGINEER. Salary Grade VIII, £685-£760. Candidates must be Members of the Institution of Heating and Ventilating Engineers, capable of maintaining all heating, electrical, mechanical and ventilating installations in all Council properties and also be able to prepare designs, specifications and estimates for new installations and supervise their erection.

(f) TWO ASSISTANT QUANTITY SURVEYORS. Salary Grade VI, £595-£660. Candidates must be Members of the Royal Institution of Chartered Surveyors and have had considerable experience in the preparation of estimates, Bills of Quantities, measuring for interim and final certificates and in the settlement of final accounts.

Application forms and further particulars can be obtained from the County Architect, 35 Bath Road, Reading, to whom they should be returned completed by Saturday, 15th March, 1949.

H. J. C. NEOBARD,
Clerk of the Council.

Shire Hall,
Reading. 1864

MIDDLESEX COUNTY COUNCIL.

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

ARCHITECTS.

(a) SENIOR ASSISTANT ARCHITECTS, A.P.T. Grade VIII, commencing salary £715 p.a. × £25-£790 p.a. Must be qualified Architects with wide experience in the design, planning and construction of school buildings.

(b) ASSISTANT ARCHITECTS, A.P.T. Grade VII, commencing salary £665 p.a. × £25-£740 p.a. Must be qualified Architects with high ability in design and able to take charge of large contracts.

(c) ASSISTANT ARCHITECTS, A.P.T. Grade VI, commencing salary £625 × £20(2) × £25(1)-£690 p.a. Must be qualified Architects; ability in design essential.

(d) ARCHITECTURAL ASSISTANTS, A.P.T. Grades II, IV and V (combined). (£450-£600 p.a. Commencing salary according to qualifications and experience).

(e) SENIOR AREA STRUCTURAL ENGINEERS, A.P.T. Grade VIII, commencing salary £715 p.a. × £25-£790 p.a. Must be experienced in design of structural steelwork and reinforced concrete and be capable of taking charge of sub-section under general supervision of Chief Structural Engineer.

(f) SENIOR AREA HEATING ENGINEERS, A.P.T. Grade VIII, commencing salary £715 p.a. × £25-£790 p.a. To take charge of a staff of engineers designing heating, domestic hot water, ventilation, gas and kitchen installations, under the general supervision of Chief Engineer.

(g) SENIOR AREA ELECTRICAL ENGINEERS, A.P.T. Grade VIII, commencing salary £715 p.a. × £25-£790 p.a. To take charge of staff of engineers designing electric lighting and power installations under general supervision of Chief Engineer.

(h) HEATING ENGINEERS, A.P.T. Grade VI (£625-£690 p.a.). Thoroughly experienced in design of heating, domestic hot water, ventilation, gas, kitchen installation and engineering services generally, including specifications and supervision of contracts.

(i) ELECTRICAL ENGINEERS, A.P.T. Grade VI (£625-£690 p.a.). Thoroughly experienced in design of electric lighting and power installation, including specifications and supervision of contracts. Experience in electric lifts and refrigeration an advantage, etc.

All salaries quoted include London Weighting for 36 years and over. Established and pensionable staff subject to medical fitness.

Application forms to be obtained (stamped addressed envelope required) from The County Architect, 10, Great George Street, Westminster, S.W.1, to be returned by 26th March, 1949 (quoting F.419A.J.). Canvassing disqualifies.

C. W. RADCLIFFE,
Clerk of the County Council.

Guildhall, S.W.1. 1993

MERIONETH COUNTY COUNCIL. **COUNTY ARCHITECT'S DEPARTMENT.**

Applications are invited for the following permanent appointments in the County Architect's Department—

(a) **CHIEF ASSISTANT ARCHITECT.**

Salary A.P.T. Grade VII, commencing at £635 per annum and rising to £710 per annum.

Applicants should be registered Architects and Associates of the Royal Institute of British Architects with considerable experience in the design of educational buildings and handling of contracts. Housing accommodation is available in the County if required, for the successful applicant in respect of this particular appointment.

(b) **ONE ASSISTANT ARCHITECT.**

Salary A.P.T. Grade VI, commencing at £595 per annum and rising to £660 per annum.

Applicants should be registered Architects and members of the Royal Institute of British Architects, with experience in the preparation of surveys and design of buildings, preparation of working drawings, particularly school buildings, and supervision of buildings in course of erection.

(c) **ONE ARCHITECTURAL ASSISTANT.**

Salary A.P.T. Grade II, commencing at £420 per annum and rising to £465 per annum.

Applicants should have good experience of work undertaken by a Local Authority and preference will be given to applicants who have passed the Intermediate examination of the Royal Institute of British Architects.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidates satisfactorily passing a medical examination by the County Medical Officer of Health.

The appointments are also subject to two months' notice on either side in the case of appointment (a) and to one month's notice on either side in the cases of (b) and (c).

Applications in envelopes appropriately endorsed, stating age, training, qualifications, experience, past and present appointments, and giving the names of two references, and accompanied by a copy of one recent testimonial, should reach the undersigned not later than Saturday, 19th March, 1949.

HUGH J. OWEN,

Clerk of the County Council.

County Offices, Dolgelly.

Merioneth.

16th February, 1949.

METROPOLITAN BOROUGH OF LEWISHAM.

APPOINTMENT OF ARCHITECTURAL ASSISTANT, CLASS II.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT, Class II, in the Borough Architect's Department. Salary scale A.P.T. Division, Grades IV and V (£480 rising to £570 per annum, plus London "Weighting" varying between £10 and £30 per annum according to age).

The appointment will be subject to the rules and regulations of the Council from time to time in force in relation to officers; to the National Scheme of Conditions of Service; to the provisions of the Local Government Superannuation Act, 1937; to the satisfactory passing of a medical examination by the Council's Medical Officer of Health, and to termination by one month's notice on either side.

Candidates for the appointment must have passed the intermediate examination of the Royal Institute of British Architects, or possess equivalent qualifications, and preference will be given to those applicants with experience in design and construction of housing estates and multi-storey flats.

Forms of application may be obtained from me and should be returned, accompanied by copies of not more than three recent testimonials, addressed to me in an envelope endorsed "Architectural Assistant Class II," so as to be received not later than Saturday, the 19th March, 1949.

Canvassing, either directly or indirectly, will be a disqualification.

ALAN MILNER SMITH,

Town Clerk.

Lewisham Town Hall,

Catford, S.E.6.

1949

CITY OF STOKE-ON-TRENT.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited from suitably qualified persons for the following appointments to the permanent staff—

TWO SENIOR ASSISTANT QUANTITY SURVEYORS. Salary A.P.T. Div. Grade VI. £595-£660.

Applicants must be competent to prepare Bills of Materials for large contracts and experienced in all branches of Quantity Surveying practice. The selected applicants will be required to pass a medical examination and the appointments will be subject to the usual conditions applicable to Local Government Service.

Previous experience of Local Government work is not essential.

The successful applicants will be assisted in obtaining HOUSING ACCOMMODATION.

Applications giving date of birth, particulars of training and experience, etc., with copies of two recent testimonials, should be received by J. E. Fitzgerald, F.R.I.B.A., City Architect, City Architect's Department, Kingsway, Stoke-on-Trent, endorsed with the title of the appointment applied for, not later than Friday, 18th March, 1949.

HARRY TAYLOR,

Town Clerk.

Town Hall,

Stoke-on-Trent.

Mid February, 1949.

1949

CITY OF BIRMINGHAM EDUCATION COMMITTEE.

Applications are invited for permanent appointments to the following vacancies in the Architect's Branch of the Birmingham Education Department (Architect to the Committee: Mr. Alex. Steele, A.R.I.B.A.):—

SENIOR ASSISTANT ARCHITECTS. A.P.T. VII (£635-£710), and A.P.T. VI (£595-£660).

Experience in the preparation of sketch plans, working drawings and the supervision of building contracts necessary.

ARCHITECTURAL ASSISTANTS. A.P.T. III (£450-£495), and A.P.T. I (£390-£435).

Experience in the preparation of working drawings and details necessary.

SENIOR ASSISTANT QUANTITY SURVEYOR. A.P.T. VII (£635-£710).

Experience in the preparation of Bills of Materials for major contracts and the settlement of final accounts necessary.

HEATING ENGINEERING ASSISTANT. A.P.T. III (£450-£495).

Candidates must have had experience in the calculation and preparation of heating schemes for buildings of a general character, and be good draughtsmen with previous experience in a large drawing office.

Application forms, which may be obtained from the undersigned on receipt of a stamped, addressed envelope, must be returned not later than a fortnight after the appearance of this advertisement.

E. L. RUSSELL,

Chief Education Officer.

Education Office,

Margaret Street, Birmingham, 3.

1949

THE COUNTY COUNCIL OF THE COUNTY OF CLACKMANNAN.

PLANNING STAFF.

Applications are invited for the following permanent appointment in the Town Planning Section of the County Architect's Department—

PLANNING ASSISTANT. Salary scale (A.P.T. Grade V), £520-£570, inclusive of all bonus.

Candidates should preferably be Associate Members of the Town Planning Institute or hold a professional qualification in Civil Engineering, Architecture, or Surveying; and should have experience in the preparation of basic surveys and development plans, and should be conversant with the Town and Country Planning (Scotland) Act, 1947, and the various regulations and orders.

The appointment will be subject to the Local Government Superannuation (Scotland) Act, 1937, and the person selected will require to undergo a medical examination prior to appointment.

Applications stating age, qualifications and experience, with one copy of three recent testimonials, should be lodged with the County Clerk, County Buildings, Alloa, not later than 15th March, 1949.

1949

CHESHIRE COUNTY COUNCIL.

COUNTY PLANNING DEPARTMENT.

APPOINTMENT OF PLANNING STAFF.

Applications are invited for the following appointments which are on the permanent establishment of the County Architect's Department.

The posts are subject to the Local Government Superannuation Act, 1937, and the successful applicants will be required to act under the direction of the County Planning Officer and, in the case of area appointments, under the direction of the Area Planning Officer in the preparation of a Development Plan for the County and the control of development under the Town and Country Planning Act, 1947.

(a) **SENIOR PLANNING ASSISTANT-HEAD-QUARTERS, CHESTER.** Salary A.P.T. V-VI (£520-£660).

Applicants should be corporate members of the Town Planning Institute, and preference will be given to those possessing an additional recognised qualification in architecture or engineering. They must also have had considerable experience in all aspects of statutory planning, development control and planning procedure.

(b) **PLANNING ASSISTANTS-SALARY**

A.P.T. III-IV (£450-£525).

Applicants for these positions should have obtained the intermediate examination (or equivalent) of one of the recognised institutions, and preference will be given to candidates who have had training in architecture, and some experience in Town and Country Planning.

The successful applicants will be stationed in the following areas:—Northwich, Nantwich, Stockport, Chester and Altrincham, and all applications should indicate the applicant's preference.

(c) **JUNIOR PLANNING ASSISTANTS.** Salary A.P.T. I-II (£390-£465).

Applicants should have had training in a planning, architectural, surveying or engineering office.

The successful applicants will be stationed in Northwich, Nantwich, Stockport and Altrincham, and all applications should therefore indicate the applicant's preference.

Forms of application, together with details of the duties and conditions attaching to the appointments, may be obtained from the undersigned on receipt of a STAMPED AND

ADDRESSED ENVELOPE.

The last date for the receipt of completed applications is Saturday, the 19th March, 1949.

KENNETH O. MALE,

County Planning Officer.

Bridgegate House, Lower Bridge Street,

Chester.

1949

COUNTY BOROUGH OF ROTHERHAM.

ASSISTANT BOROUGH ARCHITECT.

Applications are invited for the post of ASSISTANT BOROUGH ARCHITECT in the office of the Borough Engineer at a salary of £760, rising by annual increments to a maximum of £910 per annum.

Applicants must be Associate Members of the R.I.B.A., and preferably a holder of a degree in Architecture from a recognised school.

The department is responsible for carrying out all building work of the Corporation, including large housing and educational programmes, and the successful applicant will be required to exercise a general supervision over staff engaged on this work (with particular emphasis on design) under the direction of the Borough Engineer and Deputy Borough Architect, in addition to the direct control of a major project.

The appointment will be subject to the Conditions of Service adopted by the Council and based on the National Scheme of Conditions of Service and will be determinable by one month's notice on either side.

The post is Superannuable and the candidate selected for the appointment will be required to pass a Medical Examination.

HOUSING ACCOMMODATION will be available for the successful applicant if required.

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

Canvassing of Members of the Council, whether direct or indirect, will disqualify.

Applications endorsed "Assistant Borough Architect" stating age, qualifications and details of experience, accompanied by copies of three recent testimonials, should be delivered to the undersigned not later than 25th March, 1949.

JOHN S. WALL,

Town Clerk.

Municipal Offices,

Rotherham, Yorks.

1949

COUNTY BOROUGH OF GATESHEAD.

Applications are invited for the following appointments:—

(1) **SENIOR ASSISTANT QUANTITY SURVEYOR.** A.P.T. Grade VI (£595-£660 p.a.).

(2) **ASSISTANT QUANTITY SURVEYOR.** A.P.T. Grade III (£450-£495 p.a.).

(3) **CLERK OF WORKS.** A.P.T. Grade IV (£480-£525 p.a.).

Candidates for (1) should have passed the Final Examination of the R.I.C.S., and should have a sound knowledge of Quantity Surveying in all its branches. They should be well experienced in the preparation of Bills of Materials, Specifications, Estimates, Measurement of Work for Interim and Final Certificates and the Settlement of Final Accounts.

Candidates for (2) should have passed the Intermediate Examination of the R.I.C.S., and should have a sound knowledge of Quantity Surveying in all its branches, together with experience in measurement, abstracting and billing.

Candidates for (3) should hold the Diploma of the Institute of Builders, or similar qualification, and should have had previous experience in a similar capacity. They should have a sound knowledge of all branches of the Building Trade and should be capable of measuring up work done and preparing schedules of materials required.

Experience in supervision of work by Direct Labour, including the erection of houses, would be an advantage.

The appointments will be subject to the Local Government Superannuation Act, 1937, and to one month's notice on either side. The successful candidates will be required to pass medical examinations.

Applications, to be made on forms obtainable from the Chief Architect, should be returned together with copies of three recent testimonials, to Mr. F. Cook, A.R.I.B.A., M.I.Struct.E., Chief Architect, Municipal Buildings, Swinburne Street, Gateshead, 3, not later than the 31st March, 1949.

J. W. PORTER,

Town Clerk.

Town Hall,

Gateshead, 3.

1949

DURLEY RURAL DISTRICT COUNCIL.

ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT in the Department of the Engineer and Surveyor, at a salary in accordance with Grade IV of the National Scale of Salaries (£480-£525), together with travelling allowance upon the appropriate scale. The appointment will be for a period not exceeding two years in the first instance, but subject to one month's notice on either side at any time, and to the National Scheme of Conditions of Service for local government officers.

Applicants should have had experience in general architectural work, house planning and design, including the preparation of working drawings and specifications, and must possess suitable architectural qualifications.

Applications, stating age, qualifications, and full details of experience, together with the names and addresses of two persons to whom reference may be made, should be forwarded to the undersigned to be received not later than first post on Wednesday, the 16th March, 1949.

H. A. PATE,

Clerk of the Council.

Council Offices, Kingshill,

Dursley, Glos.

21st February, 1949.

1949

SALOP COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments to established posts in the Department.

1. **ARCHITECTURAL.**
(a) CHIEF ASSISTANT ARCHITECT. Salary £735 to £810 p.a.
(b) SENIOR ASSISTANT ARCHITECTS. A.P.T. Grades V-VI. Salary £520 to £610 p.a.
Applicants for post (a) must be members of the R.I.B.A. and have had a wide experience in the design and construction of educational buildings.
2. **QUANTITY SURVEYING.**
(a) CHIEF ASSISTANT QUANTITY SURVEYOR. A.P.T. Grades VII-VIII. Salary £635 to £760 p.a.
(b) ASSISTANT QUANTITY SURVEYOR. A.P.T. Grades V-VI. Salary £520 to £660 p.a.
(c) ASSISTANT QUANTITY SURVEYOR. A.P.T. Grade IV. Salary £480 to £525 p.a.
(d) ASSISTANT QUANTITY SURVEYOR. A.P.T. Grades II-III. Salary £420 to £495 p.a.
(e) ACCOUNTS CLERK. A.P.T. Grades I-II. Salary £390 to £465 p.a.

- Applicants for post (a) must be members of the R.I.C.S. (Quantities Division) and have had administrative experience.
3. **ENGINEERING SECTION.**
(a) SENIOR ASSISTANT ENGINEER. A.P.T. Grades V-VI. Salary £520 to £660 p.a.
(b) ASSISTANT ENGINEER. A.P.T. Grades III-IV. Salary £450 to £525 p.a.

Applicants for post (a) must be experienced in the preparation of drawings and specifications for central heating and hot water supply installations.

Applicants for post (b) must have a good knowledge of the practical side of electrical engineering as applied to lighting and canteen equipment, and be capable of supervising electrical installations and maintenance. The successful applicant will be required to provide his own car, and travelling expenses in accordance with the County Scale will be paid.

4. **MAINTENANCE SECTION.**
BUILDING INSPECTOR. A.P.T. Grades II-III. Salary £420 to £495 p.a.

Applicants must have a practical knowledge of building work, and preference will be given to those who have experience in the supervision of building contracts and the preparation of specifications and reports.

The successful applicant will be required to provide his own car, and travelling expenses in accordance with the County Scale will be paid.

All the foregoing appointments will be subject to one month's notice in writing on either side; to the terms of the National Joint Council's Scheme of Conditions of Service, and to the provisions of the Local Government Superannuation Act, 1937. Successful applicants will be required to pass a medical examination.

Application forms for any of the appointments may be obtained from the County Architect, A. G. Chant, F.R.I.B.A., 5, Belmont, Shrewsbury, to whom the forms must be returned, accompanied by copies of not more than three recent testimonials, not later than Saturday, 2nd April, 1949. When applying for forms, applicants must clearly state for which appointment they wish to make application.

G. C. GODBER,
Clerk of the Council.
Shrewsbury,
February, 1949. 1929

NORTHAMPTONSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF MAINTENANCE OFFICER.

Applications are invited for the appointment of MAINTENANCE OFFICER for the maintenance of police buildings, including houses, police stations and courts, in the County of Northamptonshire. Applicants should have had previous experience in supervision of maintenance work, with some experience in draughtsmanship and the preparation of plans and the settlement of accounts.

The salary will be in A.P.T. Grade V, £520-£570, according to qualifications and experience. Travelling allowances will be paid in accordance with the Council's approved scales. The appointment will be determinable by one month's notice on either side and the selected candidate will be required to pass a medical examination before the appointment is confirmed.

If the selected candidate is married, is unable to obtain a house in or near Northampton and is compelled to maintain his family elsewhere, his salary will be temporarily increased by 25s. per week together with such sum as will reimburse him for the cost of a third-class return railway ticket to his family's home once every two months, his circumstances to be reviewed by the appropriate Committee of the Council every three months.

Canvassing, either directly or indirectly, will be a disqualification.

Applications (endorsed "Maintenance Officer"), stating age, qualifications and previous experience, accompanied by a copy of one recent testimonial and the names, status and addresses of two persons to whom reference can be made, must be forwarded to the County Architect, County Hall, Northampton, so as to reach him not later than 21st March, 1949.

J. ALAN TURNER,
Clerk of the County Council.
County Hall,
Northampton.
26th February, 1949. 1936

ESSEX EDUCATION COMMITTEE.
SOUTH-WEST ESSEX TECHNICAL COLLEGE
AND SCHOOL OF ART.

FOREST ROAD, WALTHAMSTOW, E.17.
The Governors invite applications for the permanent full-time posts of:-

- (a) STUDIO MASTER AND LECTURER IN ARCHITECTURAL DESIGN. Ability to take classes in technique of presentation will be an advantage. The post involves studio and lecture work in connection with the full-time courses of study for the Examinations of the Royal Institute of British Architects.
- (b) LECTURER IN BUILDING SCIENCE.
- (c) LECTURER IN STRUCTURAL ENGINEERING SUBJECTS. The post involves instruction and the supervision of design and drawing classes in connection with the full-time course of studies for the Examinations for the Institution of Structural Engineers.

Salary scale in each case £300×£415-£555, with the addition of a London allowance of £36 or £48, according to age, plus allowances up to £45 for recognised full-time training and £30 for graduate qualifications. In fixing the basic salary, up to twelve increments may be allowed for suitable professional experience.

Applications (no forms), giving full particulars of training, qualifications and experience, should be submitted to the Clerk to the Governors at the College within two weeks of the appearance of this advertisement.

B. E. LAWRENCE,
Chief Education Officer.
County Offices,
Chelmsford. 1928

COUNTY OF KENT.
PLANNING DEPARTMENT.
PLANNING ASSISTANTS.

Applications are invited for posts of Planning Assistant in various Area Offices of the Planning Department. The salary scale is £420-£525 per annum. The commencing point in the scale will be fixed in each case according to qualifications and experience. Applicants should be competent draughtsmen. Preference will be given to those who have passed the Intermediate Examination of the Town Planning Institute; experience of development control will be an advantage.

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

Applications in own handwriting, stating age, education, qualifications, experience, present position and salary, accompanied by copies of two recent testimonials and endorsed "Planning Assistant" must reach the County Planning Officer, County Hall, Maidstone, Kent, not later than 19th March, 1949.

W. L. PLATTS,
Clerk of the County Council.
County Hall,
Maidstone.
22nd February, 1949. 1942

COUNTY OF LINCOLN-PARTS OF LINDSEY.
COUNTY ARCHITECT'S DEPARTMENT.
BUILDING SURVEYORS/INSPECTORS.

Applications are invited from persons having a sound practical knowledge of building, and able to prepare brief specifications and rough estimates for maintenance and small building works. The successful applicants for the three posts may be required to reside in a particular area of the County and all applicants will be required to provide their own car for which an allowance for an S-h.p. car will be allowed on the County Council scale.

The appointments are superannuated, salary in accordance with A.P.T. Grade IV, commencing at £480 per annum, rising in four years to a maximum of £525, plus £20 per annum office expenses if living in a particular area.

Particulars relating to the appointment and application forms can be obtained from the undersigned, completed forms are to be returned not later than Tuesday, 22nd March, 1949.

A. RONALD CLARK,
A.R.I.B.A., A.M.T.P.I.,
County Architect.
County Offices, Lincoln. 1944

HEREFORDSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the Permanent Staff:-
Two ASSISTANT ARCHITECTS, Grade VIII, A.P.T. Division, £565 by £25 to £760 per annum. Candidates must be Associate Members of the R.I.B.A. and be able to take charge of a section of the drawing office.

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

Forms of application may be obtained from W. Usher, A.R.I.B.A., County Architect, County Offices, Bath Street, Hereford. Completed applications must reach the County Architect by not later than 21st March, 1949.

1943

HAMPSHIRE.
Applications are invited for the following appointments on the established staff of the County Architect's Department:-

SENIOR ASSISTANT ARCHITECTS on Grade VI of the National Salary Scales (£595×£20×£25-£660).

Candidates must be Registered Architects, preferably A.R.I.B.A., with experience in design and construction of public buildings, including schools.

ASSISTANT MAINTENANCE SURVEYOR on Grade II of the National Salary Scales £420×£15-£465.

Candidates should have passed the Intermediate Examination of the R.I.B.A. or R.I.C.S. and have had experience on maintenance and minor works and surveys of sites and buildings.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the National Scheme of Conditions of Service, and will be terminable by one calendar month's notice on either side. In approved cases, the County Council are prepared to assist newly appointed members of the staff to meet removal and other expenses.

Applications, on forms to be obtained from the County Architect, The Castle, Winchester, should be returned to him not later than the 28th March, 1949.

G. A. WHEATLEY,
Clerk of the County Council.
The Castle,
Winchester.
February, 1949. 1942

SHIPLEY URBAN DISTRICT COUNCIL.
SURVEYOR'S DEPARTMENT.
APPOINTMENT OF TECHNICAL ASSISTANT
-BUILDING.

Applications are invited for the above appointment on Grades III-IV of the A.P.T. Division of the National Scales (£450 to £525 p.a.).

Candidates should have a sound knowledge of Building Quantities and experience in the valuation of building contracts, ordering of materials and purchasing building work.

HOUSING ACCOMMODATION will be made available, if necessary, to the successful candidate.

The appointment will be subject to one month's notice on either side. The successful applicant will be required to pass a medical examination. Applications, stating age, qualifications, past and present appointments and experience and length of notice required to terminate present appointment must be delivered to the Surveyor, Town Hall, Shipley, to arrive by Monday, the 14th March, 1949.

HAROLD S. HASLAM,
Clerk of the Council.
Town Hall,
Shipley.
24th February, 1949. 1927

BOROUGH OF SOUTHGATE.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.
APPOINTMENT OF CHIEF ARCHITECTURAL
ASSISTANT.

Applications are invited for the above mentioned appointment in the Department of the Borough Engineer and Surveyor.

The post is graded A.P.T. VII-VIII plus the appropriate London Weighting, and the commencing salary will be fixed within the Grades mentioned in accordance with the qualifications and experience of the successful candidate.

Applicants must be Associate Members of the Royal Institute of British Architects or hold an equivalent qualification.

Forms of application may be obtained from the Borough Engineer and Surveyor and should be returned to the undersigned not later than 9 a.m. on Monday, 21st March, 1949.

Canvassing, directly or indirectly, will be a disqualification.

GORDON H. TAYLOR,
Town Clerk.
Town Hall, Palmers Green,
London, N.13.
26th February, 1949. 1922

COUNTY BOROUGH OF IPSWICH.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT in the Borough Surveyor's Department.

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

The salary will be in accordance with Grade A.P.T. VI of the National Scales of Salaries (£595×£20×£25-£660). Applicants must possess the A.R.I.B.A. or equivalent examination.

There is no form of application, but candidates must state age, experience, and any other relevant details, and submit copies of not more than three recent testimonials.

Applications must be received by the Borough Surveyor, Town Hall, Ipswich, not later than first post on Thursday, 10th March, 1949.

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

J. G. BARR,
Town Clerk.
Town Hall,
Ipswich.
23rd February, 1949. 1933

COUNTY BOROUGH OF TYNEMOUTH. BOROUGH SURVEYOR'S DEPARTMENT. STAFF VACANCY.

Applications are invited for the following appointment:—

ARCHITECTURAL ASSISTANT, Grade V, £250-£270.

Applicants must be Associates of the R.I.B.A., and have had good general architectural experience. Experience in settling contractors' final accounts will be an advantage.

Applications on forms to be obtained from the Borough Surveyor, Mr. D. M. O'Herrily, B.Sc., M.I.C.E., Howard Street, North Shields, together with copies of not more than three recent testimonials, should be addressed to the Borough Surveyor to arrive by 10 a.m. on the 21st day of March, 1949.

All appointments are subject to the National Scheme of Conditions of Service, the Local Government Superannuation Act, 1937, a medical examination and one month's notice on either side.

Canvassing, either directly or indirectly, will disqualify, and applicants must state whether or not to their knowledge they are related to any member of the Council or to a holder of any senior office under the Council.

Dated this 24th day of February, 1949.

(Signed) FRED. G. EGNER, Town Clerk.

M. Northumberland Square, North Shields. 1931

COUNTY OF MONMOUTH. COUNTY PLANNING COMMITTEE.

Applications are invited for the following appointments in the County Planning Department:—

(a) One PLANNING ASSISTANT—Grade III, salary £250, rising by annual increments of £15 to £265 (A.P.F. 1. 111).

(b) TWO DRAUGHTSMEN—Salary according to age, £135 at 16 years of age, rising by annual increments to £365 at 32 (General Scale).

Applicants for appointment (a) should have had a good practical experience in the preparation of planning schemes for Urban and Rural Areas and should be suitably qualified. Preference will be given to applicants who have secured the Intermediate Examination of the Town Planning Institute or Royal Institute of British Architects, or the Institution of Municipal and County Engineers.

Applicants for appointment (b) should be neat and expeditious draughtsmen, tracings and co-ordinates, with experience of work on 1/2,500th and 6-in.-to-the-mile Ordnance maps. An elementary knowledge of land surveying and levelling will be an additional recommendation.

Appointments will be subject to the Local Government Superannuation Act, 1937, and to passing a medical examination, and will be terminable by one month's notice on either side.

Applications, stating age, qualifications, training and experience, and giving particulars of past and present appointments, accompanied by copies of two recent testimonials, or, in the case of H.M. Forces, the names of two referees, and endorsed "Planning Assistant" or "Draughtsman," must be delivered to the County Planning Officer, Cambria House, Caerleon, Mon., not later than 21st March, 1949.

VERNON LAWRENCE,

Clerk of the Council.

County Hall, Newport, Mon.

February, 1949.

1941

COUNTY BOROUGH OF ST. HELENS. BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the following appointments on the permanent establishment in accordance with the National Conditions of Service and Salary Scales:—

(a) SENIOR ARCHITECTURAL ASSISTANT, Grade A.P.F. VI (£595-£660 per annum).

(b) ARCHITECTURAL ASSISTANT, Grade A.P.T. II (£420-£465 per annum).

(c) PLANNING ASSISTANT, Grade A.P.T. III (£265-£295 per annum).

(d) PLANNING ASSISTANT, Grade A.P.T. I (£240-£245 per annum).

Consideration for housing accommodation will be given according to the circumstances of the successful applicant.

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

Candidates must, when making application, disclose in writing whether, to their knowledge they are related to any member of the Council or to a holder of any senior office under the Council.

Applications stating age, qualifications, present and past appointments and experience, accompanied by copies of three recent testimonials, must be forwarded to the undersigned not later than Saturday, 19th March, 1949.

Canvassing in any form will be deemed a disqualification.

M. WARD, M.I.M.E., A.M.T.P.I.,

Borough Engineer,

Town Hall,

St. Helens.

14th February, 1949.

1939

Sale by Tender and Auction

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

METROPOLITAN WATER BOARD.

THE METROPOLITAN WATER BOARD invite tenders for the erection and completion of six houses and all necessary site works at Windmill Road, Ashford Common, Middlesex.

Forms of tender, conditions of contract, specification, bills of quantities and other particulars, may be obtained from the Board's Surveyor at these offices on production of an official receipt for two guineas. This sum, which must be deposited with the Board's Treasurer and Comptroller, will be returned on receipt of a bona fide tender (which is not subsequently withdrawn), accompanied by all the above-mentioned documents. Such payments and applications must be made between the hours of 9 a.m. and 4 p.m. (Saturdays, 9 a.m. and 11 a.m.). Cheques must be made payable to the Metropolitan Water Board and not to individuals.

The latest date for the receipt of deposits will be 19th March, 1949.

Tenders, enclosed in sealed envelopes addressed to the undersigned and endorsed "Tender for Houses, Windmill Road, Ashford Common," must be delivered at the offices of the Board (Room 122), not later than 12 noon on 14th April, 1949.

The Board do not bind themselves to accept the lowest or any tender.

C. W. STOKER,

Clerk of the Board.

Offices of the Board,

New River Head,

Rosebery Avenue, London, E.C.1.

1930

Sale by Auction

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

Messrs. GORDON PRIOR & GOODWIN will offer by Auction at Warne's Hotel, Worthing, on Thursday, April 7th, 1949, at 2.30 p.m., the prominent corner block of FREEHOLD BUILDING LAND at the junction of Ash Lane and The Street, Rustington, Sussex (unless previously sold). Area, 12 acres (about). Particulars and conditions of sale from the Auctioneers' Offices, 9, Stone Buildings, Lincoln's Inn, London, W.C.2. (Holborn 4526/7). 1902

Architectural Appointments Vacant

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

ARCHITECTURAL ASSISTANT required (qualified) for General Practice—Surveys, Working Drawings and Specifications. Write, stating age, previous experience and salary required. Henry C. Smart & Partners, L.R.I.B.A., 120, Moorgate, E.C.2. 1555

SEELY & PAGET, F./L.R.I.B.A., require fully qualified ASSISTANT; must be experienced working drawings and specifications. With sound knowledge of all normal methods of construction; licensed work now in hand includes many important Ecclesiastical commissions. Apply by letter giving usual details to 41, Cloth Fair, E.C.1. 1581

AN expanding Middle East Oil Company urgently requires an ASSISTANT ARCHITECT in the London office for the execution of sketch and working drawings connected with any architectural items required; should be up to senior architectural standard; A.R.I.B.A. preferable; not less than 7 years in drawing offices engaged on housing schemes, public buildings, town planning, etc.; knowledge of Middle East architectural practice, climatic conditions, materials, is an advantage; some knowledge of reinforced concrete and specialised construction, including the "Bellrock" system, desirable; age 25-40; salary £600-£750 per annum, according to age and experience. Write, giving brief details for application form, and quoting LO 125, to Box "Z.F." c/o J. W. Vickers & Co. Ltd., 7/8, Great Winchester Street, London, E.C.2. 1534

SENIOR ARCHITECTURAL ASSISTANTS required for General Architectural Practice. Reply, stating experience and salary required, to Thomas Worthington & Sons, 178, Oxford Road, Manchester, 13. 1673

JUNIOR ARCHITECTURAL ASSISTANT required in London office; salary according to experience. G. H. N. Inman & H. A. J. Darlow, F.A.R.I.B.A., The Charterhouse, E.C.1. (CLB 3414.) 1797

ARCHITECTURAL ASSISTANTS of all grades, also SHOPFITTING ASSISTANT, required in Architect's London office of expanding Chain Store organization; salary in accordance with qualifications and experience; pension scheme and staff canteen provided; alternate Saturdays free. Applications, giving full details of age, qualifications, experience and salary required, to Box P.T.370, Everett Advertising Ltd., 10, Hertford Street, W.1. 1772

ARCHITECTURAL ASSISTANT (single) required for country town office; office trained; good draughtsman; car owner/driver; experience in outside supervision and specifications; salary £500 per annum. Details to Box 1946.

REQUIRED immediately, N.E. London, SENIOR ARCHITECTURAL ASSISTANT; Final standard; experienced industrial and commercial buildings. Box 1773.

SENIOR ASSISTANT, qualified, with extensive experience of preparing working drawings for work in connection with large housing, cinema, and office schemes. London West Central area. Age 30/35. Salary up to £750. Write Box 1825.

EXPERIENCED ARCHITECT'S ASSISTANT required, preferably with experience in hospital planning, must have passed Inter R.I.B.A. Please send in qualifications, age, experience, salary required to:—Lewis, Cranbrook House, Cranbrook Road, Ilford, Essex. 1806

SENIOR ARCHITECT'S ASSISTANT, for busy country practice near coast, North Midlands. Salary £500 to £700, according to qualifications and ability. Must be experienced, properly trained, able to carry out all duties. Car driver or owner preferred. Housing experience and Quantity Surveying an advantage. Box 1834.

SENIOR and Junior ARCHITECTURAL ASSISTANTS required by London Consultants for work on industrial projects. Also Assistant with experience in road and railway layouts. Five-day week. Salaries £250 to £500, according to experience. Apply with full particulars to Box 1861.

ARCHITECTURAL ASSISTANT wanted, approaching R.I.B.A. Final Standard or post-final. Experience General practice. Progressive post for suitable person. Five-room flat with small garden available March. Full particulars to R. J. Page, A.R.I.B.A., 47, North Hill, Colchester. 1866

REQUIRED at Company's Head Office, Guildford, two ARCHITECTURAL ASSISTANTS, one to be A.R.I.B.A., and one to have reached R.I.B.A. Intermediate Standard. Five-day week. Salary by arrangement. Box 1887.

TEMPORARY ARCHITECTURAL OR SURVEYING ASSISTANTS required in London office. Experience of measuring existing buildings necessary. Write stating age, experience, and salary required, to Box 1888.

ARCHITECTURAL ASSISTANTS required in a long-established private Architects' office in Oxford. Applicants must be neat and accurate draughtsmen. Good salaries and prospects for advancement. Apply giving age and experience, to Box 1877.

ARCHITECTURAL ASSISTANT required. Salary £300 to £500, according to experience. Details to Beecher & Stamford, F.A.R.I.B.A., 14, Park End Street, Oxford. 1886

OPENING for QUALIFIED ASSISTANT to old-established London Architects. Good prospects. Please state experience, etc., fully, to Box 1885.

ASSISTANT SURVEYOR with building experience and who has reached the stage of the final examination on R.I.C.S., required by Architect and Surveyors in North West Kent. Salary £500 p.a. Box 1882.

ARCHITECTURAL ASSISTANT of at least R.I.B.A. Inter Standard required. Apply Arthur J. Knott (F), 28, Orchard Street, Bristol, 1. 1873

ARCHITECTURAL ASSISTANT to works maintenance dept. Manager of Multiple retailers. Maintenance, alteration, extensions, shop fitting and domestic. Pensionable post. Particulars of experience, qualifications, age and salary required, to the Personnel Manager, J. Sainsbury Ltd., Stamford House, Stamford Street, Blackfriars, S.E.1. 1935

ARCHITECTURAL ASSISTANT required immediately. Applicant should have passed the intermediate examination of the R.I.B.A. and should write stating age, experience, qualifications and salary required, to L. F. Vanstone & Partners, Southbank, Kingsteigton Road, Newton Abbot, Devon. 1925

ASSISTANT for E. Midlands office. Good draughtsmanship and practical experience of domestic work, alterations, maintenance, and quantities desirable. Box 1945.

SENIOR ARCHITECTURAL ASSISTANT required on South Coast. Must be capable all round. Salary up to £700 per annum by arrangement. Applications, stating age, experience and copies of two testimonials, to Box 1866.

ARCHITECTURAL ASSISTANT required with general experience in the preparation of working drawings, details, site supervision and surveys. Applications stating age, experience, salary, and when at liberty, to Box 525, T. & G., 101, St. Martin's Lane, London, W.C.2. 1863

ARCHITECTS' Co-operative Partnership require ASSISTANT. Work to include preparation of working drawings. Salary £200-£550, according to experience. Apply in writing to 34, Gordon Square, London, W.C.1. 1922

ARCHITECTURAL ASSISTANT. male or female, required for office, carrying out good class domestic work in the Isle of Man. Attractive position for capable applicant. Davidson, Marsh & Co., 16/18, Athol Street, Douglas, Isle of Man. 1859

ARCHITECTS. Westminster, require **SENIOR ARCHITECTURAL ASSISTANT.** Salary according to capabilities and experience. Box 1856.

ASSISTANT wanted for London office. Must be good draughtsman. Write giving particulars of experience, etc. Salary according to qualifications. O'Rourke, 12, Cliveden Place, S.W.1. 1854

QUALIFIED or fully experienced **ASSISTANT** required for permanent position in company Architects' office in the Midlands. Applicants are requested to give full particulars of training, age and salary required, to Box 1913.

ARCHITECTURAL ASSISTANT required in Architects' and Surveyors' office in Romford. Good draughtsman with sound knowledge of construction. Box 1911.

ARCHITECTURAL ASSISTANTS required, as follows:—(1) A.R.I.B.A., to work for approx. 6 months in London office, afterwards in Birmingham (experience in school design an advantage). (2) Student or Intermediate standard for Birmingham office. Apply giving details of age, experience, salary required, to Francis W. B. Yorke & H. M. Barker, F./L.R.I.B.A., 36, Calthorpe Road, Birmingham, 15. 1914

ARCHITECTURAL ASSISTANT required immediately for office West Riding of Yorkshire. Must be experienced in working drawings, details, levelling and have knowledge of quantities. Write, giving experience and salary required, to Box 1919.

RALPH TUBBS is wanting a **QUALIFIED ASSISTANT**, experienced in construction and imaginative and sensitive in design. Would anyone interested and sympathetic to my approach to architecture please phone Welbeck 6312, or write 35, Welbeck Street, W.1. 1917

TWO JUNIOR ARCHITECTURAL ASSISTANTS of intermediate standard required in busy country practice in Shropshire and adjoining counties. Varied work and responsibility. Salary around £300 p.a. according to experience. Five-day week. Box 1998.

WANTED immediately. **ARCHITECTURAL ASSISTANT**, preferably one accustomed to housing. Salary according to experience and capability. Apply to W. M. Norman Webster, F.E.I.B.A., 1a and 2a, Station Street, Spalding, Lincolnshire. 1897

EXPERIENCED ARCHITECTS required for interesting large-scale work in Liverpool private practice. Responsible posts for suitable applicants. State age, training, experience and present salary. Box 1896.

CHIPPENHAM. **SENIOR ARCHITECTURAL ASSISTANT** required in old-established office, housing, reconditioning, farm buildings, etc. Responsible and progressive position. Write giving details, salary required. Box 1896.

Architectural Appointments Wanted

REGISTERED ARCHITECT, University Degree, 20 years' excellent experience in large housing schemes, flats, conversions, commercial and industrial buildings, seeks position in London. Box 240.

SENIOR ASSISTANT, with 12 years' varied experience, requires position of responsibility with firm having contemporary outlook; R.I.B.A. Final examination (first part). Box 241.

CHARTERED ARCHITECT requires responsible appointment. Wide experience in England and overseas. Room 32, 4, Inverness Terrace, W.2. 254

A. R.I.B.A., 40, over twenty years' experience at home and abroad, requires permanent and responsible position. Used to taking charge and outside representative. Minimum salary, £700. Box 253.

Other Appointments Vacant

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

WANTED.—ASSISTANT to Divisional Engineers (Sales) to represent large firm of Reinforced Concrete Engineers in the Birmingham area. Write, giving full details of experience, to Box A.J.203, at 191, Gresham House, E.C.2. 1695

QUANTITY SURVEYOR requires experienced **TAKER-OFF**, to take charge of London office; permanency, with possibility of partnership for the right man. Full particulars to Box 1701.

ESTIMATOR required for taking off and tendering for Fibrous and Solid Plastering and Decorative Painting. Full details of previous experience and salary required to Dejonge, 84, Albert Street, London, N.W.1. 1239

EXPERIENCED HEAD DRAUGHTSMAN required for long established practice in pleasant district. Energy and ability essential. Apply: Hall, Architects, Bangor, N. Wales. 1809

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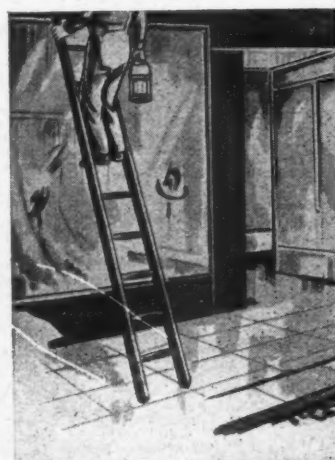


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Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Aga Heat, Ltd.	xvii	Electrolux, Ltd.	lxxi	Morris, Herbert, Ltd.	lxxi
Aldan Electric, Ltd.	xix	Ellis School of Building	lxxi	Mumford Bailey & Preston, Ltd.	lxxi
Allied Ironfounders, Ltd.	xxxix	Ellison, George, Ltd.	lxxi	National Federation of Clay Industries,	
Anderson Construction Co.	xxxix	Empire Stone Co., Ltd.	xxiv	The	
Anderson, D. & Son, Ltd.	xxxix	English Joinery Manufacturers' Association	xxiv	North British Chemical Co., Ltd.	i
Ascot Gas Water Heaters, Ltd.	lxi	Easo Cooker Co., The	lxi	Park Foundry (Belper), Ltd.	
Ashwell & Nesbit, Ltd.	lxi	Ferodo, Ltd.	iv	Peglers, Ltd.	
Austin Hall Group of Companies, The	lxi	Fisher & Ludlow, Ltd.	lxxiii	Pilkington Bros., Ltd.	xviii
Banister, Walton & Co., Ltd.	lxi	Fordham Pressings, Ltd.	lxxiii	Pritchett & Gold & E.P.S. Co., Ltd.	xviii
Bath Cabinet Makers & Artcrafts, Ltd.	ix	Formacon, Ltd.	lxxiii	Prodorite, Ltd.	iv
Bigwood, Joshua, & Sons, Ltd.	lxx	Fothergill & Harvey, Ltd.	lxxiii	Pynford, Ltd.	lxxiii
Biro Pen	lxx	Franki Compressed Pile Co., Ltd., The	xxxv	Rackstraw, G. T., Ltd.	lxxiii
Blackburn, Thos. & Sons, Ltd.	ii	General Accessories Co., Ltd., The	xxxv	Radiation, Ltd.	
Bone, Connel & Baxters, Ltd.	x	Gillett & Johnston, Ltd.	lii	Rippers, Ltd.	i
Booth, John, & Sons (Bolton), Ltd.	lxxiii	Greenwood's & Airvac Ventilating Co., Ltd.	iv	Ripolin, Ltd.	xviii
Boulton & Paul, Ltd.	lxxiii	Griffiths Bros. & Co., Ltd.	lix	Ruberoil Co., Ltd.	
Box, C. W., F.R.I.B.A.	lxxiii	Gyproc Products, Ltd.	lxxiii	Sadd, John, & Sons, Ltd.	
Braby, Fredk., & Co., Ltd.	lxxiii	Hall, J. & E., Ltd.	xxix	Salter, T. E., Ltd.	xxi
Brathwaite & Co., Engineers, Ltd.	lxxiii	Harvey, G. A., & Co. (London), Ltd.	xxxviii	Sankey, J. H., & Son, Ltd.	xxi
Bratt, Colbran, Ltd.		Heal's Contracts, Ltd.	xiv	Santon, Ltd.	xxi
Briggs, Wm., & Sons, Ltd.		Henderson, P. C., Ltd.		Scaffolding (Great Britain), Ltd.	viii
British Electricity Authority		Higgs & Hill, Ltd.		Seacombe Products, Ltd.	liii
British Gas Council		Hollway, W. F., & Brother, Ltd.		Semtex, Ltd.	xviii, xviii
British Insulated Callender's Cables, Ltd.	xxii	Holoplast, Ltd.		Sharman, R. W., Ltd.	lxxi
British Plaster Board, Ltd., The	xii	Hope, Herry, & Sons, Ltd.	xlii	Smith & Rodger, Ltd.	lxxi
British Transo Co., Ltd.	lvi	Imperial Chemical Industries, Ltd.	xvi	Smith's Fireproof Floors, Ltd.	xxxvii
Building Centre, The	lxxi	Industrial Engineering, Ltd.	lii	Southern Lime Association, The	
Britmac Electrical Co., Ltd.	xxxviii	Insulte Products Corporation, Ltd.	lii	Standard Patent Glazing Co., Ltd.	lvii
Broad & Co., Ltd.	xxxviii	International Correspondence Schools	lxxiii	Stelcon (Industrial Floors), Ltd.	
Celcon, Ltd.	xxxix	Jenkins, Robt., & Co., Ltd.	lii	Sunderland Board Co., Ltd.	v
Colotex, Ltd.	xxxix	Jenson & Nicholson, Ltd.	lii	Taylor, Robt., & Co. (Ironfounders), Ltd.	lxxiii
Coment Marketing Co., Ltd.	lii	Jicwood, Ltd.	lii	Thompson Beacon Windows, Ltd., John	
Central Office of Information	xxxix	King, George W., Ltd.	lii	Thornton, A. G., Ltd.	lii
Colthurst, Symons & Co., Ltd.	xxxix	Lacrinoid Products, Ltd.	xvii	Thorp, John B.	lxxi
Compression Joints, Ltd.	lxxiii	Laing, John, & Son, Ltd.	ix	Tretol, Ltd.	xxxvi
Constructors, Ltd.		Lead Industries Development Council	ix	Troughton & Young (Lighting), Ltd.	xxiii
Copperd, Ltd.	xx	Leatherfor, Ltd.	ii	True-Flue, Ltd.	lx
Copper Development Association	xx	Lever, James, & Sons, Ltd.	ii	Turners Asbestos Cement Co., Ltd.	lx
Critical Manufacturing Co., Ltd.	vi	Linmer & Trinidad Lake Asphalt Co.	ii	United Paint Co., Ltd., The	lviii
Crompton Parkinson, Ltd.	vi	Loft Ladders, Ltd.	ii	United Steel Companies, Ltd., The	lii
C.S.A. Industries, Ltd.	xxxiii	London Brick Co., Ltd.	xxvi	Versil, Ltd.	lii
Davis, H., & Co., Ltd.	xxxiii	Mallinson, Wm., & Sons, Ltd.	xxix	Venesta, Ltd.	xxxiii
Dawnays, Ltd.	xxxiii	Marley Floor Tile Co., Ltd., The	xi	Vulcanite, Ltd.	lxxi
De La Rue Insulation, Ltd.	xxxiv	Mart, Robt., & Co., Ltd.	xi	Wardle Engineering Co., Ltd., The	lxxi
Denny, Mott & Dickson, Ltd.	xxxiv	Midland Electric Manufacturing Co., Ltd.		Ward, Thos. W., Ltd.	lvii
Doulton & Co., Ltd.	xv	Midland Joinery Works, Ltd.		Watco (Sales), Ltd.	lvii
Downing, G. H., & Co., Ltd.	lvi	Midland Woodworking Co., Ltd.	lxxiv	Wellington Tube Works, Ltd.	xlii
Dreyfus, A., Ltd.	lvi	Mills Scaffold Co., Ltd.	lxxi	Whentley & Co., Ltd.	xxxvii
Dunlop Rubber Co., Ltd.	xiv	Ministry of Works	lxxi	Williams, John, & Sons (Cardiff), Ltd.	vii
Edgar, Wm., & Sons, Ltd.	liii	M.K. Electric, Ltd.	xlii	Woods of Colchester, Ltd.	lxxi
Effri Sales Organisation	liii				

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational, Legal Notices, Miscellaneous Property, Land and Sales, see lxiii, lxiv, lxv, lxvi, lxvii, lxix, lxx and lxxi.



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PAGE
1221
1221

1

xviii

iv
1221

1
xviii

xxd
1221
viii

1221
d, 1221
1221
1221

1221

v

1221

1221
1221
1221
1221
1221
1221

1221
1221

1221

1221
1221
1221
1221

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XV

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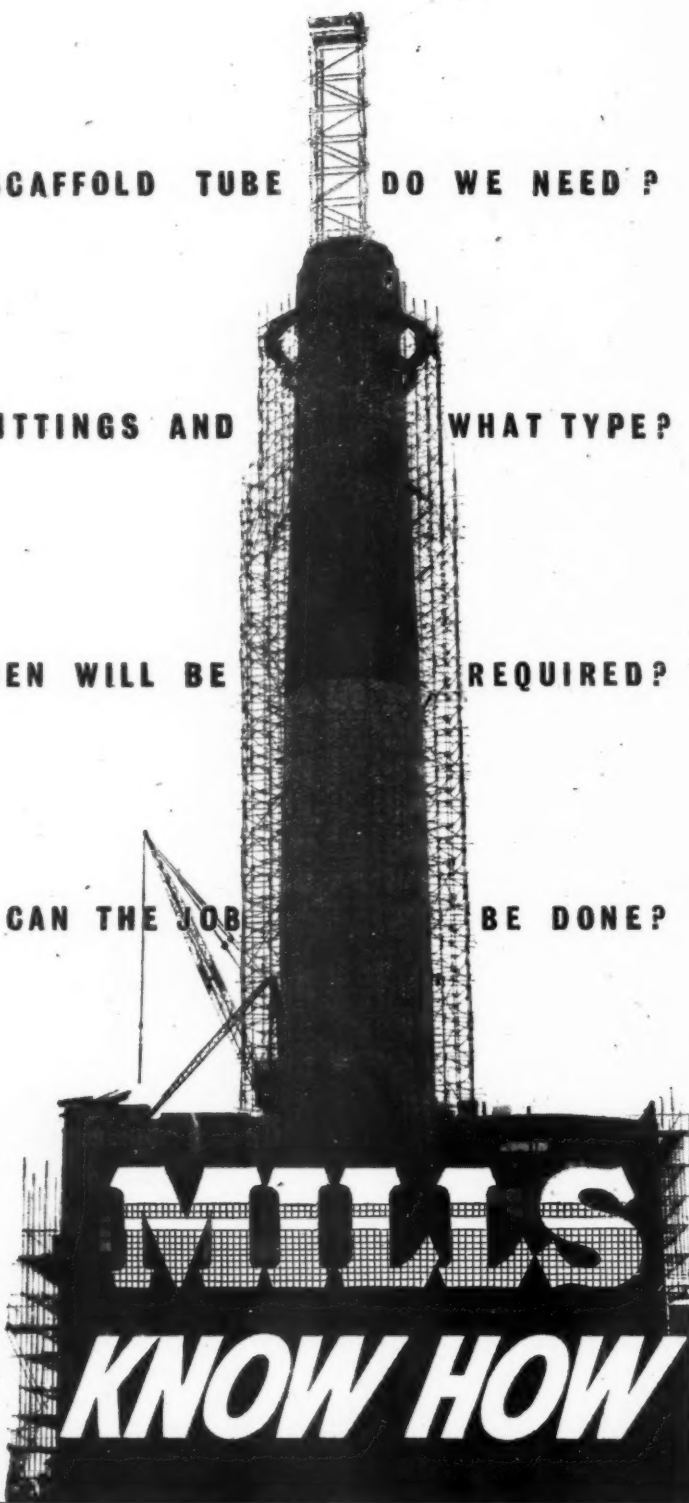
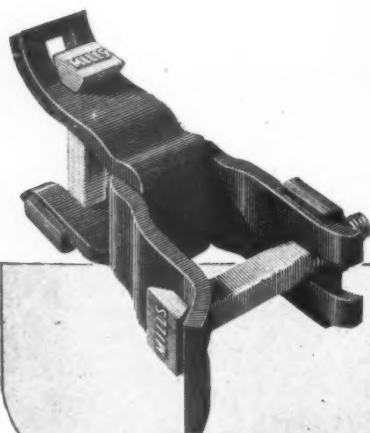
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