

# THE ARCHITECTS' JOURNAL

STACK



## 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, Ie to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

IEE	Institution of Electrical Engineers. Savoy Place, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers. 1, Grosvenor Place, S.W.1.	Sloane 8606
IHVE	Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1.	Sloane 3158
IIBD	Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects. 12, Gower Street, W.C.1.	Museum 1783
I of Arb.	Institute of Arbitrators, 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197
IR	Institute of Refrigeration. Empire House, St. Martin's-le-Grand, E.C.1.	Monarch 7391
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128-9
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MARS	MARS Group (English Branch of CIAM). 34, Gordon Square, W.C.1.	Euston 2158-9
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1.	Mayfair 9400
MOH	Ministry of Health. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service. St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Abbey 7711
MOTCP	Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1.	Whitehall 8411
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council. 94, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 5277/8
NBR	National Buildings Record. 37, Onslow Gardens, S.W.7.	Kensington 8161
NCBMP	National Council of Building Material Producers. 2, Caxton Street, S.W.1.	Abbey 5111
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041
NFBTO	National Federation of Building Trades Operatives, Federal House, Cedars Road, Clapham, S.W.4.	Macaulay 4451
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 2881/2/3
NHBRC	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4041
NPL	National Physical Laboratory. Head Office, Teddington.	Molesey 1380
NSAS	National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1.	Abbey 1359
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211/2
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
PWB	Post War Building, Directorate of. Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 1761
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Whitehall 9936
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Edinburgh 20396
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
RICS	Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1.	Whitehall 5322
RFAC	Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Temple Bar 8274
RSI	Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. 20, Piccadilly, London, W.1.	Regent 6347
SCR	Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8.	Western 1571
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3.	Mansion House 3921
SIA	Structural Insulation Association. 14, Moorgate, London, E.C.2.	Central 4444
SIA	Society of Industrial Artists. Room 243, Empire House, St. Martin's-le-Grand, E.C.1.	Metropolitan 8344
SNHTPC	Scottish National Housing & Town Planning Council. Hon. sec., Robert Pollock, Town Clerk, Rutherglen.	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 75, Cannon Street, E.C.4.	City 6146 (3 lines)
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 81, Cannon Street, E.C.4.	City 1476
WDC	War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1.	Mayfair 8866
WEDA	Welfare Equipment Development Association. 61, St. Paul's Churchyard, E.C.4.	City 4263/4
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	Oxford 47988

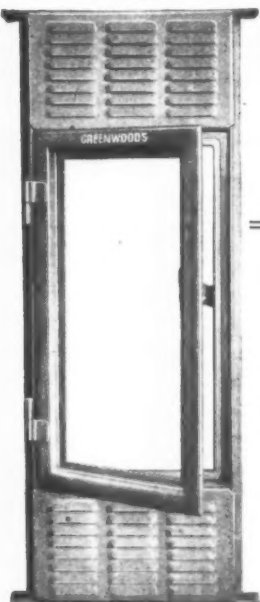
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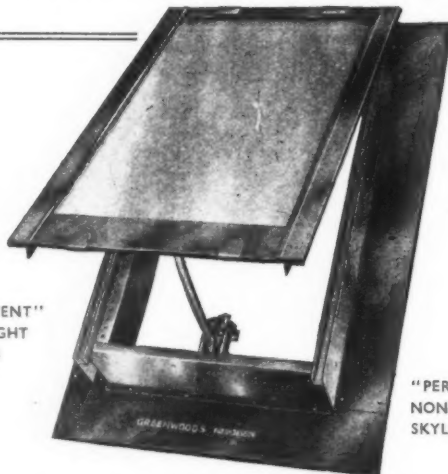
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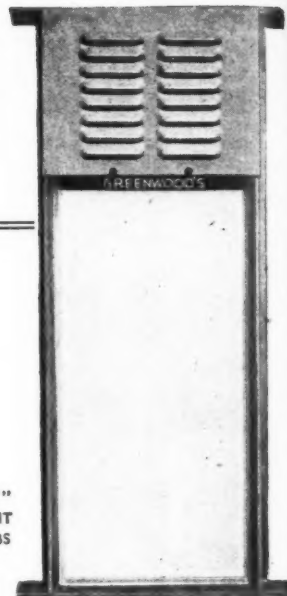
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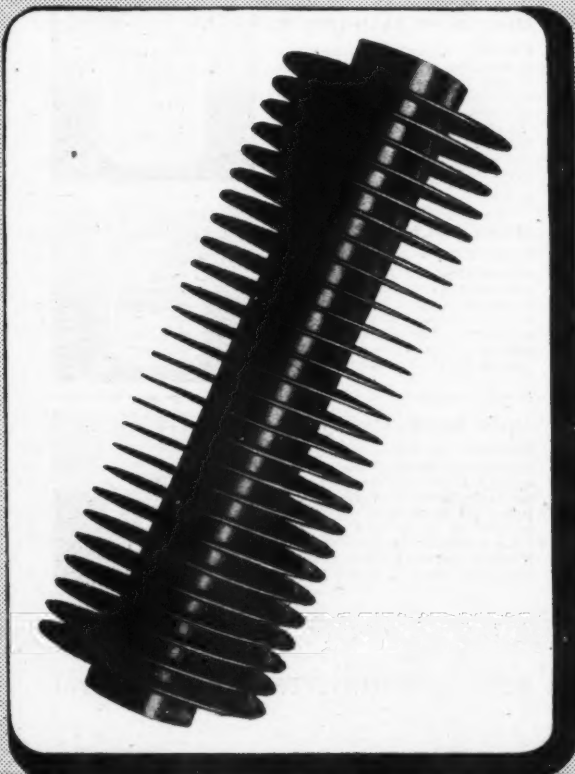
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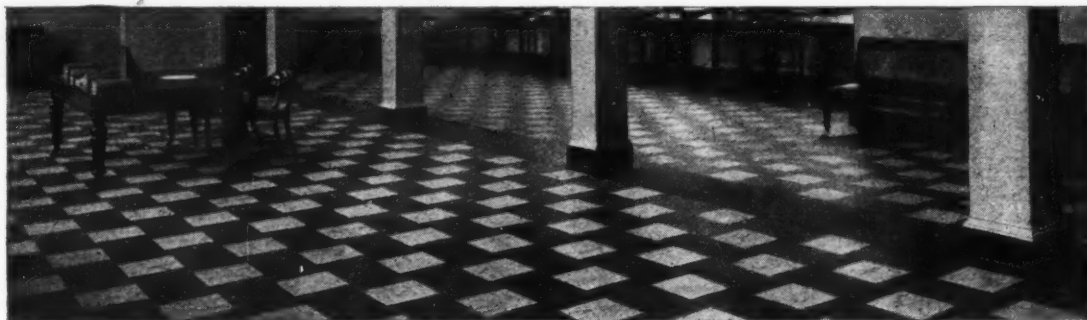
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Accotile floors are quickly laid, and can be used immediately. The tiles are available in a wide range of pleasing marbled or plain colours, giving ample scope for individual design. These colours are permanently fresh, and since they are an integral part of the composition, they cannot wear off. Warm and quiet to the tread, Accotile is easily washed or polished. It resists staining — even cigarette

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We feel sure that you will be interested in this versatile new flooring. We shall be pleased to send sample tiles on request, with full information and a list of specialist firms who alone are authorized to install Accotile floors.

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**LONDON—Earls Court and Olympia.** Weekdays 9.30 a.m.—6 p.m. Buyers Badges and Catalogues, 2/6 each, obtainable only at Fair. Public admitted Wednesday, Saturday and Wednesday (May 4, 7, 11) 1/6 each building.

**BIRMINGHAM—Castle Bromwich.** Weekdays 9.30 a.m.—6 p.m. Buyers Badges and Catalogues, 2/6 each, obtainable only at Fair. Public admitted daily from 2 p.m. (all day Saturday) 2/6.

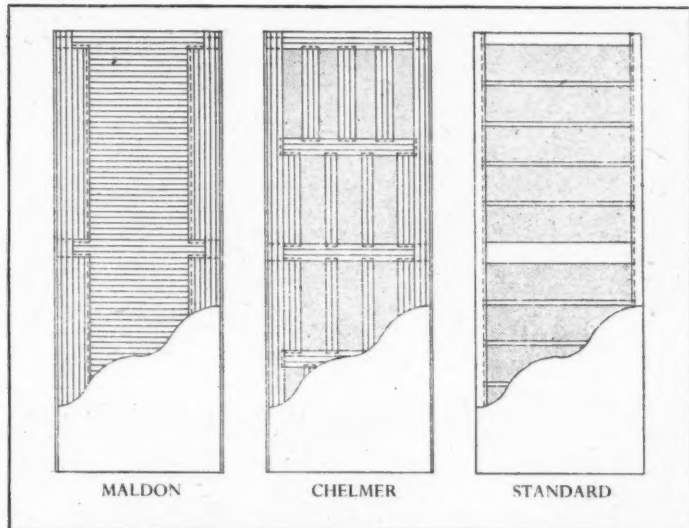
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## ARCHITECTURE AND BUILDING AT CASTLE BROMWICH

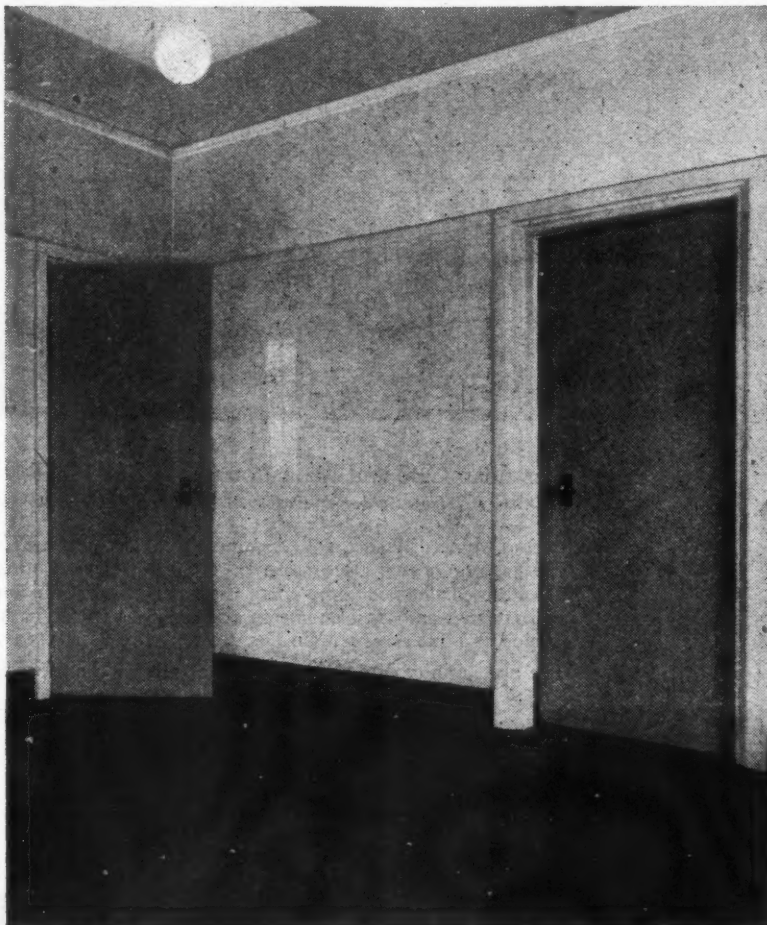
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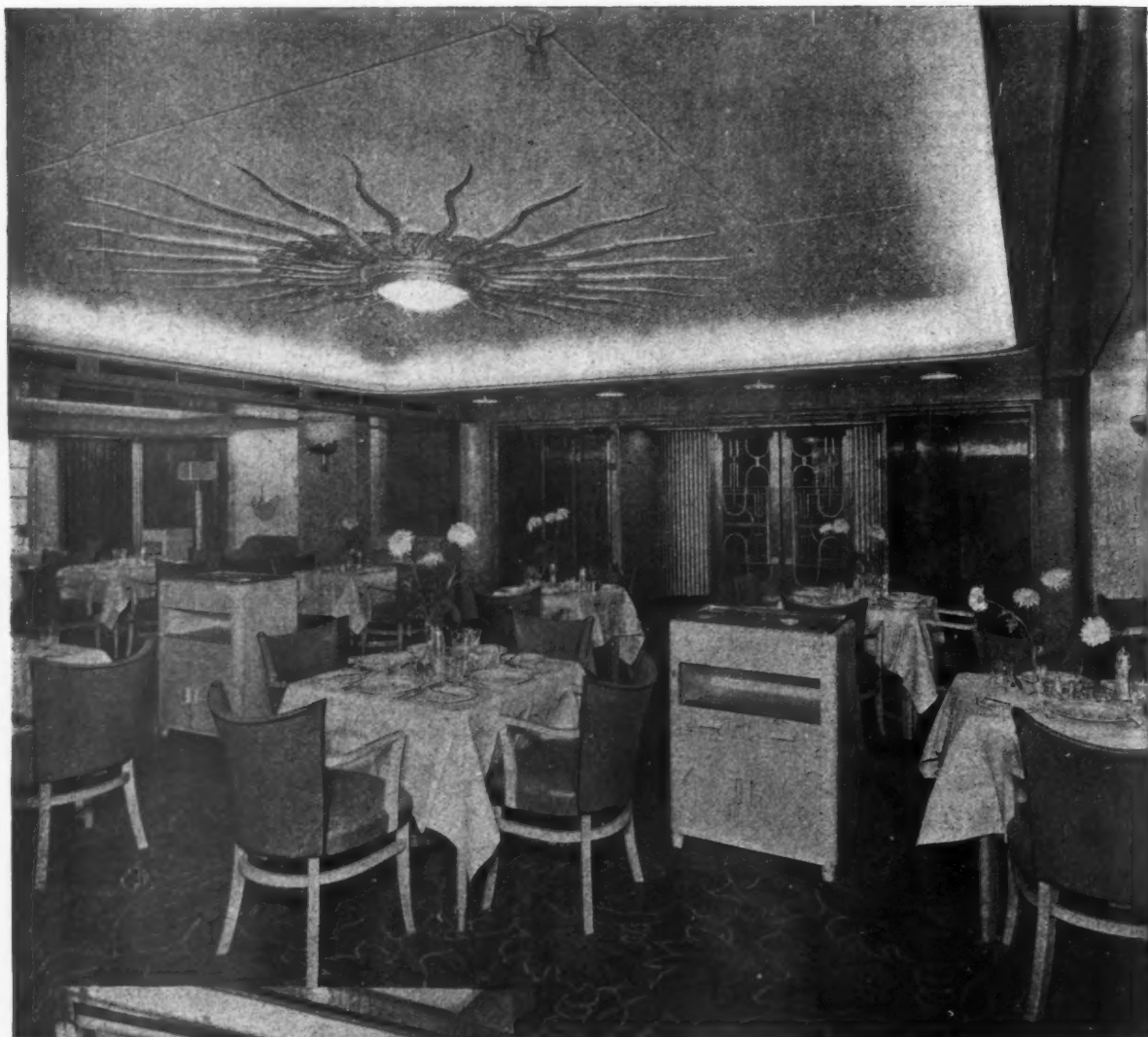
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# Fireplaces

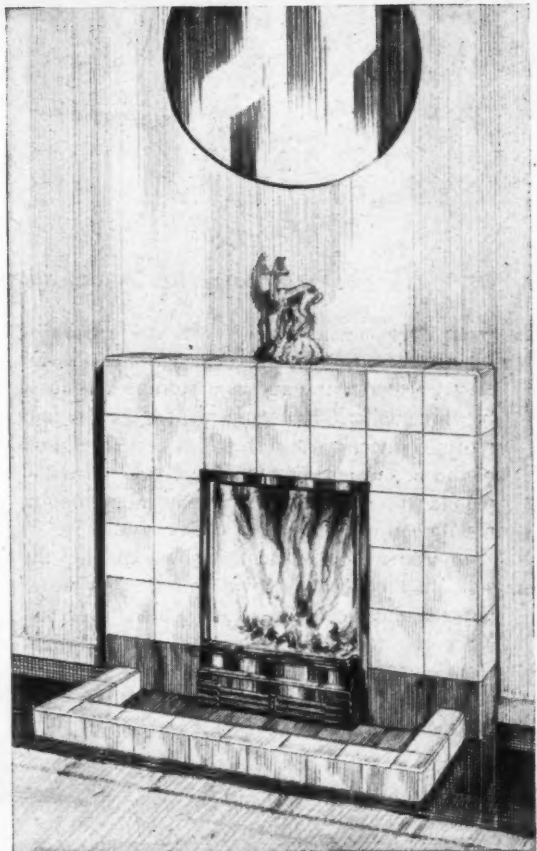


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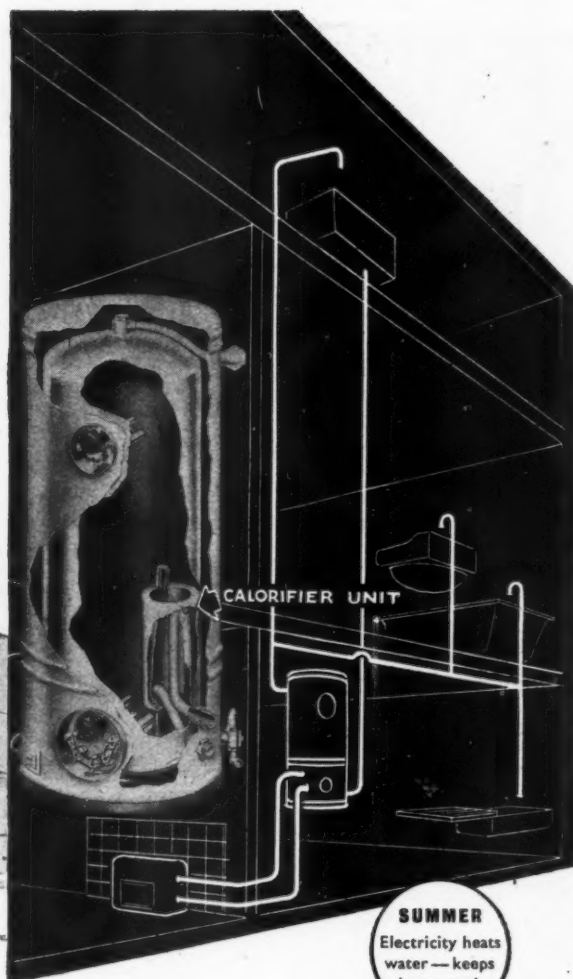
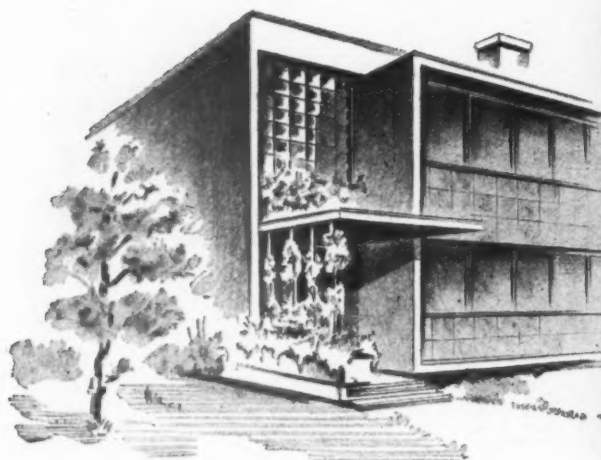
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## CHINA CLIPPERS

The spirit of the English sea-captains, who roamed the oceans far and wide in the age of discovery, not only established a glorious tradition but was an inspiration to the designers and builders of their vessels. Ships grew in size and sea-worthiness; their lines and spread of canvas acquired a beauty in keeping with their qualities of navigation. Athwart the principal trade routes between the Old World and the New, the English grasped the opportunity to become masters of the sea and the world's greatest sea-carriers of international trade. Safer and quicker passages resulted in an abundance of Eastern goods to Europe. Prices were such that tea, pepper and spices were no longer luxuries.

The magnificent China Clippers reached their zenith by the middle of the 19th century. The first of the season's cargoes of tea to reach London secured a premium, and this inspired many famous races of which that of 1866 is still a classic in Mincing Lane. Five clippers left Foo-Chow as nearly as possible together, *Fiery Cross*, *Taeping*, *Serica*, *Ariel* and *Taitsung*, the flower of the fleet. *Fiery Cross* was the first to load her final chest and cast off early on May 29th; *Ariel* followed on the same day and the remainder before another two days were past.

Fresh Trade Winds were found in the Indian Ocean and on this run they averaged 320 miles in twenty four

hours. The Cape of Good Hope was rounded on July 14th with *Fiery Cross* leading *Ariel* by less than a day. Twenty days later *Fiery Cross* was on the equator with *Ariel* still one day astern. *Taeping* and *Taitsung* had by now each gained one day and *Serica* two days. Variable breezes were encountered and *Fiery Cross* became becalmed for twenty-four hours. So it was that between the Azores and the English Channel, *Taeping* and *Serica* passed the *Taitsung* and *Fiery Cross* and closed on *Ariel*, with *Taeping* leading *Serica* by about six hours. At dawn on September 5th the two clippers sighted each other running for the Lizard. They were about five miles apart, beam and beam, steering on slightly converging courses. *Taeping*, *Ariel* and *Serica*, swept up the Thames on the same tide and docked within a few hours of each other on September 6th. *Fiery Cross* passed Deal on the 7th and *Taitsung* on the 9th, each 101 days out of Foo-Chow.

*Taeping* won this race by a bare twelve minutes, having made, with *Ariel* and *Serica*, the 16,000 mile voyage in ninety-nine days. Between them they brought home five million pounds weight of tea. These lovely ships were evenly matched and the race was fairly contested with a close and exciting finish. It was one of the finest ocean races ever sailed and a triumph of superb seamanship.



## THE UNITED STEEL COMPANIES LIMITED, SHEFFIELD

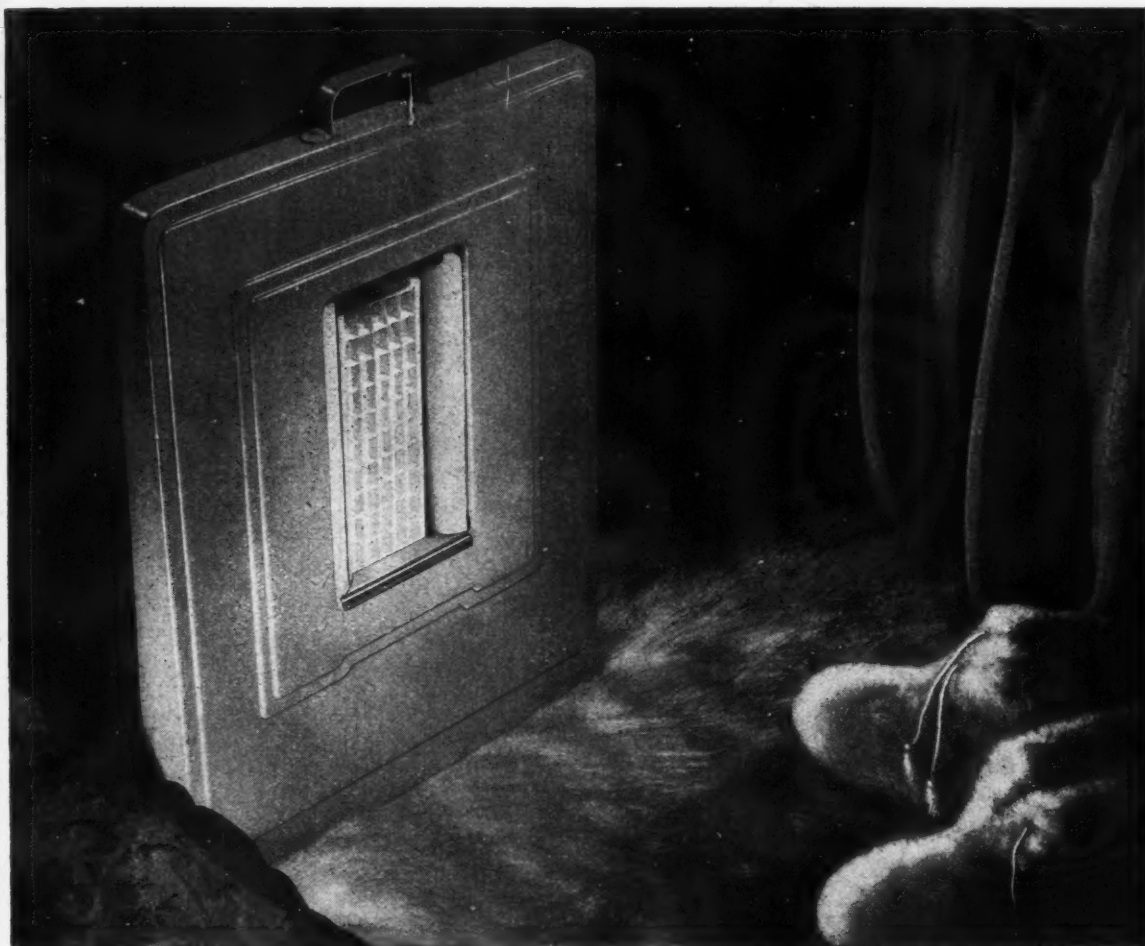
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WORKINGTON IRON & STEEL COMPANY, WORKINGTON · UNITED STRIP & BAR MILLS, SHEFFIELD · UNITED COKE & CHEMICALS CO. LTD., TREETON

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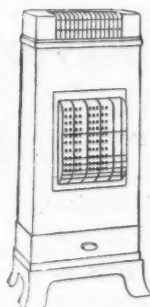


*Illustrated above is the 'Portette' Portable Fire.*

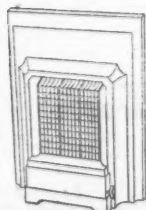
## Here's comfort for those who want the best

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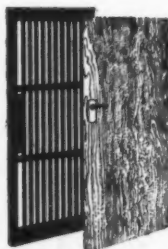
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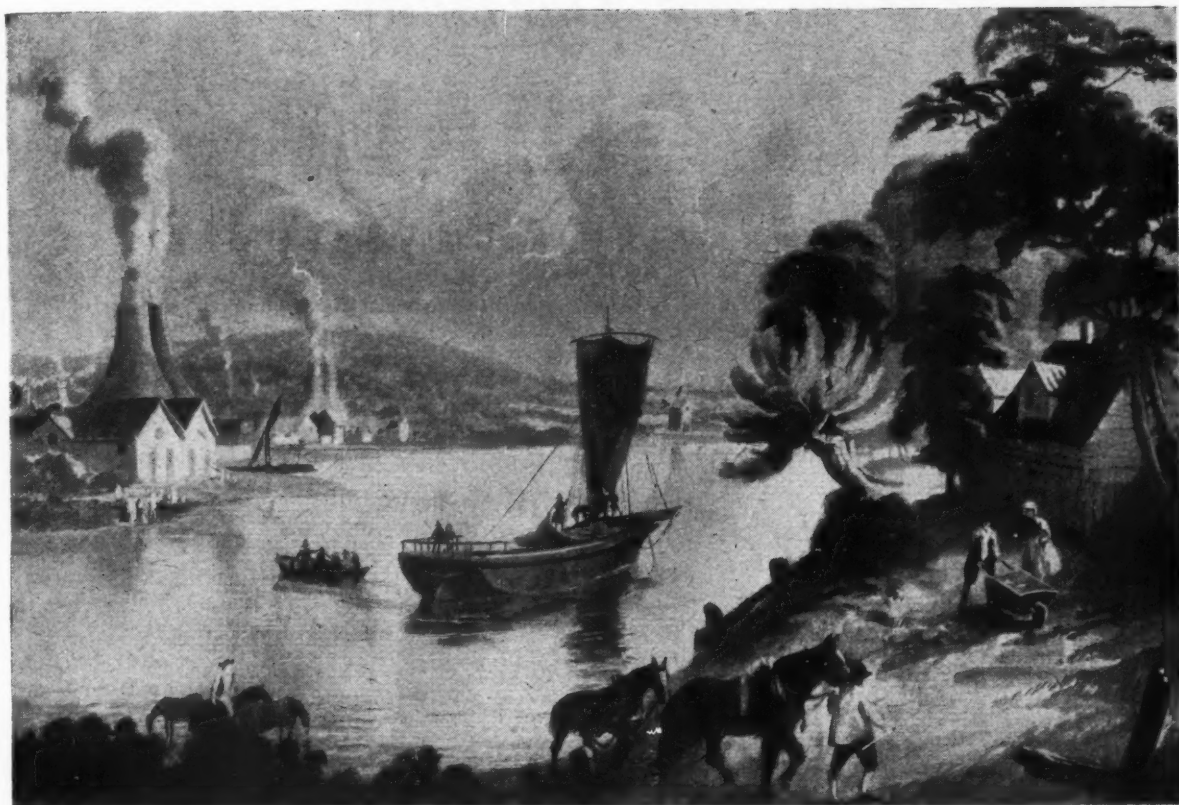
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## POTTERY THROUGH THE AGES · NO. 17



## ENGLISH TIN-GLAZED POTTERY

The art of making tin-glazed pottery was practised in Ancient Babylon. Its development can be traced from Persia to North Africa, and thence through Spain, Italy and the Netherlands to England, where it was introduced about 1550 by Flemish potters.

The Southwark and Lambeth districts of London became the first important centres for making "gallyware", as it was then called. Tin from Cornwall, fused with lead oxide and glass, was used to produce the special opaque white glaze or enamel which, at its best, gave the ware a surface somewhat resembling Chinese porcelain—although the body beneath was an ordinary porous earthenware. The ware was fired, then glazed and painted before being fired a second time. Painting on the friable, absorbent glaze demanded great skill and certainty of touch, but—com-

pared with earlier English pottery—the tin-glazed ware offered far greater possibilities for the use of bright colours, especially blues, greens, purple, red, orange and yellow.

From about 1628 onwards, wine bottles, posset pots, plates, dishes, mugs and drug jars of a distinctive English type were produced in London, Bristol and Liverpool. But the influences on English design and decoration of Flemish pottery, Rhineland stoneware, Italian polychrome maiolica and, above all, of Chinese Ming blue and white porcelain are clearly to be traced.

In the latter part of the 17th century, interchanges of pottery craftsmen between England and Holland took place, and many Dutch potters from Delft settled in Lambeth. Our illustration, based on an old painting by J. Laporte,

shows the arrival of some of these. The horse ferry between Lambeth and Millbank is seen in the foreground and, on the Lambeth side of the river, several potters' kilns.

All English tin-glazed wares eventually became known as delftware—although this type of pottery was being made in Lambeth long before Delft itself became famous. Most of the English delftware was made for practical use, but large dishes or "chargers" were sometimes used for decorative purposes, painted with biblical scenes, royal portraits, coats of arms, floral designs and geometrical patterns. After the introduction of cream-coloured earthenware by Josiah Wedgwood about 1765, the demand for the delightfully painted but expensive delftware gradually declined and the technique had practically disappeared by the end of the century.



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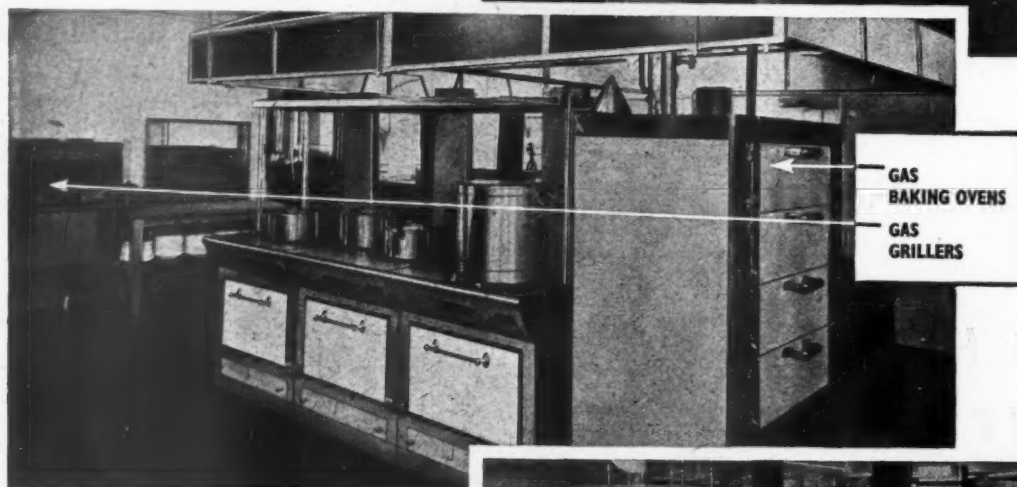
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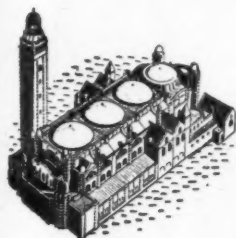
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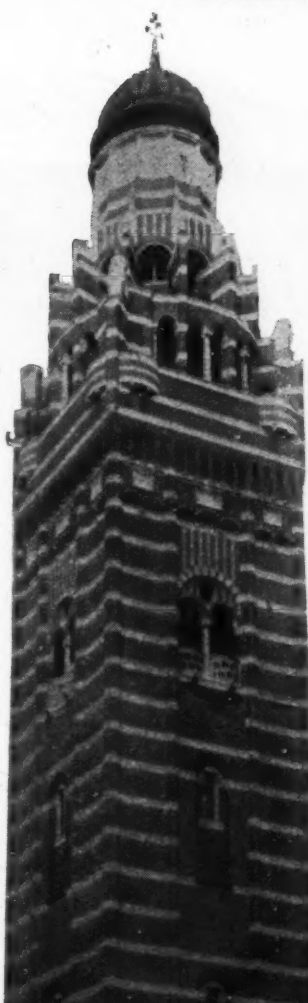
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Corrugated Iron	—	220	—	220	—	—	220	220
Celotex Insulating Board	—	—	—	—	1/2"	1"	1/2"	1"
Air Space/Purlins	—	—	4"	4"	—	—	—	—
Celotex Insulating Board	—	—	1/2"	1/2"	—	—	—	—
Thermal Transmittance "U"	1.40	1.50	0.31	0.32	0.35	0.23	0.36	0.24
Fuel Consumption tons p.a.	7.7	8.3	1.7	1.8	1.9	1.3	2.0	1.3
Cost of Heating Plant. Cost £'s	88	84	19	20	22	14	22.5	15
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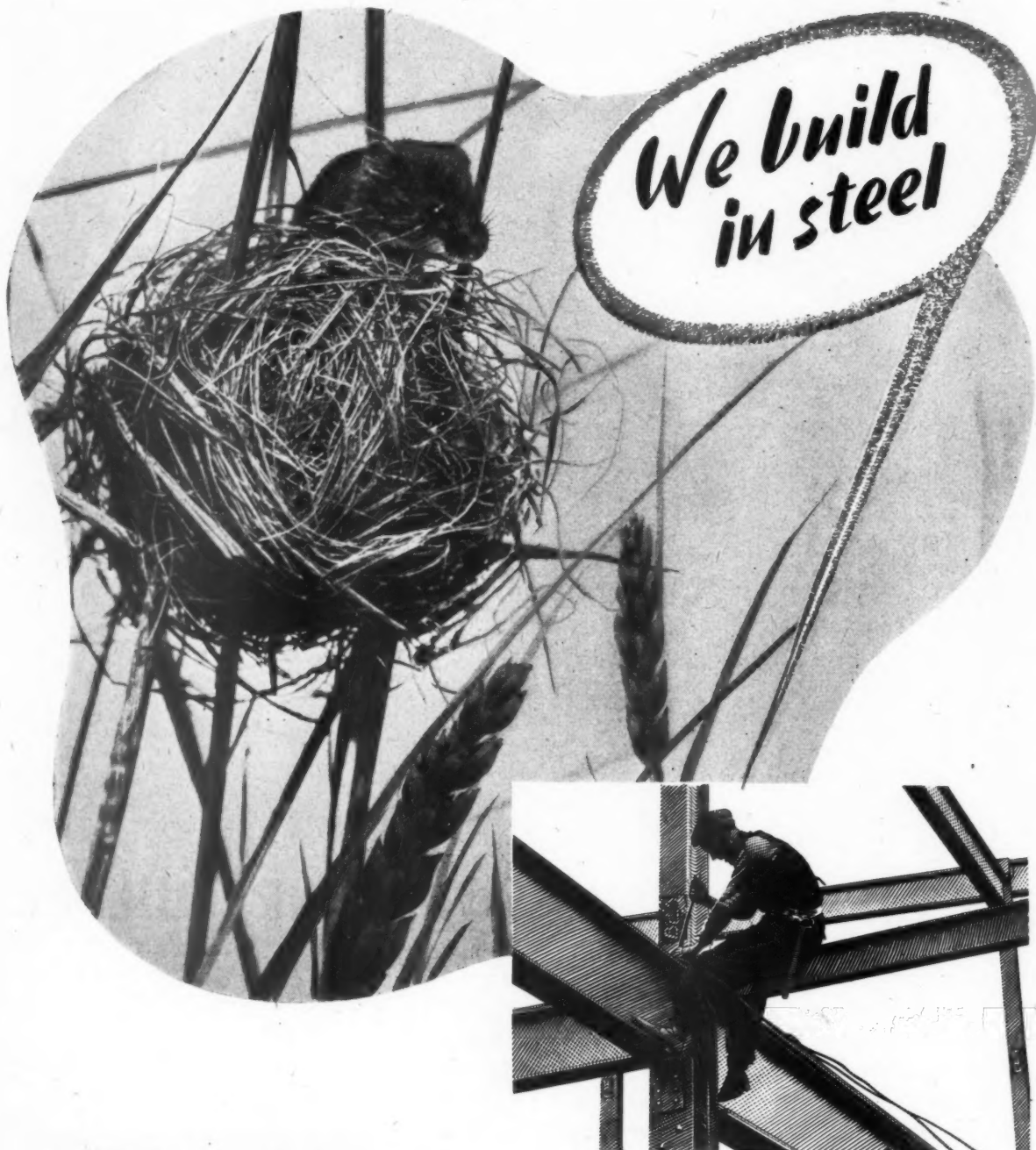
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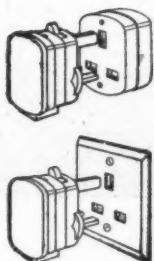
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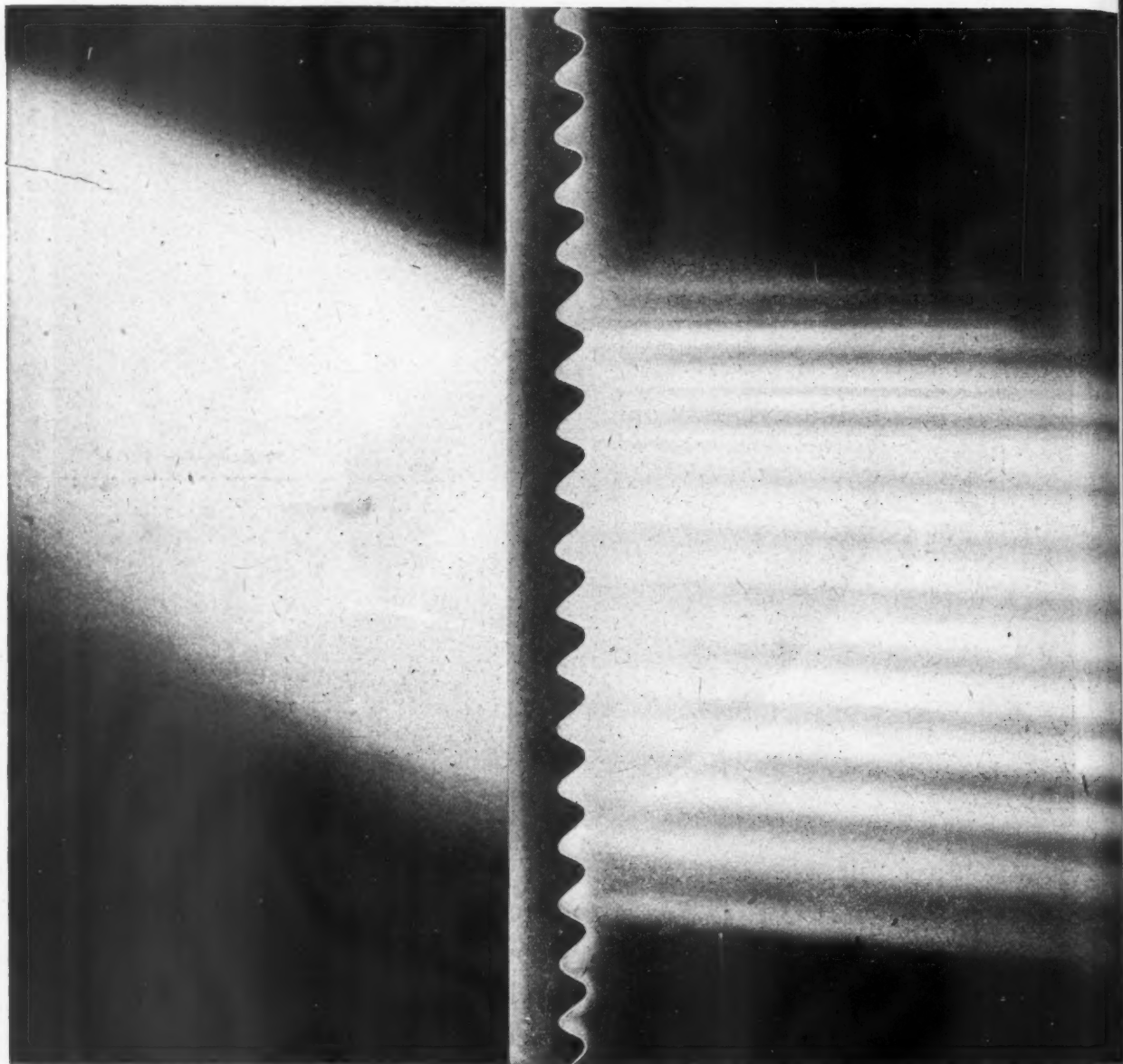
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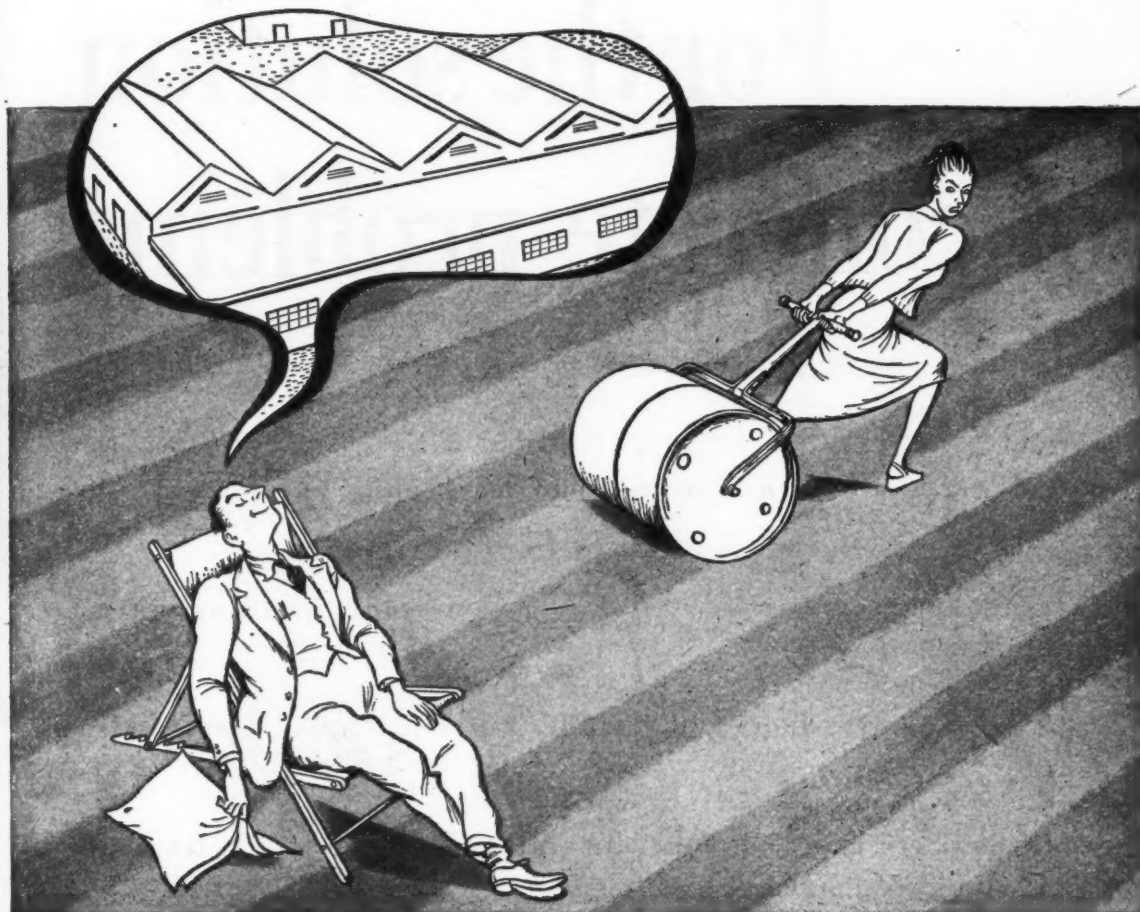
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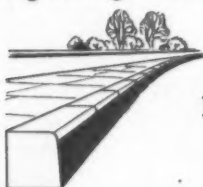
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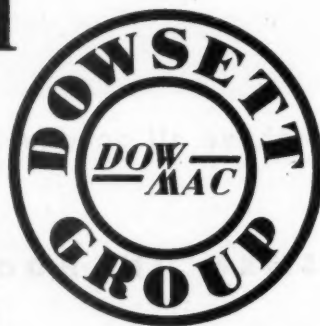
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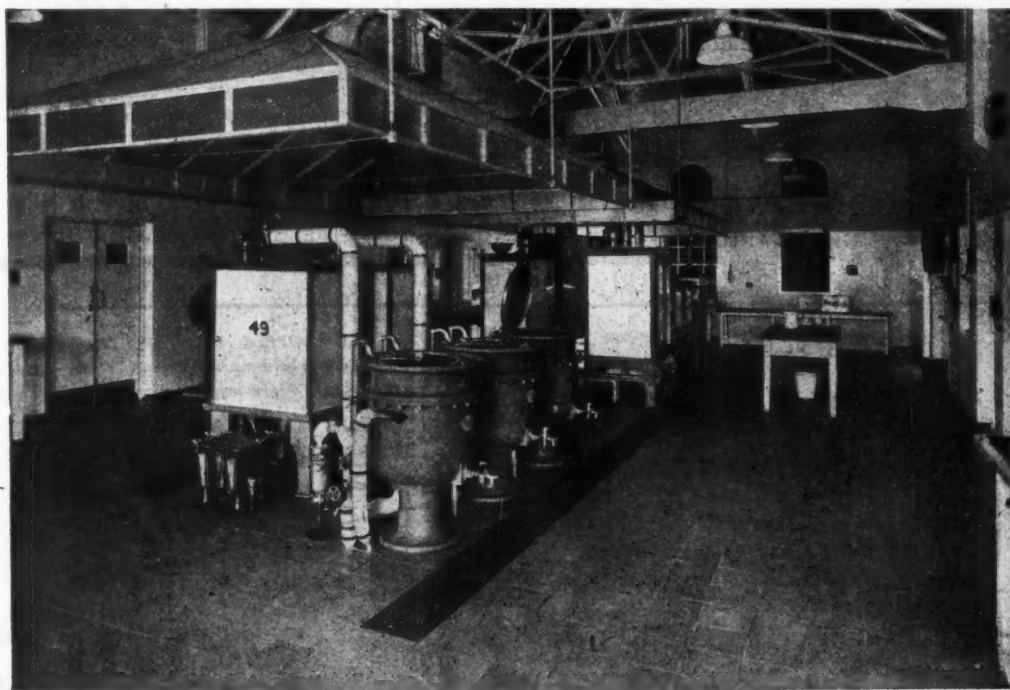
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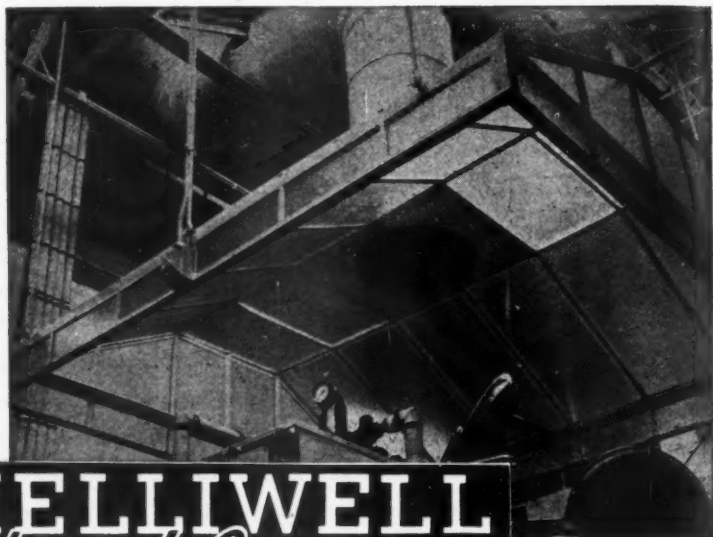
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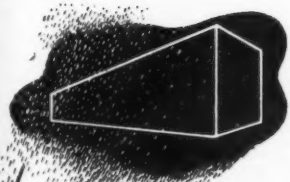
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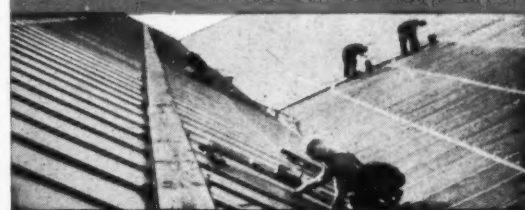
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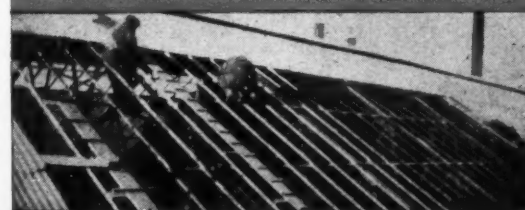
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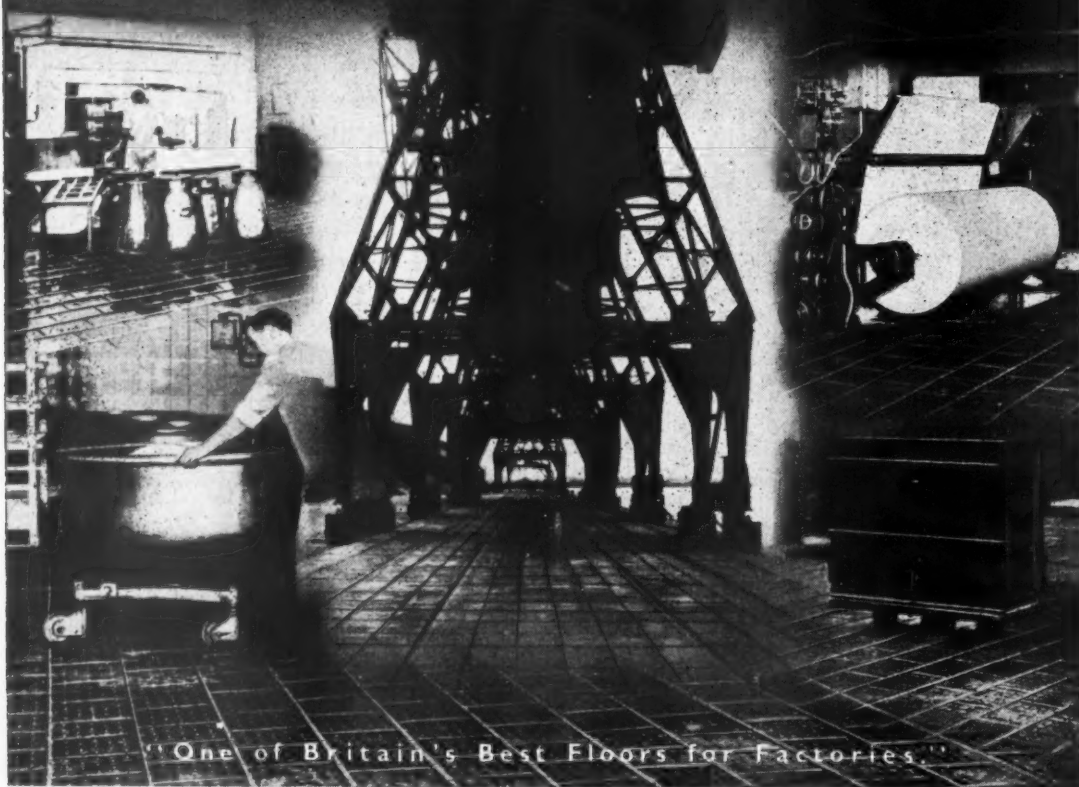
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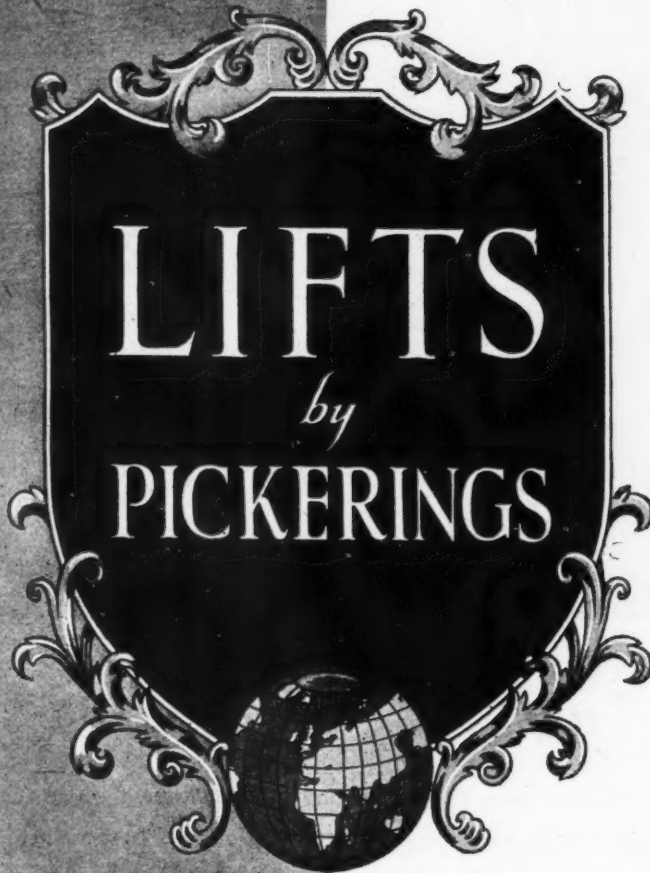


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Architects: Messrs. Joseph. Lowndes Square, S.W.1

Director of Housing and Valuer to the L.C.C.:

Mr. Cyril H. Walker, O.B.E., M.C., F.S.I.

Contractors: W. H. Gaze and Sons Ltd., London.

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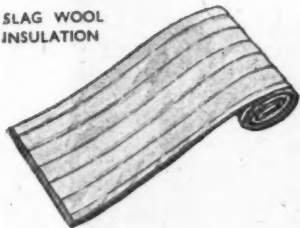
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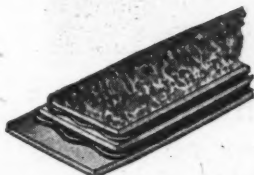
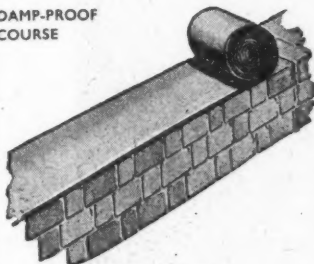


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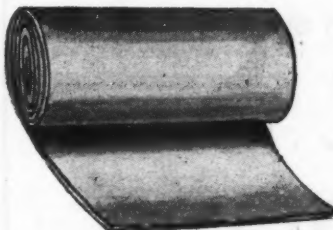
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## DIARY FOR APRIL MAY AND JUNE

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

**ABERDEEN.** *Trade Exhibition.* At the Caledonian Hotel, Aberdeen. (Sponsor, D. Anderson & Son Ltd.) MAY 10-12

**AMSTERDAM.** *International Exhibition of Industrial Design.* Stedelijk Municipal Museum. (Sponsors of British section, British Council and Council of Industrial Design.) UNTIL MAY 20

**BIRMINGHAM.** *British Industries Fair.* Birmingham and London. MAY 2-13

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

**BRISTOL.** *Design Week organized by the Council of Industrial Design.* Details to be announced locally. JUNE 13-18

**DUNDEE.** *Trade Exhibition.* At the Royal British Hotel, Dundee. (Sponsor, D. Anderson & Son Ltd.) APRIL 26-28

**FOLKESTONE.** *TPI Country Meeting.* W. L. Platts. *Administrative Problems in Relation to Securing Amenities.* Sir Patrick Abercrombie. *Some Planning Problems of Coastal Towns.* At Folkestone. MAY 20-22

**INVERNESS.** *Trade Exhibition.* At the Caledonian Hotel, Inverness. (Sponsor, D. Anderson & Son Ltd.) MAY 17-19

**LISBON.** *The Sixteenth International Congress of the History of Art.* Details, Sir Leigh Ashton, Victoria and Albert Museum, S.W.7. UNTIL APRIL 24

**LONDON.** *International Architectural Student Exhibition.* Regent Street Polytechnic School of Architecture, Little Titchfield Street. (Sponsors, British Architectural Students' Association.) APRIL 21-25

*International Architectural Students Conference.* Opening at RIBA at 11 a.m. Further sessions to be held at RIBA and AA. (Sponsor, International Union of Students and British Architectural Students Association.) APRIL 21-27

*Reception by the President and Mrs. Waterhouse.* At the RIBA, 66, Portland Place, W.1. 8.15 p.m.-12 midnight. APRIL 29

*The Royal Academy Summer Exhibition.* At Burlington House, Piccadilly, W.1. APR. 30-AUG. 7

*British Industries Fair.* London and Birmingham. MAY 2-13

*RIBA Annual General Meeting.* At the RIBA, 66, Portland Place, W.1. 6 p.m. MAY 3

*Exhibition of Packaging Materials at Murray House Exhibition Hall, Murray House, Petty France, S.W.1.* (Sponsors, Institute of Packaging and Printing, in collaboration with the CID.) MAY 3-31

*Mr. E. B. Hugh-Jones. Safety as a Factor of Road Design, Construction and Layout.* The First Rees Jeffrey's Triennial Lecture. At the Institution of Civil Engineers, Great George Street, S.W.1. (Sponsor, TPI.) 5.30 p.m. MAY 5

*Open-air exhibition of paintings in the Embankment Gardens.* (Sponsor, LCC.) Weekdays. MAY 9-21

*Building and Engineering Exhibition (Equipment and Materials.)* At the Horticultural Hall, S.W.1. (Sponsor, "Britain's Best" Exhibitions.) MAY 16-27

**NOTTINGHAMSHIRE.** *RIBA New Schools Exhibition.* At the county branch library, Stapleford. MAY 16-21

*RIBA New Schools Exhibition.* At the county branch library, West Bridgford. MAY 23-28

**SOUTHAMPTON.** *Design Week organized by the Council of Industrial Design.* Details to be announced locally. JULY 11-16

**SOUTHEND.** *Allied Ironfounders' Exhibition Train.* Passenger Dock, Up Side, Southend Station. (Sponsor, Allied Ironfounders.) UNTIL APRIL 23

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

### COMPETITIONS

*Fleet Air Arm Memorial of the 1939-45 War, at Lee-on-Solent, for the Imperial War Graves Commission.* Premiums, £100, £60, and £30. Assessor, Edward Maufe, R.A. Conditions from the Secretary, Imperial War Graves Commission, 32, Grosvenor Gardens, London, S.W.1. Closing date, May 20, 1949.

*Design of Community Centre.* The Incorporated Association of Architects and Surveyors. Details to be announced by IAAS, 75, Eaton Place, Belgrave Square, S.W.1.

## NEWS

THURSDAY, April 21, 1949  
No. 2828 Vol. 109

News .. .. .	355
A New Building Centre .. .. .	356
This Week's Leading Article .. .. .	357
Astragal's Notes and Topics .. .. .	358
Letters .. .. .	359
The New Rotterdam Building Centre .. .. .	360
In Parliament .. .. .	360
Swiss Tourist Office .. .. .	361
Prefabricated Houses .. .. .	365
House at Highbury Park .. .. .	367
Information Sheets :	

30.D1 Extractor Ventilators .. .. .	To face page 368
2.H2 Characteristics of Common Geometrical figures .. .. .	

Technical Section :	
Information Centre .. .. .	370
The Building Programme for 1949. By Ian Bowen. .. .. .	373

*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.

### A PLEA FOR FREEDOM IN BUILDING was made recently by Mr. Nigel Hannen, President of the LMBA.

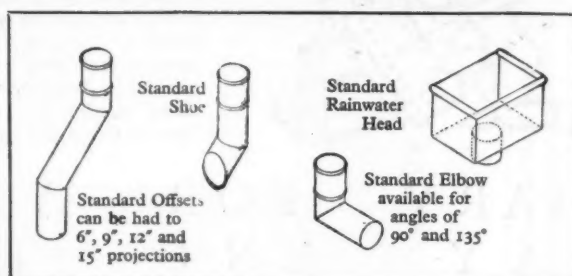
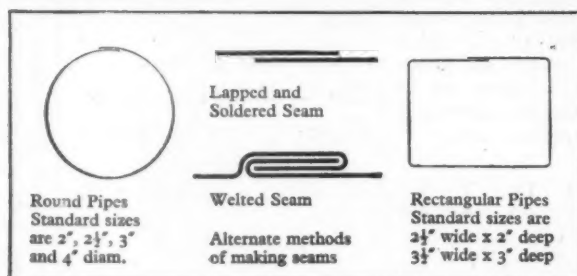
Mr. Hannen, who was speaking at a meeting of the Central Area No. 3 of the LMBA, said that the time has come when, given more scope for initiative, builders would be able to reduce costs, for, to them, it was a question of their livelihood. It was, therefore, the aim of the association to persuade the Government to return to them, at the earliest possible moment, the freedom that inspired enthusiasm and enterprise.

In the days following the war the association supported the rationalization of the national programme, but whenever supplies eased they had urged, and eventually obtained, an easement, or even de-control. Present conditions were not yet normal. There were still shortages of steel and softwood. There were still priority classes of work, which must be encouraged and unessential work which should be discouraged. The basic requirements of high productivity were an adequate supply of materials and fittings, a balanced labour force and a steady flow of work of all types. The prospects of achieving them were steadily improving.



# DATA SHEET FOR ARCHITECTS No. 2

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6', 7' and 8', complete with astragals and ears, are joined by slipping the lower end of each pipe into the top of the next for at least 2". Standard rainwater heads, offsets (swan-necks), elbows and shoes are also available. Further information on rainwater pipes, gutters and other uses of zinc in building can be had from the Association together with a list of publications.

### ZINC DEVELOPMENT ASSOCIATION

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## From AN ARCHITECT'S Commonplace Book

**VISUAL RE-EDUCATION.** [*From Buildings and Prospects, by John Piper (Architectural Press).*]  
The incorporation of Picasso and Matisse, Ernst and Miro into our visual philosophy may mean an uncomfortable stretching of the word "picturesque" to embrace our beliefs; but it is certain that if the lessons of these painters are properly learned "pleasing decay" will be found to have a very large place in our present-day visual consciousness. Their works must have a strong bearing on architectural and planning practice in the long run, and the shorter we can make that run the better. They prophesied the beauty as well as the horror of bomb damage, and as visual planners they are at the moment unrivalled. Bomb damage has revealed new beauties in unexpected appositions—a rich source of information for the planner who would retain picturesque elements from the past that can be opposed in size, colour and shape to new buildings and groups of buildings, whether by way of contrast or agreement. As to texture, modern painters have left few possibilities unexplored; surely their works are source-books that can inspire architecture in the future, as painters have inspired architects in the past? For the planner of the future, the visually re-educated planner, it will not be merely a question of retaining and incorporating the best existing buildings, but a question of using existing buildings that will be an enrichment, or will form a knot of interest, or allow an area of rest, or even a note of agitation.

### THE PARISH CHURCH OF COCKINGTON is to be restored.

Work is to commence on this church at Cockington, near Torquay, soon after Easter. Six years ago bomb-blast exposed serious damage to the roof from death watch beetle. £18,000 is needed for re-roofing. The parish has raised £3,000 and is now appealing for the balance. The church incorporates a chapel begun in 1070, and except for the Tudor sanctuary, most of the building dates from the thirteenth and fourteenth centuries. Donations should be sent to the Rev. F. Roy Chatfield, Cockington Vicarage, Torquay.

### THE NEED FOR EFFICIENT SOLID FUEL BURNING APPLIANCES in every home is stressed in the annual report of the Coal Utilization Joint Council.

The primary aim of the Council, says the report, is to promote the efficient use of solid fuel for domestic purposes by encouraging co-operation between the coal and appliance industries. Progress was made during the year because of the increase in the output of new appliances which were now coming forward in more than sufficient numbers, to meet the housing programme. However, progress was handicapped by the fact that the majority of homes were rented from landlords who had little inducement to incur capital expenditure on urgently needed improvements when, under the Rent Restriction Act, they could claim so little return on their outlay. On the other hand, the recent relaxation of the licensing restrictions, which now permitted up to £100 to be spent on repairs or improvements, had removed an obstacle that previously impeded the replacement of out-of-date appliances. The council were already directing much of their publicity to stressing the economical fuel consumption of the latest appliances and, in particular, the monetary savings that could be effected by their use.

A feature of the council's 1948 work was the inauguration of the "service and showroom scheme" in the north-western area; plans were already being made to extend this scheme to the remainder of the north of England during 1949, and it was hoped eventually to cover the whole country. This scheme, by making full use of the existing organizations in the appliance distributive trade, aimed at setting a high standard of

showroom display and technical service by solid fuel appliance distributors. The report points out that if the scheme realized the aims which the council had in mind, it would mean that the public would be offered a standard of service for solid fuel appliances which would not compare unfavourably with the service already available for users of gas and electricity.

### ECONOMY IN THE USE OF CEMENT is the subject of an investigation by the MOW.

As a result of interim reports made by sub-committees of the MOW committee set up to examine the possibilities of effecting economies in the use of cement, two economy memoranda have been prepared. These are: PI. 31/5, "Use of Cement in Housing and Small Scale Building," and PI. 31/6, "Use of Cement in Engineering and Large Scale Building." Copies may be obtained free of charge on application to the MOW, Room 611, Lambeth Bridge House, S.E.1. In Scotland, application



Sections of an aluminium pre-fab school, made by the Bristol Aeroplane Company (Housing) Ltd., being loaded for shipment from Weston-Super-Mare to Paris. The school has been erected in the Avenue Victor Hugo.

should be made to the Ministry's Scottish Office at 122, George Street, Edinburgh.

### ★ The Programme of the INTERNATIONAL ARCHITECTURAL STUDENT CONFERENCE has been announced.

This conference, which has been organized on behalf of the International Union of Students by the British Architectural Students' Association, will be opened at the RIBA on April 21, at 11 a.m., by Professor Sir Patrick Abercrombie, the Hon. President of the Conference. On Saturday, April 23, at 10 a.m., a discussion on "The Tasks of Architecture in the World Today," will be introduced by Mr. R. Furneaux Jordan. Mr. Arthur Ling will lead a discussion on "Town Planning for the People" at 10 a.m. on Monday, April 25. These meetings at the RIBA are open to all, as is the discussion on "Education for the Future," to be held at the AA on Tuesday, April 26. More details may be obtained from the Organizing Committee, 34, Bedford Square, W.C.1. Tickets for seven sessions may be obtained at 5s. from the same address.

### ★ An architect has been appointed for GLENROTHES NEW TOWN.

Mr. E. A. Ferriby, B.A., A.R.I.B.A., has been appointed architect and town planning officer to the Glenrothes Development Corporation, Fife. At the moment he is architect to the Northern Ireland Housing Trust, Belfast. He studied at Liverpool School of Architecture, Liverpool School of Civic Design, and also in New York. He has held appointments in Hull and Southampton and was principal assistant to Sir Lancelot Keay, P.R.I.B.A., at Liverpool.

### ★★ This year's CIAM SUMMER SCHOOL will be held from August 8 to September 3.

There are vacancies for some English post-graduate students at this international summer school of architecture which is being organized by the MARS Group on behalf of CIAM (Les Congrès Internationaux d'Architecture Moderne). Applications should be sent as soon as possible to the Bursar, 34, Gordon Square, W.C.1, and should be accompanied by not more than three sheets of drawings. The closing date for applications is May 8.



## A New Building Centre

On May 18, the date known throughout Holland as Reconstruction Day, the recently finished Rotterdam Building Centre will be officially opened as an international information centre and as a permanent exhibition for the building industry. The Centre will be controlled by a board consisting of representatives of the Dutch Ministry of Reconstruction and of the architectural, engineering, building and research organizations of the country. The intention is to provide, in addition to the

permanent exhibition, a comprehensive documentation service on sociological, architectural and technical matters, and to hold lectures and conferences (for which a separate hall has been built), in the hope that the Centre may become a focal point for the whole world on matters of building interest. The photograph above, of the main hall, shows the stairs that link the central exhibition space with the individual manufacturers' stands that line the periphery of the hall. See also page 360.

### *The PROGRESS AND AIMS OF THE ABT were recently outlined by its president, Mr. Kenneth Campbell.*

Mr. Campbell, speaking at the association's annual meeting, said that the success of the ABT was due to its affiliation to the TUC and also to the fact that its members had achieved a remarkable unity based on a common acceptance of certain agreed and well-understood aims. These aims were the

material welfare of members, the advancement and technique of builders and their industry, and the determination to use that technique solely for the benefit of fellow citizens. They could not fail while they clung to those aims, nor could sectional or private interests survive long among them. As a united organization they were infinitely stronger than the sum of their individual abilities.

However, the results achieved were only

a fraction of what they might be if the association had attained the size and membership of which it was potentially capable. At this stage recruitment was very largely a matter of personal contact and effort, but consolidation of their membership could only be achieved by the establishment of recognized gradings and scales all over the country. Their task now was to increase and extend their negotiations and agreements with every type of employer.

★★

**THE ANNUAL ELECTIONS OF THE AA COUNCIL***are to be held shortly.*

Mr. Henry Braddock, A.R.I.B.A., A.A.D.I.P., has been nominated President of the AA for the session commencing on June 1. The Vice-Presidents will be Mr. S. E. T. Cusdin, A.R.I.B.A., A.A.D.I.P., and Mr. Anthony Chitty, F.R.I.B.A., A.A.D.I.P. The names of new council members will be announced on May 25.

**NEWS IN BRIEF**

**Dr. T. W. Parker** has been appointed Deputy Director of Building Research in the Department of Scientific and Industrial Research. He joined the staff of the Building Research Station in 1930.

**Mr. C. E. Aspinall**, chief architectural assistant in the borough engineer's department at Bolton, has been appointed deputy borough architect to the county borough of Huddersfield.

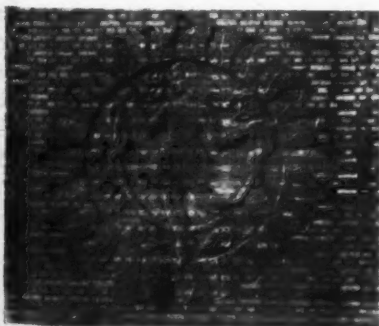
**The Architecture Bronze Medal** Award has been awarded to the late Professor Otto R. Salvisberg, of Switzerland, and Mr. C. Stanley Brown, of England, in recognition of the merits of their building, the Roche Products Building, Welwyn Garden City, by the jury appointed to select the work best deserving of such recognition among buildings completed during the eleven years ended December 31, 1948, in the counties of Essex, Cambridge and Hertfordshire.

**Mr. E. R. Phizacklea**, an architectural assistant to the urban district council of Thurrock, has been appointed senior architectural assistant to the Corporation of Boston, Lincs.

**Mr. W. C. Leslie-Carter**, F.R.I.C.S., M.I.N.S.T.T., has been appointed chief surveyor and architect at the headquarters of the Road Transport Executive.

**The Twenty-Third Annual Country Meeting** of the T.P.I. will be held in Folkestone from May 20 to 22, under the chairmanship of the President, Mr. James W. R. Adams. The Meeting will open on Friday afternoon, May 20, at the Hotel Metropole, when Mr. W. L. Platts will read a paper entitled *Administrative Problems in Relation to Securing Amenities*.

**Designs for a Royal Fusiliers' Memorial Chapel** in St. Sepulchre's Church, in the City of London, have been approved. Work on transforming the former graveyard into a Garden of Remembrance is nearing completion.



This low relief sculpture, carved in the brickwork of the tower of the new St. Nicholas School, Borders Lane, Loughton, was designed and executed by Mr. Barry Hari, assisted by Miss Aileen Hoey, for the Essex County Council.

**INTERNATIONAL STUDENTS' CONGRESS**

**F**ROM today, April 21, architectural students from all parts of the world will be meeting at the RIBA in London for the first international conference of architectural students ever held. The theme "unite and rebuild for peace" is a brave one, and at a time when post-war unity on any subject is fast disappearing it ill behoves anybody to disparage this youthful attempt.

The war-time organization of world food supplies still continues. Is it therefore too much to hope that the second essential to man's well-being, that of shelter, may prove to be a second subject for mutual co-operation between the nations? The architects' solution to the problem of providing homes and buildings for work, travel and play is always one of international interest, however varied the standards of living or how different the politics and customs of the countries concerned. The term "an international style," so often used before the war to describe an international taste or fashion, should surely mean an international appreciation of standards, of technique and of architecture without implying the loss of national tradition. If by this congress the students can prepare the way for future understanding on so wide a scale, they will have done more than a century of politicians.

The decision to hold a special architectural students' congress in London was made by the Council of the IUS at the international student congress in Prague of 1947. The leadership of the Architectural Faculty of the IUS was accepted by the British Architectural Student Association in the forming of the conference programme. The President of the RIBA will speak at the opening session, which will be followed by a reception for the delegates by the British Council. A day of visits to post-war buildings will be followed by five days of discussions on recent developments in British architecture, led by very well-known figures in the spheres of town and country planning, architecture, and building technique. The congress will also be concerned with the formation of a permanent international organization and with discussing the student's role in his own education, his place in the building industry and his position as a responsible member of society. In addition, there is to be an exhibition of students' work and a debate on architectural theory.

Here indeed is a formidable list of events which, coupled with the difficulties of language amongst the representatives of over a score of foreign countries, make this conference a very ambitious one. Nevertheless, this form of conference can never be a failure as it might well be in the sphere of politics. Out of the very effort of organization, out of the mere attempt to understand the problems of other nations, can only spring good. In the sphere of building it is not the differences between nations that emerge, but the similarities. The basic problems are the same, only in degree and detail do they



differ. These architects of the future will discover that the profession of architecture, in its true sense, has, like the profession of medicine, no national boundaries.

An attempt at collaboration on such a scale is all too rarely made by senior official bodies. It is refreshing that students have avoided the cynicism and pretentiousness that in their elders could make such endeavour futile: in this respect at least they have put away childish things.



*The Architects' Journal*

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

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

### CAMPDEN PRESERVE

It is, I suppose, typical of the human race that we have to spend more time and energy trying to stop events happening than we spend attempting to guide them along the right lines. Last week's meeting of the TCPA and the Campden Hill Preservation Fund illustrates the point. Nearly two hundred middle-class inhabitants of Kensington approved a resolution which opposed building of any description on the gardens between Campden Hill Road and Holland Park.

This nine-acre site, illustrated in last week's JOURNAL, is just a small portion of an area which should surely be dealt with as a whole—preferably on the lines indicated in the County of London Plan. Choice parts of the area should not be nibbled away by the LCC, nor left in abeyance by the Kensington Council, whose plans are still unknown. Neither should the energies of the inhabitants be dissipated on purely obstructive work when every effort possible should be made by all to get intelligent planning and reconstruction carried out.

A few flats on that site might be satisfactory (not, of course, at the

enormous density advocated by private enterprise for luxury dwellings or indulged in by the LCC elsewhere), especially if by so doing the more uneconomic buildings on other parts of the Hill could thereby be emptied, pulled down, and a reasonable mixture of flats and open space substituted. What an opportunity for Kensington Borough to show a progressive policy!

### POTTER'S NEW FIELD

One thing the Grenfell-Potter partnership never, to my knowledge, attempted in their BBC "How" programme was "How to Run a Magazine." Instead, Stephen Potter has been daring enough to replace satirical comment on the efforts of others with personal endeavour in the field of editorship. The first issue of his "replanned and repainted" version of Hulton's *Leader* magazine appeared last week. Though less revolutionary in appearance and content than had been rumoured—the current magazine formula of crime, pets, quizzes, doctor-casebook and James Laver is retained with only minor alterations—it is, in one instance at least, unique among magazines. Its weekly "Guide to the Arts," in which marks are awarded for merit, actually includes *architecture*. (Last week's list was Tecton's Rosebery Avenue flats, 80 per cent.; Miner's Welfare Buildings at Comrie, 70 per cent.; Sheppard's Aluminium School, 60 per cent.)

Full marks to pioneer Potter for re-introducing the long-lost habit of architectural criticism, or nearly full marks—say 80 per cent. (20 per cent. deducted for not giving architects' names).

### AA GIRL MAKES GOOD

Astragal's congratulations to Carmen Dillon, ex-AA student, who has been awarded an "Oscar" for her work as art-director of the film of *Hamlet*. Since she left architecture for

films (or should one merely say since she left permanent buildings for temporary sets?) Miss Dillon has risen higher in the art-directing world than a woman has ever done before. She has been concerned with several films which will be remembered for their distinguished architectural settings, including the charmingly stylized *King Henry V*. Another feather in the AA's cap.

### MARTYR TO OUR ART

An architect who was looking for a house in a town where they are specially scarce was told of one which had just come into the market. The district and price were both reasonable, so the architect went to look.

The house was, in truth, something special—an amalgam of all the advantages offered in the fruitiest of pre-war housing estate puffs: parquet, strip and rubber floors; luxurious flush doors on which the veneer looked like a varnished display of oysters; immersion heater and cream-enamelled boiler; a kitchen panelled with metal cabinets; wash-basins in the bedrooms, and so on. All were there down to draught-excluders and oil silk shower curtains in the bathroom. It seemed absurd not to take it at once.

The only hitch was that all the other things were also there. It had bay windows, lead casements, touches of stained glass and brick battlements. In the living room was a 7-foot fireplace—a ghastly mass of moulded blue toffee—and upstairs there were several small pink offspring.

The architect told me that as he went over the house he thought quite seriously of taking it and then trying to pass it off as a joke, or of making it a place of pilgrimage. But he did not take the house. Removed a few hundred



*A shelter hut at Christchurch camping ground in the Forest of Dean. See Astragal's comment.*



## LETTERS

W. Kretschmer

John G. Jefferson,  
M.I.C.E., M.I.Mun.E., M.T.P.I.

## LCC Housing

SIR.—As a former member of the Housing Architect's staff I was pleased to hear "The Critics" call attention to the low quality of LCC housing. But it is unfortunate that they concluded by putting the blame on "the architects of the Housing Department." This, I feel, is quite unjust.

The vast majority of the Housing Architect's staff are painfully aware of the poor standard of their department's work, but under the existing organization they have no power to improve it. They are as eager and quite as capable of producing imaginative schemes and good architecture as any group of architects—provided they are given the opportunity.

The present controversy will have been useful if it becomes the starting point for joint action by the LCC staff and the profession as a whole. Here, then, is a practical suggestion for responsible organizations of the profession—such as the RIBA and the ABT—to join forces and contact a representative cross-section of the Housing Architect's staff. Together they should find out where the difficulties lie and how they can be overcome.

One of the first things to emerge, most probably, will be the need for LCC Housing to become once again the responsibility of the Council's architect.

The work of the committee that I have suggested—or whatever it may choose to call itself—will be slow and difficult. It will have to convey its findings to the proper authorities and not rest until the suggestions are carried out. And it will need the whole weight of the most influential professional bodies to make any impression at County Hall. But any effort will be small by comparison to the ultimate result which could easily be to make the largest housing authority in the world also the most enlightened and progressive.

London.

W. KRETCHMER

## Chichester Planning Proposals

SIR.—Arising out of the note on Chichester which appeared in your issue of March 24, 1949, I think that your readers might be interested in the following facts:—

The proposal to construct an inner ring road around the centre of Chichester was put forward by my predecessor (Mr. M. W. Robinson) as long ago as 1943. The route then suggested was substantially the same as that now proposed by Dr. Sharp.

While I am in general agreement with the proposal to provide an inner ring road and to use every possible inducement to make traffic follow that route, I am doubtful as to the proportion of the town traffic which would, in fact, use it in preference to the four main streets. A traffic census has indicated that it might be no more than one fifth!

The footpaths in East Street are far too narrow for present day requirements and there seems to be general agreement that, at any rate in part, they should be widened.

Some increased width for pedestrians can be achieved either by narrowing still further an already narrow carriageway or by setting back (possibly on ground floor



Mr. R. E. Enthoven, President of the AA, and Mrs. Enthoven, receiving the President of the RIBA and Mrs. Waterhouse at the AA's annual reception.

yards from the frig., loft ladder and immersion heater, he could anticipate too well the horror of those future, long-continued jokes.

The end of the story makes one wonder if this kind of house can be too perfect even in times of great shortage. The architect expected that a dozen people would take it the first day. Instead it was still being advertised a fortnight later.

## DOWN IN THE FORESTS SOMETHING HAS STIRRED

Following up my recent note of trees, I have been looking at the guides to National Forest Parks, which are published by the Stationery Office. Snowdonia, the Forest of Dean and Argyll are the subjects of the guides that have so far appeared. They have chapters on History, Geology, Plant Life, Insect Life, and so on. It is interesting to note that the first National Forest Park, the Forest of Dean, was founded in 1938.

There are also many isolated areas of Forestry Commission woodlands now open to the public. These Forest Parks have received little publicity, and the facilities, which include "official" camping grounds, deserve to be more widely known. It is, however, regrettable that the shelter hut (shown opposite) in the Forest of Dean is an unworthy a piece of architecture.

## NIP OFF FROM NIPPON

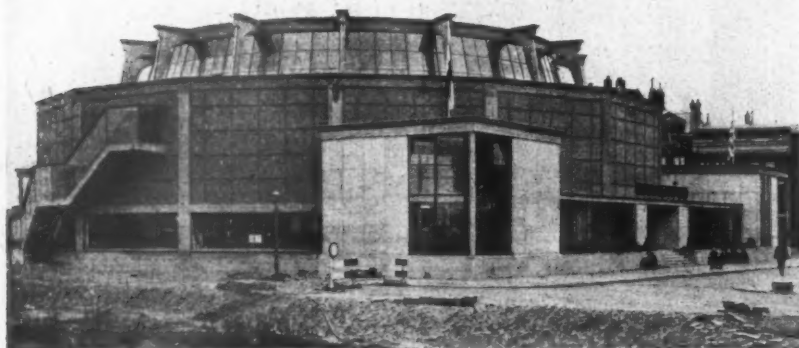
The September issue of the *Kogei News*—a Japanese art magazine which looks as if it had been knitted rather than printed—contains an article by Mitsuo Yamagata on the *Architectural Review*, practically the only British art magazine, says the author, at present available to Japanese readers.

After a preliminary survey of the *Review's* make-up, a raised eyebrow over the apparent paucity (by American standards) of editorial departments, Mr. Yamagata tucks up the sleeves of his kimono and lays about him with determined courtesy. "One of the disadvantages of the *Review*," he writes, "is its use of inexplicit words and expressions, in conformity with King's English but not so lucid as American English . . . it lacks the brightness of America, but its steadiness resembles that of British history . . . etc., etc."

The *Review* layout, typography and system of captioning (so often criticized by the inscrutable occident) have no terrors for Mr. Yamagata (whose own paper, after all, has to be read backwards and from the bottom of the page up), but he rightly castigates the Occupation Authorities for officially listing the *Review* as an American publication—an added injury to the old insult printed on the last page of every issue: "Entered at the New York Post Office as Second Class Matter." Passed to you, General MacArthur, with a sturdy Banzai from No. 9 Queen Anne's Gate.

ASTRAGAL

## THE NEW ROTTERDAM BUILDING CENTRE



*This building, which was illustrated as a project in the JOURNAL for February 12, 1948, has been open to the public since December 24, but the official opening will not take place until May 18. Designed by J. W. C. Boks, a Rotterdam architect, the building has a circular plan in order to provide the greatest possible area for exhibition stands. The building is constructed with a reinforced concrete frame carried on 176 concrete piles. The exterior walls are of cavity construction, the outer skin being half-burnt paving bricks, and the inner of sand-lime bricks and insulating blocks, finished with plaster. Floors in the exhibition areas are screeded with carborundum cement. Staircases are of vibrated reinforced concrete, with the exception of the stairs to the restaurant, which have steel stringers and glass treads. Top, a general view showing the main entrance on the right. Left and below, views of the exhibition area.*



only), as they are rebuilt, some of the buildings which for one reason or another have to be reconstructed.

In my report to the County Planning Committee in December last I expressed the following opinion:—

"Everyone would agree that to lay down a widening line on plan in an arbitrary manner without any regard to some of the existing (and very lovely) buildings in Chichester's main streets, would be just as absurd as to take no advantage whatever of securing a chance of widening—if only to increase the width of the footpath—as opportunity arose in the schemes for rebuilding some of the existing (and perhaps less attractive) properties."

Provision for the kerbside waiting of vehicles is a very difficult problem. Adequate car parks near to the inner ring road and within the central area will naturally have to be provided. Access to the rear of the shops for loading goods vehicles is most desirable; but even if and when these are made available (and it is likely to take a considerable time) is it reasonable to suggest that the carriageway of the main shopping street in Chichester should, throughout its whole length, be made so narrow that there can be no waiting whatever?

During the past twenty years a number of buildings in the main streets of Chichester (including the General Post Office) have successfully been rebuilt to a line set back from the main frontage line without detriment to the quality or character of the City. I believe that if, with careful architectural control, and with due regard to the buildings of historic or aesthetic interest, this process can be continued in certain defined lengths in the main streets of Chichester, the effect will be to enhance rather than detract from the charm of those streets.

The problem is still under discussion between the two Authorities concerned.

JOHN G. JEFFERSON,  
County Planning Officer,  
West Sussex County Council.

Chichester

## In Parliament

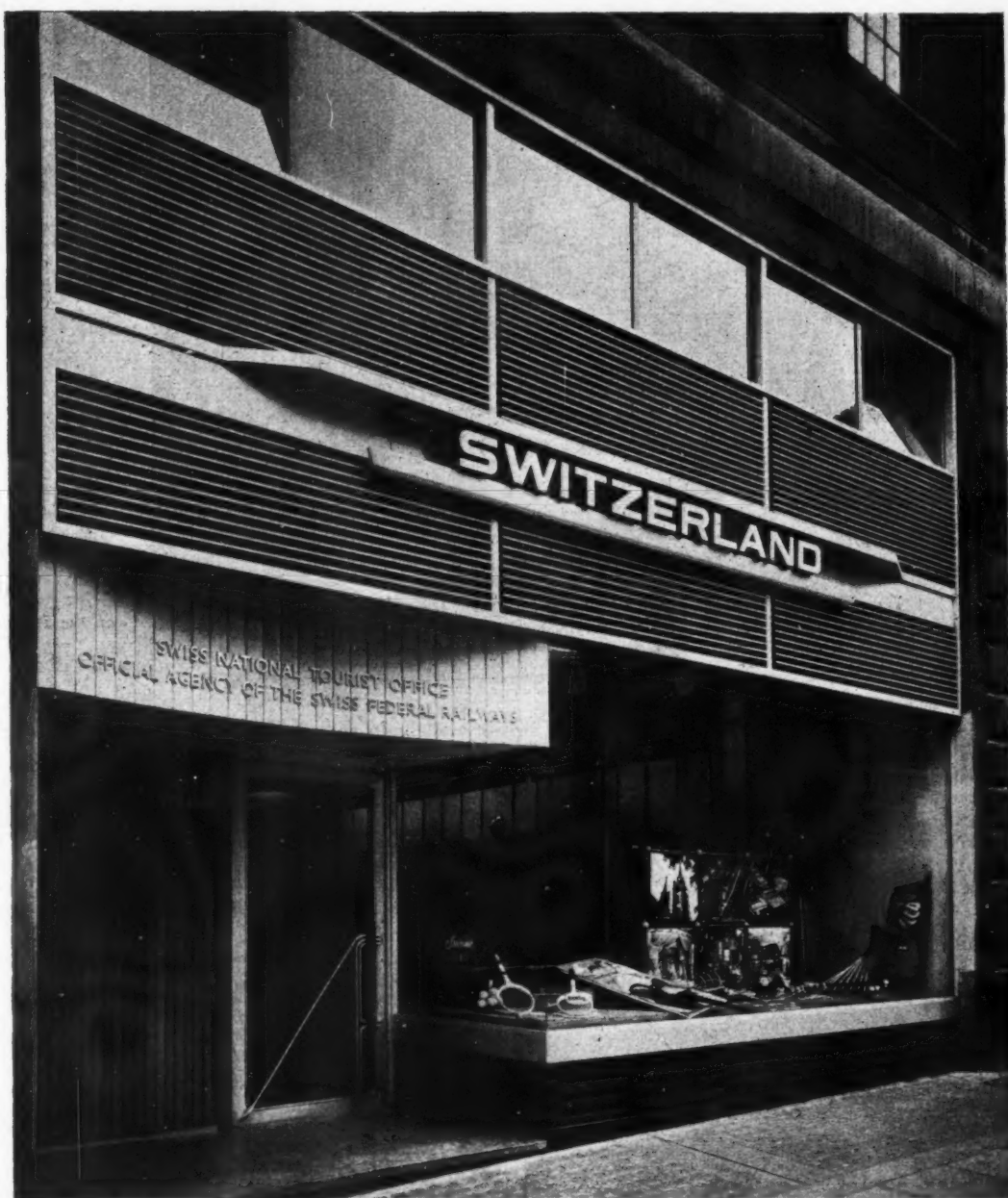
A number of questions about the appointment of architects to regional hospital boards were put to the Minister of Health by Mr. G. M. Sharp (Lab.—Spen Valley).

He asked how many regional hospital boards had appointed full-time architects; how many others had invited applications for such appointments; for what reasons these were justified; and whether the work of the regional architect was advisory or executive in character, and included work initiated by hospital management committees under the boards.

Mr. Bevan said that 12 regional hospital boards had appointed full-time architects. Of the remaining two, neither had yet invited applications for such appointments. The regional boards were responsible for all capital works of construction, reconstruction and adaptation at non-teaching hospitals, and also for the supervision of major schemes of building maintenance.

The majority had found that this necessitated the employment of full-time professional officers. The work of the regional architect might be both advisory and executive and include the handling of proposals designed to meet needs made known to the boards by hospital management committees.

When Mr. Philip Piratin (Comm.—Mile End) asked the Minister for an estimate of the additional cost to the building of a house as a result of the increases in the price of iron and steel, Mr. Bevan replied that for an average house it would be trifling.



# SWISS TOURIST OFFICE, LONDON

DESIGNED BY ALFRED ROTH OF ZÜRICH

ASSOCIATED ARCHITECTS: T. P. BENNETT & SON

**GENERAL.**—The site is at the Trafalgar Square end of the Strand, and the purpose to provide office accommodation and a reception room for intending travellers for the Swiss National Tourist Office. It provides information about travel to Switzerland and sells travel tickets of all kinds.

**CONSTRUCTION.**—Existing steel framed building, with hollow tile floors. New partitions: 3 in. hollow tile and steel.

**ELEVATIONAL TREATMENT.** Shopfront designed in natural anodized and stove enamelled aluminium. The plinth grill and

the step are in Belgian black granite and the facing to the entrance lobby is in solid natural oak vertical strip.

**INTERNAL FINISH.**—Reception room: floor—black marbled sheet rubber. Shopfittings, wall to sitting corner and the counter and





SECTION SHOWING METHOD OF FINISHING THE WOODEN FRONT OF THE COUNTER

(Scale :  $\frac{1}{2}$  full size)

Left : general view of the interior.

other fittings are all in natural oak with aluminium skirtings and trim. The sitting corner with its seat in red hide provides a comfortable waiting space for the public while tickets are being prepared. All light fittings are for fluorescent tubes and purpose-made to shine on to the walls and picture feature at the rear of the room. Walls are finished in matt oil paint. The picture frames contain lithographed

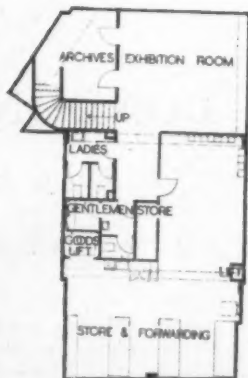
views of Switzerland and are readily interchangeable. Steel desk units under the counter were supplied from Switzerland. The facing to the false ceiling over the sitting corner is in a special ribbed Swiss insulation board. Staircase is in steel with a polished aluminium balustrade and open risers in the upper flight. Remaining offices : brown linoleum floor, matt paint in shades of grey and

cream. Standard fluorescent light fittings.

SERVICES. — Central heating. GPO and inter-communicating telephones. Electric goods lift to basement and hand lifts for papers between office floors.

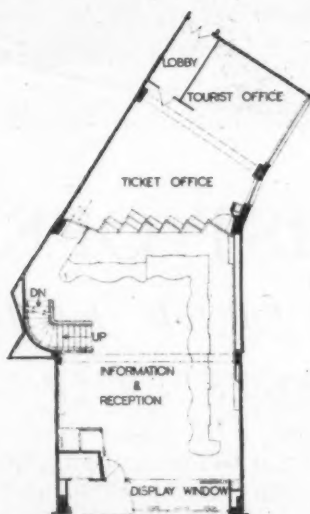
The general contractors were F. G. Minter, Ltd.

For list of sub-contractors see page 374.

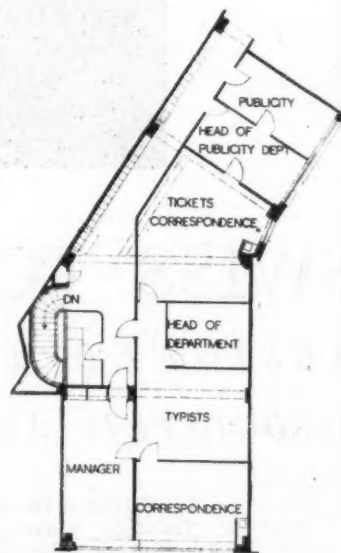


BASEMENT PLAN

(Scale :  $\frac{1}{4}$ " = 1'0")



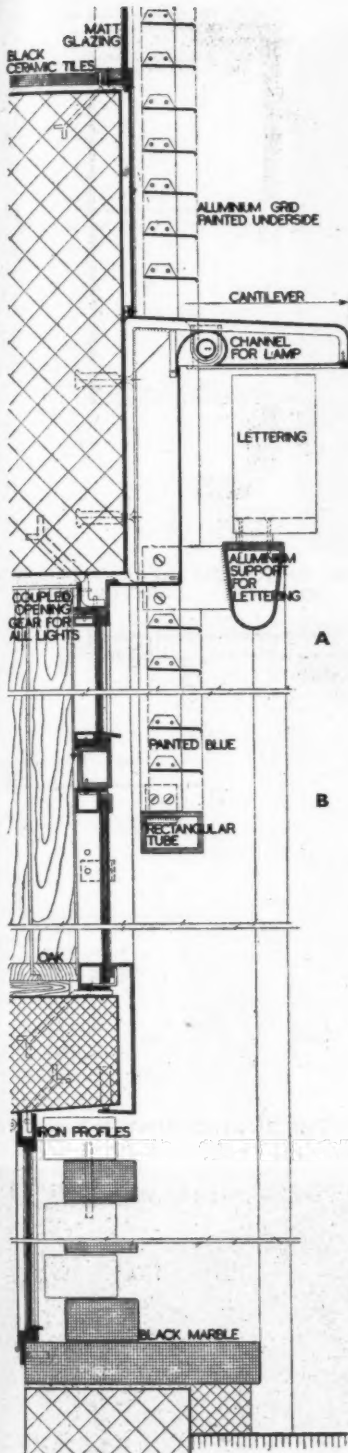
GROUND FLOOR PLAN



FIRST FLOOR PLAN

S W I S S T O U R I S T O F F I C E



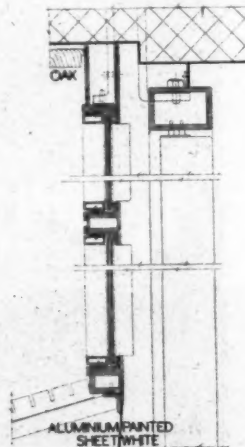


**SECTION THROUGH  
FRONT EXTERNAL WALL**  
[Scale:  $\frac{1}{2}$  full size]

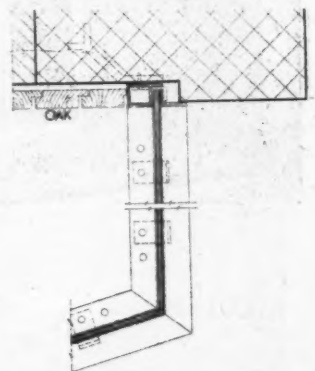
Above; the section shows details of the aluminium grid and the large shop window. Right: plan at A shows the opening lights behind the grill and the junction with the aluminium sheet over the entrance. Plan at B shows the junction at the corner of the window.



Above: the staircase as seen from the information and reception area.

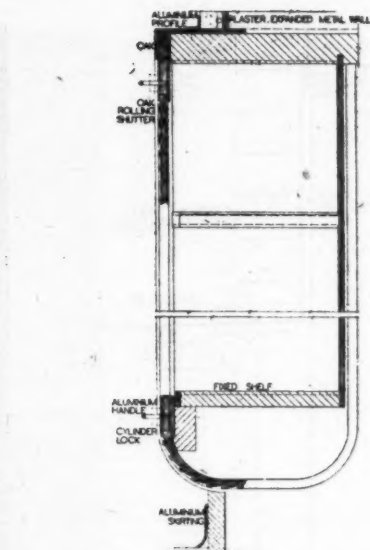


**PLAN AT A**  
[Scale:  $\frac{1}{2}$  full size]

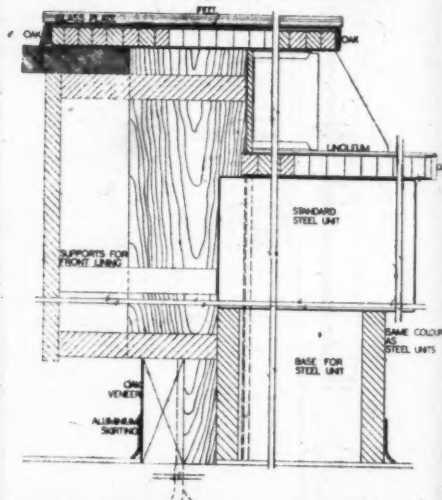


**PLAN AT B**  
[Scale:  $\frac{1}{2}$  full size]

DESIGNED BY ALFRED ROTH

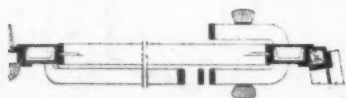


SECTION THROUGH REAR FITTING OF COUNTER [Scale:  $\frac{1}{2}$  full size].



SECTION THROUGH COUNTER [Scale:  $\frac{1}{2}$  full size].

Above : the shop from the foot of the staircase. Below : left, detail of the entrance ; right, the sitting corner.



HORIZONTAL SECTION OF DOOR [Scale:  $\frac{1}{2}$  full size]



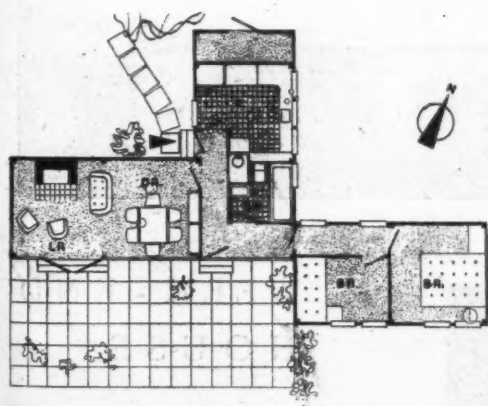
S W I S S T O U R I S T O F F I C E



# PREFABRICATED HOUSES

DESIGNED BY NOEL MOFFETT

I. HOUSE AT GREACEN: EIRE



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

Above, house at Greacen from the south; below, three views of the house at Greacen from: left, north-west; centre, west; right, east.

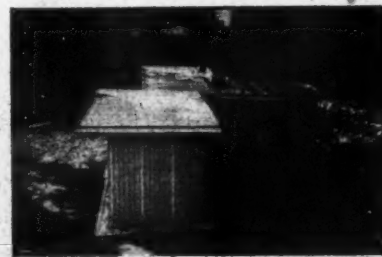
**GENERAL.**—The construction of the three houses illustrated, is based on a standard system of prefabrication. The house at Greacen is built exactly in accordance with the system outlined below. The other two houses have an external finish of plaster (rough-cast and smooth) on wood-wool slabs attached to angle-iron framing, in place of corrugated asbestos.

**FLEXIBLE UNITS.**—The units are designed to give maximum adaptability of plan and construction, and can be arranged to suit different kinds of sites, resulting in a pleasing relationship of form, texture and colour. The accommodation provided in any house can be added to, or subtracted from, rapidly and economically.

**FRAMING.**—Steel stanchions every 9 ft. bolted down to concrete point foundations forming part of overall site concrete. Steel beams at roof-level take roof panels. Framework is designed to take a second storey if required.

**WALL PANELS.**—Light steel or timber framing. Outer lining of varying materials as they become available, such as coloured plastic slabs, waterproof plywood, patent hardboards or sheet steel. Inner lining of hardboard, painted or papered, plaster or plaster slabs, plywood panelling or coloured plastic slabs, Cabot's quilt insulation in the central air space. Windows of wood or metal.

**INTERNAL PARTITIONS.**—Are of same size, construction and







## 2. HOUSE AT HEGARTY

The construction of the house at Hegarty is based on the system of construction outlined here. Above, model of the house. Right, the house from the south and from the west.



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

materials. All wall panels are delivered to site complete and ready for erection and are 9 ft. 3 in. high and either 3 ft. or 6 ft. wide.

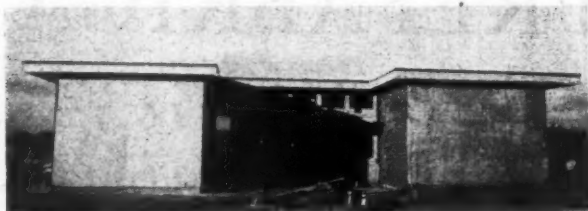
**FLOOR PANELS.**—9 ft. by 9 ft., of T. and G. boarding on wood joists.

**ROOF PANELS.**—9 ft. by 9 ft., of two or three layers of bituminous material on 1-in. boarding on wood or light steel ceiling joists. Ceiling of hardboard, plywood panelling or plaster on plate plaster slabs. Cabot's quilt insulation.

**PLUMBING.**—All internal piping

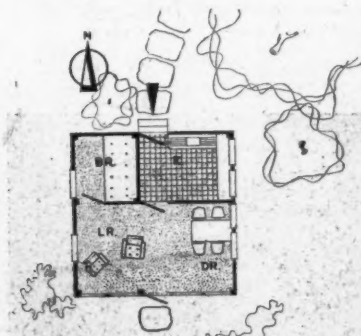
is contained in a horizontal duct situated between kitchen and bathroom. Drainage runs direct from this duct to sewer or septic tank.

**HEATING AND HOT WATER.**—Living room heated by open fire-place or stove. Other rooms by plug-in electric fires or ceiling radiation system. Hot water provided either by (1) piping from water tank built in behind living room fireplace or stove; (2) hot water heater in kitchen back to back with cylinder in hot press; (3) immersion heater in cylinder for use when living room fire is not lit.



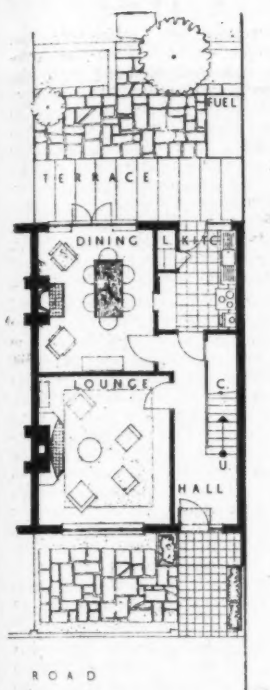
## 3. WEEK-END HOUSE

Left: week-end house from the south. The construction of this house is based on the system outlined above.

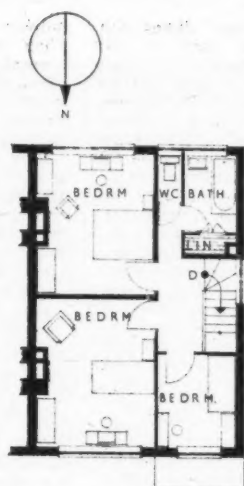


PLAN [Scale:  $\frac{1}{4}$ " = 1'0"]





GROUND FLOOR PLAN

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

FIRST FLOOR PLAN

Right, front elevation;  
below, left, the lounge;  
and right, the kitchen.



# HOUSE AT Highbury Park

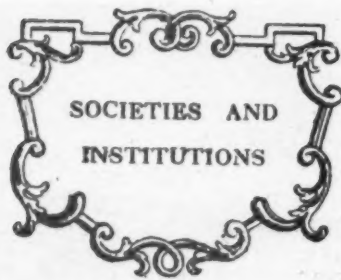
DESIGNED BY EDWARD D. MILLS

**GENERAL.**—Stephen House is the end house of a terrace which was completely demolished as a result of enemy action during the war. The rebuilding was carried out on a Cost of Works War Damage claim and the client was anxious to erect a compact modern dwelling at no greater cost than rebuilding the house in its original

form. This was achieved with the approval of the War Damage Commission by simplifying the external design, omitting the shallow bay windows on the road elevation, and using carefully selected fittings and a cheerful internal colour scheme. Special fireplaces were designed for the ground floor living rooms, and the

open fires in the bedrooms replaced by electric fires. In order to conform to the general lines of the rest of the terrace, the same facing bricks have been used and the tiled pitched roof retained. The general contractors were James Webb and Son Ltd. For list of sub-contractors see page 374.





*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.*

## MOW

### Sir Owen Williams and John Gloag

April 5. At Abell House, S.E.1. Extracts from a debate on MODERN BUILDING—IS IT AN ART OR A SCIENCE? held by the MOW Arts Society. The chairman was Sir Eric de Normann.

**Sir Owen Williams:** Is modern building an art or a science? It could be either, it could be neither, it could be both. Modern building is the act of putting things up. Architecture is the delineation of things even before they are put up, and that is quite different, because modern building, the doing of things, is a laborious process of putting things together. I do not think that is what is in the minds of the people here at this discussion. I don't think they want to know what the workman on a site thinks of, other than profit, when he is putting up a building. Well then, what is architecture, or what is building? We have to think first of all that if the outside temperature was over 65 deg. and there was no rain and there was no wind, then there would be no building. We would not have lights or walls. In the process of dealing with the elements you build a structure which necessarily weighs something and then you need constructional ability. You must apply yourself solely to the problem of keeping humanity free from the ills caused by temperature, wind and rain; that is, as far as I can see, a definition of architecture or, possibly, the nature or the rudimentary origin of architecture. What is art? Art is the performer itself; the actual operation of putting something down. You can have supreme art and clumsy art. What is science? It is only knowledge; and knowledge is not anything until it operates, but science in operation and moving into the performance of things

is art. Art is the performing of things with knowledge; knowledge by itself is just thinking. It really turns round very much on the difference between a definition of an architect and an engineer. If the engineer actually applies in all his various works, or any of his operations, practical content of buildings, he is automatically in nature an architect. If the architect thinks about his constructional problem, then he may remind himself that he is also an engineer. One can be a bad architect or a bad engineer. The engineer may only know about stresses and strains and other theoretical matters. There is nothing so bad as a building without science and there is nothing so bad as a scientific building without art. Do not mistake my bringing in the word "art." There has always been this ridiculous, nonsensical competition between art and science. Building is both an art and a science, but it is probably neither.

At the end of the debate Sir E. Owen Williams summed up by referring to various points raised. The following are extracts from his remarks: A nearby power station has been quoted as an example of excellent architecture, the inference being that we shall have wonderful brick edifices. This is nonsensical, as a great deal of time will be spent on producing outstanding architectural masterpieces from which we shall obtain no electricity.

Another topic raised was "the builder." The builder is really an employer of labour. A friend of mine, who was a B.Sc., thought the world did not know enough about construction. He thought he ought to take up construction. And he did. After a few years he decided the trouble lay with defaulting foremen putting men on the books who did not exist.

The word "beauty" was mentioned. I must stress that beauty is not a method of approach in design. It is a reward from God for doing the job given to you in the best way possible. Taste is not an employment of design. Taste is the employment of appreciation by untutored outsiders, but not the process of approach by a designer, and it does it through his logic and his knowledge.

Piccadilly Hotel was mentioned. It has never been a success—it never would be, whatever happened to it. I always remember when I designed the Dorchester, although I left it of my own accord. I remember it being said to me, "it is surprising that there is not an hotel in Europe which is successful and which was originally designed as an hotel," and that "every hotel which has been designed as an hotel has been a failure." Take the Ritz—it is an impossibility. All were done with a view to elevation.

I have practised solely as an architect and an engineer ever since I designed the Dorchester. I do everything myself, every drawing, every elevation and all the designing. I cannot see how any man can plan a building unless he is a master of construction.

**John Gloag:** So many people, when they address their attention to problems of building and are prepared to pronounce judgments on whether building is an art or science, betray the fact that they or their parents or, perhaps, their grandparents, were infected with the great Morris Movement of the mid-nineteenth century.

I suppose that the greatest possible harm which could be done about the subject was done by the handicraft movement in the mid-nineteenth century. It confused the issue gloriously and at a time when the issue was going to be clarified.

During the early part of the nineteenth century some extremely fine architecture was produced by people we call engineers. For instance, the Stephenson, father and son, produced some first-class industrial architecture. Some of their bridges and their

railway architecture was admirable, but when the architect embarked on the architectural field and tried to cope with the needs of contemporary industry of the nineteenth century he produced entrances to tunnels which looked like gateways to medieval castles. You have all seen the building used for housing the great Exhibition of 1851. Someone who knew how to use that extraordinarily useful metal, cast iron, and glass produced a design at which the architects turned up their noses. Later, however, in the nineteenth century Ferguson paid a belated tribute to the Crystal Palace.

I have always thought that architecture, and indeed building, except when you are building monuments or monoliths, is the enclosure of space to provide shelter. That is all quite simple. For example, take those early American settlers, the Red Indians. They were architects up to a point. They could produce a skin tent capable of keeping out the rain and biting winds of the plains of North America. But where does this discussion lead us to? Is modern building an art or a science? Modern building is surely concerned with providing shelter, enclosing space, shall we say, to give the best possible convenience for people at work. As Sir Owen Williams said, it is extremely difficult to record it as either an art or science.

There is a feeling abroad today that unless an idea or job of work is endorsed by a scientist it cannot be sound, and that unless it pleases the people it cannot be good. The question of whether modern building is an art or a science is going to be fought out by people who have not the faintest conception of what either of these words mean. And behind it all is the scientist with his arrogant complacency. Behind that man you have a by-product of the scientist, and that is the man who is, today, in control of planning. He is the economist.

### THE ARCHITECT AND ENGINEER

Now, in my view, which dates, perhaps, from my early training, there is only one man who is fit to do any planning at all. That is the architect. I say that without any suggestion of minimizing the importance of the engineer. The history of the nineteenth century has proved that an engineer, while occasionally being a good architect, is very often likened to a feckless barbarian when he has been employed by an industrialist.

One has only to look at the large area of country which lies between Birmingham and Wolverhampton to realise what can be done by engineers. The architect is the only man with a trained imagination who has a sense of social responsibility, and he is the only man who should be in charge of large-scale planning in this country. But what are you going to do about this? How are you going to establish as technicians that modern building is an art or a science? Surely you can only do it by letting the people know how architecture affects their lives. People do not realize today that anything that is built for them will in all probability have to stand for their lifetime. The task of educating people is only just being tackled. I am optimistic, but even so I think it will take 150 years to undo the work of the first Industrial Revolution, which, of course, was helped by the engineers. And we shall never undo it unless you, as practising technicians, always fight for your work against the majority vote.

Just for the sake of expediency I feel that the word "art" should be left out of it. People have the wrong ideas about artists. I should also advise you to avoid the use of the word "science." Everybody thinks the scientist can produce a remedy for anything. But the people who can redress the state of affairs are the people who can plan with imagination, like those original architects and engineers who carried out the Tennessee Valley Authority Scheme.

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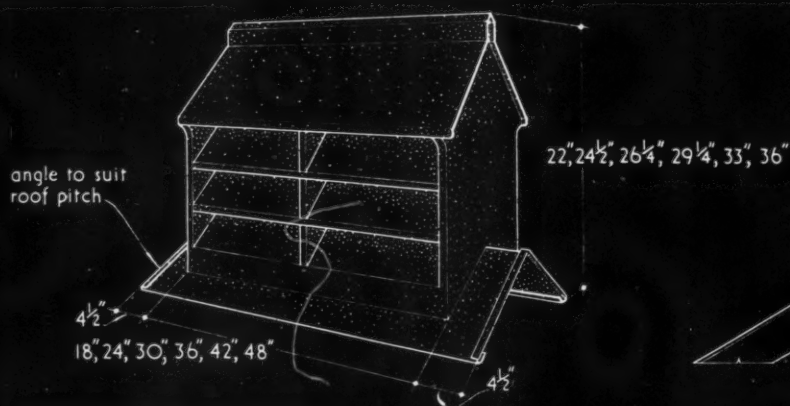




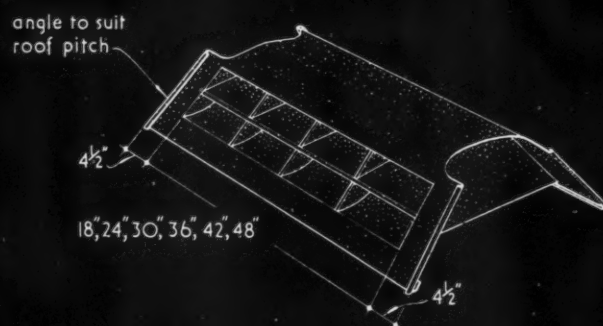
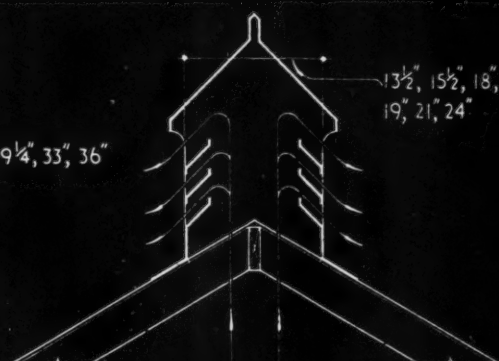
# VENTILATION | NATURAL

30.D1

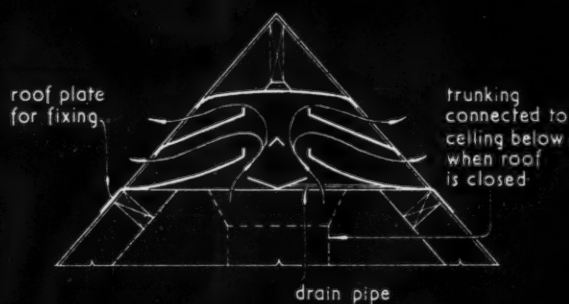
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CREST TYPE ROOF VENTILATOR.

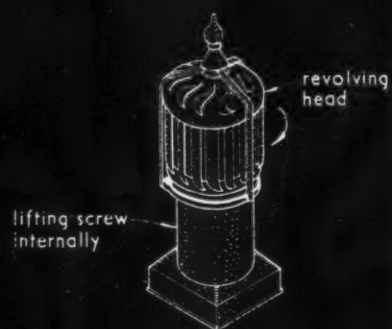


CONCEALED TYPE ROOF VENTILATOR FOR OPEN ROOF.



EXTRACTOR VENTILATOR NO. 1107.

dia of stem	size of base	dia of stem	size of base	dia of stem	size of base
6"	8" x 8"	10"	12" x 12"	18"	22" x 22"
8"	10" x 10"	12"	15" x 15"	21"	24" x 24"
9"	11" x 11"	15"	18" x 18"	24"	28" x 28"



ARCHIMEDEAN VENTILATOR.

dia of stem	size of base	dia of stem	size of base	dia of stem	size of base	dia of stem	size of base
4"	6" x 6"	11"	13 1/2" x 13 1/2"	18"	22" x 22"	28"	32" x 32"
6"	8" x 8"	12"	15" x 15"	20"	24" x 24"	30"	35" x 35"
8"	10" x 10"	13"	16" x 16"	22"	26" x 26"	32"	37" x 37"
9"	11" x 11"	14"	17" x 17"	24"	28" x 28"	34"	39" x 39"
10"	12" x 12"	16"	19" x 19"	26"	30" x 30"	36"	41" x 41"

TYPICAL EXTRACTOR VENTILATORS.

Manufacturer: G. A. Harvey and Co. (London) Ltd

### 30.D1 EXTRACTOR VENTILATORS

This Sheet describes a range of extractor ventilators. Those illustrated are typical of the range manufactured. The numbers given are manufacturer's type numbers.

#### Crest Type Roof Ventilator

This is designed for fixing to pitched roofs, and when ordering, the pitch of the roof and whether it is slated or otherwise should be clearly stated. It operates as an efficient air extractor either with open types of roof or in conjunction with trunking, where the roof space is closed off by means of a ceiling. This type is available in zinc, galvanised steel or copper, in the range of sizes shown on the face of this Sheet.

#### Concealed Type Roof Ventilator

This is designed to be installed flush with the roof line and is suitable for open or closed roofs. The setting of the louvres is arranged to minimise draught. This type is available in any size in copper, zinc and galvanised mild steel and to suit any pitch of roof, which, together with the type of roof covering, should be stated when ordering.

#### Extractor Ventilator Type 1107

The example illustrated is typical of a wide range. There are no moving parts and the efficiency does not, therefore, depend on regular servicing. This type is supplied either for fixing to pipes, roof slopes, flat roofs, or at the ridge of pitched roofs and is available in zinc, galvanised steel or copper.

#### Archimedean Ventilator

This ventilator is designed on the principle of a lifting screw in a circular shaft which is rotated by air currents driving winged vanes. The head revolves

on hardened steel bearings in oil reservoirs which are easily filled from the outside. The action of these ventilators is such that they are silent in operation. The head is of tinned steel, enamelled: stems and bases of galvanised steel. The ventilators can also be supplied in copper or zinc. They are made for fixing to existing piping, roof slopes, flat roofs or at the ridge of pitched roofs.

#### Further Products

Flèche type extractor ventilators with and without weathervanes, lobster-back ventilators, louvre ventilators for roofs, walls and ceilings, air inlet ventilators, tubes and wall panels, ventilation ducts, piping and accessories, perforated ceiling panels, hit and miss ventilators, weathervanes, chimneys and smoke cowl including down-draught preventors, tall-boys and elbow pots, elbow chimneys and revolving cowls.

This Series of Sheets deals with tanks, cisterns, bins, bunkers, cycle-racks, non-ferrous metal mouldings, perforated and embossed metals, woven wire screens, steel partitions and furniture, railings, fencing, gates, manhole covers, rainwater goods and ventilators.

*Compiled from information supplied by:*

**G. A. Harvey & Co. (London), Ltd.**

Head Office: Greenwich Metal Works, London, S.E.7.

Telephone: Greenwich 3232 (20 lines).

Telegrams: Cheaper, Wol, London.

London Office: 58, Victoria Street, S.W.1.

Telephone: Victoria 4963.

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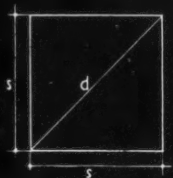
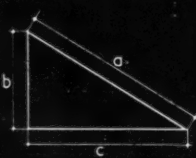
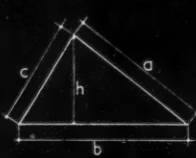
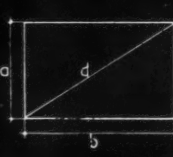
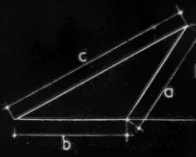
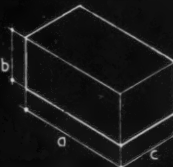

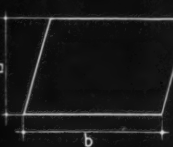

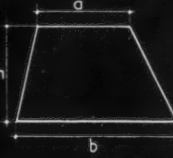

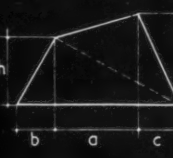


## BUILDING SCIENCE | MENSURATION

The Architects' Journal Library of Information Sheets 164. Editor: Cotterell Butler, A.R.I.B.A.

2.H2

2.H2

 <p>square</p>	<p>A = area  <math>A = s^2</math>  <math>A = \frac{1}{2} d^2</math>  <math>s = 0.7071d = \frac{\sqrt{A}}{2}</math>  <math>d = 1.414s = 1.414\sqrt{A}</math></p>	 <p>right-angled triangle</p>	<p>A = area  <math>A = \frac{bc}{2}</math>  <math>a = \sqrt{b^2 + c^2}</math>  <math>b = \sqrt{a^2 - c^2}</math>  <math>c = \sqrt{a^2 - b^2}</math></p>
 <p>cube</p>	<p>V = volume  <math>V = s^3</math>  <math>s = \sqrt[3]{V}</math></p>	 <p>acute-angled triangle</p>	<p>A = area  <math>A = \frac{bh}{2} = \frac{b}{2} \sqrt{a^2 - \left(\frac{a^2 + b^2 - c^2}{2b}\right)^2}</math>          if <math>S = \frac{1}{2}(a+b+c)</math> then  <math>A = \sqrt{S(S-a)(S-b)(S-c)}</math></p>
 <p>rectangle</p>	<p>A = area  <math>A = ab</math>  <math>A = a\sqrt{d^2 - a^2} = b\sqrt{d^2 - b^2}</math>  <math>d = \sqrt{a^2 + b^2}</math>  <math>a = \sqrt{d^2 - b^2} = A \div b</math>  <math>b = \sqrt{d^2 - a^2} = A \div a</math></p>	 <p>obtuse-angled triangle</p>	<p>A = area  <math>A = \frac{bh}{2} = \frac{b}{2} \sqrt{a^2 - \left(\frac{c^2 - a^2 - b^2}{2b}\right)^2}</math>          if <math>S = \frac{1}{2}(a+b+c)</math> then  <math>A = \sqrt{S(S-a)(S-b)(S-c)}</math></p>
 <p>rectangular prism</p>	<p>V = volume  <math>V = abc</math>  <math>a = \frac{V}{bc}</math>   <math>b = \frac{V}{ac}</math>   <math>c = \frac{V}{ab}</math></p>	 <p>regular hexagon</p>	<p>A = area          R = radius of outer circle          r = radius of inner circle  <math>A = 2.598s^2 = 2.598R^2 = 3.464r^2</math>  <math>R = s = 1.155r</math>  <math>r = 0.866s = 0.866R</math></p>
 <p>parallelogram</p>	<p>A = area  <math>A = ab</math>  <math>a = A \div b</math>  <math>b = A \div a</math>          note: dimension a is measured at 90° to line b</p>	 <p>regular octagon</p>	<p>A = area          R = radius of outer circle          r = radius of inner circle  <math>A = 4.828s^2 = 2.828R^2 = 3.314r^2</math>  <math>R = 1.307s = 1.082r</math>  <math>r = 1.207s = 0.924R</math>  <math>s = 0.765R = 0.828r</math></p>
 <p>trapezium</p>	<p>A = area  <math>A = \frac{(a+b)h}{2}</math></p>	 <p>regular polygon</p>	<p>A = area          n = number of sides  <math>x = 360^\circ \div n</math>  <math>y = 180^\circ - x</math>  <math>A = \frac{nsr}{2} = \frac{ns}{2} \sqrt{R^2 - \frac{s^2}{4}}</math>  <math>R = \sqrt{r^2 + \frac{s^2}{4}}</math>  <math>r = \sqrt{R^2 - \frac{s^2}{4}} : s = 2\sqrt{R^2 - r^2}</math></p>
 <p>quadrilateral</p>	<p>A = area  <math>A = \frac{(H+h)a + bh + cH}{2}</math>          a quadrilateral can also be divided into two triangles as indicated by the dotted line. the area of each of these triangles is computed and the results added to find the area of the quadrilateral</p>		

## 2.H2 CHARACTERISTICS OF COMMON GEOMETRICAL FIGURES 2

This Sheet describes the characteristics of common geometrical figures and tabulates the length and breadth of rectangles of proportions  $\frac{1}{2}$ : 1, 1: 1,  $1\frac{1}{2}$ : 1 and 2: 1 for given areas.

Rectangle: Length =  $\frac{1}{2}$  Breadth

Area	$l \times b$	Area	$l \times b$	Area	$l \times b$
1	0.866 × 1.154	35	5.124 × 6.832	69	7.169 × 9.592
2	1.225 × 1.633	36	5.196 × 6.928	70	7.246 × 9.661
3	1.50 × 2.00	37	5.269 × 7.025	71	7.297 × 9.729
4	1.733 × 2.310	38	5.339 × 7.119	72	7.349 × 9.798
5	1.937 × 2.582	39	5.408 × 7.211	73	7.399 × 9.865
6	2.121 × 2.828	40	5.477 × 7.303	74	7.450 × 9.933
7	2.291 × 3.055	41	5.546 × 7.394	75	7.500 × 10.00
8	2.450 × 3.267	42	5.612 × 7.483	76	7.545 × 10.06
9	2.598 × 3.464	43	5.678 × 7.571	77	7.590 × 10.12
10	2.739 × 3.652	44	5.745 × 7.660	78	7.650 × 10.20
11	2.873 × 3.831	45	5.810 × 7.746	79	7.695 × 10.26
12	3.00 × 4.00	46	5.874 × 7.832	80	7.748 × 10.33
13	3.122 × 4.163	47	5.939 × 7.918	81	7.800 × 10.40
14	3.241 × 4.321	48	6.00 × 8.00	82	7.845 × 10.46
15	3.354 × 4.472	49	6.062 × 8.083	83	7.890 × 10.52
16	3.464 × 4.618	50	6.125 × 8.166	84	7.935 × 10.58
17	3.572 × 4.762	51	6.185 × 8.246	85	7.980 × 10.64
18	3.674 × 4.899	52	6.246 × 8.328	86	8.030 × 10.71
19	3.774 × 5.032	53	6.305 × 8.407	87	8.078 × 10.77
20	3.881 × 5.174	54	6.364 × 8.485	88	8.123 × 10.83
21	3.968 × 5.291	55	6.424 × 8.565	89	8.175 × 10.90
22	4.063 × 5.417	56	6.482 × 8.642	90	8.213 × 10.95
23	4.154 × 5.539	57	6.539 × 8.718	91	8.258 × 11.01
24	4.243 × 5.657	58	6.596 × 8.794	92	8.310 × 11.08
25	4.330 × 5.773	59	6.652 × 8.869	93	8.355 × 11.14
26	4.416 × 5.888	60	6.708 × 8.944	94	8.393 × 11.19
27	4.50 × 6.00	61	6.765 × 9.020	95	8.445 × 11.26
28	4.582 × 6.109	62	6.820 × 9.093	96	8.490 × 11.32
29	4.664 × 6.219	63	6.874 × 9.165	97	8.528 × 11.37
30	4.744 × 6.325	64	6.929 × 9.239	98	8.573 × 11.43
31	4.823 × 6.430	65	6.983 × 9.311	99	8.618 × 11.49
32	4.900 × 6.533	66	7.036 × 9.381	100	8.655 × 11.54
33	4.975 × 6.633	67	7.089 × 9.452		
34	5.050 × 6.733	68	7.141 × 9.521		

Rectangle: Length =  $1\frac{1}{2}$  Breadth

Area	$l \times b$	Area	$l \times b$	Area	$l \times b$
1	1.225 × 0.816	35	7.247 × 4.831	69	10.173 × 6.782
2	1.731 × 1.154	36	7.349 × 4.899	70	10.248 × 6.832
3	2.121 × 1.414	37	7.451 × 4.967	71	10.320 × 6.880
4	2.450 × 1.633	38	7.548 × 5.032	72	10.392 × 6.928
5	2.739 × 1.826	39	7.649 × 5.099	73	10.464 × 6.976
6	3.00 × 2.00	40	7.746 × 5.164	74	10.538 × 7.025
7	3.242 × 2.161	41	7.844 × 5.229	75	10.607 × 7.071
8	3.465 × 2.310	42	7.937 × 5.291	76	10.679 × 7.119
9	3.674 × 2.449	43	8.034 × 5.356	77	10.748 × 7.164
10	3.873 × 2.582	44	8.126 × 5.417	78	10.817 × 7.211
11	4.062 × 2.708	45	8.217 × 5.478	79	10.886 × 7.257
12	4.242 × 2.828	46	8.309 × 5.539	80	10.955 × 7.303
13	4.416 × 2.944	47	8.397 × 5.598	81	11.022 × 7.348
14	4.583 × 3.055	48	8.486 × 5.657	82	11.091 × 7.394
15	4.743 × 3.162	49	8.574 × 5.716	83	11.159 × 7.439
16	4.901 × 3.267	50	8.660 × 5.773	84	11.225 × 7.483
17	5.049 × 3.366	51	8.747 × 5.831	85	11.289 × 7.526
18	5.196 × 3.464	52	8.832 × 5.888	86	11.357 × 7.571
19	5.339 × 3.559	53	8.916 × 5.944	87	11.424 × 7.616
20	5.478 × 3.652	54	9.000 × 6.00	88	11.490 × 7.660
21	5.613 × 3.742	55	9.084 × 6.056	89	11.555 × 7.703
22	5.747 × 3.831	56	9.164 × 6.109	90	11.619 × 7.746
23	5.873 × 3.915	57	9.248 × 6.165	91	11.684 × 7.789
24	6.00 × 4.00	58	9.329 × 6.219	92	11.748 × 7.832
25	6.125 × 4.083	59	9.408 × 6.272	93	11.811 × 7.874
26	6.245 × 4.163	60	9.488 × 6.325	94	11.877 × 7.918
27	6.365 × 4.243	61	9.567 × 6.378	95	11.937 × 7.958
28	6.482 × 4.321	62	9.645 × 6.430	96	12.000 × 8.00
29	6.596 × 4.397	63	9.720 × 6.480	97	12.063 × 8.042
30	6.708 × 4.472	64	9.800 × 6.533	98	12.125 × 8.083
31	6.819 × 4.546	65	9.875 × 6.583	99	12.186 × 8.124
32	6.927 × 4.618	66	9.950 × 6.633	100	12.249 × 8.166
33	7.035 × 4.690	67	10.025 × 6.683		
34	7.143 × 4.762	68	10.100 × 6.733		

Rectangle: Length = Breadth (square)

Area	$l \times b$	Area	$l \times b$	Area	$l \times b$
1	1.00 × 1.00	35	5.916 × 5.916	69	8.307 × 8.307
2	1.414 × 1.414	36	6.00 × 6.00	70	8.367 × 8.367
3	1.732 × 1.732	37	6.083 × 6.083	71	8.426 × 8.426
4	2.00 × 2.00	38	6.164 × 6.164	72	8.485 × 8.485
5	2.236 × 2.236	39	6.245 × 6.245	73	8.544 × 8.544
6	2.449 × 2.449	40	6.325 × 6.325	74	8.602 × 8.602
7	2.646 × 2.646	41	6.403 × 6.403	75	8.660 × 8.660
8	2.828 × 2.828	42	6.481 × 6.481	76	8.718 × 8.718
9	3.00 × 3.00	43	6.557 × 6.557	77	8.775 × 8.775
10	3.162 × 3.162	44	6.633 × 6.633	78	8.832 × 8.832
11	3.317 × 3.317	45	6.708 × 6.708	79	8.888 × 8.888
12	3.464 × 3.464	46	6.782 × 6.782	80	8.944 × 8.944
13	3.606 × 3.606	47	6.856 × 6.856	81	9.000 × 9.000
14	3.742 × 3.742	48	6.928 × 6.928	82	9.055 × 9.055
15	3.873 × 3.873	49	7.00 × 7.00	83	9.110 × 9.110
16	4.00 × 4.00	50	7.071 × 7.071	84	9.165 × 9.165
17	4.123 × 4.123	51	7.141 × 7.141	85	9.220 × 9.220
18	4.243 × 4.243	52	7.211 × 7.211	86	9.274 × 9.274
19	4.359 × 4.359	53	7.280 × 7.280	87	9.327 × 9.327
20	4.472 × 4.472	54	7.348 × 7.348	88	9.381 × 9.381
21	4.583 × 4.583	55	7.416 × 7.416	89	9.434 × 9.434
22	4.690 × 4.690	56	7.483 × 7.483	90	9.487 × 9.487
23	4.796 × 4.796	57	7.550 × 7.550	91	9.539 × 9.539
24	4.899 × 4.899	58	7.616 × 7.616	92	9.592 × 9.592
25	5.00 × 5.00	59	7.681 × 7.681	93	9.644 × 9.644
26	5.099 × 5.099	60	7.746 × 7.746	94	9.695 × 9.695
27	5.196 × 5.196	61	7.810 × 7.810	95	9.747 × 9.747
28	5.291 × 5.291	62	7.874 × 7.874	96	9.798 × 9.798
29	5.385 × 5.385	63	7.937 × 7.937	97	9.849 × 9.849
30	5.477 × 5.477	64	8.00 × 8.00	98	9.899 × 9.899
31	5.568 × 5.568	65	8.062 × 8.062	99	9.950 × 9.950
32	5.657 × 5.657	66	8.124 × 8.124	100	10.00 × 10.00
33	5.745 × 5.745	67	8.185 × 8.185		
34	5.831 × 5.831	68	8.246 × 8.246		

Rectangle: Length = 2 Breadth

Area	$l \times b$	Area	$l \times b$	Area	$l \times b$
1	1.414 × 0.707	35	8.366 × 4.183	69	11.746 × 5.873
2	2.00 × 1.00	36	8.486 × 4.243	70	11.832 × 5.916
3	2.450 × 1.225	37	8.602 × 4.301	71	11.916 × 5.958
4	2.828 × 1.414	38	8.718 × 4.359	72	12.00 × 6.00
5	3.162 × 1.581	39	8.832 × 4.416	73	12.084 × 6.042
6	3.464 × 1.732	40	8.944 × 4.472	74	12.166 × 6.083
7	3.742 × 1.871	41	9.056 × 4.528	75	12.248 × 6.124
8	4.00 × 2.00	42	9.166 × 4.583	76	12.328 × 6.164
9	4.242 × 2.121	43	9.272 × 4.636	77	12.410 × 6.205
10	4.472 × 2.236	44	9.380 × 4.690	78	12.490 × 6.245
11	4.690 × 2.345	45	9.486 × 4.743	79	12.570 × 6.285
12	4.898 × 2.449	46	9.592 × 4.796	80	12.650 × 6.325
13	5.100 × 2.550	47	9.698 × 4.849	81	12.730 × 6.365
14	5.292 × 2.646	48	9.780 × 4.890	82	12.806 × 6.403
15	5.478 × 2.739	49	9.900 × 4.950	83	12.884 × 6.442
16	5.656 × 2.828	50	10.00 × 5.00	84	12.962 × 6.481
17	5.832 × 2.916	51	10.102 × 5.051	85	13.038 × 6.519
18	6.00 × 3.00	52	10.198 × 5.099	86	13.114 × 6.557
19	6.164 × 3.082	53	10.294 × 5.147	87	13.194 × 6.597
20	6.324 × 3.162	54	10.392 × 5.196	88	13.266 × 6.633
21	6.482 × 3.241	55	10.488 × 5.244	89	13.342 × 6.671
22	6.634 × 3.317	56	10.582 × 5.291	90	13.416 × 6.708
23	6.782 × 3.391	57	10.676 × 5.338	91	13.490 × 6.745
24	6.928 × 3.464	58	10.770 × 5.385	92	13.564 × 6.782
25	7.072 × 3.536	59	10.862 × 5.431	93	13.642 × 6.821
26	7.212 × 3.606	60	10.954 × 5.477	94	13.712 × 6.856
27	7.350 × 3.675	61	11.048 × 5.524	95	13.786 × 6.893
28	7.484 × 3.742	62	11.136 × 5.568	96	13.856 × 6.928
29	7.616 × 3.808	63	11.226 × 5.613	97	13.930 × 6.965
30	7.746 × 3.873	64	11.314 × 5.657	98	14.000 × 7.00
31	7.876 × 3.938	65	11.404 × 5.702	99	14.072 × 7.036
32	8.00 × 4.00	66	11.490 × 5.745	100	14.142 × 7.071
33	8.124 × 4.062	67	11.576 × 5.788		
34	8.246 × 4.123	68	11.662 × 5.831		

## TCPA

## Charles Madge

March 16. At 28, King Street, W.C.2. Extracts from a lecture by Charles Madge on THE SOCIAL SIDE OF A NEW TOWN, given to a meeting of the Planning Forum. The chairman was J. Mumford.

**Charles Madge:** There has been a certain amount of speculation as to whether there is too little sociological planning in new towns or too much, and the too much point of view has been expressed by quite a lot of different people. I think one might start by trying to look critically at the idea of social planning in relation to a new town and to see just who is at the moment rather worried about it and why.

I think one section of the people who have been rather worried about it are the architects, who saw certain of their prerogatives encroached upon. The social theorist is inclined to lay down a rather rigid structure against which the architect instinctively rebelled because the architect, although accustomed to solving technical problems, was accustomed to solving them with the minimum of mental rigidity and approaching the matter in a way which satisfied his aesthetic conscience as well as the sense of function. I think as far as the architects are concerned their criticism is not likely to do anything good on the grounds that if an architect has a good aesthetic approach it is likely to be a good social approach as well. A more forcible critic, in these times particularly, is the engineer, whose job it is to construct the town as effectively and as cheaply as possible. I think the engineer must always see the enormous advantages of any kind of standardisation; that it to say, if he can repeat the same unit a great number of times—if he can lay down block after block to the precise pattern—he is going to save time, money, and is going to be able to offer the positive social advantage of lower rents. He is, I think, someone to be reckoned with. Unfortunately both the architect and the sociologist are going to crab the engineer constantly and say they cannot sacrifice other advantages to the advantage of cheapness and standardisation.

I think it has been the experience of the new towns, in their brief life, that they cannot very well do without such advice as is available on social problems. In some cases they began without having much provision of this kind, but I think that by now they have all realized that they have got to have some sort of trained staff dealing with their social and economic problems just to tie up with certain conditions in the nature of new towns.

The first condition, of course, is the one of the fixed ceiling to the population; 60,000 is a condition from which practically everything else can be said to stand. The figure of 60,000 was not arrived at in a very precise or scientific way. There are many good reasons for it, but it is not a figure which has been proved by experience to have any special validity. Having decided that you are going to have a town of a certain fixed size, you have got to take steps to prevent it from becoming very much bigger; in other words, you have got to call in the particular brand of soothsayers whose job it is to predict changes in population, one of the most complex and mysterious branches of the social sciences. You have, therefore, to watch for the point at which you have brought in enough people, and that point may be reached considerably in advance of the full complement of 60,000.

Another major condition of the new town is that every attempt should be made to see that people who live there also work there, and that brings with it a great many

consequences. Briefly, it means that in deciding what to build next there is going to be very careful phasing of the house and factory building. There has got to be a deliberate choice by the new town corporation of the tenants it brings into the town, particularly in the early stages when every family which comes in will have an important part to play, either to help build the town or supply part of its services, or manning the important industry in the town. In other words, when we have our houses they will be very precious assets in the task of building the towns in a social and economic sense.

At the same time, of course, we shall have to exercise the most careful choice of the industries we do bring in if we are to avoid, for example, an excessive demand for female labour, or skilled as against unskilled. I think we shall also have to be very wary about having any firms which, from their nature, need to expand on economic grounds, and need not only to expand their total output but to expand it in one place.

We have also to be very sure that we are providing the shops and the other buildings which will be needed by people coming in. We shall have to strike a balance between the very urgent need for housing and the excessive bleakness which would descend on the town if other buildings were not available.

We have also to watch the provision of schools very carefully. We shall have to keep in very close touch with the county authority on this because we are going to be a population with a very much higher proportion of children of school age than education authorities normally have to reckon with and, therefore, their standard figures of children to be expected at a given time are likely to be far from the mark.

I think it is extremely important, in building up this social plan, that the service industry of the town should be at an adequate level. You have a limited number of people available for employment in the town and to some extent you have to decide what proportion of those should work in factories and what proportion should be engaged in actually servicing the town. If one compares the proportion of service industry in different towns in the country one finds that it is a proportion which varies very widely. On finds there are certain types of towns which have a very low level of service industries, and those towns as a rule tend to be deserted by the better-off people. As a result the providers of the services are loath to open in the town. So you get the vicious circle which prevents the town from having attractions it might have.

## THE COMMUNITY AND THE FAMILY

I am very much in agreement with the viewpoint of the Institute of Human Relations when they claim that the community and its wealth is bound up with the psychological health of the family. I would put it very simply this way, that we will not get people to like or love that environment sufficiently unless that liking and loving does stem out of the whole of their family and impersonal lives. That is to say, they will not really develop these likes that we know they should by birthright develop unless somehow or other their psychological development is enabled to give them a strong positive feeling towards that environment. That is where I could, but will not, make a long digression on the subject of the Polynesian Island of Tico Pia as described by Raymond Forth in his extremely instructive book *We of Tico Pia*, which I do recommend to all interested in town and country planning as an extremely well documented account of a small community where the link of family and environment is traced in a good deal of detail. It is worth mentioning that in this island there are 1,200 people, and they live in something like 24 villages, so each village has on an average about 50 people in it. Each of

these villages has a distinct life of its own. Those 1,200 would only be one small corner with us, so the scale of the thing is very sobering to anybody who is trying to devise a balanced community.

The psychology of this situation is, I think, something like this, that we all inevitably start from the starting point of our primary, with mothers, fathers, brothers, sisters, and all our subsequent social relations stem from those. But in the sort of system we have that stemming process is broken into first of all by school, and we are pitched into a state-run school, and then, when we have been there for some years, we are pitched again into industry of some kind. And so we have been thrown into two groups, educational and industrial, which are entirely alien in their leadership and incentives from the home group, the family group. That is the basic disbalance in our society. To talk about balance in a society like ours is really rather ludicrous, and I think it is rather ludicrous to talk about community. I think the talk about community has really started up from the dawning realization that there is no such thing, but at the same time it is important to remember that right from the beginning of the industrial revolution and from Robert Owen onwards there has been a groping towards getting back into a more integrated social organization.

I will sum up the position of the social planning in this way, that at a conscious level and with a rational plan new towns have an honest function which is to play their part in the decentralisation of people and jobs from London and other urban centres. This decentralisation is agreed to be essential for very sound economic, and even military, reasons. There is the function of the new towns in a sentence. I think the new towns are part of an attempt by society to renovate its own working basis in the family, and to undo some of the damage which we know is being done to us all the time. We are trying to restore something which had established itself and which was swept away by the very rapid economic developments of the 19th century.

## THE PSYCHOLOGY OF PLANNING

Social planning has to be clear cut and down to earth on the demographic and economic issues and those are the basis and the foundation of it. I think that on the psychological side—on the attainment of a balanced community and integrated society—one has to proceed in an experimental frame of mind because one is dealing with forces which are very largely unknown. I think it is true that the social development officer, whoever he is, who tries to act on behalf of the consumer impersonates the client in the architect's office in a sense, and not only has to interpret the conscious wishes of his consumers but has to know something about their unconscious wishes. When he has arrived at some conclusions about their unconscious wishes he has then to break down the psychological and unconscious resistance of the architects, bureaucrats, corporations and all the rest of them before these wishes can be expressed. That is a formidable, and perhaps an impossible, task, but a start has been made at Stevenage which is, perhaps, encouraging. It has been encouraging, for example, to find that it was possible to work in very close liaison with architects on these questions, to give and take ideas, and criticize and learn. I think from what I know of the new towns that this is happening generally.

Another step forward was the establishment at the Ministry of a group headed by Ruth Glass, which is dealing centrally with some of the social research problems common to all new towns. We are still, of course, at the planning stage, and we hope that very soon now we shall pass from that stage into the first construction and into the first concrete problems of bringing in families. Then social planning will cease to be something which is entirely on paper.



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## TECHNICAL SECTION

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

### INFORMATION CENTRE

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

#### 2.76 planning: general

##### PLANNING BULLETIN, CANADA

*Monthly Review.* (Institute of Professional Town Planners, Toronto, Canada.)

New four-page information bulletin published towards end of last year for Canadian town planners. Contents restricted to Institute's news, matters of professional practice and short descriptions of planning developments in Canada.

#### 4.47 planning: urban and rural

##### VILLAGE SURVEY

*The Village Surveyed.* C. Stewart. (Edward Arnold & Co., 1948. 12s. 6d.)

Account of a survey and plan for an English village. Useful and informative contribution to planning technique. Fully illustrated. Selected bibliography.

Although a great number of studies similar in nature and purpose to this one have been carried out recently for the redevelopment or development of towns, no attempt has been made to investigate the smaller rural communities which play—or should play—such an important rôle in regard to agricultural rehabilitation and intensification of land use. The book is, therefore, particularly valuable in that it provides a method and technique of approach which may well be applied to other village communities in the country. Sutton-at-Hone is a long, straggling village in Kent, along a main road between a railway station and a Parish church, with most of its buildings dating from 1860. Its survey follows the pattern of Patrick Geddes's trilogy of *Place, Folk and Work*, and was undertaken by a basic survey team consisting of a geographer, a sociologist and an economist.

The geographical setting of the village and its relation to other villages and towns are the main concern of the physical sur-

vey which was carried out on three levels—regional, district, local. It covers growth and change since 1845, the accessibility of different places in the districts to the village, transport services within the area, land forms and soil materials, the pattern of land use in relation to surface form and rock formation, and land utilisation.

The results of the physical survey are followed by an account of a social and economic survey. This was based on a specially designed questionnaire which sought information about family size and composition, the occupation and place of work of adults, and the more important social activities. The questionnaire, which is reprinted in full in an appendix to the book, was submitted to each family in the village.

Lastly, the development stages of a plan are explained in detail, the proposals trying to satisfy the needs of the village people as shown by the survey.

There are three appendices containing individual contributions by the three survey specialists. They deal with the geographical, social and economic study of the village. Particular attention should be paid to the black and white presentation technique adopted for the survey and planning maps, which is excellent.

#### 6.22 planning: social and recreational

##### LANDSCAPE DESIGN: GARDENS

*Gardens in the Modern Landscape.* C. Tunnard. (Architectural Press, London; Charles Scribner's Sons, New York. 1948. 18s. 6d.)

Second revised edition of only important British standard textbook on evolution of contemporary landscape gardening. Fully illustrated. Selected bibliography.

The text of the present edition of this invaluable book for architects and planners, which was first published in 1938, is unchanged except for a slight condensation and a few corrections. A section in the first edition entitled *Planting Plans for a Section of a Garden near Leicester* has been omitted and is replaced by one on *Architects' Plans*. Instead of the original pictorial supplement on *Garden Decoration from the XVIIIth Century to the Present Day*, an illustrated section on *Modern American Gardens* has been added, followed by a note on *The Modern Garden* by Dean Joseph Hudnut, of Harvard. The bibliography is unchanged, which seems a pity in view of published developments during the last ten years.

"A garden is a work of art . . . it must first be an aesthetic composition." Based on this conception, which is contained in the first sentence of the book, the author develops his theme, taking into account those influences which have shaped contemporary expression in architecture and the arts. He examines the development of gardens, together with the artistic trends of the last two hundred years, and discusses present-day garden planning technique and its ultimate aims.

#### 15.50 materials: applied finishes and treatments

##### LINSEED OIL: PAINTS

*Linseed Oil.* (The Decorator. Feb., 1949. pp. 53 & 54.)

An enumeration of the essentials of a paint

vehicle, and an account of how linseed oil fulfils them; together with a brief description of its characteristics.

After describing the purifying process and the differences between boiled, blown and stand oils, the article discusses briefly the drying properties, adhesion, flexibility, moisture resistance, penetration, and gloss.

#### 18.25 construction: theory

##### TESTS ON HOUSE PROTOTYPES.

*Survey of Loading Tests on Some Post-war House Prototypes.* A. Short and L. G. Smms. (The Structural Engineer, Feb. 1949, pp. 67-98.)

Vertical and lateral loading tests on various types of unorthodox houses carried out by BRS. Special tests on the stiffening effect of cladding. Very important contribution to the design of non-traditional houses.

The main objectives of the tests were:—  
 (i) To provide data which would be directly useful in furthering the provision of dwelling-houses.

(ii) To provide information which would enable engineers to design frames for houses more economically.

The design and test loadings and the methods used for carrying out the tests are described in Special Report No. 1, "Structural Requirements for Houses" (see Inf. Centre No. 17.35). The structures tested can be grouped in the following characteristic classes:—

(i) Steel frames, widely spaced, i.e., at a distance varying between 6 and 12 ft.

(ii) Steel frames, closely spaced, i.e., 4 ft. or less.

(iii) Load bearing metal panels, i.e., sheet steel or aluminium panels supporting floor and roof loads.

(iv) Reinforced concrete frames, widely spaced, i.e., at approximately 10 ft. centres.

(v) Reinforced concrete frames, closely spaced, i.e., at less than 4 ft. centres.

(vi) Timber structures.

(vii) Brick houses.

In addition, a considerable number of tests were carried out on structural components of various types.

Eighteen types of joist were tested and the deflection limitation of 1/300 span under the stiffness test load (i.e., 45 lb./sq.ft.) was complied with in all floors except one, where the deflection was only just above the permitted value. Generally, with the exception of the all-timber floors, the measured deflections were well below this value. The deflections of reinforced concrete floors in particular were very small. Approximately 30 per cent. of the steel-type floors did not comply with the requirements for recovery after first loading, but all floors were sufficiently elastic in second tests and were therefore satisfactory.

With two exceptions the floor covering was of timber. Floor structures were generally found to act as an indeterminate grid system; any weakness in one member could be readily balanced by the resulting redistribution of bending moments, thus relieving the weak component.

Vertical loading tests were made on 14 different types of pitched roof. Generally, the deflections under the stiffness test loading of 15 lb./sq. ft. of plan area were quite small and the recovery was satisfactory.

Most of the structures tested were found to possess at least the requisite load factor against collapse, but since it was not practicable to extend the loading up to general failure, the true load factor of the different types of house tested could not be determined.

Several cases of weak internal columns were observed. These were designed without regard to the effect of continuity in the floor beams and failed under the resulting overload.





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A lightweight welded structure failed owing to the inadequacy of the welded joints; the structure consists of latticed mild-steel round bars.

In order to obtain a basis of comparison with the behaviour of a traditional brick house under the effect of lateral loads, a few exploratory tests were made on brick cubicles, and a brick house of orthodox design was tested. It seemed that brick houses would behave like rigid boxes, with the floor or roof having but a minor effect on the stiffness of the structure. On the other hand, steel and timber framed structures were largely dependent for stiffness under lateral loading on the nature of the external cladding and on the initial wind bracing. The type and rigidity of the frame joints has considerable influence on the horizontal deflection. In one type of lightweight steel framed structure it was calculated that the cumulative effect of specified tolerance could lead to a non-recoverable movement of 4½ in. at eaves level. Even after repeated application of the lateral stiffness tests, 3 out of 19 structures failed to satisfy the recovery requirements. In all cases, however, it was found possible to suggest modifications which eliminated the causes of deficiency observed.

Generally, the framed structures tested showed that roofs, walls and floors behave like membranes interconnected at the edge. The gable ends and party wall are the mainstay of the structure against overturning. The effectiveness of the floor depends on composite action between the main beams or joists and the floor covering. A wall plate along the perimeter of a house at first floor and/or eaves level may add considerably to the stiffness of the horizontal membranes. Where the floor or wall membranes are insufficiently rigid themselves, it is necessary to introduce bracing elements. In most houses tested, such elements were provided.

On three occasions it was found possible to apply loads before and after a steel frame had received its cladding, and the data obtained from these tests were most interesting in indicating the part played by the roof, floor and wall covering in resisting the lateral loads used to represent wind pressure. With both flexible and rigid type of cladding elements the maximum horizontal deflection was no more than 1/20 in. and the overall stiffness of the clad frames under the design load (8 lb./sq. ft.) ranged from 20 to 200 times that of the unclad frames. Considered on the load carried by the frame, the effect of the cladding was to reduce the load to a value between ½ and 5 per cent. of that originally carried by the frame.

Brick veneers provided the largest relative increase in stiffness as against other types of wall cladding. By replacing the brick cladding above first floor level by lighter cladding sheets the stiffness of the structure was not appreciably reduced. Outer leaf wall cladding in the form of asbestos sheets was found to be only one-quarter as effective in reducing the load carried by a light steel frame as compared with 4½-in. brick-work.

#### 19.64 construction: details CONCRETE ROADS

*Concrete Roads. Modern Design and Construction.* Paper by W. P. Andrews, read at a meeting of the Institution of Highway Engineers, Northern Branch. (The Builder, Feb. 18, 1949, pp. 223-4.)

Modern American tendencies of design and construction, particularly with regard to reinforcement, provision of joints, maintenance and repair.

#### 19.65 construction: details SAVING COST OF CONCRETE

*Stretching the Concrete Building Dollar.*

A. J. Boase. (Eng. News-Record [USA], Oct. 28, 1948, pp. 109-111.) Hints for designers to achieve economy in reinforced concrete construction.

The author suggests that buildings over two storeys high should have a skeleton frame with the minimum possible storey heights. Saving in formwork is the most essential consideration. Flat slab floors without capitals or drop panels are advocated.

Another line of development is precasting, either in a factory or on the site. A special type of on-site precasting now enjoying popularity is known as tilt-up construction. On most tilt-up jobs, wall panels are cast in a horizontal position in edge forms set on the finished concrete floor. The slabs are then tilted into position by means of a winch or crane. This method is now being used in an eight-storey office building in Columbia, SC. Preliminary figures indicate saving over conventional methods of erection.

#### 20.120 construction: complete structures PRE-STRESSED CONCRETE

*Pre-stressed Concrete Construction.* Conference on February 16, 1949, at the Inst. of Civil Engineers. Paper by Dr. F. G. Thomas. (The Builder, March 4, 1949, pp. 276-9.)

Short abstract from a comprehensive paper on the development and use of pre-stressed concrete. The paper will be published later with discussion and will then be reviewed in Information Centre.

#### 20.121 construction: complete structures PRE-STRESSED CONCRETE

*Pre-Stressed Concrete in Bridges and Buildings.* (The Civil Engineers' Review, Jan., 1949, pp. 10-16.)

Application of pre-stressed concrete by the Freyssinet method in bridges and in the airport hangar at Karachi.

#### 20.122 construction: complete structures ARC-WELDED STEEL WORKSHOP

*A Light Steel Frame Workshop Building of Unorthodox Design in Total Arc-Welded Construction.* A. E. R. Stephenson. (Civil Engineering and Public Works Review, Feb., March, 1949, pp. 82-4, 150-2.)

Works' extension at Perth, Australia, 3,000 miles by sea from nearest steelworks.

The workshop had to be built from material in stock, comprising light angles and a few heavy I-sections. Without the use of arc-welding it would not have been possible to carry out this job for two or three years. The design shows several interesting features, e.g., hollow welded boxed angle sections were used wherever economically possible.

#### 20.123 construction: complete structures SCHOOL IN ALUMINIUM

*Bristol's New Schools. First Prefabricated Aluminium School at Lockleaze.* J. Nelson Meredith. (The Architect & Building News, and other journals, March 18, 1949, pp. 243-8.)

First application of "Bristol" prefabricated aluminium unit construction, details of which were described in The Architect & Building News, Jan. 30, 1948, pp. 90-5.

#### 21.28 construction: miscellaneous CITY FOR "ATOMIC AGE"

*Walled City for the Atomic Age.* O. Kilne Furner & Fred N. Severud. (Eng. News-rec. [USA], Jan. 27, 1949, pp. 18-9.)

Huge concrete tubes laid out to a hexagonal pattern house factories and serve as protective "hills" for residence and business buildings in proposed walled city for the "atomic age"!

#### 23.96 heating and ventilation GENERAL TEXTBOOK: HEATING

*Heating and Ventilating.* Oscar Faber. (Spon, 1949. 10s. 6d.)

Excellent introduction to heating and ventilating in simple language. Clear diagrams. Useful to students. 140 pp.

There is nothing in this book which has not been said before, and often many times before, but it is perhaps the simplest and clearest general introduction to the subject that has yet been written. It is reasonably short and it contains numerous diagrams, some of which are especially good in conveying their story easily.

It is a book for the student rather than the man in practice.

#### 25.70 water supply and sanitation THE HYDRAULIC RAM

*The Hydraulic Ram.* Norman Allwood (Plumbing Trade Journal. Feb., 1949).

Short but clear article describing the principles, construction and operation of a hydraulic ram. (To be continued.) 3 diagrams.

*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

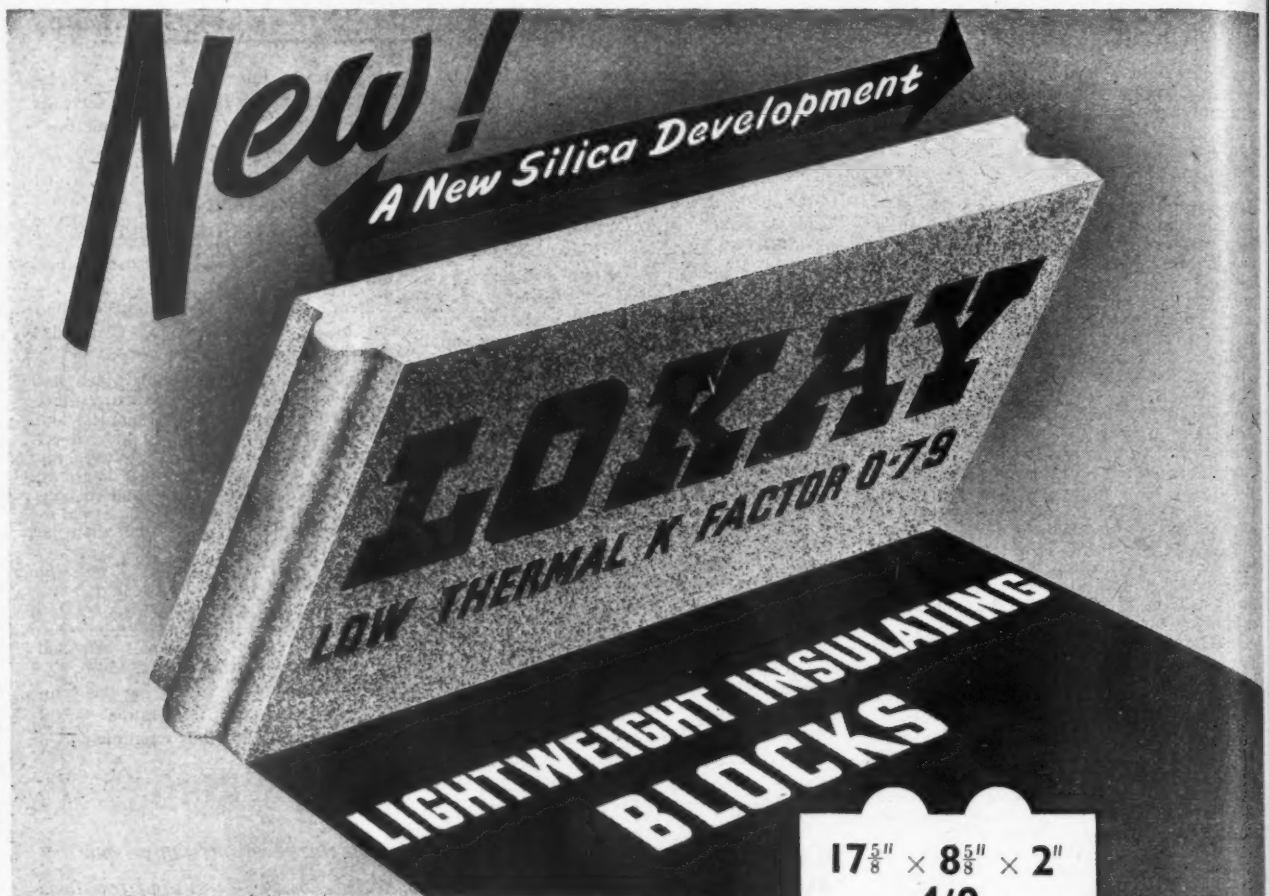
### 2986 WIND PRESSURES

**Q** In considering wind pressures on walls I believe the common terms such as "breeze," "storm," etc., have generally accepted values in miles per hour. Can you give me these and tell me the appropriate pressures exerted? Also, what is the maximum pressure to be expected in England?

**A** Wind pressures on buildings are specified in British Standard Code of Practice CP4:1944, Chapter V. Loading. Clause 8 contains a table of wind velocities which vary between 55 and 85 miles per hour according to the district and the conditions of exposure. A second table contains the wind pressures corresponding to these wind velocities at various effective heights of the building. Clause 9 specifies many details regarding the distribution of the wind pressure on different parts of a building and Clause 10 deals with wind pressure on roofs.

This Code dates from 1944 and is likely to be revised in due course. Meanwhile, BS449:1948, The Use of Structural Steel in Building, has been published. The wind pressures in this standard are based on the same principles as CP4:1944, Chapter V, but the numerical values are slightly different. The chief difference is that the limits are now 50 and 80 m.p.h. respectively.





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# THE BUILDING PROGRAMME

for 1949

By Ian Bowen

One of the most awkward problems of economic planning is that the plans can hardly be prepared, published and discussed before the time for their realization has arrived. The full import of the construction programme issued in the "Economic Survey for 1949" has only now begun to be understood, yet March and April, two of the best months of the building season, are nearly over.

The most serious implication of the building plan for 1949 is that there is to be a huge expansion in new construction other than housing, half of it at the expense of the housing programme itself. This is shown by the following figures (from Table 7 of the "Economic Survey"):

CONSTRUCTION PROGRAMME FOR 1949 (EXCLUDING PLANT AND MACHINERY) IN GREAT BRITAIN

	1948	1949
Fuel and power .. .. .	60	80
Transport, communications and shipping .. .. .	115	140
Agriculture, forestry and fisheries .. .. .	25	35
Other industries .. .. .	100	125
Housing (including repairs and maintenance) .. .. .	475	420
Other social services .. .. .	65	100
Defence and administration .. .. .	55	60
<b>Total .. .. .</b>	<b>895</b>	<b>960</b>
<b>Deduct housing .. .. .</b>	<b>475</b>	<b>420</b>
<b>Construction other than housing .. .. .</b>	<b>420</b>	<b>540</b>

Thus it is intended to increase the value of building and civil engineering work done in Great Britain by £65 millions in 1949. But housing is to be reduced by £55 millions. Therefore constructional work other than housing is to be increased by a total of no less than £120 millions.

If this figure of £120 millions is compared with the size of the non-housing programme in 1948 (£420 millions) it will be realized what a colossal switch of building effort is being made in the current year. The increase of non-housing work is to be 29 per cent. in one year, a stupendous rate of increase.

This increase is to be accomplished, moreover, without any net change in the manpower engaged in the industry. Manpower in the industry is to be at the same level in December, 1949, as in December, 1948. The whole gain is to be at the expense either of housing or of some non-specified smaller works.

Moreover, this constant labour force (of 1,480 thousand workers on a new statistical basis) is to produce about 7 per cent. more output, presumably by means of increased productivity, at the same time as making a rapid transfer from one type of work to another.

Even this is understating the problem. While housing work is to decline in value by 11.6 per cent., it is unlikely that a correspondingly large labour force will immediately become available for other work.

There are clearly two separate grounds of criticism. First, is it practicable to carry out the plan as stated in the Survey, and, secondly, is it sound social policy to cut down the housing programme for the sake of all the other items?

On the first point, the Economic Survey covers itself to some extent by observing

that "however carefully the estimates for work to be undertaken may be drawn up, the investment actually achieved will, in some cases, be less than the programme as a result of unforeseen difficulties and delays." The Survey then comes to the strange (strange in the light of the rest of its plans) conclusion that "the total of fixed investment [in 1949] is unlikely to rise much above the level of 1948—despite a rise in the expenditure planned for plant as well as that planned for construction. The only assumption that could reconcile these statements is that output in the case of building should fall short of the target by 7-10 per cent. But to fall short of the investment target in 1949 would badly jeopardize the long-term plans already laid down last year in the White Paper on European Co-operation.

No doubt the Economic Survey is wise to be cautious on this point. Surely the experience of all large-scale building programmes goes to show that a 29 per cent. increase in activity in one year is well outside the realm of possibility. Plans have all to be ready, contracts let, builders' organizations ready to start, the labour exchanges able to supply men and so on, at precisely the right times and places. The most recent and notorious case of an over-expanded programme failing to reach its target was the local authority housing programme in 1946. Is 1949 to be the same story for schools and power-stations?

The accompanying graph shows how labour employed on housing and non-housing work has moved since the end of the war. At the very fastest rate of expansion labour on housing work was increased at a rate of about 24,000 a month, but this high rate was not maintained over many months. The 1949 plan demands a very fast build-up of labour on non-housing work. In fact it would have to be increased by at least 250,000 men in a year—indeed, by a much higher figure than this to increase output by £120 millions. What are the reasons for thinking that this is impracticable?

First, there is the experience of the housing programme itself; and secondly the fact that quite evidently the non-housing programme is not very far advanced. Vacancies for labour notified to the labour exchanges are only about one-quarter what they were

two years ago; so there is little reason to suppose that the non-housing programme can advance many times as fast as housing once did.

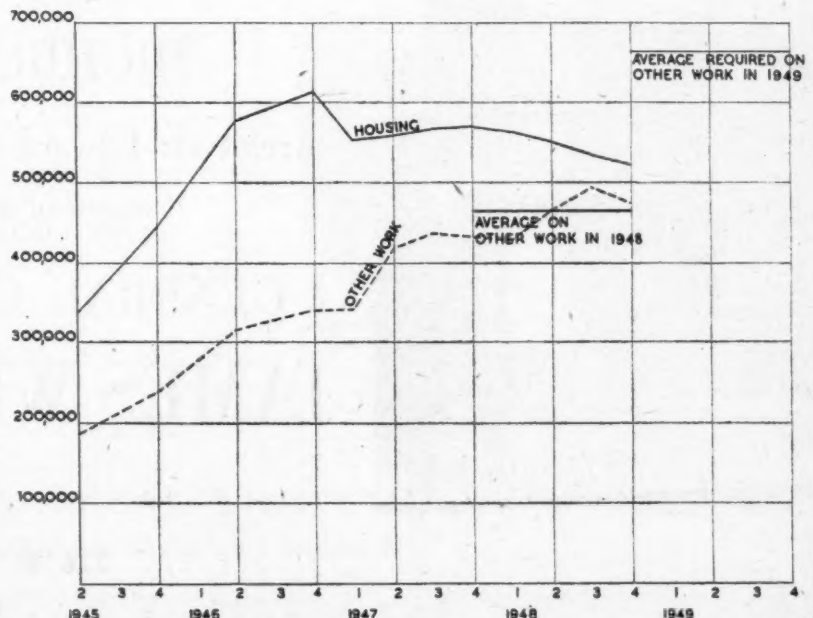
If, then, it is reasonable to suppose that the 1949 plans of the Government ought indeed to be discounted as over-ambitious, what will the position then be? Labour will be squeezed out of the housing programme. Vacancies to absorb it all on the new non-housing work will not fully materialize. The labour will then either be temporarily unemployed, or drift on to less essential small works.

The non-housing programme will no doubt be completed eventually. But surely by now it should be manifest that sudden large changes in the employment pattern are undesirable and wasteful. The 1949 programme as it stands is 'unrealizable'; it would be more realistic to allow for at least a part of the "normal" delays to be experienced.

The second question, whether it is socially desirable or not to cut down on the housing programme for the sake of other types of construction, can only be answered according to a subjective valuation. Politically the decision would seem to be a difficult one to sustain. The figure of 200,000 houses per annum is hardly going to meet the needs of the increasing families in this country, let alone make it possible to replace the worst sub-standard dwellings. Many social reforms in other spheres are liable to be defeated if the housing problem cannot be tackled faster than this. Sooner or later the target must again be raised.

There is a special case for raising the housing target in 1949. The housing programme is well advanced, and the machinery is available for letting more contracts and beginning work. Approvals have been running at a high figure. It is unlikely that the manpower needs of the non-housing programmes will become pressing in all parts of the country before the middle of 1950. Meanwhile, rather more houses should be allowed to proceed, because the labour that becomes unemployed, or is used on non-essential works, during this year will be as good as lost. It is essential that this labour should be kept on productive work.

The Economic Survey suggests that planners still have much to learn. It is not really good enough to write down an un-



Building and Civil Engineering Labour Employed on Housing and other work (Great Britain).

realistic proposal with the saving remark that it is not likely to be realized. This unrealistic scheme should be withdrawn and revised. What is now before the country is a muddled attempt to do too much in one direction and too little in another. It is to be hoped that the energetic Minister of Health will try to seize the opportunity this year to slip some extra housing into his programme; next year or the year after may be too late.

## Announcements

The address of the School Furniture Manufacturers' Association Ltd. is now 30, Cornhill, London, E.C.3. Telephone: Mansion House 3921.

Mr. E. John Preece, A.R.I.B.A., has entered into full partnership as from February 1, 1949, with Mr. Gordon E. Payne, O.B.E., F.R.I.C.S., M.T.P.I., at 19, Clarence Street, Gloucester, where they will continue the practice formerly carried on as Gordon Payne and Partners as Town Planning Consultants, Architects and Surveyors, as Gordon Payne and Preece.

Mr. Behram A. Sunavala (Indian Architect) is visiting this country for a short period, and will be pleased to receive trade catalogues at 11, Clifton Gardens, Warwick Avenue, London, W.9.

Messrs. Davidson, Marsh & Co., of Douglas, Chartered Architects and Surveyors, have opened a branch at Bridge Chambers, Ramsey, Isle of Man, where they would be pleased to receive trade catalogues, etc.

Mr. Arthur A. Stewart, A.R.I.B.A., has opened an office at 6, Cromwell Place, South Kensington, S.W.7. Telephone: Freemantle 4593. He will be pleased to receive trade catalogues, etc. He is also continuing to practise at Grove Meadow, Jordans, Buckinghamshire. Telephone: Jordans 3137.

## Buildings Illustrated

*House in Kelross Road, Highbury Park* (page 367). Architect, Edward D. Mills, F.R.I.B.A. Quantity Surveyors, Lay & Clark, A/A.I.A.S. General Contractors, James Webb & Son, Ltd. Sub-contractors: Furniture, curtains & lino., Heal & Son, Ltd.; electrical works, Service Electric Co. Ltd.; lettering, The Lettering Centre; aluminium fire-place surround, Southborough Sheet Metal Works Ltd.; ironmongery, Parker, Winder & Achurch Ltd.; tiled fireplaces, B. Finch & Co. Ltd.; lighting fittings, The Merchant Adventurers Ltd.; sanitary fittings, B. Finch & Co. Ltd.; metal flower boxes, Allen & Greaves Ltd.; kitchen flooring, Semtex Ltd.; refrigerator, Electrolux Ltd.; gas water heater, Ascot Gas Water Heaters Ltd.; gas servicing, Gas Light & Coke Co.; metal windows, James Couper & Co. Ltd.; sink unit, Easiclean Ltd.; hot water boiler, Ideal Boiler & Radiator Co.; facing bricks, Nutbourne Brickwork Ltd.

*The Swiss National Tourist Office in Golden Cross House, Trafalgar Square* (pages 361-364). Architects, Alfred Roth, B.S.A., S.I.A., of Zurich, and T. P. Bennett & Son, F/A.R.I.B.A. General contractor, F. G. Minter Ltd. Sub-contractors: Asphalt, Limmer Trinidad Lake Asphalt Co. Ltd.; structural steel, Moreland Haynes & Co.; fireproof construction, Kleine Floors Ltd.; tiles, Carters; partitions, Roneo; rubber flooring, Dunlop Rubber Co.; cork flooring, Cork Insulation & Asbestos Co.; lino, F. G. Minter (Decorations) Ltd.; central heating, J. H. Nicholson & Co. Ltd.; electric wiring, H. J. Cash & Co.; electric light fixtures, Courtney Pope (Electrical) Ltd.; sanitary fittings, John Bolding & Sons; telephones, Ericsson Telephones Ltd.; iron staircases, Metalwork Services Ltd.; shopfront metalwork, Starkie Gardner Ltd.; marble, Fenning & Co.; lifts, Aldous & Campbell; clocks, Smith Setric.

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*Reviewed in this issue, page 367*

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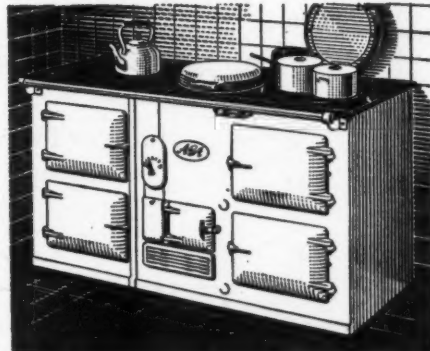
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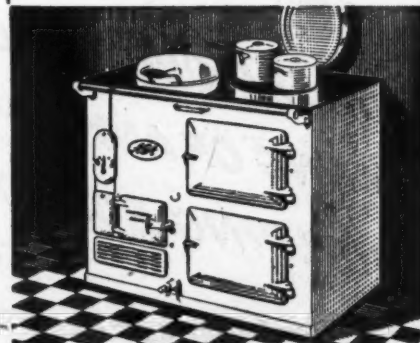
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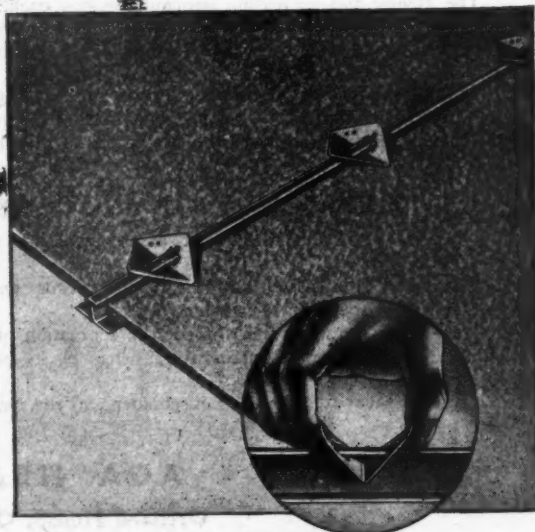
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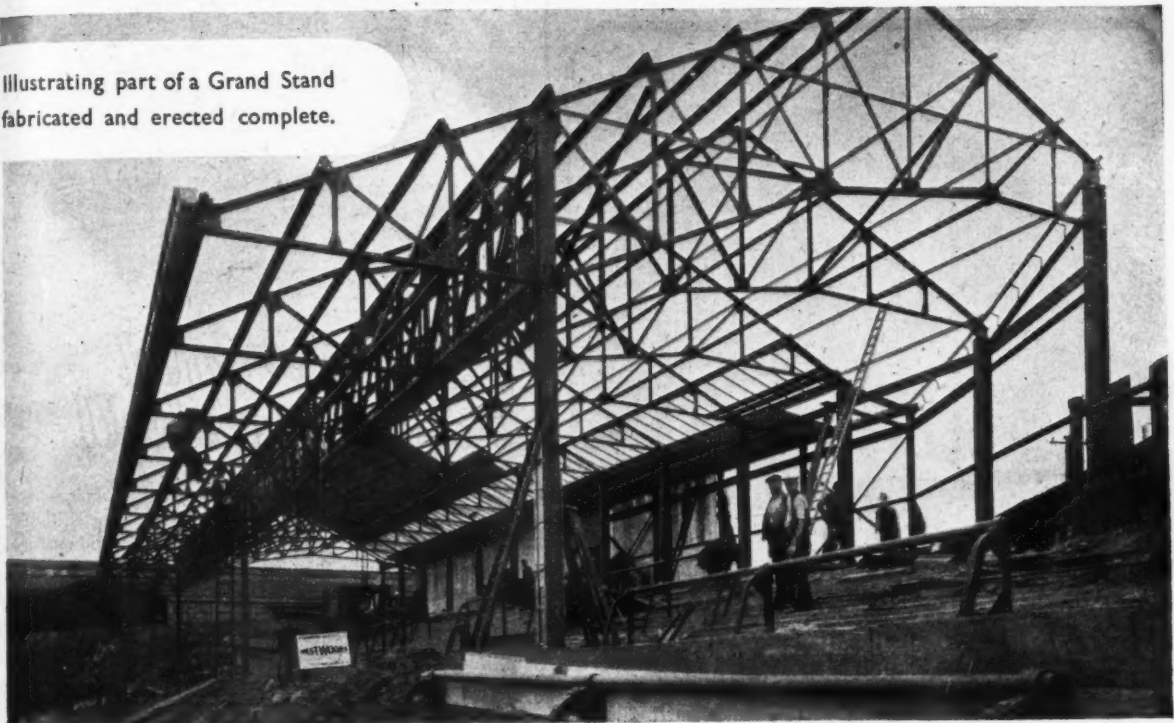
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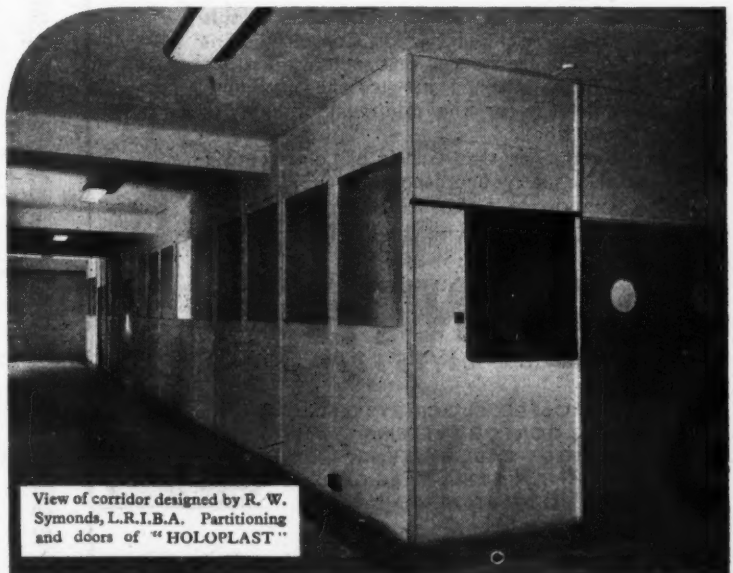
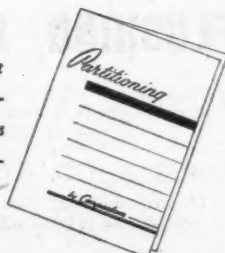
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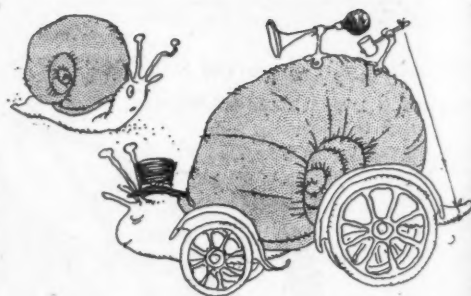


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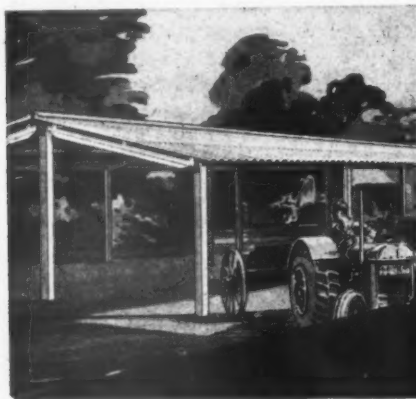
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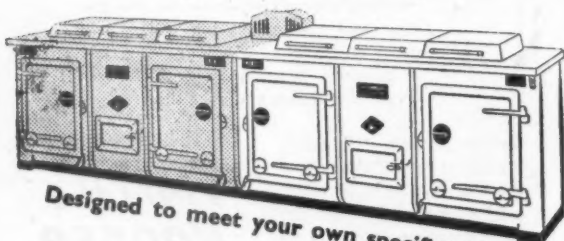
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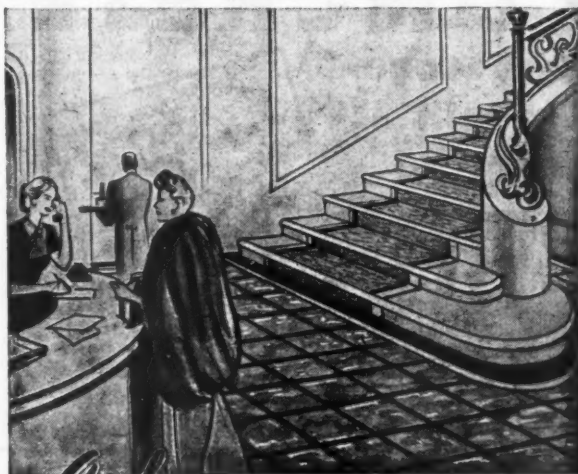
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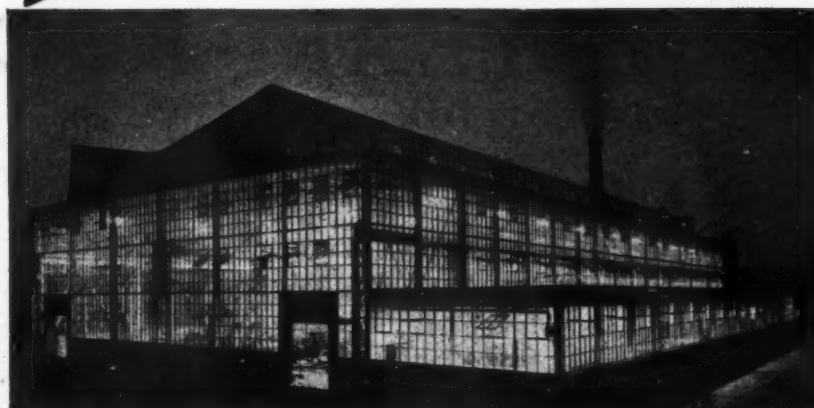
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## CLASSIFIED ADVERTISEMENTS

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

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

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## 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, WHYTELEAF, Tel.: Uplands 0935, 991

## LONDON COUNTY COUNCIL.

Applications are invited for unestablished positions of (1) ARCHITECT, Grade III (salaries up to £700 a year) and (2) ARCHITECTURAL ASSISTANTS (salaries up to £580 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 Act, 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-storey flats), and will be employed in the Housing Architect's Division. Preference will be given to candidates holding a recognized professional qualification.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped addressed envelope required, and quote Ref. G.R.3). Canvassing disqualifies. (2269) 1045

## CITY OF SALFORD.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT in the Architects' Department. Salary Grade V, £520 to £570. Candidates must be Associates of the Royal Institute of British Architects or hold an equivalent qualification, and should possess a sound experience in design and construction, and also be experienced in the management of building contracts.

The appointments will be subject to:—  
(a) The Conditions of Service of the National Joint Council as adopted by the City Council.

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

(c) The passing successfully of a medical examination.

(d) The Standing Orders of the Council.

Applications, stating age, qualifications and experience, together with particulars of past and present employment—accompanied by copies of two recent testimonials—should be forwarded in envelopes endorsed "Architectural Assistant," addressed to the City Engineer and Surveyor, Town Hall, Salford, 3, and be delivered not later than Wednesday, 4th May, 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. 580

## EAST SUFFOLK COUNTY COUNCIL.

## COUNTY PLANNING DEPARTMENT.

Applications are invited for the appointment of AREA OFFICER in the County Planning Department. The salary will be within the A.P.T. Divisions, Grade VI-VII, £595 to £710 per year on the National Joint Council's scale, with scale allowance for use of motor car, and will be determinable by one month's notice on either side.

Candidates should have had wide experience of all aspects of Town and Country Planning, development control and the preparation of factual surveys, and must be either Members or Associate Members of Town Planning Institute, preference being given to those possessing additional qualifications in Engineering, Surveying or Architecture.

Applications, endorsed "Area Officer," stating age, qualifications, experience, present and past appointments, present salary, and giving names and addresses of two persons to whom reference may be made, to be delivered to the undersigned not later than the first post Saturday morning, 30th April, 1949.

Canvassing, directly or indirectly, will disqualify.

## G. C. LIGHTFOOT.

Clerk of the County Council. 640

County Hall, Ipswich.

## LONDON COUNTY COUNCIL.

Applications are invited for a position of COUNTY SCHOOLS ARCHITECT, at a salary up to £1,500 a year. The position is temporary but superannuable, and has been created to cope with a programme of school buildings. Candidates must be A.R.I.B.A. and experienced in contemporary design. Successful candidates eligible for higher positions on merit selection as vacancies occur. Application forms obtainable from the Architect to the Council, The County Hall, S.E.1, and returnable not later than 30th April, 1949. (410) 627

## CITY OF PLYMOUTH.

## DEPUTY CITY ARCHITECT.

Applications are invited for the above appointment, at a salary of £1,000 per annum. The person appointed will be under the control of the City Architect, who is responsible for the whole of the Architectural Work of the Corporation.

Candidates should hold appropriate professional qualifications, and previous experience with a Local Authority is desirable.

The person appointed will be required to devote the whole of his time to the duties of the office and not to engage in private practice. All fees and emoluments received by him in respect of his duties must be paid by him into the Council's account. The appointment will be terminable by three months' notice on either side, is subject to the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination.

Forms of application may be obtained from the City Architect, Weston Lodge, Seymour Road, Plymouth, and should be forwarded to the undersigned in envelopes endorsed "Deputy City Architect," not later than 30th April, 1949.

Housing accommodation may be made available to a successful married applicant, if he requires it.

## COLIN CAMPBELL,

Town Clerk.

Pounds House, Peverell, Plymouth. 587

## CITY OF NOTTINGHAM.

## CITY ENGINEER'S DEPARTMENT.

## APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for appointments as Architectural Assistants in the following grades:—

(a) Grade VII (£635×£25—£710).

Applicants must be Members of the Royal Institute of British Architects and have had good Municipal experience.

(b) Grade VA (£550×£20—£610).

Applicants must have had good Municipal experience.

(c) Grade III (£450×£15—£495).

Applicants must have either passed the Final examination of the Royal Institute of British Architects, or had a good training in an Architect's office.

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

Applications are to be on forms to be obtained from R. M. Finch, O.B.E., M.I.C.E., City Engineer and Surveyor, Guildhall, Nottingham, to whom they should be returned not later than Friday, 13th May, 1949.

## J. B. RICHARDS,

Town Clerk. 609

Guildhall, Nottingham.

## NORTH RIDING OF YORKSHIRE COUNTY COUNCIL.

## ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of TWO ASSISTANT ARCHITECTS in A.P.T. Division, Grade IV (£480-£525), on the permanent staff.

Candidates should have passed the Intermediate examination of the Royal Institute of British Architects.

Appointments superannuable and subject to satisfactory medical examination, to the National Scheme of Conditions of Service, and to two months' notice in writing on either side.

Forms of application are not being issued, but further information may be obtained from the County Architect, County Hall, Northallerton. Applications, stating age, qualifications and experience, together with particulars of present and previous appointments, and the names and addresses of three persons to whom reference may be made, to reach the undersigned not later than the 2nd May, 1949.

Canvassing will disqualify, and candidates should state in writing whether they are related to any member of or senior officer under the Council.

## HUBERT G. THORNLEY,

Clerk of the County Council. 607

County Hall, Northallerton.

5th April, 1949.

## LONDON COUNTY COUNCIL.

## QUANTITY SURVEYORS.

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

Duties will include:—

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

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

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

Canvassing disqualifies. (2140) 762

## CITY OF COVENTRY.

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

(a) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T., VII, commencing at £635 per annum and rising to £710 per annum.

(b) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T., V, commencing at £520 per annum and rising to £570 per annum.

In certain circumstances, housing accommodation may be made available for the successful applicants.

Applicants should be Associate Members of the Royal Institute of British Architects, or hold equivalent qualification.

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

(d) ONE ASSISTANT ARCHITECT. Salary on Grade A.P.T., III, commencing at £450 per annum and rising to £495 per annum.

Applicants should have passed the Intermediate examination of the Royal Institute of British Architects.

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

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

Applicants for (f) should have passed the Intermediate examination of the Royal Institute of Chartered Surveyors (Quantities Division).

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 all 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 ten days after the publication of this advertisement.

Canvassing, directly or indirectly, will be a disqualification.

## D. E. B. GIBSON,

City Architect.

1A, Warwick Row, Coventry.

14th April, 1949. 619

## CITY OF STOKE-ON-TRENT.

## CITY ARCHITECTS' 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.

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. Pigott, 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 Saturday, 14th May, 1949.

## HARRY TAYLOR, Town Clerk.

Town Hall, Stoke-on-Trent. 665

11th April, 1949.

## BOROUGH OF SOUTHGATE.

## BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

## APPOINTMENT OF ARCHITECTURAL STAFF.

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

(a) CHIEF ARCHITECTURAL ASSISTANT.

A.P.T. VII-VIII.

(b) TWO ARCHITECTURAL ASSISTANTS.

A.P.T. V-VA.

(c) TWO ARCHITECTURAL ASSISTANTS.

A.P.T. IV-V.

In all cases the appropriate "London weighting" will be paid, and the commencing salary will be at some point on the lower grade, such point to be fixed in accordance with the qualifications and experience of the successful candidate.

For appointments (a) and (b) applicants must be Associate Members of the Royal Institute of British Architects or hold an equivalent qualification. For appointment (c) candidates must at least be in possession of the Intermediate examination of that Institute.

Forms of application for each appointment may be obtained from the Borough Engineer and Surveyor, and should be returned clearly marked Appointment (a), (b), etc., as the case may be, to the undersigned not later than 9 a.m. on Monday, 2nd May, 1949.

Canvassing directly or indirectly, will be a disqualification.

## GORDON H. TAYLOR,

Town Clerk.

Town Hall, Palmers Green, London, N.13. 601

4th April, 1949.



**LONDON COUNTY COUNCIL.  
VACANCIES FOR QUANTITY SURVEYORS  
AND ASSISTANTS IN ARCHITECT'S DEPARTMENT.**

**SURVEYOR.** Grade II, £700 × £35—£840 a year.  
**SURVEYOR.** Grade III, £550 × £25—£700 a year.

**TEMPORARY TECHNICAL ASSISTANT (a).** £440 × £20—£580 a year.

**TEMPORARY TECHNICAL ASSISTANT (b).** Up to 10% of a week.

Commencing rates for Grade III and Technical Assistants according to qualifications and experience.

Candidates for Grade II and Grade III should be Associates of the Royal Institution of Chartered Surveyors, and experienced in abstracting and billing, estimating, interim valuations for payment on account, measuring, adjusting and agreeing final accounts, "taking off" and the preparation of Bills of Quantities. Applicants for positions as Temporary Technical Assistants should be up to Intermediate R.I.C.S. standard, and should have had previous experience in a quantity surveyor's office.

Successful candidates are required to contribute to the Council's Superannuation and Provident Fund. There are opportunities for Temporary Assistants to compete on merit for permanent appointment.

Application forms from the Architect (AR/P/Q), County Hall, Westminster, S.E.1, enclosing stamped addressed foolscap envelope. Canvassing disqualified. (389) 582

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

The above County Council invites applications for the under-mentioned appointments in the County Architect's Department, Wrexham, viz.:

**ONE ASSISTANT QUANTITY SURVEYOR.** A.P.T. Division, Grade III. Salary £450-£495 per annum.

Preference will be given to candidates who have passed the Intermediate examination of the R.I.C.S. (Quantities Sub-division), or who hold an equivalent qualification. Applicants must be capable of "taking off" for small works, abstracting, and should have a good knowledge of specification writing and experience in the settlement of accounts.

**ONE ASSISTANT ARCHITECT.** A.P.T. Division, Grade V. Salary £520-£570 per annum.

Applicants should be preferably Members of R.I.B.A. and Registered Architects, and must have had sound experience in architectural design and in the preparation of working drawings, with full understanding of modern school construction.

**TWO JUNIOR ASSISTANT ARCHITECTS.** A.P.T. Division, Grade III. Salary £450-£495 per annum.

Preference will be given to applicants who have passed the Intermediate R.I.B.A. examination. Applicants must be capable of the preparation of working drawings and details for modern buildings.

**TWO JUNIOR ASSISTANT ARCHITECTS** (one for Headquarters Office, Wrexham, and one for Abergele Area Office), Grade II. Salary £420-£465 per annum.

Preference will be given to applicants who are preparing for the Intermediate R.I.B.A. examination. Applicants must be capable of the preparation of working drawings and details.

**ONE JUNIOR ASSISTANT ARCHITECT.** Misc. Division, Grade II. Salary £375-£420 per annum.

Preference will be given to applicants who are preparing for the Intermediate R.I.B.A. examination. Applicants must be capable of preparing working drawings and have a good knowledge of building construction.

The appointments will be subject to termination by one month's notice in writing on either side, and also to the provisions of the Local Government Superannuation Act, 1937. The successful applicants will be required to pass a medical examination, and to reside in such place in the County as the County Council may direct.

Applications, giving age, qualifications, and particulars of present and previous appointments, and accompanied by copies of three recent testimonials, to be sent to me, the undersigned, in a sealed envelope, endorsed with a description of the post applied for, by not later than the 3rd day of May, 1949.

W. J. ROWLANDS,  
Acting Clerk of the County Council.  
County Offices, Ruthin. 673  
11th April, 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 hold a professional qualification in Architecture or Surveying, and have experience in Town and Country Planning and in the preparation of basic surveys and development plans.

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 30th April, 1949. 634

**BOROUGH OF CHESTERFIELD.  
BOROUGH ENGINEER AND SURVEYOR'S  
DEPARTMENT.**

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

(a) **JUNIOR ARCHITECTURAL ASSISTANT.** A.P.T. Division, Grade II (£420-£465).

(b) **DRAUGHTSMAN.** Miscellaneous Division, Grade II (£375-£420).

Applicants for appointment (a) must have had good experience in general Architectural work, and preference will be given to candidates who have passed the Intermediate examination of the R.I.B.A.

Applicants for appointment (b) must be expert draughtsmen and must have had previous experience in the preparation of drawings for Architectural work.

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

Canvassing will disqualify. Candidates must disclose whether they are related to any member of the Council or to any senior officer of the Council.

Applications, endorsed "Junior Architectural Assistant" or "Draughtsman," stating age, qualifications and experience, present and past appointments, and accompanied by copies of three testimonials, should be received by the undersigned not later than 7th May, 1949.

RICHARD CLEGG,  
Town Clerk.  
Town Hall, Chesterfield. 651  
April, 1949.

**ESSEX EDUCATION COMMITTEE.  
SOUTH-EAST ESSEX TECHNICAL COLLEGE  
AND SCHOOL OF ART, LONGBRIDGE ROAD,  
DAGENHAM.**

**FULL-TIME LECTURER (Man)** required for courses leading to the Intermediate examinations of the R.I.B.A. and R.I.C.S. Applicants must have practical knowledge of Building Construction and experience in one or more of the following:

Elementary Surveying and Levelling.  
Quantities.  
Valuations.  
Draughtsmanship.  
Architectural History.

Teaching experience is not essential.  
Salary: Assistants' Scale of the Burnham Further Education Report (£300 × £15 to £555), plus London allowance (£35 or £48), and allowances for qualifications and training. Commencing salary determined by previous teaching and professional experience.

Further particulars and forms of application, which should be returned to him within 14 days of advertisement, may be obtained from the Clerk to the Governors at the College.

D. N. BUNGEY,  
Acting Chief Education Officer.  
County Offices, Chelmsford. 641

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

Applications are invited for the following appointments in the office of the City Engineer—  
**ARCHITECTURAL ASSISTANT, Grade I** (Permanent Staff).

Salary £400 to £425, by annual increments of £25.

**ARCHITECTURAL ASSISTANT, Grade III** (Auxiliary Staff).

Salary £560 to £750, by annual increments of £25.

Commencing salary within the above grades will be considered in relation to qualifications and experience.

Applicants must be Chartered Architects, who have passed the Final examination of the R.I.B.A. or who hold an appropriate Degree of a British University, and who have had experience in design, construction and maintenance of Public Buildings and Housing.

The appointments are subject to the Standing Orders of the Corporation, and the selected candidates will be required to pass a medical examination and contribute to the Corporation's Superannuation Scheme.

Forms of application and conditions of service are to be obtained from the City Engineer, Corporation of London, 55/61, Moorgate, London, E.C.2.

Applications, together with copies of two recent testimonials, are to be forwarded to the Town Clerk, Corporation of London, 55/61, Moorgate, E.C.2, by the 16th May, 1949. 654

**CITY OF PORTSMOUTH.  
CITY PLANNING DEPARTMENT.**

Applications are invited for the following appointments:

(a) **ASSISTANT PLANNING OFFICER** (Grade VII, £585-£760 per annum).

(b) **TWO PLANNING ASSISTANTS** (Grades III-V, £450-£570 per annum, according to experience and qualifications).

Applicants for post (a) must be Corporate Members of the Town Planning Institute, and preference will be given to those having architectural training or qualifications. Applications, stating age, present position, qualifications and experience, together with names of three responsible persons to whom reference may be made, must be delivered to the undersigned, marked "City Planning Appointment," not later than 23rd May, 1949. Canvassing will disqualify.

V. BLANCHARD,  
Town Clerk.  
City Council Chambers, Southsea. 660  
7th April, 1949.

**COUNTY COUNCIL OF DURHAM.  
COUNTY PLANNING DEPARTMENT.**

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

(a) **TWO PLANNING ASSISTANTS.** Grade VI, A.P.T. of the National Scheme of Conditions of Service (£595-£660).

(b) **TWO PLANNING ASSISTANTS.** Grade Va, A.P.T. (£550-£612).

(c) **TWO PLANNING ASSISTANTS.** Grade II, A.P.T. (£420-£465).

(d) **ONE JUNIOR PLANNING ASSISTANT.** Grade I, Miscellaneous Division (£315-£360).

Applicants for

(a) Must be qualified architects, and additional qualifications in planning will be an advantage;  
(b) and (c) suitably qualified by examination and experience;

(d) previous planning experience will be an advantage.

The appointments are subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination by the Council's Medical Officer. The appointments will be terminable by one calendar month's notice in writing on either side. Canvassing, either directly or indirectly, will disqualify. Applicants must disclose in writing whether to their knowledge they are related to any member or to the holder of any senior office under the Council.

Applications, stating age, married or single, and giving full particulars of qualifications and experience, and the names of three persons to whom reference may be made, must be delivered to the County Planning Officer, 10, Church Street, Durham, by Thursday, 28th April, 1949.

J. K. HOPE,  
Clerk of the County Council.  
Shire Hall, Durham. 690  
11th April, 1949.

**COUNTY OF LINCOLN—PARTS OF  
KESTEVEN.**

**KESTEVEN TEACHERS' TRAINING COLLEGE,  
STOKE ROCHFORD, NEAR GRANTHAM.**

**LINES.**

Applications are invited for the appointment of CLERK OF WORKS, to supervise the works in connection with the erection of two Hostel Blocks, Gymnasium, etc., for the Teachers' Training College, at Stoke Rochford Hall, near Grantham.

The salary offered is £8 to £10 per week, according to qualifications and experience. Subject to satisfactory service, the appointment will be for the duration of the contract.

Candidates should possess practical training and experience in one of the main building trades, preferably that of Carpenter and Joiner, and should also have had previous experience as a Clerk of Works.

Forms of application may be obtained from the undersigned, to whom completion forms should be submitted not later than the 30th April, 1949.

J. E. BLOW,  
Clerk of the County Council.  
County Offices, Stamford, Lincs. 671  
11th April, 1949.

**HOLLAND COUNTY COUNCIL.  
COUNTY PLANNING DEPARTMENT.**

**AREA PLANNING OFFICER.** Grade VI, £595-£660.

Applications are invited for the above post from persons with wide experience in Town and Country Planning.

They should be fully conversant with recent legislation governing all aspects of Development Control, the Preparation of Factual Surveys and Reports leading to the preparation of a Development Plan.

The successful applicant will be required to provide motor car, for which he will be paid a travelling allowance in accordance with the County Scale.

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

Applications, stating age, education, qualifications and experience, accompanied by a copy of one recent testimonial and the names of two persons to whom reference may be made, should be sent to arrive not later than 14 days after the publication of this notice. Known relationship to any member or senior officer of this Council must be disclosed.

Envelopes should be endorsed "Area Planning Officer," and addressed to the County Planning Officer, Harrington House, Broad Street, Spalding, Lincs.

H. C. MARRIS,  
Clerk of the County Council.  
County Hall, Boston, Lincs. 611  
5th April, 1949.

**CITY OF BATH.  
CITY PLANNING DEPARTMENT.**

Applications are invited for the appointment of a SENIOR PLANNING ASSISTANT, Grade V (£520-£570), or Grade VI (£595-£660), according to qualifications and experience. Preference will be given to candidates who possess a recognized Town Planning qualification. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination.

Applications, stating age, qualifications and experience, together with the names of three referees, should be forwarded to the City Planning Officer, 2, Princess Buildings, Bath, not later than 30th April, 1949. 679



# BUCKS COUNTY COUNCIL COUNTY ARCHITECT'S DEPARTMENT

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

(a) SENIOR ASSISTANT QUANTITY SURVEYOR, Grade VIII. Salary £685-£760 per annum.

Candidates should be members of the Royal Institute of Chartered Surveyors (Quantities Section) with pre-war experience, and must show evidence of special ability and experience as a Taker-off for all types of building works undertaken by a Local Authority, also fully capable of dealing with the settlement of final accounts.

(b) ASSISTANT QUANTITY SURVEYOR, Grade VII. Salary £635-£710 per annum.

Candidates should be members of the Royal Institute of Chartered Surveyors (Quantities Section) and must be capable of undertaking all stages of the work in the preparation of specifications, bills of quantities and the settlement of final accounts for all types of minor building works undertaken by a Local Authority.

(c) ASSISTANT QUANTITY SURVEYOR, Grade IV. Salary £480-£525 per annum.

Preference will be given to candidates who have passed the Intermediate R.I.C.S. examination and must be experienced Workers-up.

(d) ASSISTANT ARCHITECTS: One Grade VIII, salary £685-£760 per annum; and one Grade VII, salary £635-£710 per annum.

Candidates should be members of the R.I.B.A., and preference will be given to Graduates in Architecture or persons possessing some pre-war experience.

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

Applications for the above appointments must be made on the prescribed forms, obtainable from the County Architect, County Offices, Walton Street, Aylesbury, to whom completed application forms should be returned not later than 9th May, 1949.

GUY R. CROUCH,

Clerk of the County Council.

County Hall, Aylesbury. 672  
April, 1949.

# MIDDLESEX COUNTY COUNCIL

## AMENDED ADVERTISEMENT

PLANNING ASSISTANTS—Grade A.P.T., IV-V (£480 to £570 per annum, plus £20-£30 London weighting, according to age)—required in the County Planning Department. Duties will include preparation of maps, reports and plans, investigation of survey data, and work on development control. Candidates should have town planning or architectural experience and appropriate qualifications. Applications, stating age, giving full particulars, with three recent testimonials, to the undersigned by 23rd May (quoting F.479 A). Canvassing disqualifies.

C. W. RADCLIFFE,

Clerk of the County Council.

Middlesex Guildhall, Westminster, S.W.1. 653

# SURREY COUNTY COUNCIL

## COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:—

SUPERINTENDENT CLERK OF WORKS, Grade VIII. Salary £685, rising by annual increments of £25 to a maximum of £760 per annum, plus London allowance of £30 per annum.

The successful applicant will be responsible for the control and organization of all Clerks of Works engaged on the supervision of major contracts.

Applicants must have had full experience in the building trade and possess a sound knowledge of all materials.

Full details should be given of present and previous appointments, including the duties of the appointment, and the salary attaching thereto.

ASSISTANT ARCHITECT, Grade VIII. Salary £685 to £760 per annum, plus London allowance of £30 per annum.

Applicants must hold either a degree in Architecture, or be Members of the Royal Institute of British Architects, and have had a good training and an adequate experience in the design and construction of modern buildings.

Applicants should give full details of present and previous appointments and the salary attaching thereto.

ASSISTANT ARCHITECT, Grade VI. Salary £595 to £660 per annum, plus London allowance of £30 per annum.

Applicants must be Associate Members of the Royal Institute of British Architects.

The appointments will be subject to the provisions of the Local Government Act, 1937, and the successful applicants 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 7th May, 1949.

Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

The Council will be unable to provide any housing accommodation, and the successful applicants will be required to make their own arrangements in this direction.

DUDLEY AUKLAND,

Clerk of the Council.

County Hall, Kingston-upon-Thames. 678

# 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 3rd May, 1949.

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

C. M. S. WELLS,

Clerk of the County Council. 658  
County Hall, Brecon.

# ANGLESEY COUNTY COUNCIL

## COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the post of ARCHITECTURAL ASSISTANT in the County Architect's Department. Salary within Grades III/IV, A.P.T. Division (£450-£525 per annum), according to experience and qualifications. 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 appointment will be subject to the provisions of the Local Government Officers' Superannuation Act, 1937. Candidates called for interview will be required to undergo a medical examination by the County Medical Officer. The appointment is subject to one month's notice on either side.

Applications stating age, training, qualifications, experience, past and present appointments, names of two referees and accompanied by a copy of one recent testimonial should be delivered to the undersigned not later than Monday, 2nd May, 1949.

WILLIAM JONES,

Clerk of the County Council. 670  
Shire Hall, Llangefni, Anglesey.

# MIDLANDS ELECTRICITY BOARD

## BIRMINGHAM AND DISTRICT SUB-AREA

### APPOINTMENT OF QUANTITY SURVEYOR

Applications are invited for the position of Quantity Surveyor in the Sub-Area Engineer's Department.

Applicants must have had a sound theoretical and practical training in quantity surveying, should be a Member of the Chartered Surveyor's Institution or hold equivalent technical qualifications, and be fully experienced in the writing of specifications, the preparation of Bills of Quantities in all stages for industrial type, buildings, sub-stations, showrooms and offices, and be capable of settling accounts for contract work. He must also be prepared, if required, to undertake draughting work associated with the above. The commencing salary will be in accordance with the N.J.B. Schedule, Grade 5a, at present £577 per annum.

Applications, giving full details of experience, present position and salary, should be endorsed "Quantity Surveyor," and sent within 14 days of the publication of this notice to the undersigned.

A. C. EVANS,

Sub-Area Manager.

14, Dale End, Birmingham, 4. 645  
6th April, 1949.

# CITY OF STOKES-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 M.P.T. Div., Grade VI, £595-£660.

Applicants must be competent to prepare Bills of Quantities 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. 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 Saturday, 14th May, 1949.

HARRY TAYLOR, Town Clerk.

Town Hall, Stoke-on-Trent. 666  
11th April, 1949.

# METROPOLITAN BOROUGH OF FULHAM HOUSING AND PUBLIC BUILDINGS DEPARTMENT

Applications are invited for the following appointments in the Housing and Public Buildings Department:—

(a) SENIOR ASSISTANT ARCHITECT (A.P.T., Grade VI, £595-£660 per annum, plus London weighting).

(b) ASSISTANT ARCHITECT (A.P.T., Grade V, £520-£570 per annum, plus London weighting).

(c) TWO ASSISTANT ARCHITECTS (A.P.T., Grade IV/V, £480-£570 per annum, plus London weighting).

(d) ARCHITECTURAL ASSISTANT (A.P.T., Grade I, £390-£435 per annum, plus London weighting).

(e) TECHNICAL ASSISTANT (A.P.T., Grade IV/V, £480-£570 per annum, plus London weighting).

(f) ESTIMATING AND COSTING ASSISTANT (A.P.T., Grade III/IV, £450-£525 per annum, plus London weighting).

(g) WORKER-UP, Quantity Surveyor's Section (A.P.T., Grade II/III, £420-£495 per annum, plus London weighting).

(h) CLERK (General Division, £310 per annum at 25, rising to £415 per annum at age of 32 and over).

Candidates for appointments (a), (b) and (c) must be Chartered or Registered Architects, with experience in the design and construction of blocks of flats and other buildings required by a Local Authority.

Candidates for appointment (d) should have reached the standard of the Intermediate examination of the R.I.B.A., and preference will be given to candidates possessing this qualification, and with previous Local Government experience.

Candidates for appointment (e) must have a sound knowledge of building construction, have had experience in dealing with maintenance works, be conversant with prices, the preparation of estimates and bills of quantities, have a knowledge of the London Building Acts and By-laws, be capable of drafting reports to Committees, have administrative ability and able to control staff. Local Authority experience is desirable, but applicants with comparable experience will be considered.

Applicants for appointment (f) will be responsible for the preparation of estimates for direct labour works on maintenance of and alterations to public buildings and residential properties, and contracts for new works, and will also be responsible for the costing of maintenance and contract works and the supervision of accounts and wages. Candidates must have had similar experience with a Local Authority or in a Builder's office.

For appointment (g) candidates must be thoroughly experienced in "Working-up" bills of quantities for large works. The commencing salary will be fixed according to experience.

For appointment (h) applicants must have previous experience in a Building Department of a Local Authority or in a Builder's office, and should be familiar with building materials, wares, haulage, plant, etc. A knowledge of building construction is desirable.

Applications on the official form, which may be obtained from me on receipt of a stamped addressed envelope, must be returned not later than noon on Monday, 2nd May, 1949.

CYRIL F. THATCHER, Town Clerk.

Town Hall, Fulham, S.W.6. 633  
April, 1949.

# SURREY COUNTY COUNCIL

## COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointment:—

ASSISTANT QUANTITY SURVEYOR (GRADE VII).

Commencing salary £450, rising by annual increments of £15 to a maximum of £495 per annum, plus London allowance of £30.

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 30th April, 1949.

Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

The Council will be unable to provide any housing accommodation, and the successful candidate will be expected to make his own arrangements in this direction.

DUDLEY AUKLAND,

Clerk of the Council. 590

County Hall, Kingston-upon-Thames.

# THE GLASGOW SCHOOL OF ARCHITECTURE

The Governors of The Glasgow School of Art invite applications for the post of SENIOR ASSISTANT in the Department of Architecture.

Previous teaching experience, though desirable, is not essential. Salary scale £700-£825 to £900 per annum, with placing according to qualifications and experience. An aptitude for lecturing on the History of Architecture will be a strong recommendation for the post. Further information and particulars, with form of application, may be obtained from the undersigned: W. H. MASON, Secretary and Treasurer, The Glasgow School of Art, 157, Renfrew Street, Glasgow, C.3.

629

**COUNTY BOROUGH OF BRIGHTON.**

**BRIGHTON TECHNICAL COLLEGE.**

Principal: G. E. WARR, M.A., Ph.D., F.R.I.C.  
Applications invited for the following posts from 1st September, 1949:—

(a) **LECTURER IN CIVIL ENGINEERING.** Lecturer, with degree in Civil Engineering and/or Corporate Membership of the I.C.E. or I.Struct.E., required to assist with teaching of general civil engineering subjects, and possibly one subject (Theory of Structures, Surveying, or Hydraulics) up to final degree standard.

(b) **LECTURER IN BUILDING SCIENCE.** Science degree or some comparable qualification, and practical experience of building materials required. Ability to assist with teaching Building Mathematics or Mechanics a recommendation.

(c) **TWO LECTURERS IN BUILDING SUBJECTS.** Recognized qualifications in Architecture, Building or Surveying required. Lecturers will have opportunity of specializing in those subjects in which they are especially qualified.

Burnham Technical Scale of Salaries. In cases of posts (a) and (b) a special responsibility allowance may be added to the scale.

Further particulars and forms of application, obtainable from the undersigned, to be returned with copies of two recent testimonials, to the Principal, Technical College, Brighton, within 14 days.

W. G. STONE,  
Education Officer.

54, Old Steine, Brighton. 622

The Department of Estate Management, University of Cambridge, requires the services of **ASSISTANT ARCHITECT**, who has passed the Final examination of the R.I.B.A.; **ASSISTANT BUILDING SURVEYOR**, who has passed the Final examination of the R.I.C.S. Sub-division III (Building); **ASSISTANT QUANTITY SURVEYOR**, who has passed the Final examination of the R.I.C.S. Sub-division III (Quantities). Applicants for these three posts must be not less than 25 years of age. Commencing salaries according to age and experience.

Successful candidates will, subject to 6 months' probationary service, be eligible for appointment to graded pensionable posts, the salary scales for which will be forwarded to applicants.

Detailed applications, with copies of three recent testimonials, to Secretary, Department of Estate Management, 74, Trumpington Street, Cambridge. 577

**COUNTY BOROUGH OF CARLISLE.**

**APPOINTMENT OF SENIOR ASSISTANT TOWN PLANNING OFFICER, GRADE IV.**

Applications are invited for the above appointment on the permanent staff of the City Engineer and Surveyor or Planning Officer, at a consolidated salary of £480, rising by annual increments of £15 to £525 per annum.

Applicants should preferably have passed the Final examination of the Town Planning Institute and/or the Final examination of the Institution of Civil or Municipal Engineers, Royal Institution of British Architects or the Royal Institution of Chartered Surveyors, or hold other equally suitable qualifications. Previous experience in the practice of Town and Country Planning is desirable.

The Council will do their best to make housing accommodation available to the successful applicant if he so desires.

Application forms may be obtained from the City Engineer, 18, Fisher Street, Carlisle, and completed forms should be returned to me not later than Monday, 9th May, 1949.

H. D. A. ROBERTSON,  
Town Clerk.

The Town Clerk's Office, Fisher Street, Carlisle. 628

**CORPORATION OF GLASGOW.**

**HOUSING DEPARTMENT.**

Applications are invited for the undernoted appointments:—

**ASSISTANT ARCHITECTS, Grade I.**  
**ASSISTANT CIVIL ENGINEERS, Grade I.**  
**ASSISTANT QUANTITY SURVEYORS, Grade I.**

Salary scale A.P.T., VI, £595-£660.  
**ASSISTANT ARCHITECTS, Grade II.**  
**ASSISTANT CIVIL ENGINEERS, Grade II.**  
**ASSISTANT QUANTITY SURVEYORS, Grade II.**

Salary scales A.P.T., I, III and V, £390-£435, £450-£495, £520-£570.

Appointments to Grade I will be restricted to those candidates who are members of the appropriate professional body. For appointments to Grade II applicants should have passed the Final examination of the appropriate professional body or should hold an equivalent qualification.

In the case of Grade II appointments, the commencing salary will be fixed according to age and experience.

The appointments will be to the permanent Establishment of the Department, and are subject to the provisions of the Corporation's Superannuation Scheme. Successful applicants will require to pass a medical examination.

The appointments are terminable on either side by one month's notice in writing. Applications, indicating the position applied for, and stating age, particulars of training, experience and qualifications, should be addressed to the undersigned, and should be received within 14 days of the publication of this advertisement.

A. G. JURY,  
Director of Housing.

Housing Department, 20, Trongate, Glasgow, C.1. 625

**BERKSHIRE COUNTY COUNCIL.**

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

(a) **ASSISTANT COUNTY ARCHITECT (ADMINISTRATIVE).** Salary Grade VIII, £685-£750. Candidates must be Members of the Royal Institution of British Architects, with considerable professional experience of Local Authority administration and organization of contracts, and must have had experience in negotiating approval under the various recent Acts and be fully conversant with their requirements.

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

(c) **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.

(d) **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 can be obtained from the County Architect, Wilton House, Parkside Road, Reading, to whom they should be returned completed by Saturday, 30th April, 1949.

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

Shire Hall, Reading. 632

**LONDON COUNTY COUNCIL.**

**BRITTON SCHOOL OF BUILDING,**

**FERNDALE ROAD, S.W.4.**

Part-time VISITING TEACHERS are required from time to time, for DAY and EVENING CLASSES, as shown in the following subjects:—

**ARCHITECTURE: DAY CLASSES** in Architectural Design, including studio instruction, History, Hygiene, Acoustics and Sound Control, Professional Practice. **EVENING CLASSES** in Architectural Design and all subjects for the R.I.B.A. examinations.

**BUILDING (DAY or EVENING):** Building Construction, Building Geometry, Mathematics, Builders' Accountancy, Builders' Estimating.

**STRUCTURAL ENGINEERING (DAY or EVENING):** All Structural Engineering subjects, including Theory of Structures, Specifications, Steel Design and Detailing, Reinforced Concrete Design and Detailing.

**SURVEYING (DAY or EVENING):** Quantity Surveying, Land Surveying, Valuations, and all subjects of the R.I.C.S. examinations.

Suitably qualified persons wishing to be considered can obtain application forms (stamped addressed foolscap envelope necessary) from the Secretary at the School. (378) 621

**CITY AND COUNTY OF NEWCASTLE-UPON-TYNE.**

**CITY ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointments:—

(a) **FOUR SENIOR ASSISTANT ARCHITECTS.** Salary £595 per annum, rising to £660 per annum (A.P.T. Grade VI).

(b) **THREE SENIOR ASSISTANT ARCHITECTS.** Salary £520 per annum, rising to £570 per annum (A.P.T. Grade V).

(c) **TWO ASSISTANT ARCHITECTS.** Salary £480 per annum, rising to £525 per annum (A.P.T. Grade IV).

(d) **ONE SENIOR ASSISTANT QUANTITY SURVEYOR.** Salary £595 per annum, rising to £660 per annum (A.P.T. Grade VI).

(e) **TWO ASSISTANT QUANTITY SURVEYORS.** Salary £520 per annum, rising to £570 per annum (A.P.T. Grade V).

Applicants for appointments (a) and (b) should be Associates of the Royal Institution of British Architects, and must have had experience on Housing, General Architectural work, and/or Educational buildings.

Applicants for appointments (c) should have passed the Intermediate examination of the Royal Institution of British Architects.

Applicants for appointments (d) and (e) must have had experience in the preparation of Bills of Quantities, Specifications, Estimates, and the settlement of Final Accounts on all kinds of building contracts. Preference will be given to Professional Associates of the Royal Institution of Chartered Surveyors.

The appointments will be subject to the National Conditions of Service as adopted by the City Council: 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.

Housing accommodation will be made available to successful candidates, if required.

Applications, stating age, particulars of training, qualifications, experience, present and previous appointments, together with copies of two recent testimonials, and the names and addresses of two persons to whom reference may be made, should be addressed to the City Architect, 18, Cloth Market, Newcastle-upon-Tyne, 1.

JOHN ATKINSON,  
Town Clerk.

Town Hall, Newcastle-upon-Tyne, 1. 650  
8th April, 1949.

**EAST RIDING OF YORKSHIRE COUNTY COUNCIL.**

Applications are invited for the following appointments on the permanent staff of the County Architect's Department:—

(1) **PRINCIPAL ASSISTANT ARCHITECT.** A.P.T. Grade VIII, £685-£760 per annum.

Applicants must be fully qualified Architects and have had extensive experience in the supervision of Drawing Office Staff and possess a contemporary outlook on architectural design and construction.

(2) **ASSISTANT ARCHITECTS.** Grades IV to VI. The salary range is £480 to £660, and each suitable applicant will be appointed to the grade appropriate to his qualifications and experience. Provision is made for progress between grades within the groups, dependent upon satisfactory service. Applicants should have had satisfactory experience in the design and construction of modern buildings, and preference will be given to those who have appropriate professional qualifications.

(3) **QUANTITY SURVEYORS' ASSISTANT.** A.P.T. Grade II, £420 to £465 per annum.

Applicants should have had experience in a Quantity Surveyor's or Builder's office and possess some knowledge of the preparation of Bills of Quantities, Specifications, Site Measurement, and the preparation of Final Accounts.

(4) **ENGINEERING ASSISTANT.** A.P.T., Grade II, £420 to £465 per annum.

Applicants should be capable of designing and preparing specifications for heating and hot water service installations, and be a neat and careful draftsman. Some experience of panel heating would be considered an advantage.

(5) **LAND SURVEYING ASSISTANT.** General Grade £220 at the age of 21, rising to £385 per annum.

Applicants should preferably have previous experience in a Surveyor's office, and be capable of carrying out land surveys, including the preparation of necessary drawings.

The Authority's building programme includes for the provision of New Schools, County Colleges, Police Housing, Fire Stations, Health Centres, and Homes for Aged Persons.

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

Applications, stating age, training, qualifications, experience, and details of past and present appointments, stating salary, and accompanied by copies of three testimonials, should reach the County Architect, County Hall, Beverley, not later than the 2nd May, 1949.

Relationship to a member or senior officer of the Council must be disclosed to the undersigned.

T. STEPHENSON,  
Clerk of the County Council.

County Hall, Beverley. 639  
April, 1949.

**COUNTY BOROUGH OF HALIFAX.**

**BOROUGH ENGINEER'S DEPARTMENT.**

**APPOINTMENT OF PRINCIPAL ARCHITECT FOR SCHOOLS.**

Applications are invited for the above appointment, at a salary in accordance with combined National Grade, A.P.T. VII-VIII, £635-£760 p.a. The commencing salary will be fixed having regard to the candidate's experience, qualifications, and present salary. Housing accommodation will be available. The person appointed will be responsible for the design and construction of new schools and other architectural work under the control of the Education Committee, and will be terminable by two months' notice by either side.

The appointment is a superannuated one. Applications, stating age, qualifications, present position, salary and experience, accompanied by copies of three recent testimonials, and endorsed "Principal Architect-Schools," should be delivered to the undersigned not later than Saturday, 30th April, 1949.

RICHARD de Z. HALL,  
Town Clerk.

Town Hall, Halifax. 691  
4th April, 1949.

**BOROUGH OF BACUP.**

**TEMPORARY JUNIOR ARCHITECTURAL ASSISTANT.**

Applications are invited for the appointment of Temporary Junior Architectural Assistant in the office of the Borough Engineer and Surveyor. Applicants must have a good knowledge of house and general building construction, and be competent to prepare plans and working drawings. Preference will be given to candidates holding an appropriate technical qualification.

The post will provide persons who have completed technical training, with a good opportunity of gaining valuable experience in Local Authority housing construction.

The salary will be in accordance with Grade I of the A.P. and T. Division of the National Scales of Salaries (£390-£435 per annum).

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

Forms of application may be obtained from the undersigned, to whom they should be returned completed not later than Saturday, 30th April, 1949.

C. G. EVERATT,  
Town Clerk.

Municipal Offices, Bacup. 636



# MIDLANDS ELECTRICITY BOARD. BIRMINGHAM AND DISTRICT SUB-AREA. APPOINTMENT OF ARCHITECTURAL DRAUGHTSMAN.

Applications are invited for the position of Architectural Draughtsman in the Sub-Area Engineer's Department.

Applicants must have had a thorough architectural training, hold appropriate professional or technical qualifications, and be fully experienced in the preparation of preliminary, working and detail drawings for industrial type buildings, sub-stations, showrooms and offices. Experience in the design of reinforced concrete and steel structures would be considered an advantage.

The commencing salary will be in accordance with the N.J.B. Schedule, Class O, Grade 10, at present £324 per annum. Applications, giving full details of experience, present position and salary, should be endorsed "Architectural Draughtsman," and sent within 14 days of the publication of this notice to the undersigned.

A. C. EVANS,  
Sub-Area Manager.

14, Dale End, Birmingham, 4. 642

# MIDLANDS ELECTRICITY BOARD. BIRMINGHAM AND DISTRICT SUB-AREA. APPOINTMENT OF CLERK OF WORKS.

Applications are invited for the position of Clerk of Works in the Sub-Area Engineer's Department.

Applicants should possess a sound knowledge and experience of all building trades, and be competent to undertake all duties normally required of a Clerk of Works in connection with the construction of industrial type buildings, sub-stations, showrooms, offices, and reinforced concrete structures. The possession of a recognized diploma will be considered an additional qualification.

The commencing salary, within the range of £450-£550, according to qualifications and experience, will be provisional and subject to adjustment by the appropriate negotiating machinery.

Applications, giving full details of experience, present position and salary, should be endorsed "Clerk of Works," and sent within 14 days of the publication of this notice to the undersigned.

A. C. EVANS,  
Sub-Area Manager.

14, Dale End, Birmingham, 4. 643

# MIDLANDS ELECTRICITY BOARD. BIRMINGHAM AND DISTRICT SUB-AREA. APPOINTMENT OF JUNIOR ARCHITECTURAL DRAUGHTSMAN.

Applications are invited for positions as Junior Architectural Draughtsmen in the Sub-Area Engineer's Department.

Applicants should have received good technical and architectural training, some experience in an Architect's office, and be capable of preparing, under supervision, detail and working drawings in connection with industrial type buildings, sub-stations, showrooms and offices.

The commencing salary, in accordance with qualifications and experience, and not less than £270 per annum, will be provisional and subject to adjustment by the appropriate negotiating machinery.

Applications, giving full details of experience, present position and salary, should be endorsed "Junior Architectural Draughtsman," and sent within 14 days of the publication of this notice to the undersigned.

A. C. EVANS,  
Sub-Area Manager.

14, Dale End, Birmingham, 4. 644

# COUNTY OF LINCOLN—PARTS OF LINDSEY.

# COUNTY ARCHITECT'S DEPARTMENT.

The County Council will consider making an allowance in the case of married men finding it necessary to obtain lodgings in Lincoln whilst maintaining their home outside Lincoln of 25s. per week for six months, plus third-class railway fare to their home each two months.

Applications are therefore invited for the following vacancies:

# ASSISTANT ARCHITECTS AND ASSISTANTS:

(a) Three vacancies. Grade VI, £595-£660 per annum.

(b) Two vacancies. Grade V, £520-£570 per annum.

(c) One vacancy. Grade IV, £480-£525 per annum.

(d) Two vacancies. Grade III, £450-£495 per annum.

(e) Three vacancies. Grade II, £420-£465 per annum.

# QUANTITY SURVEYOR:

(f) One vacancy. Grade VII, £635-£710 per annum.

Applicants need not have had previous Local Government experience, but preference will be given to applicants who are Associates of the R.I.B.A. or the R.I.C.S. or in the case of (c), (d) and (e) who are Registered Architects.

Applications, stating which post is applied for, age, qualifications, experience, present salary, and whether to their knowledge they are related to members or senior officers of the County Council, accompanied by copies of two recent testimonials, should be sent to the undersigned not later than Wednesday, 4th May, 1949.

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

County Offices, Lincoln 676

# GLAMORGAN COUNTY COUNCIL. HIGHWAYS AND PLANNING DEPARTMENT.

Applications are invited for the appointment of an AREA PLANNING OFFICER in the County Planning Department at a consolidated salary of £310 per annum, rising by annual increments of £50 to a maximum of £390.

In addition, a lodging allowance at the rate of £75 per annum will be granted if the person appointed is (a) not already in the employ of the County Council and is employed outside the administrative county; (b) maintaining a home elsewhere; and (c) unable to obtain suitable accommodation within a reasonable distance of Pontypridd. This lodging allowance is payable up to a maximum period of 6 months.

The person appointed will be required to take charge of the Eastern Area Planning Office at Pontypridd and will be responsible for the control of development in the area together with certain duties in connection with the survey and preparation of development plans.

Applicants should possess a qualification in Civil Engineering, Surveying, Architecture, Planning, and should have had considerable planning and administrative experience in the position involving the control of staff.

The appointment will be subject to the National Scheme of Conditions of Service; to the staffing regulations of the County Council from time to time in force, and to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

The appointment will be subject to three calendar months' notice on either side. Applicants must not be over 45 years of age, but this condition may be relaxed in the case of a person already in the service of the County Council or a specially suitable candidate already employed by another Local Authority. In the case of ex-Service applicants, the age limit will be raised by the number of years served in H.M. Forces during the recent war.

The person appointed will be required to provide and maintain a motor car for which an allowance is made on the appropriate County Council scale.

Applications stating age, qualifications, experience and present salary, accompanied by a copy of a recent testimonial, and the names and addresses of two referees, should be addressed to the County Planning Officer, Mr. E. John Powell, M.Inst.C.E., County Hall, Cardiff. Envelopes should be endorsed "Appointment of Area Planning Officer."

The latest date for the receipt of applications is Monday, 9th May, 1949.

Dated the 11th day of April, 1949.

A. CLIFFORD WALTER,  
Deputy Clerk of the County Council.

Glamorgan County Hall, Cardiff. 668

# HUNTS COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT.

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

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

(b) ARCHITECTURAL ASSISTANT, Grade III, Salary £450-£495 per annum.

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

Applications, stating age, qualifications, and experience and date on which duties could be commenced, if appointed, together with copies of two testimonials, should be sent to the County Architect, Walden House, Huntingdon, by not later than 2nd May, 1949.

JOHN KELLY,  
Clerk of the County Council.

County Buildings, Huntingdon. 663

# BOROUGH OF STRETFORD. APPOINTMENT OF ARCHITECTURAL ASSISTANT AND DRAUGHTSMAN (PERMANENT).

Applications are invited for the position of Architectural Assistant and Draughtsman in the Borough Engineer and Surveyor's Department, at a salary in accordance with Grade IV of the National Scales of Salary, viz., £480, with three increments of £15 to £525.

Candidates should be experienced in the design and construction of all types of Municipal buildings, including housing schemes, blocks of flats, public buildings, etc., and be capable of preparing specifications and quantities, setting out, measuring up and settling accounts. They should have qualifications equivalent to the Intermediate examination of the R.I.B.A.

The appointment will be subject to one month's notice on either side to the provisions of the Local Government Superannuation Act, 1937, the National Scheme of Conditions of Service, and to the passing of a medical examination. The appointment is a whole-time one, and work in connection with a private practice will be prohibited.

Forms of application may be obtained from the Borough Engineer, Town Hall, Stretford, to whom they should be returned not later than Monday, 25th April, 1949.

C. TREWAVAS,  
Town Clerk.

Town Hall, Stretford. 646

# THE GLASGOW SCHOOL OF ARCHITECTURE.

The Governors of The Glasgow School of Art invite applications for TWO ASSISTANTS in the Department of Architecture. Previous teaching experience, though desirable, is not essential. Salary scale £450-£720 per annum, with placing according to qualifications and experience. Further information and particulars, with form of application, may be obtained from the undersigned: W. H. MASSON, Secretary and Treasurer, The Glasgow School of Art, 167, Renfrew Street, Glasgow, C.3. 630

# Architectural Appointments Vacant

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

THE CO-OPERATIVE WHOLESALE SOCIETY, LIMITED, invite applications for the following appointments on the Staff of the Manchester Architects' Department:—

TWO SENIOR ASSISTANT ARCHITECTS. Salary range £675-£775 per annum. Applicants should preferably be Associates of the Royal Institute of British Architects and must have had considerable experience either in design and planning of modern factories or large shopping emporiums and retail shops. A high standard of architectural design is expected, in addition to administrative ability and experience.

THREE ASSISTANT ARCHITECTS. Salary range £470-£535 per annum. Applicants should have a sound knowledge of building construction and architectural design and be able to produce working drawings and details, under supervision, from sketch plans.

THREE ASSISTANT ARCHITECTS. Salary range £400-£465 per annum. Applicants should be good draughtsmen and possess a sound knowledge of construction and some general architectural experience.

The above appointments are permanent and offer prospects of up-grading to competent Assistants. Successful candidates will be required to undergo a medical examination for entry into compulsory superannuation scheme.

Applications, stating age, experience and qualifications to be addressed to:—The Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4. 614

ASSISTANT for E. Midlands office. Good draughtsmanship and practical experience of domestic work, alterations, maintenance, and quantities desirable. Box 1946.

ASSISTANT ARCHITECT required in London office of Oil Company operating in the Persian Gulf; should be prepared for possibility of short tour of company's site; applicants must be A.R.I.B.A. and have actual office experience in the design and supervision of public buildings, housing schemes, etc.; age 23 to 37; salary according to age and experience. Write, giving details age, experience, etc., and quoting L0126, to Box "K.L.", c/o J. W. Vickers & Co., Ltd., 7/8, Great Winchester Street, E.C.2. 2169

ARCHITECT'S ASSISTANT required; must be good draughtsman and have full knowledge of building construction and capable of making war damage surveys. Reply, stating age and salary to Messrs. H. Payne Wyatt, Son & Partner, 463/465, Brixton Road, London, S.W.9. 2270

ARCHITECTURAL Staff required by London Firm of Architects.—(a) SENIOR QUALIFIED ASSISTANTS; (b) ASSISTANTS, R.I.B.A. Intermediate standard, preferably those having some experience of surveying and levelling; (c) JUNIOR ASSISTANTS AND IMPROVERS. Apply by letter, stating experience, age, and salary required, Box 2283.

ARCHITECTURAL ASSISTANT required by building and civil engineering contractors in North-West London. Applicants should be to R.I.B.A. final standard and experienced in industrial and housing design. Full particulars and salary required to Box 567.

ARCHITECTURAL ASSISTANTS required (Intermediate standard) in West End offices of Chartered Architects; good salary and prospects of early promotion to position of responsibility for suitable men. Reply, stating age, experience, etc., to Box 584.

B.O.A.C. has a vacancy for a Male ARCHITECT to be based in London, who involves general architectural and administrative duties of a varied nature, including personal supervision of building contracts; candidates must be Registered Architects and Members of the R.I.B.A., or have similar qualifications, and have good general experience in the practice of architecture with a certain amount of administrative ability; the salary is from £480-£780 p.a., plus 15s.-25s. per week London allowance, according to qualifications and experience. Applications, stating brief details of experience, to Staff Manager, U.K., Stratton House, Stratton Street, Piccadilly, London, W.1, enclosing stamped addressed envelope for reply. 599

SENIOR ARCHITECTURAL ASSISTANT required, preferably with experience of School buildings; salary £600 p.a. J. K. Hawkes A.R.I.B.A., 51, High Street, Baser, Surrey. 616

**JUNIOR ASSISTANT** required immediately for office, West Riding of Yorkshire; must be experienced in working drawings, details, levelling, etc. Write, giving age, experience, and salary required, Box 612.

**ARCHITECTS. SENIOR ASSISTANTS** required. Should have good knowledge of commercial and industrial buildings and contemporary design. Apply in writing to S.C.W.S., Ltd., Architectural Department, 119, Paisley Road, Glasgow, C.S. Envelopes to be endorsed "Architect." 2025

**QUANTITY SURVEYORS. SENIOR ASSISTANTS** required. Preferably with pre-war experience in Scheduling; probable costing; measuring and agreeing Final Measurements. Apply in writing to S.C.W.S., Ltd., Architectural Department, 119, Paisley Road, Glasgow, C.S. Envelopes to be endorsed "Surveyor." 2026

**ASSISTANT ARCHITECT** required by large industrial organisation for service in the Middle East for work on development of sites and designs of housing amenity buildings; L.E.I.B.A. experience, and a minimum of 5 years in an Architect's office on Housing Development essential; age limit 35 years; attractive salary, plus generous allowance in local currency; free passages out and home; free medical attention; kit allowance; pension scheme; good leave arrangements. Write, giving age and details of qualifications and career, quoting Department F.12, to Box 1992, at 191, Gresham House, E.C.2. 1788

**ASSISTANT, Inter. standard or above, for large scale Factory and Housing Work.** Louis Erdi, 27, Knightbridge Street, E.C.4. 'Phone: Central 3310. 669

**AN opportunity** occurs in a London Architect's office for one capable **SENIOR ASSISTANT**. Please send full details of capabilities to Box 677.

**ASSISTANT** required for work on Flats and Industrial Buildings; salary £240-£500 a year, according to experience. Apply by letter or 'phone to Powell & Moya, 36, Gt. Smith Street, S.W.1 (Abbey 5231). 664

**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. 662

**ASSISTANT** required, with knowledge of Structural Design, prepared to study application of aluminium alloys to all types of Building Construction; age, experience, salary required. Box 661.

**QUALIFIED ARCHITECTURAL ASSISTANT** required; age about 30; salaried partnership if suitable after probationship will be offered. Apply Box 657.

**ONE ASSISTANT**, up to Inter. stage, with office experience; salary £8; progressive job for a suitable man. **ONE TEMPORARY ASSISTANT**, experienced in measuring up and detailing; salary £10-£12. F. J. Lenton & Partners, Chartered Architects, Stamford. 665

**HUGH CASSON** urgently requires **ASSISTANT** for General Practice in Kensington office. Freemantle 2802. 631

**APPLICATIONS** are invited for the post of **JUNIOR DRAUGHTSMAN** in a London office engaged in the preparation of technical detail drawings; extensive experience of building construction is not essential, but applicants must be capable of preparing accurate drawings in both ink and pencil. Write, stating age, experience, and salary required, Box 2289.

**QUALIFIED CHIEF ASSISTANT** (not under 35) required for busy East Anglian office; housing accommodation provided if required; car owner-driver; good designer; experienced in controlling jobs through all stages. Reply, stating salary required and with full details, to Box 647.

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## Architectural Appointments Wanted

**CHIEF ASSISTANT ARCHITECT**, extensive experience in large modern factories and commercial buildings, mainly in London, accustomed to complete charge, seeks appointment, with scope and responsibility. Box 280.

## Other Appointments Vacant

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

**ARCHITECTURAL METALWORK REPRESENTATIVE** required with a connection amongst Architects and Architectural experience. Apply by letter in first instance to Morris-Singer Company, Ferry Lane Works, Forest Road, Walthamstow, E.17, stating age, experience and salary required. 2062

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**ESTIMATOR** required for taking-off and tendering for Fibrous and Solid Plastering and Decorative Painting. Full details of previous experience and salary required to Dejonges, 84, Albert Street, London, N.W.1. 675

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**CLERK OF WORKS**. — Applications are invited for the post of Clerk of Works for the rebuilding of the Incorporated Accountants' Hall, Victoria Embankment, London, W.C.2. Applications, stating age, salary required, trade, and experience as Clerk of Works, accompanied by copies of two recent testimonials from Architects, should be addressed to the Secretary of the Society of Incorporated Accountants. 667

**REQUIRED** immediately, by leading Exhibition Contractors and Interior Decorators, young **DESIGNER**, with knowledge of construction, for interesting and varied work; previous experience essential; good salary will be paid in accordance with ability. Write, giving full details, to Box 659.

**TAKERS-OFF, ESTIMATORS**, urgently required in West London area; knowledge of pre-cast reinforced concrete preferred, but not essential; 5-day week; canteen and staff transport facilities available. Write, stating age, experience, present position, and salary, to Box 648.

**DRAUGHTSMEN**, with good knowledge of pre-cast concrete unit construction, urgently required in West London area; must be quick, neat and accurate workers; 5-day week; canteen and staff transport facilities available. Write, stating age, experience, present position and salary, to Box 649.

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## THE FACULTY OF SURVEYORS OF ENGLAND.

**NOTICE to Quantity Surveyors**. — The next examination in Quantity Surveying will be held in London on June 2nd and 3rd, 1949. The Syllabus and Form of Application can be obtained on request from the Secretary, 8, Buckingham Palace Gardens, London, S.W.1. Closing date for receipts of completed form is 30th April, 1949. 2111

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# Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Adams, Robert (Victor), Ltd.	xxix	Formacon, Ltd.	lii	Rawlings Bros., Ltd.	iv
Agas Heat, Ltd.	x	Gent & Co., Ltd.	ii	Rippers, Ltd.	vi
Aldas Electric, Ltd.	xviii	Greenwood's & Airvac Ventilating Co., Ltd.	lii	Rubercoid Co., Ltd.	vi
Allied Builders, Ltd.	xviii	Hall, J. & E., Ltd.	lii	Sadd, John & Sons, Ltd.	vi
Anderson Construction Co.	v	Harris & Sheldon, Ltd.	lii	Sankey, J. H. & Son, Ltd.	vi
Armstrong Cork Co., Ltd.	xv	Harvey, G. A. & Co. (London), Ltd.	lii	Sankey, Joseph & Sons, Ltd.	vi
Ascot Gas Water Heaters, Ltd.	xv	Helliwell & Co., Ltd.	lii	Sankey-Sheldon	vi
Banister Walton & Co., Ltd.	xxiv	Hickson's Timber Impregnation Co. (G.B.), Ltd.	lii	Saunders, Wm. & Co. (Widnesbury), Ltd.	vi
Bath Cabinet Makers & Artcrafts, Ltd.	viii	Higgs & Hill, Ltd.	lii	Scaffolding (Great Britain), Ltd.	vi
Benham & Sons, Ltd.	xxix	Hills, F. & Sons, Ltd.	lii	Sealcrete Products, Ltd.	vi
Bignood, Joshua, & Sons, Ltd.	xlv	Hope, Henry, & Sons, Ltd.	lii	Semtex, Ltd.	vi
Boulton & Paul, Ltd.	xlv	Ibstock Brick & Tile Co., Ltd.	lii	Service Electric Co., Ltd.	vi
Braithwaite & Co. (Engineers), Ltd.	xx	Imperial Chemical Industries, Ltd.	lii	Sharman, R. W., Ltd.	vi
Bratt, Colbran, Ltd.	xxiii	Industrial Engineering, Ltd.	lii	Shires & Co. (London), Ltd.	vi
Briggs, Wm., & Sons, Ltd.	xxvii	International Correspondence Schools	lii	Smith & Rodger, Ltd.	vi
British Aluminium Co., Ltd.	xvi	Johnston Bros. (Contractors), Ltd.	lii	Sommerfeld, K. J. & A., Ltd.	vi
British Gas Council	vi	Jones, Saml., & Co., Ltd.	lii	Southern Lime Assoc., The	vi
British Industries Fair	xxi	Lead Industries Development Council	lii	Stelcon (Industrial Floors), Ltd.	vi
British Mouldex Rubber Co., Ltd.	xi	Lever, James & Sons, Ltd.	lii	Stobart & Son, Ltd.	vi
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lv  
vii

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lvi  
lxiii  
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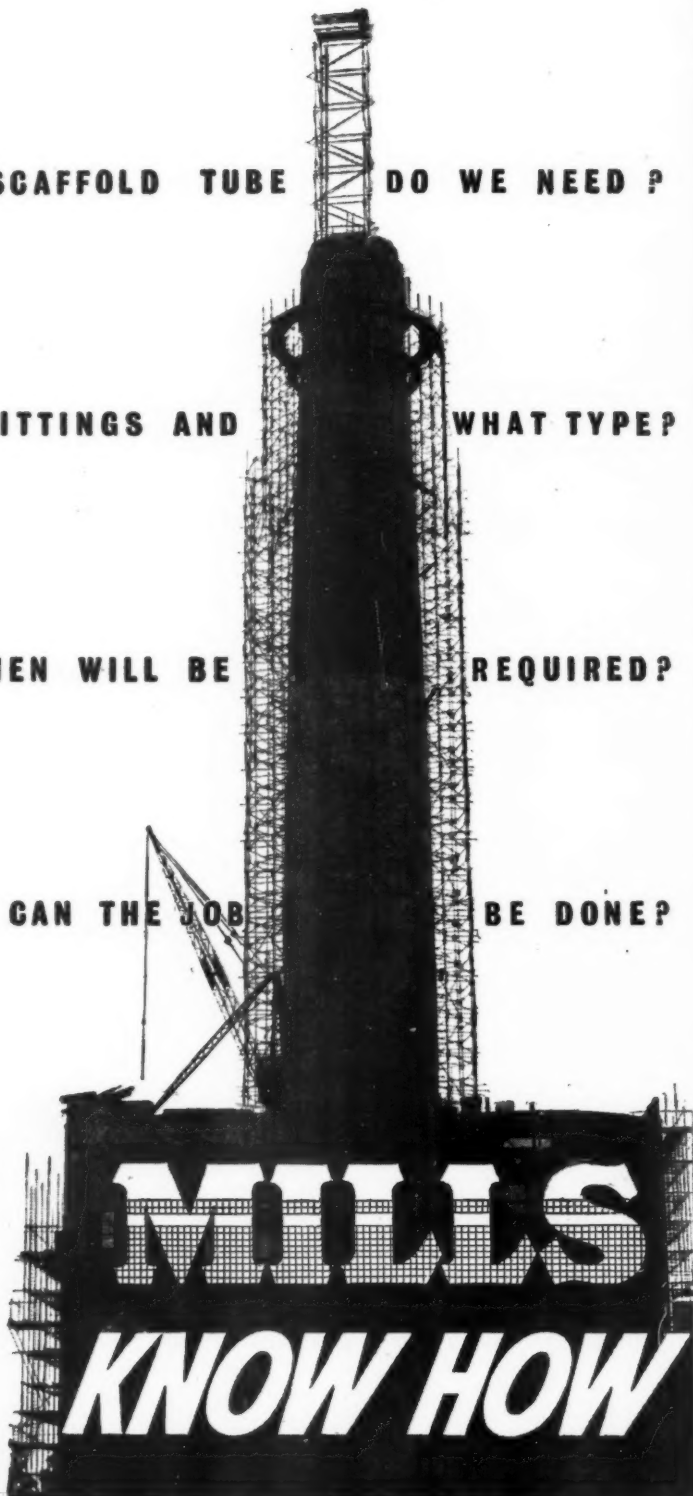
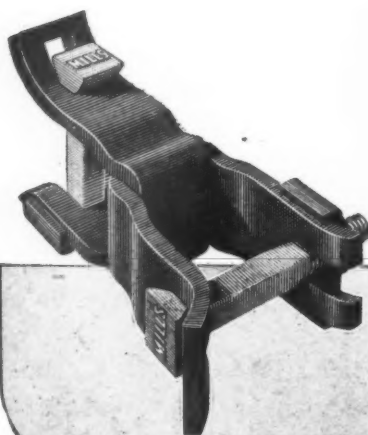
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