

# THE ARCHITECTS' JOURNAL



## standard contents

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

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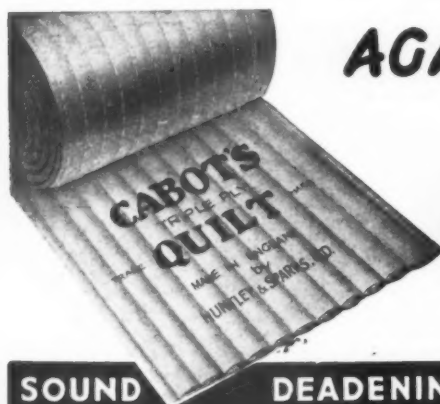
★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ic one week, Ic to Z the next. In all cases where the town is not mentioned the word LONDON is implicit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

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. Marlborough Whitehead, "Dyneley," Castle Hill Avenue, Berkhamstead, Herts.	
ABS	Architects' Benevolent Society, 66, Portland Place, W.1.	Welbeck 5721
ABT	Association of Building Technicians, 5, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain, 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association, 33, Grosvenor Street, W.1.	Mayfair 7501/8
APRR	Association for Planning and Regional Reconstruction, 34, Gordon Square, W.C.1.	Euston 2158-9
ArchSA	Architectural Students' Association, School of Architecture, Manchester Municipal School of Art, All Saints, Manchester, 15.	Ardwick 3480
ARCUK	Architects' Registration Council, 68, Portland Place, W.1.	Welbeck 9738
ASB	Architectural Science Board of the Royal Institute of British Architects, 66, Portland Place, W.1.	Welbeck 5721
AScW	Association of Scientific Workers, 15, Half Moon Street, Piccadilly, W.1.	Grosvenor 4761
BAE	Board of Architectural Education, 66, Portland Place, W.1.	Welbeck 5721
BATC	Building Apprenticeship and Training Council, Lambeth Bridge House, S.E.1.	Reliance 7611, Ext. 1706
BC	Building Centre, 9, Conduit Street, W.1.	Mayfair 8641/6
BCC	British Colour Council, 28, Sackville Street, W.1.	Regent 3613
BCCF	British Cast Concrete Federation, 17, Amherst Road, Ealing, W.13.	Perivale 6869
BCIRA	British Cast Iron Research Association, Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association, 25, Victoria Street, S.W.1.	Abbey 5422-3
BEDA	British Electrical Development Association, 2, Savoy Hill, W.C.2.	Temple Bar 9434
BGC	British Gas Council, 1, Grosvenor Place, S.W.1.	Sloane 4554
BGF	British Gas Federation, 1, Grosvenor Place, S.W.1.	Sloane 8266
BIA	British Ironfounders' Association, 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BIAE	British Institute of Adult Education, 29, Tavistock Square, W.C.1.	Euston 5385
BID	Building Industries Distributors, 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council, 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade, Millbank, S.W.1.	Whitehall 5140
BRS	Building Research Station, Bucknalls Lane, Watford	Garston 2246
BSA	Building Societies Association, 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution, 28, Victoria Street, S.W.1.	Abbey 3333
BTE	Building Trades Exhibition, 4, Vernon Place, W.C.1.	Holborn 8146/7
CAS	County Architects Society, C/o A. Guy Chant, F.R.I.B.A., Salop County Council, 5, Belmont, Shrewsbury.	Shrewsbury 3031
CCA	Cement and Concrete Association, 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CDA	Copper Development Association, Kendals Hall, Radlett Herts.	Radlett 5616
CIAD	Central Institute of Art and Design, 41, 42, Dover Street, W.1.	Regent 3074
CIAM	Congrès Internationaux d'Architecture Moderne, Dolderal, 7, Zurich, Switzerland	
CID	Council of Industrial Design, Tilbury House, Petty France, S.W.1.	Whitehall 6322
CPC	Codes of Practice Committee, MOW, 42, Onslow Gardens, S.W.7.	Kensington 8161
CPRE	Council for the Preservation of Rural England, 4, Hobart Place, S.W.	Sloane 4280
CUJC	Coal Utilization Joint Council, 13, Grosvenor Gardens, London, S.W.1.	Victoria 1534
DIA	Design and Industries Association, 9, Conduit Street, W.1.	Mayfair 5432
DOT	Department of Overseas Trade, 35, Old Queen Street, S.W.1.	Victoria 9040
EC	Electricity Commission, Savoy Court, Strand, W.C.2.	Temple Bar 7565
EJMA	English Joinery Manufacturers Association (Incorporated), Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society, 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors, 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FB 1951	Festival of Britain 1951, 2, Savoy Court, Strand, W.C.2.	Temple Bar 1951
FASSC	Federation of Association of Specialists and Sub Contractors, 21, Tothill Street, S.W.1.	Whitehall 9606
FBI	Federation of British Industries, 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission, 25, Savile Row, W.1.	
FCMI	Federation of Coated Macadam Industries, 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd., Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District, Pennington House, Nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders, 26, Great Ormond Street, Holborn, W.C.1.	Chancery 7583
FRHB	Federation of Registered House Builders, 82, New Cavendish Street, W.1.	Langham 4041
FS (Eng.)	Faculty of Surveyors of England, 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
GG	Georgian Group, 27, Grosvenor Place, S.W.1.	Sloane 2844
HC	Housing Centre, 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors, 75, Eaton Place, S.W.1.	Sloane 3158
ICE	Institution of Civil Engineers, Great George Street, S.W.1.	Whitehall 4577

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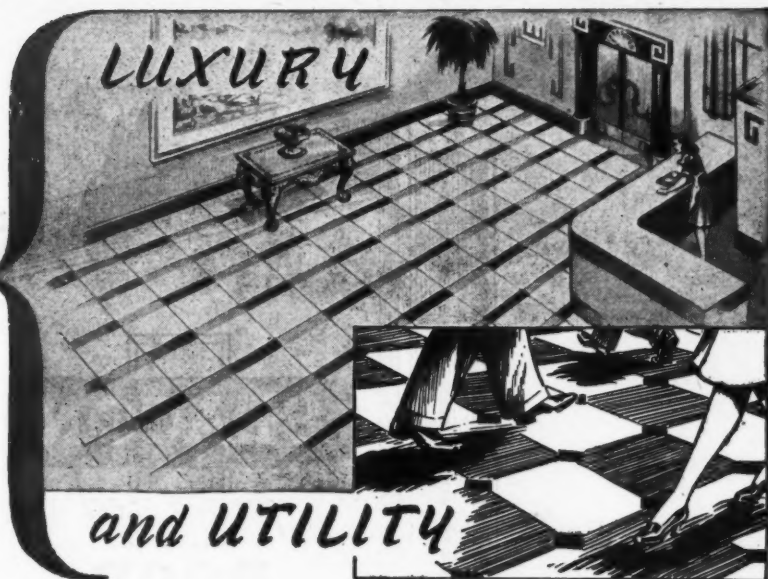


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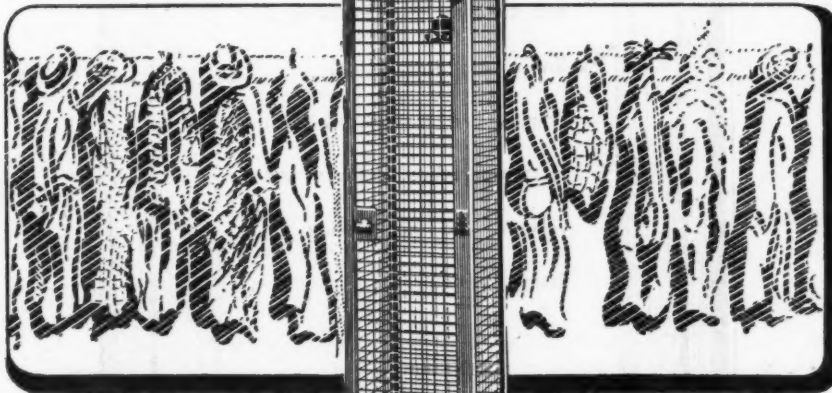
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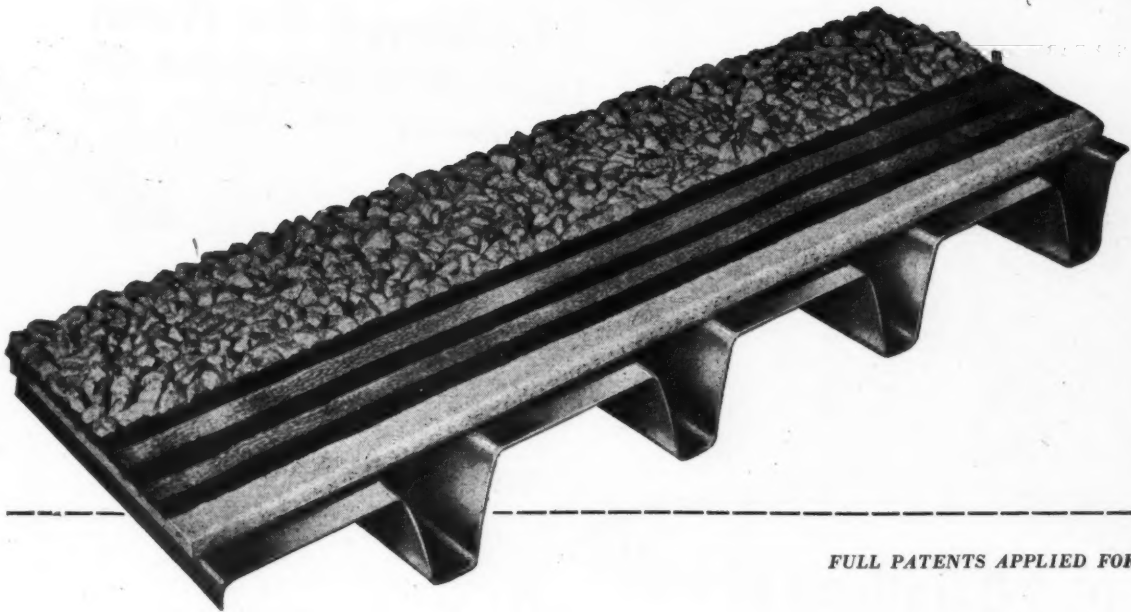
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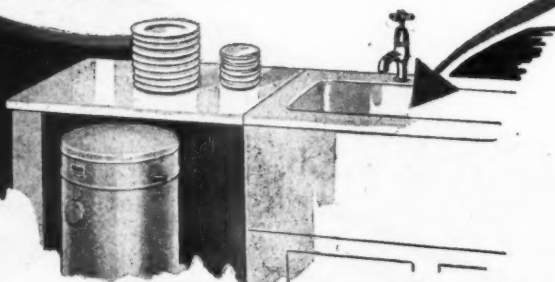
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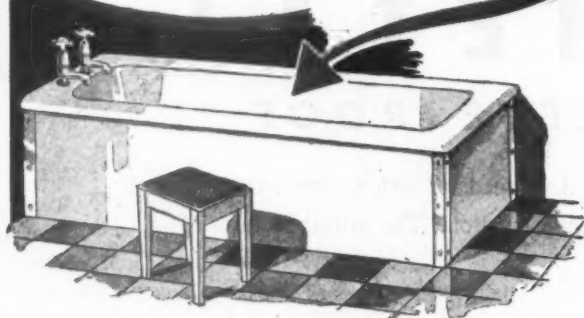


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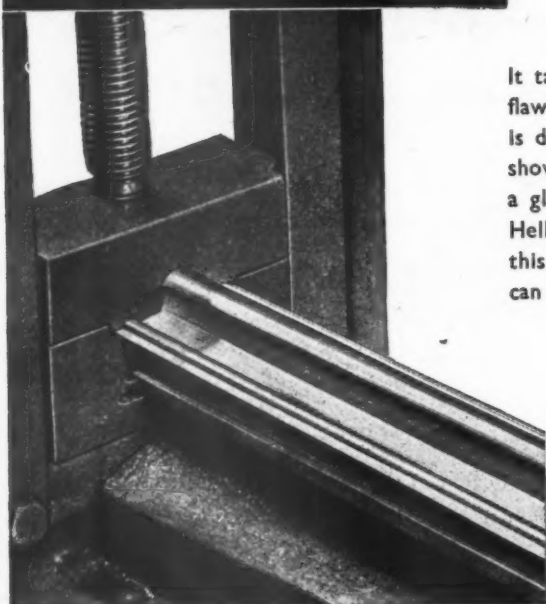
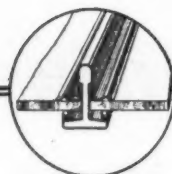
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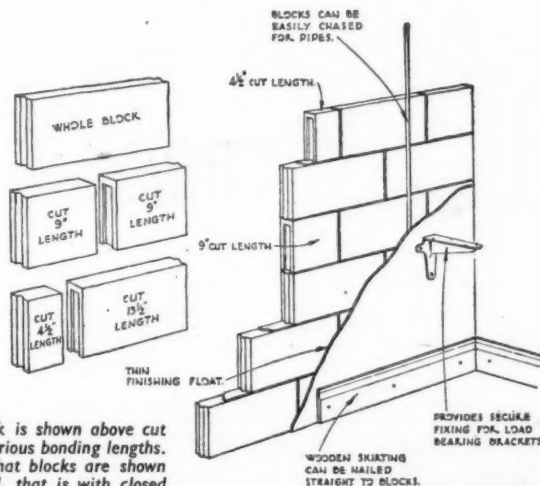
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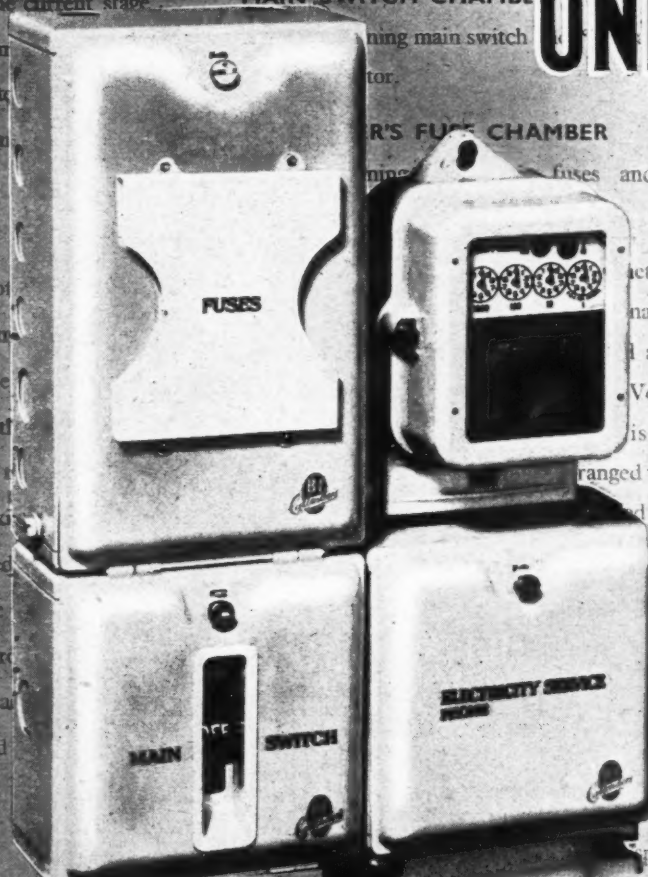
bines, in one compact assembly, the following components: Supply Intake Chamber, Main Switch Chamber, Consumer's Fuse Chamber, and a single meter. The unit is designed for ease of installation, connection and service equipment and meter, coupled with protection against tampering. The installation needs have been closely studied, and the unit is particularly designed for ease in fixing and for the provision, when desired, of separate circuits. To the consumer it has the advantage of being unobtrusive while affording ample protection against shock. In fact, blown fuses are so easily replaced that the process need no longer hold the housewife.

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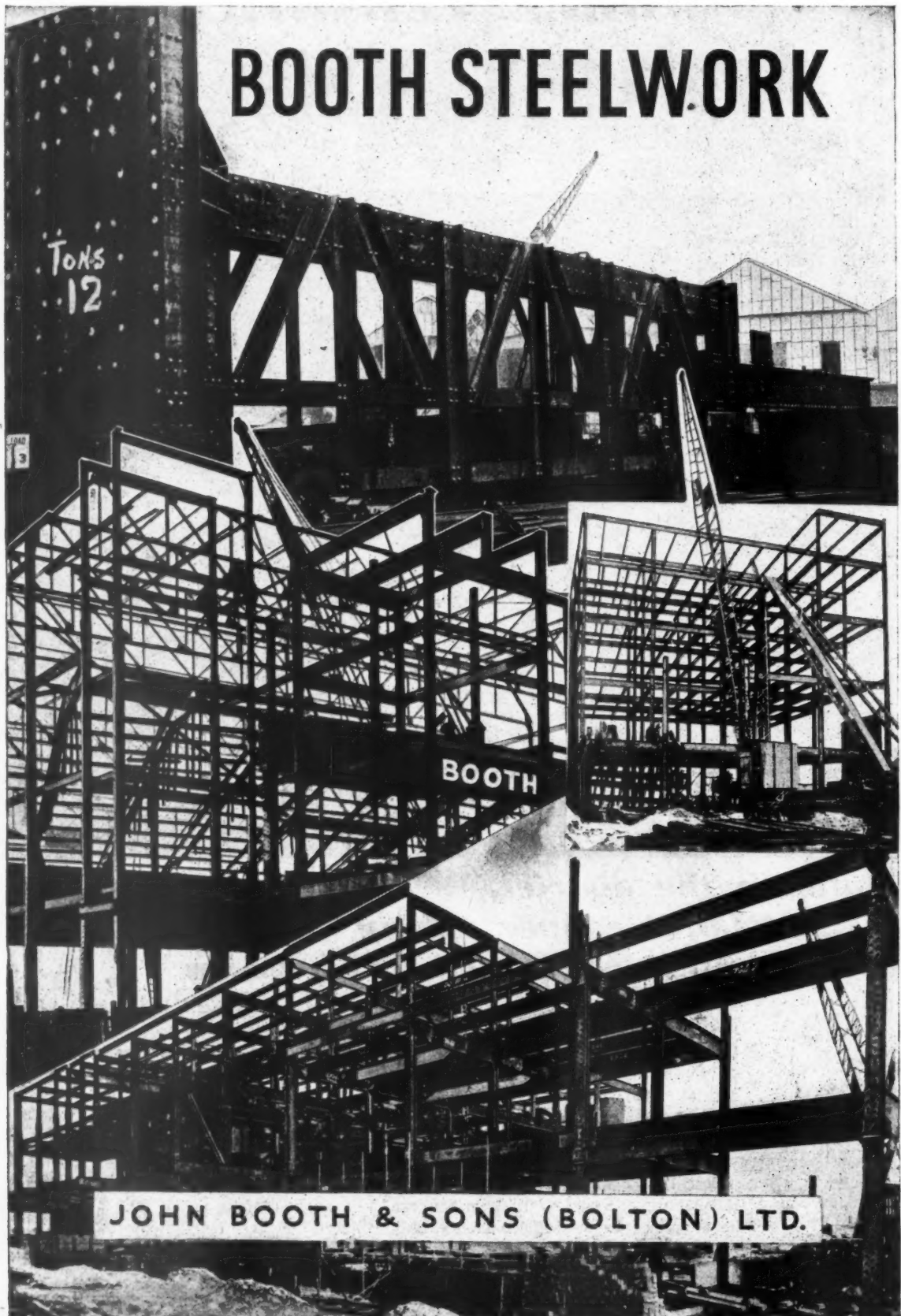


*Supplies are at present restricted, but everything is being done to meet the increasing demand.*

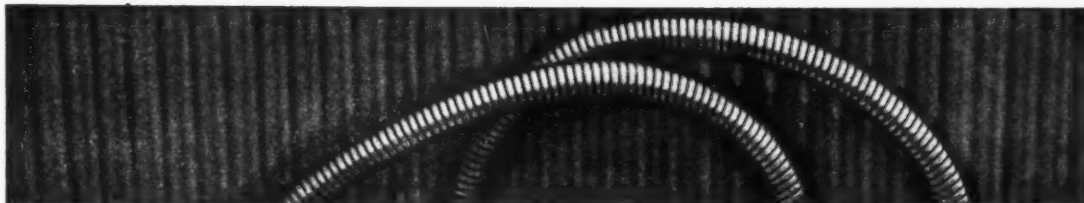
**IMPERIAL CHEMICAL INDUSTRIES LTD., LONDON, S.W.1**

M.170

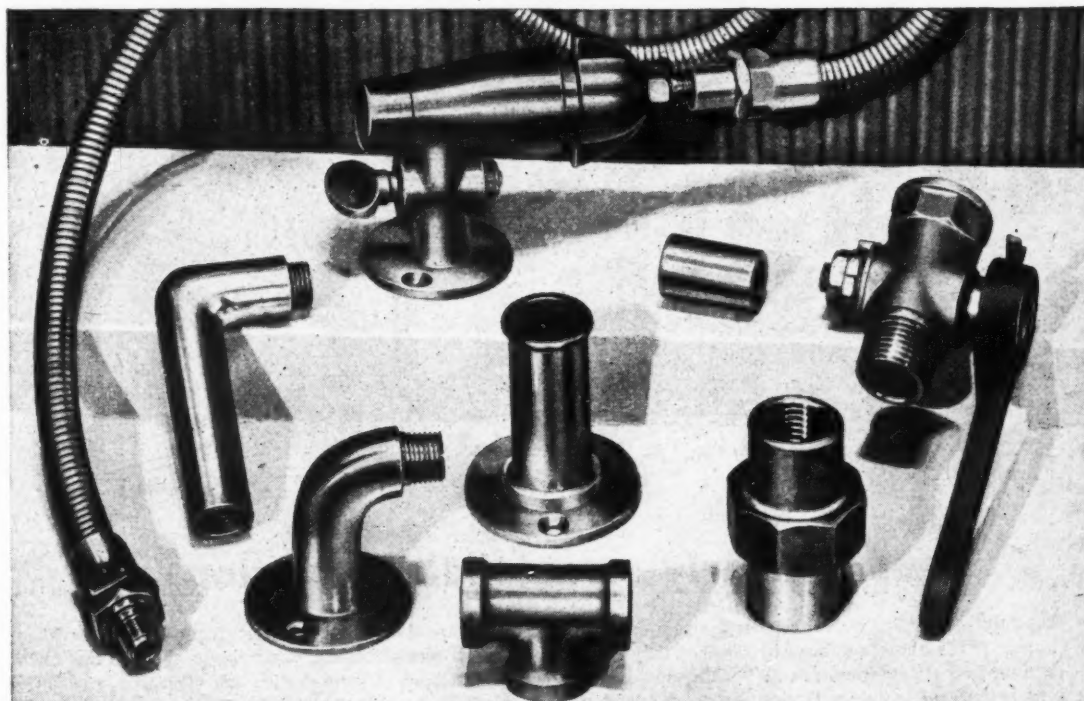








*Contributing to the*  *efficiency of GAS*



Flexible Plugs and Sockets, Main Cocks, Union Cocks, Equal Tees, Flanged Elbows, etc., supplied by Edgar's are designed to conform to B.S. Specification and are available in a complete range to meet all requirements.

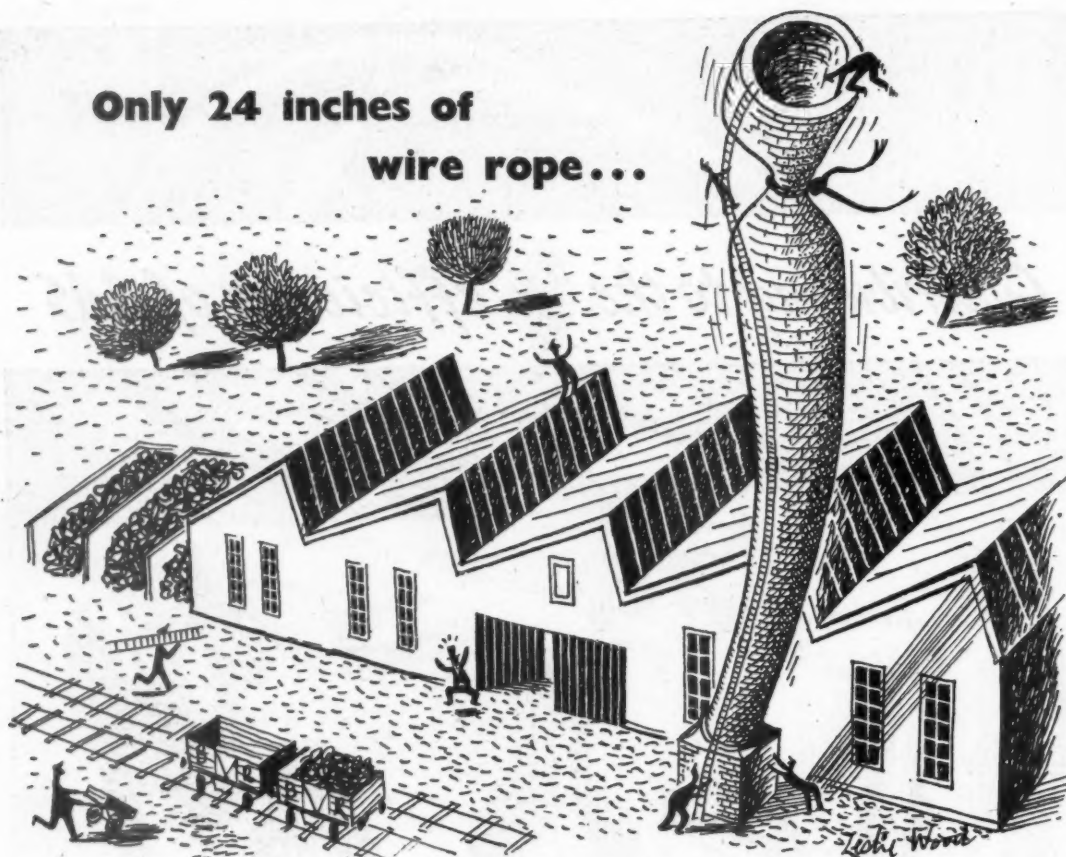
Edgar's are specialist contractors for complete Street Lighting Equipment, and for all Gas, Hot Water and Central Heating Installations for every type of domestic or commercial building. Full details furnished on request.



**WILLIAM EDGAR & SON LTD., Blenheim Works, W.6** Tel: RIVerside 3486

See our Exhibit at the Building Centre, 9, Conduit Street, W.1

Only 24 inches of  
wire rope...



but it nearly strangled production

Recently a certain works reported steam-raising difficulties. "It's these confounded slacks," they said. "Now if we had *graded* fuel . . . . . " Off went one of the Ministry's Fuel Engineers to visit the plant. At first he was mystified. Both boiler brickwork and chimney were in good order and the flues had just been cleaned, yet for some reason draught was insufficient.

Then he looked at the damper. This was operated by a wire rope bringing the control to the front of the boiler in the usual way and clearly marked to show damper positions. He soon spotted that, when the weights were on the floor, the damper was barely open. The wire had

evidently stretched. By cutting two feet off it and revising the damper position marks accordingly, the load was met with the damper little more than half open!

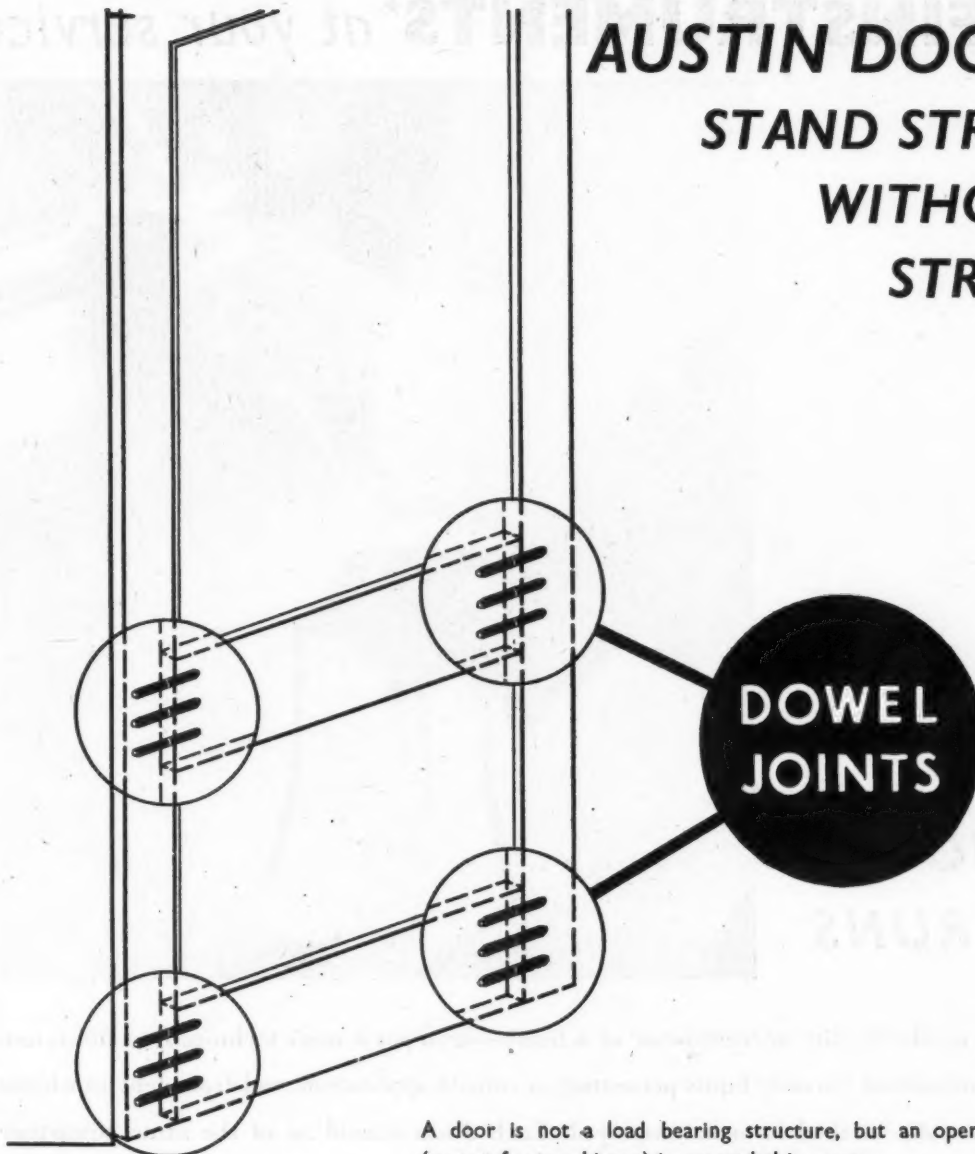
Here it is again—the old, old story of the wood being obscured by the trees! What is Management's first line of attack in the battle against these 'blind spots'? Simply to call in the Ministry's Fuel Engineer. Here's a man eager to help and trained to spot any weak link which may be hindering your production drive. His services are free. Why not give him a ring to-day? It's so much better to be safe than sorry.

YOUR REGIONAL FUEL OFFICE	REGION	ADDRESS
	Northern	Government Buildings, Ponteland Road, Newcastle-on-Tyne, 5
	North-Eastern	Century House, South Parade, Leeds, 1
	North-Eastern	Mount Pleasant School, Sharrow Lane, Sheffield
	North-Midland	Castle Gate House, Castle Gate, Nottingham
	Eastern	Shaftesbury Road, Brooklands Avenue, Cambridge
	London	Mill House, 87/89, Shaftesbury Avenue, W.1
	South-Eastern	95, High Street, Rochester
	Southern	Whiteknights, Earley, Reading
	Wales	27, Newport Road, Cardiff
	South-Western	12/14, Apsley Road, Clifton, Bristol, 8
	Midland	Temporary Office Buildings, Hagley Road West, Birmingham, 17
	North-Western	Burton Road, West Didsbury, Manchester, 20
	Scotland	145, St. Vincent Street, Glasgow, C.2
	Scotland	51, Cockburn Street, Edinburgh, 1
	Scotland	1, Overgate, Dundee

TELEPHONE
Newcastle 28131
Leeds 30611
Sheffield 52461
Nottingham 46215
Cambridge 56268
Gerrard 9700
Chatham 2225
Reading 61491
Cardiff 9234
Bristol 38223
Bearwood 3071
Didsbury 5180-4
Glasgow City 7635
Edinburgh 34881
Dundee 2179

ISSUED BY THE MINISTRY OF FUEL AND POWER

## AUSTIN DOORS STAND STRESS WITHOUT STRAIN



A door is not a load bearing structure, but an open door (except for two hinges) is suspended in space.

The weight of an open door puts a strain on the joints. Slamming a door does so, too.

Dowel joints are constructed for strength and for withstanding wear and tear.

Austin doors are dowel jointed. They are being produced at the rate of 400 a day,  $5\frac{1}{2}$  days a week, 50 weeks a year.

A door stands by its joints. We stand by the dowel joint.

# AUSTINS OF EAST HAM LTD.

GRAngeWood 3444

The Parent Company of the

London, E.6

## AUSTIN-HALL GROUP OF COMPANIES

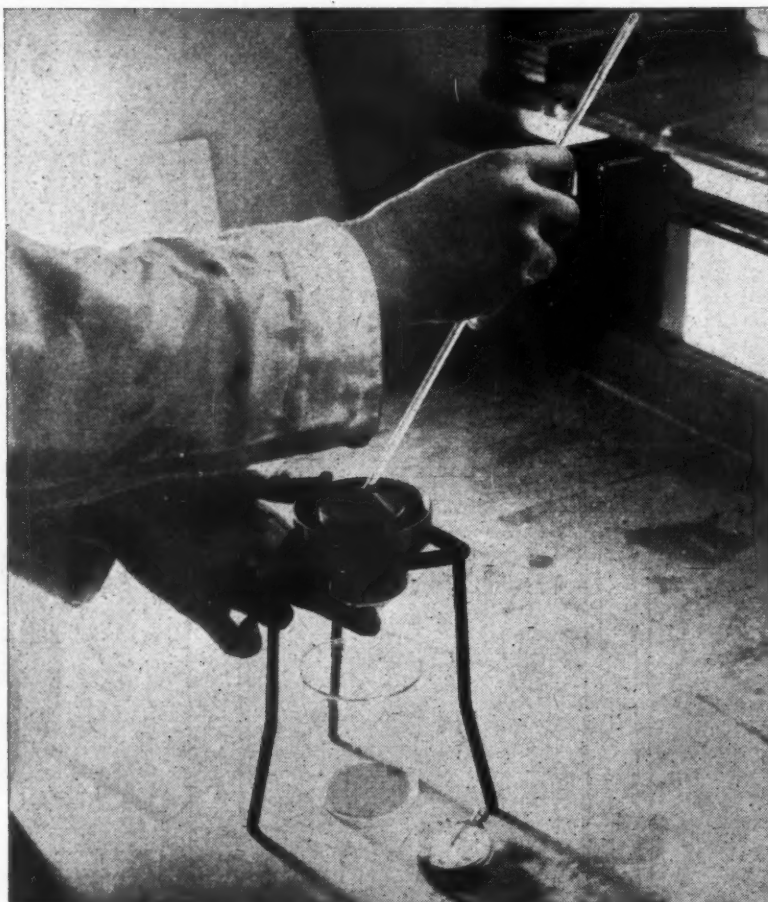
A.XIV/5/48

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xvii



## BOFFINSTRUMENTS\* at your service



### SEE HOW IT RUNS

Much depends on the fluidity or 'runniness' of a finish—or to put it more technically, a finish must conform to standardized viscosity limits permitting of smooth application, and dependent on whether a brush, spray or dip method is to be employed. Each drum should be of the same consistency and the Cerrux Boffins have to test a sample from every batch of finish before it leaves the factory. For this purpose they use a device called the Ford Cup. The Ford Cup is filled with the test material at a temperature of 25°C. The material is then released and allowed to run into a beaker. The time taken for the cup to empty is measured by a stopwatch, and this factor serves as an index of the viscosity of the material. This test, and others like it, ensures that Cerrux productions will do the work for which they are intended—and do it well.

# CERRUX

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

## DECORATIVE FINISHES

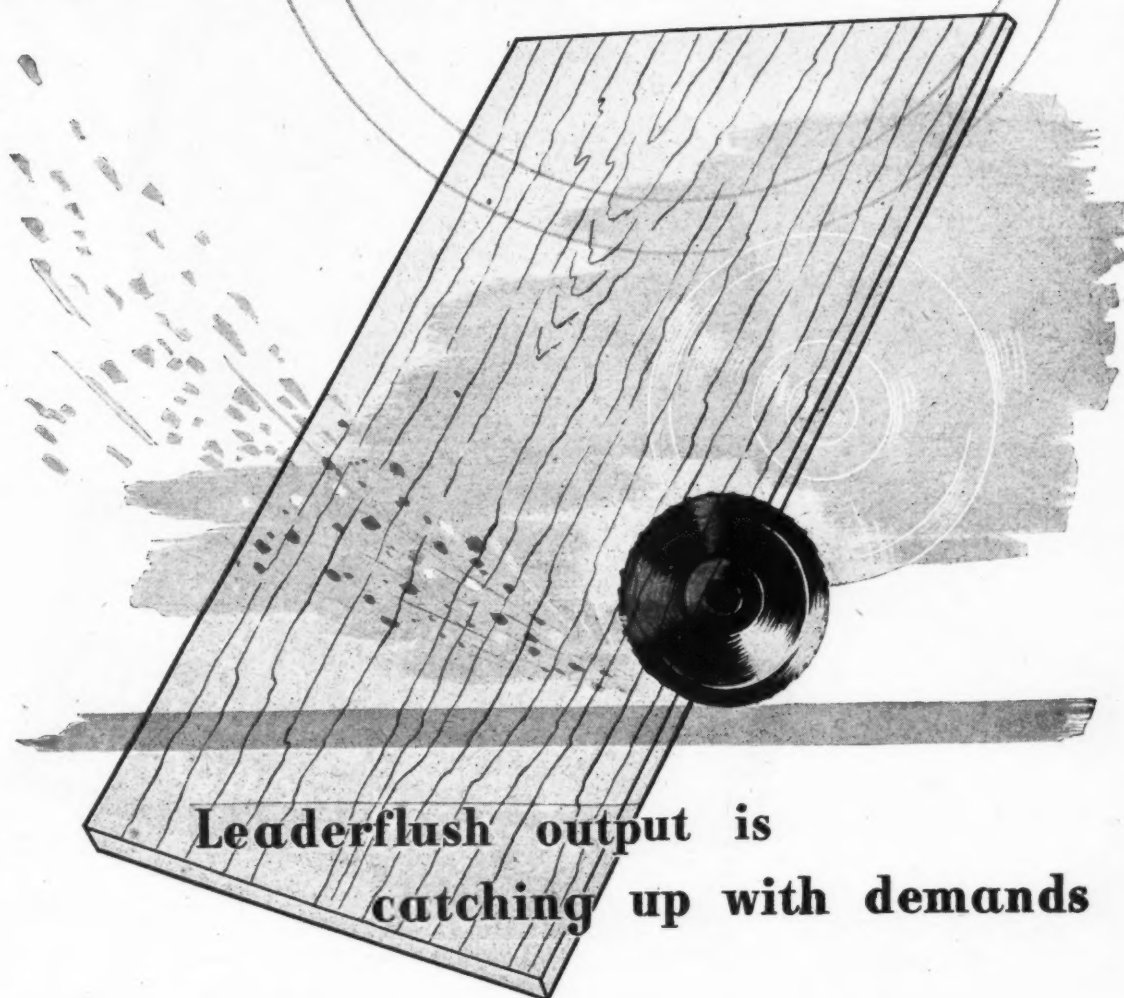
CELLON LIMITED, KINGSTON-ON-THAMES, ENGLAND • TELEPHONE: KINGSTON 1234 (7 lines)

*Also manufactured in Canada, France, Holland and Norway*

CVS-606



**Re-planned, geared-up and ready-**



**Leaderflush output is  
catching up with demands**



*This trademark in three colours is inlaid in the hinge edge of every Leaderflush flush door.*

**IMPORTANT NOTICE TO  
ALL OUR CUSTOMERS**

Our contract with the Adamite Co. Ltd., of London who were our National distributors for Midlands and the South for both Flush and Panel doors, has now expired, and in future we shall be glad if you will send all correspondence to our Head Office, at Trowell, Nottingham.

The demand for Flush Doors is ever increasing—but we at Leaderflush are organised and equipped to meet all orders. Modern methods and machinery—planned production—ample warehouse capacity—centre of England situation—all combine to give you Britain's Best Flush Doors faster.

**LEADERFLUSH**  
LTD.

**BRITAIN'S BEST FLUSH DOOR  
HEAD OFFICE : TROWELL, NOTTINGHAM**

*Gagant*

# SAVINGS REPORTED AS HIGH AS



Start a savings campaign  
of your own... save time  
timber and labour with  
**KWIKFORM** Equipment

**KWIKFORM EQUIPMENT  
INCLUDES:-**

**PATENTED  
WALL SHUTTERING  
SUSPENDED FORMWORK  
UNIT FRAME  
SAFETY SCAFFOLDING  
RISING TRESTLES  
SHORES and STRUTS  
BUILDERS' TOOLS**

Prefabricated — but supremely adaptable! What better example could be found than the contract illustrated where Kwikform Unit Frame Scaffolding was used for shoring two floors and a roof weighing over 30 tons.

Speed of erection plus acquisition of maximum working space on the job, ensured a saving in excess of 50%.

Kwikform is more than a good equipment—it is a good investment. Start today and participate in the dividends it pays.

For further details write Sales  
Office for Schedule No. 1537D.

*It's quicker... it's* **KWIKFORM**

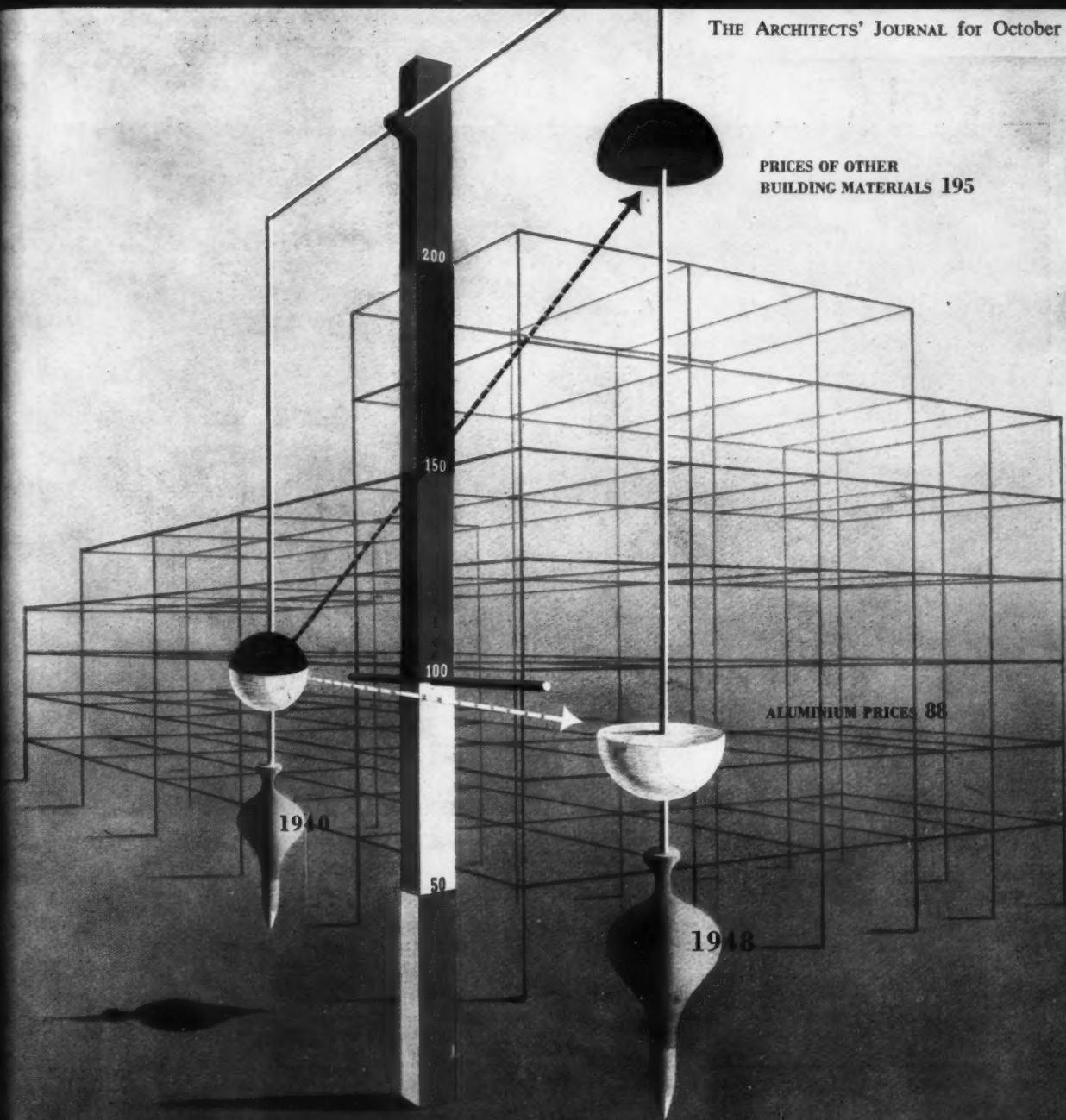
**KWIKFORM LTD.** LONDON, 66, VICTORIA ST. S.W.1  
BIRMINGHAM (TECHNICAL & SALES OFFICE) 67, WHITMORE RD. 10.

L.G.B.









A. GAMES

## ALUMINIUM ECONOMICS . . . . . Building

*Aluminium sheet for building purposes is substantially cheaper today than in 1939, although the average cost of other Building Materials has risen to almost double the pre-war figure. Firmly established as a building material because of its strength, lightness and durability, aluminium is used extensively for roofing, corrugated sheeting, rain-water goods, etc., and for many decorative purposes. Build the modern way with*

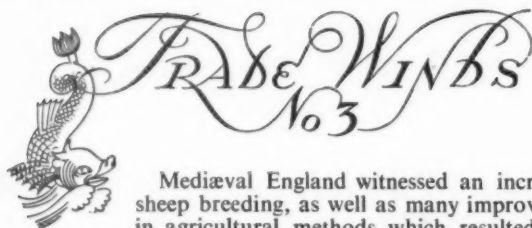
### BRITISH ALUMINIUM



THE BRITISH ALUMINIUM CO LTD SALISBURY HOUSE LONDON WALL LONDON EC2



Painting by Lance Cattermole, R.O.I.



Mediaeval England witnessed an increase in sheep breeding, as well as many improvements in agricultural methods which resulted in an impetus to the export of wool and corn. At first little ships averaging 30 'tuns' carried the cargoes from our inland ports to those of the nearby Continent.

In opening out this seaborne trade the hazards and physical dangers to be surmounted were formidable. The smallness of the craft, lacking any navigating instruments, added to their peril. The masters had to face unknown ocean currents, tidal races, storms, fogs, unlit rocky headlands and uncharted islands, yet despite such obstacles and the absence of set courses, trade gradually developed along the coasts of Northern Europe.

Marts of English wool were established at Bruges, Antwerp and Calais and became so important that the merchants were granted exclusive rights by Royal Authority to buy and sell in certain specified towns known as

#### THE VENT OF CLOTH

"Staples." The trade of London, Southampton and Bristol was built up in this fashion. Wool and grain ships ploughing across the Channel brought back French wines and other luxuries.

Before Elizabeth came to the throne the energy and initiative of the merchants had made them both rich and politically powerful, yet the export of wool waned and suffered extinction in the loss of Calais, known for generations as "The Staple."

The trade with the Low Countries also ceased because of political, religious and economic differences between Elizabeth and the Spanish Governor of these territories. It was a severe blow to the country, but craftsmen were fast learning the art of weaving wool, and at the same time our shipbuilders and sailors were improving the maritime arts. The inspiration of the Queen, the spirit of the City, allied to the enterprise of free men, created vast new markets further afield than the old Continental ports, and England entered upon a new trade for the Vent of Cloth.



#### THE UNITED STEEL COMPANIES LIMITED, SHEFFIELD

STEEL PEECH & TOZER, SHEFFIELD • SAMUEL FOX & CO. LTD., SHEFFIELD • APPELBY-FRODINGHAM STEEL COMPANY, SCUNTHORPE, Lincs.  
WORKINGTON IRON & STEEL COMPANY, WORKINGTON • UNITED STRIP & BAR MILLS, SHEFFIELD • UNITED COKE & CHEMICALS CO. LTD., TREETON

® USP 59



THE  
OCTO

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BY S  
THD

C-

D.S.J.



THE FACTORY OF HOLOPLAST LIMITED,  
NEW HYTHE, KENT.

Architect: Denes Pogany, Esq., A.R.I.B.A.



# FACTORY

## thermal & acoustic INSULATION

at low cost with good appearance

In this light-weight roof, MARLITH SLABS are supported over steel purlins by transverse and longitudinal "tee" pieces of pressed steel, the latter being secured to the purlins by clips. The roof finish consists of a  $\frac{3}{4}$ " cement and sand screed and 2 layers of 1-ply felt. The underside of the Marlith Slabs is finished with "Snowcem"

MARLITH Wood Wool Building Slabs conform to B.S. 1105 and are made in the standard sizes of 6' 0" x 2' 0" x 1", 1½", 2" and 3". The slabs give an excellent key for plaster or cement rendering. These light weight slabs provide a high degree of thermal and acoustic insulation when used for lining walls or roofs. Slabs of 2" or more thickness can be used as self-supporting non-loadbearing partitions



# MARLITH

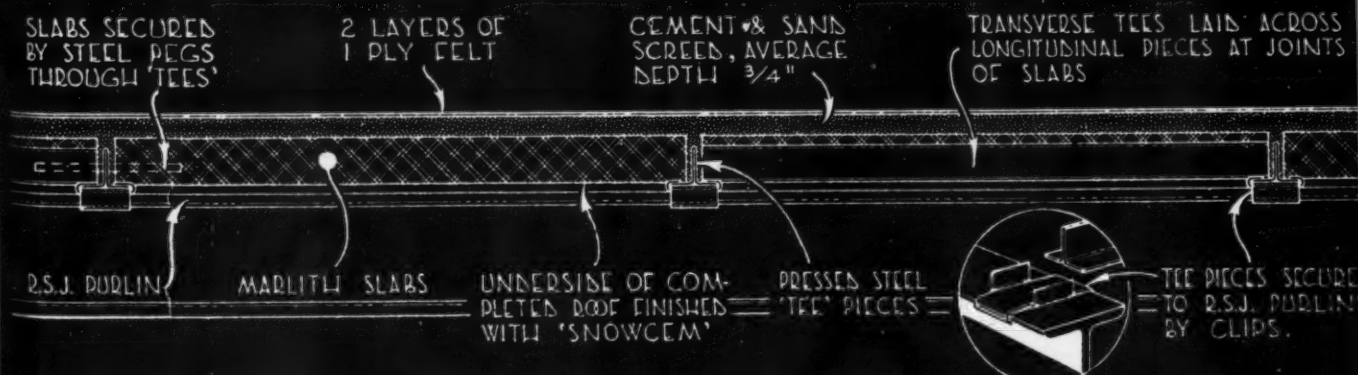
Wood Wool Building Slabs

THE MARLEY TILE COMPANY LTD.

SEVENOAKS KENT

Works throughout the country

M.M.I



# *At the Architect's Service*

**ORLIT** precast concrete framework—with or without **ORLIT** cast stone walling—is now available for

**SINGLE or MULTI - STOREY STRUCTURES**  
to meet the Architect's requirements



*Office Block in Orlit Construction.*

*Architect: G. P. Stainsby, A.R.I.B.A.*

**Immediate Delivery** (WHERE STANDARD COMPONENTS REQUIRED)

**Designed for Permanence**

**Easiest and Speediest Erection**

**Advantageous in Cost**

**Low Steel Content**

for SCHOOLS, FLATS, OFFICES, FACTORIES,  
HOUSES, SHOPS, HEALTH CENTRES, etc.

**ORLIT LTD.,**

TELEPHONE:  
VICTORIA  
6701

18, BUCKINGHAM GATE, LONDON, S.W.1

# Introducing



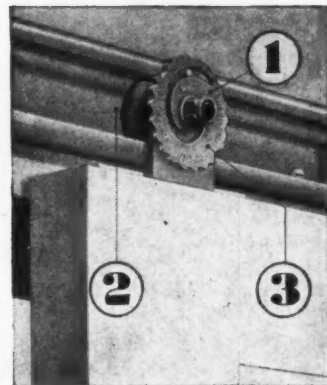
## KING Homestic Sliding Door Gear

**EASY TO FIX**  
**NO MAINTENANCE**  
**SMOOTH & SILENT**  
**MODERATE COST**  
**READILY AVAILABLE**

**1** Trolley is designed to give smooth easy running and long life. Wheel contour fits track snugly with minimum side play. Roller fitted with self-lubricating bush.

**2** King Homestic Sliding Door Track is of light alloy, with adequate rigidity. It is completely rustless; supplied in standard lengths, drilled and with wood screws for fixing.

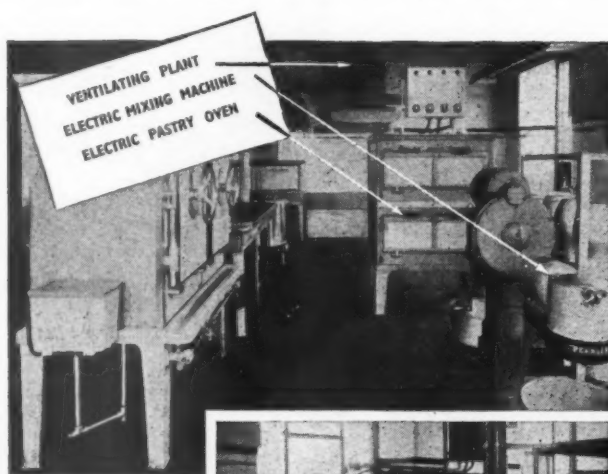
**3** Door trolleys are fitted with a patented vertical adjusting device giving a height adjustment of  $\frac{1}{4}$  in. Adjustment is made quickly and easily by self-locking nut.



WRITE FOR ILLUSTRATED FOLDER

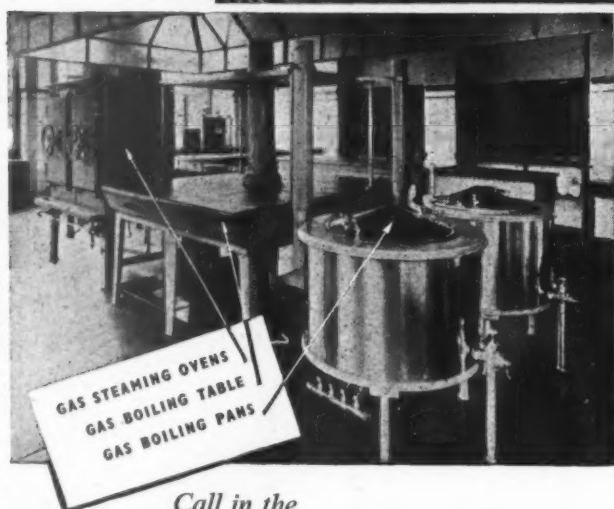
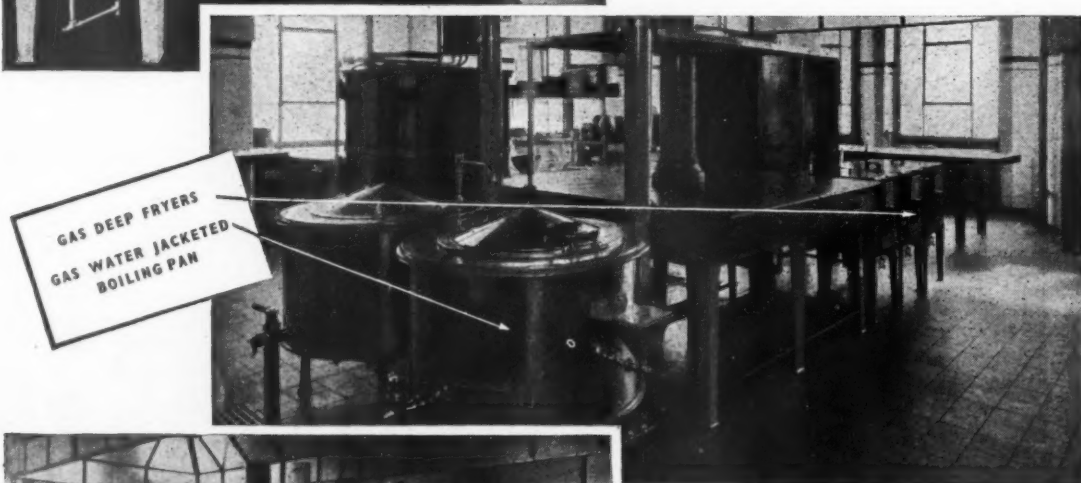
**GEO. W. KING LTD. D.G.B. WORKS, HITCHIN, HERTS.** Phone: **HITCHIN 960**

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



## A GLASGOW TRAINING COLLEGE

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



## THE 'FALKIRK' SERVICE COVERS EVERYTHING

A fully qualified staff will co-operate with you in drawing up plans for the whole installation, including heating, ventilating and cooking equipment. In this way, you will obtain the most suitable type of equipment, for Falkirk supply appliances for steam, gas, electricity, heat storage, oil and solid fuel.

## PERSONAL CONSULTATIONS AT YOUR CONVENIENCE

We shall be glad to give you further information regarding Falkirk Installations and Service, including advice and assistance on any large-scale catering plans you may be working on at present. Please write to :

Call in the  
**'Falkirk' SERVICE**  
*One firm does the whole job*

**ALLIED IRONFOUNDERS LTD**

*Catering Equipment Department*  
Mortimer House, 37-41 Mortimer Street, London, W.1

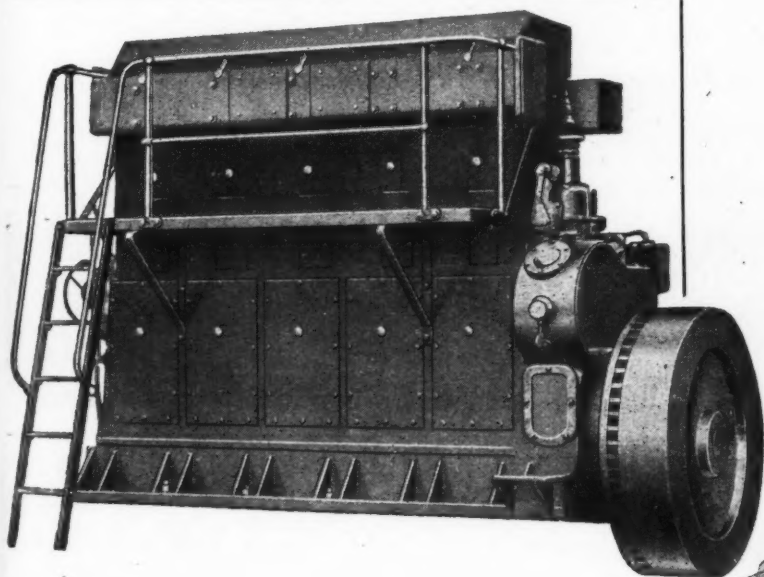




# POWER FOR INDUSTRY

## *Mirrlees'*

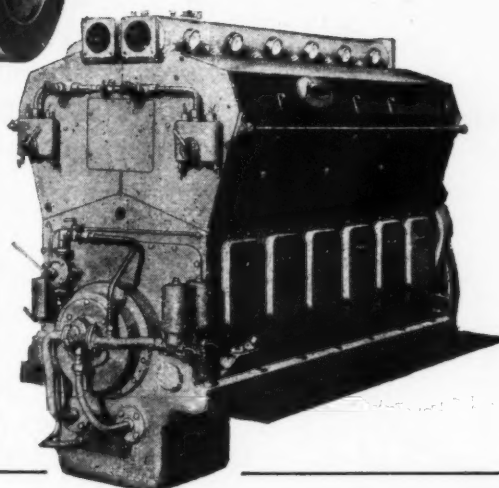
### 135 TO 1320 BHP



Illustrations show (left) the Type HF Range developing 550 to 880 B.H.P. at 370 R.P.M. built from 5 to 8 cylinder units, and (below) the latest Type TV and TVS, 12 cylinder engine, developing 720 and 1050 B.H.P. at 750 R.P.M. (the latter being Turbo-charged).

## TO-DAY independent power is vital to all industrial establishments

MIRRLEES built the first British Diesel in 1897 and offer a wide range of oil engines which incorporate the modern features in oil engine designs created from the results of their wide experience and research work gained over 50 years in building engines which are found to-day throughout the Empire and on the high seas.



★ Write for descriptive leaflets: Nos. A1/55/4 and A1/84/1, also direct your enquiries to :—  
D.7

**ASSOCIATED BRITISH OIL ENGINES LTD., HAZEL GROVE, STOCKPORT**  
Telephone: Great Moor 3841



# SUNDEALA

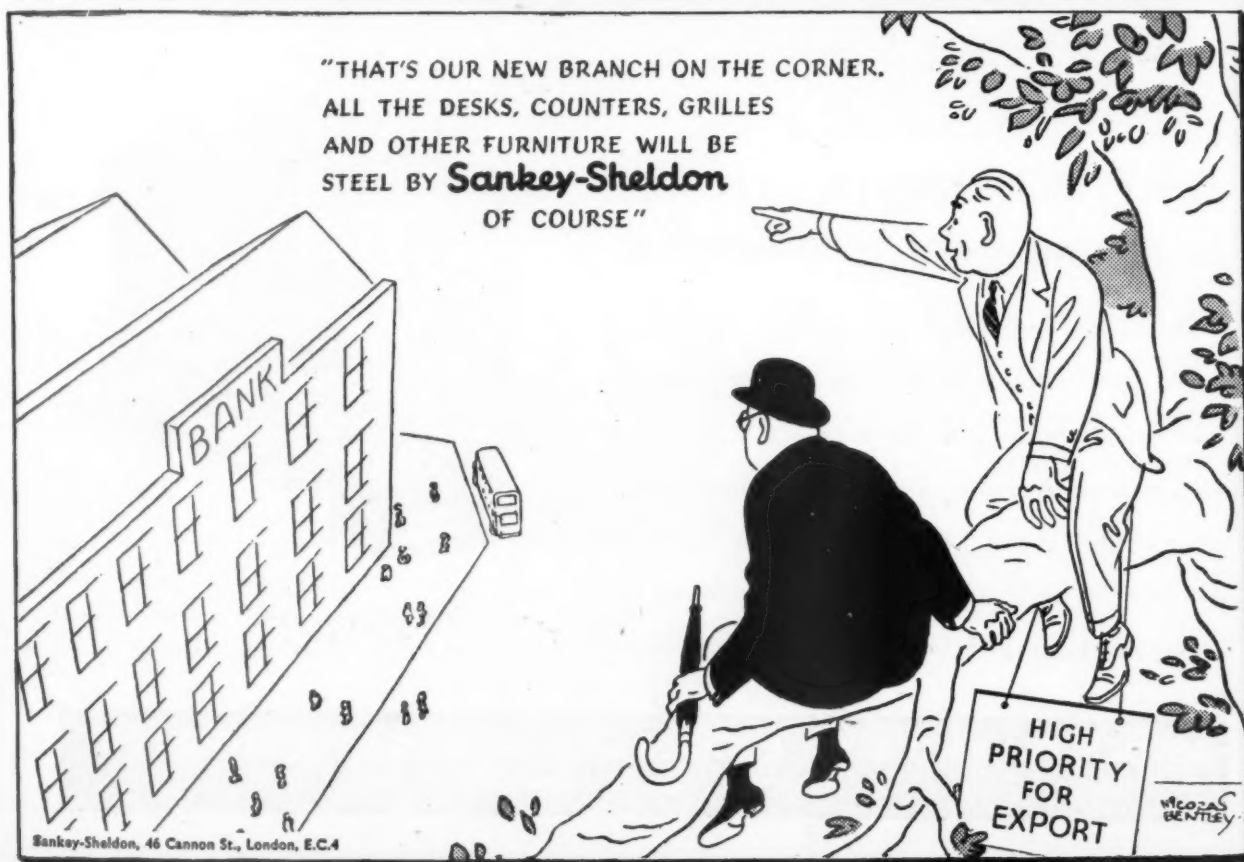
**BRITISH MADE BUILDING AND PANEL BOARDS**

*For fifty years the name of **SUNDEALA** has denoted  
the supreme achievement in scientifically  
waterproofed Building and Insulation Boards*

**SUNDEALA BOARD CO. LTD. ALDWYCH HOUSE, LONDON, W.C.2**

Tel: CHAncery 8159. Works: Sunbury-on-Thames, Middx.

Members of Building Board Manufacturers Association



Sankey-Sheldon, 46 Cannon St., London, E.C.4

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*Announcing*

**A PRACTICAL AND COLOURFUL  
FLOORING MATERIAL**

**A**RMSTRONG Cork Company Limited are now producing ACCOTILE in England; a practical, low-cost, all-purpose flooring. This type of resilient flooring is in the form of tiles, and it is made in a range of pleasant colours. Accotile is quickly installed and easily maintained, has a smooth surface, is hard-wearing—the latest product of a company that has long been recognized as a leader in the production of this type of high-grade flooring.

Installations in England of Accotile imported from America were made before the war; and these floors have shown remarkable qualities of endurance. Their lasting quality during years of bad maintenance conditions is exceptional.

*Information and literature is available from*

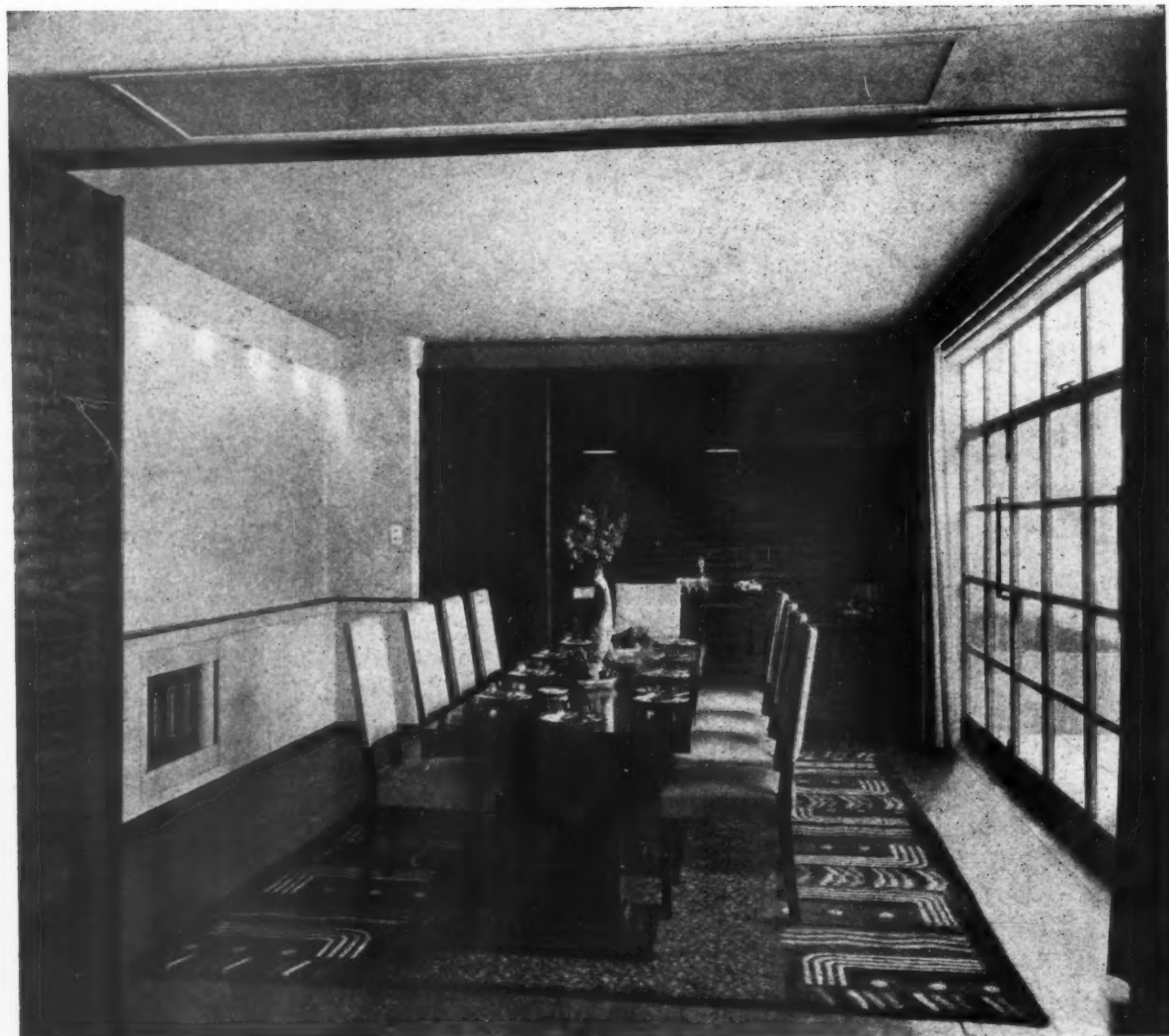
**ARMSTRONG CORK COMPANY LIMITED**

*Kingsbury, London, N.W.9. Tel: Colindale 7080*

SCOTTISH BRANCH

*5 Oswald Street, Glasgow, C.1. Tel: Central 5703*

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*Bath*

**CABINET MAKERS  
AND ARTCRAFT LTD**

**CONTRACTORS FOR MODERN INTERIORS**

*Enquiries are invited from Architects interested in the Furnishings of Ships, Hotels, Public Buildings and Offices.*  
LOWER BRISTOL RD., BATH Tel : Bath 7214-5 • LONDON SHOWROOMS, 1 GRAFTON ST., W.I. Tel : Regent 4671



# The CHEVIN

*Solid Fuel*

CONVECTOR FIRE

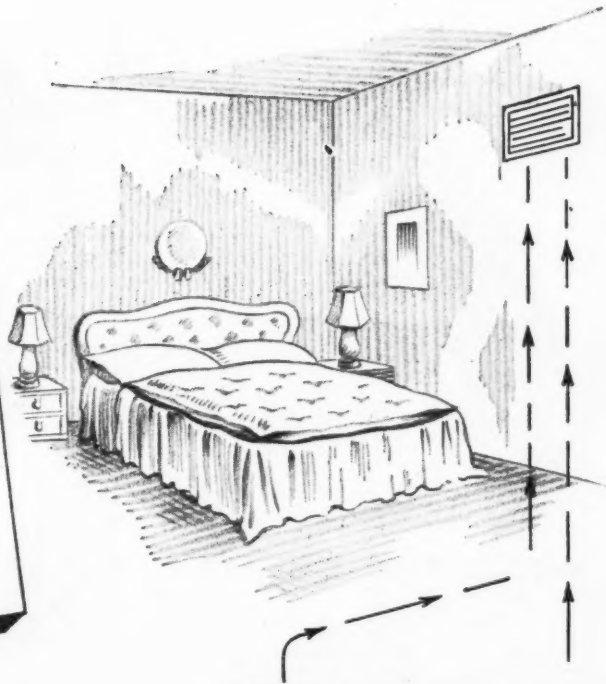
provides

RADIANT HEAT

Domestic HOT WATER

WARMED AIR TO  
OTHER ROOMS

HIGH EFFICIENCY  
with FUEL ECONOMY



## *A Self-contained*

### OPEN FIRE

THE double-cased unit, incorporating the CHEVIN smokeless Fuel Grate and shown here, provides warm air which may be directed by ducts to other parts of the house. Air to the fuel bed is controlled by the hook-on Ashpit front, giving infinite variation of control. A loose ash pan provides easy removal of ash and is easily carried by means of the operating tool. There is a built-in luminous flame gas burner arranged for right-hand, left-hand or concealed connection, and a boiler may be fitted for the supply of domestic hot water. The fire front and fire surround are finished in vitreous enamel in attractive colours.



## The CHEVIN *Convector Fire*

There is a single-cased CHEVIN Convector Fire (which also incorporates the Chevin Smokeless Fuel Grate) for heating the room in which it is installed. Both models are described in our leaflet 12/48. May we send you a copy?



PARK FOUNDRY BELPER DERBY



## pints and quarts

This advertisement appears because we do not want anyone to forget how good IBECO is — and not because there is enough IBECO for all who would like to use it.

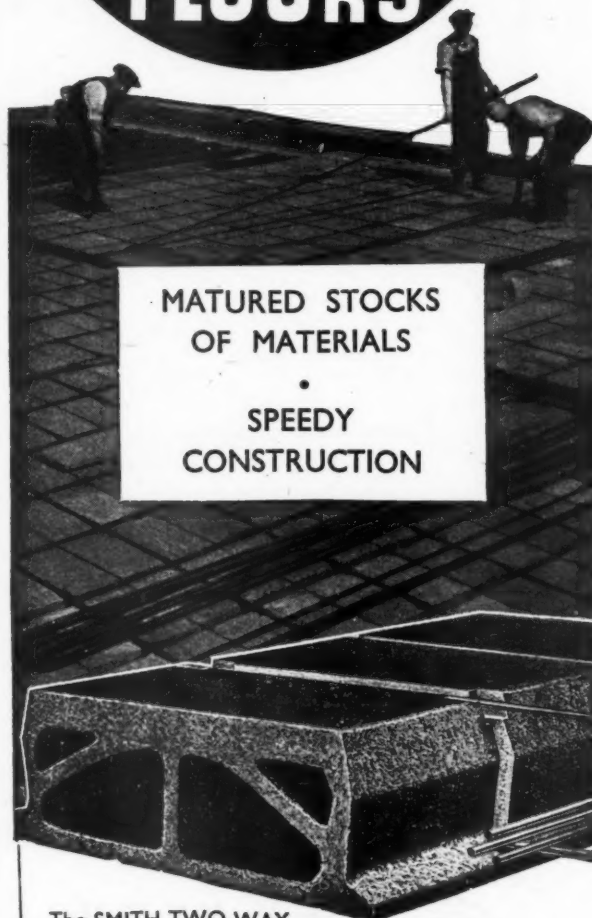
Day in, day out, we are struggling to find ways and means of satisfying the continually growing demand for IBECO ; but—a quart of product simply can't be got from a pint of raw material.

Nevertheless, we don't give up trying. So—if you have good cause for using IBECO—let us know. We'll do our best.



**—famous British waterproof  
Kraft paper, with a score  
of proofing uses in building  
and constructional work**

C. DAVIDSON & SONS LTD. (DEPT. K73) BUCKSBURN ABERDEEN



MATURED STOCKS  
OF MATERIALS

•  
SPEEDY  
CONSTRUCTION

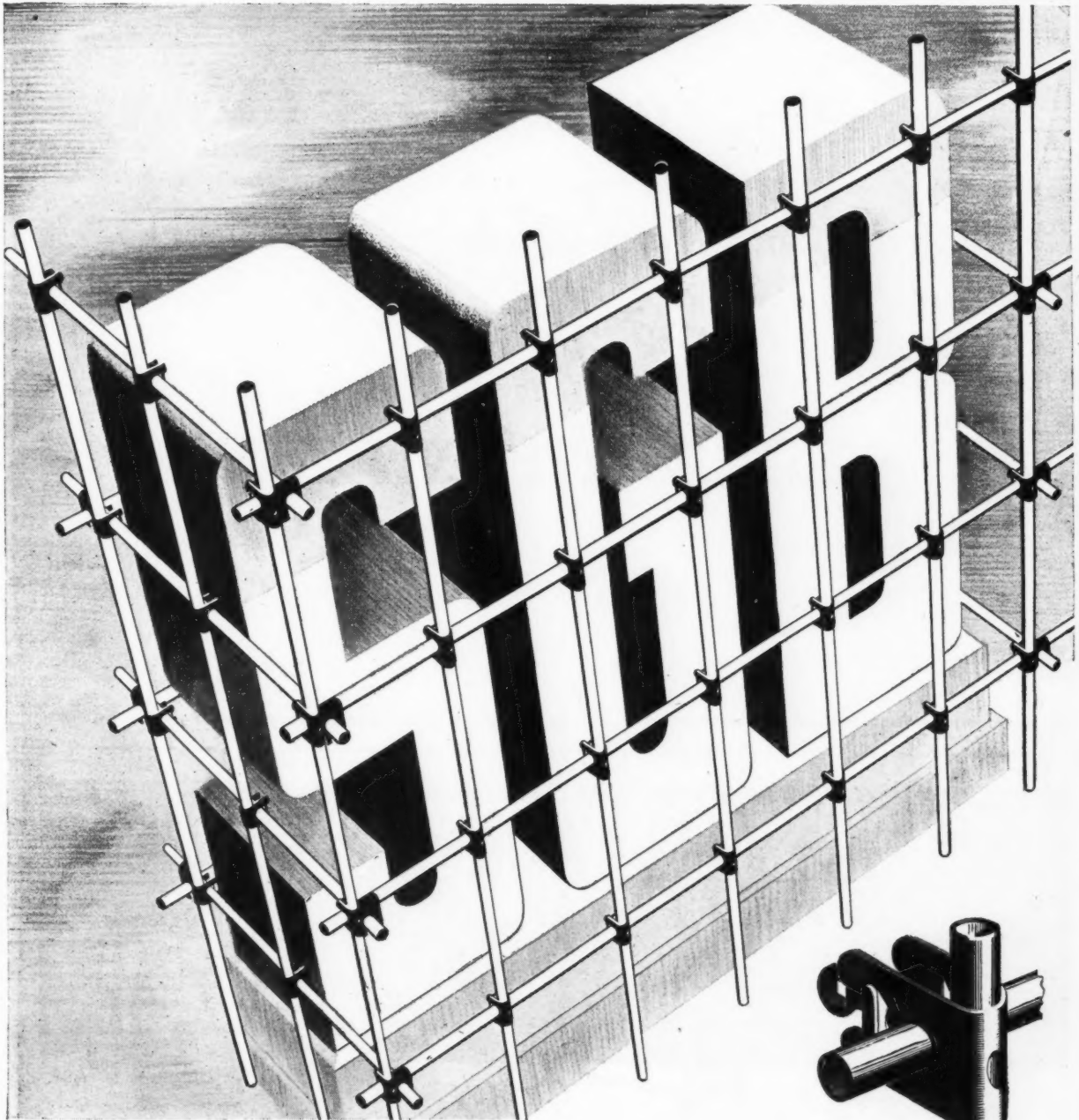
### The SMITH TWO-WAY

reinforced fireproof floor can be employed immediately for any flooring or roofing requirement. It is constructed with standardised pre-cast hollow concrete blocks.

The employment of patent telescopic centres permits the immediate use of the floor with the additional advantage of their removal in the minimum of time.

SMITH'S FIREPROOF FLOORS LTD. (Dept. A)  
Imber Court, East Molesey, Surrey. Telephone: Emberbrook 3300 (4 lines)

**SMITH'S** 2-WAY REINFORCED  
FIREPROOF FLOORS  
*employing Unique Telescopic Centering*



*- does the job!*

We can supply and erect, by which method you call on our experience of over 34 years. If you prefer to Hire, you call on the same experience but know also that S.G.B. Patented fittings mean the quickest possible and safest erection. Those who like to buy get all the same advantages plus the finest material value for money obtainable.

Our Technical Experts are always available to help you with any Scaffolding problem.



*- the originators of tubular scaffolding!*

## SCAFFOLDING

## (GREAT BRITAIN) LIMITED

Registered Office and Works:

53, PLOUGH LANE, LONDON, S.W.17

Telephone: WIMbledon 8070 (15 lines)

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*Craftsmen in*  
*Ornamental and Solid Plasterwork*  
*Interior Decoration*

**CLARK & FENN Ltd.**

16 OLD TOWN, LONDON, S.W.4

MACAULAY 2455-6-7

**CONSTRUCTORS**  
**STEEL EQUIPMENT**

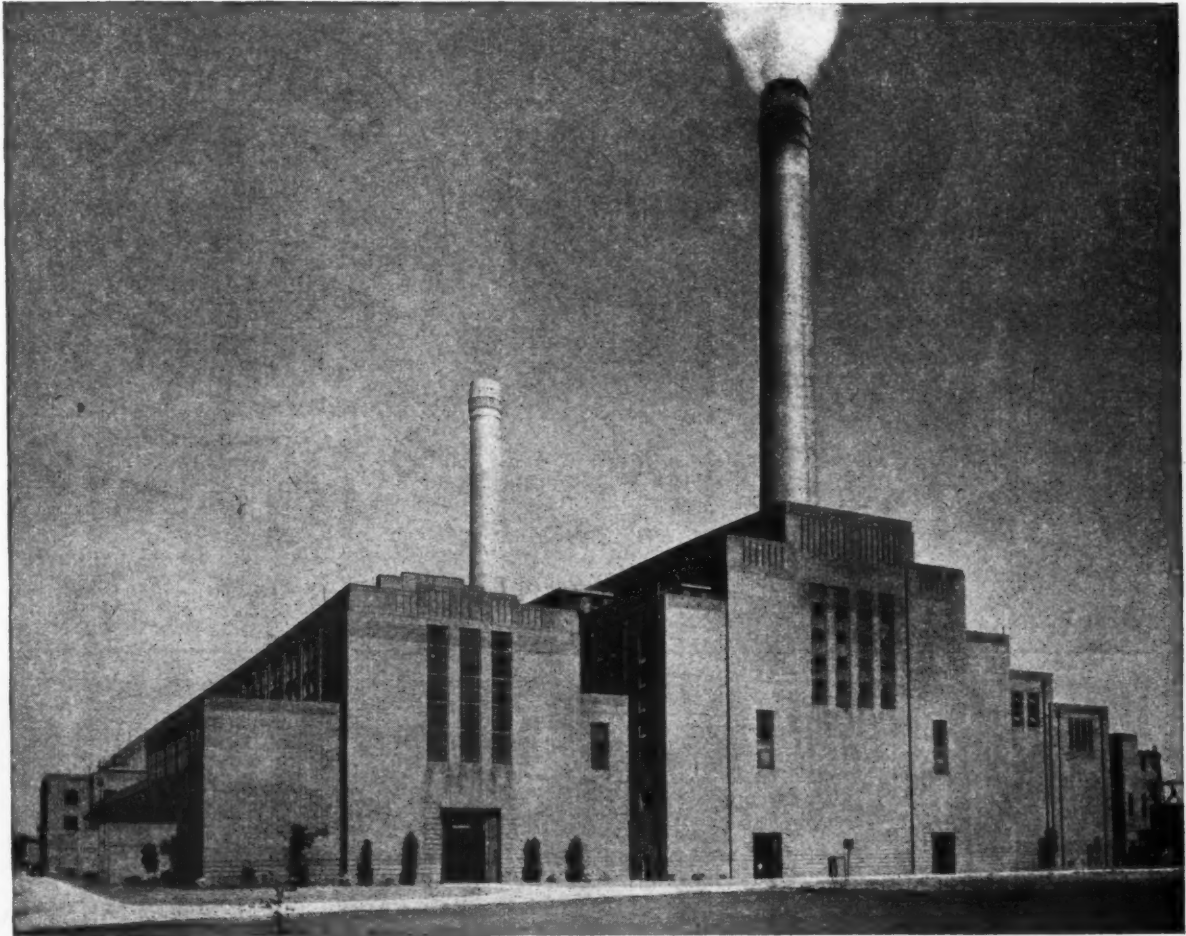
1 STEEL 'ARC' WORK BENCHES  
2 'VISPANS' AND RACKS  
3 CYCLE PARKS  
4 STILLAGES AND JACK TRUCK PLATFORMS  
5 'ADJUSTEEL' SHELVING FOR ALL STORAGE PURPOSES  
6 STEEL CLOTHES LOCKERS  
7 STEEL TOOL STANDS

SEND FOR CATALOGUE AJ/47  
PLEASE QUOTE ITEM NUMBERS

**CONSTRUCTORS LTD**  
TYBURN ROAD • BIRMINGHAM 24 TELEPHONE: ERDINGTON 1616 • TELEGRAMS: EQUIPSTORS • BIRMINGHAM, 24



# *Brick* FOR INDUSTRIAL DEVELOPMENT



*Hams Hall Power Station—General View, West End. City of Birmingham Electric Supply Department.*

**B**OTH for normal building construction and for engineering work, Brick has given long and dependable service to industry.

For buildings exposed to smoke, grime and other atmospheric impurities, Brick effects substantial economies in maintenance.

Where exceptional strength and durability are essential, special grades of Brick are available which will

withstand loads exceeding 10,000 lbs. per square inch. For resistance to chemical action, Engineering Bricks constitute a formidable barrier.

Brick is playing a vital part under the Capital Construction Programme—new power stations, mining improvements, water and sewage works, railway development and new factories for export production are being planned and constructed in Brick.

BUILD FOR THE PRESENT AND THE FUTURE . . IN

# BRICK

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

...but for trouble free installations




TRADE MARK  
**REDCLIFFE**  
TANKS & CISTERNS

JOHN LYSAGHT'S BRISTOL WORKS LTD., BRISTOL. 2.

# SEALOCRETE SEALANTONE

**SEALOCRETE**

**MAKES CONCRETE  
DUSTPROOF  
OILPROOF  
WATERPROOF  
CASE HARDENED**

Rapid hardens—seals leaks under pressure  
ENABLES CONCRETING TO BE  
CARRIED OUT IN FROSTY WEATHER

**SEALANTONE**

**THE ORIGINAL  
AND UNIQUE  
NON-FADING  
LIQUID COLOURS**

for  
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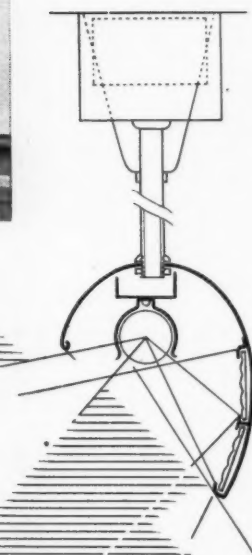
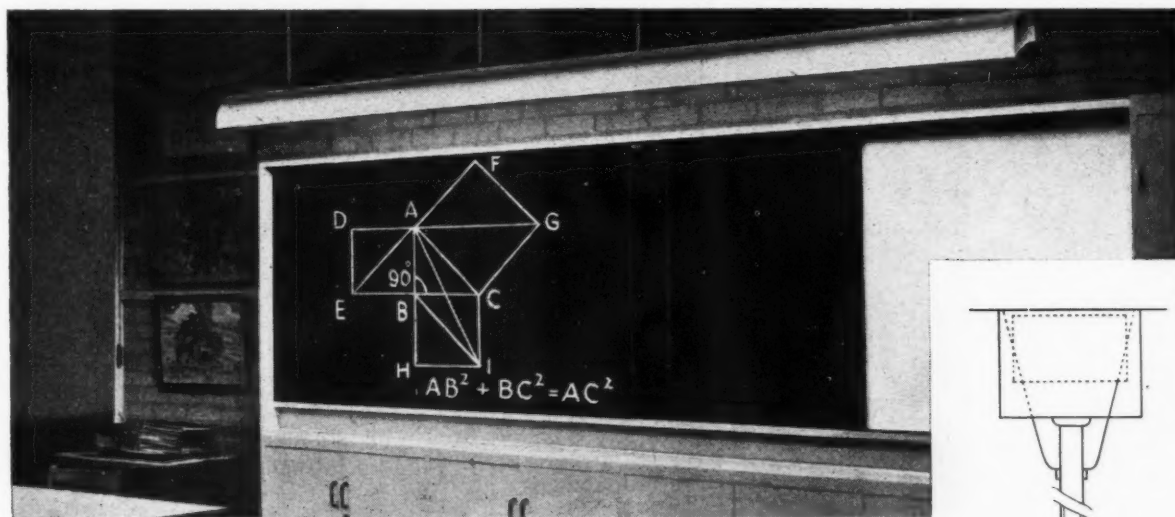
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*This is the blackboard in one of the classrooms of the Bourne Secondary Modern School. We supplied all the lighting fittings for this school and gave special attention to the fluorescent lighting of blackboards. BELOW RIGHT: A working drawing prepared in our Design Department in collaboration with the architect, Howard V. Lobb, F.R.I.B.A. The design ensures that there is neither "board shine" nor light glare for any pupil. One example of the care taken in every detail of the lighting work we do.*



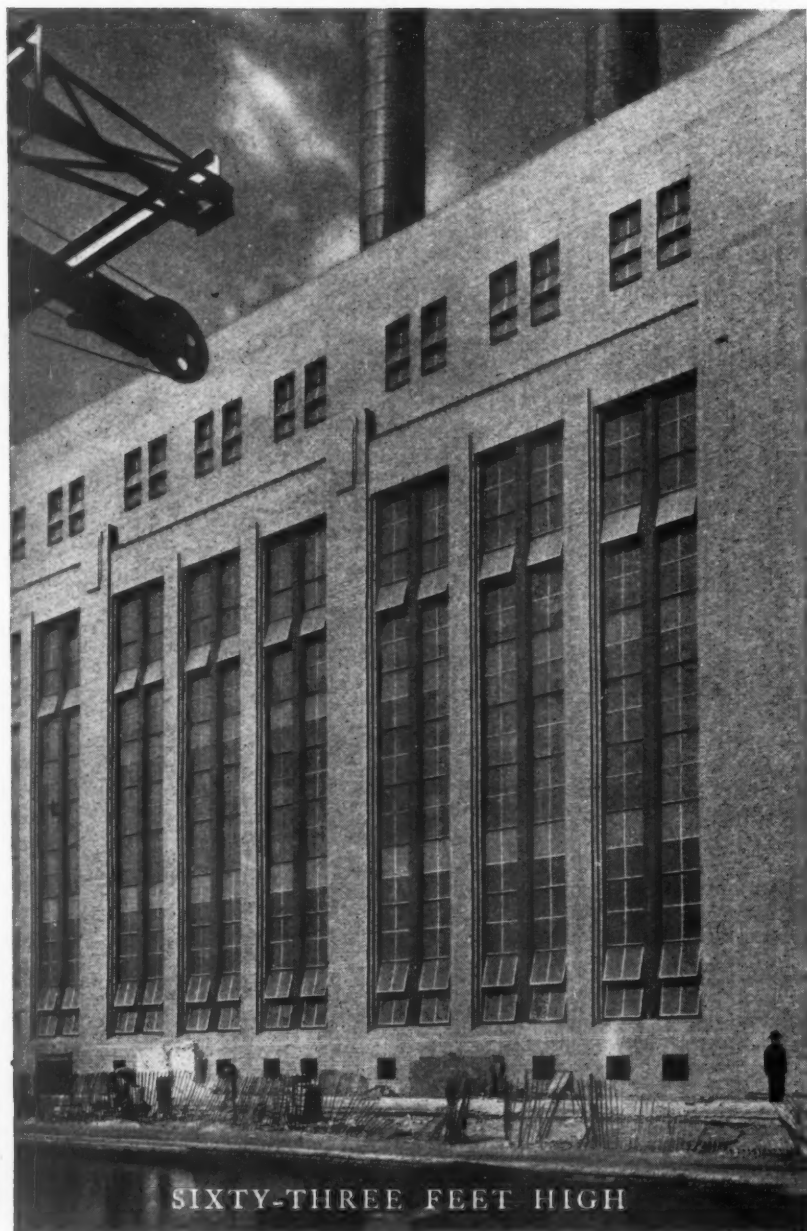
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In common with every other periodical, this JOURNAL is rationed to a small part of its pre-war consumption of paper. Circulation is therefore temporarily restricted but would-be subscribers are advised to have their names put on the waiting-list. Their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



## DIARY FOR OCTOBER NOVEMBER AND DECEMBER

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

**BIRMINGHAM.** *Design Week.* In the City Art Gallery. (Sponsor, CID.) OCT. 11-16

**BRIGHTON.** *Sussex Industries Exhibition.* At the Dome and Corn Exchange, Brighton. (Sponsor, Federation of Sussex Industries.) UNTIL OCT. 9

**GLASGOW.** *Exhibition of Sadcolok Walling and Partitioning and Nerkorode Aluminium Rainwater Goods and Soilpipes.* At 29, Wellington Street, Glasgow. (Sponsors, Sadcolok Ltd. and T. B. Campbell & Sons, Ltd.) OCT. 11-16

**LEEDS.** E. H. B. Boulton. *Timber.* At the Leeds College of Commerce. (Sponsor, TDA.) 7 p.m. OCT. 11

**LONDON.** *Exhibition of Prints and Sculpture.* At Whitechapel Art Gallery. (Sponsor, Whitechapel Art Gallery.) Week-days 11 a.m. to 6 p.m., Thursday 11 a.m. to 8 p.m., Sunday 2 p.m. to 6 p.m. Closed Mondays. UNTIL OCT. 31

Gordon Hemm. *Exhibition of Drawings and Watercolours.* At the Kensington Art Gallery, 15, St. Mary Abbot's Terrace, W.14. (Sponsor, Kensington Art Gallery.) UNTIL OCT. 23

*The English Home.* A series of four lectures. A. E. Richardson. 18th Century. Oct. 12. H. S. Goodhart-Rendel. 19th Century. Oct. 19. Gordon Russell. 20th Century. Oct. 26. All lectures begin at 7 p.m. The chairman at each lecture will be F. R. Yerbury. At the Geffrye Museum, Kingsland Road, E.2. (Sponsor, Geffrye Museum.) OCT. 12, 19, 26

Hugh E. Seaton. *Trees and Local Climate.* At the Planning Centre, 28, King Street, W.C.2. (Sponsor, TPCA.) 6.15 p.m. OCT. 12

*Builders' Clerks' Benevolent Institution.* Annual Dinner at the Café Royal, Regent Street. OCT. 12

L. G. Larke. *Industrial Housing Associations.* At the Housing Centre, 13, Suffolk Street, S.W.1. Buffet lunch, 12.45-1.15 p.m., 2s. 6d. Lecture, 1.15-2.15 p.m., 6d. (Sponsor, HC.) OCT. 12

Anthony Minoprio. *The Master Plan for Crawley New Town.* At the Planning Centre, 28, King Street, W.C.2. (Sponsor, TPCA.) 6.15 p.m. OCT. 13

*LMBA Central Area No. 1 General Meeting.* Luncheon, 2 p.m., at Derry & Toms Restaurant, W.8; meeting 2 p.m. (Sponsor, LMBA.) OCT. 13

Donald Gibson. *A Review of Coventry from an Architect's point of view, 1938-48.* A course of two lectures. At University College Embryology Theatre, Gower Street, W.C.1. (Sponsor, London University.) OCT. 15 AND 22

**MAIDSTONE.** J. Singleton-Green. *Concrete Troubles.* At the Maidstone Technical Institute, Tonbridge Road, Maidstone. (Sponsor, S.E. Society of Architects, Maidstone Group.) 7 p.m. OCT. 7

*Discussion. Architects, Builders and Operatives.* At the Maidstone Technical Institute, Tonbridge Road, Maidstone. (Sponsor, S.E. Society of Architects, Maidstone Group.) 7 p.m. OCT. 19

**WALTHAMSTOW.** *Course of Evening Lectures in Town Planning Law.* N. Abbey. *Town Planning Law (Sale and Mortgage of Land).* Monday evenings, 6.30-8 p.m. *Town Planning Law (Lease of Land).* Monday evenings, 8-9.30 p.m. *Law Relating to Town and Country Planning, I (General).* Wednesday evenings, 6.30-8 p.m. *Law Relating to Town and Country Planning, II (1947 Act).* Wednesday evenings, 8-9.30 p.m. At the S.W. Essex Technical College, Forest Road, Walthamstow, E.17. (Sponsor, S.W. Essex Technical College.) OCT.-JULY

**WEMBLEY.**—*Wembley Civic Industrial and Commercial Exhibition.* At the Civic Hall, Exhibition Grounds, Wembley. OCT. 13-23

### COMPETITIONS

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

Secondary Modern School at Nunnery Farm, Spetchley Road, Worcester, for the City of Worcester Local Education Authority. Premiums, £400, £200, and £100. Assessor, John B. Surman, F.R.I.B.A. Conditions from the Secretary for Education Department, 4, Copenhagen Street, Worcester. Deposit, £2 2s. Closing date, February 21.

## NEWS

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

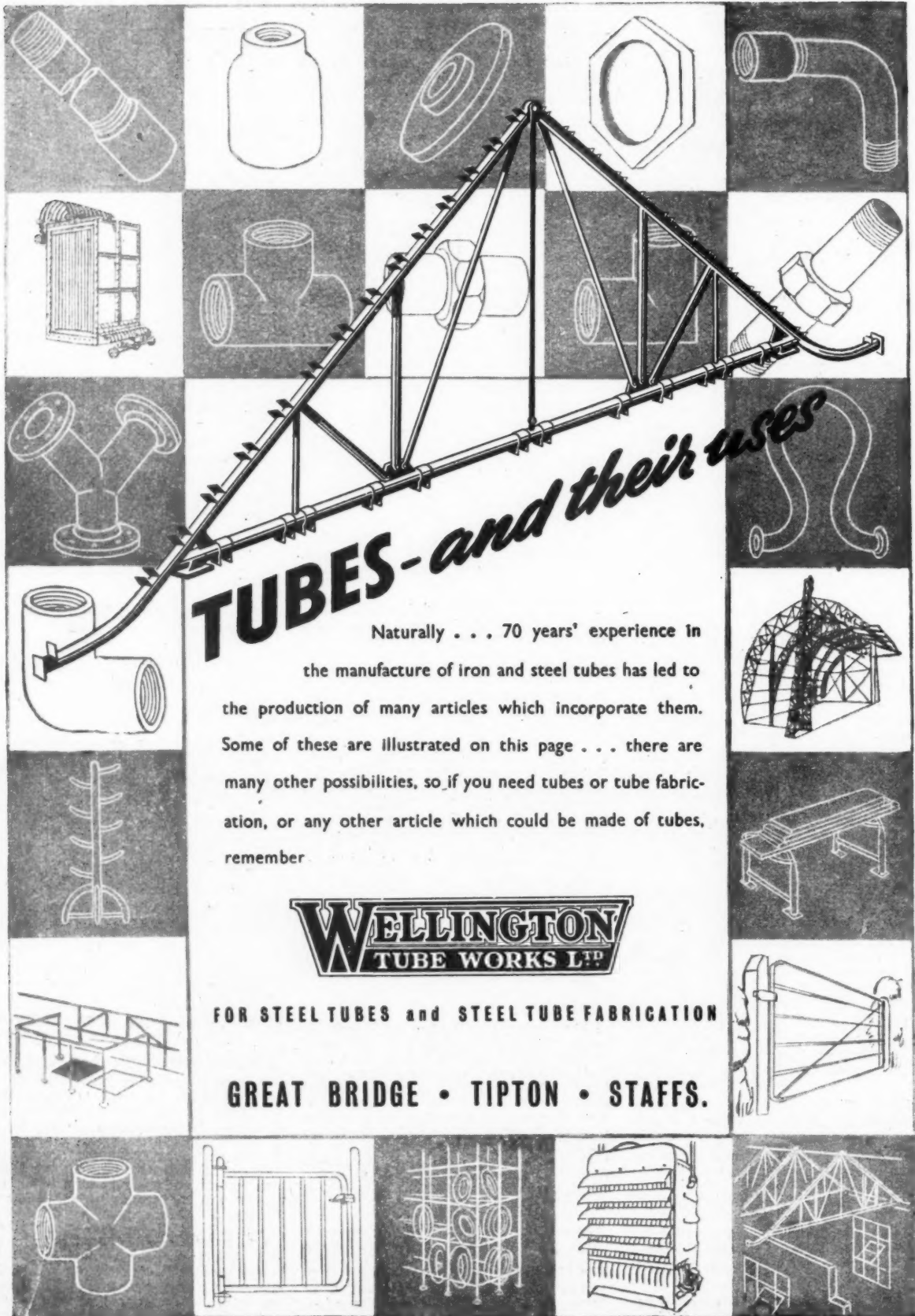
★ means spare a second for this, it will probably be worth it.

★★ 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.


### MR. E. H. B. BOULTON has resigned his full time Technical Directorship with the Timber Development Association.

A farewell gathering was held at the Building Centre last week. Coming out of the Army in 1920 (with an MC gained at Gallipoli), Brooke Boulton studied forestry at Cambridge University and was later appointed University Lecturer in Forestry. In 1934 the Timber Development Association was formed and he relinquished his University post to become Technical Director of the TDA, for whom he has lectured in many parts of the world. He is now setting up as a private consultant in forestry and timber preservation. In his new company (Brooke Boulton & Evans) he has engaged a trained staff of experts specialising in the cure and eradication of dry rot and beetle damage. His services as part-time consultant have been retained by the TDA.



# TUBES - and their uses

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



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## From AN ARCHITECT'S Commonplace Book

ROMANTICISM IN REVERSE. [From The Work of William Kent, by Margaret Jourdain (*Country Life, Ltd.*)] But if the classical revival by Burlington's Palladians was thus inspired by Shaftesbury's æsthetic moralising, then the whole basis of eighteenth-century classical architecture is shown to be fundamentally sentimental. Nowadays classical implies the antithesis of romantic; a rational, logical, finite conception, founded, as regards architecture, on subtle but ascertained and definite mathematical ratios. Yet to Shaftesbury, and no less, apparently, to the Burlingtonians, classical signified mainly the accurate reproduction of those buildings, or parts of buildings, that dated undoubtedly from Roman times, and which consequently were associated with scenes and ideas of classical antiquity. It was the sentiments and virtues associated with classical architecture, more than its objective formal qualities, that aroused their enthusiasm, just as it was the departures of Wren and Vanbrugh from the strict canon, and not necessarily the intrinsic qualities of St. Paul's or Blenheim, that aroused their indignation. English Palladian classicism was essentially associative, subjective—in fact, Ruskinian romanticism in reverse.

★★★

### *The Ministry of Health's committee of inquiry on the COST OF HOUSEBUILDING has issued its first report.\**

It points out that the typical local authority house of 1947 cost three and a quarter times as much as its pre-war counterpart, and required twice as much labour and one-third more material. This means that while 2.9 per cent. of the national income was invested in house building in 1938, the present figure of 2.6 per cent. is invested in only 56 per cent. of the number of houses built in 1938. A large part of the cost is being met by subsidies amounting to £7½ millions a year. If the present rate of local authority work is maintained and 1947 costs, rents and subsidies remain unchanged, this figure could be expected to increase by £3,300,000 a year.

The report states that in 1938-39 the typical local authority three-bedroom house cost approximately £380, but that by the end of last year the cost was £1,242. The cause of increase is attributed to an improvement in housing standards coupled with an increased cost of labour and a smaller output per man-hour. The average house size had increased from 800 sq. ft. in 1938 to 1,029 sq. ft., including outbuildings, in 1947. This increase in size accounted for £201, and improved fittings for another £127. A review of housing standards and the building of more two-bedroom houses is strongly urged. The cost of labour is estimated to have increased by £297 a house, of which £96 was due to better pay, £75 to the improvement in housing standards and £126 to the decline in output.

This decline in output is closely examined. Between 1939 and 1947 the number of man-hours required to build a house increased by 45 per cent., an equivalent to a decline in output of 31 per cent. The causes of this are given as (a) shortages of materials resulting in a bad psychological effect; (b) shortage of labour; (c) deterioration of the quality of labour, increase in the average age of the operatives, and the greater attractiveness of other industries; (d) overloading of the building industry; (e) lack of individual effort—more incentives are required; (f) bad weather in 1947.

The cost of building materials had followed the trend of prices of industrial materials generally, and had resulted in an increase in cost of £472 a house, of which £284 was due to increased prices, and £188 to extra materials for larger houses. Overhead charges and profits accounted for another £77.

Other conclusions that the committee have reached are: that direct labour is not usually more economical; that there was no evidence that prefabrication or non-traditional construction produced any saving in cost; and that evidence existed to show that private enterprise had achieved a faster

building rate than local authorities although differences between the types of houses that each built had tended to hide this fact.

★

### *The project for BASILDON NEW TOWN may have to be abandoned.*

This was stated at Laindon, Essex, last week, by the Minister of Town and Country Planning. The Ministry have tried for two years to find a suitable site, the main difficulty being one of size and location, since the new town must be suitable for both industry and recreation in order to establish a balanced community. A public inquiry is being held today.

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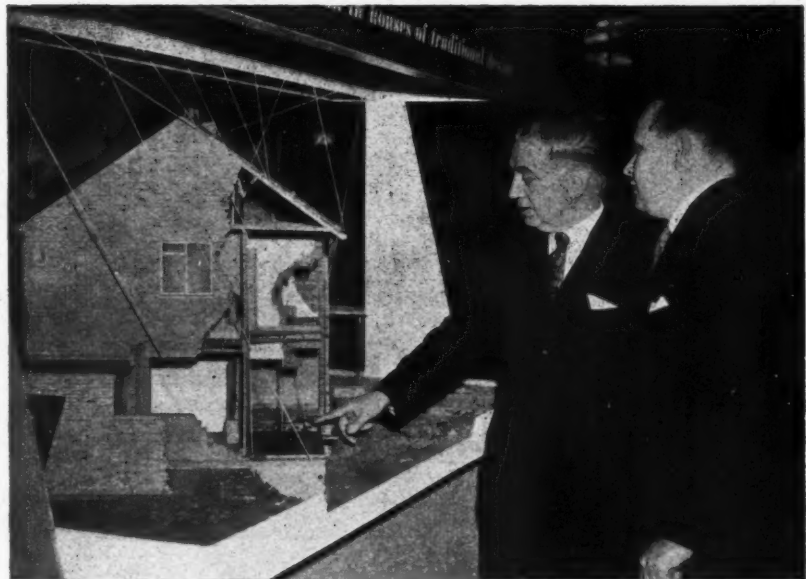
### *Mr. Frederick Gibberd has been appointed CONSULTING ARCHITECT FOR LONDON AIRPORT.*

The appointment has been made by the Ministry of Civil Aviation, and Mr.

Gibberd's main task is in connection with the interim terminal buildings at Heathrow which are to be built in the central area of the airport to replace the temporary buildings along the Bath Road. Work will begin at the end of the year, and it is intended to have them ready for the 1951 Festival of Britain. The interim buildings will be of semi-permanent unit construction in either two or three storeys.

### *Four new CODES OF PRACTICE have been issued.*

They deal with Protection of Structures against Lightning (Code 326.101); Installation of Consumers' Electricity Supply Controls for Small Dwellings (for A.C. system) (Code 322.103); Selection and Installation of Domestic Electric Cookers (Code 324.301); and Provision of Electric Lighting in Schools (Code 324.102). Copies of these codes are obtainable from the British Standards Institution, 24-28, Victoria Street, London, S.W.1, price 2/- each, post free.



A Building Science Exhibition, organised by the Department for Scientific and Industrial Research, was opened at Croydon last week by Sir Edward Appleton, Secretary to the Department. The exhibition was on view at Croydon for a few days only, but it is moving to the Science Museum, South Kensington on November 1, and will remain there for two months. The photograph shows Sir Edward Appleton with Mr. F. W. Harris, M.P. for North Croydon, inspecting a model of a sectionalised house in the exhibition. In his opening speech Sir Edward stressed the importance of economical heating in houses and spoke of the experiments in heat insulation and house design that his department has been carrying out.





## Exhibition on Wheels

Easy mobility is essential to exhibitions if they are to reach the largest possible audiences. An exhibition of house fittings in a specially designed train was opened on Monday by the Earl of Huntingdon. The train consists of two coaches, one displaying cookers, heating stoves and baths, the other being fitted as a reception and cinema coach. The photograph above shows the entrance to the display coach and demonstrates how effective confined

spaces can be when imaginatively handled. The train is at present at Paddington Station before setting off to visit twenty-five towns throughout the country during the next six months. It was conceived and planned by Donald Atkins of Mather & Crowther for Allied Ironfounders. The architect was Arthur Braven, and the consulting architect was Derek Bridgwater. Further illustrations will appear in a coming issue of the JOURNAL.

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## NEWS IN BRIEF

**400 Flats are to be erected** on the Hurlingham No. 2 polo ground by Fulham Council. The cost will be £750,000. This was announced at a recent council meeting. The chairman of the Housing Committee stated that work would begin as soon as possible, and that a tender for the removal of the grandstand had been accepted.

**Sir Patrick Abercrombie** is leaving Britain by air today for a six weeks' tour of Australia at the invitation of the Government of Australia, and arranged in conjunction with the British Council. He will make an extensive tour including visits to all the States where he will lecture on Town Planning and undertake advisory work for the State Governments. He arrives in Sydney on October 11, and will go to Melbourne on October 12 to lecture in connection with the British Council Town Planning Exhibition, which opened on September 27 and will be shown until October 15. His tour also includes visits to Sydney and Brisbane during the showing of the Exhibition in those cities. The Exhibition opens in Sydney on October 20, closes November 10, and is being shown in Brisbane from November 16 to November 26. Afterwards the Exhibition will tour until June, 1949, visiting a total of 27 Australian cities. Sir Patrick ends his official Australian visit in Sydney on November 21 and will leave on November 27.

**The Rebuilding of Bristol** is to start soon. Mr. Silkin, the Minister of Town and Country Planning, has met representatives of the Corporation to discuss the redevelopment of the city, and it has been agreed that Ministry officials should visit Bristol as soon as possible in order to settle the programme with the Corporation's representatives, who are proceeding with the city plan as quickly as possible.



The new block of flats at Aspen Gardens, Hammersmith, is nearly ready for occupation, and a fully furnished show flat was opened by the Minister of Health last week. The flats range in size from one to four bedrooms and the block contains 131 flats in all. It forms part of Hammersmith's river front plan and will be adjacent to the civic centre when it is built. The architect for the flats was Mr. F. D. Barton, Hammersmith Borough Engineer and Surveyor. Turtons Ltd. were the builders.

## TRAINING CENTRES FOR BUILDING WORKERS

**A** MOST astonishing passage in the recent report of the Committee on Public Accounts\* deals with the violent change during 1947 in the numbers of young men training to become craftsmen in the building industry. The report, which deals with training as a whole, states:—

"The maximum number in training at one time was about 26,000 in February, 1947; of these, 23,400 were being trained for the building industry. *It then became apparent* that the war-time assumptions on which the original programme was based were not going to materialise. Capital investment cuts became necessary within the balance of the national economy as a whole, which involved a projected decline in the total building labour force." Accordingly, the total number in training declined, and stood at only 4,300 in April, 1948.

The strictures of the Committee on the excess numbers of staff retained, despite this severe cut in the numbers of trainees, then follow, being based on unimpeachable "hind-sight."

But what does the passage just quoted really mean? To whom did it "become apparent" in February, 1947, that the original training programme ought to be abandoned? In actual fact, in February, 1947, the first Economic Survey was published,† which announced a projected *increase* in the building labour force from 1,250,000 to 1,300,000. The capital cuts referred to by the Committee of Public Accounts were not found necessary by the Government (nor, for that matter, by His Majesty's Opposition) until very much later in the year.

The vague and inaccurate language of the Committee would not call for comment but for the fact that it leaves the whole question of training for the building industry alarmingly suspended in mid-air. In a recent housing debate, it was pointed out by some speakers that the 25,000 intake of building craftsmen annually was calculated on the idea of maintaining a total craftsmen force of some 625,000. An annual wastage of about 4 per cent. justified the intake figures. Hence the absence of mass unemployment and other factors referred to by the Committee of Public Accounts have very little relevance to the problem; nor can the steep decline in trainees be directly ascribed to a national change of policy based on the effects of the capital cuts.

What, then, is the true position? At the moment, it is impossible to say. No one knows if the 4 per cent. wastage figure, calculated during the war, is being borne out by events; no one propounds a new target figure for craftsmen; thus no one can say how many young men ought now to be in training. But even the slightest consideration of the

\* Report of the Committee of Public Accounts, Session 1947-48 (HMSO, 6d.).  
† i.e., Cmd. 7046; see specially paragraphs 111 to 114.

matter suggests that it should be more than 4,000—unless the whole plan of trained apprenticeship is being quietly thrown overboard. Surely it is time that some public discussion of these points was undertaken. If the matter is left to go by default, the standard of training will decline instead of being raised, boys and youths will drift away from the industry, and there will be a man-power crisis in the industry that will take years to mend. In the parallel case of coal-mining, one year's neglect caused trouble for many years afterwards. Unless the entry to a skilled industry is rationally planned, its balance is bound to be disturbed, and in a problem of man-power worse than too much planning is a policy of planned planlessness.



*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

### WHO'LL HOE THE HEATHROW?

One of the most discouraging features about returning home from a holiday abroad is the appearance of our aerodromes. To touch down at Croydon, Heathrow or Northolt after taking off from Bromma or Copenhagen or Le Bourget is a depressing experience to which the architecture of Airways Terminal, Victoria, adds its own gruesome climax. It's not just that the aerodrome buildings consist of huts—even huts can be made to look cheerful and elegant—it's the feeling that what will eventually replace the huts will be worse still.

All the more welcome therefore is the news that Frederick Gibberd has been appointed consultant designer for the temporary buildings at Heathrow. These temporary buildings are likely to remain for some years and wisely the Ministry of Civil Aviation has decided that it's worth taking trouble with them. Gibberd's duties are likely to consist mainly in advising upon planning improvements, elevational

treatments and colour schemes, so that by 1951 our Festival of Britain guests may have something worth while looking down at.

### HOIST ON MY OWN PETARD

Remember the bungalow plans (5s. 9d. each or 25s. for working drawings) offered by a firm in the Midlands, which I published on this page two weeks ago? I expected, if not a flood of angry correspondence, at least a guarded statement from Mr. Pembroke Wicks. Instead I received the following letter:

Dear Sir,

In your issue of the Architect Sept 23rd there was an article by "Astragal" about a Midland Firm supplying 3 drawings of Bungalows for 5/9. Could you give me the name and address of the Firm so that I could send for the drawings, & oblige

Problem, do I send the address, or do I send my correspondent the plans I already have and ask for 5s. 9d. for the Architects' Benevolent Fund? God knows we shall all be drawing on the fund soon enough if the 5s. 9d. plan business catches on.

### VITAL STATISTICS BEAT PLANNERS

Mr. Bevan, opening some flats, complains that people are getting married faster than the planners expected, and that as a result the housing programme is further behind than might have been expected. Now what people say at the openings of flats isn't evidence, and perhaps is meant to do no more than amuse. For planners to be wrong in their estimates is no very new thing, but must the public really conform to some pre-determined curve based on the 1923 census and the circulation figures of the *Matrimonial Gazette*? Like everyone

else, I have often tried to persuade clients that what I think they ought to have is also what they really want, but it's a little hard when the public is assumed to be wrong just because it does what the planners didn't expect.

Weather forecasters all too often go wrong by sticking to isobars and forgetting to look out of the window; may one suggest that statisticians should occasionally throw away their calculating machines and try reading the letters in the *Daily Mirror*, or even listening to the conversation in a public bar? Astragal may not get around very much, but he will take a small bet that the marriage rate will keep ahead of housing for a good many years to come.

### ASTRAGAL BUYS A COW

Last week I advised you to go to Reading if you wanted to build a shack. This week the advice is the same—if you want to buy a cow.

Most people think of a cattle market as a filthy or a fascinating mess, according to taste, in the middle of a small town. Twisted tails, loud shouts, and hordes of urchins thumping sticks at the unfortunate beasts, a rubicund, rotund auctioneer loudly encouraging the purchase of gilts, hoggets, tegs, maiden heifers, and such-like, presiding over the show. When the excitement is over there is a good blow-out at the "farmers' ordinary."

Happening to require a cow, Astragal repaired to a sale at Reading. What a contrast is the scene at the cattle market there, surely something of a model of what such establishments should be. The beasts are all under cover, the sale takes place in a sort of lecture theatre, a semicircle of ascending steps with the auctioneer elevated above the mob in the centre of the diameter. The sale ring round which the animals are led being immediately in front of him and the would-be purchasers. Cushions may be hired by those who are sensitive to concrete steps.

The purchase of a cow was a pleasure, and it was possible to examine the prospective purchase with all the care a collector bestows on an antique. As many new planning schemes require existing inadequate or wrongly sited

markets to be removed, the designers might profitably visit Reading to see how the thing might be done.

#### PREFABS IN SCOTLAND

Clydebank on the Gorbals polling day sounded as though it might be mildly interesting, but at the official opening of some prototype terrace houses with a traditional carcass and prefabricated interiors everyone seemed more interested in houses than in politics, though Mr. David Kirkwood did his best to convince everyone that the best place to buy furniture was the Co-Op.

But the houses were interesting, in that Blackburn Aircraft have modified the standard Airoh house units so that you can have a prefab inside with any type of traditional carcassing. For some reason or other the Scots seem to prefer a bathroom on the ground floor, so that the bungalow kitchen-bathroom unit is just what is needed, but it should not be too difficult to produce a two-storey version of the unit, and we should then have a system of building which could be applied anywhere in the country. Apart from cost, the main snag of nearly all prefabs has been that you have to have one particular house or nothing at all. Prefabricated floors, roofs and partitions which could be fitted into any not too whimsical plan are much more likely to be the long term answer. Mr. Hargreaves, of Blackburn, suggests that the idea is worth trying, if only because the prototypes were ready for the tenants six weeks from the word Go.

#### THE STANDARD ON THE WARPATH

The British Council must be breathing a bit easier this week, for the Beaverbrook Press has apparently decided to turn its guns aside, temporarily, on to the 1951 Festival. "Gerald Barry, Director General," exclaims the *Evening Standard*, "gets £3,000 a year plus expenses! M.P.'s should insist upon knowing also how much is paid to P.R.O. Paul Knight, Secretary Leonard Gainford, Scientific Director Ian Cox and architectural director Hugh Carson." (Jolly good, London Diarist: two names out of four spelled correctly!)

Like most people I'm always interested in somebody else's income, but

I doubt if in fact the salaries paid to these gentlemen will be worth much indignation. (Delighted the gentlemen would be if they were!) Ammunition would be better spent if it were directed against the Government, who from all accounts, show little signs of urgency in dealing with allocations of labour and material for the Festival.

However, as has been noted before, there are some papers who always reach for their leader-writer when they hear the word "culture," and the Festival is further still in the mud in having a Fleet Street fugitive as Director General. Perhaps all will get a little friendlier when we are told—and I hope it will be soon—what the Festival will be, and where it will be.

#### THE SMALL MAN'S PROBLEM

Recently I suggested that not enough builders made use of the small power hand tools which the Ministry of Works is industriously publicising at different centres throughout the country. How often, for instance, have you seen a power screwdriver or plane being used by a jobbing builder? Not more than once or twice, I would guess. And why? Mainly, I suspect, because the "small" builder is very small indeed; round about three-quarters of the builders on the MOW register employ less than ten men, and a third of them have no employees at all.

These small men carry out work to the value of several million pounds in the course of the year; they often do the jobs well because many of them are craftsmen, and they are efficient from the cost point of view because their overheads are low. But it is too expensive for them to try to mechanise themselves. Saw, drill, hammer and plane driven by power will leave little change out of £100—too much for the single-handed man who may well clear less than £7 a week.

And the remedy? Hiring is no good for tools which must be on the job all the time, and a multi-purpose weapon which will do everything will be nearly as expensive as the separate units, or else so heavy and complicated that it will hardly ever be used. This is one of the occasions where I haven't got the answer up my sleeve.

ASTRAGAL.

## LETTERS

D. P. Reay, A.R.I.B.A.

Alexander Furness

Grahame Martin-Turner

S. Johnson-Marshall, A.R.I.B.A.

Christopher Bayard

### Designers for East Kilbride

SIR,—It is pleasant to have Astragal sympathize with me in the task of building up what he calls the "right sort" of staff to work on the New Town at East Kilbride. What makes me mildly and, I am afraid, rather gleefully peeved is not his inference that we do not have a full staff—as yet we've barely had time to advertise for one—but his bland and blissfully unconscious assumption that our team of "lively young designers" when complete would naturally hail entirely from south of the border. The phrase "join him in Scotland" can mean nothing else. It implies that there aren't any lively young designers here already—which is far from being the truth—and it seems to be spoken in the same awesome and adventurous tone of voice as one would use to say "join him in Northern Manitoba" or "we hope to join you in Tanganyika" or "I went into exile and joined him in Siberia."

East Kilbride is to be a Scottish town for Scottish people, but, because it is to be a first-class affair, we have no objection to recruiting talent from wherever we can find it, although, of course, there are plenty of good lads up here. We do not want England to be cut off completely from our developments north of the border, and we shall not be above taking on Sassenachs if they are bright enough to make it a really British effort; we can give them plenty to do and a stimulating atmosphere to do it in.

For Astragal is quite correct in one thing—he "supposes we are already under way." Well, I think we most certainly are. He can come up and see for himself if he likes.

D. P. REAY,  
Chief Architect and  
Planning Officer.

East Kilbride

### Minimum Ceiling Heights

SIR,—I am surprised to see a letter of agreement with Mr. Anthony Clark's suggestion of a room-height of 7 ft. 3 in. maximum, but, at last, in your issue of September 23 there is such a letter from Mr. Eric S. De Maré. I am completely baffled, why anyone should wish to have room-heights lowered from 8 ft. to 7 ft. 3 in., unless one is designing homes for pygmies. Mr. Clark is a former colleague of mine, and I know he does not come within this classification; but as I have never seen Mr. De Maré, I cannot speak with the same degree of certainty about his physical stature.

Georgian domestic architecture is generally acknowledged to be the best from every point of view, whether it be on the score of beauty, grace, dignity or proportion; but I have yet to see an authentic Georgian house with rooms 7 ft. 3 in. low. Indeed, my own flat is on the fourth floor of a converted Georgian terrace—the floor which in former days was relegated to



## STAINED GLASS IN THE TATE GALLERY



Architects who are not afraid of gorgeous colours in a suitable context can hardly fail to be interested in the new window in the Tate Gallery which is to be uncovered for the first time on Monday, October 11. This window has been designed and wholly executed by Esvin Bossanyi, whose work, though he has been living in England for fourteen years, is still by no means as widely known as it deserves.

Since settling in England in 1934, Bossanyi's public commissions have included windows for the Senate House of London University, a rose window for the West End Synagogue, and a heraldic window at Uxbridge Station. But it is for private patrons that he has executed some of his finest work.

The position for the Tate Gallery window, which measures 14 ft. by 4 ft. 6 in., was carefully chosen by the artist for its suitability and in particular for its interior darkness, with no competing bright light from windows of clear glass to destroy the effect of his window. Even so, the position is not ideal as it has been found impracticable to dispense with a protective window 18 in. from the outer glass surface which has had to be specially treated to ensure light diffusion and thus mask the iron bars of the windows behind.

The window, depicting an angel descending to bestow upon washwomen the blessing of heaven, was first inspired by a visit to Chartres. Heaven is symbolised by an abstract harmony, static and symmetrical, of blues and scarlets with the flame as a symbol of life in the centre. Below the flame the wings of the angel loom impressively, his right hand rests upon the upturned head of the uppermost of the four women. The other women occupy the lower part of the window where the predominant colours are reds and green, with a strong near-black accent in the jersey of the lowest woman washing a garment in the water whose surface reflects all the colours.

Bossanyi's designs are all worked out on small scale "transparencies" placed against the light, so that the special potentiality of the stained glass medium is never lost sight of. The window shows many passages of subtle and sensitive shading and great luminosity is achieved by the skilful juxtaposition of colours.

servants—and yet even these rooms are 8 ft. 6 in. high.

Please let us preserve what few remaining decent architectural standards we yet possess before we lose them all.

London

ALEXANDER FURNESS

## Intake Needed

SIR.—It was recently disclosed by the House of Commons Committee on Public Accounts that large numbers of workers were still being trained for the building industry when it was well known that building schemes had been cut. We should like to suggest that the time has come when it would pay the country more thoroughly to co-ordinate its training methods.

My own company recently opened a large factory at Newcastle for the production of a decorative laminated plastic with a large potential export demand. Staffing problems presented, and still do present, a major difficulty and we are ourselves having to undertake the complete training of all new employees. This has taken time and thereby lost us valuable foreign currency.

Under present conditions the flow of labour is closely controlled, and it should be comparatively simple also to forecast the relative needs of various industries and firms. Is it not possible to establish a planning board to co-ordinate, in respect of training, the needs of industry with the workers available? This could cover not only the immediate present, but could accurately judge the probable requirements of the labour market some time ahead. Such a board might result in considerable saving to industry and help in solving our economic problems. I feel sure that leading industrialists would be only too happy to co-operate with the Ministry of Labour in founding a plan along these lines.

GRAHAME MARTIN-TURNER,  
Director,  
De La Rue Insulation, Ltd.

## Lighting for Schools

SIR.—Mr. Waldram, in his letter in your issue of September 2, states that the lighting standards required in teaching spaces "could only be obtained by single-storey schools with the top lighting at one time forbidden by the Board of Education."

May I point out that architects find it possible to achieve the daylight factor of 2% required by the Ministry of Education Building Regulations without recourse to top light and without distorting the proportions of the rooms concerned.

Multi-storey designs obviously present a slightly more complex problem than do single-storey types, but several aesthetically satisfying and economically suitable solutions have been incorporated in buildings now under construction.

London

S. JOHNSON-MARSHALL

## Patina

SIR.—Surely this time the National Smoke Abatement Society is not flogging its accustomed horse, but the wrong one? The exciting sooty patina on the Epstein "Night," illustrated in Astragal, will soon, I hope, be matched by an equally sympathetic weathering of Moore's "Three Standing Figures." To misquote: There are lies, damned lies and photographs. The photographs published give an entirely wrong idea of the effects of London soot on "Night."

The green bronze patina on the Roosevelt image is offensive because it is entirely insincere—a whimsical hang-over from the natural enrichment found on works of antiquity; but a fortuitous interaction between a sculptor's work and its environment produces a validity of a very different order.

London

CHRISTOPHER BAYARD





*The internal court, from the west.*

# FLATS AT PADDINGTON

DESIGNED BY THE HOUSING  
DEPARTMENT OF PADDINGTON  
BOROUGH COUNCIL

DIRECTOR OF HOUSING: R. A. JENSEN

BOROUGH ENGINEER: W. E. ROBERTS

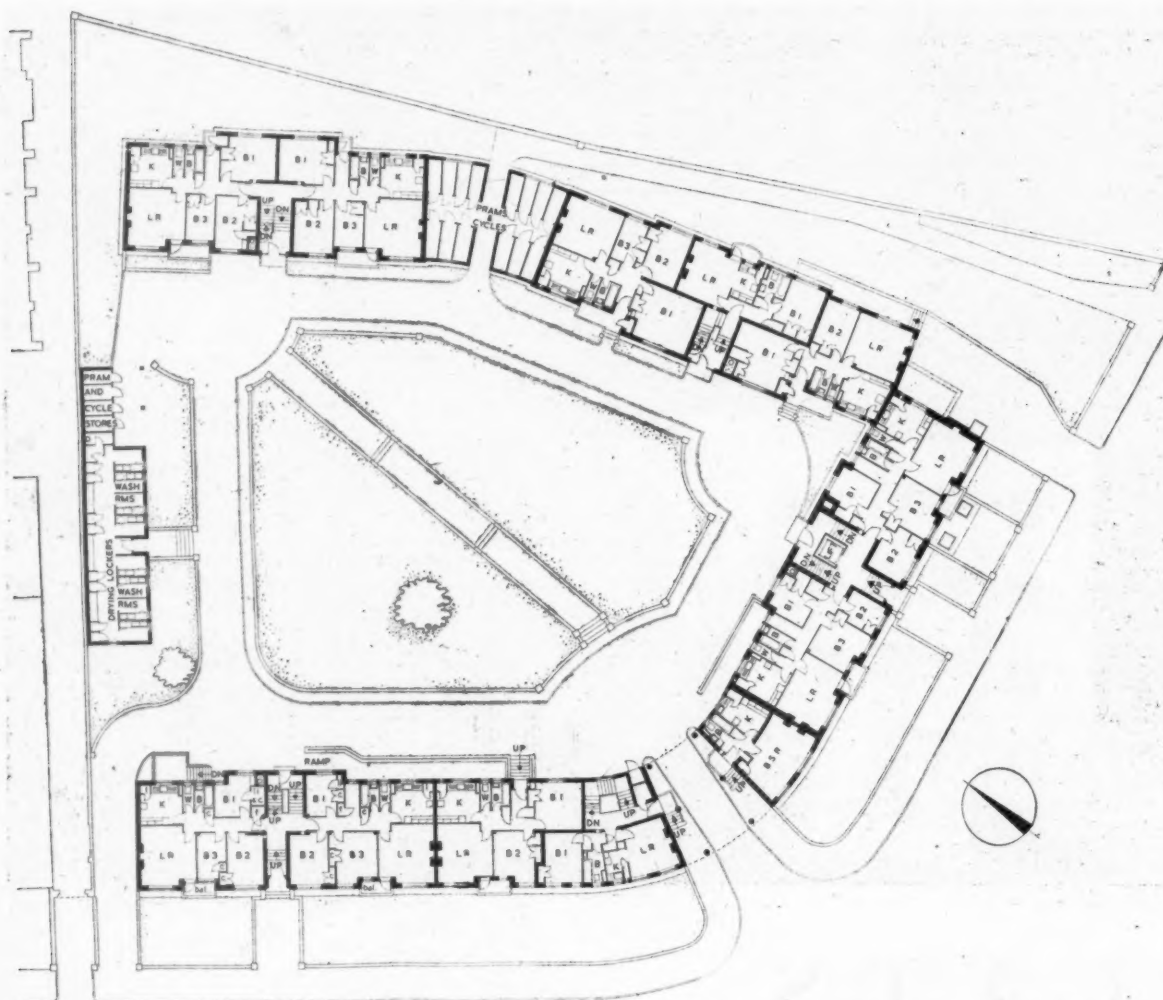
CHIEF ASSISTANT ARCHITECT: A. R. PRATT

GENERAL.—This building in St. Mary's Square, is the first permanent post-war housing scheme to be completed in Paddington, and shows some of the more recent trends in internal design, equipment and finish. The site

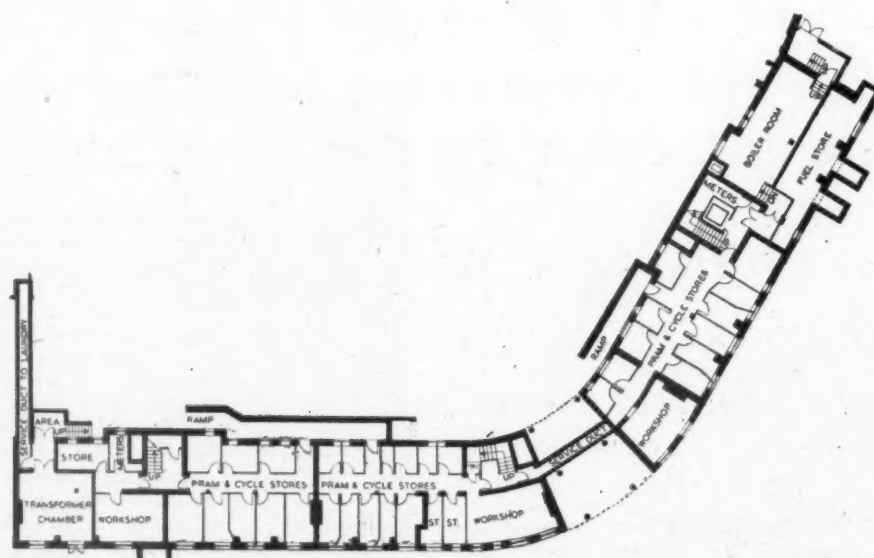
was originally purchased by the council in May, 1939, for an extension to the Town Hall, but was subsequently appropriated for housing purposes, with the consent of the Minister, in 1944. The scheme was started in 1945

under the supervision of the Borough Engineer, W. E. Roberts, the planning and design being carried out by the architectural staff under the chief assistant architect, A. R. Pratt. In the spring of 1947 the architectural staff were transferred to the newly formed Housing Department, and the building has since been under the supervision of the Director of Housing, R. A. Jensen.

SITE.—The area is just over one acre and previously contained terrace houses with mews premises in the rear. Many difficulties attended the building of the flats, chief among which was the discovery of faults in the sub-soil which necessitated unusually deep foundations. The gardens have been laid out with turf and flowering shrubs. A ring road round the courtyard encloses a grassed area crossed by a diagonal footpath, and a grass verge surrounds the whole building with shrubs at the entrances.



### GROUND FLOOR PLAN



### PART BASEMENT PLAN

[Scale :  $\frac{1}{8}'' = 1'0''$ ]

FLATS AT ST. MARY'S SQUARE, PADDINGTON

PLA into another. There are thirty average rooms of 2 and 3. In each bath a stove, bicycle are a eleven prisoners and with 8 in the morning 3 on

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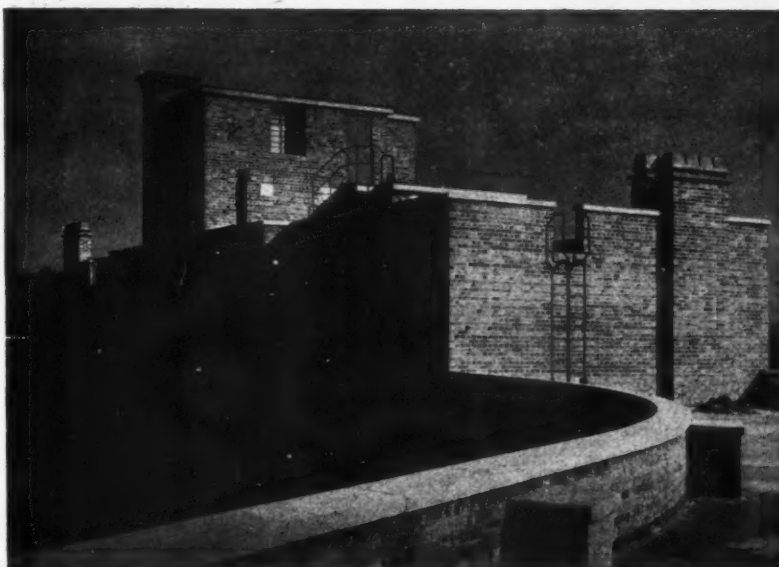
*B*

**PLAN.**—The scheme is divided into 5 blocks, 4 adjoining one another and 1 standing alone. There are 48 flats, comprising thirty-one 4-roomed dwellings averaging 823 sq. ft., eight of 3 rooms averaging 700 sq. ft., eight of 2 rooms averaging 465 sq. ft., and one of one room of 360 sq. ft. In addition, each flat has kitchen, bath, w.c., and in the basement a store room for perambulators, bicycles, etc. Three workshops are available in the basements and eleven laundry units, each comprising gas copper, 2 wash tubs and gas-heated drying cupboard, with slot gasmeters, are provided, 8 in a separate 1-storey block on the north side of the courtyard and 3 on the top of the 5-storey block.

**CONSTRUCTION.**—This is of brick load bearing walls, the facings being in a warm honey colour, reinforced hollow block floors and roofs, and reinforced concrete columns and spine beams.

**SERVICES.**—The equipment includes built-in cupboards, dressers and refrigerators. Electricity and gas services are laid on so that tenants may have the cookers of their choice. The living rooms each have a patent grate, lit by gas,

*Right, from the south-west. Below, left, the centre block at roof level from the north-west. Below, right, the street front from the north-west.*



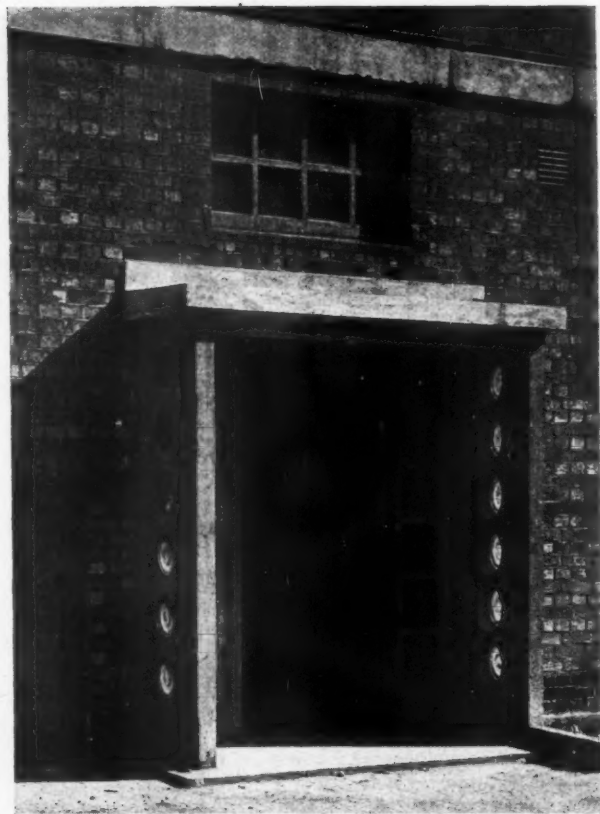
BY PADDINGTON BOROUGH HOUSING DEPARTMENT

for burning smokeless fuel; bedrooms each have an electric power point; background central heating is provided from a central boiler and constant hot water is also provided. The boilers are oil fired but could in an emergency be converted to burn solid fuel. Polished composition floors are laid in the living rooms and bedrooms. Kitchens are painted a warm peach colour and the rest of the flats distempered in cream. Almost all flats have a balcony with artificial stone flower boxes on the coping. Radio relay is available throughout the building. The five staircases have cement glazed dados for ease of cleaning, and on each half landing a hopper is provided for the tenants to empty their refuse into the chutes which discharge into containers in the basement.

**COST.**—The cost of the scheme, including the site, the demolition of old buildings and extra deep foundations is approximately £122,000.

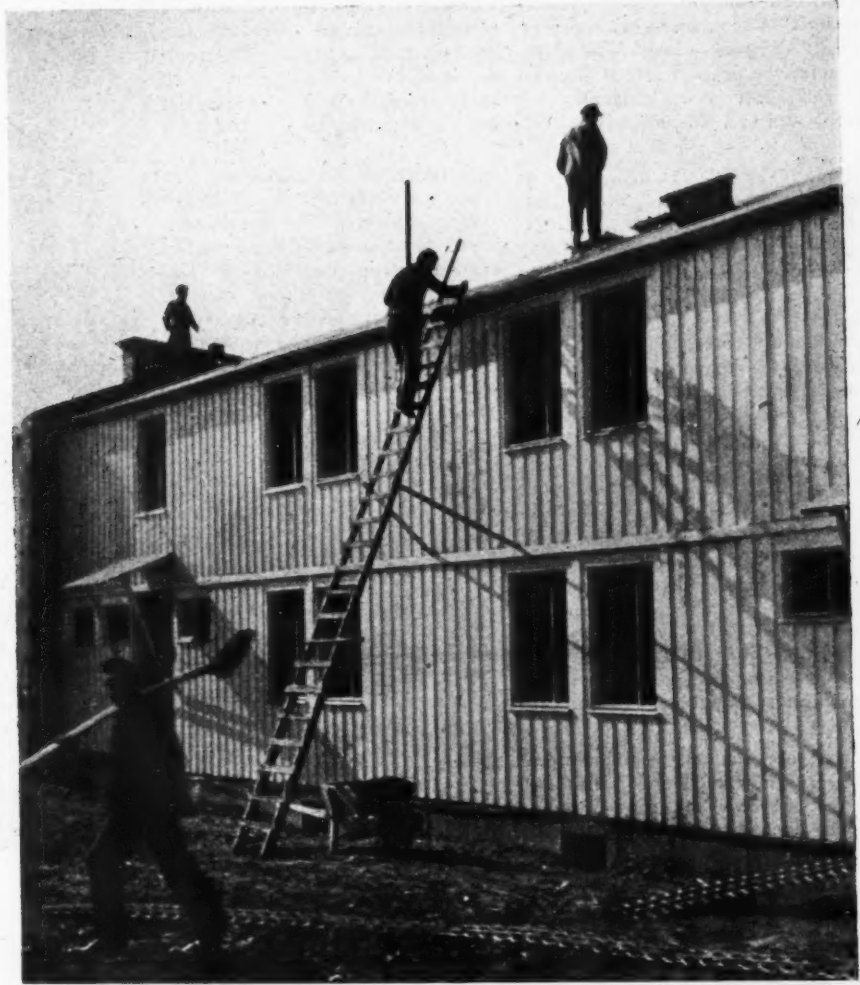
The general contractors were The Demolition & Construction Co., Ltd. For list of sub-contractors see page 344.

*Right, an entrance to a block. Below, the single block of flats.*



FLATS AT ST. MARY'S SQUARE, PADDINGTON

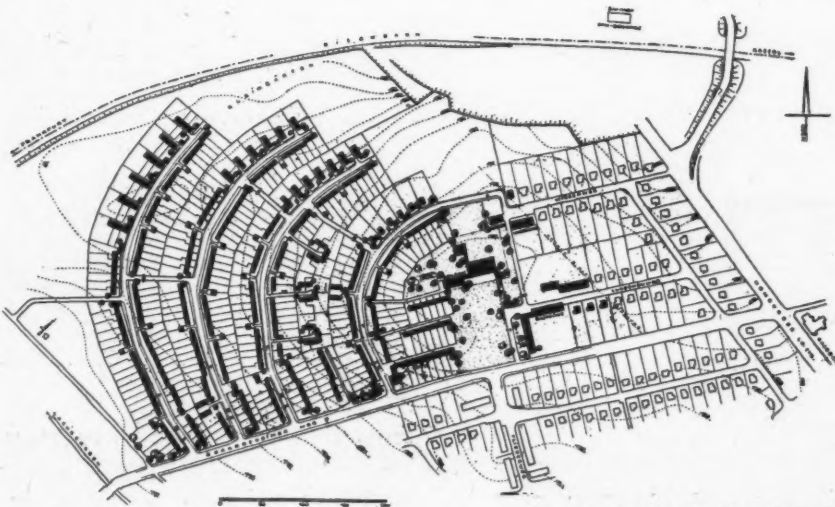




*The entrance front.*

# PREFABRICATED HOUSES AT FRANKFURT ON MAIN, GERMANY

BY JOHANNES KRAHN & A. LEITL



TYPICAL SITE LAYOUT

**GENERAL.**—This housing scheme was planned by the Planning Officers, Böhm and Hebebrand, in the Department for Reconstruction of the City of Frankfurt, under their Chief Architect, Eugen Blanck. Since the scheme was begun, however, the whole trend of architectural policy has been reversed, Blanck has been retired, and his successor has restricted the number of these prefabricated dwellings to 200, the rest to be finished in quarried stone with pitched roofs.

**PLAN.**—Quite inconsistent with the simplicity and speed of erection of the two upper storeys, the houses were required to be built

with one complete storey below ground, built in brick or concrete, with a fireproof ceiling. The planning of the upper floors is similar to our rural types, although the total area is under 900 sq. ft.

**CONSTRUCTION.**—A series of main frames at 1 metre (3 ft. 3½ in.) centres, are connected and stiffened by single storey panels which are hung by means of V-shaped clamps, wedged by their own weight. These panels contain windows or doors. The panels are covered with vertical boarding inside and out, so that the joint over the main frame post can be filled in after fixing without any difficulty.

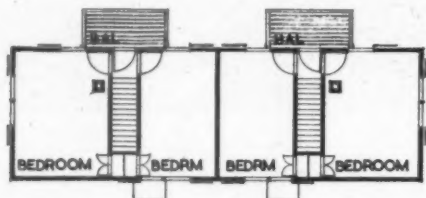
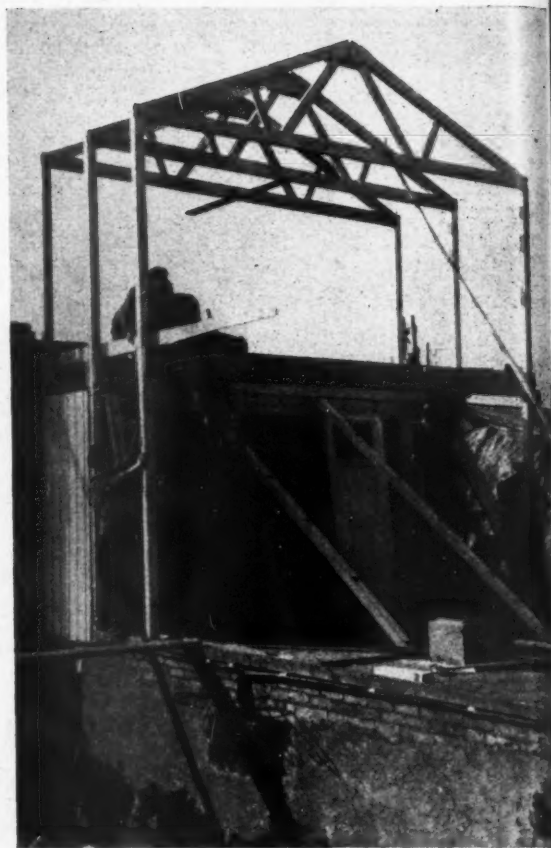
The saw miller, who is also the timber house manufacturer, has worked out a method of sawing timber in such a way that there is little waste. The number of operations is reduced to an absolute minimum, and all details are perfectly plain, with a minimum of machining, ploughing or jointing.

Floors are made in prefabricated panels and laid on joists at 3 ft. 3½ in., fixed in pairs on each side of the main frames.

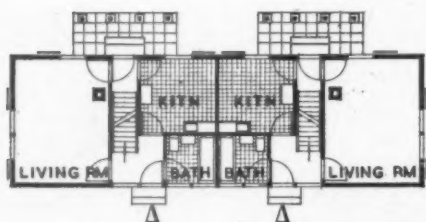
There are no fine tolerances to be considered nor are there any site connectors to be fixed. The panels are manufactured by many small sub-contractors with the simplest kind of equipment.

**EQUIPMENT.**—All windows except those facing north have sliding shutters. The details are simple, and allow no lodgment for rain water on any ledge. The windows are single glazed, open in, and are provided with a patent hinge which allows the window to open either as a sidehung casement or as a bottom hung ventilator.

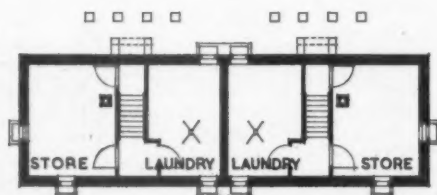
*In course of erection. The trusses, posts and coupled joists being bolted together.*



FIRST FLOOR

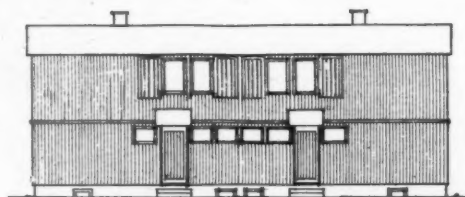


GROUND FLOOR

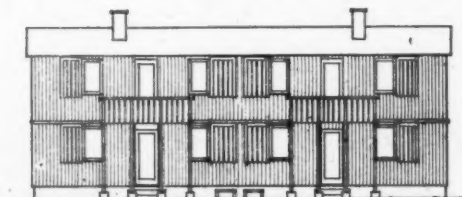


BASEMENT

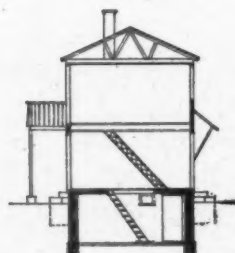
0 10 20 30 40 FT



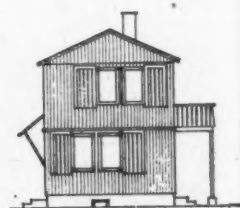
ROAD ELEVATION



GARDEN ELEVATION



SECTION



END ELEVATION

## PREFABRICATED HOUSES IN GERMANY

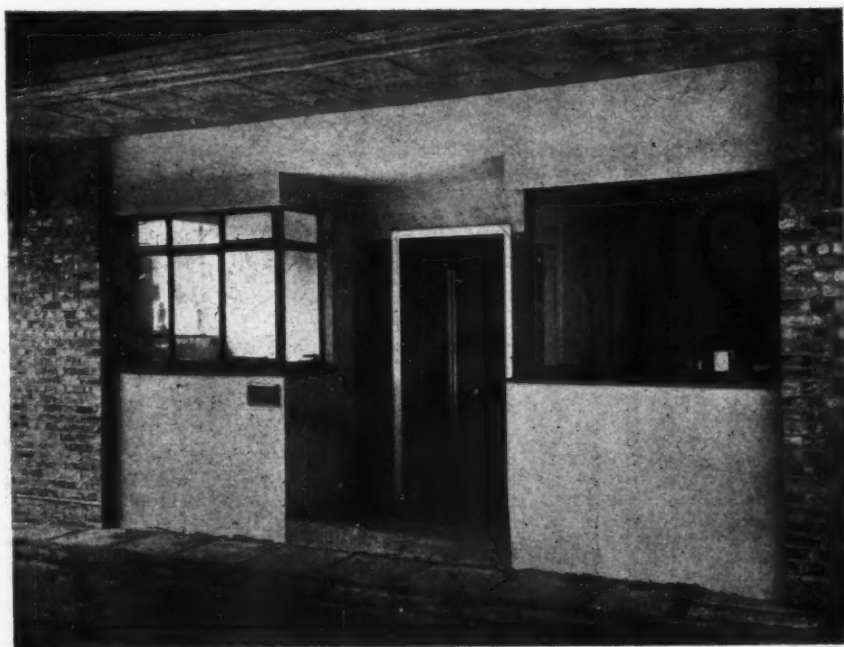


*The main front.*

# OFFICES IN OLD FORD ROAD, BOW

DESIGNED BY CLIVE PASCALL

*Below, the main entrance.*



**GENERAL.**—The purpose of the scheme was to provide office accommodation for Fitzpatrick & Son, Road Contractors.

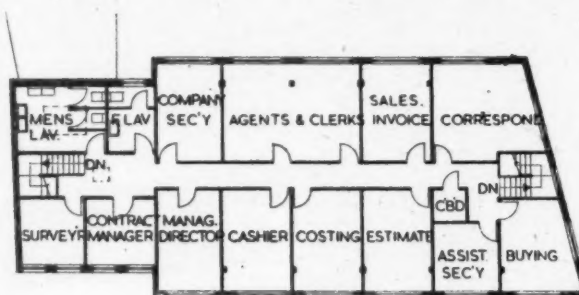
**SITE.**—The clients' requirements were that as little yard space as possible was to be occupied by the building, as they have to accommodate a large number of lorries each night in the yard in the rear of the building, and it is essential to provide a one-way circulation for the articulated lorries. This necessitated building the main block at first floor level, so that there is a clear way through beneath.

**PLAN.**—The two small blocks at each side of the entrance contain personnel whose work is directly connected with the yard and its supervision. For the control of traffic clear views of incoming and outgoing traffic were provided.

**CONSTRUCTION.**—The ground floor walls are of load-bearing



## OFFICES IN OLD FORD ROAD



FIRST FLOOR PLAN

brick, with reinforced concrete beams and columns over. The first floor external wall is 9-in. brickwork rendered. The floor is of in-situ reinforced concrete finished with a screed and patent resin-bonded flooring. The roof, also of in-situ concrete, is screeded to falls and finished with  $\frac{1}{2}$ -in. insulation board and pumice insulating tiles with a grit finish. The internal partitions are pre-fabricated units of asbestos-faced wood wool in aluminium frames.

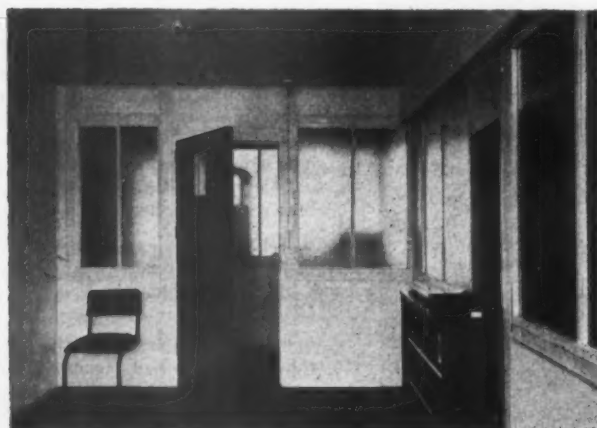
**INTERNAL FINISH.**—The  $\frac{1}{4}$ -in. internal walls on the ground floor are plastered; other walls, fair-face brickwork. Director's offices plastered, other offices fair-face brickwork and concrete left from the shuttering.

**SERVICES.**—The conduits for the electrical installation were cast in the concrete floors and ceiling to avoid the expense of surface treatment.

The general contractors were Henry Knight & Son. For list of sub-contractors see page 344.

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

Below, left, the director's office, right, a typical office.



DESIGNED BY CLIVE PASCALL



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L



**SPECIALISED FITTINGS KITCHEN UNITS**

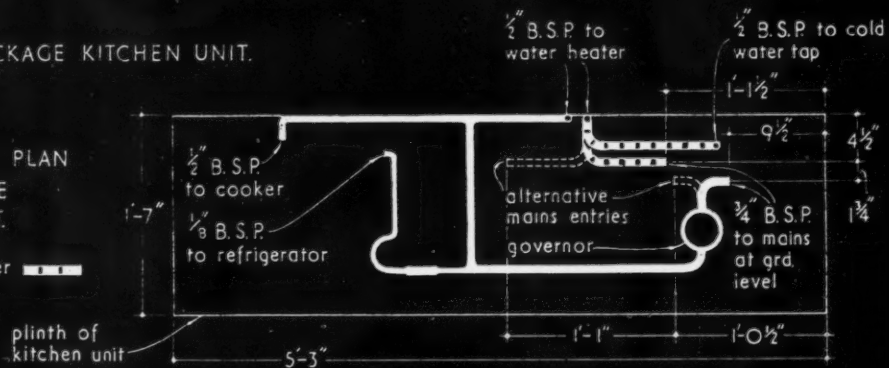
**43.E10**

The Architects' Journal Library of Information Sheets 107. Editor: Cotterell Butler, A.R.I.B.A.

PERSPECTIVE VIEW OF PACKAGE KITCHEN UNIT.

DIAGRAMMATIC PLAN  
OF COPPER PIPE  
PLUMBING UNIT.

gas  water 



ALUPLEX PACKAGE KITCHEN UNIT.

Manufacturer: Trup Industries Ltd.

### 43.E10 ·ALUPLEX· PACKAGE KITCHEN UNIT

This Sheet describes the Aluplex package kitchen unit. The unit comprises in one compact assembly a gas cooker, refrigerator, sink, draining board, gas water heater, cupboards, plate and cup racks. It is completely plumbed for connecting to mains supply at either end as required. Vegetable bins can be supplied as an alternative to the refrigerator if required.

#### Construction Generally

The main frame on which the components are mounted is of sheet steel and steel tube. The cupboards are of Aluplex—two aluminium sheets with an insulating material between—fitted to a solid drawn extruded aluminium frame. The splash-back, cup rack, plate rack and shelves are of sheet aluminium.

#### Gas Cooker

*Type:* Main 177.

*Hot-plate:* The surround is of cast iron vitreous enamelled. There are three boiling burners—high-speed, medium and simmering—and a grill.

*Oven:* Inside dimensions are 1 ft. 4 in. by 1 ft. 4 in. by 11½ in. deep.

*Taps:* These are of the spring-loaded safety type and can only be turned by pressing inwards first.

*Thermostat:* The cooker is fitted with a Mainstat oven-heat control.

*Finish:* Cream and green vitreous enamel.

#### Refrigerator

*Type:* Electrolux built-in Model M.151.

In practice this model has been found to operate satisfactorily in this unit.

#### Gas Water Heater

*Type:* Ascot R12/4 single point heater.

#### Sink and Draining Board

These are of stainless steel and integral with each other. The bowl is 1 ft. 8 in. by 1 ft. 3 in. by 7½ in. deep, tapering slightly to the waste outlet.

#### Cupboards

The top cupboard is fitted with a shelf giving two compartments measuring approximately 2 ft. 2 in. long by 11 in. high by 10 in. deep.

*Handles:* These are of polished aluminium.

*Catches:* These are spring type.

*Finish:* Cream and green stove enamel.

#### Vegetable Bins (Alternative to Refrigerator)

Two vegetable bins and a pot rack can be fitted as an alternative to the refrigerator if required. The bins and rack are of mild steel and slide on runners welded to the main frame at each side. The overall size of each bin is 1 ft. 7 in. by 1 ft. 4 in. by 6 in. deep.

*Finish:* Green stove enamel.

#### Plumbing Unit

This is of solid drawn copper pipe with Kontite fittings and a Bryan Donkin gas governor. The connection for the refrigerator is supplied integral with the unit whether or not a refrigerator is fitted in the first instance.

#### Finish Generally

The general finish of the kitchen unit is cream and green enamel.

#### Further Information

The Electrolux refrigerator model 151 and the Ascot single-point heater R12/4 are described on Information Sheets 28.H1 and 32.C21 respectively.

*Compiled from information supplied by:*

**Trup Industries, Ltd.**

Address: 6, Upper Brook Street, London, W.1.  
Telephone: Mayfair 8121.



# BUILDING SCIENCE | MATHEMATICS | CONVERSION FACTORS

2.A1

The Architects' Journal Library of Information Sheets 108, Editor: Cottrell Butler, A.R.E.B.A.

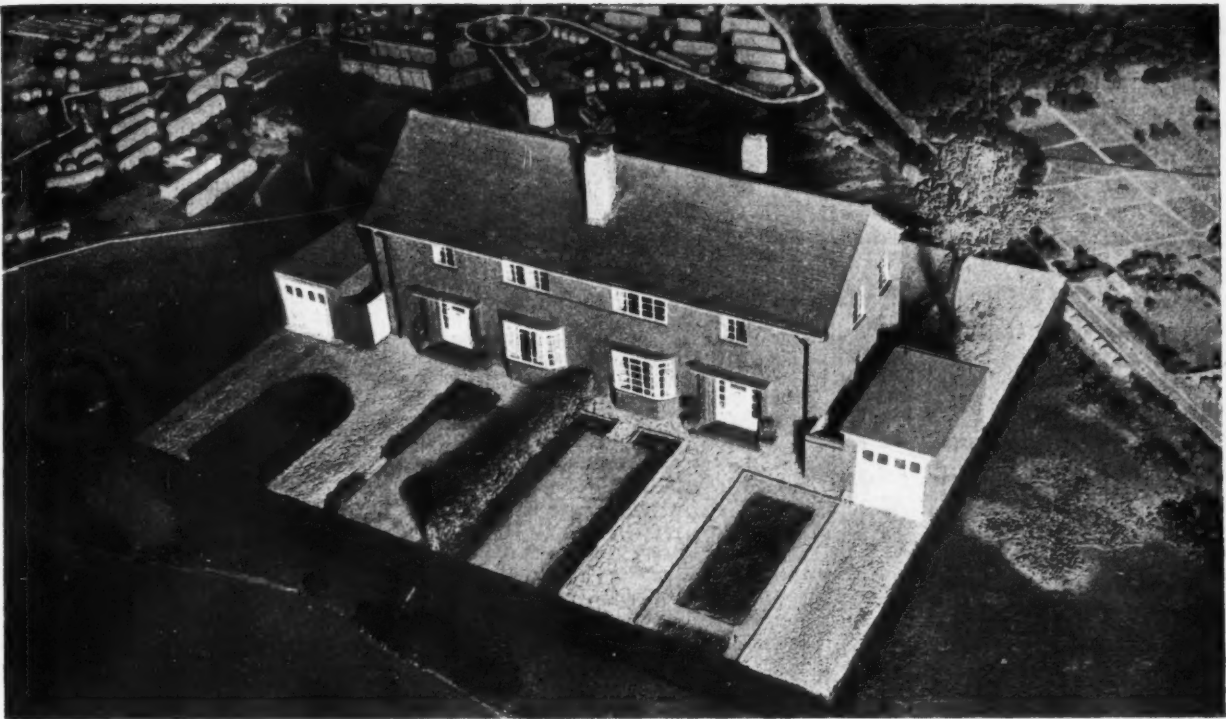
This Sheet tabulates a list of conversion factors. The items are arranged in alphabetical order; the factors are multipliers in each case with the exception of the conversion of degrees Centigrade to degrees Fahrenheit and vice versa.

To Convert	Into	Multiply by	To Convert	Into	Multiply by
acres	chains <sup>2</sup>	10·0	head of water (metres)	lb. in. <sup>2</sup>	1·4223
acres	hectares	0·404686	hectares	acres	2·47105
acres	miles <sup>2</sup>	0·0015625	hectares	metres <sup>2</sup>	10000·0
acres	yd. <sup>2</sup>	4840·0	hectares	miles <sup>2</sup>	0·003861
British thermal units	cal.	251·996	hectares	rods <sup>2</sup> , poles <sup>2</sup> or perches <sup>2</sup>	395·369
British thermal units/foot <sup>2</sup>	cal./metre <sup>2</sup>	2712·46	hectares	rods	9·8842
British thermal units	kg. cal.	0·251996	hectares	yd. <sup>2</sup>	11959·9
B.th.u./sq. ft./hr./F°/in. thick	cal./sq.cm./sec. C°/cm. thick	0·0003445	horsepower	cheval vapeur or force de cheval	1·01387
calories	B.th.u.	0·003968	horsepower	ft. lb./sec.	550·0
calories/metre <sup>2</sup>	B.th.u./ft. <sup>2</sup>	0·0003686	horsepower	kw. (Greenwich)	0·74608
cal./sq.cm./sec./C°/cm. thick	B.th.u./sq. ft./hr./F°/in. thick	2903·0	hundred-weight/yard <sup>3</sup>	lb./in. <sup>3</sup>	0·00240055
Centigrade degrees	Fahrenheit degrees	multiply by 9/5 add 32	inches	cm.	2·54
centimetres	in.	0·393701	inches	mm.	25·40
centimetres <sup>2</sup>	in. <sup>2</sup>	0·15500	inches	metres	0·0254
centimetres <sup>3</sup>	in. <sup>3</sup>	0·061024	inches <sup>2</sup>	cm. <sup>2</sup>	6·4516
chains	miles	0·0125	inches <sup>2</sup>	metres <sup>2</sup>	0·00064516
chains <sup>2</sup>	acres	0·1	inches <sup>3</sup>	cm. <sup>3</sup>	16·3871
chains <sup>2</sup>	metres <sup>2</sup>	404·686	inches of mercury	lb./in. <sup>2</sup>	0·49117
chains <sup>2</sup>	rods <sup>2</sup>	16·0	inch pounds	ft. lb.	0·083333
chains <sup>2</sup>	yd. <sup>2</sup>	484·0	inch pounds	ft. tons	0·000037202
cheval vapeur	horsepower	0·98632	inch pounds	in. tons	0·00044643
decimetres <sup>3</sup>	pints	1·75975	inch pounds	kg. metres	0·0115212
degrees	radians	0·017453	inch pounds	tonne metres	0·0000115212
Fahrenheit degrees	Centigrade degrees	deduct 32 multiply by 5/9	inch tons	in. lb.	2240·0
feet	metres	0·3048	inch tons	kg. metres	25·8076
feet <sup>2</sup>	metres <sup>2</sup>	0·092903	kilograms	lb.	2·20462
feet <sup>3</sup>	gal. (Imp.)	6·2288	kilogram	B.th.u.	3·96832
feet <sup>3</sup>	metres <sup>3</sup>	0·0283169	calories	lb./in. <sup>2</sup>	14·2233
foot pounds	in. lb.	12·0	kilograms/centimetre <sup>2</sup>	lb./h.p.	2·235
foot pounds	kg. metres	0·138255	kilograms/cheval	lb./mile	3·548
foot pounds/second	horsepower	0·00181818	kilograms/kilometre	lb./gal.	10·024
foot tons	in. lb.	26880·0	kilograms/litre	lb./ft.	0·67197
foot tons	tonne metres	0·309691	kilograms/metre	lb./yd.	2·01591
force de cheval	horsepower	0·98632	kilograms/metre	tons/ft.	0·000300
furlongs	miles	0·125	kilograms/metre	tons/yard.	0·000900
gallons (Imperial)	ft. <sup>3</sup>	0·160544	kilograms/metre <sup>2</sup>	lb./ft. <sup>2</sup>	0·2048
gallons (Imperial)	gal. (U.S.)	1·20095	kilograms/metre <sup>3</sup>	lb./ft. <sup>3</sup>	0·0624
gallons (United States)	gal. (Imp.)	0·83267	kilograms/metre <sup>3</sup>	lb./yd. <sup>3</sup>	1·685
gallons/foot <sup>2</sup>	litres/metre <sup>2</sup>	48·905	kilograms/millimetre <sup>2</sup>	lb./in. <sup>2</sup>	1422·33
grains	lb. (av.)	0·00014286			
grains/gallon	grams/litre	0·01426			
grams	oz. (av.)	0·0352740			
grams/litre	grams/gal.	70·13			
head of water (feet)	lb./in. <sup>2</sup>	0·43352			

## 2.A1 CONVERSION FACTORS

To Convert	Into	Multiply by
kilogram/millimetre <sup>2</sup>	tons/in. <sup>2</sup>	0.63497
kilogram	ft. lb.	7.2330
metres		
kilogram	in. tons	0.038748
metres		
kilometres	miles	0.62137
kilowatts	h.p.	1.34033
(Greenwich)		
litres	pints	1.75980
litres/metre <sup>3</sup>	gal./ft. <sup>2</sup>	0.0204
metres	ft.	3.28084
metres	in.	39.3701
metres	miles	0.00062137
metres	yd.	1.09361
metres <sup>2</sup>	chains <sup>2</sup>	0.002471
metres <sup>2</sup>	ft. <sup>2</sup>	10.7639
metres <sup>2</sup>	hectares	0.0001
metres <sup>2</sup>	in. <sup>2</sup>	1550.0
metres <sup>2</sup>	yd. <sup>2</sup>	1.19599
metres <sup>3</sup>	ft. <sup>3</sup>	35.3147
metres <sup>3</sup>	yd. <sup>3</sup>	1.30795
miles	chains	80.0
miles	furlongs	8.0
miles	km.	1.609344
miles	metres	1609.344
miles	rods, poles or perches	320.0
miles <sup>2</sup>	acres	640.0
miles <sup>2</sup>	hectares	258.999
millimetres of mercury	lb./in. <sup>2</sup>	0.019337
millimetres	in.	0.3937
ounces (av.)	grams	28.3495
pints	dm. <sup>3</sup>	0.56826
pints	ft. <sup>3</sup>	0.020068
pints	gal. (Imp.)	0.125
pints	litres	0.56825
pints	quarts	0.5
pounds	kg.	0.453592
pounds	tons	0.00044643
pounds (av.)	grains	7000.0
pounds/foot	kg./metre	1.48819
pounds/foot <sup>2</sup>	kg./metre <sup>2</sup>	4.883
pounds/feet <sup>3</sup>	kg./metre <sup>3</sup>	16.020
pounds/gallon	kg./litre	0.09983
pounds/horse-power	kg./cheval	0.447
pounds/inch <sup>2</sup>	head of water in ft.	2.3067

To Convert	Into	Multiply by
pounds/inch <sup>2</sup>	head of water in metres	0.70309
pounds/inch <sup>2</sup>	in. of mercury	2.3060
pounds/inch <sup>2</sup>	kg./cm. <sup>2</sup>	0.070307
pounds/inch <sup>2</sup>	kg./mm. <sup>2</sup>	0.00070307
pounds/inch <sup>2</sup>	mm. of mercury	51.713
pounds/inch <sup>2</sup>	tons/ft. <sup>2</sup>	0.064286
pounds/inch <sup>2</sup>	tons/in. <sup>2</sup>	0.000446429
pounds/inch <sup>2</sup>	tonnes/cm. <sup>2</sup>	0.000070307
pounds/inch <sup>3</sup>	tonnes/metre <sup>3</sup>	27.6799
pounds/mile	kg./km.	0.2818
pounds/yard	kg./metre	0.496055
pounds/yard <sup>3</sup>	kg./metre <sup>3</sup>	0.5933
quarts	pints	2.0
radians	degrees	57.29578
rods <sup>2</sup>	chains <sup>2</sup>	0.0625
rods, poles or perches	miles	0.003125
rods <sup>2</sup> , poles <sup>2</sup> or perches <sup>2</sup>	hectares	0.00252929
roods	hectares	0.101171
tons	lb.	2240.0
tons	tonnes	1.01605
tons/foot	kg./metre	3333.33
tons/foot <sup>2</sup>	tonnes/metre <sup>2</sup>	10.9366
tons/foot <sup>2</sup>	lb./in. <sup>2</sup>	15.5556
tons/inch <sup>2</sup>	kg./mm. <sup>2</sup>	1.57488
tons/inch <sup>2</sup>	lb./in. <sup>2</sup>	2240.0
tons/yard	kg./metre	1111.11
tons/yard <sup>2</sup>	tonnes/metre <sup>2</sup>	1.215
tons/yard <sup>3</sup>	tonnes/metre <sup>3</sup>	1.329
tonnes	tons	0.98421
tonnes/centi-metre <sup>2</sup>	lb./in. <sup>2</sup>	14223.3
tonne metres	ft. tons	3.22902
tonne metres	in. lb.	86796.0
tonnes/metre <sup>2</sup>	tons/ft. <sup>2</sup>	0.091436
tonnes/metre <sup>2</sup>	tons/yd. <sup>2</sup>	0.823
tonnes/metre <sup>3</sup>	lb./in. <sup>3</sup>	0.0361273
tonnes/metre <sup>3</sup>	tons/yd. <sup>3</sup>	0.752
yards	metres	0.9144
yards <sup>2</sup>	acres	0.000206612
yards <sup>2</sup>	chains <sup>2</sup>	0.00206612
yards <sup>2</sup>	hectares	0.000083613
yards <sup>2</sup>	metres <sup>2</sup>	0.83613
yards <sup>3</sup>	metres <sup>3</sup>	0.76455



# HOUSING AT ST. PAUL'S CRAY, KENT

DESIGNED BY S. HOWARD

**GENERAL.**—The provision on a new LCC estate of 570 acres at St. Paul's Cray of seventy-two larger type houses for letting to the professional classes marks a new stage of development in municipal housing. Building operations began on the first of the houses last week. The houses, of which there are six types, are planned on more spacious lines than any house previously built by any municipal authority. In order to implement the general policy of mixed development and ensure that their future out-county estates shall, in fact,

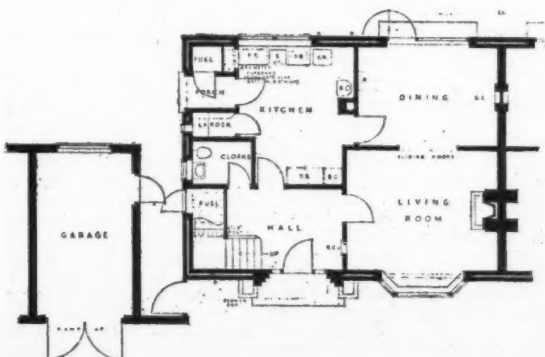
contain an accurate cross-section of the population, it is proposed that ultimately 5 per cent. of all dwellings to be erected on LCC out-county estates shall be of the new types. Rents will be between £120 and £150.

**PLAN.**—The houses have 5, 6 or 7 rooms. Each house will have a cloakroom opening from the hall, complete with washbasin and lavatory, a constant hot water system, heated towel rail in bathroom, sliding doors between dining room and sitting room and a garage

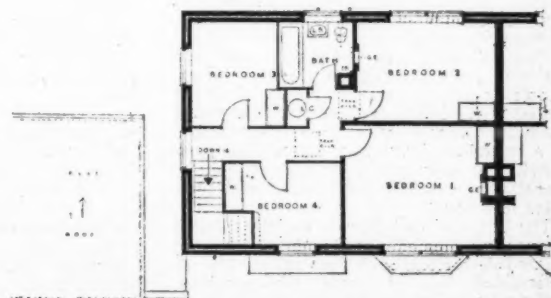
either separate or incorporated in the house.

The room areas of two of the new types of house compare favourably with present minimum standards:

	6-room type Sq. ft.	7-room type Sq. ft.
Dining room ..	102	108
Sitting room ..	190	154
Lounge.. ..	—	177
1st Bedroom ..	184	163
2nd „ ..	124	154
3rd „ ..	90	131
4th „ ..	80	108
Garage ..	144	135
Kitchen, Bathroom, etc.		



GROUND FLOOR PLAN [Scale:  $\frac{1}{8}$ " = 1'0"]



FIRST FLOOR PLAN

D

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

## TECHNICAL SECTION

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

### INFORMATION CENTRE

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.

#### 2.56 planning: general

##### PLANNING INFORMATION BOOK

*The Planner's Notebook: A Compendium of Information on Town and Country Planning and Related Subjects.* H. Myles Wright, Ed. (The Architectural Press, 1948. 30s.)

Comprehensive reference book covering aims, policy, legislation and factual data in relation to town and country planning, arranged under selected alphabetical main headings. Illustrated by tables. Detailed subject index. Useful and informative.

It is stated in an introduction that the purpose of the book has been to collect, within a single volume, information on many aspects of town and country planning which has hitherto been available only in a large number of separate publications. The book does not claim to provide complete and altogether up-to-date information, owing to the great increase in published planning literature at the time of its going to press. An attempt has, however, been made just before publication to improve the balance and immediate usefulness of the subject matter covered.

The references are compiled under well selected main headings in the form of extracts or summaries from published books, reports, pamphlets and articles. They deal with fundamental problems as expressed in the planning legislation introduced since 1944, and with particular aspects such as legislation proper, administration and planning technique.

The origin of each item is usefully cited at the end of a reference; it is, however, to be regretted that the book does not contain an assembled list of these bibliographical references under the adopted subject headings, augmented by other relevant references not mentioned in the text. Another omission which may be rectified in a forthcoming edition is the absence of any

directory information covering administrative bodies, educational and research facilities in this country. Lastly, it is to be hoped that the subject matter in future editions will include such important aspects as survey technique and planning education under their own subject headings.

#### 10.38 design: building types

##### HOUSING RESEARCH, USA

*Planning the Neighbourhood: Standards for Healthful Housing.* American Public Health Association, Committee on the Hygiene of Housing. (Public Administration Service, Chicago, USA, 1948. \$2.50.)

Valuable and comprehensive American publication analyzing principles and recommending standards for environment of residential areas in relation to basic health aspects. Selection and development of neighbourhood sites. Numerous statistical tables. Excellent bibliography and glossary of housing terms.

The report investigates the subject of healthful housing not only in relation to sanitation and safety from physical hazards, but also, and mainly, in relation to those qualities of comfort, convenience and aesthetic satisfaction which are essential for emotional and social well-being. The conduct of individual life and the joint performance of family and community functions should be the fundamental aims of housing.

The present volume is the first in a series of three monographs. It deals with the physical setting of housing. The two later volumes will discuss the planning of the home proper for occupancy and house construction and equipment.

The neighbourhood under discussion is defined as an area served by an elementary school. As a basis for standards recommended, certain assumptions have been made regarding average family size and composition which should be adjusted locally. The majority of recommendations are applicable to all types of new housing developments except those of strictly rural character.

The essential requirements for an adequate environment supplying reasonable protection to health are described as:—

- (a) Protection against accident hazards;
- (b) Protection against contagion and provisions for maintenance of cleanliness;
- (c) Provision of adequate daylight, sunshine and ventilation;
- (d) Protection against excessive noise;
- (e) Protection against atmospheric pollution;
- (f) Protection from fatigue and provision of adequate privacy;
- (g) Provision of opportunities for normal family and community life, and protection against moral hazards;
- (h) Provision of possibilities for reasonable aesthetic satisfaction.

These criteria form the basis of the standards recommended and discussed in detail in the report under the following headings:—

- (i) *Basic Requirements for Site Selection.* covering neighbourhood and family size, physical site characteristics, availability of water and power, freedom from local

nuisances, and regional relationships and facilities.

- (2) *Development of Land, Utilities and Services,* covering surface drainage, water supply, sewage and refuse disposal, power distribution, postal and other communications, and planting and landscape design.

- (3) *Planning for Residential Facilities,* covering dwelling types and reasons for their selection, site design requirements, and residential densities.

- (4) *Provision of Neighbourhood Community Facilities,* covering need, selection and accessibility of facilities, educational and health services, outdoor recreation, indoor social facilities, and neighbourhood shopping.

- (5) *Layout for Vehicular and Pedestrian Circulation,* covering functions and organisation of the traffic system, street design and layout, parking, and street lighting.

- (6) *Neighbourhood Density, Co-ordination of Housing Elements,* covering density limits and standards, range of neighbourhood sizes, densities in relation to the region, and planned location of neighbourhood elements.

The tables illustrating the various chapters provide valuable statistical data. There is also a most informative appendix tabulating specified potential nuisances and hazards resulting from transport services, industry, commerce and miscellaneous other sources.

#### 13.32 materials: timber

##### NEW TIMBERS, AFRICAN TIMBERS

*African Timbers and New Timbers and Their Uses.* TDA Information Sheets Nos. 33 and 34. (Timber Development Association Ltd.)

Leaflet on African timbers; contains names of twenty-two new timbers found impossible to include in first edition of TDA red booklet *Timbers of West Africa*. Brief descriptive notes about each species given. Timbers from both West and East Africa included.

Leaflet No. 34—"New Timbers and Their Uses"—is a list of the species which have been imported under the Hardwood Overseas Procurement Scheme, Part III, during the last 12 months. The leaflet, which is in tabulated form, records the botanical and common names of some ninety-seven different species together with brief notes concerning their country of origin, weight, colour, uses and other characteristics or remarks concerning them.

Leaflet No. 34 should form an important reference to the confusing number of timbers in the market at present.

#### 14.18 materials: concrete

##### FOAMED SLAG CONCRETE HOUSES

*A Notable Scottish Housing Scheme.* (The Municipal Journal, Aug. 20, 1948, pp. 1631-1632.)

Description of houses using foamed slag concrete walling.

This is a short article describing chiefly the use of foamed slag concrete for walling. Below D.P.C. ordinary concrete is used, but above, the external and party-walls are in continuous cavity construction of foamed slag blocks set in mortar composed of 1 cement:4 foamed slag sand: 2 natural sand. Two 3-inch leaves are tied by galvanized ties of twisted square steel bar inserted during manufacture. Basic dimensions of blocks are 32 in. long by 8 in. high by 8 in. thick, and the structural range includes corner blocks, stop ends, and jambs. Openings are spanned by twin lintels in normal concrete. Spine wall and partitions are built of foamed slag blocks of normal size. Chimney breasts and stacks are a built up hollow casing of 4-inch foamed slag



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To Whom it may concern.

Dear Sir(s),

### SCHOOLS-WOOD BLOCK FLOORING.

The Ministry of Education, owing to their comparatively small allocation of hardwoods, have been able to authorize the use of hardwood block or strip floorings only for Assembly Halls, using other types of flooring for classrooms. Inasmuch as, in our opinion, the only really serviceable and hard-wearing floor suitable for classrooms is a wood block floor, and having been able to secure a fairly large quantity of reclaimed hardwoods and slabs and off cuts (which Timber Control agrees as "outside allocation"), we have pointed out to the Ministry that this material is available for their use. The Department has now agreed to withdraw the ban on the use of hardwood block flooring for classrooms, and circulars to this effect have been issued to Local Authorities. We invite enquiries for these floors from the Home Counties and the South, and orders will be accepted and executed in rotation until supplies are exhausted. The thickness of the hardwoods referred to in either strip or block is 1 inch nominal, finishing  $\frac{3}{4}$  inch.

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

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

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

Yours faithfully,

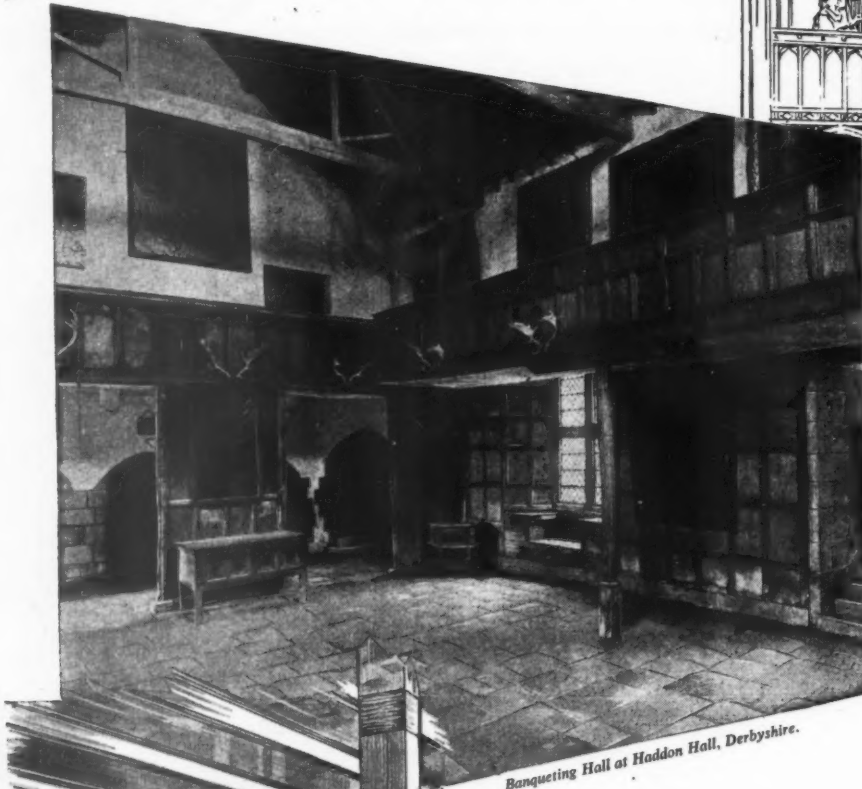
The Philip Flooring Company.

*P.D. Philip.*

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

**P.S. HOUSING.** We have been fortunate enough to secure a large parcel of reclaimed softwood from which we have manufactured some thousands of yards of  $\frac{3}{4}$ " tongued and grooved flooring blocks. These can be used for floorings over and above the statutory 1.6 standards of softwood per house, and we have the permission of the Ministry of Health to lay such floors. We shall be glad to submit quotations for these floorings laid complete and orders will be executed in rotation until the materials are exhausted.

*In a changing world...*



Banqueting Hall at Haddon Hall, Derbyshire.



## Timber endures

The permanent beauty and utility of timber is enshrined in ancient monuments everywhere. Haddon Hall, for instance, with its open timber roof, panelled screen and minstrel gallery excites admiration of 14th century craftsmanship and emphasizes the unique suitability of the material. For similar reasons the modern architect, craftsman and designer prefer timber. They enjoy not only a far greater range of hardwoods and veneers but a wide variety of plywoods—water resistant, flat, shaped or metal faced—prepared for their use with all the advantages of modern kiln drying, fireproofing, etc. to meet the exacting demands of modern tastes and requirements.

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blocks with flues formed in ordinary fire-clay flue liners held in position with no-fine foamslag lime concrete.

Walling was carried up in four stages and was built overhand. Materials required above first floor were lifted either by light-weight crane or carried up ramps. Blocks weighing up to 70 lb. each were laid by hand, and it is claimed were built at a rate equivalent to 1,200 standard bricks per man per day.

A brief description of the factory production of the blocks is also given.

### 15.35 materials: applied finishes and treatments PAINT BLISTERS

*Why Paintwork Blisters.* (The Decorator, August, 1948, pp. 50-52.)

Short discussion of the factors influencing the blistering of paint on woodwork including old paintwork. Special reference to imprisoned air, resinous exudations and the presence of moisture either from sap or by rain.

### 15.36 materials: applied finishes and treatments PITCH MASTIC FLOORING

*Pitch Mastic Flooring.* British Standard 1450:1948. (British Standards Institution, 2s.)

Supersedes BS 1093 and incorporates changes which experience has shown to be necessary; provides for flux and binder in which the emission of irritant or objectionable fumes during manufacture and laying can be avoided. Emphasis is placed on the temperature limits laid down and on the necessity for avoiding prolonged heating.

### 17.35 construction: general HOUSES

*Structural Requirements for Houses.* National Building Studies Special Report No. 1. B. F. G. Thomas. (HMSO, 1948, 9d.)

Loadings, strength and stiffness requirements, methods of applying test loads, measurement of deformations.

The development of dwelling houses of new, unconventional construction during and after the war, involved the establishment of new standards for structural design and methods of testing. While the thicknesses of walls in traditional houses are adequate for the loads to be supported, with present knowledge of the insulation and weather protection given by building materials, and with the development of structural framework, it is possible to design houses which satisfy all functional requirements but which have a strength less than that of a traditional house. In the interest of economy, an excessive strength is to be avoided, and it has become important to decide what are the minimum structural requirements that need to be fulfilled. The rules given in this booklet are aimed at a two-storey dwelling house, but can be taken as a guide for the single-storey and three-storey house.

The loadings adopted are those specified in "Chapter V Loading" of the Code of Functional Requirements in Buildings. (See No. 1776/1.2.45). The primary structural requirement is that the house should have an ample load factor against collapse. The load factor is the ratio of the ultimate load-carrying capacity of the house, or any structural part, to the working load. The value proposed is 2.0. That is, the calculations must show that the construction can support in theory, in addition to its actual dead weight, a load equal to the sum of the dead weight and twice the specified superimposed load.

It should be noted that this strength requirement is much lower than is generally specified in building by-laws.

The booklet also contains the test requirements for strength and stiffness both for vertical and lateral loading, and describes the methods of applying test loads and measuring of deformations. The illustrations convey a good idea of the field tests carried out by the Building Research Station.

### 17.36 construction: general TEXT BOOK

*Architectural Construction.* Theodore Crane. 1947. (New York, John Wiley & Sons, Inc. London: Chapman & Hall, Ltd. 6 USA dollars.)

Textbook dealing with the appropriate choice for the structural portions of a building, based on conditions in USA.

In designing any type of building, the architect has to decide about a number of structural problems at an early stage, such as the question of load bearing walls *versus* framing, structural steel *versus* reinforced concrete framing, type of foundation, roofs, floors, etc. The purpose of this book is to assist the architect in the solution of these problems. It presents the various alternatives without bias, and gives a number of good examples for all cases to be considered. Although it is based on USA building codes and standards, and on materials and types of construction available in that country, many parts of it are of general interest and applicable to this country as well, e.g., the chapters on choosing the framing materials, planning the framing of a building, wide span designs, and choosing the type of foundation.

### 20.92 construction: complete structures PRESTRESSED R. CONCRETE

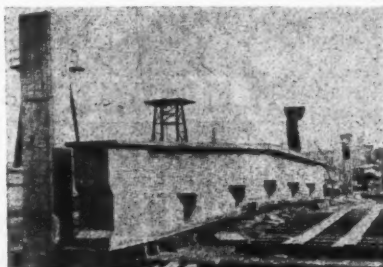
*Some Prestressed Concrete Buildings in Belgium.* (Concrete & Constructional Eng., July, 1948, pp. 193-9.)

Two large buildings, constructed recently with prestressed concrete beams; the raising by 8 ft. of two mediaeval towers at Tournai.

The two buildings described in the article are a hangar at Brussels Airport and a textile factory at Ghent. The hangar contains three clear floor areas of 164 ft. by 131 ft. and one area of 360 ft. by 131 ft. The single-storey factory at Ghent covers an area of 375,000 sq. ft. The columns are spaced at 71 ft. in one direction and at 47 ft. in the other. In both cases the beams were cast on the ground, prestressed, and then hoisted in position.

The raising of the towers at Tournai involved the lifting of about 2,800 tons of old masonry in each. This work would have been hardly possible without the use of prestressed concrete beams.

In all cases the prestressing was done by the method developed by Professor Magnel (see No. 2,442: 21.3.46).



*A precast concrete beam after being cast on the ground is hoisted into position. See 20.93.*

### 20.93 construction: complete structures SHELL ARCH HANGARS

*Thin-Shell Arch Hangars Span 257 ft.* Boyd G. Anderson. (Eng. News-Record [USA], July 22, 1948, pp. 55-57.)

Twin arch hangars built for American Airlines in Chicago: floor space 257 ft. by 175 ft. each.

The twin hangars share a central buttress. The structure is a 3½-in. thick shell stiffened by ribs projecting both inwards and outwards. The thickness of the shell is increased to 5½ in. at the ribs and to 6 in. at the edge beams. There are seven ribs in each hangar, spaced at 29 ft. centres, with a depth varying from 38 in. at midspan to a maximum of 50 in. at the abutments. The ribs are 22 in. wide, with alternate ribs split vertically into two 11 in. wide sections for construction purposes. The concrete arches are more flexible than economically feasible for steel ribs. Steel framing was used at both the front and rear ends of the hangars.

In the design great care was taken to minimise stresses due to shrinkage, temperature, rib shortening and abutment displacement. This was the reason for placing the shell near the neutral axis of the ribs.

*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

### 2962 PLANKING AND STRUTTING

**Q** A schedule of prices for a school under the Ministry of Education Operational Programme included a number of items for planking and strutting of drain, etc., trenches. No bills of quantities were issued for the job, only the schedule.

Competitive tenders were obtained on the schedule and it was found that the successful contractor had priced each of the separate items for planking, etc. These particular items were not carried out, but the contractor has entered a claim for them, amounting to some hundreds of pounds, on the grounds that it is a trade custom to do so.

So far I have refused to entertain such claims. Whilst agreeing it is a trade custom to include such items in a bill of quantities, the issue, it appears to me, is entirely different in the case of a schedule of prices. What is your advice?

**A** In our opinion the trade custom of measuring planking and strutting, whether executed or not, exists in relation to schedule contracts as well as to contracts based on orthodox bills of quantities, and that this custom was established beyond doubt by the many contracts carried out during the war, in the manner referred to.

The contractor knows that it is contrary to normal practice for the employer to take the responsibility for saying that planking and strutting is not to be used, and to take the risk of paying for extra excavation, damage to pipes, etc., and injury to men, should earth fall in.

When pricing a bill of quantities or schedule, the contractor must take into consideration the method of measurement which will be adopted and in this case, in the absence of clear indications to the contrary, he was entitled to assume that the normal trade custom and method laid down in the Standard Method of Measurement would be adopted.



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# RAWLPLUG FIXING DEVICES

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

**RAWLBOLTS.** For all bolt fixings. It is a dry fixing which requires no grouting. Heavy machinery can be fixed in a few minutes and put into use immediately after fixing.

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## THE INDUSTRY

### SAWDUST BOARD PRODUCTION

Boards made from sawdust and bonded with resin have been in use for a number of years, but production has been limited to a certain extent by the need for heavy and expensive presses in which the boards must be placed for curing under heat and pressure. Loading the press, waiting for the curing period and then emptying, leads to a production bottle-neck which would obviously be solved by some continuous production process.

For a period of years research has been going on under the direction of Mr. W. J. Fischbein, of British Artificial Resins, and a small scale continuous board making plant is now in operation, and can be seen in Camden Town. Here the sawdust and resin are fed into a hopper and mixed, after which a layer (of a thickness appropriate to the finished board thickness) of the mix is pre-heated by high frequency waves. The layer of mix, faced on each side with paper, then passes between two endless metal belts, pressure and heat being applied simultaneously by heavy infra-red heated backing plates. On emerging from the pressure belts the board is finished, and only needs cutting to length.

In the Camden Town plant boards can be produced up to 4 ft. wide, and in any thickness from  $\frac{1}{4}$  in. to 1 in., and with a specific gravity ranging from 0.5 to 0.9, according to the pressure applied. The finished board has a moisture content of about 7 per cent., and is composed of about 5 per cent. thermosetting resin, the remainder being sawdust.

The most important result of the continuous process is that the board is produced very cheaply. With a small unit it is only possible to give approximate figures, but it is claimed that the price of the  $\frac{1}{4}$  in. thickness should not be more than 6d. a square foot, or somewhere between one half and one third the price of board produced by existing methods.

Experiments have been carried out with sawdust samples from most of the timber producing countries, and Egyptian rice husks have also been used instead of sawdust, the task being to determine the amount of resin required, and the degree of heating and other factors. The board can be finished with paint or distemper, printed designs, wood veneers, metal sheet or fabrics.

Plans are in hand for the erection of factories in various parts of the country, and the production units will also be for sale abroad. (British Artificial Resin Co., Ltd., 3, Vere Street, London, W.1.)

### RADIO IN SCHOOLS

During recent years the educational authorities in this country have shown an increasing interest in the use of school broadcasting; between 1937 and 1948 the number of schools using the programmes rose from 7,000 to 16,000. This increase has been brought about mainly by the Schools' Broadcasting Council, which has done a great deal to raise the value of the broadcasts and to popularise the service among teachers.

The technical aspect of the receiving equipment has also been the subject of considerable development. The requirements of schools cannot adequately be met by the use of either domestic receivers or public address amplifiers. The quality of reproduction has to attain a high standard to hold the pupils' attention without fatigue; this is not the only important factor, however, for since broadcasts form part of a school syllabus, reliability becomes of utmost importance and the mechanical design has to cater for continual use with simplicity of operation.

The requirements of schools are varied and no one equipment can meet them. A broad division can be made, however, based on the number of pupils. For small schools, of up to one hundred pupils, apparatus consisting of a cabinet receiver amplifier with a separate loudspeaker is satisfactory. This unit is reasonably portable, and though it can be moved to a classroom as required, it is advisable to leave it at one point so that the loudspeaker can be correctly placed acoustically and an efficient aerial and earth system wired. For larger schools, where two or more classes require reception at a time, an installation consisting of a remote receiver feeding a number of rooms is the best solution.

The facilities that an installation normally has to provide are radio and gramophone reproduction in all general classrooms, together with the science and possibly art rooms, radio gramophone and microphone in the assembly hall, while the desirable features are a minimum of controls at the listening points together with a minimum of portable equipment. With this in mind the demonstration equipment at Rowland Hill School, Tottenham, was planned and installed by the BBC in conjunction with Audix Limited. The main control rack feeds twelve classrooms and comprises a radio receiver and amplifier, gramophone amplifier, monitor speaker and switching unit; in each classroom is a control panel and a loudspeaker. The set is controlled remotely

and except for the initial adjustments and selecting the station, it need not be touched. A main switch outside the equipment room door makes the equipment "alive," but the amplifier or receiver is not switched on until a classroom switch is operated; this, through a relay circuit, operates the required amplifier. The volume may also be adjusted in the classroom; for gramophone reproduction a portable turntable is connected to the control panel in the classroom, the signal from it is wired back to the rack, amplified, and returned to the classroom loudspeaker. The electrical design is such that under no condition does any classroom interfere with another; the only limitation is in the use of gramophone, which is only available to one room at a time.

The installation should, of course, be considered at the planning stage of a new school, so that it can be installed as economically as possible. A room has to be set aside for the main equipment and it should be as central to the classrooms to be served as is possible, and accessible from a main corridor. The size should be not less than 5-foot width with a volume of 300 cubic feet, while the ventilation must be capable of dealing with a minimum of 250 watts. If it is not possible to provide a separate room, a store room can be used by providing a wire cage against a wall to the approximate dimensions given. In the classroom the loudspeaker should be placed with its centre line five to six feet above the floor level and directed towards the centre of the class. The control unit is placed at a convenient height of 3 feet and directly below the speaker. Alongside the blackboard is the normal location, and it is worth while giving consideration to combining the units in the normal furnishing and fixings.

Messrs. Audix have provided a number of different types of installation including recording systems and microphone attachments so that announcements can be made to classrooms from a central point. (Audix House, 39, West Hill, London, S.W.18.)



*Above, a radio installation in which both the receiver and amplifiers are housed in a room separate from the classroom. Right, gramophone reproduction in the classroom.*



The form printed below is to assist readers requiring up-to-date information on building products and services. Complete and post it to *The Architects' Journal*, 9, 11 and 13, Queen Anne's Gate, S.W.1, and the advertisers listed will be asked to supply information direct.

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## Announcements

The Licensing Office, Ministry of Works North-West Region have moved to Virginia House, Gt. Ancoats Street, Manchester, 4. The telephone number remains the same as before, Manchester Central 2191. The geographical area covered comprises the county of Lancashire, Cheshire, and part of the High Peak of Derbyshire.

The Timber Development Association, Limited, 75, Cannon Street, London, E.C.4, announces the following alterations to their telephone system. There are now five lines, City 6146, 6147, 6148, 3682, and 3683, the latter being two additional lines. The Director of the Association, Mr. Phillip O. Reece, and the Constructional Research Directorate are included on these five lines instead of City 9704/6 as heretofore. The address of the Constructional Research Directorate is still the same, i.e., 38, Bow Lane, E.C.4.

Mr. Derek Bridgwater, B.A.R.C.H., F.R.I.B.A., has taken into partnership Mr. Peter Shephard, B.A.R.C.H., A.R.I.B.A., A.M.T.P.L., who has resigned from his post of Deputy Chief Architect to the Stevenage Development Corporation and from the Ministry of Town and Country Planning. They will practise in architecture, town planning, and landscape architecture under the name of Bridgwater and Shephard. The address of the firm will remain 42, Bruton Place, Berkeley Square, London, W.1 (Mayfair 6391-2).

The RIBA (Archibald Dawnay) Scholarships for 1948-1949 have been awarded as follows:—

Scholarships of £65: Roger C. Marshall of the Leeds School of Architecture; Kimball Pollitt of the Leeds School of Architecture; Frank Shaw of the Leeds School of Architecture; A. R. C. Johnston of the Liverpool School of Architecture; and A. P. Roach of the Department of Architecture, Northern Polytechnic.

## Buildings Illustrated

Flats at St. Mary's Square, Paddington (pages 331-334). Architects: The Paddington Borough Architects' Department. General Contractors: The Demolition & Construction Co. Ltd. Sub-Contractors: bricks, Leicestershire multi buff rustic facings, Finnis, Ruault & Nicholls; stairs, reinforced concrete stairs, floors and roof, Helical Bar & Engineering Co. Ltd.; asphalt, Highway Construction Co. Ltd.; plumbing, R. J. Audrey Ltd.; hot water installation, heating installation, oil fired boilers, Stitson White & Co. Ltd.; electrical installation, C. H. Pearce & Co. Ltd.; gas installation, Gas, Light & Coke Co.; lift, Hammond & Champness; metal work, Clark Hunt Ltd.; glazing, James Clark & Eaton Co. Ltd.; Ritzide floor finish, Leatherfloor Ltd.; glazed cement dadoes, Modern Surfaces Ltd.; kitchen dressers and tradesmen's hatches, H. Newsom Sons & Co. Ltd.; ironmongery, Demolition & Construction Co. Ltd., and Graham Ross Ltd.; turf and shrubs, H. L. Holdrup.

Offices in Old Ford Road (pages 337-338). Architect: Clive Pascall. General Contractor: Henry Knight & Son, 16, Bruce Grove, N.17. Sub-Contractors: reinforced concrete, stairtreads, artificial stone, F. Bradford & Co. Ltd.; bricks, Broad & Co. Ltd.; special roofings, roofing felt, Permanite Ltd.; partitions, Uni-Seco Ltd.; patent flooring, Semtex Ltd.; gas fixture, Ascot Gas Water Heaters, Ltd.; electric wiring, Barlow & Young Ltd.; door furniture, cloakroom fittings, signs, Yannedis & Co. Ltd.; clocks, Smith's English Clocks, Ltd.; central heating, Norris Warming Co. Ltd.; sanitary fittings, Associated Clay Industries Ltd.; plaster, Plastering Ltd.; casements, James Couper & Co. Ltd.; folding gates, Acme Metal Works Ltd.; lantern light, C. E. Welstead Ltd.



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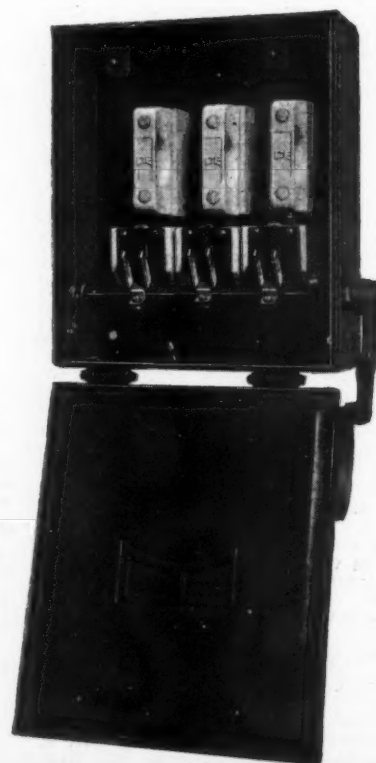
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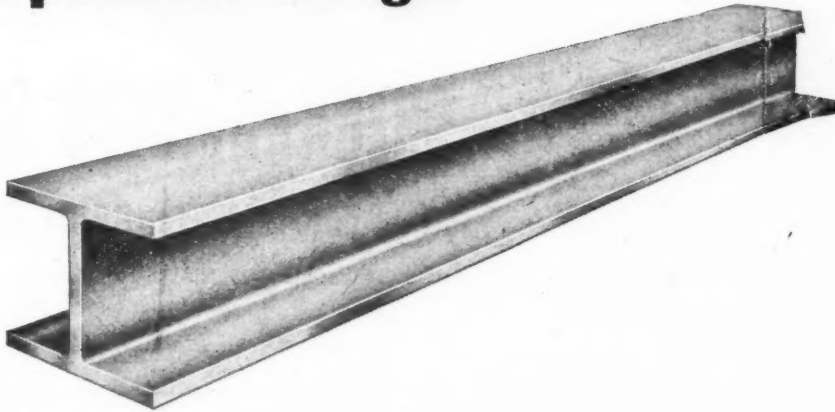


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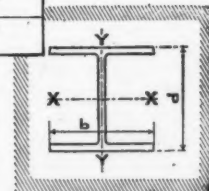


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7 x 7	34	10.00	20.00	.35	.55	88.15	31.48	25.19	9.00	2.97	1.77	105.8
8 x 8	45	13.23	20.50	.39	.64	152.76	55.02	38.19	13.75	3.39	2.04	106.0
10 x 10	62.63	18.42	23.25	.43	.72	338.97	119.94	67.79	23.98	4.79	2.54	108.2
12 x 12	82.55	24.28	25.53	.47	.79	652.00	228.00	108.60	38.00	5.18	3.07	109.6
14 x 12	100	29.41	25.45	.55	.92	1048.40	265.20	149.80	44.21	5.97	3.00	107.0
16 x 12	110	32.35	29.10	.55	1.00	1504.60	288.30	188.10	48.05	6.82	2.99	106.8
18 x 12	122	35.88	30.50	.59	1.08	2094.50	311.40	232.70	51.90	7.64	2.95	106.0
20 x 12	135	39.71	31.746	.63	1.16	2808.00	334.60	280.80	55.78	8.41	2.90	104.0
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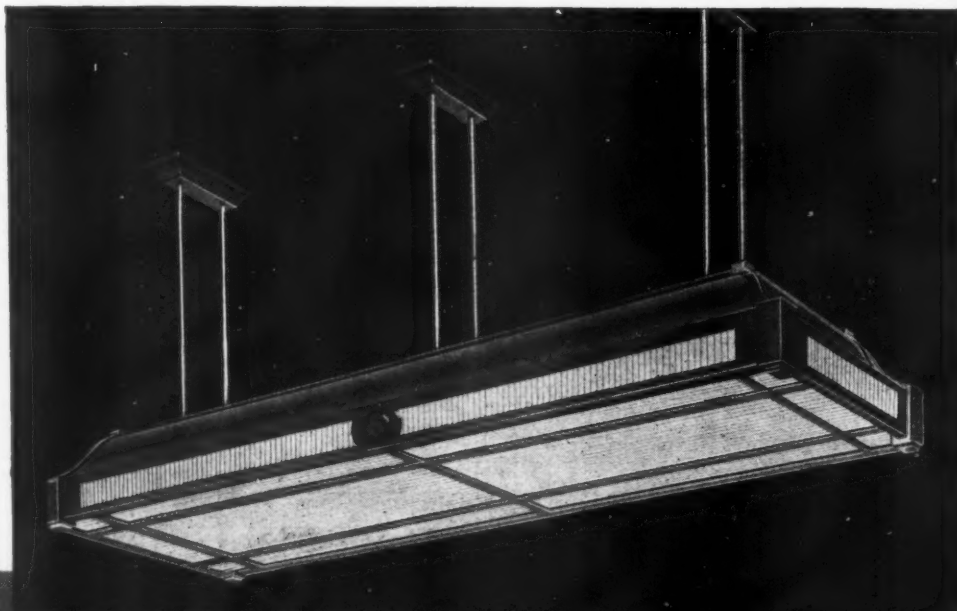
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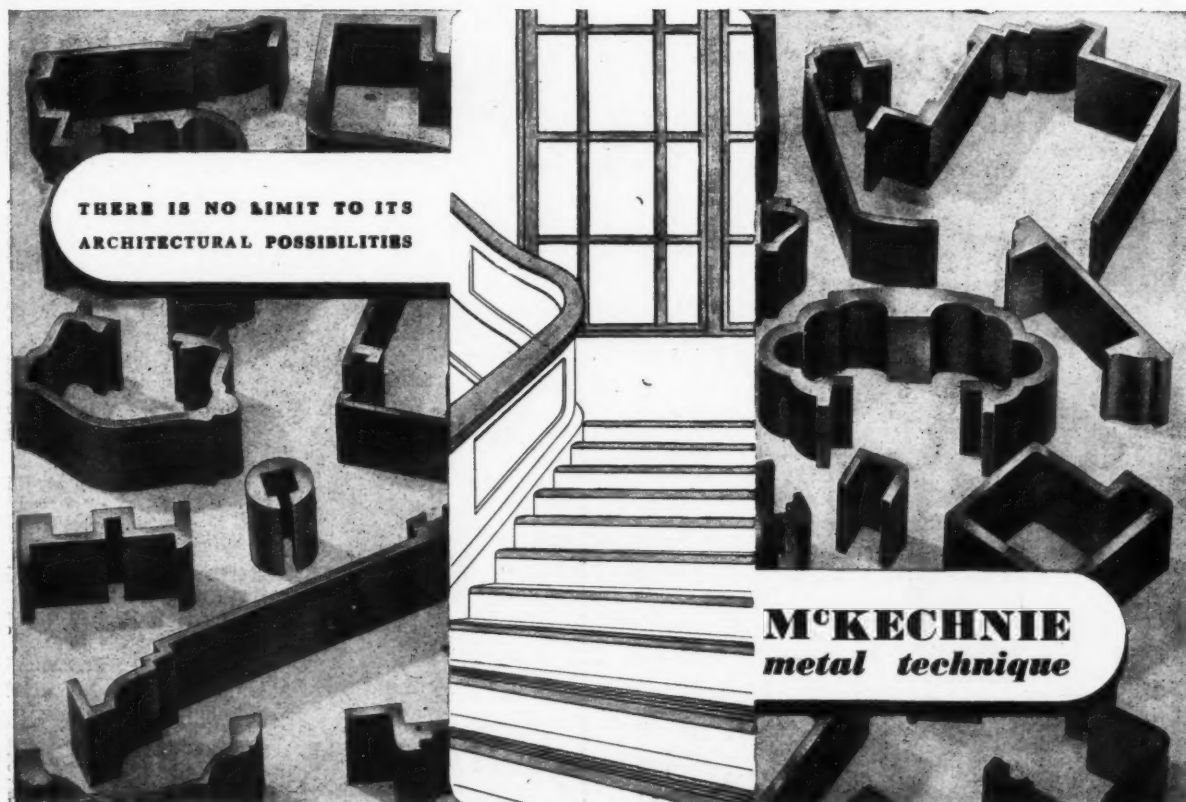
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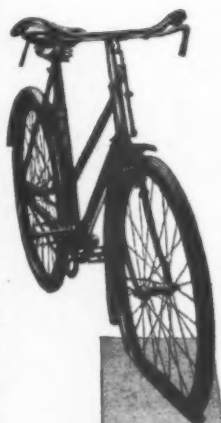
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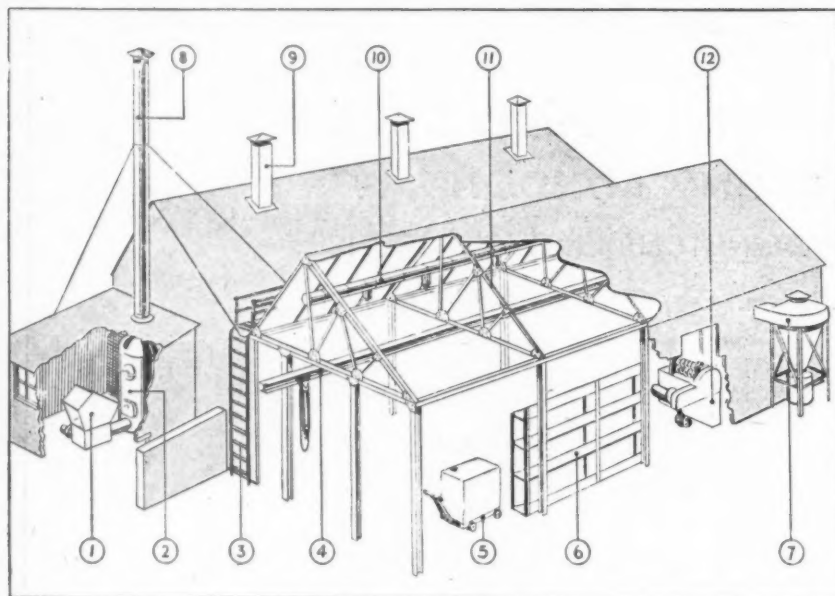
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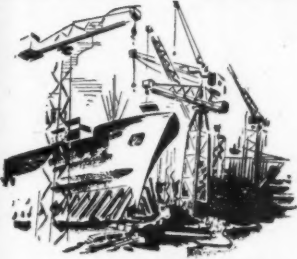
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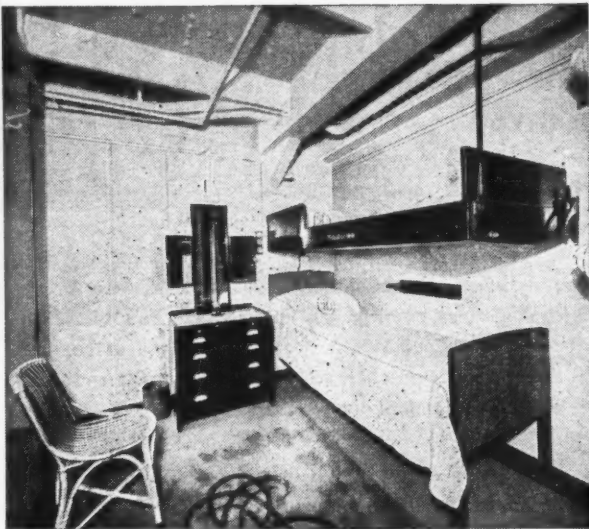
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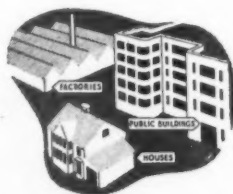
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## Public and Official Announcements

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

**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, WREN PARK, WHITLEAVE. Tel.: Uplands 0935. 991

### DEVON COUNTY COUNCIL.

Applications are invited for the following appointments on the permanent establishment of the County Architect's Department, at consolidated salaries, in accordance with the grades of and subject to, the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional and Technical Services.

(a) ONE ASSISTANT ARCHITECT. A.P.T., Grade VI. Commencing salary £595 p.a., rising by three annual increments (£20×£20×£25) to £660 p.a.

(b) TWO ASSISTANT ARCHITECTS. A.P.T., Grade V. Commencing salary £520 p.a., rising by three annual increments (£15×£15×£20) to £570 p.a.

(c) TWO ASSISTANT ARCHITECTS. A.P.T., Grade I. Commencing salary £390 p.a., rising by three annual increments (£15×£15×£15) to £435 p.a.

Candidates for (a) and (b) must be Associates of the Royal Institute of British Architects, and possess a sound experience in the design and maintenance of all types of buildings carried out by a large local Authority; they must be fully conversant with the Building Regulations of the 1944 Education Act, and the Regulations for Police Buildings; and possess organizing ability and experience in the management of building contracts.

For (c) candidates must have a good training in architecture, and preference will be given to those who have passed the Intermediate examination of the Royal Institute of British Architects.

Applications, stating age, qualifications and experience, accompanied by not more than three recent testimonials, should be sent to the County Architect, 97, Heavitree Road, Exeter, not later than Friday, the 15th October, 1948. No forms of application will be issued.

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

The successful candidates will be required to pass a medical examination.

H. A. DAVIS,

Clerk of the County Council.

The Castle, Exeter.

10th September, 1948.

### LONDON COUNTY COUNCIL.

**HOUSING AND VALUATION DEPARTMENT. ARCHITECTURAL ASSISTANTS.** Applications are invited for positions of Architectural Assistant, at salaries of up to £580 a year. Commencing salaries will be determined according to qualifications and experience, and qualified candidates will be eligible for appointment to the permanent staff of the Department on the occurrence of vacancies. Engagement will involve Superannuation contributions at the rate of 6 per cent. of salary.

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.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped addressed foolscap envelope required). Canvassing disqualified. (870).

### CUMBERLAND COUNTY COUNCIL.

Applications are invited for the appointment of a CLERK OF WORKS to supervise the erection of a new Secondary School at Wigton.

The inclusive wages will be £8 8s. per week. Applicants should have good practical knowledge of all trades and experience in the erection of steel frame buildings, and should be able to measure up work.

The appointment will be temporary, and will be subject to four weeks' notice on either side.

Applications, stating age, present employment, qualifications and experience, together with copies of three recent testimonials, should be delivered to John H. Haugan, F.R.I.B.A., County Architect, 15, Portland Square, Carlisle, not later than 15th October, 1948.

G. N. C. SWIFT,

Clerk of the County Council.

September, 1948.

1900

**BOROUGH OF BEXLEY. BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT (ARCHITECT'S SECTION).** Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT, within Grade A.P.T., I (£390×£15-£435) or A.P.T., II (£420×£15-£465), plus London "weighting" not exceeding £30 p.a., according to qualifications and experience.

Forms of application with conditions of appointment may be obtained from the Borough Engineer and Surveyor, Council Offices, Bexleyheath, to whom applications must be returned by 18th October, 1948.

Canvassing, directly or indirectly, will disqualify.

W. WOODWARD,

Town Clerk.

1893

### NEWCASTLE-UPON-TYNE REGIONAL HOSPITAL BOARD.

Applications are invited for the permanent appointment of SENIOR QUANTITY SURVEYOR, on the Headquarters Staff of the Board. Candidates must be members of the Royal Institute of Chartered Surveyors, and should have had wide experience of the preparation of Estimates, Specifications and Bills of Quantities, of measuring variations and of the checking of final accounts. Salary will be £760 per annum, rising by annual increments of £25 to £860 per annum.

Applications, marked "Senior Surveyor," should state: (1) Name and address (2) age, and whether married; (3) professional qualifications; (4) past appointments; (5) present appointment and salary; (6) experience; (7) war service; (8) date available if appointed. Name and addresses of three referees should be given, and applications should be received not later than 15th October, 1948, addressed to the Secretary to the Board, "Dunira," Osborne Road, Newcastle-upon-Tyne, 2.

### BOROUGH OF SOUTHALL. APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment, on the permanent staff of the Corporation, at a salary in accordance with A.P.T.V.(a) of the National Scheme (£550-£610), plus appropriate London weighting.

Candidates must be Members of the Royal Institute of British Architects, and previous Local Government experience is desirable.

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

It is a condition of appointment that the successful applicant shall be a member of his appropriate trade union, professional organisation, or other recognized body.

Applications, on forms to be obtained from the Borough Engineer, Town Hall, Southall, must be returned to him on or before Monday, 11th October, 1948.

Canvassing will disqualify.

J. S. SYRETT,

Town Clerk.

1889

### CITY OF PORTSMOUTH.

**APPOINTMENT OF CITY ARCHITECT.** Applications are invited from qualified persons, who must be Fellows or Associates of the R.I.B.A., for the appointment of City Architect, at a consolidated salary of £1,400 per annum, rising to £1,700 per annum by annual increments of £75. The successful applicant will be required to pass a medical examination. Particulars of the appointment may be obtained from the undersigned, to whom applications, accompanied by the names of three persons to whom reference may be made, should be sent (endorsed "City Architect"), and be received not later than first post on Monday, 25th October, 1948. Canvassing in any form will be a disqualification.

V. BLANCHARD,

Town Clerk.

1861

City Council Chambers, 1. Clarence

Parade, Portsmouth.

1861

### CITY OF LINCOLN. CITY ENGINEER'S DEPARTMENT.

#### APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment.

The salary will be in accordance with Grade V of the A.P. and T. Division of the scales of salaries of the National Joint Council (£520-£570 per annum).

Candidates should be Associate Members of the Royal Institute of British Architects (or hold equivalent qualifications), and have had good experience in general architectural work, including school planning and design, and in the preparation of working drawings and specifications.

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

Forms of application can be obtained from, and should be returned to, the City Engineer and Surveyor, Corporation Offices, Silver Street, Lincoln, so as to be received not later than Wednesday, 13th October, 1948.

(Sgd.) J. H. SMITH,

Town Clerk.

Corporation Offices, Lincoln.

28th September, 1948.

1872

liii

**CITY OF PORTSMOUTH. CITY PLANNING OFFICER'S DEPARTMENT.** Applications are invited for the following permanent appointments, in the Department of the City Planning Officer:—  
**TWO PLANNING ASSISTANTS. Grade V (£520-£570 per annum).**

The appointments are in connection with the preparation of the Development Plan under the Town and Country Planning Act, 1947, and for work on the reconstruction of the Central Area of the town.

Candidates should be qualified for Associate Membership of the Town Planning Institute, and preference will be given to applicants possessing, in addition, a recognised qualification in architecture, engineering or surveying.

The appointments will be subject to:—

(a) The National Scheme of Conditions of Service;

(b) the provisions of the Local Government Superannuation Act;

(c) the successful candidates passing satisfactorily a medical examination by the Corporation's Medical Referee;

(d) termination by one month's notice on either side.

Applications, stating age, present position, qualifications and experience, together with the names of three responsible persons to whom reference may be made, must be delivered to the undersigned, clearly marked "City Planning Appointment," not later than the 31st October, 1948.

Canvassing will disqualify.

V. BLANCHARD,

Town Clerk.

City Council Chambers, Southsea.

21st September, 1948.

1904

### MANCHESTER MUNICIPAL COLLEGE OF TECHNOLOGY.

#### (FACULTY OF TECHNOLOGY IN THE UNIVERSITY OF MANCHESTER).

The Governing Body invites applications for a Lectureship or an Assistant Lectureship in STRUCTURAL ENGINEERING, with similar title and status in the University of Manchester.

Salary scales:—  
LECTURESHPIS: £650-£900 by annual increments of £25.

ASSISTANT LECTURESHPIS: £500-£580 by annual increments of £20.

The appointment may be made anywhere within these scales, depending on the qualifications and experience of the applicant.

Conditions of appointment and form of application may be obtained from the Registrar, College of Technology, Manchester, 1. The last day for the receipt of applications is Monday, 1st November, 1948.

Canvassing, either directly or indirectly, will disqualify a candidate for appointment.

J. E. MYERS,

Principal of the College.

1950

### CITY OF CARDIFF EDUCATION COMMITTEE.

#### THE TECHNICAL COLLEGE.

Principal: A. HARVEY, Ph.D., B.Sc., F.Inst.P.

Applications are invited for a LECTURER AND STUDIO INSTRUCTOR. Candidates should have been trained in a recognized School of Architecture and be Associate of the R.I.B.A. Appropriate professional and/or industrial experience will be expected.

The salary payable will be in accordance with the Burnham (Technical) Scale, i.e., £300×£15-£555, plus appropriate allowances for training and qualifications, the maximum possible salary under this scale being £660 per annum. War service and appropriate professional or industrial experience rank for increments in fixing "the commencing salary."

Application forms, together with further particulars, may be obtained from the undersigned on receipt of a stamped addressed foolscap envelope, and should be returned as soon as possible.

W. J. WILLIAMS,

Director of Education.

City Hall, Cardiff.

September, 1948.

1931

### BOROUGH OF WORTHING.

#### BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of a SENIOR ARCHITECTURAL ASSISTANT, on the permanent establishment of the Borough Engineer and Surveyor's Department, at a salary in accordance with Grade A.P.T., IV, commencing salary £480, rising by three annual increments of £15 to £525 per annum.

Candidates should preferably be Associates of the Royal Institute of British Architects, and should have a sound experience in the preparation of drawings and specifications for all types of building work carried out by a Local Authority.

The appointment will be subject to the National Scheme of Conditions of Service of Local Government Officers, to the Local Government Superannuation Act, 1937, and to the successful candidate passing satisfactorily a medical examination.

Applications endorsed "Senior Architectural Assistant," stating age, qualifications, present and previous appointments and experience, with dates, and accompanied by copies of three recent testimonials, should be forwarded to the Borough Engineer and Surveyor, Town Hall, Worthing, not later than 12 noon on Friday, 22nd October, 1948.

ERNEST G. TOWNSEND,

Town Clerk.

Town Hall, Worthing.

23rd September, 1948.

1930



**BUCKS COUNTY COUNCIL.**  
Applications are invited for the following appointments in the County Architect's Department:—

**ASSISTANT QUANTITY SURVEYOR.** A.P. and T., Grade VII, £635-£710 p.a.  
**ARCHITECTURAL ASSISTANTS.** A.P. and T., Grade IV, £480-£525 p.a., and Grade V, £520-£570 p.a.

**ASSISTANT ARCHITECTS.** A.P. and T., Grade VI, £595-£660 p.a., and Grade VII, £635-£710 p.a.

Travelling and subsistence allowances will be paid in accordance with the National Scheme of Conditions of Service for the time being in force. The appointments are superannuable and subject to medical examination.

Further particulars and forms of application may be obtained from the County Architect, County Offices, Aylesbury, to whom applications must be delivered by 12th October, 1948.

**GUY R. CROUCH,**  
Clerk of the County Council.  
County Hall, Aylesbury.  
September, 1948. 1929

**BOROUGH OF SOUTHALL.**  
**APPOINTMENT OF DRAUGHTSMAN.**

Applications are invited for the above appointment on the permanent staff of the Corporation, at a salary in accordance with Miscellaneous Division, Grade I, of the National Scheme (£315-£360), plus appropriate London weighting. Candidates should be competent draughtsmen, and the appointment is open to women applicants as well as men. The successful candidate would have an opportunity of assisting with architectural and town planning work, and the post therefore offers scope to a keen applicant anxious for advancement.

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

It is a condition of appointment that the successful applicant shall be a member of his or her appropriate trade union, professional organization or other recognized body.

Applications, on forms to be obtained from the Borough Engineer, Town Hall, Southall, must be returned to him on or before Monday, 25th October, 1948. Canvassing will be disqualifying.

**J. S. SYRETT,**  
Town Clerk.  
Town Clerk's Office, Southall.  
1940

**COUNTY BOROUGH OF DERBY.**  
**BOROUGH ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointment on the permanent staff in accordance with the National Scale of Salaries:—

**ONE SENIOR QUANTITY SURVEYOR.** Grade VI, A.P. and T. Division. Salary £595-£660 (Consolidated).

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

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

Form of application may be obtained from Thos. W. East, F.R.I.B.A., Borough Architect, The Council House, Corporation Street, Derby, and should be returned when completed, together with copies of three testimonials, to arrive not later than Monday, 25th October, 1948.

Canvassing, directly or indirectly, will be a disqualification.

**C. ASHTON,**  
Town Clerk.  
The Council House, Corporation Street,  
Derby. 1927

**PIPE COUNTY COUNCIL.**  
**ASSISTANT PLANNING OFFICER (DEVELOPMENT PLAN).**

Applications are invited for Assistant Planning Officer (Development Plan). Preference will be given to candidates holding the Associate Membership of the Town Planning Institute, and who have had previous experience in a planning office. Salary £540-£525 to £690 per annum. A car is desirable but not essential. Age under 45; medical examination under Superannuation Scheme. Applications, stating age and experience, together with copies of testimonials, should be lodged with the undersigned by 15th October, 1948. No canvassing.

**J. M. MITCHELL,**  
County Clerk.  
County Buildings, Cupar-Fife.  
28th September, 1948. 1938

**COUNTY BOROUGH OF DARLINGTON.**  
**BOROUGH ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointments:—

**TWO ASSISTANT ARCHITECTS.** Grade V (£520-£570).

Candidates should have had previous experience on Housing and Education work, and preference will be given to those who are members of the Royal Institute of British Architects.

Applications, stating age, qualifications, present appointment, and salary and previous experience, accompanied by names and addresses of three referees, to be endorsed "Assistant Architect," and delivered to E. A. Tormbom, A.R.I.B.A., A.M.T.P.I., Borough Architect, Central Buildings, Darlington, not later than the 12th October, 1948.

1906

**PENARTH URBAN DISTRICT COUNCIL.**  
**APPOINTMENT OF ARCHITECTURAL ASSISTANT.**

Applications are invited for the permanent appointment of Architectural Assistant, at a salary in accordance with A.P.T., Grade V (£520-£570) of the National Scale of Salaries.

Applicants should be Associates of the Royal Institute of British Architects, or hold an equivalent qualification, and have had experience in the general architectural and housing work of a Local Authority, including the preparation of Working Drawings, Specifications and Quantities.

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

The Council will be prepared to give sympathetic consideration thereto should the need to provide housing accommodation arise.

Applications, endorsed "Architectural Assistant," stating age, training, qualifications, present and previous appointments and experience, together with copies of not more than three recent testimonials, should reach the undersigned not later than the 16th day of October, 1948. Canvassing will be disqualifying.

Dated this 27th day of September, 1948.

**DUDLEY E. MORSE, A.M.I.C.E.,**  
Engineer and Surveyor.  
Council Offices, "West House," Stanwell  
Road, Penarth. 1879

**METROPOLITAN BOROUGH OF HACKNEY.**  
**BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.**

Applications are invited for the following appointments on the permanent establishment at salaries in accordance with the grades stated of, and subject to, the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, plus London weighting allowance. The commencing salaries will be determined according to the experience of each successful candidate.

**ARCHITECTURAL ASSISTANTS:**  
Salary, Grade VI, A.P. and T. Division (£595 p.a., rising to £660 p.a.). Candidates must be Associates of the Royal Institute of British Architects, and preference will be given to those with a wide experience of Municipal housing work.

**ARCHITECTURAL ASSISTANT:**  
Salary, Grades IV-V, A.P. and T. Division (£480 p.a., rising to £570 p.a.). Candidates must have had a good experience, particularly in connection with the repair and maintenance of buildings. Preference will be given to those holding a recognized professional qualification.

Applicants are advised that the Council is unable to provide any housing accommodation for the successful candidates.

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

Applications in writing, on forms to be obtained from the undersigned upon receipt of a stamped addressed envelope, must be received not later than first post on the 22nd October, 1948, endorsed "Architectural Assistant (Grade —)," Borough Engineer and Surveyor's Department.

**DUDLEY SORRELL,**  
Town Clerk.  
Town Hall, Hackney, E.8.  
25th September, 1948. 1925

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

Applications are invited for the following appointments:—

(a) **TWO AREA PLANNING OFFICERS.** A.P.T., Grade VI, £595-£660. These Officers will be responsible for development control and will assist in the survey work for their respective areas.

(b) **ONE PLANNING ASSISTANT.** A.P.T., Grade IV, £480-£525.

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

Qualifications required:—  
(a) A.M.T.P.I., with an additional qualification in architecture, surveying or engineering. Experience in rural planning and knowledge of agriculture will be an advantage.

(b) A.M.T.P.I., with practical planning experience in survey work and research.

(c) Intermediate T.P.I., with experience in a planning office.

Applicants for posts (a) and (b) will be required to provide a motor car, for which they will be paid an allowance in accordance with the County Scale. Appointments will be subject to the provisions of the Local Government Superannuation Act, 1937. Successful candidates will be required to pass a medical examination. The County Council are unable to assist applicants in the matter of housing accommodation. Applications, stating age, education, qualification and experience, accompanied by 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. Envelopes should be endorsed with the post for which application is made, and addressed to R. N. Whiston, A.M.T.P.I., Harrington House, Broad Street, Spalding, Lincs.

**H. C. MARRIS,**  
Clerk of the County Council.  
County Hall, Boston, Lincs.  
27th September, 1948. 1921

**NORTH-WEST METROPOLITAN REGIONAL HOSPITAL BOARD.**

**ARCHITECT'S DEPARTMENT.**

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

(1) **THREE ASSISTANT ARCHITECTS.** Grade A.P.T., VI (£595 to £660 p.a., plus London weighting).

(2) **FIVE ASSISTANT ARCHITECTS.** Grades A.P.T., II, III, IV or V (£420 to £570 p.a., plus London weighting).

(3) **TWO JUNIOR ASSISTANTS.** Grade General Division (Salary according to age and experience).

(4) **SENIOR BUILDING SURVEYOR.** Grade A.P.T., VIII (£685 to £760 p.a., plus London weighting).

(5) **BUILDING SURVEYOR.** Grade A.P.T., VI (£595 to £660 p.a., plus London weighting).

London weighting will normally be £30 p.a. Applicants for (1) should be members of the R.I.B.A. or hold an equivalent qualification, and must have a good general experience in design and construction. A knowledge of hospital work is an advantage.

Applicants for (2) must have a good general experience of design and construction, and will be placed on the Grade appropriate to their experience and qualifications.

Applicants for (3) should have had not less than three years' experience. Applicants for (4) must be Chartered Surveyors, with wide general experience. The person appointed will be responsible to the Architect and will be required to supervise a small staff of Building Surveyors attached to the Department preparing estimates, specifications, supervising building works, checking final accounts, etc.

Applicants for (5) must be Chartered Surveyors and be capable of preparing estimates, writing specifications, supervising building contracts, and checking final accounts.

All the appointments will be subject to the provisions of the National Health Service (Superannuation) Regulation, 1947, and will be terminable by one month's notice.

Applications, giving details of experience, together with the names of two referees, should be addressed to the Secretary, North-West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1. not later than 12th October, 1948.

**CITY OF WAKEFIELD.**  
**CITY ENGINEER'S DEPARTMENT.**  
**ARCHITECTURAL AND QUANTITY SURVEYING STAFF.**

Applications are invited for the following appointments in the City Engineer's Department:—

(a) **TWO PRINCIPAL ARCHITECTURAL ASSISTANTS.** Grade A.P.T., VII (£635-£710). Applicants for one of these appointments should have had good experience in Housing and General work, and for the other appointment experience on Educational Buildings and new Schools is required. Applicants for these appointments should hold the qualification A.R.I.B.A.

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

(c) **QUANTITY SURVEYOR.** Salary, Grade A.P.T., V-VI (£520-£660).

The appointments will be subject to the Local Government Superannuation Act, 1937, and to the passing of medical examinations.

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

Applications, endorsed with the title of the appropriate appointment, stating age, qualifications, present and previous appointments and experience, should be accompanied by copies of two testimonials, and sent to me not later than Saturday, the 23rd October, 1948.

The Council will give favourable consideration to the provision of housing accommodation.

**W. S. DES FORGES,**  
Town Clerk.  
30th September, 1948. 1968

**COUNTY BOROUGH OF DUDLEY.**  
**BOROUGH ARCHITECT'S DEPARTMENT.**

Applications are invited for the above permanent appointment, at a salary on the scale £550 per annum, rising by annual increments of £50 to £1,000 per annum, the commencing salary to be fixed according to experience.

Applicants must be members of the R.I.B.A. and have had considerable professional experience and also administrative experience in a Local Government Architect's department. Preference will be given to those who have passed the Final Examination of the Town Planning Institute.

Travelling and subsistence allowances will be paid on the Council's scale, and housing accommodation will be provided on the usual terms and conditions.

The appointment will be subject to the National Conditions of Service and to the provisions of the Local Government Superannuation Act, 1937, to a satisfactory medical examination, and to determination by three months' notice in writing by either side.

Applications should be made on forms to be obtained from the undersigned, to whom they should be returned not later than 28th October, 1948.

**IAN R. DRUMMOND,**  
Acting Town Clerk.  
The Council House, Dudley.  
30th September, 1948. 1947



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 consolidated salaries of up to £580 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; measurements 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). Completed forms must be returned not later than seven days after the appearance of this notice. Canvassing disqualifies. (632) 997

## SURREY COUNTY COUNCIL.

## COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of:—

ARCHITECTURAL ASSISTANT (Grade I). Commencing salary £390, rising by annual increments of £15 to £435 per annum, together with London allowance of £30.

Applicants should be of good general training and experience.

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 23rd October, 1948.

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

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

DUDLEY AUKLAND.

County Hall, Kingston-upon-Thames. 1945

CITY OF PETERBOROUGH.  
CITY ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of a QUANTITY SURVEYOR, in the Architectural Section of the City Engineer and Surveyor's Department, at a salary in accordance with Grade V, A.P.T., i.e., £520, rising by annual increments to £570 per annum. Applicants must be capable of taking off bills of quantities, abstracting and billing, measuring up on site, and agreeing final accounts.

The City Council have adopted the National Scheme of Conditions of Service. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and successful applicant will be required to pass a medical examination. Applications, stating age, qualifications and experience, accompanied by copies of not more than three recent testimonials, and suitably endorsed, must be delivered to the undersigned not later than 16th October.

Applicants must disclose whether they are related to any Senior Official or Member of the Authority.

ARTHUR J. REEVES.

Town Clerk.

Town Hall, Peterborough. 1962  
September, 1948.

## CITY OF WAKEFIELD.

## CITY ENGINEER'S DEPARTMENT.

## TOWN PLANNING ASSISTANTS.

Applications are invited for the following appointments in the City Engineer's Department:—

(a) CHIEF TOWN PLANNING ASSISTANT. Grade A.P.T. VII (£635-£710).

(b) SENIOR TOWN PLANNING ASSISTANT. Grade A.P.T. V (£520-£570).

(c) TOWN PLANNING ASSISTANT. Grade A.P.T. IV (£480-£525).

Applicants for appointment (a) will be required to take charge of the Town Planning Section of the City Engineer's Department, and applicants for the appointments should hold suitable qualifications.

The appointments will be subject to the Local Government Superannuation Act, 1937, and to the passing of medical examinations.

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

Applications, accompanied with the title of the appropriate appointment, stating age, qualifications, present and previous appointments and experience, should be accompanied by copies of two testimonials and sent to me not later than Saturday, the 23rd October, 1948.

The Council will give favourable consideration to the provision of housing accommodation.

W. S. DES FORGES.

Town Clerk.

30th September, 1948. 1951

COUNTY BOROUGH OF DERBY.  
APPOINTMENT OF PLANNING STAFF  
(ESTABLISHED).

(a) GENERAL PLANNING ASSISTANT (£480-£525).

(b) JUNIOR PLANNING ASSISTANT (£390-£435).

Applications are invited for the following appointments in the Town Planning Department, Borough Engineer and Surveyor's Office:—

(a) GENERAL PLANNING ASSISTANT (Grade IV, £480-£525).

Candidates should be suitably qualified and experienced in general planning work, preferably in a large Municipal office. In this appointment preference will be given to a person with a surveying (valuation and estate management) background, or to a person with a degree in economics.

(b) JUNIOR PLANNING ASSISTANT (Grade I, £390-£435).

Candidates should be trained in a Municipal office, be good surveyors and draughtsmen, and should have had some experience of town planning work. Preference will be given to candidates who are students of the Town Planning Institute, the Chartered Surveyors' Institution, or the Institution of Municipal Engineers.

Conditions of service are those formulated by the National Joint Council, and 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. The appointments will be terminable by one month's notice on either side. Applications, appropriately endorsed, together with copies of three recent testimonials, should be sent to M. L. Francis, F.R.I.C.S., M.I.Mun.E., Borough Engineer and Surveyor, The Council House, Corporation Street, Derby, not later than the 23rd October, 1948. Canvassing, directly or indirectly, will be a disqualification, and candidates should state whether they are related to any member or senior official of the Council.

C. ASHTON.

Town Clerk.

Town Clerk's Office,  
The Council House, Derby.  
October, 1948. 1969

## GOVERNMENT OF IRAQ.

Applications from qualified candidates are invited for the following post:—

ARCHITECT required by Government of Iraq, Ministry of Communications and Works (Buildings) for two years in first instance. Salary up to I.D. 150 a month, according to experience, plus cost-of-living allowance of I.D. 24 a month (I.D. 1 equals £1). Free passages. Provident Fund. Candidates must possess University degrees or diplomas in architecture or be A.R.I.B.A., and have had at least 4 years' practical experience. They must have specialised either in design or construction of public buildings. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/18197/3D on both letter and envelope. 1967

## LONDON TRANSPORT EXECUTIVE.

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

(a) ARCHITECTURAL ASSISTANTS. Fully qualified and experienced. Salary range £500-£560 per annum.

(b) GENERAL TECHNICAL ASSISTANTS. Passed Intermediate standard, with office experience. Salary range £215 to £445, according to age and qualifications.

Applications, giving full particulars of training and experience, to be addressed to the Staff Officer (P/RT 20), London Transport Executive, 55, Broadway, S.W.1. 1977

CHICHESTER RURAL DISTRICT COUNCIL.  
ENGINEER AND SURVEYOR'S DEPARTMENT.

## CHIEF PLANNING ASSISTANT.

Applications are invited for the appointment of Chief Planning Assistant, in the Engineer and Surveyor's Department, with salary in accordance with Grade A.P.T. VI (£595 to £660).

Candidates should have a sound experience of planning administration, preferably under a Local Authority, and must be either A.R.I.C.S., A.R.I.B.A., or A.M.I.Mun.E., and membership of the Town Planning Institute in addition is desirable.

The Council has the full delegated powers permitted under the Town and Country Planning Act, 1947, and the person appointed will be responsible for the examination of all deposited plans, acting as liaison officer between the department and the County Planning staff, compiling reports and supervising the keeping of records, including the Statutory Register.

The Council will provide a house if required.

The appointment is subject to:—  
(a) The National Scheme of Conditions of Service; (b) one month's notice on either side; (c) the Local Government Superannuation Act, 1937, and (d) a medical examination.

Forms of application and further information may be obtained from J. K. Lawson, F.R.I.C.S., Engineer and Surveyor to the Council, East Pallant House, Chichester, and applications accompanied by copies of two recent testimonials, must be delivered to the undersigned not later than 23rd October, 1948.

(Sgd.) LEONARD RILEY.

Clerk to the Board.

Pallant House, Chichester.  
30th September, 1948. 1965

## CITY OF COVENTRY.

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

(a) ONE CHIEF ASSISTANT ARCHITECT. Salary grade, A.P.T., VIII, commencing at £685 per annum and rising to £760 per annum.

(b) ONE ASSISTANT ARCHITECT acting as Section Deputy. Salary grade on A.P.T., V, commencing at £550 per annum and rising to £610 per annum.

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

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

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

(e) ONE QUANTITY SURVEYOR, acting as Section Deputy. Salary grade, A.P.T., VII, commencing at £635 per annum and rising to £710 per annum.

Candidates should be Professional Associates of the Royal Institute of Chartered Surveyors (Quantities Division).

(f) ONE ASSISTANT ENGINEER (Heating and Ventilation). Salary grade, A.P.T., III, as (d) above.

Applicants should preferably be Graduate Members of the Institute of Heating and Ventilating Engineers, and be experienced in the design, preparation of drawings, and specifications for all classes of heating, hot and cold water supplies and ventilation equipment of buildings.

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, 1935, 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.

In addition applications are invited for the following post on the temporary staff:—

ONE ASSISTANT ARCHITECT. Salary grade, A.P.T., VIII, as (a) above.

This post will carry special responsibility in connection with the new permanent buildings to be erected in the City Centre.

Salary increments are subject to satisfactory service.

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 Tuesday, 26th October, 1948.

Canvassing, directly or indirectly, will be a disqualification. D. E. E. GIBSON, City Architect.

1A, Warwick Row, Coventry. 1970  
7th October, 1948.

## NORTH RIDING EDUCATION COMMITTEE.

Applications are invited from men with suitable qualifications and experience for the following posts:—

(1) ASSISTANT ARCHITECT. Salary according to A.P.T. Grade V and VI, i.e., £520, rising to £660 a year. Travelling and subsistence allowance in accordance with the County Council Scale.

(2) JUNIOR ASSISTANT QUANTITY SURVEYOR. Salary according to A.P.T., Grade I, i.e., £390×£15 to £435 a year.

(3) DRAUGHTSMAN. Salary according to General Division, rising to £385 at 32 years of age.

(4) CLERK OF WORKS (two posts). Salary according to A.P.T. Grade III, i.e., £450×£15 to £495 a year. Motor car travelling and subsistence allowances in accordance with the County Council's Scale.

The posts are subject to the Local Government Superannuation Act, and the successful applicants will be required to pass a medical examination by the County Medical Officer. The posts are exempt from the Control of Engagements Order. Further particulars and application forms may be obtained by sending a stamped addressed foolscap envelope to the undersigned, to whom completed applications must be returned not later than Saturday, 30th October, 1948. Canvassing disqualifies. F. BARRACLOUGH.

Secretary for Education.  
Education Offices, County Hall, Northallerton. 1966

## SALOP COUNTY COUNCIL.

## COUNTY ARCHITECT'S DEPARTMENT.

## SENIOR ASSISTANT ENGINEER.

Applications are invited for the appointment of Senior Assistant Engineer on A.P.T., Grades IV and V (£480-£570 per annum). Applicants must be experienced in the preparation of heating and electrical schemes.

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

Application forms may be obtained from the County Architect, Mr. A. G. Chant, F.R.I.B.A., 5, Belmont, Shrewsbury, to whom they must be returned, accompanied by copies of not more than three recent testimonials, not later than Monday, 25th October, 1948. G. C. GODBER.

Clerk of the Council.

Shrewsbury, October, 1948. 1949

**HELPER RURAL DISTRICT COUNCIL.  
APPOINTMENT OF ARCHITECTURAL  
ASSISTANT.**

Applications are invited for the appointment of Architectural Assistant, at a salary in accordance with Grade IV, A.P.T. Division, National Scale, together with a motor car allowance in accordance with the National Scale.

Applicants must have architectural qualifications, and have had experience in the design and preparation of house and layout plans, specifications, bills of quantities, roadworks and sewers in connection with housing schemes.

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

Applications, stating age, qualifications and experience, with the names and addresses of two persons to whom the Council may refer, must reach the undersigned not later than the 23rd October, 1948.

**H. H. CREASER,**  
Clerk of the Council.  
Council Offices, Derby Road, Belper,  
Derbyshire. 1917

**CROWN AGENTS FOR THE COLONIES.**

Applications from qualified candidates are invited for the following post:—

**JUNIOR ASSISTANT QUANTITY SURVEYOR** required by Kenya Government Development and Reconstruction Authority for three years in first instance. Commencing salary according to experience in scale £350-£540, plus cost-of-living allowance up to £202. Outfit allowance £30. Free passages. Candidates should be of matriculation standard, and have had at least two years' experience of working up, abstracting and billing in a Quantity Surveyor's office. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/23697/3D on both letter and envelope. 1966

**BOROUGH OF RICHMOND, SURREY.**

Applications are invited for the appointment of an **ARCHITECTURAL ASSISTANT**, on the established staff of the Borough Engineer and Surveyor, at a salary in accordance with A.P.T. Division, Grade II, of the National Scale of Salaries, i.e., £420-£465 per annum, together with appropriate London area weighting, according to age.

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

Applicants should have passed the Intermediate examination of the R.I.B.A., or hold some other diploma in architecture, and should have had some years' experience in an architect's office.

Applications, stating age, qualifications and previous appointments, should be delivered, together with copies of two recent testimonials, to the undersigned not later than noon on Monday, 26th October, 1948.

Canvassing will disqualify. Candidates shall, when making application, disclose in writing whether to their knowledge they are related to any member of the Council or senior officer.

The Council is unable to assist in the provision of housing accommodation.

**CLIFFORD HEYWORTH,**  
Town Clerk.

Town Hall, Richmond, Surrey. 1974

**LANCASHIRE COUNTY COUNCIL.**

**COUNTY ARCHITECT'S DEPARTMENT.**  
Applications are invited for the following appointments on the permanent staff:—

(a) **SENIOR ASSISTANT ARCHITECTS.** Grade VI. Salary £595-£660 per annum. Preference will be given to Members of the R.I.B.A.

(b) **SENIOR ASSISTANT LAND SURVEYOR.** Grade VI. Salary £595-£660 per annum. Candidates must be Associates of the Royal Institution of Chartered Surveyors. (Valuation Division.)

(c) **JUNIOR ASSISTANT LAND SURVEYOR.** Misc. Div., Grade I. Salary £315-£360 per annum. Candidates should be competent to make own surveys and take levels.

(d) **BUILDINGS INSPECTOR.** Grade II. Salary £420-£465 per annum. Applicants should have knowledge of all building trades and have experience in the maintenance work of buildings, and should be capable of preparing reports, specifications and estimates in connection with same. He will be required to reside in the neighbourhood of Prestwich.

(e) **SENIOR ASSISTANT HEATING ENGINEER.** Grade VI. Salary £595-£660 per annum. Candidates must be Corporate Members of the Institute of Heating and Ventilating Engineers.

(f) **ASSISTANT STRUCTURAL ENGINEER.** Grade V. Salary £530-£570 per annum. Candidates must be Corporate Members of the Institute of Structural Engineers.

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

Applications should be forwarded on the forms to be obtained from the County Architect, G. Noel Hill, F.R.I.B.A., M.T.P.I., County Offices, Preston, to whom they should be returned, accompanied by copies of three recent testimonials, to arrive not later than Saturday, 16th October.

**R. H. ADCOCK,**  
Clerk of the County Council.  
County Offices, Preston. 1906

**COUNTY BOROUGH OF SWANSEA.  
BOROUGH ARCHITECTS' DEPARTMENT.  
QUANTITY SURVEYORS.**

Applications are invited for the following appointments on the Established Staff in the Borough Architect's Department:—

**TWO SENIOR ASSISTANT QUANTITY SURVEYORS** (Grade VII, A.P.T.). Salary £635 to £710 per annum.

The salary scale is that of the National Scheme of Conditions of Service.

Applicants must be under 45 years of age unless in Local Government Service, and must be Professional Associates of the Royal Institution of Chartered Surveyors (Quantities Section). Candidates should have experience in the preparation of Bills of Quantities, Specifications and Estimates for Schools, Houses and Buildings of various types.

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

The appointments may be terminated by one month's notice on either side.

The Council will, if required, make housing accommodation available for the successful applicants.

Forms of application may be obtained from the Borough Architect (Mr. H. T. Wykes, F.R.I.B.A.), Guildhall, Swansea.

Applications, accompanied by copies of three recent testimonials, and enclosed in an envelope endorsed "Senior Assistant Quantity Surveyor," must be delivered to the undersigned not later than Thursday, 4th November, 1948.

Canvassing, directly or indirectly, will disqualify.

**T. B. BOWEN,**  
Town Clerk.

Guildhall, Swansea. 1942

**CITY OF BATH.**

**CITY ENGINEER'S DEPARTMENT.**

**ARCHITECTURAL SECTION.**

Applications are invited for the appointment of a **GENERAL ARCHITECTURAL ASSISTANT** (Permanent), at a salary of £450-£495 or £480-£525 per annum (A.P.T., Grade III or IV), according to qualifications and experience.

Candidates should be Associate Members of the Royal Institute of British Architects or hold equivalent qualifications. Preference will be given to candidates with experience in the design and supervision of housing estates or domestic buildings.

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

Applications, stating age, qualifications and experience, together with copies of two recent testimonials, should be sent to the City Engineer, Guildhall, Bath, not later than Saturday, 23rd October, 1948.

**J. BASIL OGDEN,**  
Town Clerk.

Guildhall, Bath. 1946

**CITY OF SHEFFIELD.**

**CITY ARCHITECT'S DEPARTMENT.**

**EDUCATION SECTION.**

**APPOINTMENT OF ARCHITECTURAL AND SURVEYING ASSISTANTS.**

Applications for the under-mentioned appointments are invited from persons with requisite qualifications:—

(a) **CHIEF ASSISTANT** in charge of Section. A.P.T., Grade J. Salary £770 to £860 per annum.

(b) **ONE SENIOR ASSISTANT ARCHITECT.** A.P.T., Grade VII. Salary £635 to £710 per annum.

(c) **SIX ASSISTANT ARCHITECTS.** A.P.T., Grades IV to VI. Salary £480 to £660 per annum, according to experience and ability.

(d) **ONE INTERMEDIATE ASSISTANT ARCHITECT.** A.P.T., Grade III. Salary £450 to £495 per annum.

(e) **ONE JUNIOR ASSISTANT ARCHITECT.** A.P.T., Grade I. Salary £390 to £435.

(f) **ONE SENIOR SURVEYING ASSISTANT,** with knowledge of Road and Sewer Works. A.P.T., Grade VII. Salary £635 to £710 per annum.

(g) **TWO ASSISTANT QUANTITY SURVEYORS.** Grades IV and V. Salary £480 to £570.

Candidates for positions (a) to (c) must hold qualifications equivalent to Associateship of the Royal Institution of British Architects.

Candidates for position (f) must hold Engineering Degree with A.M.Inst., M. & C.Y.E., or A.M.T.P.I.

Candidates for position (g) must hold qualifications, A.R.I.C.S. or A.I.Q.S.

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

Preference will be given to Assistants with experience in Educational Buildings.

Canvassing will disqualify.

Applications, stating age, qualifications, previous and present appointments, and salary, full details of experience and the earliest possible date when available, together with copies of recent testimonials, should be sent to reach the under-mentioned not later than first post on Monday, the 18th October, 1948.

**W. G. DAVIES, F.R.I.B.A.,**  
City Architect.

Town Hall, Sheffield, 1. 1939

**ESSEX EDUCATION COMMITTEE.  
MID-ESSEX TECHNICAL COLLEGE AND  
SCHOOL OF ART.**

Required for 1st January, 1949, a full-time **LECTURER** in Technical Subjects in ARCHITECTURE, to assist in the instruction of Students preparing for the Intermediate and Final examinations of the Royal Institute of British Architects. It is desirable that candidates should be Associates of the R.I.B.A., preferably trained at a recognized School of Architecture, and with experience in an Architects' office. Previous teaching experience, though desirable, is not essential. Salary in accordance with the Burnham Technical Scale (1948) for Assistants, with increments for approved professional and/or teaching experience.

Forms of application and further particulars may be obtained from the Clerk to the Governors, Mid-Essex Technical College and School of Art, Market Road, Chelmsford.

**B. E. LAWRENCE,**  
Chief Education Officer.  
1919

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

Applications are invited for the appointment of a **SENIOR ARCHITECTURAL ASSISTANT** in the County Architect's Department, the salary being in accordance with A.P.T., Grade V, £520 per annum, rising to £570 per annum.

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

The appointment is terminable by one month's notice on either side.

Applications, stating age, qualifications, experience and date on which duties should be commenced, if appointed, together with copies of three testimonials, should be sent to Mr. T. H. Longstaff, M.Inst.C.E., F.R.I.B.A., M.T.P.I., County Architect, Walden House, Huntingdon, by not later than Monday, 18th October, 1948.

**J. B. KELLY,**  
Clerk of the County Council.  
Walden House, Huntingdon. 1918

**COUNTY BOROUGH OF DONCASTER  
EDUCATION COMMITTEE.**

**EDUCATION ARCHITECT'S DEPARTMENT.**

Applications are invited from men of suitable qualifications and experience for appointments as **ASSISTANT ARCHITECTS**. Preference will be given to candidates who are Associates of the Royal Institute of British Architects.

Salaries in accordance with Grade A.P.T. V, of National Joint Council Scales (£520 × £15 × £15 × £20 = £250).

The posts in the first instance will be temporary, but should the applicants prove suitable a permanent post of Senior Assistant Architect may be created.

Conditions of appointment obtainable from the undersigned on receipt of stamped addressed foolscap envelope. Applications should be endorsed "Assistant Architect" and received at this office by Monday, the 25th October, 1948.

**V. H. HOSKIN,**  
Chief Education Officer.  
1928

**EDUCATION OFFICE, DONCASTER.**

**Amended Advertisement.**

**CORPORATION OF LONDON.**

**CITY PLANNING OFFICE.**

Applications are invited for the appointment of:—

**1ST CLASS PLANNING ASSISTANT**, at a salary of £600 by £25 to £750.

The duties consist of surveys for planning purposes, the preparation of plans for areas of re-development, development control, including architectural treatment, and generally to assist in the work of the Planning Department.

Previous experience with a local authority is desirable but not essential. Preference will be given to candidates possessing one or more of the following qualifications, A.R.I.B.A., A.R.I.C.S., A.M.T.P.I.

The candidates appointed will be required to pass a medical examination and to contribute to the Corporation's Superannuation Scheme.

Applications, giving full details of age, experience and qualifications, accompanied by copies of not more than three recent testimonials, to be submitted not later than 1st November, 1948, to the City Planning Officer, Corporation of London, 55/61, Moorgate, E.C.2.

**PICKFORD,**  
1920

**BOROUGH OF NUNEATON.**

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

**APPOINTMENT OF ARCHITECTURAL ASSISTANT.**

Applications are invited for the appointment of **ARCHITECTURAL ASSISTANT**, on the staff of the Borough Surveyor, at a salary in accordance with Grade A.P.T., III, of the National Scale of Salaries.

Applicants should have passed the Intermediate examination of the Royal Institute of British Architects, or hold an equivalent qualification, and have general knowledge and experience of architectural work.

Further particulars and form of application may be obtained from the undersigned, by whom all applications must be received not later than Saturday, 23rd October, 1948.

**T. OLDROYD,**  
Town Clerk.

Council House, Nuneaton. 1976

September, 1948.



# COUNTY BOROUGH OF WEST HAM. BOROUGH ARCHITECT AND PLANNING OFFICER'S DEPARTMENT.

Applications are invited for the following positions on the establishment of the above Department.

(a) **CHIEF ASSISTANT-TOWN PLANNING** (£280×£50-£1,000 p.a.). Applicants should be A.R.I.B.A., A.M.T.P.I., and have had considerable experience in the redevelopment of war damaged and obsolete areas; examination of Development Applications; preparation of evidence for Public Inquiries; and Committee work.

The successful applicant will be required to take charge of the Town Planning Section of the Department.

(b) **SENIOR ASSISTANT ARCHITECT-A.P.T.** Grade VII (£265×£25-£750).

Applicants should be A.R.I.B.A., with considerable experience in Housing and Education Works.

(c) **ASSISTANT ARCHITECT-A.P.T.** Grade VI (£595×£20×£20×£25-£660).

Applicants should be A.R.I.B.A. and have had experience in either Housing or Education Works.

(d) **ARCHITECTURAL ASSISTANTS-A.P.T.** Grade II (£420×£15-£465).

Applicants should be Students of the R.I.B.A. and have had at least two years' experience in an office.

(e) **ARCHITECTURAL ASSISTANT-A.P.T.** Grade I (£390×£15-£435).

Applicants must be good draughtsmen with a sound knowledge of construction and at least two years' office experience.

(f) **ADMINISTRATIVE CLERK-CERICAL DIVISION (FEMALE)** (£316×£12-£352).

Applicants must be competent shorthand typists, and it would be an advantage to have had experience in an Architect's Office.

London allowance payable in respect of posts (b)-(f) inclusive.

Details of above appointments, together with application forms, which must be returned by 30th October, 1948, obtainable from the Borough Architect and Planning Officer, 70, West Ham Lane, E.15.

E. E. KING,  
Town Clerk.

1963

# NORTHERN IRELAND HOUSING TRUST. APPOINTMENT OF ARCHITECTS, ENGINEERS AND QUANTITY SURVEYORS.

Applications are invited for the following posts:-

(a) **ASSISTANT ARCHITECTS** (Grade II). Salary scale £500×£25-£750.

(b) **ARCHITECTURAL ASSISTANTS** (Grade III). Salary scale £250×£20-£500.

Applicants for Grade II posts should be Fellows or Associates of the R.I.B.A. and should have a sound knowledge of housing.

(c) **ASSISTANT CIVIL ENGINEERS** (Grade II). Salary scale £500×£25-£750.

(d) **ENGINEERING ASSISTANTS** (Grade III). Salary scale £250×£20-£500.

Applicants for Grade II should hold a University Degree in Civil Engineering and/or be Corporate Members of the Institution of Civil Engineers or the Institution of Municipal and County Engineers.

(e) **QUANTITY SURVEYORS**. Salary scale £500×£25-£750.

(f) **ASSISTANT QUANTITY SURVEYORS**. Salary scale £250×£20-£500.

Applicants should be Members of the Royal Institution of Chartered Surveyors, and be experienced in the preparation of Estimates, Bills of Materials, Measuring-up and the adjustment of Final Accounts in connection with housing schemes.

Applicants for the Assistant Quantity Surveyor post should have passed the Intermediate examination of the same body and be experienced in similar duties.

For all the above posts the entry point on the salary scale will be determined according to the experience and qualifications of the successful candidates.

Successful candidates in each case will be required to undertake and supervise such work in connection with housing schemes as may be assigned to them throughout Northern Ireland.

Preference will be given to ex-Servicemen candidates possessing the required qualifications provided the Trust is satisfied that such candidates can within a reasonable time fill the vacant posts efficiently.

The Northern Ireland Housing Trust was established by the Housing Act (Northern Ireland), 1945, to build and manage houses for workers.

Apply by letter stating post applied for, age, and place of birth, qualifications and experience, and the names of two referees, to General Manager, Northern Ireland Housing Trust, 5, Donegall Square South, Belfast.

1959

# COUNTY BOROUGH OF DARLINGTON. BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of

**TWO CLERK OF WORKS**, Grade Misc. Divn. II (£375-£420).

Candidates should be well trained in the Building Industry; capable of supervising Housing and Education work, have a sound knowledge of all trades, and should not be over 45 years of age.

Applications, stating age, qualifications, present appointment and salary, previous experience, and also names and addresses of three referees, to be endorsed "Clerk of Works," and delivered to E. A. Tornbohm, Esq., A.R.I.B.A., A.M.T.P.I., Borough Architect, Central Buildings, Darlington, not later than the 12th October, 1948.

1975

# WEST SUFFOLK COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT.

Applications are invited for the appointment of **ASSISTANT PLANNING OFFICER** in the above Department at Bury St. Edmunds, on A.P. and T. Grade VI (£595-£660), position on scale according to qualifications and experience.

The Officer will be required to take charge of the West Suffolk Office under the direction of the County Planning Officer for the purposes of Development Control and Survey work. He should have had wide experience in all aspects of Town and Country Planning, Development Control, and the preparation of factual surveys.

Applicants for the appointment should be either Members or Associate Members of the Town Planning Institute, and preference will be given to those possessing qualifications in either Engineering, Surveying or Architecture. The successful candidate will be required to provide a 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 candidate will be required to pass a medical examination.

Applications in own handwriting, stating age, education, war service (if any), experience, present position and salary, together with the names of two referees, should be submitted as soon as possible.

L. G. H. MUNSEY,

Clerk of the County Council.

Shire Hall, Bury St. Edmunds.

1st October, 1948.

1971

# FIFE COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following posts:-

(a) **TWO ASSISTANT ARCHITECTS**. Applicants should be qualified Architects, with previous experience of Local Authority Schemes, particularly housing. Consolidated salary, £490×£20 to £590.

(b) **TWO ARCHITECTURAL DRAUGHTSMEN**. Applicants must have had experience in an Architectural Drawing Office and be quick and accurate draughtsmen. Consolidated salary, £330 to £430 per annum.

Applicants should be under 45 years of age, and successful candidates will be expected to undergo medical examination in connection with the Superannuation Scheme. Applications, stating the post applied for, experience, qualifications, and date of birth, to be lodged with the undersigned not later than 15th October, 1948. No canvassing.

J. M. MITCHELL,

County Clerk.

County Buildings, Cupar-Fife.

30th September, 1948.

1973

# COUNTY BOROUGH OF EAST HAM. BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the under-mentioned appointments:-

**SENIOR ARCHITECTURAL ASSISTANT**. Grade A.P.T. VI. Salary, £595-£660.

**ARCHITECTURAL ASSISTANT**. Grade A.P.T. III. Salary, £450-£495.

**JUNIOR ARCHITECTURAL ASSISTANT**. Grade A.P.T. I. Salary, £390-£435.

**CHIEF QUANTITY SURVEYOR**. Grade A.P.T. VII. Salary, £635-£710.

**SENIOR ASSISTANT PLANNING OFFICER**. Grade A.P.T. V. Salary, £520-£570.

London Allowance is payable in addition to the above salaries as follows:-Age 16-20, £10 p.a.; age 21-25, £20 p.a.; age 26 and above, £30 p.a.

Salaries in excess of the minima of the grades may be paid according to the qualifications and experience of successful candidates.

The Council have in course of preparation a large and varied programme of interesting works which it is anticipated will not be affected by the proposed reductions in capital expenditure.

Housing accommodation is not provided, but the Council will be prepared to consider applications for subsistence allowances in appropriate cases from persons appointed who may be unable to obtain suitable accommodation.

Full particulars of the duties, terms and conditions of appointment and form of application (which must be returned by Monday, October 18th, 1948), may be obtained from the undersigned.

Canvassing in any form will disqualify.

H. A. EDWARDS,

Town Clerk.

Town Hall.

East Ham, E.6.

September, 1948.

1896

# BOROUGH OF BARNES. APPOINTMENT OF TEMPORARY ARCHITECTURAL ASSISTANT (GRADE II).

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department, at a commencing salary of £420, rising by annual increments to a maximum of £465 per annum, plus London weighting.

Applicants should be good draughtsmen and be capable of preparing plans and details for general architectural work. Preference will be given to applicants having an architectural qualification.

The Council are unable to make any provision of housing accommodation for the successful applicant.

Applications, together with the names of three persons to whom reference can be made, should be submitted to the undersigned not later than Saturday, 23rd October, 1948.

W. R. SHEPHERD, A.M.I.C.E.,

A.R.I.C.S.,

Borough Engineer and Surveyor.

Municipal Offices, Sheen Lane, S.W.14.

1948

# CITY OF OXFORD EDUCATION COMMITTEE. SCHOOLS OF TECHNOLOGY, ART AND COMMERCE. SCHOOL OF ARCHITECTURE AND BUILDING.

Applications are invited for the post of Full-time **STUDIO INSTRUCTOR IN ARCHITECTURAL DESIGN AND CONSTRUCTION**.

Applicants must be members of the R.I.B.A. and should preferably be holders of a degree or diploma of a recognized School of Architecture. Special experience and knowledge of Science applied to Building will be an additional qualification.

The post is newly created to meet expansion, and is permanent. Salary will be paid in accordance with the Burnham (Technical) Award.

Forms of application and further particulars may be obtained on receipt of a stamped addressed foolscap envelope from the Chief Education Officer, 77, George Street, Oxford, to whom completed forms must be returned as soon as possible, and in any case not later than 14 days from the appearance of the advertisement, 1961

# BOROUGH OF SOUTHGATE. BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

**APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.**

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

The salary will be Grade IV of the A.P.T. Division of the National Joint Council Scales, plus the appropriate London weighting.

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

Forms of application may be obtained from the Borough Engineer and Surveyor, and should be returned to the undersigned not later than 9 a.m. on Monday, the 25th October, 1948.

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

GORDON H. TAYLOR,

Town Clerk.

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

1st October, 1948.

1960

# BOROUGH OF FINCHLEY. HOUSING AND TOWN PLANNING DEPARTMENT.

Applications are invited for the appointment of **SENIOR ARCHITECTURAL ASSISTANT**, in the above Department, at a salary in accordance with Grade VI, A.P. and T. Division (£595 to £660, plus £30 per annum London weighting).

Candidates must be suitably qualified and have had practical experience in housing and general architectural work.

The appointment is subject to medical examination, the provisions of the Local Government Superannuation Act, 1937, and the National Scheme of Conditions of Service.

Applications, giving full particulars of qualifications and experience, and accompanied by copies of two recent testimonials, must reach the Borough Housing and Town Planning Officer, The Avenue, Finchley, N.3, by not later than the 20th October, 1948.

R. M. FRANKLIN,

Town Clerk.

Municipal Offices, Finchley, N.3.

27th September, 1948.

1926

# SOMERSET COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following posts in the County Architect's Department, viz.:-

(a) **ONE ARCHITECTURAL ASSISTANT**. A.P.T., Grade VI. Salary scale, £595 to £660.

(b) **ONE ARCHITECTURAL ASSISTANT**. A.P.T., Grade V. Salary scale, £520 to £570.

(c) **THREE ARCHITECTURAL ASSISTANTS**. A.P.T., Grade IV. Salary scale, £480 to £525.

(d) **TWO ASSISTANT QUANTITY SURVEYORS**. A.P.T., Grade IV. Salary scale, £480 to £525.

(e) **ONE ASSISTANT ENGINEER**. A.P.T., Grade II. Salary scale, £420 to £465.

Applicants for (a) must be Associate Members of the Royal Institute of British Architects. Preference will be given to applicants for (b) and (c) who are Associate Members of the Royal Institute of British Architects. Good experience in design and construction of Public Buildings, e.g., Schools, Police Stations, Fire Stations, Small Holdings, etc., etc., will be an advantage.

Applicants for (e) must be capable of the proper inspection and reporting upon existing heating and H.W.S. installations, steam boilers and services, and kitchen equipment, also of supervising repairs and replacements and should have practical experience of this work. Experience of the maintenance of electrical installations is desirable.

All the appointments will be subject to the Council's Conditions of Service in force from time to time and to the provisions of the Local Government Superannuation Act, 1937, and any amendments thereof. The selected candidates will be required to pass a medical examination.

Applications, giving full details of age, qualifications and experience, should be forwarded, together with copies of three testimonials, to reach the undersigned by Monday, 25th October, 1948.

Candidates must disclose in writing whether they are related to any member or senior official of the Council.

Canvassing members of the Council either directly or indirectly will disqualify.

R. O. HARRIS, F.R.I.B.A.,

County Architect.

Park Street, Taunton.

5th October, 1948.

1962

**COUNTY BOROUGH OF GREAT YARMOUTH.  
BOROUGH ENGINEER'S DEPARTMENT.  
APPOINTMENT OF CHIEF ASSISTANT  
ARCHITECT (SCHOOLS).**

Applications are invited for the appointment of Chief Assistant Architect (Schools), at a salary in accordance with A.P.T., Grade VII, of the National Conditions of Service, commencing at £660 per annum and rising to £710 per annum.

Applicants must be Associates of the Royal Institute of British Architects, and must have had considerable experience in modern practice in design and construction of school buildings.

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

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, should be enclosed in an envelope endorsed "Chief Assistant Architect (Schools)," and must reach the undersigned not later than Friday, the 22nd October, 1948.

Canvassing, directly or indirectly, will be deemed a disqualification, and candidates must disclose in writing whether, to their knowledge, they are related to any member of, or holder of any senior office under the Council. Candidates who fail to do so will be disqualified and, if appointed, will be liable to dismissal without notice.

FARRA CONWAY, Town Clerk.

Town Hall, Great Yarmouth.  
1st October, 1948. 1972

**COUNTY BOROUGH OF HALIFAX.  
APPOINTMENT OF ASSISTANT ARCHITECT  
(EDUCATION).**

Applications are invited for the above appointment, in the Borough Engineer's Department, at a salary in accordance with Grade V of the National Scales (£528, rising to £570 per annum). The successful candidate, who should possess appropriate qualifications, will be engaged principally on the design and erection of new schools. It is not, however, necessary that he should have had specialized experience on School or Municipal work, provided he possesses a good background of architectural knowledge. The position is a superannuated one.

Applications, stating age, qualifications, present position and salary and experience, and accompanied by copies of recent testimonials and appropriately endorsed, should be delivered to the undersigned not later than Saturday, 16th October, 1948.

R. de Z. HALL, Town Clerk.

Town Hall, Halifax.  
21st September, 1948. 1885

**LONDON COUNTY COUNCIL.**  
Required at South-East London Technical College, Lewisham Way, S.E.4, to commence as soon as possible, a SENIOR ASSISTANT in the Building Section. Applicants should have good industrial or professional experience and possess a Higher National Diploma or Certificate or other suitable qualifications, and be competent to teach building construction, building quantities, estimating and other related subjects. Burnham Scale salary (£770-£775-£800 with London allowance and where applicable training and graduate additions). Application forms (stamped addressed foolscap envelope necessary) from the Secretary at the College, returnable by 13th November, 1948 (2077). 1964

**COUNTY BOROUGH OF GRIMSBY.  
BOROUGH ENGINEER AND SURVEYOR'S  
DEPARTMENT.  
APPOINTMENT OF ARCHITECTURAL  
ASSISTANTS.**

Applications are invited for the following appointments in the Architectural Section of the Department:—

ARCHITECTURAL ASSISTANT on Grade A.P.T. V (£520, rising to £570 per annum consolidated).  
ARCHITECTURAL ASSISTANT on Grade A.P.T. IV (£480, rising to £525 per annum consolidated).

Candidates should be Registered Architects and preference will be given to applicants holding the appropriate professional qualifications. Experience on new schools and large public buildings is desirable.

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

Applications, stating age, qualifications, and details of experience, together with copies of two recent testimonials, must be suitably endorsed and delivered to the undersigned not later than first post on Monday, the 19th October, 1948.

J. V. OLDFIELD, Borough Engineer and Surveyor.

Municipal Offices,  
Town Hall Square,  
Grimsby. 1899

**Architectural Appointments Vacant**

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

ARCHITECTURAL ASSISTANTS required immediately; salary according to qualifications and experience. John & Slater, F.A.R.I.B.A., 8, Lower Brook Street, Ipswich. 1819

ARCHITECTURAL ASSISTANT required; preferably experienced in the design, alteration and maintenance of industrial buildings, and capable of preparing surveys, working drawings, details and specifications; knowledge of quantities an advantage; the appointment would be permanent and pensionable. Applications, stating age, experience, qualifications and salary required, should be sent to the Staff Controller, The Gas Light & Coke Co., 30, Kensington Church Street, W.8. 1836

ARCHITECTURAL ASSISTANTS and QUANTITY SURVEYOR required for busy progressive Plymouth office, run on co-operative lines. Apply, stating full particulars, to Box 1828.

REQUIRED.—DESIGNERS and DRAFTSMEN DETAILERS for a Firm of Reinforced Concrete Engineers in Birmingham; only men with several years' experience in reinforced concrete need apply. Write, giving full details, to Box 806, at 191, Gresham House, E.C.2. 1946

REINFORCED CONCRETE ENGINEER required to specialize in design of pre-cast and in situ floors; London drawing office. Write, stating age, experience, and salary required, to Box 815, at 191, Gresham House, E.C.2. 1848

DRAFTSMEN required for London drawing office; experience in reinforced concrete or structural steelwork desirable. Write, stating age, experience, and salary required, to Box 810, at 191, Gresham House, E.C.2. 1847

ASSISTANT ARCHITECTS required for progressive office engaged in large commercial work in Coventry reconstruction; salary according to ability and experience. Apply Rolf Hellberg, F.R.I.B.A., 13, Queen Victoria Road, Coventry. 1878

ARCHITECTURAL or SURVEYING ASSISTANTS required for London office; must be quick and accurate draughtsmen with experience of measuring existing buildings. Write, stating age, experience, and salary required, to Box 1907.

SENIOR ARCHITECTURAL ASSISTANT required; state experience, salary £10 per week. Apply Clifford Tee & Gale, 38, Bennett's Hill, Birmingham, 2. Telephone: Central 3628. 1910

ARCHITECTURAL ASSISTANT required; Inter-standard or just qualified, for preparation of specifications, working drawings, supervision, institutional and factory work, including war damage to Non-Conformist Churches. Apply, stating qualifications and salary required, to Box 1936.

ARCHITECTURAL ASSISTANT required (Qualified) for General Practice—Surveys, Working Drawings and Specifications. Write, stating age, previous experience and salary required, to Henry C. Smart & Partners, L.R.I.B.A., 120, Moorgate, London, E.C.2. 1943

IMPERIAL CHEMICAL INDUSTRIES, LTD., Wilton Works, near Redcar, require the services of an ASSISTANT ARCHITECT; preference will be given to applicants who have experience of industrial work and are registered Architects or Associates of the R.I.B.A.; the successful candidate will be appointed to the Established Staff. Applications, giving full details, should be submitted in writing to the Personnel Manager, Imperial Chemical Industries, Ltd., Wilton Works, P.O. Box 54, Middlesbrough, quoting advertisement reference ICI/X/45/G. 1941

ASSISTANT ARCHITECT required for responsible post in busy general practice (10 miles from London); applicants should have had good general experience of design, construction and administration, and should preferably be Associates R.I.B.A.; experience of hospital work an advantage; entry to staff superannuation scheme if desired; housing accommodation could be provided. Apply promptly by letter, stating age, experience in detail, including service in H.M. Forces, if any, and salary required, to Tooley & Foster, F.A.R.I.B.A., Chartered Architects, Midland Bank Chambers, Buckhurst Hill, Essex. 1923

ARCHITECTURAL ASSISTANT required in busy General Practice. Reply, stating age, qualifications, experience, and salary required, to W. G. Rymills, A.R.I.B.A., 5, Church Green, Witney, Oxfordshire. Tel.: Witney 394. 1932

ARCHITECT'S CHIEF ASSISTANT required; varied practice; Manchester district; permanency; view to partnership. Box 1958.

TO QUANTITY SURVEYOR ASSISTANTS.—TAKER-OFF required in S.E. provincial office; JUNIOR also considered. Box 1956.

JUNIOR QUANTITY SURVEYOR; capable working up quantities.—State qualifications, age, details of previous experience, to Personnel Manager, T.I. (Group Services), Ltd., Rocky Lane, Aston, Birmingham. 1957

SENIOR ASSISTANT required in Architect's office of large company in the City; applicants should be about 40 years of age, and preferably Associates of R.I.B.A.; must be proficient in the design, construction and maintenance of office buildings; well acquainted with City and L.C.C. regulations; salary about £600, with prospects of bonus and pension. Box 1944.

TRUMAN'S BREWERY require ASSISTANT SURVEYOR; age 25-35; salary at 30 would be £600; position holds a future for the right man. Reply to Truman's Brewery, Brick Lane, E.1. 1964

ASSISTANT ARCHITECT required in busy General Practice. Reply, stating age, qualifications, experience, and salary required, to Johnson & Crabtree, F.A.R.I.B.A., 20, Priory Place, Doncaster. Tel. 3445. 1963

TWO JUNIOR ARCHITECTURAL ASSISTANTS up to Intermediate standard required in busy West End Architect's office; salary by arrangement. Box 1976.

QUANTITY SURVEYORS required for site measurements on large power stations in South and West Coast areas. Write, stating age, experience, and salary, to L. G. Mouchel & Partners, Ltd., Civil Engineers, 38, Victoria Street, S.W.1. 1978

**Architectural Appointments Wanted**

ASSISTANT (30) desires permanent position; capable taking charge; good testimonials; experience includes church and school work, housing and lay-outs, farm lay-outs and surveys. Details and salary to Box 187.

YOUNG MAN, released from Forces, requires an opening in an Architect's office; he has some drawing board experience and a fair sketching ability, and with opportunity would work devotedly; preferential wish for London or S.E. areas. Box 191.

ARCHITECTURAL ASSISTANT; 7 years' experience, L.C.C., local government, and private offices; housing and schools; 3rd year Building Construction. Box 192.

**Other Appointments Vacant**

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

WANTED, for small but very busy Architect's office, within 3 mins. of Baker Street Station, SECRETARY, with initiative and personality; experienced and able to cope with the administrative part of the practice; typing essential, shorthand an advantage; salary by arrangement; excellent prospects for the right person. Write, with full details, Box 1808.

MANAGER AND SECRETARY for an old established and well-known firm of Building Specialists required; to have knowledge of Building and Concrete Construction, Accountancy, Secretarial duties, Correspondence; good disciplinary and reliable; only those applications fulfilling these requirements will be considered. Write fully to Box 291, Allardrye Palmer, Ltd., 109, Kingsway, W.C.2. 1937

WANTED.—Industrial and Building Trade CORRESPONDENT for Architectural Journal; qualifications: technical knowledge of architecture and familiarity with the building trade; capacity to write fluently; some journalistic experience an advantage. Write, stating age, qualifications and salary wanted. Box 1935.

COMPETENT SHORTHAND-TYPIST required in Architect's office; small staff and interesting work. Reply, stating experience, age and salary required, to Edward Armstrong, F.R.I.B.A., 19, Manchester Square, W.1. 1934

CONSULTING ENGINEER, London, requires R.C. and Steelwork DESIGNER; good prospects for future for right type. Write, stating age, experience, and salary, to Box 1973.

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INDEPENDENT QUANTITY SURVEYOR, who has prepared Bills of Quantities for Government Departments, is available at hourly rate or on a percentage basis. Box 1924.

RELIABLE EXPERIENCED SECRETARY/SHORTHAND-TYPIST (just over direction age) seeks position with Architect. Please write Box 1914.

SENIOR ARCHITECTURAL AND SURVEYING ASSISTANT requires whole or part-time post, or would work free-lance, with West End or City firm; 18 years' experience in these areas with first-class firms; available immediately; particulars, etc., on request. Box 1980.



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### Miscellaneous

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**ARCHITECTURAL STUDENTS** require any "Architects' Journal" between 1932-1939 containing "Working Details"; state price. Box 1955.

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### Educational Announcements

4 lines or under, 5s.; each additional line, 1s. 6d.  
**R.I.B.A. AND T.P.I. EXAMINATIONS**—Mr. L. Stuart Stanley, M.A., F.R.I.B.A., Dist. T.P., M.T.P.I., Tutor in the Bartlett School of Architecture, London University, prepares candidates by correspondence tuition. 212, Euston Road, N.W.1 Tel.: EUSTon 7760.

**UNIVERSITY OF LONDON**. Two Lectures, entitled "A Review of Coventry from an Architect's point of view from 1938-48, with reference to development in various spheres, including Civic Design, Commercial Building, and Housing," will be given by Donald E. E. Gason (City Architect and Joint Planning Officer, City of Coventry), at 5.30 p.m. on 15th and 22nd October, at University College (Embryology Theatre), Gower Street, W.C.1.

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JAMES HENDERSON,

Academic Registrar. 1915



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Appointments will, in the first instance, be non-pensionable but there will shortly be an open competition for established pensionable posts. APPLY in writing, stating age, nationality, full details of experience, to Chief Architect, W.G.10/D, Ministry of Works, Abell House, London, S.W.1.

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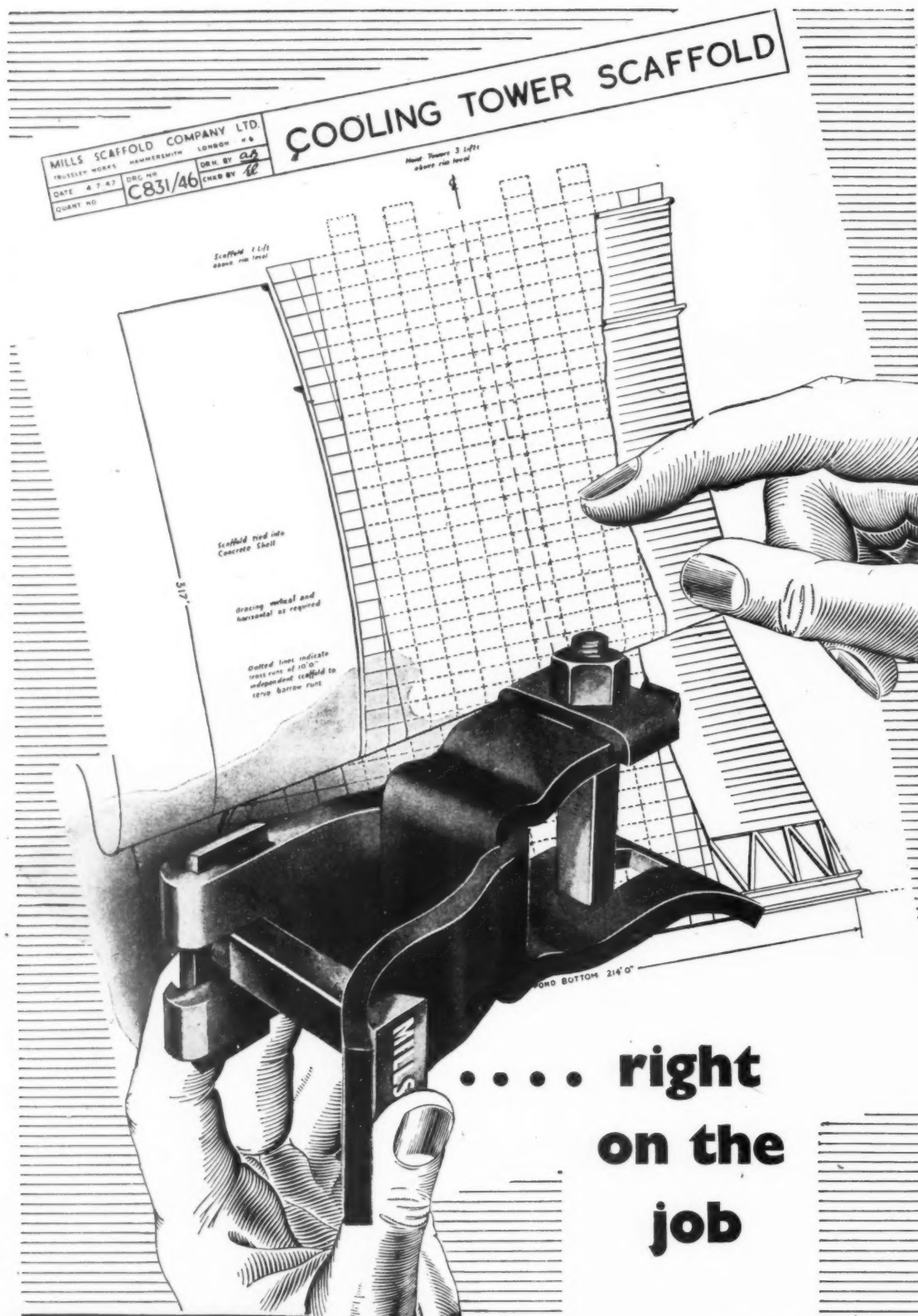
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