

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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Architectural Appointments

Wanted and Vacant

No. 3417]

[Vol. 132

THE ARCHITECTURAL PRESS

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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their addresses and telephone numbers. The glossary is published in two parts—A to Ii one week, II 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.: J. H. Holden, College of Art, Cavendish Street, Manchester 15	
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Langham 5533
ABT	Association of Building Technicians. 1, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James's Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Langham 5861
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Langham 5721
BASA	British Architectural Students Association. Building Centre, 26 Store Street, W.C.1.	
BC	Building Centre, 26, Store Street, Tottenham Court Road, W.C.1.	Museum 5400
BCC	British Colour Council. 13, Portland Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 105, Uxbridge Road, Ealing, W.5.	Ealing 9621
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 10, The Boltons, S.W.10.	Fremantle 8494
BE	Building Exhibition. 11, Manchester Square, W.1.	Hunter 1951
BEDA	British Electrical Development Association, 2, Savoy Hill, W.C.2.	Temple Bar 9434
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
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. Whitehall Gardens, Horseguards Avenue, S.W.1.	Trafalgar 8855
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 4040
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. British Standards House, 2, Park St., W.1.	Mayfair 9000
CABAS	City and Borough Architects Society. C/o S. A. G. Cook, A.R.I.B.A., Borough Architect and Director of Housing, Town Hall, High Holborn, W.C.1.	Holborn 3411
CAS	County Architects' Society. C/o S. Vincent Goodman, F.R.I.B.A., Shire Hall, Bedford.	Bedford 67444
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Belgravia 6661
CDA	Copper Development Association. 55, South Audley Street, W.1.	Grosvenor 8811
COID	Council of Industrial Design. 28, Haymarket, S.W.1.	Trafalgar 8000
CPRE	Council for the Preservation of Rural England, 4, Hobart Place, S.W.1.	Sloane 4280
CUC	Coal Utilization Council. 3, Upper Belgrave Street, S.W.1.	Sloane 9116
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
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. 68, Gloucester Place, W.1.	Welbeck 9966
FASS	Federation of Associations of Specialists and Sub-Contractors, 14, Bryanston Street, W.1.	Welbeck 1781
FBBDO	Fibre Building Board Development Organization Ltd. (Fidor), Stafford House, Norfolk Street, W.C.2.	Covent Garden 3008
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	Regent 0221
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	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. 33, John Street, W.C.1. Tel.: Chancery 7583 (6 lines)	
FPC	Federation of Painting Contractors, St. Stephen's House, S.W.1.	Whitehall 3902
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4341
GPDA	Gypsum Plasterboard Development Association. 11, Ironmonger Lane, E.C.2.	Monarch 8888
GC	Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
GG	Georgian Group. 2, Chester Street, S.W.1.	Belgravia 3081
HC	Housing Centre. 13, Suffolk Street, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 29, Belgrave Square, S.W.1.	Belgravia 3755
ICA	Institute of Contemporary Arts. 17-18, Dover Street, W.1.	Grosvenor 6186
ICE	Institution of Civil Engineers. 1, Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, Victoria Embankment, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 49, Cadogan Square, S.W.1.	Sloane 1601/3158
IIBDID	Incorporated Institute of British Decorators and Interior Designers. 100, Park Street, Grosvenor Square, W.1.	Mayfair 7086

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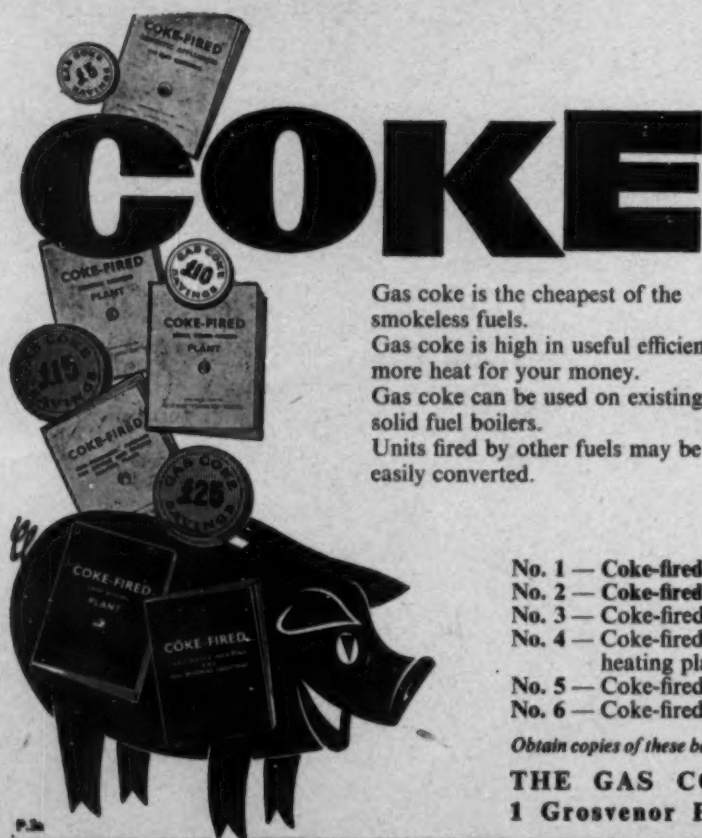
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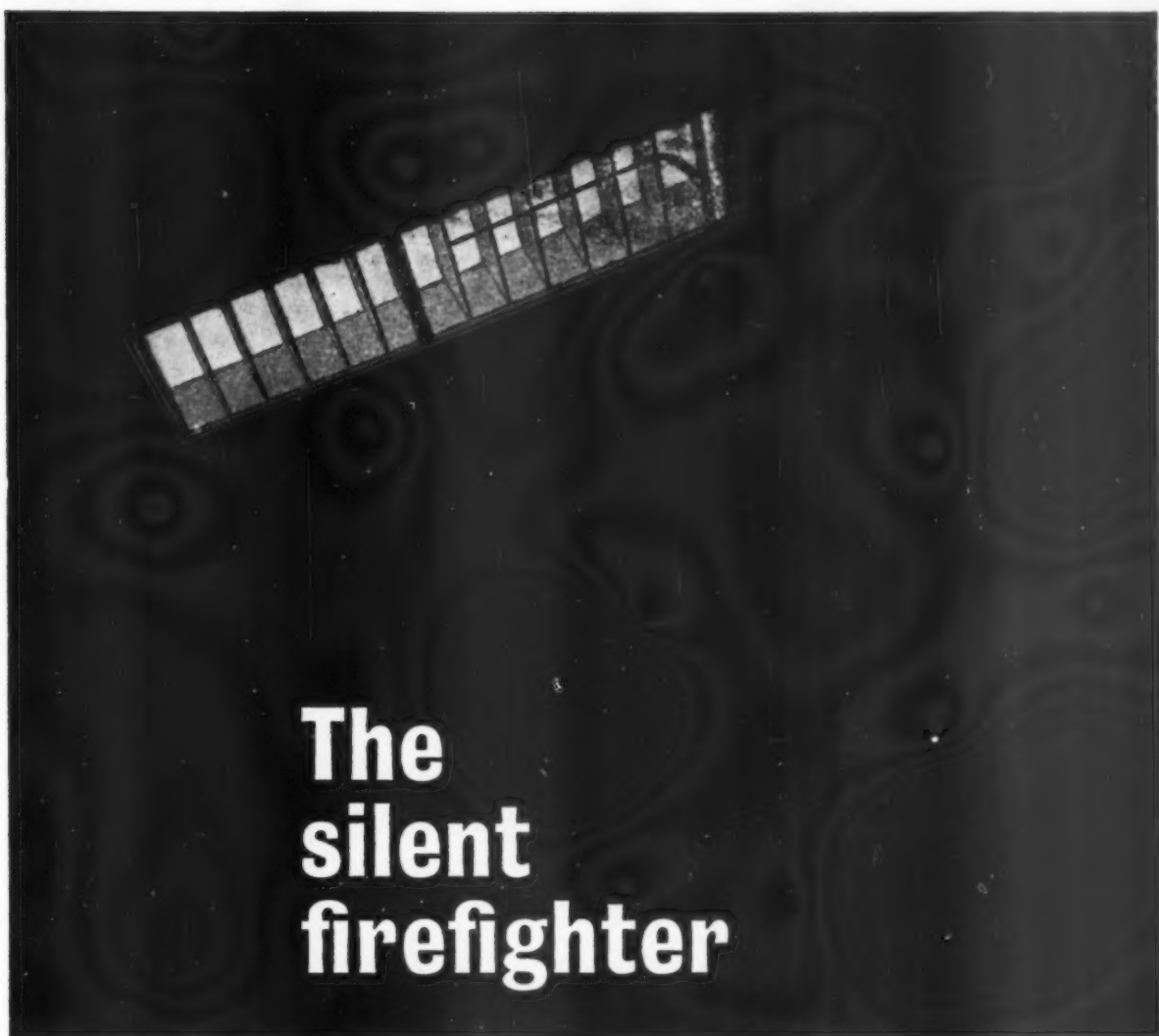
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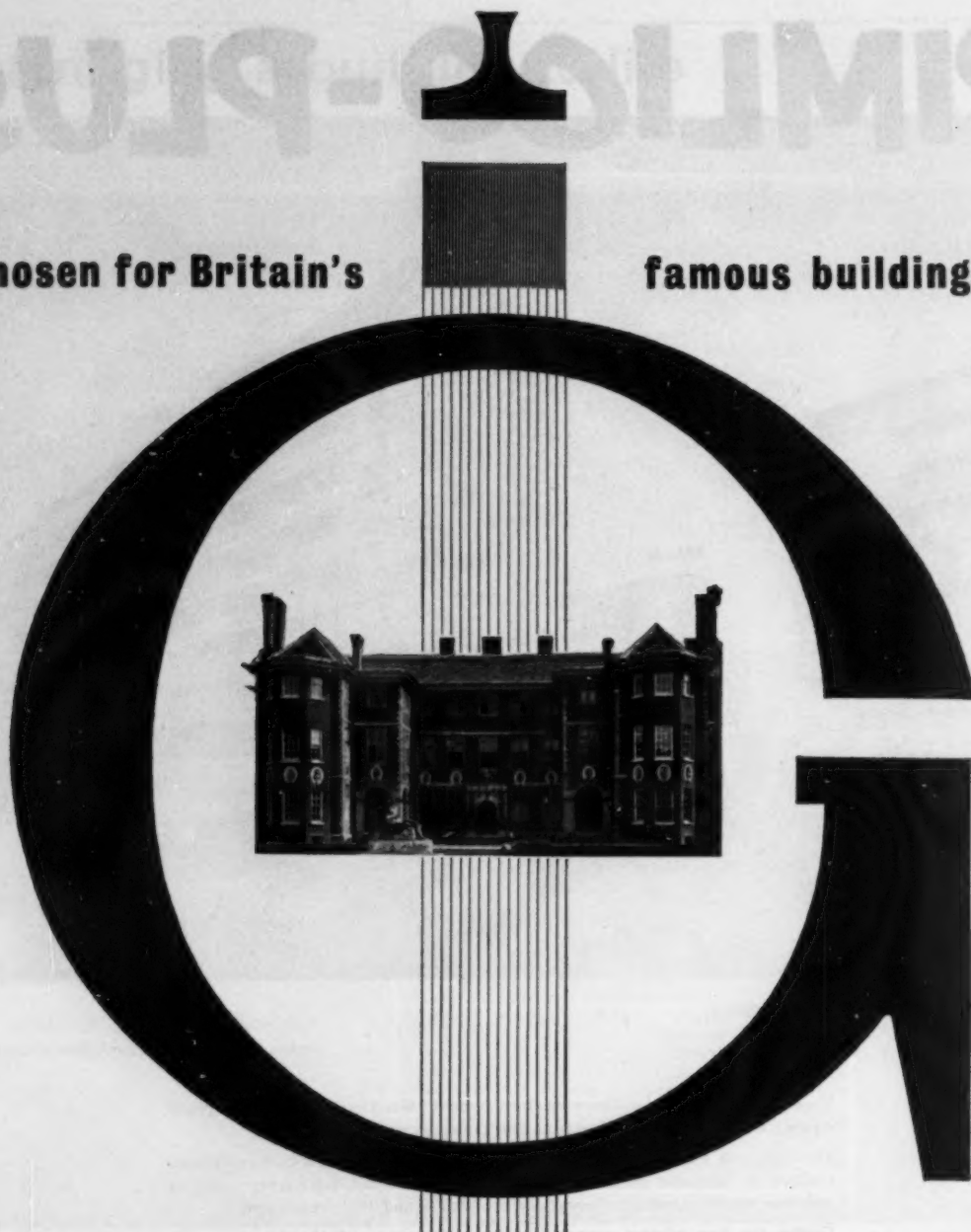
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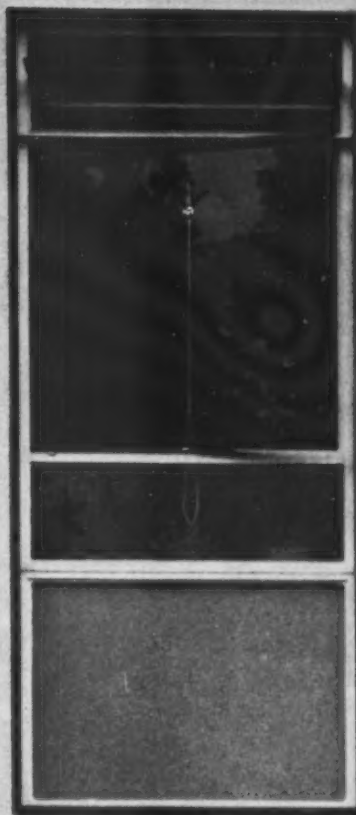
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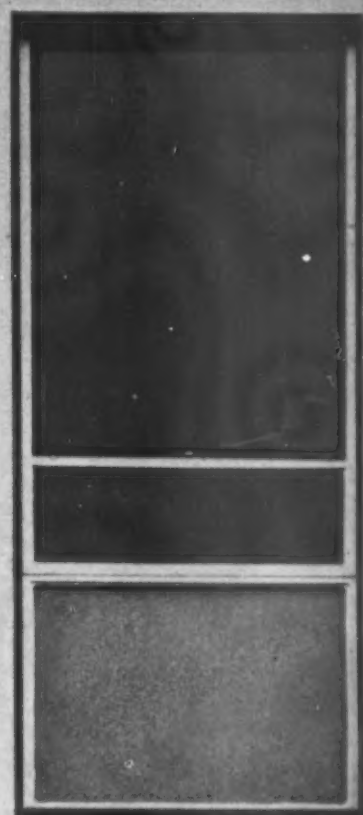
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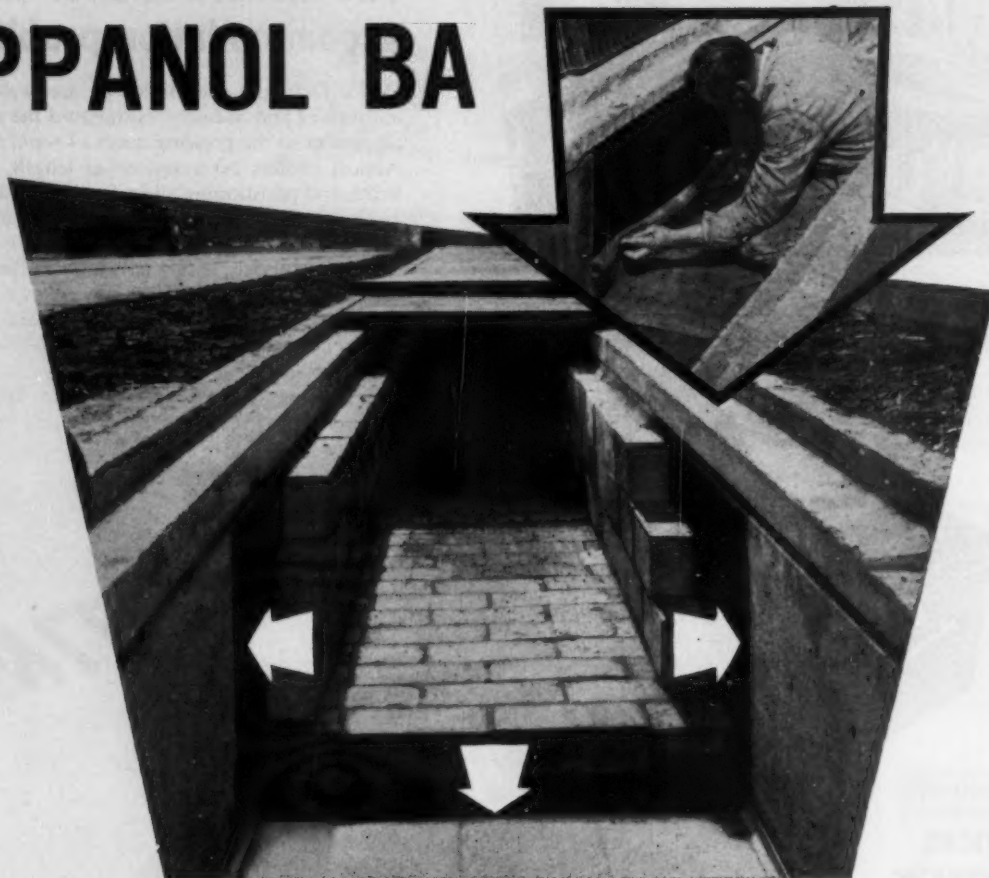
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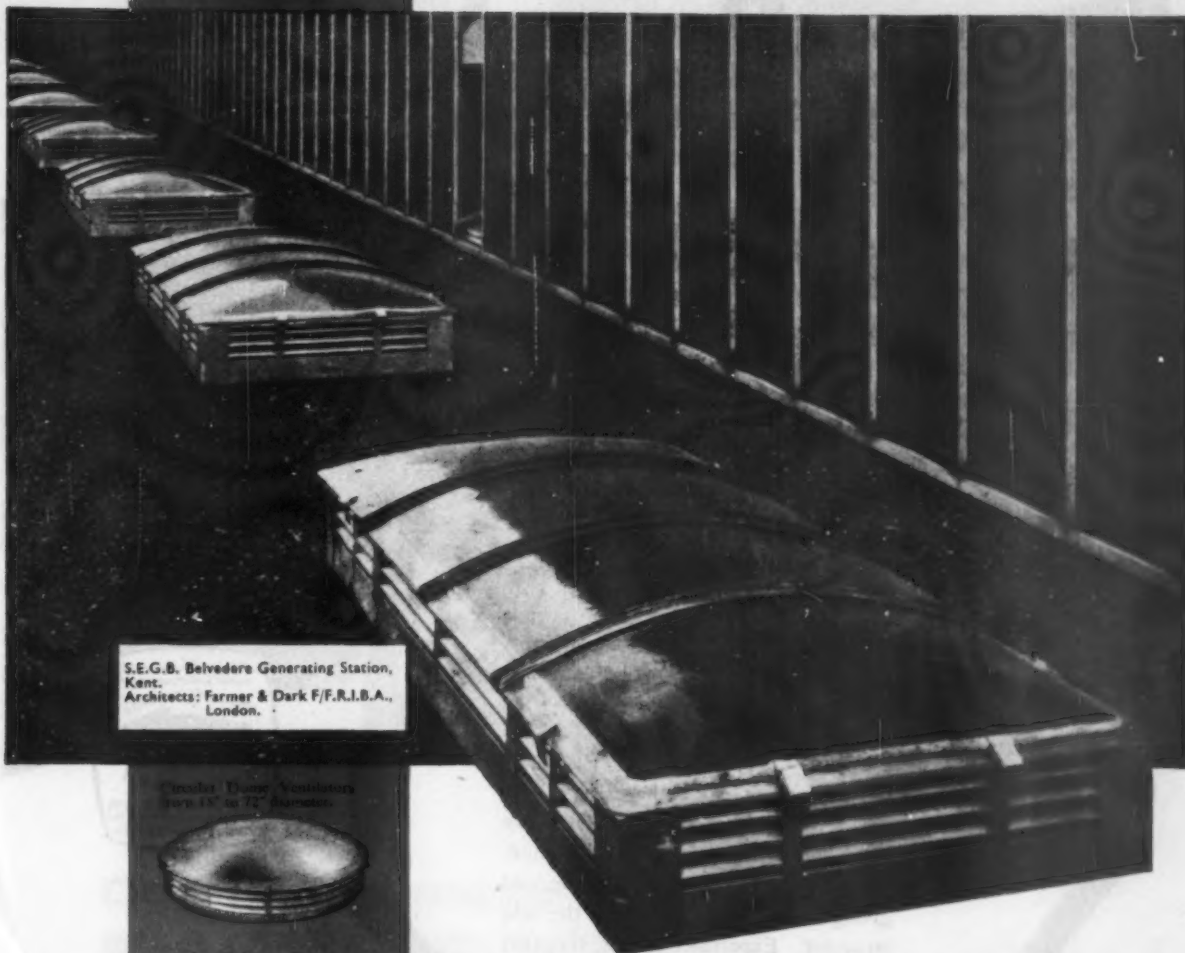
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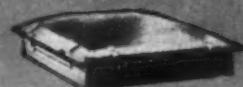
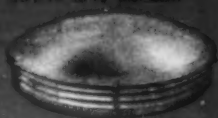
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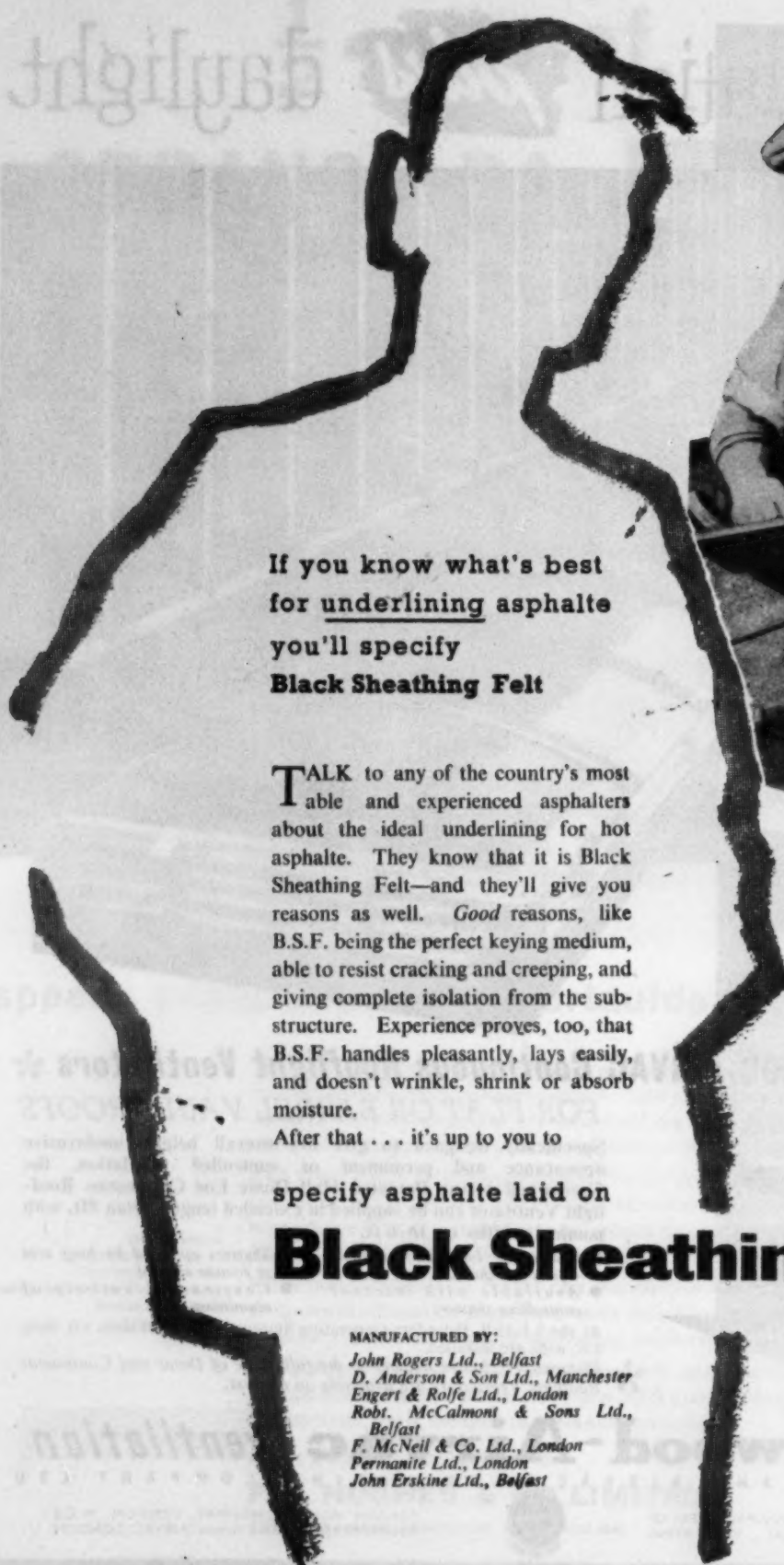
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100 'Duplus' Domelights made from 'Perspex' acrylic sheet by Duplus Domes Ltd., Chatham Street, Leicester, are installed on the roof of the Bournemouth Bus Station of the Hants and Dorset Motor Services Limited. Architect: Alan A. Briggs, F.R.I.B.A., The Tilling Association Limited.

Domelights made from 'Perspex' give maximum light

'Duplus' domelights let in the daylight at Bournemouth's new bus station. Because they are made from 'Perspex' acrylic sheet, they let in more daylight than does any other form of domelight. The use of 'Perspex' for domelights has made available to the Architect a very wide choice of shapes, colours, finishes, and degrees of light transmission. Since 'Perspex' is both strong and light, installation is simplified. These domelights made from 'Perspex' will remain efficient for very many years—despite the salty atmosphere. From both the builder's and the designer's point of view, 'Perspex' is the ideal material for domelights.

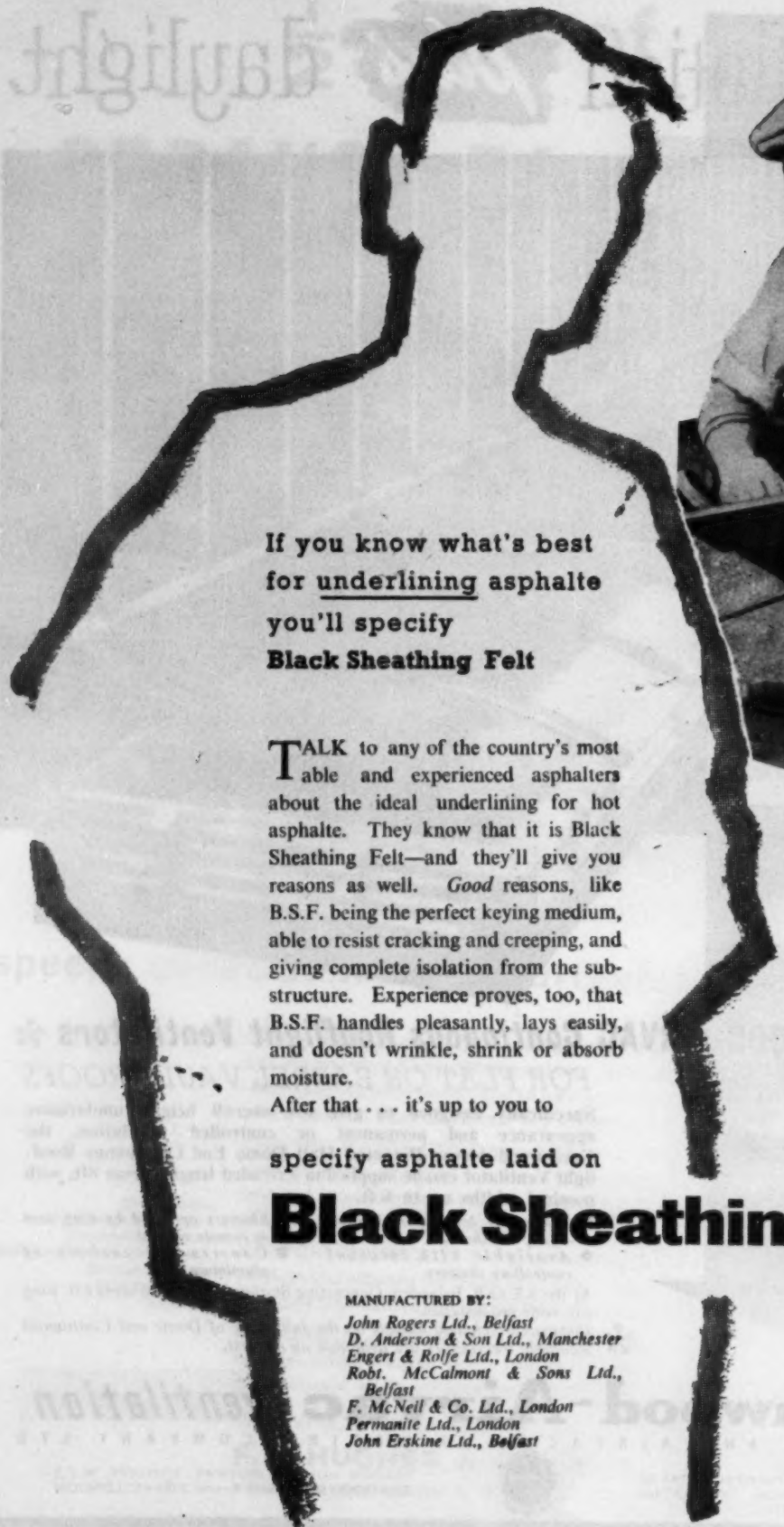
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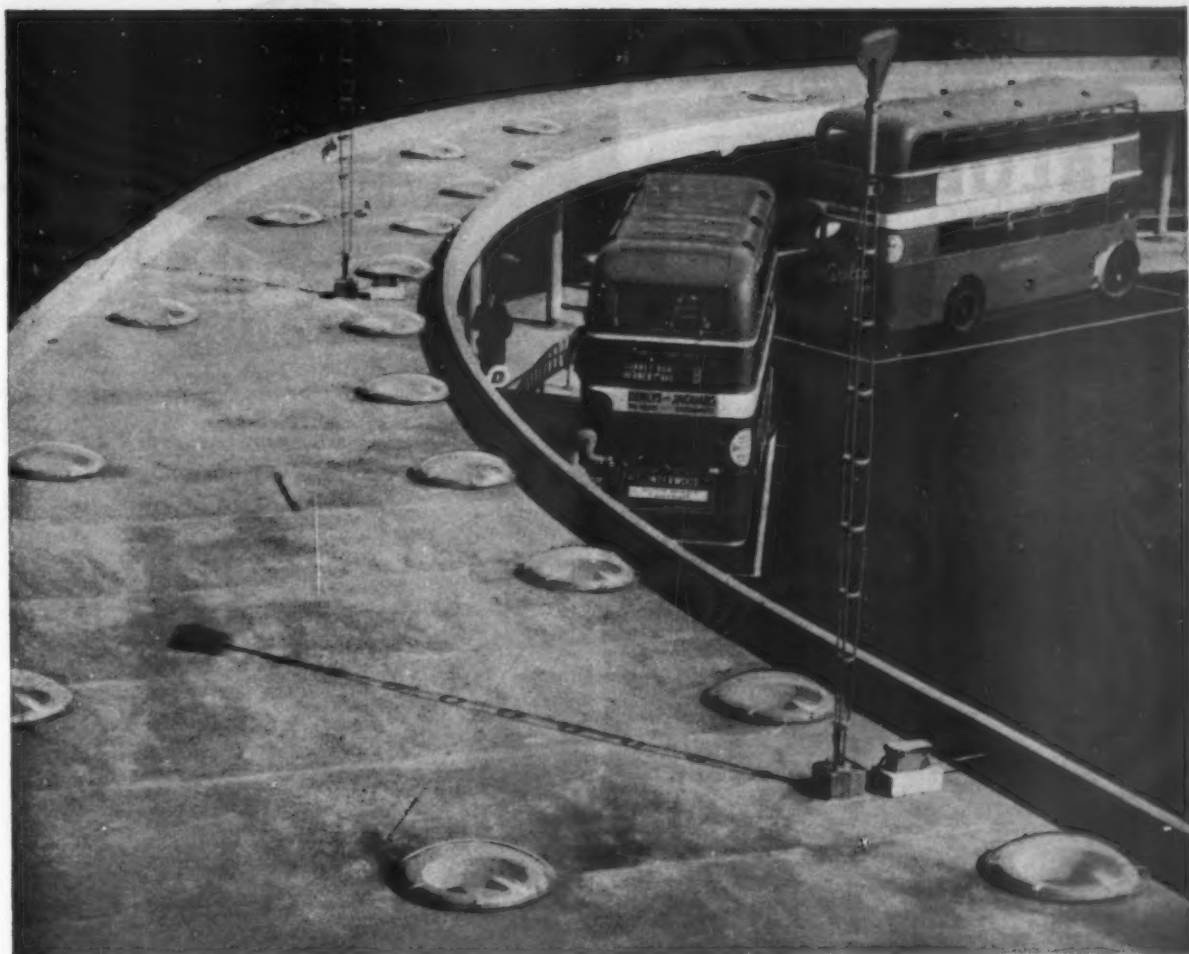
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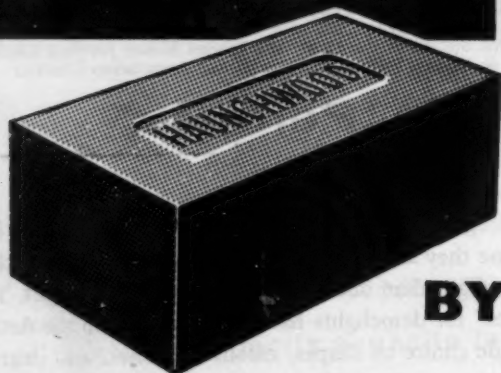
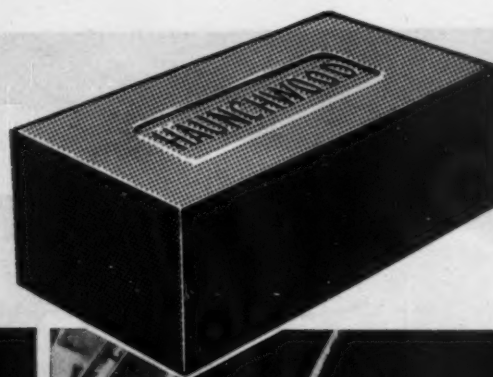
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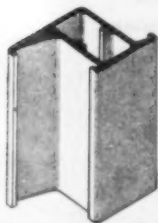
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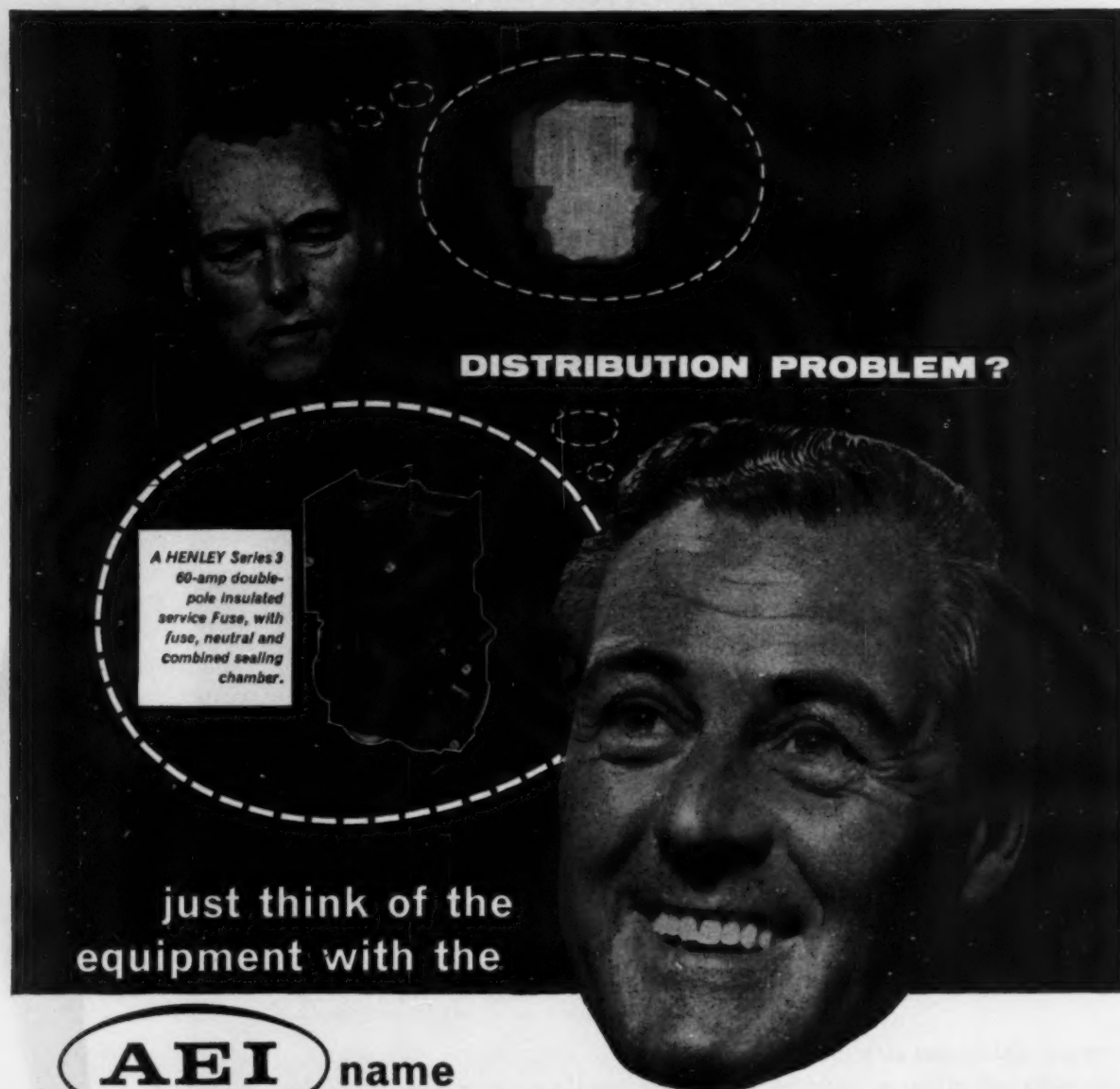
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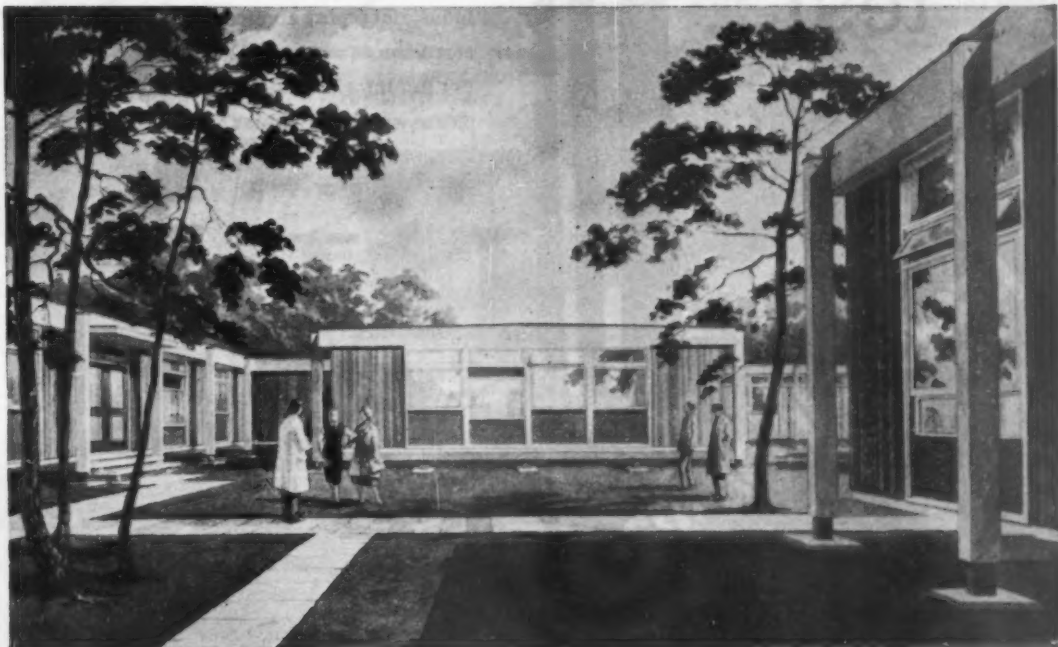
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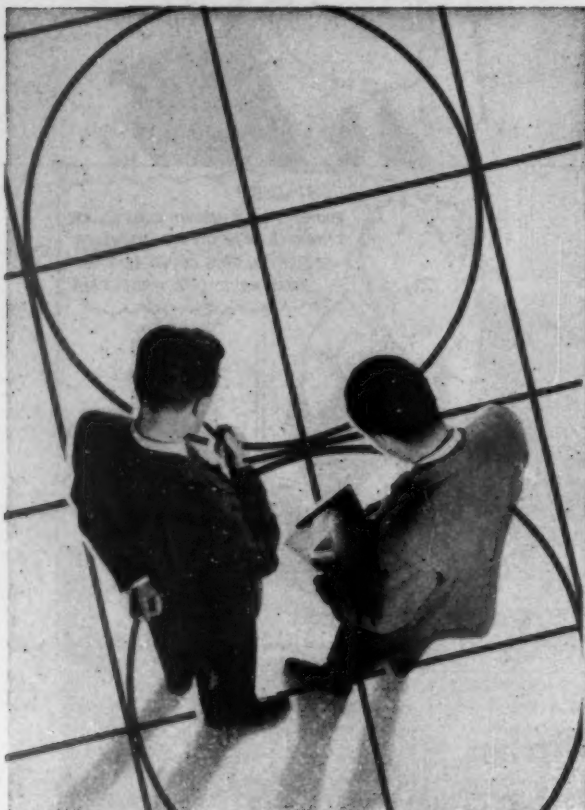
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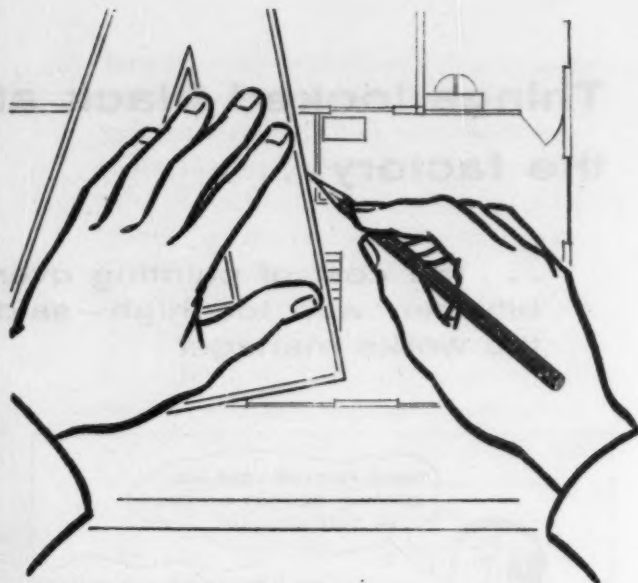
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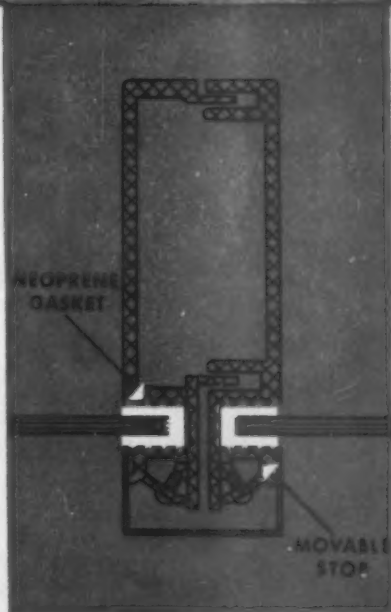
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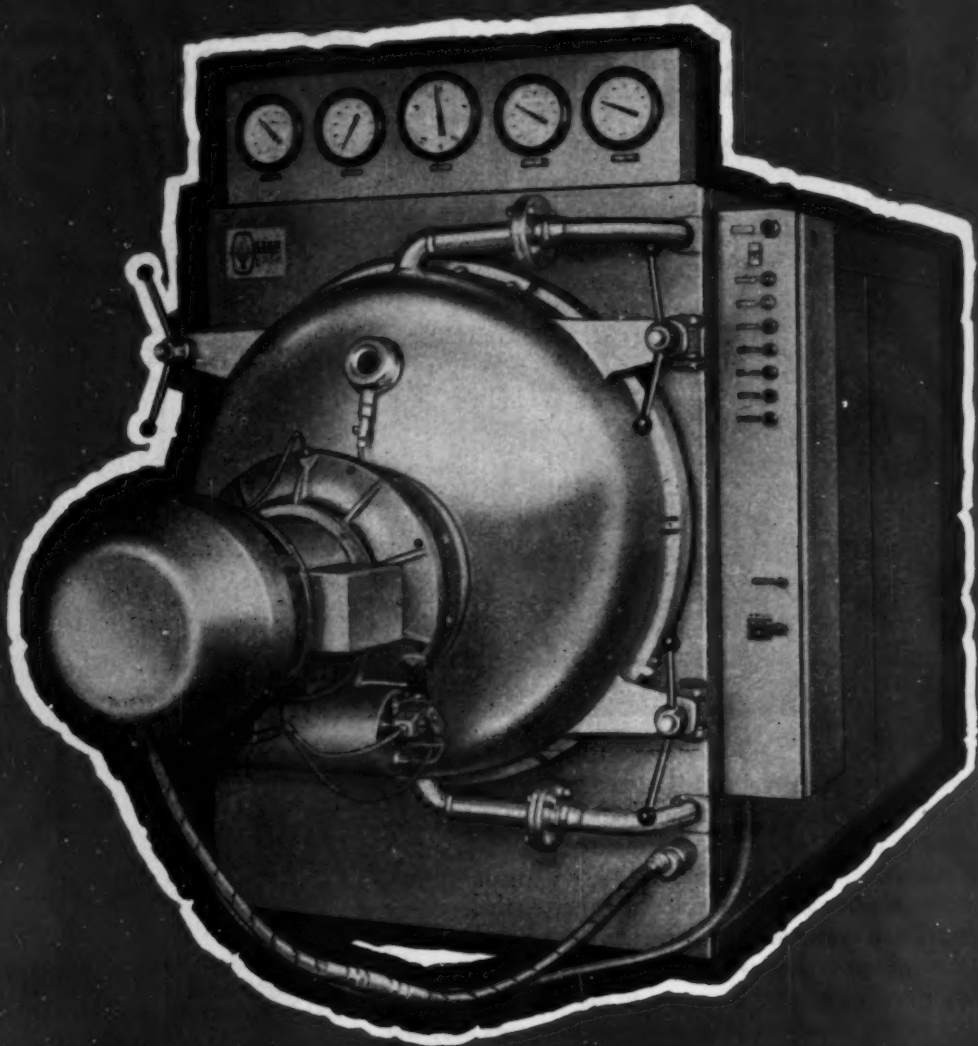


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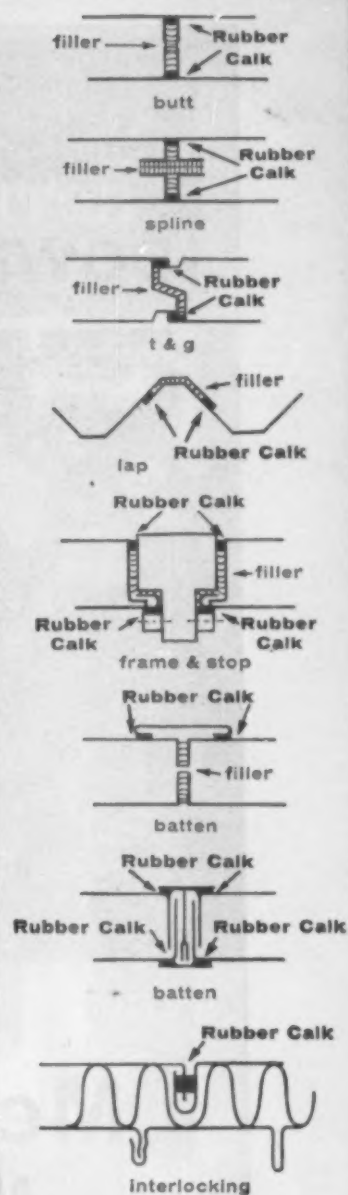
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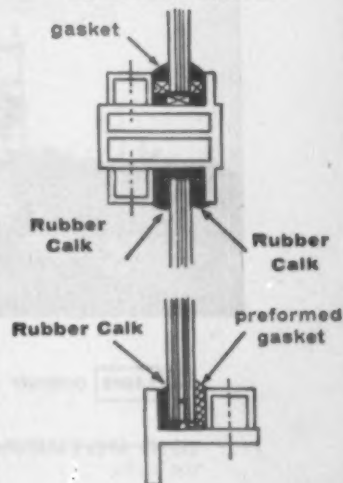
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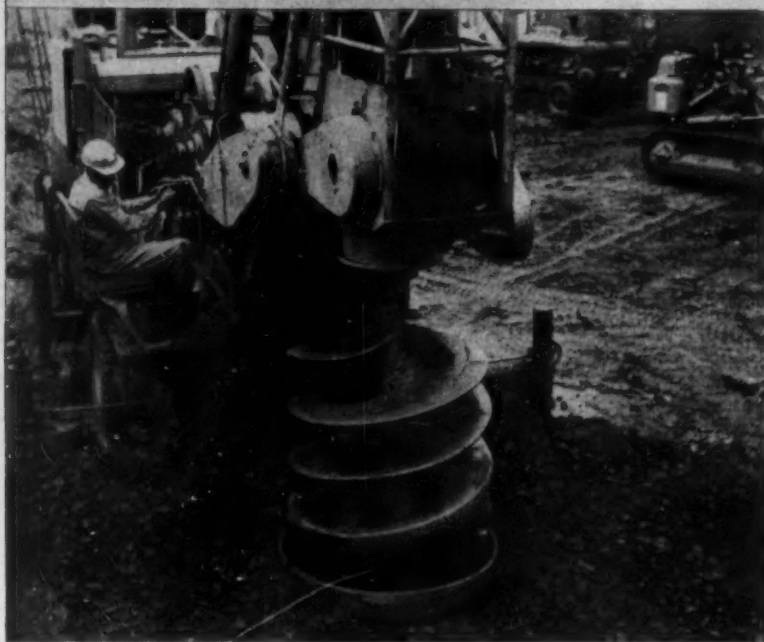


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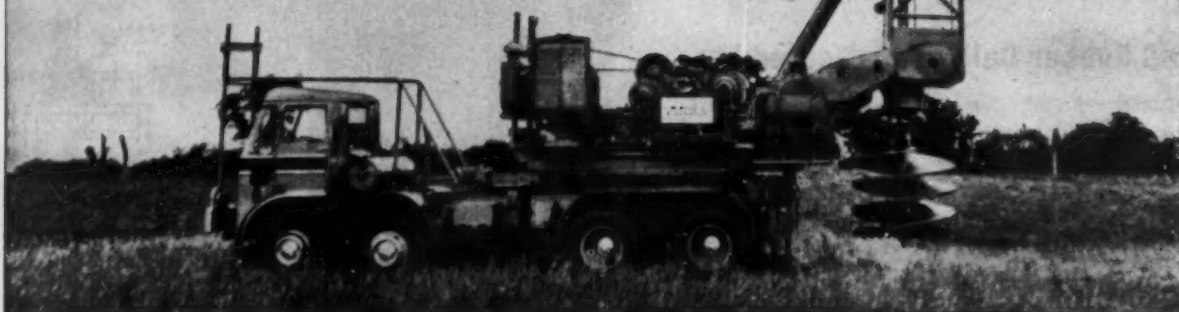


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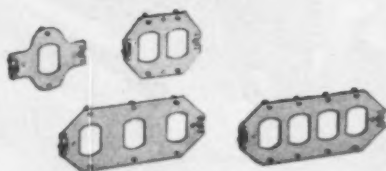
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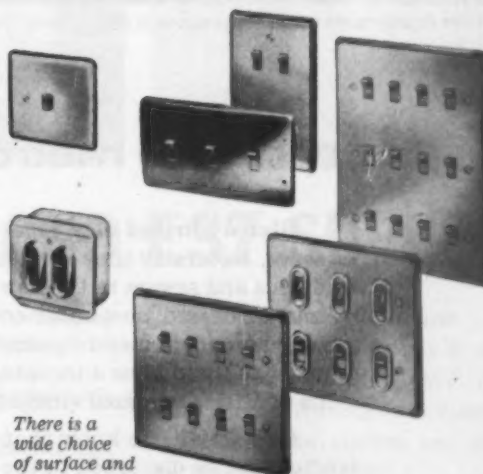
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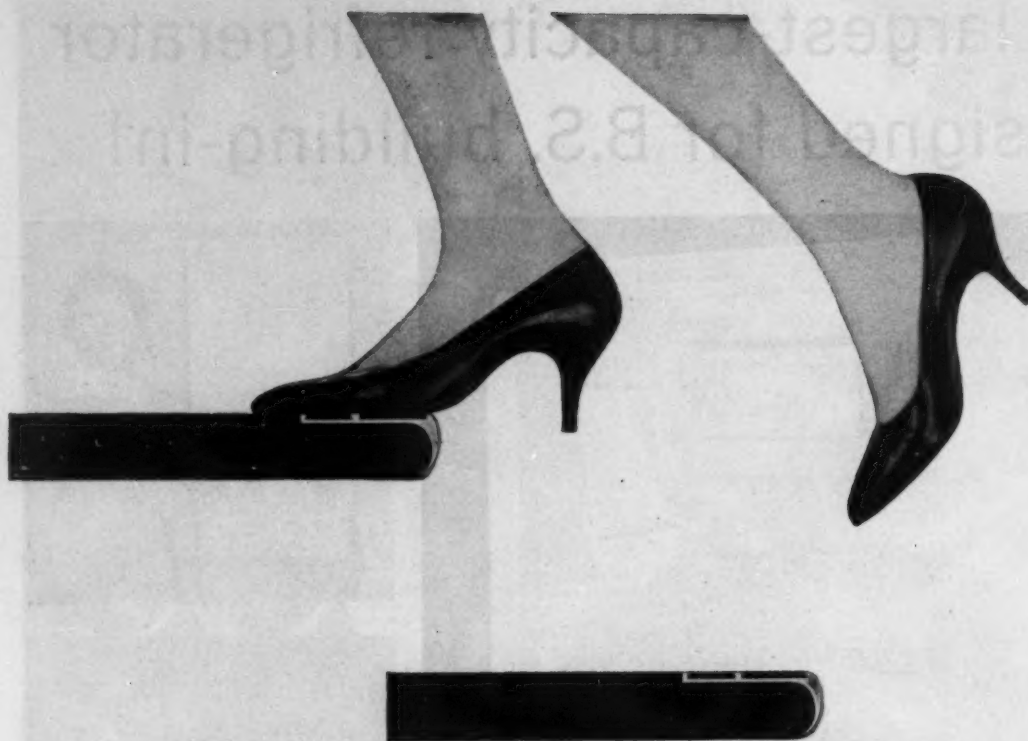
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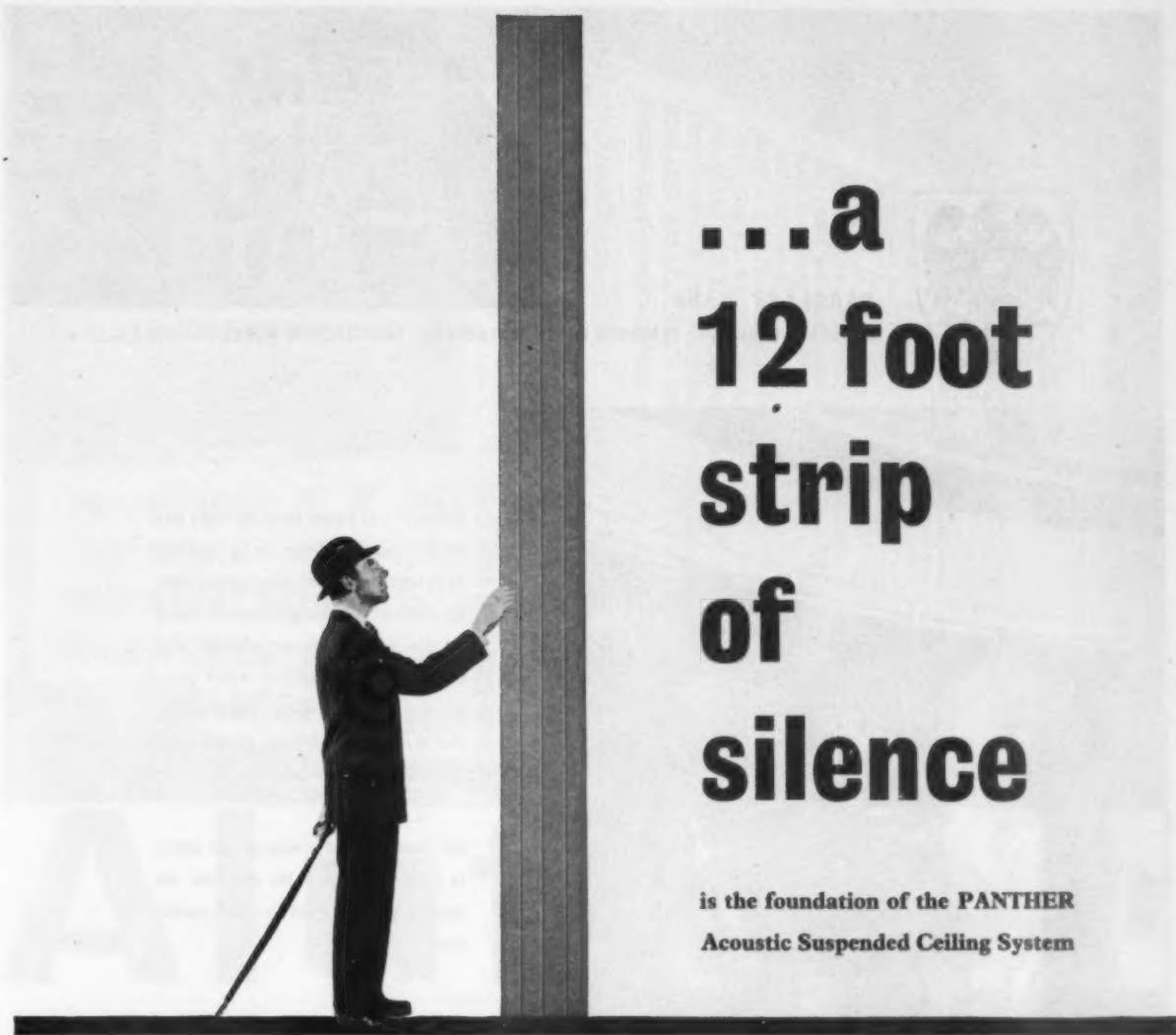
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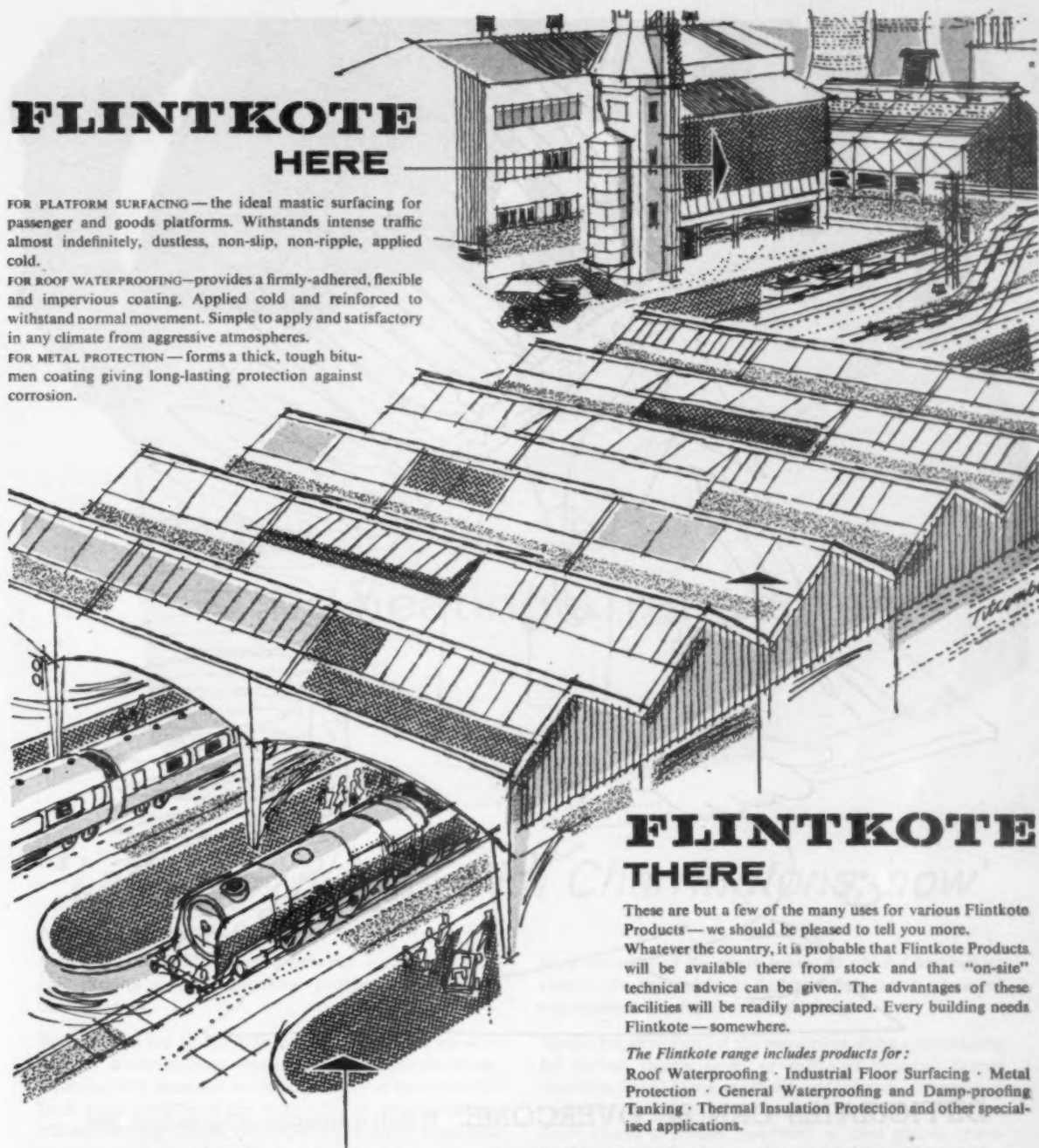
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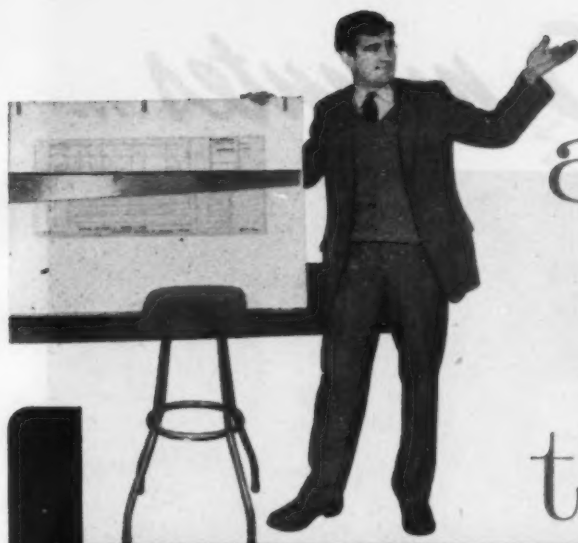
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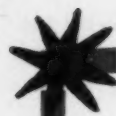
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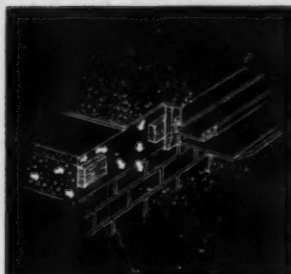
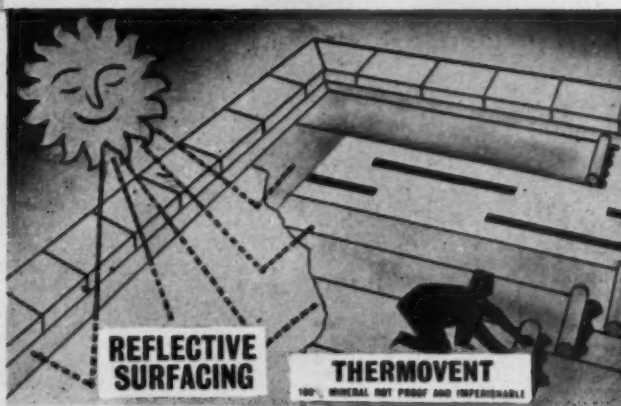
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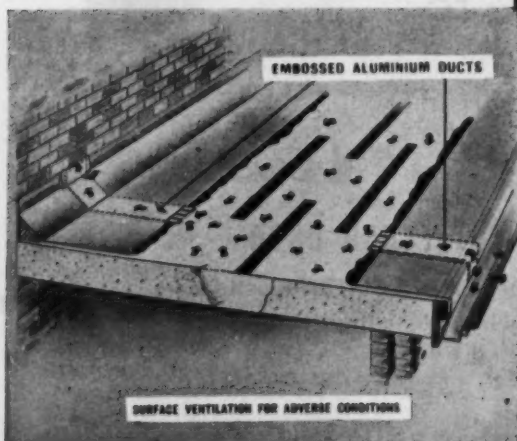
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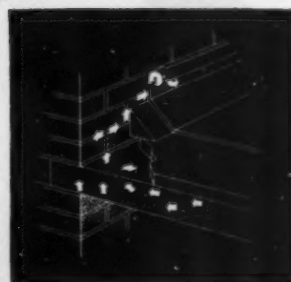
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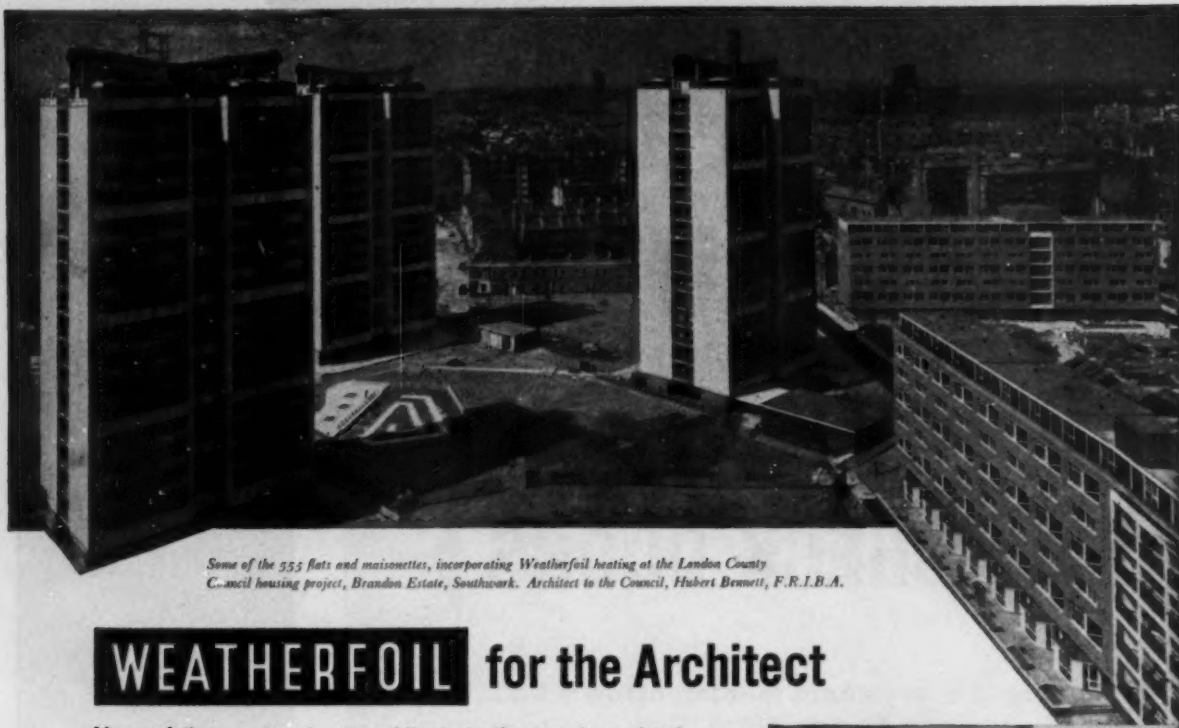


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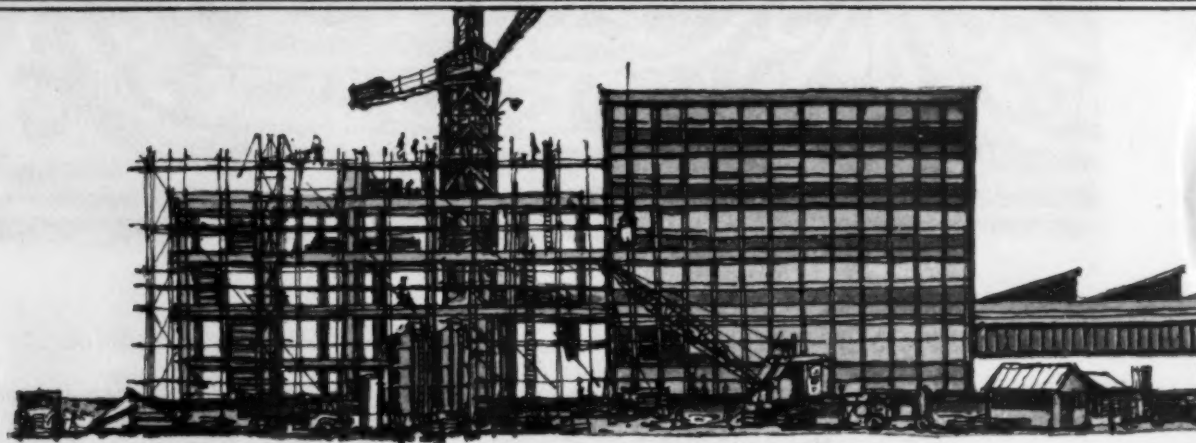
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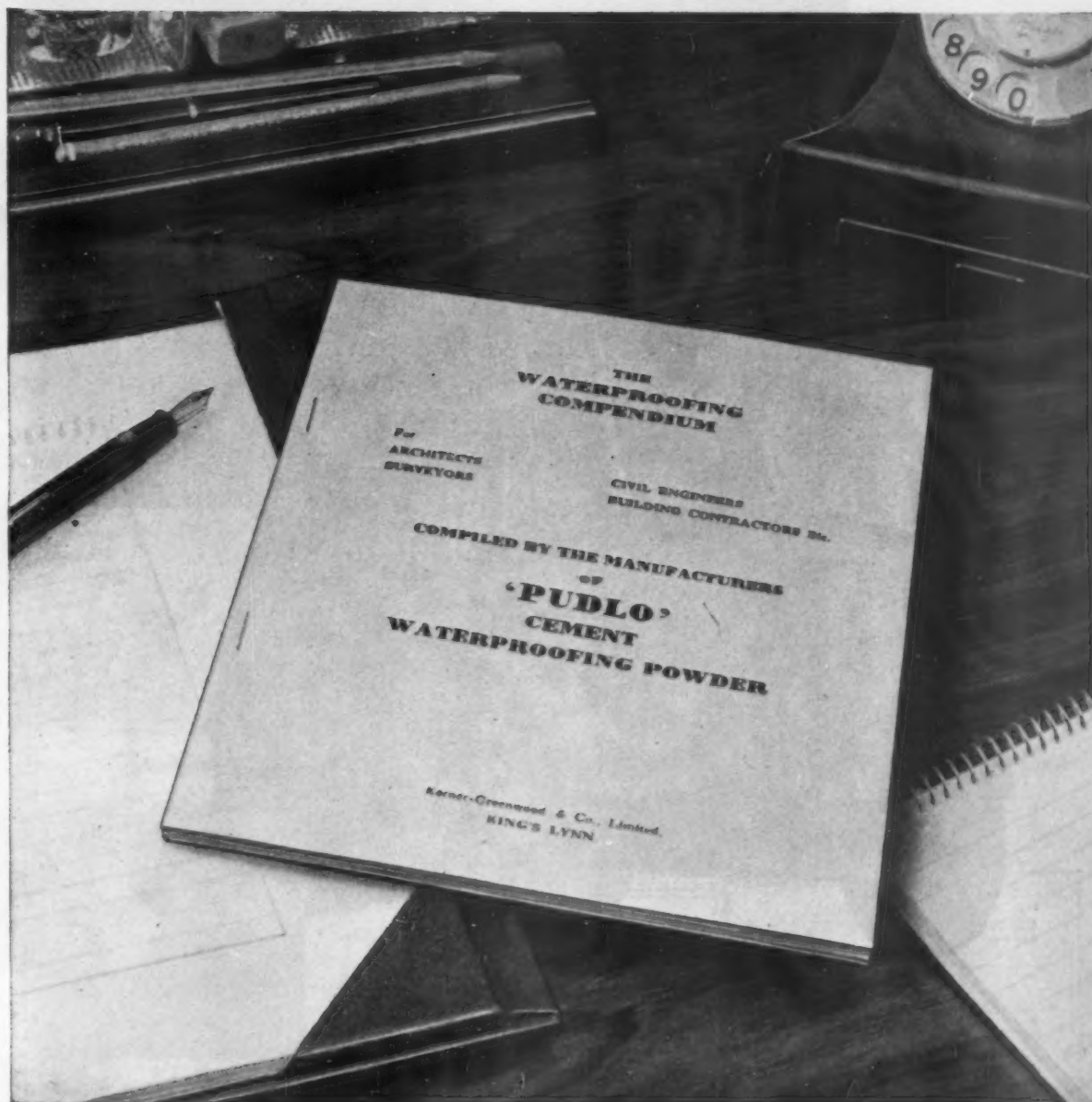
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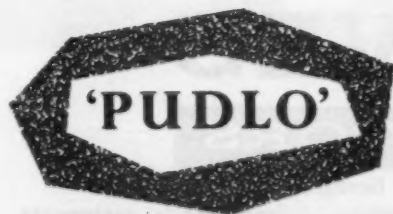


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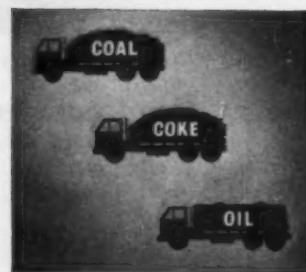
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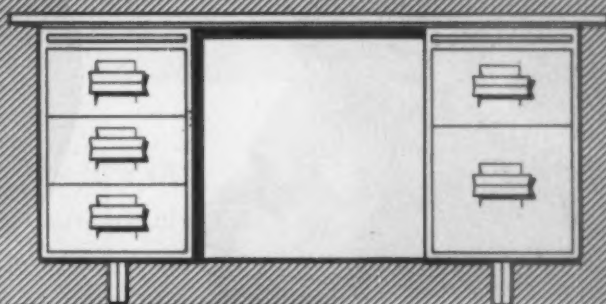
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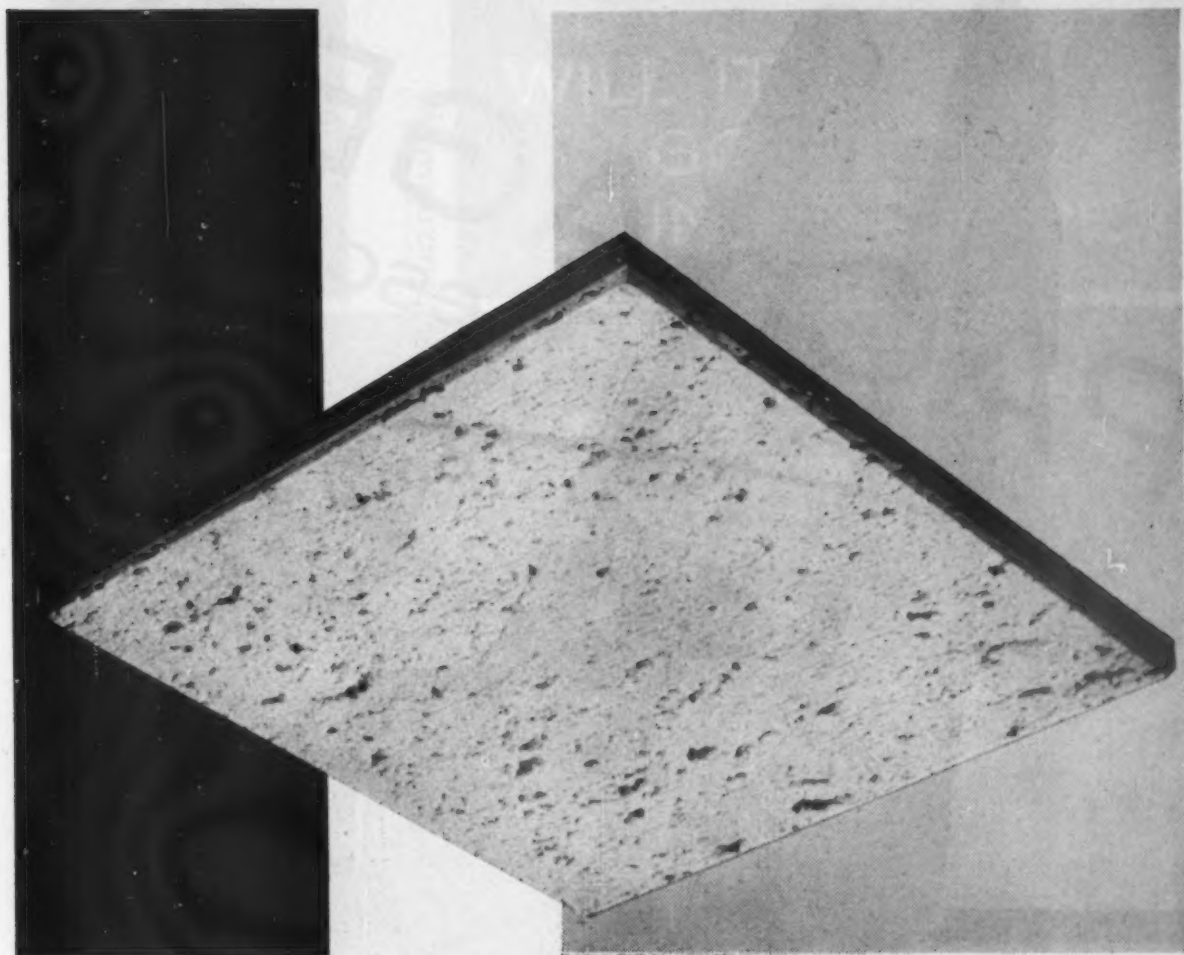
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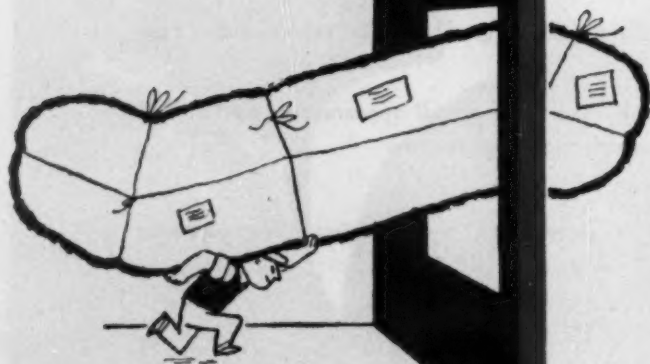
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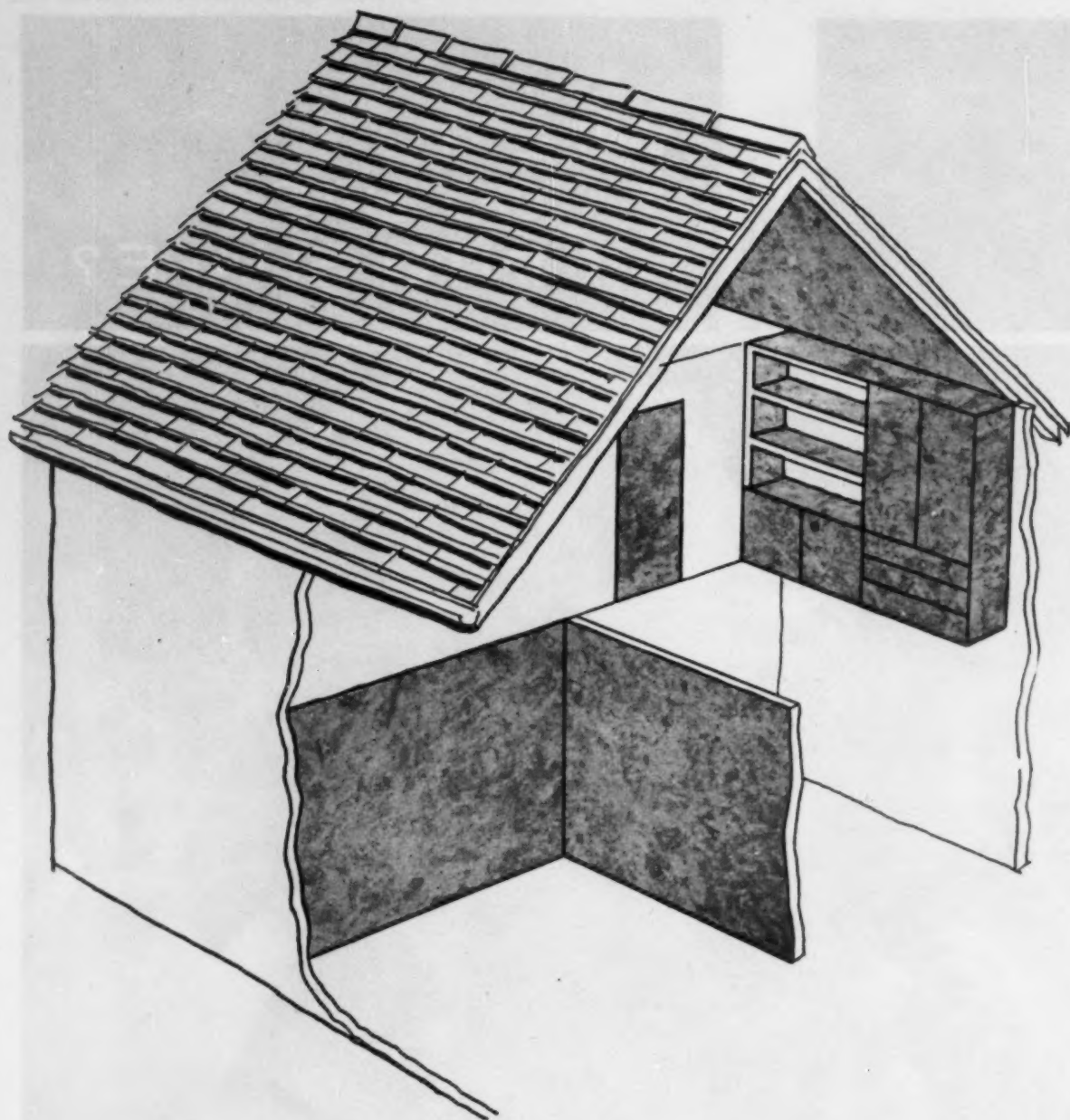


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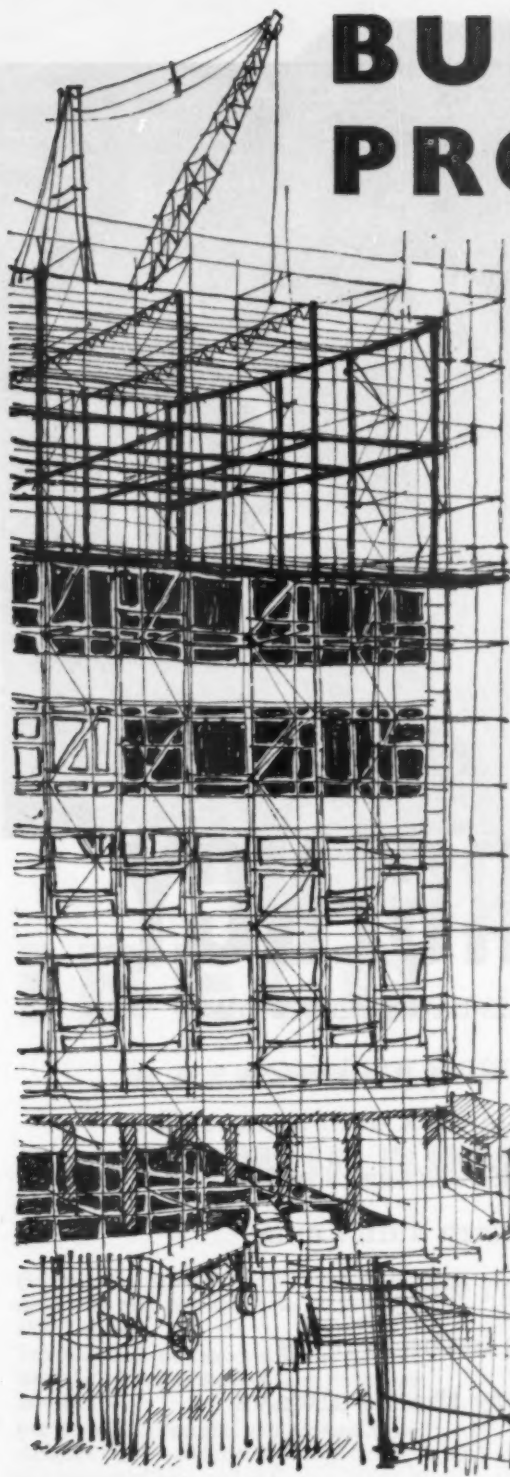
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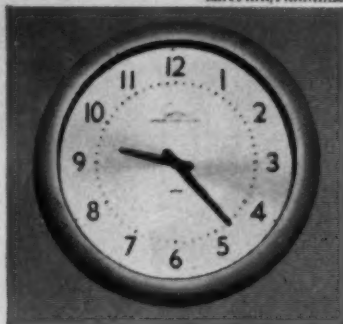
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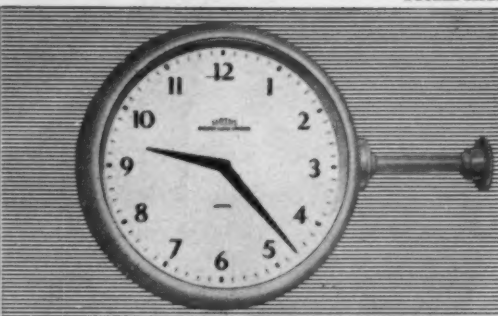


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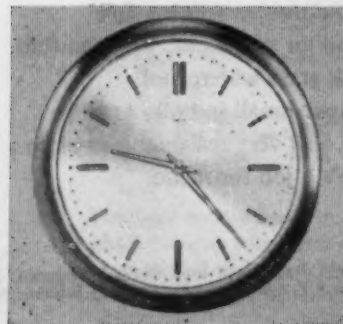
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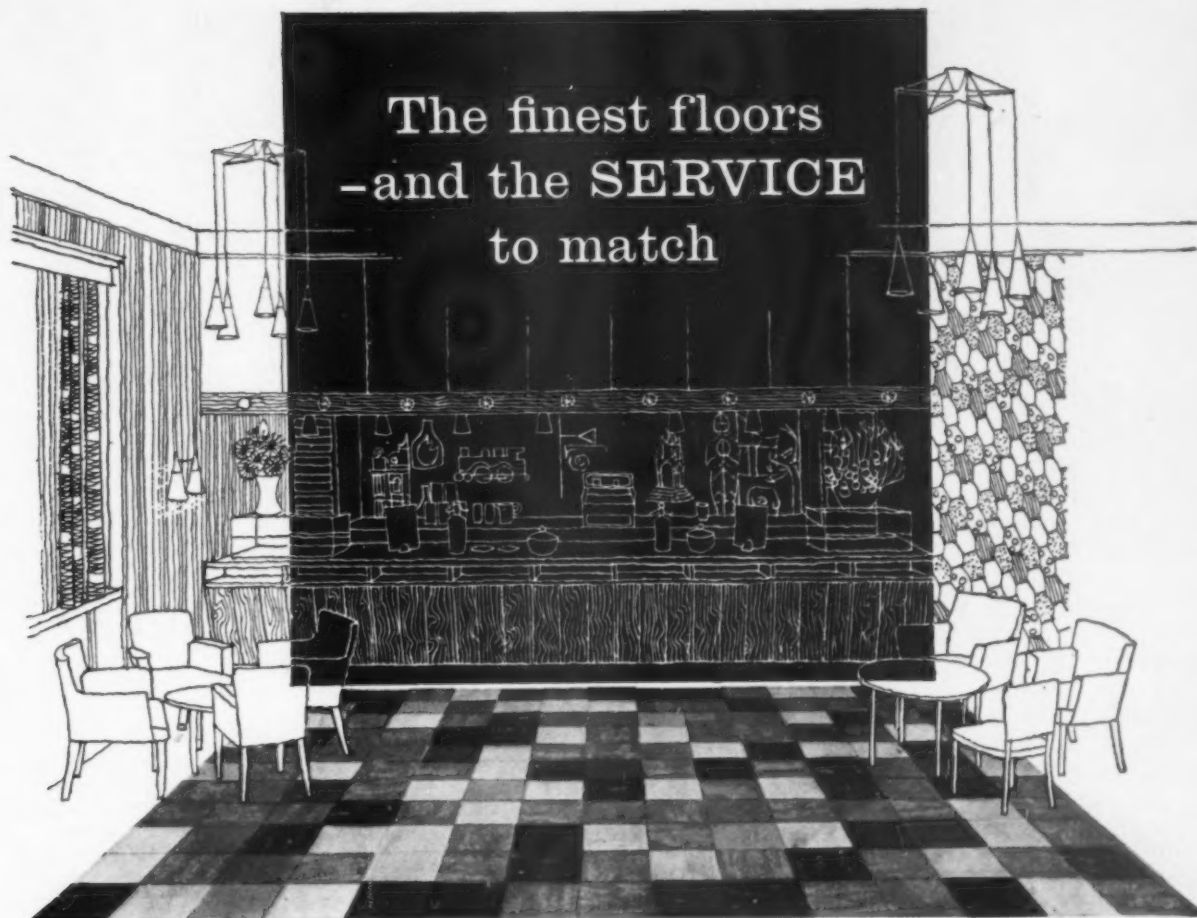
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THE ARCHITECTS' JOURNAL
(Supplement) October 13, 1960



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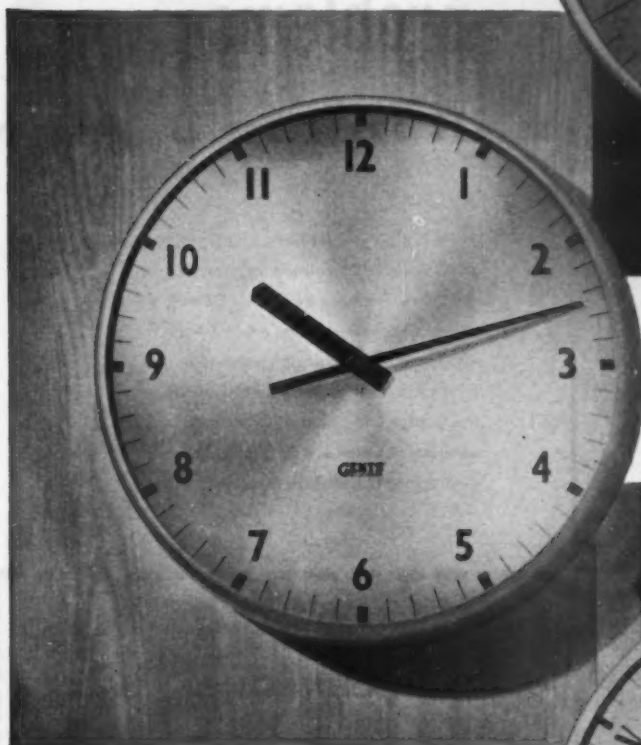


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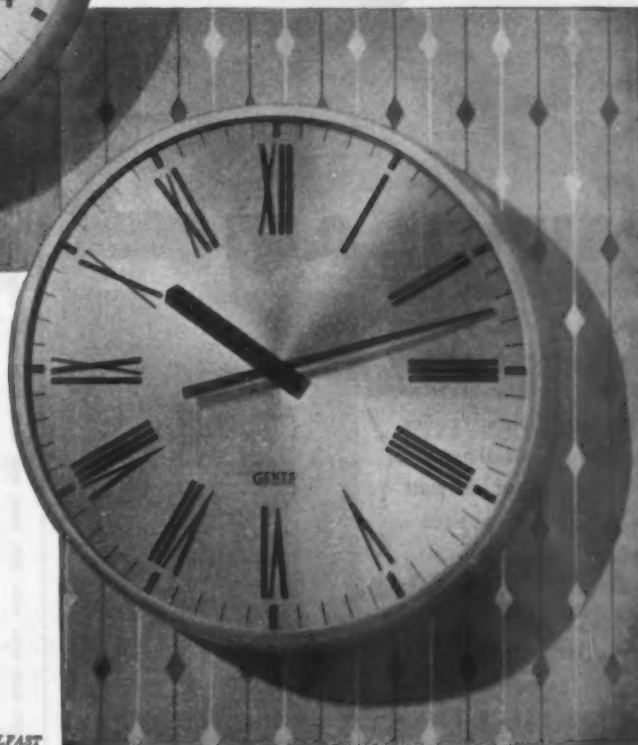
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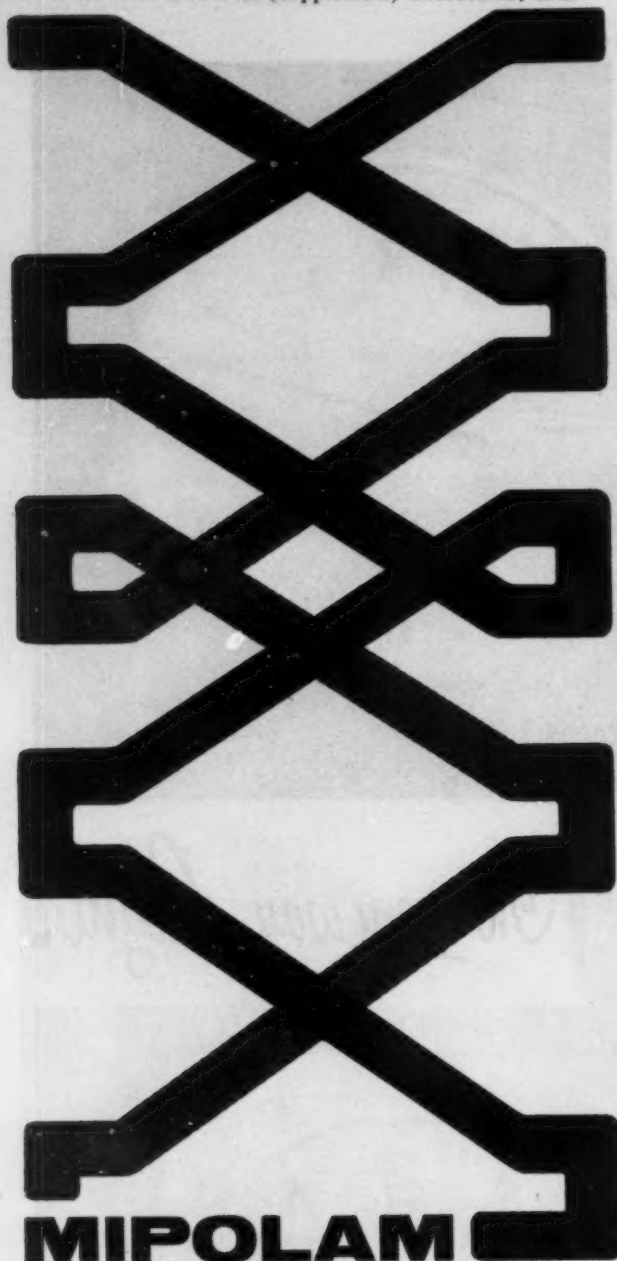
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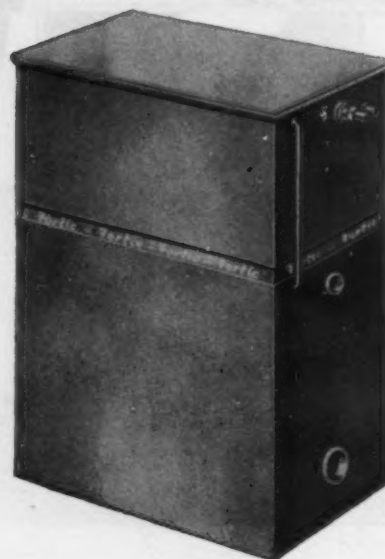
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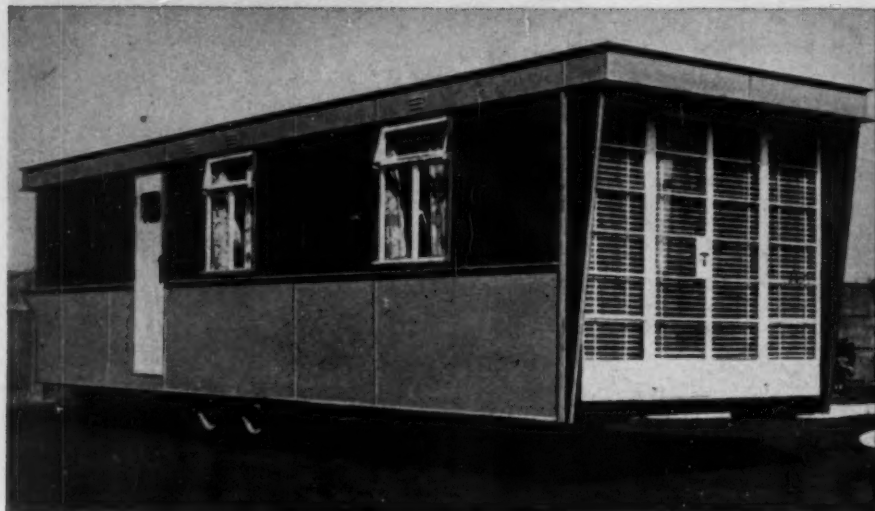
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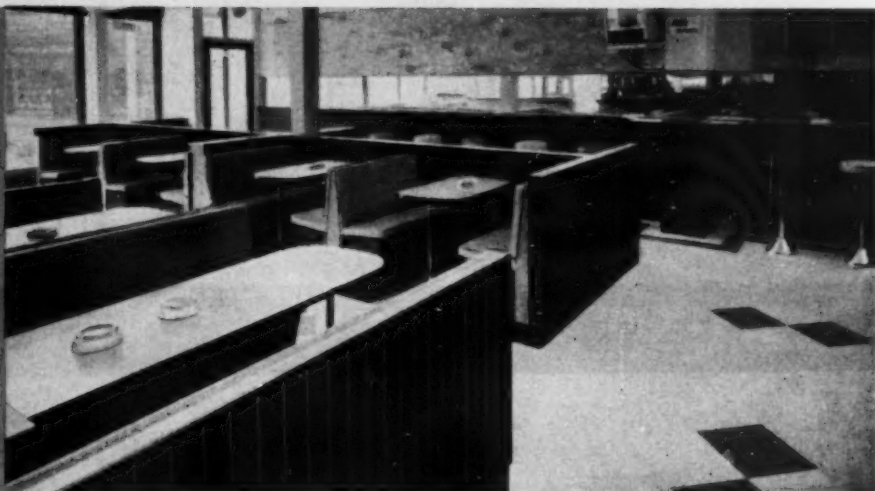
outdoors

Plydek cladding on the 'Housemaster' mobile home, built by Fairholm Products Ltd. This firm says: "Plydek is a great attraction and we are very pleased with it."

the contemporary decorative plywood

indoors

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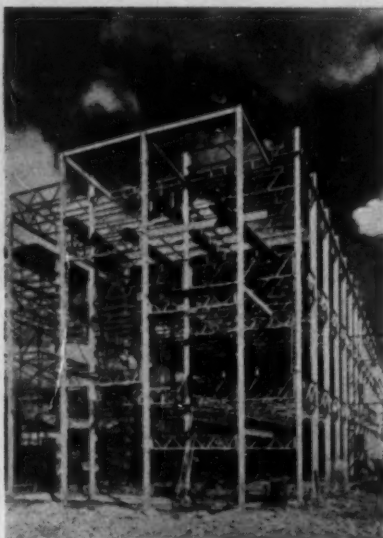
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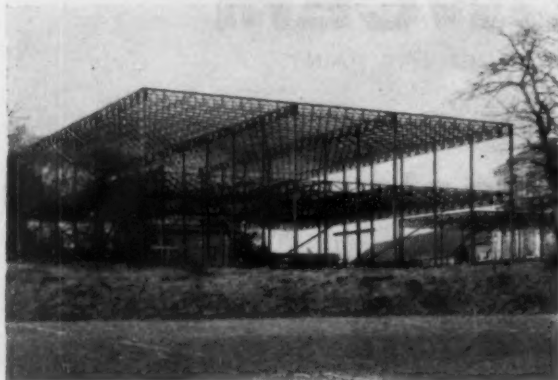
structural steelwork

THE BOWATER PAPER CORPORATION LIMITED. The Architects for the new Office Blocks at both Mersey and North-
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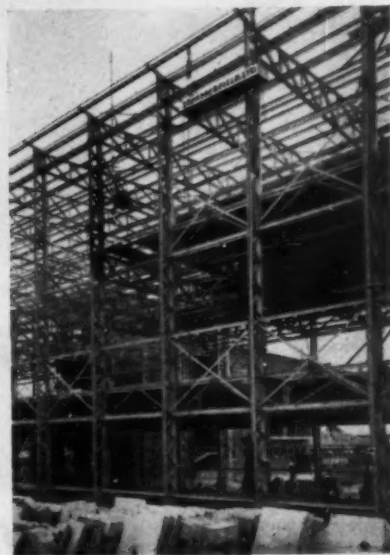
YORK. For the City of York a Grammar School. Sommerfelds designed the Steelwork on a 3 ft. 4 in. modular grid allowing complete freedom for the Architect to use curtain walling and internal arrangements.

Architect: E. Firth, F.R.I.B.A., A.M.T.P.I., City Architect.



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Architects: Messrs. J. Douglass Matthews & Partners.

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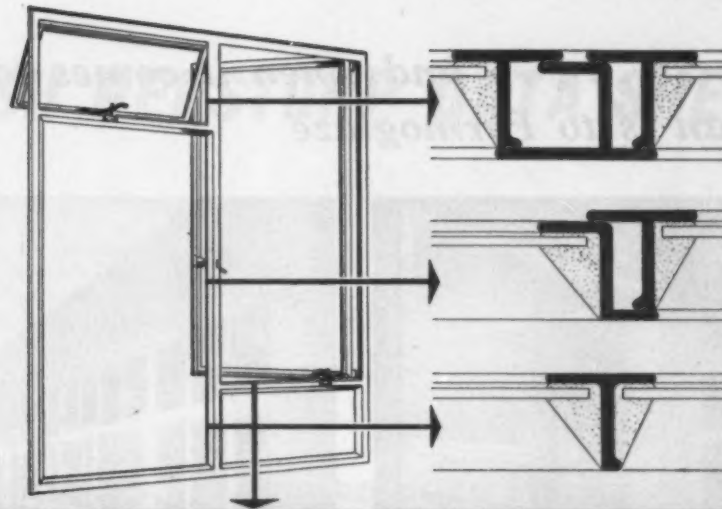
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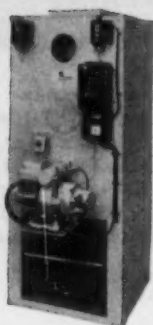
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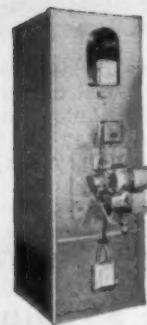
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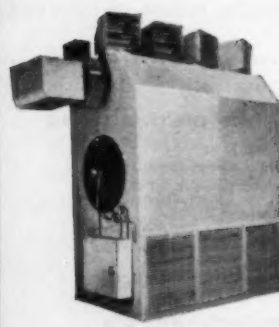
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4 AIRHEAT 'MAJOR': Output up to 1,500,000 B.T.U./hr.; max. fuel consumption 11 gals/hr. oil; 35 secs. gas oil; capacity approx. 450,000 cu. ft.

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containing full specifications

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FORMICA*

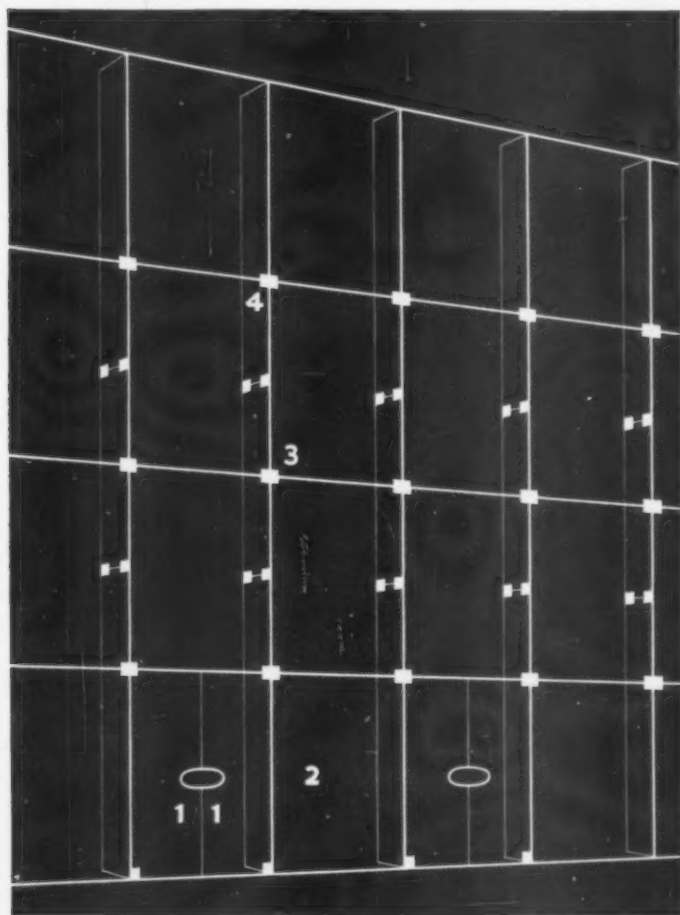
Formica Limited, De La Rue House, 84-86 Regent Street, London, W.1. *This reproduction may differ from the actual Formica colour/patterns



This showroom front, based on an idea by Edward D. Mills, F.R.I.B.A., exemplifies the opportunities for erecting exciting all-glass assemblies, using Pilkingtons' "ARMOUR-PLATE" Glass Doors and Panels.

Dramatic Display

Pilkingtons' "Armourplate" Glass Doors and Assemblies



Now, the inviting elegance of "ARMOURPLATE" Glass Doors can be expanded to include the whole frontage. For full details of Pilkingtons' "ARMOURPLATE" Glass Assemblies and fittings—which make possible uninterrupted expanses of glass, two storeys high—write to the manufacturers, Pilkington Brothers Limited.

- 1 Pilkingtons' "ARMOURPLATE" Glass Doors (guaranteed five years) are available in standard sizes up to 96" x 36". Non-standard sizes made to order.
- 2 "ARMOURPLATE" Glass fixed panels and transoms are available in sizes up to 164" x 60".
- 3 "ARMOURPLATE" Assemblies require no metal framing. Small patch fittings link and secure the separate panels.
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"ARMOURPLATE" is a registered trade mark of Pilkington Brothers Limited. Supplies are available through the usual trade channels.





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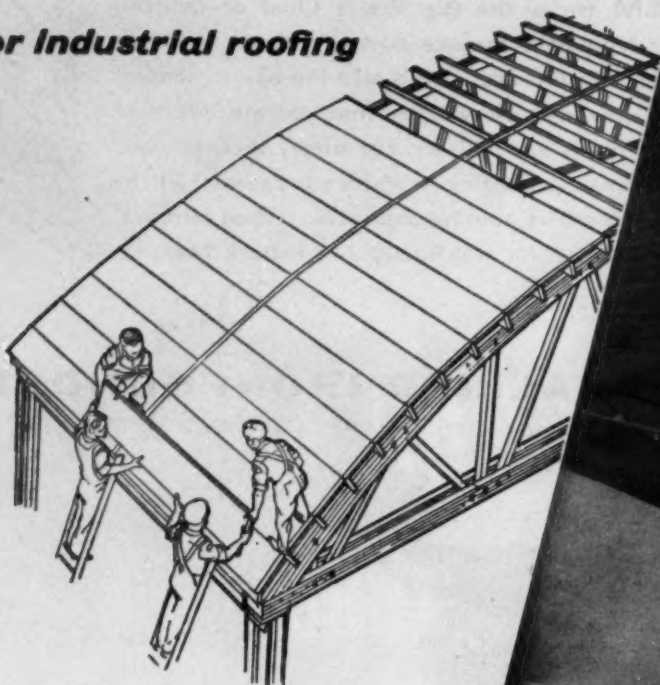
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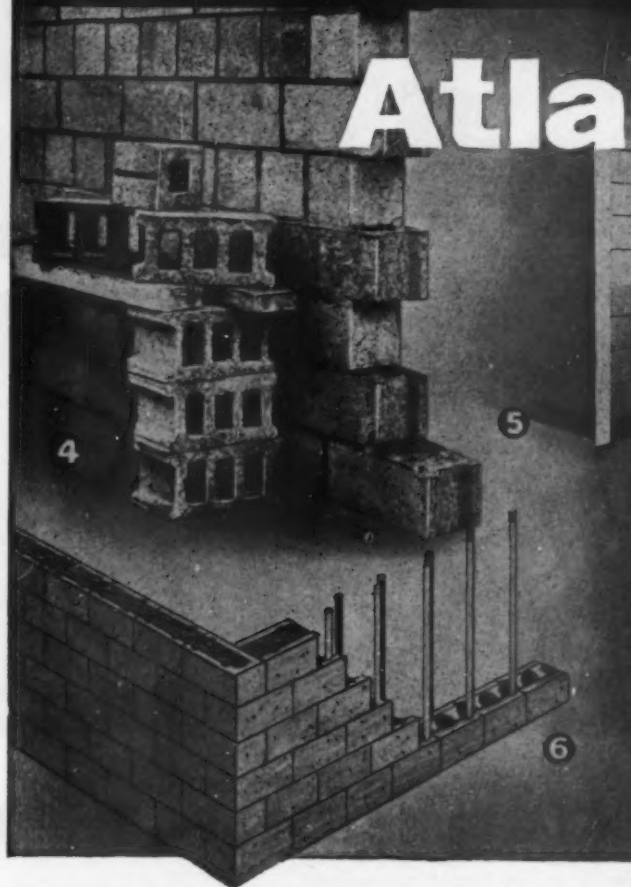
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1 WINDOWALL

A glazing frame made from superior quality pressed concrete subjected to high frequency vibration in manufacture, which with reinforcement in the corners can be built into large areas of glazing.

2 RECONSTRUCTED STONE

A complete service is available so that details can be taken off architects' drawings, stone produced and fixing sub-contracts undertaken.

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Atlas Stone have specialised in the production of these units for some time and are confident that they can offer material second to none on the market.

4 B. S. BUILDING BLOCKS

One of the largest single block making units is operating at Greenhithe Works producing 1000 yards per day.

5 SPECTRA-GLAZE

Atlas Stone have pioneered the introduction to the U.K. of this range of blocks with a semi-glazed colored finish.

6 QUICKBUILD

A new block which can make material savings in building costs.

7 PRECAST CONCRETE ROOF AND FLOOR UNITS

Illustrate the capacity for producing structural concrete to specification. Atlas Stone are currently making the OMNIA floor under sub-license.



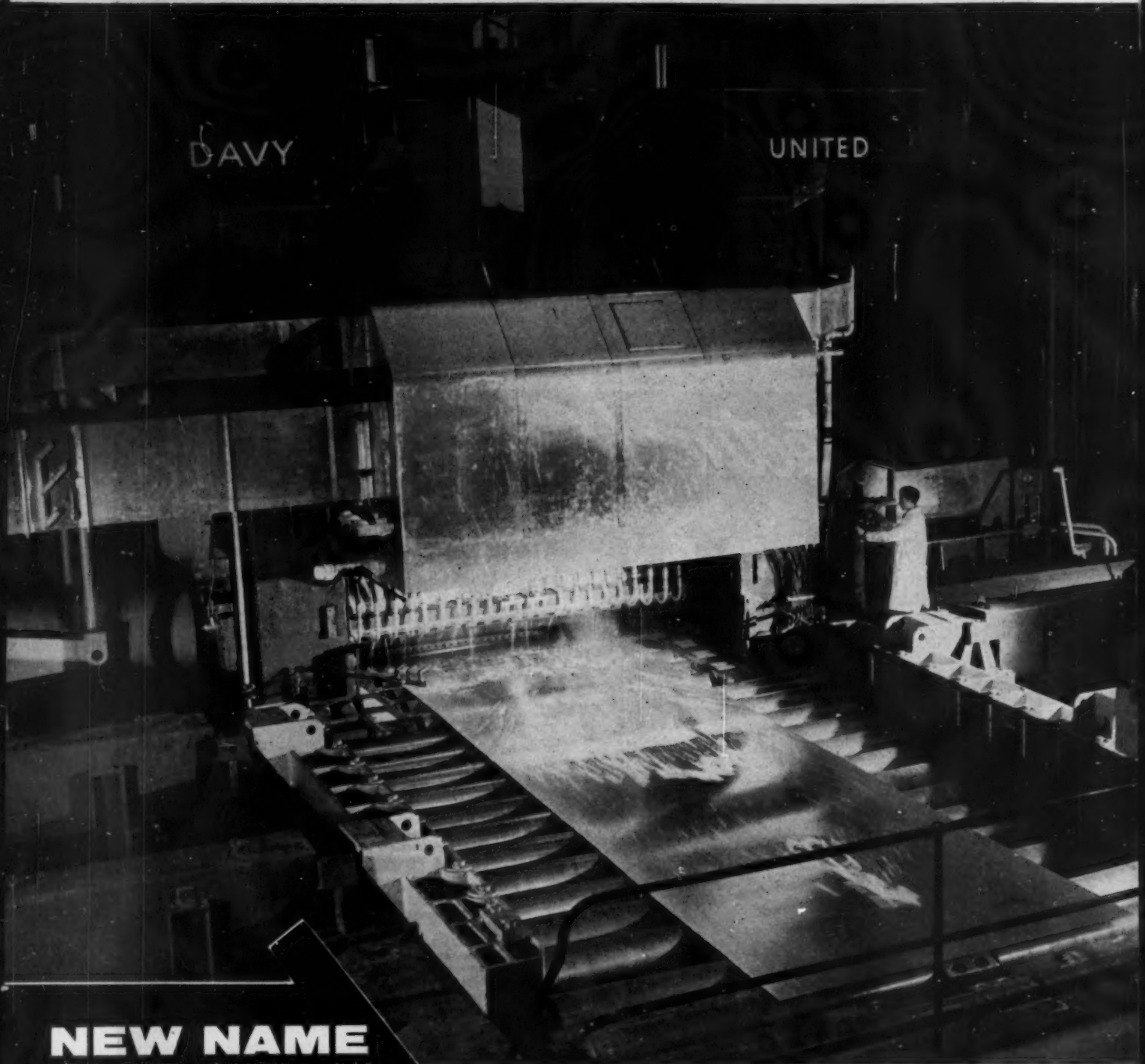
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THE ARCHITECTS' JOURNAL (Supplement) October 13, 1960

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aluminium rolling mill in Europe



This 8,000 horse-power 144-inch mill, first stage in a 'hot line' one third of a mile long, is the centrepiece of the latest expansion of the continuous strip mill at Rogerstone, Monmouthshire. New equipment and modernisation at a cost of over £7 million makes Rogerstone the largest aluminium rolling mill in Europe, with a nominal capacity of 70,000 tons of sheet and strip products a year, plus a substantial extra capacity for hot-rolled coil and plate. It demonstrates the determination of Alcan Industries - the new name of Northern Aluminium Company - to maintain their position as leading suppliers of aluminium products to British industry. Leadership in equipment is backed by long experience in the application of aluminium, including joining methods. If you use, or might well use, aluminium, for expert advice get in touch with your nearest Alcan Industries (formerly Northern Aluminium) office.

LIMITED

This new name identifies the company more clearly as a member of the Aluminium Limited of Canada enterprise, comprising some fifty companies in all parts of the world. Emphasis is thereby laid on the advantages that the company and its customers enjoy in being able to avail themselves of the Group's extensive research and development resources, and its great fund of experience in the smelting, manufacture and application of aluminium.



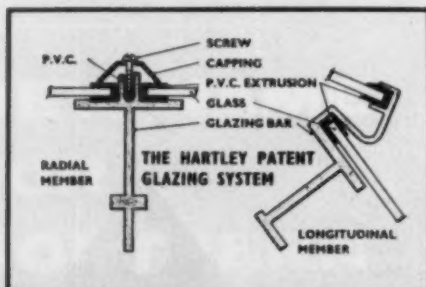
A member of the
ALUMINIUM LIMITED OF CANADA
group of companies



Floral Conservatory, for the Rhyl Urban District Council.
312 ft. long x 43 ft. wide x 25ft. high

The **HARTLEY** Glasshouse range covers all needs

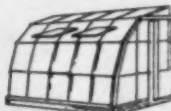
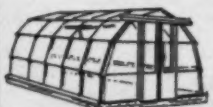


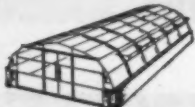

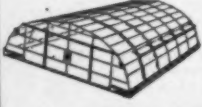
The Hartley range of glasshouses has been designed to meet the requirements of Parks, Research Establishments, Horticulturalists, Nurserymen and Private Gardeners, and include these outstanding features:—

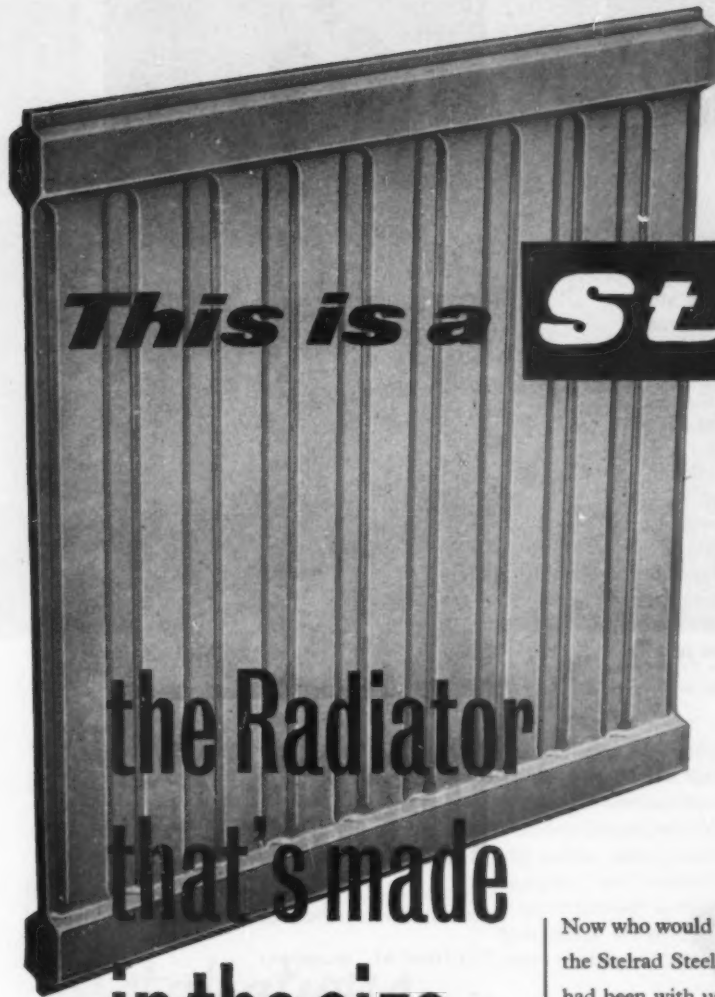


Aluminium alloy construction; new shape with new glazing system to admit far more light; absence of internal supports for unrestricted working space; virtual elimination of breakages—each pane is enclosed on all edges by P.V.C. extrusion and aluminium frame, and so safeguarded against shock, draughts and weather, and against breakages caused by expansion and contraction; stove enamelled structure preventing unsightly surface corrosion.

Full details of the Hartley Range are available on request to

V. & N. HARTLEY LIMITED
GREENFIELD, NR. OLDHAM, LANCASHIRE
Telephone: Saddleworth 444

<p>This is the full range of Hartley Glasshouses. Built to any length.</p>	 Hartley "7" 7'3" Wide 7'9" High (Lean-to)
 Hartley "10" 10'0" Wide, 7'1" High	 Palm House 38'6" Wide, 18'6" High
 Hartley "14" 13'3" Wide, 8'6" High	 Hartley "18" 18'4" Wide, 9'8" High
 Hartley "21" 21' 2 1/2" Wide 10' 8" High	 Hartley "27" 28'1" Wide, 11'9" High



This is a *Stelrad*

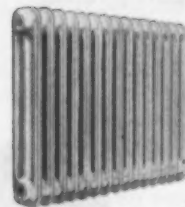
**the Radiator
that's made
in the size
you want,
and in the
shape your
client likes**



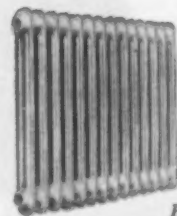
Double Wall



Angle-Wall



3-Column



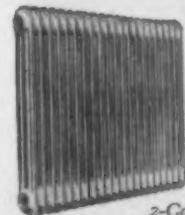
Easy Clean

Now who would have thought the Stelrad Steel Radiator had been with us for nigh on twenty-five years?

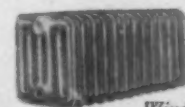
Why, you can probably remember people telling about it at the time.

***Stelrad* PATENTED PROCESS RADIATORS**

Some were doubters, holding forth about steel and how the only Radiator to use was one that was not only heavy to handle but ungainly to behold. But where is the Stelrad today? In buildings large and small throughout the length and breadth of the land, and in a range so wide there is not a single nook a Stelrad cannot heat.



2-Column



Window seat type

STEEL RADIATORS LIMITED

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Next to Godliness *'Tis said*

Briggs minor doesn't give a tinker's cuss about hygiene. But to those of us who are responsible for the welfare of these supermen of tomorrow, hygiene is more, much more, than jolly good fun. That's why the choice of just the right sanitary equipment is of paramount importance. **Ceramic Glazed Fireclay Sanitary Ware** is the obvious answer. **Ceramic Glazed Fireclay** is *clean*. It looks *clean*. No lurking germ-traps here. Its gleaming surface is impervious to dirt and grease, resistant to acids. And remember its immense strength and durability. When you specify sanitary ware for schools, or for any other public building for that matter, specify **Ceramic Glazed Fireclay**. You just can't go wrong.



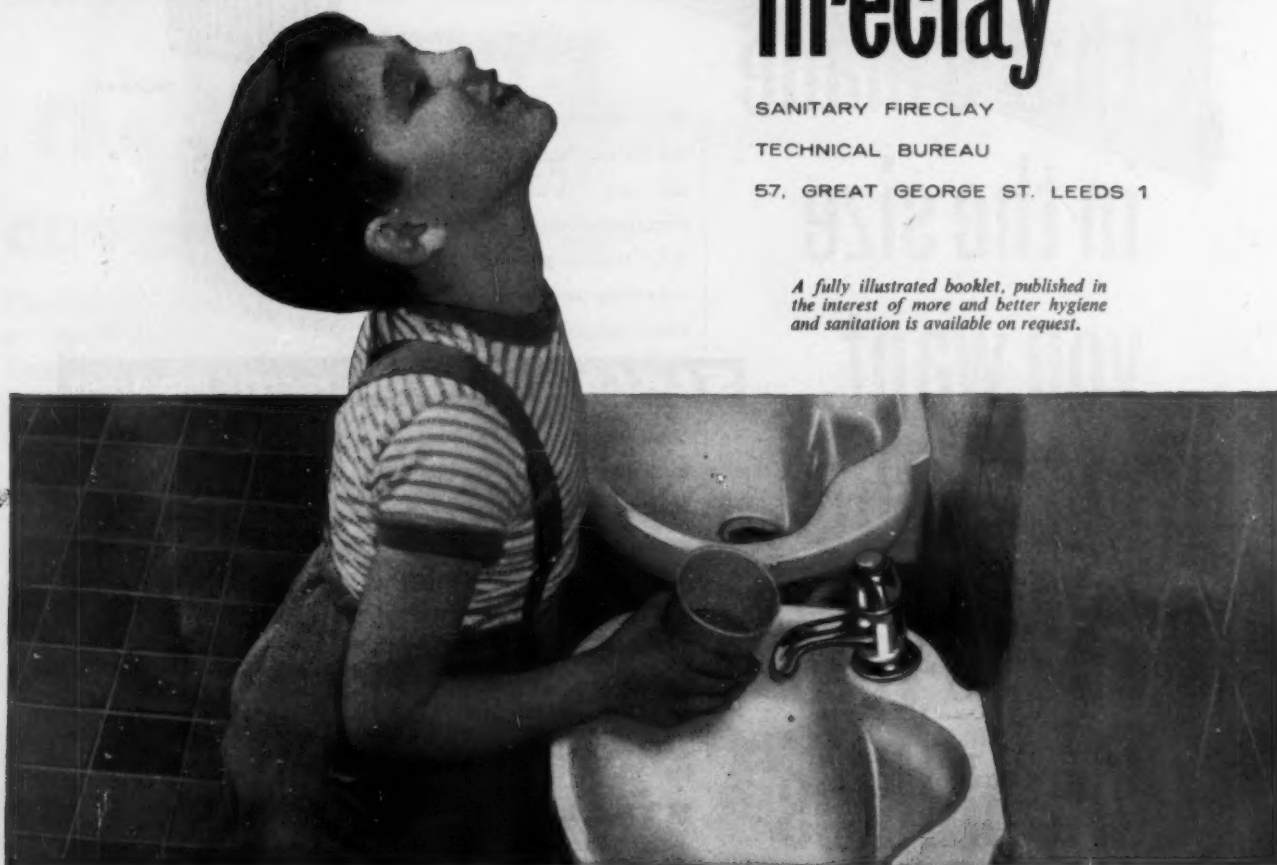
fireclay

SANITARY FIRECLAY

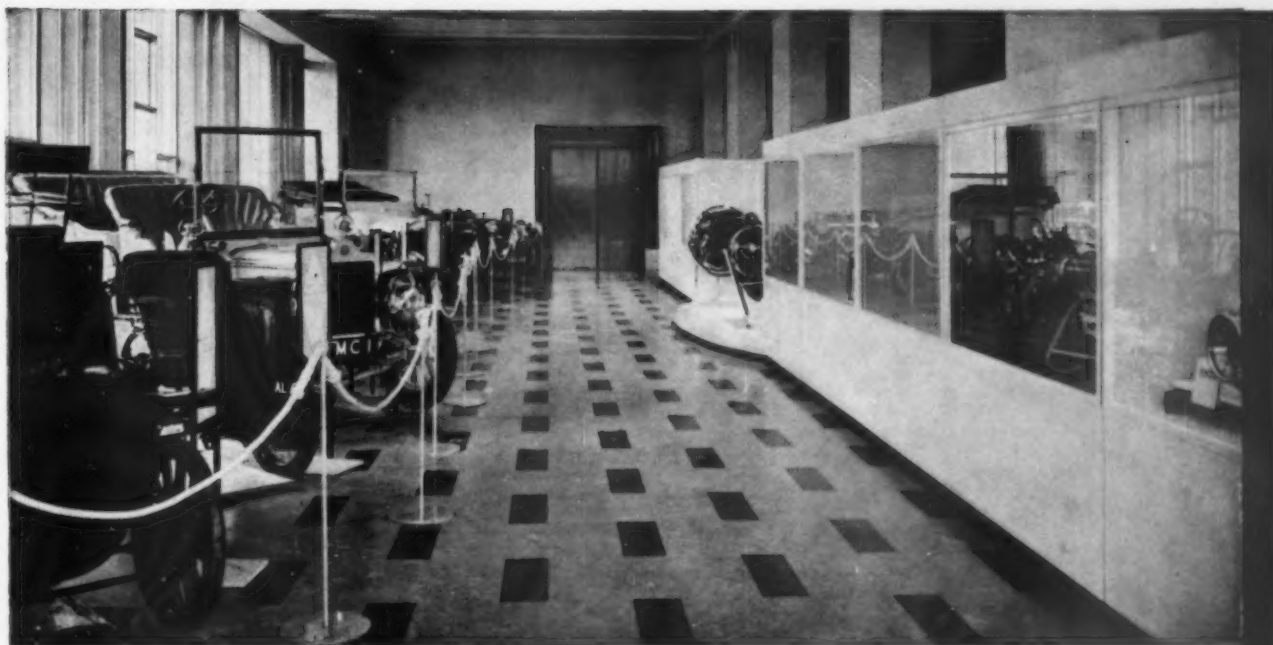
TECHNICAL BUREAU

57, GREAT GEORGE ST. LEEDS 1

A fully illustrated booklet, published in the interest of more and better hygiene and sanitation is available on request.



SPECIFY SANITARY FIRECLAY WARE FOR **PERMANENT** SATISFACTION



These floors in the Herbert Museum and Art Gallery, Coventry are covered with Williamson's heavy grade linoleum (4.50 mm.)

*Modern
linoleum
for modern
installations*

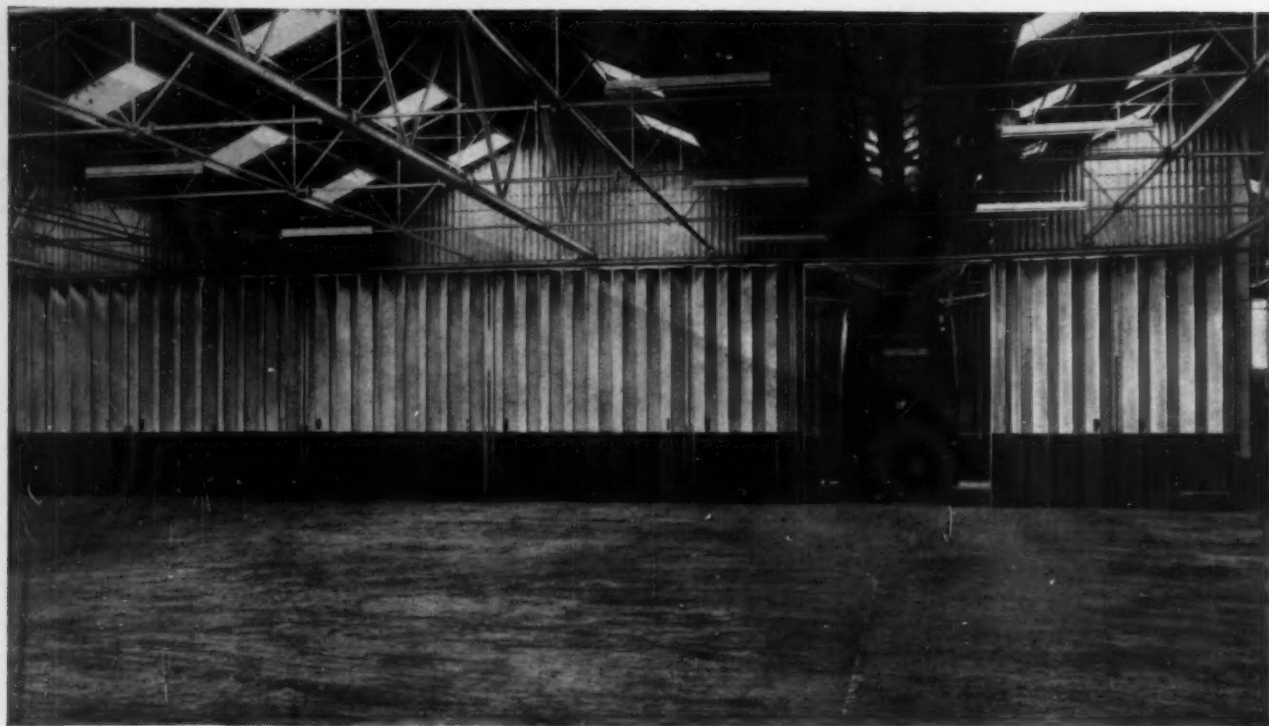
Low capital cost, ease of laying, durability, minimum maintenance, quality of finish and appearance . . . judge how you will, Williamson's linoleum is unequalled as a commercial or industrial floor covering. From the design point of view, Williamson's offer a range of linoleums with colour values carefully chosen to complement modern decors. Designers and architects can find in this range just what they need to carry through a scheme—and carry it through economically. Specialised knowledge is readily available. For advice and information, please contact the Williamson Technical Advisory Service.

WILLIAMSON LINOLEUM

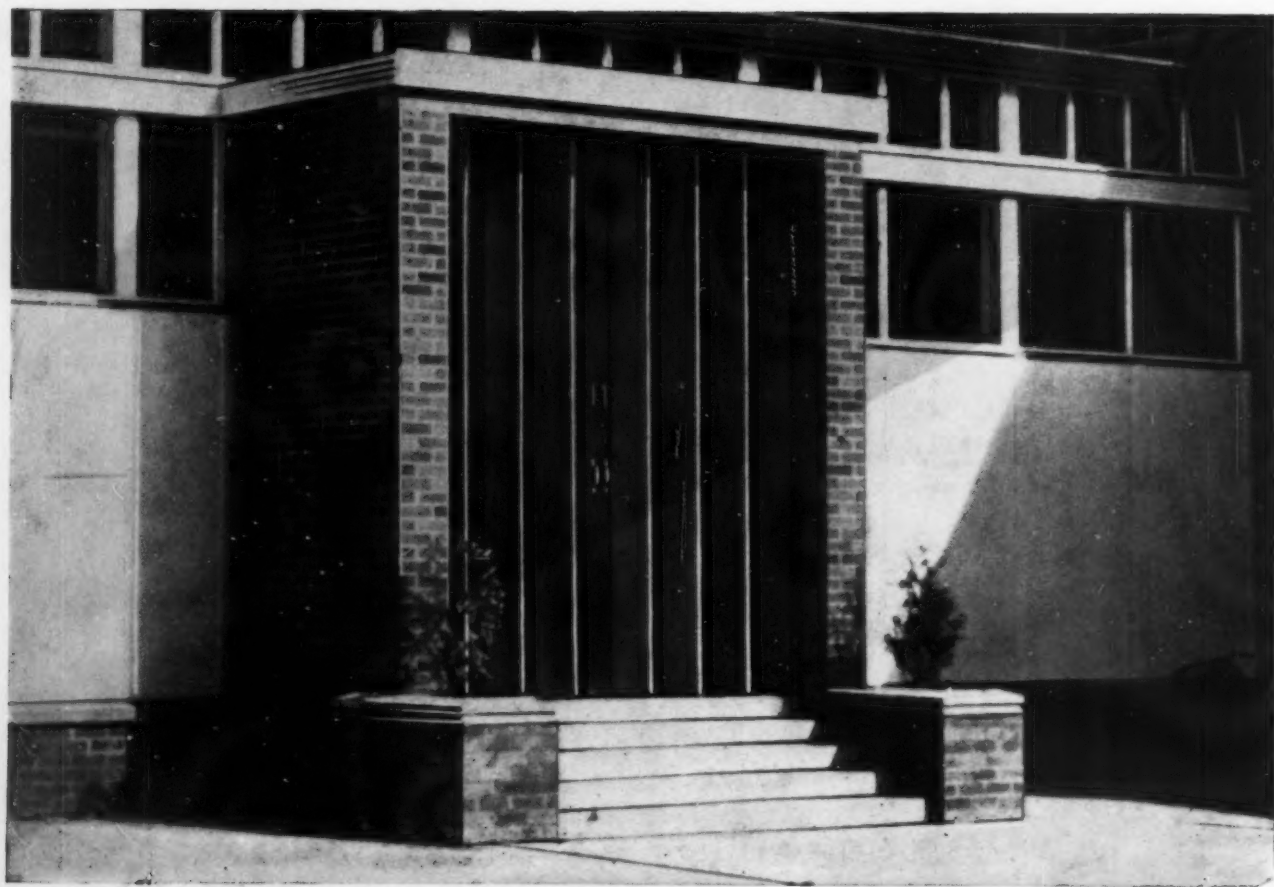
JAS. WILLIAMSON & SON LIMITED • LANCASTER • FOUNDED 1844

Architect: Herbert, Son & Seward, F.I.A.R.E.B.A. Contractor: Coventry Tile Co. Ltd.



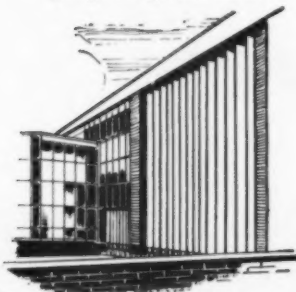


BOLTON The BIG name



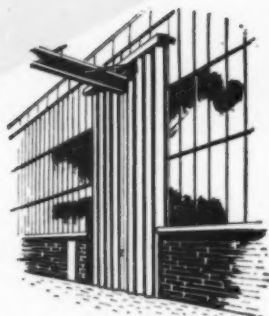


Bolton Shutter Doors for a double garage at a private house.

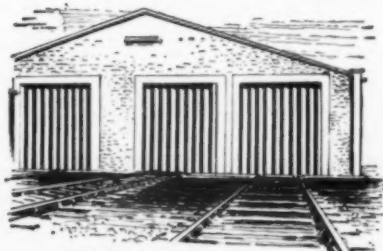


Bolton Shutter Doors at a large modern research centre.

in doors

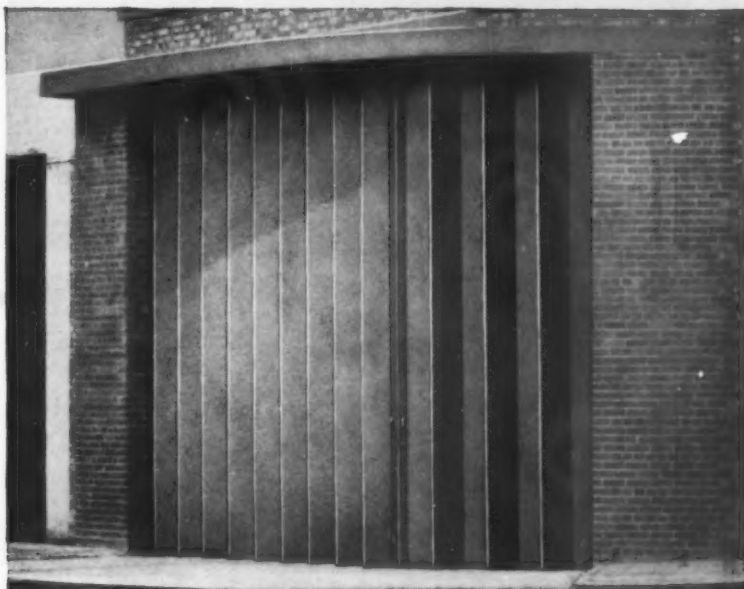


25 ft. high, this pair of Bolton Shutter Doors accommodates a runway beam.



A railway building in Ireland; the top hung Bolton Shutter Doors pass over the tracks.

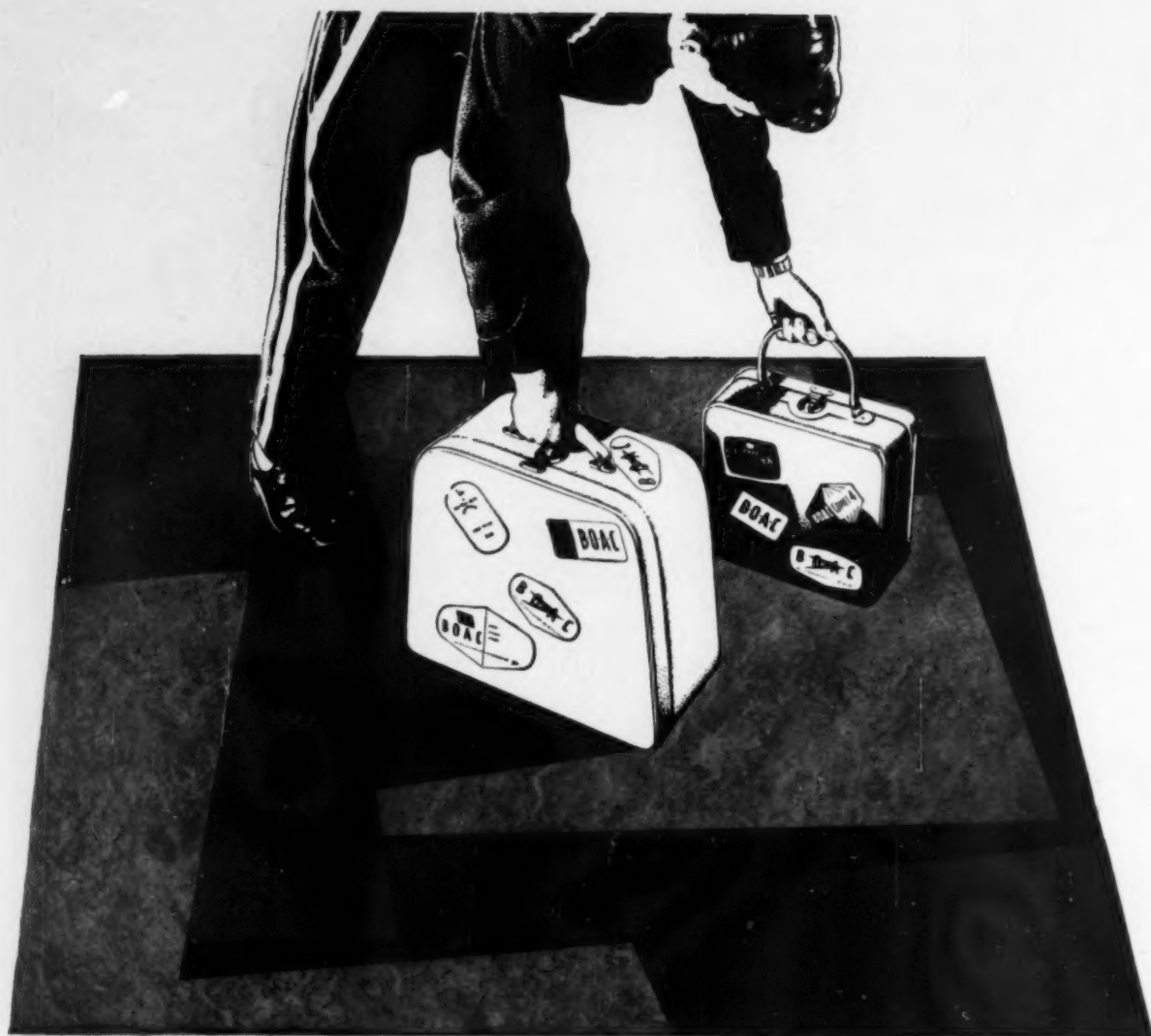
They're built to last!



Quality is the keynote—
quality in design—top hung on
ball bearings and with all leaves reinforced;
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sherardised steel leaves, manganese,
bronze or alloy hinging strips.
Study these illustrations showing
adaptability; the view above is of a
Bolton patent Shutter Door in pair—
meeting at an angle. Our latest
catalogue is very informative—
write for a copy now: reference AJ 344.

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You can't put a foot wrong with **LINOLEUM**

Walls may have ears; but floors have their own ways of finding out things—like weaknesses in floor coverings for example.

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Modern Linoleum is tougher and more resilient than ever before. No other floor covering combines such comfort and durability with such a variety of patterns, shades, tones and effects. Modern Linoleum is your finest possible choice from the dual aspects of decorative effect *and* long-term economy.



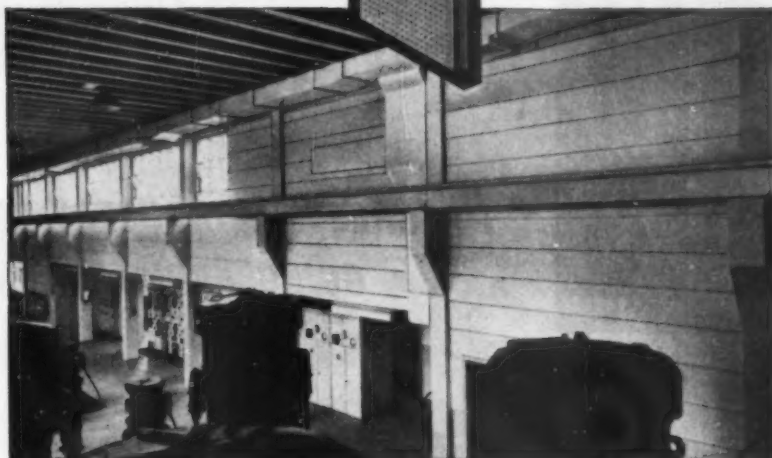
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For further information write to the Association or to any of the following members: **DARBY OPTILE & SHEPHERD LTD.**, Kirkcaldy · **DUNDEE LINOLEUM CO. LTD.**, Dundee · **LINOLEUM MANUFACTURING CO. LTD.**, 6 Old Bailey, London, E.C.4 · **MICHAEL HAIRN & CO. LTD.**, Kirkcaldy · **NORTH BRITISH LINOLEUM CO. LTD.**, Dundee · **SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LTD.**, Falkland, Fife · **JAS. WILLIAMSON & SON LTD.**, Lancaster.

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there's
NOISE...

there's need for



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PUMP ROOM

Acoustic Board Installation by:
DAWBER, TOWNSLEY & CO. LTD. HULL

NEW PUMPING STATION for City and County of KINGSTON-UPON-HULL WATER DEPT.

Tophill Low · Watton · E. Yorks

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Acoustic Ankarboard is available as boards or tiles in either $\frac{1}{2}$ " or $\frac{3}{4}$ " thickness and there is a choice of regular or random perforations. Regular perforations are 4 m/m holes at 15 m/m centres and random perforations are 4 m/m and 7 m/m holes. In both patterns holes are of the necessary depth to provide maximum acoustic correction. Corner holes of tiles are bored to half thickness for fixing, ensuring an excellent grip for nails or screws.

ACOUSTIC TILES

Are bevelled on all four edges and are available in five sizes 12"x12": 12"x24": 24"x24": 16"x16" and 16"x32" ($\frac{1}{2}$ " thickness only).

ACOUSTIC BOARDS

Are supplied with shiplap joints on two long edges or if required on all four edges and are available in 12" or 16" widths by lengths of up to 16'. All acoustics are supplied surfaced with white washable paint and can also be obtained surfaced with fire retardant paint to Class 1 BSS 476/53.

ENTRANCE HALL

Ceilings by:
DAWBER, TOWNSLEY & CO. LTD. HULL



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COLMAN'S are keen as mustard-on COAL

Homo sapiens has seldom been content to take food as he finds it—and it is this desire to titillate the appetite which has created a gastronomic world that is one of the highlights of every civilization. In this world of rich odour and delicate flavour Colman's mustard is an essential servant, waiting upon both taste and digestion with unfailing diligence.

The men who control and direct this great company—with over a score of products that are favourites with the British housewife—chase coal

**PROGRESSIVE INDUSTRY IS
GOING FORWARD ON**



ISSUED BY THE NATIONAL COAL BOARD

to fire the boilerhouses of their vast factory at Norwich. They choose coal because coal provides them with the greatest heat for the lowest cost; because coal, mechanically stoked, is smokeless, and because our coalfields contain enough coal to supply all the fuel needs of British industry for generations to come.

When you have to make a decision about fuel, be wise—like Colman's—and choose coal. It could well help to make your product a hot favourite for top place.

COAL



Coal Supplies the Power at Colman's Carrow Factory. **Mr. P. S. O. Durrant, Works Engineer** **comments:**

"Coal-fired boilers can be expected to maintain a high efficiency throughout their life. That is one of the reasons why we use coal to supply the power at Colman's.

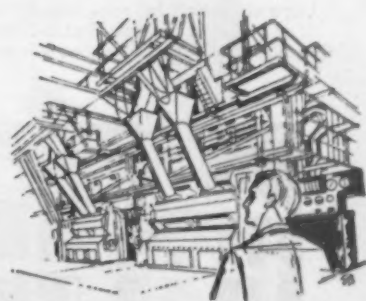
We had proof of our decision when we called in a fuel efficiency team to investigate the state of our boilers after 26 years' service. They were able to report that the overall efficiency was 'extremely good'. In fact, they found an overall thermal efficiency of 81.7%.

Our present installation dates back to 1926 when a central boiler house equipped with four coal-fired water tube boilers replaced a number of small units scattered throughout our works. In 1930 a fifth boiler was added to cope with increased demand, and these five have satisfied our steam requirements ever since.

The boilers which are conservatively rated at 8,000 lbs. per hour each operate at a steam pressure of 250 lbs. per sq. inch with a temperature of 600°F. The coal, burned on chain grate stokers, arrives on site mainly by rail whence it is elevated to a U-link conveyor feeding the bunkers. We sell the ash to a local contracting firm.

Steam is used both for process and space heating, and a recently installed back-pressure turbo-alternator generates a proportion of our power requirements.

We look back over more than thirty years' experience of burning coal on chain grate stokers with the conviction that no other fuel can meet our needs economically."



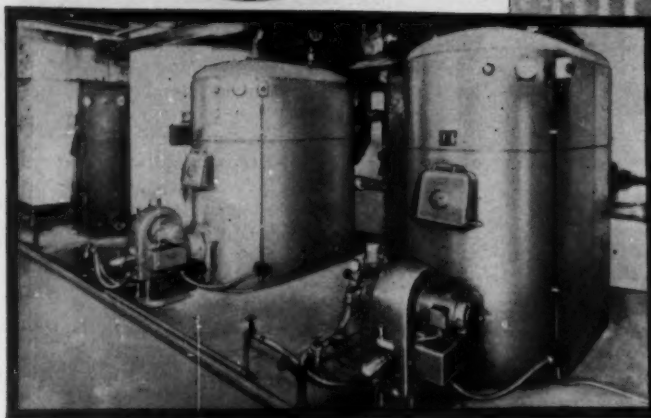
Here are some key facts and figures about the consumption of coal at Colman's:

Number of boilers: 5 water tube
Method of firing: Chain grate stokers
Steam pressure: 250 lbs. per sq. inch
Continuous max. rating: . 8,000 lbs. per hour each
Steam temperature: 600°F.
Feed temperature: 138°F.
Annual fuel consumption: 6,000 tons of coal



HOVAL

THE CHOICE FOR BOILER EFFICIENCY



**LONDON RESIDENCE OF THE AMERICAN
AMBASSADOR, REGENTS PARK**

(Three Hoval Boilers supplied.)

2 — Hoval RCH 3-200 — 800,000 B.T.U.'s.

1 — Hoval RCH 2-11 — 440,000 B.T.U.'s.

Providing full central heating and domestic hot water.

The dual-purpose HOVAL Boiler provides at maximum efficiency, **FULL CENTRAL HEATING**, and **COPIOUS SUPPLIES of DOMESTIC HOT WATER**, from one unit.

Peak demands for hot water met readily and adequately.

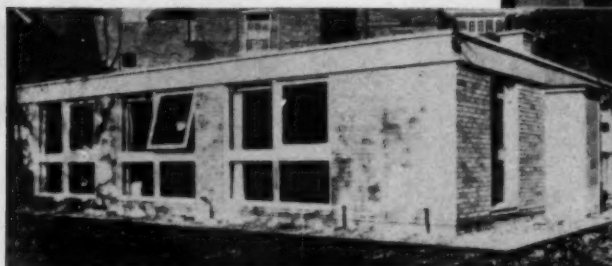
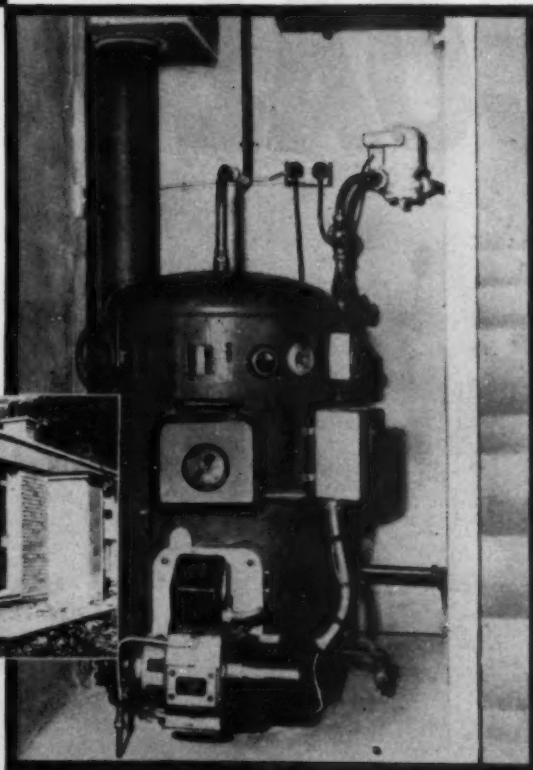
A separate cylinder is not required.

'RK' and 'RCH' Boilers for oil or gas firing. Convertible to coke firing.

'TKS' and 'TKC' Boiler-Incinerators with built-in facilities for oil and coke firing, also the effective disposal of waste matter.

For installations not requiring domestic hot water, specify Models 'TKC' and 'RCH.'

Overall capacity range: 60,000 to 1,600,000 B.T.U.'s per hour.



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Architects — Messrs. George Brown & Partners A/ARIBA.,
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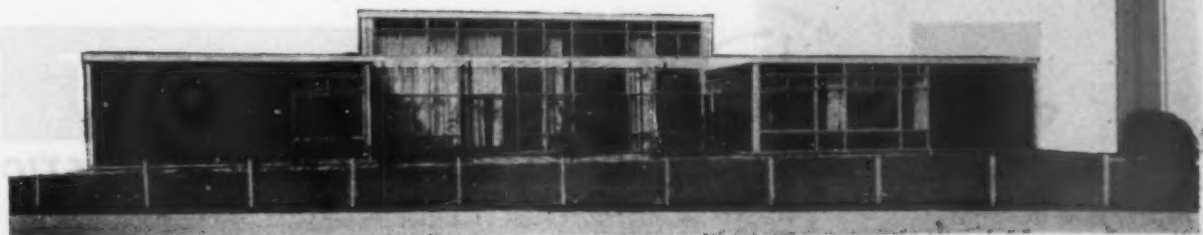
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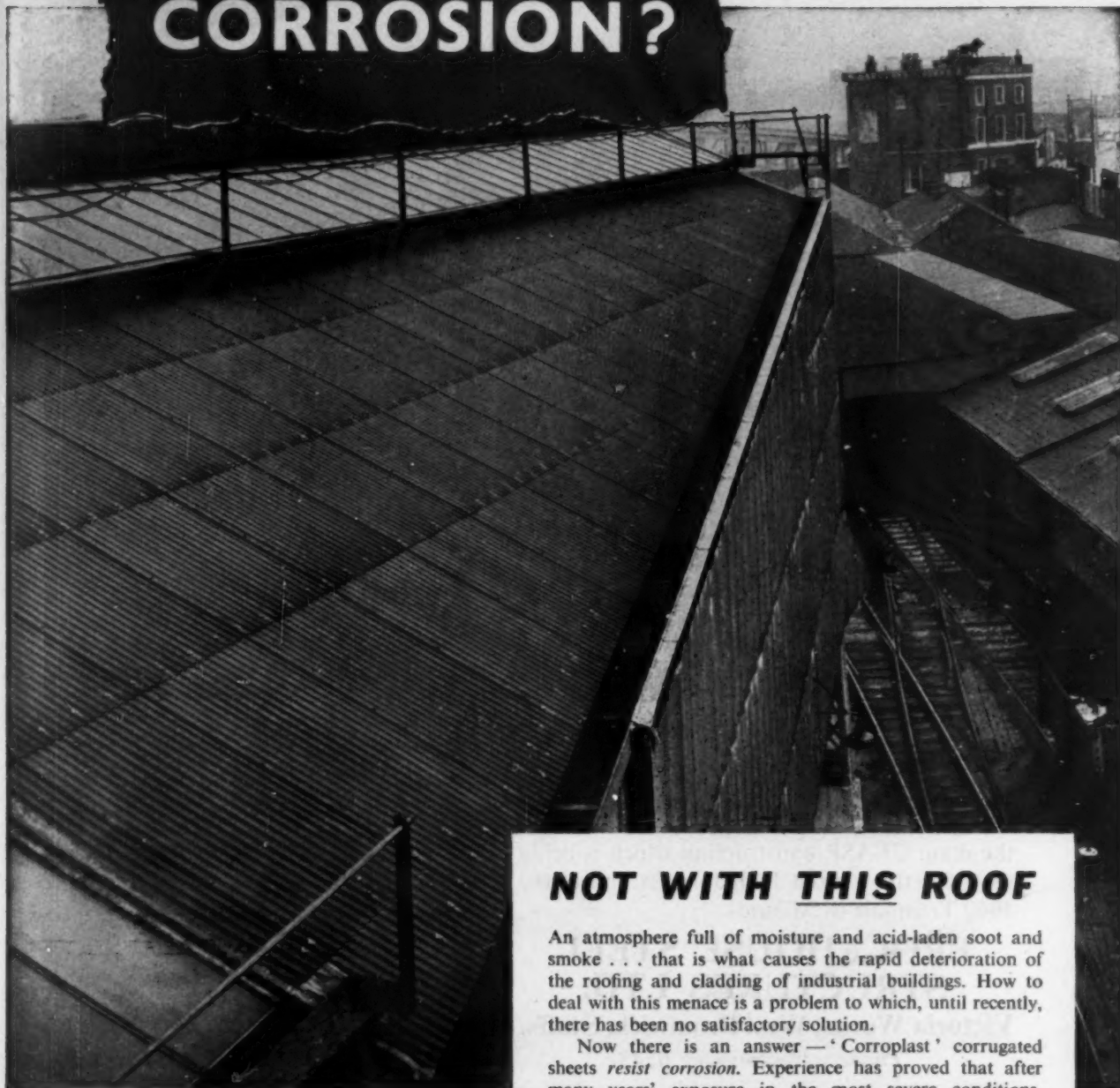
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*Our illustrations show the school building erected at Milan.
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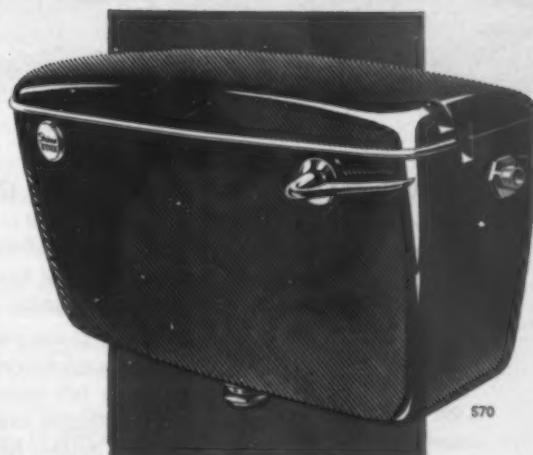
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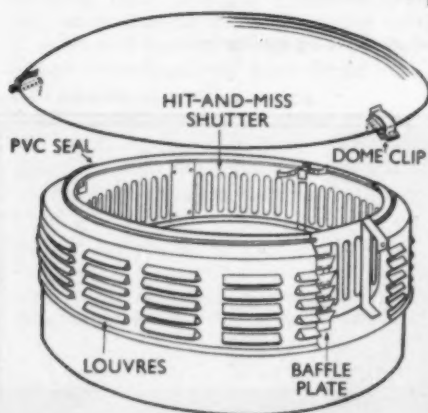
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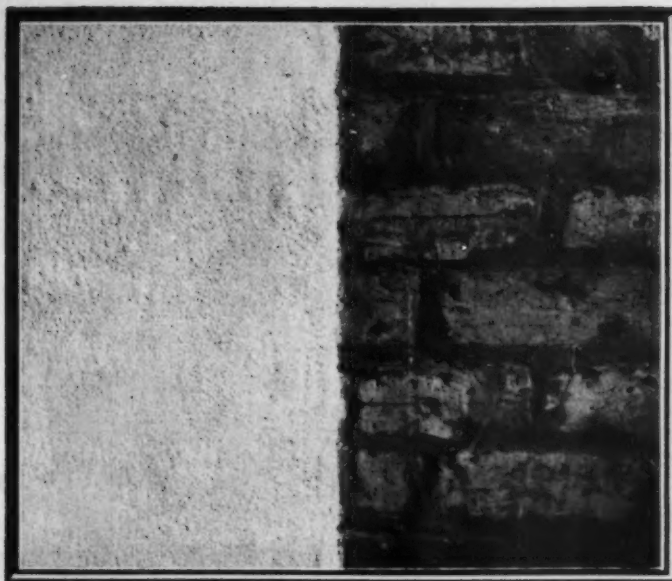
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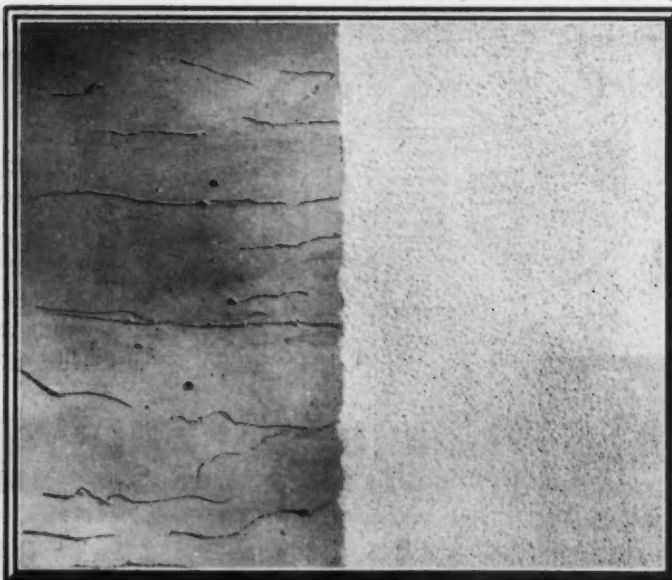
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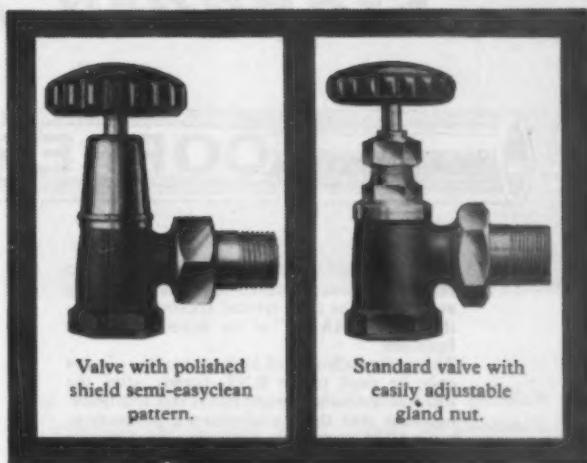
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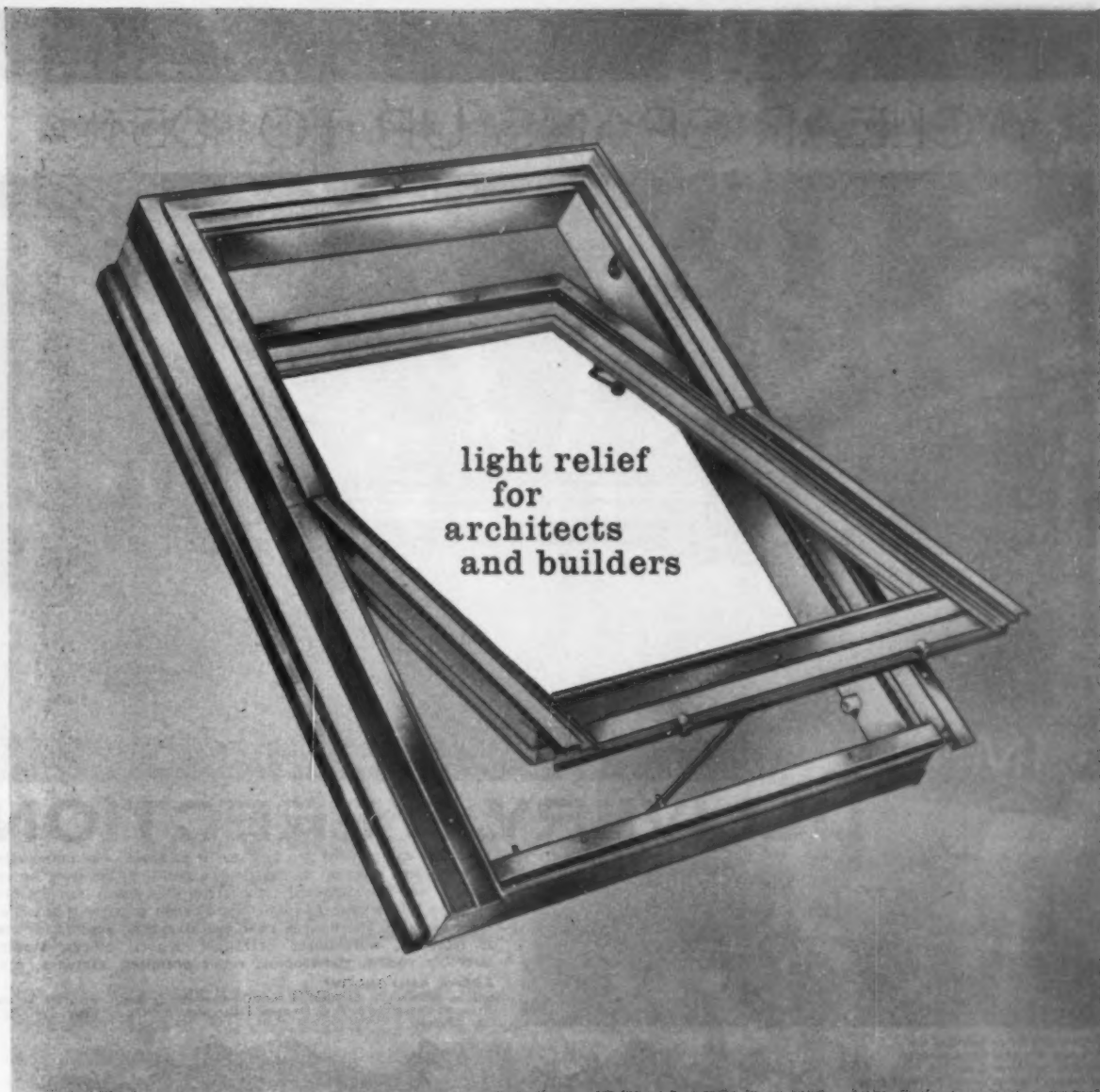
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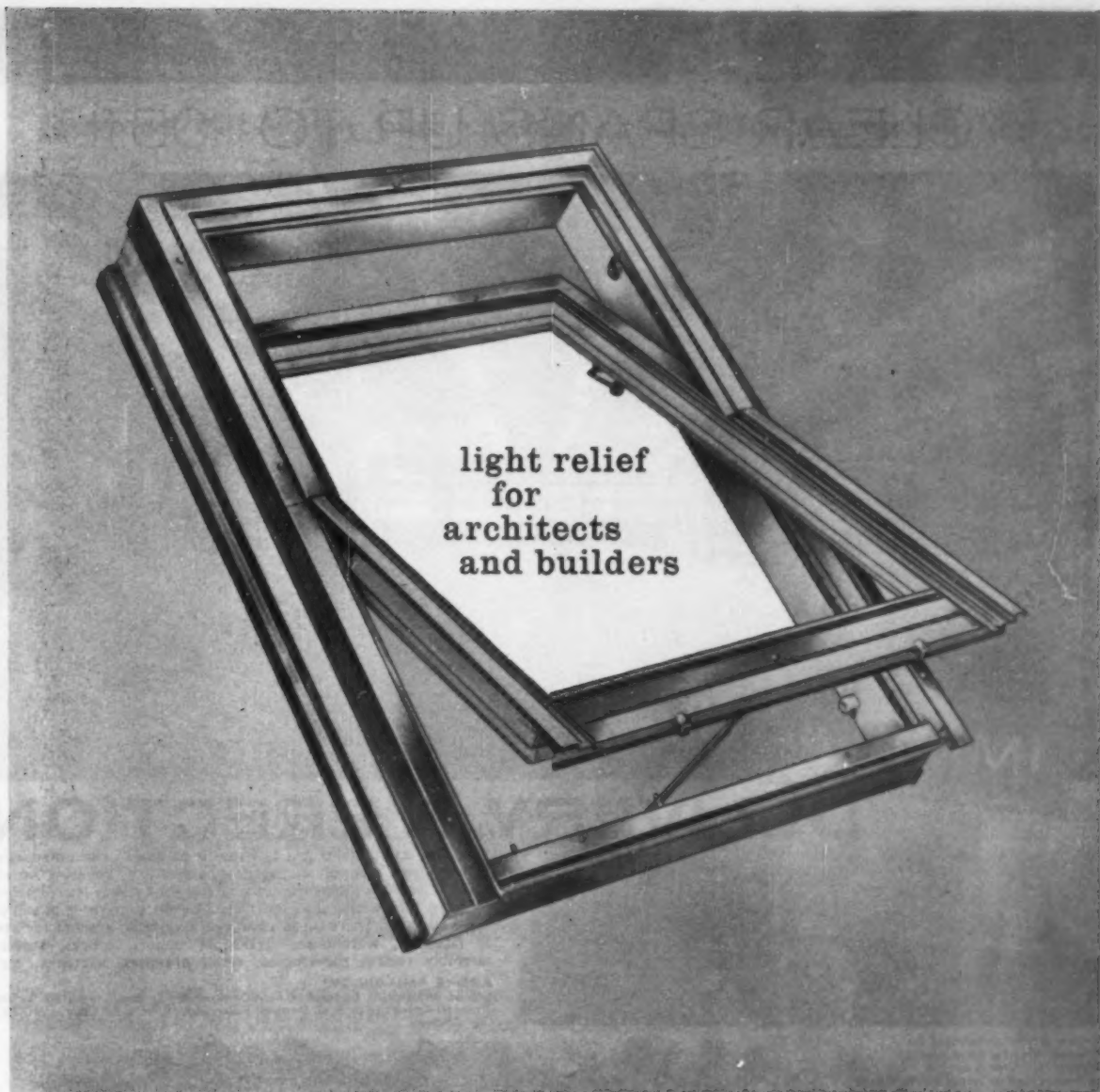
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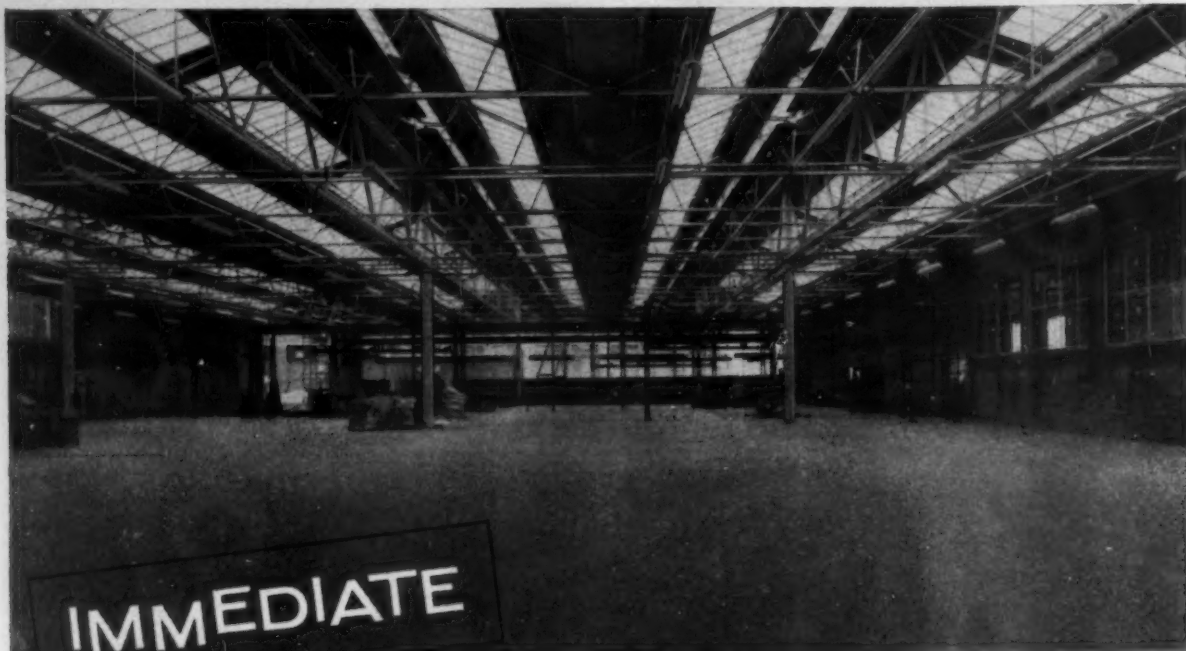
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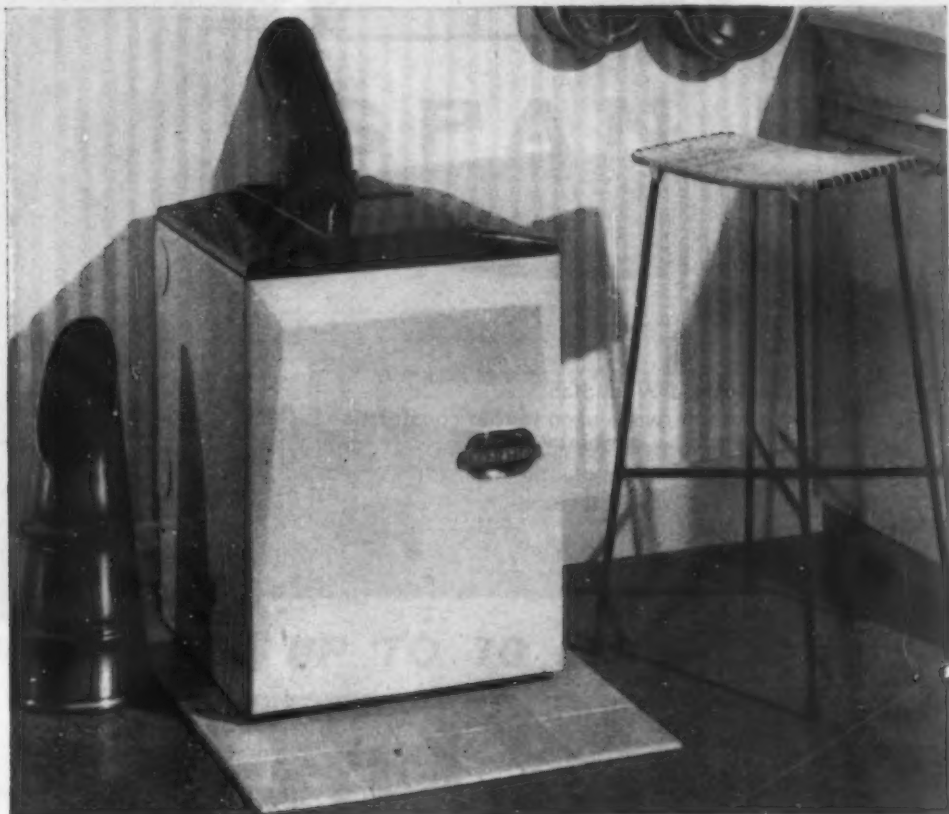
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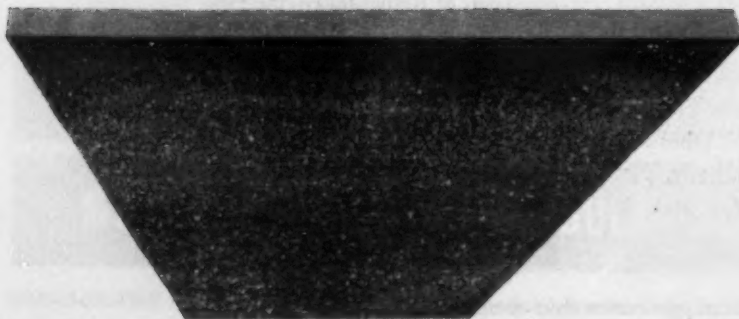


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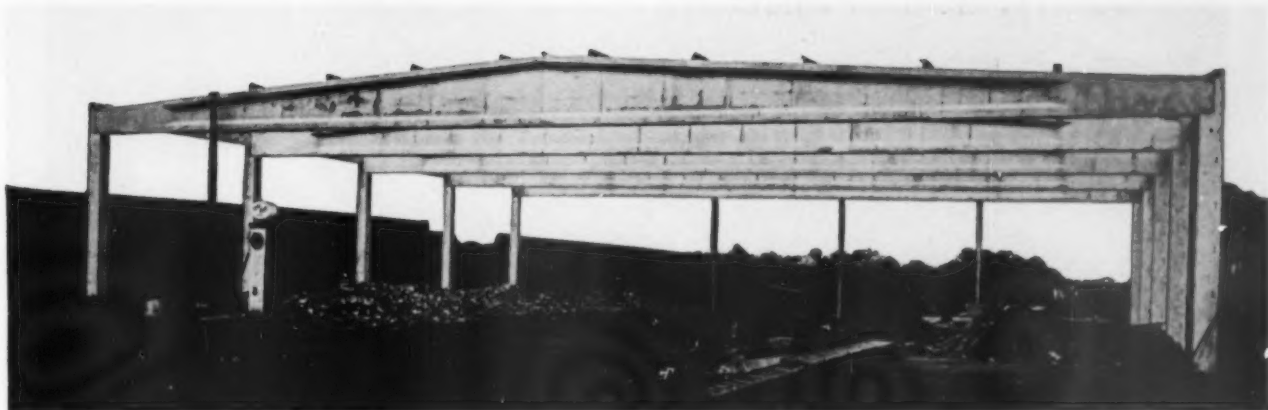
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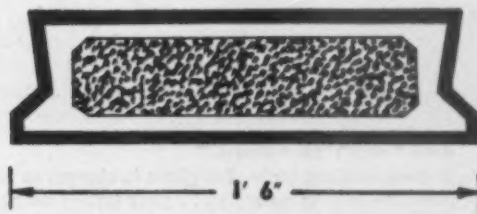
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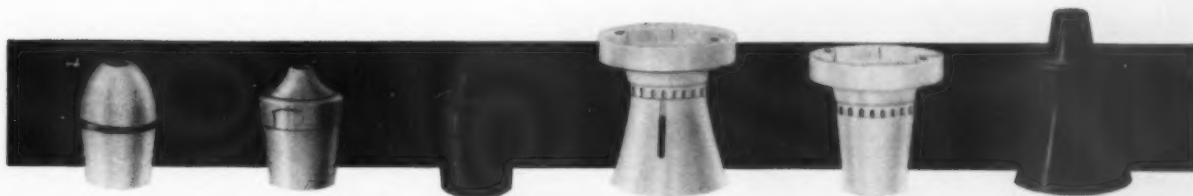
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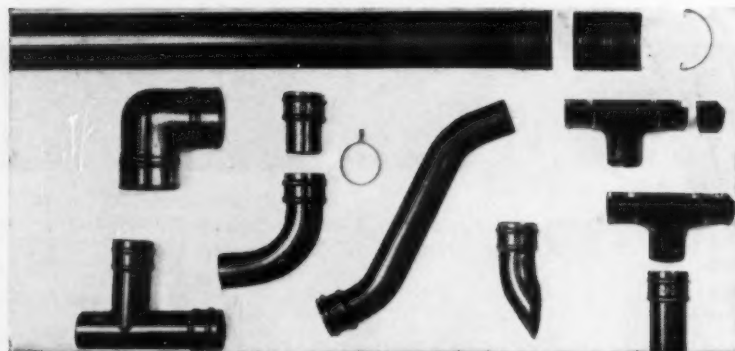
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The Architects' Journal

No. 3417. Vol. 132. October 13, 1960

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NOT QUITE ARCHITECTURE

... but very nearly



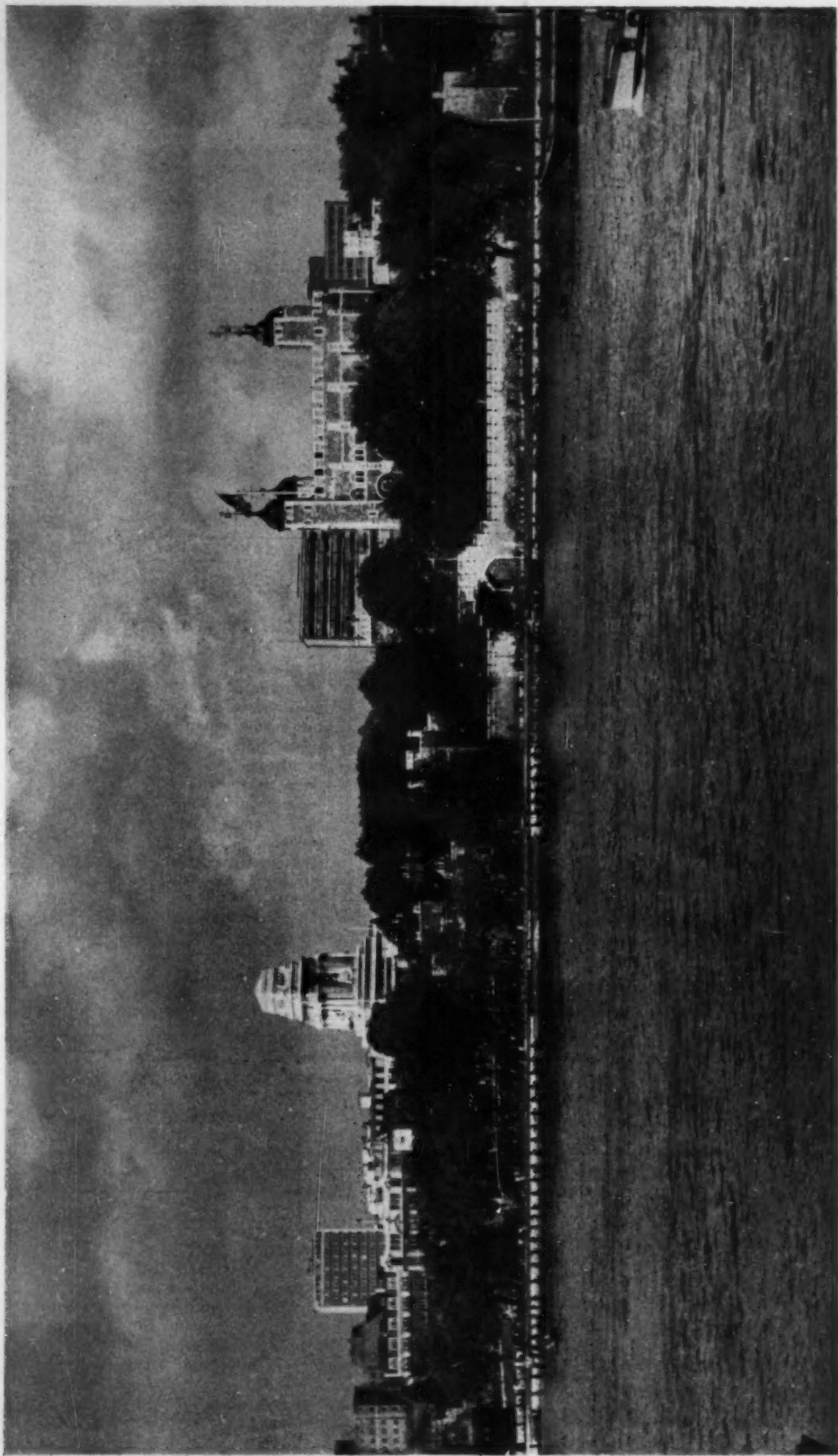
Cantilevered over a prefabricated whale-bone frame clad in pale mauve satin, the upper storey braced in the same materials, there was certainly something architectural about Miss Heather Firbank, a selection from whose wardrobe has just been put on show at the Victoria and Albert.

Miss Firbank was a débutante in 1908, one of those clothes-dedicated girls, and a sister of Ronald Firbank, whose novels abound in descriptions of exquisite toilettes for which perhaps she should have some of the credit.

Though passionately addicted to dress, Miss Heather was a fervent

believer in the elegance of simplicity, and for this reason the exhibition may give us a rather idealised version of the clothes of her day, upon which these, which she wore between 1908 and 1921 and then packed in 24 trunks, placed in a depository and forgot, are a great advance towards modern "under-statement."





No

Bloody

Tower

The twentieth-century equivalent in London of the spires and towers of medieval and seventeenth-century London could have been, and indeed still could be, the slender towers of modern commerce and of London flats. The sinister compromise between the towers available to us through the development of modern building techniques and the low roofs of traditional building is the multi-storey slab: the building which turns streets into sunless canyons, makes the citizen crane his neck for a glimpse of the sky and rubs out, with its inflated india-rubber profile, the grace and romantic variety of London's

skyline. The latest building whose silhouette is in danger of being smudged is the Tower of London, shown above from Tower Bridge, with the design for a twelve-storey office block superimposed. The proposed office block, replacing warehouses in Coopers Row, north of the Tower, was accepted by the City but opposed by the LCC who were supported by the Royal Fine Art Commission in their wish for the slab to be reduced to eight storeys. A public enquiry by the Ministry of Housing and Local Government resulted in Ministerial support for commerce rather than for a clean silhouette for the Tower,

(The fact that the trunks only came to light after her death in 1954 and all the clothes were still in perfect condition speaks much for the use of depositories rather than a cupboard in the attic for anyone with 24 trunkfuls of clothes to store.)

Not for Miss Firbank the high lace whale-boned collar of the day (my nurse called it a spoked collar and claimed that it was invented for Queen Alexandra to conceal the scars where King Edward tried to cut her throat), but delicious turned-back chiffon. Her summer morning dresses of inky blue or pale pink linen have a nursemaidly simplicity until you spot the chiffon and the minute hemstitching.

Her "costumes," for walking, for motoring, for golf, for mourning, were deathlessly dashing. That ginger and black striped tweed of which her golfing clothes were made—a gored and cuffed skirt, nattily half-belted Norfolk jacket, and manly peaked cap—would be high fashion now. Miss Firbank's hats show her remarkable self-discipline: though often two feet or more across, they never looked like a bowl of fruit, a *nature morte*, or resembled in any way the Quangle-Wangle's famous hat which, you may remember, was "... a hundred and two feet wide, "With ribbons and bibbons on every side, "And bells, and buttons, and loops and lace, "So that nobody ever could see the face "Of the Quangle-Wangle-Quee."

This display is not merely a posthumous exhibition of the taste of one wealthy young woman: it is almost entirely a collection of clothes designed by London's three top couturiers of the day, Lucille (for ball gowns), Mascotte (for blouses and lingerie that really was lingerie, all ribbons and bibbons), and Redfern's tailormades.

The Museum and Simon Fleet, who designed this exhibition, have used this fact most effectively by making the figures' heads and arms from a papier-mâché of old billheads of these three firms. And the background of Heather Firbank's life is touched in with silhouetted figures behind white-lighted screens, so a grumpy-looking coachman sits on his box behind an evening dress, and a vintage car appears faintly beside the heroine's motoring garb—an all-enveloping tussore coat with braid buttons, which I would very much like to have, and red tweed flat cap, tied on, of course, with billowing chiffon.

Altogether a most agreeable exhibition, where one could play "Which would I choose if I could have just one?" on any rainy Sunday afternoon from now till December.

By the way, at times she wore bright purple or orange silk stockings, so don't be so down on our current girls.

SHEILA LYND

The Editors

A NEW WORLD

THE fundamentally new approach to architecture which has been evolving and developing in a growing number of architects' minds over the past thirty years is at last having effect in the council chamber at Portland Place. The RIBA Council is no longer content to act only when compelled, and to base its decisions on guesswork or to have its mind made up for it by a ruling clique. The Council has decided to conduct a survey of architects' offices (see details on page 529) the purpose of which is to throw light on the essential guts of architectural practice: education, remuneration, and efficiency.

The days of maintaining the *status quo*, or of waiting for a return to the "normal conditions" of prewar days, are well and truly over. The RIBA staff are no longer mere technicians turning (and occasionally oiling) the wheels of bureaucracy. They are now key men in the development of a new, forward-thinking and forward-looking profession. They are executives responsible for exposing the facts from which a reformed, more efficient architectural profession can be evolved.

The limited funds available mean that the facts discovered will tend to relate only to the better type of architectural practice. The survey will not show the quality and performance of the *average* offices of the various kinds depicted. The results, therefore, will be of great value to all offices, enabling them to measure their own competence and performance. Whether the results can be presented so that the client also can profit from them and learn how to select an efficient, talented architect we do not know, but we hope it will be possible, and thus provide an accelerator for change. One of the results of the questionnaire will be the discovery of what the architects' skills should be and how he should be trained and what supporting staff he needs. It is particularly satisfying to note that while the senior professional body, the RIBA, prepares its questionnaires, the junior body, the British Architectural Students Association, is also posing questions with the aim of improving school facilities. Here is reform and progressive endeavour and a common attitude of mind throughout the profession which is marvellous to contemplate.

SELF-CRITICISM AT THE NFBTE

Though hard things are said about the shortcomings of architects from time to time, a lack of self-criticism is not now usually one of them, as witness the flow of pamphlets, and pronouncements from 66 Portland Place. It is encouraging to find that the builders are developing a similarly self-critical attitude. Last week* the president of the NFBTE

*See report on page 528.

pointed out that the public has ample opportunity to draw its own conclusions on the general level of efficiency in the industry and that these conclusions are not always complimentary either to building firms or to their operatives. He was commenting on people's hesitancy to call in assistance when maintenance and repair works are necessary. The Federation's concern with this has prompted them to issue three pamphlets aimed at the repairs and maintenance builder (with a plain exhortation to pull his socks up) and the public he serves. Congratulations to the NFBTE for displaying such a healthy attitude, from which nothing but good can come, and such foresight in recognising that though it may be a seller's market for their members at the moment, it will not always be so.



GAMES WITHOUT FUN

The BBC has missed a good opportunity. For some weeks it has been boasting about its restyled, enlarged and more expensive *Radio Times*. Now that it is published it turns out to be a great disappointment. We haven't been told how much of it is the work of Abram Games. The cover certainly is, according to a note inside—and a nasty mess it looks, with its raggedly-applied colour (to be changed each week for the benefit of readers who can't read dates) and its blobby lettering. And there's not much to be said for the cluster of rectangles containing days and dates at the top of each page, though these would prob-

ably look better if they didn't have to fight such appallingly-designed advertisements. Some people may like the new device of putting television and sound programmes for each day next to each other. But if the BBC really wanted to give us a clearer time-table, why on earth did they insert a magazine section after each day's programmes?

*

No doubt we'll soon get accustomed to finding our way around in what could have been the best-designed magazine with almost nation-wide circulation. At least we shall not have many nostalgic regrets for the crisper, cleaner-looking older version: its quainter features are still with us. Where else could you see, on the same page, Eartha Kitt adjacent to handy hints about the lavatory floor, a note about Ibsen's interest in the "pliant self-interested mob" and sketches of the life-cycle of a dragonfly? By the way, in case you can't yet master the new layout, let me tell you that today's programmes (October 13) include, on sound, Katherine Whitehorn investigating the function of the Design Centre (Light, 2.0) and J. M. Richards reviewing the US Embassy building (Third, 8.55).

SUNDAY ARCHITECTURE

Rumour has it that the editor of the *Sunday Telegraph*, which is to make its appearance early next year, is concerned about the way to present architecture as a regular feature. This is not surprising, because the *Daily Telegraph* is often very quick off the mark with architectural news. But a weekly

feature is a different matter. The *Sunday* papers can't hope to have all the architectural news first; but they do have the chance of putting forward considered criticism about buildings of the week. If the *Sunday Telegraph* provides such a service, it will be the first Sunday paper to regard architecture as something just as worthy of regular coverage as sculpture, painting and ballet—subjects which to many people are of much less interest than their environment.

NEW LOOK FOR OLD THEORY

The other day I quite upset a Swedish woman who was talking about the value of cats and dogs as a means of teaching children the facts of life. My children, I said, would learn many of the facts from Penguins and Pelicans. I was thinking, of course, of books like Steen Eiler Rasmussen's *London the Unique City* (just out, 5s.) and Pevsner's *Pioneers of Modern Design*—a new five-shilling edition among the firm's jubilee collection. But I'm not so happy about the Rasmussen now I've read it. It was originally one of the sacred books of the Bloomsbury-squares-are-marvellous mystique. But when you settle down to read the text between the illustrations of Georgian housing and landscape gardening, you'll be horrified to find the book is in favour of urban sprawl.

*

The first page of text tells us that concentrated cities are evil; and all the way through the mechanisms of spread, sprawl and thin development are detailed with loving care. It's a relief to see, in the postscript, that Professor Rasmussen no longer stands by the propaganda aims of the first edition. But this won't prevent the book being used by the TCPA or spec builders' advocates at town planning enquiries.

NOT REVOLUTIONARY

Swansea's University College wants half a million pounds towards its eleven-million-pound building programme. The Right Hon. James Griffiths, M.P., backed by a group of distinguished Welshmen opened the appeal for money by saying that Britain now faced the biggest challenge in its history—another industrial revolution. This must have seemed irrelevant to anyone who looked at the proposed archi-

ecture (example below) in the tasteless and commercial-looking campaign brochure. The hostel block shown here is better than the Natural Sciences building of 1954, but there is no doubt that universities on the whole have a long way to go before their buildings will match post-war schools, either in elegance or in the application of research and scientific development.

TOO MANY COOKS?

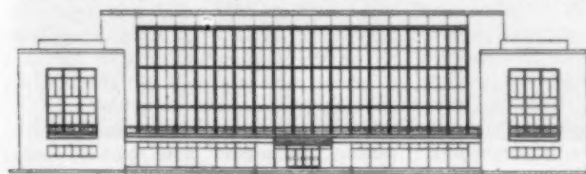
My other illustration is of a Durham building which, according to Costain's, "promises to become as much a talking point as the Cathedral itself". In case you want to talk about it—and you should know first that it's a crematorium—here are some points culled from a Costain report.

"Basically the building is developed from Norman Architecture and can be compared in design with the Monks' Kitchen near the Cathedral. And while many of the appendages are obviously contemporary, the whole blends together in pleasing harmony."

"The exterior of the building also has unusual features. The main chapel is the central point rising above the rest of the structure. Leading off from two sides are long covered walks with bat-wing roofs. All roofs throughout the building, including the bat-wing walks, are covered in copper and the undersides of the bat-wing roofs are also done in exposed timbers."

THE OLD ADAM AGAIN

The Council at Bury St. Edmunds,



The new University College of Swansea (see *Not Revolutionary*). Above, perspective of the front elevation of the College House, described as "glazed in modern style." A wide sun terrace in front has a splendid view southward over Swansea bay. Central core contains assembly hall, refectory and five dining rooms, the wings hold senior and junior common rooms and medical centre. A bookshop and a barber's flank the main entrance. On right, a model of one the new halls of residence, with single-storey common rooms and warden's quarters forming a small quadrangle with a ten-storey tower of study bedrooms.



Crematorium at Durham, designed by Chaplin and Burguine. (See *Too Many Cooks?*)

which meets on October 18 to decide on the project for pulling down the nineteenth century corn exchange and library and making serious alterations to the Adam town hall (as reported here on August 25) has been under pretty steady fire since the news of these plans broke.

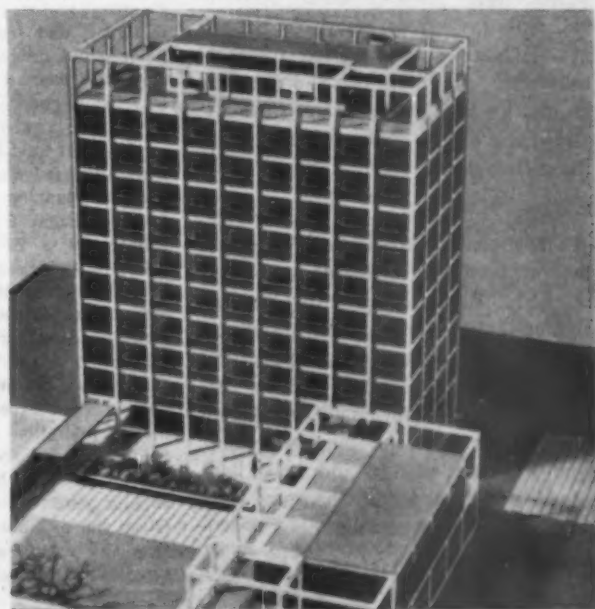
A meeting of the Ratepayers Association brought 600 people to the Corn Exchange last month, and although the Association had indignantly denied in the *Observer* that this was a protest meeting (merely an "open" one), and proponents of the scheme were invited, only eight of the 600 voted in favour of the scheme. One opposition councillor described the plan to this meeting as "Selling our birthright for a mess of pottage which will turn out to be a very dirty mess of pottage." The matter has now been raised with the Royal Fine Art Commission, the Civic Trust, the Victorian Society and the

Georgian Group, and the last two have written to the Council to express their disapproval.

One interesting feature of the campaign is that the local architects of Bury St. Edmunds have played a big part in getting it going, which shows how much can be achieved when the expert—who sometimes feels himself an isolated and superior being—goes to the ordinary public and asks for support.

SECOND THOUGHTS

A colleague reports that a pleasant little ceremony took place at Portland Place last week when John Murray Easton presented a salver to Ernest Franck to commemorate his 30 years as secretary of the RIBA Council's dining club. To lunch with Ernest Franck is a remarkable experience, as he recounts his experiences of seven or



70 years ago. On this occasion he recalled an AA visit to the nearly completed Victoria and Albert Museum when Aston Webb asked Leonard Stokes his opinion of a large number of sculptures which embellished the windows. Stokes replied that if he were Webb he'd knock them all off. Which, apparently, Webb did, at a cost of a mere £40,000. Cost targets were presumably more flexible then.

PRIBA WIMPEY

Recently a number of very eminent architects on the RIBA Council were indignant to find in their morning post an *unstamped* envelope. When they had paid up their sixpences they found it contained a copy of a Wimpey circular offering these gentlemen "good opportunities . . . to apply their knowledge . . . to progressive design and construction techniques . . . good salaries . . . pension scheme" and so forth. The envelope also contained an announcement of the policy of A. H. Anderson Ltd., who have appointed a chief architect responsible for the control and co-ordination of the architectural surveying and contract management groups within the company, as part of the company's policy of providing a "comprehensive design and management service within which the disciplines of cost analysis, the cost plan, the fixed price contract and the controlled contract period are effectively practised."

Before long, the story goes, infuriated voices were phoning these firms to ask why they were being circularised in this manner and puzzled voices at the other end were disclaiming any knowledge and promising to investigate and discover the innocent responsible for such a daring recruitment policy.

It occurred to ASTRAGAL, who learns that at least one envelope was post-marked "Runcorn," that the likeliest answer is that some Cheshire architect is engaged in canvassing support for action against the all-in service, and emphasising its dangers to an affluent profession by not stamping his letters. One wonders what would have happened if the profession had not been enjoying a boom period.

ASTRAGAL



J. D. Tetlow, F.R.I.B.A., M.T.P.I.

Sydney B. Downs, A.R.I.B.A.

Ian Nairn

Finance or Society?

SIR: Mr. Risdon's letter in your issue of September 29 very ably draws attention to some of the problems of central area redevelopment. At the same time it seems to start from false premises on the very point to which the RIBA circular letter was directed.

Mr. Risdon says that "it is the prime duty for the local authority to ensure that the land in the centre of the city is used to maximum financial advantage compatible with building projects of a scale and quality to satisfy civic pride." I should have thought, as a member of the council of a small city which has a redevelopment scheme in hand, that the prime duty was to secure the maximum social advantage. Planning is for people as complete personalities, and only secondarily as shareholders and ratepayers. Local authorities—and their members—are far from perfect, but, with good advice, they are more likely than any other agency to take the long view of total benefit to the community. I am surprised that Mr. Risdon is satisfied that the Planning Act is effective in controlling design; I do not know any other architect who is. Planning officers strive valiantly and have their successes on the broader issues; the "details" of form, texture and colour, and quality of workmanship come only from the individual architect.

I agree that architects are not and should not try to be expert in property valuation; the collaboration of a specialist in that field is needed from the outset. And Sir William Holford has said just that in his circular letter.

Given the collaboration of planners, architects and valuers as assessors I see no insuperable difficulty in drawing up concrete

programmes of accommodation on which designs could be submitted in competition and tenders subsequently invited.

Programmes for civic offices, technical colleges and hospitals, all complex and involving the co-ordination of many divergent factors, have proved practicable; a programme for central area redevelopment would be a good deal easier than some of these.

The design finally executed might differ in detail from the premiated scheme but this would not be uncommon.

Central area redevelopment abounds in problems; what we are concerned with as architects is architecture. At the moment we are not seeing very much of it in central areas and the RIBA letter does seem to point a way to better things.

J. D. TETLOW

Lichfield

IUA Congress

SIR: Having seen reports of the inadequacy of assembly halls in London with microphonic translation facilities for next year's I.U.A. Congress, I have been prompted to write to the RIBA offering my services, however humble and inadequate they may be, in the translation of French.

Would it not be a good idea if any architect linguists were to do likewise?

SYDNEY B. DOWNS

Withington, Manchester

A very good idea indeed; the RIBA is counting upon the voluntary assistance of large numbers of associates, as linguists, guides and hosts, as well, of course, as delegates.

THE EDS.

The Limit

SIR: Could the AJ explain that sinister phrase in the description of the public baths at Coventry, "a signalling system showing whether the bather has exceeded the allotted time"?

What is the allotted time? And what happens if the dreaded signal comes up—does the Baths Committee of the City of Coventry come and pull out the offender and charge him under a byelaw?

When will planners, of any political persuasion, understand how human beings react? In those circumstances I wouldn't use baths with an "allotted time" even if they were gold plated. Charity may be the greatest of virtues, but it can also be the meanest and most cheese-paring of mimbly mumbly vices.

IAN NAIRN

* Sorry my Thesaurus gave out.

If Ian Nairn will go and take a public bath in almost any public bath house he will probably find there is a time limit, more rigid perhaps on busy nights like Friday but always available to put a stop to his wallowing. It is probably more generous however than the time limit allowed in many family bathrooms.

THE EDS.



HOUSING CENTRE

Holford on Central Residence

Sir William Holford devoted his presidential address at the 23rd A.G.M. of the Housing Centre on October 5 to the question of "Central Residence"—the provision of flats and even small terraces of houses in the hearts of our cities, in particular in and around the City of London. There were many kinds of people who would like to live centrally, he thought, and this trend could play a part in urban renewal.

The trend out of city centres, he pointed out, has been going on for centuries, and he proved it for the City of London by giving its population from the year of the Great Fire, when 150,000 people lived within the walls, to 1951, when it had dropped to 5,324.

There were three types of people who would welcome the chance to live at the centre, he thought: people with low incomes who work near there and would like to live near their work; well-to-do small families, probably with a country hide-out for week-ends and holidays; and students, teachers and other professional people "who would like to live in the City at any rate for a limited period of years, if housing policy made it possible for them to do so."

The Barbican was a pilot scheme for such experiments, and its suitability for central areas in other towns "needs to be looked into much more fully, not so much as an important element in national housing policy, because it will always be a very small proportion of total housing demand but as an important element in urban renewal and an alleviation of some of the problems of the journey to work," said Holford.

He went on to point out the value of providing students' hostels near the City, and using the rooms for visitors to London during vacations. "This seems a

specialty suitable form of central residence," he said, "since it caters for individuals and some families at a time when they can make the most of city life, and contribute a good deal of colour and liveliness to a town centre. Personally, I wish it could be put to good use in the University precinct of Bloomsbury."

Such building would receive the necessary subsidy "disguised in the Quinquennial Grants of the University Grants Committee."

Holford went on to speak with high enthusiasm of the example of the sort of redevelopment project just opened in St. Pancras designed by Frederick MacManus. "Here are 10-storey blocks of flats, a tower of 17 storeys called The Coombe, and 4-storied maisonettes replacing the war-damaged Regency squares of brick and stucco houses," he said. "The Coombe was occupied only last week: it has one of the finest views of London from its roof and looking down one sees the teeming and vigorous life that is already flowing into the new squares. . . . This project is a true little piece of renaissance, an authentic piece of urban renewal, preserving human values and presenting them in a fresh and effective way."

He suggested that research as to who would welcome "central residence" might well be undertaken by some such organisation as SPUR.



Frederick MacManus's redevelopment in St. Pancras, described by Sir William Holford as "a true little piece of renaissance." Left, the Coombe; right, the square from the Coombe.

FIRE OFFICERS CONFER

Safety in High Flats

On September 29 Kenneth Lack, a senior architect in the MOHLG, speaking on designing for fire safety in high flats at the Chief Fire Officers' Association annual conference at Bournemouth, discussed the recommendations given in the new Code of Practice which is now circulating in draft form. As regards safety in dwellings, the new code recommends that all maisonettes should have a secondary escape route; but that flats need not, if bedrooms open

out of the entrance lobby and if their doors are nearer the flat entrance door than the living room or kitchen doors.

The most interesting development on the question of horizontal escape is the acceptance of a single staircase. The conditions for this acceptance are that the stair should open, on each floor, on to a "place of safety" (i.e., a corridor or lobby protected by a smoke stop door) and that no doorway should be further than 15 ft. away from this "place of safety." It is noticed that this "place of safety" need no longer be ventilated to the open air.

Great importance is attached to the protection of the staircase. Where there are

two, this can be obtained by placing a smoke stop door across the connecting corridor, but where there is one only a ventilated lobby should be placed between staircase and corridor. It was previously thought that a fire lift must open on to a lobby ventilated to the open air; but this would inflict hardship on the ordinary users of the lift and this recommendation has been waived. Instead a fire lift may open on to an enclosed hall provided there is a smoke stop door not more than 15 ft. away leading to a staircase. At the moment the draft stipulates that fire hydrants must be in a protected position; but Kenneth Lack suggested that, to avoid unnecessary

duplication of hydrants, they should be placed in the space by the fire lift provided the whole of one floor can be covered by a hose from the floor below in an emergency.

The concept of the protected stair makes it no longer necessary to leave space round buildings for 100 ft. ladders. Kenneth Lack finished by comparing the draft code with practice in Scandinavia and America, concluding that, on the whole, our draft is based on criteria which seem to be more securely based.

INSTITUTION OF MUNICIPAL ENGINEERS

Car Parking

On October 6 the Institution of Municipal Engineers held a one-day convention at the Central Hall, Westminster, on The Problem of Car Parking. The convention was opened by John Hay, the Joint Parliamentary Secretary of the Ministry of Transport, who outlined the Government's policy. This policy relies on the use of the parking meter to reduce congestion in the streets, to place the cost of parking firmly on the shoulders of the motorist and to compel the long term parker to put his car in a garage. It is admitted that there may be a longish period during which the motorist will steel himself against paying the heavy charges of garage parking and that during this period parking garages will not pay; but Mr. Hay was insistent that the Government would not give any direct financial help either to local authorities or to private developers during this sticky initial period. The most that will be done is to give local authorities loan sanction for composite projects in which garage accommodation was provided with shops, etc., on the ground floor. Mr. Hay also spoke of a long term planning group to study traffic problems which the Ministry has set up under the leadership of C. D. Buchanan.

The general tendency among main speakers at the convention was to suggest that the progressive speeding up of the traffic by clearing the streets of parked cars and the providing of enough off-street parking places would solve the traffic problem. It was left to a speaker from the floor, Mr. B. A. Payton, a London County Councillor, to point out that the long term effect of adequate parking in central areas is to generate more traffic and that, if you speed traffic in the streets by moving the parked car, you still cannot speed it at the intersections. The Americans, he pointed out, have in a sense solved the problem of full motorisation, but only because they have unlimited space. Los Angeles is 150 miles across: if you were to provide equivalent facilities in London, you would have to allow the city boundaries to extend from Dover to Bristol. The most interesting of the formal papers was by Granville Berry of Coventry on roof top and mechanical parking, if only because Coventry is the only

city in this country to make a contribution to the parking problem which is at once original and all-embracing in scope. The originality of the Coventry solution lies, not in the concept of roof top parking (which is common enough), but in the linking of a series of roof top parks to provide a peripheral parking ring round and above the city centre at roof top level. The chief practical advantages of this are (or, rather, will be—for Coventry has not completed her system) that the approaches to the central area will not get clogged by cars roving from one parking area to another trying to find a berth; and that cars will leave the ring and enter the ordinary road system at the point most favourable for a get-away. But over and above these it has the decisive human advantage that it segregates traffic and people at the city centre. Municipal engineers discussing the traffic problem nearly always give the impression that the sole objective is to make travel more expeditious for the motorised unit, forgetting that the city centre, and indeed all human environment, is where people consort together, not cars.

There was an exhibition of photographs and models, but nothing of startling interest was shown.

NFBTE

Press Conference

At a Press conference held at the NFBTE on October 6 the President, D. E. Woodbine Parish, drew attention to the efforts being made by the Federation to foster better relations between the public and those building firms who specialise in maintenance and repair work. He pointed out that of a total national expenditure of just over £2,000m. on building work each year some £600m. is spent on maintenance and repair work. Mr. Woodbine Parish made these comments when announcing the publication of three pamphlets by the Federation.

The first of these, "You and Your Client," gives advice to members on their dealings with the public, such as the importance of discussing thoroughly the proposed work with the client and of submitting, whenever possible, a firm price based on a properly prepared specification. The other two pamphlets are for the client. "The Care and Maintenance of Your Property" draws attention to those parts of a building likely to cause trouble (blocked gutters and rain-water pipes, for example) or to require regular maintenance. "So You're Having the Builders In" is for the client when building work commences and advises him, amongst other things, to make proper arrangements with the builder for the storage of his equipment and to ensure that furniture and breakables are removed from rooms where work is to be carried out. Mr. Woodbine Parish said, "Every builder knows or suspects the hesitancy there is on the part of many people to call in assistance when maintenance and repair works are necessary. It is not always a lack of

funds which causes this hesitancy . . . it is because so much building work is done in people's homes and in the places where they work that the public have ample opportunity to draw their own conclusions on the general level of efficiency in the industry. It has to be admitted that these conclusions are not always complimentary either to building firms or to their operatives. Hence the hesitation about calling them in. This does the whole industry much harm. It was with considerations such as these in mind that a representative committee of principals of smaller building firms, of which the NFBTE has some 8,000 in membership, was recently formed to draw up these three pamphlets.

Members will be able to purchase copies of the pamphlets from the Federation for a few pence each and distribute the latter two amongst clients or would-be clients in their district.

LETTERS TO "THE TIMES"

City Rebuilding

A correspondence has been running in *The Times* since October 1 on the problems of rebuilding cities, opened by Mr. C. D. Pilcher with a complaint that architects regard architecture as "the only centrally important factor," whereas "what matters first and foremost is the basic plan for circulation, land use and density."

An effective reply from G. R. Ricketts, secretary of RIBA, quoted the RIBA's recent document on "Competition by Tender" to make clear that architects quite as much as others regard a redevelopment scheme as essentially taking into consideration these questions.

"The only difference," wrote Mr. Ricketts, "seems to be that . . . we believe that a satisfactory result is most unlikely in the centres of large cities at least, unless the complex problems of circulation and land use are first worked out in three dimensions."

He was followed next day by Professor J. S. Allen, president of the Town Planning Institute, who made the point that city redevelopment "must be the work of a team selected from the professions concerned with land use," and that a planner must lead such a team, and went on to point out that "Any method of procedure will fail . . . if the best possible skills are not employed. The problem which concerns everyone is how best the skills—including those of the architect—may be secured for these major operations."

Since then further appeals for teamwork have been published from Mr. W. J. Clark, president of the Incorporated Association of Architects and Surveyors, from the editor of the *Master Builder*, calling for the inclusion of an engineer in the team, and from Mr. Bryan Anstey, President B.Sc. (Estate Management) Club, urging the claims of an estate manager to lead the team.

RIBA

October Council Meeting

From the Secretary's report

Consolidated Design Fee. Philip Bennett and Geoffrey Rowe have been appointed to represent the RIBA on an informal Joint Working Party, with representatives of the RICS and the Association of Consulting Engineers. This Party is to study and report quickly on the possibility of introducing a scale of consolidated fees. Bennett and Rowe are now preparing a draft scale.

Architecture Week. The general opinion of Allied Societies was that it was well worth the effort, but that a week was hardly long enough.

Sir Charles Barry Exhibition. Original drawings of his buildings will be shown in the Reception Room from October 10 to 22 to mark the centenary of his death.

Industrial Architecture Exhibition for Poland. At the request of the Polish Architectural Society a small exhibition of industrial architecture has been sent to Poland. The British Council have paid for most of the cost of the exhibition and will be sending it to other countries eventually. The exhibition has been supplemented by a special article on industrial architecture by M. J. Keyte.

Frank Lloyd Wright Exhibition. It is hoped, if finance allows, to show this exhibition at the RIBA early in 1961.

Joan Milne to be Deputy Secretary of the Board of Architectural Education. Sixty-seven applications were received, and a committee of Edward Mills, D. H. Beatty Pownall, Denis Clarke-Hall and Richard Llewelyn Davies selected Miss Milne for the post at a starting salary of £2,000 a year.

The RIBA is now advertising for an economist to undertake Miss Milne's previous work and to act as secretary of the Joint Consultative Committee of Architects, Quantity Surveyors and Builders. In order to ensure that the grasp of the structure and statistics of the profession and the industry possessed by Miss Milne continues to be put to good use it is proposed that the new economist and his research department be subject to Miss Milne's supervision and should come within the aegis of the Board of Architectural Education.

RIBA Survey of Office Organisation Staffing and Costs

The Professional Relations Committee, under the chairmanship of S. A. W. Johnson-Marshall has asked the RIBA Council to approve the acceptance of £12,000 from the Leverhulme Trust to finance a survey of architects' offices. A team or teams will visit architects composed of some or all of the following: Miss Joan Milne, a management consultant, a woman economist (the wife of an architect) to work on the data assembled, and Michael Austin-Smith and a local authority architect.

The Committee's proposals are given in detail below.

Objects of the survey

The survey is being undertaken in order to

provide factual information in relation to the following questions:—

Architectural education

(a) What sort of work needs to be done in architects' offices and what proportion of kinds of staff, professional and non-professional, does this argue?

Fees and salaries

(b) To what extent is the present scale of fees remunerative, and what, if any, changes are (i) desirable and (ii) practical?

(c) Is it possible to lay down any broad levels of comparable responsibility common to a number of offices and, if so, to indicate the range of salaries paid at each level?

Management and technical competence

(d) How can the efficiency of the architect be raised through better management of the office and the job; and how far is efficiency inhibited by factors beyond his control?

Selection of offices to be surveyed

Fifty per cent of the profession is to be found in offices in private practice and 27 per cent. in local authority offices.

It is suggested that these two main groups should be surveyed, with sufficient numbers of each to enable comparisons to be made. In addition, a small number of offices in other fields (e.g. industry, contracting firms) should be included to see whether anything can be learned from the different types of organisation evolved within the framework of a larger business unit.

In selecting the offices, the following factors should be taken into account:—size of office, location, type of work handled, kind of office organisation (e.g. use of qualified/unqualified staff, use of consultants on staff/outside).

It is suggested that 50 offices be chosen, the numbers in each group being in general proportional to the total numbers of architectural staff in each group (though with a concentration on the medium and larger office, which yield a wider range of experience and offer greater scope for variations in organisation and for the exercise of management techniques than the very small office). It has been decided to visit 32 private practices, 6 county offices, 4 City and Borough offices, 2 central government, 2 national boards and 4 industrial and commercial offices. The offices are grouped according to size: 1-5 staff, 6-10, 11-30, 31-50 and 51 or more staff.

Method of survey

It is suggested that the full survey should be undertaken by a team of three people, each having the main responsibility for one aspect of the survey (staffing, organisation and costs)—although all three aspects are in fact interdependent. The team should have at least one architect, probably two, but the third member might be chosen primarily for his knowledge of cost accounting or organisation and methods.

A pilot survey will be made of about 6 offices by members of the RIBA staff (Miss Milne, dealing with staffing and responsibilities, Mr. Waterhouse with costs and Mr. Anthony Williams with the management aspect). Mr. Ricketts, who carried out the first survey of local authority offices in 1957, also intends to take part personally in the pilot survey. This is intended to map

out the ground to be covered in the main survey.

Report on survey methods of the Pilot survey for the guidance of the team(s) for the main survey

Six offices were visited, as follows:—

Private practice (4):—

One large London office, long established but having grown substantially since the war, with a mixed practice, including industrial work.

One small London office, established post-war and only just beginning to flourish, likely soon to have to face the problem of expansion.

One large and long-established provincial office with a substantial and varied local practice.

One small provincial office, established post-war, with a high proportion of conversion work.

Local authorities (2):—

One large county office with a big and steady schools programme and a small amount of minor work.

One small borough office with a mixed programme of local authority building work.

Method of the survey

The survey was carried out by a RIBA team of three or four (including Miss Milne, Mr. Ricketts, Mr. Waterhouse and Mr. Williams) who spent approximately two days in each office. Offices were asked to provide some information in advance and were given notice of the scope of the inquiry and the sort of questions to be put.

A first session was held with either the senior partner, or all the partners together, or the chief architect and his senior officers, when a general discussion took place on the method of working and the economic prospects of the office.

The team then followed a project through its various stages starting with the partner or group leader responsible and working down to the various assistants concerned in the drawing office, qualified and unqualified. Discussions were held with individuals whose jobs or background seemed to be particularly relevant to the scope of the inquiry. Factual information was obtained about the costs of the office, work carried out, staffing over the years. Records were explored and copies collected of any standard forms, letters, etc., in current use.

Full co-operation was received from every office visited. Private practices made readily available their annual accounts and details of income of the most confidential nature. In the local authority offices, the Treasurers participated in the discussions and did their best to provide cost information on a basis comparable to that of private practice. Thanks are due to all those concerned.

Basic factual information required

The following is a list of the factual information that appears to be required as a basis for arriving at any conclusions on staffing and costs. Some of it was found to be already available, some will require special analysis by the firm or their accountants. An attempt should be made to obtain the whole lot as the full survey progresses, giving time for any special analysis required.

(a) Reply to a questionnaire supported by:
(b) Organisation chart, with names of staff in post for all architectural staff, supporting administrative staff and senior staff of other professions (quantity surveyors, engineers, etc.).

(c) Complete list of architectural and administrative staff, giving brief details of post filled/grade and salary, age, training, qualifications, length of service. (To be amplified orally by a thumbnail sketch by the principal).

(d) Staff totals at 31st December for the 10 years 1950-59 showing separately the numbers of partners, assistant architects, architectural assistants, other technical staff and administrative staff.

(e) Copies of standard letters, forms, handbooks, specifications etc. in use.

(f) Lists of standard drawings.

(g) Statement of income and expenditure, if possible for the ten years 1950-59, analysed in a specified form.

(h) Balance sheet, with details of partners drawings and statement of the firm's capital position (in strictest confidence) for the ten-year period.

(i) Value of building work certified (in total, and with separate figures for local authority housing) for the 10 years 1950-59.

Aspects that throw light on the efficiency of the office

Administrative efficiency:—

(a) Overheads in relation to the size of firm; ratio of administrative to technical salaries; the kinds of jobs that are passed to the administrative staff or handled centrally.

(b) The records that are maintained, and how well they are kept.

(c) The extent to which such records are in fact used.

(d) Accommodation and working facilities.

(e) Staff relationships—welfare services provided; general atmosphere.

(f) Attitude to clients—(i) as expressed by the partners/chief architect; (ii) from the client's point of view (if it should prove possible to obtain this).

Technical efficiency:—

(g) Drawing office and job procedures—extent of rationalisation of methods.

(h) Quality and quantity of communications (e.g. drawings and written instructions) to quantity surveyors, specialists and contractors.

(i) Use of standard forms (e.g. certificates, specification clauses, check lists, letters).

(k) Use of standard drawings and attitude towards them.

(l) Organisation of information services; assessment and feedback of experience from previous jobs.

Proposed Questionnaire

1. Name of office

2. Date when office was established

3. Description of work (e.g. range of jobs handled with description of type client, location and value)

4. How does the firm undertake specialist design (e.g. large structures, heating and ventilating schemes)

Is this normally done by

(a) your own staff

(b) consultants

(c) sub-contractors

5. Are records kept of the number of man-hours spent on the various stages of each project? If so, under what headings are they available

Office organisation

6. Brief description of method of working (to be amplified in discussion around the organisation chart)

covering e.g. division of work between partners

extent of delegation by partners of responsibility

at the stage of

(a) negotiations with the client

(b) sketch designs

(c) working drawings

(d) relation with suppliers, specialists, contractors and sub-contractors

(e) site supervision

7. Are staff organised in teams for work on specific jobs, or specific aspects of work (e.g. working drawings) or do they work individually on jobs

8. Have any special posts been created in the office (e.g. office manager, materials information officer, liaison officer with consultants) to meet particular needs? If so, give reasons why

Recruitment and training

9. At what levels are new staff recruited, and how

10. Has the office any links with particular Schools of Architecture

11. Are there any arrangements for the training for qualification of junior staff

12. Is it difficult to obtain the right kinds of staff? And if so, why?

13. Is it difficult to keep the right kinds of staff? And if so, why?

14. What, if any, changes in the present form of architectural education and training are needed to enable the architect to carry out his functions more satisfactorily

Staffing

15. What is the policy of the office on the employment of unqualified staff

(a) in principle

(b) in practice

16. Could use (or greater use) be made of non-professional staff if they were given special training e.g. an architectural technician, working under the direction of the architect, whose training would include the history and appreciation of architecture as well as a wide range of technical subjects (i.e. a vertical extension of the design team)

17. Could use be made of staff of professional level with training in design but having specialised at a fairly advanced level in a technical subject such as structures, heating, acoustics, office management (i.e. a horizontal extension of the design team)

18. What use is made of administrative staff to relieve the architect of routine work? Could this be increased with advantage

Conditions of service

19. Is there an established scale of salaries for assistants? If so, please give details

20. What are the arrangements for review of salaries

21. Is there a scheme for profit sharing or bonus payments to staff? If so, on what basis is it calculated and which staff benefit

22. Is there a staff superannuation scheme?

If so, please give details

23. Working hours:

24. Annual leave allowances:

25. Other staff welfare arrangements:

Financial

26. From the firm's balance sheets for the years 1950/59 (inclusive) establish

(a) The proportion of the firm's income accounted for by the main items of expenditure already listed (for the purpose of inter-office comparison)

(b) The proportion of the expenditure attributable to staff salaries;

(c) The percentage of the firm's income after accounting for overheads which is distributed to assistants by way of

(i) Annual bonuses and/or

(ii) Assistants' agreed sharing of profits in addition to salary

(d) The percentage of income available for allocation to principals or partners after accounting for overheads;

(e) The ratio of administrative to technical salaries;

(f) The ratio of overhead costs to technical salaries;

(g) The ratio of total salaries to principal's drawings.

27. Does the firm carry a professional indemnity insurance and if so, in what sum

28. If the firm has created any "Associate" partners, how do their responsibilities compare with those of actual partners?

29. How does the firm raise its working capital? What is the extent of the bank overdraft (if any)

30. (a) What is the firm's experience as to the profitability of the various types of building work undertaken

(b) Do the firm agree any higher percentage than the normal Scale for jobs which they feel would be unprofitable on the normal basis

31. Is it felt that the stage payments at present prescribed in the RIBA Scale allow an adequate income during the running of a job? If not,

(i) at what stage is it most difficult

(ii) what suggestions have the firm to ease the position

32. What is the range of profit or loss on each category of building work when full architectural services have been provided

33. What is the firm's experience as to the engagement of specialist consultants

34. Have the firm established any consortia with other firms of consultants or quantity surveyors? If so, what are the methods

(i) of working

(ii) of payment of fees by the client, and

(iii) if an all-in fee is charged, how is this broken down between the three professional parties

35. Are any special precautions e.g. indemnities etc., taken by the firm where specialist designs are utilised

36. What external factors most frequently bring about delays

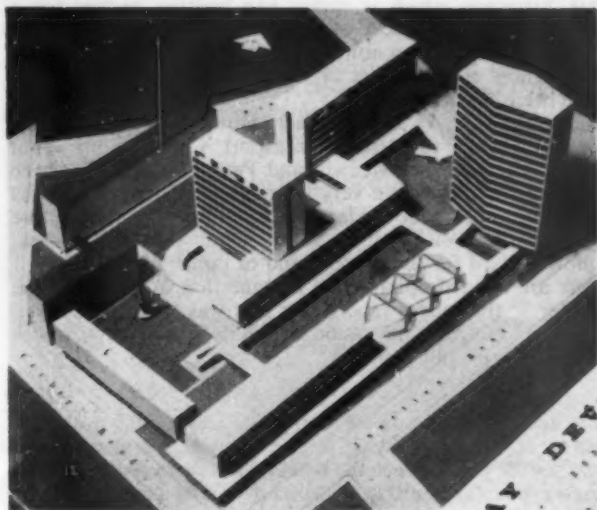
(a) at the design stage of a job

(b) during the building period

(c) in the settlement of final accounts

37. Does the firm use the Standard Form of RIBA Certificate? If so, what arrangements are made as to notifying sub-contractors of amounts due to them

Development Scheme for Archway

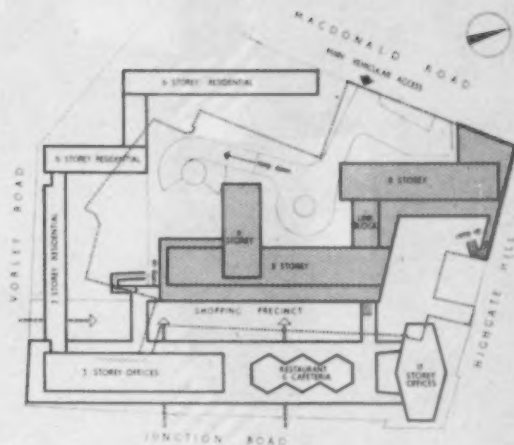


The model of the Archway Development

Plans for rebuilding an area around Archway Underground have been described as the largest post-war comprehensive development project in London conceived and promoted by private enterprise. Developer of the scheme is the Rodwell Group, which operates rather like a property company undertaking to provide its clients with office accommodation offered on leasehold agreements. The area concerned is a six-acre site bounded by Macdonald Road, Vorley Road, Junction Road and Highgate Hill.

The Archway development, as it has come to be known, will comprise a pedestrian shopping precinct at the level of Junction Road, approximately 300,000 sq. ft. of office space, 100 flats and a restaurant and dance hall. Reconstruction of the existing underground station approach is proposed. This will permit direct access to the shopping precinct and underground parking for 400 cars. Present plans provide for a 17-storey tower block on the north-east corner of the site straddling the underground, though this is not included in the first construction stage.

The redevelopment will be carried out in three stages. All the land has not yet been acquired, notably the strip along the east boundary fronting Junction Road. Architects for the redevelopment are Oscar Garry & Partners, and working drawings are well under way for the first stage. Planning consent for this stage has been obtained and demolition on the site completed. It is hoped to start building early next year.

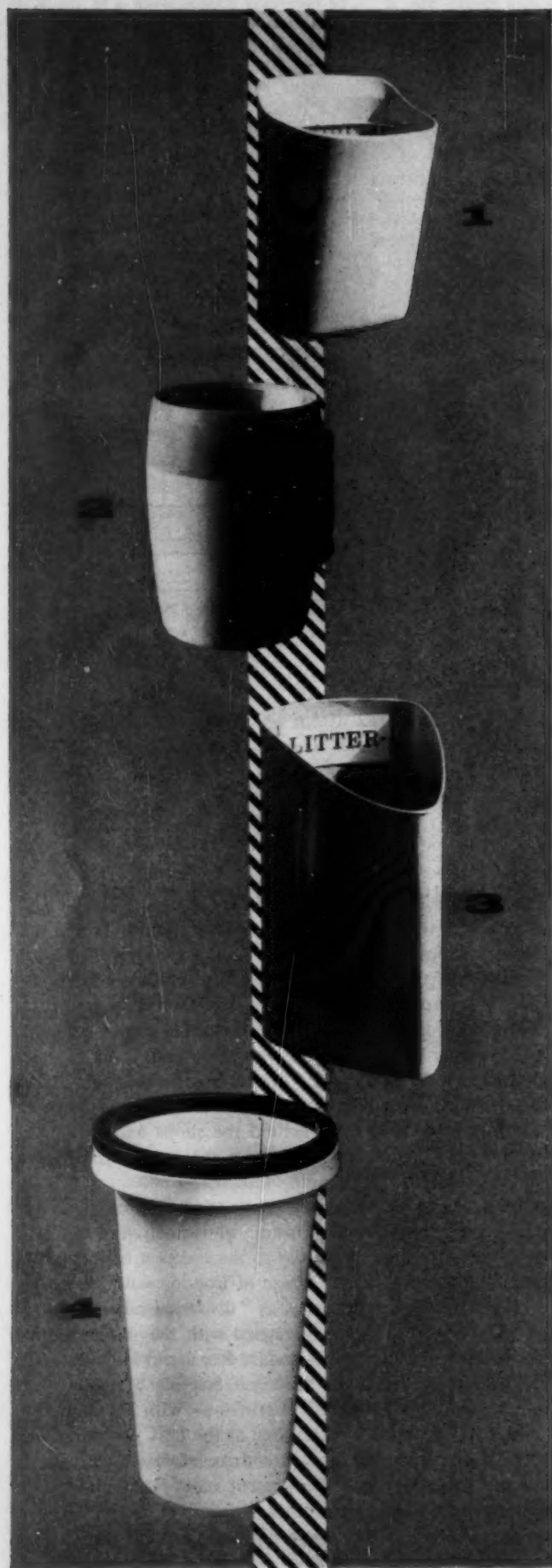


Site plan. The area within the dotted lines is stage 1 and the buildings shown hatched will be erected first.

Stage 1 consists of three linked office blocks, twelve-, eight- and three-storeys respectively. These will be built on a large podium formed by the ground floor shops. The top floor of each of the two tallest blocks contains penthouse flats. Construction of the blocks is reinforced concrete flat slab floors cantilevered beyond the outer line of columns. Cladding is exposed aggregate slabs, glass and mosaic. Vehicle access to the site will be from Macdonald Road on the north-west boundary with a ramp leading down to a covered servicing area behind the shops and to the car park below. Pedestrian exits from the car park will give direct access to the shopping precinct.

The Archway development is the most ambitious so far tackled by the Rodwell Group, whose activities hitherto have been confined primarily to the erection of individual office blocks around the fringe of London within a policy of what the Group describes as "dispersed office development." In fact this project started with the purchasing of a site on the corner of Macdonald Road and Highgate Hill on which the developer proposed erecting a single office block. During preliminary discussions with the planning officer for the north-eastern area at the LCC, however, the Group was encouraged to extend its interest to the whole of this large site and the present redevelopment scheme sprang from these discussions.

Estimated cost of the whole project is around £4m. and it is expected that the first stage will cost £1½m.



A Litter of Bins

The COID's Litter Bin competition, for which 24 diploma-winning designs and 10 runners-up are now on show in Victoria Embankment Gardens, west of Charing Cross Bridge, has produced some neat, clean designs and a few which the judges were even prepared to declare "elegant" or "original."

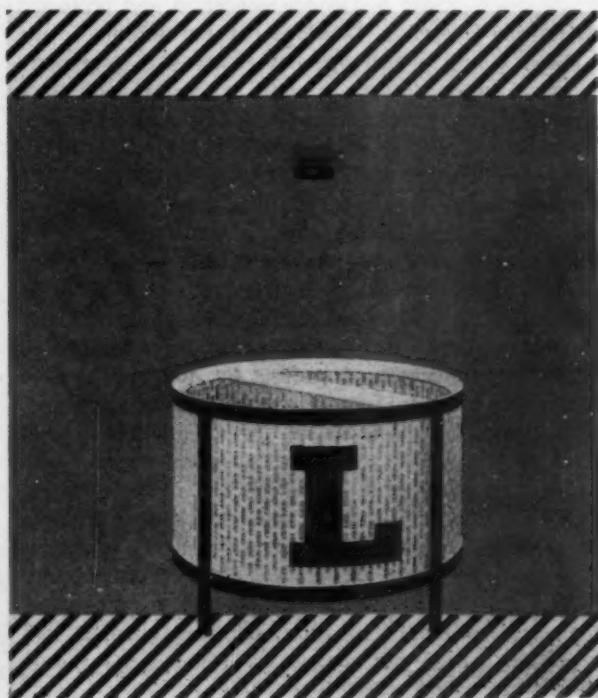
Its fundamental weakness is that it treats litter bins in isolation instead of as an essential part of our street and park furniture, which is rather like inviting designs for a teacup without a saucer or teapot. One hopes that this rather serious flaw can now be remedied by a more ambitious competition in the design of street furniture, incorporating these litter bin designs.

The judges, G. A. Jellicoe, Jack Howe, George Williams (Design Officer to British Transport Commission), Paul Reilly, Alec Gardner-Medwin and Peter Whitworth (of the COID) have approved a very wide range of designs for bins of all purposes, from the large paperbag on a stand for use at processions or fairs to a tall, slim, white openwork, hollow bollard for the neatest kind of public gardens.

There are divided opinions on the question of labelling bins "Litter": the judges report that this was "not considered essential" but in some "good bold lettering . . . contributes towards the overall design."

The competition aroused surprising response, over 100 entries, of which the judges report a high general standard, but "a wide gap between the best and the average. A common mistake was the spoiling of basically sound conceptions by deliberately attempting to be different for the sake of being different."

The judges thought that a good bin should not only hold litter but conceal it, and therefore that perforated sheet or wire mesh should be fine enough to obscure the contents. Too large mesh, in any case, allows small litter to go through. Some of the finer mesh containers, incidentally, are quite hard to lift out for emptying and should be provided with handles.



Some of the winners:

1. *Ironclad A*. Coloured vitreous enamelled cast iron.

Designer: Kenneth Grange, F.S.I.A.

"Commendable for simplicity, excellent use of the material and long lasting finish."

2. *Hybrid 1*. Glass fibre with removable sheet metal interior.

Designers: John and Sylvia Reid, A./A.R.I.B.A., F./F.S.I.A.

3. *Hybrid 3*. Painted metal, sheet metal interior.

Designers: John and Sylvia Reid A./A.R.I.B.A., F./F.S.I.A.

"Good straightforward designs."

4. *Delta*. Aluminium container, anodized. Polythene protection ring.

Designer: British Aluminium Co. Ltd., Consultant: A. B. Kirkbride, B.A.

"One of the most interesting entries, a simple conception, well-proportioned and nicely detailed, the fastening bracket being particularly commendable."

5. *Perf and Weaving 3*. Perforated sheet metal with removable inner baskets.

Designers: Derek Goad and John Ricks of Donald Forrest, A.R.I.B.A.

"Sound logical thinking. The basket in two sections aids emptying as well as providing wind break . . . good solution for open type bin suitable for parks. . . ."

6. *Perf and Weaving 1*. Perforated sheet metal, no inner container, disconnects from base for emptying.

Designers: Derek Goad and John Ricks of Donald Forrest, A.R.I.B.A.

"A most elegant bin that seems to make a new contribution."

7. *Jackpot*. Container of coopered hardwood, with removable inner wire mesh basket. Designer: David Mellor, Des.R.C.A.

"Elegant, restrained design."

8. *Litterfree*. Sheet metal inner container supported by slatted hardwood cage. R. A. Lister & Co. Ltd.

9. *Mercury*. Sheet metal body, two removable wire baskets. Rocking action, glass fibre canopy.

Designer: David Mellor, Des.R.C.A., for National Benzole Ltd. "Excellent example of the prestige bin."

10. *Hybrid 6*. Metal lined glass fibre container with glass fibre canopy.

Designers: John and Sylvia Reid, A./A.R.I.B.A., F./F.S.I.A.

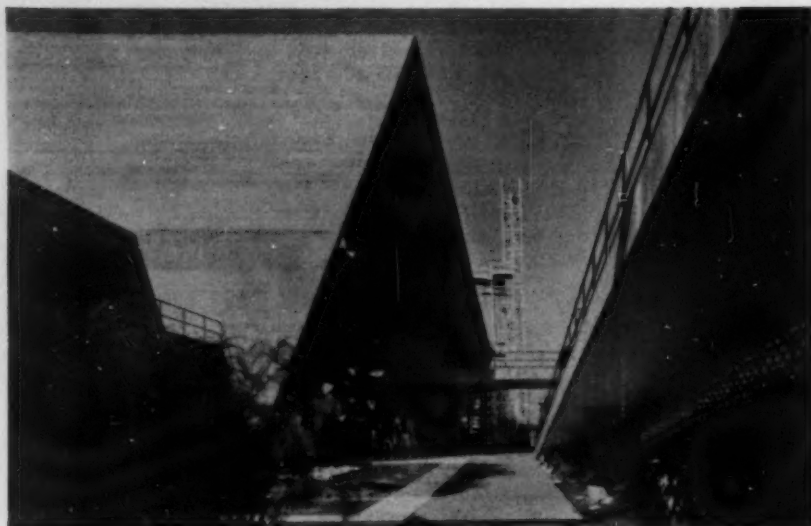
"Sophisticated, perhaps rather fashionable . . . canopy height encourages sitting on."

11. *Satellite*. Free-standing metal support holding disposable paper bags of high wet strength.

Designer: John F. Morgan.

"A useful contribution for temporary use, well suited for processions, fairs, etc."

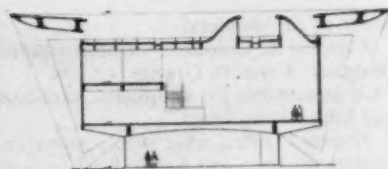




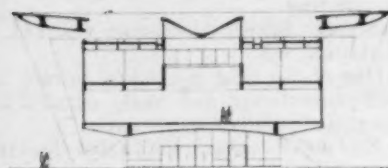
Looking east from the courtyard

The Modern Art Museum at Rio de Janeiro, designed by E. Reidy, is one of those new buildings that make architects today want to get to South America. Built on land reclaimed from the sea, which was originally laid out as a public park, the museum covers an area of 108,000 sq. ft. and is supported on 390 60-ft. piles. It is a glass-walled building constructed round the evenly spaced supporting columns, which provide the only permanent dividing points within, as there are no permanent walls, but only movable panels. The glass exterior walls not only give the building an air of lightness, but make good use of the wonderful curving bay, lined with mountains, as the background to the exhibitions inside, and ensure admirable natural lighting. This is supplemented by artificial lighting diffused through translucent plastic sections in the ceiling.

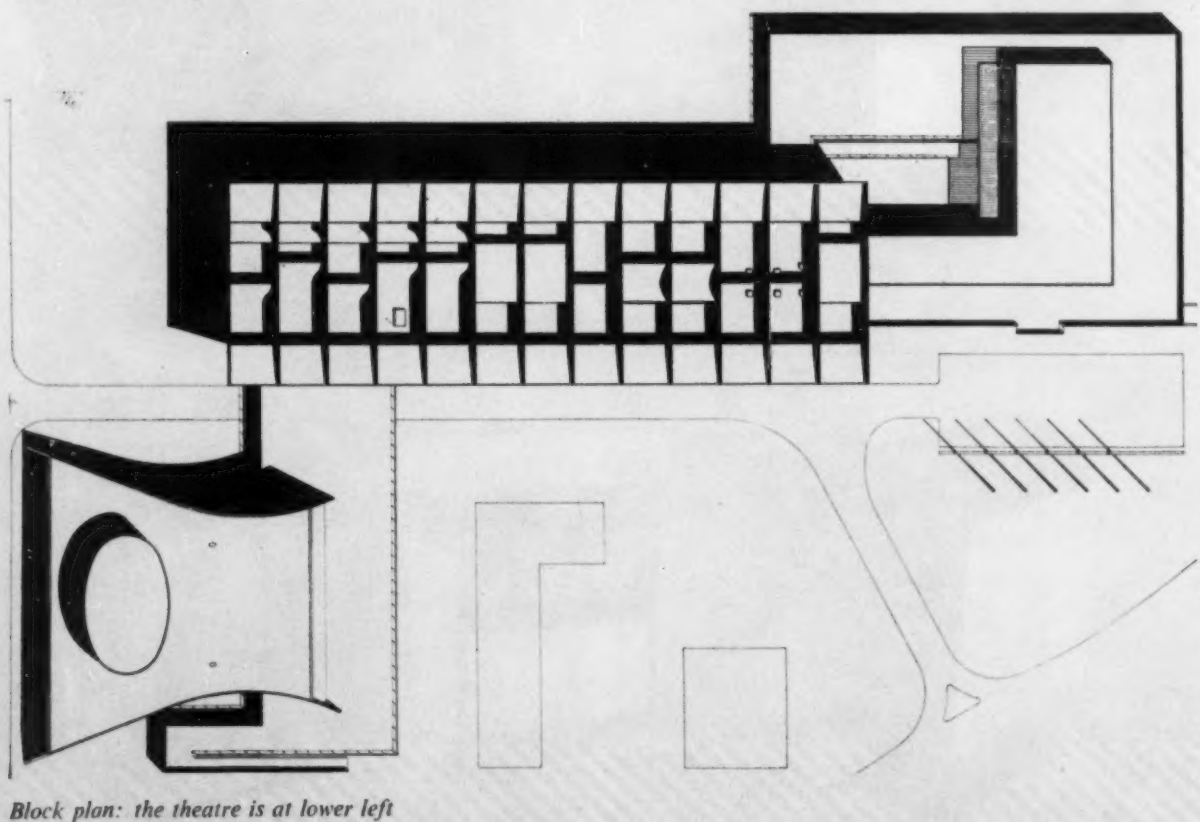
Only the museum is finished so far, but the completed building will comprise a school of art and industrial design, and a theatre. The enclosed courtyards and surrounding open spaces have been boldly and simply landscaped with paved areas of striking design, so that the whole presents an exciting view not only from sea level but from above, where the mountains rush up from the bay, and Rio is rushing up the mountains.



Two sections through the museum



MUSEUM OF MODERN ART: RIO



Block plan: the theatre is at lower left

KEY TO GROUND FLOOR PLAN
THEATRE

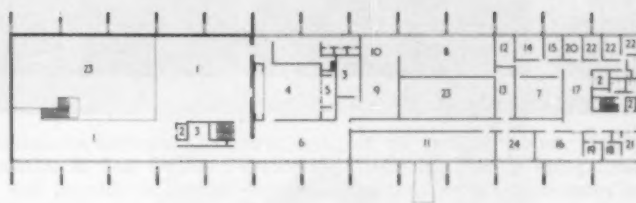
1. Pilotis
2. Hall
3. Box office
4. Cloakroom
5. Ramp
6. Auditorium
7. Stage
8. Administration
9. Prompter
10. Television studio
11. Conductor's room
12. Conductor's dressing-room
13. Service entrance
14. Store for scenery
15. Technical spaces
16. Artists' dressing-room
17. Artists' entrance
18. Storage space for trolleys

MUSEUM

1. Pilotis
2. Ticket office
3. Hall
4. Information
5. Sales office
6. Lift
7. Machine room
8. Access to first floor
9. Entrance: administration and restaurant
10. Entrance for lorries
11. Loading and unloading
12. Records
13. Identification, records
14. Store
15. Preparation of exhibitions
16. Prints room
17. Kitchen service entrance
18. Canteen
19. Students' hall
20. Secretary
21. Director
22. Administration
23. Administration
24. Teachers
25. Archives
26. Basic course
27. Visual information
28. Photo studio
29. Dark room
30. Information
31. Printing shop
32. Compositors
33. Blocks
34. Paper store
35. Book-binding
36. Post room
37. Ramp
38. Pools
39. Flagpoles
40. Car park



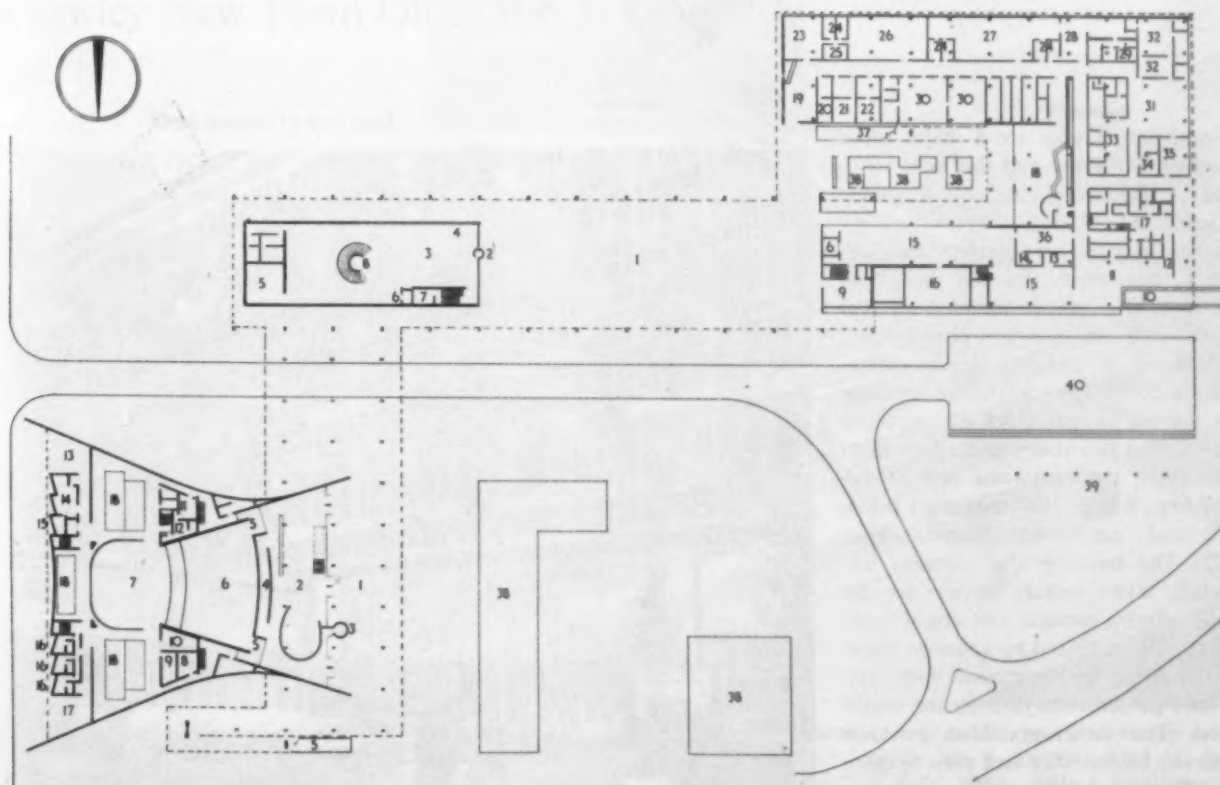
Exhibition of Finnish glass



Second floor plan

KEY TO SECOND FLOOR PLAN

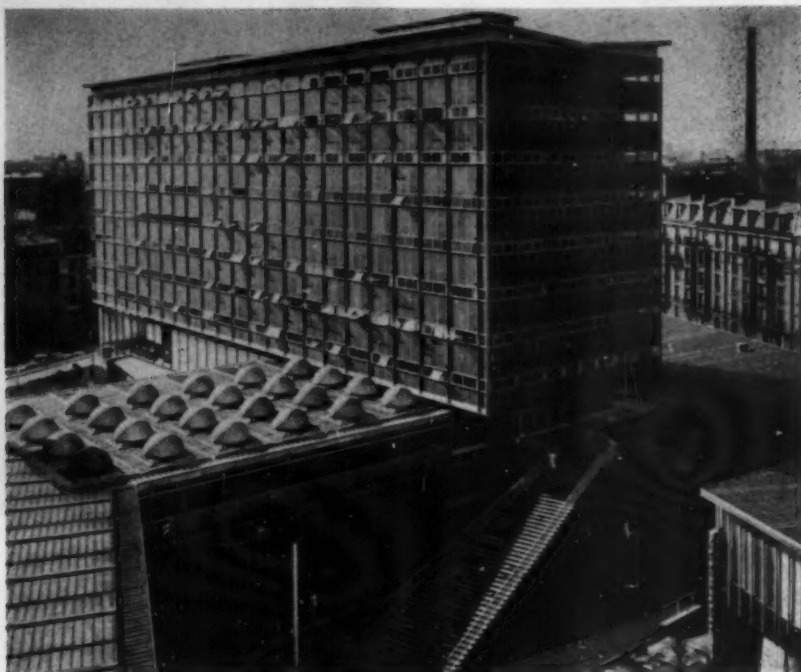
1. Exhibition room
2. Lift
3. Air conditioning
4. Lecture room
5. Projection room
6. Foyer
7. Council chamber
8. Library
9. Card index
10. Records, lantern slides
11. Picture store
12. President
13. Print room
14. Executive director
15. Typists
16. Secretary
17. Waiting-room
18. Finance director
19. Secretary director
20. Assistant director
21. Accounts
22. Curator
23. Public hall



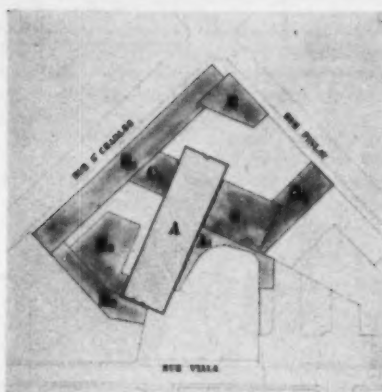
Ground floor plan [Scale: 1/40" = 1' 0"]

HQ for French Family Social Services

Family allowances are a major social service in France, and this new building in Paris (designed by Raymond Lopez and Marcel Reby) brings together in one headquarters building, work that since the war has been carried on in offices scattered all over Paris. The new building covers about 30,000 sq. ft. and provides accommodation for some 4,500 office workers, in the tall central block (A on block plan), with two-storey executive offices (B) along the north-east side of the building, a large staff restaurant below (C) and mechanised records office (C2). The building also contains unusually lavish welfare services for the staff, offering medical and dental treatment. All are linked by spacious circulation space on the ground floor, and a little garden courtyard on the south-west. The rather grandiose entrance stairway for the office staff must be quite a sight when 4,000 people are running up it in the morning.



Looking south-west across block C

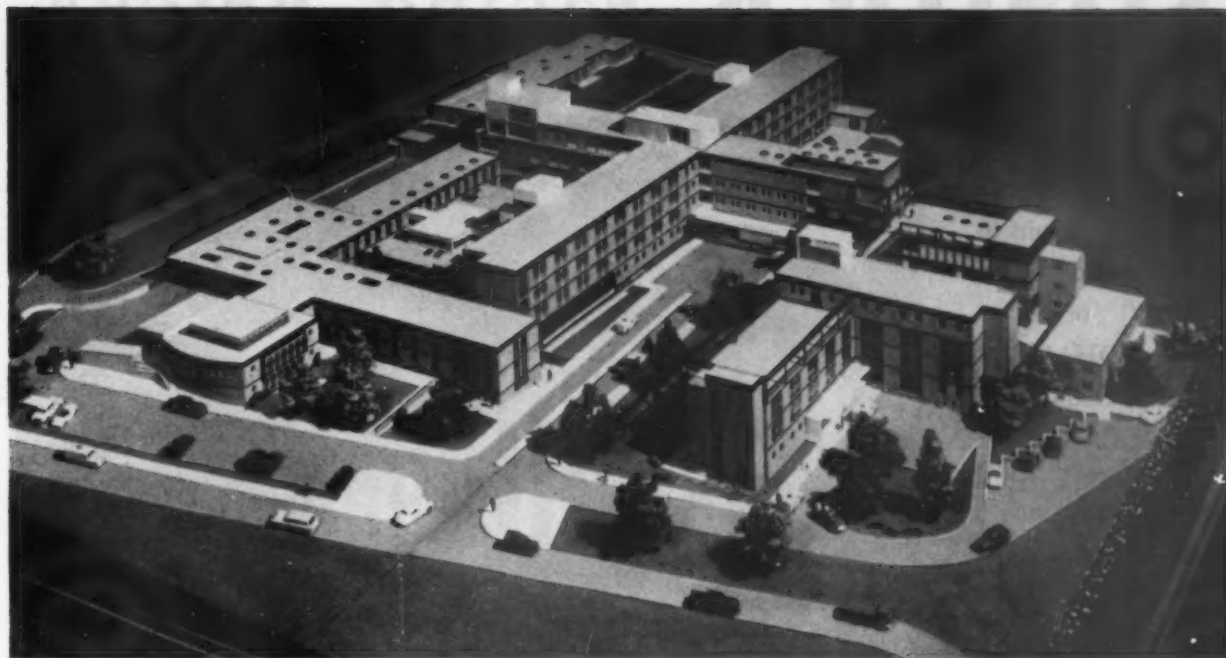


 *Block plan*

East face of central block



West Cumberland Hospital



West Cumberland's new hospital now in course of construction (designed by Charles B. Pearson & Son for the Newcastle Regional Hospital Board) will provide a general hospital serving a population of 140,000 people whose nearest hospital is at present 40 miles away. Its first phase, already completed in 1956 and in use, consisted of the reconstruction

of an existing house, Homewood, as a 41-bed unit for TB patients. This is being followed by the departments to be housed in the single-storey buildings on left, geriatrics department, psychiatry ward and staff accommodation. The main multi-storey block will provide for a general medical and surgical service, and is expected to cost about £1,800,000.

Crawley New Town Office Block



This new office block at Crawley New Town, designed by Eric Firmin & Partners, will house the Building and Civil Engineering Holidays Scheme Management Ltd.—a company running a voluntary scheme for paid holidays, with a turnover of some £20,000,000 a year. The building will house mechan-

ised accounts departments, despatch, post and stamp sales on the ground floor, which has a monitor roof to give maximum uninterrupted floor space, with a single-storey archive store to the left and six-storey administration block above. There is room on the 3½-acre site for future extensions.

Ibstock Facing Bricks

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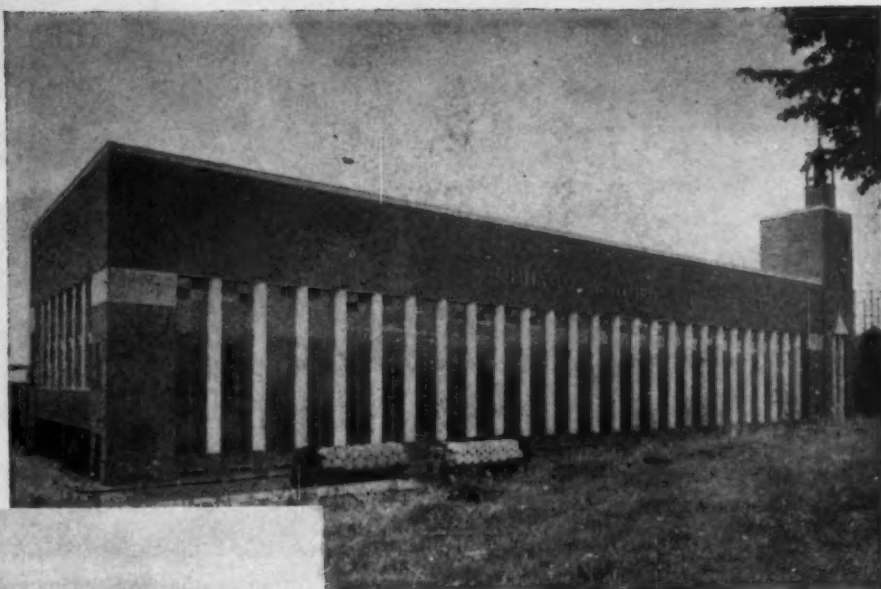


Photo by courtesy of Odhams (Watford) Ltd.



Photo by courtesy of Odhams (Watford) Ltd.

Architects

Yates, Cook & Darbyshire

Contractors

W. & C. French Ltd.

Ibstock Multi Golden Brown Handmade facing bricks were chosen for this fine modern extension to the Photogravure, Letterpress, Bookbinding and General printing works, and nearly completed for Odhams (Watford) Ltd. Architects everywhere specify Ibstock facing bricks for durability and appearance.



Most facing bricks are now in short supply and all orders should be placed as far ahead as ever possible. We are, of course, anxious to receive enquiries for future deliveries and shall be happy to make reservations against architects' specifications.



FACING BRICKS

Ibstock

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THE INDUSTRY

This week Brian Grant describes a booklet on thermoplastic tiles, an infra-red heating panel, a bulkhead lighting fitting, a self-adhesive weatherstrip, an inflatable shelter, and fire resisting panelling.

Thermoplastic Tiles and Floor Heating

Marley Tiles have recently issued a booklet on thermoplastic tiles for floor heating, by Mr. F. L. Brady, formerly of the Building Research Station and now the Marley Group's technical director. The Company has had experience going back as far as 1951 with a hot water heated floor, and it was found that the maximum floor surface temperature reached on a particularly cold day in February was 93 deg. F., but that there was no trouble with excessive indentation of the floor, loosening of tiles or exudation of mastic. Indentation tests made on the same floor after a lapse of 6½ years showed that some degree of hardening had occurred but the tiles were by no means brittle, and the improved indentation resistance should, if anything, be an advantage. In general the lower the thermal resistance of the flooring the more easy is the passage of heat, and the lower the differential between the lower and upper surface of the flooring. Temperature differences of as much as 30 deg. are possible with ¾ in. wood blocks whereas with thermoplastic tiles the difference is not more than 1 or 2 degrees. The tiles have a co-efficient of expansion from 2 to 6 times the value for concrete but the difference is absorbed by the plasticity of the material and movements at individual joints, and no trouble has been experienced with lifting. The use of carpets on a heated floor raises some problems, which depend to a certain extent on the type of heating used. With water the working temperature is controlled, but with electricity the current used is increased by the insulating covering and the temperature of the

floor will rise. In general the temperature builds up until the covering reaches the former temperature of the floor surface, and with the average Wilton carpet the increase will be 10 degrees or a little more, giving a maximum tile temperature of 90 to 95 deg. F., which is well within the capacity of the tile and the adhesive. Only if carpets with foam or cork underlays are used is there any likelihood of damage to the tiles. This is a sensibly reassuring booklet, and it is obtainable from *The Marley Tile Co., Ltd., Sevenoaks, Kent.*

Electric Fires

Falks have just introduced a new range of electric fires, one of the more interesting ones being the Supersil infra-red panel model. This is rated at 2½ kW., and has three long 750 watt silica cased elements, each with its own parabolic reflector and separately switched. There is a freestanding model as well as the built in version illustrated here. Price (either type) is £13 19s. 11d., including purchase tax. (*Falk, Stadelmann & Co. Ltd., 91, Farringdon Road, London, E.C.1.*)

Lighting Fittings

The illustration on the right shows a miniature bulkhead lighting fitting which contains two 12 inch 8 watt tubular fluorescent lamps. It is weatherproof and dustproof, and is intended for the public areas of local authority flats, but will no doubt be used in schools and other public buildings. The design seems quite nice and clean, and it has been accepted by the C.O.I.D. Price is £6 17s. (*Victor Products (Wallsend) Ltd., Wallsend on Tyne.*)

Draughtproofing Doors

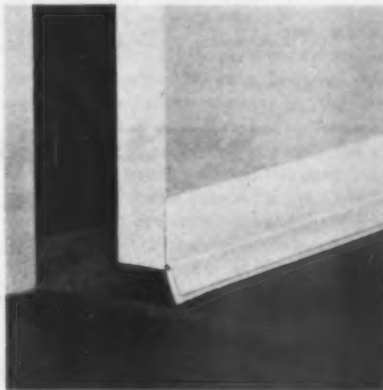
Sealdraught, who already produce a self-adhesive foam weatherstrip for doors and windows are now making Seel-a-Door, a strip of thin white plastic to which is fixed a strip of resilient felt which makes the seal against the floor or carpet. The plastic has an adhesive on the back and it is only necessary to strip off the backing paper and press it to the foot of the door. Standard lengths are 38½ in., and can be cut to the length required with scissors. (*Sealdraught Ltd., Chandos House, Buckingham Gate, London, S.W.1.*)



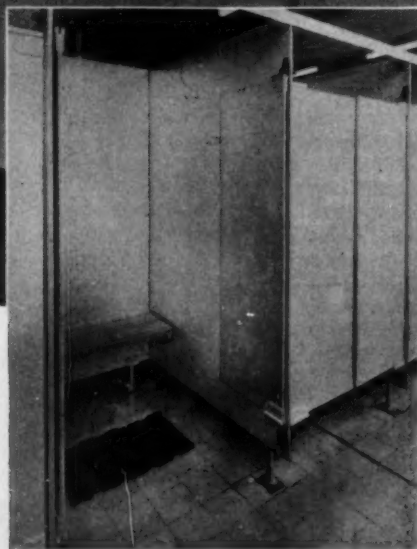
Falk's Supersil infra-red panel



Victor bulkhead lighting unit



Sealdraught Seel-a-Door



*F. J. Bowyer A.M.I.C.E., M.I.Mun.E., Borough Surveyor
Chief Assistant Architect, A. V. T. Storey-Moore, L.R.I.B.A.
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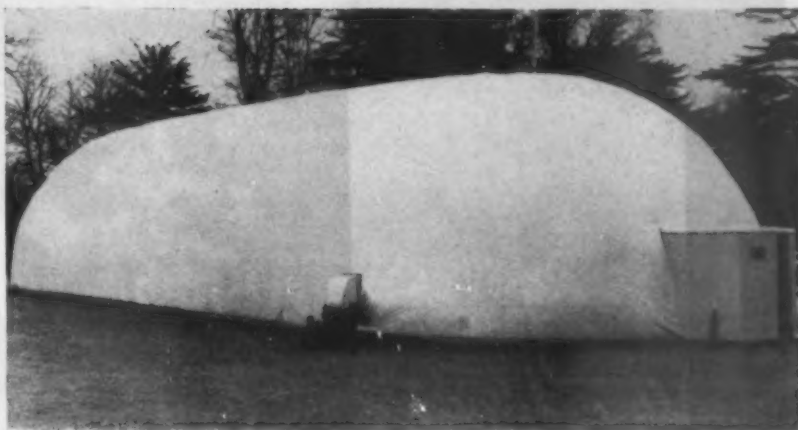
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technical section

Inflatable Shelter

The illustration on the right shows an inflatable shelter made from proofed nylon, and measuring 100 ft. by 40 ft. with a height of 20 ft. It is held up by pressure from a small electric fan which costs only a penny an hour to run, the pressure difference between the inner skin and the outer air being only $\frac{1}{4}$ in. water gauge. The air-house is easily transportable, this size weighing about 6 cwt., and is held in position by pegs securing the base ring, which allow it to withstand very strong winds. Shelters of this type should be useful for site buildings, or for such things as flower shows where tents are the usual thing. Various sizes are produced, but this version can be erected in about two hours by four men, and takes only 15 minutes to inflate. (*Gourock Rope Co. Ltd., Port Glasgow, Scotland.*)



Gourock nylon inflatable shelter

Fire Resisting Panelling

Solastos-LD was originally developed as a non-combustible bulkhead material for shipbuilding and is now being offered to the building industry as a material for curtain wall panels, partitioning, wall linings, surrounds for heated ceilings, and other purposes where a fire resistant insulator is required. It is a low density sheet consolidated from a mixture of asbestos fibre, hydrated lime and silica, and is suitable for

facing with wood veneers, laminated plastics or other decorative media used in the building industry. Density varies from 36 to 45 lb. cu. ft. according to grade and standard thicknesses run from $\frac{1}{4}$ to $1\frac{1}{8}$ in. Lengths can be up to 10 ft. and widths from 2 to 4 ft. and cut sizes can also be supplied. The panels can be worked with normal joiners' tools, but a dust extraction system is advisable and it is recommended that if a lot of cutting is required it should be

done at the works: minor cutting and trimming can be done on site without masks. Self-tapping screws should be used for fixing light articles such as fuse boxes or coat hooks, and wood screws should not be used unless for fixing through to timber grounds. Prices in plain finish, vary from 1s. 6d. to 3s. 9d. a square foot according to thickness. (*Solastos Ltd., Kingsborough House, Wood Street, Kingston on Thames, Surrey.*)

INFORMATION CENTRE

A digest of current information prepared by independent specialists; printed so that readers may cut out items for filing and paste them up in classified order.

A

333-32

1.18 sociology**CENTRAL REDEVELOPMENTS**

Rehousing in the Gorbals. Copies are available, on application with large stamped addressed envelope, from M. Broady, Department of Economics, University of Southampton.

A Scottish Urban Renewal study group, set up by the Department of Economics of the University of Southampton, and including architects and sociologists, has produced a small but useful survey, "The Design and Use of Central Area Dwellings," based on tenants' reactions to the first five blocks of new dwellings to be occupied in the Hutchesontown-Gorbals area of Glasgow.

The dwellings form a two-acre precinct, which includes a children's playground, lawns and private gardens for 18 ground-floor maisonettes, part of 111 acres of notorious slums which are being replaced over the next 13 years, reducing population density from 456 to 150 persons per acre and requiring an overspill of 4,000 houses.

The tenants who have moved into these first 96 dwellings were all "exceptionally good tenants," and 39 of them answered a number of questions about how they liked the new flats. Although rents were much higher (e.g. a widow who paid 9s. 8d. for two rooms before now pays 17s. for a one-roomed flat), there were no complaints; tenants were satisfied whether they had a flat or a maisonette, although some with one-roomed flats would have liked a bed alcove for greater privacy. Nobody minded changing from coal and gas to electric cooking and heating—except one old man who missed having a fire to spit into.

Of internal facilities the only widespread complaints were that clothes drying cabinets were too small, storage space inadequate and windows—designed to be cleaned from the inside—difficult to do con-

veniently.

So few cultivated their gardens that the report suggests replacing them with a communal space which could be used for clothes drying—not at present allowed outside. Of the six garages provided none is used by a tenant.

The major complaint was of noise and nuisance from the children's playground, which serves a much wider area of this overcrowded neighbourhood than just these 96 dwellings.

The Group comments that the tenants' "general approval is particularly striking by contrast with the very frequent complaints made about houses in the new estates" and suggests that the reason is that they have not been uprooted, but are in a familiar neighbourhood "excited about the changes being made in it, notably curious about the future development plans . . . and proud of their new environment, to the point of telling five of the interviewers off for sitting on the raised grass plots!"

They urge that consumer research of this kind should be undertaken by all local authority architects' departments, "to help the architect to be more aware of how his designs work out in practice."

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17 CONSTRUCTION: GENERAL

light cladding, 12: survey, 1

In this and in the following (and concluding) articles *R. Michael Rostron presents the results of a survey of 67 curtain wall structures in this country.

In 1954 the Research Advisory Service of the American Institute of Architects carried out a survey among architects into the use of metal cladding panels†. The following year a similar but less extensive survey of building owners and building contractors was conducted by the Building Research Advisory Board‡. The purpose of both these surveys was the same: to reveal facts for product research and development; but in doing so they also gave an extremely accurate picture of the performance of cladding at that time. Whilst the results of these surveys proved valuable to American architects, contractors, manufacturers and

prospective clients, it cannot be said that they gave very much help to their British counterparts. The different techniques, climatic conditions, economic structure and acceptable standards of comfort prevailing in this country made it extremely unwise to accept the results as an indication of performance standards in Britain. At the same time there has been, for many years, the need for information on the performance of cladding in this country. In the review of the BRS Digests on Light Cladding (Nos. 98 and 99), THE ARCHITECTS' JOURNAL, whilst praising the valuable information on construction contained in the digests, suggested that, "... after all these years we have the right to expect more information on the functional performance of curtain walls and on their ability to provide the kind of climatic control which we need in this country."*

No such comprehensive survey is contemplated by either BRS or the RIBA. The BRS is at present engaged in measurements of "U" values on various types of cladding of northerly aspect, and the Fire Research Station is engaged in an experimental investigation into the fire resistance of panel walls, but neither of these investigations, however valuable and welcome otherwise, will give an overall picture of the present performance of cladding. It was, therefore, decided at an early stage that a survey along similar lines to the AIA and BRAB surveys (although not comparable in extent) was a desirable and necessary part of this study.

The choice of buildings to be included in the survey was dictated by four considerations. Firstly, a representative range of types of cladding, framing systems, and panel materials was desired. Secondly, in order

* Previous articles in the series were as follows: Heat Transmission, February 25, 1960; Stability, March 3; Condensation, March 10; Fire Resistance, March 17; Sound Insulation, March 31; The Joint, April 28; Materials and Finishes, Metals, May 12; Materials and Finishes, Timber and Glass, May 19; Materials and Finishes, concluded, June 23; Erection, July 21; Durability and Maintenance, September 22.

† Bulletin of the American Institute of Architects, July-August 1955, p. 99.
‡ "Metal Curtain Walls," report of a conference held in the Chamber of Commerce of the United States, Washington D.C., on September 28 and 29, 1955. National Academy of Sciences Publication 378, December 1955, p. 13.

* THE ARCHITECTS' JOURNAL, vol. 126, p. 287 (August 22, 1957).

technical section

LOCATION	No.	%
Greater London	22	33
Rural	19	28
Industrial	16	24
Coastal	10	15
	67	100



TABLE 1 Location of buildings in survey

BUILDING TYPE	No.	%
SCHOOLS COLLEGES AND UNIVERSITY BUILDINGS	28	42
OFFICE BUILDINGS, Industrial Administration Buildings	16	24
MANUFACTURING BUILDINGS, Warehouses	9	13
PUBLIC BUILDINGS, Civic Buildings Cinemas, Churches	4	6
COMMERCIAL BUILDINGS, Stores, Showrooms, Restaurants, Canteens	3	4½
RESIDENTIAL BUILDINGS, Flats, Hostels	3	4½
POWER GENERATING PLANTS	2	3
RESEARCH LABORATORIES	2	3
	67	100

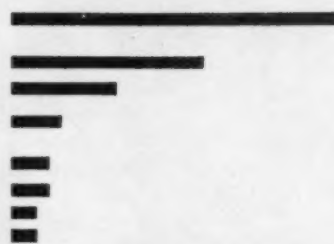


TABLE 2 Building types in survey

CLADDING TYPE	No.	%
SHEATH	28	42
PANEL	Grid	15
	Horizontal	12
	Vertical	21
SHEETED	7	10
	67	100

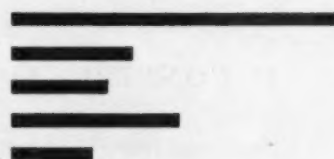


TABLE 3 Cladding types in survey

to cover all methods of maintenance, it was considered necessary to include buildings varying in height from single storey to the very highest. Maintenance and durability also influenced the third criterion: location. Buildings were selected in most types of atmosphere so that weathering could be studied in coastal areas, industrial pollution and London smog, as well as in ideal conditions. The final consideration was the age of the building. At first a minimum age limit of four years was considered, so that the weather would have had sufficient time to discover weaknesses in the cladding. Such a limit was later realised to be impracticable as it would have excluded many new systems and materials of interest. The majority of manufacturers are conducting continuous research and new developments appear with great rapidity. Ultimately, all buildings included in the survey have, with very few exceptions, weathered at least one winter and one summer, and the majority have weathered two or more.

Lists of buildings throughout England and Wales were obtained from manufacturers and others concerned with the production of cladding as well as from journals and trade literature. Over 500 buildings were considered and of these, 119 buildings, designed by

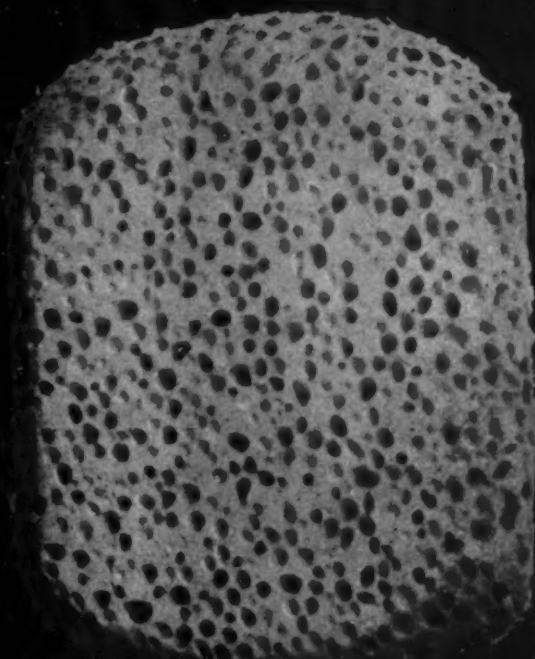
81 architects, were initially selected on the basis of the four criteria outlined. Questionnaires, together with a request for the loan of working details, were sent to each architect.

The architects' questionnaires were concerned with design problems relating to each building and any special requirements which materially affected the design. The information requested was mostly that which could not be ascertained from drawings, and, to ensure an adequate response, questions were kept as specific as possible. Usable replies were received from 41 (50 per cent) of the architects circulated. These covered 67 (56 per cent) of the 119 buildings selected—an exceptionally good response for a postal survey.

One question on the architects' questionnaire was concerned with costs and, unfortunately, for many reasons, this did not yield any useful results. Rather less than two-thirds of the usable replies included some information on costs, varying from a very complete breakdown from the quantity surveyor to a bald lump sum for the complete job. Between these extremes were prices for framing alone, framing and panels, and framing, panels and glazing, some including back-up wall and some not, and a large

THE ARCHITECTS' JOURNAL
for October 13, 1960

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technical section

EXPOSED PANEL MATERIAL	No	%
Glass	32	37
Vertical boarding	11	13
Aluminium	9	10
Asbestos cement	8	9
Plywood	7	8
Precast concrete	7	8
Vitreous enamelled steel	4	5
Slate	3	3½
Stove enamelled steel	2	2½
Copper	1	1
Plastics	1	1
Rendered preformed plaster	1	1
Stainless steel	1	1
	87	100



TABLE 8 Panel material

PANEL SURFACE	No	%
FLAT	shiny	26
	dull	10
	matt	5
TEXTURED	large corrugations	11
	fluted	8
	hammered	4
	dimpled	1
	65	100

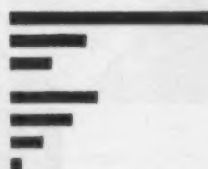


TABLE 9 Panel Surface

PANEL FINISH	No.	%
None	46	71
Site painted	8	12
Porcelain enamel	2	3
Varnish	8	12
Anodised	1	2
	65	100

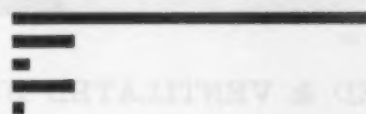


TABLE 10 Panel Finish

PANEL	No.	%
Fixed from outside	41	82
Fixed from inside	9	18
	50	100



TABLE 11 Erection: PANELS

GLAZING	No.	%
Fixed from outside	35	66
Fixed from inside	18	34
	53	100



TABLE 12 Erection: GLAZING

As the introduction to the BRAB Survey observed, a survey of this nature has definite limitations, the most severe of which is its method of presentation. The tables generally are of two kinds: those which compare various items (answering questions which required an opinion) and those which show a simple majority (questions which required a "yes" or "no" answer). Interpretation of each kind is not as simple as it appears. For example, in a table which reveals, say, a 95 per cent success and a 5 per cent failure,

the failures may be very severe and of more importance than the 5 per cent leads one to assume. Also, to obtain really complete information, the failures and the successes would need further analysis into, for example, cladding types, panel types, locations, and so on. In a few instances (notably Appearance, Table 23 and Leakage, Table 26) this has been done. If, however, these limitations are borne in mind, the tables can give a fairly accurate picture of the use of cladding in this country.



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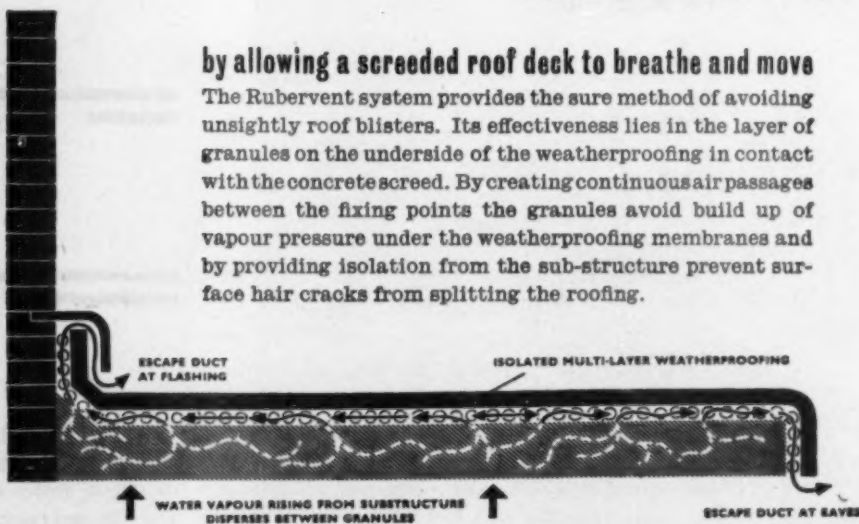


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technical section

PANEL FIXING	No.	%
Beads	33	66
Putty	3	6
Screws	1	2
Nails	7	14
Bolts	2	4
Rivets	1	2
Cover strip	2	4
Interlock	1	2
	50	100

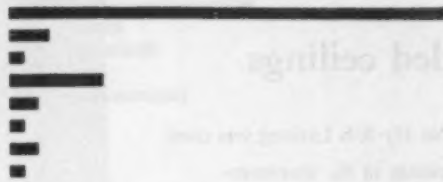


TABLE 13 Attachment of panel

JOINT TYPE	No.	%
Accessory	41	76
Tongue and groove	6	11
Lap	4	7
Butt	3	6
	54	100

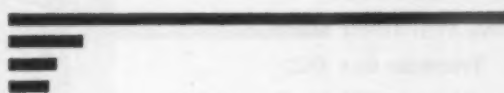


TABLE 14 Joint type

WINDOW TYPE	No.	%
Side hung	9	10
Top hung	26	30
Bottom hung	3	3½
Horizontally pivoted	22	26
Vertically pivoted	17	20
Horizontally sliding	3	3½
Sash	1	1
Projected	5	6
	86	100

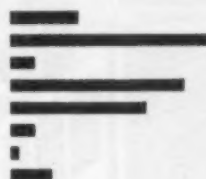


TABLE 15 Window type

WINDOW FIXING	No.	%
Windows integral with panels	3	6
Windows fixed separately	48	94
	51	100



TABLE 16 Fixing of windows

FIXING OF GLAZING	No.	%
Beads	38	71
Putty	12	23
Cover strip	3	6
	53	100

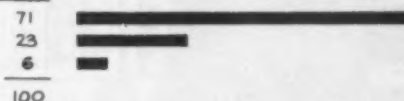


TABLE 17 Fixing of glazing

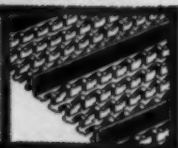
Distribution : Types (Tables 1 to 4)

The criteria set for the original selection of buildings have been retained. Because no positive selection of building types was made, Table 2 gives some indication of the types of building on which cladding is most used. The generous fire regulations in force for schools are probably the most important reason why schools constitute nearly half of the survey. Table 4 suggests that the most popular height is three storeys. Rather surprisingly, the most common height in the BRAB Survey was one storey with three to six storeys a poor second.

Construction : (Tables 5 to 10)

Easy maintenance, quick erection and appearance constitute over half the reasons why a particular type of cladding or material was used (Table 5). Glass is by far the most popular panel material, despite its fragility (Table 8), probably due to the fact that easy maintenance leads the reasons for use. Over half the framing systems are the standard or "off the peg" metal type (Table 7) although the limited cost information received suggested (surprisingly) that purpose-made systems in either timber or metal were cheaper.

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technical section

TYPE OF INSULATION	No.	%
Composite panel	21	39
Loose infill	6	11
Separate backing	10	18
Aluminium foil	3	6
Air space only	13	24
None	1	2
	54	100

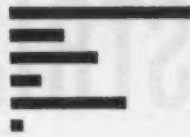


TABLE 18 Type of insulation

BACK-UP WALL	No.	%
Clinker block	11	16
Brick	8	12
In-situ concrete	7	10
Clay block	5	8
None	36	54
	67	100

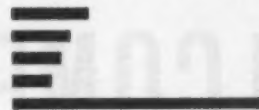


TABLE 19 Use of back-up wall

INTERIOR FINISH	No.	%
Timber	2	4
Metal	10	19
Asbestos cement	6	11
Plasterboard	5	10
Glass	2	4
Concrete	1	2
Plaster	24	46
Brick	2	4
	52	100

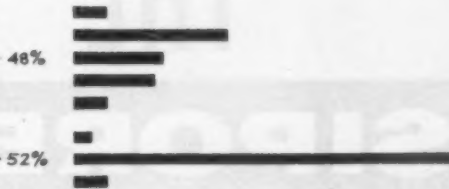


TABLE 20 Interior finish

Erection: (Tables 11 to 20)

Despite fire legislation, over half the buildings in the survey used no back-up wall. It must, however, be remembered that 42 per cent were schools or colleges and 12 per cent were single-storey buildings. What is interesting is that although only 46 per cent used back-up walls (Table 19), in 82 per cent of the buildings panels were fixed from OUTSIDE (Table 11). This suggests that the necessary provision of back-up walls is not the only reason for the continued scarcity of internal erection in this country. A relevant fact is that 70 per cent of the buildings used outside scaffolding (Table 6) although in less than half these cases was the scaffolding used solely for the erection of the cladding. It would appear that for buildings of three storeys or fewer (which constitute 67 per cent of the

survey), the advantages of internal erection are negligible compared with the ease of erection of scaffolding. This is borne out by Table 12, which shows that in 66 per cent of the buildings, glazing is by beads fixed from outside. The most popular method of fixing both panels and glazing is by beads (Tables 13 and 17) and the accessory type of joint is the most common (Table 14). This is more than likely due to the good performance of these methods. A depressing, but hardly unexpected, fact is that over half the internal finishes of the panel are still wet, plaster being by far the most common (Table 20). There is little doubt that this is due to the necessity for a back-up wall and cannot be taken as a true indication of architects' wishes.

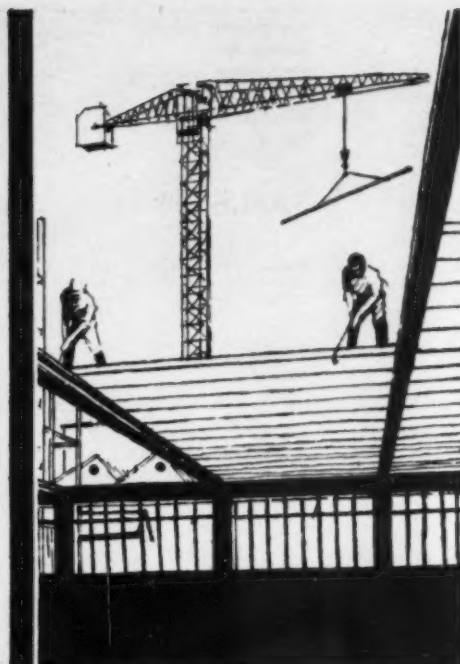
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1 Sociology. 2 Planning: General. 3 Planning: Regional & National. 4 Planning: Urban & Rural. 5 Planning: Public Utilities. 6 Planning: Social & Recreational. 7 Practice. 8 Surveying & Specification. 9 Design: General. 10 Design: Building Types. 11 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.

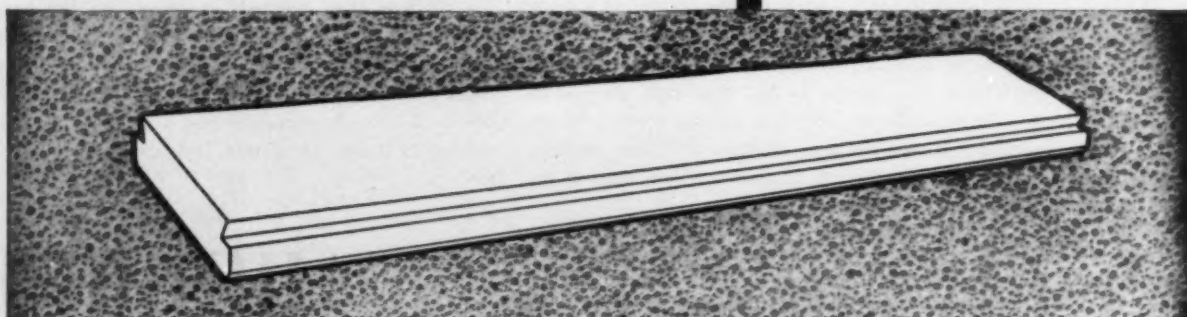
INDUSTRIAL ROOFING WELCOMES THE **SIPOREX** AGE

For over 25 years in widespread use in Northern Europe and many other parts of the world, SIPOREX, the lightweight cellular structural material *is now being manufactured here.*

Siporex revolutionises building techniques and offers architects and structural engineers many outstanding advantages.



- ★ 25 years successful experience all over the world are behind Siporex.
- ★ Over 30 million sq. yds. of Siporex roofing have already been laid, from the equator to the arctic.
- ★ Siporex is simple and rapid to erect—reducing site labour costs.
- ★ Siporex has a thermal insulation ten times that of concrete and is completely incombustible.
- ★ Siporex is only a quarter the weight of an equivalent volume of concrete, reducing the cost of structural framework and foundations.
- ★ Siporex compares favourably in price with other building materials.



SIPOREX THE MODERN LIGHTWEIGHT CONSTRUCTION MATERIAL

Manufactured in Great Britain by: COSTAIN CONCRETE COMPANY LIMITED (A member of the Costain Group)
DUNCAN HOUSE, DOLPHIN SQUARE, LONDON, S.W.1. SIPOREX FACTORY, NEWARTHILL, LANARKSHIRE, SCOTLAND

FACTORY OFFICE BLOCK

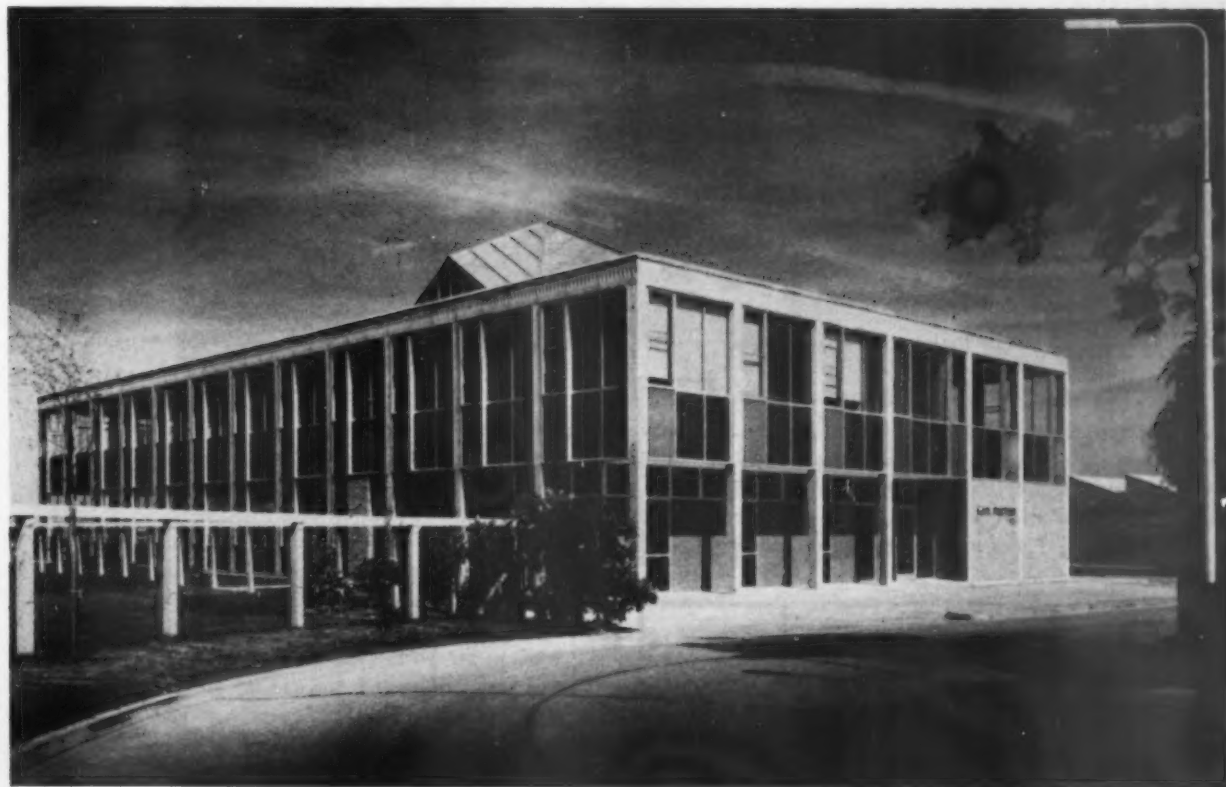
at WEST HOWE, BOURNEMOUTH
for MAX FACTOR & CO. INC.
architects FARMER AND DARK
staff: partner in charge E. M. C. BUTCHER
assistants I. C. CASE
I. T. G. KIDD
N. G. A. PEARCE
quantity surveyors E. C. HARRIS AND PARTNERS
who prepared this cost analysis

SIB No. 92

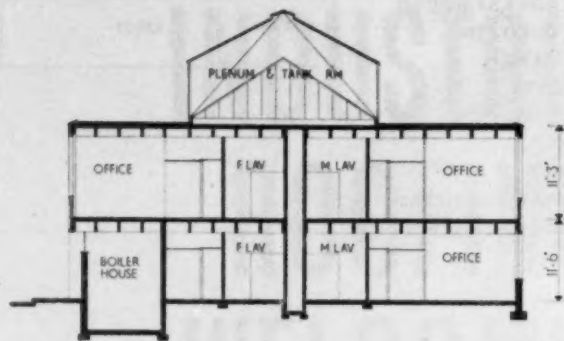
UDC No. 725-23

A high standard of office accommodation has been achieved in this building, by means of an essentially simple but carefully developed method of planning and by close attention to detailing.

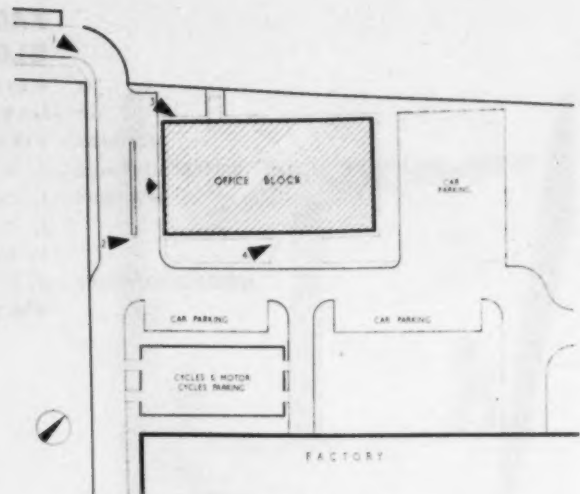
Viewpoint 1. General view from the entrance



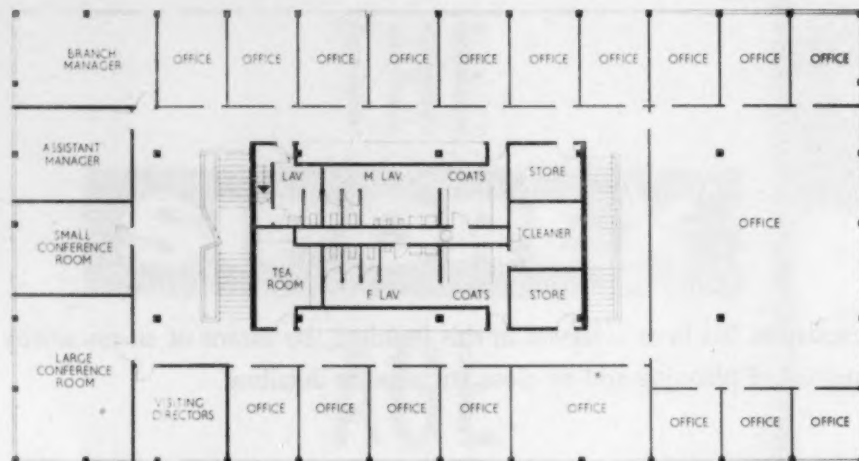
building illustrated



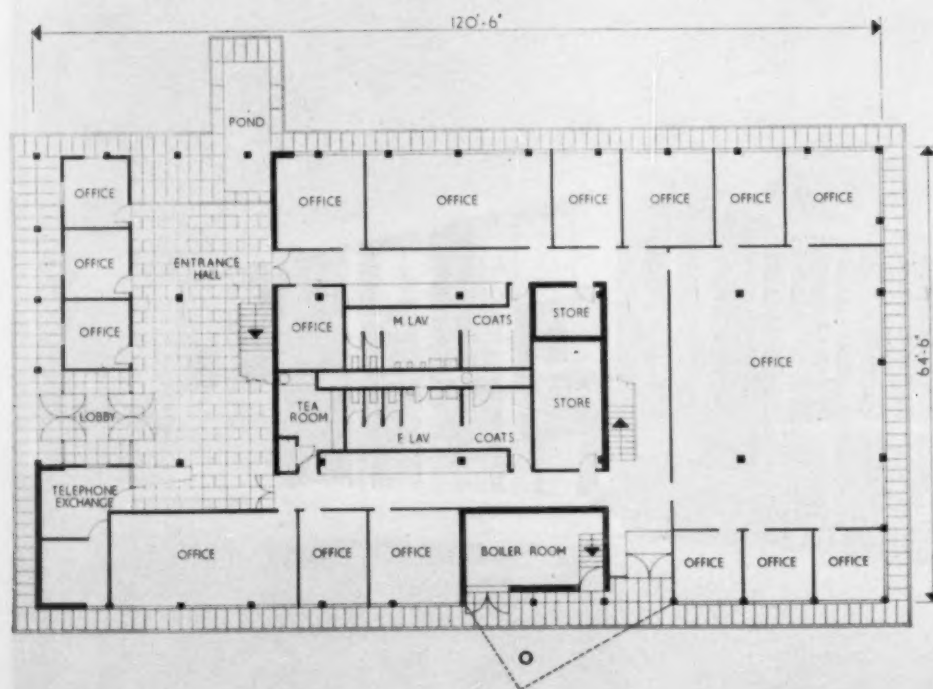
Section through boiler house:



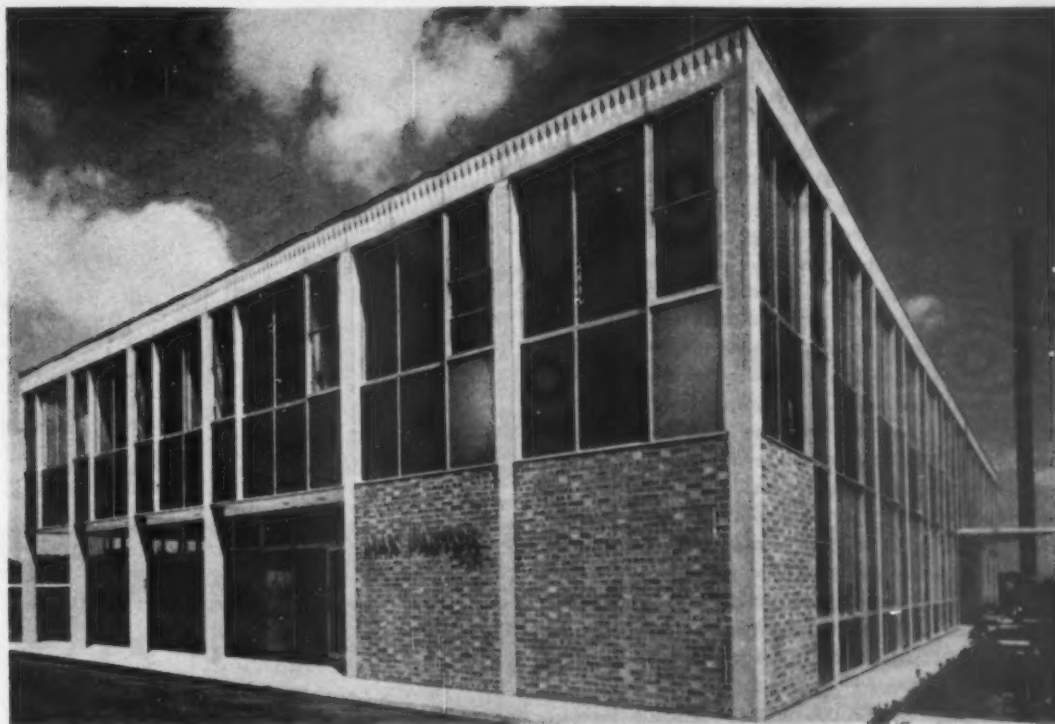
Site plan [Scale: $\frac{1}{8}$ " = 1' 0"]



First floor plan



Ground floor plan
[Scale for floor plans and section: $\frac{1}{8}$ " = 1' 0"]



Viewpoint 2. "the more forthright design of the building proper"



Viewpoint 3. "slightly modulated planes"



Viewpoint 4. "a good idea, but practical difficulties"

APPRAISAL: In the design of this building the starting point, and one of the most interesting features, is the tackling of the problem of how to provide flexible office space with a satisfactorily high standard of working conditions.

The client, an American cosmetics manufacturer who wanted an office block for his British factory, began with the preconception that the building should be designed on the basis of completely open planning, which is, of course, the now generally accepted method in the U.S.A. of overcoming the problem of flexibility. The technique depends for its success upon dealing with the problem of noise transmission by the use of quiet floor finishes and a highly absorbent ceiling. Keeping the latter low will mop up

the noise as close to the source as possible, while sound deadening will be helped by avoiding a completely flat surface to break up any reflections. An example of these techniques is the main office of the pharmaceutical factory at Slough by J. Douglass Mathews & Partners (A.J., July 17, 1958).

The entirely open working environment that results from this type of design is almost certainly repellent to the average British architect, although it must be said that the problem of agoraphobia has been dealt with in the better American examples by partial screening, with demountable panels up to eye level or ceiling height, and by intelligent furniture layouts, to give the individual some sense of privacy and the

building illustrated

feeling that he has his own particular niche in which to work.

In this country the typical method of combining flexibility with a greater measure of privacy is to use demountable partitions, but this raises its own problems. The main difficulty is sound insulation; with the relatively low mass of these partitions, with inevitable cracks at floor and ceiling (and at junctions of panels with some types), the level of sound insulation tends to be very low, a typical noise reduction being only 20 to 25 decibels. This is not enough to prevent your being clearly overheard in the next office, or being very conscious of adjacent telephone bells and typewriters, particularly on a quiet site where there is no blanketing by external noises such as traffic.

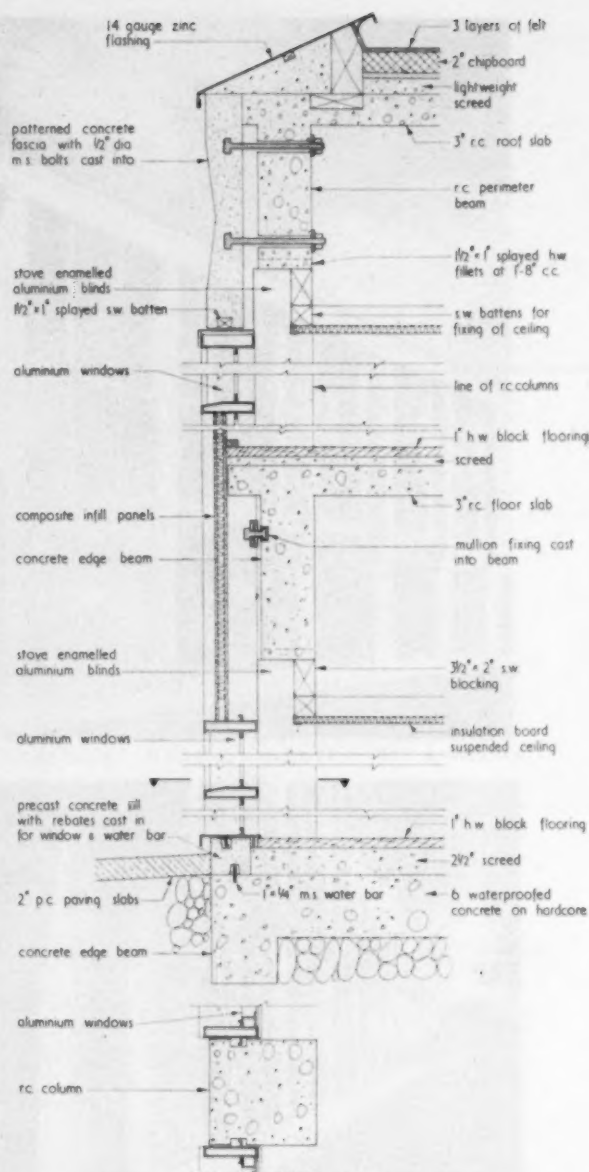
It is thus difficult, if not impossible, to provide adequate privacy from the point of view of noise, without reverting to plastered brick or concrete block partitions, accepting the fact that they will have to be demolished when changes in layout are required. A further problem with solid partitions, particularly where a series of individual offices is required, is that they have a relatively severe effect upon the level of daylight. Because of the absence of cross-lighting from other windows, the level is reduced at the back of individual rooms and there is a harsh silhouetting effect as you look towards the windows, with heavy shadowing.

The method adopted in this building—generally demountable partitions which are fully glazed—might be regarded as a compromise between the stock U.S. and British methods worked out by architect and client. It allows some privacy yet permits a measure of that sense of combined work and easy communication which Americans seem to regard as desirable for an efficient office. However the method has produced two important effects, which appear to be the key to the client's satisfaction with the building.

The first effect is largely psychological. Experience with this building suggests that if you can see the source of the noise in the next-door office—an interview going on, or a typewriter being used—the sound penetration immediately tends to become acceptable.

The second, and equally important, effect is on the level of daylight. With a relatively low ceiling a much higher level of natural illumination can be achieved at points farthest from windows, and because the light is multidirectional through glazed partitions, there is no harsh shadowing and little likelihood of silhouetting. This is particularly noticeable in the large offices on both ground and first floors on the north side of this building; these offices benefit considerably from daylight penetrating through the small compartments on both east and west sides.

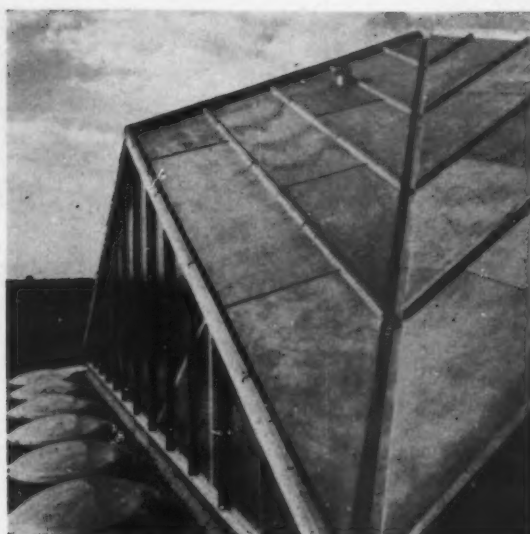
Having agreed this method with the client, the architects adopted two principles as the basis for the planning. First, they arranged the office space so that everyone works within about twenty feet of the windows. Thus everyone has a reasonable visual contact with the outdoors (there are fine views across the countryside) and permanent supplementary artificial lighting is unnecessary. Second, to achieve as efficient a plan as possible, virtually all accommodation other than offices, such as storage and w.c.s, is grouped in a core at the centre of the block. On top of this core, at roof level, is a lightweight tent-like structure housing tanks and ven-



Typical details through external walling, one-sixteenth full size. (Note: revised roof and floor finishes are now as described in the cost analysis.)

tilation plant. This structure is an elegant *jeu d'esprit* in contrast to the more forthright design of the building proper; one can only regret that foreshortening makes it difficult to see and appreciate from the ground the form adopted. The method of core planning is, of course, equally satisfactory from the point of view of minimal internal circulation. Access to the first floor is provided by two staircases, one at each end of this central feature. The south staircase rises out of the main entrance hall and serves the managerial offices, this end of the building being used for the prestige areas.

The exterior reflects a positive attempt by the architects to avoid the repetitive and mechanistic appearance of curtain walling. They have exposed the precast concrete columns, and used at fascia level a three-dimensionally-patterned concrete panel which is successful both in its crisp character



The plant housing on the roof



Interior of the plant room

and in indicating that the element is non-structural. At the same time, the architects have slightly modulated the plane of the curtain walling between the columns, the difference in vertical alignment being emphasised by a change from dark to light grey for the infilling panels. Although this variation is dimensionally small, it gives a depth and richness which is hardly evident in the photographs. On the entrance side the elevation is set back for the main doors and some interview rooms, mosaic being used as the outside finish to the solid walling. This mosaic is crisply in character with the rest of the external cladding.

Slightly obtrusive and less in keeping is the brickwork infilling to the telephone exchange on the south-east corner of the ground floor and to the boiler house on the east side. These two elements of non-office accommodation have not been drawn into the central core; the boiler house presumably because direct external access was required, and the telephone exchange to be linked directly with the desk in the entrance hall. Since the boiler house is on the periphery of the block, the idea of expressing the flue as an independent, free-standing element, to act as a foil to the building proper, was a good one. Obviously, there were practical difficulties, such as the need for gussets to the flange plate and for some protection to prevent people getting singed by leaning against the flue, which have slightly marred the execution of the idea.

Internally the architects have achieved a high standard of accommodation, with good quality finishes and an excellent handling generally of neat and sophisticatedly simple detailing. This sense of quality is matched by the services—fluorescent lighting recessed into the ceiling void in the offices, and mechanical ventilation throughout the building. The ventilation was provided at the request of the client, who believes that without it, particularly in winter when windows are shut, offices tend to become stuffy and hence unsatisfactory places in which to work. He asked, in fact, for there to be a constant and positive sense of freshness.

The duct space required for mechanical ventilation was provided generally by lowering the ceiling level over the central core and its surrounding circulation area. Fresh air inlets occur at high level into office spaces, the return being through louvres in the bottom of office doors, via the circulation areas and extracted from the w.c.s. These louvres do allow some noise penetration into offices from the circulation area, but apparently there have been no complaints, and the method has the obvious advantage that long extract ducts are avoided.

Where columns are free-standing internally they have been left uncased, showing a high quality of exposed aggregate finish (which also occurs externally), and the central core is expressed by fair-face brickwork. This latter feature is highly successful in achieving a clear statement inside the building of the way in which it is planned. The method adopted, of having a central core, has one important drawback: that the building is not readily adaptable for extension other than vertically (which always seems to be a messy way to do it). In this case no structural provision has been made for extension because, it would seem, at the briefing stage the client specified that no extension would be required, even in the distant future. This is surprising since provision for expansion is normally a primary and essential requirement in the planning of factories and their ancillaries. How unfortunate, therefore, that thanks to the growing affluence of our society, and the resultant enormous increase in the sale of cosmetics, the time when it will be necessary to extend the building seems to be rapidly approaching.

CLIENT'S REQUIREMENTS

The client needed for his British factory a new administrative building, sited so as to leave as much space as possible for extension of the factory. Easy access between departments and flexible office space were essential. The heating system was to be augmented by warm fresh air.

PLANNING AIMS

To build a perimeter of offices enclosing a central core containing lavatories and store-rooms. To provide all offices with warm air in winter and fresh air in summer; the air to be extracted via the central core, thus ventilating the lavatories. To design the building on a 3 ft. 4 in. module, with all office partitions movable except those for waiting-rooms, conference rooms and higher executives' offices.

SUMMARY

Ground floor area: 7,640 sq. ft.
Total floor area: 15,280 sq. ft.

building illustrated



Entrance hall and enquiry desk

Type of contract: RIBA, with quantities.

Tender date: January 1958.

Work began: March 1958.

Work finished: January 1959.

Estimated final cost of foundations, superstructure, installations and finishes: £66,269 os. od.

Estimated final price of external works and ancillary buildings: £15,160 os. od.

Total: £81,429 os. od.

Preliminaries and insurances

Contingencies

Work below ground floor level

STRUCTURAL ELEMENTS

Frame or load-bearing element

Precast reinforced concrete columns with exposed aggregate finish. Prestressed main and secondary beams.

External walls

Mosaic on 4-in. aerated concrete blocks. 4½-in. facing bricks, 2-in. cavity, 4-in. aerated concrete blocks.

$$\text{Ratio: } \frac{\text{solid wall}}{\text{floor area}} = \frac{0.050}{1}$$

Windows

Modified form of aluminium curtain walling containing vertical sliding sashes and 2 pairs aluminium fully glazed doors. Infill panels of

asbestos cement sheeting and embossed aluminium, both with mineral quilt insulation and inner linings of wallboard or polished aluminium sheet.

$$\text{Ratio: } \frac{\text{windows}}{\text{floor area}} = \frac{0.507}{1}$$

External doors

Framed, ledged and braced (to boiler house)

$$\text{Ratio: } \frac{\text{doors}}{\text{floor area}} = \frac{0.003}{1}$$

Upper floor

Span: 3 ft. 4 in.

Area: 7,640 sq. ft. 3-in. in situ reinforced concrete.

Super loads: 50 lb. per sq. ft.

Staircases

Precast terrazzo units.

Number of staircases: 3.

Width: 5 ft. 4 ft and 2 ft. 4 in.

Total rise: two 11 ft. 6 in., on: 11 ft. 2½ in.

Roof construction

3-in. in situ reinforced concrete. Additional reinforcement under plant chamber.

Area: 7,640 sq. ft.

Rooflights

Number of lights: 14. Circular cast glass, with precast concrete pipes forming lining and curb.

Glazing

32-oz. clear sheet in sashes. ½-in. plate.

1 3½

5 2½

3 3½

8 4½

10½

11 8½

0½

1 7½

1 6½

1 9

2½

1 5½



Entrance hall, looking out towards the pond



The north staircase

Total of structural elements: 27s 7d

PARTITIONS AND FITTINGS**Internal partitions**

4-in. aerated concrete blocks: 536 sq. ft.
 2½-in. plasterboard with cellular core: 243 sq. ft.
 Terrazzo (in w.c.s): 342 sq. ft.

2 2½

Screens

Plastic panel partitioning on aluminium framing
 (including No. 35 hardwood doors).
 5,604 sq. ft.

5 10½

Internal doors

40 single doors; 1 strong-room door; 3 double doors.

1 1½

Ironmongery

Anodised aluminium.

Fittings

Reception counter, telephone exchange unit, filing-room fitting, tea-room fittings, shoe racks in cloak-rooms, cupboards for dead filing, venetian blinds.

5½

2 10½

Total of partitions and fittings: 12s 6½d

FINISHES**Floor finishes**

Type of finish	Area in sq. ft.	Price per sq. yd.
Random marble	972	88s. 4d.
Rubber tiles	1,980	44s. od.
Vinyl sheeting	8,073	30s. 6d.

5 11½

Hexagonal ceramic

mosaic	63	123s. od.
Ceramic tiles	1,062	63s. 4d.
Carpeting	1,278	67s. od.

Wall finishes

Plaster.

1 5½

Ceiling finishes

In entrance hall, corridors and offices, ½-in. plaster-board (foil-backed for first floor) covered with ribbed insulation board. In central core, plain insulation board.

5 9

Roof finishes

Type of finish: 3-layer asbestos-based built-up felt roofing with mineral spar chippings as finish on ½-in. insulation board on vermiculite screed laid to falls.

2 1½

Area: 6,606 sq. ft.

Decorations

Emulsion paint on walls. Anti-condensation paint on tea-room ceilings. Oil-bound distemper on all other ceilings.

1 8½

Total of finishes: 16s 8½d

SERVICES**External plumbing**

Vitreous enamel steel rain-water pipes from canopy. Supply to pond and fountain.

2½

building illustrated

Hot and cold water installation

Electric water-heaters. Single mixer spray taps to basins.

Sanitary fittings

Type of fitting	No. of each type
W.c.s	11
Urinals	6
Lavatory basins	9
Drinking fountains	4
Sinks	3
Incinerators	2

Heating and ventilation

	Offices	Lavatories
Internal temperatures	65 deg. F.	55 deg. F.
Air changes	2	6
U value of walls: 0.3		
U value of roof: 0.18		

Plant chamber

Light steel framing carrying double-boarded roof covered with zinc. Sides, aluminium patent glazing.

Electrical installation

Type of point	Total No.
13-amp. floor and skirting outlets	91
Fluorescent tubes mounted on continuous trunking within depth of floor and roof	

Total of services: 20s 0½d

Drainage**External works**

Roads, car parks, covered cycle and motor-cycle parks, fencing, sewer construction.

Total per sq. ft. of floor area:

£66,269 (net cost excluding external works)

15,280 (floor area, measured inside external walls)

COST COMMENTS

The building cost at 91s. 5½d. appears to be good value for money in relation to the high standard of office accommodation and good quality finish. The compactness of the building—with a perimeter ratio of 0.56 (solid walling, windows and external doors)—coupled with the relatively low ceiling, has kept the expensive external wall, eaves and sill treatments to a minimum. The unit cost of the aluminium curtain walling, excluding glass but including infill panels, is by calculation 22s. 9d. per sq. ft. Costlier systems are of course available

and the term "expensive" is used only in a relative sense. The tight plan has its drawbacks in that provision must be made for ventilation to internal lavatories. However, this must have had little financial effect on the project, as the whole building is subject to mechanical ventilation. The cost of this requirement is not separable in the analysis from the heating installation.

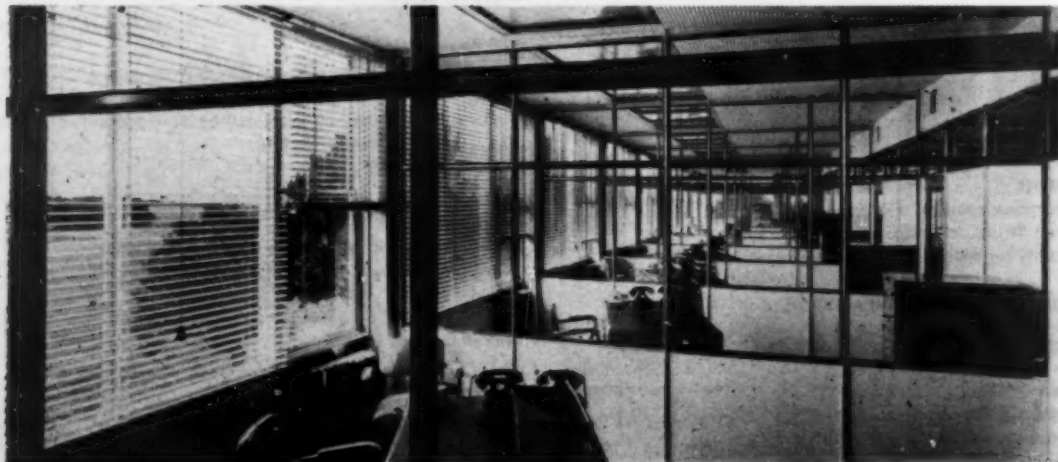
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Ceilings are at a cost one would expect in return for good acoustic qualities (5s. 9d. per sq. ft.). The cost would have been greater had not the secondary frame beams provided a system on which the ceilings could be suspended.

One final and important point is that aluminium windows, hard-wearing floors, self-finished concrete columns, vitreous enamel rainwater pipes, etc., will go a long way towards keeping maintenance costs down.

CONTRACTORS

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"a compromise between the stock U.S. and British methods"

SANITATION | EQUIPMENT | R.W. GOODS

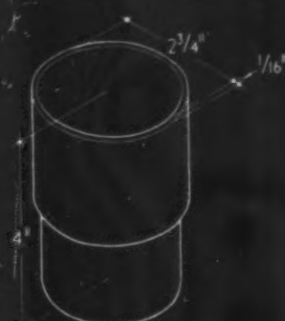
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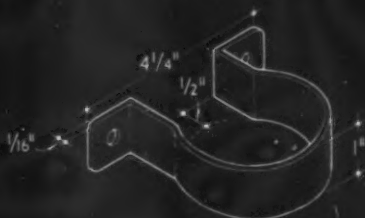
dia of pipes (in)	thickness (in)	standard lengths (ft and in)		
2 3/4	1/16	6-0	9-0	12-0
3 1/2	1/16			
4	1/8	5-0	10-0	20-0
6	3/16			

special lengths available up to 40'-0"

SIZES OF RAINWATER PIPES



PIPE CONNECTOR



PIPE CLIP



SHOE (for 2 3/4" pipes)
for 3 1/2", 4" and 6" pipes, shoes are formed by removing spigot from end of bend



OFFSETS. (for 2 3/4" pipes)

angle A	projection a (in)
159°	2 1/4
142°	4 1/2
133°	6
117°	9

for greater projections, two bends and an offset to be used, as for larger diameter pipes



METHOD OF FORMING OFFSETS FOR 3 1/2", 4" AND 6" PIPES



BENDS

angle A for pipe sizes (in)		dimensions (in)	
		a	b
92 1/2°	2 3/4	5	7
	2 3/4	4	6
	3 1/2	4 1/4	6 3/8
112 1/2°	4	4 1/2	6 5/8
	6	5	6 3/4
135°	2 3/4	3 1/4	5 1/4

building illustrated

Hot and cold water installation

Electric water-heaters. Single mixer spray taps to basins.

Sanitary fittings

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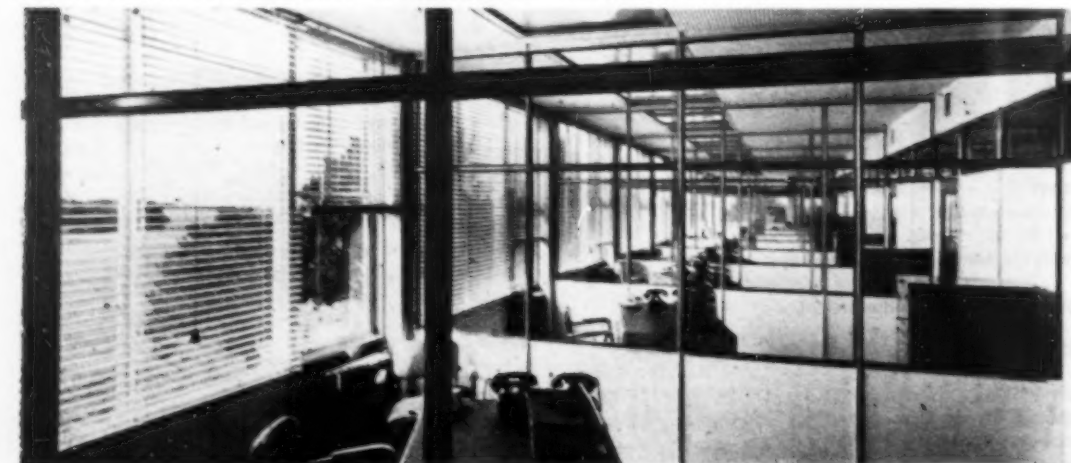
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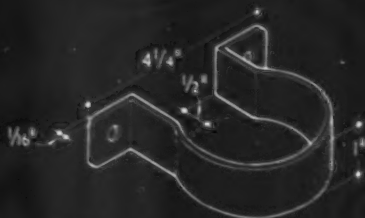
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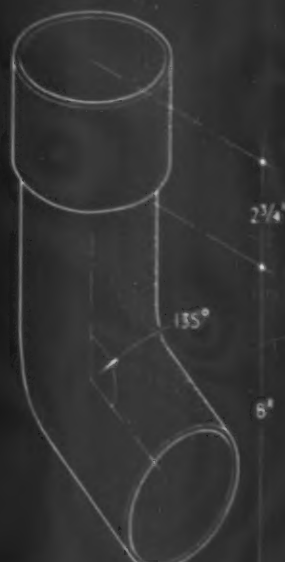
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2 3/4	1/16	6-0	9-0	12-0
3 1/2	1/16			
4	1/8	5-0	10-0	20-0
6	3/16			

special lengths available up to 40'-0"
SIZES OF RAINWATER PIPES

PIPE CONNECTOR

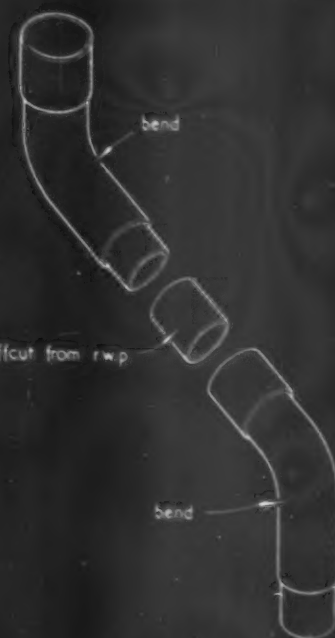
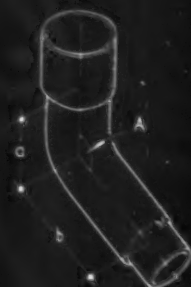


PIPE CLIP

SHOE (for 2 3/4" pipes)
for 3 1/2", 4" and 6" pipes, shoes
are formed by removing spigot
from end of bend

OFFSETS. (for 2 3/4" pipes)

angle A	projection a (in)
159°	2 1/4
142°	4 1/2
133°	6
117°	9

for greater projections, two
bends and an offset to be
used, as for larger diameter
pipesMETHOD OF FORMING OFFSETS
FOR 3 1/2", 4" AND 6" PIPES

BENDS

angle A for pipe sizes (in)		dimensions (in)	
		a	b
92 1/2°	2 3/4	5	7
	2 3/4	4	6
	3 1/2	4 1/4	6 3/8
112 1/2°	4	4 1/2	6 3/8
	6	5	6 3/4
	2 3/4	3 1/4	5 1/4
135°	2 3/4	3 1/4	5 1/4

33.U6 · OSMA · HIGH-IMPACT P.V.C. RAINWATER PIPES AND FITTINGS

This Sheet describes Osma rainwater pipes and fittings made from high-impact polyvinylchloride. Gutters and rainwater heads to match in polyester glass fibre are described on Sheet 33.U7.

Material

The pipes and fittings are made from high-impact p.v.c. which does not corrode. It is impervious to industrial atmospheres having a heavy acid content, and is suitable for use in marine areas. It requires no initial painting or subsequent maintenance. It is light in weight and tough and does not damage easily even when roughly handled on the site. Any expansion or contraction is taken up by the spigot-and-socket method of jointing and the pipe clips have been specially designed to allow for this movement.

Pipes

The sizes of pipe obtainable are given in the table on the face of the Sheet: 3½ in., 4 in. and 6 in. are nominal internal diameters and 2½ in. the nominal external diameter. Lengths of pipe are joined by pipe connectors which form a spigot-and-socket joint. Pipe clips are available as shown. Pipes of square section can be supplied to the architect's requirements.

Fittings

For 2½-in. diameter pipes, offsets, bends and shoes are obtainable in addition to the connectors and pipe clips previously mentioned.

For 3½-in., 4-in. and 6-in. diameter pipes, bends, connectors and pipe clips only are available. Offsets are formed by using two bends and an offset as shown in the drawing on the lower right of the Sheet. Shoes are formed by removing the spigot end from a bend. Branches can be manufactured to the architect's requirements.

Fixing

The pipe clips should be fixed to the wall face by wood screws in plugs. Hardwood or plastic distance pieces may be used behind the clips where the pipe is required to be more than ½ in. from the wall. The pipes can easily be cut with a hacksaw when required.

Colours and Finish

Painting of the pipes to prevent corrosion is unnecessary. The colours available are yellow, green, blue, grey and black.

Further Information

In addition to the pipes and fittings described above and the products described on Sheet 33.U7, the manufacturer can supply polyester glass fibre cold water tanks and cisterns: details are obtainable on application.

The manufacturer maintains a technical department prepared to advise on problems dealing with this subject and the application of plastics to the building industry in general.

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G. H. Osborn Building Products Limited

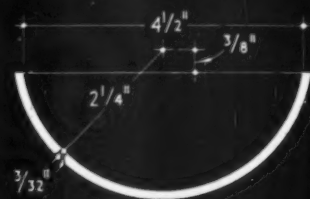
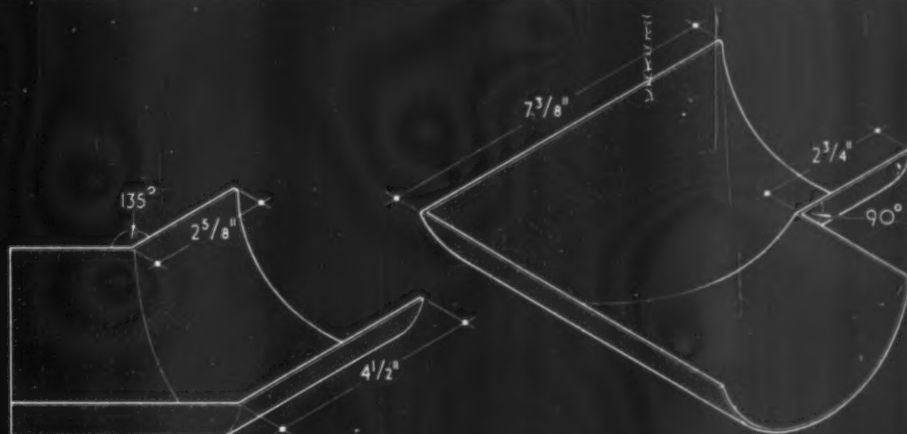
Address: Grove House, 551, London Road, Isleworth, Middlesex.

Telephone: Isleworth 7261-3

SANITATION | EQUIPMENT | R. W. GOODS

33.U7

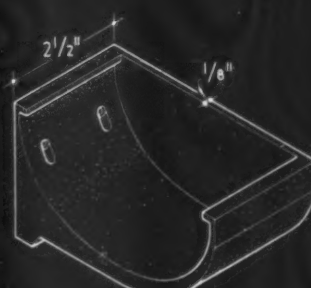
The Architects' Journal Library of Information Sheets 788. Editor: Cotterell Butler, A.R.I.B.A.

SECTION THROUGH
GUTTER

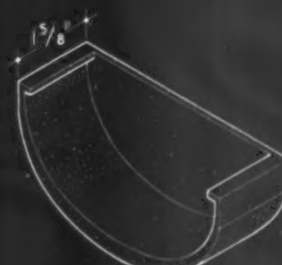
ANGLES



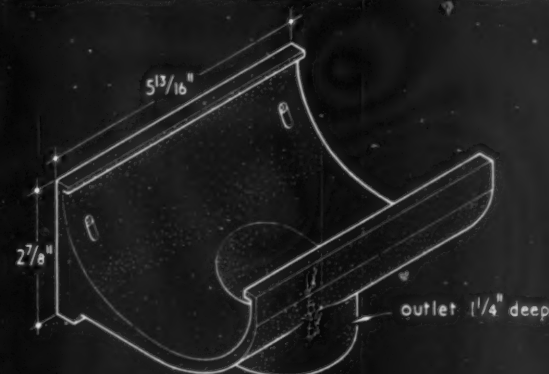
FASCIA BRACKET AND UNION CLIP



FASCIA BRACKET AND STOPEND

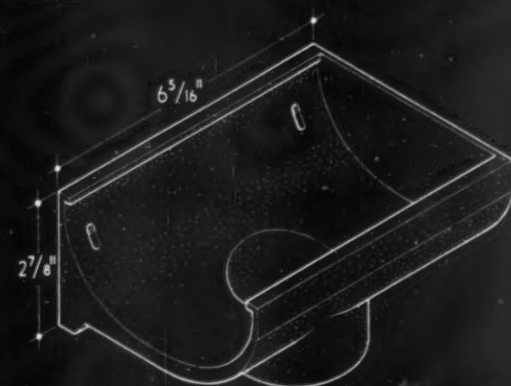


STOPEND (OUTSIDE)

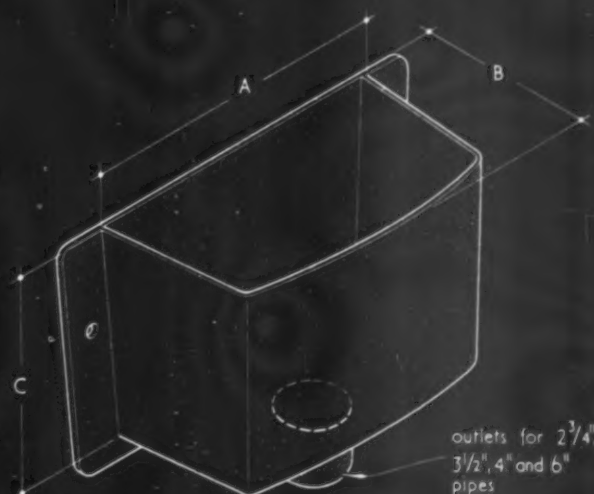


OUTLET

type	size (in)		
	A	B	C
small	9 1/2	5 1/4	5
medium	10	5 9/16	7
large	13	5 5/16	7 1/2



STOPEND AND OUTLET



TYPICAL RAINWATER HEAD

33.U7 ·OSMA· POLYESTER GLASS FIBRE GUTTERS AND RAINWATER HEADS

This Sheet describes Osma gutters and rainwater heads manufactured from polyester glass fibre. Rainwater pipes and fittings to match in high-impact polyvinylchloride are described on Sheet 33.U6.

Material

The gutters and rainwater heads are made from polyester glass fibre which does not corrode. It is impervious to industrial atmospheres having a high acid content, and is suitable for use in marine areas. It requires no initial painting or subsequent maintenance. It is light in weight and tough and does not damage easily even when roughly handled on the site. It does not expand or contract to any appreciable extent and, when supported by brackets at 3 ft. 0 in. centres, will support the weight of both ladder and workman.

Gutters

The gutters and fittings illustrated are standard 4½-in. half round, but 6-in. half round, valley, box and boundary wall gutters can be obtained.

Fittings

Fittings for 4½-in. gutters include stopends, outlets, stopend outlets, 90° angles, 135° angles and fascia brackets; 6-in. half round gutters, valley, box and boundary wall gutters have outlets incorporated in their length and separate stopends.

A sealing strip of synthetic rubber is supplied on each fascia bracket and outlet. It can be folded back for access to the two countersunk fixing holes which are provided. The compressed sealing strip tensions the gutter in the bracket or outlet and makes a water-tight joint.

Rainwater heads are also available to the sizes shown.

Fixing

The gutter brackets should be screwed to the fascia with No. 8 wood screws. The gutters are fixed by placing the back edge under the rear nib of the bracket and pressing down on the sealing strip until the front edge clips under the front nib of the bracket. Adjacent lengths are butt-jointed in the centre of the bracket. The fixing at outlets and stopends is similar. Gutters should be supported at 3 ft. 0 in. centres. They can easily be cut to the required length with a hacksaw.

Colours and Finish

Painting of the gutters and heads to prevent corrosion is unnecessary. The colours available are yellow, green, blue, grey and black.

Further Information

In addition to the gutters and fittings described above and the products described on Sheet 33.U6, the manufacturer can supply polyester glass fibre cold water tanks and cisterns; details are obtainable on application.

The manufacturer maintains a technical department prepared to advise on problems dealing with this subject and the application of plastics to the building industry in general.

Compiled from information supplied by:

G. H. Osborn Building Products Limited.

Address : Grove House, 551, London Road, Isleworth, Middlesex.

Telephone : Isleworth 7261-3

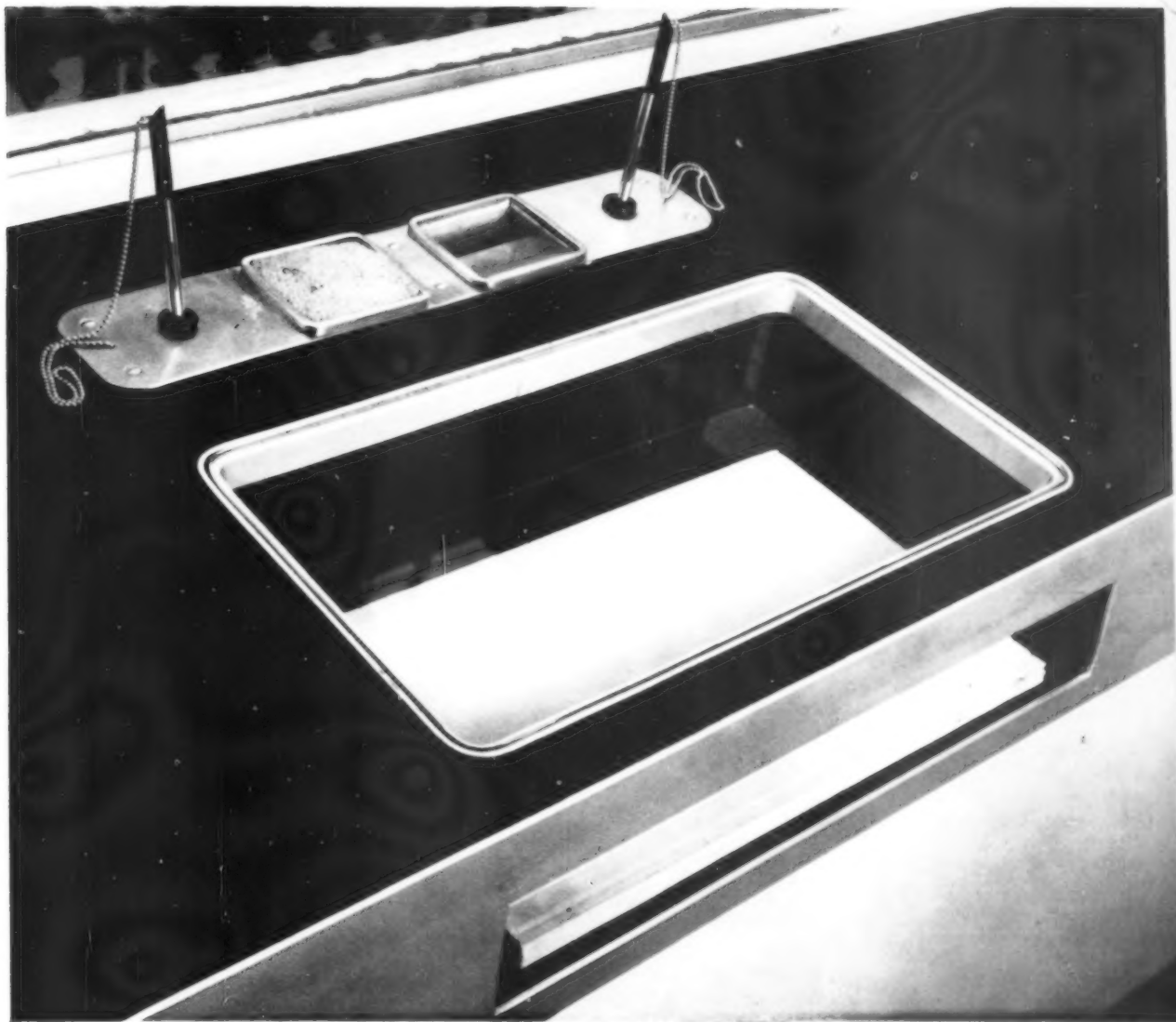
working detail

(8)

FURNITURE AND FITTINGS: 101

COUNTER TOP: POST OFFICE IN LONDON, W.1

Design Research Unit and Sir Hugh Casson, architects.



This detail is an example of the intelligent use of trim and of the building-in of permanent fittings. The shelf beneath the desk is to be used for housing lists of premium bond winners and the Post Office Directory. Note the PO's preference for linoleum as the surfacing for this class of counter.

33.U7 · OSMA · POLYESTER GLASS FIBRE GUTTERS AND RAINWATER HEADS

This Sheet describes Osma gutters and rainwater heads manufactured from polyester glass fibre. Rainwater pipes and fittings to match in high-impact polyvinylchloride are described on Sheet 33.U6.

Material

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working detail

(8)
FURNITURE AND FITTINGS: 101

COUNTER TOP: POST OFFICE IN LONDON, W.1

Design Research Unit and Sir Hugh Casson, architects.

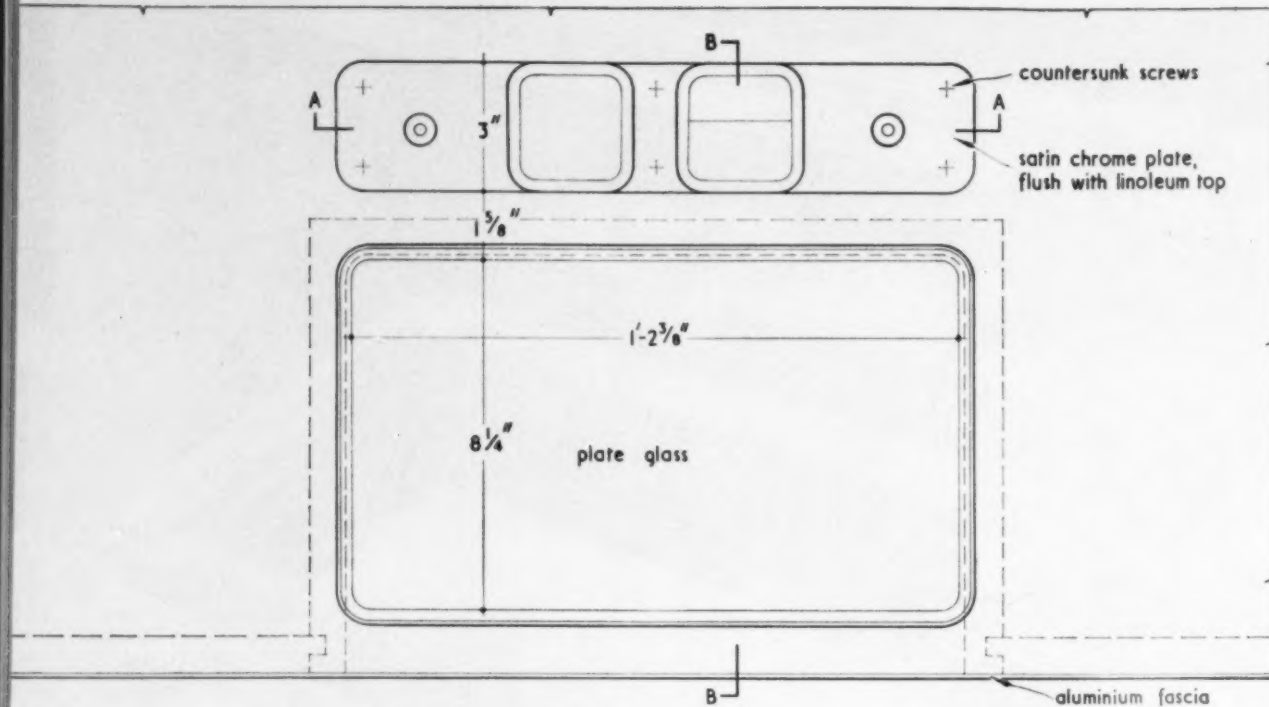
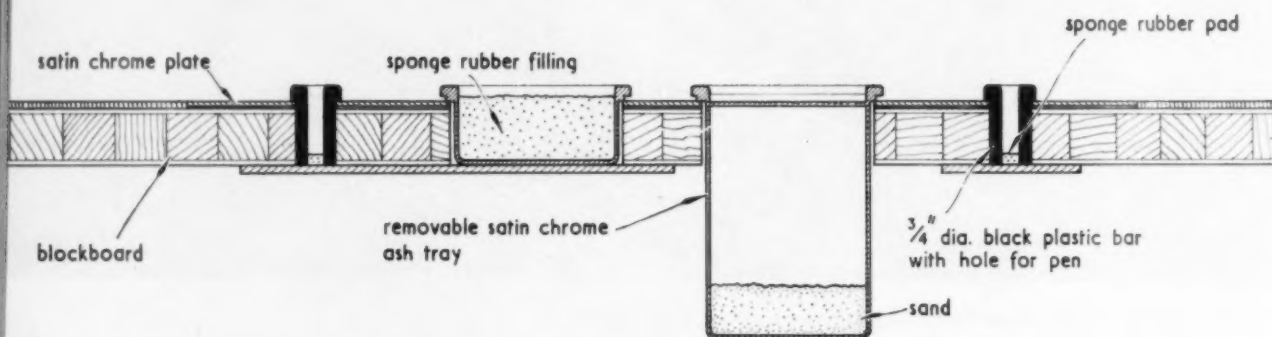
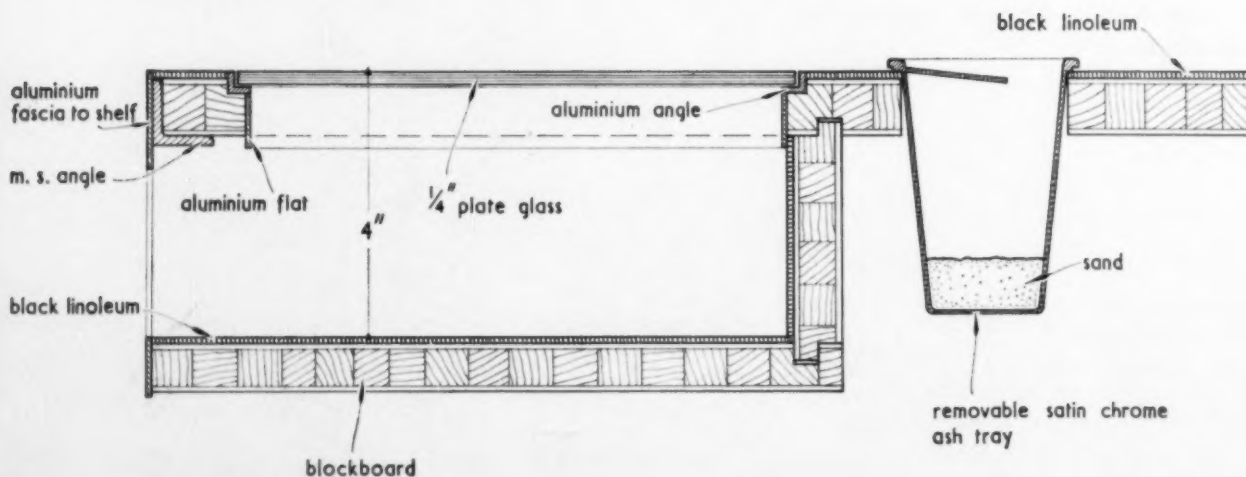


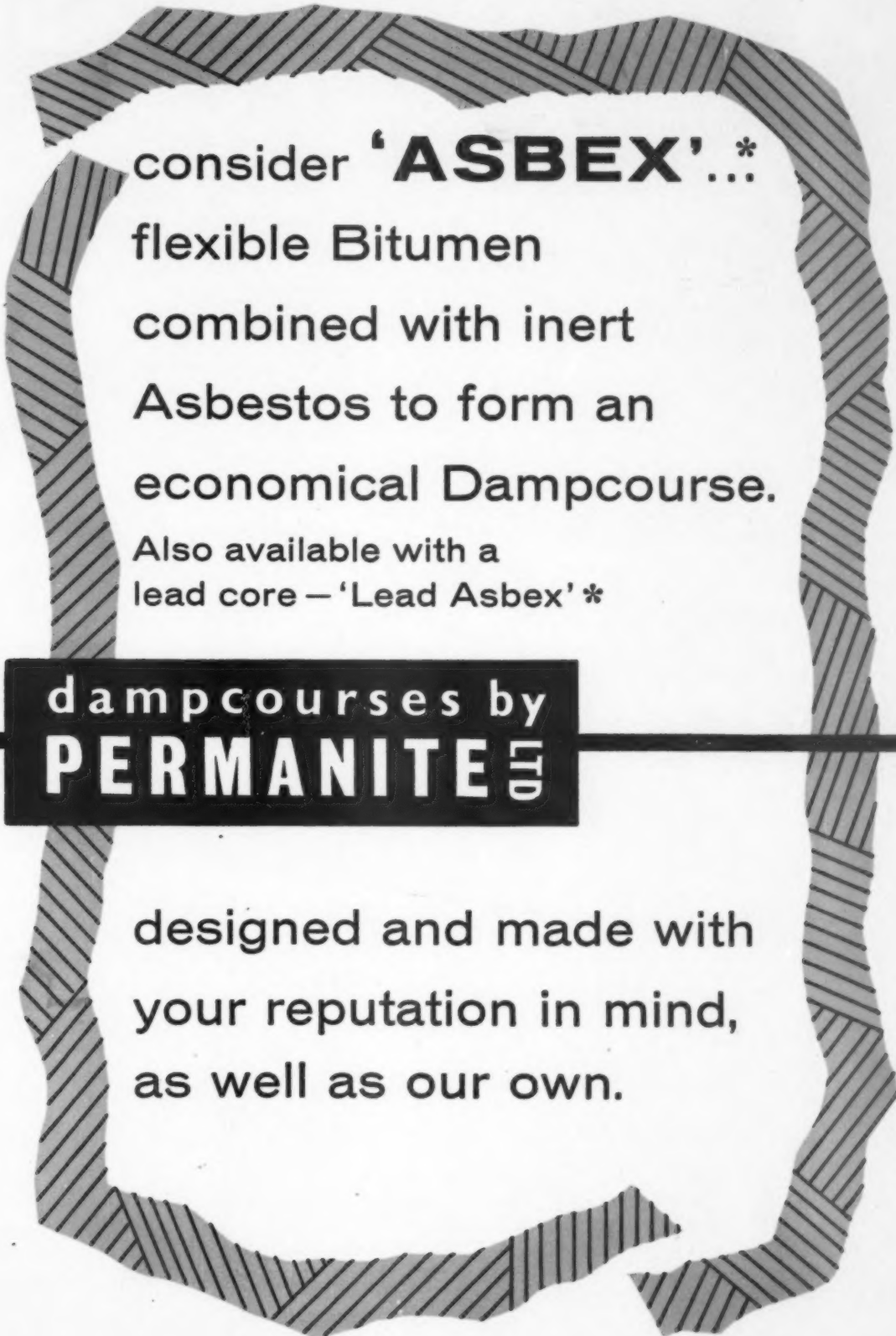
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working detail

FURNITURE AND FITTINGS: 101

COUNTER TOP: POST OFFICE IN LONDON, W.1

Design Research Unit and Sir Hugh Casson, architects.PLAN OF WRITING SHELF. scale $\frac{1}{4}$ full sizeSECTION A-A. scale $\frac{3}{8}$ full sizeSECTION B-B. scale $\frac{3}{8}$ full size



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This building is designed for heavy floor loading
on long-span girders, as illustrated.

Architects: Messrs. Grace & Farmer, F.R.I.B.A.

Consulting Engineer: A. E. Highfield Esq., B.Sc. (Eng.) Hons., A.M.I.C.E.

Contractors: John Mowlem & Co. Ltd.

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Housing for the College of Aeronautics, Cranfield



The post-graduate College, at which most of the staff are residential, is on a one-time RAF airfield some distance from the nearest town. These houses are part of a larger scheme of 60 for the use of married lecturers. A proposal for a more compact layout, using terraces, was turned down by the College because it offered limited access to individual houses. The architects, Stillman and Eastwick-Field, have therefore adopted a pattern of detached houses, linked by

garages and screen fences, all square on plan, with low-pitched concrete-tiled roofs on the same axis. Four alternative plans cater for different conditions of orientation and access. External walls are of white sand-lime bricks, with timber windows painted white: tiles are very dark brown. The cost per house, including garage and immediately surrounding site works, has been kept below £3,000.

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Announcements

COURSES

The Polytechnic, Regent Street, announces a series of Special Short Courses under its Department of Civil and Mechanical Engineering, at post-graduate level. Courses include "Engineering Concrete," by D. A. Stewart, M.B.E., M.I.C.E., A.M.I.E.E. and J. A. Bickley, beginning January 10, 1961, and "Collapse Design of Steel Structures," by W. M. Jenkins, B.Sc., Ph.D., beginning February 17. Applications for places may be made individually or through an employer to the Registrar of the Department.

PROFESSIONAL

Birmingham and Five Counties Region of the Association of Official Architects has elected the following officers: chairman, G. E. Gott (Birmingham City); secretary, E. G. Craven (Warwickshire County Council); treasurer, J. E. Middleton (Stratford-on-Avon Borough Council).

W. H. Saunders & Son, of Southampton, London, Portsmouth, Coventry and Gosport, announce that an associated firm of Brown, Saunders & Grime has been established in Guernsey at the Hotel de France, La Plaiderie, St. Peter Port. The partners are, A. E. Brown, A.R.I.B.A., John H. Saunders, L.R.I.B.A., F.R.S.A., and W. H. Grime, L.M.I.A.A.

The University of Oxford has appointed Philip Dowson, A.R.I.B.A., of Ove Arup and Partners, to design the new office building for the university, on the site of the Indian Institute in Broad Street.

Messrs Cogan & Partners, Quantity Surveyors, have moved to new offices at 50 Pall Mall, London, S.W.1. Telephone numbers remain unchanged, WHItellah 7120 and 3848.

J. H. Garnham Wright, A.R.I.B.A., Dip.Arch., has left his previous appointment in the County Architect's Department of the Kent County Council and has joined the staff of the Directorate at the War Office in the section dealing with Research and Development.

G. C. Manly, L.R.I.B.A., and A. D. McGill, A.R.I.B.A., are now Principal Executive Assistants in the Architects' Department of London Transport. Each has the title of Principal Assistant Architect.

Edward Mold, A.A.Dip., A.R.I.B.A., M.S.I.A., has terminated his partnership in the practice of Scott, Brownrigg & Turner, of 32, London Road, Guildford, and has commenced practice under his own name at Weygate House, Portsmouth Road, Guildford, where he will be pleased to receive trade catalogues.

TRADE

M.A.L. have moved their offices to new premises at 115/129, Carlton Vale, N.W.6 (telephone Maida Vale 9355).

The Midland Electric Manufacturing Co. Ltd. of Birmingham have acquired an interest in Pritchett Pty. Ltd. of Sydney, N.S.W., Australia.

CHW Roles & Associates Ltd. have moved to new offices at 68/70 Goswell Road, E.C.1 (telephone Clerkenwell 1849).

F. H. Bourner & Co. (Engineers) Ltd. have appointed G. E. P. Lloyd to the Sales Promotion staff.

A merger has been arranged between Duresco Products Ltd. and Aspinalls (Paints) Ltd.

Correction

We have been asked by Space Decks Division of Denings of Chard Limited, Chard, Somerset, to draw readers' attention to the fact that steelwork in the roof of the museum in Durham, designed by architects, P. R. Middleton & Partner and published in the Journals of 18th August and 15th September is a proprietary system supplied and erected by them.

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Registered Design Nos. 893239 and 893941.

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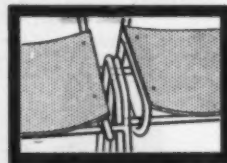
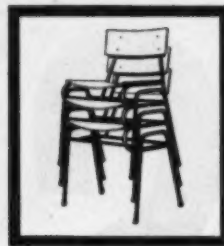
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MS4 Sturdy, lightweight, continuous tubular steel frame with polished canvas backrest and seat. In red, blue or green. Seat height 18".



MS5 Similar frame to MS4 but with beech plywood seat and back.



How Remploy/Stafford stacking chairs link together ... stack better too.



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Flexpipe

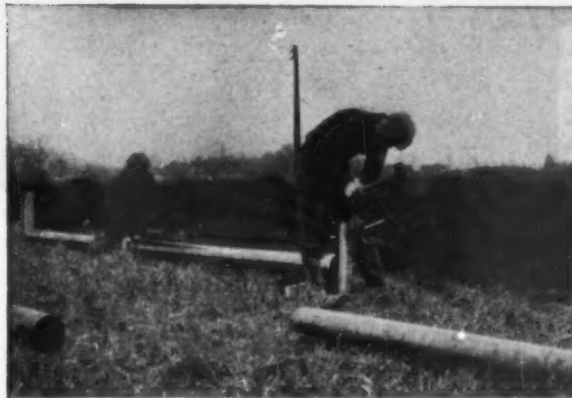
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port, announce that an associated firm of Brown, Saunders & Grime has been established in Guernsey at the Hotel de France, La Plaiderie, St. Peter Port. The partners are, A. E. Brown, A.R.I.B.A., John H. Saunders, L.R.I.B.A., F.R.S.A., and W. H. Grime, L.M.I.A.A.

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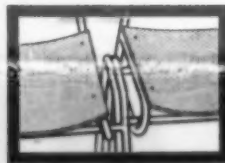
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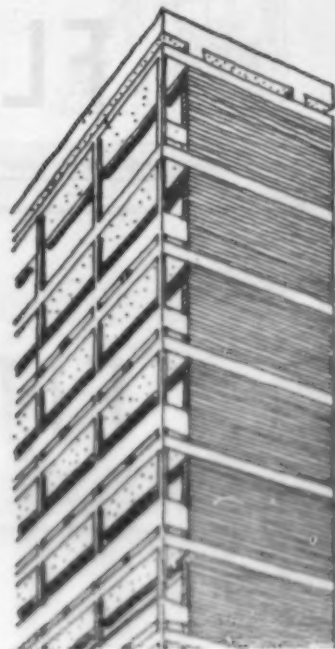
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to join. Flexpipe is simply joined with a coupling which is knocked on with a hammer and a block of wood—a quick, easy, complete seal.

EASY

to cut. Flexpipe can be sawn to any length as easily as softwood, and there's a specially designed tool for tapering the ends.



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Flexpipe

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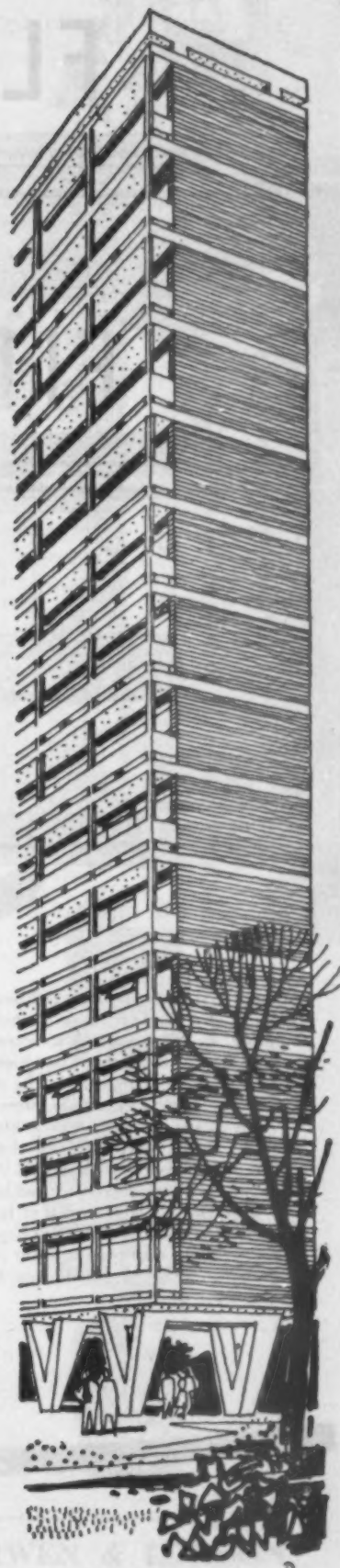
Costs naturally vary widely with the installation. However, assuming a 600 sq. ft. flat with 8 ft. ceilings the capital cost would probably be between £165 and £180, and the operating cost with gas at 13d. to 21d. per therm would be between 10/- and 16/- a week.

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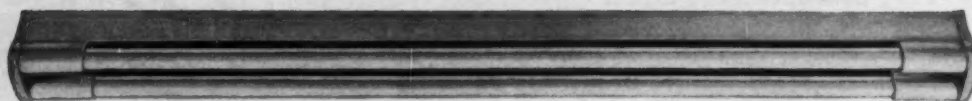
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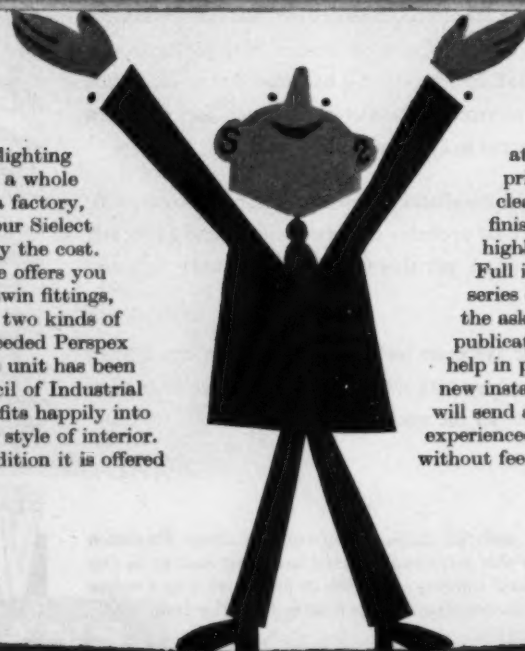
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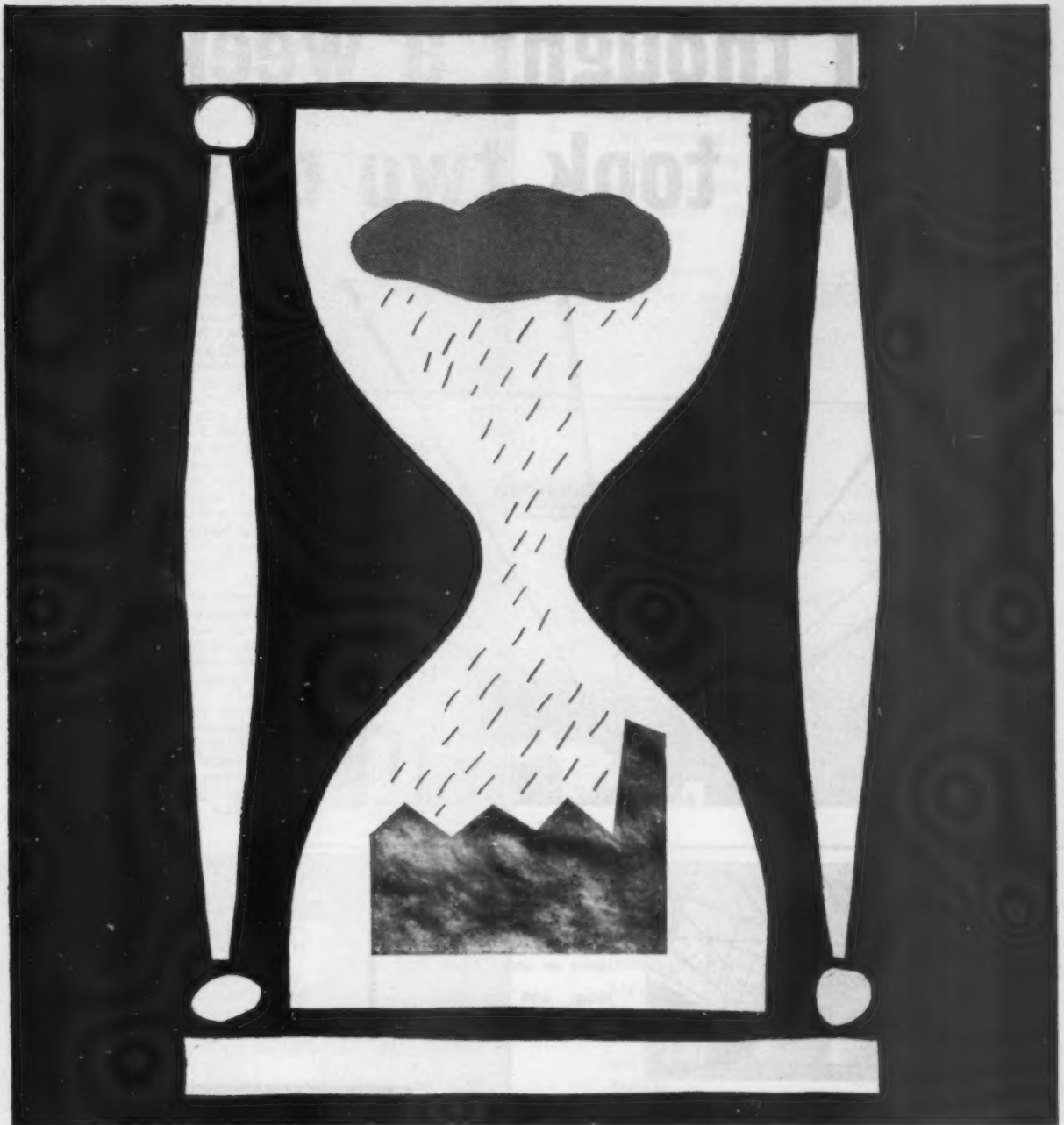
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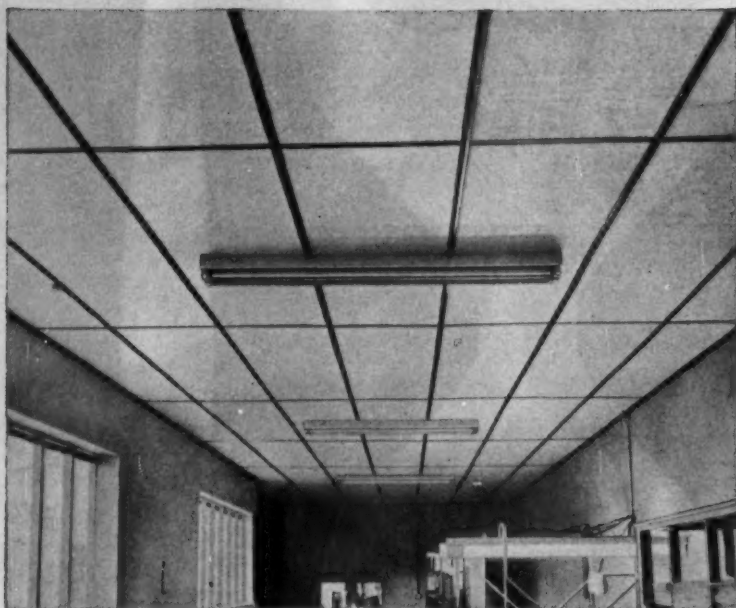
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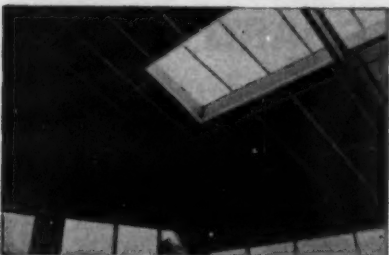
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Grecon

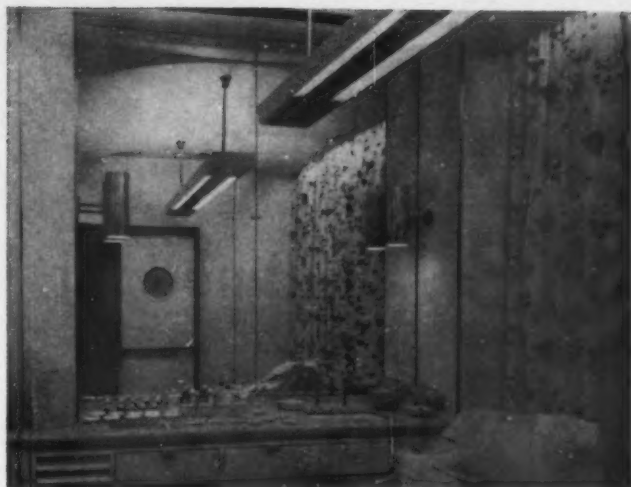
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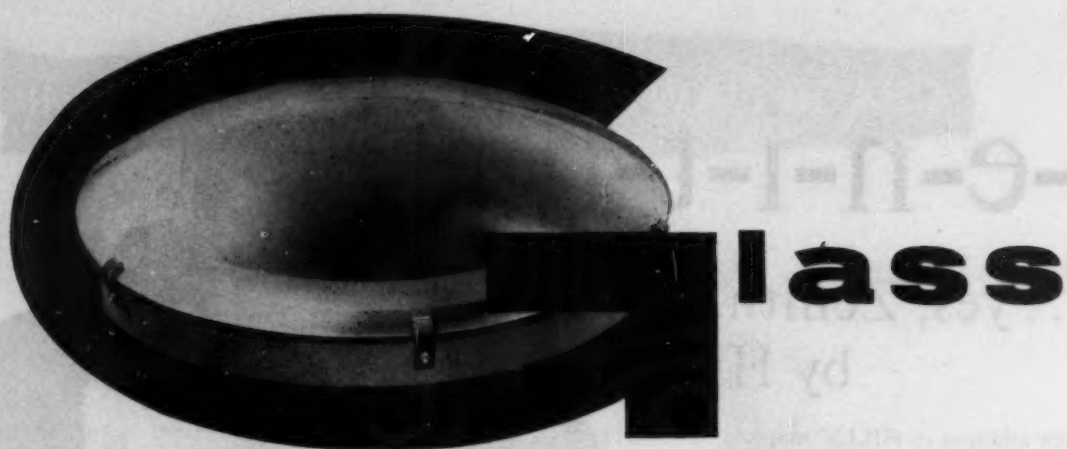
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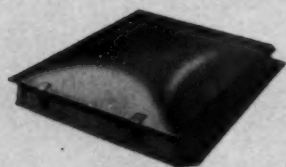
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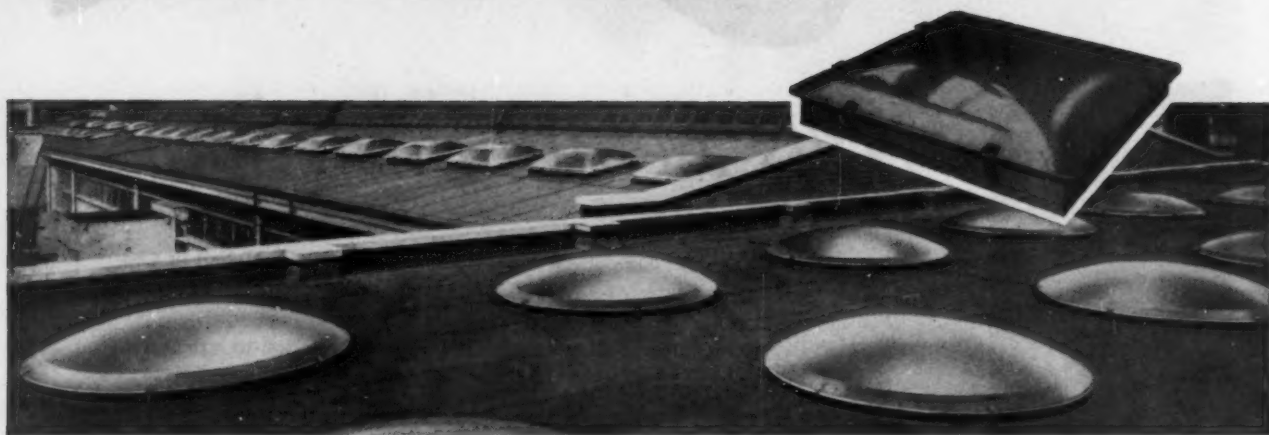




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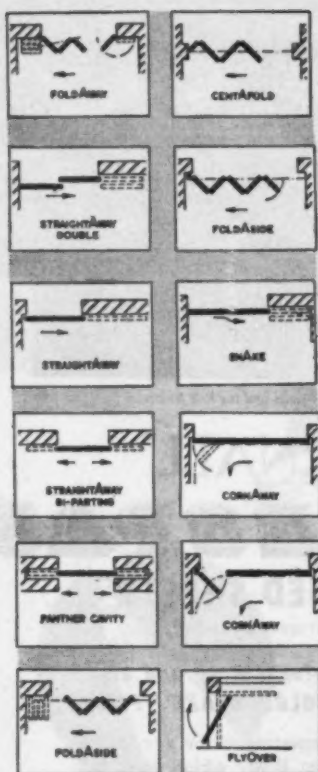
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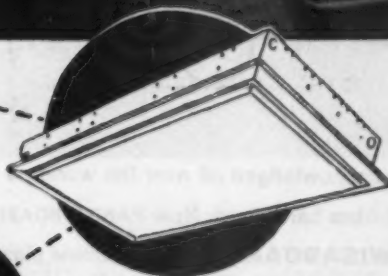
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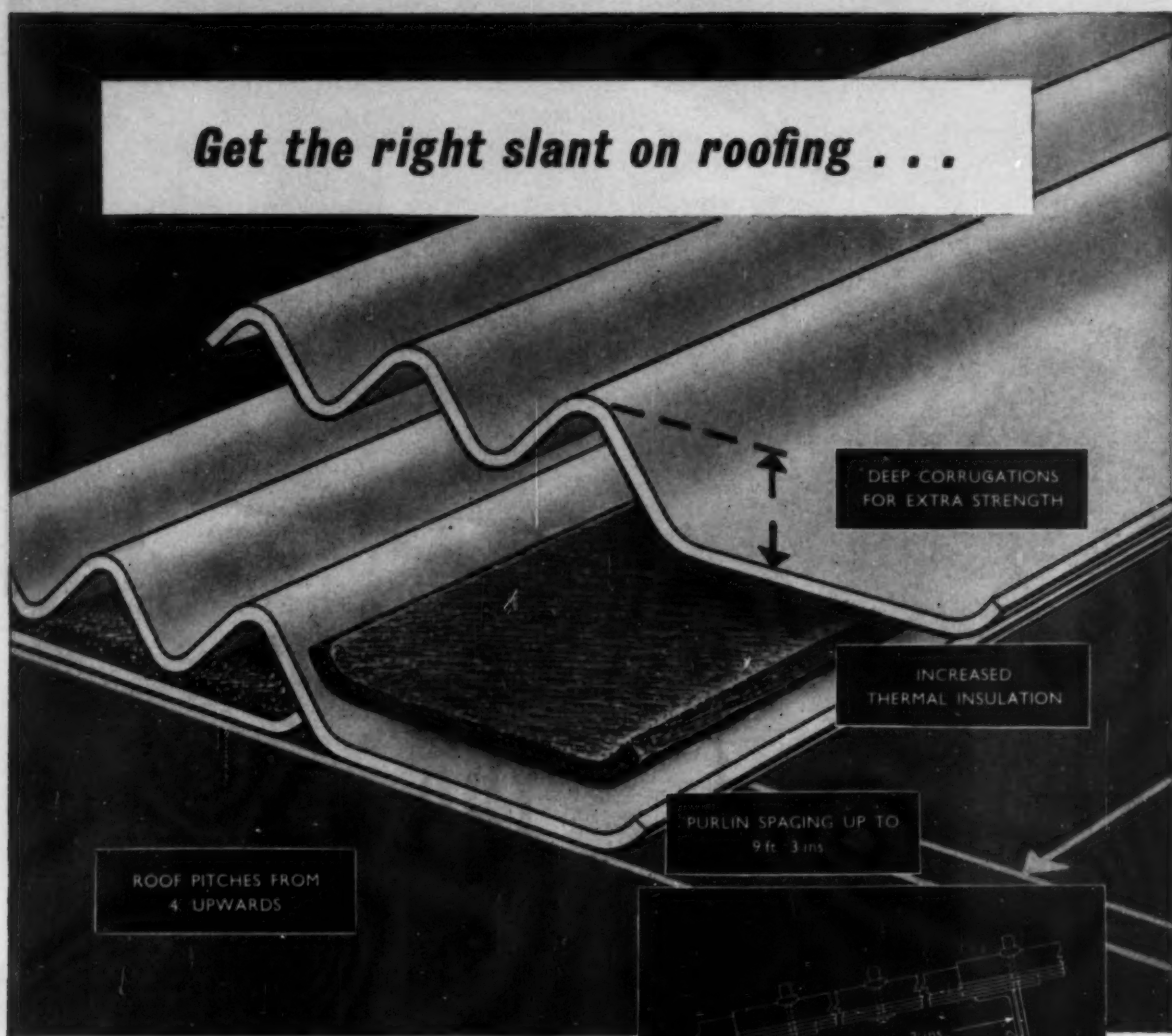
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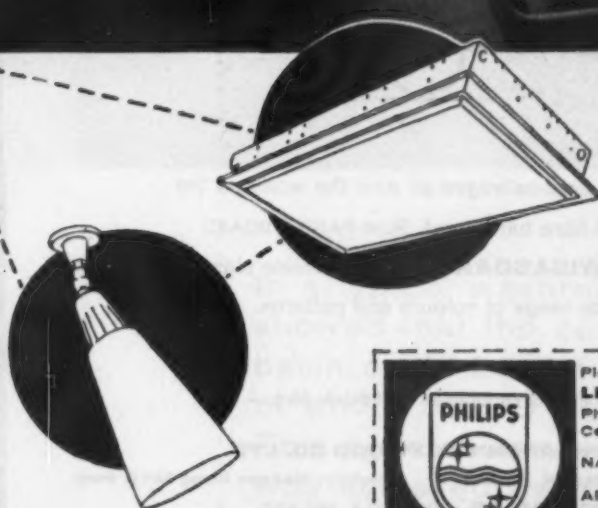
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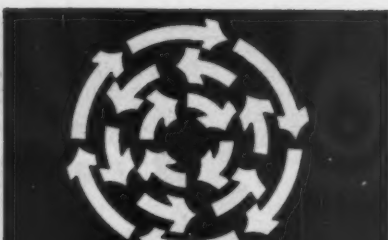
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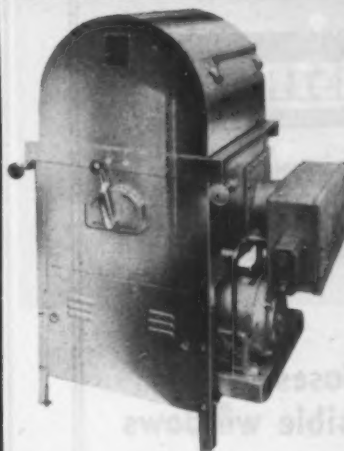
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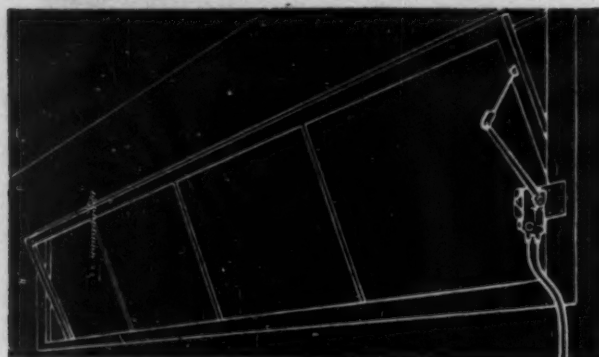


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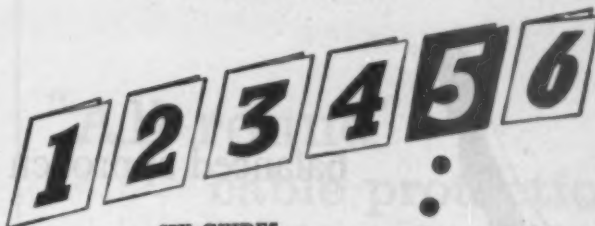
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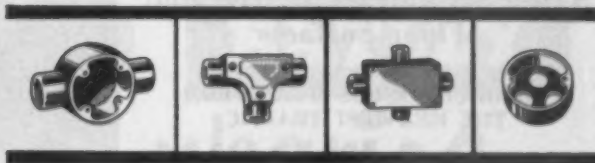
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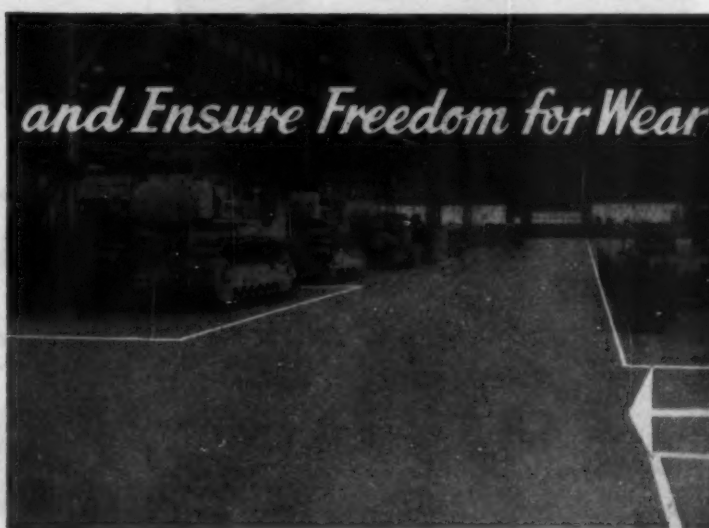
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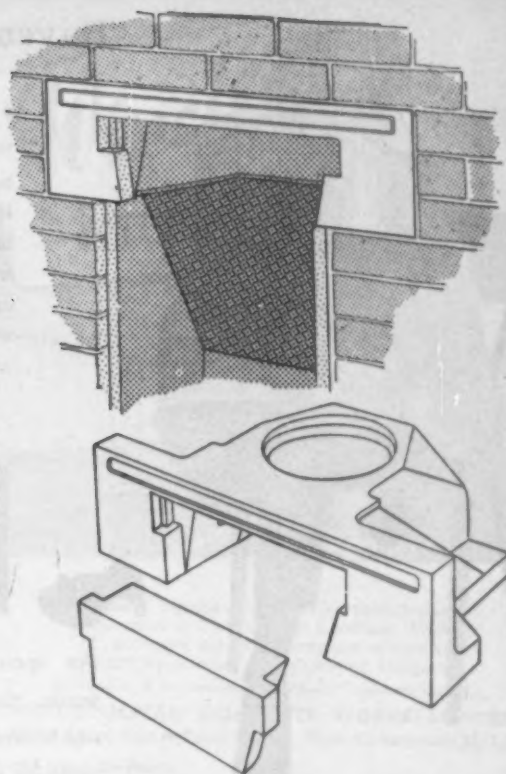
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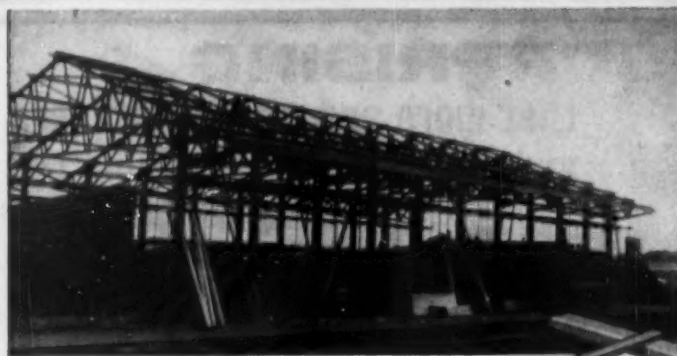
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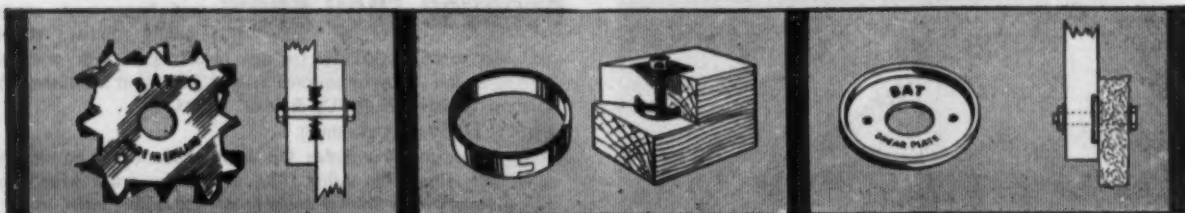


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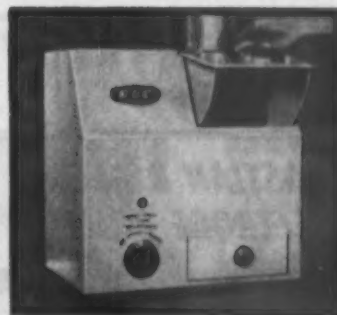
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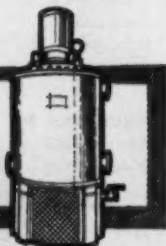
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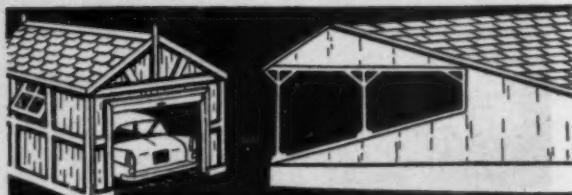
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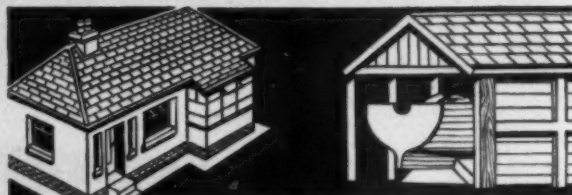
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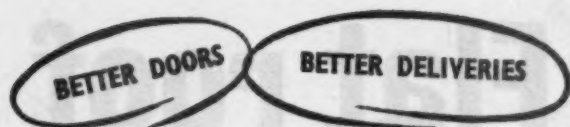
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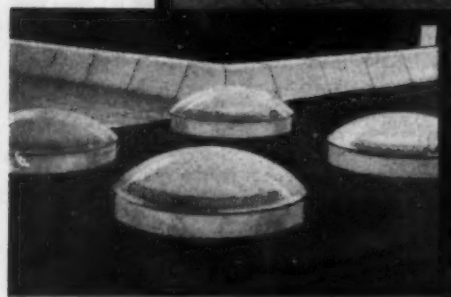
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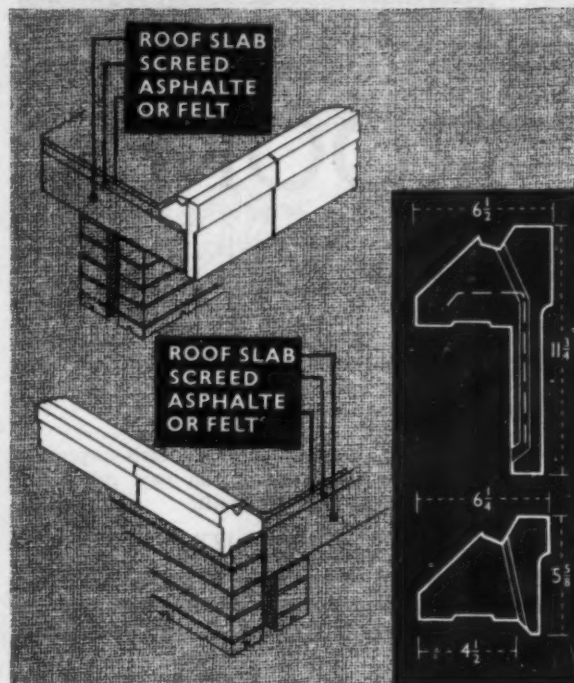
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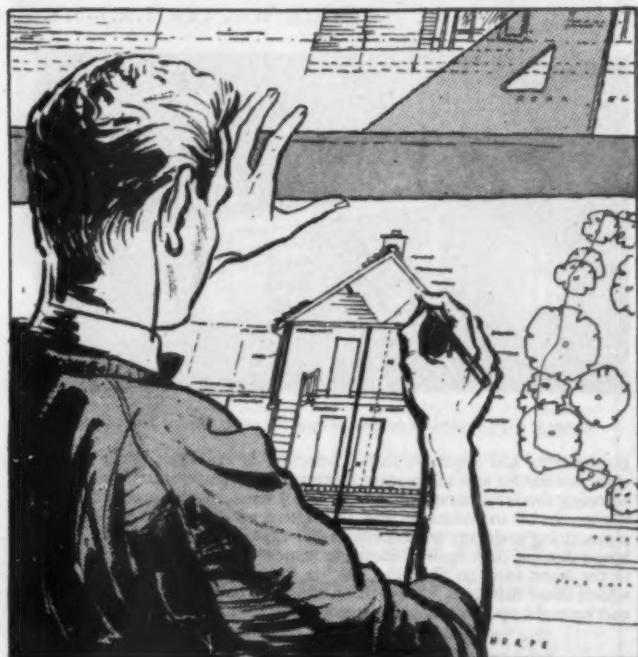
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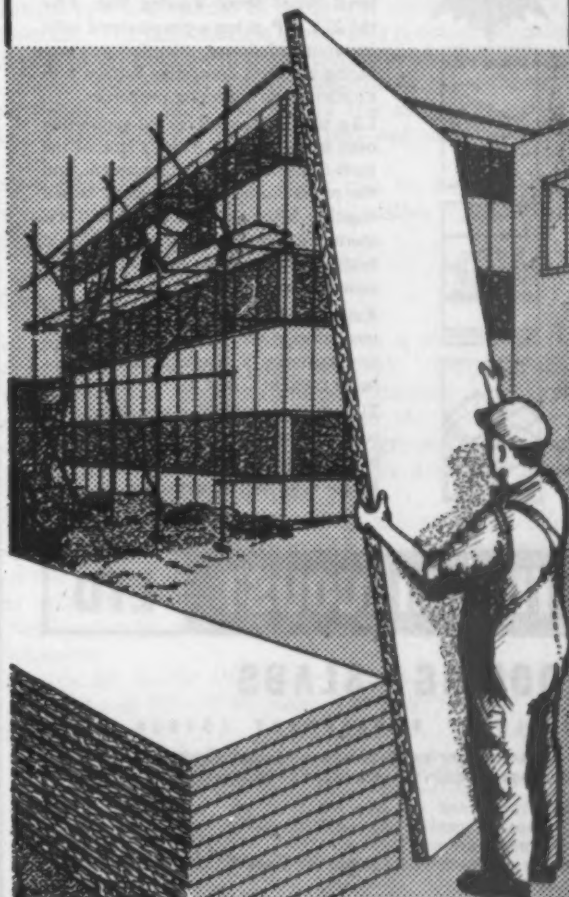
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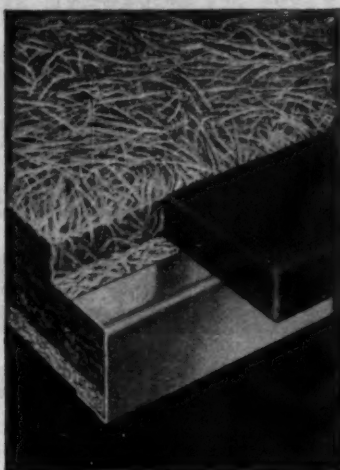
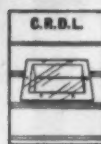
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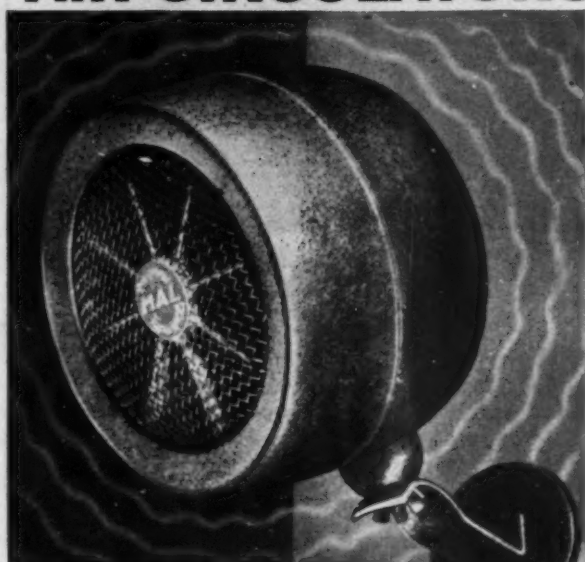
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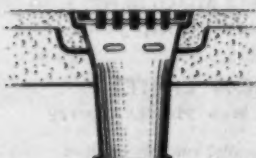
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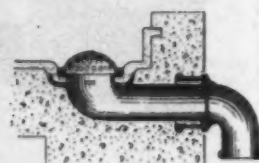
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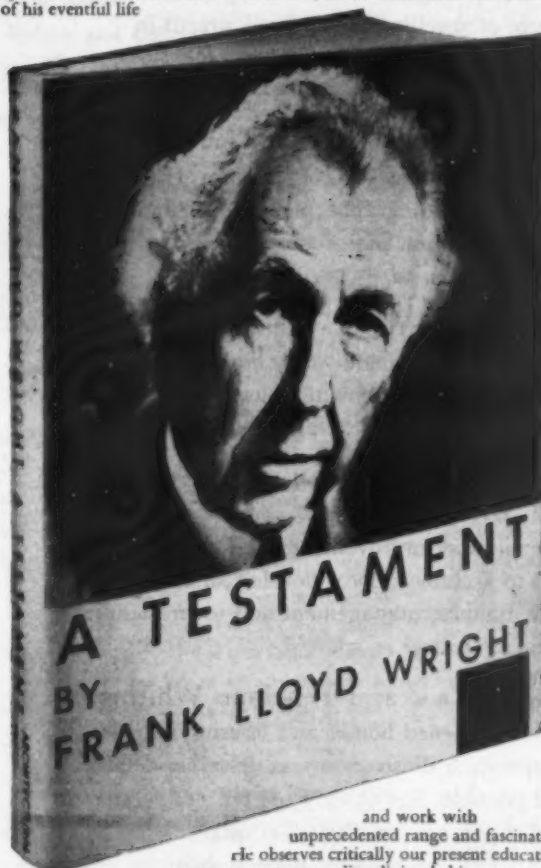


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'Frank Lloyd Wright is America's eldest and greatest practising architect. His working life spans nearly three-quarters of a century, starting in Chicago in 1887. In his 87th year nobody would now question his claim to greatness. Like the man's architecture his literary *oeuvre* defies comparison as completely as it defies emulation', writes Ian McCallum in *Architecture U.S.A.* A TESTAMENT is not merely a book about F. L. W., but this time a book by the master—his first new book in ten years; in it he distils the essence of his eventful life



and work with unprecedented range and fascination. He observes critically our present educational systems, our metropolitan living habits, our architecture, our democracy; affirms his faith in youth; forecasts the qualities of the ideal city, the nature of our future homes—even of our future culture. A TESTAMENT comprises two major parts: 'Book One—Autobiographical' and 'Book Two—The New Architecture.' Book One describes childhood influences—parents, kindergarten training, the pawnshop transaction that led to Chicago and the first architectural job with Louis Sullivan—and continues through the challenging years when the master was forging his own life and creating, alone, a new architecture. It contains penetrating evaluations of the renowned architects Frank Lloyd Wright has known, from Richardson to Sullivan and Adler; including Richard Hunt and McKim, Mead and White, and Mies van der Rohe when he first arrived in America. Book Two presents an illuminating synthesis of the nine great principles on which Frank Lloyd Wright's life work has been based, the foundation of his creative impulse and ideas—his Testament. The book has over 200 illustrations—photographs, plans, original drawings, many published for the first time—beginning in 1888 with the drawing Wright showed when applying to Sullivan for a job, culminating in his new drawings of master-pieces conceived in 1957 and still to be built, and including a magnificent large fold-out of THE MILE-HIGH SKYSCRAPER CITY Size 12½" x 9½" 256 pages. Portrait frontispiece and over 200 illustrations. Price 70s. net, postage 2s. 3d.

*Since the publication of *Architecture U.S.A.*, and since the first announcement that we were about to publish a Testament we have learned with great regret of the death of Frank Lloyd Wright.

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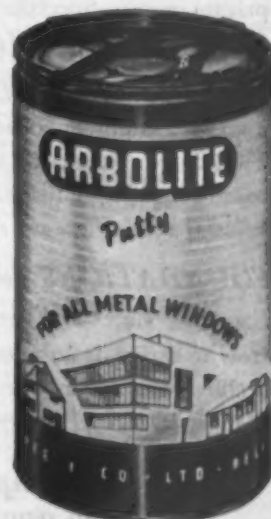


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Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

AIR-MAIL SERVICE available on request. In response to requests from a number of Overseas subscribers for air-mail delivery of Public and Official Appointment details and Other Appointments Vacant, we have been pleased to arrange that cuttings of all such classified advertisements appearing in the A.J., shall be despatched by air-mail on Wednesday of each week (one day prior to A.J. publication date). The cost of this special service to Overseas subscribers will be 5s. for four weeks (1s. 3d. for each additional week) and prepayment should be sent by subscribers wishing to take advantage of this service. The charge we are making represents only the actual cost of the postage involved.

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HUNTINGDONSHIRE

COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:—

(a) ARCHITECTURAL ASSISTANTS

Special Grade (£785—£1,070).

(b) ARCHITECTURAL ASSISTANT

Grade APT II (£765—£980).

The persons appointed will become members of small architectural teams engaged in projects of varying size. It is desired that the persons appointed shall be keenly interested in architecture with an up-to-date approach to both planning and design.

Application forms and further particulars may be obtained from The County Architect, County Buildings, Huntingdon; completed forms should be returned to the undersigned as soon as possible.

A. C. AYLWARD,

Clerk of the County Council.

County Buildings,
Huntingdon.

3246

METROPOLITAN POLICE

RECEIVER'S OFFICE

requires staff

for interesting and varied work in connection with an extensive Police Building Programme.

BASIC GRADE ARCHITECTS

Salary: £830 per annum at age 25 rising by annual increments to £1,300 per annum. (Maximum salary on entry: £1,125 being age 34 point on scale.)

Qualifications required: Applicants must be registered Architects.

LEADING DRAUGHTSMEN/WOMEN (New Works and Sanitary Engineering)

Salary: £980 per annum at age 21 rising by annual increments to £1,145 per annum.

Qualifications required: Inter-R.I.B.A., Higher National Certificate or equivalent training.

BASIC GRADE DRAUGHTSMEN/WOMEN (New Works)

Salary: £600 per annum at age 21 rising by annual increments to £900 per annum. (Maximum salary on entry: £595 being age 28 point on scale.)

Qualifications required: Ordinary National Certificate or to be of Inter-R.I.B.A. standard.

TECHNICAL ASSISTANT II (New Works)

Salary: £975 per annum rising by annual increments to £1,115 per annum.

Qualifications required: Ordinary National Certificate as a minimum qualification or to be of Inter-R.I.B.A./R.I.C.S. (Building) standard.

ASSISTANT SUPERINTENDENT OF WORKS III (Maintenance)

Salary: £820 per annum at age 26 rising by annual increments to £975 per annum. (Maximum salary on entry: £875 per annum being age 28 point on scale.)

Qualifications required: Ordinary National Certificate or City and Guilds.

Application forms can be obtained from Chief Clerk, Architect and Surveyor's Department, New Scotland Yard, S.W.1.

3414

COUNTY BOROUGH OF SUNDERLAND

BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for posts in the above Department, viz:—

(a) CHIEF ASSISTANT ARCHITECTS—

Grade A.P.T. IV

(b) SENIOR ASSISTANT ARCHITECT—

Special Grade

(c) SENIOR ARCHITECTURAL ASSISTANTS

—Grade A.P.T. I/II

Salaries according to experience and qualifications. Application forms obtainable from Borough Architect, Grange House, Stockton Road, Sunderland, which, duly completed, must be received at my Office, Town Hall, not later than 28th October, 1960. Canvassing will disqualify.

G. S. MCINTIRE,

Town Clerk.

3526

CITY OF CANTERBURY

SENIOR ASSISTANT ARCHITECT £840—£1,310

Applications are invited for the above appointment in the City Architect and Planning Officer's Department.

Commencing salary within Special Scale to A.P.T. IV according to ability and experience. The successful candidate will be engaged initially on the new Technical College project and must have attained the necessary standard of professional qualification.

Housing accommodation available if required. Applications, with the names of two referees, to the City Architect and Planning Officer, John L. Berbers, F.R.I.B.A., A.M.T.P.I., by Saturday, 22nd October, 1960.

Canvassing will disqualify.

J. BOYLE,

Town Clerk.

Municipal Buildings,

Canterbury.

3499

NEWTON-LE-WILLOWS URBAN DISTRICT

APPOINTMENT OF

ARCHITECTURAL ASSISTANT

Applications are invited for this post. Salary Grade A.P.T. II. Usual service conditions. Provision of housing accommodation considered.

Preference will be given to applicants who have had experience in municipal housing.

Applications, stating age, qualifications and experience, and the names of two referees, to be received by Clerk of the Council, Town Hall, Market Street, Newton-le-Willows, Lancashire, not later than 17th October, 1960.

3499

EAST BARNET URBAN DISTRICT COUNCIL

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

(i) SENIOR ASSISTANT ARCHITECT, A.P.T. IV plus London weighting.

(ii) ARCHITECTURAL ASSISTANT, A.P.T. II plus London weighting.

(iii) ARCHITECTURAL DRAUGHTSMAN, A.P.T. I plus London weighting.

(iv) SENIOR ASSISTANT ENGINEER, A.P.T. IV plus London weighting.

(v) ASSISTANT ENGINEER, Special Grade plus London weighting.

Application forms obtainable from the Engineer and Surveyor, Town Hall, Station Road, New Barnet, Hertfordshire, must be returned by not later than Monday 24th October, 1960.

3558

BOROUGH OF NUNEATON

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

(a) JUNIOR ARCHITECTURAL ASSISTANT, Grade APT I to II (£645—£960) according to qualifications and experience.

This post provides scope and opportunity for a varied experience as the Borough Council have varied engineering and architectural work in hand.

(b) TRACER, Grade General Division (£260—£530).

Forms of application which must be returned not later than 21st October, 1960, may be obtained from the Borough Engineer and Surveyor, Council House, Nuneaton.

A. A. CRAETREE,

Town Clerk.

Council House,

Nuneaton.

3513

ARCHITECTURAL ASSISTANT

Required by NYASALAND GOVERNMENT PUBLIC WORKS DEPARTMENT

on contract for one tour of 24-36 months in first instance. Commencing salary according to age and experience in scale £985 rising to £1,540 a year. Gratuity at rate of 10 per cent. of total salary drawn. Outfit allowance £30. Free passages.

Liberal leave on full salary.

Candidates, 25-35, should have passed Intermediate R.I.B.A., have had at least five years' experience in Architect's Office, have a good standard of draughtsmanship and possess a sound knowledge of building construction and be capable of carrying out site surveys including topographical work.

Apply to CROWN AGENTS, 4, Millbank, London, S.W.1, for application form and further particulars, stating age, name, brief details of qualifications and experience and quoting reference M2B/51966/AG.

3671

LONDON COUNTY COUNCIL

ARCHITECT'S DEPARTMENT

NEW AND EXPANDING TOWNS SECTION—

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Qualified ARCHITECT PLANNER (or Architect with Planning experience) for work on

Expanding Towns, mainly in Hampshire (salary up to £1,950). Imagination, initiative and new ideas on problems of central area renewal and expansion, master planning and layouts are called for. The New and Expanding Towns Section is a compact group with a wide range of skills, and is at present engaged on schemes for Andover, Basingstoke and Tadley.

Forms and particulars returnable by 26th October) from Hubert Bennett, F.R.I.B.A., Architect to the Council (EK/3/2456/10a), County Hall, S.E.1.

3681

MINISTRY OF HOUSING AND LOCAL GOVERNMENT: HOUSING AND PLANNING INSPECTORS.

At least 20 pensionable posts for men and women: (a) SENIOR INSPECTORS; (b) INSPECTORS. Age at least 45 for (a) or 35 for (b) on 1.1.61. Candidates must either be Registered Architects or Corporate Members of an appropriate professional institution. Practical experience in housing design and development or town and country planning an advantage.

Duties include conducting public local inquiries under Housing and Town and Country Planning Acts; considerable travelling. Men's starting salary (London): (a) £1,540; (b) £1,325 (age 35-37) to £1,400 (at 40 or over). Exceptionally higher starting salary may be recommended. Scale maxima: (a) £2,120; (b) £1,780. Promotion prospects. Write Civil Service Commission, Burlington Gardens, London, W.1, for application form, quoting £217/61. Closing date 4th November, 1960.

3581

BOROUGH OF GOSPORT

APPOINTMENT OF TWO ASSISTANT ARCHITECTS

Applications are invited for the above appointments in the Architectural Section of the Borough Engineer's Department, on the salary scale for Special Classes (£840—£1,145 by seven annual increments). The successful applicant would be required to work on housing and multi-storey development in conjunction with the Central Area Redevelopment Scheme.

Applicants should have passed Parts I and II of the R.I.B.A. Final Examination, or equivalent.

The appointment will be subject to the following:—

(i) The National Scheme of Conditions of Service.

(ii) Medical examination.

(iii) The Local Government Superannuation Acts.

(iv) One month's notice on either side.

Housing accommodation, if necessary, will be made available for the successful applicants.

Applications, giving age, full details of qualifications and experience, together with the names and addresses of two referees, should reach the undersigned not later than first post on Saturday, the 29th October, 1960.

EDWARD ADDENBROOKE,

Town Clerk.

Town Hall,

Gosport.

6th October, 1960.

3585

BOROUGH OF WREXHAM

ENGINEER & SURVEYOR'S DEPARTMENT

Applications are invited for the following appointments in the Borough Engineer and Surveyor's Department.

(a) ASSISTANT ENGINEER, Salary A.P.T. Grade IV (£1,065 to £1,220 per annum).

(b) ASSISTANT ARCHITECT, Salary, Specialists Grade commencing at £950 per annum.

(c) JUNIOR ASSISTANT ARCHITECT, Salary, A.P.T. Grade I (£610 to £755 per annum).

The salary scales are subject to the recent N.J.C. revisions on acceptance by the Council. Candidates for appointment (a) should have passed the Final Examination of the Institute of Civil and Municipal Engineers or equivalent to this, and for appointment (b) Parts 1 and 2 of the R.I.B.A. Examinations or equivalent.

Casual car allowance will be paid on the instructions of the Borough Surveyor in the case of appointments (a) and (b) and the Council will consider the payment of removal expenses.

Housing accommodation is available if required. Form of application and particulars of duties and work in hand are obtainable from the Borough Surveyor, 31, Chester Street, Wrexham. Applications to be returned to the undersigned by not later than 12 noon on Thursday, 20th October, 1960.

PHILIP J. WALTERS,

Town Clerk.

Guildhall,

Wrexham.

September, 1960.

3594

GOVERNMENT OF NORTHERN IRELAND

ASSISTANT ARCHITECT CLASS II

Applications invited from Registered Architects by examination with at least two years' experience in an Architect's office in preparing working drawings for pensionable post in Chief Architect's Branch, Ministry of Finance. Salary scale:—£805 (at age 25)—£1,095 (age 34 and over)—£1,260. Existing pension rights may, in certain circumstances, be transferred. Preference for ex-Servicemen. Application forms, obtainable from Secretary, Civil Service Commission, Stormont, Belfast, 4, must be returned by 25th October, 1960.

3587

BOROUGH OF GUILDFORD

Applications are invited for the appointment of an ASSISTANT ARCHITECT, commencing salary at a point within Grade A.P.T. III according to qualifications. Applicants should have passed the Intermediate Examination of the Royal Institute of British Architects and have had practical experience in general architectural work and housing.

Consideration will be given to the provision of housing accommodation if required.

Application with names and addresses of two referees, must be sent to the Borough Engineer and Surveyor, Municipal Offices, High Street, Guildford, Surrey, by Wednesday, the 26th of October, 1960.

HERBERT C. WELLER,

Town Clerk.

3593

ARCHITECTS: STRUCTURAL ENGINEERS

A leading industrial Group engaged in a very wide field of manufacture requires additional Architects and Structural Engineers for its Architect's Department. The vacancies are due to expansion. There are immediate openings for qualified men under 40 as follows:—

ARCHITECTS

Men with some years' practical experience are primarily required, but those who have recently qualified may also apply. Candidates should be prepared to accept responsibility for initiating design and would be expected to enjoy freedom in exercising their professional skill. There is a wide variety of work. *Reference Number 115A*

STRUCTURAL DESIGN ENGINEERS

Men with practical experience in designing building frames and structures to support process plants are required. The most advanced principles in design are used in building and civil engineering activities. Candidates would be expected to work in a team and use initiative. *Reference Number 115B*

These appointments are pensionable and carry salaries up to £2,000 per annum. Salary scales are flexible and rapid advancement is possible for those who merit it. Other terms of service are worthy of one of Britain's greatest companies, including assistance to married men on removal.

Please reply in confidence quoting reference number to:—

Robert Clive (Consultants) Limited

Appointment Consultants,

27, ALBEMARLE STREET, LONDON, W.1

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SENIOR ARCHITECT

A Senior Architect is required in the DEVELOPMENT SECTION of a Building Company in the West End of London.

Applicants must have had experience in the DESIGN, LAYOUT and DEVELOPMENT of HOUSING and FLAT SCHEMES and be able to negotiate with public and other authorities.

Administrative as well as technical ability will be an advantage. The position is permanent and progressive and a superannuation scheme is available.

Commencing salary about £1,200 p.a. according to experience plus bonus and car allowance.

Apply Box No. 3580, The Architect's Journal.

ARCHITECT'S DEPARTMENT CAMBERWELL BOROUGH COUNCIL

vacancies occur in the Following grades for architects to carry out an interesting building programme

A.P.T. V. £1,355-1,525 p.a.

A.P.T. IV. £1,185-1,355 p.a.

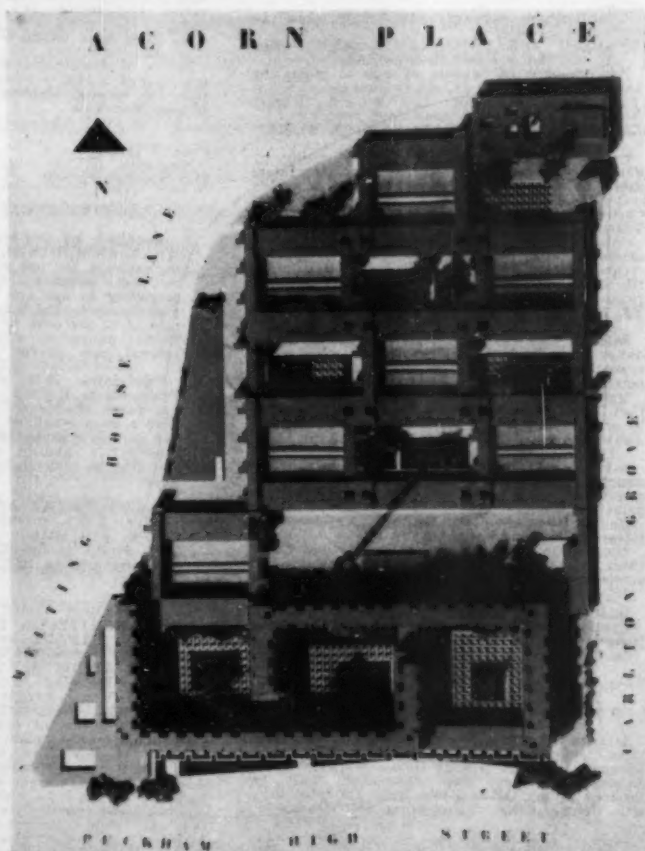
A.P.T. III. £1,005-1,185 p.a.

vacancies also occur in the following grade for assistants who have passed in all subjects, except professional practice, for the Associateship of the R.I.B.A.

A.P.T. II. £855-1,000 p.a.

Application forms from the Town Clerk, Town Hall, Camberwell, S.E.5.

Applications to be returned by the 31st October 1960



**SOUTHAMPTON COUNTY BOROUGH
EDUCATION COMMITTEE
SOUTHAMPTON TECHNICAL COLLEGE**
Principal: F. T. WEST, M.B.E., A.I.S.T.C.E.,
M.I.P.R.O.E.

DEPARTMENT OF BUILDING
LECTURER required 1st January, 1961, to teach QUANTITIES, ESTIMATING and kindred subjects to Final Examination standard in R.I.C.S. and I.Q.S. courses. Candidates must be Chartered Quantity Surveyors. Salary Scale (Burnham F.E. Report) £1,370 x £36-£1,550. Further details and application forms (to be returned in 14 days) from Chief Education Officer (Ref. 57/66), Civic Centre, Southampton. 3697

**COUNTY BOROUGH OF CROYDON
ARCHITECTURAL STAFF**

Applications are invited for these appointments on the Corporation's Housing and General Architectural work which includes a considerable variety of large interesting projects.

- (a) ASSISTANT ARCHITECTS (Team Leaders), R.I.B.A. Final required, A.P.T. V (£1,356 to £1,525 including "London weighting").
- (b) ARCHITECTURAL ASSISTANTS, A.P.T. I/II/III/IV (£660 to £1,356 including "London weighting").

"Essential user" car allowance payable for appointments (a); similar allowance for appointments (b) when graded in A.P.T. IV with R.I.B.A. Final.
Pensionable posts; commencing salaries according to qualifications and experience. Five-day week (38 hours).

Housing—advances up to 100 per cent. of Borough Valuer's valuation will be made available where needed for the purchase of suitable houses in Croydon by successful applicants.

Further particulars and application forms from the Borough Engineer, Town Hall, Croydon. Closing date 31st October, 1960.

E. TABERNER,
Town Clerk. 3590

**ARGYLL COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT**

Applications are invited from members of the Royal Institute of British Architects for the post of SENIOR ASSISTANT ARCHITECT on salary grade £1,950 x £50-£1,200 with placing according to experience. Applicants should have had considerable experience of architectural practice and in particular knowledge of modern school building with experience in organising large building projects and be capable of supervising assistant staff. Housing accommodation will be made available if necessary.

Applications, stating age, present salary, present and previous appointments, details of training and experience, together with the names and addresses of two referees, should be lodged with the County Architect, County Offices, Dunoon, on or before 22nd October, 1960.

A. D. JACKSON,
County Clerk. 3575

**BOROUGH OF SOUTHALL
APPOINTMENT OF ARCHITECTURAL
ASSISTANT**

Applications are invited for the above appointment on the Permanent Staff of the Corporation. Salary in accordance with A.P.T. Grade II (£915-£960) plus London weighting.

Candidates should have passed the Intermediate Examination of the Royal Institute of British Architects or an equivalent and have had practical experience of design and construction. Favourable consideration will be given to the provision of housing accommodation, if required, on a Private Estate.

Applications, on forms to be obtained from the Borough Engineer and Surveyor, Town Hall, Southall, Middlesex, must be returned to him on or before Wednesday, 26th October, 1960.

J. S. SYRETT,
Town Clerk. 3579

CITY OF WINCHESTER

Applications are invited for the posts of (a) JUNIOR ARCHITECTURAL and (b) JUNIOR ENGINEERING ASSISTANTS in the City Engineer's Department. Salary within Grade A.P.T. I, according to qualifications and experience. The appointments are subject to the terms and conditions laid down by the Southern Provincial Council, and to the Local Government Superannuation Act.

Applications, stating age and details of experience, together with the names of two referees, should be addressed to the City Engineer, Guildhall, Winchester, and should reach him not later than Monday, 31st October, 1960.

In the case of (a) the post has been designated as a key post for housing purposes, and suitable housing accommodation will be made available.

R. H. McCALL,
Town Clerk.

Guildhall,
Winchester. 3624
4th October, 1960.

**ADMINISTRATIVE COUNTY OF LEICESTER
BUILDINGS SURVEYING ASSISTANT**
£645-£815

Candidates must have had experience in specification writing and be good draughtsmen. Intermediate A.R.I.C.S. preferred. Removal expenses and lodging allowances may be paid to a married man. Apply by Friday, 21st October, 1960, on forms obtainable from County Architect, 133, London Road, Leicester. 3616

BERKSHIRE COUNTY COUNCIL—Applications invited for appointment of PLANNING ASSISTANT. Salary on A.P.T. Grades I (£645-£815 p.a.) or II (£815-£960 p.a.) according to qualifications. Duties primarily to assist in the preparation of the survey and development plan for the County. Previous experience in a planning office, and drawing ability would be considered an advantage. Application forms obtainable on receipt of stamped addressed envelope from County Planning Officer, 7, Abbot's Walk, Reading, to whom completed applications must be delivered not later than 10 days from the date of this advertisement. 3623

BOROUGH OF CHESTERFIELD
Applications are invited for a SENIOR ARCHITECT within Grade A.P.T. IV (£1,140-£1,310). The commencing salary will depend on qualifications and experience.

A car allowance is payable and housing accommodation will be provided if required.
A substantial programme of capital works is envisaged for completion during the next few years.

Chesterfield, which has a population of nearly 70,000, is situated bordering the Peak District National Park.

Applications, stating age, qualifications, training and experience, naming two referees, to the Borough Engineer, Town Hall, Chesterfield, not later than Monday, 24th October.

RICHARD CLEGG,
Town Clerk. 3620

5th October, 1960.
SURREY COUNTY COUNCIL

Applications invited for following appointments:—
GRADE SPECIAL-IV. (£840-£1,310 p.a. plus £40/£45 p.a. London allowance.)

ARCHITECTS. Must be A.R.I.B.A. and have had experience in preparation of drawings and specifications, and be capable of assuming responsibility for medium to large scale contracts.

Approved removal expenses will be paid to successful candidates in this Grade.
GRADE II. (£815-£960 p.a. plus up to £40 p.a. London allowance.)

ARCHITECTURAL ASSISTANTS. Must be of good general training, preference given those who have passed Intermediate R.I.B.A. Candidates will be appointed at the appropriate point within the scale according to age and ability.

Full details, present salary and three copy testimonials to County Architect, County Hall, Kingston, as soon as possible. 3614

**CORPORATION OF GREENOCK
BURGH SURVEYOR AND MASTER OF
WORKS DEPARTMENT**

PRINCIPAL PLANNING ASSISTANT
Applications are invited for the appointment of PRINCIPAL PLANNING ASSISTANT to the Burgh Surveyor and Master of Works, as Town Planning Officer, on the salary scale of £1,039 10s. to £1,197 per annum.

Applicants are required to be corporate members of the Town Planning Institute with sufficient practical experience to enable them to take full charge of the Town Planning Section of the Department.

The appointment offers an opportunity of gaining experience in the work of major redevelopment of central areas, in collaboration with a well known Town Planning Consultant and previous participation in such work will be an advantage.

The post is superannuable and housing accommodation will be provided if required.

Applications, giving particulars of age, qualifications, present and previous appointments and experience, together with the names of two referees, to be lodged with the undersigned not later than Wednesday, 26th October, 1960.

JOHN LIDDELL,
Town Clerk. 3613

RHONDDA BOROUGH COUNCIL

BOROUGH ARCHITECT'S DEPARTMENT
Applications are invited from suitably experienced persons for the post of ARCHITECTURAL ASSISTANT, at a salary in accordance with Grade A.P.T. I/II (at present £610 to £880 per annum).

The appointment will be terminable by one month's notice on either side and will be subject to the National Scheme of Conditions of Service. The successful candidate will be required to pass a medical examination and will contribute to the Council's Superannuation Fund.

Applications, on forms to be obtained from Mr. C. Gingell, A.R.I.B.A., A.R.I.C.S., Borough Architect, Bronwydd, Forth, are to be submitted to the undersigned not later than Saturday, 15th October, 1960.

E. D. WILDE,
Town Clerk.

Council Offices,
Pentre, Rhondda. 3609
3rd October, 1960.

CITY OF PETERBOROUGH

Applications are invited from qualified Architects with Local Government experience for the appointment of a SENIOR ARCHITECTURAL ASSISTANT in Grade IV, A.P. & T.

Housing accommodation, if desired, will be provided.

Forms of application from the City Engineer, Town Hall, Peterborough. Closing date for applications 27th October, 1960.

C. PETER CLARKE,
Town Clerk. 3696

**CITY OF GLOUCESTER
APPOINTMENT OF PLANNING ASSISTANT**
The Corporation invite applications for the appointment of PLANNING ASSISTANT in Grades A.P.T. I (£645/£815) or A.P.T. II (£815/£960).

Applicants should preferably have had three years' training and some additional experience in planning work with qualifications of the Intermediate Examination of the Town Planning Institute.

The appointment is subject to the Council's superannuation scheme and the successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications and experience, accompanied by two recent testimonials, or names of two referees, and addressed "Planning Assistant," should be delivered to the Town Clerk, Guildhall, Gloucester, not later than 10 a.m. on Monday, 24th October, 1960. 3645

**HERTFORDSHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
ASSISTANT ARCHITECTS.**

Salary £840 to £1,310.
Candidates should be registered Architects. Starting salary according to experience.

TECHNICAL ASSISTANTS.
Salary Scales A.P.T. I (£645-£815), A.P.T. II (£815-£960), A.P.T. III (£935-£1,140).

Candidates should be good draughtsmen with a sound knowledge of modern building construction and will be required to work with teams of Architects engaged on large scale programmes of work. Salary according to experience and ability.

All posts are permanent and pensionable. Write or telephone for appointment to County Architect, County Hall, Hertford. (Hertford 4242-Extension 206.) 3647

**CITY OF CARDIFF
CITY ARCHITECT'S DEPARTMENT
ARCHITECTURAL AND QUANTITY
SURVEYING STAFF**

Applications are invited for the following appointments.

- (a) SENIOR ASSISTANT ARCHITECTS, A.P.T. Grade III/IV, £960-£1,310.
- (b) ARCHITECTURAL ASSISTANT, A.P.T. Grade II, £815-£960.
- (c) JUNIOR ARCHITECTURAL ASSISTANT, A.P.T. Grade I, £645-£815.
- (d) SENIOR ASSISTANT QUANTITY SURVEYOR, A.P.T. Grade IV, £1,140-£1,310.
- (e) QUANTITY SURVEYING ASSISTANT, A.P.T. Grade II, £815-£960.

General Conditions of appointment may be obtained from the undersigned.

The commencing salaries will be subject to qualifications and experience.
Applications, stating age, qualifications and experience, together with the names of two referees, should be delivered in me not later than the 26th October, 1960.

S. TAPPER-JONES,
Town Clerk. 3654
City Hall,
Cardiff.
October, 1960.

**HORNCHURCH URBAN DISTRICT COUNCIL
ENGINEER AND SURVEYOR'S DEPARTMENT
APPOINTMENT OF CLERK OF WORKS
(BUILDING)**

Applications are invited from suitably qualified persons for the above appointment. Applicants must have had considerable experience in the supervision of housing construction, have a sound knowledge of all the trades in connection therewith, including the setting out and measurement of all works on the site, and the keeping of the necessary records.

The salary to be paid is within the range of the Miscellaneous Division, Grade VI, £760-£825 per annum, and in addition, an amount equivalent to London weighting will be paid.

The post is subject to the appropriate N.J.C. Conditions of Service, the normal hours worked in the building trade, a medical examination, and termination by one month's notice on either side.

Applications, on the forms provided by the undersigned, stating qualifications, experience and the names of two referees, must be returned not later than Tuesday, 17th October, 1960.

P. L. COX,
Clerk of the Council.

Council Offices,
Billet Lane,
Hornchurch,
Essex.
30th September, 1960. 3636

**COUNTY BOROUGH OF DARLINGTON
DEPUTY BOROUGH ARCHITECT**

Applications are invited for the above appointment. Salary within the range £1,525 + £45 (4) + £40 (1)-£1,745.

The Department has a large programme including Secondary and Primary Schools, Housing, Welfare Schemes, Municipal Offices, Markets and Central Redevelopment. Preference will be given to candidates experienced in this class of work and who are members of the R.I.B.A.

Applications, giving full particulars of age, qualifications, present appointment with salary previous appointments with dates, and name and address of three referees, to be received by E. A. Tornbohm, A.R.I.B.A., A.M.T.P.I., Borough Architect, Central Buildings, Darlington, not later than 19th October, 1960.
29th September, 1960. 3661

CITY OF SHEFFIELD
CITY ARCHITECTS' DEPARTMENT
 Applications are invited for the following appointments on the permanent staff of the City Architect, Mr. J. L. Womersley.

(a) **ASSISTANT ARCHITECTS—Grade S.C.** (£240–£1,145). Vacancies exist in the Housing, Education and General and Central Area Sections which offer considerable scope and early prospects of advancement to young qualified architects.

(b) **ARCHITECTURAL ASSISTANTS—Grade A.P.T. II** (£215–£960). Applicants must have passed the Intermediate R.I.B.A. Examination.

(c) **ARCHITECTURAL DRAUGHTSMEN—Grades M.IV** (£225–£265), **M.V** (£265–£760), or **M.VI** (£760–£225). Applicants should be good draughtsmen and preferably have several years' experience in an architect's office.

Commencing salaries within the above grades according to qualifications and experience. Applications, stating post applied for, age, education and training, qualifications, past and present appointments (with dates and salaries) and the names of two persons to whom reference may be made, should reach the undersigned not later than Thursday, 20th October, 1960.

JOHN HEYS,
 Town Clerk.

Town Hall,
 Sheffield, 1.
 6th October, 1960. 3668

CITY AND COUNTY OF BRISTOL
ARCHITECTS' COMMITTEE
 Applications invited for the following permanent staff appointments from applicants who have the qualifications shown or equivalent qualification:

SENIOR ASSISTANT ARCHITECT—Special Scale (£240–£1,145 p.a.)—Parts 1 & 2 Final R.I.B.A. (Starting salary up to £960 per annum.)

ARCHITECTURAL ASSISTANTS—Grade A.P.T. II (£215–£960 p.a.)—Intermediate R.I.B.A.

ARCHITECTURAL ASSISTANTS—Grade A.P.T. I (£245–£215 p.a.)—Intermediate R.I.B.A.

SENIOR QUANTITY SURVEYORS—Special Scale (£240–£1,145 p.a.)—Final R.I.C.S. (Starting salary up to £960 per annum.)

QUANTITY SURVEYOR'S ASSISTANTS—Grade A.P.T. II (£215–£960 p.a.)—Intermediate R.I.C.S.

QUANTITY SURVEYOR'S ASSISTANTS—Grade A.P.T. I (£245–£215 p.a.)—Intermediate R.I.C.S.

LAND SURVEYOR—Grade A.P.T. I (£245–£215 p.a.)—Intermediate R.I.C.S. (Land Surveying or Building Surveying Section).

JUNIOR ASSISTANTS—General Division. Duties include assisting with surveys and generally to work under the supervision of an Assistant Architect.

Starting salary in General Division at 13 not less than £320 p.a. on scale rising to £690 p.a. for applicants with University School Certificate or good G.C.E.

The department has an interesting and varied programme of work including the design and construction of Colleges of Art and Further Education, Secondary Schools, Markets, Baths, Libraries and redevelopment projects including blocks of dwellings up to 15 storeys. Facilities will be given for design and contract experience and good opportunities exist for men with drive and initiative to assist in works of major architectural importance.

Housing accommodation provided, if necessary, at an economic rent. Assistance with removal expenses. Five-day week.

Details and application forms, returnable by Monday, October 31st, from City Architect, Council House, Bristol, 1. 3667

COVENTRY
 Applications invited for the following Architectural posts:

(a) **A.P.T. V (Education)**
 Member of group on Primary, Boarding, and Residential E.S.N. Schools, Youth Centres, etc.

(b) **A.P.T. V (Housing)**
 Housing estates, multi-storey building in redevelopment areas, and Welfare Homes.

(c) **Special or A.P.T. IV (Central Area)**
 Central Redevelopment, Multi-storey shops, flats, offices, car parks and Central Baths.

(d) **A.P.T. I/II/III (Education)**
 Housing accommodation in approved cases. Removal expenses loan available. 5-day working week. Canteen facilities. Application forms from Department of Architecture and Planning, Council House, Earl Street, returnable 10 days after publication. 3668

URBAN DISTRICT COUNCIL OF BASILDON
 (Population 26,000–27,000 acres, rapidly developing district)

ARCHITECTURAL ASSISTANT (ESTABLISHED)
 WITHIN A.P.T. II (£215–£960 p.a.)

Applicants should have passed the Intermediate Examination of the R.I.B.A. or equivalent and have practical experience.

Housing accommodation considered. Five-day week.

Full particulars and application form from, and the latter returnable to, Mr. S. A. Wadsworth, A.M.I.C.E., A.M.I.Mun.E., Council Offices, 88, Town Square, Basildon. Closing 29th October. 3635

BOROUGH OF SOLIHULL
APPOINTMENT OF QUANTITY SURVEYING ASSISTANTS
 Applications are invited from Quantity Surveyors with suitable qualifications and experience for the under-mentioned appointments:—

(a) **ASSISTANT QUANTITY SURVEYORS—A.P.T. Grade IV** (£1,140–£1,310 per annum).

(b) **ASSISTANT QUANTITY SURVEYOR—A.P.T. Grade III** (£960–£1,140 per annum).

The Borough, which has a population of approximately 30,000 and which is still expanding rapidly, is an Excepted District for education and has been recommended for County Borough status by the Local Government Commission for England. There is a considerable programme of varied capital works to be undertaken in the very near future.

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

In appropriate cases the Council will assist in the provision of housing accommodation, and half removal expenses will be paid.

Applications, giving full particulars as to age, qualifications and past and present experience, together with the names and addresses of two referees, should be submitted to the Borough Engineer and Surveyor, 90, Station Road, Solihull, Warwickshire, not later than Friday, 21st October, 1960.

W. MAURICE MELL,
 Town Clerk.

The Council House,
 Solihull,
 Warks.
 3rd October, 1960. 3632

BOROUGH OF SOLIHULL
APPOINTMENT OF ARCHITECTURAL ASSISTANTS
 Applications are invited from Architects with suitable qualifications and experience for the under-mentioned appointments:—

(a) **ASSISTANT ARCHITECT, A.P.T. Grade IV** (£1,140–£1,310 per annum).

(b) **ASSISTANT ARCHITECT, A.P.T. Special** (£240–£1,145 per annum).

(c) **ASSISTANT ARCHITECT, A.P.T. Grade I-II** (£245–£960 per annum).

The Borough, which has a population of approximately 30,000 and which is still expanding rapidly, is an Excepted District for education and has been recommended for County Borough status by the Local Government Commission for England. There is a considerable programme of varied capital works to be undertaken in the very near future.

The appointments will be subject to satisfactory medical reports, the Local Government Superannuation Acts, the National Scheme of Conditions of Service and to one month's notice in writing on either side.

In appropriate cases the Council will assist in the provision of housing accommodation and half removal expenses will be paid.

Applications, giving full particulars as to age, qualifications and past and present experience, together with the names and addresses of two referees, should be submitted to the Borough Surveyor, 90, Station Road, Solihull, not later than Friday, 21st October, 1960.

W. MAURICE MELL,
 Town Clerk.

The Council House,
 Solihull,
 Warks.
 3rd October, 1960. 3633

BOROUGH OF SWINDON
SENIOR TOWN PLANNING ASSISTANT
A.P.T. IV (£1,140–£1,310)

Applications are invited for the above appointment in the Borough Surveyor and Planning Officer's Department.

The Borough is expanding rapidly under the Town Development Act, and there is considerable scope for imaginative and skilful planning work—both in the layout of the large open areas earmarked for industrial and residential development about to proceed, and in the town centre, which is being extensively remodelled and developed on pedestrian way lines for shopping.

Candidates should have had suitable experience and have passed the Final Examination of the Town Planning Institute. The commencing salary will be in accordance with qualifications and experience.

A five-day week is in operation. Housing accommodation will be offered to married candidates from other areas, and assistance towards removal expenses may be granted.

Applications on forms to be obtained from the Town Clerk, Civic Offices, Swindon, must be returned by 27th October, 1960. 3634

URBAN DISTRICT COUNCIL OF CRAYFORD
ENGINEERING ASSISTANT
 Permanent superannuable appointment. Salary within special grade (£240 to £1,145 per annum) plus London "weighting," according to qualifications and experience as laid down in the national scheme of conditions of service. Architectural experience, or knowledge of design of housing schemes, would be an advantage. Housing available.

Application forms from the Engineer and Surveyor, Town Hall, Crayford, Kent. Closing date 24th October, 1960.

G. B. HODGSON,
 Clerk of the Council. 3666

BOROUGH OF HARROW
 Applications are invited for the following appointment in the Department of the Borough Engineer and Surveyor:

QUANTITY SURVEYING ASSISTANT—Salary £215 per annum plus London "weighting" (maximum of A.P.T. Grade I).

The Council is unable to provide housing accommodation but a contribution towards removal expenses will be considered.

The appointment will be subject to the Local Government Superannuation Acts; and to the National Joint Council's Scheme of Conditions of Service.

Application forms, obtainable from me, should be returned not later than Saturday, 22nd October, 1960.

DAVID PRITCHARD,
 Town Clerk.

Town Clerk's Department,
 92, Uxbridge Road,
 Harrow Weald Lodge,
 Harrow, Middlesex. 3637

SOUTHAMPTON
BOROUGH ARCHITECTS' DEPARTMENT
 Applications are invited for the permanent posts of:—

(a) **SENIOR ASSISTANT PLANNING OFFICER**
 A.P.T. V (£1,310–£1,480)

Applicants should be Associate Members of the Town Planning Institute and possession of a University degree or other appropriate qualification will be of advantage. The post is second to the Senior Planning Officer in charge of the Planning Section of the Department and requires experience in a senior capacity of technical and administrative planning work.

(b) **ASSISTANT PLANNING OFFICER, Special Grade** (£240–£1,145), to work primarily in redevelopment, reconstruction proposals.

Applicants should be A.M.T.P.I., architectural qualification or experience an advantage.

HOUSING ACCOMMODATION available in approved cases, and approved removal expenses reimbursed up to a maximum of £50. Commencing salary within grade according to experience and qualifications.

Application forms from the Borough Architect, Civic Centre, Southampton, returnable by 22nd October, 1960. 3692

BRITISH EUROPEAN AIRWAYS. An **ASSISTANT ARCHITECT** is required to work under the Chief Staff Architect on an increasing programme of interesting and varied projects involving some travel in the UK and overseas. Working conditions are good and a vigorous and practical approach to first class contemporary design is encouraged. This permanent pensionable post would suit a qualified young man, trained full time at a recognised school of architecture with not less than two years' office experience. A man with experience who is about to qualify will be considered. Sensitive design ability and sound technical experience are essential. Salary range £1,005–£1,367 depending on qualifications and experience. Write for full details and Application Form to Personnel Officer, Head Office, BEA, Beeline House, Ruislip, Middlesex. 3693

BOROUGH OF GOSPORT
APPOINTMENT OF TWO ASSISTANT ARCHITECTS
 Applications are invited for the above appointments in the Borough Engineer's Department, on the salary scale for Special Classes (£240–£1,145 by seven annual increments).

Applicants should have passed Parts I and II of the R.I.B.A. final examination, or equivalent. The appointment will be subject to the following:—

(i) The National Scheme of Conditions of Service.

(ii) Medical Examination.

(iii) The Local Government Superannuation Acts.

(iv) One month's notice on either side.

Housing accommodation, if necessary, will be made available for the successful applicants.

Applications, giving age, full details of qualifications and experience, together with the names and addresses of two referees, should reach the undersigned not later than first post on Saturday, the 29th October, 1960.

EDWARD ADDENBROOKE,
 Town Clerk.

Town Hall,
 GOSPORT.
 Dated 5th October, 1960. 3694

ARCHITECTS
 required by **LONDON TRANSPORT** for the following posts:—

ASSISTANT ARCHITECTS: Salary range £1,070 p.a.–£1,245 p.a.

Applicants must be fully qualified and capable of supervising staff. (Reference 108/A/1.)

ARCHITECTURAL ASSISTANTS: Salary ranges £255 p.a.–£951 p.a.

£255 p.a.–£1,028 p.a.

Applicants should be qualified to R.I.B.A. Intermediate standard with previous office experience. (Reference 108/B/1.)

FREE TRAVEL; FIVE-DAY WEEK; medical examination; contributory superannuation after probation.

Applications quoting reference number of post applied for and stating age, qualifications and full details of experience, to Staff and Welfare Officer, LONDON TRANSPORT, 55, Broadway, S.W.1. 3612

**LANCASHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
SENIOR ASSISTANT ARCHITECTS, N.J.C.**

Scale 'B'—£1,320 to £1,485 (now under review) according to experience, and covered by Lancashire County Council Superannuation Scheme.

The Governors of Salford College of Advanced Technology are proceeding with a major expansion of the College. This project is to be of advanced design, offering opportunity for experience in the design of buildings to meet the needs of pioneer scientific processes, which are estimated to cost £3,000,000.

The team for this scheme will work with Messrs. Ove Arup & Partners, Structural Consultants, and will include Quantity Surveyors and Mechanical Engineers. The team will work in the County Architect's Office at Preston.

On completion of the project, Architects will be engaged on a wide variety of new buildings for the Lancashire County Council.

Application Forms and details of appointment from:— The County Architect,
P.O. Box 26,
County Hall,
Preston.

returnable by 27th October, 1960, quoting reference A/AJ. 3690

AIR MINISTRY Works Designs Branch requires in LONDON and PROVINCES ARCHITECTURAL ASSISTANTS with adequate training and drawing office exp. O.N.C. (Building) an advantage. Work includes site layouts, sketch plans, working drawings and details for variety of technical and domestic buildings in permanent and semi-permanent construction. Financial assistance and time off given for recognised courses of study. Promotion and pension prospects. Five-day week with 13 days' paid leave per year initially. Overseas tours for which special allowances granted.

Salary: in LONDON ranges from £905 (age 25) to £980 p.a., somewhat lower in PROVINCES. Commencing salary dependent on age, quals. and exp. Applicants, who must be natural born British subjects, should write (quoting Order No. Kings Cross 897) to Air Ministry, W.G.1, Lacon House, Theobalds Road, London, W.C.1, or to any Employment Exchange giving age, details of training, quals., full particulars of former posts held and copies of any testimonials. Candidates selected will normally be interviewed in London and certain expenses reimbursed. 3608

**BOROUGH OF CASTLEFORD
APPOINTMENTS IN THE BOROUGH
ENGINEER'S DEPARTMENT**

Applications are invited for the following appointments:—

SENIOR ASSISTANT ENGINEER. Salary—Special Grade: commencing salary according to qualifications and experience but not less than £960 per annum, rising to £1,145 per annum. Applicants must be Corporate Members of the Institution of Municipal and/or Civil Engineers, and have had experience in a Municipal Engineer's Office.

SENIOR ASSISTANT ARCHITECT. Salary—Special Grade: commencing salary according to qualifications and experience but not less than £960 per annum, rising to £1,145 per annum. Applicants must be Associate Members of the R.I.B.A. and/or Registered Architects, and have had some years' practical experience.

ARCHITECTURAL ASSISTANT. Salary—Grade A.P.T. II (£815—£960). Applicants should have passed the Intermediate Examination of the R.I.B.A. or its equivalent at one of the recognized Schools of Architecture.

N.J.C. Service conditions: superannuable; terminable by one month's notice on either side. The successful applicants will be required to pass satisfactorily a medical examination.

If required, housing accommodation will be provided for successful married applicants. Applications, on forms obtainable from me, to be returned by the 29th October, 1960.

Canvassing disqualified. **ERNEST HUTCHINSON,**
Town Clerk. 3629
Castleford.

**CHESTERFIELD RURAL DISTRICT COUNCIL
APPOINTMENT OF CHIEF ASSISTANT
PLANNING OFFICER**

J.N.C. SCALE 'B'
Applications are invited for the appointment in the department of the Engineer and Surveyor and Planning Officer (Mr. J. B. Wikeley, M.Eng., M.I.C.E.) at a salary in accordance with Grade B (£1,375—£1,485).

The population of the district is nearly 100,000 and the Council exercise functions under the Town and Country Planning (Delegation) Regulations, 1959. The person appointed will be responsible for development control and for the preparation of schemes for town and village redevelopment and for industrial estates.

Housing accommodation will be provided in appropriate cases. Removal expenses will be paid. Essential User car allowance on Scale 1.

Applicants must be members of the Town Planning Institute and have other suitable professional qualifications, preferably in Architecture.

Applications, with the names of two referees, to reach the undersigned by 19th October, 1960.
H. O. HAWKINS,
Clerk of the Council.

Rural Council House,
Saltergate,
Chesterfield. 3578

SOUTH AUSTRALIAN GOVERNMENT
Applications are invited for appointments in the following professions in the Government Service of South Australia:—

	Salary Range.
ARCHITECTS	£A1,170—£A1,920
ARCHITECTURAL ASSISTANTS	£A1,340—£A1,525
QUANTITY SURVEYORS	£A1,460—£A1,655
ASSISTANT QUANTITY SURVEYORS	£A1,340—£A1,525
SPECIFICATION WRITERS	£A1,340—£A1,525
SURVEYORS AND ASSISTANT SURVEYORS	£A1,340—£A1,525
DRAUGHTSMEN, ARCHITECTURAL	£A895—£A1,280

Commencing salaries within these ranges according to qualifications and experience.

First class passages provided for selected applicants and families.

Good leave conditions (Recreation, Sick and Long Service). Superannuation Fund available.

Houses on a rental basis provided.

Full information from:—
Agent General for South Australia,
50, Strand,
London, W.C.2.

Whitehall 7471. 3611

**CITY OF PLYMOUTH
APPOINTMENT OF PLANNING ASSISTANT
GRADE A.P.T. SPECIAL GRADE (£840—£1,145)**
Vacancy in Development Plan/Urban Renewal Section affording a suitably qualified person an excellent opportunity for work upon a variety of development and redevelopment schemes and the Quinquennial Review. Previous experience in civic design will be an advantage.

Appointment is superannuable and subject to medical examination; consideration will be given to making housing accommodation available and the Council will contribute to removal expenses.

Applications, on forms obtainable from the undersigned, to be returned by 1st November, 1960.

J. ACKROYD,
City Engineer and Surveyor.

The Guildhall,
Plymouth. 3628
4th October, 1960.

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

Applications are invited from qualified ARCHITECTS of initiative, keen on design and modern constructional methods, to work on a large and varied programme.

Permanent staff appointments within the salary range £1,310—£1,480 (A.P.T.V) starting point according to experience.

Application forms and details of appointment from the County Architect, P.O. Box 26, County Hall, Preston, returnable by 27th October, 1960, quoting reference A/AJ. 3699

**CITY OF STOKE-ON-TRENT
CITY ARCHITECT'S DEPARTMENT
APPOINTMENT OF CHIEF ASSISTANT
ARCHITECT (EDUCATION)**

SCALE 'B'—£1,485
Applications are invited from qualified and experienced Architects for the appointment of Chief Assistant Architect (Education) at a salary in accordance with Scale 'B'—£1,485 p.a.

The Officer appointed will be responsible under the direction of the City Architect for the control of the Education Section of the Department and for all building work for the Education Committee and the Governors of the North Staffordshire Technical College.

This post is one of responsibility requiring a high degree of initiative and design ability in all types of construction, job planning, control of costs, attendance on Committees and organisation of staff.

Superannuable post, subject to medical examination and to the National Conditions of Service.

Applications, stating age, present post and salary, qualifications, training, previous appointments and experience and names of two referees, to be sent to J. R. Piggott, T.D., F.R.I.B.A., City Architect, Kingsway, Stoke-on-Trent, by Monday, 31st October, 1960.

HARRY TAYLOR,
Town Clerk. 3630

**HUNGERFORD RURAL DISTRICT COUNCIL
ARCHITECTURAL ASSISTANT**

Applications are invited for the appointment of an Architectural Assistant in the Surveyor's Department. Salary within A.P.T. II (£765—£960) according to qualifications and experience. Essential User's travelling allowance. Housing accommodation provided. Approved removal expenses paid. N.J.C. Conditions of Service.

Candidates should have sound general experience of local authority housing schemes, including site supervision.

Applications, giving full details and the names of two referees, to be received by the Surveyor not later than Monday, 31st October, 1960.

D. J. BRITAIN,
Clerk of the Council.

The Priory,
Hungerford,
Berkshire. 3627

WEST SUFFOLK COUNTY COUNCIL

Applications are invited from suitably qualified persons for the following posts:—

(a) **ARCHITECTURAL ASSISTANT**, within A.P.T. Grade II (£815—£960).

(b) **JUNIOR ARCHITECTURAL ASSISTANT**, within A.P.T. Grade I (£645—£815).

Position on scales according to qualifications and experience.

N.J.C. Service Conditions; posts pensionable; medical examination.

Application forms obtainable from the County Architect, 13, Westgate Street, Bury St. Edmunds, to be returned as soon as possible. 3609

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

SENIOR ASSISTANT ARCHITECTS—N.J.C.
Scale 'B'—£1,320 to £1,485 (now under review) according to experience.

Applications are invited from experienced, registered architects to deal with a wide variety of buildings, including Magistrates' Courts, Police Training Schools and Technical Colleges.

Application Forms and details of appointment from:—The County Architect, P.O. Box 26, County Hall, Preston, returnable by 27th October, 1960, quoting reference A/AJ. 3691

**LANCASHIRE COUNTY COUNCIL
PLANNING ASSISTANT required at BURY.**

Salary within range £645—£1,145.

Applicants should be studying for or possess a recognised qualification in architecture, surveying, engineering and/or town planning. The commencing and maximum salary will be according to qualifications and experience.

Applications, giving age, qualifications, present appointment, experience, etc., and two referees, to the County Planning Officer, East Cliff County Office, Preston, by the 24th October, 1960. 3669

MARLEY MULTIPLE GARAGES
IN PRECAST CONCRETE



Of spacious dimensions and good appearance. This fire-proof and rot proof garage is available in four types—high front, high back, back-to-back and stepped with superlative Marley up and over or traditional timber doors. Low initial cost. Virtually maintenance free. Many thousands now being supplied and erected for Architects and Local Authorities throughout Great Britain. Site work can also be undertaken, if required. We shall be pleased to submit quotations on request. **MARLEY CONCRETE LIMITED** Dept. M1/8 Peasmarsh, Guildford, Surrey (Head Office) Guildford GU1 1T • Shurdington, Nr. Cheltenham, Glos. Shurdington 334/5. Hatchpond Road, Waterloo, Poole, Dorset. Broadstone 911/2 London Showrooms: 251 Tottenham Court Road, W.1.

STEPNEY M.B.C. require DRAUGHTSMAN AND TRACING ASSISTANT, male or female. Salary £650-£850. Forms and other particulars from Town Clerk, 327, Commercial Road, E.I. Closing date 22nd October, 1960. 3618

CITY OF STOKE-ON-TRENT CITY ARCHITECTS' DEPARTMENT Applications are invited from qualified and experienced persons for the following appointments on the permanent staff:—

- (a) ASSISTANT ARCHITECTS, Grade A.P.T. IV (£1,065-£1,230).
- (b) ASSISTANT ARCHITECTS, Special Scale (£735-£1,070).
- (c) ARCHITECTURAL ASSISTANTS, Grade A.P.T. II (£765-£880).
- (d) ASSISTANT QUANTITY SURVEYORS, Grade A.P.T. IV (£1,065-£1,230).

For posts (a) and (d) experience in the design and planning/taking-off Bills of Quantities on major building projects is essential. Post (b) is suitable for newly-qualified Architects and post (c) for Intermediate R.I.B.A.

Commencing salaries in accordance with qualifications and experience. Superannuable posts, subject to medical examination and to National Conditions of Service.

Applications, stating the post applied for and giving details of age, present post and salary qualifications, training, previous experience and names of two referees, to be sent to J. R. Pigott, T.D., F.R.I.B.A., City Architect, Kingsway, Stoke-on-Trent, by Monday, 31st October, 1960.

HARRY TAYLOR
Town Clerk.

3631

Tenders Invited

36s. per inch; each additional line 3s.

CITY OF BIRMINGHAM: PARKS COMMITTEE KENTS MOAT RECREATION GROUND BIRMINGHAM, 33

Tenders are invited for the following separate contract works:—

- (1) Construction of a brick and timber sports pavilion.
- (2) Site levelling; surface and foul water drainage; concrete paths; tennis courts and netball pitches; car park; children's playground; ground preparation; grass seeding; supply and planting of trees, shrubs, herbaceous plants and bulbs.

The Form of Tender and a copy of the Bill of Quantities and drawings may be obtained upon application to the General Manager, Parks Department, Civic Centre, Broad Street, Birmingham, 1, on payment of a deposit of £2 2s. 0d. in respect of each separate contract, which will be returned upon receipt of a bona fide tender. Applications must be received not later than Wednesday, 12th October, 1960.

A copy of the Corporation's General Conditions (which include the Corporation's usual fair wages and Conditions of Labour Clauses) may be inspected at the Parks Department, Room 435, Civic Centre, during usual office hours.

Tenders for any one, or both, of these contracts enclosed in the envelope provided for the purpose, must be sealed and delivered to the Town Clerk's Office, Room B33, Council House, Birmingham, 1, not later than 12 noon on Monday, 14th November, 1960, when they will be opened. Tenders received after that time will be rejected.

The Committee do not bind themselves to accept the lowest or any tender received.

T. H. PARKINSON
Town Clerk.

Council House, Birmingham, 1.
27th September, 1960. 3632

CITY OF BIRMINGHAM HOUSING MANAGEMENT DEPARTMENT REINFORCED CONCRETE FENCING POSTS

Tenders are invited for the supply and delivery of 5 ft. 6 in. x 4 in. x 4 in. and 2 ft. 10 in. x 5 in. x 4 in. reinforced concrete fencing posts to be supplied as required during the twelve months commencing 1st November, 1960. Forms of Tender can be obtained from the undersigned, and should be returned by the 21st October, 1960.

J. P. MACEY,
Housing Manager.

Housing Management Department,
Bush House,
Broad Street,
Birmingham, 1. 3643

Architectural Appointments Vacant

3s. per line; minimum 12s. per Number, including forwarding replies, 2s. extra.

ARCHITECTURAL ASSISTANTS required for interesting work on new Colleges. One Senior and one Junior. Good salaries according to ability. H. V. Ashley & Winton Newman, (HOLBORN 2804.) 2829

WEST END OFFICE requires ASSISTANT ARCHITECTS of Final and Intermediate standards for interesting Industrial projects in Home Counties. Good salaries offered to men with initiative and ability. Bonus Scheme. Five-day week, holiday arrangements honoured. Box 2039.

ARCHITECTURAL ASSISTANTS required in busy Bloomsbury office with varied practice. Good salary and prospects for suitable applicants. Five-day week. Write giving particulars of age, qualifications, experience, etc., to Box 910, c/o V. Copic Street, W.C.1. 8615

LEWIS SOLOMON, KAYE & PARTNERS, A rapidly expanding practice require ARCHITECTS and ASSISTANTS with initiative and competence to work on major design projects in the London area. These projects include Comprehensive Development Schemes, Hotels, Schools, Offices, and Luxury Flats. Good salaries according to ability and experience, luncheon vouchers, five-day week, and excellent working conditions. Write to 6, Holborn Circus, Tavistock House, E.C.1, or telephone City 811, quoting SLB in both instances. 7700

ARCHITECTURAL APPOINTMENTS VACANT AUSTRALIA

Architects for our three offices.
Sydney 2 Architects.
Goulburn (N.S.W.) 1 Architect.
Orange (N.S.W.) 1 Architect.
This is an established and expanding firm of young men. Yours is the opportunity to share in this firm and this country's growth.

SALARY: £40 per week (Aust.) to start.
FARES: We will arrange this with no resultant cost or obligation to you (including families) through the assisted Passage Migration Scheme.

Contact Chief Migration Officer, Mr. K. J. Smith, Australia House, London, for details.
ACCOMMODATION: We will have accommodation available to suit your needs on arrival.

QUALIFICATION: A.R.I.B.A. or equivalent (min.). Age max. 35.

APPLICATION: Give full details of training and experience. Forward to: Brown, Brewer & Gregor, Architects, 26, Alfred Street, Milton's Point, SYDNEY, AUSTRALIA. 4471

RONALD WARD AND PARTNERS invite applications from ARCHITECTS, Senior and Junior. Long-term prospects. Scope for initiative and responsibility in interesting commercial, industrial and civic projects in British Isles, West Africa and Australia. Salaries commensurate with ability. Non-contributory Pension and Life Insurance schemes. Five-day week. Pleasant offices. Apply to Chesham Place, Belgrave Square, London, S.W.1. Tel.: BELGRAVIA 3361. 2960

BASIL SPENCE & PARTNERS require qualified and experienced ARCHITECTS to fill positions of responsibility on a major building programme. Write to 48, Queen Anne Street, W.1, stating experience and salary required. 9624

£1,000/£2,000 p.a. will be paid to experienced competent ARCHITECTS by a private practice in the City of London. The work will be primarily on the drawing board on new and interesting projects of magnitude. A high standard of design and detailing ability is required. Please apply in writing to Box 9360.

LEICESTER—SENIOR ARCHITECTS and ASSISTANTS required for general practice. Appropriate salary paid. Five-day week. Apply by telephone or in writing for an interview to Herbert, Son & Sawday, 18, Friar Lane, Leicester. Tel. 56476. 2413

ARCHITECTURAL ASSISTANT required, able to work on own initiative, varied practice, small office, opportunity for advancement. Write or phone: Nicholson & Rushon, 2, New Square, Lincoln's Inn, W.C.2. HOLBORN 2095. 2345

£850-£1,400. ARCHITECTS with imagination and designing ability required to assist with large and important new developments in the central London Area. Telephone or write—Trehearne & Norman, Preston & Partners, 83, Kingsway, W.C.2. HOLBORN 4071. 2186

DONALD ROWSWELL urgently requires capable ASSISTANTS of various grades for Croydon office. Salary by agreement. Holiday arrangements honoured. Apply with full details to 54, Friends Road, Croydon, or telephone CROYDON 4980. 1945

SENIOR ASSISTANTS required immediately. Salary by arrangement. Theo. H. Birks, 39, Portland Place, London, W.1. LAN 7236. 1486

MONRO AND PARTNERS require ARCHITECTURAL ASSISTANTS of Intermediate/Final R.I.B.A. standard in their London, Watford, and Glasgow Offices for work on interesting industrial and commercial projects. Salary range £800-£1,000 p.a. Non-contributory Pension Scheme. Five-day week. Apply in writing to 32, Clarendon Road, Watford. 5669

SENIOR ASSISTANT required by Haaker & Hall, L.F.R.I.B.A., in their office in Warwickshire. Good salary, with scope for initiative and responsibility. Write Longdon House, High Street, Knowle, or telephone Knowle (Birmingham) 3592. 8143

INTERMEDIATE to Final ASSISTANTS required immediately. Salary according to ability and experience. Theo. H. Birks, 39, Portland Place, London, W.1. LAN 7236. 9739

SIR JOHN BURNET, TAIT & PARTNERS have vacancies for ARCHITECTURAL ASSISTANTS of all grades. Salaries ranging from £1,000 to £1,500 per annum. Luncheon vouchers. Pension and Medical schemes (non-contributory). Telephone LAngham 3826 for appointment. 2113

ARCHITECTURAL ASSISTANTS of all categories required for busy City office engaged in industrial and commercial work. Good working conditions, 5-day week, luncheon vouchers. Salary by arrangement. Please contact Eric Firmin & Partners, Tavistock House, Holborn Circus, E.C.1. Tel.: City 8111. 2692

A PROGRESSIVE and expanding building and civil engineering organisation requires the services of an ARCHITECTURAL ASSISTANT in their Housing Division. Applicants should be experienced in the design and execution of working drawings in connection with Housing and Flat Development Schemes. Permanent and progressive position. Pension and Luncheon Voucher Schemes. Salary according to ability and experience. Write or phone Percy Bilton Ltd., Bilton House, 54-58 Uxbridge Road, Baling, W.5. Tel. BAling 7777. 2068

ARCHITECTURAL ASSISTANT required, with at least two years' office experience. Apply in writing to Thomas Mitchell & Partners, 26, Bedford Square, London, W.C.1. 7282

CITY OFFICE requires ASSISTANTS for industrial and commercial work. 5-day week, luncheon vouchers. Salary £1,250 p.a. 2691

SIR GILES SCOTT, SON & PARTNER require a SENIOR ASSISTANT with good general experience in practical supervision of work and also in administration. Varied work including schools, hostels, churches, office buildings, municipal buildings, etc. Five-day week, luncheon vouchers, and salary in accordance with experience. Please apply in writing to 9, Gray's Inn Square, London, W.C.1. 2710

SIR GILES SCOTT, SON & PARTNER require ARCHITECTURAL ASSISTANT, qualified or unqualified, with practical experience. Interesting and varied practice. Salary up to £1,000 plus luncheon vouchers. Write 9, Gray's Inn Square, W.C.1, or telephone CHANCERY 8387/8. 2469

ASSISTANTS required urgently in expanding Practice. Plenty of scope with opportunities of varied site experience. Initiative encouraged. Write giving particulars and experience and salary required. Box 3503.

WELCH AND LANDER require ASSISTANTS, Intermediate to Final standard, preferably with office experience. 38, Gloucester Place, W.1. Tel. WELbeck 6551. 3442

ARCHITECTURAL ASSISTANTS AND DRAUGHTSMEN required. Five-day week. Dining room facilities. Pension Scheme. Good salaries offered to the right men. Apply in writing giving details of age and experience. Box 3395.

VACANCIES exist in large provincial practice with offices in Peterborough and Spalding for the following:

- (1) ARCHITECTURAL ASSISTANT, qualified, with few years' office experience. Salary up to £1,150 to suitable applicant.
- (2) ARCHITECTURAL ASSISTANT, qualified, having recently left college, office experience not essential. Salary up to £900.
- (3) JUNIOR ASSISTANTS, Intermediate/Final standard with 2 1/2 years' office experience. Salary up to £800.

The work is of a varied and interesting nature, pension scheme in operation, every third Saturday morning free. Assistance will be given with accommodation in appropriate cases. Apply in writing with full details to: Ruddle & Wilkinson, F/L A.R.I.B.A., Long Causeway Chambers, Peterborough. 3444

ARCHITECTS

UP TO £2,000 per annum with excellent future opportunities offered in a private office, Edgbaston, Birmingham, to an Architect who has been responsible for large scale projects from start to finish. Three weeks' holiday after qualifying period. Profit sharing scheme. Pension scheme. State precise details of contracts undertaken. Box 2903.

DESIGNERS. To prepare and develop sketch designs for every type of work. Imaginative outlook and good sense of detail required. Salary £800-£1,250.

JOB ORGANISERS. To take charge of jobs; able to control drawing office and site work and deal with Consultants and Specialists. Salary £1,000-£1,250.

ASSISTANTS. To work on a wide range of projects. Good opportunities for those interested in the preparation of working drawings of a high standard. Salary £700-£1,000.

are required in LONDON for an expanding programme of work which includes Industrial, Commercial, Housing, Schools, Churches, etc., by LLEWELLYN SMITH AND WATERS, 103, OLD BROMPTON ROAD, S.W.7. KENSINGTON 4477.

There are also vacancies for Assistants in Worcester. 3419

ASSISTANTS required for Schools, Warehouses, Offices, domestic work. Salary bracket £750 to £950. Apply Lawrence Butlerfield, F.R.I.B.A., 4, Raymond Buildings, Gray's Inn, London, W.C.1. Tel. HOLborn 0535. 3477

WELL KNOWN Firm of Architects, with offices both in London and on the South Coast, require ASSISTANT ARCHITECTS of all grades. High salaries paid for a five-day week, with luncheon vouchers, and other benefits. Reply, stating age, experience and qualifications, to Box 3106.

ASSISTANT ARCHITECTS required for staff-ing a new office opening in Southampton for work on interesting projects including University, War Department and Ecclesiastical programmes. Juniors also required. Apply stating age, qualifications, experience and salary required to Robert Potter, F.R.I.B.A. & Richard Mare, B.Arch., A.R.I.B.A., De Vaux House, Salisbury. 3507

J. W. HAMMOND offers £2900/£1,000 to an ASSISTANT wishing to enjoy the conditions of a provincial practice with a variety of work. Telephone or write, giving particulars to Lloyds Bank Chambers, Main Road, Gidea Park, Romford, Essex. Telephone ROMford 40562. 3513

VACANCY occurs in the West End Branch of large provincial Architectural Practice for an ASSISTANT at Intermediate standard. The post offers considerable scope on varied projects. Five-day week, luncheon vouchers. Write, giving particulars of age, experience and salary required, to Box 3511. 3513

QUALIFIED ARCHITECTURAL ASSISTANT required immediately in Home Counties office. Successful applicant will have the opportunity of working on widely varying industrial, commercial and housing schemes. Five-day week. Write full particulars to Box 3512. 3513

ARCHITECTURAL ASSISTANT required in small office. Jobs include new church work and schools. Salary by arrangement. Apply: Thompson, 5, Bluecoat Chambers, School Lane, Liverpool, 1. 3509

MR. H. HUBBARD FORD, F.R.I.B.A., requires immediately-Intermediate and Junior ASSISTANTS to work in his London office on interesting projects. Salary by arrangement. Please telephone GROsvenor 6208/9 for interview. 3504

BRIGHTON & HOVE. Experienced ASSISTANTS in all grades required. Details please to: H. Hubbard Ford & Associates, 51, Church Road, Hove, 3. Sussex. 3482

ARCHITECTURAL ASSISTANTS of Final standard required immediately for busy country practice with varied programme of work. Some office experience essential. Experience in country house and ecclesiastical work an advantage. Salary by arrangement. Write stating experience and salary required to Forsyth Lawson, Cunningham & Partners, 30, Horse Fair, Banbury, Oxon. 3483

ONE qualified ASSISTANT required—salary by arrangement—and Two Intermediate standard ASSISTANTS required, salary within range £700—£800. Wilburn & Son, 11, South Parade, Doncaster. 3487

JUNIOR TECHNICAL ASSISTANT required to assist in the preparation of Shopfitting Estimates and Specifications, including clearance of Specialist Trades and checking Accounts, etc. Compulsory Superannuation Scheme; five-day week. Apply: R. C. Steel, A.R.I.B.A., Chief Architect, C.W.S. Ltd., 99, Leman Street, London, E.1. 3500

ARCHITECTS require Senior and Intermediate ASSISTANTS in their well-established office near Charing Cross. Interesting and busy general practice. Write Box 3501. 3495

ASSISTANT ARCHITECTS AND ASSISTANTS required, all levels. Geens & Cross, Metropole Chambers, Lansdowne, Bournemouth. 3495

ASSISTANT ARCHITECTS AND ASSISTANTS required, all levels. Ronald Sims, Metropole Chambers, Lansdowne, Bournemouth. 3496

ARCHITECTURAL ASSISTANTS required in medium sized general practice. Apply in writing only, stating age, qualifications, experience and salary required, to Thomas Sibthorn, F.R.I.B.A., A.R.I.C.S., A.M.T.P.I., 10, Manchester Square, London, W.1. 3489

ARCHITECTS FAIRFOTHER HALL & HEDGES, CHARTERED ARCHITECTS, EDINBURGH, 1

HAVE vacancies for the following appointments:—

1. ASSISTANT ARCHITECT for responsible work on secondary and primary schools. Excellent salary offered.
2. ASSISTANT ARCHITECT for interesting work on Local Authority housing schemes. Good salary offered.
3. ARCHITECTURAL ASSISTANT with good general experience. Knowledge of surveying and levelling an advantage. Salary £800—£900.

Applications in writing, stating experience, to: THE SECRETARY, 27, RUTLAND SQUARE, (Telephone: FOU. 1251.) 3491

ON OFFER. A variant works programme. Occasional Travel. Five-day week. Annual Bonus. Non-contributory Pension Scheme. A base in Ealing. A secure job with a Multinational Company. Canteen facilities. Wanted: Keen Young Intermediate Standard Assistants. Apply for appointment, stating age, experience and salary required. Box 3539. 3492

LIKE to be responsible for any of the following? ● work for Top Local Authority Architects, incl. CLASP. ● projects for a well-known Group, incl. redevelopment of central areas. ● design and development of new materials and techniques.

Applications are invited from high calibre men who are preferably (but not necessarily) qualified and aged 27-37. The scope of these posts is unique and some require an ability to undertake high level discussions. Initial salaries are in the range £900—£1,750

and there is no slowness in rewarding initiative. The present team is 9 strong, independent or group work as preferred; no Saturdays. Belper, a place of no beauty but near fine countryside, is a temporary base until we move to new offices in Derby. Why not come and talk the matter over?

O. E. Grey, A.R.I.B.A., A.A.Dipl., Fernmaen House, Belper, Derbyshire. 3527

WEST END office requires capable ASSISTANT for varied work. Five-day week. Phone or write to Kevin Katona, A.R.I.B.A., 23, Old Earlsgate Street, W.1. REG 1945/6. 3532

LEONARD MANASSEH & PARTNERS require capable energetic ASSISTANTS, minimum three years' experience. Write giving particulars and salary required to, 39/40, Bedford Street, Strand, W.C.2. 3533

VACANCIES for ASSISTANTS to work individually on a variety of projects. Qualifications preferred, but not essential. Write or telephone any time for interview. Frank H. Saunders, A.R.I.B.A., 9, Palmers Avenue, Grays, Essex. Grays Thurrock 2146. 3540

ELIE MAYORCAS requires ARCHITECTURAL ASSISTANTS with a minimum of three years' office experience in this country. Write, giving brief particulars of architectural education and experience, and salary required to: 13, David Mews, Baker Street, W.1. 3293

BOOTH, LEIBROER AND PINCKHEARD require ASSISTANTS in the salary range £750—£1,250. Apply 17-20, Mason's Yard, Duke Street, St. James's, S.W.1. Tel.: TRAFalgar 1866. 5119

RESPONSIBLE position vacant in congenial City Office. Salary by arrangement, reviewed annually. Luncheon voucher scheme. Applicants of Intermediate to Final R.I.B.A. standard (at least two years' office experience) should ring MET. 9511 or write Seely and Paget, 41, Cloth Fair, E.C.1. 3281

W. PATON ORR & PARTNERS require ARCHITECTURAL ASSISTANT with practical experience and competent to carry out work in connection with building projects from the design stage to completion. Telephone LANGham 6169 for appointment. 3274

QUALIFIED ASSISTANT ARCHITECT required shortly for resident supervision of important large hotel project. Overseas tropical experience desirable. Write with full particulars to R. Fraser Reekie, F.R.I.B.A., Messrs. W. H. Watkins & Partners, 14, St. Stephen's Street, Bristol 1, or telephone Bristol 20673. 3546

ARCHITECTURAL ASSISTANT, Intermediate or Final standard, required in West Riding. State experience, salary required, etc., in Box 3545. 3545

APPLICATIONS are invited for the post of ARCHITECTURAL ASSISTANT, Intermediate R.I.B.A. standard, in busy office engaged on varied work, five-day week. Salary commensurate with experience and ability. Quick & Lee, Chartered Architects, 11, Waterloo Place, Leamington Spa, Warwickshire. 3547

STIRLING AND MARGARET CRAIG require an ASSISTANT of Final or Intermediate standard for specialised schools and general work. Housing likely to be available shortly. 30, London Road, Stevenage, Herts. Stevenage 1082. 3549

THE LAING HOUSING COMPANY HAVE VACANCIES FOR ARCHITECTURAL STAFF AT THEIR HEAD OFFICE AT QUEENSBURY, MIDDLESEX.

Work to include Estate Layouts, Design and Working Drawings for Houses and Flats. These positions are permanent, and offer scope for initiative and advancement. Assistance given to those studying for R.I.B.A. qualifications. Conditions include Pension Scheme and other progressive benefits.

Applications in writing, giving brief details of past experience, to Personnel Manager (A.L.H.3), John Laing and Son (Holdings), London, N.W.7. 3663

ARCHITECTS with initiative and responsibility for a variety of contemporary work in expanding practice in South Yorkshire. Bonus, Pension and Life Assurance Scheme. Travelling and removal expenses paid by agreement. Salary according to ability. 3560

ASSISTANT with several years' office experience and accustomed to preparing working drawings from sketches, required immediately by West End Architects. Should be interested in supervising the work and have a sound knowledge of construction. Write for interview to Box 3567. 3567

ARCHITECTURAL ASSISTANTS required in busy West End office. Varied work, excellent salary and prospects. Apply to Maurice Sanders, F.R.I.B.A., 24 Harley Street, W.1. 3195

FARMER AND DARE have vacancies for:—

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Wide variety of interesting projects both here and abroad, including Schools, Offices, Laboratories, Factories, Power Stations and Military Establishments.

Please write or telephone:—Romney House, Tufton Street, S.W.1. ABBEY 6311. 3566

CO-OPERATIVE WHOLESALE SOCIETY LTD.

ARCHITECT'S DEPARTMENT, MANCHESTER.

have vacancies for

SENIOR AND JUNIOR ARCHITECT'S ASSISTANTS

to work on a variety of interesting commercial and industrial projects.

Five day week. 3 weeks' Holiday. Pension scheme. Commencing salary up to £1,300 according to experience and qualifications.

Apply in writing with details of age, qualifications and experience to:— G. S. Hay, F.R.I.B.A., Chief Architect, Co-operative Wholesale Society Ltd., 1, Beacon Street, MANCHESTER, 4. 3565

ARCHITECTURAL ASSISTANTS up to, or near Final standard for varied work including landscape in Lancaster office of practice with country-wide work. Good salary and prospects according to ability. The practice has furnished accommodation which might be available to suitable applicants. Write or phone Thomas H. Mawson & Son, 4-6, Castle Park, Lancaster. Tel. 2479. 3569

ARCHITECTURAL ASSISTANTS required for large and important new developments. Pension Scheme. Five-day week. Telephone or write: Leonard J. Multon & Partners, 6, Greenfield Crescent, Birmingham 13. Telephone: Edgbaston 4188. 3404

ARCHITECTURAL ASSISTANT required. R.I.B.A. Intermediate standard with some office experience. Varied and interesting work. Five-day week. Good salary for keen and competent person. William Crabtree, F.R.I.B.A., 1, Robert Adam Street, W.1 (WELbeck 9909). 3407

ARCHITECTURAL ASSISTANTS required, salaries £600 to £1,000. W. Leslie Jones & Partners, 241a, High Street, Poole, Dorset. 59 High Street, Great Missenden, Bucks., and 8, Acrefield, Bolton, Lancs. 3433

RESPONSIBLE ASSISTANTS FOR COLLEGES, HOSTELS, SCHOOLS OFFICES SALARY ACCORDING TO ABILITY. APPLY CERLES PIKE & PARTNERS, 16, LINCOLN'S INN FIELDS, W.C.2. OR PHONE HOL. 3532. 3405

ASSISTANTS WANTED—ESSEX. SALARY £750—£1,000. Apply Box No. 3541. 3541

ARCHITECTURAL ASSISTANT of Intermediate to Final standard required for private practice near Portsmouth. Write stating experience, and salary requested, Box 3542. 3542

ASSISTANT with office experience required in small busy general practice. Work on flats, multi car parks, etc. Salary according to age and experience. Apply in writing to: R. Jelinek-Karl Esq., F.R.I.B.A., 6, Buckingham Street, Strand, London, W.C.2. 3544

WIMPEY

AN expanding programme of work in the Architects' Department offers to experienced and able

ARCHITECTS AND ASSISTANTS good opportunities to work as Project Architects and Leaders of design and construction groups, on work covering various types of Industrial, Commercial and Domestic Projects of considerable size and interest.

Permanent appointments with good progressive salaries for the right men are immediately available at Head Office.

Five-day week and Pension Fund available. Similar appointments are also available in Regional Offices for applicants preferring to work in the Midlands or North of England.

Applicants should write to:— F. V. Collins, A.R.I.B.A., Chief Architect, George Wimpey & Co. Ltd., 27, Hammersmith Grove, London, W.6. 3626

MEDWAY TIMBER BUILDINGS require Qualified ARCHITECT familiar with modular methods of construction, to lead design team. Interesting work on wide variety of projects using existing systems with some development design. Modern outlook, top-grade planning ability and sound knowledge of joinery detailing are all essential requirements. Send full details of training, qualifications, experience and salary required to Personnel Manager, Medway Buildings & Supplies Ltd., Phoenix Wharf, Rochester, Kent. 3495

MEMBER with busy practice in Northampton is willing to offer partnership to a member, who, after a trial period as Senior Assistant, can prove himself efficient and suitable. Box 3563. 3563

WANTED FOR CASH, able ASSISTANT for small Pinner branch office with urge to expand. Brutish, romantic, or eclecticists, 16-60, male or female, intermediate or just naturally gifted, five-day week (or mornings only), all types welcome. Phone Pinner 8657 or Welbeck 2803 for appointment. 3690

ARCHITECTURAL ASSISTANT required, preferably unqualified capable of accepting responsibility for design and working drawings and site supervision. Salary £750-£900 according to experience. Apply in writing to Taylor Son & Bracken, 28 London Road, St. Albans, Herts. 3687

WATKINS, GRAY & PARTNERS, 57 Catherine Place, S.W.1, require ASSISTANTS of Intermediate standard for work on large hospital projects. Excellent opportunities for those seeking first hand experience in this most interesting and rapidly developing field. Luncheon vouchers and pension scheme in operation. Write giving full particulars. 3673

WILLIAM RYDER requires ASSISTANTS in the salary range £800 to £1,100 according to age and experience. Hours 9.30 to 5.30. Five-day week. Apply in writing to 21 Bruton Street, Berkeley Square, W.1. 3676

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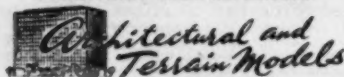
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