

# THE ARCHITECTS' JOURNAL



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

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Architectural Appointments

Completed and Vacant

3337]

[Vol. 129

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

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. L. Stevenson, College of Art, Hope Street, Liverpool 1.	Royal 1826
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
BC	Building Centre. 26, Store Street, Tottenham Court Road, W.C.1.	Museum 5400
BCC	British Colour Council. 13, Portman 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
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, Whitehall, 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
BTE	Building Trades Exhibition. 32, Millbank, S.W.1.	Tate Gallery 8134
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
CVE	Council for Visual Education. 13, Suffolk Street, Haymarket, S.W.1.	Reading 72255
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.	Welbeck 9966
FAS	Faculty of Architects and Surveyors. 68, Gloucester Place, W.1.	Whitehall 6711
FASS	Federation of Associations of Specialists and Sub-Contractors, 14, Bryanston Street, W.1.	Regent 0221
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	The Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders., 33, John Street, W.C.1. Tel.: Chancery 7583 (6 lines)	
FPC	The 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, Pall Mall, 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, Piccadilly, 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
IHE	Institution of Heating and Ventilating Engineers. 49, Cadogan Square.	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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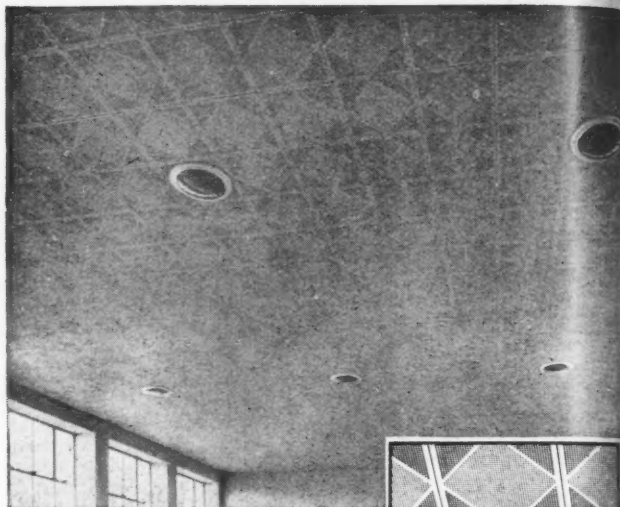
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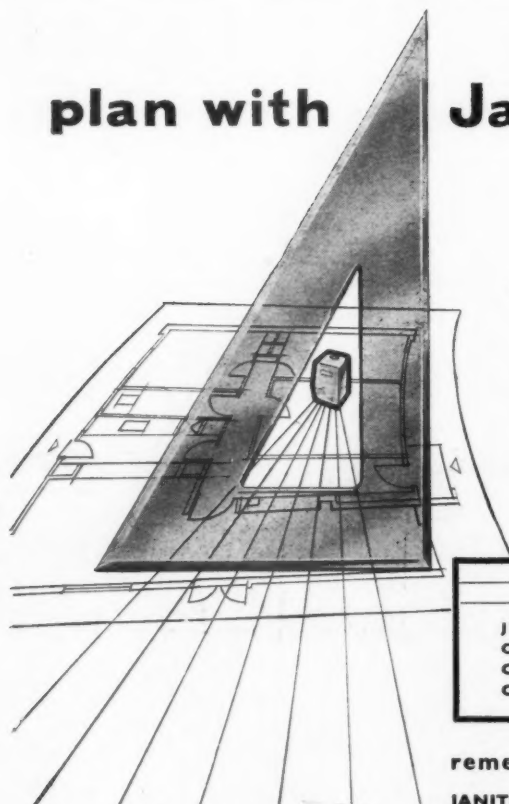
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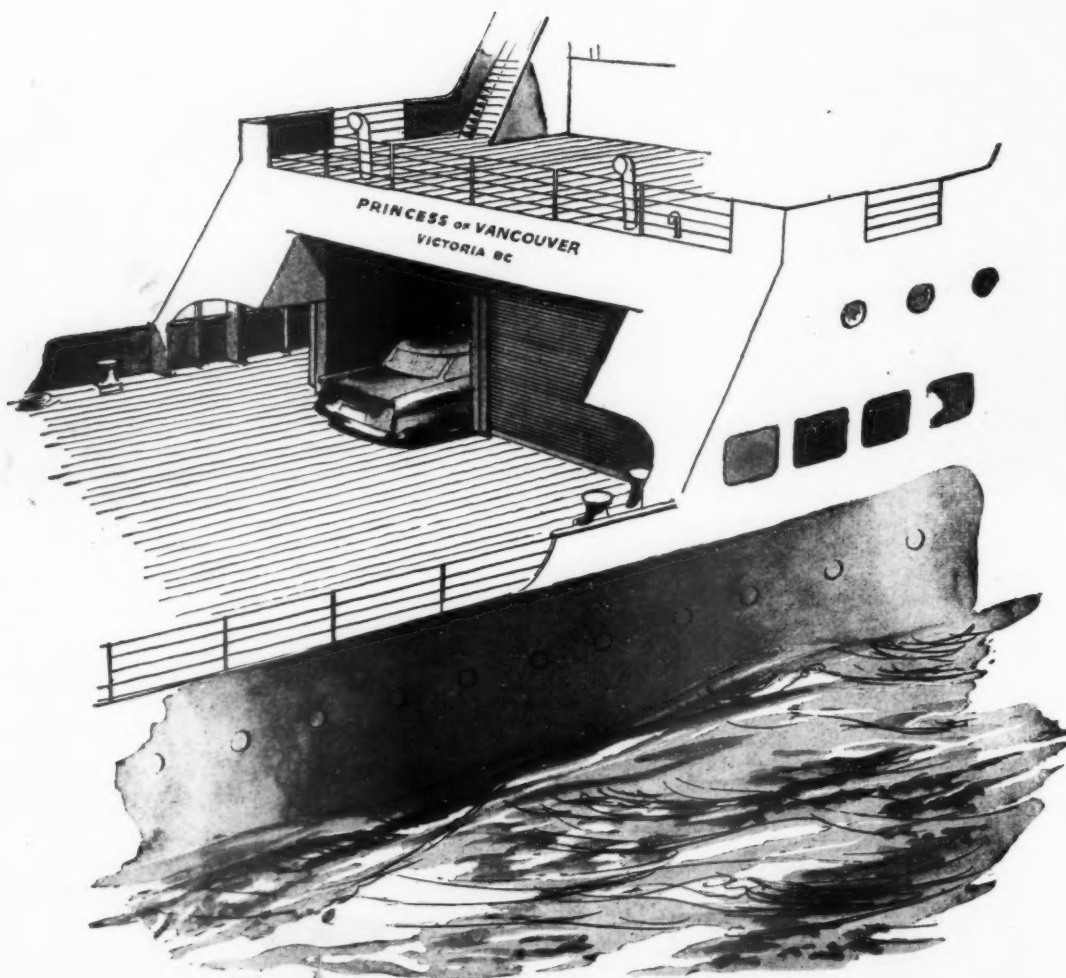
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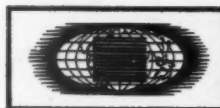
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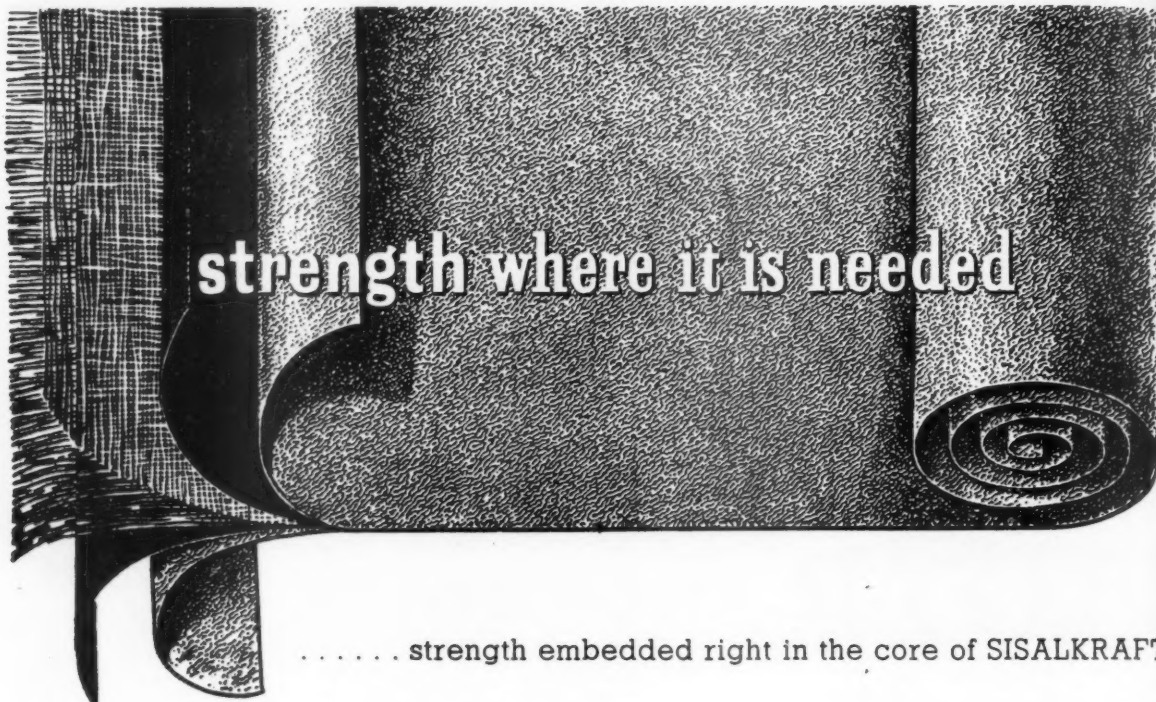
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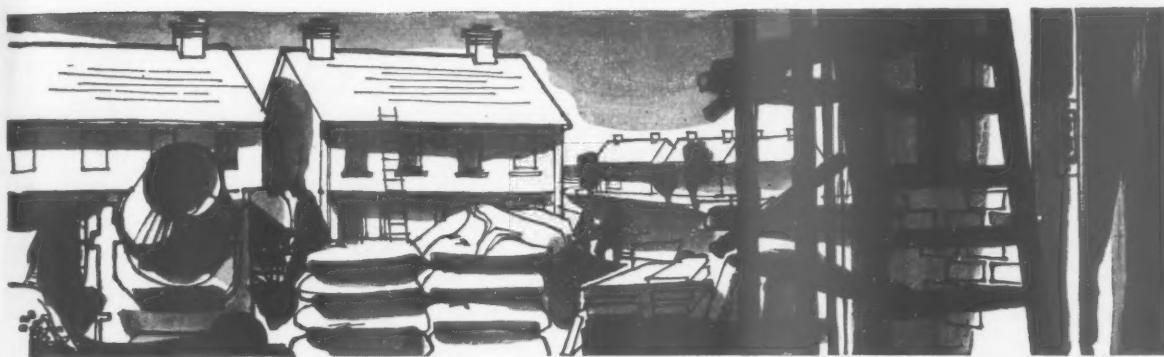
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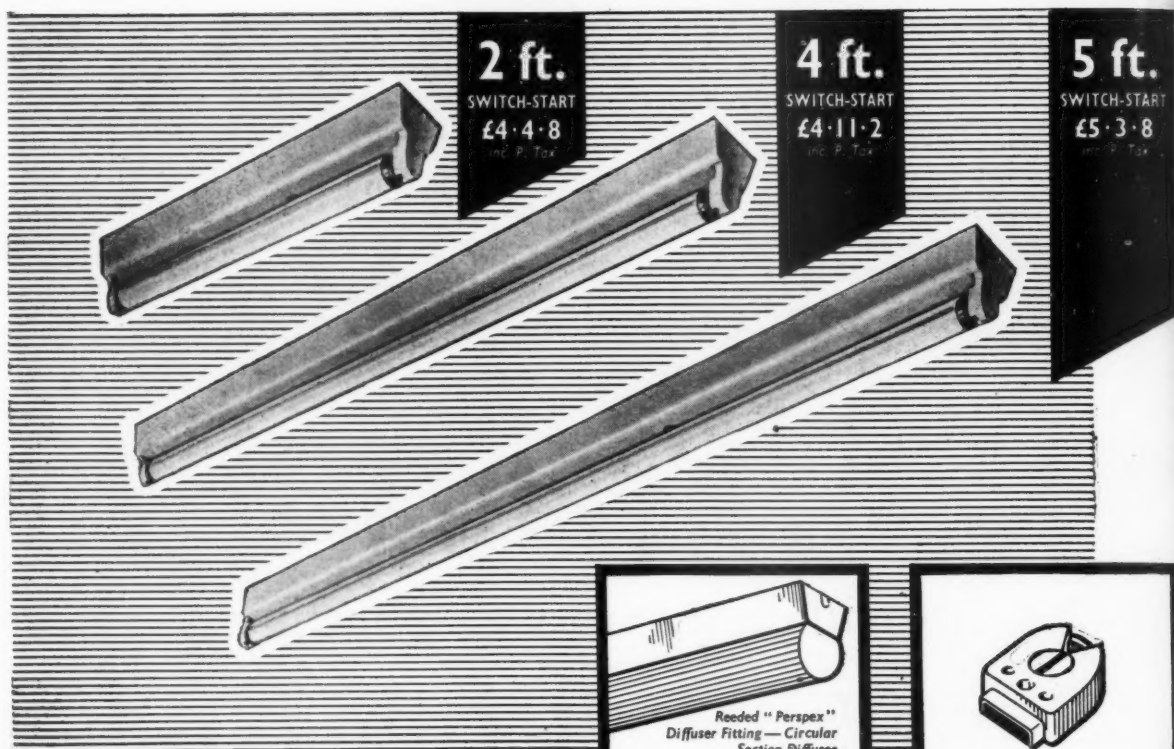
*Chief Architect : G. A. Goldstraw, O.B.E., B.A. (ARCH.), A.R.I.B.A.*

# REDFYRE

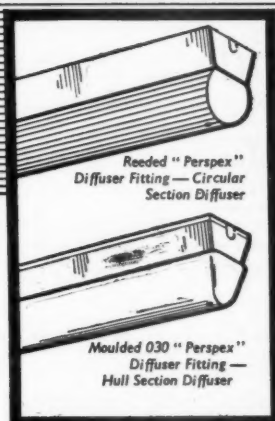
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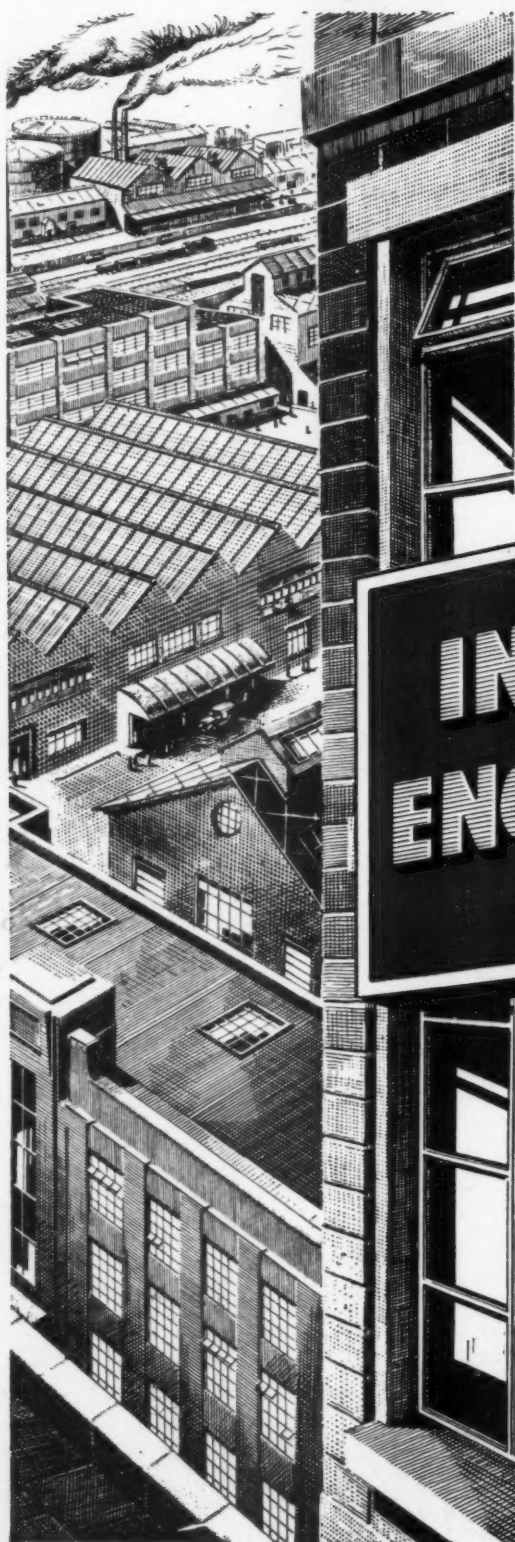
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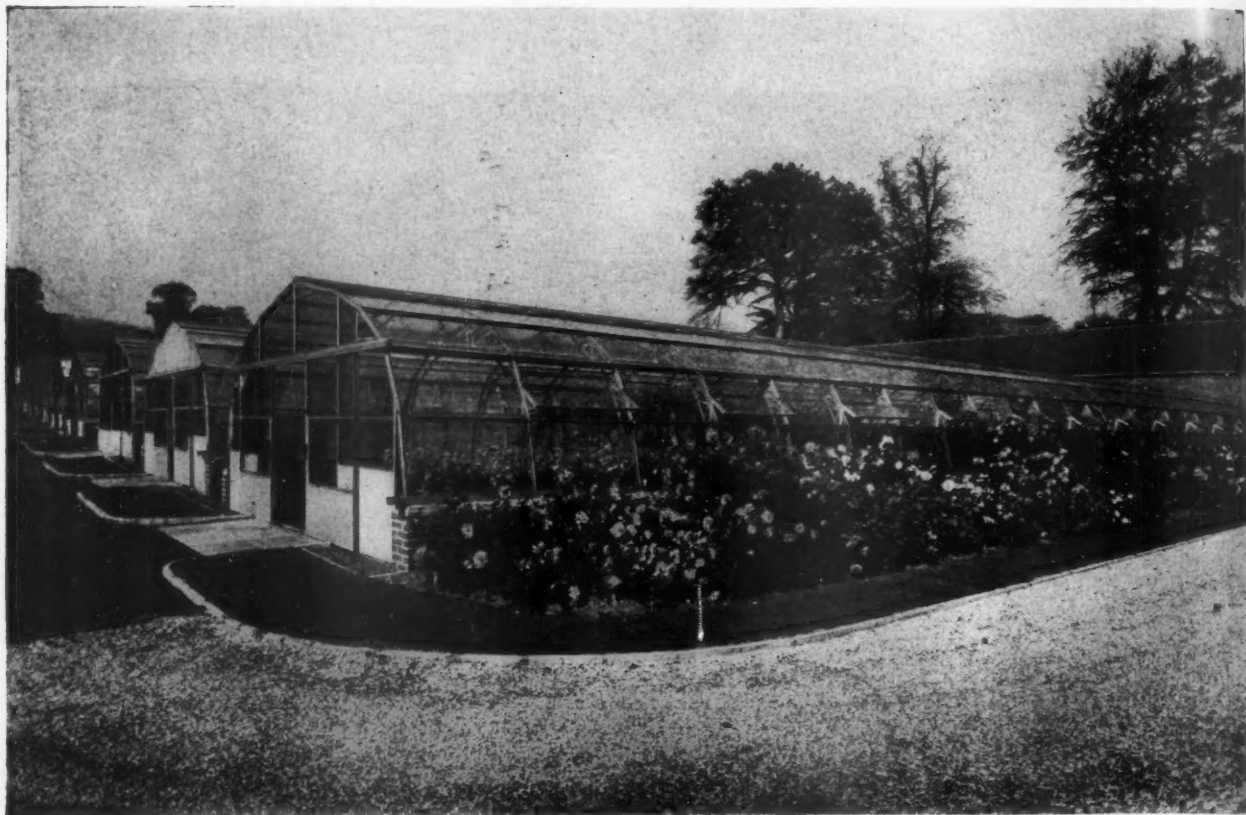


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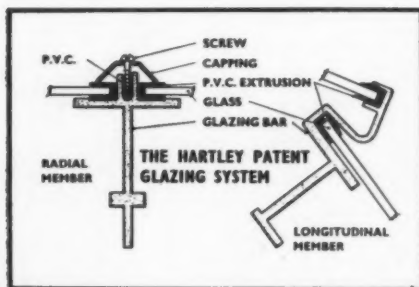
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Hartley Glasshouse, installed at Stanmer Park


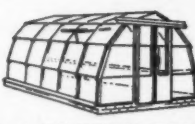
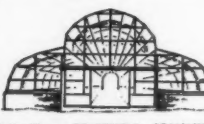

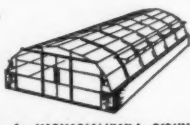


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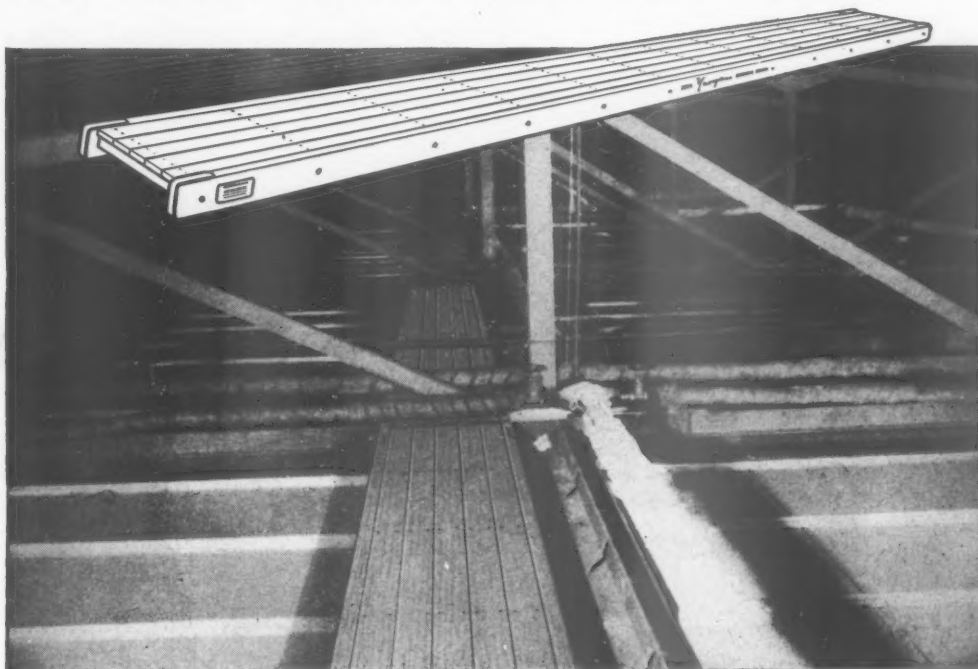
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 Hartley "21" 21' 2 1/2" Wide 10'0" High	 Hartley "27" 28'1" Wide, 11'9" High



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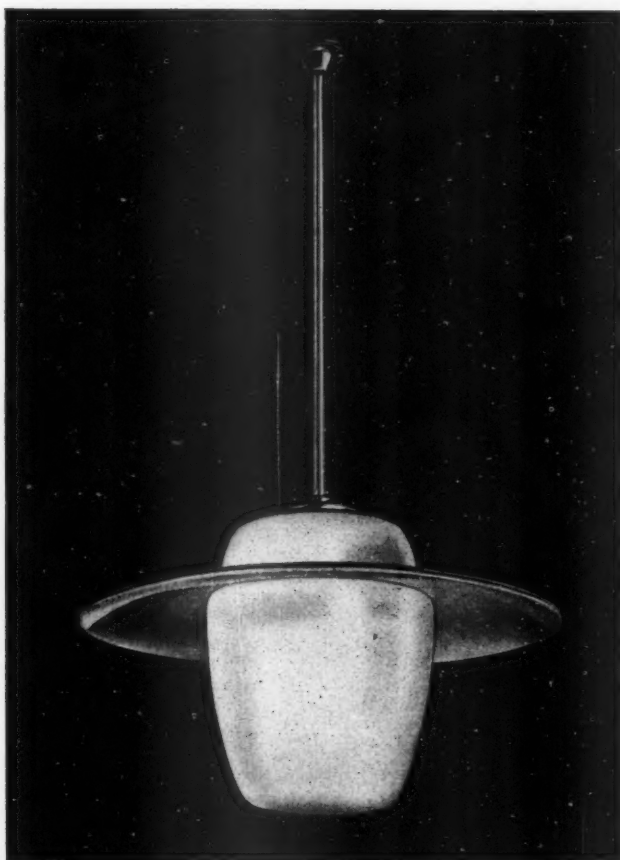
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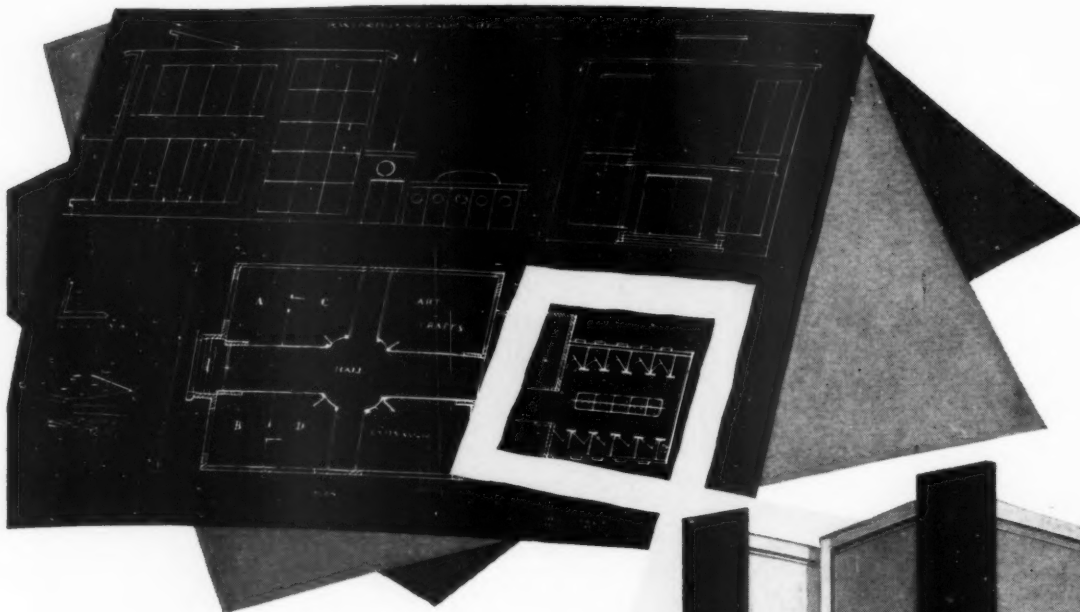
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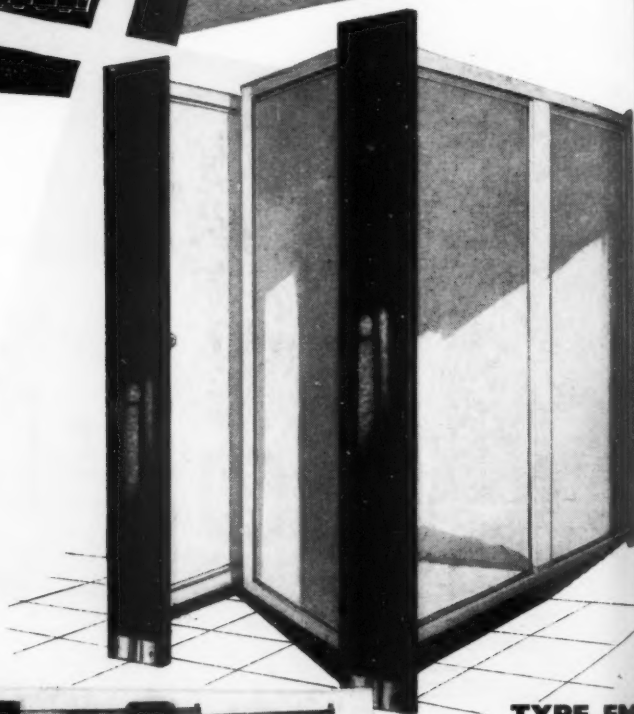
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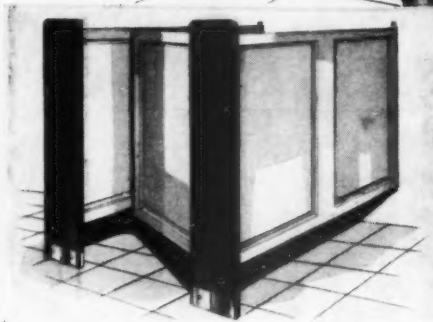
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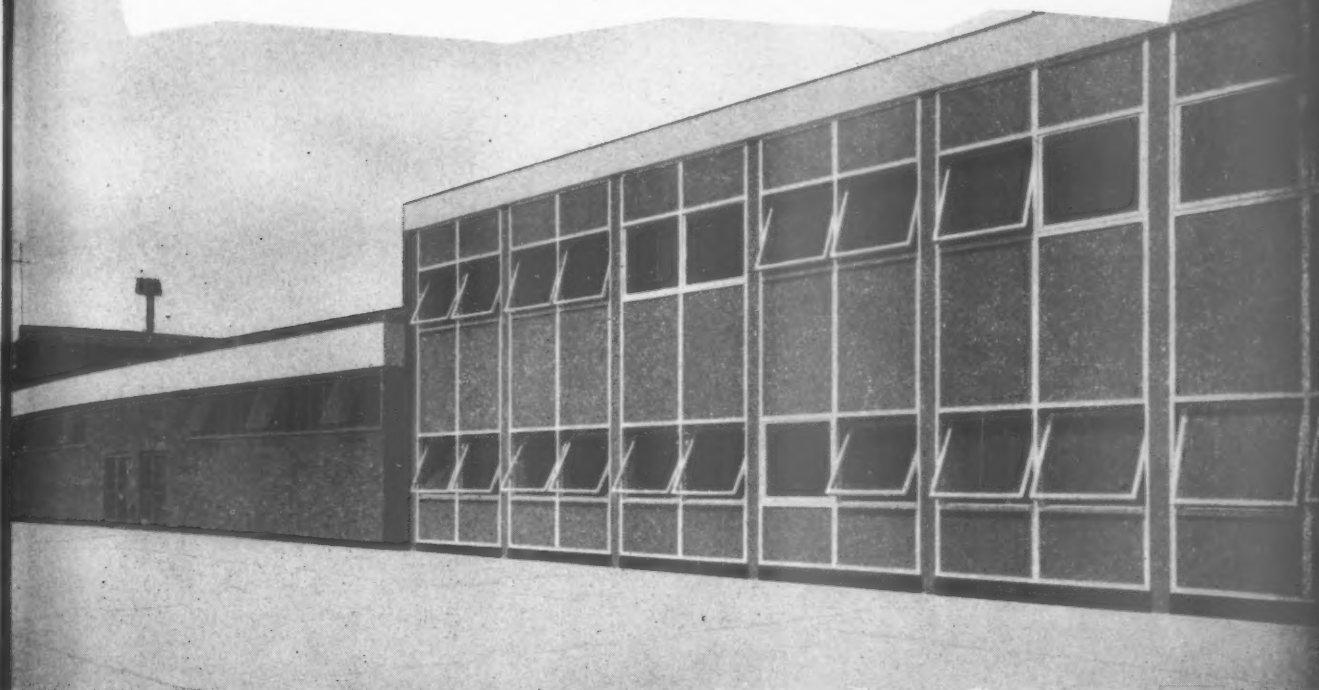
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*Administrative and operations offices for aviation fuel supplies at London Airport, half of which are occupied by Shell-Mex & B.P. Ltd. and the other by Esso Petroleum Co. Ltd. Architect: Frederick Gibberd, C.B.E., F.R.I.B.A., M.T.P.I.*

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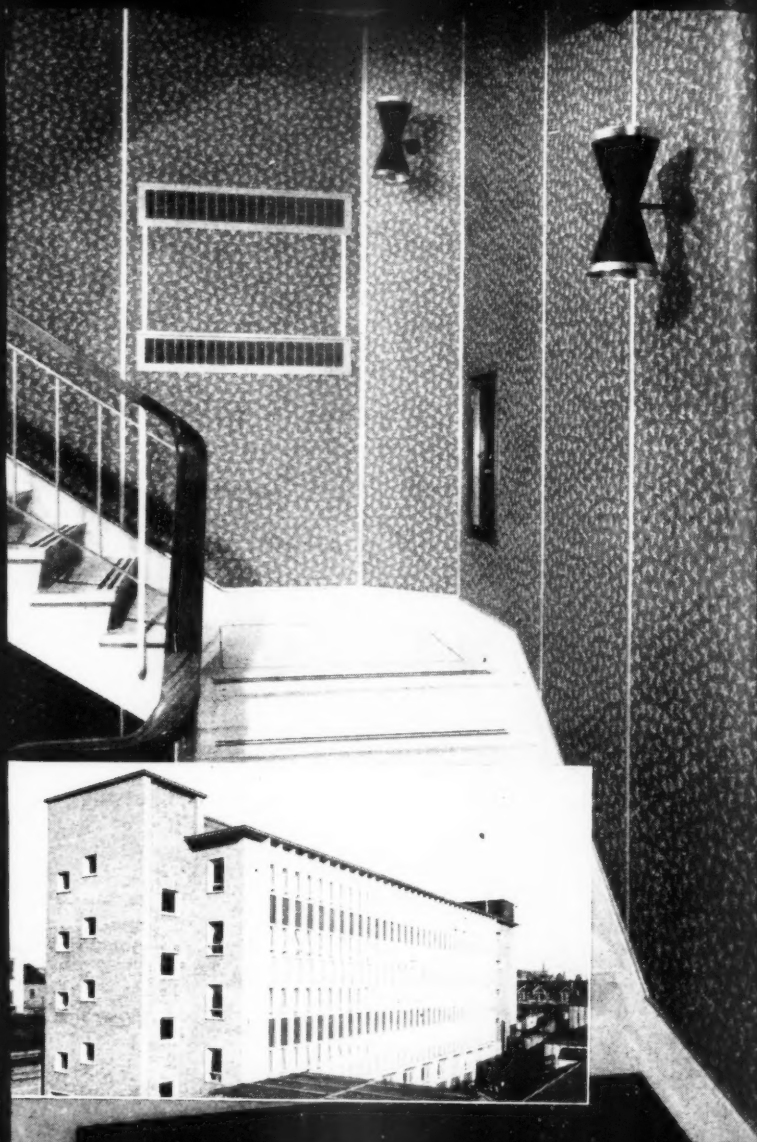
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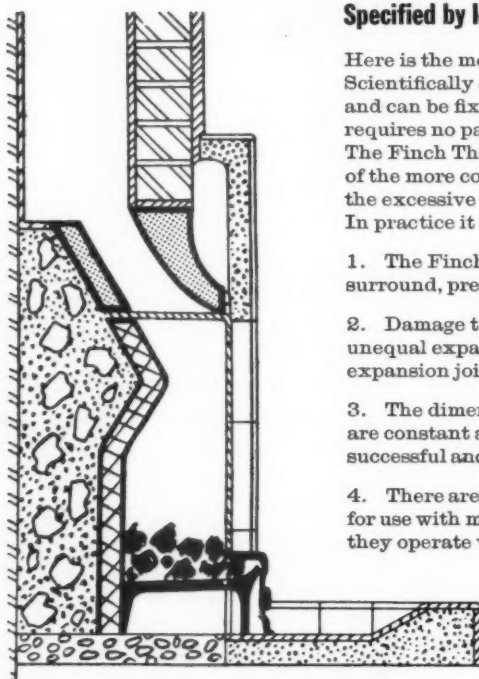
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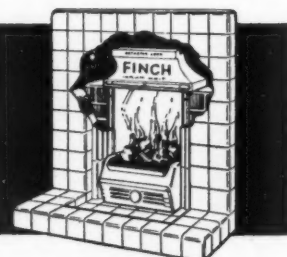
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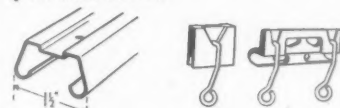
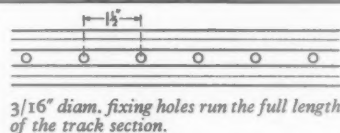
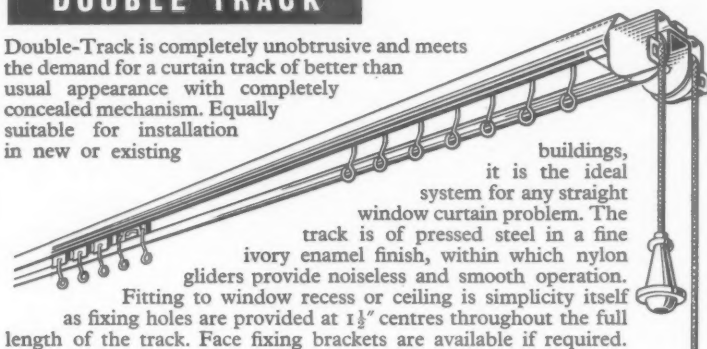
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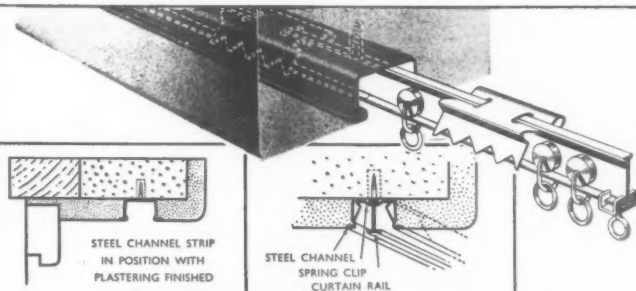


At one end of the track is the double pulley unit and at the other the single pulley unit shown above.

At one end of the track is the double pulley unit and at the other the single pulley unit shown above.

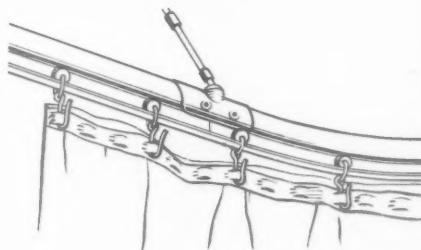
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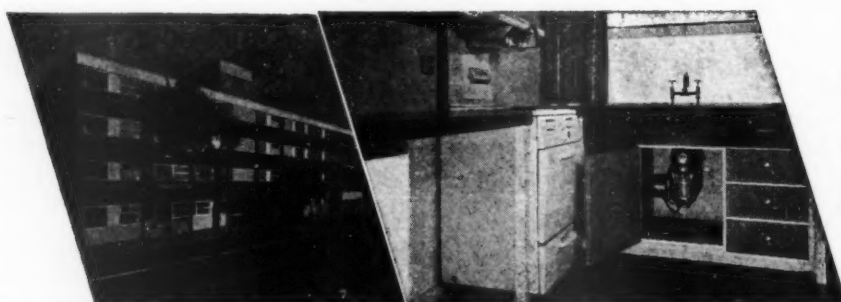
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B. 21

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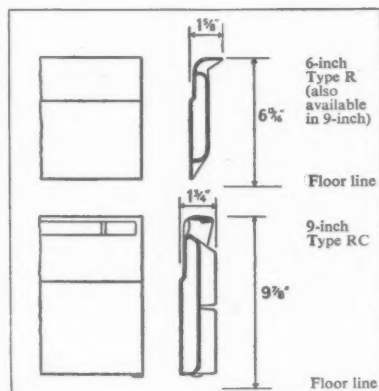
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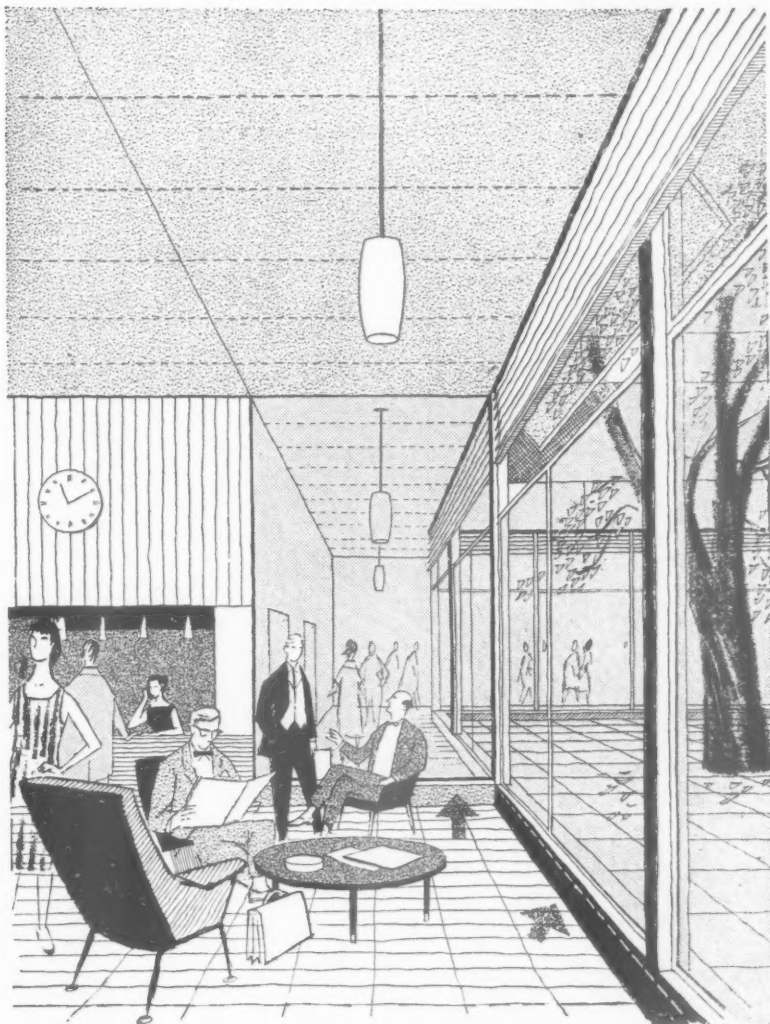
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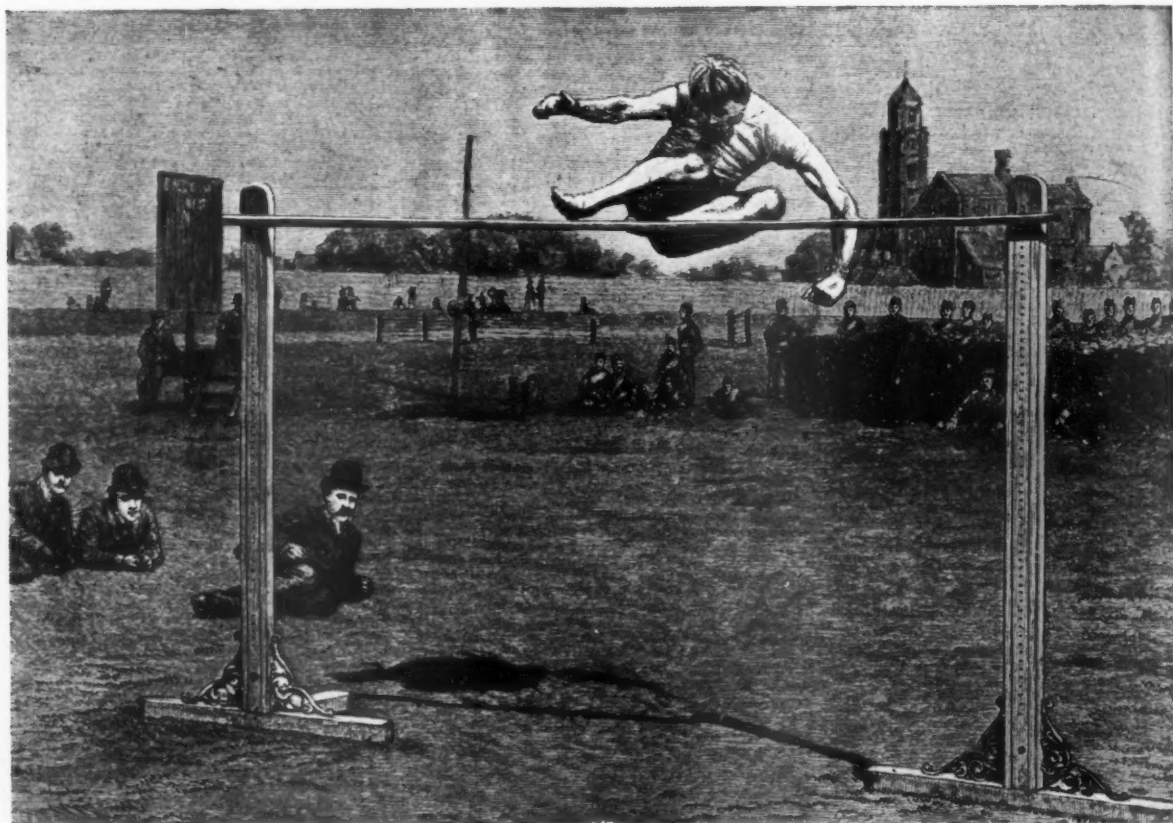
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*Architects: Thomas Worthington & Sons, Manchester.*

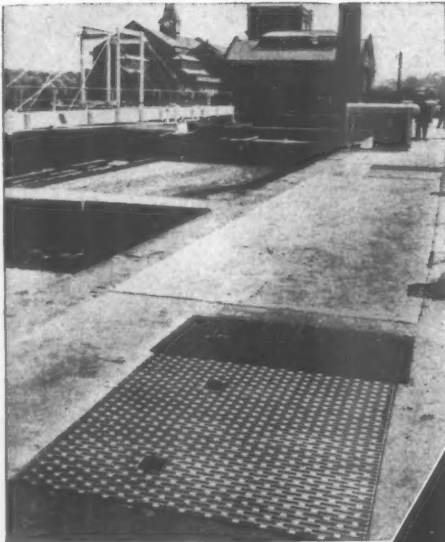
*Contractors: Witcombe & Blackwell Ltd., Leicester.*

*Photograph: Thomas-Photos, Oxford.*

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*Lighting Fittings: Troughton & Young (Lighting)*





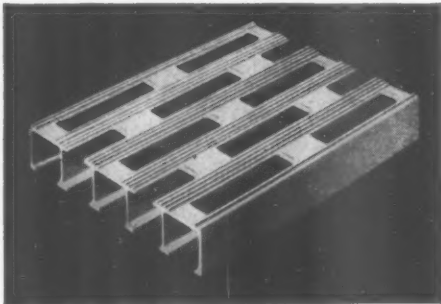
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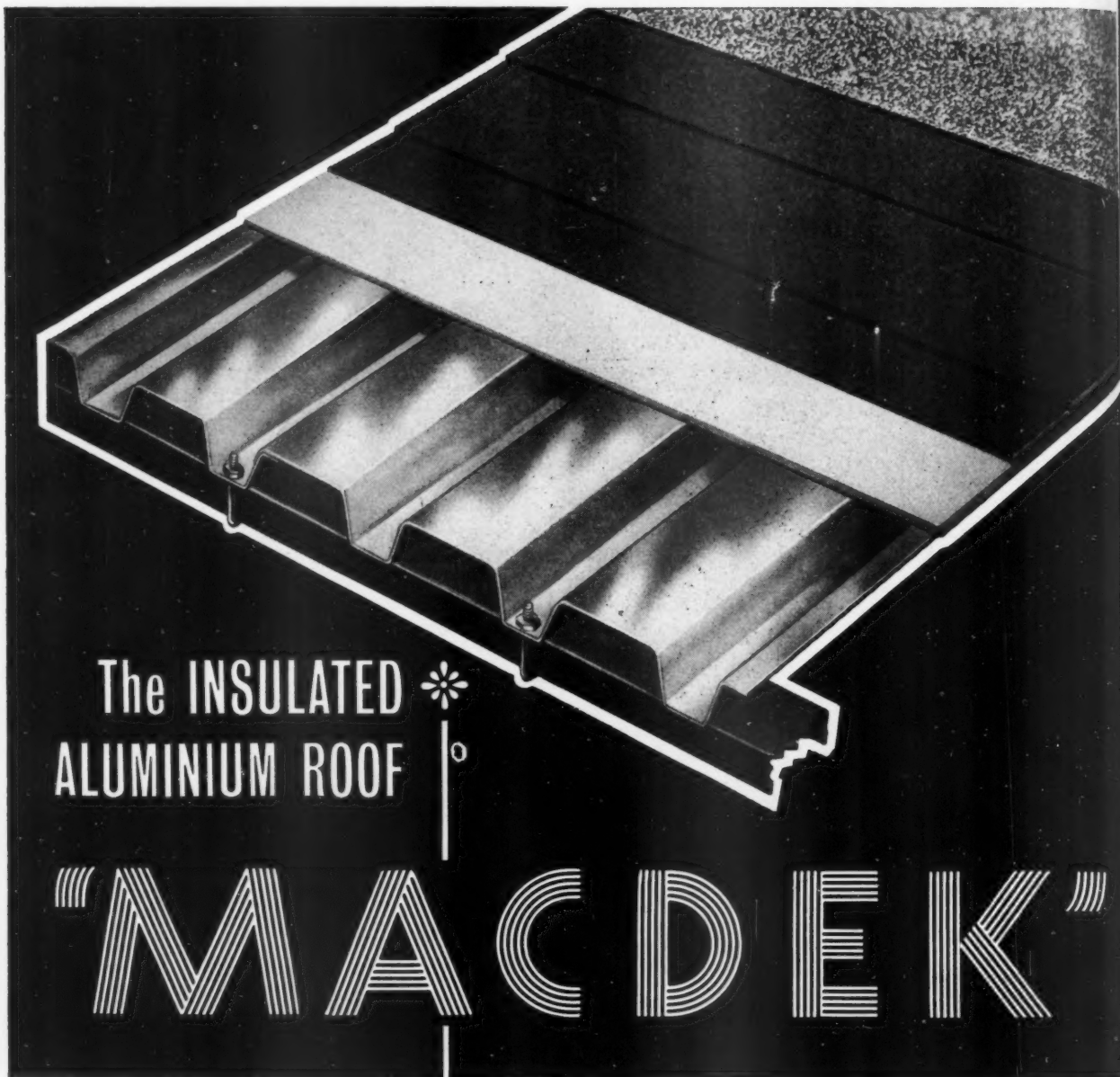


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*FIROLA shutter shown in the lowered and raised positions at the Institute of Marine Engineers, 56-59 Fenchurch St., London, E.C.3. Chartered Architects: Ronald Ward & Partners.*

*Full size section through FIROLA Curtain showing the interlocking slats with continuous end locks.*

Haskins 'FIROLA' Fire Resisting Rolling Shutters are designed to conform to London County Council, London Fire Brigade and Fire Office Committee Regulations, and is the only Fire Resisting Rolling Shutter approved by the Ministry of Transport under Class A risk for ships at sea.



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## The face of London changes...

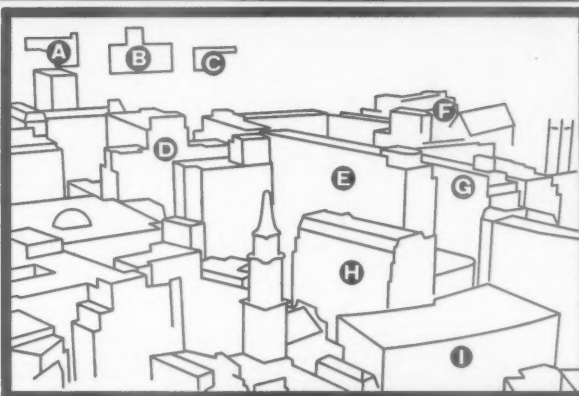
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<b>D</b> Garrard House	Major A. S. Ash, 66 Gt. Cumberland Place, W.1.	Sir Robert McAlpine.
<b>E</b> 2/12 Gresham St.	Easton & Robertson, 53 Bedford Sq., W.C.1.	John Laing & Son Ltd.
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floors, walls and working surfaces

is detailed on the following pages



Marleyflex floor tiles in the Marley London Showrooms, 251 Tottenham Court Road, W.1. In the background, panels of Marley Wall Tiles can be seen.  
*Architects:* Howard V. Lobb & Partners F/R.I.B.A.  
*Contractors:* Hickman Ltd.



MarleyFlor, the vinyl flooring in 48" wide rolls. This new floor covering is easy to handle and lay and is made in a wide range of colours.



The above photographs show Marleyflex floor tiles in an office and the canteen at Western House, the London Headquarters of the Taylor Woodrow Group. Similar tiled areas occur on all six floors.

Architects: T. B. Bennett & Son.

Consulting Engineers: Bylander, Waddell & Partners.

Contractors: Taylor Woodrow Construction Ltd.

#### MARLEYTILE

Tiles of the well-known Marleytile range can be laid on any smooth and solid sub-floor to give rot-proof, durable and highly decorative flooring. Each tile measures 9" x 9" and there are 28 colours in the range.

#### MARLEYFLEX

Marleyflex tiles have a finer, more resilient surface, making them suitable for suspended as well as solid sub-floors. Ideal for use in canteens and kitchens, or wherever there is risk of contamination from grease and oils. There are 35 attractive colours and designs in this range.

#### MARLEYFLEX DE LUXE

The most luxurious tile of all: Marleyflex de Luxe is a true high vinyl tile. First choice where quietness underfoot, durability and magnificent appearance are required. Perfect for Showrooms, Reception areas etc. Each tile measures 12" x 12". Nine charming colours are available.

#### MARLEYFLOR

MarleyFlor is a 48" wide continuous vinyl flooring. It is an extremely flexible material and the handy width of the roll makes it easy to lay. In addition to its decorative qualities MarleyFlor is ideal for use wherever hard wear and hygiene are of paramount importance: hospitals, schools, kitchens etc. Available in a range of colours.

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plain.

Marley Mos  
Oak, Idigbo



## MARLEY MOSAIC

Marley Mosaic Hardwood flooring is another Marley flooring of superb appearance. It consists of top-grade hardwood strips in units 18" square, giving a most handsome mosaic appearance. Available in English Oak, Idigbo, Yugoslavian Oak, Ramin and Sapele.

## MARLEY FLEXIBLE SURFACINGS

The three adhesive backed Marley flexible surfacings: Marleyfilm, Marleydecor and Super Marleydecor offer real permanence with speed and ease of fixing. All three have exclusive thermo-adhesive backing and are so flexible that they can be moulded to follow the contours of any surface to give perfect finishes. Marleydecor is twice as thick as ordinary 18" surfacings, and Marleyfilm and Super Marleydecor are twice as thick again—these are the surfacings that keep their good looks. Marleyfilm has marbled colours that go right through, Marleydecor and Super Marleydecor have sealed-in patterns on background colours that go right through. All three make for brighter, more cheerful interiors and have a range of use that is almost universal.

## MARLEYBORD

Marleybord is a rigid, melamine surfaced  $\frac{1}{8}$ " hardboard which is extensively used for panelling and unit furnishings. Balanced to prevent warping, it is available in a wide variety of colours and patterns.

## MARLEY VINYL WALL TILES

These tiles couple a beautiful appearance with real permanence. Ideal for use in bathrooms etc., for their satin-smooth surface resists condensation. There is a wide choice of attractive colours in four patterns: stippled, flecked, marbled or plain.



Marley Mosaic Hardwood flooring, available in English Oak, Idigbo, Yugoslavian Oak, Ramin and Sapele.

Marley Floor Tiles at the Hall of Technology, Brussels Exhibition 1958.

Architects: Howard V. Lobb & Partners F/R.I.B.A.

Designer: James Gardener O.B.E., R.D.I.



Ladies' Powder Room at the Marley Showrooms. Marley Wall Tiles are used for the walls; Marleyfilm for the top and doors of the built-in fitment and Marleyflex tiles for the floor.

## A SCHOOL JOB



Classroom: Marleyflex



Library: Marleyflex



Domestic Science Room: Marleyflex



Arts and Crafts Room: Marleyflex



Staircase: Marleyrail

All the above photographs feature the Blessed Edmund Campion School, Iffley, Oxford, where Marleyflex floor tiles and Marleyrail have been used throughout the building.  
Architects: Harrison & Cox F/A.R.I.B.A.  
Contractors: Hinkins & Frewin.



A staircase in the Marley Showroom where the adaptability of Marleyrail, Marley's colourful plastic handrail, to wreaths, bends and angles is clearly illustrated. The tiling on the background wall is carried out in a pattern composed of cut Marley vinyl wall tiles.

### MARLEYRAIL

A most ingenious and versatile product—the Marley vinyl handrail. Supremely flexible in operation, Marleyrail will negotiate wreaths and bends of every type without jointing, playing its colourful part in interior decoration. A variety of sizes to fit over rectangular metallic or wooden core rails, and a choice of eight colours.

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London Showrooms: 251 Tottenham Court Rd. W.1.

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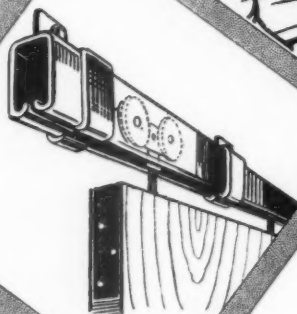
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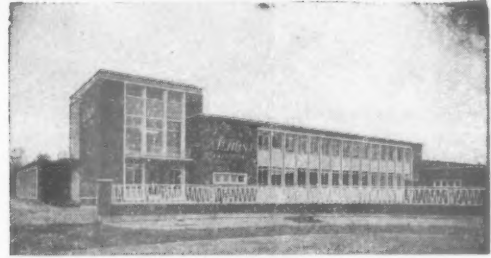
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*George Bernard Shaw*

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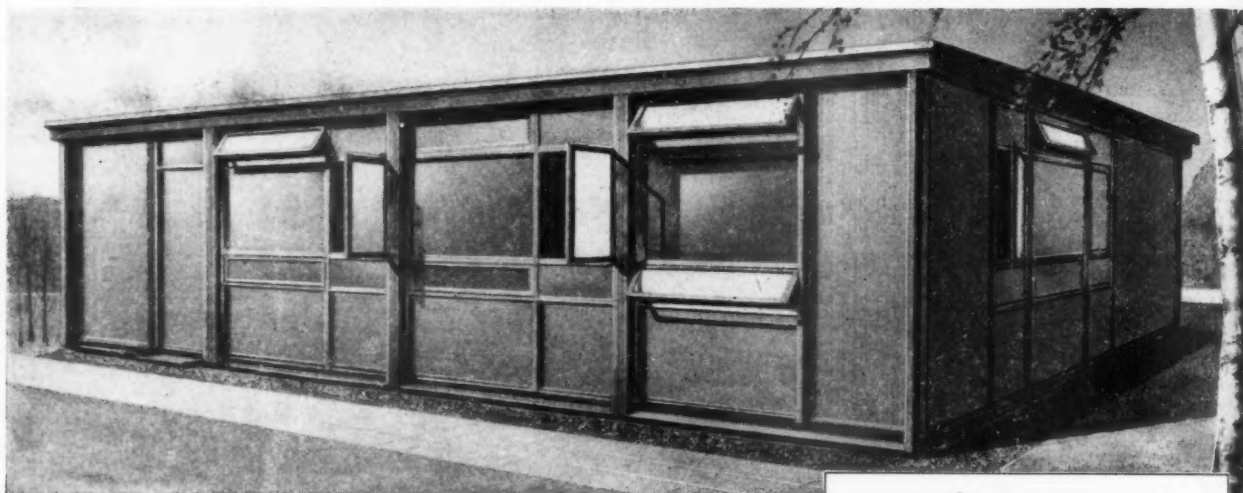
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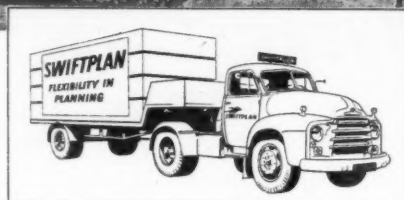
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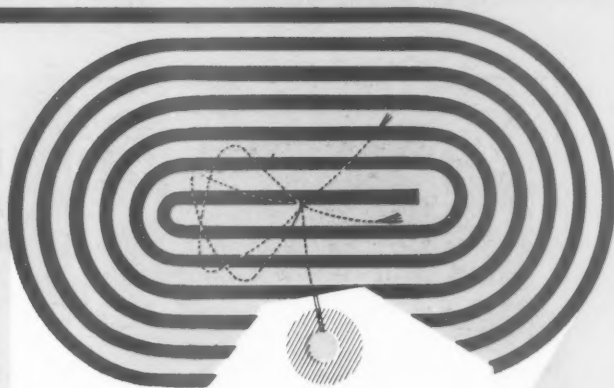
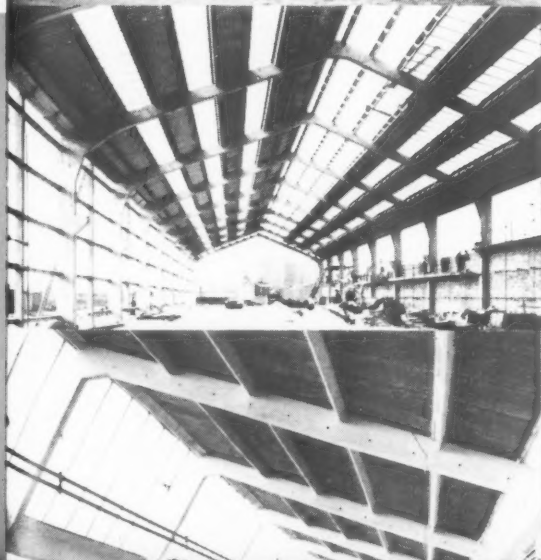
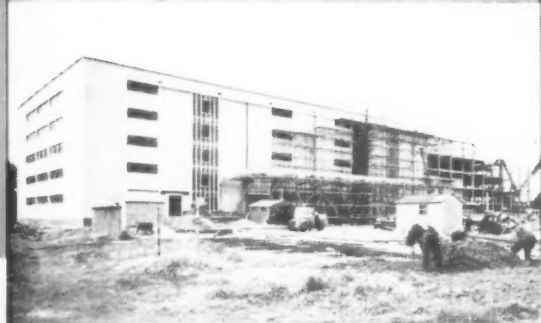
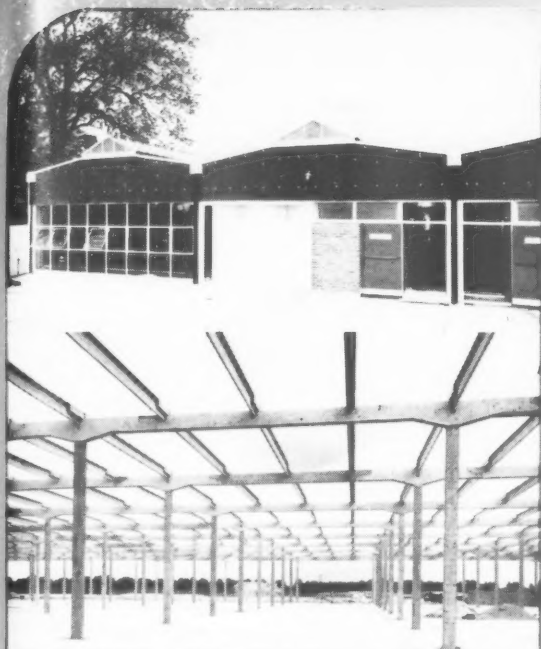
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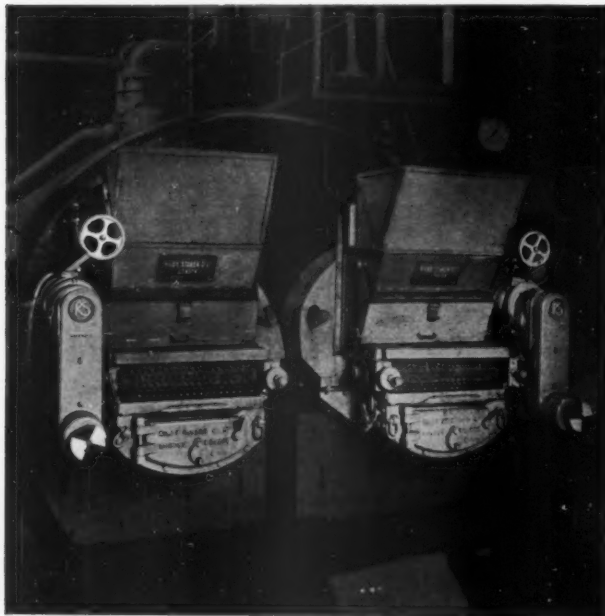


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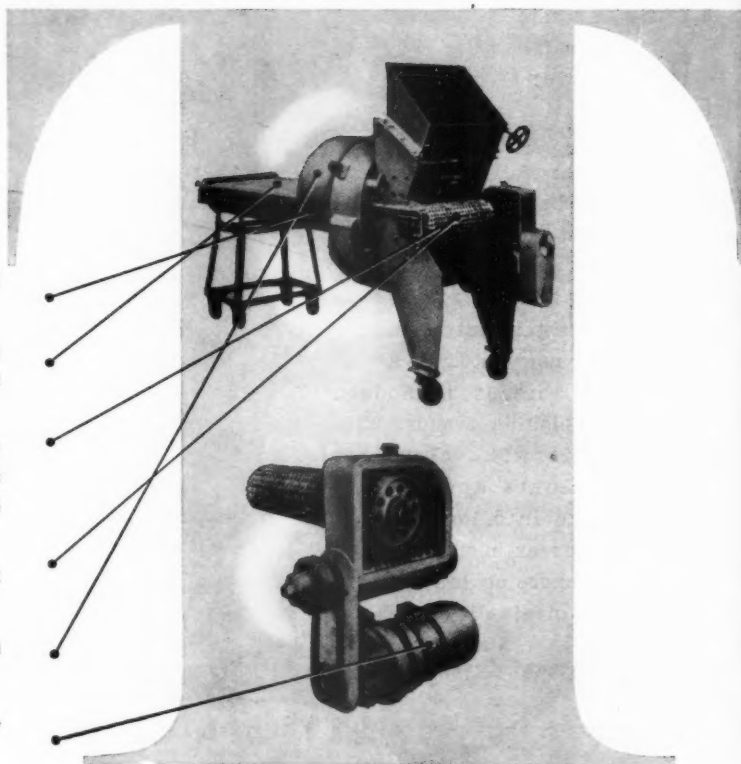
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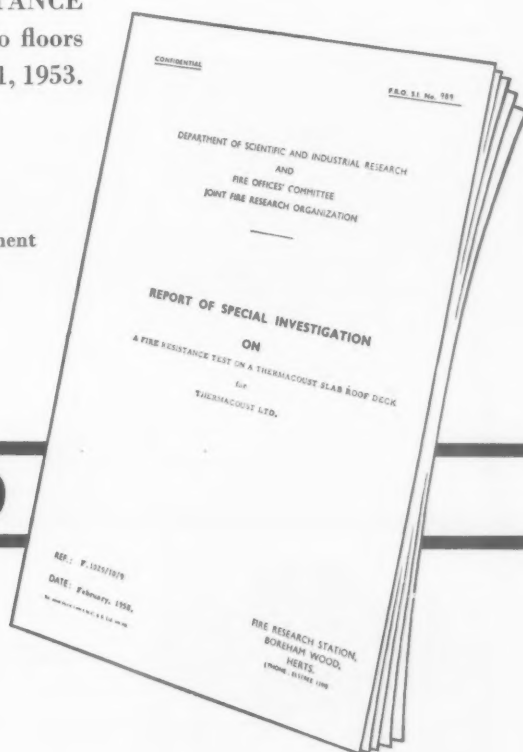
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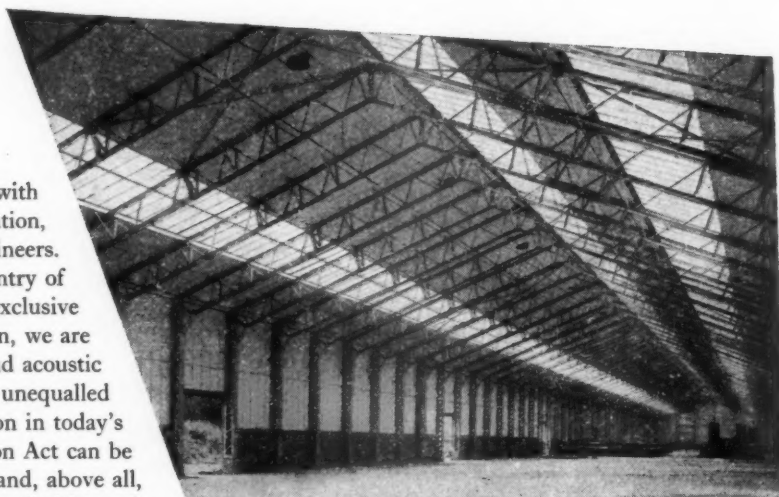


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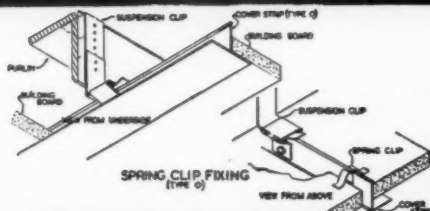
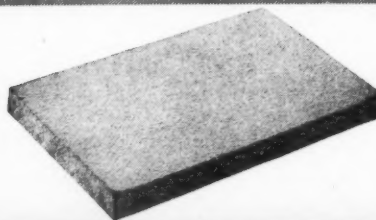
When you are next faced with the problem of factory insulation, seek the help of Tentest engineers. We are the *pioneers* in this country of metal fixing devices which are exclusive Tentest patents. In addition, we are manufacturers of thermal and acoustic boards and tiles and have an unequalled knowledge of their application in today's problems. The Factory Insulation Act can be complied with effectively and, above all, economically, provided we are called in at the

beginning. The accompanying illustration shows a fibreboard lining fixed by Tentest Aluminium Sections to roof and walls of the new Assembly Shop at the Rover Co. Limited, Solihull. Area 7,118 sq. yds. A Tentest Spring Clip fixing method, as illustrated below, was used on this contract.



### FLAME-CHECK FINNBOARD

A high quality fibre board which has been classified Class 1 following B.S. 476 Surface Spread of Flame Test. This board does not require decoration and is available in standard  $\frac{1}{2}$ " thickness.



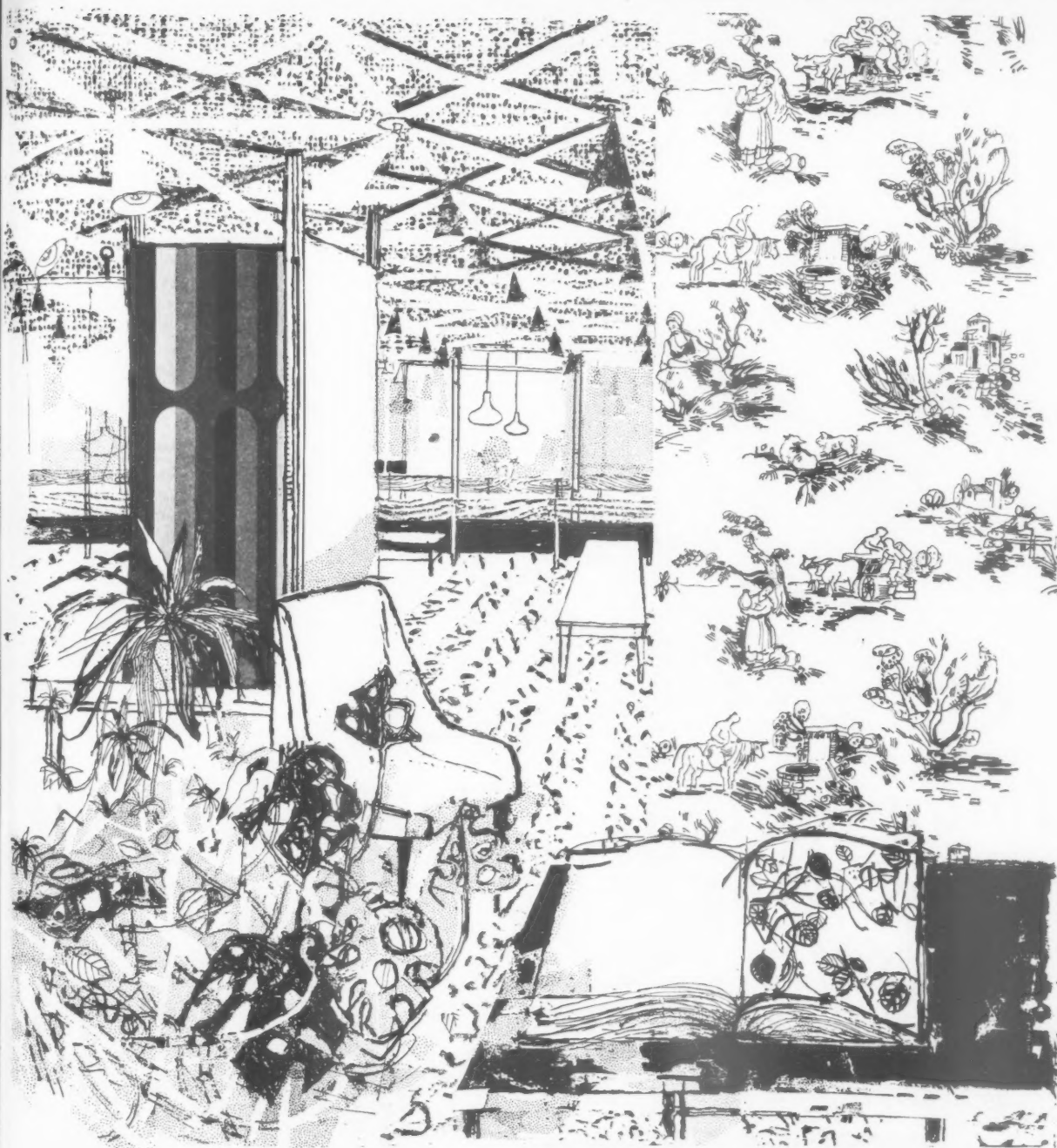
### PATENTED SPRING CLIP FIXING (TYPE O)

Used for ceiling, roof slope, and wall linings. Tentest Spring Clips ensure a vibration proof and commercially dust proof joint. No drilling or special fabrication is necessary.



**TENTEST FIBRE BOARD CO. LTD.**

FIBOARD HOUSE, OAKLEIGH GARDENS, LONDON, N.20 Telephone: Hillside 889



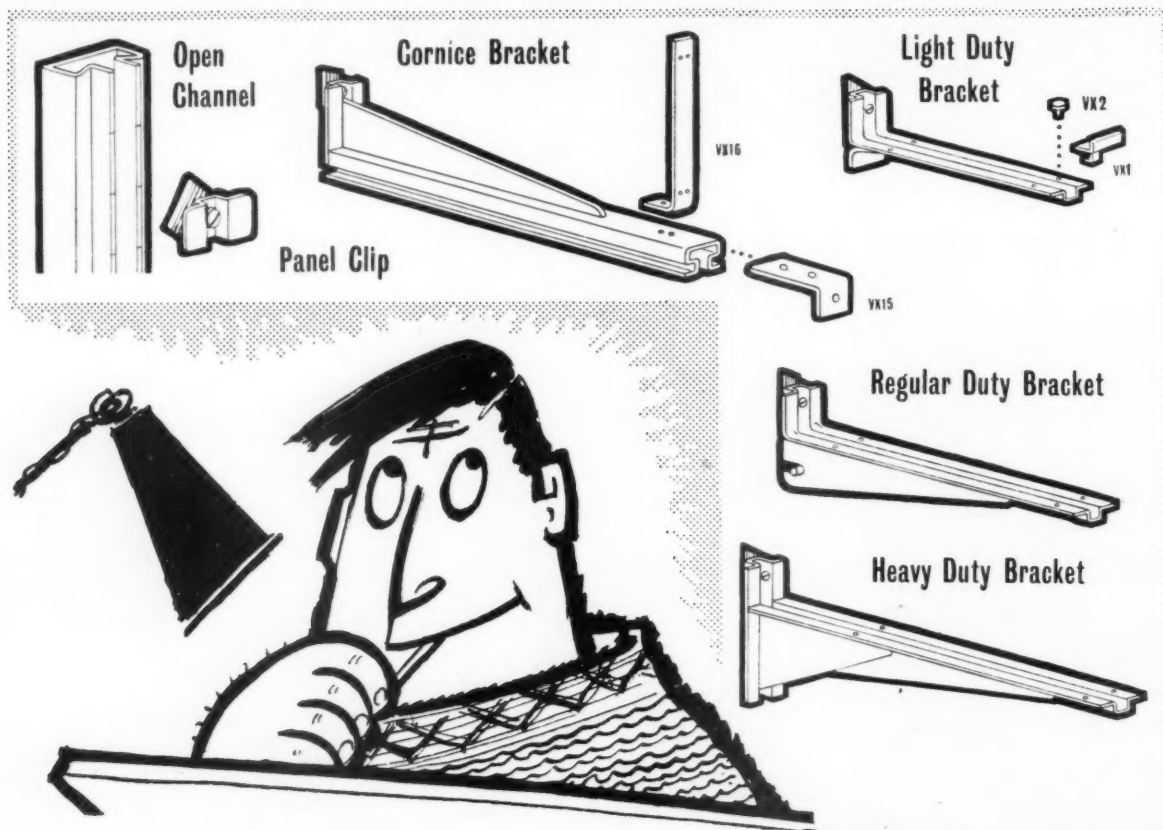
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The Architects' Department, formerly at 125, High Holborn, W.C.1, has been reopened in the Company's new London premises at 19/21, Mortimer Street, W.1. You are invited to visit our spacious showroom on the 1st Floor and to make use of the improved facilities of our special advisory service. Our artist Jane Shannan depicts Haywards wallpaper "Jouy" No. 544 (right) and Palladio Magnus wallpaper "Digitus" (left).

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THE SPECIFICATION OR DIRECTION  
OF DECORATIVE SCHEMES

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suspend cupboards here—some shelves there—  
place a partition at this point—cornice lighting  
here—run some seating along the side—some  
coloured panels there—free standing units down  
the length—but there's no end to what you can  
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# VIZUSELL

which is a complete system of suspension

Write for full details (and particulars of the other  
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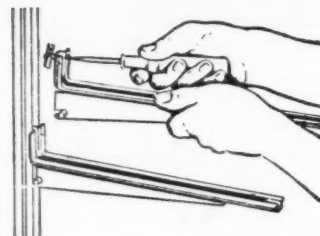
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GLASGOW · MANCHESTER · BRISTOL



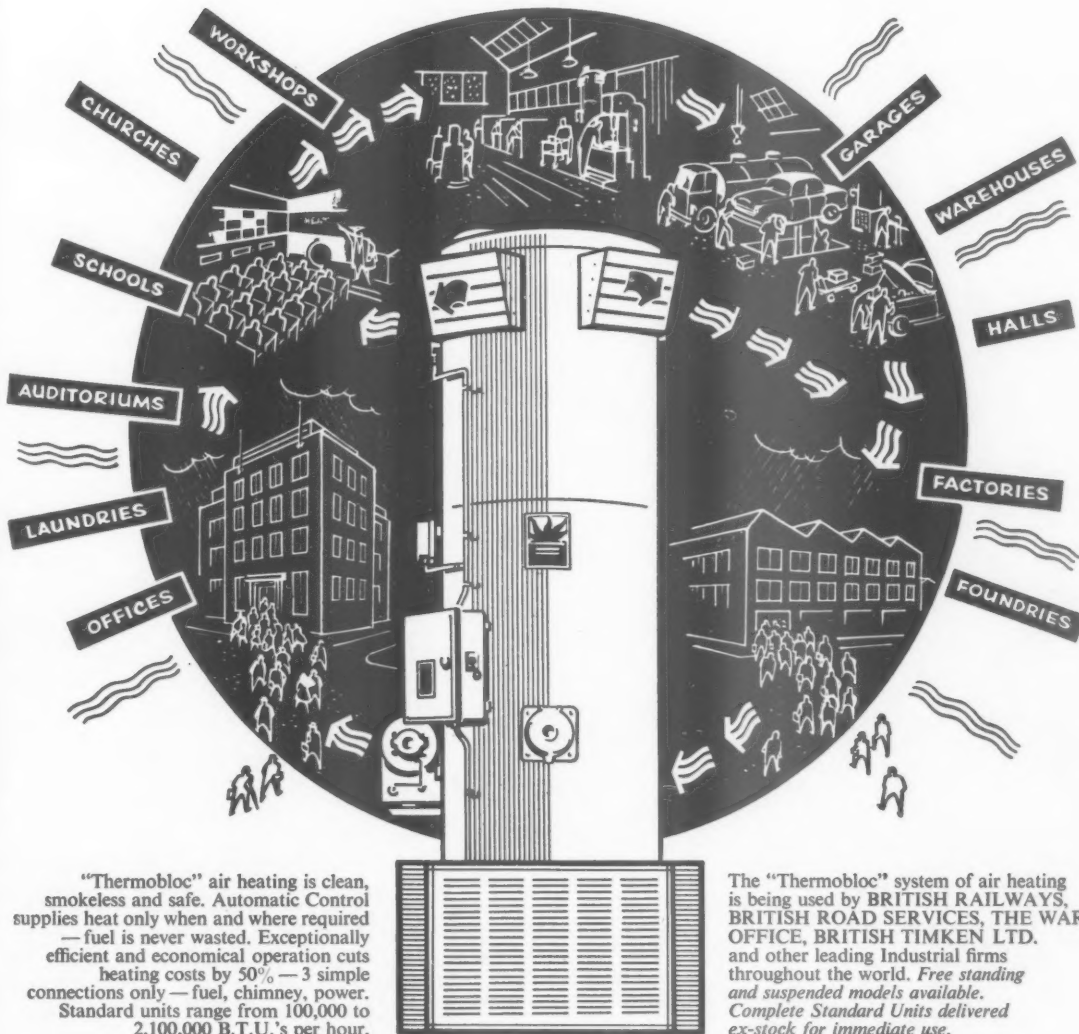
Messrs. Clarks (Sidcup) Shoe Repairs Ltd.  
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*of Universal application*

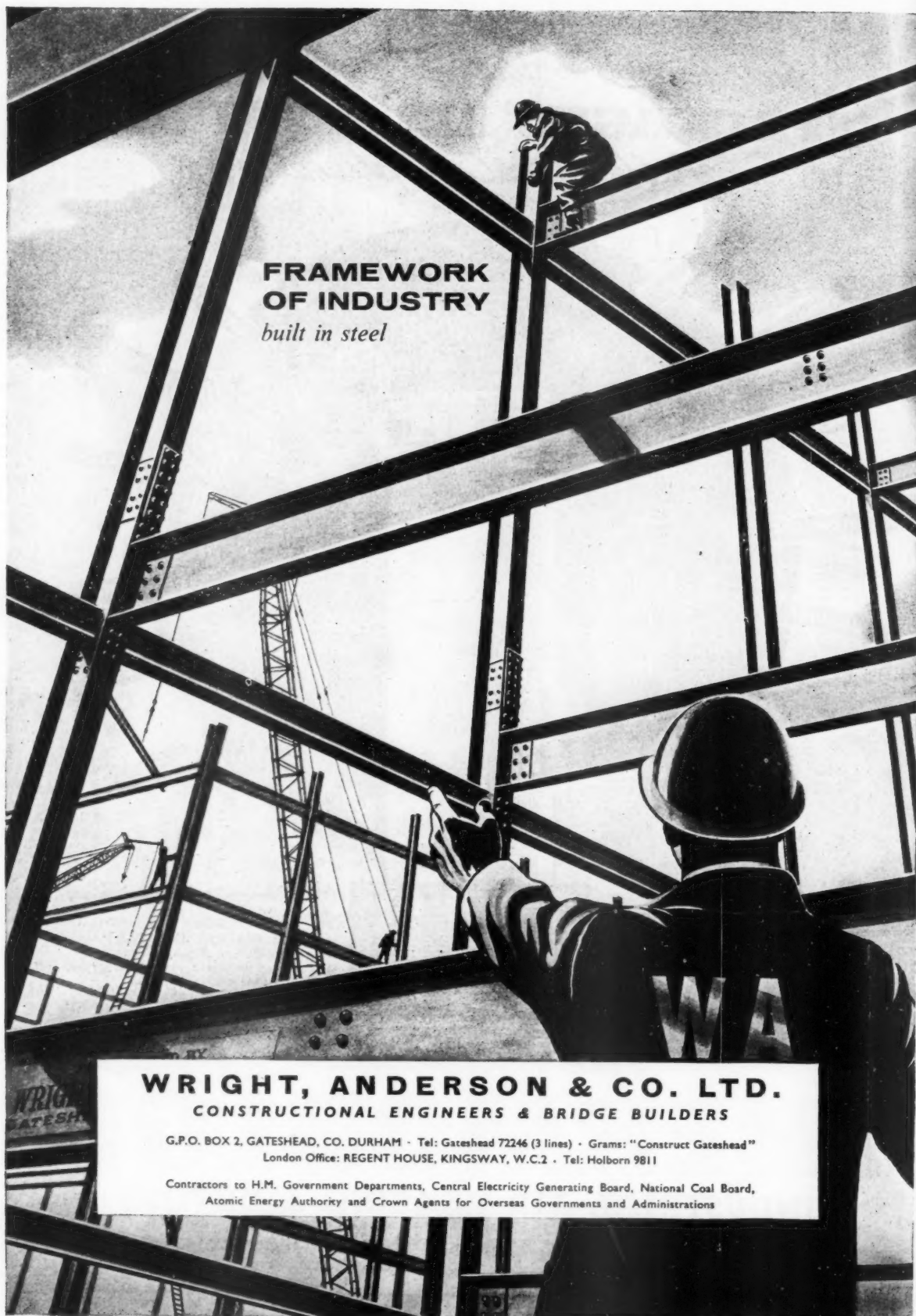


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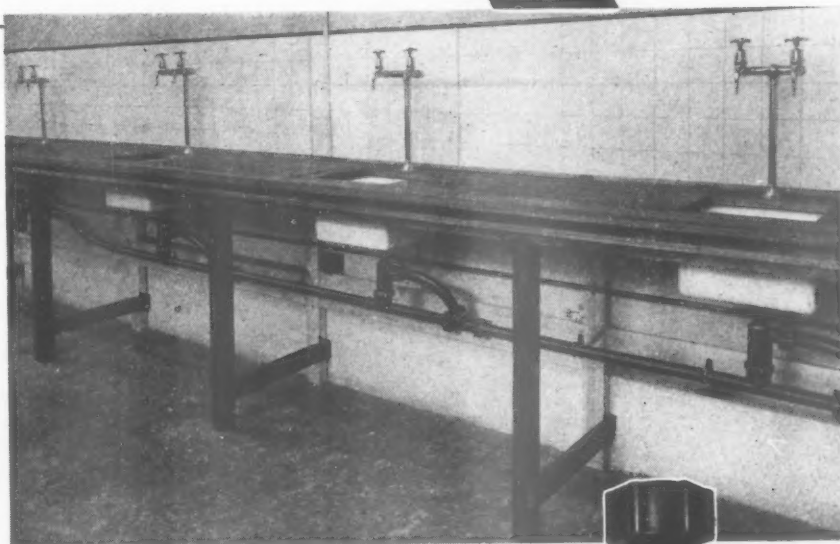
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IMPERIAL**



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POLYTHENE TUBES & FITTINGS**

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plumbing  
installations*

Waste installations in  
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(Main Contractors:—Messrs. W. E. Belton & Son, Horsham;  
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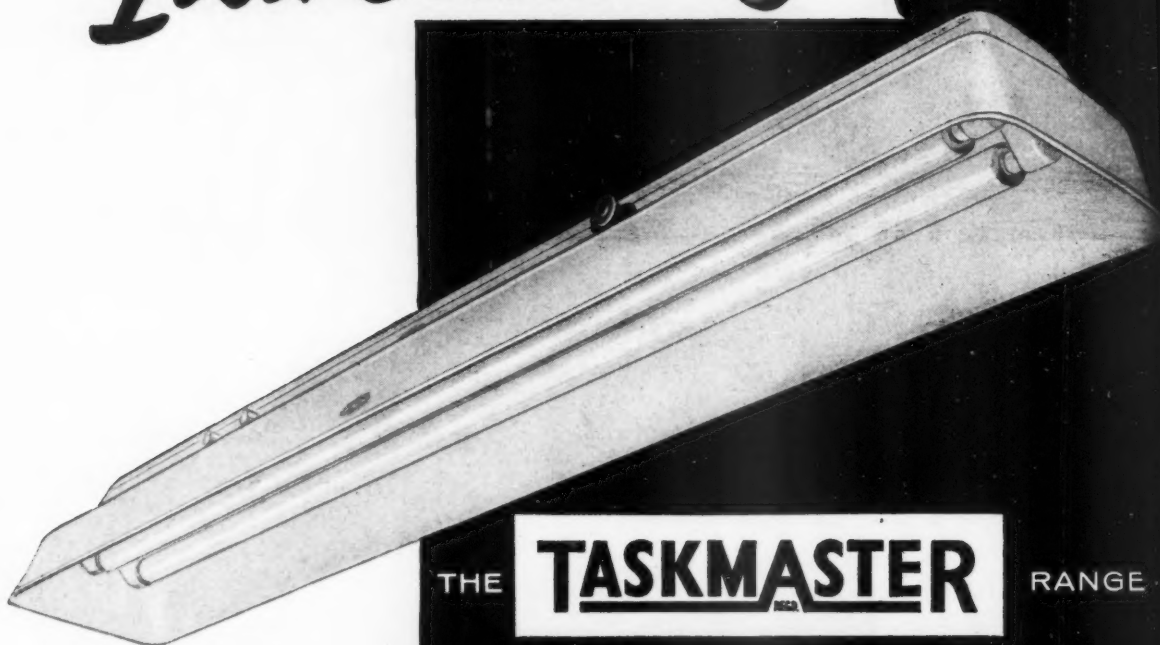
"Plastronga" high-strength polythene tubes, and the wide range  
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Smee's 139







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80

Architects: *Rasil Spence & Partners, Edinburgh, 3.*  
Consulting Engineers: *Donald, Smith, Seymour and Rooley, Glasgow.*

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Every type of problem in designing conditions of comfort has been met, mastered and credited to the experience of S.E.I.

The knowledge gained, the resultant technical ability and the economics to be effected by experience are yours for the asking.

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*Main Plenum Heating Plant, Natural Philosophy Building, Glasgow University.*

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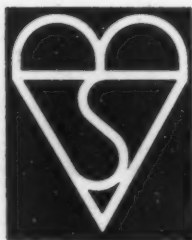
# Key Plan

## TO CUT YOUR BUILDING COSTS

**Outlay on pipes is only a fraction of the cost of a drainage installation.** In winter one out of every five days is lost when putting in conventional pipes. With Key pipes, however, the job still goes ahead cutting out unproductive labour, keeping down overheads and therefore cutting costs.

**Now you can keep to schedule** Delays are negligible with Key pipes, because they can be laid and tested in almost any weather, even despite bad ground. Pre-planning with Key can be done accurately, so that operations are smoothly sequenced and closely dovetailed. Snags are avoided and schedules kept or bettered.

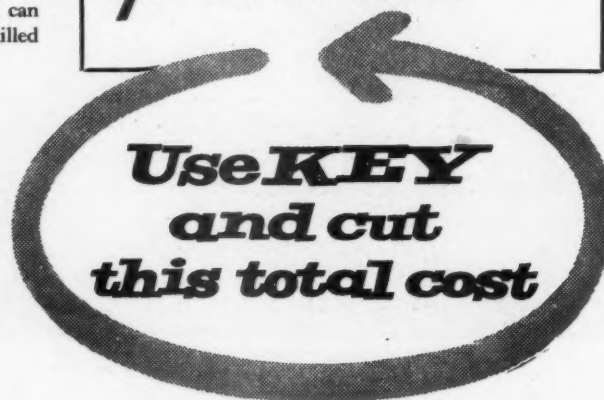
**Urgency on large projects** When your normal drainlaying team is too small for a big rush job, work can still go ahead successfully, by making up with semi-skilled men.



### BRITISH STANDARD KITE MARK

Key pipes comply with BS2760 1956. They are the first pitch fibre drainpipes to carry the British Standard 'Kite' Mark. This is a guarantee of quality and means that the Inspectors of the British Standards Institution have access to our pipe factory at any time.

COST OF A DRAINAGE INSTALLATION	
=	COST OF LABOUR
+	COST OF OVERHEADS
+	COST OF HOLD-UPS
+	COST OF SITE DISRUPTIONS
+	COST OF MATERIALS





# THE JOB GOES AHEAD -against all odds

**Rain?** Driven taper joints give Key an immediate advantage over cement-jointed rigid pipes, which cannot normally be laid in waterlogged trenches. Runs can be prefabricated at ground level, lowered into prepared trenches and tested immediately.

**Frost and Snow?** Here again the taper joint means that work can still go ahead with Key. In fact frosty days are usually ideal for laying these modern drainpipes.

**Bad Ground?** Key pipes do not have to be laid in concrete, and haunched, on bad ground. Being resilient, they are better without concrete. The savings in skilled labour, time and cost are obviously considerable.

**Site Congestion?** Open trenches and pumping equipment normally cause hold-ups on site in wet weather. Immediate laying, testing and backfilling with Key pipes overcome this problem and keep traffic flowing.

**Hot Sun and Drying Winds?** Even good weather can be bad weather when pipes have to be mortar-jointed. This problem never arises with Key pipes.

## More advantages of KEY PITCH FIBRE PIPES

**No corrosion** Remarkably resistant to acids and alkalis

**No root growth** The close fitting tapered joints are machined to close limits.

**No cracking through settlement** Natural resilience means that pipes will not crack through normal earth movement.

**Faster laying—fewer breakages** 500 ft. an hour is a modest average with semi-skilled labour. A trench can be excavated, the drain laid, tested and backfilled in a day. Long lengths, toughness and resilience mean fewer breakages.

**Widely approved** Most public authorities and relevant professional bodies have given their approval.

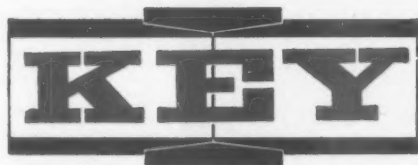
**Lower handling costs** Your unloading and handling costs will be cut by 75% because Key Pitch Fibre pipe is only one quarter the weight of salt glaze ware. It is available in the same diameters, in convenient 8 ft. lengths.

### Ask for a demonstration

A practical demonstration of the advantages of Key pipes can be arranged at any time through your merchant, who will also supply any quantity you require within a matter of hours.



**SPEED THE JOB—CUT THE COST WITH**



**PITCH FIBRE PIPES**

THE WORLD'S FINEST AND MOST MODERN DRAINAGE SYSTEM

A PRODUCT OF **THE KEY ENGINEERING COMPANY LIMITED**

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# ELLARD

## SLIDING DOOR GEAR

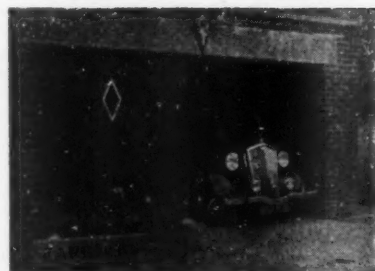
### ESTATE FOR THE HOUSE



The illustration on left shows yet another example of ELLARD "Estate" Sliding Door Gear in the modern dwelling-house. See how simple it is to convert a spacious room to one of cosy and intimate atmosphere. Elegant appearance, ease of operation and long service are the main selling features of this attractive ELLARD Door Gear. The obvious choice for both council estates and private houses is ELLARD Door Gear.

## FOR THE RADIAL GARAGE

The illustration on right shows ELLARD "Radial" Sliding Door Gear fitted to a private garage. Valuable working space is offered at the entrance to the garage. ELLARD Door Gear provides easy access to and from the garage by a personal entry door. ELLARD "Radial" Sliding Door Gear is low in price and gives long service without maintenance. This gear is also suitable for the larger openings of commercial and industrial garages.



## OVERDOR FOR THE GARAGE



ELLARD "Overdor" Gear, illustrated on left, represents the best method of operating an overhead-type door, and it requires the minimum space, fixing time and maintenance. An entirely clear threshold is achieved, and both side walls are available for windows and shelves. ELLARD "Overdor" Gear is designed for doors from 6ft. to 7ft. 3in. high and up to 200lbs in weight. The door is safely balanced and can be opened and closed with ease.

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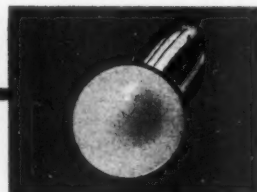
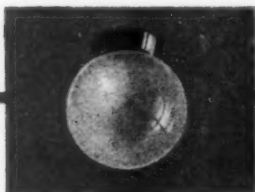
the

widest

range

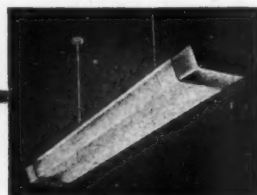
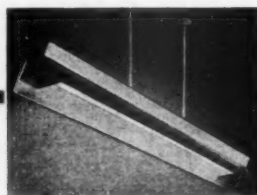
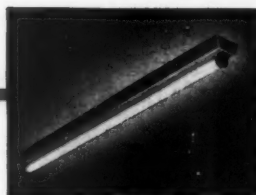
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ULTRALUX



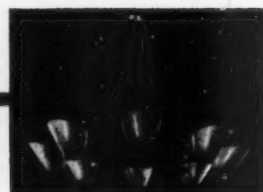
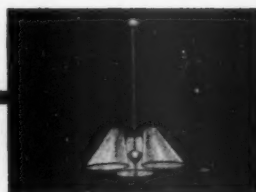
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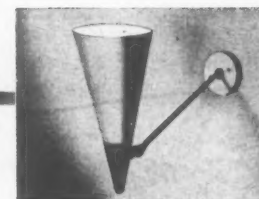
# of lighting fittings



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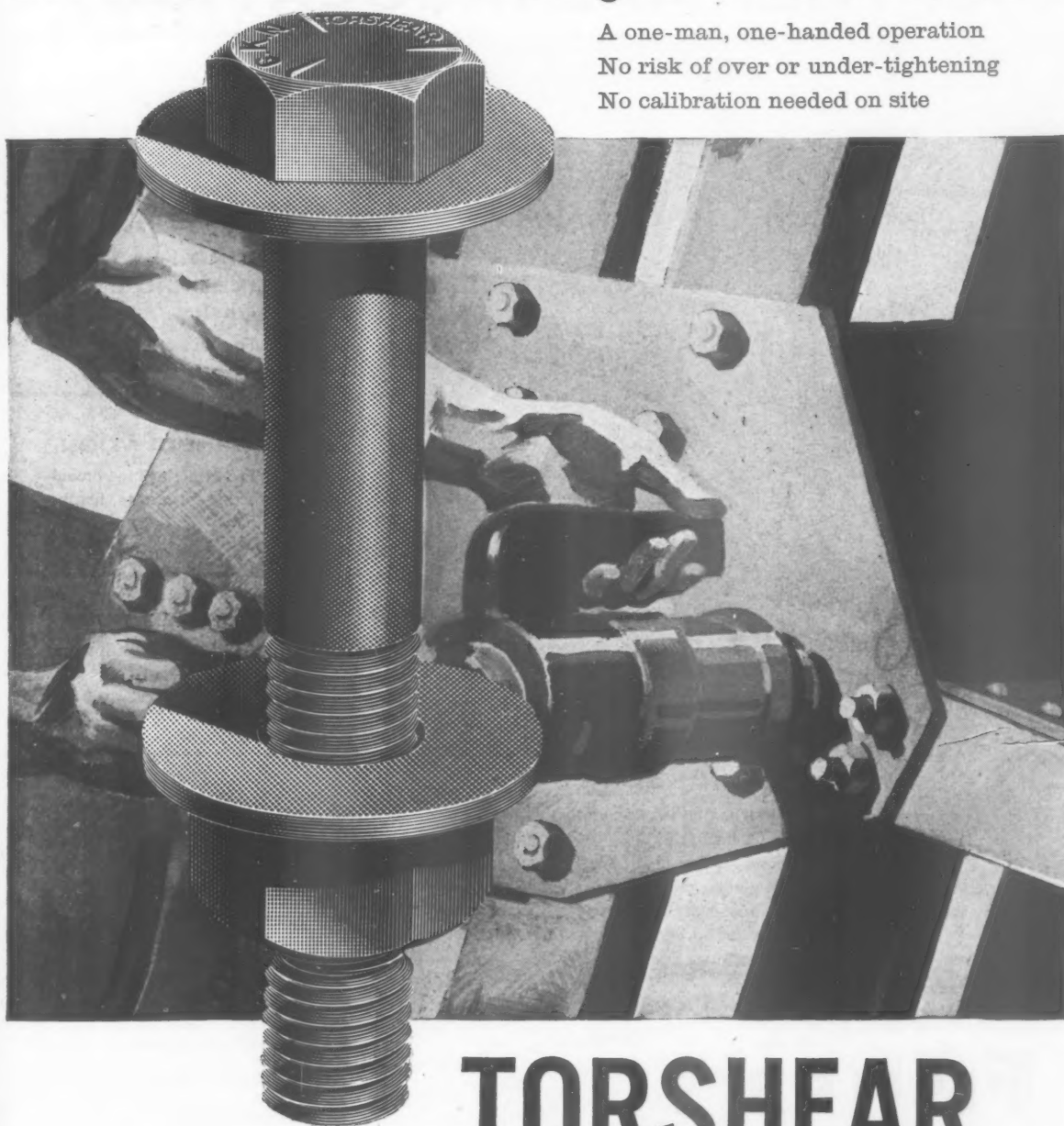
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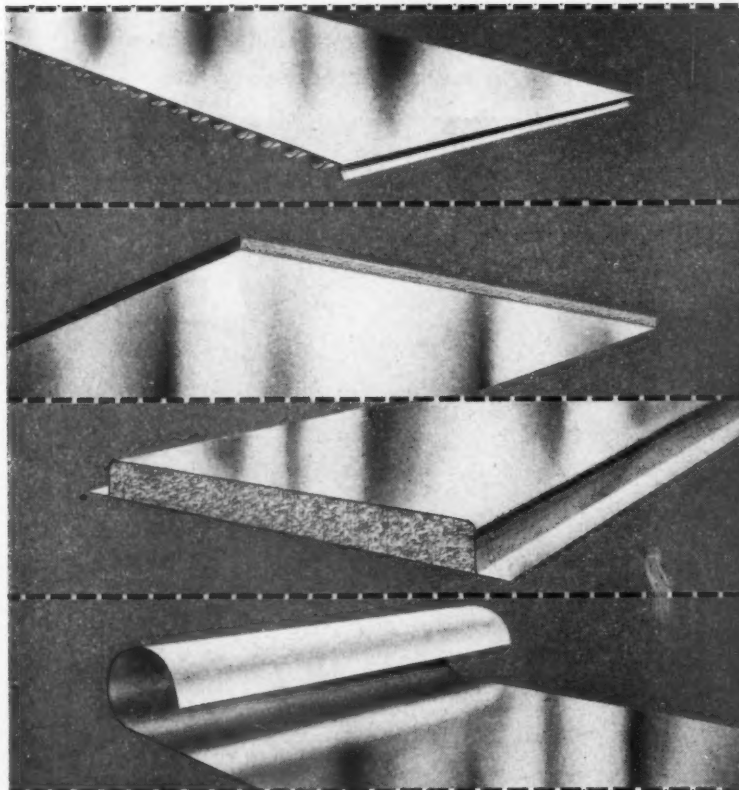
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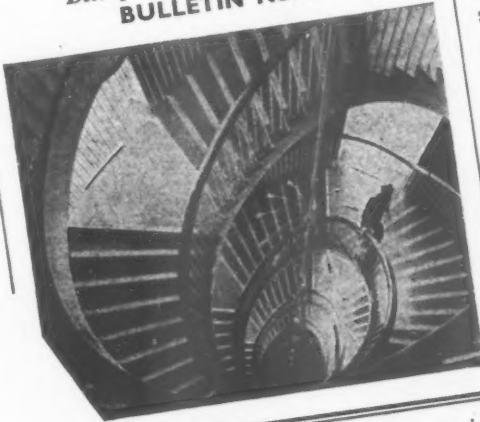


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Have you ever considered the abrasive effect produced by thousands of pairs of shoes shuffling on the stairs of a departmental store?

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Descriptive literature is available  
**BULLETIN No. 9**



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eliminate noise. How hard wearing?  
than granolithic concrete for  
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Certified tests in Bulletin No. 7.

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Scott tissue  
some very &  
dust proof and  
and eliminate  
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instance. T  
heavy duty  
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**Taps where they're handy**, on either corner or  
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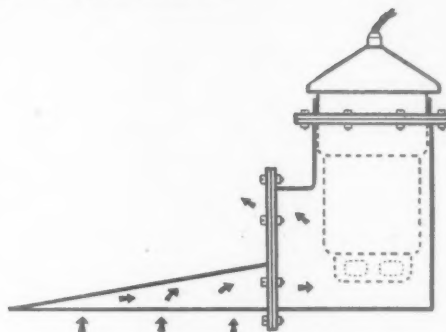
## TECHNICAL DATA SHEET No. 4

# Minerva

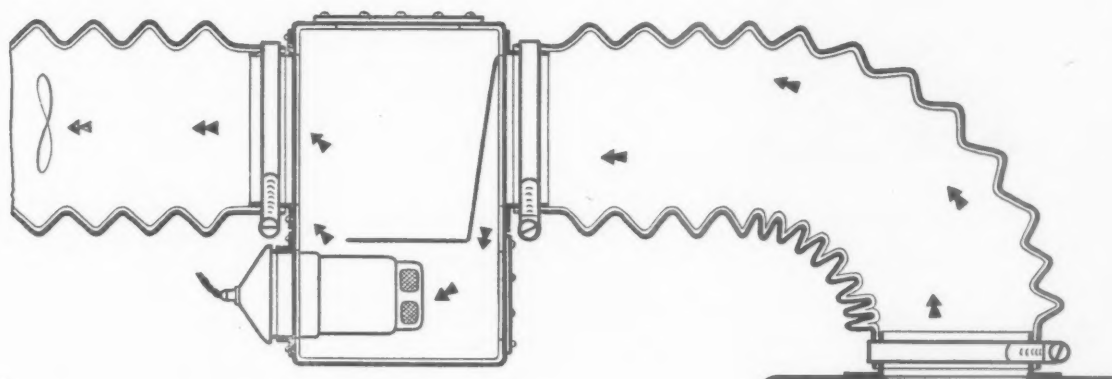
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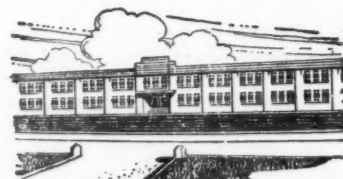
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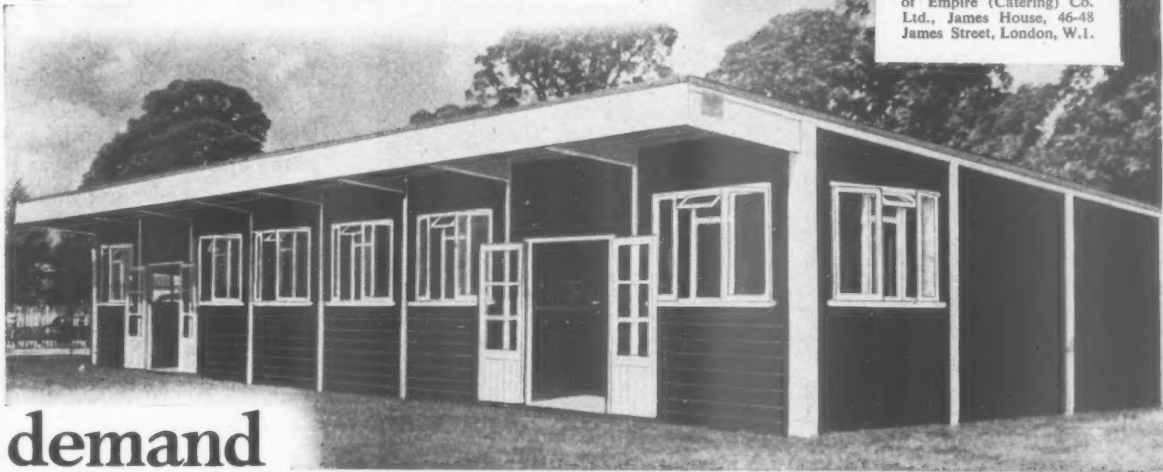


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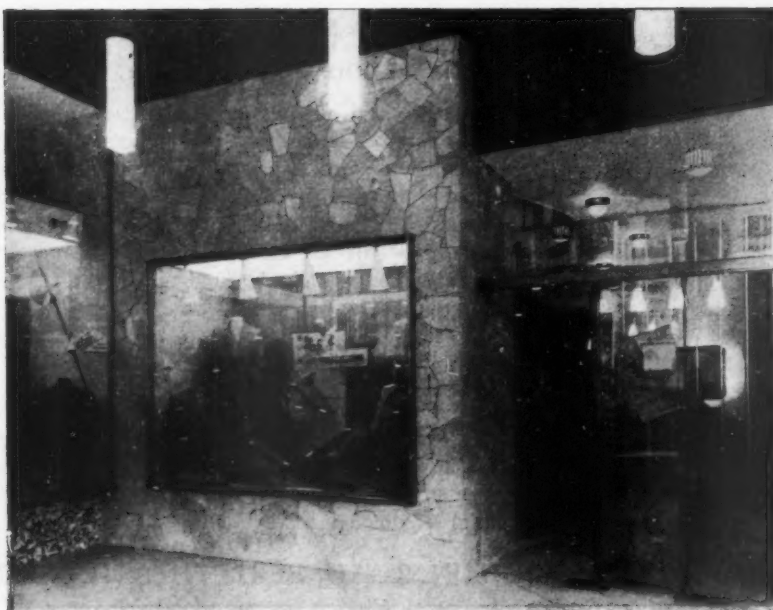
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NOT QUITE ARCHITECTURE

## BACK HOME IN NADAVILLE\*

This time last year you hadn't heard of the Beat Generation, had you? couldn't tell a hipster from a holster and probably thought Kerouac was an archaeological site in Brittany. So that when Ian MacCullum ended his last ICA talk (on *America's Crystal Palaces*) with an apotheosis of Bruce Goff as real beat, and Gordon Bunshaft as a cool cat, he was using language that many of his audience could only just recognize, and very few understand, even. The odd thing is that he probably won't ever use such language again because, by the time he gives another such talk, even this side of Easter, the cool vocabulary will have been so dirtied-up by establishment hacks (even the *Observer* uses it now) that no one will want to use it again.

\*

Whatever happened to the Beat Generation, then, supposing anyone can still remember who they were? Mostly they have been dragged down by the weight of literary gents who want to come along for the ride. Jack Kerouac's *On the Road*, an uncool book about near-beat characters is about all that most of them have read anyhow, and most of the literary public have only read their reviews of it, so you get ignorance squared, or cubed, if the review they read was Alan Price Jones's toffee-nosed effort in the *Listener*. But strictly, Kerouac is for the vegetarians, anyhow. He describes a dubious sort of hipster, mooning rapidly about the surface of a half-continent, living off friends and strangers, sleeping on their wives, spouting old-hat literary-type literature of revolt. If that is all that beat was, then this was hardly news; with a few changes the routine describes architecture students. Worst of all, Kerouac probably invented the term *Beat Generation*, and thus

\*Equals nowhere (nada: for out term of cool negation).

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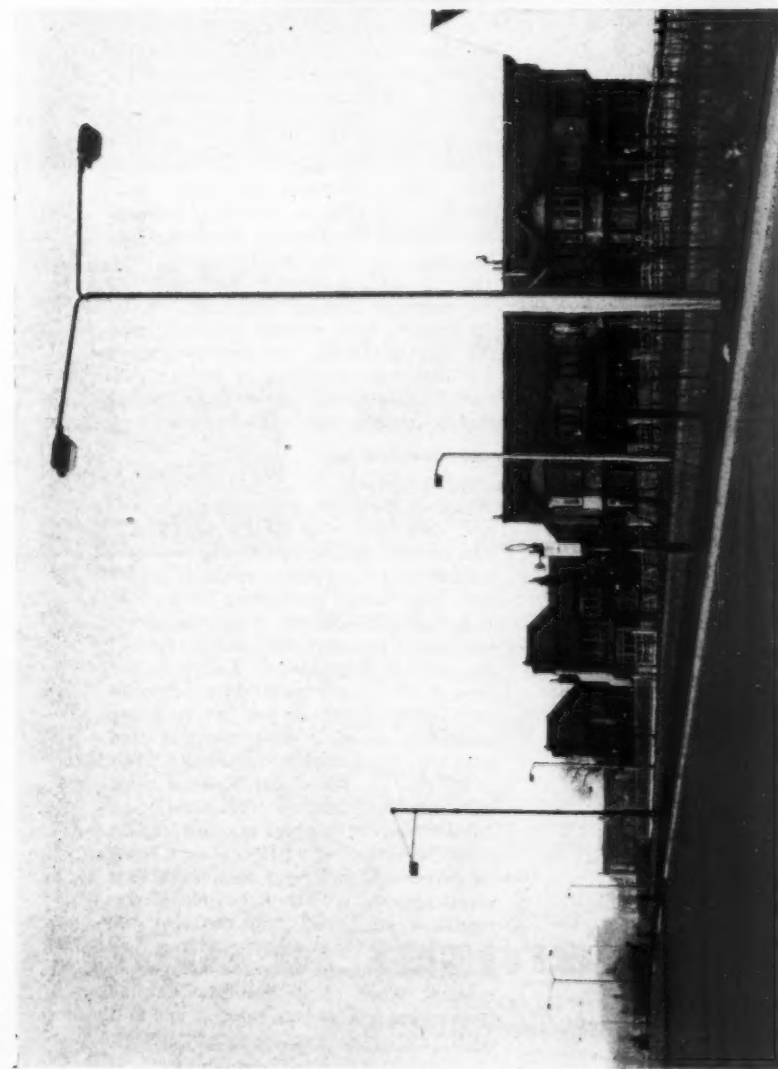
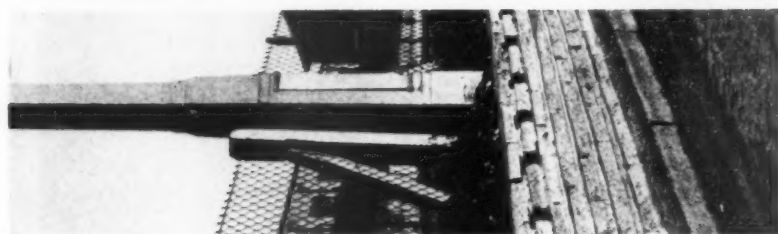
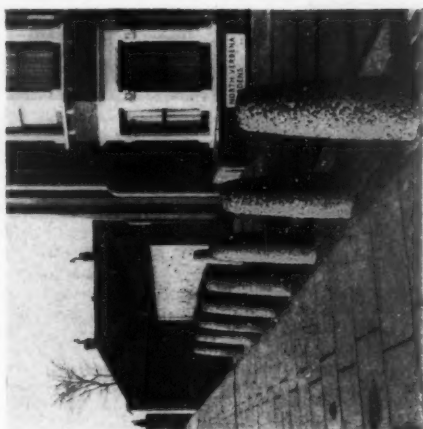
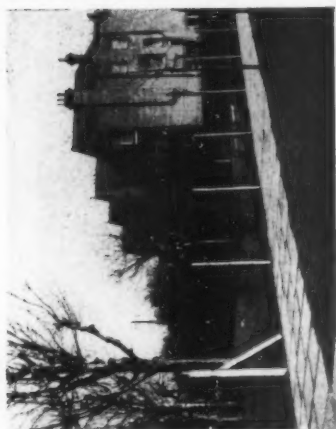
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## Which Way on the Motorway?

Would architects have a useful role to play in the design of urban motor ways? These pictures show the new Cromwell Road extension, London's new highway to the west, of which the eastern part was detailed by LCC architects, and the western part by the Middlesex County Engineer. The large picture, top left, shows the road cutting through the streets of suburban houses at the county boundary. Three types of lamp post can be seen—LCC (foreground), Middlesex (background) and an odd man out in the middle, on the Middlesex side of the boundary. On the left two subway treatments: LCC far left, Middlesex near left. Above, centre, the treatment of the central strip in Middlesex. Above right, verge treatment by Middlesex (top) and by the LCC (lower).



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drew a false equation with the Lost Generation and other pre-cool episodes.

Of the rest of the moderately available beat-type literature, Norman Mailer's article in *Dissent* is another outside job, since Mailer, it appears, having exhausted the literary powers of you-know-what-word in *The Naked and the Dead*, joined the hip fringe only to enlarge his vocabulary. More like it are the three articles by various unsteady hands that appeared in the "male-interest" magazine *Playboy*, back in the cold spring of 1958. One of these was a hostile critique, the other two were eye-witness accounts (E & OE) of cool parties in New York and San Francisco. They had the ring of authority, but still couldn't get even needle-deep under the skin of the subject—indeed the two frigid swinging orgies clearly involved the kind of fringe-hipsters who actively thought of themselves as beat, and Man, real far-gone hipsters just don't actively think, period.

Whatever the beat attitude was before the squares moved in for kicks, it manifestly wasn't communicable as literature, but only sort of subliminally as a shared mood of splendid and other-worldly isolation brought on by rapid travel, depressive drugs, very far-out jazz, not eating, and a studied negativism designed to prevent anything happening on purpose, much. Hipsters may have moved easily through the American scene, as Kerouac proposes, but strictly as if it wasn't there. And this they might have gone on doing for the rest of their short natural lives, had they not invented in self-delusive self-defence a canting lingo that almost demanded appropriation by the forces of hearty normality. So from the time it first surfaced as bop-talk, and we learned to preface our cries of admiration with "Dig that cra-a-azy folded slab!" down to the present condition of "Don't think I don't dig that Ronchamp jazz, ma-a-a-an, strictly from sculptureville, but that Corb is for the troglodytes, dad," those whose business is with words have been unable to keep their hands off. Either because, like me, they think a good new word is worth two worn-out ones, or because they think that any neologism or bent syntax is an attack on their vested interests in literature.

Either way on, we have all done our bit to kill off the Beat Generation, whoever they were, and polluted their private language by making it mean something affirmative. Too late now to de-desecrate the mobile shrines of the wandering hipsters, one can only wish them to get lost quietly and make themselves over new. The Beat Generation is dead, but somewhere out there, far out in outré-space beyond coolburg, there must yet be characters as beat as ever there were, and doubtless they'll be back. This time, let's let them alone.

REYNER BANHAM

## The Editors

### CODE ON IMMORTALITY?

FIFTY years from now, will the architectural papers be publishing the current work of Corbusier, Candilis and Partners? We doubt it. When the great Corb dies, he will be remembered for his buildings and not his business. It was only in the 19th century, with the growth of architecture as a form of professional business, that the custom grew of keeping the senior partner's name, whether he was dead or merely retired, in the firm's title. In no earlier age was it customary or we might well have practising in Bloomsbury "Capability Brown, Soane, Smith and Partners," or some other nomenclative relics of a great age.

In an article on page 257, J. M. Richards points out the faults of this rather commercial custom. We support his views, and consider the abandonment of this custom (which makes architects vulnerable to the charge of deceitfulness) a necessary and inevitable step in a long term policy of getting buildings credited to the architects who designed them, and not ascribed to the businessman or committee-man who technically carries legal responsibility for them. Such a policy will not merely make the future architectural historian's life more easy. It will also be more truthful.

### A JUDGE OF THEIR OWN CASE

The London Brick Company are to be congratulated on their perseverance in testing over a period of four years the relative thermal merits of brick and concrete blocks when exposed to the weather (see page 254). The most important outcome of these tests is to reverse the current view of the relative merits of hollow clay and concrete blocks when these are used as the inner skin of a cavity wall. The factor which has caused this reversal is the part played by moisture, which is more quickly taken up and less readily released by concrete products than by clay products. Thus the 10½ in. unventilated cavity wall with an inner skin of 4 in. hollow clinker concrete block, which has a *calculated* U value of 0.20, has been shown to have an *actual* U value of 0.26. This is the same as the actual U value of a 9½ in. unventilated cavity wall with a 3 in. hollow clay block inner skin. Cellular concrete blocks, thickness for thickness, show the same actual U values as hollow clay blocks, but are, of course, more expensive. This is news. Our only comment is that we would have preferred to have received it from an impartial source. What a pity it is that the meagre resources of BRS place the architect once more in the awkward position of having to cope with information which he cannot quite ignore, but which he cannot unreservedly believe. We have asked BRS about these potentially important findings and it is perplexing and regrettable that BRS neither confirm nor deny them.

left, Middlesex near left. Above, centre, the treatment of the central strip in Middlesex. Above right, verge treatment by Middlesex (top) and by the LCC (lower).



## A JOB DOWN OUR STREET

All the architectural weeklies have supported the RIBA's efforts to bring sense and architects into the motor roads set-up. ASTRAGAL was glad to see that the *Manchester Guardian*, which has given a leader to the subject of last week's leader in the AJ, recognizes that it will be very hard to make radical amendments later on to motor road plans based on traffic requirements alone. But why does the *Guardian* doubt whether the introduction of architects into motor road committees is the right answer "at this stage." The time to get things right is at the beginning. And the right time, as the *Guardian* would agree (it says that the problem will soon be a matter of urgency) is now.

## PROVOST PROVOKED

Anyway, the RIBA Council—as Basil Spence told the Press last week—is not going to let the matter drop. Mr. Spence is certainly proving to be a lively leader of the profession. He is always in the news. The other day he wrote in *The Scotsman*, flaying the City Fathers of Edinburgh for ruining their city, and had the fun of hearing the Lord Provost's cry of "palpable ignorance." And I see that on the 20th of this month he will be addressing the New Hampstead Society at a meeting they have called to discuss his scheme for their civic centre. You may remember that the Society was formed over a year

ago to protest against the plan to build a neo-Georgian centre. If the Society have any doubts about the proposed building I'm sure there won't be any left by the end of their meeting. Mr. Spence is pretty good at defending town halls. Last time he did so was at Slough, where he showed colour slides of such advanced-looking Scandinavian halls that the councillors he was talking to were quite relieved by the modesty of the building he had in mind for them.

## ANTI-UGLIES AGAIN

The first warning we had about Kensington's mock-classical library came a few months ago when *The Spectator* called attention to a mock-up of a classical doorway which stood alone on the site, rather like a skeletal set for a play by Tennessee Williams. It is a pity the Anti-Uglies were not around in those days: their demonstration against the building, which was not held until last week, might have made somebody think. Unfortunately the library's framework is up and the work of cladding has begun. But it is not too late for the Borough Council to change its mind about the town hall to be built on the same site. The picture opposite shows Vincent Harris's preliminary sketch published in 1956 of the library (in the foreground) and the town hall. An official says that the Borough Council is unlikely to go ahead with this design, though no firm decision has yet been taken.

\*

A word to the Anti-Uglies, whose excellent show (with such slogans as "Classic Veneer Deserves a Sneer" and "West End Scandal: £500,000 Forgery") was put on with the help of students from the AA and the Bartlett school. Do make it clear to the public what you are demonstrating about. If they understood they might even agree with you. The more people who know about these protests, the more chance there is that councils and clients will think twice before putting 20th century work into 18th century dress.

## THREAT TO THE RUSKIN

Why is Oxford thinking of closing down the Ruskin School of Art? This is typical of our older universities' attitude towards the visual arts. Is it felt that undergraduates ought not to waste their time on art? The Ruskin School, founded by Ruskin himself, has world-wide fame and a long tra-

dition, and has taught some first-class artists. It is one of the few art schools to have the advantage of being housed in a famous museum. Its close connection with the Ashmolean is valued by the Ashmolean itself. Oxford must surely see that the School's work is not duplicated by the art courses available in the local technical college, though that is a reason given for closing it.

## REPS FROM AMERICA

American cities are disintegrating. Centres are shrinking and suburbs are expanding. Why? Professor Reps gave an answer to the TCPA the other night. Apparently the Local Government Boundary structure virtually encourages decentralization to avoid tax.

\*

Professor Reps told us that every US Planning Commission has a scheme for central redevelopment—and the slides he showed of Los Angeles told us why. The most ingenious, imaginative and costly scheme seems to be the one by Victor Gruen for Fort Worth. It was encouraging to see what Philadelphia is doing to rehabilitate its slum areas—an example that many European cities could learn from.

\*

At the end of the evening ASTRAGAL wondered what the TCPA thought of its own championing of the Garden City and decentralization.

## THE CORB EXHIBITION

At last the Corbusier exhibition is here — jammed into the Building Centre, which has seldom been so packed with visitors. It is just as exciting as our Liverpool correspondent said it was, and it is really appalling to think London nearly missed it. (Many thanks to Jane Drew for finding the accommodation and to Theo Crosby for finding the money.) The exhibition comes at a good time—before Corbusier's reputation wavers. And waver it must—a regrettable, but inevitable and salutary outcome of the unfortunate cult of personality.

## LIVELY ZEVI

No-one, not even the President, congratulated Bruno Zevi after his talk at the AA last week on the remarkable feat of giving a funny, fluent, comprehensible talk in a language not his own. ASTRAGAL, for one, was most impressed with the performance, if not

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exactly overcome by the argument. Zevi made three main points; that we had failed, even after a hundred years of trying, to integrate engineering and architecture; that we had failed to create a prose vernacular of modern architecture that non-genius could use without making ghastly mistakes; and that modern architecture had served all classes of modern society well, except the peasants, whom it was only just beginning to reach. He himself doubted that the last point had much relevance to England, but J. M. Richards opened the discussion with the assertion that England, being an industrial country, did have peasants, only they were to be found in places like Manchester and Stepney, not out in the country.

Most of the rest of the discussion came from the students present, whom Zevi answered with fluency and good humour, but without giving way an inch anywhere. He is clearly a man of doggedly held opinions, and equally clearly enjoys a good argument—to see him in the flesh was to understand why Italian architectural journalism has become so lively since his magazine *l'Architettura* entered the lists against *Domus*, *Casabella* and the Milan school.

#### MORE ENTRIES WANTED

While *ASTRAGAL* was enjoying Edward Mills's forthright criticism of

*Vincent Harris's 1956 design for Kensington Library and Town Hall. See "Anti-Uglies Again."*



entries for the RIBA prizes and studentships he thought what a pity it was that there was never time for more complete criticisms. Couldn't just one or two of the award winners be given a full criticism? The remaining criticisms could be published in the *RIBA Journal*.

Mr. Mills wanted to know how the prizes could be made more popular and Robert Gardner Medwin suggested, in his vote of thanks, that the British Architectural Students' Association should take the matter up. Good. But how many people realize that most of the prizes are available to members?

Perhaps the RIBA expects too much. There were only two entries for the Hunt Bursary—for the study of housing and town planning. This was hardly surprising—it is a complex subject. I wonder if the critics would accept work published in the previous year? Surely Cleeve Barr's book on housing, or A. G. Bellamy's *MOHLG* handbook would be suitable entries for what is, after all, a modest prize (£95) if offered only for specially written work.

#### TOIL AND SWEAT

Some readers have asked why, in the limited competition for Churchill College, no premium is being offered to the unsuccessful competitors in the first stage. The RIBA competition regulation 8 (c) says that where a competition is held by personal invitation to a limited number of selected architects each competitor shall receive a specified sum. Regulation 17, however, says that in limited competitions the regulations may be waived "where the Royal Institute is satisfied that special circumstances may exist."

In this case, the RIBA has waived regulation 8 (c) because it is a two-stage competition open to an exceptionally large number of competitors. That, at least, is the formal answer to the question. *ASTRAGAL* heard some time ago, however, that the trustees intended to give the job to an architect whose name aroused alarm and despondency in some quarters. It is thanks to the RIBA that the trustees have been prepared to go as far as they have done. If the only alternative to a



*John and Sylvia Reid's new range of Stag furniture. See below.*

competition limited to 21, with fees for only four of them, was no competition at all or a competition limited to half a dozen, none of them younger men, what was the RIBA to do?

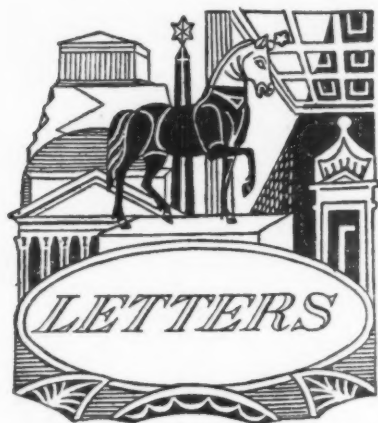
Is it too late for the trustees to think again? The reputation they have won by their whole-hearted acceptance of the modern movement should not be tarnished by financial shabbiness.

#### STAG STAGGERS

John and Sylvia Reid, who review the Furniture Exhibition on pages 258-261, are well known as designers of light fittings and of modern furniture. This year they have unashamedly designed a "period" range of furniture for Stag, one piece of which, a dressing table, is shown here. Apart from the Queen Anne brass handle and the bevelled edges it is an unexceptionable item in a neo-traditional field of design. The question is: should modern designers soil their fingers with eclecticism? Theoretically not, but in a sphere, such as furniture, dictated to entirely by fashion and commercial interests, it can be argued that it does more good than harm to have competent designers attempting to tidy up "period" furniture. The dangers, however, are obvious. The Reids are attempting to introduce, artificially, the good taste of traditional furniture so prevalent in Scandinavia into the very different industrial society of Britain.

**ASTRAGAL**





*Nigel L. Mould, Student R.I.B.A.*

*Clive Wooster, A.R.I.B.A.*

*George Grenfell Baines, A.R.I.B.A.*

*Rex Dempsey, A.R.I.B.A.*

*A. A. Stewart, F.R.I.B.A.*

*Wm. T. Glare*

*Guy Morgan, F.R.I.B.A. and*

*Hubert Bennett, F.R.I.B.A.*  
*Architect to the L.C.C.*

## RIBA Exams: A Protest

SIR: Hats Off! to Mr. Newnum (AJ, Jan. 22), for being the sole critic in print of the shameful exploitation of the examinee by the RIBA. Mr. Newnum considers it is little short of shameful that in 1961 the amount expected to be collected in examination fees will be some £16,000 more than the expenditure on examinations. I would point out that, according to the report, the equivalent amount for 1958 was over £17,000, and I wonder whether he and other members of this notoriously apathetic profession are aware of some of the methods whereby such excess sums are acquired. I sat for the Design subject of the Final Examination held at the RIBA, 66, Portland Place, last November, so that I am in a position to give him first-hand information of the shameful and undignified conditions under which candidates are expected to sit, over 470 of us within the RIBA building at this session.

First of all, some 60 of us were crowded into the Members' Room and each supplied with a rickety desk barely large enough to take an imperial size drawing board. The spacing between desks laterally was about 2 ft. 3 in. and from front to back just enough to be able to move one's stacking type chair back to get a leg in and out. Nowhere at all is provided to put drawing instruments, ink, paper, etc., excepting the floor, where it is trodden upon and/or upset by neighbours, and furthermore, the floor is the only place where completed plans &c. can be put to refer to. No addition was made to the normal lighting of the room, which is by indirect light from bowl fittings, and which had perforce to be switched on early as it is dark by about 3.30 p.m. in November.

This latter point was the subject of a letter of protest from me to the examiners in which I stated that although I was fortunate enough during daylight hours to be up against the central window overlooking Portland Place, after 3.30 p.m. I was unable to see sufficiently well to trace any work and that this fact allied to the intolerable overcrowding made this examination a frustrating test of endurance rather than of skill in design.

I, and the many other candidates I have spoken to, consider that these conditions which have to be borne for some three and a half days for Design alone, are not only utterly unfair and intolerable to candidates sitting for a subject wholly devoted to drawing, but are also entirely unnecessary as it is clear that more than sufficient money is provided by us to cover the hire of appropriate buildings, allowing reasonable side space for everyone and the normal individual lighting that any draughtsman requires. Is it not inconceivable, surely, that an Institute of "Architects" can contemplate for one instant the use of a room such as the Members' Room of the RIBA for such a purpose? Incidentally, it may interest Mr. Newnum and others that the fees per subject, formerly one guinea, have recently been increased by 100 per cent to two guineas.

Another factor responsible for an increased collection of fees is that, due to the abnormal demands made of the candidate in the way that one is asked to design a building for this examination, it is rare to find anyone who has passed at the first attempt, and in fact, large numbers of them have made as many as eight attempts, and therefore paid the fee eight times. This is not because they are necessarily incompetent designers, in fact some are middle-aged men wholly responsible for large projects in practice, but because on the first day (of 6½ hours working), the candidate has to hand in a tracing of his design indicating its main lines (which is not returned to him)—this for a building of a size and complexity for which the sketch plans in practice would not be worked out in less than two weeks. Some recent titles of subjects are: "A School to be built in two stages"; "Premises for a Publishing Company" (a five-storey block); "A Central Town Development" (involving a multi-floor garage, and blocks of offices and shops). The ludicrous part of this system is that most of the remaining 20½ hours of the examination are occupied in drawing out the details to scale, although almost every candidate is employed in an architect's office and in any event has to submit examples of his work proving his capabilities in this direction, before he is accepted to sit.

Is this really a test of skill in design or is it deliberately formulated in a way which bears no relation to design in practice in order to keep the numbers of successful candidates low, while at the same time the level of receipts for fees is maintained? Such questions are bound to arise under the circumstances and are rife amongst external candidates as anyone may glean upon enquiry as I have done.

For my part, I have written to the Secretary to the Board of Architectural Education asking that the gist of what I have set out above be brought to the notice of the Committee responsible, which is being done. I also asked that they be informed that I decided at the examination that, whether I passed or failed, I would not continue to sit for the whole of the examination or Part 2, which I have not taken, under the prevailing conditions, but only when it became clear that the RIBA intended to bring the conditions of lighting, working space, etc., up to the standard that could be reasonably expected in keeping with the status and dignity of the Final Examination of a professional institute.

NIGEL MOULD

London

## Office Practice

SIR: I was very interested to read the first two articles by Sinclair Gaudie and Arthur Wright on certain aspects of office management, and I look forward to those that will follow. There is one point, however, in their first article that should not pass without discussion, for it is a fundamental point that affects their whole approach, and consequently their conclusions. The authors suggest as a proper basis for analysis of architects' work the three abstract terms of *information*, *decision*, and *communication*. It is quite true that everything that an architect does can be classified in this way, but in the widest meaning of the terms, so can any activity carried out by anybody, and the analysis does not therefore show the essential nature of architects' work; the terms are too wide. The three headings may represent the best formula for examining one small self-contained activity (in the work study manner) but it is less certain that by themselves they are best both for exposing the nature of the whole group of complex activities that comprise an architect's work, and for use as the guiding principles in organizing the office.

For practical purposes it is activities that are of interest, and not the abstract classification of their parts. The obvious and principal activities of the architect are *getting* information, *making* decisions, and *making* communications, which have elsewhere been termed "investigation," "design," and "instruction." Somewhat similarly the obvious activities of an industrial undertaking are *getting* materials, *making* a product, and *selling* the product. In both the professional and the industrial set-ups there must be a fourth but less obvious activity, that of continuous and overall control, which in the business field is known as *management*.

Contrary to what the authors suggest, there is no "mystery" about management; neither is it sinister or prejudicial to the highest aims of architecture. It is defined quite simply in *Management Training for the Building Industry*\* as the "... direction ... of, the use of men and materials to a definite end." An architect's activities, un-

\* Published by British Institute of Management for the Board of Building Education.

less they are definite end classified. The assumption management additional is automated classified a communication their conclusion that architecture of information needed. Or able, but them because of analysis alternative of lack of cost tenable. It that an architect has already more information ters worse need was to be proper his attention proper time management is of course doing prior This information activity with pursuing, weaknesses procedure. So traps for alive—as seriously management I wonder within the tion, decision open to (to arrive) an office from bound to articles with ment policies Gaudie and to believe

Rickmans

The author compressing Wooster's important "mystery" mediaeval did in fact (the) must We did not approach architects least (De 1959) even Our point We did not from lack of way of point that clogged up We did not matically fully agree



less they are positively directed towards a definite end, are of little value however classified.

The assumption made by the authors that management should not be considered as an additional activity (because as they say it is automatically taken care of by activities classified as information, decision, or communication) weakens the effectiveness of all their conclusions. For example, they said that architects forget things because of lack of information, and that therefore more is needed. On the face of it this is not credible, but the conclusion was forced upon them because within their limited pattern of analysis there were only two other alternative conclusions—lack of decision, or lack of communication—both equally untenable. It might be more usual to suppose that an architect forgets things because he has already too much on his mind, and that more information would simply make matters worse; it might be thought his greatest need was for the information that he had to be properly sorted out, and directed to his attention in a suitable form at the proper time. One of the functions of management is to arrange just this; and it is, of course, what the authors have been doing prior to writing these articles.

This unfortunate failure to recognize an activity which they are in fact energetically pursuing, has led to a number of other weaknesses in their conclusions and procedure. Some of them would prove deadly traps for architects who were not already alive—as the authors are, albeit unconsciously—to the onerous responsibilities of management as an activity.

I wonder now how the authors ensure that within the simple framework of information, decision, and communication (which is open to any engineer or builder to contrive) an environment can be created in an office from which good architecture is bound to emerge. I suspect that the next articles will again show that their management policy is more positive than Sinclair Gaudie and Arthur Wright are leading us to believe.

Rickmansworth.

C. WOOSTER

The authors reply: It may have been over-compression on our part that has led Clive Wooster to pick us up wrongly on some important points. We were using the word "mystery" (perhaps rather donnishly) in its mediaeval sense of "specialist trade," and did in fact say that management (of a practice) must *not* be so considered.

We did not infer that the "managerial" approach is sinister or prejudicial. Some architects probably do think so, and one at least (Denis Robinson, AJ, January 22, 1959) evidently considers it unnecessary. Our point of view is the exact opposite. We did not say that the architect suffered from lack of information (God forbid), but from failure of information—a shorthand way of expressing Clive Wooster's own point that his channels of information get clogged up and need clearing.

We did not say that management is automatically taken care of by anything, and fully agree that it is a specific activity.

But like all human activity, it can be analysed in terms of our three elements (*i.e.*, in terms of discipline in which architects are specifically trained) and should be so analysed, rather than considered (as it often is) to be some sort of extra faculty which the architect may or may not possess.

The one factor in architecture which evades analysis has nothing to do with management—that is, the individual's attitude to design. Given identical conditions of load, different engineers may well produce identical roof trusses: given identical programmes, architects are most unlikely to produce identical designs. This is where the "architect—as—artist" comes in.

Whatever the managerial environment, good architecture can only be produced by good architects (probably plenty of bad architecture is produced in offices which are, by lay standards, efficient): but, *other things being equal*, we think a well-organized office has a better chance, and that is what we are driving at.

We hope the remaining articles will convince Clive Wooster that we are on his side: indeed, our process of self-analysis was set in motion largely by his own articles here in 1955.

### Felix Samuely

SIR: As one of the many architects who has worked in the warm sunshine of Felix Samuely's collaboration, may I add a personal tribute.

It was not only the brilliant engineer we admired, but the man we loved; not only the inexhaustible flow of his ideas, but his great human kindness, his modesty and simplicity. The unique experience of working with a genius on terms which he made you feel were equal, seems like something that could never be repeated.

Working with Felix Samuely one was always conscious of Design in its most comprehensive and deepest sense. As a result the architectural content of one's work was improved just as much as, if not more, than would have been the case had one been working with an equally brilliant architectural colleague.

Felix Samuely has gone, but his ideas and the ideas he helped to inspire in others, particularly architects, will live to enlighten British architecture for a very long time.

GEORGE GRENFELL BAINES

Preston.

### Salaried Architects

SIR: Following the General Meeting of the erstwhile Local Government Architects' Society, which endorsed the proposal to limit initial membership to specific "Official" groups, I feel that a great opportunity to create a measure of harmony within at least part of the profession has been missed. My own view is that the introduction of another Society to promote the welfare of what is now a majority of the RIBA membership should not be necessary, and that the RIBA itself should be the sponsoring body. This, it seems, is for various reasons not possible, even though Constitutional reforms can apparently be made in other directions.

But if a new society is thought to be necessary it should at least fully represent all architects in salaried employment. Delegates to the meeting from other than Local Authorities must surely have gone away somewhat fearful for a future where one section is to hold such a dominant position.

The amended constitution of the new Association has still to be ratified by a further General Meeting, and before this takes place I would like all Local Government Architects to put to themselves this question—"Am I primarily a Local Government Officer, or am I first and foremost an architect?" If, as I sincerely hope, the answer is a resounding "yes" to the latter, then the proposed title of "Association of Official Architects" is unrealistic; any distinction between those in official positions and those in private and commercial firms and other bodies not included in the amended Constitution being out of the question.

Salaried architects from all fields of employment deserve to have some representation in regard to salaries, conditions of service and other matters, and unless this principle is accepted at the very inception of the new Association, I fear that a great deal of disillusionment will be felt by those not included, and will reflect on the relationships within the profession.

It was said at the meeting that the attitude of those in private and commercial firms was not known and could not be taken into account. I can only hope, therefore, that they can make their combined and individual voices heard before the next General Meeting takes place. An encouraging response from them, and some new thinking and action by the uncommitted Local Government members could lead to the question of the new Association's title, and proposed membership being raised again before final ratification of the constitution, and perhaps averting what threatens to be yet another split within the profession.

Newcastle-upon-Tyne.

REX DEMPSEY

### Wokingham School

SIR: As a slightly disgruntled competitor I have a lot of sympathy with the view expressed by your quantity surveyor correspondent, H. A. L. Tozer, although I see no reason why his conscience should be troubled by the thought that his advice had an adverse effect on the architectural quality of his architect friend's design.

The other letter on this subject from correspondents Cedric Price and Bill Cowburn is, however, rather childish if not hypocritical.

A. A. STEWART

London.

SIR: The recent letter by H. A. L. Tozer might conceivably have been written by the chartered surveyor who collaborated with me in preparing a design for the Wokingham School competition.

Doubtless a majority of competitors experienced in this type of project would feel that, above all, no liberties could be taken in the matter of cost. The conditions stipu-

lated that the school must be designed so that it can be built within the figures laid down by the Ministry of Education—the total cost must therefore not exceed £42,350. One might be excused for expecting the assessors to consider this clause as binding. However, of the first and second winning designs the assessors' report states that it is "doubtful whether they could be built within the permissible cost allowance." All very frustrating.

One wonders how many other competitors abandoned "first thoughts" about placing the school on the obviously better and higher part of the site because of the attendant extravagant services and access roadway and consequent wastage of the already minimum site area. In normal circumstances the expenditure would severely tax the very tight costing, in this particular case the additional burden of essential site drainage must leave little margin for such fun.

Fortunately the design placed first has a great deal to commend it. How much this is due to a little "rough-shod riding" over the maximum cost Condition will best be judged by those who grappled with the problem of Cost Planning their schemes. *C'est magnifique—mais—ce n'est pas la guerre!*

Leamington Spa.

W. M. T. GLARE

## Development at Knightsbridge

SIR: We have read the comments attached to the photograph of the model of the above scheme, and we would like the following to be placed on record:

The scheme has been prepared most carefully as a co-operative effort between the Developers' Architects, Guy Morgan and Partners, and the London County Council, and its Architect's Department.

The previous plan submitted, which is referred to in the caption, was produced following close collaboration between the Developers' Architects and the Authority. It was deposited largely in order to obtain certain policy decision in principle. It was later agreed between the Council and the Developers that this scheme should be withdrawn and a new scheme prepared.

Following a suggestion made by the Chairman of the Development Company, and in line with the ideas of both the Council's officers and the Developers' Architects, a new scheme was prepared giving a more open treatment to the centre island. It is this scheme, as illustrated, which will form the basis of further discussions with the Metropolitan Borough Councils and all other interested parties.

With regard to your comments on the pedestrian aspects, this has been, and is being intensively considered by both the Council and the Developers' Architects.

GUY MORGAN,  
Guy Morgan and Partners,  
HUBERT BENNETT,  
Architect to the Council,  
London County Council.



## 'U' VALUES

### LBC Research Results

It seems that for brick and clinker block external walls we have all been using the wrong U values. With both skins in brick it should be 0.28 and not 0.30; with clinker inner and brick outer skin it should be 0.26 and not 0.20.

This is the announcement made to the technical press last week by the London Brick Company who have been measuring U values under "real" (as distinct from laboratory) conditions for the last 4 years. Apparently the U values commonly accepted have been based on calculations from test conditions which did not fully account for variations in transmittance due to wind, radiation, loss to sky, moisture content and so forth.

The LBC decided to measure actual losses through 4-ft. square sample panels built into the external north facing wall of a building at their Stewartby, Bedfordshire, research establishment. The method, actually suggested to them by BRS, who have co-operated in the work, was to mount a "guarded hot plate" behind the panels. Heat output from the plate is controlled and thermocouples built into the wall feed back to a recording computer the separate transmittances of each skin and the cavity as well as the overall transmittance, air to air. From these results a graph is produced showing variations in loss day by day and an astonishing variation it is—from about 0.20 to 0.40 for a wall whose average is 0.28. A significant, though not the only cause of variation is moisture content of the outer roof.

Subsidiary studies by the company show that clay products absorb moisture less

readily and dry out more quickly than concrete products and that a cavity filled with glass wool reduces the U value of a brick wall from 0.28 to 0.14.

It seems doubtful whether the new values would have any considerable effect on calculated heat loads for buildings (the LBC has not investigated this) especially in buildings with a fair amount of glass where the transmittance through solid walls is probably not very significant. Again, the LBC results imply that the local conditions of a building, orientation, degree of shelter, prevailing wind, rain protection and nature of surrounding surfaces, vary the U value so much that a correction of an average figure will make no discernable change in comfort conditions.

J. C.

## TPI

### Tall Buildings in Towns

One of the greatest risks in tall building today is that people will put up extremely tall buildings into which very little thought has been put, which will be seen above the normal skyline. This was one of the points made by Professor Sir William Holford in a talk on "Tall Buildings In The Town" at the TPI last week. L. W. Lane, the LCC principal planning officer, had told the meeting that although in dealing with the planning application the LCC tried to visualize the points from which it could be seen, it could in fact be seen from points that would never have been dreamed of when it was on the drawing board. Sir William Holford drew from this the conclusion that the public had the right to say to the architect or engineer "once you become as visible as that what we see has jolly well got to be interesting." This, he added, was one item of elevational control he had no hesitation about. "I would say to the man who brought me another few yards of office machine with no beginning or ending, no kind of subtlety or external treatment, 'that's not good enough to be seen from all over London.'"

Sir William also argued that absolute height did not seem to be a criterion in itself; it had to be read in conjunction with thickness and depth, the form and tone of the cladding materials, translucence and opacity, the degree of vertical emphasis, and the proportion and composition of its subsidiary and surrounding masses. "The slim and unbulky appearance of a tall building may sometimes be accentuated by increasing its height, if by that means its proportions are bettered, rather than by cutting it down."

U values obtained by measurement and by calculation  
Construction

Inner leaf	Cavity (unventilated)	Outer leaf	U value B.t.u./ft. <sup>2</sup> h deg. F.	
			Measured	Calculated
Common fletton	Air	Sandfaced fletton	0.28	0.30
3-in. 6-cavity clay block	Air	3-in. 6-cavity clay block, rendered	0.27	—
3-in. 6-cavity clay block	Air	Sandfaced fletton	0.26	—
4-in. hollow clinker block	Air	Sandfaced fletton	0.26	0.20
4-in. 6-cavity clay block	Air	Sandfaced fletton	0.22	—
4-in. cellular concrete block	Air	Sandfaced fletton	0.22	0.18
Common fletton	Glass wool	Sandfaced fletton	0.14	0.09

## PRISON

### The Bu

A big project announced in the *Pennsylvania Paper*, *Pennsylvania* (HMSO, 2s.) is an ordinary programme is cost a great time (it will be the response (which is a programme is relieved by prisons which economical The programme "Present Prison but it is u should be a "Future Prison are given, adopted.

Two security completed); one remand secure borstal one secure borstals for centre for boys (for and modern

Security pri at least 1,8

Thirty dwell designed by room houses; 4 two-room more varied may become

## PRISON REFORM

*The Building Programme*

A big prison building programme is announced by the Home Office in a White Paper, *Penal Practice in a Changing Society* (HMSO, 2s. 6d.). The programme is extraordinarily vague about cost ("all this will cost a great deal of money") and about time (it will "take some time"), and about the responsibility for the architecture (which is not mentioned). Until the programme is complete overcrowding is to be relieved by placing more prisoners in open prisons which, it says, are "extremely economical to acquire and adapt."

The programme is divided into two parts, "Present Programme" (no dates are given, but it is understood that this programme should be completed by about 1962), and "Future Programme" for which no dates are given, and none have in fact been adopted.

**Present programme**

Two security prisons for 300 men (one completed); one psychiatric prison hospital; one remand and observation centre; three secure borstals each for up to 200 boys; one secure borstal for 96 girls; four open borstals for boys; one borstal reception centre for 350 boys; six detention centres for boys (four completed); 1,000 new houses and modernization of 625 houses.

**Future programme**

Security prisons sufficient to accommodate at least 1,800 men serving long sentences.

*Thirty dwellings are to be built on a 1.7 acre site at Silverdale, Lewisham. They have been designed by the architect to the LCC, Hubert Bennett. The accommodation consists of 20 five-room houses, 4 four-room houses, 2 three-room maisonettes (in the four-storey block) and 4 two-room flats. An interesting attempt has been made with single pitch roofs to provide a more varied silhouette, though when accompanied by staggering the houses on plan, the effect may become unduly restless.*

A security prison for dangerous prisoners serving long sentences. Accommodation for women in place of Holloway. Remand and observation centres sufficient to accommodate all untried prisoners and such convicted prisoners as require observation before being classified. Six detention centres. Such additional borstals, open and closed, as the needs disclose. A programme of reconstruction for the local prisons. Reconstruction of Dartmoor prison. 2,000 new houses.

## RIBA

*Jacobsen Exhibition*

An exhibition of the work of Arne Jacobsen, which will be opened by the Danish Ambassador, is to be presented at the RIBA from February 26 to March 25 (Mondays to Fridays, 10 a.m.—7 p.m.; Saturdays, 10 a.m.—5 p.m.).

Professor Jacobson has been working on the preparation of the exhibition since last Spring and has had photographs taken especially for the exhibition. These together with plans and models will illustrate his architectural work since 1930, chiefly in the fields of housing, schools, industry and buildings for public use.

*Town Planning Award*

The RIBA Award for Distinction in Town Planning has been conferred on Noel Tweddell and Professor John Fassler (South Africa).

## DIARY

*The Illuminating Engineering Society.* Trotter-Paterson Memorial Lecture, by Professor Sir Solly Zuckerman at the Royal Institution, Albemarle Street, W.1. 6 p.m.

FEBRUARY 16

*Warsaw Today.* Talk by Professor B. Szmidt at the AA, 34, Bedford Square, W.C.1. 6.15 p.m.

FEBRUARY 16

*An Architect Looks at America.* Talk by N. Keith Scott at the RIBA, 66, Portland Place, W.1. 6 p.m.

FEBRUARY 17

*Le Corbusier: Oeuvres Supprimées.* An illustrated lecture by Dr. Reyner Banham at the ICA, 17/18, Dover Street, W.1. 8.15 p.m.

FEBRUARY 17

*Modular Society.* A paper given by Professor Sir William Holford and Donald Fraser at the BC, 26, Store Street, W.C.1. 6 p.m.

FEBRUARY 18

*Le Corbusier.* Lectures by Peter Smithson and Erno Goldfinger. At the BC, 26, Store Street, W.C.1. 5 p.m. and 6 p.m.

FEBRUARY 19

*Symposium on Laboratories (No. 2).* At the RIBA, 66, Portland Place, W.1.

FEBRUARY 19 &amp; 20

*Hampstead Civic Centre.* Basil Spence at Hampstead Town Hall. New Hampstead Society. 8.30 p.m.

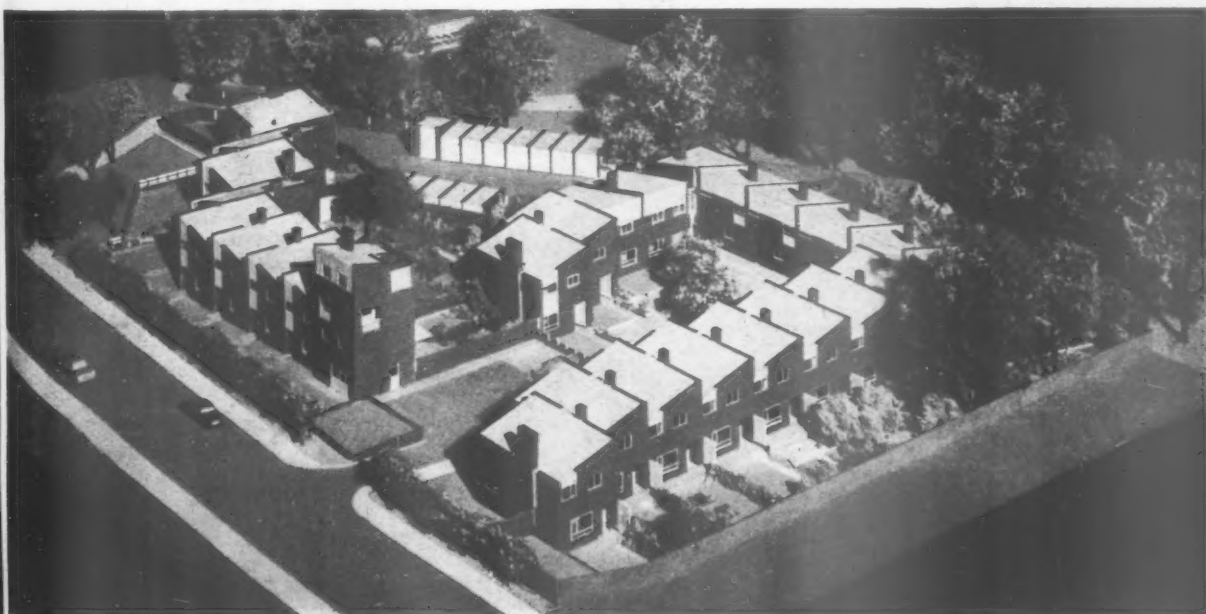
FEBRUARY 20

*Planning South.* An exhibition of architecture and planning in South London. At County Hall, North Block Extension. 9 a.m. to 5 p.m.

UNTIL FEBRUARY 21

*Le Corbusier Exhibition.* At the BC, 26, Store Street, W.C.1 Monday to Friday, 9.30 a.m.—5 p.m. (Thursday till 7 p.m.). Saturday, 9.30 a.m.—1 p.m. Sunday, 2—6 p.m.

UNTIL MARCH 6



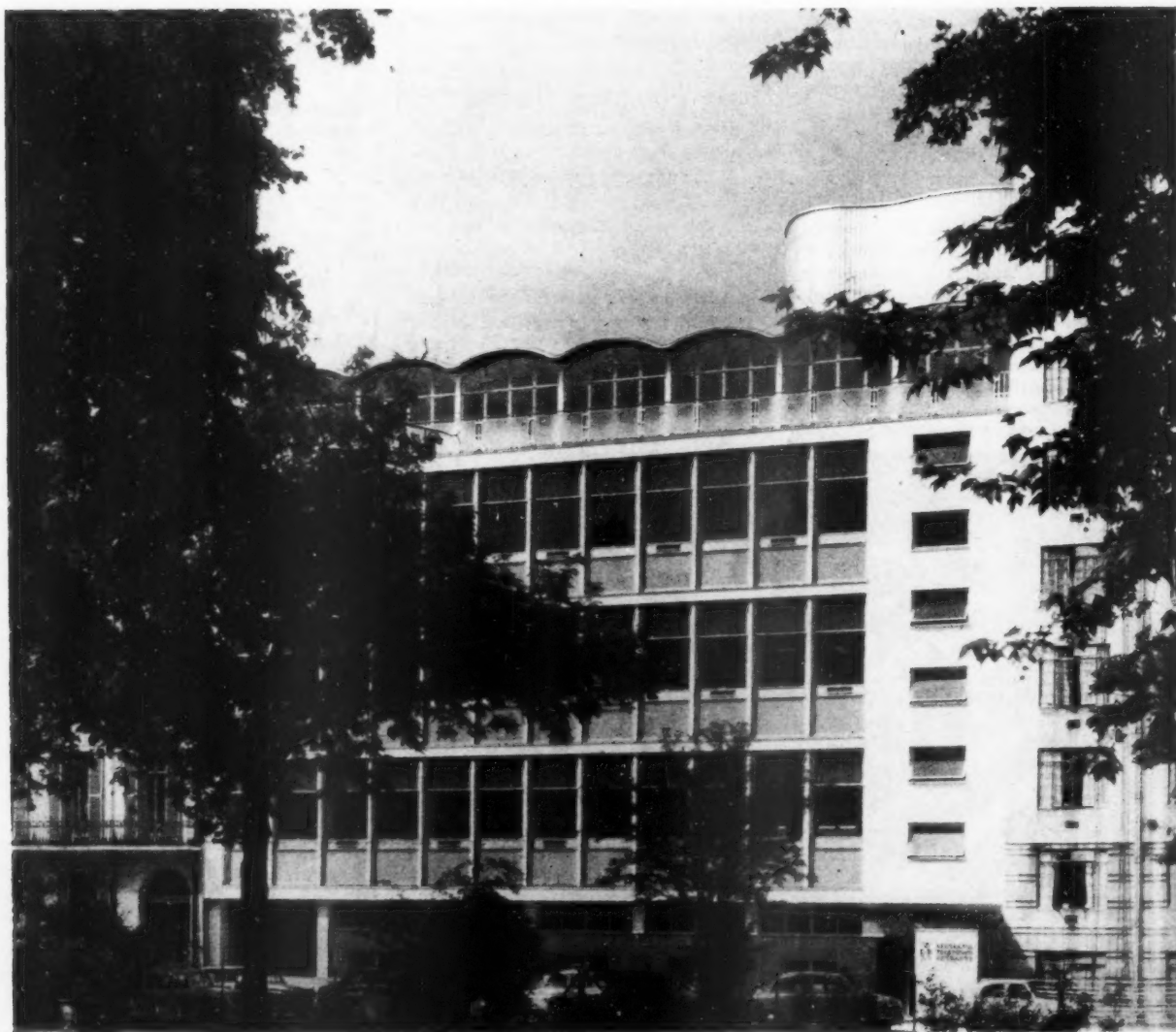


## TWO NEW TELEPHONE EXCHANGES IN LONDON

Two of the largest new telephone exchanges designed for London since the war are the Belgravia Exchange in Chesham Place, shown below, just completed and now being equipped, and Fleet Building, Farringdon Street, of which a perspective sketch is shown alongside, which will be finished in 1961. Both are the responsibility of the Ministry of Works, Belgravia being designed by G. R. Yeats, architect in charge, E. H. Lockton; and Fleet Building by W. S. Frost. The Belgravia exchange has been designed to allow for estimated increased demand for additional services for the next 20 years. It is a five-storey block, to line up with adjoining Victorian houses, set back 6 ft. at front and rear at 4th floor level, to comply with daylight angles. The front elevation is faced with Portland stone and, at ground level, with dark blue-grey faience tiles, and blue laminated glass panels below the windowsills. A reinforced-concrete wave-form roof overhangs the top storey by 18 in. at front and rear, and behind this a circular reinforced-concrete boiler flue, painted bright yellow,



rises on the right to the height of the block of modern flats next door. The Farringdon Street building, on a sloping site, will rise to 165 ft. and 14 storeys, at its highest point. The external frame will be faced in Portland and Derbydene natural stone, and window units will be glazed from floor to floor.





*In his article below, J. M. Richards criticizes the way in which many architectural practices are named, and calls on the RIBA to take the initiative in changing it. The JOURNAL supports his views and would be interested to have the opinions of readers. It is a question that goes deeper than mere nomenclature because it has a bearing, as J. M. Richards points out, on the relationship between architects and their clients.*

## RECENT WORK BY DEAD ARCHITECTS

by J. M. Richards

I would like to recommend to the Practice Committee of the RIBA that they look into the question of the names under which architects run their practices, and I hope that as a result of doing so they will insist that in future architects use their own names and no others. This would represent a complete break with a custom that has grown up in the profession—the custom of architectural firms continuing to use the names of partners who are dead or retired—but I am convinced that it is time the tradition was broken.

It is not only a good principle that a man should sign his own work—or at any rate work that he is personally responsible for—but the custom of disguising himself as a dead architect, even though it is not intended to mislead, does in fact seriously mislead clients. It is quite natural that, in choosing an architect, a client—whether he be an individual or a board of directors or the buildings committee of some institution like a university—should be influenced by the reputation of any firm he is considering. Many clients in fact, having no other criteria to guide them, are predisposed in favour of a known name and an established reputation. Is it fair to the client that this name should be used (and, by implication, the reputation claimed) by firms composed of quite different individuals than those whose work earned the reputation? A client who engages a firm with a famous name should be able to count on getting a design by the hand that made the name famous.

There is a large number of firms of architects in Britain at the moment—including some of the busiest—who practise under the names of well-known architects who themselves no longer play any part in the firm; but the client isn't to know this. Because of the name he expects architecture of a certain quality, and too often he gets architecture of a far lower quality.

When partners die or retire, their practices, as things are at present, are passed on to others for all sorts of reasons of which design qualifications are not the most important. The practice may be purchased by another architect, inherited by a junior partner, or carried on by someone who was no more than a chief draughtsman under the original partners. There are arguments for keeping offices going, and for keeping up contacts with clients who have employed a particular firm of

architects in the past, but this should be done under whatever new names are responsible. Doing it under the disguise of the original names is, I am convinced, causing harm to the reputation of the profession as well as causing important buildings to be entrusted to second-rate architects.

It may be argued that the same custom is followed without harm in other professions—for example by lawyers; legal firms are carried on under the same name for generation after generation long after any individual bearing that name has ceased to be connected with them. But the practice of law is not a creative activity. Lawyers make no claim to be artists. Architects do, and have, therefore, an obligation to take personal responsibility for their work. No painter or sculptor who takes over a dead artist's studio and sells work to the same patrons or galleries would think of signing that work with the dead artist's name. Before the National Health Service it was common form for doctors to start their careers in a particular locality by buying the practice of a retiring doctor, but having done so they carried on the practice in their own name, not his.

The RIBA should insist on architects doing the same. Let them, if they wish, state on their letter-heading that they are the successors to such-and-such a firm of architects, but let the name of the firm be that of the men who run it. The present practice is not only misleading and (though not intentionally dishonest) it is also in some instances ludicrous, which is not a good thing for the dignity of the profession. Several of the leading knighted architects of a couple of generations back are—according to current lists of architectural firms—still in practice. Everyone knows them to be dead, and what layman—who is told he ought to think of architects as creative designers—can understand how they can go on designing buildings or why anyone should pretend that they do?

A whole issue of one of the architectural journals could be filled with illustrations of recent work by dead architects. There is already enough dead work being done by recent architects to make it rather important for the profession that the names of architects no longer able, or for some reason unwilling, to protest, are not used to make even more dead work appear respectable.

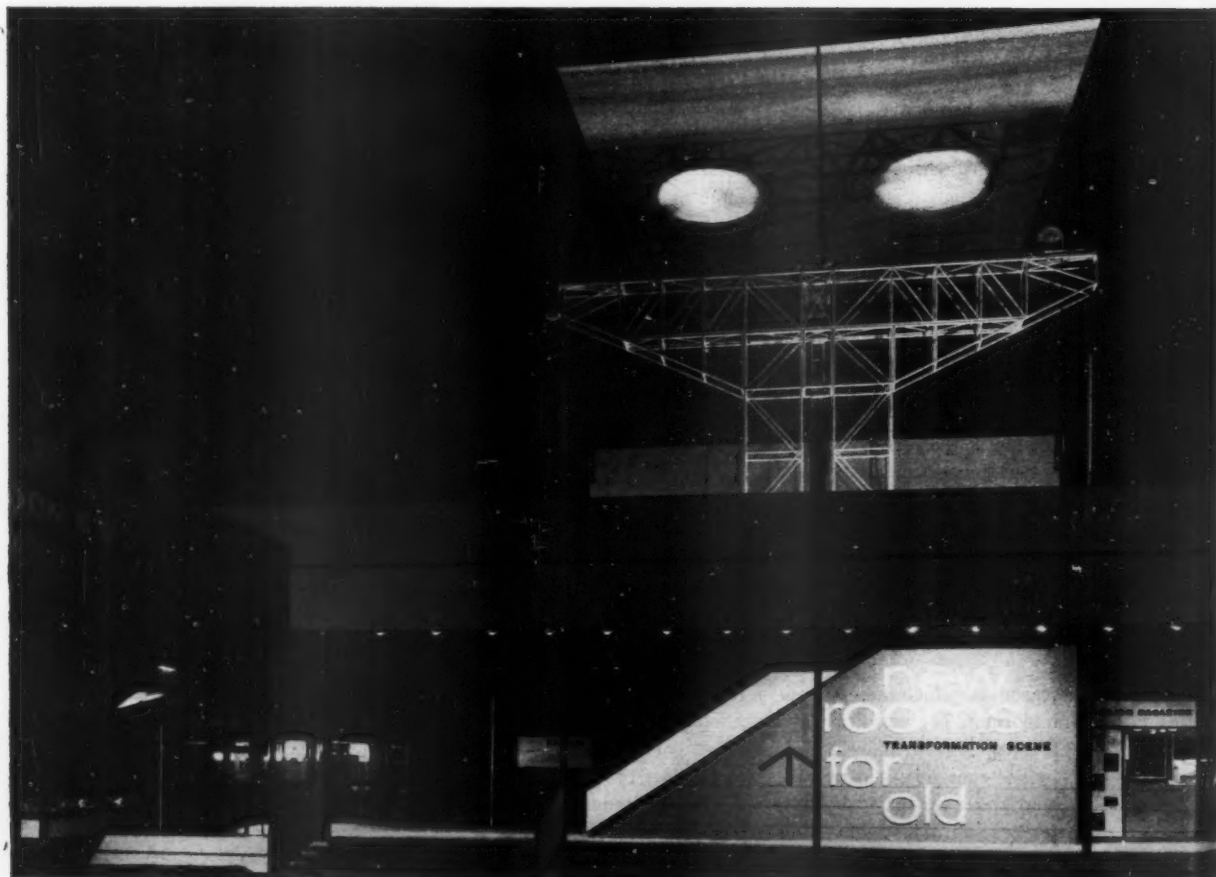
## From Emergence to Decadence in Three Years

# Furniture '59

*This year's Furniture Exhibition at Earls Court  
reviewed by John and Sylvia Reid*

*Below: the ground floor of this year's central feature is a public lounge with flower beds of snow white cyclamen, surrounding the great Transformation Scene which is viewed from first floor galleries. (Architect for the Public Exhibition and Central Feature: Misha Black. Interior designers of "New Rooms for Old" in the Transformation Scene: Jo Patrick and Elizabeth Henderson.)*

*The only interesting new exhibit, and making its first public appearance in this country, is Charles Eames' famous easy chair (right) made by Hille under licence from Herman Miller. Eames wanted his chair to have the comfortable "sat-in" look of the old leather-covered chairs of the past and he has achieved this with leather-covered soft upholstery deeply buttoned and cradled in pre-formed laminated wood veneered in rosewood or walnut. It is mounted on a cast steel and aluminium base, on which it swivels. Its comfort is rather costly—about £150.*



In the annals of the Furniture Show, 1959, will not be regarded as a vintage year, and to all who are concerned with the advancement of good modern design it must come as a great disappointment.

The Furniture Show first opened its doors to the general public in 1957. This was a big step forward in itself, but to those of us who had seen it in its more secret years it was a double step because then for the first time ever modern design established a lead and the way forward was wide open.

Last year the furniture industry lived up to the promise of 1957 and that show was a triumph of consolidation, with a great deal of furniture of clean, simple, modern form. Now there has been a relapse, and this year there is literally no good new furniture to report! From emergence to decadence in three years must surely be a record in the history of design.

As an example of what we mean let us trace the development of a wooden leg. Some years ago leading modern designers began to put their furniture on legs in order to achieve an appearance of lightness and give an effect of spaciousness so necessary for today's small rooms. Most of these short legs were vertical and of a simple tapered form—the result pleasing. When "contemporary" design was developing the legs became played to increase their stability, for a vertical leg will wobble unless the piece is very well made. So to be "contemporary" splayed legs were essential, and were much in evidence in 1957. By 1958 they had nearly all acquired brass ferrules and some had developed an underframe between them and the object

they supported. This year they are doing even better. The underframe has become a highly detailed piece of work with complex junctions for all its members. The leg which now forms part of all this still has its brass ferrule, but what a ferrule, it has developed its own independent brass feet!

Whilst the simple leg has become highly neurotic and complex the other parts have been similarly developed and many basically good design features have been tortured and distorted. From this new vocabulary of clichés 1959's furniture is created by jig-saw puzzle enthusiasts so that there is no simple, clean, wholesome form. Stripped of the discipline of symmetry, required by the "traditional" approach to design, panels of colour, texture and even marquetry are applied with the skill of naval camouflage—with results that, for the most part, are just as successful in breaking up the visual form of the piece of furniture they are supposed to enhance. Overlying all of this is a kind of plushiness—a Hollywood-epic sickliness, and lack of sincerity of design that is most unpleasing.

This year's central feature by Misha Black and Design Research Unit is completely different from the previous two, which were vertical features. At first sight less interesting, it turns out to be the best thing in the whole show. The "New Rooms for Old" theme can never have been done so effectively before. All architects are familiar with the dramatic changes that can be made to existing rooms by new colour schemes, with new furniture, lighting and a little remodelling, but these transformations all take time and so the impact of the change is lost by a gradual transition from one stage to another as the work is carried out. Here, with two outside lifts, two sets of rooms—in one case kitchen, dining and living rooms and in the other a spare room and two bedrooms—appear firstly as they exist throughout the country with dull furniture and the national gravy-and-boiled-cabbage colour schemes and then seconds later the identical volumes appear in place of the first. Remodelled slightly but realistically, they have attractive furniture and light, airy colour schemes. The difference is astonishing, and is enhanced by the rapidity of the changeover. The gasp of astonishment from the spectators shows that the lesson hits home decisively. The tape-recorder commentary that accompanies this explains in reasonably realistic terms how you-too-can-do-this-transformation-scene in your own homes if you work to a pre-determined three-year-plan. What it doesn't say is that it is a whole lot easier to do it if your name happens to be Jo Patrick or Elizabeth Henderson, who are the designers of the new rooms. Full marks to all concerned in the design of this feature for the realistic and telling lessons embodied in these rooms—neither "before" or "after" scenes are overdrawn or exaggerated, and this is one of the rare instances where a huge gimmick turns out to be more exciting on inspection and not the more usual anti-climax.

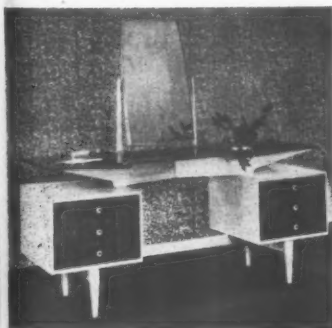
Let us hope that the 1960 Exhibition will show a return to sanity, with the leading manufacturers leading once more, and with good, simple, honest furniture.

As for this year . . . well what can you expect from a nation that can let the bulldog go into a decline and makes its popular pet the poodle!

#### bedroom furniture

*Left, this dressing table is a typical example of 1959 "Contemporary." Over contrasted veneers and irritatingly fussy detailing shows how modern design is being misunderstood.*

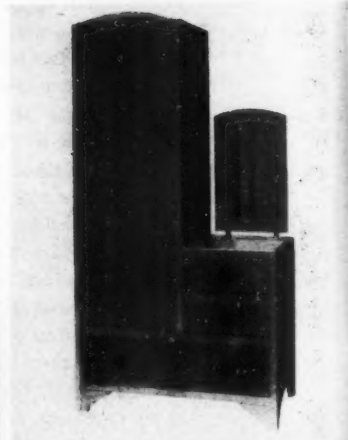
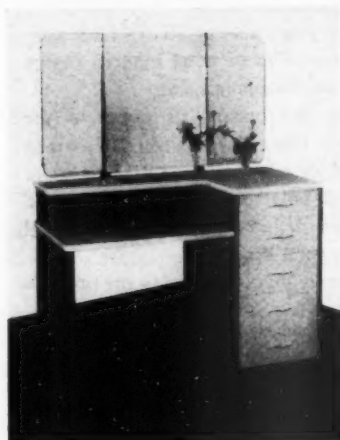
*Below, this dressing table is another example of over elaboration. Note the fussy underframes and leg details and the complication caused by the fly-over shelf and mirrors. The stool also shows the trend to needless complications.*



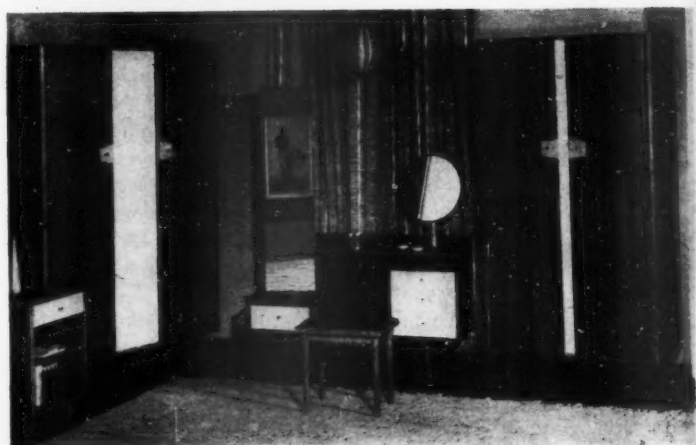
## Furniture '59 continued

### bedroom furniture

Right and far right, two examples of what happens when the "traditionally" minded stray into the path of asymmetry.



Right and below right, these two typical bedroom suites, by different manufacturers, show a conscientious application of all the "OK" gimmicks for 1959. Fussy brass feet and ferrules, little brass knobs, panels of colour applied with gay abandon, asymmetry forced in wherever possible and often where not possible, and standard veneers. The result—a restlessness of line and distraction of form that would delight the eye of a naval camouflage expert.



### the bed

Bottom right, "The Bed," Slumberland's £2,500 creation, is one of the major attractions at this year's BFM and shows just how little you can get for your money if you try really hard enough. Like most other things in the exhibition it is a collection of expensive non-integrated bits and pieces. Designed to herald the "era of the bedroom," The Bed has twin mattresses and twin push-button control units by which it is not only possible for the beds to be raised and lowered at either end, but also, among other things, to switch the TV set on and off, open the bedroom curtains, warm the bed and answer the telephone. It has twin coverlets of rare "champagne" mink and French velvet and has a frame and panels of 200-year-old English ash and exotic Rio Rosewood. The firm concerned has actually sold some!

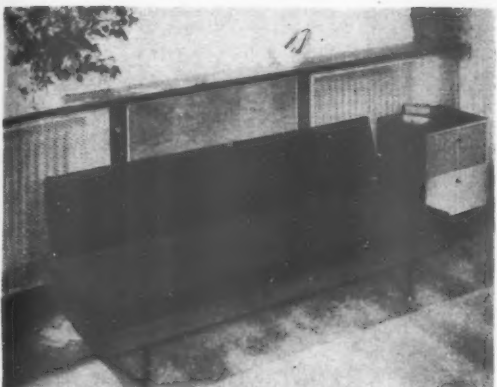






#### the bed

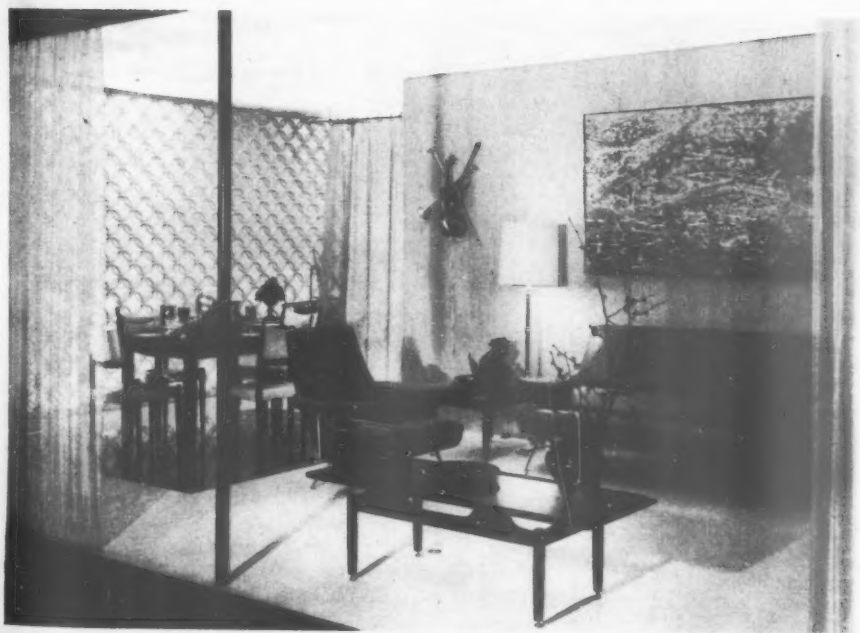
Further down the price scale the "contemporary trend" (far left) is still in the direction of a Hollywood epic. If you find the present lines too severe there is always this of course (left).



#### seating

There are several worthwhile additions to the number of modern settee cum single bed type of unit of which this is a good one (above left). Unfortunately, however, the same manufacturer shows that he is not out of step with the rest of the industry, by producing this chair (above centre) with its heavy looking metalwork and arm units reminiscent of a carpenter's mitre block. Above right, how to get the best of both worlds.

Left, new additions to the G-Plan range of furniture include a number of competently designed chairs and settee units with an Italian accent. If a little self-conscious these are a welcome relief from the rather plushy creations to be seen on other stands. Much of this year's upholstered furniture is similar to this example, bottom left, lacking the essential simplicity of good modern design and yet not "traditional."



#### dining

Left, there is little dining room furniture of interest. Most of it consists of various assemblies of clichés and gimmicks lacking in grace, proportion or simplicity.

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*Illustrated*

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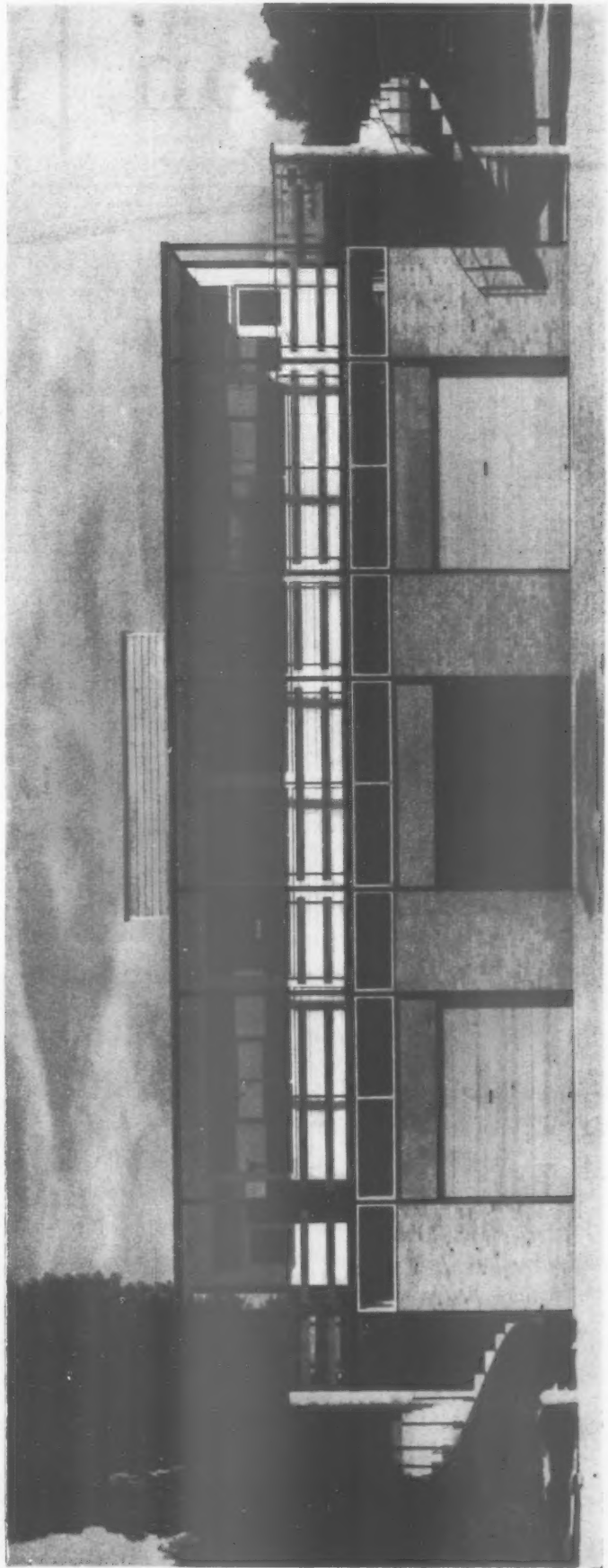
H 127

## BOAT HOUSE ON THE RIVER

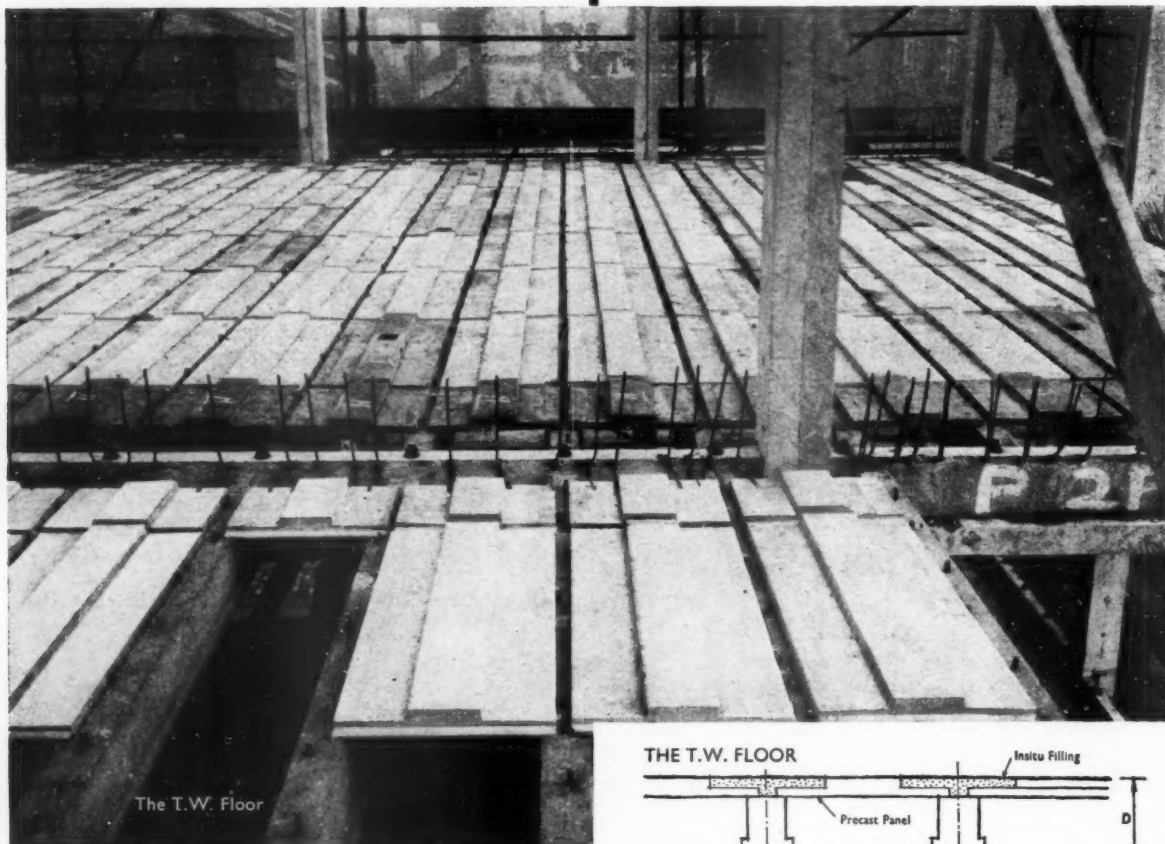


## CAM AT CAMBRIDGE

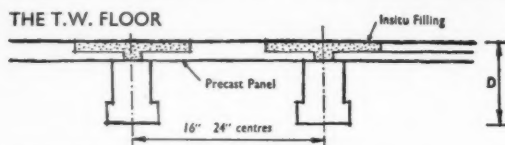
David Roberts has designed this boathouse for Corpus Christi and Sidney Sussex Colleges, on the bank of the River Cam, Cambridge. It consists of a two-storey section at the front and a single-storey section at the rear. The ground floor, 78 ft.  $\times$  61 ft., contains the boathouse, workshop and lavatories, and the first floor, 18 ft.  $\times$  61 ft., contains changing rooms, showers and drying rooms. Foundations are r.c. bored piles and ground beams. The building is steel framed with steel roof trusses covered with corrugated asbestos cement sheeting to the single-storey section. The roof of the two-storey section is of timber joists and t. and g. boarding covered with three-layer felt roofing. The single-storey section is clad with corrugated asbestos cement sheeting, with softwood windows extending the full length at eaves level. The two-storey section has on the ground floor a half-brick wall of stock facings finished fair-faced on both sides and on the first floor a hollow wall of half-brick outer skin and 3-in. lightweight blocks inner skin. Partitions are 4-in. lightweight blocks fair-faced. The floor of the single-storey section is tarmac with gravel surrounds on hardcore. The ground floor of the two-storey section is concrete with grano finish on hardcore; on the first floor the changing room floors are 1-in. t. and g. boarding and the wash rooms and balcony are asphalt on r.c. slab. The quantity surveyors were Davis, Belfield and Everest and the general contractors were W. Sindalls Ltd.



# Truscon | prestressed floors



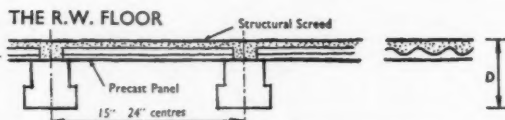
The T.W. Floor



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80 lb./sq. ft. Superload					
Depth:	6"	7½"	9"	10½"	12"
Span:	15' 0"	19' 0"	24' 0"	27' 0"	32' 0"



80 lb./sq. ft. Superload					
Depth:	5"	7"	8"	10"	13"
Span:	14' 0"	20' 0"	24' 0"	30' 0"	35' 0"



## THE INDUSTRY

*From the industry this week Brian Grant describes a self-aligning level, a new plastic floor covering and wash fountains for factories.*

**Simplified levelling**

For accurate levelling work there has always been a good deal of rather tiresome fiddling with spirit levels and a further drill of reversing the telescope for a final check. Not that all this is always necessary on the smaller site with the simpler kind of level, but for setting outs of the second order of accuracy a new type of self-aligning level is now being marketed by Hilger & Watts (98, St. Pancras Way, Camden Town, London, N.W.1) and by Cooke, Troughton & Simms (York). The patents for the self-aligning device are held by Hilger & Watts, and the telescopes in the two firms' levels are interchangeable. All that is necessary to set up the instrument is to adjust a bubble so that it is centralized in a circular glass, after which a pair of self-aligning prisms take care of any tilt in the telescope. Accuracy of the order of 0.02 ft. in a mile is an average achievement, but owing to the speed with which the tripod can be set up, the work can be done twice as fast.

**Plastic flooring**

A new form of floor covering patented in Switzerland and known as Plastik is now being marketed in this country by Vigers Bros. It is trowelled on to screeded concrete in two layers with a total thickness of about  $\frac{1}{4}$  in., and can be taken up over a pre-formed cove, and up the wall if necessary to form a dado. It is made in a range of clear transparent colours, and is claimed to be extremely hard wearing and capable of standing up to heavy trucking, while at the same time it is resistant to grease and most chemicals. Apart from its use in factories it is also suitable for hospitals, canteens, and bathrooms or kitchens. The price is slightly

higher than asphalt tiles, but less than the more expensive types of plastic floor, and the manufacturers are confident enough to give a three year guarantee. (Vigers Bros. Ltd., Broadway Chambers, Ludgate Broadway, London, E.C.4.)

**Washing in factories**

The illustration on the right shows a range of Ocriet wash fountains, which are now being sold in this country by Sankey. The material used is an artificial stone product, with a light buff-like appearance, but during manufacture it is subjected to vacuum and pressure treatment with a fluorine-containing gas, which forms a silicon fluoride deposit to a considerable depth so that it is resistant to acids and oils, while chipping does not effect the resistance of the surface. These fountains are made in four models and prices start at £56 10s. 0d. (J. H. Sankey & Son Ltd., Essex Works, Ripple Road, Barking, Essex.)



*Above, a row of Ocriet wash fountains. Below, the self-aligning level marketed by Hilger and Watts and Cooke, Troughton & Simms.*



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## technical section

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.*

## 23.231 heating and ventilation

## ELECTRIC FLOOR HEATING

*Electric Floor Heating Practice.* A series of five articles published in the *Electrical Review* on December 12, 19 and 23, 1958, and January 2 and 9, 1959, by R. D. Jackson, Technical Director of Tyrad Electric Ltd.

These articles cover, very fully, the information required by a sub-contractor before it is possible to design and instal an electric underfloor heating installation. It is therefore of interest to architects in that it gives the electrical engineer's viewpoint of this type of heating installation; covering the whole field from the basic calculations of the amount of heat required, to a consideration of different control systems and a sample installation complete with a suggested standard specification.

The first article, dealing with the environmental characteristics of underfloor heating and the method of calculating the heat losses, sums up the author's attitude to architects in the following paragraph: "The adoption of electric floor heating as a means of space heating is, in the majority of cases, decided solely on a basis of comparative capital and running costs, and any differences in temperature distribution or in aesthetic values are rarely considered. This is because the architect and engineer responsible for the erection of a new building are primarily concerned with the provision of the various engineering services for the minimum expenditure commensurate with the satisfactory performance of their necessary duty." The author assumes from the start that this form of heating is already acceptable on economic grounds, whereas it is generally agreed that although electric heating may be cheaper in first cost than other systems, running costs will be greater unless the system is designed with reference to the pattern of occupancy and thermal characteristics of the building; and unless the saving on the installation is spent on achieving a higher degree of thermal insulation. Mention is even made that the heat losses through walls may be up to 50 per cent. more with floor heating, due to the high percentage of heat emitted

by radiation warming up the internal surface of the external walls.

The value of insulating the heated slab is doubted and details of ground floor construction (used to illustrate the calculation of the heat lost to the ground and from the slab edge) show no thermal insulation whatsoever. The problem of the greater heat loss through windows is mentioned and it is suggested that loadings should be increased in this position; however this also results in even greater edge losses. The actual calculation of the relative heat emission from the upper and lower surfaces of slabs in relation to their construction and finishes is well and fully explained, as is also the effect of internal air temperature on total heat emission. Although a method of calculating the mean radiant temperature of an enclosure is given, the effect of the heated floor raising the M.R.T. and so achieving thermal comfort with a lower air temperature than with other heating systems is not mentioned.

In the fourth article a formula is given, based on the Degree-day, so that annual consumption of electricity can be calculated in relation to heating load, for varying Tariff Rates. Use of this formula with a few examples of traditional values of thermal insulation and present Tariff Rates, even with off-peak Tariff reductions, will show that running costs will often be greater than with other forms of heating, although there is no doubt that the saving in labour, maintenance and space have all to be taken into account where large buildings are concerned, especially where land values are high. The author explains that the usual method of calculating heat requirements and running costs has been used. Unfortunately this does not take into account certain factors which appear to affect floor heating installations alone, such as edge losses and heat stored in parts of the structure other than in floors. "Unexpectedly high consumptions of a persistent nature should not cause concern as long as the requisite comfort levels are maintained. If a building requires more electricity or fuel of any kind than anticipated, it is because the higher rate is necessary to maintain comfort, and fuel costs will be above estimate whatever type of heating system is employed." This is not so. Since thermal comfort conditions can be achieved by a wide range of relative values of Air and Mean Radiant Temperatures, a building that has poor thermal insulation, but a slow rate of ventilation would be more economically heated by convection, whereas a building with a high degree of thermal insulation and a high rate of ventilation would be more economically heated by radiation.

There is an interesting paragraph on Strata Heating; this is floor heating in spaces of great volume, where the heat output can never be enough to raise the air temperature to a comfortable level, but which relies on a degree of thermal comfort being achieved by keeping the occupants' feet warm and an area of radiant heat in close

proximity to the occupants. The problem of the building where the floor area is insufficient to emit the total amount of heat required is considered; it is suggested that extra heat should be supplied by free-standing heat storage units. This, however, does not overcome the objection (which applies equally to any form of storage heater) that the heat stored may be dissipated (e.g. by too much ventilation) before the end of the occupation period.

Problems of thermostatic control where direct forms of heating are used with heat storage floors are mentioned, but not fully solved.

Although it is suggested that electric floor warming is best suited for buildings occupied the whole of the working day throughout the heating season, the thermal characteristics of these buildings are not mentioned. This series of articles is therefore of not much help to the architect, in that it assumes that electricity is already an economic source of heat for buildings and that the building itself would be of normal design and construction; whereas the architect has to decide at the very beginning of a project if electricity is to be used, as this affects the whole aspect of siting, planning and the degree of thermal insulation to be aimed at, not to mention also the provision of adequate thermal storage, and the choice of floor and ceiling materials.

INFORMATION CENTRE  
INDEX FOR 1958

*An alphabetical index covering Information Centre items and special articles published in the Technical Section during the twelve months ended December 31, 1958, is being prepared. Readers who wish to have a copy—it is free of charge—should complete the form below and post it to the Technical Editor, THE ARCHITECTS' JOURNAL, not later than March 9, 1959. This form will not be acknowledged.*

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AJ, 12.2.59

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## technical section

## 7 PRACTICE

architectural management: a method study 5  
talent and responsibility

W. Sinclair Gauldie and Arthur F. S. Wright finish their series of articles\* by considering the architects themselves. Dividing architects into two basic kinds "cerebrotonic" and "somatonic," they define the duties of each and the drill they must follow when working together.

Any systematisation of the work of the office inevitably leads us to re-examine the personnel-structure of the practice, since a system is, in the end, only as good as the people who operate it.

In the first place, we ought to state certain basic principles which we ourselves hold, although we do not for a moment claim that they have universal application.

1. Contemporary building calls for teamwork in the office, involving the integration of diverse skills from the very start of the project. This somewhat diminishes the stature of the "Master-designer," while it should enlarge that of the other members of the team: their individual contributions are essential to the success of the whole conception.

2. We expect our assistants to have a sound background of training in "pure" design. As things stand today, this is equivalent to saying that they must normally be fully-qualified, school-trained men. Apart altogether from the design approach, it is good for the client to know that, although a principal may not be at his immediate disposal, he always has access to an assistant who is a registered architect in his own right.

3. We prefer to employ a small trustworthy staff, working efficiently. Too large a staff, especially if they are inexperienced or transient, can soon reduce the principals to being mere overseers of other men's labour, which is not much fun.

The value of a qualified architect lies in his training as an *architect*. It is frustrating to him, and unprofitable to us, to take up much of his time with the duties of the old-style "draughtsman." Much of our systematisation has been aimed at freeing him from such trammels as the tracing of commonplace but necessary details, and at providing drills for easy routine work. A further step is to eliminate the inefficiency associated with "square pegs in round holes" by recognising the special aptitudes of each individual in the office, and, as far as is practicable, arranging his

work accordingly. All architects must be capable of performing all the main functions, but, in the main, a happy and successful office will use people in the capacities for which they are best fitted.

No formal machinery exists for distinguishing, during the training period, many of the skills which are useful in an architectural team, and it is certainly better that architectural education should aim at producing the "whole man" rather than the phoney specialist. In many cases, special aptitudes require time to develop and be recognised, and the wise principal will be continually looking for them and fostering them, often unknown to the man himself.

It is possible at an early stage, however, to make a distinction between the two kinds of temperament known to typologists as *cerebrotonic* and *somatonic*\*: we shall call them C and S, for short.

According to Aristotle, human activity is of two kinds, the Speculative and the Practical. This is still true, and C is recognisable by his preference for the Speculative. He is likely to have a flair for visualising problems and their solutions during the early stages of the design, and he prefers to face problems with deliberation, on the drawing-board rather than on the job. Indeed, he commonly lacks the empirical approach to the handling of people and situations which is necessary if the architect is to impose his will on the site: seeking the perfect answer, he may only too readily fall a victim to indecision.

S is equally recognisable by his attachment to the Practical. He is basically a man with the urge to *make things*, and he is most "at home" when confronted with concrete problems requiring positive and empirical action. He is capable of rapid improvisation and quick decision, and therefore of exercising indisputable leadership on the site.

All of us, of course, have both C and S elements in our make-up, but only the greatest architects can play both these parts successfully and with enjoyment all the time. The well-balanced team, however, can bring both aptitudes into play with considerable effect.

It is time to recognise that the supervision and administration of large building contracts is an increasingly specialised job, which is not necessarily best handled by the *designer*. C will produce the best design solution and details more rapidly than S, but S will be much more effectual in the vital business of getting it built: and their effectiveness in their respective fields will increase proportionately to their freedom to concentrate on them.

This is subject to the following important conditions: (a) This degree of specialisation is seldom possible where (as in the case of the small private house) close personal relationship between designer and client is established before building starts. This is, in fact, an advantage, since it keeps C from acquiring an "ivory tower" mentality, while equally preventing S from losing his powers of design.

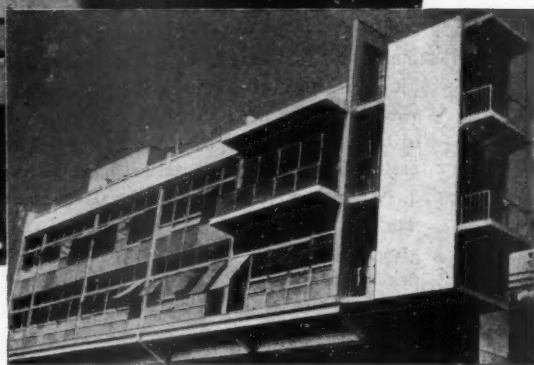
(b) S must at all times be treated in the design-stage

\* Previous articles appeared in the issues of January 8, 22 and 29, and February 5, 1959. Next week we publish, as an Appendix, five typical drawings prepared in accordance with the system discussed in articles 2 and 3

\*cf. Sheldon & Stevens *The Varieties of Temperament: A Psychology of Constitutional Differences*. (1942) Sheldon's third type, the *viscerotonic* or belly-centered, is not common in our profession.



## CASE HISTORIES



### New look for old Gibraltar

In vivid contrast to its traditionally Spanish surroundings  
the splendid new King George VI Memorial Hospital,  
with a Ruberdal Roof, now towers majestically  
above Gibraltar's ancient streets.

*Gibraltar's new King George VI Memorial Hospital was  
designed by Architects Covell & Matthews of London who specified  
Ruberoid Built-up Roofing surfaced with Ruberdal Tiles.*

# RUBEROID

### technical section

as an independent consultant, whose site experience is a necessary contribution to the evolution of a soundly designed building, so that he is fully aware of the considerations behind the final plans.

(c) S must be provided with full and accurate drawings and documentation—as if he were, in fact, the independent “site engineer” of Continental practice.

(d) C may—and indeed *must*—accompany S on the site often enough to see how his design takes shape in practice: but he must not give instructions, or publicly offer his opinion, unless S asks for it.

Within this main grouping, other specialized skills may come to light—as for instance, a particular scientific or mathematical bent—and they must be recognised and appropriately employed.

In this way, we have the beginning of a grouping of personnel based on aptitude-rating, such semi-specialisation taking place at senior level, where mature appreciation of one's own assets and deficiencies may be expected.

Only in a large practice is it likely that specialisation will be carried to the point where the team will incorporate members fully-occupied with their own specialities, being virtually embodied consultants. For the smaller practice, it is the differentiation of the C-S function that offers the most fruitful ground for specialisation. Many successful practices are based to some extent on C-S partnership, and such a combination can function much more effectively when its operational routines are deliberately based on that differential.

It will be evident that this procedure demands a high degree of teamwork, self-subordination and mutual confidence. Furthermore, the client and contractor must be brought to understand and respect the Siamese-twin relationship of C and S. This presents little difficulty in practice, since it usually strikes the intelligent layman as ordinary common sense.

While there are obvious exceptions (as in the case of the small and personal jobs already mentioned), acceptance of these principles has a marked effect on the conduct of a practice, since every major project is, in the fullest sense, the work of “the firm,” not of an individual, and has brought to bear upon it the total skill available within the office. It is also reflected in the personnel-structure of the practice, which tends to resemble one of those complex models of carbohydrate molecules, rather than the straightforward pyramid which supported the monolithic figure of the traditional Boss.

It is worth noting that this “organic” structure offers greater possibilities of natural expansion under modern conditions, where “know-how” is increasingly regarded as a contribution to partnership no less valuable than capital or contracts.

It need hardly be added that an architect's secretarial staff must be intelligent, versatile, energetic, level-headed and tactful. We have been so fortunate in this respect for so many years that we have no advice to give to those less well-attended.

### Conclusion

The method of working which we have described in these articles has emerged from analysis of our own personal problems. That is why we have called it a “method-study,” although we are well aware that management-consultants use this term to describe a much less amateurish process.

We do not pretend to have discovered any kind of universal panacea for all architectural ills, or indeed to have produced anything more than a personal solution to some of our own difficulties. It is possible that other architects will find these experiences useful, or will be encouraged to apply the same kind of thinking to their own practices. If so, the benefit to the profession as a whole would be considerable.

It is said, from time to time, that it is necessary to “educate the public” to appreciate the value of good architecture (and hence the value of the architect's services) and the RIBA spend a substantial sum on Public Relations for this purpose. In our view, the public will accept the architect's opinion on matters of aesthetics much more readily if they find him reliable and efficient in matters which they can themselves understand. If they find him unreliable in common sense affairs such as time and cost, they are the less likely to respect him as the ultimate authority on vexed questions of “design,” whether of light fittings or townscape.

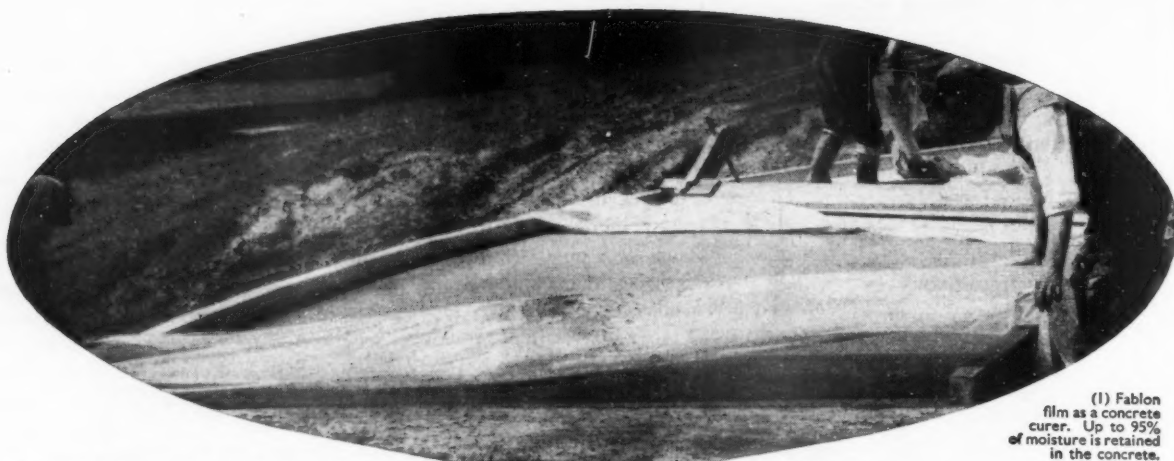
It is also said that we must “educate the client to give the architect more time.” It is perfectly true that buildings cannot be properly designed and efficiently built unless the preparatory work is done thoroughly and in detail. But, before we can convince the client that we need more time, it is necessary to show him that the need does not arise from dilatory or inefficient methods within the architect's own organization.

The system we have described is largely an attempt to rescue ourselves from this latter dilemma. We do, in fact, find that it helps us to give the client a time-estimate which he accepts (because it is based on facts, not on hopes) and, rather more important, we find that we can usually work to this deadline without undue hardship and without rushing out ill-considered solutions.

The drawings and specifications are at least as comprehensive as before, but are produced with less waste of effort and presented in a more useful form.

Site supervision is both easier and more effective, office administration is much easier, and the chances of error and omission are reduced all round.

In fairness to others who may be tempted to follow our example, we ought to make it clear that the process of analysing one's own methods, while simultaneously carrying on a practice, is very hard work. The subsequent process of systematising the practice, without upsetting the job in hand, is even harder. The reward, however, is a kind of efficiency which is understood and appreciated both by clients and contractors, and we hope that it will at least equip us to produce better architecture with fewer ulcers.



(1) Fablon film as a concrete curer. Up to 95% of moisture is retained in the concrete.

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(2) Fablon film in use as temporary glazing. Its transparency allows full transmission of light to the job.



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## structure study

## PREFABRICATED BRICKWORK IN THE UNITED STATES



A development in the field of prefabricated wall panels for building has recently been tried out in the United States. The new unit is called the SCR Building Panel and is a product of the Structural Clay Products Institute. The panels are made of brick, are  $2\frac{1}{2}$  in. thick and 1 ft. wide, and they can be manufactured in lengths of up to 12 ft. The new system was tried out in the construction of a ranch house at Geneva, Illinois. The house had a superficial area of 1,800 sq. ft. and it took five men eight and a half hours to complete the erection of the necessary 130 sq. yds. of walling at a cost of \$2.70 per sq. yd. To lift the 8-ft. panels used in this instance a special hoist incorporating a suction gripping device was used. The panels were fixed at each end with a single bolt to slotted horizontal angle iron which was temporarily supported on wooden struts. As soon as the walls were completed the roof trusses were put in position and the internal joints "power-mortared." The walls were roughened internally to form a key and plastered. The walls are sufficiently rigid to allow the roof structure to be completed before any mortaring of the joints takes place and this can be of value in bad weather building.

The manufacturers claim that, despite their extreme thinness, these walls compare favourably in qualities of strength, economy, weather resistance, and permanence with traditional brick construction. Although, in the trial at Geneva, the building was only on one floor, multi-storey buildings are planned for the near future.

*Left, fixing a panel in position. Below, the suction lifting device is lowered to pick up another panel.*



# Hey Presto!

**TODAY'S**  
open shelves can be  
**TOMORROW'S**  
fitted units



A typical three-bay assembly of trays, bins and shelves. The reverse side incorporates bins, cupboards and a ledge top. Bays may be varied as required, and joined to form a continuous run.

Full details of components and a selection of specimen assemblies are shown in List 1015. Please send for a copy. Mobile Type Shelving also available. Details on request.



Here is a storage system which is so flexible that it can always be completely up-to-date.

From the carefully designed range of components, it is an easy matter to plan and erect an installation which will not only satisfy immediate storage needs but which can also be rapidly adapted to meet new requirements. Large articles or small, many or few, can be segregated as desired, and sections may be enlarged, reduced or subdivided at any time to conform to a changing pattern of purchases, production and consumption.



Components are made from best quality mild steel sheet and rolled steel sections, and are available in a range of standard sizes. Stove enamelled Olive Green or Scarborough Grey.

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Steel Shelving**

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SE/11

building illustrated

School kitchen and dining room at Beckenham and Penge Grammar School

## SCHOOL KITCHEN and DINING ROOM

at BECKENHAM and PENGE GRAMMAR SCHOOL FOR BOYS, BECKENHAM, KENT

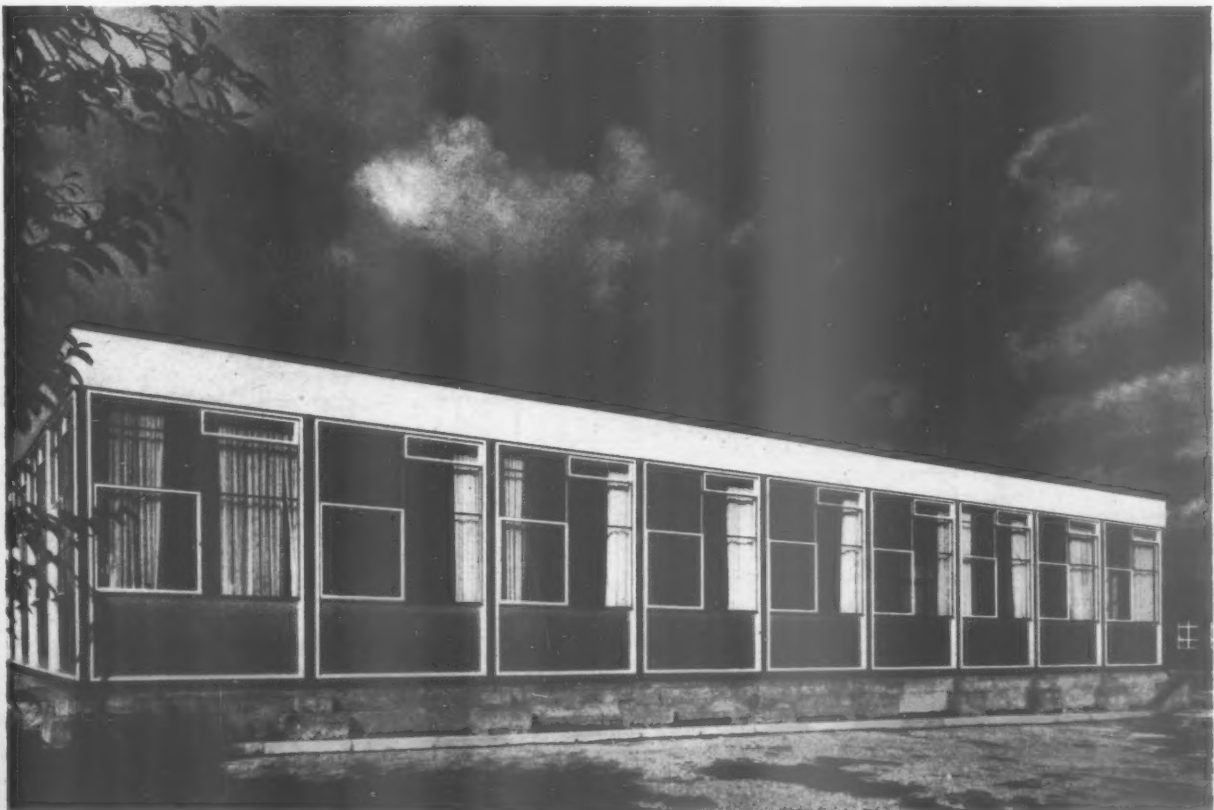
designed by ELIE MAYORCAS in collaboration with E. T. ASHLEY SMITH, county architect

assistant architects L. E. TATUM, D. A. HATCHER, A. GOUGH; quantity surveyors C. JOHN MANN and SON

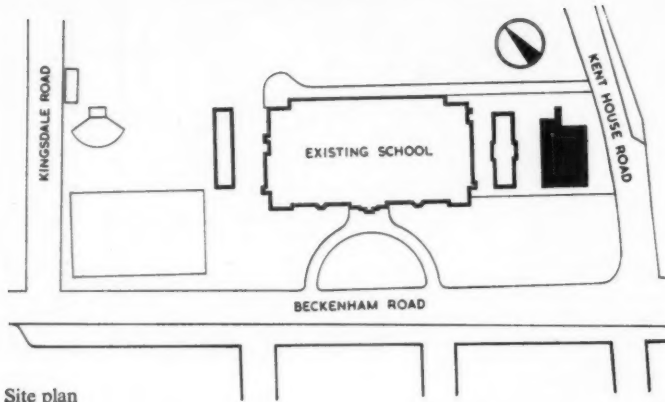
and YEOMAN and EDWARDS; consultants (mechanical and electrical) WINTON THORPE, TUNNADINE & PARTNERS

Since dinner at school became a normal part of most children's life, during World War II, and a permanent part of our education system, under the 1944 Education Act, increasing numbers of school canteen and kitchen blocks, unpretendingly cheap and utilitarian, such as the one illustrated this week, have been going up in the playgrounds of pre-war schools. As no part of the education service has been more rigorously controlled, financially speaking, we believe the cost analysis of one such canteen block will be both interesting and useful.

*The canteen from the south.*

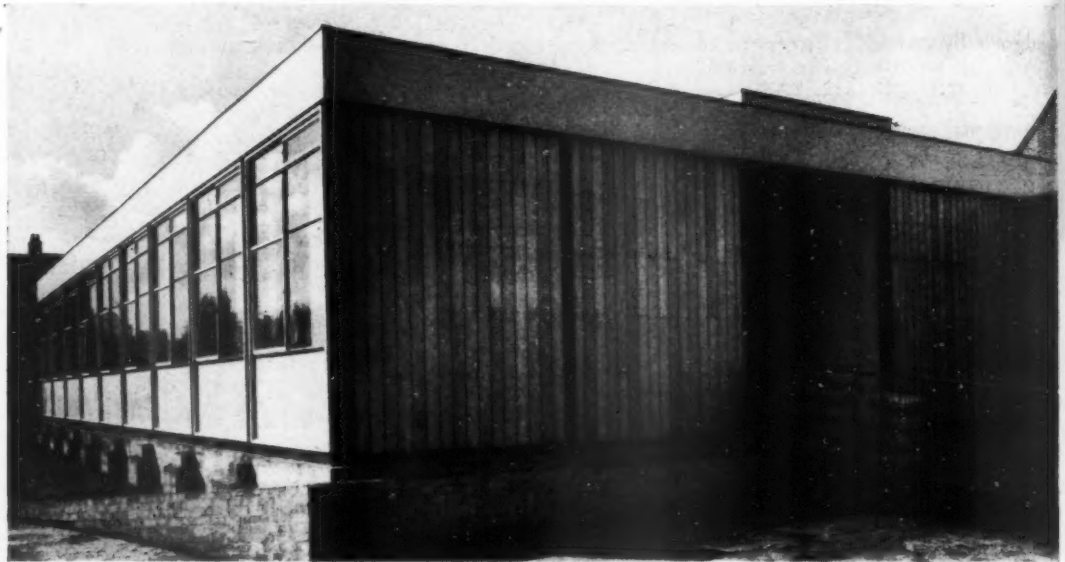


## building illustrated



Site plan

The north-east face of the building, showing glazed double doors into canteen and western red cedar weather boarding, which also covers the door into the small, outward-facing room in which are the calorifier and gas meter. The reinforced concrete toe beams, brought into prominence by sun and shadow along the south wall, look capable of supporting something much heavier than the structure of galvanized steel stanchions, glass and aluminium-covered plywood above. However, this form of foundation was specified by the client, because the block stands on rather marshy ground, and when the bed in front has been made up with good loam and planted with shrubs as planned, the architect hopes these too solid foundations will melt into the shadow.



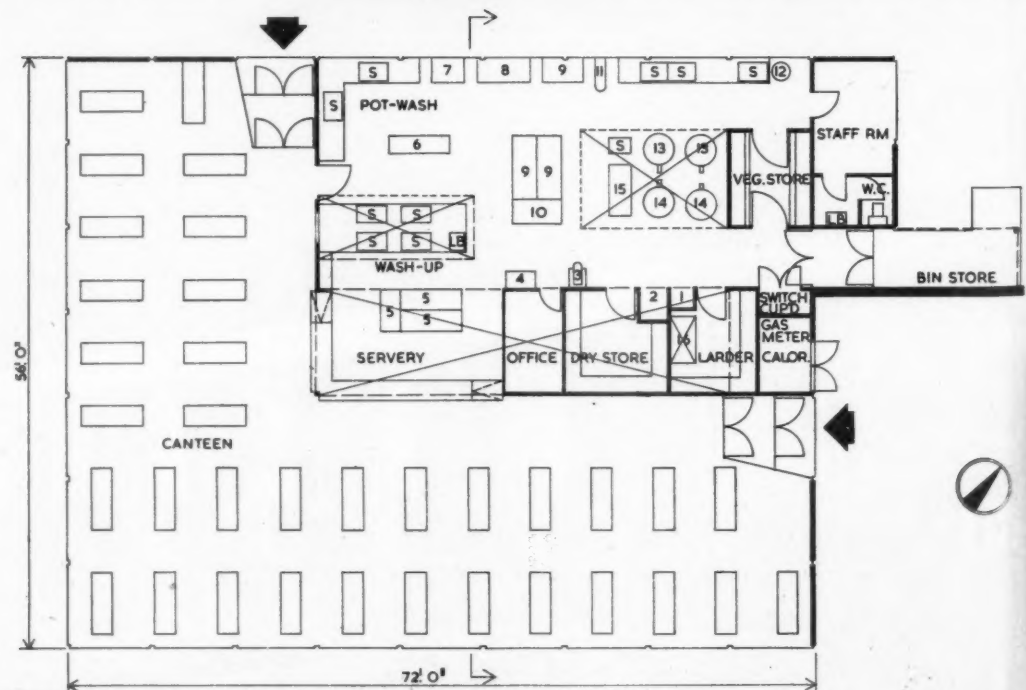
The west  
the old  
has been  
piece of  
possible

Cross

The hi  
vertical  
service  
and sto

## Key to kitchen equipment:

1. Broom cupboard
2. Scales
3. Quart mixer
4. Bench for slicer
5. Electric hot cupboards
6. Pot rack
7. 2-tier roaster
8. 2-unit oven
9. Tables
10. Marble top
11. Food preparation machine
12. Potato peeler
13. Single-purpose boiling pans
14. Dual-purpose boiling pans
15. 2-unit steaming oven
16. Refrigerator
- S. Sinks



Ground floor plan (Scale: 1/4" = 1' 0")



## analysis

## CLIENT'S REQUIREMENTS

To provide a new canteen building to serve an existing grammar school, which was to be designed economically and in accordance with the following requirements: the area of the kitchen and ancillary store rooms not greatly to exceed 1,650 sq. ft., for the preparation of 550 meals daily and provide for 11 members of kitchen staff. The dining room to take 275 diners at a sitting, and be approximately 2,475 sq. ft., or 2,500 sq. ft. maximum.

## PLANNING AIMS

The siting of the building was dictated by the necessity to make use of the existing service entrance to the school, and to be as close as possible to the boilerhouse in the main school building so that existing mechanical services could be easily adapted and extended to serve the new canteen. This meant locating the building on part of the tar-paved play area, and the scheme entailed provision of a new area of tar paving to compensate for that taken by the new building.

To minimise loss of playing area, a compact, rectangular block was planned, containing an L-shaped dining room (permitting all tables to be very near the servery counter) with the kitchen filling the space between the two arms of the L.

## SUMMARY

Ground floor area: 4,274 sq. ft.  
Total floor area: 4,274 sq. ft.  
Type of contract: Competitive tender.  
Tender date: January 31, 1956.  
Work began: March 26, 1956.  
Work finished: December 13, 1957.  
Tender price of foundations, superstructure, installations (including cooling equipment) and finishes (building contract): £18,080.  
Total of external works: £4,755.  
Total: £22,835.

	cost per sq. ft.	s	d
Preliminaries and insurances		3	6½
Contingencies		4	9½

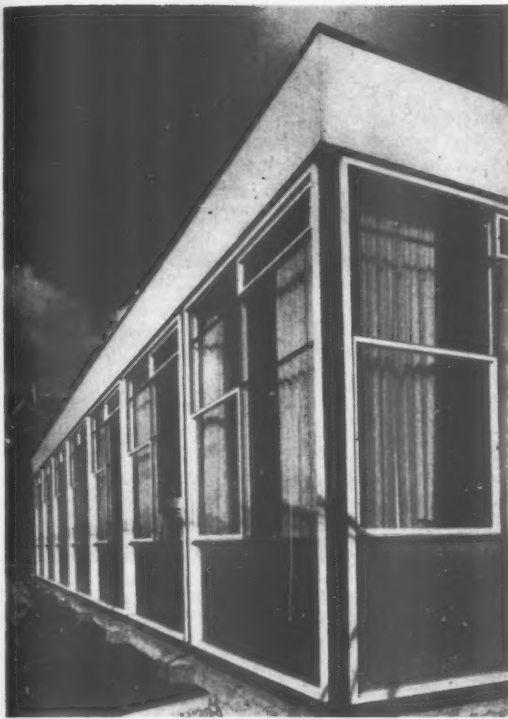
## Work below ground floor level

Mass concrete column bases, 2-ft. 6-in. × 2-ft. 6-in. 9-in. hardcore and 5-in. concrete raft reinforced with fabric (3.45 lb. per sq. yd.) and with 12-in. × 8-in. reinforced concrete toe beam under external walls and 18-in. × 8-in. thickening under internal partitions. 21-in. × 12-in. strip footing under brick wall to bin space with 9-in. rough stocks in cement mortar. Bitumen damp-proof course. 1-in. coloured granolithic to concrete plinth. All concrete, 1 : 2 : 4 with sulphate-resisting cement.

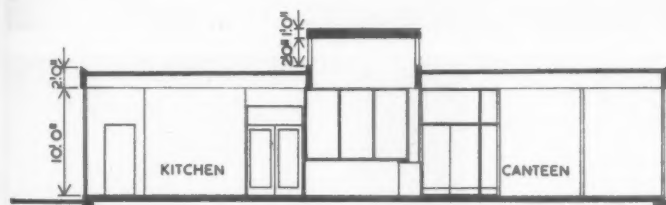
## STRUCTURAL ELEMENTS

## Frame or load-bearing element

Steel stanchions, 6-in. × 3-in. r.s. channel or r.s. joist at 8-ft. centres. Main beams, 10 in. × 4½ in. R.s. joists spanning 24 ft. at 8-ft. centres, with 4-in. × 1½-in. r.s. joists over at 4-ft. centres, to carry roof deck.  
Steel not cased, the stanchions which were exposed externally were galvanized.

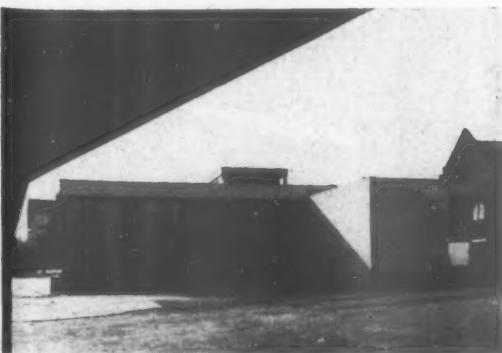


The west side, showing re-entrant angle at the corner. A view of the old school building in the background makes clear that there has been no attempt to relate the new to the old. Simply, a new piece of essential equipment has been set down on the smallest possible area of the playground.



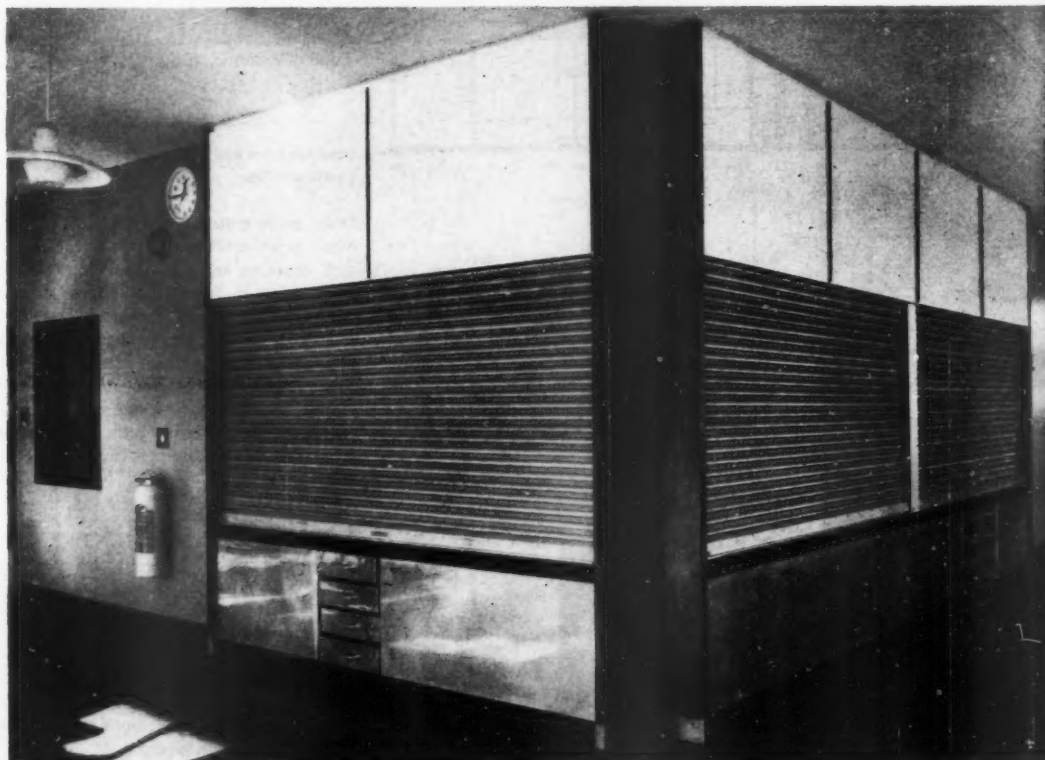
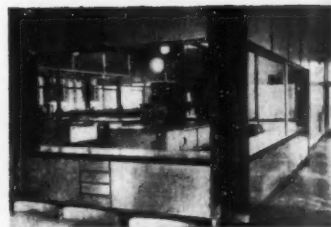
Cross section [Scale: 1/4" = 1' 0"]

The high brick blank wall to the right of the entrance, and deal vertical boarding screen, together form a bin store outside the service entrance to the kitchen, which occupies, with store rooms and staff rooms, the north-east corner of the rectangular building.



building illustrated

The L-shaped canteen occupies the south and west parts of the building, and below we look back along the south "arm" through the glazed double doors and draught lobby. There is a second entrance at the end of the west "arm." Nothing fancy is required or provided here, but plentiful light, sun and air make its simplicity agreeable. The ceiling is suspended hardboard, the floor of thermoplastic tiles. Furniture is supplied by the Kent County Council. Servery counters, shown bottom, with roller shutters closed, face both arms of the canteen, with cutlery drawers beneath. Above right, the kitchen through open servery hatches, showing layout, with electric hot cupboards behind the servery and office at right, wash-up area on left, central worktables and double unit steaming oven beyond. Right, an impressive display of kitchen equipment in the cooking area of the kitchen: steam ovens, boiling pans and low sink on right, potato peeler, sinks and general purpose food preparation machine on left. The door at the end leads into a small staff room, with wash basin and lavatory.



## analysis

## External walls

One brick wall in dark stock facing bricks built in two half brick skins in stretcher bond with metal lath reinforcement, around bin space (25 sq. yds.). 3-in. lightweight concrete block wall with 1-in.  $\times$  2-in. creosoted fir battens horizontally at 24-in. centres covered with building paper and 1-in. Western red cedar vertical weather boarding (67 sq. yds.). 4-in.  $\times$  2-in. fir framing bolted to steel with 1-in.  $\times$  4-in. deal vertical boarding spaced 1 in. apart with hardwood capping to screen by bin space (8 sq. yds.).

$$\text{Ratio: } \frac{\text{solid wall}}{\text{floor area}} = \frac{0.249}{1}$$

## Windows

Purpose-made metal windows in universal sections galvanized, part fixed and part h.c.h., with remote control opening gear to clerestory lights, in 2-in.  $\times$  5-in. softwood frame with 2-in.  $\times$  5-in. hardwood sill. Lower panels of full height windows filled with plywood, aluminium faced both sides with sealed edges (56 sq. yds.). Solid panels in kitchen windows have in addition a 3-in. partition behind them of lightweight concrete blocks (20 sq. yds.).

$$\text{Ratio: } \frac{\text{windows}}{\text{floor area}} = \frac{0.511}{1}$$

## External doors

Four pairs of purpose-made metal double doors, as for windows, with floor springs (included in cost). One 2-in. double door of softwood covered with 1-in. cedar boarding, one leaf hung on butts, the other as a removable panel. Two pairs of 2-in. hardwood glazed double doors. Hardwood frames and thresholds to wooden doors. Note that both outer and inner doors which form a draught lobby at entrances to dining room and kitchen have been included here.

$$\text{Ratio: } \frac{\text{doors}}{\text{floor area}} = \frac{0.075}{1}$$

## Roof construction

Deck of 2-in. compressed straw showerproof quality board. Timber blocked check curbs at eaves with 24-in. deep softwood fascia on timber supports bolted to steel (steel joist supports included under frame).

Area: 4,380 sq. ft.

## Rooflights

One light, 4-ft.  $\times$  3-ft. formed with timber curbs, patent glazing and aluminium flashing.

## Glazing

Metal windows, 32-oz. s.q., 24-oz. o.q. and 32-oz. o.q. generally; some g.w.p.p., and 5 sq. ft. of Pinhead Morocco glass. External doors, 1-in. g.w.p.p. 19 sq. ft. of 24-oz. o.q. Internal doors, g.w.p.p. and 32-oz. o.q. Screens, 32-oz. o.q. and s.q. 96-ft. run of 3-in. 24-oz. o.q. in louver.

Total of structural elements:

22s 9½d

s d  
1 3½

## PARTITIONS AND FITTINGS

s d

## Internal partitions

3-in. lightweight concrete blocks (166 sq. yds.).

10

## Screens

3 metal windows, 9 ft. 6 in.  $\times$  4 ft. 9 in.  
1 glazed wood borrowed light, 9 ft. 9 in.  $\times$  6 ft. 6 in.  
1 ditto beside and over door, 5 ft. 6 in.  $\times$  6 ft. 6 in. extreme.

8

## Internal doors

Plywood faced flush doors to BS459, Part 2, hardwood lipped all edges, 10 single.  
2-in. hardwood single and one pair double doors with one panel glazed.

11½

8 2

## Ironmongery

Normal ironmongery for internal and external doors in satin silver anodized aluminium. One single door hung on double action floor springs.

6½

## Fittings

Cooking equipment not included (cost taken separately is 9s. 1½d.).  
Kitchen equipment: potato peeler base, concrete larder shelf, peg rail, servery fitting with roller shutters and wall bench at one side, hatch, draining boards, work tops, shelving, desk, broom racks, matwells. Cost includes the fixing of cooking equipment, but not the equipment itself (supplied by County Council). Its cost taken separately is 9s. 1½d.

13 2½

Total of partitions and fittings:

16s 2½d

## FINISHINGS

## Floor finishes

Thermoplastic tiles (265 sq. yds.) with 3-in. skirting.  
Coloured granolithic paving (24 sq. yds.) with 3-in. coved skirting.  
6-in. square buff tessellated tiles (178 sq. yds.) with 6-in. coved tile skirting.

3 10½

3 7

## Wall finishes

2 coats of gypsum plaster generally.  
6-in. square white glazed wall tiles above kitchen worktops.

1 1½

0½

## Ceiling finishes

Suspended hardboard fixed with metal hangers to timber supports, generally.  
½-in. asbestos cement sheeting (13 sq. yds.).  
Exposed soffit of compressed straw deck (6 sq. yds.).

3 5½

1 2½

## Roof finishes

3-layer bituminous felt finished with granite chippings and with aluminium drips and flashings.

1 9½

## Decorations

Ceilings: one coat plastic emulsion paint. 52 sq. yds. of two coats.  
Walls: 30 sq. yds. two coats emulsion paint. 92 sq. yds. one coat emulsion and one coat chlorinated rubber enamel. 290 sq. yds. prime and two coats gloss or semi-gloss.  
Structural steel: one coat chlorinated rubber aluminium paint generally. Where exposed, one

2 2½

## analysis

further coat ditto and one finishing coat of chlorinated rubber enamel.  
Metalwork generally: prime and 2 coats internally, 3 coats externally.  
Softwood: prime and 3 coats internally, 4 coats externally.  
Hardwood: oil and wax polish internally. Cedar boarding left untreated externally.

Total of finishings: 12s 6d

## SERVICES

**External plumbing** 2  
Rainwater pipes 3-in. and 6-in. spun iron with caulked joints.

**Hot and cold water installation**  
A calorifier is supplied with hot water drawn from the existing solid fuel boiler in the main school building.

**Sanitary fittings**  
*Type of fitting* *No. of each type*  
Lavatory basins 2  
White glazed sinks 6  
High level w.c. suite 1  
42-ft. x 6-in. white glazed floor channel with iron grating.  
Wastes and overflows, copper pipe, BS659.  
Metal sinks provided by council 4 (fixing only).

**Heating and ventilation**  
Space heating by low pressure hot water radiators, fed from existing boiler in the main school building.  
Internal temperatures: dining space 60 deg. F., kitchen 57 deg. F.  
Air changes: dining space, 2 per hour, kitchen 25 per hour.  
U values: walls 0.70 average, roof 0.24 average.

**Gas installation** 5½  
10 points.

**Electrical installation** 2 9½  
Wiring to the following points:  
41 lights (cost includes light fittings)  
10 13-amp. sockets  
3 hot cupboards. 1 each, potato peeler, mixing machine, refrigerator, food preparation machine, slicer. (The cost of this equipment is included in fittings.)

Total of services: 18s 11d

**Drainage** 2 3½  
Rainwater drains: 4-in. seconds stoneware.  
Soil drains: 4-in. BS stoneware generally.  
Under building: 2-in., 3-in. and 4-in. cast iron.  
5 manholes. 1 catchpit.

s d

## Other external works

	s d
Drains beyond last collecting manhole	2½
Water main	5½
Gas main	3½
Electric main	8½
Playgrounds	14 8½
Making good paths and pavings	1 5½
Service duct from existing building	2 1

Total per sq. ft.:

£18,080 (excluding external works) = 84 7½  
4,274 sq. ft. (measured inside external walls)

s d

19 11½

## COST COMMENTS

Without the inclusion of the relatively low-cost dining space, the cost per square foot of the kitchen alone would be much greater than the average cost of 84s 7½d. The MOE's Building Bulletin No. 11, *The Design of School Kitchens*, sets out the daily routine and functions of a kitchen and suggests certain broad principles of design and finally sets out challenging target areas for various sizes of kitchens. For such an expensive area, this guidance is invaluable to the architect and here it looks as if the architects have followed the guidance offered pretty closely.

One might have expected that the cost emphasis would be on the "fittings" and "services" groups of elements, and it is interesting to see what proportion of the whole these represent.

Fittings at 13s 2½d per square foot of floor area exclude the cooking equipment, which was supplied separately, and amount to approximately 15 per cent. of the net cost. "Services" at 18s 11d amount to 22½d per cent of the net cost.

Heating and ventilation at 8s 4½d per sq. ft. excludes the service duct from the main building (included with "external works") and the capital cost of a boiler. This leaves only the cost of radiators and heating pipe runs, and gives some indication of the amount needed to instal an efficient extraction ventilation system to give 25 air changes per hour in the kitchen. Under the heading of ventilation comes not only the cost of extract fans but also the glazed steam hoods which can be seen in the illustrations.

## CONTRACTORS

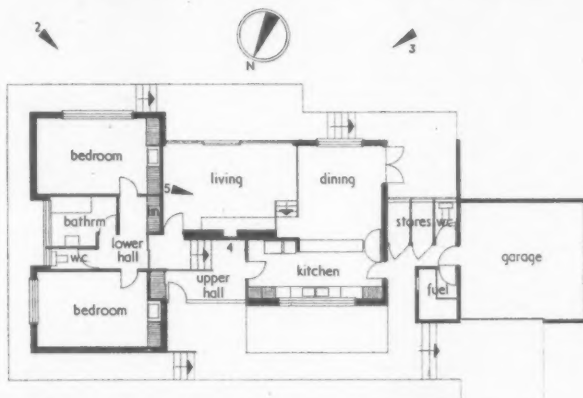
*General contractors:* J. H. Bloomfield & Son Ltd. *Sub-contractors—Structural steelwork:* R. W. Sharman Ltd. *Metal windows and doors, etc.:* The Morris Singer Co. Ltd. *Bituminous roofing:* Standard Flat Roofing Co. Ltd. *Thermoplastic tile flooring:* Bennett's Wood Flooring (Tungit) Co. Ltd. *Suspended ceilings:* G. C. Horsburgh & Co. Ltd. *Roller shutters:* Shutter Contractors Ltd. *Heating and hot water:* J. T. Meredith & Co. Ltd. *Electrical installation:* London Electricity Board. *Tar paving:* A. C. W. Hobman & Co. Ltd. *Sanitary fittings:* Stitson's Sanitary Fittings Ltd. *Ironmongery:* Childs Constantine & Co. Ltd. *Decorative finishes:* Smith & Walton Ltd.



## critical study

## FOUR HOUSES IN TRURO: 1 HOUSE AT RESTRONGUET

Much has been said on the subject of the proportionately high production costs involved for the architect in the design of small houses of up to £3,500 in cost. Certainly this is true where there is any departure from strictly traditional materials and construction, for detailing must be far more extensive if the builder is to be properly instructed. In the office of Taylor and Crowther, whose practice consists almost entirely of small house design, this problem is overcome by employing a high degree of standardization of detailing and to a lesser extent by standardization of planning.



Ground floor plan with photographic viewpoints [Scale:  $\frac{1}{4}$ " = 1' 0"]

Top left, the entrance approach, viewpoint 1, to the first house at Restronguet. Above, viewpoint 2, from the east. The site falls away sharply to the south, and terraces are constructed of local stone. Top right, viewpoint 3, from the south west.

For this house the client was a building contractor and the house was erected by him for his own occupation. One rather expects builders to be difficult clients, knowing, at least constructionally, as much as the architect (were he ever to admit it), but in this case the builder seems to have been an ideal client. There are a number of evidences of this: notice for example the sympathetic way in which the house has been decorated and furnished, and the high standard of

## 1 HOUSE AT RESTRONGUET continued



The entrance hall from viewpoint 4. The ceiling, like the eaves soffits, is of tongued and grooved softwood boarding.

the materials used in the construction. Window frames and sashes generally are of teak, the roof is slate covered, and rain water goods are vitreous enamelled. The house is planned on three levels, with the dining area at the higher level, spatially separated from the living area both by the difference in level and by the introduction of a curved ceiling over the dining area. The three highly polished steps connecting these two levels

look as if they might prove dangerous to the unwary.

Space heating in this house is by thermostatically-controlled electric radiators which have a low initial installation cost but high running costs. This latter disadvantage has obviously been appreciated and is largely overcome by a higher than normal standard of insulation and by the use of proprietary double-glazing units to all the windows.

The living room from viewpoint 5, looking towards the upper level dining room.



## critical study

## FOUR HOUSES IN TRU



Viewpoint 1, from the east, with the bedroom wing in the foreground.

Again a building-wise client—the County Planning Officer—and again a site with glorious views over the River Fal and the open sea; the sort of view most of us see only at holiday time. It is not surprising that with sites like these available there should be so much house-building activity in the area.

This house is far more traditional in appearance than the first and its building materials, exemplified by concrete roof tiles, softwood or standard metal windows, are clearly less expensive than in the first house. The general construction is, however, similar, with load-bearing external cavity walls of 4-in. concrete block, rendered externally, the



Ground floor plan of the second house at Restronguet

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

rendering forming a perfectly adaptable finish in this clear atmosphere. Brick is not indigenous to the area and is relatively expensive. There is a tradition of stone walling and it is used in this house



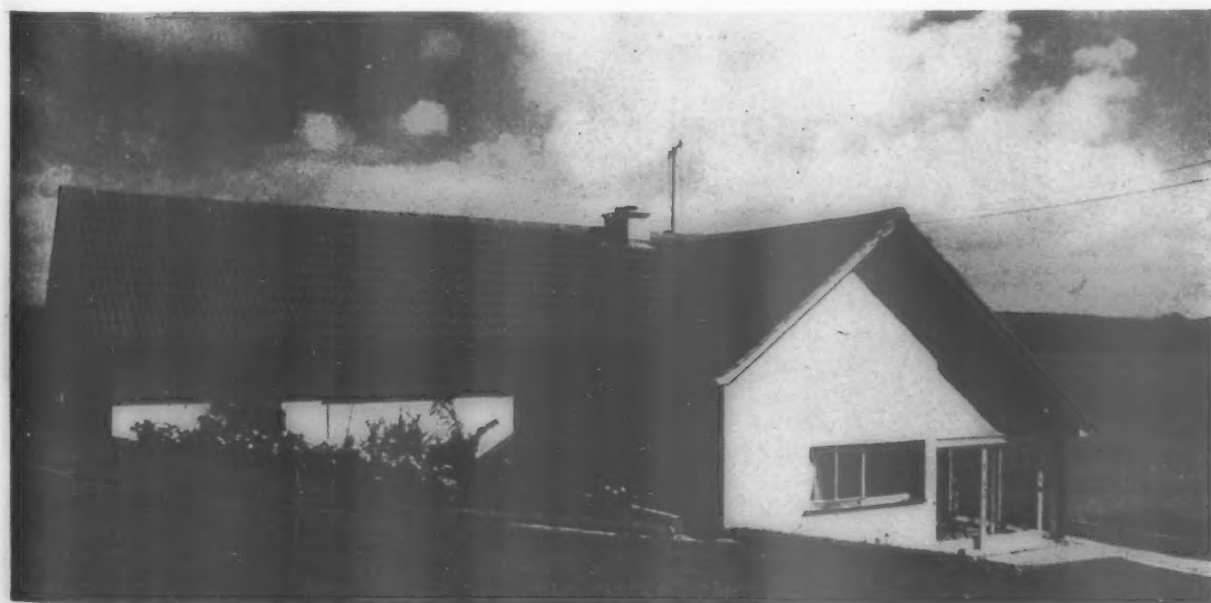
The living room from viewpoint 4, looking towards the dining area.

for part of the living room wall, but as in other districts, labour costs prohibit its use other than in small surfaces of this kind. In the centre of this wall is set a genuine ship's porthole. The wood sliding window to the dining room is one of the office's standard details.

# IN TRURO: 2 ANOTHER HOUSE AT RESTRONGUET



Above, the house from the south, viewpoint 2. The triangle above the glazed terrace was originally intended to be a panel of teak boarding; hence the vertical "joint," which is now rather meaningless. Below, viewpoint 3, from the west. The garage floor is at a higher level than that of the house; the covered space between the two levels is a service entrance and store.

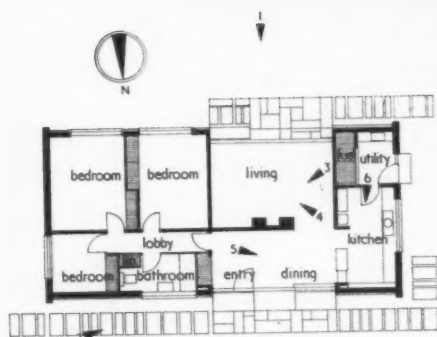


## critical study

## FOUR HOUSES IN TRURO: 3 HOUSE IN TRE



Viewpoint 1; the south side of the house. Its very simplicity makes this by far the most successful of the four houses.



Ground floor plan with photographic viewpoints  
[Scale:  $\frac{1}{8}'' = 1' 0''$ ]

Perhaps one of the major difficulties for the architect in the design of small houses is to satisfy the client without loss of his own creative integrity. There must inevitably be some compromise, for it is only to be expected that the client should have strong prejudices both in regard to appearance and in the use of materials in his own home. Each of these houses shows quite clearly the impression made by the client with the exception of this one, which was designed for the "perfect" client—one of

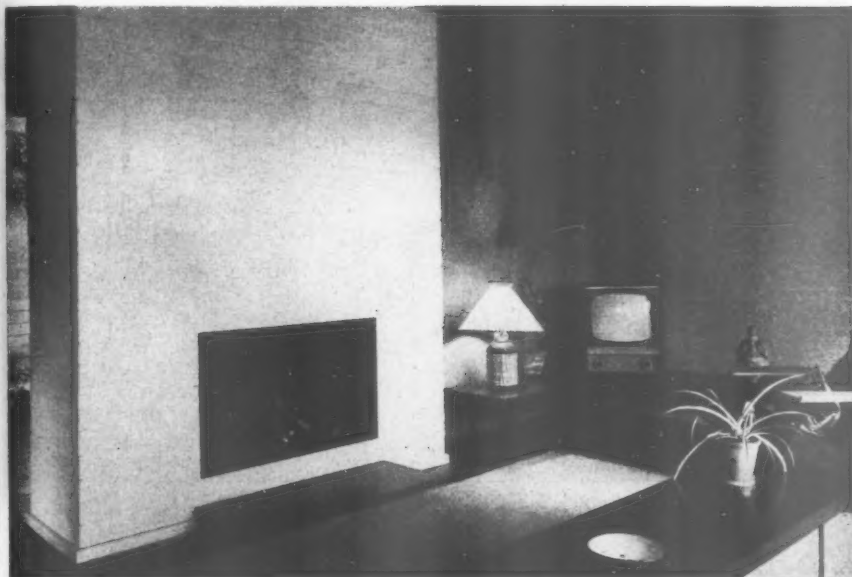
the architects. It should therefore be the most successful of the four and there is little doubt that it is. It was in fact the first, and formed the basis of the many subsequent houses designed by the firm. It is this same plan-form which reappears in the other three, with the three-bedroom and single bathroom complex repeated almost exactly, the living areas being varied in relatively minor ways to suit particular site conditions and the individual client's requirements. This is not unreasonable since the greatest de-

Viewpoint 2; the entrance side.





## IN TREMORVAH



mand in this area is for a three-bedroom house, and living area requirements are fairly comparable.

The "standard" plan appears in this house in its least complex form as a simple rectangle with terrace and entrance recessions. The living area is divided only by screens and storage units into its separate parts of living, dining and kitchen, with the main entrance giving directly into the dining area. The cobweb metal screen and the divider units were also designed by the architect. Extensive use of timber is made, with cedar vertical boarding to external walls and cedar shingles to the low-pitch gabled roof, and this helps to relate it well to the well-wooded secluded site.

*Above left, the living room from viewpoint 3. All the houses have fireplaces, but none is dependent upon them for space heating. They reflect this by being designed rather for ornament than function and seem to echo the character of the house and the outlook of the owner in each case. Far left, the living room from viewpoint 4. Below, viewpoint 5, from the entrance through the dining area to the kitchen. Tongued and grooved boarded ceilings are a feature of all the houses, as are the wood block floors. Left, the refreshing simplicity is carried on throughout the interior, as is evident here in the view of the kitchen, from viewpoint 6.*



## critical study

## FOUR HOUSES IN TRURO: 4 HOUSE AT PLAYING PLACE



Ground floor plan with photographic viewpoints  
[Scale:  $\frac{1}{8}" = 1' 0"$ ]



Above, viewpoint 1; the south side of the house. Brick is not indigenous to the area and in consequence is somewhat expensive. Cavity concrete block is generally used, rendered externally, as here. In this clean, mild area the rendering, of course, stands up well and needs little maintenance. This photograph shows the standard detailing to windows, eaves and chimney stack, etc. Left, viewpoint 2; the entrance patio. The rear wall is constructed of standard hollow clay blocks.



The clients for this house were the parents of one of the architects, whose essential requirement was to be able to use their antique and other furnishings, collected throughout their life, in their new home. The main entrance is again made directly into the dining area, this area opening on to a partly enclosed patio. The flank wall to this patio is surfaced with a clay tile pattern and this is carried "through" the large glazed wall into the dining area. The curved ceiling detail appears again here, but rather contradicts the apparent intention of spatial continuity between dining area and patio. The plan for this house is based on a 3-ft. grid, this being used more as a planning than a constructional module although its effect externally is discernible in the repetitive wall and window units.

Far left, viewpoint 3; the dining area, looking into the patio. This area has a curved plywood ceiling. Left, a detail of the bathroom, viewpoint 4. The lavatory basin is let in flush with the dressing table top; all plumbing is concealed.



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# STONE RECONSTRUCTED | PLASTIC REPAIR

5.01  
5.D1

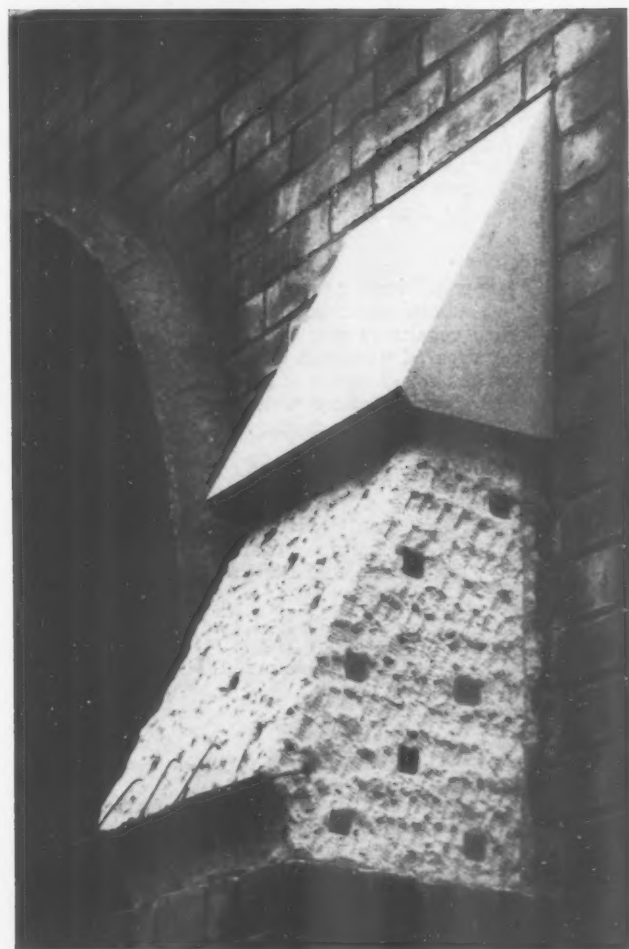
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Photograph showing three stages in restoration work.



Restored spire.



Buttress cap in process of restoration.



Door surround showing restored mouldings.

**RESTORATION OF STONework USING PLASTIC RECONSTRUCTED STONE.**

## 5.D1 RESTORATION OF STONEMWORK USING PLASTIC RECONSTRUCTED STONE

This Sheet describes a process of replacing decayed portions of the face of stonework in-situ with plastic reconstructed stone. The photographs on the face of the Sheet show typical applications.

### General

Evidence of various inferior forms of plastic repair work can be seen in most old churches where it was often carried out by plasterers using crude compositions and worked to feather edges without proper preparation. The materials now used for plastic repair work may vary from simple compositions of cement and silver sand or stonedust, "knocked up" on the site, to more elaborate compositions of prepared basic materials and the craftsmen concerned are masons and stone-restorers.

### Material

The plastic reconstructed stone described on this Sheet is composed of materials which have been subjected to processes of cleaning, drying, grading, gauging and mixing. It is a mixture of dry aggregates and cementitious materials to which water is added immediately before use and it is applied to the prepared base while still in a plastic condition. The work is carried out on the site by craftsmen who receive the prepared compositions, ready mixed and sealed in metal drums, and requiring only the addition of water. Even simple compositions, such as those for repointing rubble work, are accurately prepared and pre-mixed. The amount of water added is of great importance in securing proper adhesion without subsequent cracking and crazing.

### Method

There are two main types of plastic stone repair, formal and non-formal. In formal work the plastic stone is so fashioned and finished that it appears new. Non-formal work is appropriate to ancient buildings where it is important not to alter the character of the stonework.

For both these types of repair the technique used is similar. The decayed part is cut well back to sound stone and dovetail mortises are drilled or cut to provide a good key at centres widely enough spaced to avoid weakening the stone. Reinforcement, usually copper wire, is inserted and hooked securely into the stone and in certain cases plugged in with lead. The base is then thoroughly brushed and slurried, the new section being built up layer by layer and finished with a wooden float.

The plastic stone is allowed to dry very slowly and is protected from the sun by wet sacks and tarpaulins. The new work can be built up larger than required and dressed to size with a chisel like natural stone.

Plastic repair is always confined to the repair of individual stones, the original joint lines being maintained and repointing carried out in the usual way.

### Applications

The photographs on the face of the Sheet show typical examples of plastic stone restoration work. The photograph at the top left shows a window prepared for demonstration purposes. On the left the stonework is in the decayed state before restoration was started. In the centre the stone has been prepared with the necessary reinforcement fixed in position, ready to receive the plastic stone repair. On the right hand side of the window the repairs have been carried out, non-formal work being more appropriate in this case. The hood has been completely re-formed and the tracery restored where necessary. The work is carried out without any disturbance to the glazing or interference with the structure.

The spire shown on the top right of the face of the Sheet was threatened with demolition, decay having made it unsafe, but it was restored and made safe with plastic stone repairs, the cost being less than that of demolition.

At the lower left is a buttress cap in process of restoration in a formal manner. The upper portion has been finished; the lower portion has been prepared and shows the stone cut back and keyed and the reinforcement for the drip mould in position.

The last photograph shows the stone surround to a door restored in a formal manner. The sculptured decoration and the mouldings where decayed have been restored by exactly copying the original work. Very close inspection is necessary to see where these plastic repairs have been carried out.

### Specification

When specifying for plastic repair work the architect should use the following clause:

Where repairs in plastic stone are scheduled, cut away decayed stone to a depth of at least  $\frac{3}{4}$  in. or to sound stone whichever is the greater: properly key, reinforce as necessary with non-ferrous metal and make good to match existing.

### Further Information

The contractor will carry out surveys and prepare detailed schedules and estimates. Where it is desired to use natural stone, wholly or partly, the contractor can also undertake this work.

*Compiled from information supplied by:*

**New Stone & Restoration Limited**

Address: Francis Works, Braintree Road, Ruislip, Middlesex.  
Telephone: Ruislip 7261.

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working detail

FURNITURE AND FITTINGS: 77

PEWS: CHURCH IN GLENROTHES, FIFE

*Gillespie, Kidd and Coia, architects*



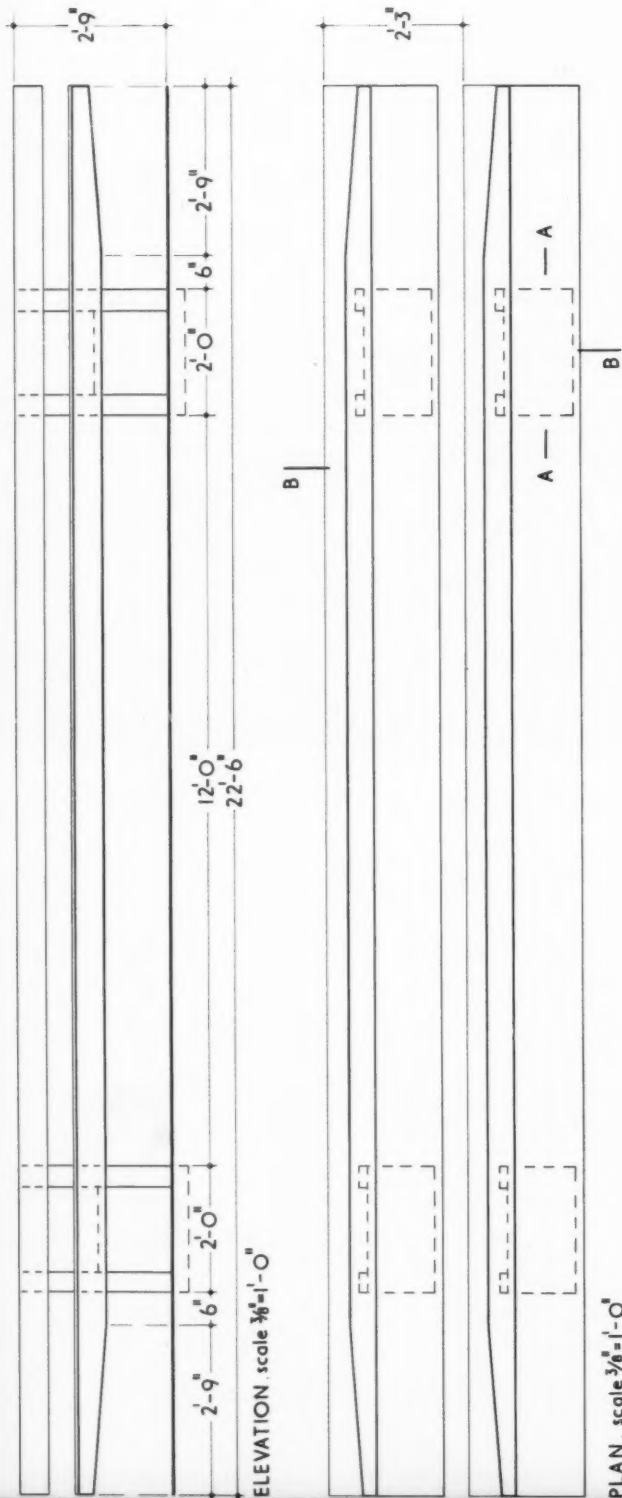
*These pews show the use of reinforced concrete and steel to give a sense of absolute solidity combined with relatively heavy sections of Douglas fir to give warmth. The precast concrete supports are polished. Connections to the concrete are by bolts in patent plugs and to the timber by brass cup and ring screws.*

working detail

PEWS: CHURCH IN GLENROTHES, FIFE

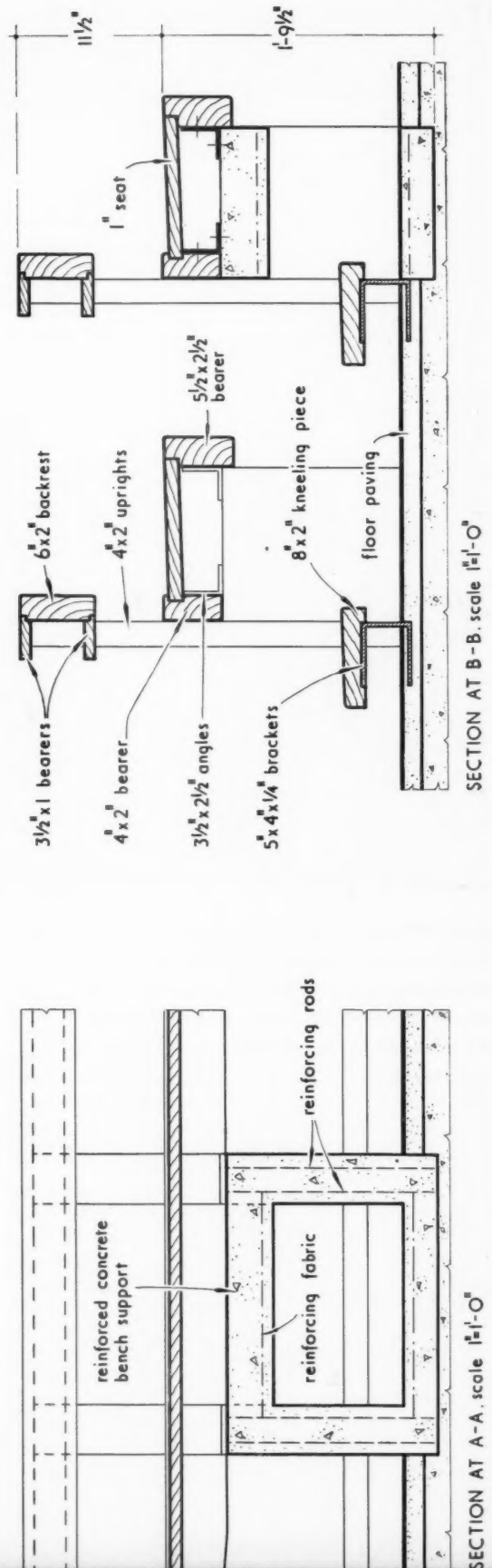
Gillespie, Kidd and Coia, architects

FURNITURE AND FITTINGS: 77



ELEVATION. scale  $\frac{3}{8}$ "=1'-0"

PLAN. scale  $\frac{3}{8}$ "=1'-0"



SECTION AT B-B. scale 1/2"=1'-0"

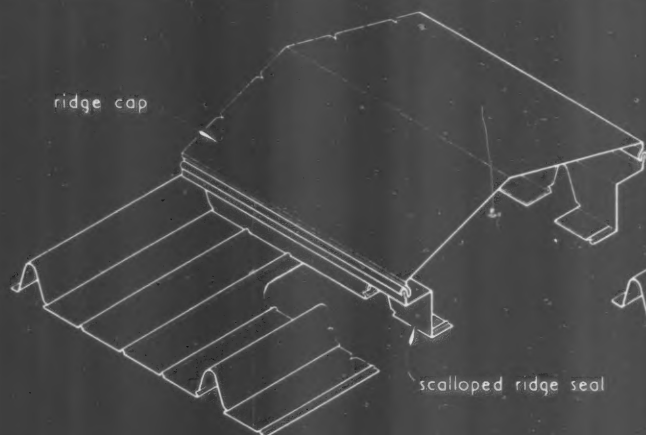
SECTION AT A-A. scale 1/2"=1'-0"



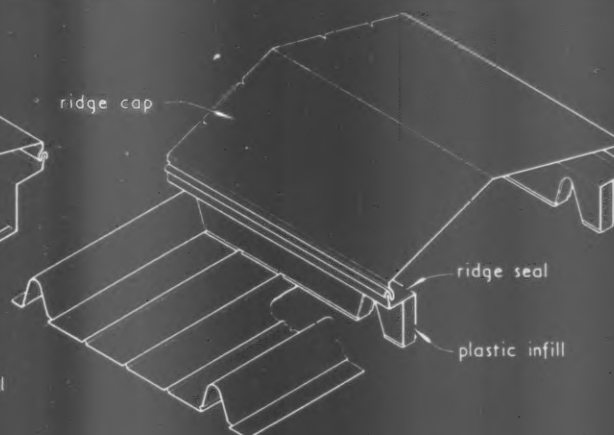
SECTION AT B-B. scale 1:1-O

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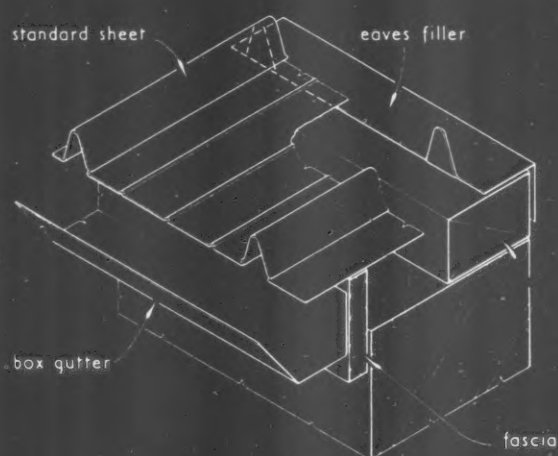




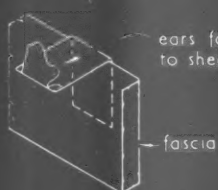
RIDGE CAP AND SCALLOPED RIDGE SEAL.



ALTERNATIVE RIDGE SEAL WITH PLASTIC INFILL.

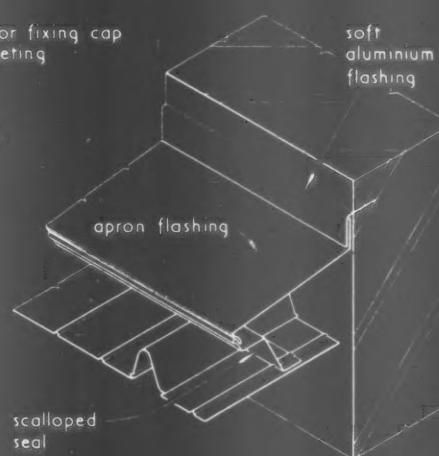


EAVES DETAIL SHOWING EAVES FILLER.

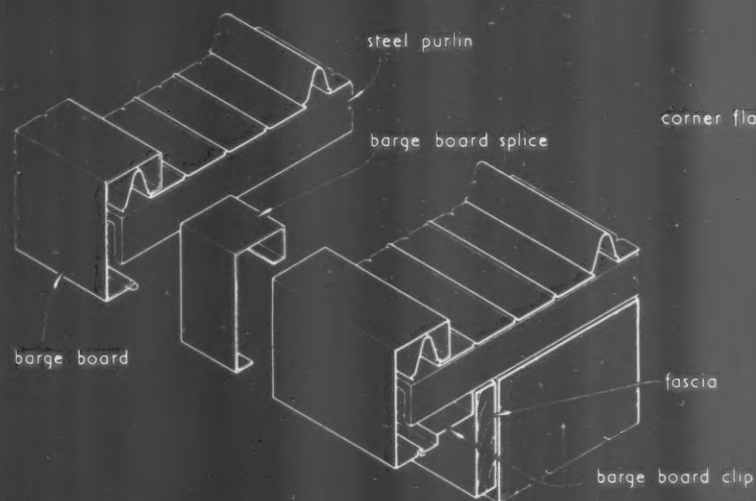


ALTERNATIVE EAVES DETAIL SHOWING RIB CAP.

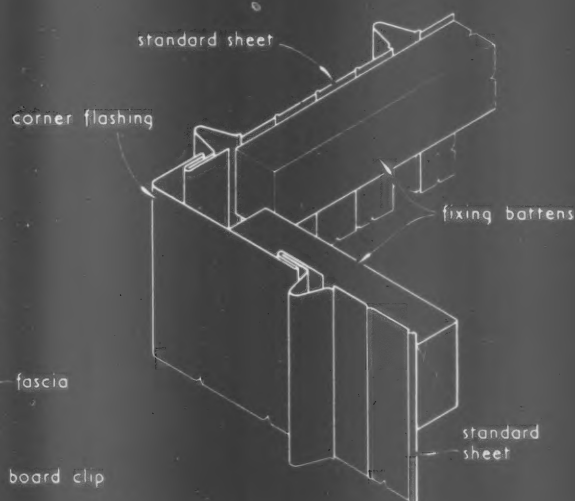
WALL PLATE



DETAIL OF END ABUTMENT.



DETAIL AT VERGE



CORNER DETAIL: VERTICAL CLADDING.

## 16.B3 ·NORAL SNAPRIB· ALUMINIUM-ALLOY SHEETING 2 : FITTINGS AND FLASHINGS

**This Sheet**, in conjunction with Sheet 16.B2, describes the Snaprib roofing system. The drawings on the face give typical details, a selection from the wide range of fittings and flashings available for use with the standard roofing sheets.

### General

The wide flats on Snaprib sheeting make flashing an easy matter as the ribs can be cut back and the flats turned up to form a weathering edge where necessary. Flashings have been designed to avoid exposed holes as far as possible and stainless steel self-tapping screws should be used. For flashing chimney stacks, copings, etc., high-purity aluminium is recommended but lead can be used with Snaprib provided the surfaces to be in contact are first coated with bituminous paint.

### Ridge

The drawings on the face of the Sheet show the standard ridge cap and alternative seals. A ridge finial is available and also a ridge spacer to assist in fixing the position of the ridge seal and ultimately to stiffen the ridge assembly under the laps in the capping. Special flashings are available for ventilated ridges: they take the standard ridge cap. The capping is available in standard lengths of 7 ft. 2 in. which allows for a 6 in. overlap, and the angle should be specified. Ridge seals are in lengths of 6 ft. 8 in. Special flashings are available for single-pitch roofs.

### Eaves

The eaves filler is shown fixed to the wall plate but it can be fixed to the fascia if desired. Where the sheeting is used for wall cladding, the eaves filler may be secured to the top of the sheeting by self-tapping screws. Eaves filler is available in lengths of 6 ft. 8 in. An alternative to the eaves filler is the rib cap, used chiefly for domestic buildings. It fits over the end of the rib and is fixed to the sheeting by the small ears on each side.

### Abutments

End abutments are as shown in the drawing, using the apron flashing and apron seal with a soft overflashing, formed from a strip of high-purity aluminium, grouted into the brickwork. Apron flashing is available in lengths of 6 ft. 8 in. and apron seal in lengths of 7 ft. 2 in. (to allow for a 6-in. overlap). Side abutments are dealt with by forming a vertical upstand on the side of the sheeting and dressing a soft flashing over it.

### Verges

The drawing shows the standard barge-board assembly fixed to brickwork: slight modifications of the clip are made for fixing to other constructions. The barge-board and clips are available in lengths of 6 ft. 8 in. and finial fittings are obtainable for use with them. Where the verge is finished with a fascia, the sheeting is turned up against it and a special capping fitted over.

### Hips and Valleys

Hips are formed by using the standard ridge cap with

a special straight seal which is cut on the site to fit the sheet profile. The cut ends of the sheets should be weatherproofed by snipping back the end of each rib into two flanges and folding these behind an upstand formed by turning up the flat the corresponding amount. The ends of the sheets are supported on rakers. Valleys can be similarly formed with the ends of the sheets supported on rakers and draining into a gutter. For sealing pieces cut from the standard eaves filler may be used; alternatively, a plastic rib filler is available.

### Deadlights

Deadlights can be supplied. They are formed from standard sheet and have a fixed width of 1 ft. 5 in. and a maximum length of 5 ft. 0 in. When ordering, the length of sheet must be specified, the distance of the opening from the top of the sheet, and the length of the opening. The minimum distance from the top or bottom of a sheet is 1 ft. 0 in.

### Soaker Flanges

Soaker flanges can be welded to the sheets where required, the maximum diameter of any opening being 1 ft. 5 in. When ordering, the diameter of the opening should be given (1 in. greater than that of the projection to be accommodated), the distance of the opening from the top of the sheet and the pitch of the roof.

### Chimneys

Where chimneys, ventilators, etc., occur at the ridge, normal weathering practice can be adopted, using preformed aluminium fittings or lead. For flashing chimneys in the roof slope special fittings and gutters are available, and either purpose-made aluminium flashings or lead can be used for weathering the chimney itself.

### Patent Glazing

No special methods are required for flashing round patent glazing, but where the sheet butts the underside of the glazing it should be weatherproofed by cutting and folding as described under *Hips and Valleys*. For dressing between ribs, lead flashing should be used.

### Wall Cladding

The drawing on the lower right of the face of the Sheet shows a corner detail where the sheeting is used for vertical work. The welts are secured with self-tapping screws at 12 in. centres and are cut away 2 in. at overlaps.

### Further Information

Details of all special fittings and flashings are obtainable from the manufacturer who will also supply a list of accredited fixing contractors.

*Compiled from information supplied by:*

**Northern Aluminium Company Limited.**

**Head Office :** Bush House, Aldwych, London, W.C.2.

**Telephone :** Temple Bar 8430.

**Sales Development**

**Division :** Banbury, Oxfordshire.

**Telephone :** Banbury 2242.





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# STEEL

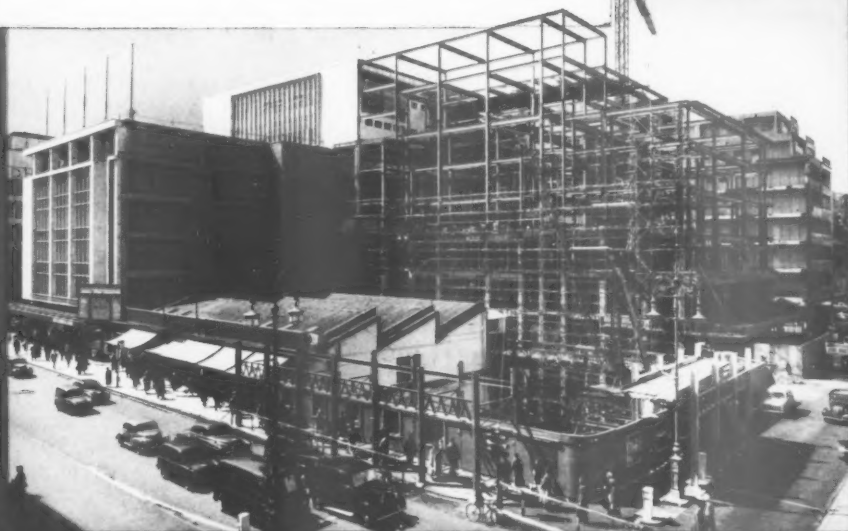
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Consulting Engineers:  
Messrs. Hurst, Paine & Malcolm, M.I.C.E., M.I.Str.E.*

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Main Contractors: Holland & Hannen and Cubitts Ltd.



**Flats at Parkley's, Ham Common.**  
Architect: Eric Lyons, F.R.I.B.A.  
Main Contractors: Wates Ltd.



**Fairlawn Primary School, Lewisham,  
for the London County Council.**  
Architect: Peter Moro, F.R.I.B.A.  
Main Contractors: E. H. Smith (Croydon) Ltd.

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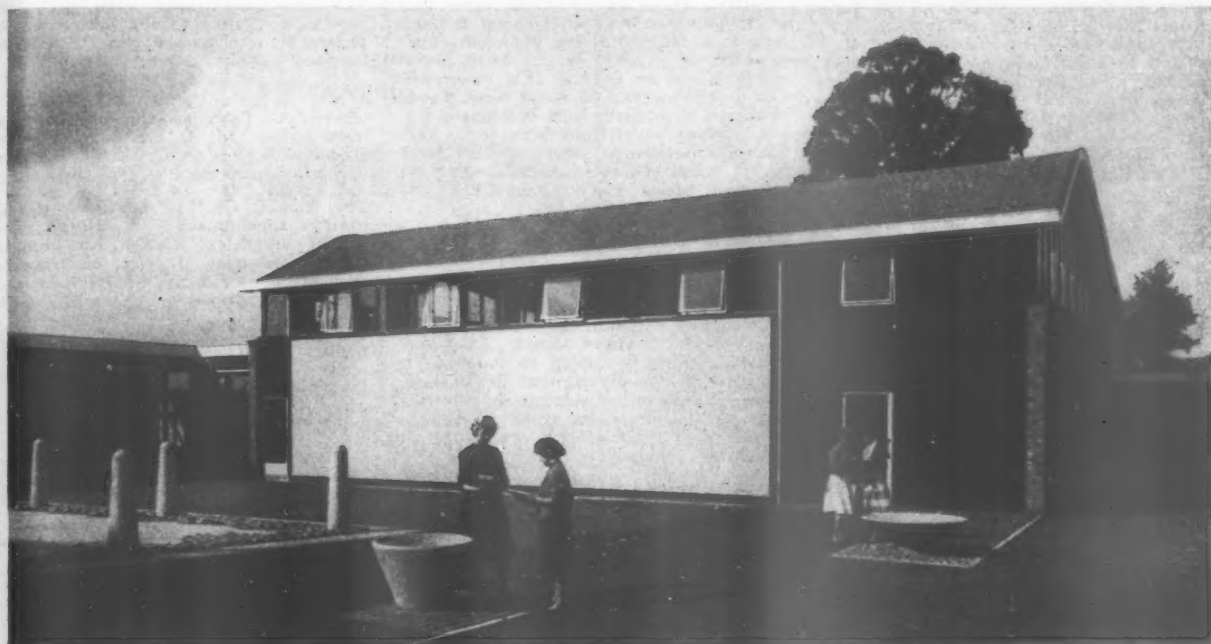
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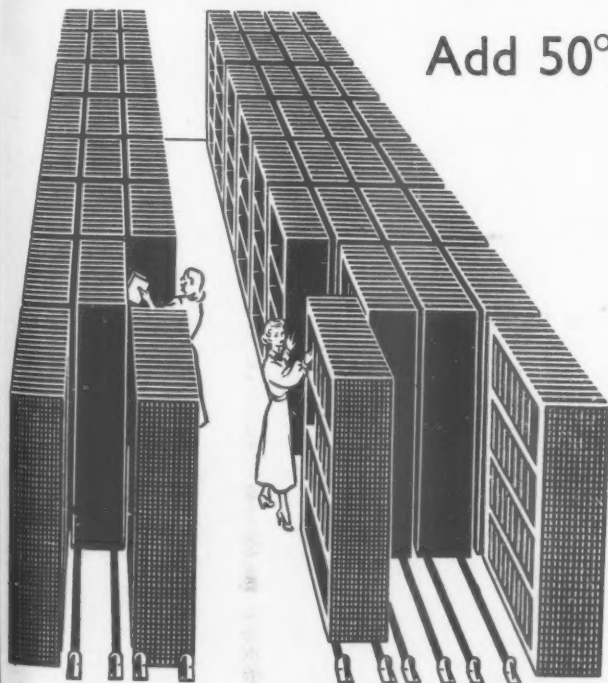
**DIRM**

SECONDARY MODERN SCHOOL AT SLOUGH, BUCKS



At Westgate Secondary Modern School, Bucks, designed by F. B. Pooley, county architect, J. C. Barker, deputy, and A. E. Smith, assistant county architect, a special study of acoustic treatment has been made. The hall and gymnasium, shown here, use curved laminated timber beams on tapered timber posts supporting a lightweight roof, and the hall is lined with a type of "Danish panelling" in beech which absorbs sound at various frequencies.

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## Contractors

*House at Restronguet, Feock, for Mr. Heck* (pages 275-276). *Architects:* Taylor & Crowther, A/A.R.I.B.A. *General contractors:* Marshall & Richards. *Sub-contractors:* *Windows:* Crittall, Rowe Bros. & Co. Ltd. *Plumbing & Heating:* W. J. Martin. *Ironmongery:* James Gibbons Ltd. *Composition floors:* Semtex Ltd., Horsley Smith Ltd. *Wood block floors:* Jewson Ltd. *Joinery:* Harvey & Co. Ltd., John Williams & Co. Ltd. *Sanitary ware:* Mallett & Sons Ltd., Rowe Bros. & Co. Ltd. *Electrical installations:* South Western Electricity Board. *Roofing:* Barnstaple Brick & Tile Co. Ltd. *Glazing:* Andrewartha Ltd. *Sliding windows:* P. G. Allday Ltd. *Terrazzo:* F. J. Moore Ltd.

*House, Restronguet, Feock, for W. J. Roberts* (pages 276-277). *Architects:* Taylor & Crowther, A/A.R.I.B.A. *General contractor:* W. J. Roberts. *Sub-contractors:* *Plumbing:* F. O. Davey. *Ironmongery:* James Gibbons Ltd. *Composition floors:* Horsley Smith Ltd. *Wood block floors:* Horsley Smith Ltd. *Joinery:* John Williams & Co. Ltd. *Sanitary ware:* Mallett & Son Ltd. *Electrical installation:* South Western Electricity Board.

*House at Tremorvah, Truro, for J. Taylor* (page 278-279). *Architects:* Taylor & Crowther, A/A.R.I.B.A. *General contractor:* W. J. Roberts. *Sub-contractors:* *Windows:* James Gibbons Ltd. *Plumbing:* W. J. Martin. *Ironmongery:* James Gibbons Ltd. *Composition floors:* Semtex Ltd. *Wood block floors:* Horsley Smith Ltd. *Joinery:* Harvey & Co. Ltd. *Truro. Sanitary ware:* Mallett & Son Ltd. *Electrical installations:* South Western Electricity Board. *Glazing:* Andrewartha Ltd. *Sliding windows:* P. G. Allday Ltd.

*House at Playing Place, for J. H. Crowther* (page 280). *Architects:* Taylor & Crowther, A/A.R.I.B.A., in collaboration with J. H. Crowther, F.R.I.B.A. *General contractors:* R. J. Mitchell & Son. *Sub-contractors:* *Plumbing & heating:* W. J. Martin. *Ironmongery:* James Gibbons Ltd. *Composition floors:* Semtex Ltd. *Wood block floors:* Jewsons Ltd. *Joinery:* John Williams & Co. Ltd. *Sanitary ware:* Rowe Bros. & Co. Ltd. *Electrical installation:* South Western Electricity Board. *Glazing:* Andrewartha Ltd. *Sliding windows:* P. G. Allday Ltd.

## Announcements

### PROFESSIONAL

The architectural department of the Middlesbrough Education Committee College of Art, Green Lane, Linthorpe, Middlesbrough, is hoping to build up a reference library of technical information. They would therefore welcome any information that manufacturers could provide to enable them to develop a comprehensive reference section.

H. H. Clark, F.R.I.B.A., has moved to 3-4, Clement's Inn, Strand, W.C.2 (telephone Chancery 3222-3).

Shepherd, Fowler & Marshall (S. E. Shepherd, F.R.I.C.S., L.R.I.B.A.) have, following the death of H. B. S. Gibbs, taken over the practice of Gibbs & Gibbs. The name of the firm remains unchanged, together with the address: 15, St. James's Row, Sheffield, 1.

Diamond, Hodgkinson & Partners, Chartered Architects, have moved their Wolverhampton office to 26a, Snowhill, Wolverhampton (telephone Wolverhampton 27621).

G. H. B. Chantrey, A.R.I.B.A., has transferred his practice to 4, Queen Street, Newcastle-under-Lyme, Staffs. (telephone Newcastle, Staffs., 65550), and would be pleased to receive catalogues, trade literature and samples.

### TRADE

Patrick G. Egan has joined Walter Lawrence & Son Ltd., 31, Sun Street, Finsbury Square, E.C.2, as Public Relations Officer and Assistant to the Board of Directors.

The Nuralite Co. Ltd. has made the following appointments: J. Honess, previously the Sales Director, has been appointed Managing Director; his place has been taken by J. Earp, who was the company's eastern region manager.

P. A. Kreamer, Area Manager (Sales) of Thermalite Ytong Limited, has now moved to 39, Clifton Rise, Maidenhead Road, Windsor, Berks.

Percy Harris, recently retired as Managing Director of Lafarge Aluminous Cement Co. Ltd., has been appointed Managing Director of Gerland Ltd. Mr. Harris is also a Director of Lafarge Aluminous Cement Co. Ltd., Cement Fondu Lafarge (Canada) Ltd. and Cement Fondu Lafarge Corporation, New York.

### Corrections

The total floor area of Mander College, Bedford, published on January 29, was wrongly given: the correct figure is 68,325 sq. ft.

We regret that in the Letters column of January 29 we attributed to Herbert Heller certain qualifications which he does not possess.



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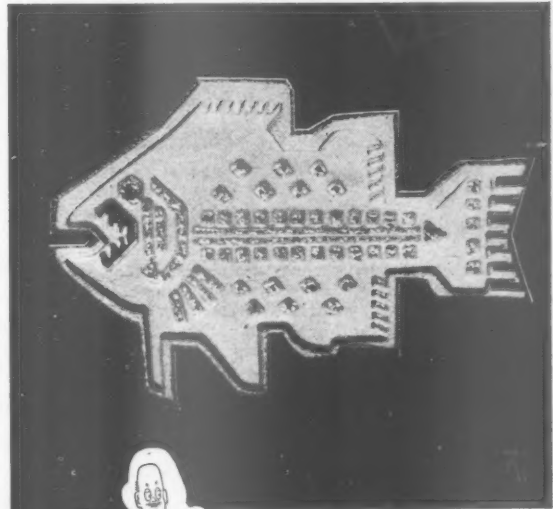


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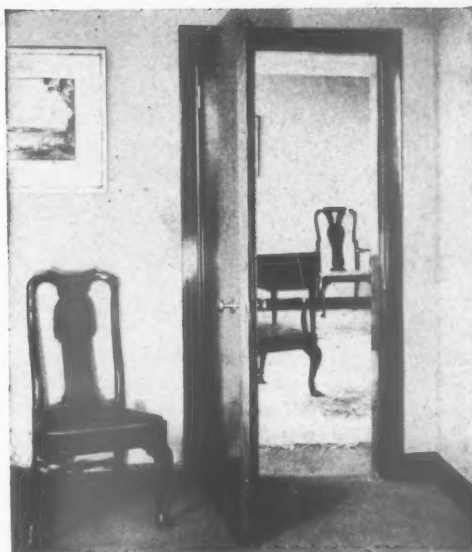
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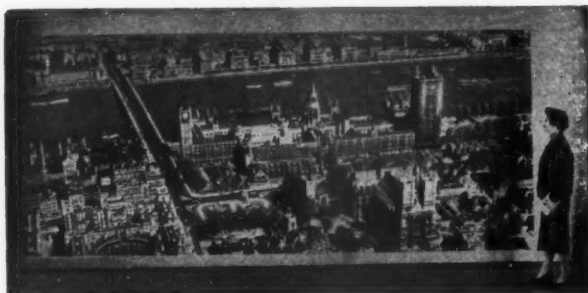
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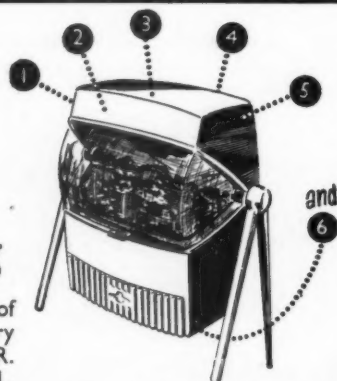
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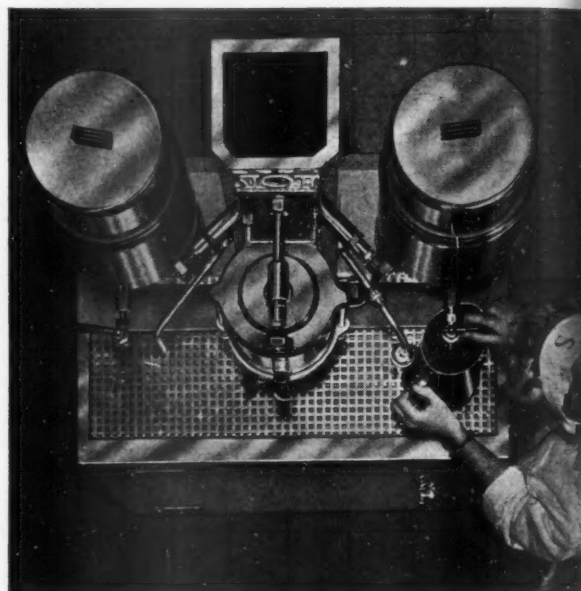
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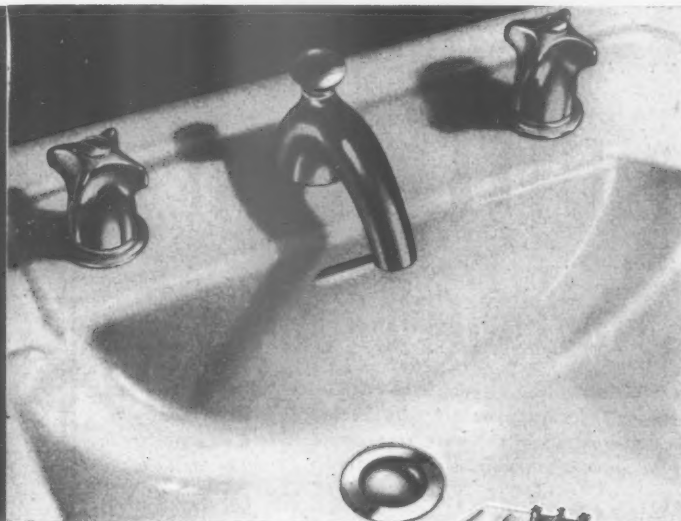
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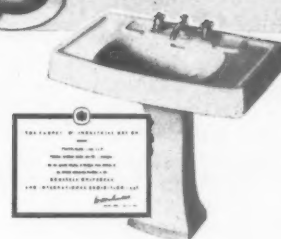
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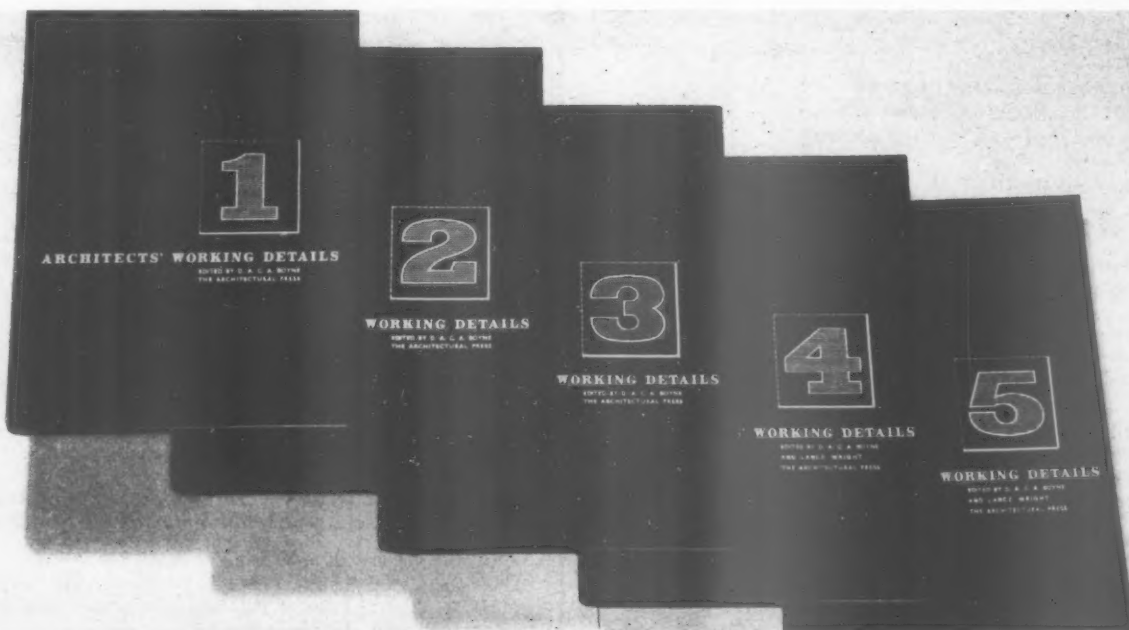
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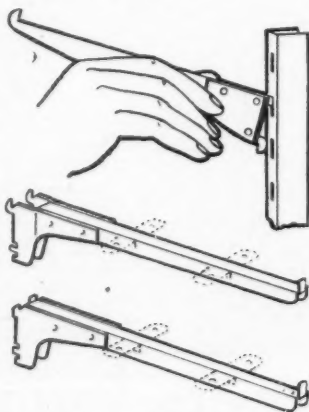
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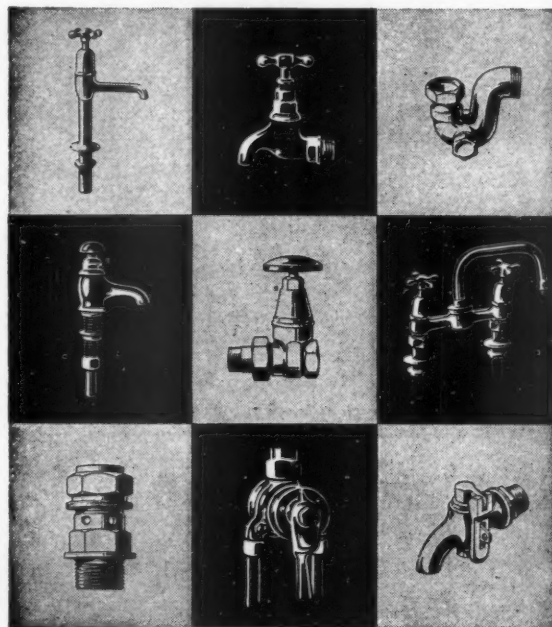
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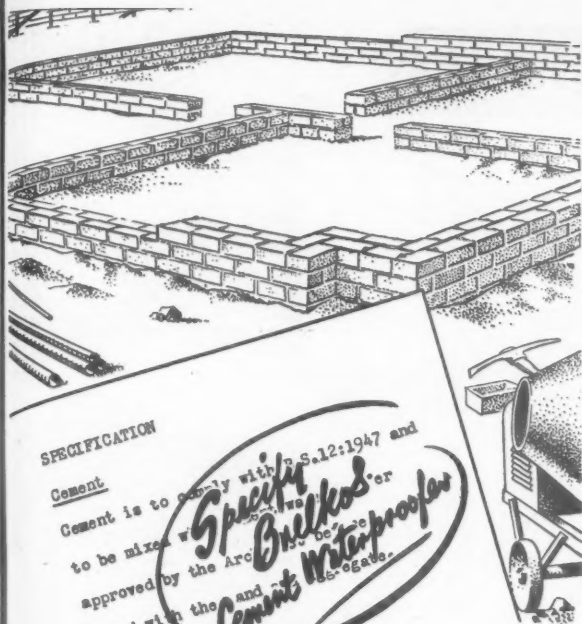
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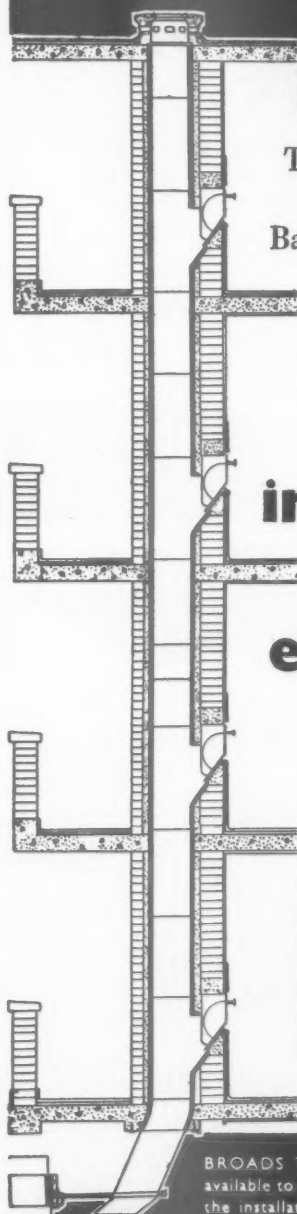
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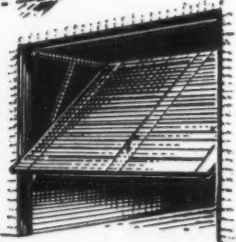
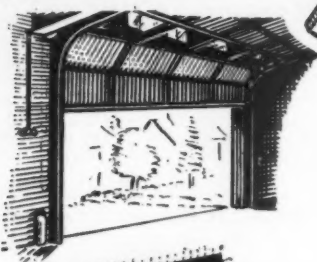
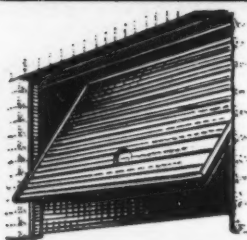


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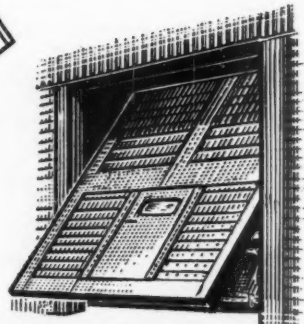
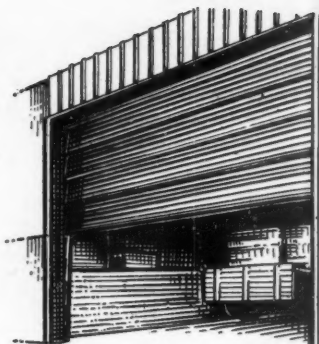
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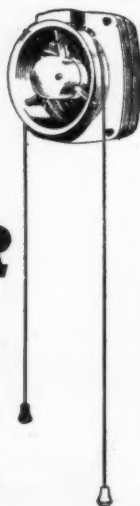
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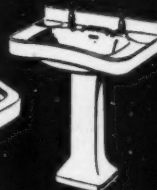
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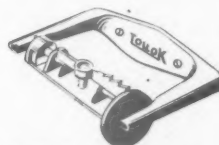
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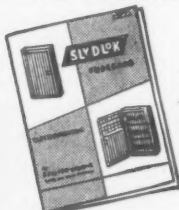
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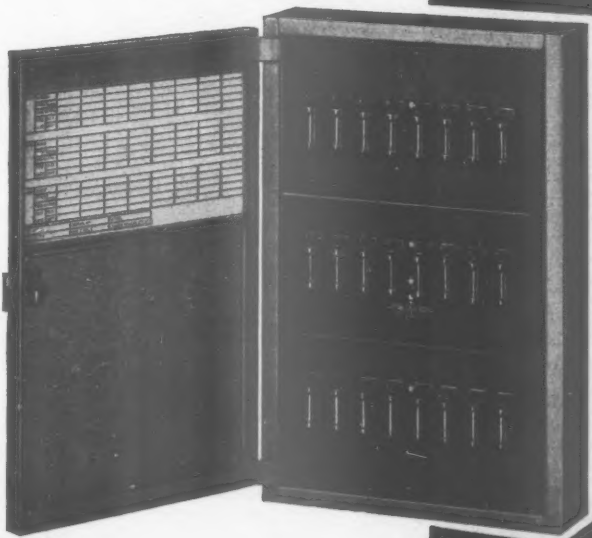
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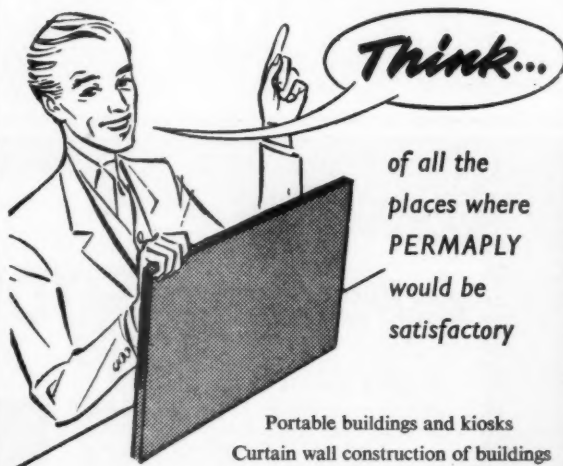
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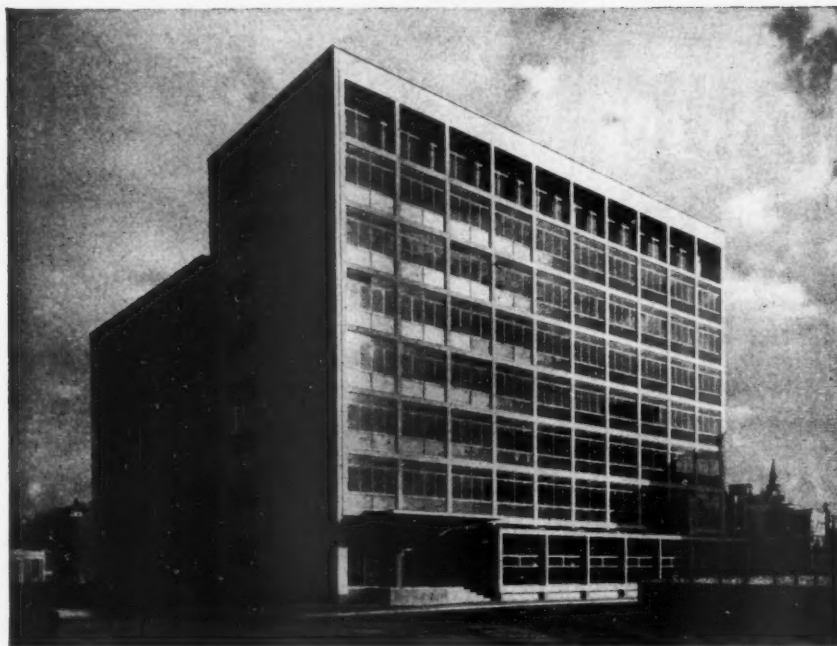
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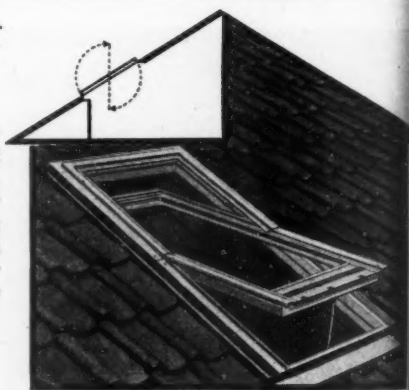
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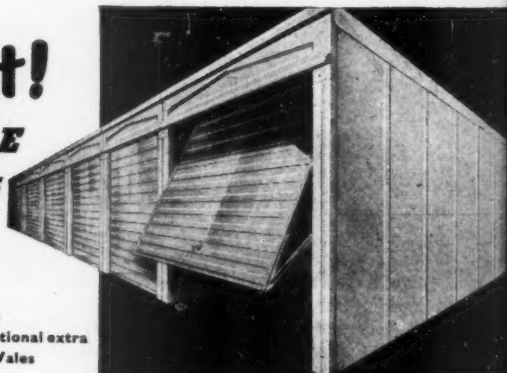
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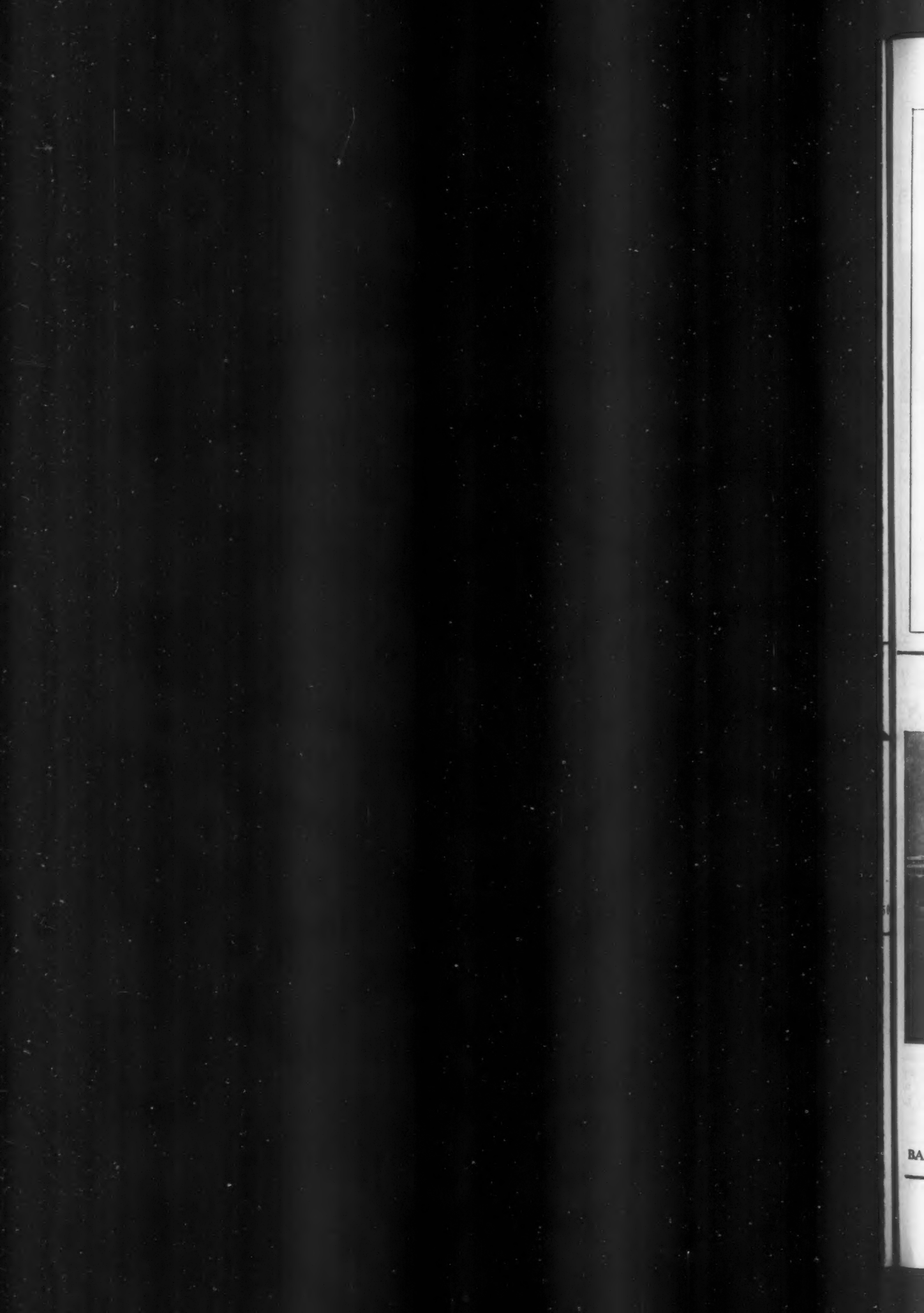
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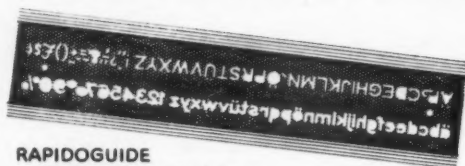
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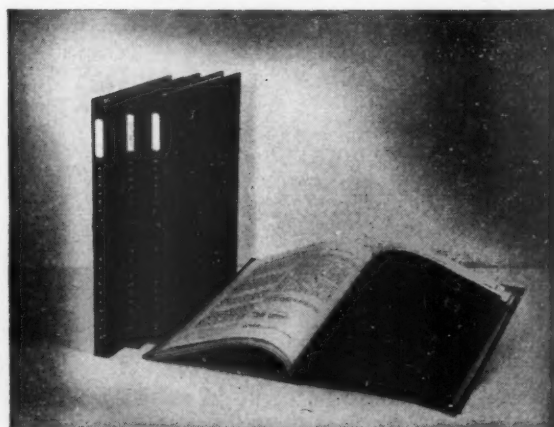
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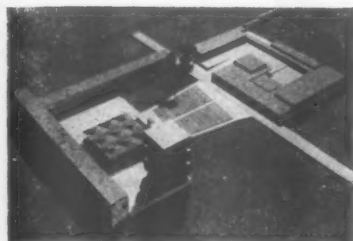
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## FEBRUARY

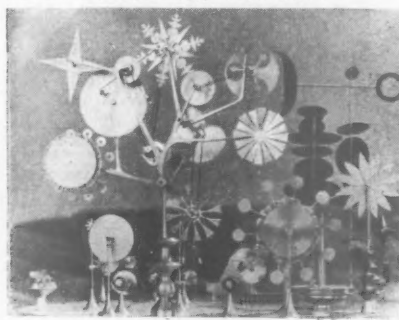


Nigerian University: Library, Arts Faculty, Administration and Students' Union buildings, and an open-air auditorium, at Nsukka, Eastern Nigeria, designed by James Cubitt and Partners, and pre-viewed in this issue.

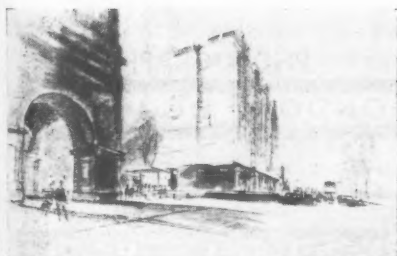


Spec and Span: this house at Teddington is among the buildings discussed in a full dress survey of Eric Lyon's Span speculative developments by R. Furneaux Jordan.

Sun Mill: the ingenious solar toy designed by the ever-inventive Charles Eames, to dramatise the potentialities of the sun as a source of energy, a cosmic mobile.



## MARCH



Royal College re-housed: Sir Hugh Casson's impression of the view along Kensington Gore, past the Albert Hall, to the proposed new building for the Royal College of Art. Architect: H. T. Cadbury Brown.



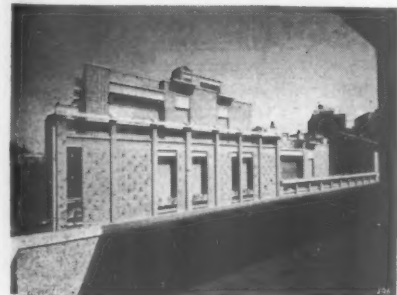
High Knightsbridge: a night view of the Bowater House office block by Guy Morgan and Partners, another stage in the transformation of the London scene.

Swiss Mushrooms: entrance canopy to the Tiefenbrunnen bathing beach by Josef Schütz, an example of indivisible landscaping/architecture from Ian Nairn's article on recent work in Switzerland.



## APRIL

Neoliberty: a recent house in Milan by Figini and Pollini, discussed in Reyner Banham's article on the 1910 Revival in Italy, and the current retreat from Modern Architecture there.



Without proscenium: the stage and amphitheatre of the Festival Theatre, Stratford, Ontario, designed by Rounthwaite and Fairfield, from Richard Leacock's article on the open stage.

Eastbourne Terrace: right, one of the tall blocks from Cecil Elsom's street-long redevelopment scheme on bombed sites at the side of Paddington station.



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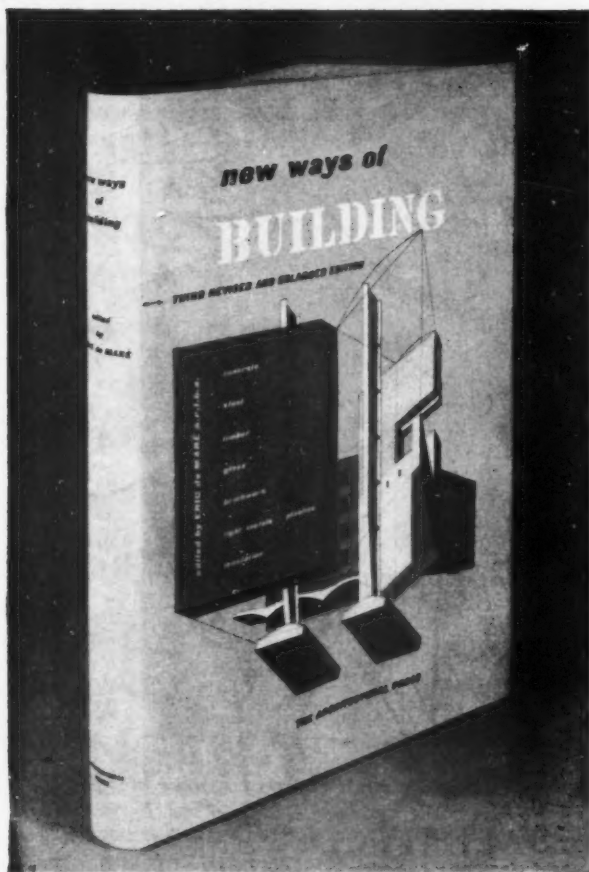
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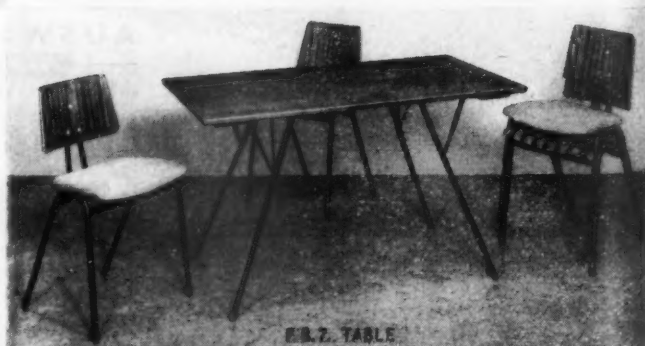
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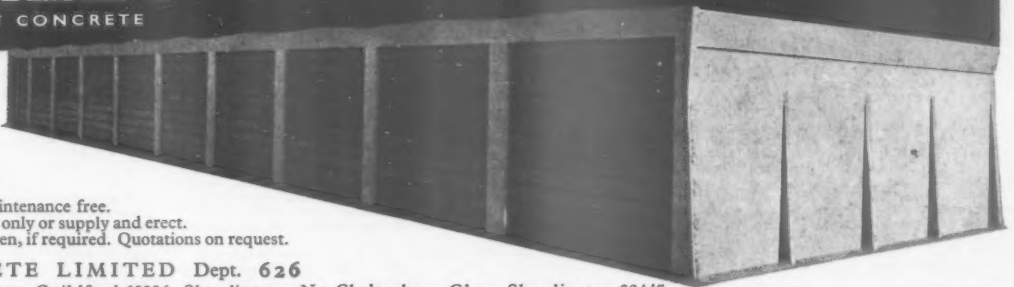
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ARCHITECT'S DEPARTMENT  
ASSISTANT ARCHITECTS: Salary scale £750-£1,030.

Applications are invited for appointment of Assistant Architects from persons who have passed Parts I and II of the R.I.B.A. Final or Special Examination or the equivalent at one of the recognised schools of architecture. The successful applicants will work in teams on large projects, but opportunity will be given to men with enthusiasm and ability to design and carry out smaller projects under a Group Architect.

The appointments are on the established staff and subject to the Scheme and Conditions of Service of the National Joint Council for Local Authorities and the Local Government Superannuation Acts, 1937-1953. The Council is unable to offer housing accommodation but consideration will be given to the granting of financial assistance towards the payment of removal expenses. The commencing salary will be determined upon the successful applicant's ability and experience.

Applications are to be on forms which can be obtained from G. R. Barnsley, F.R.I.B.A., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,

Clerk of the Council.

Shire Hall,  
Warwick.

2865

BRACKNELL DEVELOPMENT CORPORATION  
Applications are invited for the post of ARCHITECTURAL ASSISTANT in the Chief Architect's Department. The salary will be in the Higher General Division which rises to a maximum of £531. Commencing salary will be determined according to experience.

Superannuation Scheme, medical examination. Housing available. Apply by 23rd February, 1959, giving age, education and qualifications, experience and appointments held (with dates and salaries), with names of two referees, to General Manager (A.A.), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. 2926

BOROUGH OF EPSOM AND EWELL  
BOROUGH ENGINEER AND SURVEYOR'S  
DEPARTMENT  
APPOINTMENT OF ARCHITECTURAL  
ASSISTANT-A.P.T. II

Applications are invited for the appointment of an Architectural Assistant on Grade A.P.T. II at a commencing salary up to £275 per annum including London weighting, according to qualifications and experience.

The Department, at present, has a considerable volume of architectural work on hand and applicants should have had experience in the preparation of plans, specifications, etc., and preference will be given to candidates holding a part of the examination leading to associateship of the R.I.B.A.

Applications, stating age, qualifications and experience, with the names of three referees, should be sent to Mr. Colin Cobbett, A.M.I.C.E., M.I.Mun.E., Borough Engineer and Surveyor, Town Hall, The Parade, Epsom, so as to reach him not later than Wednesday, the 18th February, 1959.

EDWARD MOORE,

Town Clerk.

January, 1959.

2901

SOUTHAMPTON COUNTY BOROUGH  
COUNCIL requires under N.J.C. conditions of service:

(a) SENIOR ASSISTANT ARCHITECT—salary within A.P.T. Grade IV (£1,025/£1,175 p.a.).

(b) SENIOR ASSISTANT QUANTITY SURVEYOR—salary within A.P.T. Grade IV (£1,025/£1,175 p.a.).

(c) ASSISTANT QUANTITY SURVEYOR—salary within Special Grade (£750/£1,030 p.a.).

Applicants must be Chartered Architects or Chartered Quantity Surveyors respectively, with experience in municipal housing including multi-storey flats and shopping centres.

Apply on application forms obtainable from the Borough Engineer and Surveyor, Civic Centre, Southampton, by Monday, 16th February, 1959.

2869

CITY OF SHEFFIELD  
CITY ENGINEER & SURVEYOR'S DEPARTMENT

## SENIOR PLANNING ASSISTANT—GRADE A.P.T. V

Applications are invited for the position of Senior Planning Assistant on the permanent staff of the City Engineer & Surveyor & Town Planning Officer (H. Foster, M.A., M.I.C.E., M.I.Mun.E.). The post is established in Grade A.P.T. V (£1,175-£1,325 p.a.); commencing salary will be in accordance with experience and qualifications. Candidates must possess both Planning and Architectural experience, and will be required to be Members of either the Town Planning Institute or the Royal Institute of British Architects.

Superannuable post, N.J.C. Conditions of Service. Medical Examination.

Applications, stating age, education and training, qualifications, experience, present and past appointments (with dates and salaries), and quoting the names of two referees, should be submitted to the undersigned by the 27th February, 1959.

JOHN HEYS,

Town Clerk.

Town Hall,  
Sheffield, 1.

2884

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

Applications invited for the permanent post of SENIOR GROUP ARCHITECT: A.P.T. Grade V (£1,175 x £50-£1,325 p.a. and L.A.). Commencing salary according to qualifications and experience.

Must be A.R.I.B.A., capable of handling large and high density housing schemes and controlling staff.

Application forms and details from Borough Architect & Planning Officer, 70, West Ham Lane, Stratford, E.15, returnable by Tuesday, 24th February, 1959.

2848

## BUCKS COUNTY COUNCIL

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

(a) ASSISTANT QUANTITY SURVEYOR, A.P.T. V (£1,175-£1,325 p.a.).

(b) ASSISTANT QUANTITY SURVEYOR, A.P.T. IV (£1,025-£1,175 p.a.).

Applicants must be Associates of the Royal Institution of Chartered Surveyors with considerable experience in the preparation of Bills of Quantities and settlement of final accounts. The appointments are superannuable and subject to medical examination.

A weekly allowance of 25s. and return fare home once every two months may be paid for six months to newly appointed married officers of the Council unable to find accommodation.

Applications, on forms provided, must be returned by 14th March, 1959.

F. B. POOLEY,

County Architect.

County Offices,  
Aylesbury.

2896

## LONDON COUNTY COUNCIL

## ARCHITECT'S DEPARTMENT

Vacancies for ARCHITECT/PLANNERS. Tasks include three-dimensional planning within London's eight major Comprehensive Development Areas (including Stepney/Poplar, South Bank and Elephant and Castle) and other Redevelopment Areas. Work includes preparation of comprehensive layouts for all important areas of new development throughout the County including areas to be redeveloped in connection with road improvements.

Starting salaries up to £260 according to experience and qualifications. Application forms and particulars obtainable from Hubert Bennett, F.R.I.B.A., Architect to Council (Ref. AR/EK/7/59). County Hall, London, S.E.1. (146) 2804

## LANCASHIRE COUNTY COUNCIL

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

Applications are also invited from qualified QUANTITY SURVEYORS with a wide experience in the preparation of bills of quantities, for major projects of all types, and able to take charge from taking-off to settlement of final accounts.

All the above posts, which are permanent, are within the salary range £1,025-£1,175; starting point according to experience.

Application forms from the County Architect, P.O. Box 26, County Hall, Preston. Reference A/AJ.

2946

## COUNTY COUNCIL OF THE WEST RIDING

## OF YORKSHIRE

## OFFICE OF THE COUNTY ARCHITECT

In connection with work on the Council's extensive building programme, which includes schools, colleges, old people's and children's homes, clinics, ambulance fire, and police stations, and other public buildings, applications are invited for the undermentioned appointments.

(a) ASSISTANT COUNTY ARCHITECT, J.N.C. Scale "D" £1,405-£1,625.

Applicants must be Associate Members of the Royal Institute of British Architects, be competent designers with a sound knowledge of modern methods of construction and be capable of taking charge of a large architectural section.

(b) SENIOR ASSISTANT ARCHITECTS, J.N.C. Scale "B" £1,285-£1,440.

(c) SENIOR ASSISTANT ARCHITECTS, Grade A.P.T. V, £1,175-£1,325.

(d) SENIOR ASSISTANT ARCHITECTS, Grade A.P.T. V, £1,025-£1,175.

Applicants for posts in these grades must be Associate Members of the Royal Institute of British Architects, with a good standard of design ability and a sound knowledge of modern methods of construction, and be capable of handling building projects from sketch plans to completion.

(e) ASSISTANT ARCHITECTS, Special Grade, £750-£1,030.

Applicants must have passed Parts I and II of the R.I.B.A. Final or Special examination or the equivalent at one of the recognised schools of architecture.

(f) JUNIOR ARCHITECTURAL ASSISTANTS, Grade A.P.T. II, £725-£845.

HEATING ENGINEERS

(a) SENIOR ASSISTANT HEATING ENGINEERS, Grade A.P.T. IV, £1,025-£1,175.

(b) ASSISTANT HEATING ENGINEER, Special Grade, £750-£1,030.

Applicants for (a) must be, and for (b) preferably should be, Associate Members of the Institution of Heating and Ventilating Engineers and be capable of designing and detailing heating, hot water, and ventilation installations.

STRUCTURAL ENGINEER

SENIOR ASSISTANT STRUCTURAL ENGINEER, Grade A.P.T. IV, £1,025-£1,175.

Applicants should be Associate Members of the Institution of Structural Engineers or equivalent and possess good experience in the design of steel work or reinforced concrete for modern buildings.

QUANTITY SURVEYORS

(a) SENIOR ASSISTANT QUANTITY SURVEYORS, Grade A.P.T. V, £1,175-£1,325.

(b) SENIOR ASSISTANT QUANTITY SURVEYORS, Grade A.P.T. IV, £1,025-£1,175.

Applicants should preferably be Associate Members of the Royal Institution of Chartered Surveyors and have had experience in the preparation of Bills of Quantities and measuring for and adjustment of final accounts.

(c) SENIOR ESTIMATING SURVEYOR, Grade A.P.T. V, £1,175-£1,325.

Applicants should be competent to prepare estimates of cost for new buildings and adaptations and for maintenance repairs and have experience in the preparation of approximate bills of quantities and in the checking and adjusting of final accounts.

(d) QUANTITY SURVEYING ASSISTANTS, Special Grade, £750-£1,030.

(e) JUNIOR QUANTITY SURVEYING ASSISTANTS, Grade A.P.T. II, £725-£845.

(f) JUNIOR QUANTITY SURVEYING ASSISTANTS, Grade A.P.T. I, £575-£725.

(g) JUNIOR ESTIMATING SURVEYOR, Grade A.P.T. II, £725-£845.

BUILDING INSPECTORS (for posts based on Divisional Offices at Harrogate, Huddersfield, Wakefield and Adwick-le-Street, Nr. Doncaster).

(a) SENIOR BUILDING INSPECTORS, Grade A.P.T. III, £845-£1,025.

(b) BUILDING INSPECTORS, Grade A.P.T. I, £575-£725.

Applicants should have a sound knowledge of building construction and maintenance, be capable of preparing reports and approximate estimates of cost for maintenance works and be experienced in the supervision of building works and the checking of builders' accounts. Senior Building Inspectors will be required to control the work of Building Inspectors within the Divisional area.

Applications to be submitted by the 24th February, 1959, on forms to be obtained from and returned to the undersigned.

A. W. GLOVER, F.R.I.B.A.,

County Architect.

"Bishopgarth,"

Westfield Road,

Wakefield.

2959

CITY ARCHITECT'S OFFICE  
MANCHESTER

Applications invited for appointment on the permanent staff of an ASSISTANT ARCHITECT. Salary, Special Scale, £750 to £1,030 per annum, the commencing salary will be fixed according to qualifications and experience. Housing accommodation for a limited period may be provided. Removal expenses allowed. Five-day week in operation. Forms of application from the City Architect, P.O. Box 488, Town Hall, returnable February 19th, 1959.

2966



## CITY OF BRADFORD

## ARCHITECTURAL ASSISTANTS

Applications are invited for the following superannuable appointments in the City Engineer and Surveyor's Department, on the grades indicated:

- (a) ARCHITECTURAL ASSISTANT. Post 123. Grade A.P.T. I (£575-£725).  
(b) DRAUGHTSMAN. Post 59. Grade A.P.T. I (£575-£725).

Candidates for (a) should have had experience in architectural design and have passed the Intermediate Examination of the appropriate professional body and had experience in general architectural work.

Applicants for (b) should be suitably qualified and have experience of maps and plans to Ordnance survey scales preferably engineering or architectural experience.

All applicants should have completed their National Service. No housing accommodation can be provided by the Corporation.

Applications on form to be obtained from the City Engineer and Surveyor, Town Hall, Bradford, 1, together with three testimonials must be received by the undersigned by the 26th February, 1959.

W. H. LEATHAM,

Town Clerk.

Town Hall, Bradford, 1.

2957

BOROUGH OF SCARBOROUGH  
BOROUGH AND WATER ENGINEER'S  
DEPARTMENT

Applications are invited for the following posts:—

ARCHITECTURAL ASSISTANT. Special Grade (£750-£1,030 per annum).

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

ARCHITECTURAL ASSISTANT. Grade A.P.T. II (£725-£845 per annum).

Applicant should have passed the Intermediate Examination of the R.I.B.A.

Both appointments are subject to the provisions of the Local Government Superannuation Acts 1937-1953, and to the passing of a medical examination, and will be terminable by one month's notice on either side. Housing accommodation will be made available for successful applicants, if married.

Applications in envelopes endorsed Architectural Assistant, stating age, present and previous appointments, training, qualifications and experience, together with the names of two referees, to be delivered to the undersigned not later than the 28th February, 1959.

V. FORSHAW,

Borough and Water Engineer.

2942

## COUNTY BOROUGH OF READING

Applications invited for the appointment of ASSISTANT ARCHITECTS who have passed Parts I and II, R.I.B.A. Final or Special Final Examination or their equivalent and have had at least five years' experience. Salary range £750 x £40-£1,030, according to experience. Posts permanent and appointment subject to N.J.C. Conditions. Housing accommodation will be considered. Applications, stating age, qualifications and experience, together with names and addresses of two referees, to Borough Architect, P.O. Box 17, Town Hall, Reading, not later than 2nd March, 1959.

2985

HACKNEY BOROUGH COUNCIL requires a TEMPORARY TECHNICAL ASSISTANT with architectural or building surveying experience in interesting work in connection with the conversion and improvement of property for multi-family occupation. Salary A.P.T. II commencing at £755 per annum. Application in writing to Housing Manager, 219, Mare Street, Hackney, E.8.

3015

PERTH AND KINROSS JOINT COUNTY COUNCIL require ASSISTANT ARCHITECTS—one on Grade A. & P. VII (£945-£1,025) to act as Project Leader of an extension scheme to the County Offices, and two on Grade A. & P. V/VI (£770-£955) with placing according to experience. Applicants should hold the A.R.I.B.A. A house may be available if required. Particulars of appointment and forms of application from the County Clerk, P.O. Box 15, County Offices, York Place, Perth. Applications to be lodged by 10th March, 1959.

3027

## LANCASHIRE COUNTY COUNCIL

Applications are invited from qualified HEATING & VENTILATING ENGINEERS experienced in the design of central heating schemes and hot water installations, using all types of fuel.

The posts, which are permanent, are within the salary range £1,025-£1,175; starting point according to experience.

Application forms from the County Architect, P.O. Box 26, County Hall, Preston. Reference 141.

2945

## BOROUGH OF STOCKTON-ON-TEES

BOROUGH ARCHITECTS' DEPARTMENT  
Applications are invited for the appointment of ASSISTANT ARCHITECT at a salary in accordance with the N.J.C. Special grade (£750-£1,030). Forms of application from the Borough Architect, 28, The Square, Stockton-on-Tees, to be returned not later than the 21st February, 1959.

Housing accommodation will be available for married applicants.

JOHN B. HAWORTH,

Town Clerk.

Barclays Bank Chambers,

Stockton-on-Tees.

20th January, 1959.

2952

CARLTON URBAN DISTRICT COUNCIL  
APPOINTMENT OF ARCHITECTURAL  
ASSISTANT

Applications are invited for the above appointment at a salary in accordance with Grade IV of the A.P.T. Division of the Scales of Salaries of the National Joint Council commencing at £1,025 per annum and rising by annual increments of £50 to £1,175 per annum, the point of entry to be determined having regard to the experience of the applicant.

Applicants must be Associates of the R.I.B.A. or Registered Architects.

The appointment will be subject to the provisions of the Local Government Superannuation Acts 1937 to 1953, the National Scheme of Conditions of Service and the satisfactory passing of a medical examination.

Applications stating age, qualifications and details of experience, together with the names of three referees should be forwarded to the undersigned by 10 a.m. on Monday, the 23rd February, 1959.

Housing accommodation will be made available if required and removal expenses will be paid by the Council.

A. E. F. WALKER,

Clerk of the Council.

Council House,

Burton Road,

Carlton, Nottingham.

30th January, 1959.

2988

COUNTY BOROUGH OF OLDHAM  
BOROUGH ENGINEER & SURVEYOR'S  
DEPARTMENT

## APPOINTMENT OF

## SENIOR ARCHITECTURAL ASSISTANT

Applications are invited from suitably qualified persons for the above appointment on Grade A.P.T. IV (£1,025-£1,175). The successful candidate will be expected to pass a medical examination. The N.J.C. Conditions of Service and the Local Government Superannuation Acts will apply.

Housing accommodation available if required. Applications, suitably endorsed, together with names of two referees, should reach me not later than Monday, the 23rd February.

A. L. HOBSON,

Borough Engineer & Surveyor.

75, Union Street,

Oldham.

2975

METROPOLITAN BOROUGH OF FULHAM  
BOROUGH ARCHITECT AND  
DEPUTY DIRECTOR OF HOUSING  
DEPARTMENT

Salary £1,597 x £37 (4) £232, £1,777. Requirements: Architectural qualification with administrative experience and organising ability. Experience in Local Government; design and execution of large contracts including multi-storey housing; controlling work by direct labour; letting, management and maintenance of Council flats and maintenance of public buildings. Application forms from me. Closing date 3rd March.

CYRIL F. THATCHER,

Town Clerk.

Town Hall,

Fulham, S.W.6.

2954

## COUNTY OF CORNWALL

Applications are invited from qualified architects for the appointment of ASSISTANT ARCHITECT on the salary range £750 x £40 to £1,030.

The commencing salary will be within the above grade, dependent upon the candidate's qualifications and experience. This salary scale allows for continuous progression to the maximum of the grade, subject to satisfactory service. The architect required for this post must have a progressive outlook, be willing to accept a maximum amount of responsibility and will work in a Group under the general supervision of the Assistant County Architect for Police, Fire, Health and Welfare Services.

The appointment is subject to the usual conditions of Local Government Service. Applications, accompanied by the names of two persons to whom reference can be made, should reach Mr. F. K. Hicklin, A.R.I.B.A., County Architect, County Hall, Truro, not later than Monday, 23rd February, 1959.

E. T. VERGER,

Clerk of the County Council.

County Hall, Truro.

27th January, 1959.

2965

## QUANTITY SURVEYING ASSISTANTS required by AIR MINISTRY in LONDON and PROVINCES. Duties include abstracting and billing site measurement and preparation of estimates. Commencing salary according to age, qualifications and experience. Salary ranges in London £695 at age 26 rising to £870 for candidates holding O.N.C. (Building) or (Builders Quantities) or equivalent, and good experience under Quantity Surveyor or Building Contractor. Knowledge of W.D. schedule an advantage.

Approved full time study will count towards period of experience. Salaries somewhat lower in Provinces. Promotion and pensionable prospects. Five-day week, three weeks leave a year. Appointments carry liability for service anywhere U.K. or overseas. Applicants normally should be natural born British subjects. Write stating age, qualifications and previous appointments including type of work done, to Manager, Professional and Executive Register, Ministry of Labour and National Service, Atlantic House, Farrington Street, E.C.4, quoting reference PE 105/745. No original testimonials should be sent. Only applicants selected for interview will be advised. 3024

## HORNCHURCH URBAN DISTRICT COUNCIL

Applications are invited for the following permanent appointments in the Engineer & Surveyor's Department.

- (a) ARCHITECTURAL ASSISTANT, A.P.T. I (£575-£725).

Applicants should have had suitable practical training and be probationers and studying for the Intermediate examination of the R.I.B.A.

- (b) SENIOR CLERK OF WORKS (BUILDING), A.P.T. II (£725-£845).

Applicants must have had considerable experience in the supervision of all types of building, with particular reference to housing construction and a sound knowledge of all the trades in connection therewith, including setting out, levelling and measurement of all works on the site and the keeping of all necessary records.

In addition, an amount equivalent to London weighting will be paid in respect of both appointments.

A five-day week is in operation for post (a).

An essential car user allowance is paid for post (b) for a car not exceeding 10 h.p. or 1399 c.c.

The posts are subject to the appropriate N.J.C. Conditions of Service, a medical examination and termination by one month's notice on either side.

Applications on the form to be provided by the undersigned must be returned by Saturday, 21st February, 1959.

P. L. COX,

Clerk of the Council.

Council Offices,

Billet Lane,

Hornchurch.

2964

## ARCHITECTURAL ASSISTANT required by

HAYES & HARLINGTON U.D.C. Salary within

Grade A.P.T. II, i.e., £725-£845 per annum, plus

appropriate London weighting, 21-25 years £20 per

annum, 26 years and over £30 per annum. Candidates

must have had a good general architectural

experience and preference will be given to applicants

who have passed the R.I.B.A. Intermediate

Examination. The Council is unable to assist

with the provision of housing accommodation.

Five-day week. Further particulars and conditions

of service and form of application obtainable

from the undersigned, which when completed

must be returned by 23rd February, 1959.

GEORGE HOOPER,

Clerk and Solicitor.

Town Hall,

Hayes, Middx.

2984

## BERKSHIRE COUNTY COUNCIL

ASSISTANT ARCHITECT, Special Grade, £750

-£1,030. Candidates should have had good architectural

training and be experienced in planning, design and construction. Preference will be given to

associates of the R.I.B.A.

Application forms and further particulars can

be obtained from J. T. Castle, A.R.I.B.A., A.M.T.P.I., County Architect, Wilton House,

Parkside Road, Reading, to whom they should

be returned not later than Tuesday, 17th

February, 1959.

January, 1959.

2966

## COUNTY COUNCIL OF ESSEX

COUNTY PLANNING DEPARTMENT

Applications invited for the post of PLANNING

ASSISTANT, A.P.T. Grade I (£575-£725) at

Braintree.

Applicants should have had experience in development control and/or development plan work, particularly design and elevation control, but consideration will be given to those who are qualified in Economics, Geography or Landscape

Architecture and wish to train and study for a qualification in Planning.

Five-day week; day release facilities; medical examination; superannuation.

Applications to County Planning Adviser,

Broomfield Place, Broomfield, Chelmsford, by 24th

February, 1959.

2996

## WITNEY RURAL DISTRICT COUNCIL

TECHNICAL ASSISTANT

ENGINEER & SURVEYOR'S DEPARTMENT

Applications are invited from suitably experienced persons for the above mentioned post

at a commencing salary in accordance with

A.P.T. Grade II (£725 to £845).

Applicants should have had sound training and previous experience in all duties relating to the

Department, including water supply, sewerage

and sewerage disposal schemes, building bye-law

administration and supervision of building works,

as the successful candidate will be required to

undertake building inspections.

The Department is expanding and supervision

of Council house construction will shortly be

undertaken within the Department together

with structural repairs and improvements.

Applicants should hold appropriate qualifications

and be competent draughtsmen and capable of

carrying out surveying and levelling.

The successful candidate will be required to

provide his own car and travelling allowance

will be paid on the "Essential User" scale.

The appointment is subject to (a) one month's

notice on either side, (b) the National Scheme

of Conditions of Service, (c) the provisions of the

Local Government Superannuation Acts, and (d)

the satisfactory passing of a medical examination.

Applications, accompanied by two testimonials,

endorsed "Technical Assistant," should be received

by the undersigned not later than 21st

February, 1959.

R. A. G. RAVENOR,

Clerk to the Council.

14, The Hill,

Witney,

Oxon.

3005

**SALOP COUNTY ARCHITECT'S DEPARTMENT**

Applications are invited for the appointment of an ASSISTANT ARCHITECT. Salary scale £750 x £40 to £1,030 p.a., the commencing point being determined by the successful applicant's ability and experience. Applicants must have passed the Final or Special Final Examination of the R.I.B.A. or an equivalent at one of the recognised Schools of Architecture. N.J.C. Conditions of Service will apply.

A disturbance allowance or weekly separation allowance may be paid to a married man taking up the appointment.

Conditions of Service and application forms obtainable from Ralph Crowe, A.A.Dipl., A.R.I.B.A., A.M.T.P.I., County Architect, Column House, London Road, Shrewsbury. Closing date 28th February, 1959. 3008

**WITNEY RURAL DISTRICT COUNCIL**

**APPOINTMENT OF MINUTE CLERK**

Applications are invited for the appointment of Minute Clerk in the Department of the Clerk to the Council at a salary in accordance with Clerical Division Grade I (£565 to £640).

Applicants should be competent typists; a knowledge of shorthand will be an advantage. Appropriate instruction will be given to the successful candidate, but some experience in a Clerk's Department would be an advantage.

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

Applications accompanied by two testimonials, endorsed "Minute Clerk," should be sent so as to reach the undersigned not later than 21st February, 1959.

R. A. G. RAVENOR,  
Clerk to the Council.

14, The Hill,  
Witney,  
Oxon. 3006

**WIRRAL URBAN DISTRICT COUNCIL**

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT in the Engineer and Surveyor's Department at a salary in accordance with Grade A.P.T. II (£725-£845), commencing salary according to experience and qualifications.

Applicants should preferably have passed the Intermediate R.I.B.A. examination and have good general experience in design and supervision of works.

Applications endorsed "Architectural Assistant," giving details of age, qualifications and experience, and accompanied by the names and addresses of two referees, should reach the undersigned not later than Saturday, 21st February, 1959.

Canvassing will disqualify.

W. F. ROBERTS,  
Clerk of the Council.

Council Offices,  
Heswall, Wirral. 3002

**LINDSEY (LINCOLNSHIRE) COUNTY COUNCIL**

**ARCHITECT'S DEPARTMENT**

Large and interesting programme of work requires the following on the permanent staff:—

(a) SENIOR ASSISTANTS, Special Grade, £750-£1,030.

(b) ASSISTANT, A.P.T. II, £725-£845.

(c) ASSISTANT, A.P.T. I, £575-£725.

(d) ENGINEERING ASSISTANT, A.P.T. III, £845-£1,025.

(e) ENGINEERING ASSISTANT, A.P.T. II, £725-£845.

Applicants for (a) should be A.R.I.B.A. and capable of controlling large schemes; (b) Intermediate R.I.B.A.; (c) Intermediate R.I.B.A. or completion of articles; (d) required principally for electrical work and should be graduate I.E.E. or I.H.V.E., preference will be given to applicant who has also a knowledge of heating; (e) should hold Section A of I.H.V.E.

Salary at starting point within the grade dependent upon qualifications and experience. N.J.C. Conditions of Service. Canvassing will disqualify. Candidates must disclose in writing whether to their knowledge they are related to any Member or Senior Officer of the Council.

Applications stating post applied for and salary required, giving age, qualifications, experience, present post and salary, and the names of at least two persons to whom reference can be made to be sent not later than 28th February, 1959, to the County Architect, County Offices, Lincoln. 3039

**LONDON COUNTY COUNCIL**

Vacancies for ARCHITECTURAL ASSISTANTS, starting salary up to £860. Full and interesting programme of houses, flats, schools and general buildings.

Application form and particulars from The Architect to the Council, County Hall, S.E.1, quoting AR/EK/14/59 (256). 3040

**SURREY COUNTY COUNCIL**

Applications invited for appointment of ASSISTANT ARCHITECT, Special Grade, £750-£1,030 p.a. plus £30 p.a. London Allowance. Must be A.R.I.B.A.

Full details, present salary and three copy testimonials to County Architect, County Hall, Kingston, as soon as possible. 3029

**BRACKNELL DEVELOPMENT CORPORATION**

Applications are invited for the post of ASSISTANT ARCHITECT, salary range £934-£1,146. Applicants must be Corporate Members of the R.I.B.A. Superannuation schemes, medical examination, Housing available. Apply by 25th February, 1959, giving age, education and qualifications, experience and appointments held (with dates and salaries), and names of two referees, to General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. 2995

**NORTHAMPTON RURAL DISTRICT COUNCIL**

**ARCHITECTURAL ASSISTANT**

Applications are invited for the above appointment on Grade A.P.T. II (£725 x £30 to £96 per annum), according to qualifications and experience. A travelling allowance on the Council's Scale for an 8 h.p. motor-car will also be paid.

Applicants should have passed the R.I.B.A. Intermediate examination or its equivalent at one of the recognised schools of architecture and have had a sound general experience.

The principal work will be preparation of improvement schemes for Council Houses, although from time to time, new works will be involved.

The appointment is subject to the Local Government Superannuation Acts, the National Conditions of Service, a satisfactory medical examination, and termination by one month's written notice on either side.

Applications endorsed "Architectural Assistant," with personal details and details of experience and qualifications together with names of two referees, to be sent to the undersigned by first post on Saturday, 21st February, 1959.

CLIFFORD E. JONES,  
Clerk of the Council. 2974

**COUNTY BOROUGH OF DEWSBURY**

**BOROUGH ARCHITECT AND BUILDINGS SURVEYOR'S DEPARTMENT**

Applications are invited for the following appointments:—

(a) TOWN PLANNING ASSISTANT—A.P.I. Grade I.

(b) ASSISTANT ARCHITECT (Housing and General Section)—Special Grade.

(c) ASSISTANT QUANTITY SURVEYOR—Special Grade.

The commencing salaries will be fixed within the scope of the grades stated according to qualifications and experience, i.e., Special Grade £750-£1,030 p.a. and A.P.T. Grade I £575-£725 p.a.

Applicants for appointment (b) must have passed the Final examination of the R.I.B.A. and those for appointment (c) the Final examination of the R.I.C.S.


Housing accommodation may be made available if required.

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

Applications stating age, education, qualifications, full particulars of training and experience, together with copies of two recent testimonials should be sent to the undersigned not later than Monday, 2nd March, 1959, in envelopes endorsed "Appointment of .....".

A. NORMAN JAMES,  
Town Clerk.

Town Hall, Dewsbury.  
5th February, 1959. 3035



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**METROPOLITAN BOROUGH OF HOLBORN**  
ASSISTANT ARCHITECT in Borough Architect's Department, R.I.B.A. Intermediate; A.P.T. II (£725-£845 plus London weighting). Opportunity of promotion and facilities for studying. Applications with two references to Town Clerk, Town Hall, High Holborn, W.C.1. 2997

**COUNTY OF ESSEX**  
**BOROUGH OF WALTHAMSTOW**  
**COMMITTEE FOR EDUCATION**  
Applications are invited for the following appointments in the office of the Education Architect, Mr. T. L. Rampton, A.R.I.B.A., A.R.I.C.S. 2997

(a) ASSISTANT ARCHITECT, Special Grade, £50 to £1,030 per annum.  
(b) ARCHITECTURAL ASSISTANT, A.P.T. Grade I, £575 to £725 per annum. London weighting of £30 (under 26 years of age £20) applicable to both appointments. Commencing salary according to qualifications and experience.

For appointment (a) applicants must have passed Parts I and II of the Final Examination of the R.I.B.A. Experience in design and construction of schools an advantage.  
Forms of Application to be obtained from and returned to the Borough Education Officer, Town Hall, Forest Road, Walthamstow, E.17, within two weeks of the appearance of this notice. 3037

**NOTTINGHAMSHIRE COUNTY COUNCIL**  
**COUNTY PLANNING DEPARTMENT**  
**APPOINTMENT OF ARCHITECT**

Applications are invited for the appointment of Architect on J.N.C. Grade A, salary at present £1,100-£1,380 per annum. The appointment will have effect from 1st April, 1959. Applicants must be Associates of the Royal Institute of British Architects, and in addition membership of the Town Planning Institute would be an advantage. Experience in the design and grouping of buildings, the re-development of built-up areas and preparation of housing layouts required.

Further particulars from the County Director of Planning, Shire Hall, Nottingham, to whom applications should be submitted by 16th February, 1959.

A. R. DAVIS,  
Clerk of the County Council. 2894

### Tenders Invited

5 lines or under, 15s.; each additional line, 2s. 6d. One Number, including forwarding replies, 2s. extra

**SOUTHERN ELECTRICITY BOARD**  
NO. 2 (NEWBURY) SUB-AREA  
61 SPA ROAD, MELKSHAM  
OFFICES, WORKSHOPS & STORES  
SUPERSTRUCTURE

CONTRACT NO. N/B 353  
TENDERS on a fixed price basis are invited for the erection of the superstructure of the NEW OFFICES, STORES AND WORKSHOPS AND THE ALTERATION OF AN EXISTING OFFICE BUILDING at Melksham.

Separate contracts are already in progress for site works and for the erection of the structural steel framework.

Bill of Quantities and Form of Tender will be available from the 20th February, 1959, and may be obtained from the Sub-Area Engineer, 7 Oxford Road, Newbury, on receipt of a returnable deposit of £2 2s. 0d.

Tenders to be delivered to the Sub-Area Engineer by not later than 12 noon on Monday, 23rd March, 1959. 2967

### Architectural Appointments Vacant

5 lines or under, 9s. 6d.; each additional line, 2s. 6d. One Number, including forwarding replies, 2s. extra

**A COMPETENT ASSISTANT**, with several years' experience and capable of working with little supervision, required in Branch Office, Birmingham, engaged on a varied and interesting programme of commercial projects. Applications giving full particulars and salary required. To: G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Ballin Street, Manchester. 4. 1874

**WILL** any JUNIOR ASSISTANT who prefers to work in a small Private Office, and is interested in the preservation of Historic Buildings, please apply to L. H. Bond & R. W. Read, 4, Castlegate, Grantham. 2553

**SCHERRER & HICKS** require in their London Office ARCHITECTURAL ASSISTANTS with contemporary outlook willing to use own initiative. Salary £600 to £900. Write giving full particulars of experience and salary required to B. Cavendish Square, W.1. 2829

**KUWAIT** Qualified ARCHITECT required for office in Kuwait. Applicants should be capable of starting and supervising office, negotiating with Kuwait Government, Kuwait Oil Company, etc., for design and erection of buildings. Bachelor quarters provided, salary subject to negotiation according to experience. State age, experience and qualifications to L. W. VASS LIMITED, AMPTHILL, BEDFORD. 2700

ASSISTANT required in busy West End practice, about 25 years of age and R.I.B.A. Intermediate standard. Good opportunities for taking responsibility. Please write giving details of experience and salary required. Box 2580.

**RILEY & GLANFIELD** require MALE ASSISTANT of Intermediate standard. Work: Church, industrial, housing and public house. Some general office experience is necessary. Tel. CHA. 7328. 2737

**COMPANY ARCHITECT** required to take charge of Architect's Department of large firm of building and civil engineering contractors. Candidates must be capable of designing and supervising building projects from inception to completion. An interest in the use of modern materials and new building techniques would be an advantage. Apply giving full particulars of experience, qualifications, salary required, etc., to Box 2856.

**MATKIN & HAWKINS** require competent ARCHITECTURAL ASSISTANT. A responsible and progressive post. Varied and interesting programme. Good salary offered according to experience. Pension scheme available. Applications giving full particulars and salary required to Barclays Bank Chambers, Fawcett Street, Sunderland. 2890

**LANCHESTER & LODGE** urgently require an ARCHITECTURAL ASSISTANT nearing Final standard to assist on large and interesting University project. Write full particulars: 10, Woburn Square, London, W.C.1. 2832

**LANCHESTER & LODGE** urgently require a JUNIOR ASSISTANT with minimum of 2 years' experience. Write full particulars: 10, Woburn Square, London, W.C.1. 2833

**ARCHITECTURAL ASSISTANTS**, Intermediate standard, required in Architect's Department for work in connection with flat, maisonette, shop and housing developments throughout the country. Applicants must be competent draughtsmen with contemporary outlook. Good salary and prospects. Pension scheme in operation. Apply T. W. Matthews, Esq., Davis Estates Ltd., 346-350, Kilburn High Road, N.W.6. 2835

**BRIGHTON AND HOVE**, Experienced Senior and Junior ASSISTANTS required for small office. Salaries up to £800 per annum. Box 2843.

**ARCHITECTURAL ASSISTANTS** of Senior and Intermediate standard required for varied and interesting programme of work. Experience in contemporary design and construction essential. Salary by arrangement. Applications giving full details of experience to Cruickshank & Seward, F.R.I.B.A., 196, Deansgate, Manchester 3. 2853

**ASSISTANT ARCHITECT** (Associate) required by private firm in Nigeria. Single man. Eighteen month tour in first instance. Passages, living accommodation and car provided. Salary according to age and experience. Box 2933.

**NORFOLK** Office requires Single ARCHITECTURAL ASSISTANT of about Intermediate Standard. Experience in Local Authority Housing an advantage. Reply with details of age and salary required to Box 2935.

**ARCHITECTURAL ASSISTANT** required for Brewery Architect's Office. Capable of proceeding from sketch stage, largely licensed houses and hotels; good knowledge of design and construction essential; previous experience in brewery work not necessary. Full details, age and salary required to the Architect, Thomas Ramsden & Son Ltd., Stone Trough Brewery, Halifax. 2941

**BUCKINGHAMSHIRE** firm of Architects within 30 miles of London, with a varied practice, require two qualified ARCHITECTURAL ASSISTANTS. Five-day week, salary according to age and experience. Please write giving full particulars to Box 2861.

**ONE ARCHITECTURAL ASSISTANT**, qualified and two ARCHITECTURAL ASSISTANTS, Intermediate standard, for Manchester firm of Architects. Write stating age, qualifications and experience to Box 2860.

**NORTH & PARTNERS**, Chartered Architects, Broadway, Maidenhead, have a vacancy in their Drawing Office for ARCHITECTURAL Senior and Intermediate ASSISTANT in the salary range £750 to £1,000. 2874

**EXPERIENCED ASSISTANTS** required immediately by Hasker & Hall, L.F.R.I.B.A., for work in their London and Midlands offices. Telephone Welbeck 0061 or Birmingham Knowle 3502. 2928

**CLYDE NAVIGATION TRUST**  
ARCHITECTURAL ASSISTANT  
APPLICATIONS are invited for the appointment of a qualified Architectural Assistant on the Staff of the Trust.

Applicants must have several years' experience in the design and construction of industrial and office buildings. A knowledge of estimating and the preparation of specifications and bills of quantities would be an advantage.

The appointment will be initially in the salary range of £1,080/£1,280 per annum according to age, qualifications and experience. The post is pensionable and carries good prospects of early promotion to the higher senior salary grade.

The successful applicant will require to pass a medical examination and become a member of the Trustees' Superannuation Fund.

Applicants should state age, education, qualifications, full particulars of training and experience, and present salary.  
Applications, which will be treated in strictest confidence, should be lodged with the Engineer, Clyde Navigation Trust, 16 Robertson Street, Glasgow, C.2. 2919

**INTERMEDIATE standard ARCHITECTURAL ASSISTANTS** required. Office in Holborn area. Salary range £500/£800, dependent on experience and capability. Write Box 2903.

**ASSISTANT** required, with a sound all-round knowledge. Good draughtsman and draftsman to fit into an office carrying out many types of work. Experience in domestic and school building essential. Write or telephone A. R. Dannatt & Son, F.R.I.B.A., 65a, Duke Street, Chelmsford 3857. 2927

**BURLES & NEWTON** require JUNIOR ARCHITECTURAL ASSISTANTS. The appointments offer experience and opportunity. Reply 25, Bedford Row, W.C.1. 2920

**ARCHITECTURAL ASSISTANTS** required in London and Bishop's Stortford Offices. Intermediate to Final standard. Apply: Gerald Lacoste & Partners, 247, Regent Street, W.1. 2887

**ARCHITECT'S ASSISTANT** required for the London Office of a firm of Architects with interests throughout the country. Must be of Intermediate R.I.B.A. or R.I.C.S. standing. Superannuation scheme. Apply to: Cotton, Ballard & Blow, 5, Baker Street, London, W.1. WELbeck 3364. 2818

**NEW Nottingham and Belper Offices**, good ASSISTANTS are required to handle some exciting jobs. Salary range £500 to £1,000 with opportunities for advancement. Five-day week. Please write to G. E. Grey, Penmaen House, Belper, Derby. 2817

**WELL-KNOWN** progressive Architect, in West-Central London, whose current work includes a Town Hall, high flats, bank modernizations, schools, requires TWO forward-looking ASSISTANTS; one to work immediately under an associate partner, also one more junior, about sixth year Evening School standard. Five-day week, salaries according to ability and experience. Write Box 2814.

**ASSISTANT** required in small busy office, good knowledge of construction and administration essential; must be quick draughtsman with experience of working drawings. Five-day week. Salary according to experience. Apply J. H. Allyn, F.R.I.B.A., 1a, Berners Street, London, W.1. Langham 3457. 2993

**EXPERIENCED ARCHITECTURAL ASSISTANTS** required with a good sense of design and a sound knowledge of building construction. All applications in writing, please, with full details. C. H. Elsom and Partners, 10, Lower Grosvenor Place, S.W.1. 2994

**WANTED** immediately—a DRAUGHTSMAN of about Intermediate standard with office experience. Salary £450-£650. Waterhouse & Ripley, PP/F.A.R.I.B.A., Staple Inn Buildings, High Holborn, W.C.1. HOLborn 2399. 2992

**NORMAN & DAWBARN** invite applications from ARCHITECTURAL ASSISTANTS at Intermediate/Final standard with at least three years' office experience. Salary between £750 and £900. Write to: 7, Portland Place, W.1, giving full particulars. 2991

**ARCHITECTURAL ASSISTANT** required for small office, interesting and varied work on both new and historic buildings; must be good draughtsman and able to handle work with minimum of supervision. Five-day week; Bloomsbury area. Salary by arrangement. Box 2999.

**ASSISTANT** required for small busy office; must be experienced draughtsman, capable of detailing houses and flats. W.C.2 district. Please apply, giving full particulars, to Box 2990.

**ARCHITECTURAL ASSISTANTS** required. Salary £600 to £900. Apply Ronald Ward and Partners, 29, Chesham Place, S.W.1, or telephone Belgraveia 3361. 3009

**ARCHITECTURAL ASSISTANT** with practical experience, capable of preparing working drawings, specifications and site supervision, for West End Office. Box 3007.

**EXPERIENCED ARCHITECTURAL ASSISTANT** required, preferably qualified, for expanding practice in Dartford. Work on hand includes multi-storey flats, housing and industrial schemes. Salary range £850-£1,000. Intermediate ASSISTANT also required. Please write, stating full details, to Box 3004.

**LOUIS DE SOISSONS, PEACOCK, HODGES & ROBERTSON** have immediate vacancies for SENIOR and JUNIOR ASSISTANTS. Write, stating age, salary and experience to the above at 3, Park Square Mews, Upper Harley Street, London, N.W.1. 3005

**CROYDON**—Experienced and competent ARCHITECTURAL ASSISTANTS required. Write, stating fullest particulars, to Graham Crum and Denis Crum, F.A.R.I.B.A., Chartered Architects, 43, George Street, Croydon. 2958

**BROMLEY** Architect with small expanding practice requires temporary minded SENIOR and JUNIOR ASSISTANTS to work on multi-storey flats, offices, school, etc. Good opportunity for responsible person. Robert J. Wood, A.R.I.B.A., Lewes Road, Bromley, Kent. RAVensbourne 1083. 2947

**ONE** experienced SENIOR ASSISTANT of Final Standard and one JUNIOR ASSISTANT of Intermediate Standard required. Applications, stating age, qualifications, experience and salary required, to be made to: Fyle & Saint, Chartered Architects, Thomas Street House, Cirencester, Glos. 2949

**MANCHESTER** Architect with small but busy practice requires another ASSISTANT, at intermediate level or above. Box 2961.

**ASSISTANT** required (about Intermediate). Salary £500/£700 p.a. according to experience. Knowledge of shopfitting great asset. Apply: J. E. Dalling, L.R.I.B.A., 53, St. Martin's Lane, W.C.2. 2962

**THE EMPIRE (CATERING) CO. LTD.** have a vacancy for ARCHITECTURAL ASSISTANT, about Intermediate standard. Work mainly concerned with extensive programme of restaurant expansion. Write, giving age, salary, experience, etc., to: The Company Architect, 46/48, James Street, London, W.1. 2969

**INTERMEDIATE ASSISTANT** required to work in Deal upon variety of projects, including Flats, Offices, Conversions. Practical office experience essential. Salary according to experience, approx. £700-£800. Phone SLOANE 0833 or write 3, Buckingham Palace Gardens, S.W.1. 2968

**ARCHITECTURAL ASSISTANT** required in Architect's Department of London Brewery Company. Must be good draughtsman. Write, stating age, qualifications, experience, salary required. Box 2961.

**ARCHITECT'S SENIOR ASSISTANT**, of about R.I.B.A. Final standard or equivalent, required for busy Architect's Office. Apply Stevens and Partners, 49, Havelock Road, Hastings. Tel. 5368. 2970

**ARCHITECT'S ASSISTANT** (Intermediate standard) required for London Office. Apply G. Langley-Taylor and Partners, 9, Kings Bench Walk, E.C.4. Tel. Central 4774. 2978

**JUNIOR ARCHITECTURAL ASSISTANT**, with previous office experience, required in expanding practice. Apply, stating age, experience and salary required, to Earp, Badger & Harrison, A/R.I.B.A., 4, High Street, Evesham. 2980

**ARCHITECTURAL ASSISTANTS** required by Burgess Suspended Ceilings. Salary according to experience up to £1,000 p.a. Five-day week. Pension Scheme. Every prospect of advancement. Write: L. F. Jackson, Esq., Burgess Products Co. Ltd., Brookfield Road, Hinckley, Leicestershire. 3023

**WE** wish to engage an ARCHITECT who is not only competent at his job, but can appreciate the commercial aspect of property development. In other words, a first-class Architect and also a sound business man. Must be immediately available. Apply Box 3011.

**ARCHITECTURAL ASSISTANTS**, Senior and Intermediate. State salary and experience. Barnard and Partners, Architects, 13, Imperial Square, Cheltenham. 2977

**ARCHITECTURAL ASSISTANT**, Intermediate to Final standard, required in Eastbourne Office. Five-day week, good salary and prospects. Apply with full particulars and stating salary required, to H. Hubbard Ford, F.R.I.B.A., 24, Cornfield Road, Eastbourne. 2979

**LITTLEWOODS MAIL ORDER STORES LTD.** require

**ARCHITECTURAL ASSISTANTS** for the Construction Department. This progressive and expanding company is undertaking an extensive building development programme and a variety of interesting projects are in progress throughout the British Isles. The vacancies should appeal particularly to young men who have just become Associates of the R.I.B.A. or have reached Intermediate R.I.B.A. standard. They will be given every encouragement to exercise initiative and acquire wider experience in a well-established department. Generous starting salaries. Staff Life Assurance and Pension Scheme. Five-day week. Applications in writing should be addressed to: Establishments Manager (Ref. AA/57/AJ), Littlewoods Mail Order Stores Ltd., Spinney House, Church Street, Liverpool, 10. 2982

**ARCHITECTURAL ASSISTANTS** for University and Hospital work. Good salary, dependent on experience. Non-contributory Pension Scheme in being after probationary period. Three weeks holiday a year, and five-day week. Reply, stating age, experience, etc., to: Thomas Worthington & Sons, 178, Oxford Road, Manchester, 13. 2987

**FRY, DREW, DRAKE & LASDUN** have vacancies for experienced qualified ASSISTANTS in their London Office for work in England. Write, giving details of training, qualifications, experience and salary required, to the Secretary, 3, Albany Terrace, N.W.1. 2973

**£500-£600** salary range, Intermediate/Final ASSISTANT with Interior Design experience required by Architects' Studio, John Perring Ltd., Sheen Lane House, 254, Upper Richmond Road West, London, S.W.14. Write in first instance stating age, training and previous employers. 2972

**JUNIOR ASSISTANT** with some office experience wanted immediately. Good draughtsmanship essential. Five-day week. Write full particulars and salary required to Musman & Cousins, 12, Upper Berkeley Street, W.1. 3010

**ENTHUSIASTIC ASSISTANT**, with design ability. Salary £650-£750. Godsmark Miller-Williams, 37a, Tubwell Row, Darlington Co. Durham. 302

**HARRODS LTD.** have vacancies in their House Architect's Office for: (a) An Intermediate ARCHITECTURAL ASSISTANT able to carry out the design working drawings and supervision of Store and Factory work. (b) A SHOPFITTING DESIGNER/DRAUGHTSMAN. Varied and interesting work, fair for interior design and colour an asset. Permanent, pensionable positions. Social and Sports Club facilities. Please reply, giving full details to Mr. M. Kenfield, A.R.I.B.A., House Architect, Harrods Ltd., 42, Hans Crescent, S.W.1. 301

**JUNIOR ASSISTANT** is offered opportunity of acquiring all round experience in small City Office. Central 5766 or write Box 3016.

**NEW CITY CENTRE: ASSISTANT**, Intermediate to Final standard, with office experience, wanted to partake on design for enter new development. Clyde Young & Bernard Engle Tel. HOLborn 1772. 301

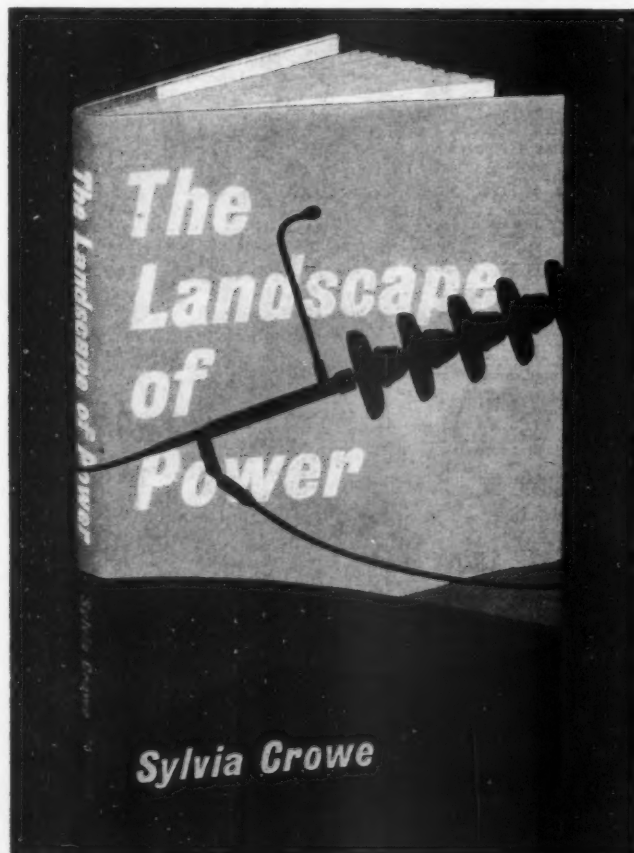
**JUNIOR ASSISTANTS** required to form nucleus of Architect's Department of established Development Company to work directly under the supervision of the Architect. Apply in writing. Box 3018.

**REQUIRED** immediately, ASSISTANT able to work on own initiative. Salary up to about £800, depending on experience. Telephone Chancery 7751. Fitzroy Robinson & Partners. 303

**ARCHITECTURAL ASSISTANT** required from about Intermediate standard to recently qualified, for interesting and varied work in practice mainly concerned with commercial projects. Five-day week. Congenial working conditions. Salary by arrangement. Apply in writing, giving full particulars, age, to J. Alfred Harper & Son, Union Chambers, 63, Temple Row, Birmingham. 297

**LEADING** Firm of Building Surveyors (City of London) requires JUNIOR ASSISTANT for Architect's Department. Must be well educated and keen to progress in profession. Salary according to ability. Box 2900.

**SENIOR ASSISTANT ARCHITECT** with design ability and administrative experience required for permanent post in busy office with wide programme of interesting work. Progressive post with good salary offered for ability and willingness to accept responsibility. Flat available for short time whilst arranging housing. T. H. Thorpe & Partners, 41 Friar Gate, Derby. 4th February, 1959. 300



## The Landscape of Power by Sylvia Crowe P.I.L.A.

THIS BOOK is addressed to everyone who cares about Britain's landscape. Sylvia Crowe, the eminent landscape architect, is not a preservationist. She accepts the fact that you cannot put the clock back; she accepts the essential need for the construction of immense oil refineries, nuclear reactors, power stations, and the network of the electricity grid. 'This network of power' she says, 'opens up a prospect of future wealth for the country, of clean industry and more efficient agriculture.' What she will not accept is that the introduction of these vast new structures into the landscape need necessarily ruin it, and in this practical, lucidly written handbook she calls for more thoughtfulness among those who are responsible for their construction. She shows, with text, photographs and diagrams, that giant buildings and their accessories can be incorporated in the landscape without destroying it—indeed, that given skilful design and sensitive siting they can in some circumstances enhance the natural scene.

There are nine chapters in the book and they deal with The New Industrial Age; Power and National Parks; Nuclear Power Stations; Hydro-Electric Power; Electric Transmission; Oil; Airfields; New Industries in Old Areas; Conclusion. Size 8½ in. x 5½ in. 116 pages including over 70 diagrams and halftone illustrations. 16s. net, postage 10d.

The Architectural Press 9 Queen Anne's Gate, SW1



**ASSISTANT** for general practice. Either keen Junior or good Draughtsman up to Final standard. Ability and enthusiasm more important than qualifications. Details and availability to Saunders & Partners, 18, Queens Parade, Grimsby, Lincs. 2732

**ASSISTANT ARCHITECTS** for Co-operative Wholesale Society Ltd., Architect's Department, Cardiff. Salary scale £200-£370 p.a. Applications are invited to fill positions at the Cardiff Branch Office. Salary according to age, qualifications and experience. The posts are superannuable, subject to medical examination. Five-day week in operation.

Applications, stating age, experience, qualifications and salary required, to: W. J. Reed, F.R.I.B.A., Chief Architect, Co-operative Wholesale Society Ltd., 99, Leman Street, London, E.C.1. 2743

**JUNIOR ASSISTANT** required in London Architect's Office. Must be neat draughtsman and have good grasp of elementary building construction. Box 3000.

**CONTEMPORARY** Office requires enthusiastic ASSISTANTS willing to accept responsibility. Several vacancies are open and applications are welcomed from both qualified and student members. The office is in pleasant out of town surroundings and works a five-day week. Salaries by arrangement. Apply with details to Morrison and Partners, St. Alkmunds House, 103, Belper Road, Derby. 2949

**SENIOR ASSISTANT** required in small West End practice. G. A. Crockett, B.A., F.R.I.B.A., A.M.T.P.I., 10, Adelaide Street, W.C.2. TEM. 1603. 2951

**ARCHITECTURAL ASSISTANTS**, either qualified or unqualified, required for London and Hertfordshire Offices, to work on large projects. Must be enthusiastic and conscientious. Salaries ranging from £750-£1,750. Write to Box 2953.

**ASSISTANT ARCHITECT**, qualified, required immediately to work on school projects. Applicants must have had two or three years' office experience and be able to produce detail drawings quickly. Experience in good contemporary design essential. Excellent prospects for the right man. Apply by letter in the first place to G. L. Thompson, F.R.I.B.A., 46a, Coney Street, York. 2955

**JUNIOR ASSISTANT** wanted. West Central London. Small Office. Interesting and varied work. Write Box 2956, with qualifications, salary required and experience.

**CLIFFORD CULPIN**, 39, Doughty Street, W.C.1. require at once, TWO SENIOR MEN to take responsibility throughout all stages of important projects. Starting salaries £950 to £1,150 according to experience. Also TWO LESS SENIOR MEN (say about sixth year Evening School standard), salaries £700 to £850. 2959

**SENIOR ASSISTANT** required of Intermediate/Final standard in Croydon office. Varied practice of interesting work. Good draughtsman and sound knowledge of construction essential. Together with ability to manage jobs. Five-day week. Salary according to experience. Apply George Lowe & Partner, 4, High Street, Croydon SE26 9J. 2611

**ARCHITECTURAL ASSISTANT** required in Chief Architect's Office of large Company with offices in Central London. All staff facilities; five-day week. Please state age, qualifications, experience and salary required. Chief Architect, Construction Department, F. W. Woolworth & Co. Ltd., New Bond St. Hse., 1/5, New Bond St., W.1. 3025

**SENIOR ARCHITECT**. This appointment is in connection with a major housing scheme in Kuwait. Candidates must be A.R.I.B.A., and A.M.T.P.I. qualification would be an advantage. A minimum of 10 years' experience since completion of training is required, and knowledge of the development of housing estates and layouts, including services, is essential. Previous experience of work in the Middle East preferred. Tours of 12 months at a basic salary of £1,800 per annum with generous additional local allowances and free bachelor accommodation, no local income tax. Paid leave after each tour. Kit allowance £50. Address application to Overseas Personnel Officer, Richard Costain Ltd., 111, Westminster Bridge Road, London, S.E.1. 3026

**ASSISTANT** for Country Practice. Intermediate standard, practical knowledge working drawings and specifications. Required drive car; knowledge levelling. Apply stating salary required, when free, etc. F. C. Levitt, Commerce House, Bickleswade. 3028

**JUNIOR ASSISTANT** required in busy Newcastle practice engaged on a varied and interesting programme of commercial and industrial projects. Reply, giving age, general and technical education and experience, to Mauchlen, Weightman & Elphick, Bayville Row Newcastle upon Tyne. Salary according to ability. 3030

**EXPANDING** East Midlands practice require energetic ASSISTANT of Final standard. Opportunities for advancement, Pension Scheme. Work includes Schools, Churches, Hospitals, Industrial and Commercial projects and private housing. Apply to Box 3031, giving full details.

**SENIOR ARCHITECTURAL ASSISTANT** required for Architects, W.C.1. Experience on large buildings essential. Salary around £1,000 according to experience. Box 3038.

**RONALD FIELDING**, A.R.I.B.A., immediately requires Qualified and Intermediate ASSISTANTS. Please write or telephone for appointment. Aldwych House, London, W.C.2. CHANCERY 8201/5. 3032

### Architectural Appointments Wanted

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. Box Number, including forwarding replies, 2s. extra

**A.R.I.B.A.** (41), 14 years' varied Architectural and Town Planning experience, seeks appointment with progressive firm. South Hampshire or West Sussex, with prospect of partnership. Capital available. Box 2963.

**A.R.I.B.A.** (45), Senior partner in progressive Colonial practice now returned U.K., available top level appointment London area. Remuneration by arrangement. Box 2938.

**SENIOR ASSISTANT**, 16 years' varied experience, speedy, accurate draughting. Excellent references. London area. Minimum salary £1,000 per annum. Box 2989.

**ASSOCIATE** (35), Senior Architect to a London Company with background of varied experience in private practice, desires change of environment and seeks similar responsible appointment or position with prospects in established practice Sussex—preferably Brighton/Worthing area. Box 3022.

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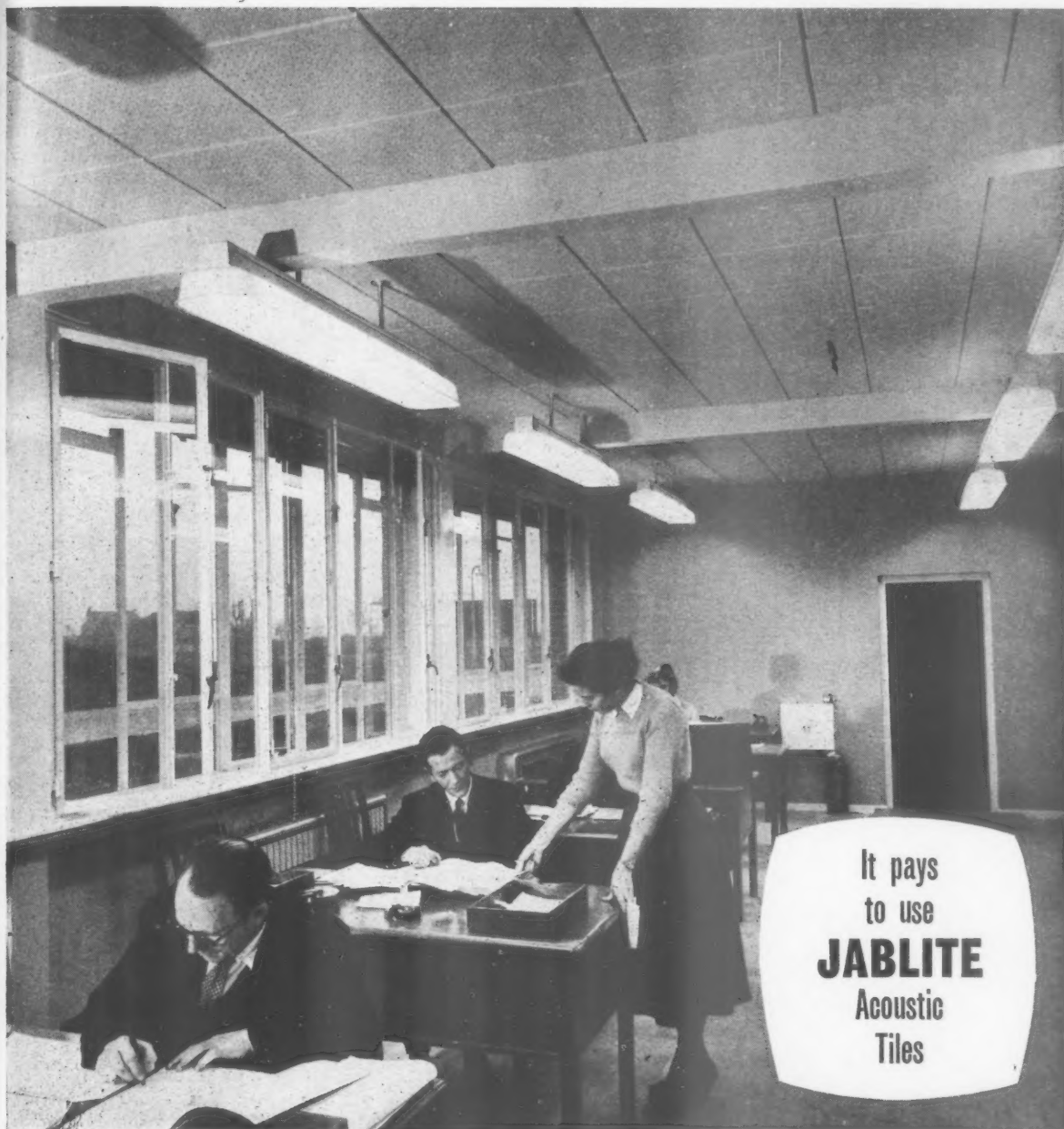
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