

The Architects' JOURNAL for March 5, 1959

# THE ARCHITECTS' JOURNAL



## standard contents

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

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## CURRENT BUILDING

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Architectural Appointments

Wanted and Vacant

No. 3340]

[Vol. 129

THE ARCHITECTURAL PRESS

11 and 13, Queen Anne's Gate, Westminster,

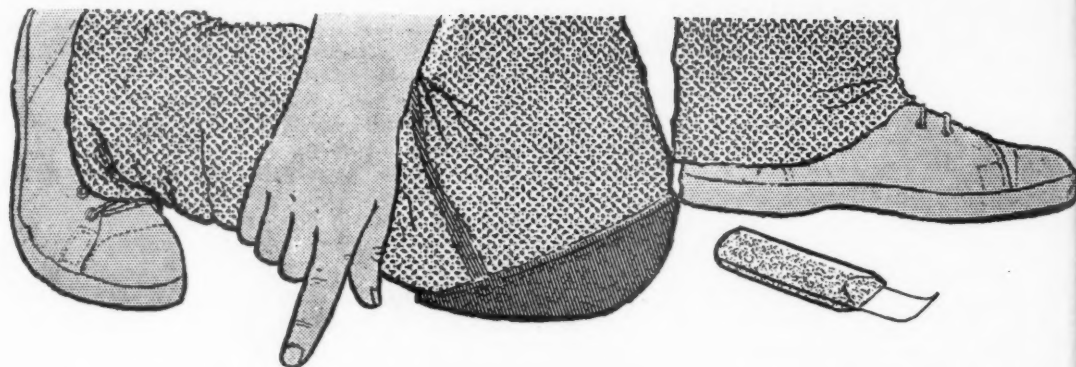
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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ii one week, Ii to Z the next. In all cases where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

|          |  |
|----------|--|
| ILA      | Institute of Landscape Architects. 1, Park Crescent, Portland Place, W.1. Museum 3473  |
| I of Arb | Institute of Arbitrators. Hastings House, 10 Norfolk Street, Strand, W.C.2. Temple Bar 4071  |
| IOB      | Institute of Builders. 48, Bedford Square, W.C.1. Museum 7197  |
| IQS      | Institute of Quantity Surveyors. 98, Gloucester Place, W.1. Welbeck 1859   |
| IR       | Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3. Avenue 6851   |
| IRA      | Institute of Registered Architects. 68, Gloucester Place, W.1. Welbeck 9966  |
| ISE      | Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128   |
| JFRO     | Joint Fire Research Organisation (DSIR & Fire Offices' Committee)<br>Fire Research Station, Boreham Wood, Herts. Elstree 1341/1797 |
| LDA      | Lead Development Association. 18, Adam Street, W.C.2. Whitehall 4175   |
| LMBA     | London Master Builders' Association. 47, Bedford Square, W.C.1. Museum 3891  |
| MAFF     | Ministry of Agriculture, Fisheries and Food. Whitehall Place, S.W.1. Trafalgar 7711  |
| MOE      | Ministry of Education. Curzon Street House, Curzon Street, W.1. Mayfair 9400   |
| MOH      | Ministry of Health. 23, Savile Row, W.1. Regent 8411   |
| MOHLG    | Ministry of Housing and Local Government. Whitehall, S.W.1. Whitehall 4300   |
| MOLNS    | Ministry of Labour and National Service, 8, St. James' Square, S.W.1. Whitehall 6200   |
| MOS      | Ministry of Supply. Shell Mex House, W.C.2. Gerrard 6933   |
| MOT      | Ministry of Transport, Berkeley Square House, Berkeley Square, W.1. Mayfair 9494   |
| MOW      | Ministry of Works. Lambeth Bridge House, S.E.1. Reliance 7611  |
| NAMMC    | Natural Asphaltic Mine Owners and Manufacturers Council.<br>94/98, Petty France, S.W.1. Abbey 1010                                 |
| NAS      | National Association of Shopfitters. 9, Victoria Street, S.W.1. Abbey 4813   |
| NBR      | National Buildings Record, 31, Chester Terrace, Regent's Park, N.W.1. Welbeck 0619   |
| NCBMP    | National Council of Building Material Producers, 10, Storey's Gate, S.W.1. Abbey 5111  |
| NEFMAI   | National Employers Federation of the Mastic Asphalt Industry.<br>21, John Adam Street, Adelphi, W.C.2. Trafalgar 3927              |
| NFBTE    | National Federation of Building Trades Employers. 82, New Cavendish Street, W.1. Langham 4041/4054                                 |
| NFBTO    | National Federation of Building Trades Operatives. Federal House, Cedars Road, Clapham, S.W.4. Macaulay 4451                       |
| NFHS     | National Federation of Housing Societies. 12, Suffolk St., S.W.1. Whitehall 1693   |
| NHBRC    | National House Builders Registration Council. 58, Portland Place, W.1. Langham 0064/5  |
| NPL      | National Physical Laboratory. Head Office, Teddington. Molesey 1380  |
| NRDB     | Natural Rubber Development Board. Market Buildings, Mark Lane, E.C.3. Mansion House 9383   |
| NSAS     | National Smoke Abatement Society. Palace Chambers, Bridge Street, S.W.1. Trafalgar 6838  |
| NT       | National Trust for Places of Historic Interest or Natural Beauty.<br>42, Queen Anne's Gate, S.W.1. Whitehall 0211                  |
| PEP      | Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 7245  |
| RCA      | Reinforced Concrete Association. 94, Petty France, S.W.1. Abbey 4504   |
| RIAS     | Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. Fountainbridge 7631                                  |
| RIBA     | Royal Institute of British Architects. 66, Portland Place, W.1. Langham 5533   |
| RICS     | Royal Institution of Chartered Surveyors. 12, Great George Street, S.W.1. Whitehall 5322/9245                                      |
| RFAC     | Royal Fine Art Commission. 5, Old Palace Yard, S.W.1. Whitehall 3935   |
| RS       | Royal Society. Burlington House, Piccadilly, W.1. Regent 3335  |
| RSA      | Royal Society of Arts. 6, John Adam Street, W.C.2. Trafalgar 2366  |
| RSH      | Royal Society of Health. 90, Buckingham Palace Road, S.W.1. Sloane 5134  |
| RIB      | Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. Wimbledon 5101  |
| SBPM     | Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1. Victoria 2186                           |
| SE       | Society of Engineers. 17, Victoria Street, Westminster, S.W.1. Abbey 7244  |
| SFMA     | School Furniture Manufacturers' Association. 30, Cornhill, E.C.3. Mansion House 3921   |
| SIA      | Society of Industrial Artists. 7, Woburn Square, W.C.1. Langham 1984/5   |
| SIA      | Structural Insulation Association. 32, Queen Anne Street, W.1. Langham 7616  |
| SNHTPC   | Scottish National Housing. Town Planning Council.<br>Hon. Sec., Robert Pollock, Town Clerk, Rutherglen                             |
| SPAB     | Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1. Holborn 2646                                      |
| TCPA     | Town and Country Planning Association.<br>28, King Street, Covent Garden, W.C.2. Temple Bar 5006                                   |
| TDA      | Timber Development Association. 21, College Hill, E.C.4. City 4771   |
| TPI      | Town Planning Institute. 18, Ashley Place, S.W.1. Victoria 8815  |
| TTF      | Timber Trades Federation. 75, Cannon Street, E.C.4. City 5040  |
| WDC      | War Damage Commission. 6, Carlton House Terrace, S.W.1. Whitehall 4341   |
| ZDA      | Zinc Development Association. 34, Berkeley Square, W.1. Grosvenor 6636   |



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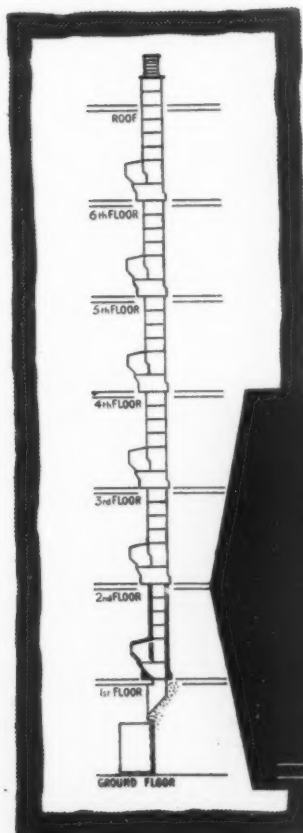
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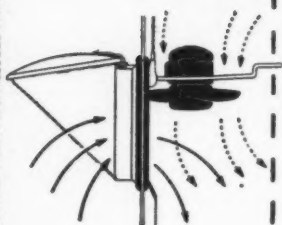


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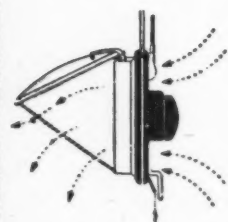
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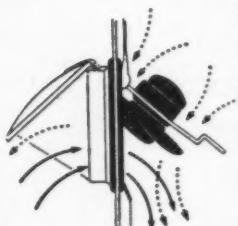
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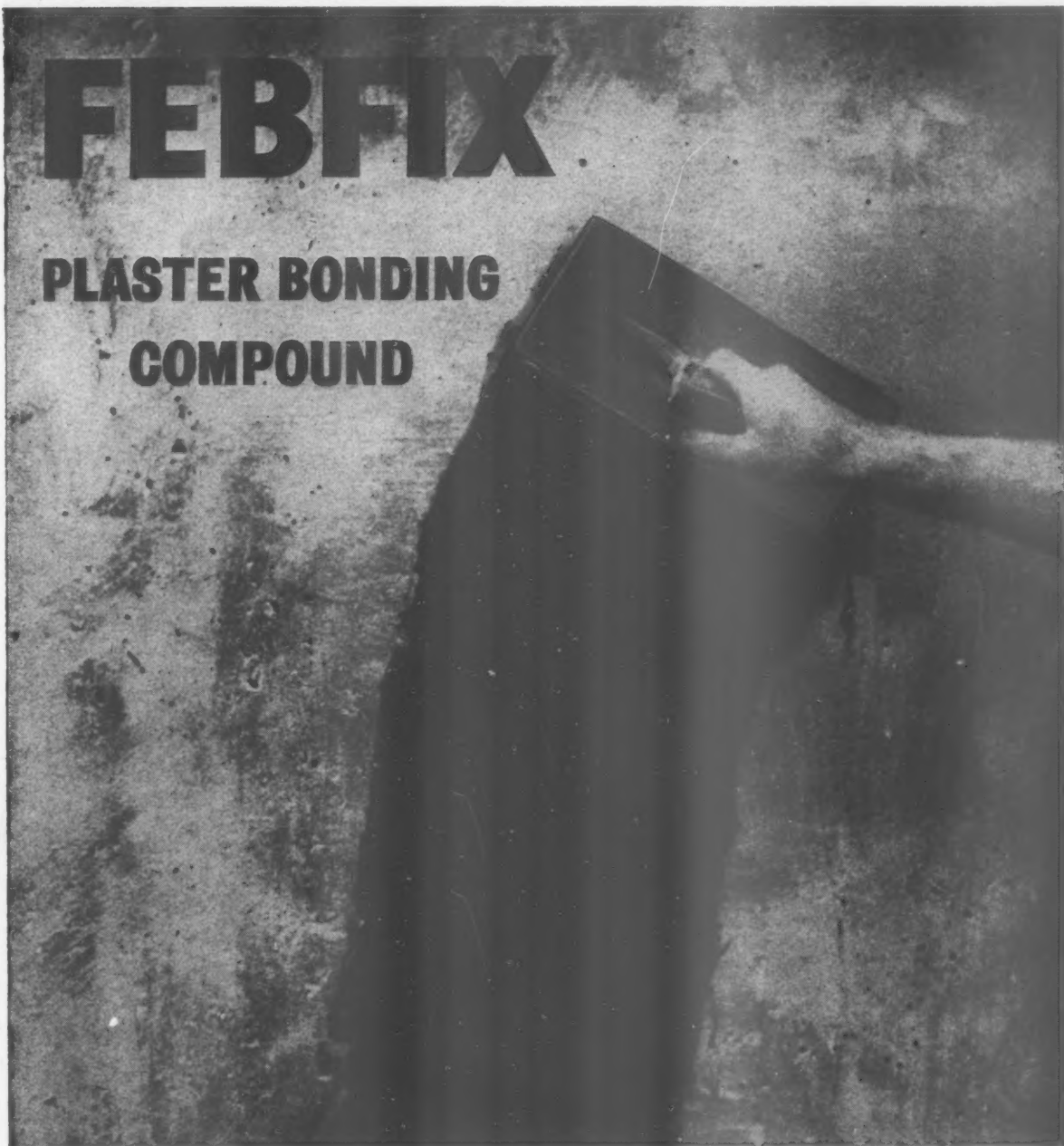
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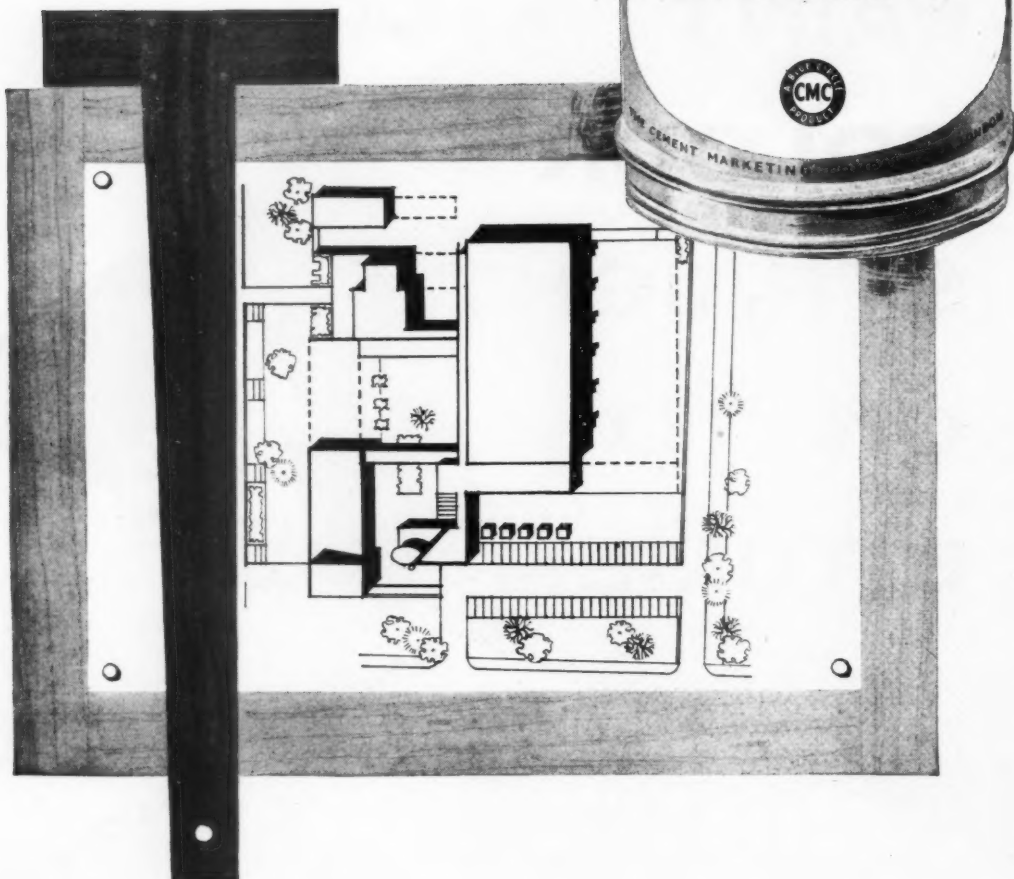
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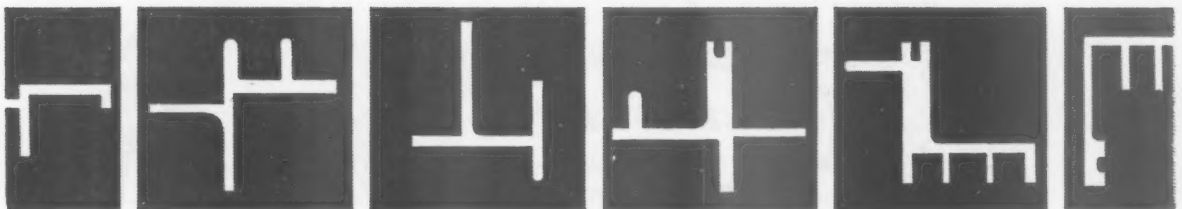
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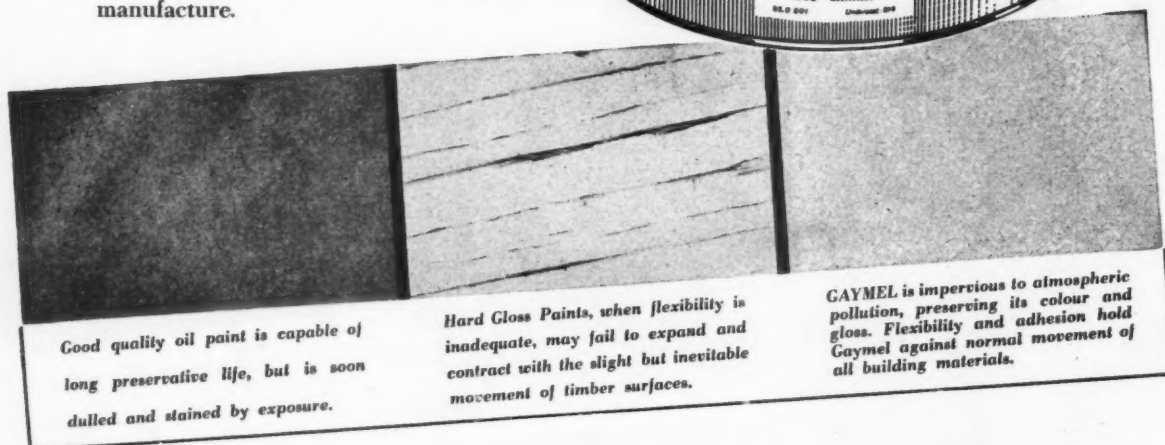
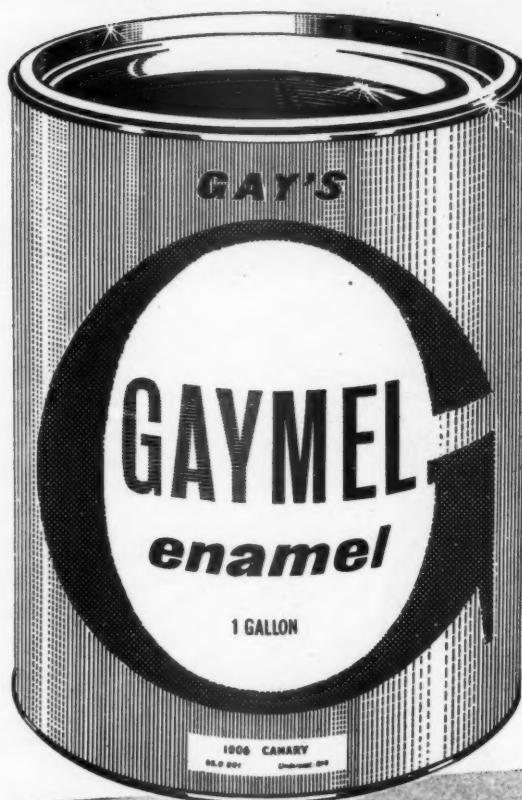
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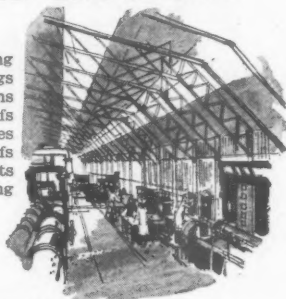
## IN COMMERCE



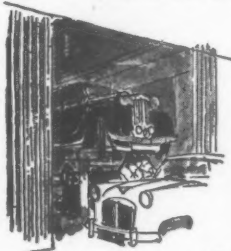
Counter Fronts  
Movable Screens  
Window Displays  
Partitions  
Lighting Effects  
Awnings  
Shopping Canopies  
Diffused Lighting  
Exhibition Stands

## IN INDUSTRY

Glazing  
Luminous Ceilings  
Partitions  
Warehouse roofs  
Signs and Notices  
Dock Roofs  
Shower Compartments  
Cladding



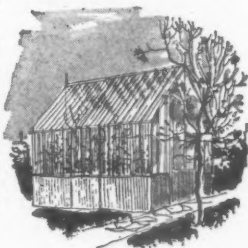
## IN TRANSPORT



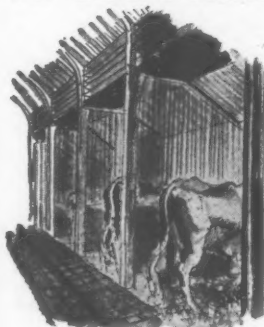
Gangways  
Rolling Stock  
Railway Station roofs  
Airports  
Washing Sheds  
Bus Shelters  
Awnings  
Maintenance Sheds  
Garage roofs and doors

## IN THE HOME AND GARDEN

Verandah Roofs  
Skylights  
Movable Screens  
Greenhouses · Fences  
Shower Compartments  
Porches · Awnings  
Wind Breaks  
Garage Doors  
Pool Enclosures  
Sun Lounges · Canopies  
Partitions  
Garden Sheds · Glazing



## ON THE FARM



Barn Skylights  
Storage Sheds  
Greenhouses  
Dairy Roofing  
Poultry Equipment  
Cow Byres  
Cloches & Frames  
Piggeries  
Machinery Storage  
Rooms  
Granaries & Driers  
Stockhouse roofs

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## FILON

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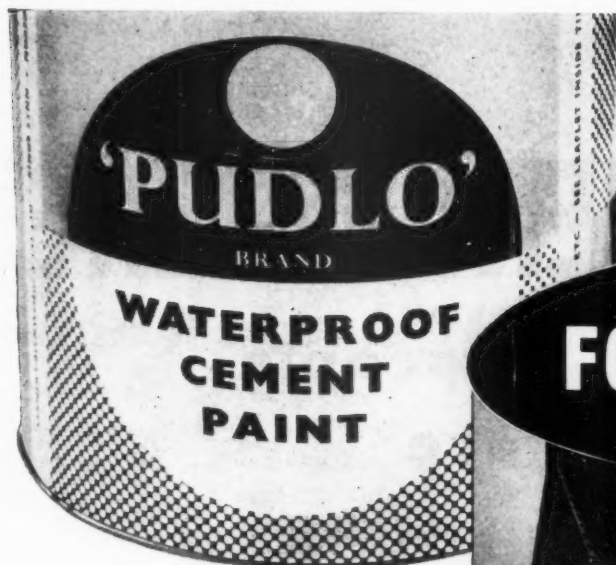


*for light with lightness  
and strength with economy*

B.I.P. Reinforced Products Ltd · Streetly Works · Sutton Coldfield

Phone: Streetly 2411





**FOR LASTING**



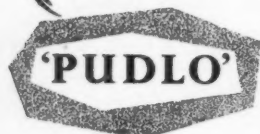
**PROTECTION**

The surface of Mr. K. R. Richardson's house at Gayton needed completely re-decorating, as the brand of cement paint covering it, had badly deteriorated. The decorator strongly recommended first priming the surface with 'Pudlo' Cement Paint Primer, followed by two coats of 'Pudlo' white Waterproof Cement Paint. Both the owner and the decorator are now thoroughly satisfied with the finished result, and in the decorator's appreciation he states "In all my 27 years as a craftsman, I consider that 'Pudlo' Waterproof Cement Paint is the best of its type I have ever used. I am using it on a number of jobs I have in hand".

**THE RANGE OF 'PUDLO' PRODUCTS INCLUDES:**

CEMENT WATERPROOFING POWDER  
WATERPROOF CEMENT PAINT  
CEMENT PAINT PRIMER  
EXTERNAL WATER REPELLENT  
CEMENT BONDER  
PLASTER BONDER  
MORTAR PLASTICISER  
FROST PROTECTOR/  
RAPID HARDENER  
LIQUID CEMENT ADDITIVE  
CEMENT HARDENER/  
DUST PROOFER  
'FEUSOL' FIRE CEMENT

**THE MOST RELIABLE  
FIRE CEMENT IS 'FEUSOL'  
HAVE YOU TRIED IT?**



Sole Proprietors and Manufacturers:

**KERNER-GREENWOOD & COMPANY LTD**

KING'S LYNN · NORFOLK · TELEPHONE KING'S LYNN 2293





where  
cleanliness  
sells

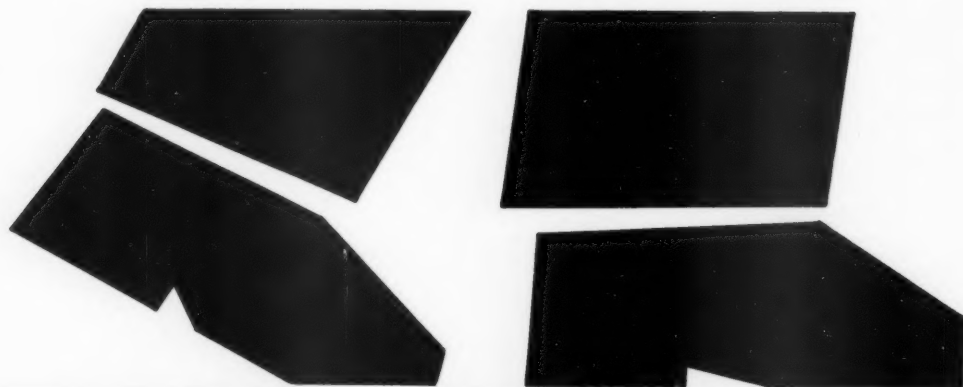
**'VITROLITE'**

opaque glass, a permanent colour wall lining

by PILKINGTON BROTHERS LIMITED

ST. HELENS • LANCs

*'VITROLITE' is a registered trade mark of Pilkington Brothers Ltd.  
Supplies are available through the usual trade channels.*



# GLAMOROCK TAKES THE FLOOR

*with a magic carpet of natural stone*

GLAMOROCK LIMITED announce with pride two truly revolutionary surfacing materials of natural stone for floors and also walls. Their names? Glamorock Glaze and Glamorock Granite. Both are beautiful and very hardwearing. Both are *outstandingly economical*.

## GLAMOROCK GLAZE

Glamorock Glaze possesses all the decorative and wear-resistant advantages of polished granite or Terrazzo, plus a far greater and altogether more attractive range of *natural* stone colours. It is simple to lay and highly economical. Depending on the size of the job, and the locality, its cost works out at between 25/- and 45/- per square yard. Glamorock Glaze is the ideal material for private dwellings, or wherever a modern, very beautiful floor or wall surface is required.

## GLAMOROCK GRANITE

Glamorock Granite was evolved to give an exceptional degree of wear-resistance under the most severe conditions, while retaining the beauty, colour and design possibilities of Glamorock Glaze. Glamorock Granite makes a perfect surfacing for factories, schools, hospitals, public buildings and similar places. It is completely slip-proof and after a normal floor polish has been applied it can be thoroughly cleaned simply by water.

Neither Glamorock Glaze nor Glamorock Granite will fade, craze or crack, structural faults excluded. Both surfaces are unaffected by oil, acid and other normally harmful substances. They are easy to keep clean and are comfortable to stand or walk on, maintaining room temperature. And they are both available in a superb range of 22 fade-free colours of the natural rock, without any added pigments whatsoever. These standard colours can be mixed to give an infinite variety of attractive blends.

Both materials (which are supplied ready-mixed) can easily and very rapidly be applied "in situ" on practically any surface—timber, stone, cement, etc.—provided it is free of oil and grease. And they are ideal for prefabrication in tile or sheet form. In either case only a comparatively thin application (say 3/16") is needed.

*Glamorock Glaze and Granite open a new world of design and economy possibilities. They are of the utmost importance to every Architect, Designer and Contractor.*

---

### Important Note to Flooring Contractors

In view of the revolutionary nature of these products and the impact they will have on the Flooring Industry, you are invited to make full use of the Demonstration Service offered by:—

GLAMOROCK LIMITED, Monza Street, Wapping Wall, London, E1. Royal 6785/6 or

Montague L. Meyer Ltd. (Branches in principal cities), 14, Buckingham St., London, WC2  
Surface Protection Limited, 28, South Street, London, W1







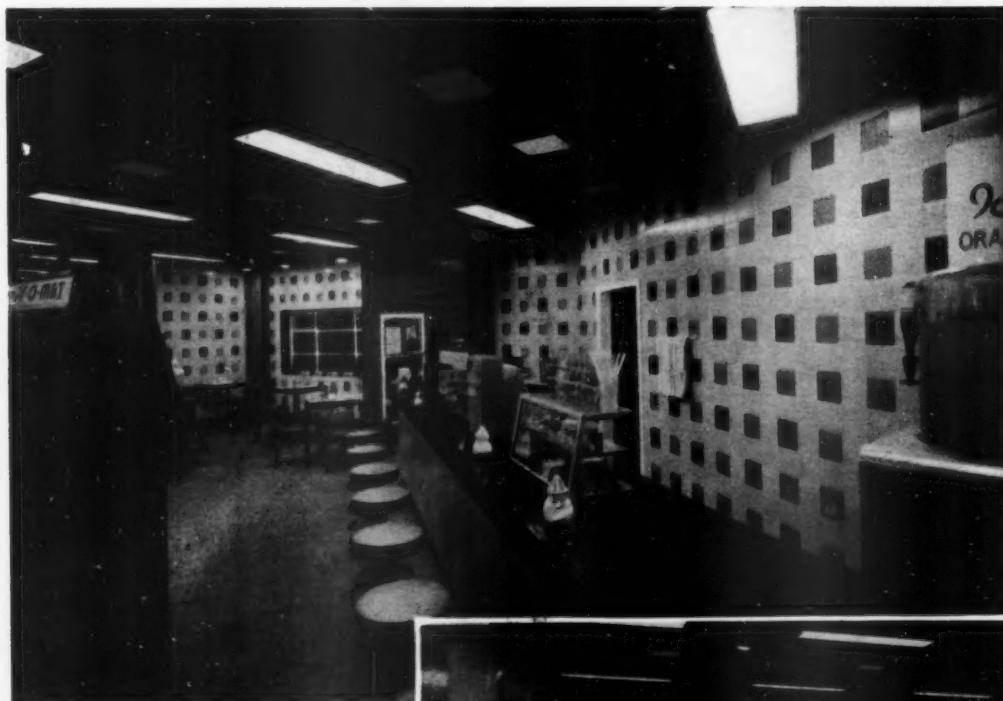


# GLAMOROCK

a magic carpet of natural stone

*Glamorock Glaze used dramatically on a corridor floor and wall. The right hand wall is faced with standard Glamorock.*

BOLTON CO-OPERATIVE SOCIETY LIMITED  
**choose Ceramic Tiles**



*An attractive innovation is the Barbecue Snack Bar in screen printed Tiles*

In their new, magnificent Supermarket . . . they enter splendidly the Ceramic Age . . . Progress is matched with the beauty and hygiene of modern Ceramic Tile surfaces. Colour schemes blend with foodstuffs displayed. An unusual feature is the Tiled columns in pastel shades each embodying 6" x 1" Tiles with  $\frac{1}{4}$ " Tile strip either side.



*Architects and Surveyors: Bradshaw Gass & Hope, Bolton.  
Main Contractors: John Dickinson & Company (Bolton) Ltd.  
Tiling Contractors: Conways (Tiles & Terrazzo) Ltd., Plymouth Grove, Manchester 13.  
Lighting, Heating and Refrigeration: C.W.S. Limited, Engineers Department.  
Window Fronts, Check Out Counters, etc.: B.C.S. Works Department, Manager Mr. T. Cheetham.*

**British**

**Ceramic**

**TILES**

*Glazed & Floor Tile Manufacturers' Association • Federation House • Stoke-on-Trent*



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# FALKS

## Introduce the new adaptable "SUMMIT" Range

(SERIES I INDUSTRIAL FITTINGS)

In introducing the "Summit" range of fluorescent lighting fittings, Falks have made *adaptability* the keynote of their design. Adaptability is achieved by using one basic channel, with provision for altering not only the appearance but also the lamping, the control gear and the suspension of the fitting. The ideal lighting fitting indeed!

### BASIC CHANNEL SPECIFICATION

#### Special Section

20 s.w.g. zinc-coated steel; provides for cover plate and reflector fixings and embodies internal and external wiring channels.

#### Cover Plate

Secured by quick release fasteners; provision for easy access to starter switches without removing cover plate.

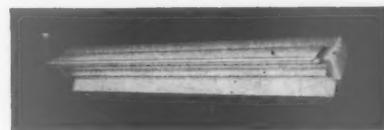
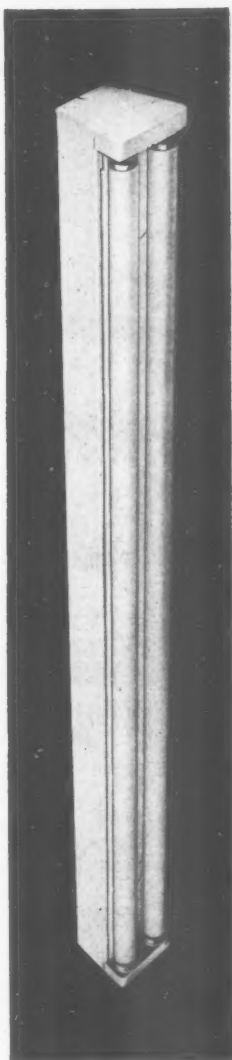
#### End Plates

Die-cast aluminium alloy secured by threaded studs.

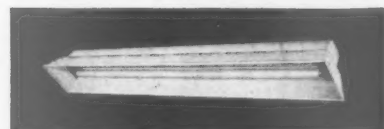
#### Lampholder Brackets

Two sizes, single and twin lamp; triple lamp.

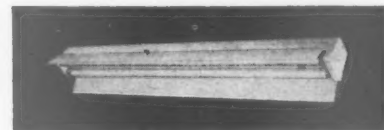
Write for full details and price list—



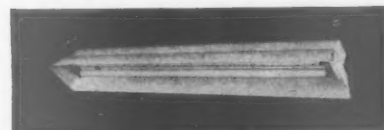
Metal Reflector, open ended CHILTERN



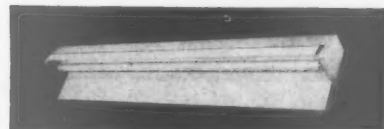
Metal Reflector, closed ended COTSWOLD



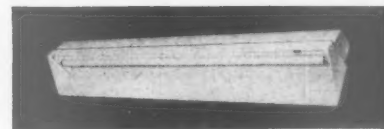
Perspex Reflector, open ended CHEVIOT



Perspex Reflector, closed ended MENDIP



CHALKBOARD  
(Open ended)



CHALKBOARD  
(Closed ended)

### GENERAL FEATURES

#### Lamping

Generally, all models are available for 5 ft., 4 ft. and 2 ft. lamp lengths in single, twin and triple lamp arrangements.

#### Control Gear

Starter or quickstart.

#### Material & Finish

Zinc-coated sheet steel throughout; etch primed and finished stove enamelled egg shell off-white. (Reflectors glossy white).

#### Suspension

Variable centres, for  $\frac{1}{2}$ ",  $\frac{5}{8}$ " or  $\frac{3}{4}$ " diam. conduit. Keyhole slots are provided for direct ceiling fixing.

#### Interchangeability

By using all the combinations of number and size of lamps together with type of fitting, over 70 different assemblies can be achieved in this series, each with starter or quickstart control gear.

#### Erection

Whether by direct fixing or chain or rod suspension, erection is effected in the simplest way possible.

91 FARRINGTON ROAD, LONDON, E.C.1 and Branches. Tel: HOLborn 7654

LONDON SHOWROOMS—20-22 MOUNT STREET, PARK LANE, W.1.

Tel: MAYfair 5671

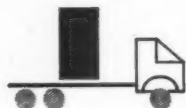
AP63A

# FALKS

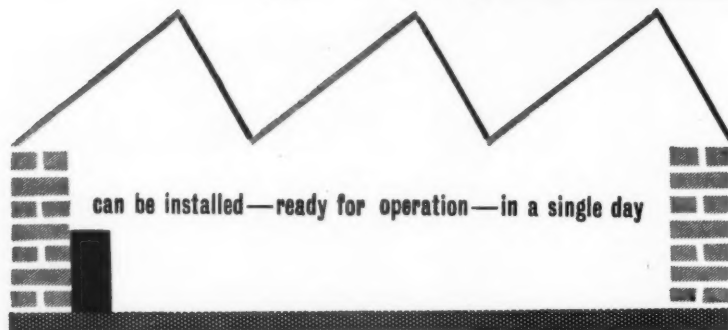
FALK, STADELMANN & CO. LTD

LIGHTING ENGINEERS  
AND MANUFACTURERS OF  
LIGHTING FITTINGS

# HEAT



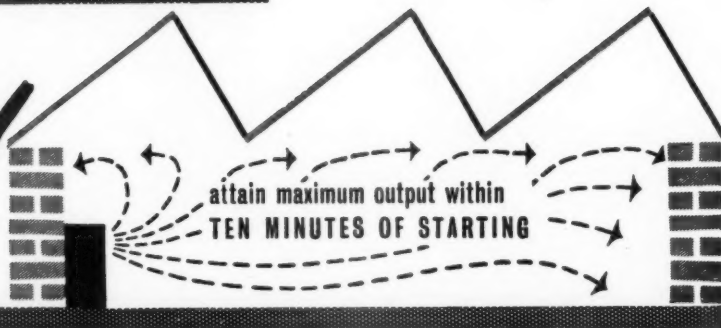
can be supplied—immediately—from stock



can be installed—ready for operation—in a single day

# in a

# hurry!

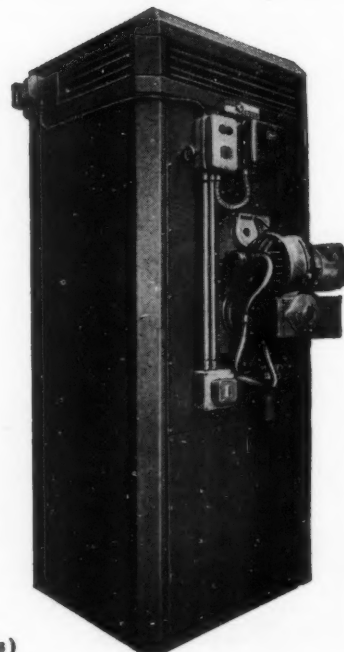


But that's not all. Efficiency and economy are of prime importance too and Colt heaters score heavily here. The units are specially designed to ensure absolutely uniform heating throughout the building and the final cost for every 100,000 B.T.U. dissipated into the heated zone is reduced to as little as 11.95d. And every Colt heating installation is as scientifically planned as a Colt Ventilation Scheme. Colt heating engineers are always available for free consultation.

Write for further details to Dept L151/3



## Oil Fired Air Heaters



COLT VENTILATION LTD · SURBITON · SURREY · Tel. ELMbridge 0161 (10 lines)

# WHEATLY triton QUARRIES

meet every purpose for which  
quality quarries can be used

## For Floors

in Industrial, Domestic, School and other buildings

## For Non-Slip Floors

in Sugar Refineries, Breweries, Dairies and the like

## For Acid and Alkali Resisting Floors

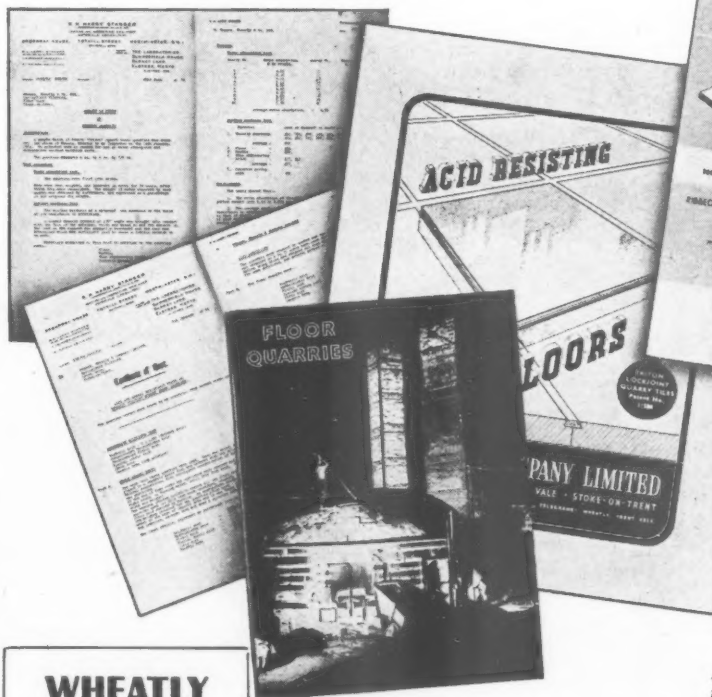
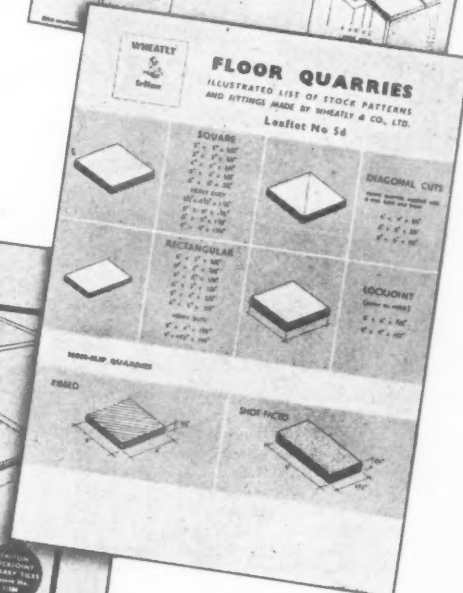
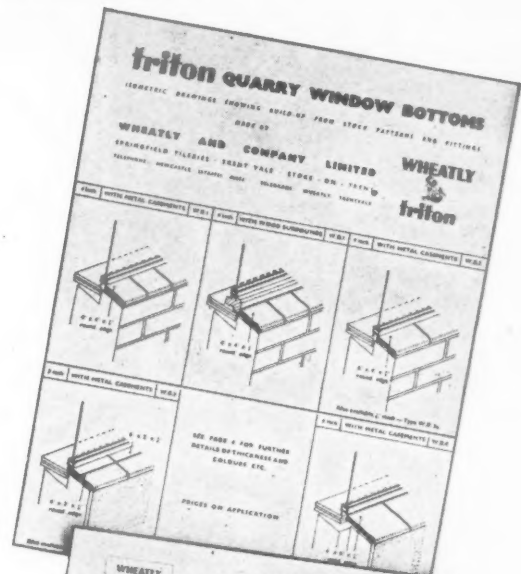
in Dairies and Industrial Buildings

## For Window Bottoms Skirtings, Cappings

and other specialised uses in housing and commercial and industrial buildings

The following publications are available on request:

- Floor Quarries - Stock Patterns and Fittings. Leaflet No. 58  
Fully illustrated account of manufacture.  
Booklet No. 53  
Reports on Independent Tests.
- Acid Resisting Floors - Leaflet No. 49
- Window Bottoms - Leaflet No. 51



WHEATLY



triton

Specimens of Wheatly burnt clay products may be seen at the Building Centre, London. Wheatly products include Single-lap Roofing Tiles, Ridge Tiles (blue and red), Floor Quarries, Air Bricks and Briquette Fireplaces.

WHEATLY & COMPANY · LIMITED

Springfield Tileries, Trent Vale, Stoke-on-Trent

Telephone: Newcastle (Staffs) 66251

Telegrams: Wheatly Trentvale

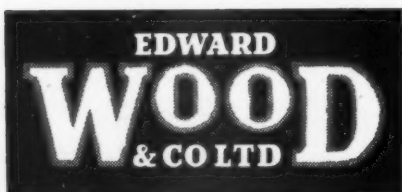
WH95



## Landmarks of the Future

This multi-storied building in structural steel will cater for the manufacture of chemical products based on silicates. The design makes provision for fork lift truck operation on all floors and incorporates a load bearing roof.

Steelwork for this landmark by—



**CONSTRUCTIONAL ENGINEERS**

Registered Office and Works:

**OCEAN IRONWORKS · TRAFFORD PARK · MANCHESTER 17**

London Office: 68 Victoria Street, S.W.1. Telephone: VICTORIA 1331/2

Telephone: TRAFFORD Park 2341 (10lines)

Technical Offices at Birmingham and Nottingham

dmDW88

New Chemical Building for Joseph Grosfield & Sons Ltd., Warrington. Photograph by courtesy of Matthew Hall & Co. Ltd., who were responsible for the design of this building.





# SPUR

## ADJUSTABLE SHELF SUPPORT

*for good looks  
and functional efficiency*

Here is a scientifically-designed shelf support which has the strength required for industrial applications, yet is attractive enough for use in showrooms, libraries and the home. SPUR is scientifically-designed, simple in principle, easy to install and flexible in arrangement. There are only two main components — slotted U-channel uprights, and flanged brackets which key into the slots.



FOR INDUSTRIAL STORES, HOMES, OFFICES, LIBRARIES, SHOPS, LABORATORIES, EXHIBITION STANDS

*Shelve those problems of support on*

# SPUR

Write for further details to

SAVAGE AND PARSONS LIMITED • WATFORD • HERTFORDSHIRE • WATFORD WD11



### FLEXIBILITY OF ARRANGEMENT

The height of SPUR brackets can be altered without the use of tools whenever storage needs change. Alignment is automatic. Both right-angled and slanting brackets are available.

### UNOBSTRUCTED ACCESS

No upright supports at front or side are needed with SPUR. This means a more pleasing design as well as easier access to shelves.

### PRE-DETERMINED STRENGTH

Uprights are available in lengths up to 94½ in., and brackets are supplied in seven standard sizes up to a maximum of 18½ in. Loadings have been calculated for each size, and the largest will support 1½ cwt.



### WALL FIXING OR FREE STANDING

The uprights are easily screwed to walls, but where free standing units are required with shelves both sides—in libraries or storerooms for example—double-sided uprights can be used. Special collars are available for fixing uprights to the floor and ceiling.

### ATTRACTIVE FINISH

SPUR uprights and brackets are attractively finished in four standard colours: Willow Grey, Terra Cotta, Frost White and Jet Black. Alternatively they can be nickel or chromium plated, zinc sprayed or galvanised when required for special service.

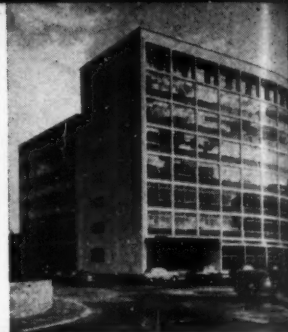
### RANGE OF FITTINGS

A full range of accessories such as shelf straps and book supports give the SPUR system added flexibility.

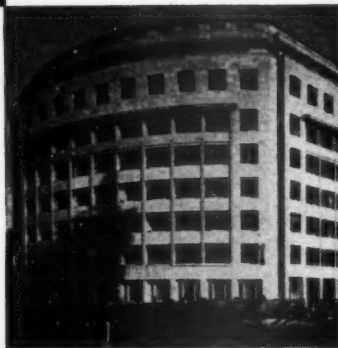
PLANTATION HOUSE  
MINCING LANE • CHEAPSIDE  
*Architects:*  
Albert W. Moore & Son



THE ARCHITECTS' JOURNAL  
(Supplement) March 5, 1959  
  
ROMAN HOUSE • LONDON WALL  
*Architect:*  
R. N. Wakelin  
of Campbell-Jones & Sons



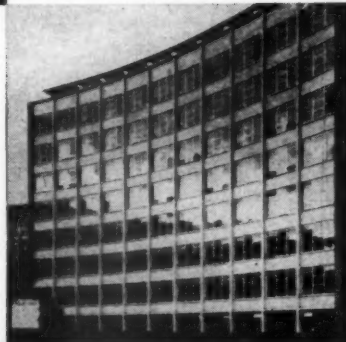
MERCERS' HALL • CHEAPSIDE  
*Architects:*  
Gunton & Gunton



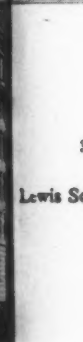
HOLBORN VIADUCT HOUSE  
HOLBORN CIRCUS  
*Architects:*  
T. P. Bennett & Son



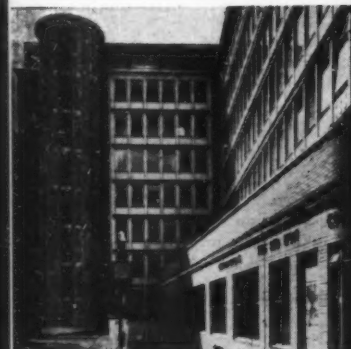
1 NOBLE STREET  
GRESHAM STREET  
*Architects:*  
Ellis, Clarke & Gallannaugh



ROYAL LONDON HOUSE  
(EXTENSION) FINSBURY SQUARE  
*Architect:*  
H. Bramhill

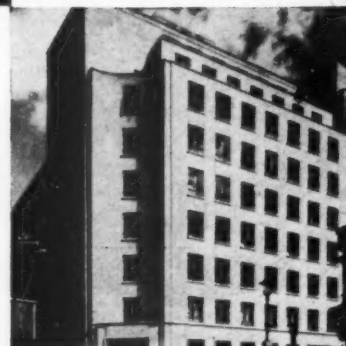


WATLING HOUSE • CANNON STREET  
*Architects:*  
Easton & Robertson



34-35 KING STREET • EC  
*Architects:*  
Alan W. Pipe & Sons

WALBROOK HOUSE  
CANNON STREET • WALBROOK  
*Architect:*  
Henry Tanner



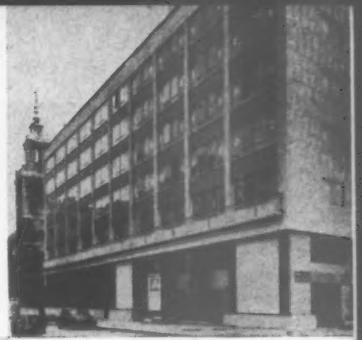
12-20 CAMOMILE STREET  
*Architects:*  
Fitzroy Robinson  
& Hubert H. Bull



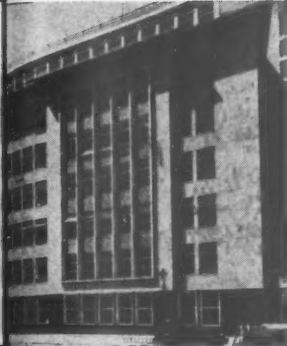
MCCANN-ERICKSON HOUSE  
FETTER LANE  
*Architects:*  
Hannen & Markham



BUCKLESBURY HOUSE  
*Architects:*  
Campbell-Jones & Sons



ST. BRIDGET'S HOUSE  
BRIDEWELL PLACE  
*Architects:*  
Trehearne &  
Norman Preston & Partners



SADDLERS' HALL • GUTTER LANE  
*Architect:*  
L. Sylvester Sullivan

3-10 FINSBURY SQUARE  
*Architects:*  
Lewis Solomon Son & Joseph



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FARRINGTON STREET  
*Architects:*  
Ellis, Clarke & Gallannaugh



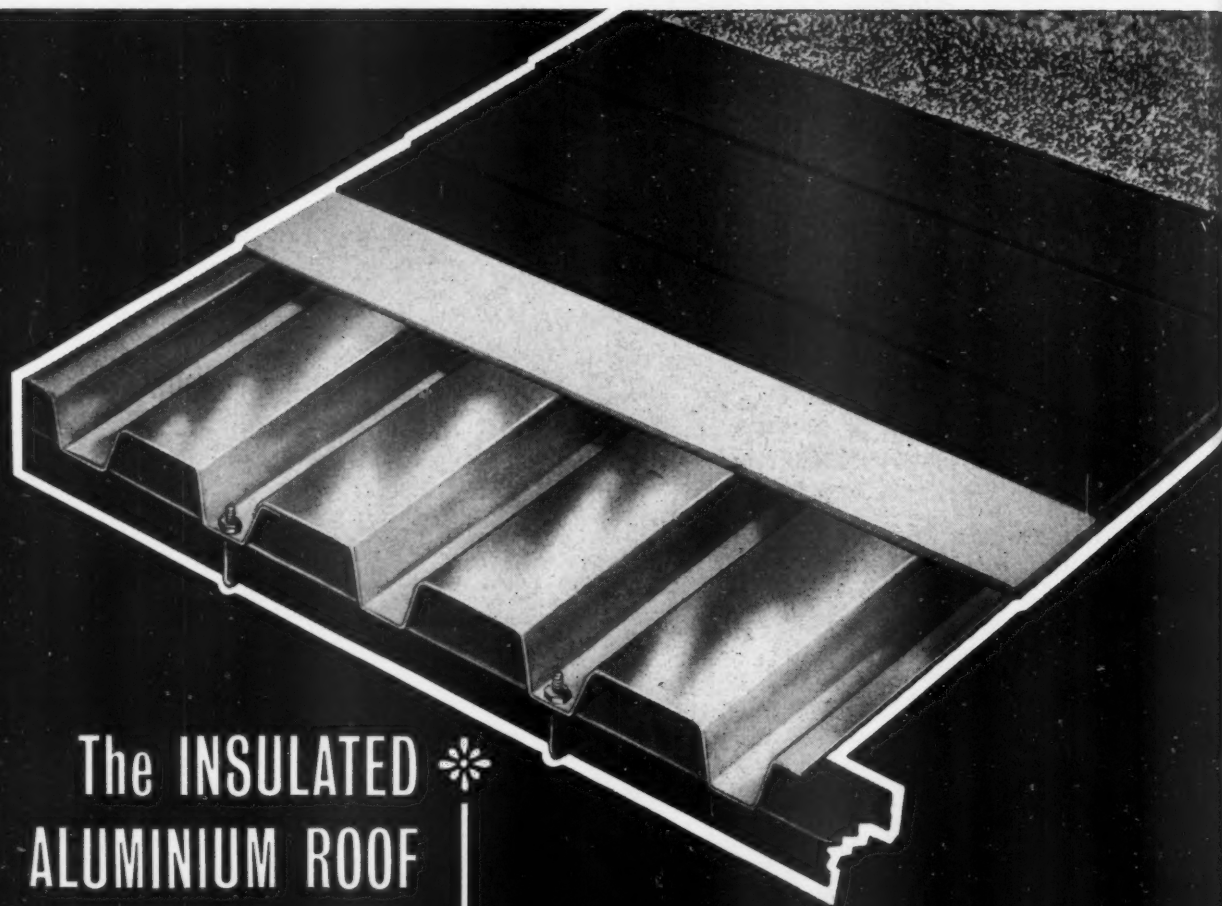
BANK OF LONDON  
& SOUTH AMERICA  
QUEEN VICTORIA STREET  
*Architect:*  
Victor Heal

**The city  
re-builds with...**

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THE CRITTALL MANUFACTURING CO LTD • BRAINTREE • ESSEX • BRANCHES & DEPOTS THROUGHOUT THE COUNTRY



The INSULATED  
ALUMINIUM ROOF

"MACDEK"

ROOF UNITS

SPAN 12' 0"

*Technical Literature and further  
Information from*

'MACDEK' (Prov. Pat.) Aluminium Roof, designed by F. McNeill & Co. Ltd., is a complete lightweight insulated roof designed for flat, pitched or vertical construction. It is made up of strong Aluminium alloy deck units with a layer of insulation material sealed to the roof deck and waterproofed with McNeill's Lion "Combinite" Multi-layer bituminous roofing.

The deck units are pre-fabricated and manufactured from high grade Aluminium Alloy. Each unit, has an effective width of 2ft. and a maximum span of 12ft. from purlin to purlin.

All erection is carried out exclusively by McNeill's skilled craftsmen, thereby giving the highest standard of efficiency.

**F. MCNEILL & CO. LTD.,**

10 LOWER GROSVENOR PLACE, LONDON, S.W.1

—Telephone VICTORIA 6022



# New Key Plan

TO IMPROVE ELECTRICAL LAYOUTS AT REDUCED COST

Tidy up power and  
telephone installations

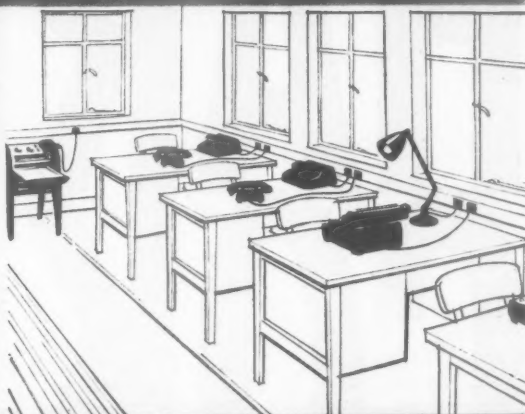


## SKIRTING or DADO DUCT

Two attractive new Key Ducts are available to simplify the distribution of electrical services by providing a layout that is flexible, neat and economical. Both systems may be used in conjunction with Key Underfloor Duct to deal with installations of any size and complexity.



**NEW DADO DUCT** with one, two, three or four compartments, offers a practical and attractive solution for power and telephone outlets at desk height. Top and bottom edges are contoured.



**NEW SKIRTING DUCT** with any number of compartment multiples, may be used where underfloor ducting is impracticable. A wide variety of moulded edges is available.

Both ducts can be economically and speedily installed in existing as well as new buildings

**A COMPLETE RANGE OF KEY DUCTS TO MEET EVERY TYPE OF REQUIREMENT**

Installing Key Ducts is the most modern way to tackle distribution problems in new buildings. As well as Dado and Skirting types, the range of ducting also includes a totally enclosed 'dee' shaped duct, and an open based duct—both surprisingly economical to lay and install. In the modernisation of existing offices, and for housing contracts, this system cuts the overall cost of distributing electrical services.

### NOTE THESE SPECIAL FEATURES

- Ideal for both existing and new buildings
- Easy to work and install using normal woodworking tools
- Pleasant, unobtrusive appearance
- Can be painted to match décor
- Takes flush fittings, as well as usual range
- Immediate delivery



**ADVANCE INFORMATION SHEETS ON NEW KEY DUCTS ARE NOW AVAILABLE**  
Phone or send attached coupon clipped to your letterheading

To Key Engineering Company Limited, Larkfield,  
Near Maidstone, Kent.  
Please send advance information sheets on Skirting,  
Dado and 'Dee' shaped ducts.

NAME \_\_\_\_\_

POSITION \_\_\_\_\_

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PAPER GROUP

**THE KEY ENGINEERING COMPANY LTD**

LARKFIELD, NR. MAIDSTONE, KENT. TELEPHONE: MAIDSTONE 7233, 7461 & 7481

TGA UD4

*Modernise with*

# HARD COKE

*for high-efficiency  
automatic Central Heating  
...with economy*

THERE is available a selection of automatic coke boilers, in a wide range of sizes, which can compete in efficiency with any other system and which operate unattended for long periods. One or more of these serving a well-designed heating system will heat offices, flats, hotels or factories cheaply, efficiently and with a minimum of attention. For domestic heating schemes, there are gravity-feed boilers of the highest thermal efficiencies with full automatic stoking and ash removal and with complete temperature control.

#### WHAT IS HARD COKE?

It is a smokeless fuel made in coke ovens from specially selected coal which is washed and crushed before carbonisation. Users prefer it because it is uniformly sized, consistent in quality and their appliances operate with greater efficiency.

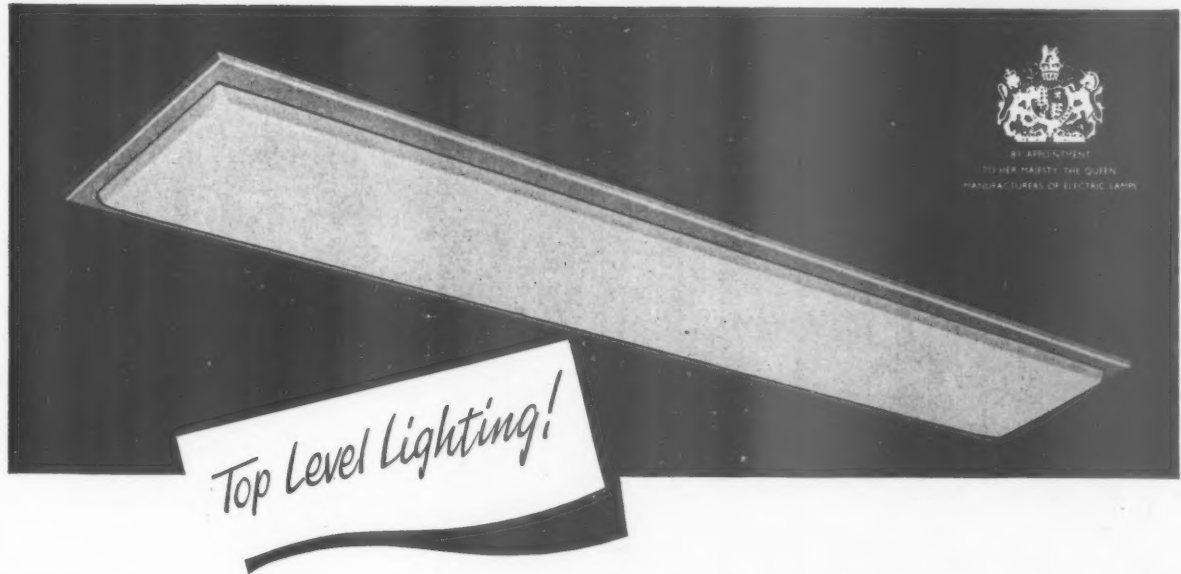
If you would like advice or further information on the use of Hard Coke, the British Coking Industry Association will be pleased to help you.

**THE  
CLEAN  
AIR  
ACT**

In 1958, the general industrial provisions of the Clean Air Act came into force. Have you a furnace or boiler which is difficult to operate smokelessly? A change to hard coke may very well be a simple solution to your problem. With attention to firing details such a change will give you added economy.

**THE BRITISH COKING  
INDUSTRY ASSOCIATION,**  
74 Grosvenor Street, London, W.1.  
Phone: MAYfair 9736

HC3



BY APPOINTMENT  
TO HER MAJESTY THE QUEEN  
MANUFACTURERS OF ELECTRIC LAMPS

## Crompton RECESSED FITTINGS

Now, to the clean-lined modern look of recessed fluorescent fittings, add the advantages of Crompton 'New-Range' standardised parts.

Smart flush-mounting frames accept either shallow opal dishes, diffusing light generally; louvres, limiting the spread of light; or open frames, allowing normal cut-off with, if necessary, quick adaptation to diffusers or louvres.

Simple fixings to usual structures; maintenance easily carried out from below. Ask for full details from your nearest Crompton Parkinson branch office.

See our exhibits on

**STAND H.14**

at the

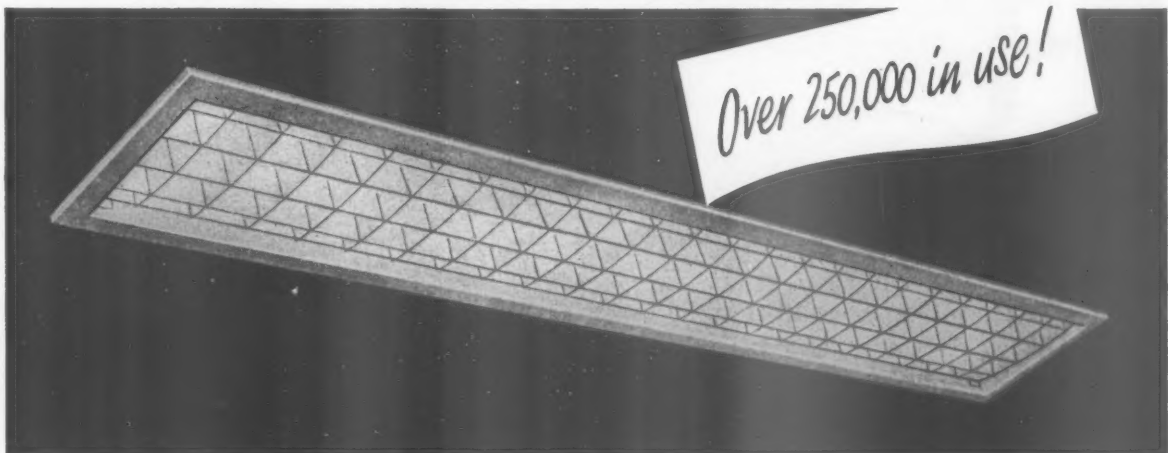
**Electrical Engineers  
(A.S.E.E.) Exhibition  
Earls Court, March 17-21**



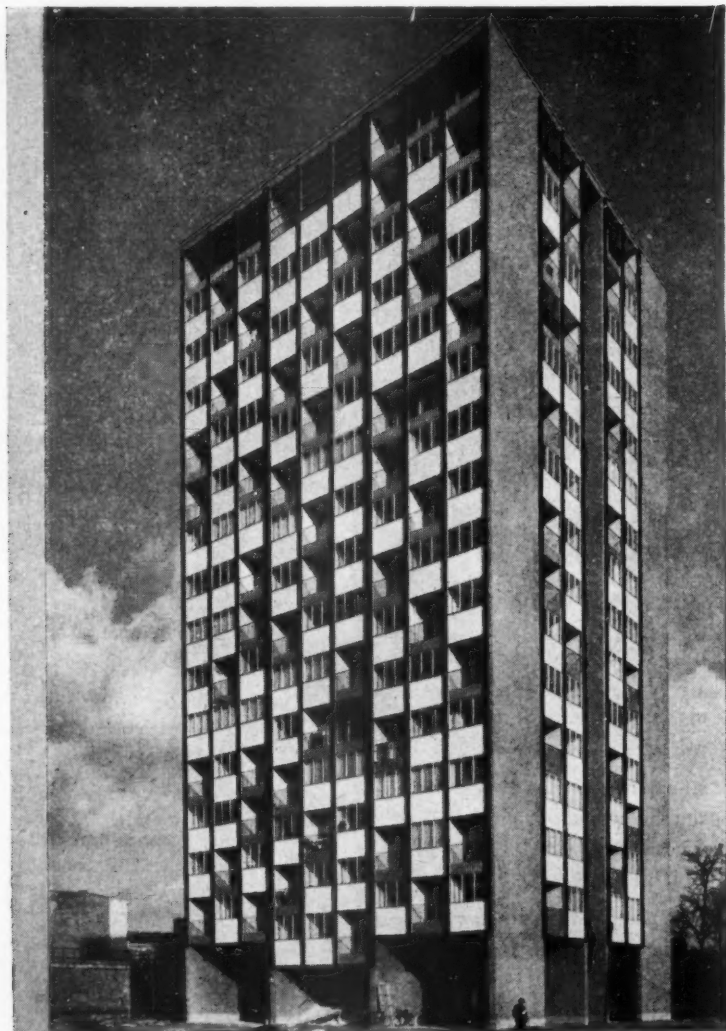
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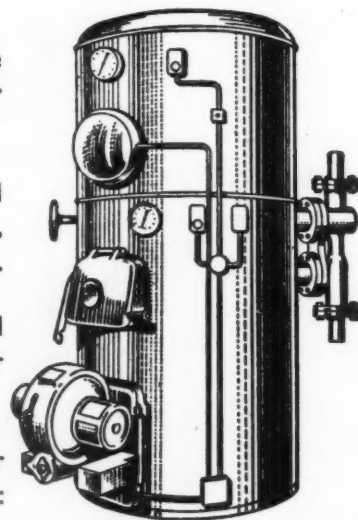
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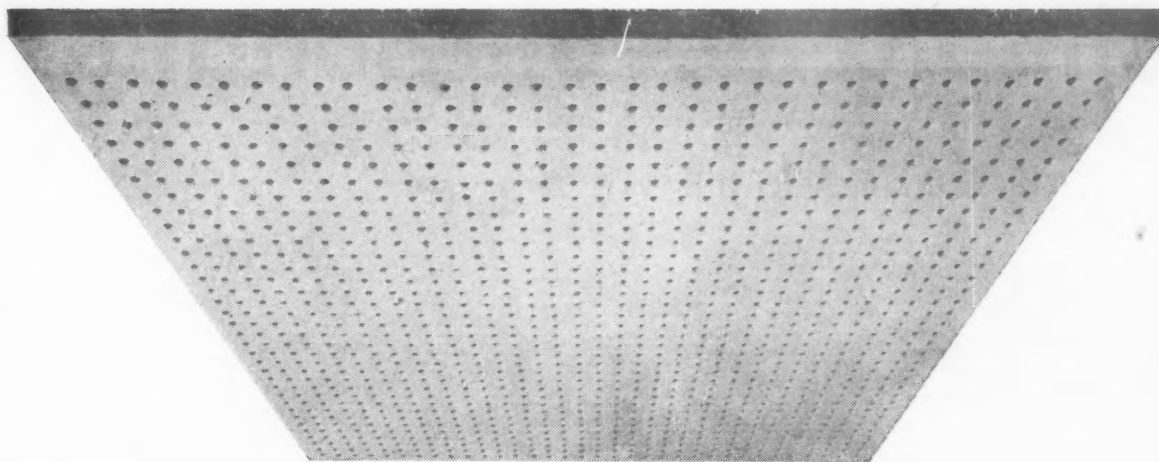
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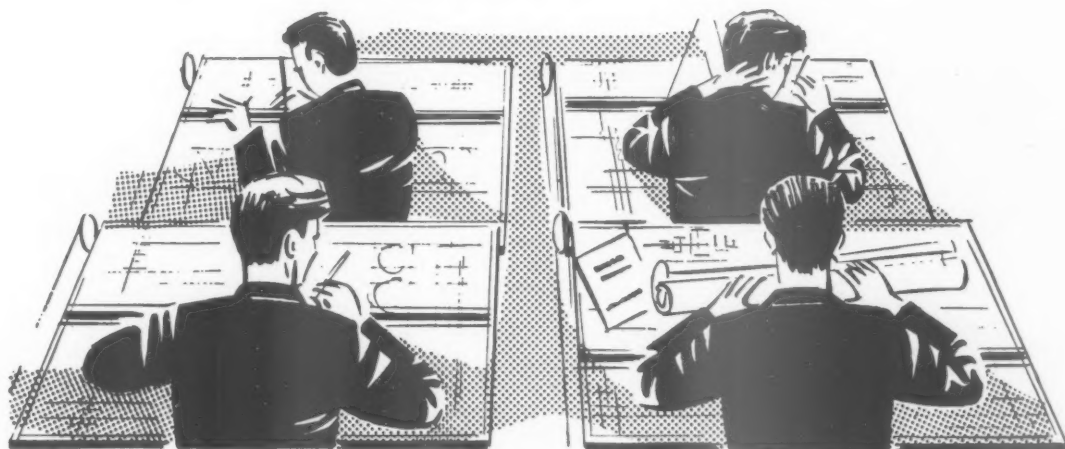
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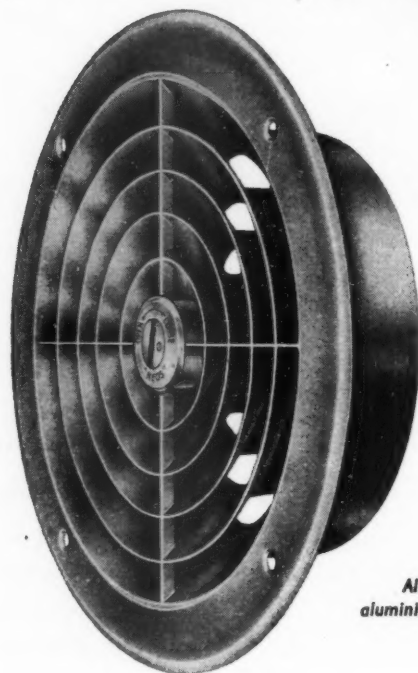
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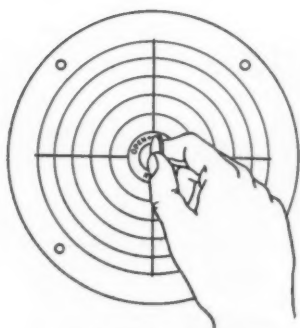
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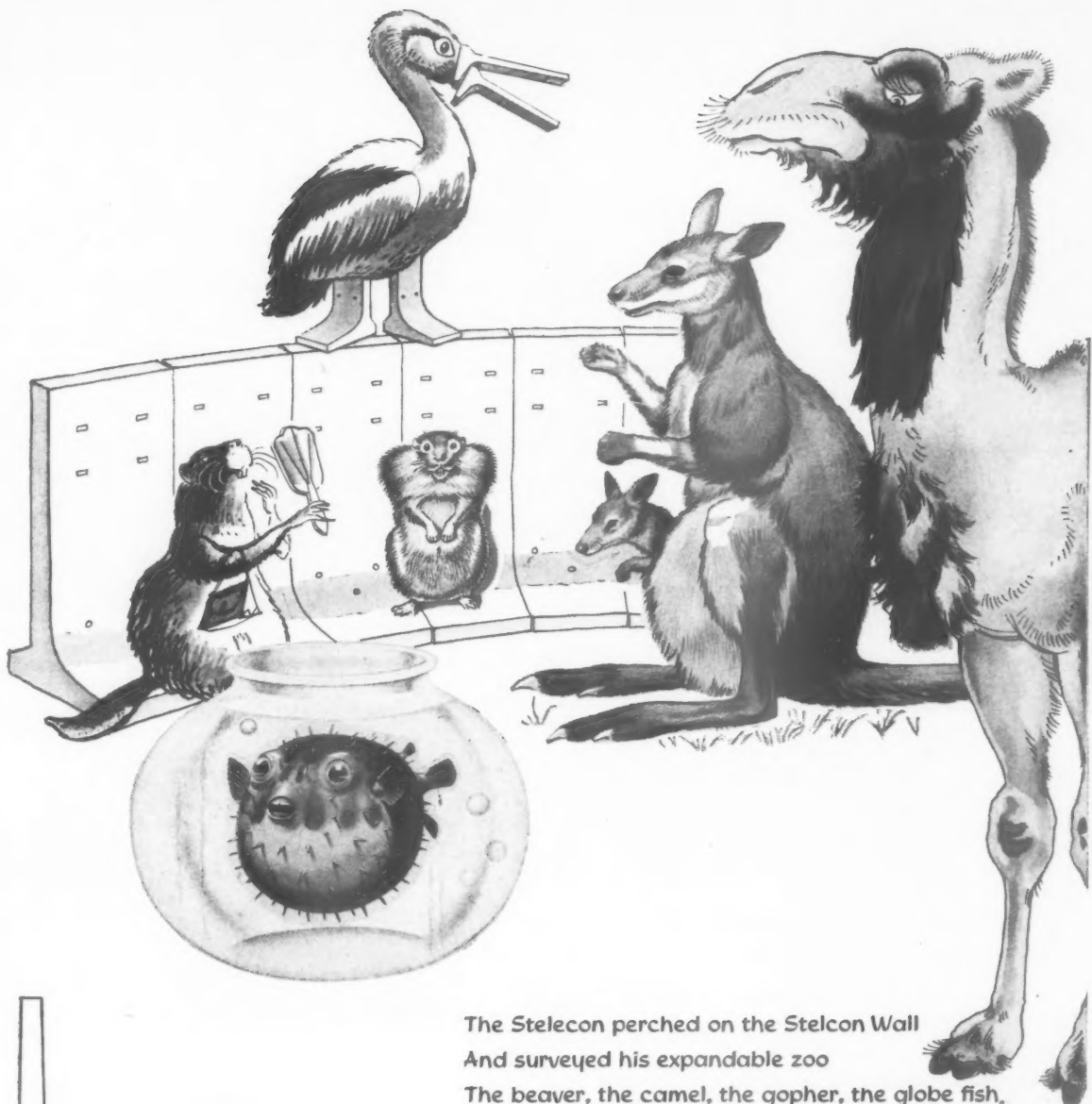
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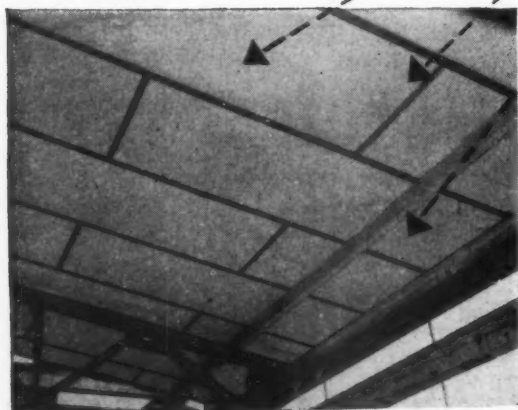
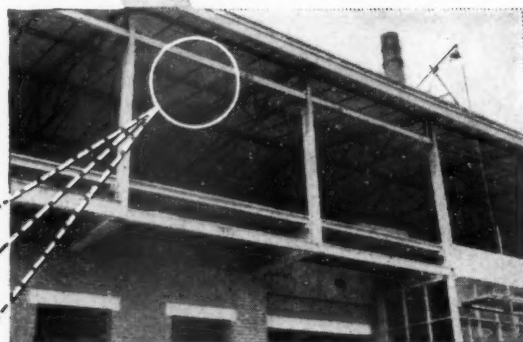
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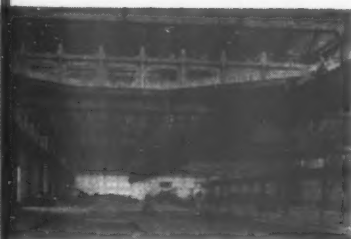
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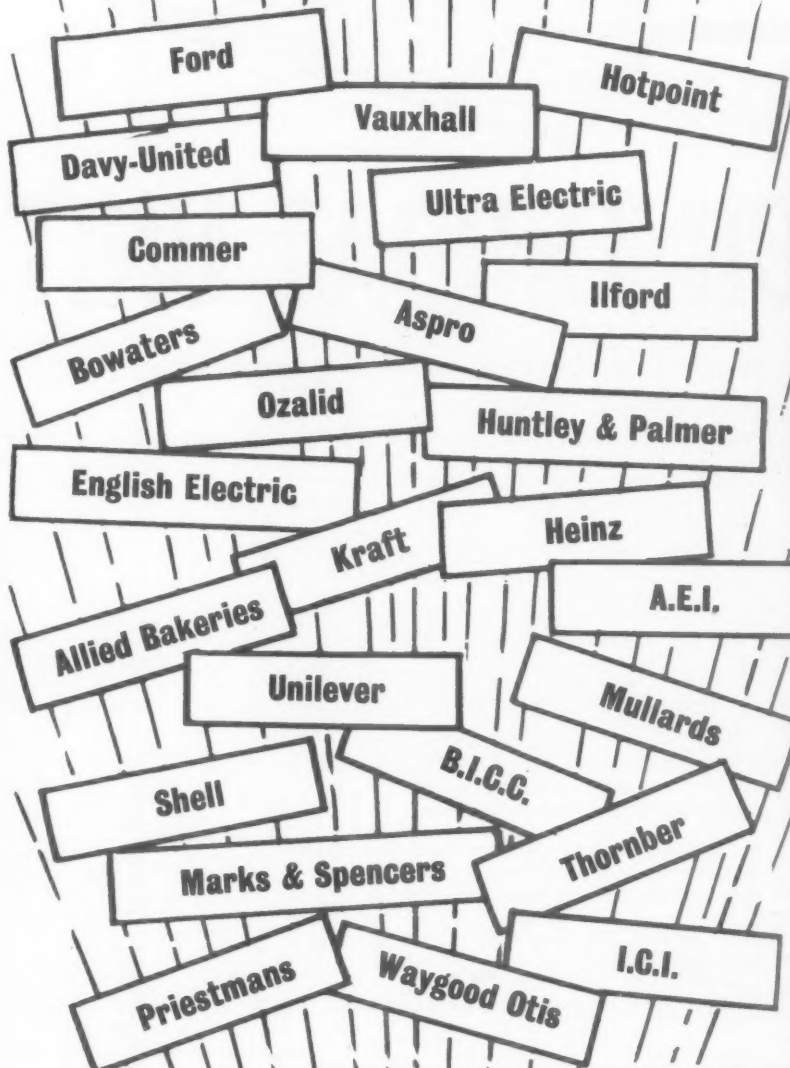
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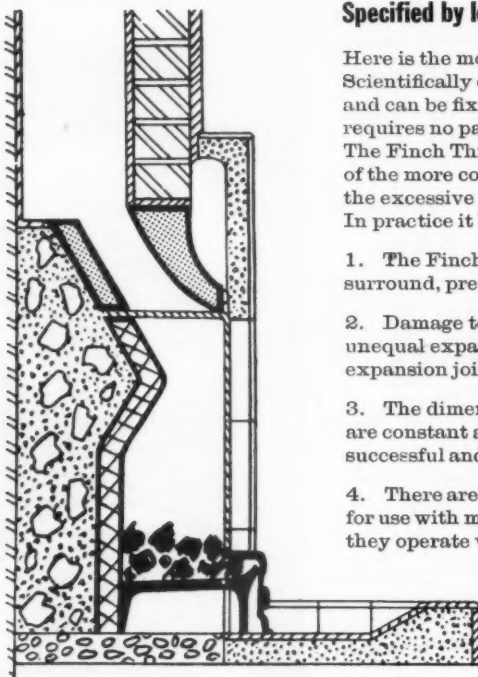


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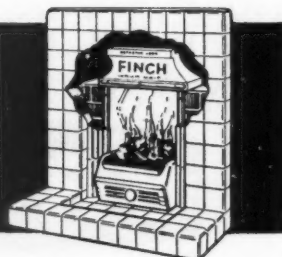


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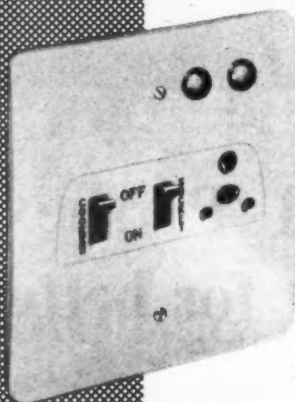
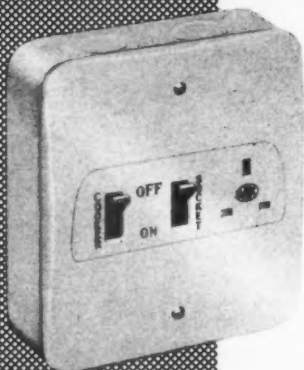
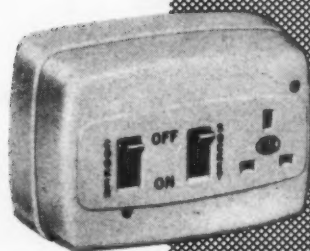
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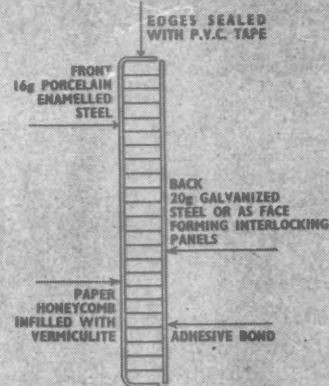
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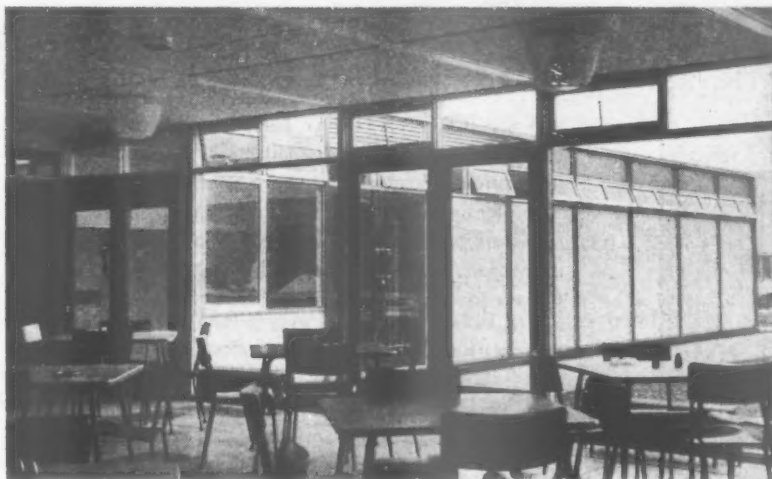
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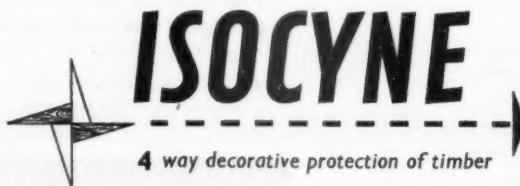
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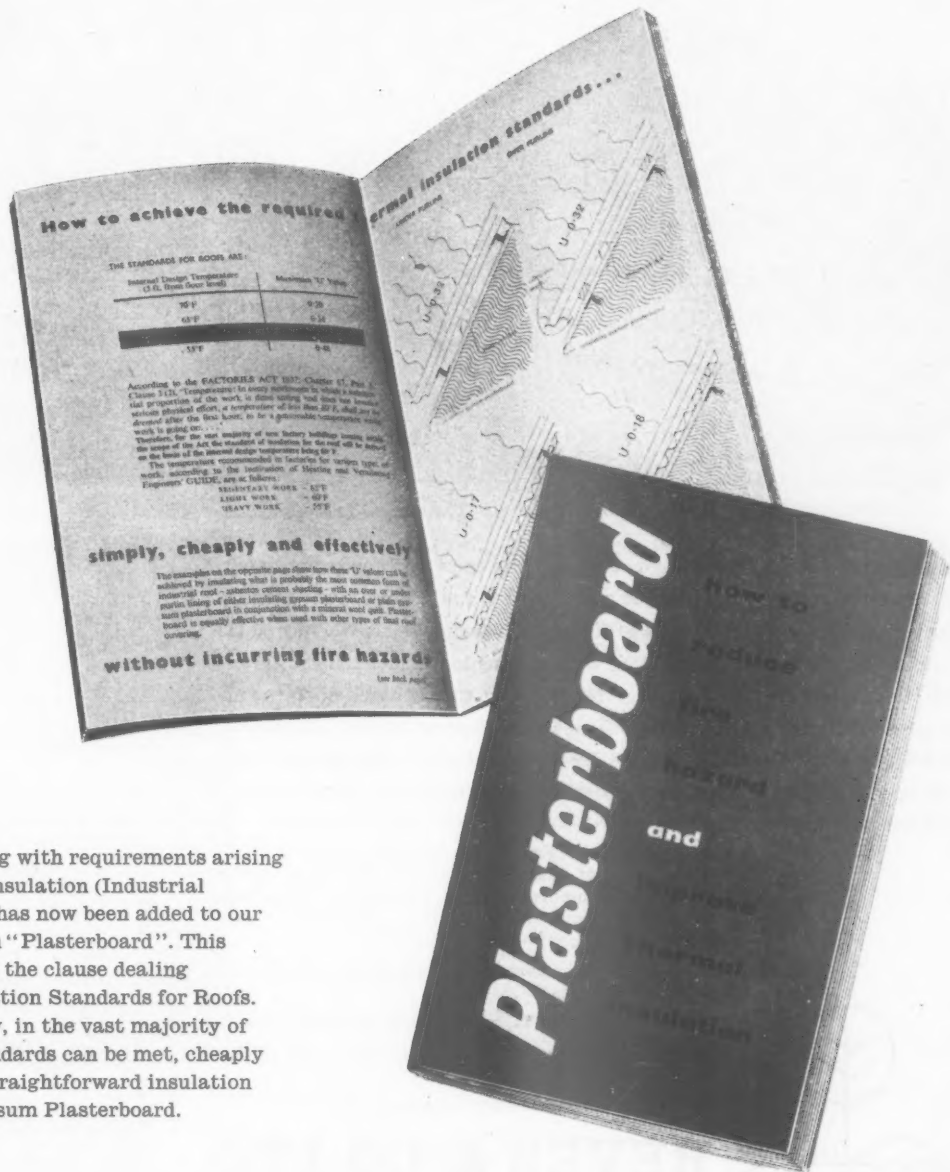
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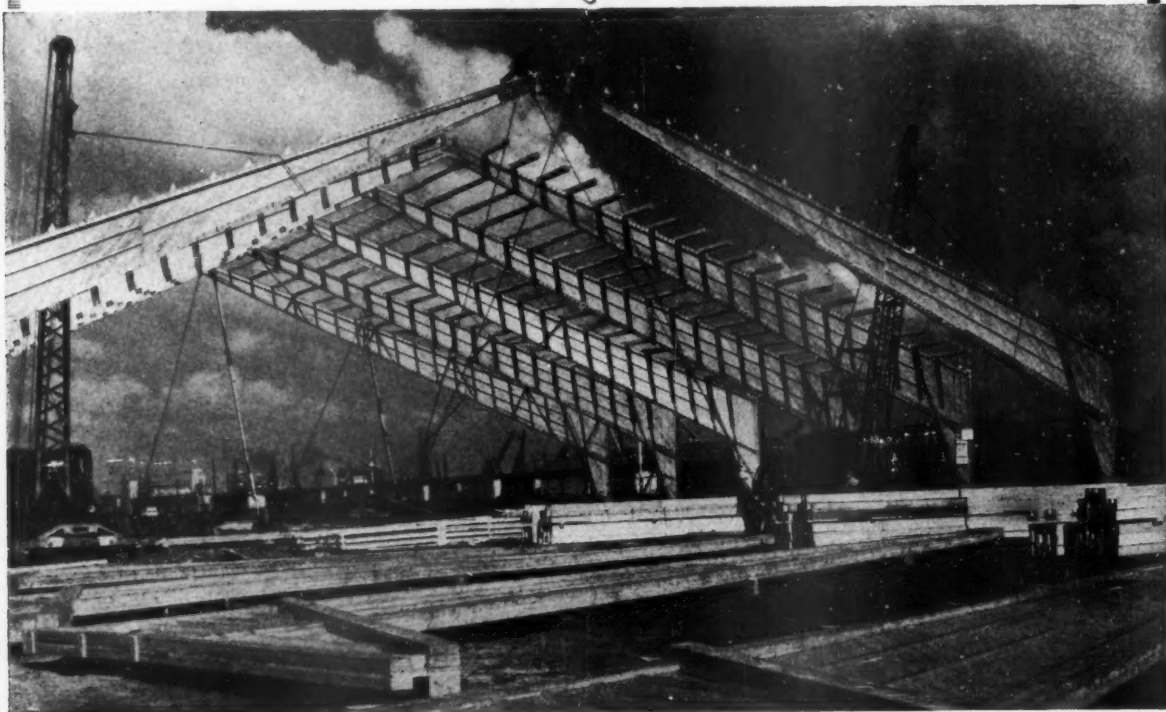
## with thermal insulation standards . . .



A supplement dealing with requirements arising from The Thermal Insulation (Industrial Buildings) Act 1957, has now been added to our standard publication "Plasterboard". This supplement explains the clause dealing with Thermal Insulation Standards for Roofs. It also indicates how, in the vast majority of buildings, these standards can be met, cheaply and efficiently, by straightforward insulation with Insulating Gypsum Plasterboard.

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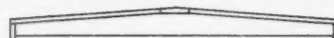


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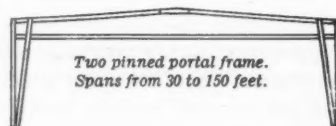
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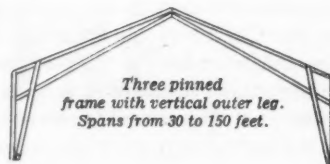
Ridge beam. Spans from 20 to 100 feet.



Northlight. Spans from 25 to 80 feet.



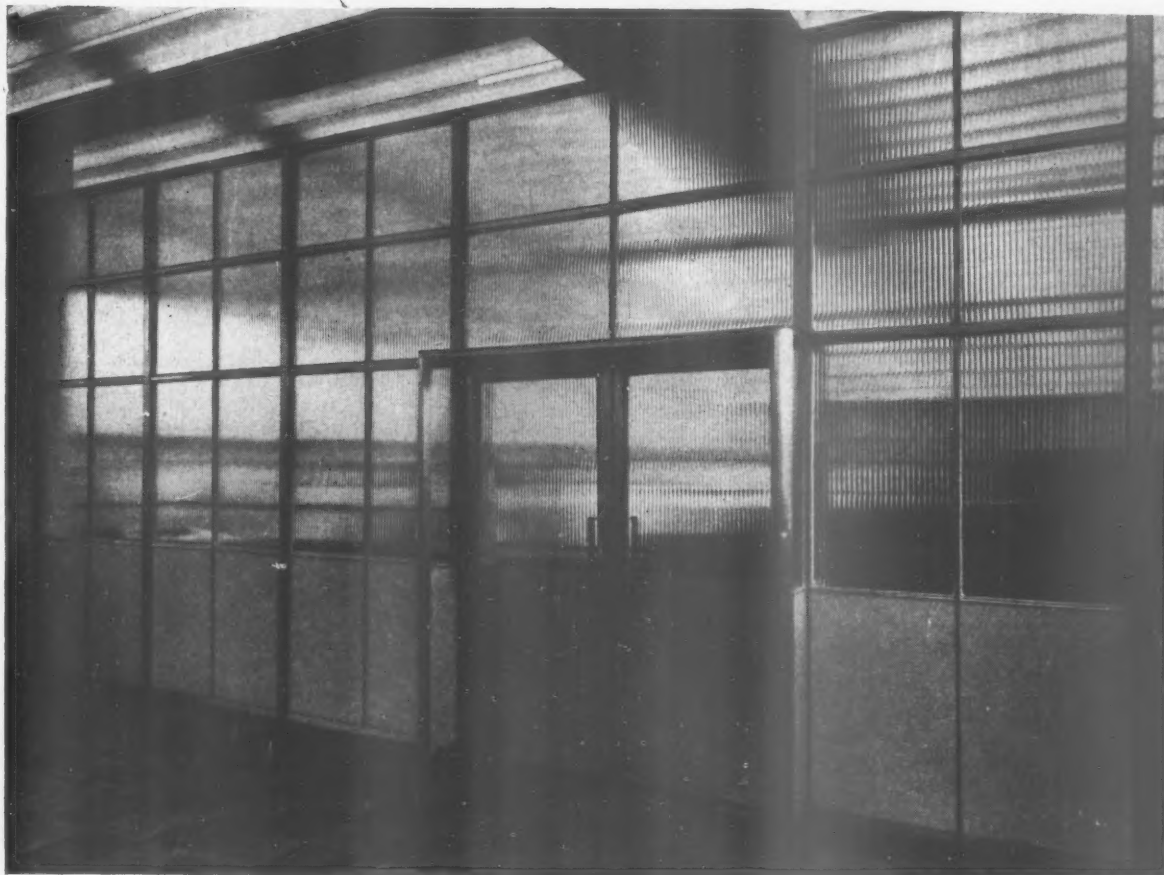
Two pinned portal frame.  
Spans from 30 to 150 feet.



Three pinned  
frame with vertical outer leg.  
Spans from 30 to 150 feet.



Two pinned portal frame with cantilevers.  
Spans from 15-40-15 to 30-80-30 feet.



*The above photograph shows BRABY 'Bar-Form' Partitions supplied and fixed at the new Research and Design Building of Messrs. C. A. Parsons & Co. Ltd., Newcastle-on-Tyne.*



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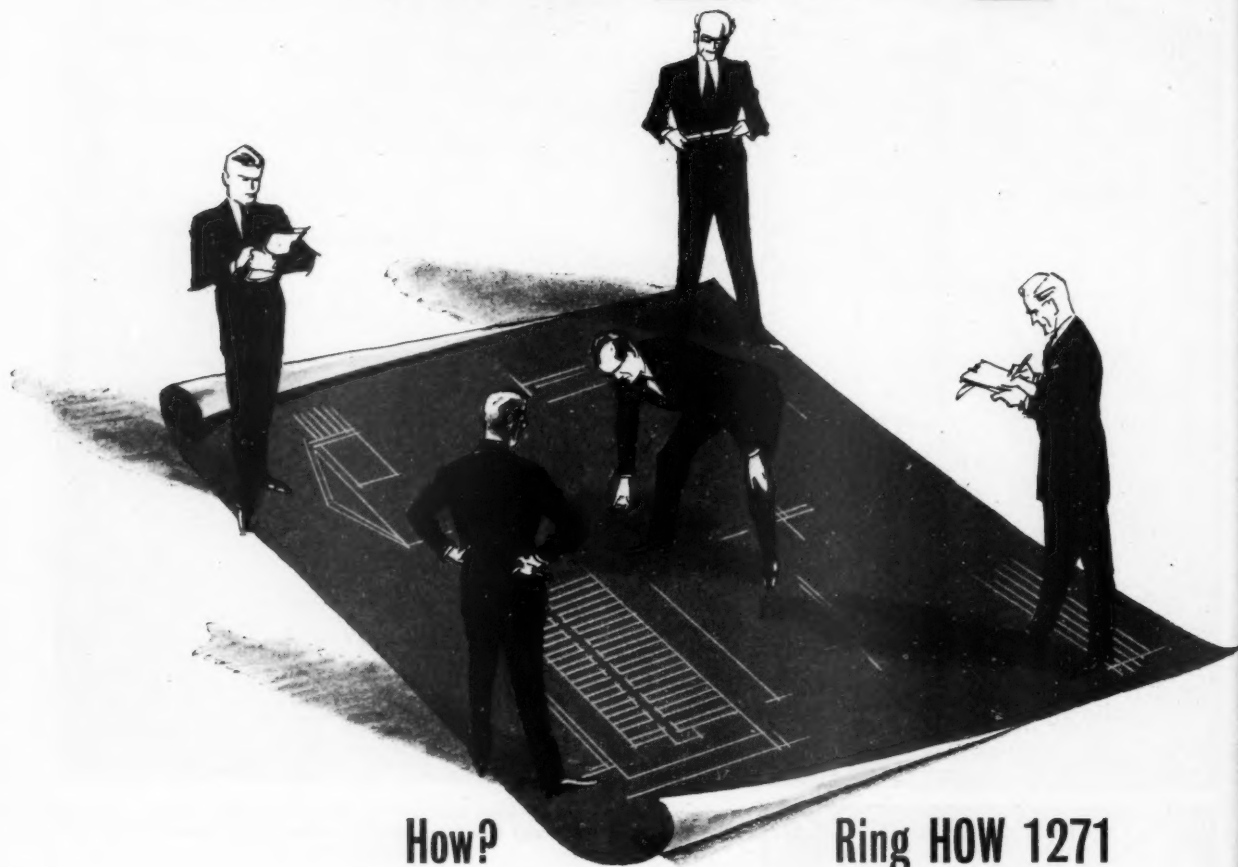
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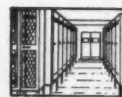
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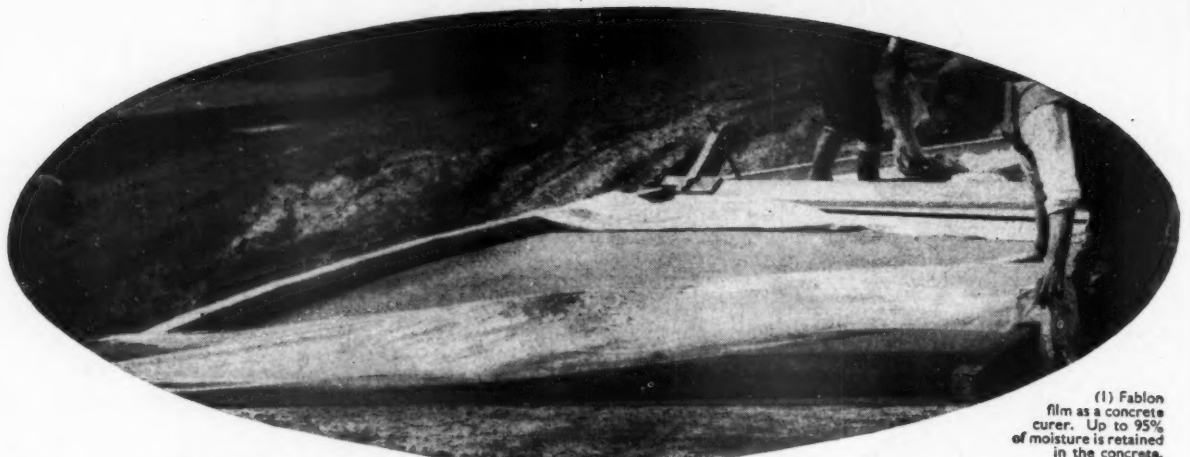
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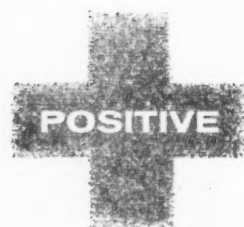
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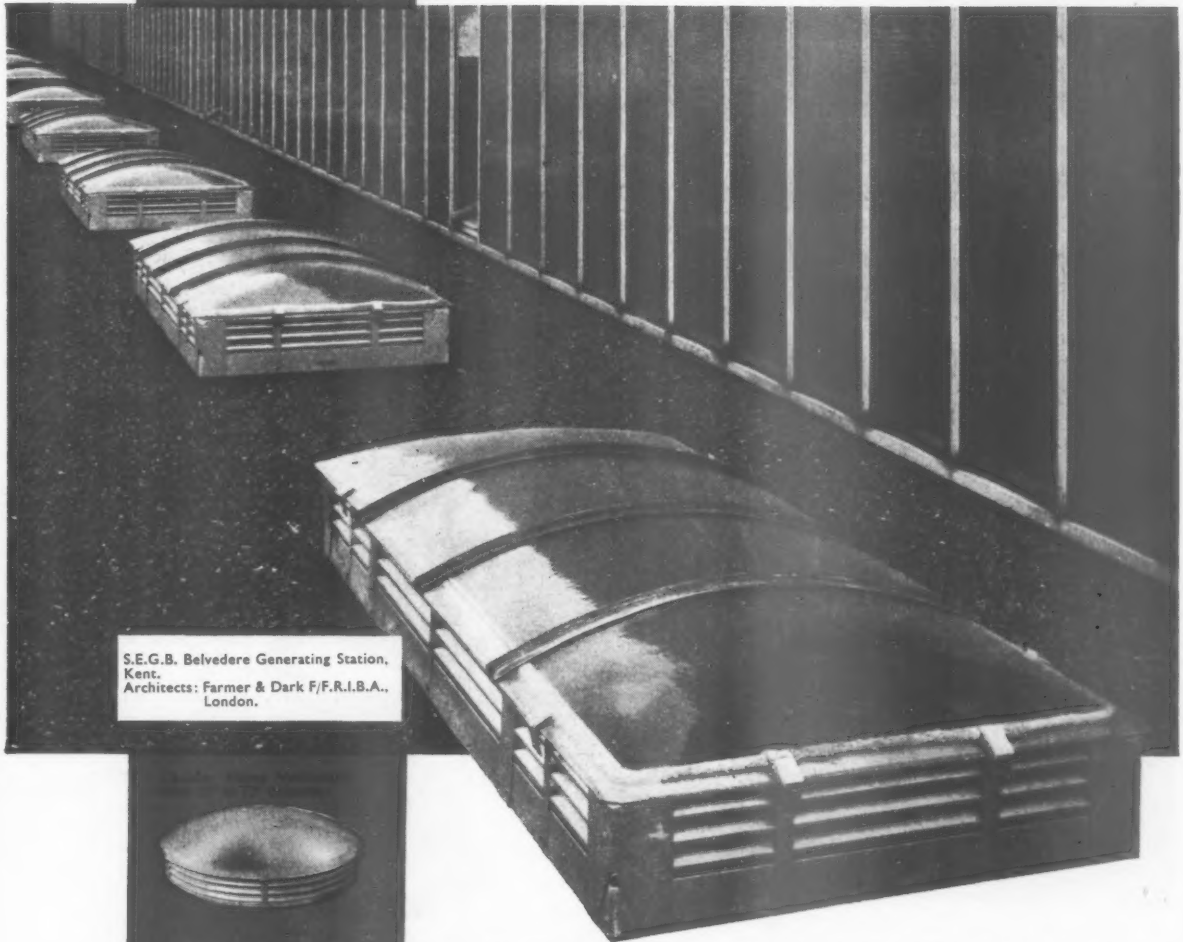


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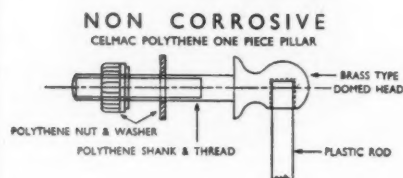
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# monthly review by

**WILLIAMS & WILLIAMS**

## 'WALLSPAN' FOR NEW B.O.A.C. WING HANGAR

**1** Both ends of this vast new maintenance hangar at London Airport are glazed by Williams & Williams—the 2-story central workshop block being emphasized by a panel of 'Wallspan' set in a projecting concrete frame. Aluminium windows are set in the 'Wallspan' grid and three types of opening lights—top-hung, projected, and vertical-pivoted are incorporated. The spandrel panels are Vitroslab.

The basic design is an interesting solution to a recurrent problem in the design of aeroplane hangars whose height, after allowing for high-level services, is dictated solely by the tail-fin height of the various aircraft to be accommodated. Airliner design in recent years has tended towards increasing tail heights, and the hangar designer has been faced with a difficult economic problem since every foot of increased height is reflected in increased capital cost and higher heating, lighting and maintenance costs. Whatever height is decided upon may still prove inadequate for some new aircraft a few years hence. But on the other hand a reversal of the present trend—airliners designed on the Delta configuration for example—would result in hangar height becoming so much wasted space.

The new B.O.A.C. Wing Hangar, as the name implies, is designed to accommodate only the wings and fuselage of the aircraft—the sliding doors are shaped to close around the rear fuselage leaving the tail unit outside. Engines, undercarriage, flight deck, passenger cabin, wing fuel tanks and wing control surfaces—the usual objects of routine maintenance—are all under cover.

The reinforced concrete structure consists of a pair of hangar pens, each with a completely unobstructed 565 ft. wide opening and depth of 110 ft. arranged back-to-back but separated by a central two-floor workshop block. The hangar pen roofs are suspended by ties from this central block.

## 'ALOMEGA' WINDOWS FOR CORNISH COMFORT

**2** This study flat is high up, midway between the coasts of Cornwall. The client wanted big windows for the

sake of the panoramic views across to St. Ives but had misgivings about draughts. The architects' solution to his problem was to install 'Alomega' double hung sashes—heads, sills, jambs, and meeting rails all designed with integral weather-stripping to keep draughts out, even in a blustery south-wester coming across thousands of miles of Atlantic! Other reasons for specifying 'Alomega'—**no maintenance**: no cords or counter weights or balances to go wrong; no painting because the windows are all-aluminium: **easily adapted to a 3 ft. building module**: the 2 ft. 8½ in. width was used—others from 1 ft. 2½ in. to 3 ft. 5½ in.: **ideal combination with picture window**—see illustration opposite.

Last (but not least in these Subtopian days), the sash window is considered in a special way to be the window for the West Country and 'Alomega' happily combines the technical resources of today with the graceful design of the eighteenth century.

A further advantage which was not applicable in this particular instance, but of considerable value in congested urban sites, is the fact that with 'Alomega' the building can come right up to the building line.

## NEW STANDARD WINDOWS CUT SITE COSTS—NEED ONLY ONE COAT OF PAINT

**3** Williams & Williams standard domestic windows to BS 990 in both 1 ft. 8 in. and 2 ft. ('Z' range) modules are now available electro-galvanized, primed and painted. The windows are processed in an entirely automatic plant which is believed to be the largest of its kind in the world.

The assembled frames are loaded on to a conveyor—chemically cleaned, phosphated and electro-galvanized. Still on the same mechanical conveyor, the windows are dipped in a paint bath and stoved for 25 minutes at 310°F. They then receive a second sandy-beige coat and are finally stoved a further 25 minutes—again at 310°F. The paint technology of the operation has been worked out in collaboration with ICI and the paint used is their beige No. B215/166/2.

This process offers four major advantages:

1. Since the human element is eliminated, a much more even distribution of paint is assured.
2. All surfaces of the frames are painted, including those which will be in contact with the masonry and which in the ordinary course of events could not be painted.
3. The fact that both primer and second coat are stoved lends greater durability to the paint giving together with the galvanizing coat an efficient triple protection to the steel surface.
4. The second stoved coat can be regarded as an undercoat. Because of its light shade only one finishing coat need be applied on site.

## WILLIAMS & WILLIAMS RELIANCE WORKS • CHESTER



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**1** B.O.A.C. WING HANGAR, LONDON AIRPORT  
*Engineers for reinforced concrete structure: Sir Owen Williams & Partners.*  
*New Works Manager, B.O.A.C.: L. B. Haley, M.Eng., A.M.I.C.E., A.M.I.H.V.E.*  
*General Contractors: W. & C. French Limited.*

**A** General view—note the tails of Britannia aircraft protruding from the hangar pen on the extreme right of the photograph.

**B** Detail of the 'Wallspan' on the central workshop block—3 types of opening lights can be seen in the aluminium windows. Note the permanent railway along the cornice for the cleaners' cradle.

**2** 'LITTLE TREFEWAHA', PRAZE, CORNWALL  
*Architects: Taylor & Crowther, Chartered Architects.*

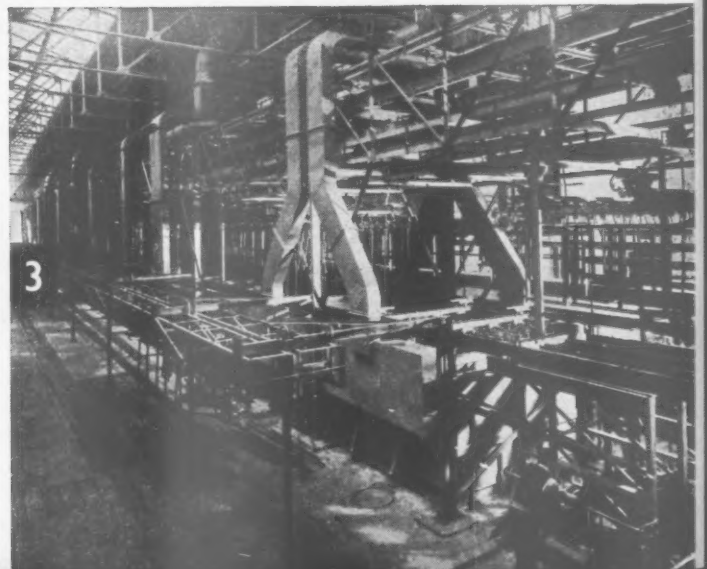
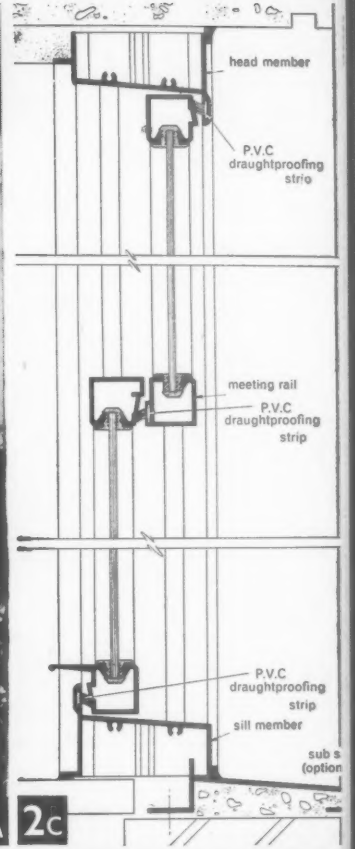
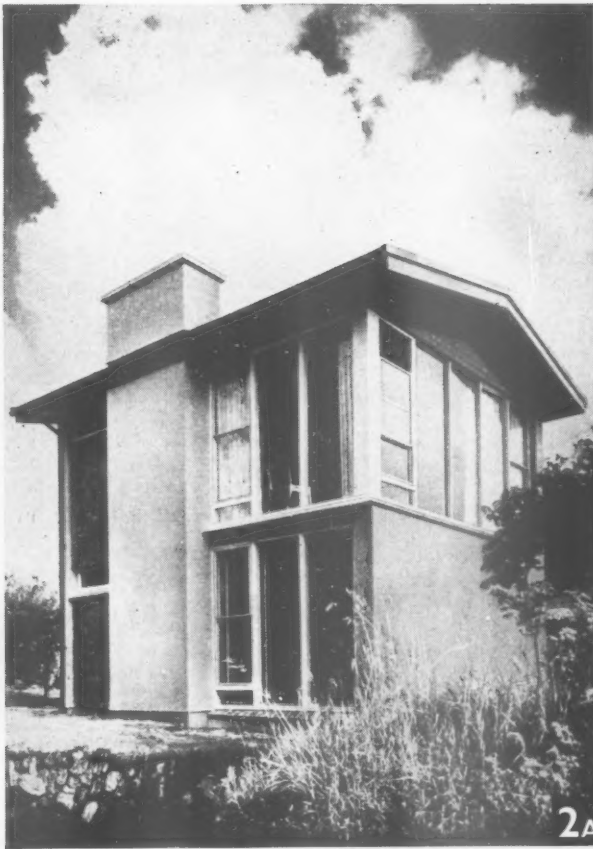
**A** Exterior.

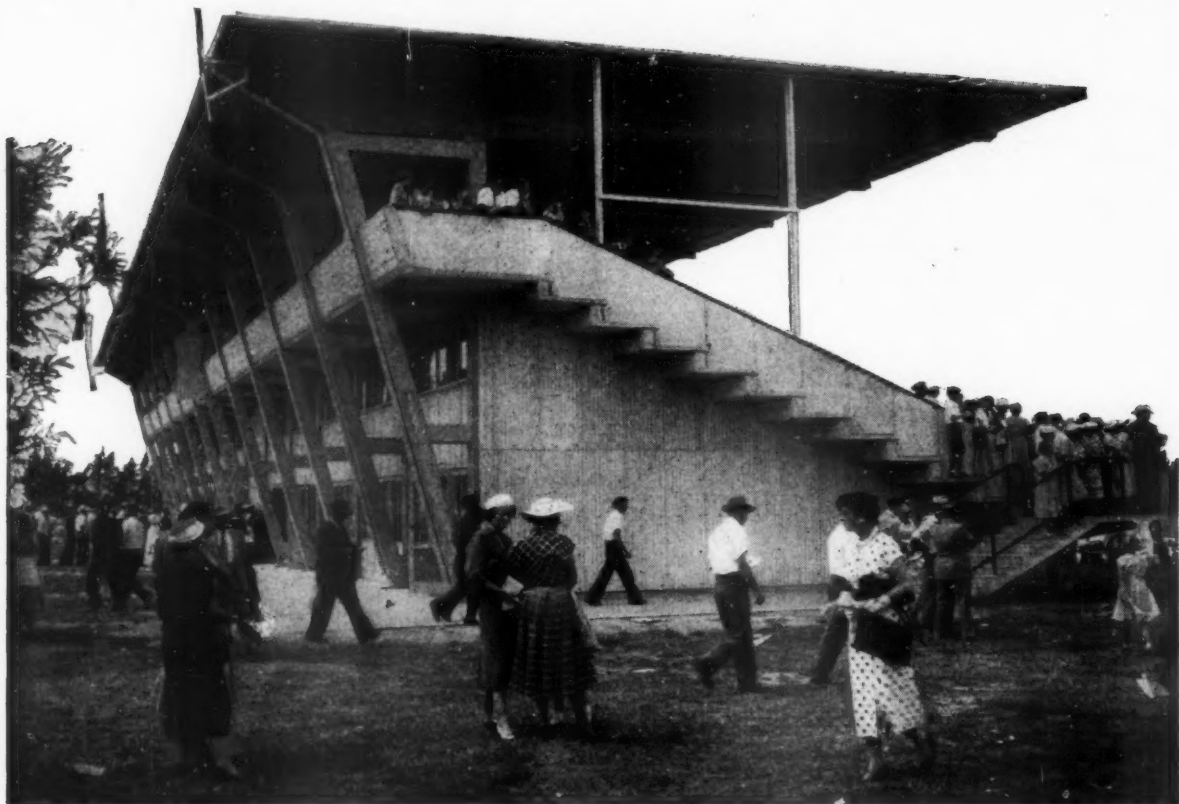
**B** Interior of the study showing how the 'Alomega' sash forms part of the glazed corner.

**C** Draughtproofing plastic extrusions at head, meeting rail and sill of 'Alomega' double-hung window.

**3** Part of the automatic conveyor system on which Williams & Williams new standard paint-finished metal windows are processed.



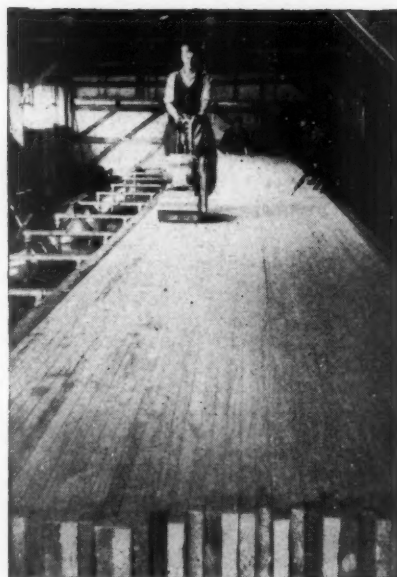




*The grandstand at the Matamata racecourse.  
Architects: Messrs. Jones, Adams, Kingston & Reynolds.  
Contractors: V. Edmonds Ltd.*

## UP OVER DOWN UNDER

The new grandstand of the Matamata (New Zealand) Racing Club is notable for its cantilever timber roof, using laminated beams of radiata pine, constructed by the Lamwood Division of the Fletcher Timber Co. Ltd. at Auckland. These beams each measure 46 ft long, 12½ in. wide and taper from 43 in. to 16 in. deep. Each pair of beams was cut from a block of laminated wood weighing over four tons, and containing 5,000 super ft of timber. The radiata pine was kiln dried to a specific moisture content, which was kept constant by special 'black heat' tubes. Aerodux 185 resorcinol resin glue was used throughout, because of its unequalled durability, resistance to all weathers and stability in the event of moisture changes occurring in the wood.



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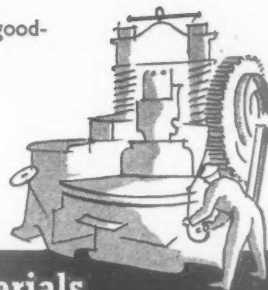
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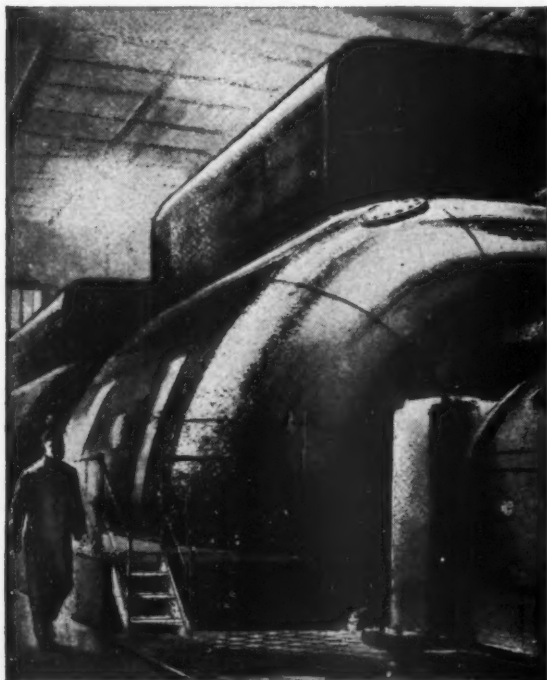
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The development of nuclear energy for generating electricity is still front-page news. Less publicised, though no less outstanding, are new developments in "conventional" generating plant. The turbo-alternator shown here is a 550,000 kilowatt unit - twice the capacity of the next largest on order for the Central Electricity Generating Board. It has been designed for the projected new power station at Thorpe Marsh. For Blythe 'B', another new station, 275,000 kilowatt in-line units are on order. They will be powered by steam at 2,350 lb. per sq. in. and 1,050°F, with reheat to 1,000°F.

Nuclear power will play an important part in meeting the ever-increasing demand for electricity. Work is now in progress on the first three nuclear power stations, at Bradwell, Berkeley and Hinkley Point. By 1966/7 some 5 to 6

million kilowatts of nuclear-generated electric power will be available.

Though these projects will not be completed for some time, the Central Electricity Generating Board plays an important part in today's fight against inflation. Power stations are being built at a cost no greater than in 1948 - £50 per kilowatt installed. And, although the output of the industry has doubled since 1948, the increase in manpower is only about one-third.

By providing today for the power we shall need in years to come, the Central Electricity Generating Board is building a secure foundation for our future prosperity.



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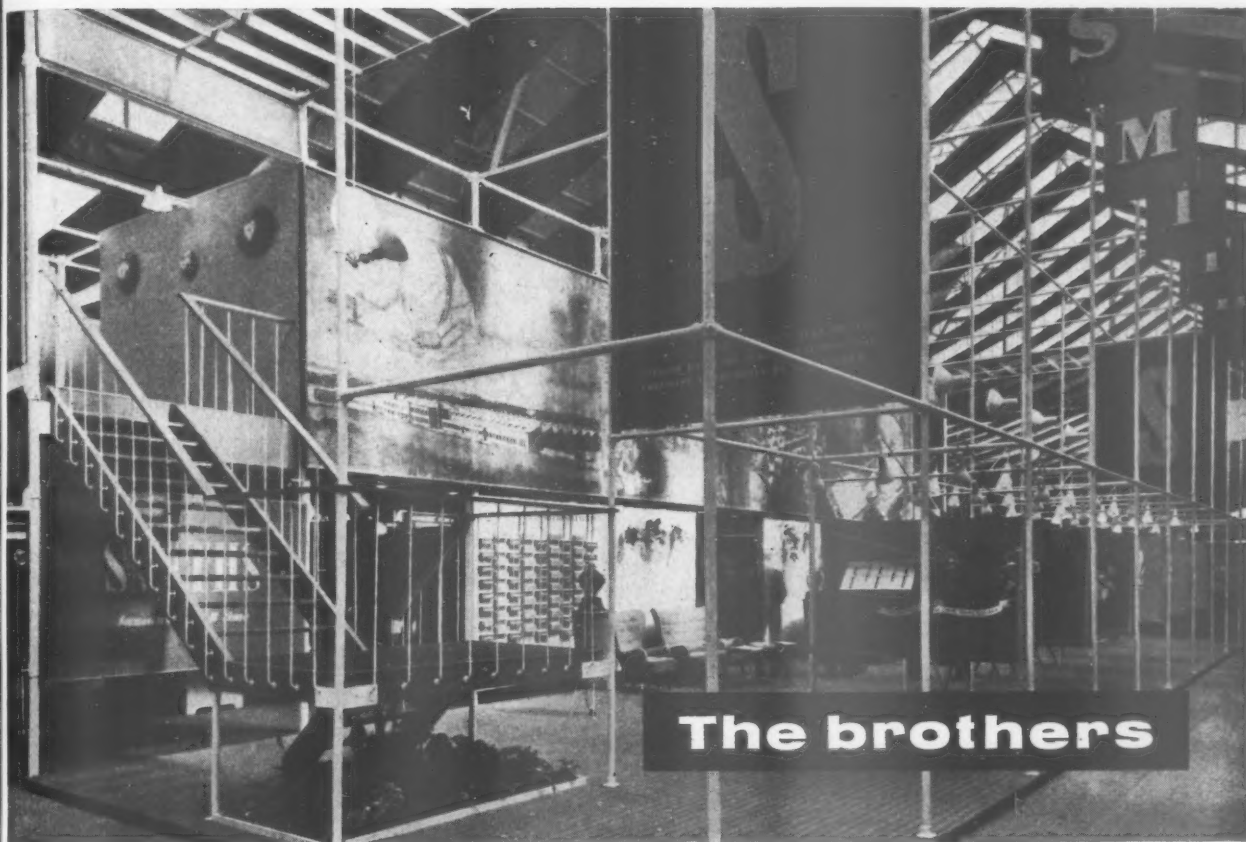
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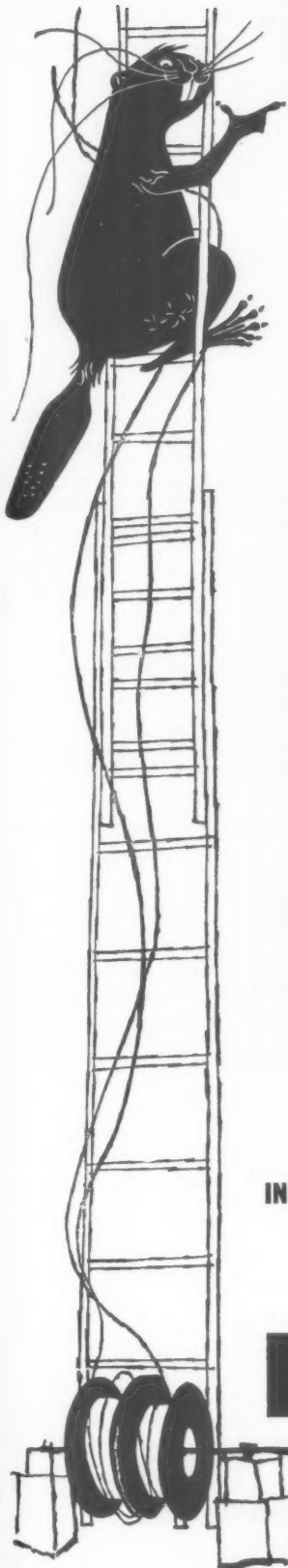
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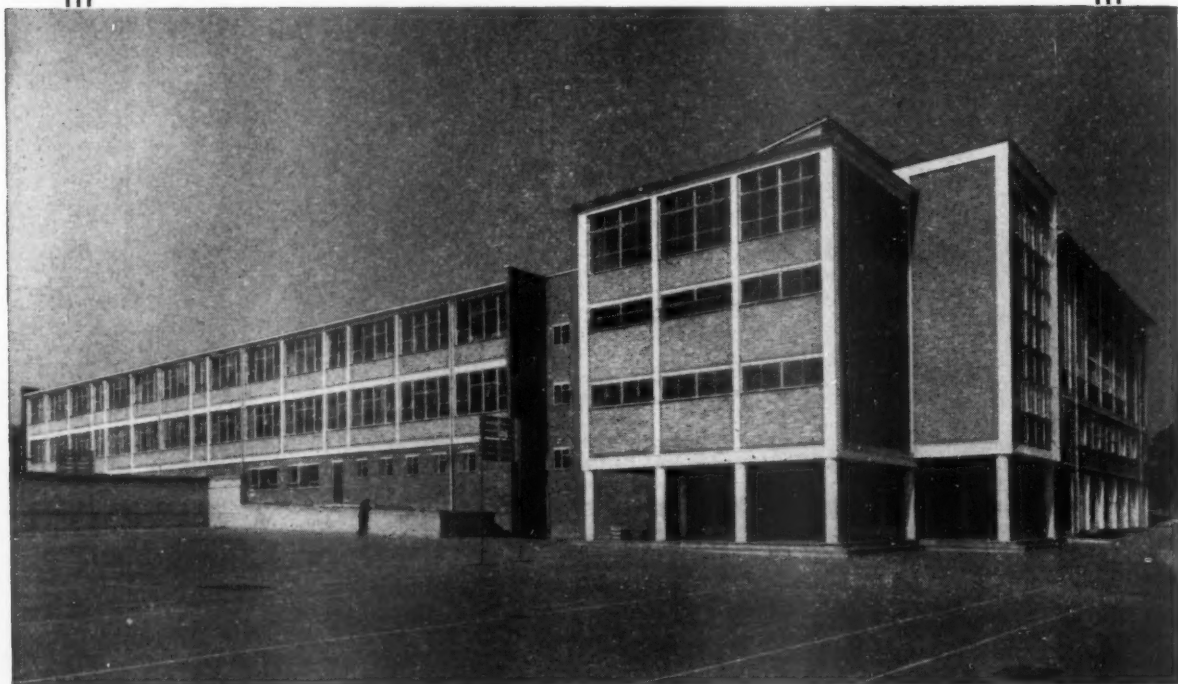
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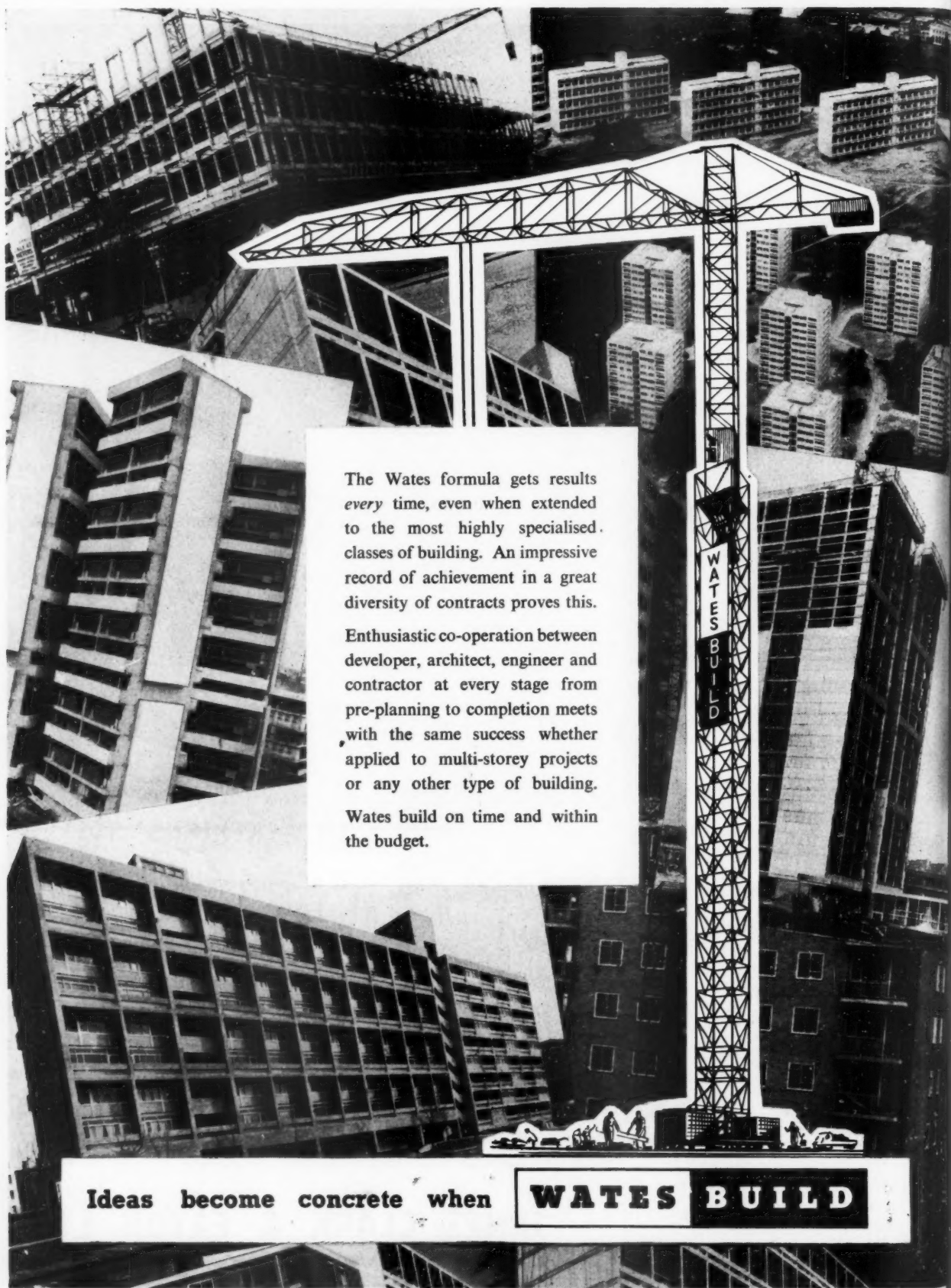


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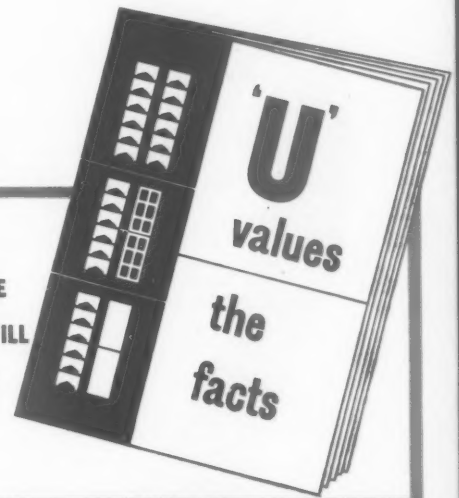
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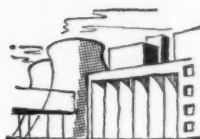
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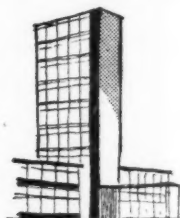
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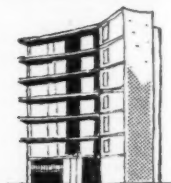
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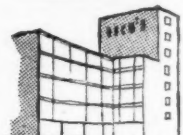
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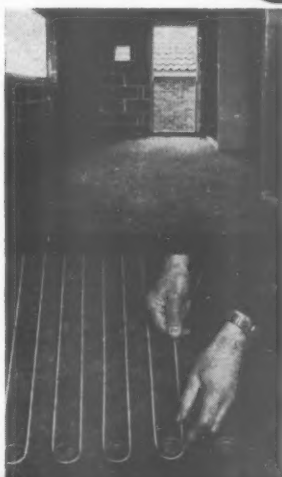
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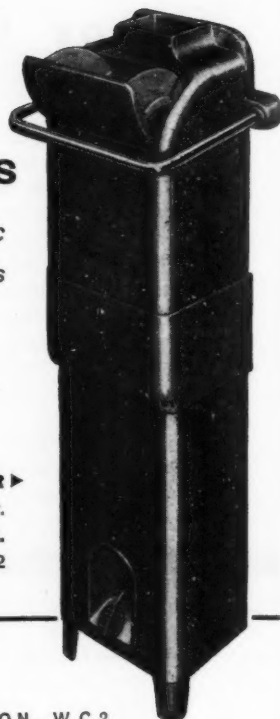
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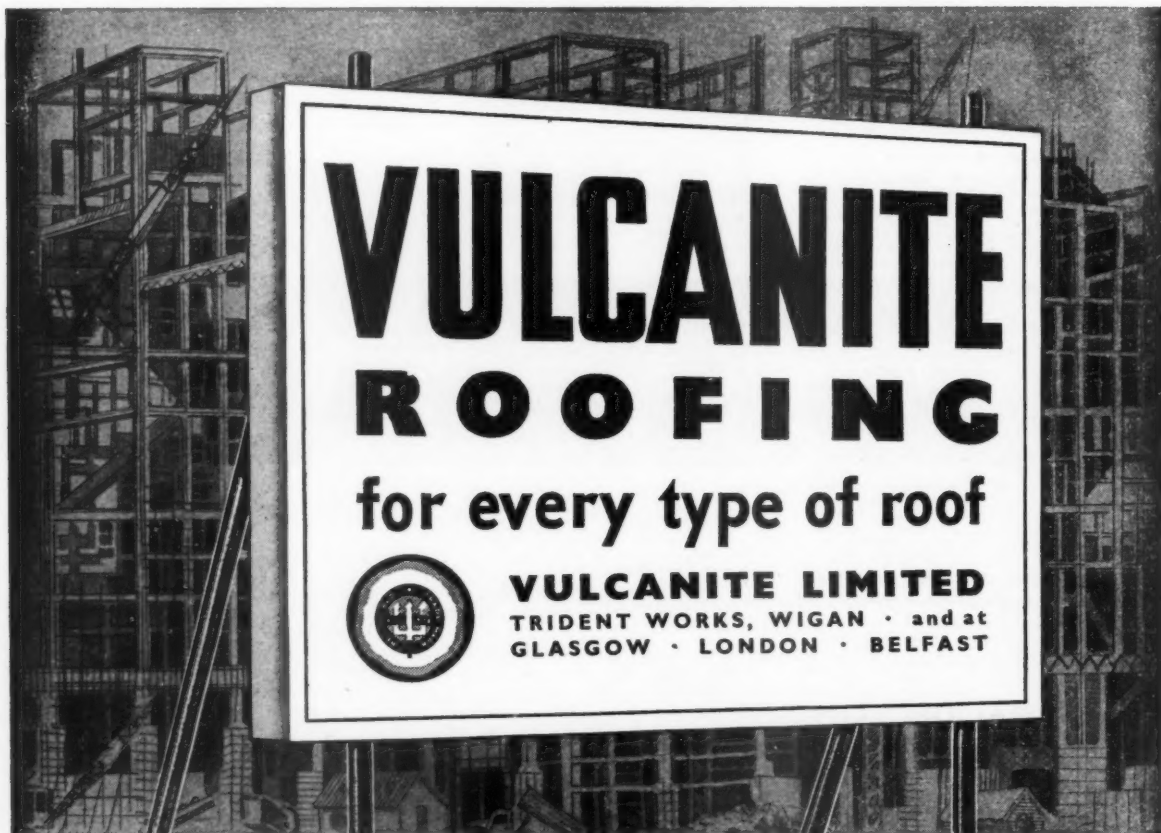
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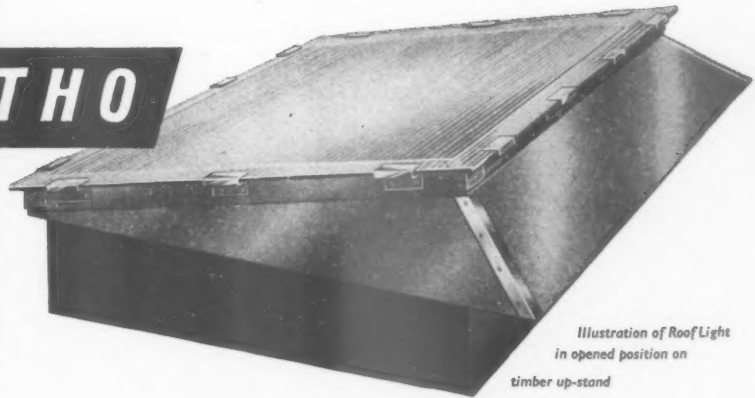


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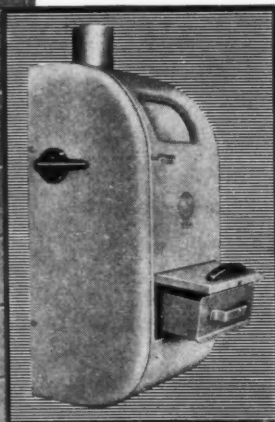
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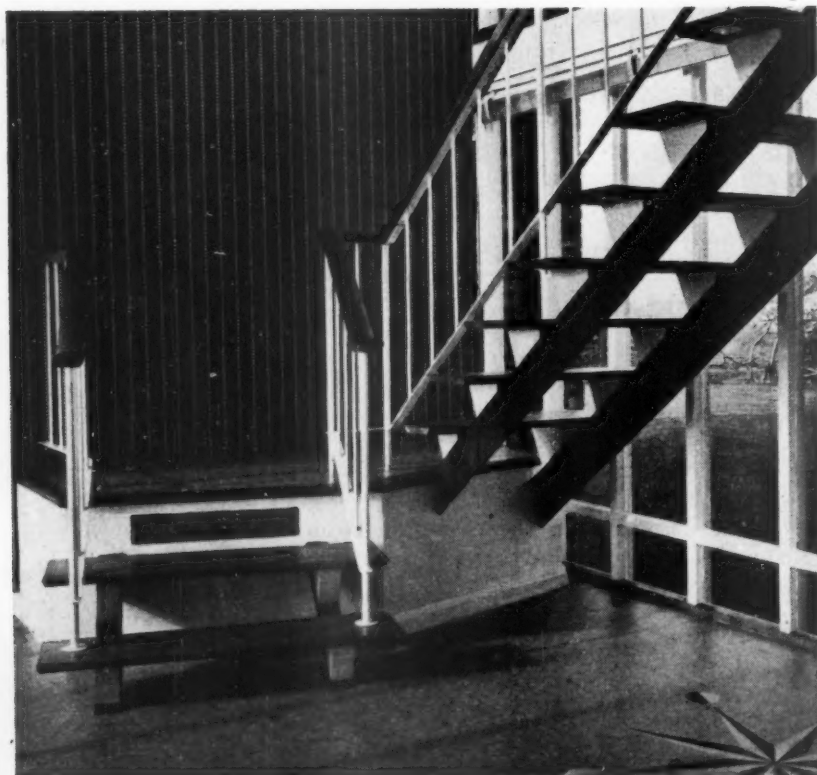
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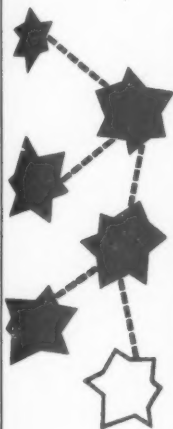
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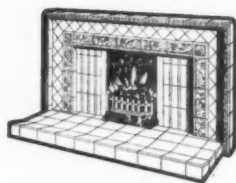
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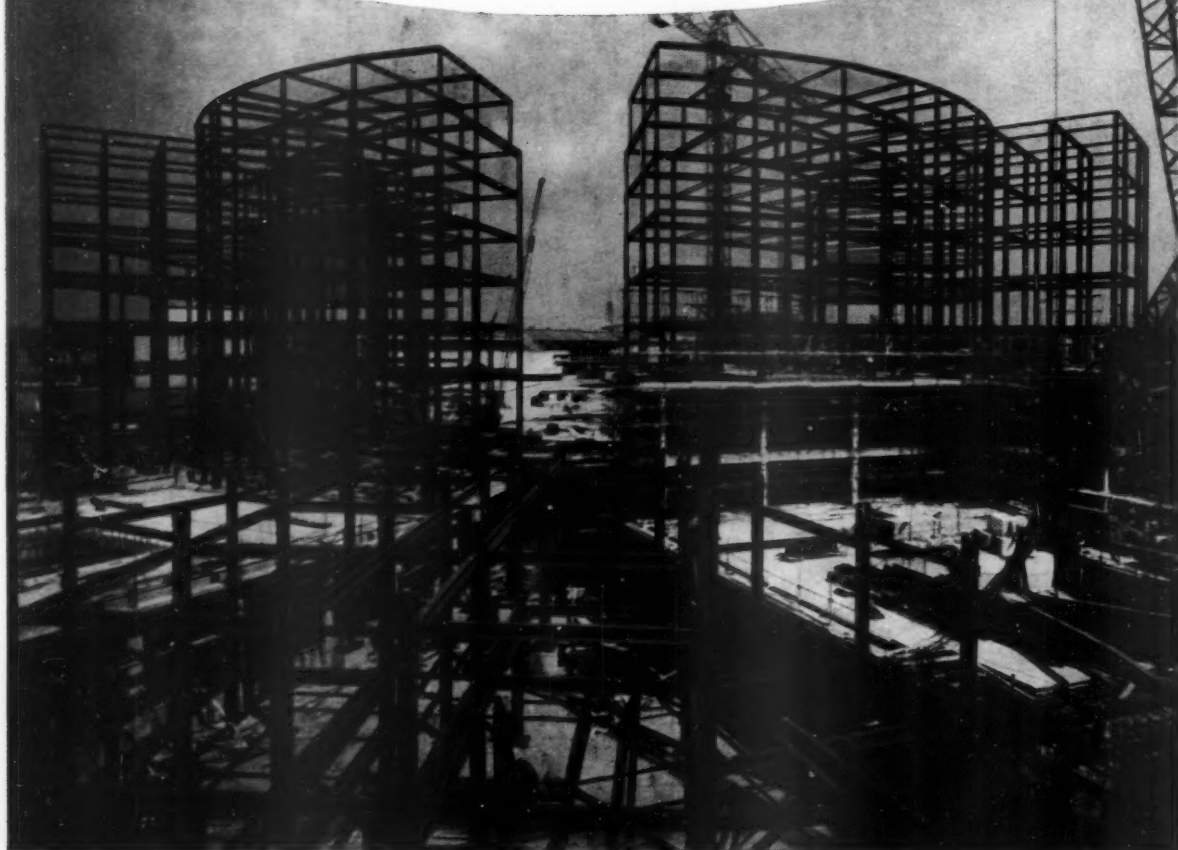
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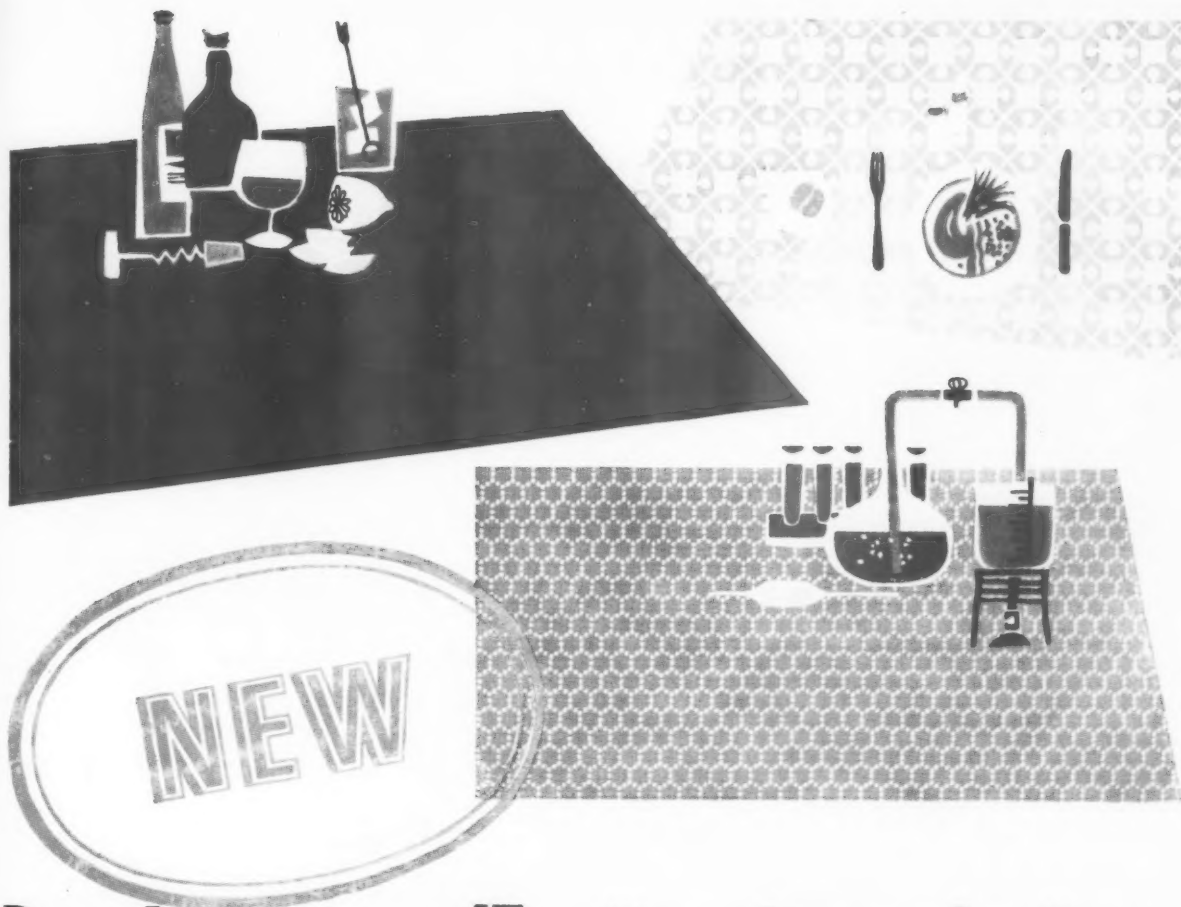


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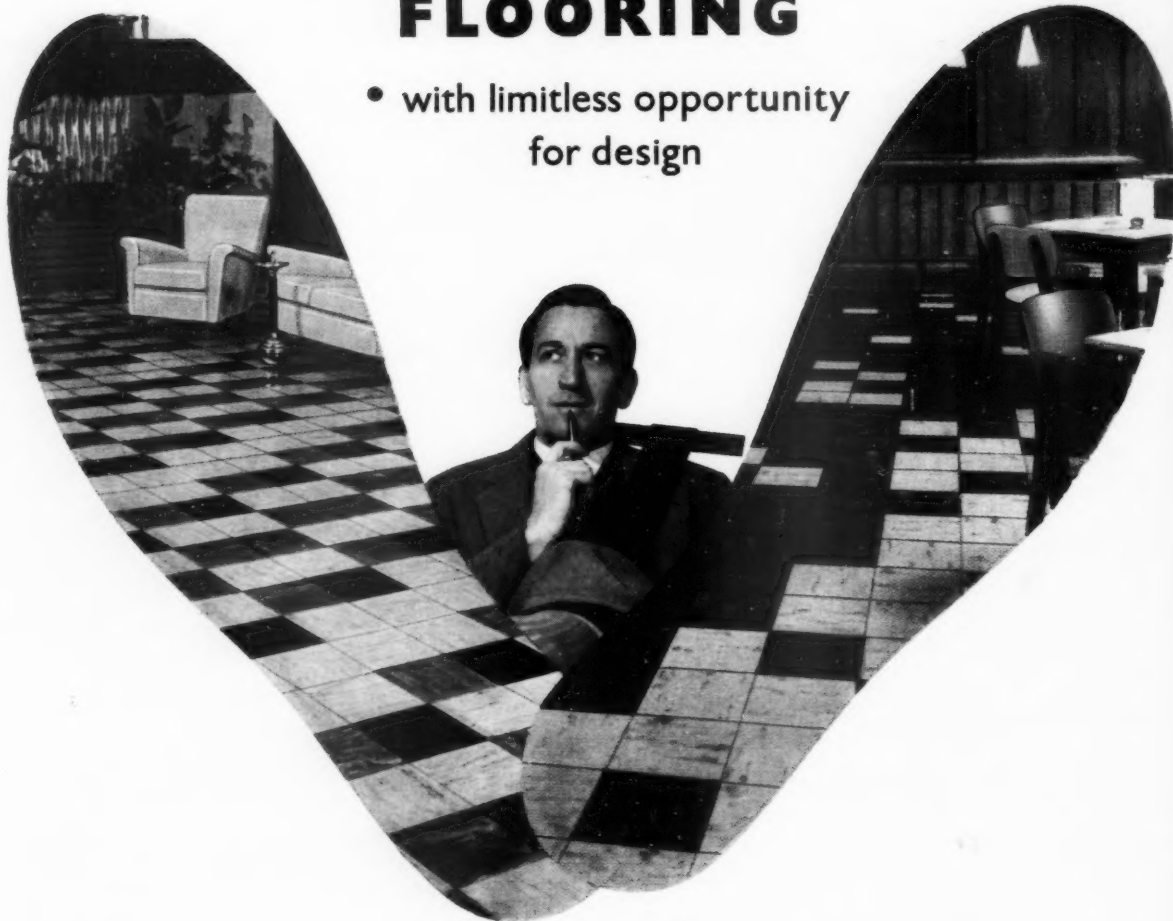
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The Architects' Journal

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NOT QUITE ARCHITECTURE

## "BERLIN PLEASE, DRIVER"

"Annabelle" was her name, twenty-one her age, Austin her make, and London taxi her description. Any qualms we might have had about taking her to the Berlin *Interbau* Exhibition last year, were increased a hundredfold two days before our departure, when she contracted violent inhibitions of the gearbox, and a complete jamming of the electrical circuit. Her dignity of movement was an absolute maximum of 30 m.p.h. (unless we liked smells and rattles). Any time we lost on the straight, we endeavoured to restore by not decreasing speed on corners or bends. It was tricky. We almost sat her out.

We tackled the Russians at midnight. Arriving at Helmstedt (a frontier town between West and East Germany) we concluded that the less the Russians saw of "Annabelle" the more chance we had of an easy passage. The Russian officer in charge of visas was asleep at the time, and we were kept an hour and a half waiting for them to be issued. We stood around being brave in front of the green, and armed, Russian guards, and smugly owning "Annabelle." However, they were contemptuous of both us and our possession, doubtless grinding their teeth, and confirming their beliefs in the Party and its views on British lack of progress.

The Helmstedt-Berlin autobahn (owned, but not maintained by the East German Government) is aptly named the Samba Road: this is because of the drumming noise made by vehicles passing over the badly kept expansion joints. Our progress was slow fox-trot. However, it was consistent because we didn't dare stop until we reached Berlin. We arrived there to a multi-coloured dawn over the outlying pine tips.

We didn't have to be in Berlin long to realize that "Annabelle" was going to make quite a hit there. Any friends we made, were made because of our novel (to them)

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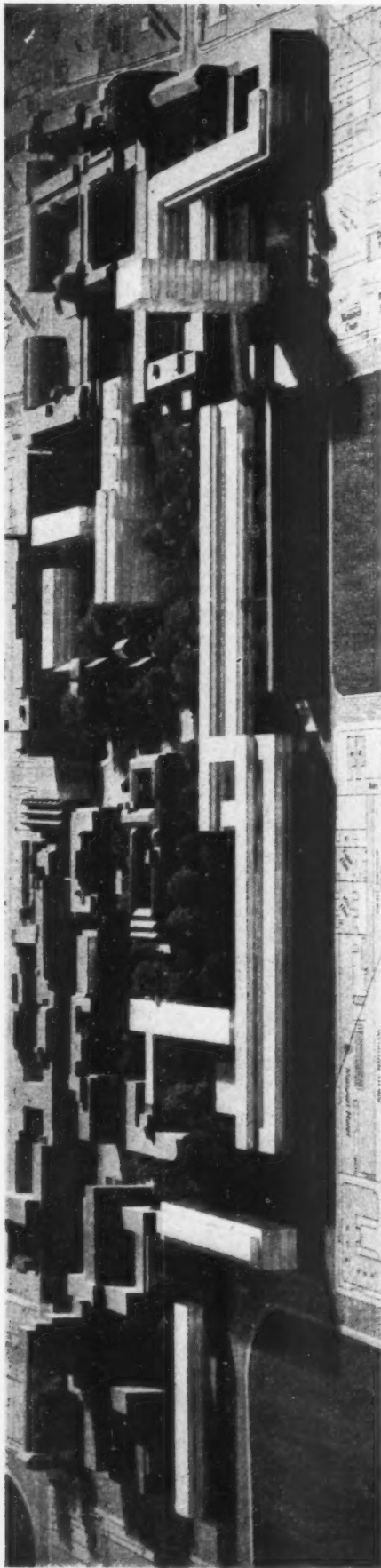
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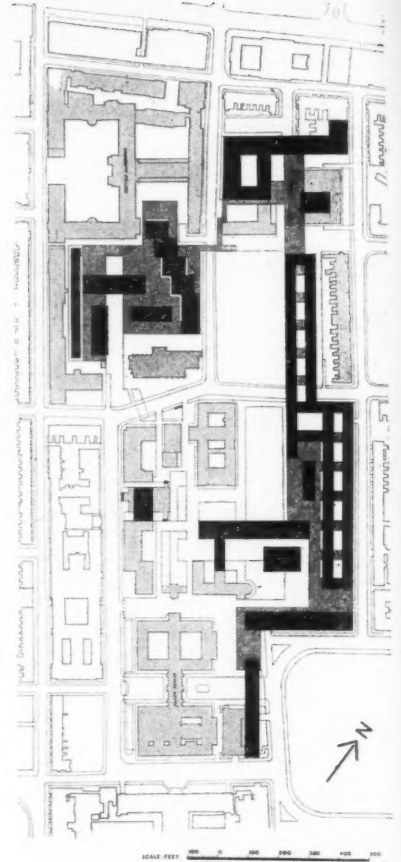
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## *A Stitch in Time?*

London University, the largest university by far in Great Britain, has been notable in architectural and planning terms in recent years only for the way in which it has been following an outworn design convention and for the way it has torn to shreds the close-knit pattern of Georgian streets and squares in Bloomsbury. In 1957 the university became aware of the great responsibility which rests on it to see that the precinct was properly planned, and appointed Sir Leslie Martin to prepare a development plan. This most promising plan, prepared by Sir Leslie in association with Trevor Dannatt, is shown above. On the left is Russell Square (with Holden's Senate House beyond) re-created again by the enclosure of its east side and on the far right is Wilkin's University College. Between the two, runs the main feature: a two-thousand foot podium and terrace which provides a high-level pedestrian way for nearly the length of the precinct. Through traffic has been limited to one north-south and one east-west route, and it is recommended that these should be closed eventually. Although some Georgian terraces disappear, two very important ones remain: one on the west side of Tavistock Square and the Gower Street block which completes Bedford Square. Brandon's Catholic Apostolic Church also remains and the existing open spaces are retained and enlarged. Beneath the 20-ft. podium will be garages, stores, and the larger units of accommodation. Above the podium will be postgraduate institutes, seminar rooms and common rooms in the parallel three-storey (to line-up with the Tavistock Square terrace) and four-storey blocks. These are frequently connected transversely. Some living accommodation is advised for the top floors. Further illustrations on page 365. Right, a plan of the

London University precinct, showing the main through roads. The light tint shows the existing and proposed buildings incorporated into the consultants' proposals. The medium tint shows the walkways, with enclosed space under, and the dark tint shows the proposed principal buildings.



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transport. People just came, and looked, and honked on the hooter, and the younger ones, climbed, and because we were intelligent enough to own her, they talked to us. One oldish dirty looking gentleman we found in the back seat had literally come in out of the rain.

\*

The Berlin *polizei* soon discovered "Annabelle" too. Apparently, because we were fool enough to take a vehicle to Berlin, it was necessary for us to complete forms (for posterity?). We discovered later that the *polizei* usually turned a blind eye to tourists' vehicles, but occasionally (and to keep up appearances) they pounced, and produced pens and forms. They pounced on us. The forms, in triplicate of course for each of the Powers, were masterpieces of their kind. HMSO could well send a team of experts to study this Teuton flair for ambiguity and idiot questions (German organization? Ho!). The answer spaces were even smaller than on an income tax F.P.39. A few examples: (i) Full names of all grandparents of occupants of vehicle. (ii) Occupations of parents of occupants of vehicle. (iii) Colour of hair and eyes and any distinguishing facial marks of occupants of vehicle.

\*

One of our party, in a rage and in a hurry, had the misfortune to write brown, his eye colour, in the address space. This really had them going, and kept us at least another thirty minutes in their clutches to convince them it was a mistake. Griffiths of Brown?

\*

Taking a taxicab abroad is to be recommended if you can keep the kids off it. Park it, and they are all over it; they think it is some kind of immobilized play-sculpture put there purely for themselves.

MICHAEL CARTER

## DIARY

*Ipswich Civic Centre Competition:* opening of exhibition at Wolsey Art Gallery, Christchurch Mansions, Ipswich. 2.30 p.m.

MARCH 7

*Cumbernauld Planning Proposals.* Talk by L. Hugh Wilson, TCPA Planning Forum, 28, King Street, Covent Garden, W.C.2. 6.30 p.m.

MARCH 9

*High Density Housing.* Talk by Peter Chamberlin at the Housing Centre, 13, Suffolk Street, S.W.1. 6 p.m.

MARCH 10

*Royal Palaces in England from Norman to Victorian Times.* Talk by John Charlton, at the RIBA, 66, Portland Place, W.1. 6 p.m.

MARCH 10

*Permanent Supplementary Artificial Lighting in Buildings.* IES lecture by R. G. Hopkinson and J. Longmore, RSA, John Adam Street. 6 p.m.

MARCH 10

*Exhibition of the Work of Arne Jacobsen.* RIBA, 66, Portland Place, W.C.1. Weekdays 10 a.m. to 7 p.m. Saturdays 10 a.m. to 5 p.m.

UNTIL MARCH 25

*Ideal Home Exhibition.* Olympia.

UNTIL MARCH 30

## The Editors

### A COMPETITION FIASCO

DESPITE their considerable disadvantages we believe in the value of architectural competitions, and have been pleased to see their number increasing. If run in the right way they provide a ladder to the top for the unknown architect and a stimulus of competition and new ideas for the profession. They should also reward the promoter with an exceptionally competent and enterprising design. But if competitions are run in the wrong way they will not produce these results, and will bring the system into disrepute. The Ipswich Civic Centre Competition, the result of which is published in this issue, is a case in point.

The appointment of a single assessor to judge such a large scheme was a mistake. A jury can correct errors of judgment or interpretation to which any individual is liable, and ensure that the final selection is not entirely personal. The six schemes selected for the second stage were, with the exception of one scheme ultimately commended by the assessor, a mediocre lot. As the assessor (in accordance with the RIBA's confidential recommendations to assessors) has published no report neither we, nor anybody else can discuss the reasons for his award—particularly as the 147 designs which he rejected at the first stage are not to be publicly exhibited at all. This is fair neither to the other competitors whose work is entirely wasted, nor to the profession which might benefit from studying the designs, nor to the ratepayers of Ipswich who are paying for the competition, nor even to the assessor himself.

If the RIBA really wants to encourage competitions it should revise both its competition regulations and the advice it gives to promoters. Important schemes should be judged by more than one assessor, and the publication of reports giving the assessors' reasons for his decision should be obligatory. Where it is impossible to exhibit all the entries locally the RIBA itself might offer to exhibit them in London. And the guidance given to promoters should be sufficiently explicit to avoid some of the mistakes which occurred at Ipswich.

### LESSONS FROM THE LABORATORY SYMPOSIUM

IF the RIBA's second laboratory symposium (see report on page 384) was not so fruitful as it was hoped to be, the fault was not so much that of the organisers (who are to be unreservedly congratulated) as of the present educational and technical background of the profession. We cannot alter this background overnight; but if we are to stop symposia from generating a sense of disappointment, we must do something to minimise its effect. The faults of the symposium were three: first, some of the main contributors misconceived their task, or, perhaps, were allotted an impossible one. This applied particularly to those who had to speak on workshop type laboratories. Second, too many of the questions asked from the floor were left un-



answered. This was aggravated by the unfortunate absence of Mr. Pritchard, but a profession ought not to have to rely on one man for specialised information. Third, the discussion *as a whole* (but with honourable exceptions) was of a primitive character. The underlying reasons for these faults are that architects are not accustomed to record their experiences in a form which will be useful to others (or even to themselves) and that the greater part of architectural practice has never been the subject of systematic investigation.

It is very noticeable that when architects are discussing a well documented subject like schools, the standard of coherence and pertinence in their remarks rises, but when they are discussing a badly documented subject, like factories or, indeed, workshop laboratories, it falls to a nadir and little profit is gained from the exchange. The first moral, therefore, is that the symposium is not the right tool for gathering information on a badly documented subject. The second is that it is folly, in this stage of our professional development, to expect anything of an unbriefed audience of architects. Symposia must be planned a long way ahead—perhaps two or three years. A large number of architects, each working on the building type in question, should be invited to systematise their thoughts and experiences with a view to sharing them with the profession; and, so that the subject may be brought into focus before the symposium begins, these should be encouraged to report their interim findings to the technical press as they go along.



#### OXFORD'S BAG

It's curious that the RIBA, which had no room for the Corb exhibition, has found space for a minor master, Arne

Jacobsen, and has given him the major honour of its first one-man show. Don't miss the exhibition by this all-rounder—a Scandinavian Ponti whose designing is more restrained, analytical and near-clinical, and whose architecture is more accomplished. His architecture is, of course, excellent. Only a handful of the architects in the world could emulate him, and none in this country could begin to match him—though I did hear one of our schools architects tearing chunks out of his grid-and-patio-planned Soborg school at the exhibition.

\*

When he is away from architecture Jacobsen's touch is not so sure. His carpets and fabrics are so restrained they are almost dull, and although his small chairs are competently designed and perfectly finished, the pleasant-looking armchairs are too sharp-edged for comfort and will wear quickly which suggests that Jacobsen is more an intuitive than a strictly functional designer. His cutlery, which, unlike the chairs, cannot be handled at the exhibition arouses similar misgivings. They do not look as though

they are based on adequate anthropometrical data to put it mildly. But you will find a lot to admire at this immaculate exhibition, with its superb photographs, its white hangings and screens and its microscopic (or missing) captions.

\*

No doubt this show will confirm Oxford University's view that they have chosen, in Jacobsen, the ideal architect for the new St. Catherine's College. And, of course, for their couple of million pounds they will get an accomplished, one-off work of art that will gratify their self esteem. But they are not likely to get anything in the form of development work that will be of value to the national university building programme. It's a pity that neither Oxford nor Cambridge can think big and put national interests before their own.

#### THOSE ROADS AGAIN

The RIBA's campaign to get architects called in on motorway design continues. In last Friday's *Manchester Guardian* a letter about the appearance of motorways was signed by president Basil Spence and by Sylvia Crowe, the president of the Institute of Landscape Architects. There were two things missing from the letter—a discussion of fundamental planning issues and the signature of the president of the Town Planning Institute, Aylmer Coates, who is an architect.

\*

Unfortunately the TPI is not joining in this battle. It did not agree with Mr. Spence's first presidential pronouncement that planning committees should be abolished. And when it was formally approached by the RIBA about the motorways problem it felt itself unable to support a policy which had not been fully worked out. (I gather there are a good many engineers and planners already co-operate very well.) Still, the TPI ought to be in on the plan to work out a comprehensive solution to the traffic problem. Or don't they mind the alternative—the traffic engineer's solution which, in the words of Basil Spence and Sylvia Crowe, can overpower the human scale in towns and cities?

#### HURD INSTINCT

On Saturday the Anti-Ugly Group demonstrated for the first time outside London. Their target was Robert

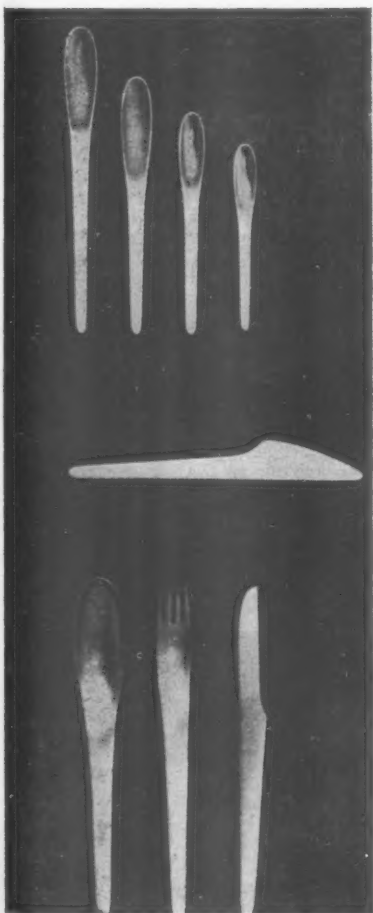


Hurd's new range at Emmanuel College, Cambridge. This building, has already in its short life—it still isn't finished—become to Cambridge a touchstone of freakish ugliness rivaling even the Fisher Building of Queens'. And yesterday the demonstrators from London were joined by many local anti-subtopians. As the sombre posters had foretold, coffins were provided, and a funeral procession 200 yards long moved through the streets of the city bearing such banners as "Dolls House for Dons," "Emmanuel's Cambridge Cowshed" and "Ban Britain's Bloody Buildings," and managing to add to the usual Saturday afternoon traffic confusion.

\*

Outside the college, the coffins were laid while a few stalwart members of the college put up a spirited defence. Most of the rest of the college were presumed to be taking shelter behind the gates (all of which had been locked for the occasion), though some un-

*Cutlery by Arne Jacobsen on view at the RIBA exhibition, see "Oxford's Bag," opposite page.*



Two views of Anti-Ugly's latest victim, the new range at Emmanuel College Cambridge. "See Hurd Instinct."



doubtedly were taking part in the demonstration. Prominent among the marchers were the Provost of King's and the Editor of the *Cambridge Review*, whose oft-repeated phrase "Emma's Ghastly New Block" (EGNB) has done much to give the building an almost legendary fame.

\*

The demonstration dispersed, the building remains. But there are—even in Cambridge—signs of a change. Martin, Roberts, Lasdun, Sheppard—these are some of the names which the University and Colleges are beginning to court. Others are still hard at work, of course, but perhaps now an end to the idea that dreariness counts above all other things, is in sight: it can't come too soon.

#### SPENCE ON SPEC

Since Basil Spence became the RIBA president he's been popping into the news several times a week, and before long ASTRAGAL is expecting to set aside part of a page as the Basil Spence column. Mr. Spence's latest achieve-

ment was a television attack (ITV: *This Week*) on the bad spec-built house. This was excellent. It's a subject the BBC has been too wary to tackle, though *Panorama*, their equivalent to *This Week*, did get near to it once.

#### CAPITAL IDEAS

From time to time someone comes along and tries to prove, with slides and music, that music and architecture are almost identical. But when Walter Bor put on some Mozart and Smetana during his AA talk on Prague the other day he was merely proving that music is sometimes better than commentary. In the non-musical parts of the talk Mr. Bor reminded us that it is now quite easy to get to Prague, a medieval city of almost unequalled architectural richness, which has not yet been overrun by the motor-car. ASTRAGAL was interested to hear that the whole of the historic core of the city is covered by a preservation order, and that all buildings seem to be restored without any serious financial restrictions.

Mr. Bor, who showed something of the Czech architect's contribution to the Modern Movement and prophesied their return to prominence, had a nice story about a wedding cake hotel. The government in Stalin's day wanted this to be put on a conspicuous site, but the architects and planners—reared in the Good Soldier Schweik tradition—couldn't find one, and dumped it in a valley outside the city where it can hardly be seen.

#### GAIETY IN ACTION

The New American Painting at the Tate is exactly what it sounds like—Action painting of the largest and rowdiest kind. Architects should see it because it gives them a rare chance to consider the point made by Lawrence Alloway some time ago. Such pictures, he said, should be seen close together, so that they *are* the interior, instead of merely decorating it. On one wall a group of Rothko's hang cheek by jowl—all more or less the same size. The effect of these adjacent panels of glowing colours is certainly new and striking, and its easy to see why Rothko has been chosen to do three large murals for the Seagram building in New York.

One leading aesthete staggering out of the exhibition complaining "Oh the blasted gaiety of it all." The painters certainly seem to get a great kick out of their work. If you insist on seeing gloomy-type action painting, try the German painters at the ICA—the difference between their work and the Americans is remarkable.

#### TECHNIQUES FOR CHISELLERS

Do you know what to do if you're looking for a sculptor to finish off that bank you're doing in Penge? You can apply to the Royal Society of Sculptors, at 6, Queen Square, W.C.1 and find out who does what, how much he charges and so on. ASTRAGAL discovered this when he attended a display of members' work the other day. As he wandered amongst the work of homely (but not famous) names, he was advised to warn his readers about the technique of applying cement to expanded metal frames. This, he was told, was technically indefensible and had a most limited life—which you can take either way.

ASTRAGAL

*The new exhibition at the RIBA, on view from February 26 to March 25, displays the work of Arne Jacobsen, Denmark's leading modern architect. The material displayed was selected and arranged for exhibition by the architect himself and covers all aspects of his work, from architecture to fabric and furniture design. Donald Tomkinson contributes the following notes on Professor Jacobsen's work and development as an architect-designer. His assessment is based partly on the exhibition and partly on conversations with Professor Jacobsen and his assistant, Knud Holscher.*

#### ARNE JACOBSEN

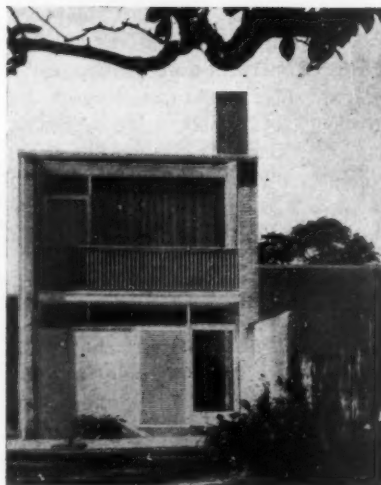
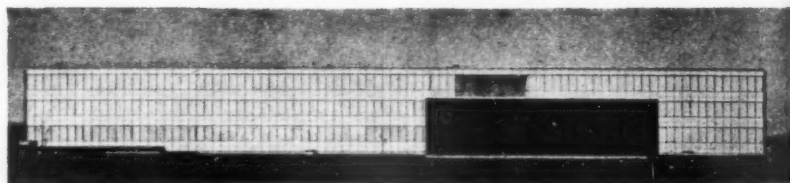
*By Donald Tomkinson*

As Basil Spence remarked at the opening of the exhibition, this is the first time the RIBA has invited a foreign architect to stage a one-man show of this kind, and one hopes that the success of the Jacobsen exhibition will encourage them to repeat the experiment as often as possible. Such exhibitions are very good for the profession, especially at the present time, and it is a pity that exhibitions of this quality are so seldom seen outside London. The key-note of the exhibition is studied simplicity: and this is particularly evident, I think, in the exhibition-layout and the way in which the material is presented. On view are carpets, textiles, a clock, light-fittings, cutlery, door-handles and a hi-fi loudspeaker unit, all designed by Professor Jacobsen; and yet, when one finally comes away from the Exhibition, the things that remain in one's mind are the furniture and the photographs.

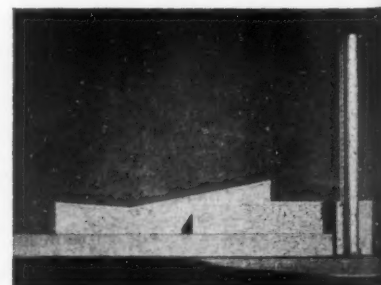
As to the furniture, there are three categories represented in the exhibition: easy-chairs, stacking-chairs, and dining tables. Of course Jacobsen is famous for his chairs on both sides of the Atlantic, and has created many new chair-forms. In 1925, whilst still a student, he exhibited a chair in the World

Exhibition at Paris and was awarded a silver medal for his design. In the present Exhibition, his two easy chairs (known respectively as the "Swan" and the "Egg") seem to have caught the public's eye; but, to my mind, the most attractive chairs on view are the laminated plywood stacking-chairs, of which there are several varieties. This particular design won the Grand Prix at the 1957 Milan Triennale and is now in mass production in Denmark at a rate of 200,000 a year.

The photographs, mounted on plain white screens, are excellent, not only because they are clear and very large, but also because of the wonderful way they bring the buildings to life. Whilst the catalogue never really attempts to analyse the essential qualities of Jacobsen's architecture, these qualities "come over" very well in the exhibition photographs: the clever compositional effects, the refinement and elegance, the clean crisp detailing, the attention to proportion and scale, the sensitive handling of the site and of materials. These photographs tell us much about Professor Jacobsen and his attitude to architecture. It is always illuminating to ask an architect to



Three buildings to illustrate Arne Jacobsen's three basic "styles": top, Rodovre Town Hall ("curtain wall"), left, Soholm chain houses ("Danish domestic"), and below, Aalborg factory ("poetic functionalism").



put together a selection of photographs of his own work. Presumably he will choose pictures which show the buildings as he intended them to be seen, and which bring out those aspects of architecture that he considers to be important. Thus, the photographs in this exhibition are very much a "personal" statement: they are probably the nearest Jacobsen will go to actually explaining his work. "I do not like to explain my buildings," he says, "I prefer to allow the buildings to speak for themselves." The exhibition tends to concentrate on Jacobsen's more recent architecture, about three-quarters of the photographs being devoted to post-1950 work. This was probably a mistake, for his earlier career is of some importance in the development of the New Empiricism in the Scandinavian countries. After a conventional academic training at the Danish Academy of Fine Arts, Jacobsen set up practice in 1929 and quickly established himself as a leading architect by winning three competitions. The first was the Bellevue neighbourhood (1932) at Klampenborg—a seaside resort near Copenhagen—where Jacobsen now lives. The layout includes the Bellavista housing estate, a restaurant, theatre and shops, and a lido. The second was the Aarhus Town Hall (1937), on which he collaborated with Erik Møller. The plan of this building is brilliantly worked-out, and the internal fittings and details are somewhat similar to those of Asplund's Gothenburg Law Courts extension, which had just been completed. The "space frame" tower of the Aarhus building has been copied so often that it has become something of a cliché. The third competition was the Søllerød Town Hall (1939), a much smaller building than Aarhus. Here Jacobsen collaborated once more, this time with Flemming Lassen. The plan is wonderfully logical and simple: and inside the building, as always, the greatest possible care is taken over materials and detailing.

For two years in the war Jacobsen was able to maintain his practice. Indeed the Søllerød Town Hall was built during the Occupation. In 1943 Jacobsen settled in Sweden and worked for a time with HSB, the largest Swedish housing co-operative. Resuming his practice in Denmark in 1945, he was soon busy on a series of small housing estates for the township of Gentofte, north of Copenhagen. These consist mainly of 3-storey walk-up flats, with pitched roofs and simple cross-wall construction, and the most famous of them is probably the Hørsholm-vejen estate (1947) which is still, to my mind, one of his best projects. The housing at Gentofte was built to a relatively low budget: but one of Jacobsen's later estates, Søholm (1950) at Klampenborg, easily comes into the category of luxury-housing. This is the layout which contains the well-known terrace of staggered "chain-houses," orientated in saw-tooth formation to catch the sun and the view. Each of these dwellings is arranged on three levels, and the result provides a most interesting section. Jacobsen lives in one of the houses himself, with his office of some 15 assistants housed in the basement.

Since 1950 Jacobsen has been continually extending his range. In addition to several one-family houses, he has built two schools, the Munkegårdsskolen at Gentofte and the Centralskole at Hårby, three factories, a town hall at Rødovre, and an office-block (the Jespersen Building) in Copenhagen. At present he is working on projects for at least two further town halls, two large factories, and the SAS terminal building to be built in the centre of Copenhagen. All these buildings and projects are fully illustrated in the exhibition, many of them by models as well. From his work in the exhibition Professor Jacobsen is clearly a man of many architectural moods—almost, one might say, of many styles. This does not argue lack of conviction: rather the reverse. For it is Jacobsen's particular conviction that architectural forms should be kept flexible, that the style will vary according to the circumstances. The architect, he thinks, should begin the design with "a free mind" rather than with a schematic conception, allowing the "style" to develop from the peculiarities of the site, the programme, and "the dictates of his own heart." His eclectic approach to architecture is apparent when he talks about architectural education, about which he holds progressive and lively views: "Architects and students should be exposed to many influences, many sources of inspiration." In point of fact, his "styles" can probably be narrowed down to three: (1) Poetic Functionalism, which he used widely in the thirties but less so today (Bellavista housing estate—the Stelling building—Aarhus Town Hall—Søllerød Town Hall—Massey-Harris exhibition building—the Aalborg factory); (2) Danish Domestic: largely a brick style, also formulated in the thirties and generally modified since the war (the Povl Munck house—the Gentofte housing—Søholm—the Munkegårdsskolen—the Hårby school); (3) the "curtain wall" style, not used before 1953, evolved for use mainly in buildings where internal flexibility is required (the Rødovre Town Hall—the Jespersen office-building—the SAS Air Terminal).

Having talked with Professor Jacobsen, I suspect he would be mildly sceptical at this attempt of mine to put "labels" on some of his buildings: but at least it helps us to understand the main trends in his development as an architect. The first two "styles" only existed in a pure form in the early thirties; later on, they became increasingly interwoven, emerging in the fifties almost as a "composite" style in its own right. Whilst Jacobsen is clearly receptive to the work of other major architects, it is absurd to suggest, as some people do, that he is merely a derivative architect. Whatever he designs, whether it is a building, a chair or a piece of cutlery, is recognizably a Jacobsen product. Any idea he adopts he recreates in his own terms, in his own manner. Thus, throughout his work we see the continual synthesis of many diverse tendencies and ideas. Like other Scandinavian architects, he has attempted to humanize functionalism: and he accepts the suggestion that his work tries to provide a link between the Modern Movement and a more traditional form of architecture.

Most of those visiting the exhibition will be content to regard Professor Jacobsen simply as an architect of exceptional range and versatility. It is doubtful, however, whether he himself would accept this assessment. To him, it is merely the architect's function to be able to design in any sphere. How otherwise can "unity of conception" be achieved? Nowadays we are told that this is very difficult to carry out in practice: we tend to accept "fragmentation" in design. In any one job we have the architect, the landscape designer, the interior designer, the furniture designer, the fabrics designer, and so on. I think Jacobsen believes that an architect should be capable of designing not only the building itself but also everything connected with the building. In his work he is something of a perfectionist: he supervises every detail, and controls every aspect of the design. For him there are no such things as standard details. Every building is designed from "scratch," and the details are conceived in the process. Once we accept this attitude, the attitude of a craftsman architect, we begin to understand both his exceptional range and his success as a designer. Professor Jacobsen, a modest unpretentious man, refused to commit himself to any one architectural philosophy. "Philosophy? I have no philosophy of architecture. I simply try to build as well as I can." But surely that is the most important architectural philosophy of all?

## IN BRIEF

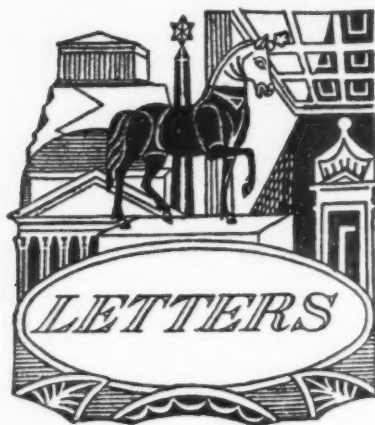
### *ABS Mid-summer Ball*

Encouraged by the growing success of their Winter Ball (last year tickets were sold out six weeks before the day), the Ball Committee of the Architects' Benevolent Society has decided to hold a Summer Ball in aid of the Society's Funds on Friday, June 19. This will take place at the RIBA, Portland Place, and thanks to the generosity of the Council in placing the building at the Society's disposal, they are able to offer an evening's non-stop dancing to two bands, with running buffet supper, for the modest price of 25s. There will also be a grand Tombola and several bars. Application forms for tickets available early in April.

### *The EFA*

The manufacturers of floor heating equipment have agreed to form the Electrical Floor Warming Association (EFA), with membership open to all manufacturers who offer a complete floor warming system and a design service. The objects of the Association are: To improve the standards of floor warming generally; to represent the interests of Members and Users; to establish, other than guarantees, liabilities to Users; to represent the Association in matters involving Government Departments and other bodies; to exchange technical information involving broad principles; to discuss items of common interest and arrange time to time relatively interesting talks and discussions. For the time being the address of the Association will be 94/98, Petty France, London, S.W.1.





*Graham Dawbarn, F.R.I.B.A.*

*Stanley Hamp, F.R.I.B.A.*

*Reyner Banham, Ph.D.*

*Moir Mathieson*

*P. M. Rich*

*Roger Thompson and  
Colin Smith, Students R.I.B.A.*

*Brian J. McMillan, A.R.I.B.A.*

### Recent Work by Dead Architects

SIR: I have read with interest the article by J. M. Richards in your issue of February 12, in which he suggests that, by perpetuating the original name of an architectural firm, prospective clients may be misled and recognition may not be given to those who really do the work.

I appreciate his point of view, but it is, I think, important to recognize the changing scene in architectural practice as in everything else. Fifty years ago it was usually on a personal level: a client went to a particular architect because he wanted the stamp of his personality on a building and the architect collected a few assistants around him to implement his designs. When this architect died his inspiration died with him.

This still applies in some cases, but the current complexity of building requirements and procedure has produced a different kind of architectural firm: one based on a group rather than on an individual. The success of a large scheme is dependent on the combined efforts of a number of people each of whom must make his own particular contribution; and a prospective client may tend to consider the merits of an organization rather than those of an individual. In such cases the name of a firm means more to him than the name of a man.

I do not, therefore, think that any lack of integrity is implied by perpetuating the name of the firm; the names of the active

partners are in any case on the notepaper for all to see.

Proper recognition is in any case difficult to achieve, if indeed it is of any great importance. In normal democratic life most people work anonymously and personal publicity can be a two-edged tool. Also, it may well be extremely difficult to apportion responsibility on a complex job which has developed over the years. At the outbreak of the last war, several people who were leaving asked me for chits. I asked each what he reckoned had been his major contribution and three of them claimed the design of the same job (which I thought I had done myself).

Whether the change of emphasis from person to group is a good or a bad thing is not the subject of this letter; but it does seem to me that, unless conditions alter, it has come to stay. My point is a simple one: that the question of perpetuating the original "style" of a firm depends on circumstances and may well be left to the good sense of the continuing partners.

GRAHAM DAWBARN

London.

SIR: I have read with much interest the article by J. M. Richards on the above subject.

I have felt for some years that the present position of the profession is unsatisfactory. In my opinion Mr. Richards, with the reputation he has, is the one man who can speak with authority and who has the courage to raise an important matter so vital in the creation of live architecture. I think his arguments are entirely sound, but I doubt whether the Practice Committee of the RIBA, will fully realise the necessity for some action being taken.

I feel that perhaps in my position as a retired architect of many years standing, I must be excused for giving my personal experiences.

When I desired to retire from active practice I decided to appoint two of the senior members of my staff as partners. I had a considerable amount of work in the office and that decided me not to ask for any monetary payment but arranged that a proportion of the net fees from my own clients should be received by me over a short period. Assuming they would be able successfully to carry on, I felt my partners would gradually be accepted as principals, and if they were enterprising, they would build up additional clients on their own. At the end of this period the name of the old firm would disappear and then their own names would take its place.

In my opinion this was the right course to follow to give the younger men the opportunity for establishing a reputation of their own. I had a fully equipped office and trained administrative staff with a high degree of proficiency. I would not think it right or fair to them if it could be avoided that the old name of the firm should be dropped the moment they took over. I think I have done right as the greater responsibility on their part would provide an opportunity for developing their own powers of creative design and management that in time would

produce new clients. Most of my old clients have remained loyal to the firm.

STANLEY HAMP  
(Colcutt & Hamp)

London.

### Corb and Banham

SIR: ASTRAGAL has every right to his own opinions about the interest of Corb's early works, and he may indeed find that they reveal "weaknesses" (I don't, I think they are pretty good for their date, as I said), but on the question of suppression I think I have the facts on my side. None of these four buildings was included in Volume One of the *Oeuvre Complète*, which was produced with Corb's approval and assistance. The word *Complète* means something perfectly precise, and the omission of these works from the allegedly complete list leads to the unavoidable conclusion that the Master prefers them to be forgotten.

REYNER BANHAM

London.

SIR: Having spent an exceptionally enjoyable and enlightening evening at the ICA listening to Dr. Banham speaking on the suppressed works of Le Corbusier, I was surprised at ASTRAGAL'S jaundiced note, and I imagine that most of the audience would feel the same.

The buildings illustrated surely served to show how Corb developed in his earlier years and how he was influenced by earlier and contemporary architects, and this must lead to a better understanding of his famous later works, which we can hardly believe to have emerged fully developed, like Minerva, without any preceding period of immaturity. Dr. Banham himself made the point that he was not "knocking Corb" but illuminating him, and his talk was a pendant to the exhibition at the Building Centre rather than an attack. It was the best evening's entertainment (or instruction) that I have had for a long time.

MOIRA MATHIESON

London.

ASTRAGAL replies: Le Corbusier almost certainly prefers his early works to be forgotten. It seems therefore an odd tribute to the Master to couple this revelation of his immature beginnings with the first major exhibition of his work in this country. It is certainly arguable whether these buildings are "good for their date" and whether seeing them leads to "any better understanding of his famous later works" in any profound sense. Of course, Reyner Banham was entertaining—he always is, and it hardly seemed necessary to keep on reminding readers of it.

### A 'Clearing House'

SIR: In your editorial of Jan. 29, you proposed "a clearing house" to collect and rewrite technical information and reports for architects and builders. I disagree with your proposal for the following reasons:

1. Your approach is mainly one of correction. You propose setting up additional expensive machinery to correct a fault



emanating from the manufacturers and technical research bodies.

2. The results of the "clearing house" would be in the form of yet another report, pamphlet or digest to add to the list of material that "should be read sometime" destined for the filing cabinet, unread.

I have two proposals to make:

1. That positive pressure (dare I say a campaign?) be brought to bear upon the disseminators of information, to produce their material in a (RIBA?) stipulated standard form.

2. A revolutionary proposal (but surely some form of revolution is necessary and overdue), based on the belief that it is essential to have a wide range of general knowledge of products and techniques to draw upon. Detailed information can always be obtained at short notice—a telephone call or letter invariably brings the required pamphlet or report within a day or two. I therefore suggest a visual method of gaining this "wide general knowledge."

I propose a Monday morning television programme for architects and builders. Say once a month and of one hour's duration. The programme to be a "live" transmission by a person qualified to make a survey of new techniques, products and items undergoing research. The survey would be of a general technical level and for further detailed information "send a postcard to . . ."

The programme might even find a sponsor or two!

I would appreciate other views on this scheme.

The obvious danger is that the programme might become just another commercial, but it should not be difficult to work out a foolproof safeguard against that happening. Many of us have criticized TV and indeed mistrust the medium, but perhaps here is one way of realizing the medium's potential.

P. M. RICH

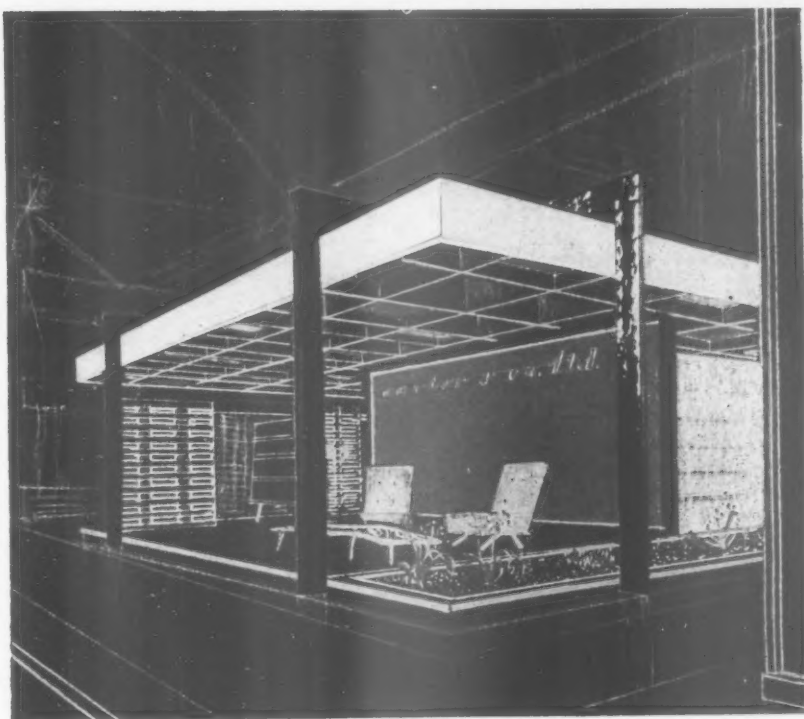
London.

The Editors reply: Mr. Rich misunderstands us, in part. The clearing house for information is necessary, we think, in order to ensure that scientific findings are reported in a manner easy to understand to the right people. This could be done by the research bodies, but in fact it often is not. The function of the clearing house is to ensure that *somebody* does it, and also that user demands for knowledge are made known to the right research body. It would not add to the supply of literature but amend or replace it. It would certainly undertake Mr. Rich's first point. As for Mr. Rich's suggested use of television, we warmly welcome the idea, but one hour a month would only touch the fringe of the problem.

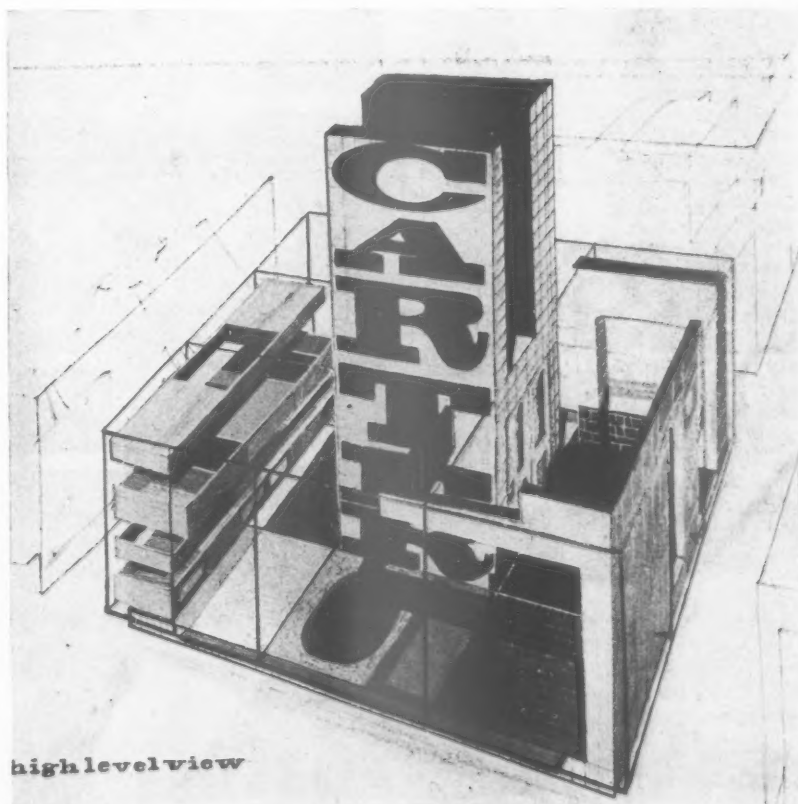
## RIBA Exams

SIR: Hats off to Mr. Mould for being the only student (to our knowledge) to do more than moan about the RIBA external examinations! From the Henry Jarvis Memorial

(Continued on page 364)



The design, top, by Nigel Lewis, student, Cardiff, wins the first prize (£100) in the competition promoted by Carter & Co. Ltd., the tile manufacturers, for their stand at the 1959 Building Exhibition. The design, below, by R. C. Hammond and J. R. G. Wheatley, A./A.R.I.B.A., London, wins the second prize (£75). The promoters allocated a further sum of £75 in prize money to be awarded at the assessors' discretion, but the assessors (Howard Lobb, Denys Lasdun and C. C. Carter) did not feel that any further award was justified. A total of 59 designs was submitted, of which two were ineligible. The drawings will be exhibited at the Building Centre from March 17 to April 17, inclusive.



## Letters continued

Hall we can endorse all he says about working conditions during the Design paper. Can anyone explain the purpose of this paper (discounting the patronising hypocrisy of the RIBA's official blurb about it) as anything else than a device for extorting money? If not, let it be abolished, and the expenses thus saved deducted from the examination fee.

In the course of his answer to Mr. McMorran at the RIBA Special General Meeting about profiteering in examination fees, Mr. Jefferiss Mathews said: "Anybody who wishes to enter this profession . . . has full knowledge of what it will cost to become a qualified member of the Royal Institute, and if he does not like the idea of paying that cost, he need not become an architect." Leaving aside the fact that students who had taken up architecture before last year were patently unaware when they did so of the pending increase in that cost, does Mr. Mathews really believe that our motive in deciding to become architects was a desire to belong to the RIBA? One fears he may do, for this same confusion of "architecture" with "the architectural profession" (i.e. the RIBA) vitiated the Ad Hoc Committee's report. A little investigation would show Mr. Mathews that the attitude of students is hardly as respectful as he would like to assume.

ROGER THOMPSON,  
COLIN S. SMITH.

London.

## Intelligence Insulted?

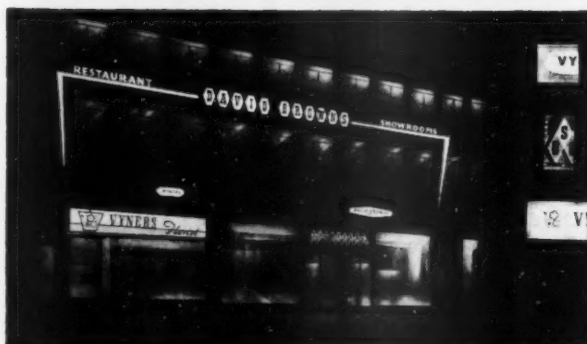
SIR: The article written by Arthur Noel Harris (AJ, February 19) leaves me puzzled on two scores. First, because you do not usually publish contributed pieces of this sort without some word of explanation; and secondly, because even after reading the article a dozen times I cannot follow any of the author's lines of reasoning.

Seldom do I recall having come across so many non-sequencers and so much sloppy thinking in the space of a thousand words. Taking an example at random, there is the statement that a reunion of splinter groups within the RIBA membership could be "generated" by an active regionally representative Council prepared to delegate authority to the regions: this very suspect association is then adduced as the only reason for branding as "extremely questionable" the composite electoral system recommended in the interim professional (sic) report of the constitutional committee! And there is much more thrown together in the same slipshod manner, ranging over a variety of topics from negotiated tendering to public relations.

Professional stocktaking, as Mr. Harris calls it, should certainly be undertaken quite frequently, but to carry it out in this way is insulting to your readers' intelligence and quite without value.

BRIAN J. MCMILLAN

Bucks.

ILLUMINATED  
SIGN  
COMPETITION

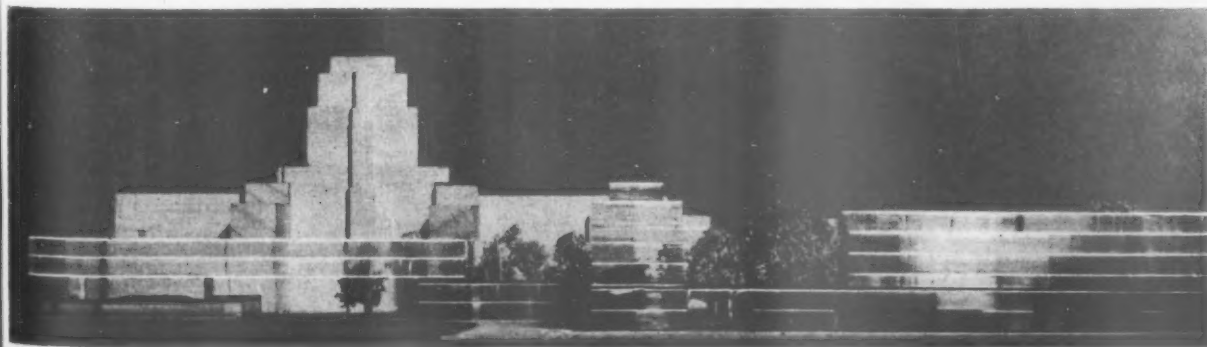
The standard of entry for the illuminated sign design competition was described as very high by assessors Sir William Holford, Sir Herbert Manzoni, Sir Miles Thomas, U. Aylmer Coates and K. J. Oldham and G. S. Campbell of the Electrical Sign Manufacturers' Association, the sponsors. There were 138 entries, almost double the number of the last competition in 1957. On the left, reading from top to bottom, are the four prize winners and one of the five commended designs, the latter showing rather more restraint than some of the winners. First prize, £150, awarded to H. Kirotar. Second prize, £75, awarded to H. P. Hopkinson. Third prize, £40, awarded to Peter Henson. Fourth prize, £20, awarded to L. R. Lewis. Consolation prize of £10 awarded to T. R. K. Crabtree. Further consolation prizes of £10 were awarded to G. W. Irons, A. W. Windsor, J. W. Raap of Holland and Eric Hyde.

Above  
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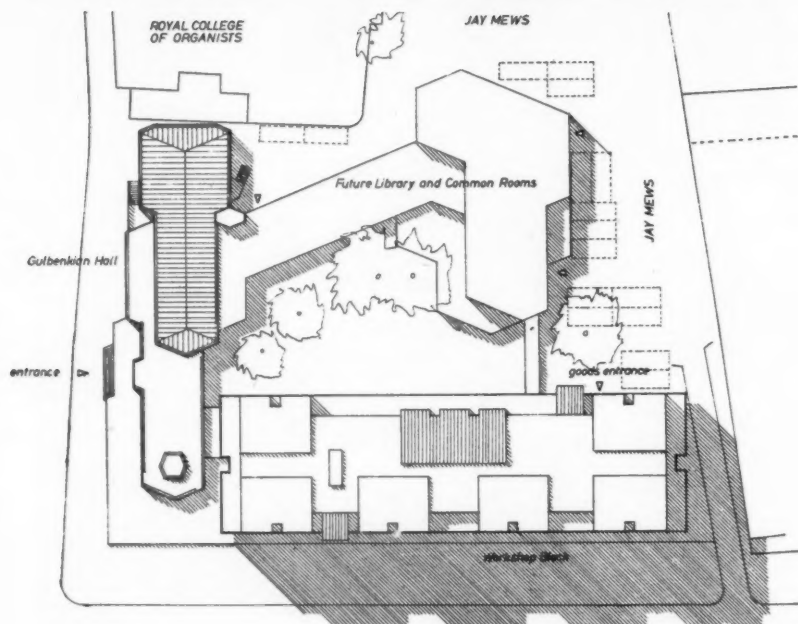
Above, a view from the south-east of the Martin-Dannett plan for London University. In the foreground, right, is a proposed basement examination hall and covered car-park forming a podium above which runs a two-storey block enclosing Russell Square. The relative heights of this block, and the long block on the east side of the

precinct is indicated in the low-level view below. In the background of the model, above, is a zig-zag and rising block for University College which, while ingeniously respecting the scale of the old buildings, is unlikely to be architecturally satisfactory. A second tower block combined with low buildings, might be a happier solution.





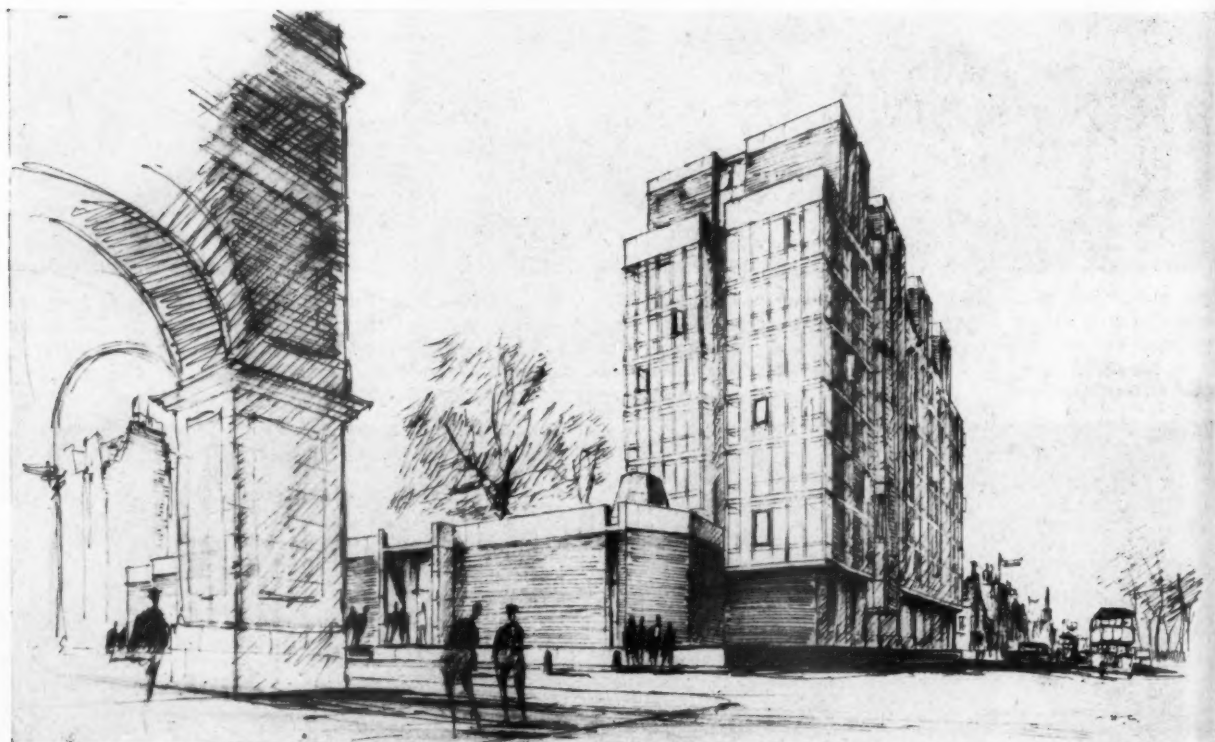
## STUDIOS AND HALL FOR THE ROYAL COLLEGE



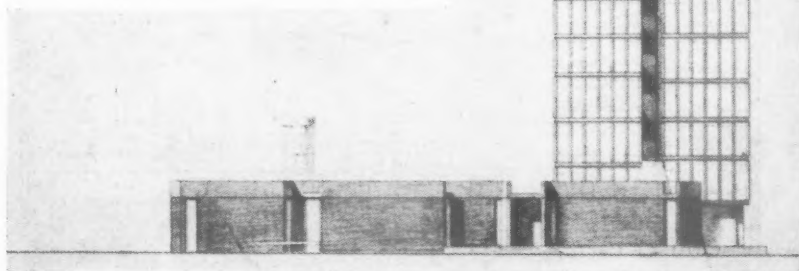
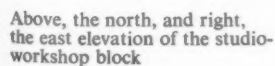
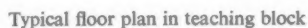
KENSINGTON

GORE

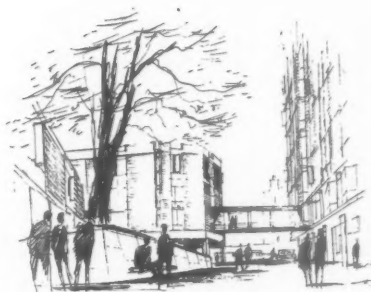
Designed by H. T. Cadbury Brown in association with Sir Hugh Casson and R. Y. Goodden, the new studios and hall for the Royal College of Art are proposed for a site immediately west of the Royal Albert Hall in Kensington Gore (see Casson's sketch, below). The building has been limited in height to balance Norman Shaw's Albert Hall mansions on the east side of the Albert Hall, and the brick cladding will be dark in colour and the skyline regular in silhouette to further relate with Shaw's gabled block. The effect is indicated in the block model, above left. The site plan, left, shows the disposition of the buildings: behind the multi-storey studio and workshop block, which will contain all the industrial departments and stained glass, lies a two-storey exhibition gallery, assembly hall and lecture rooms (built with a £75,000 grant from the Gulbenkian Foundation). Work on these two buildings will begin in January, 1960. To the west of what will be called the





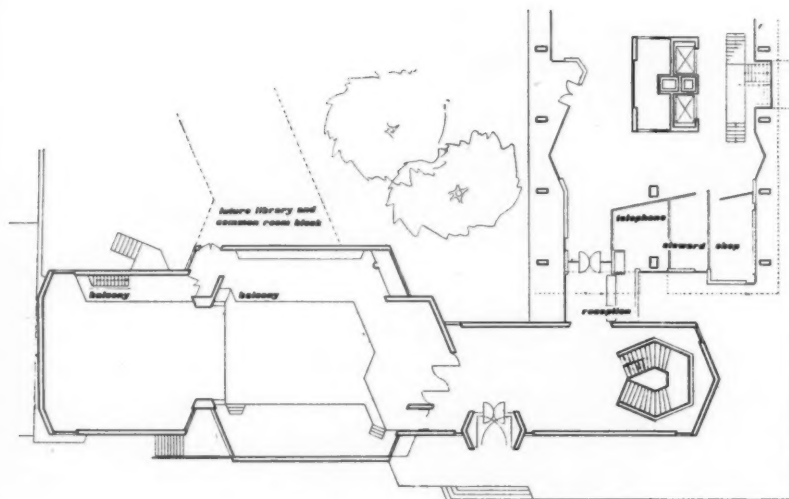
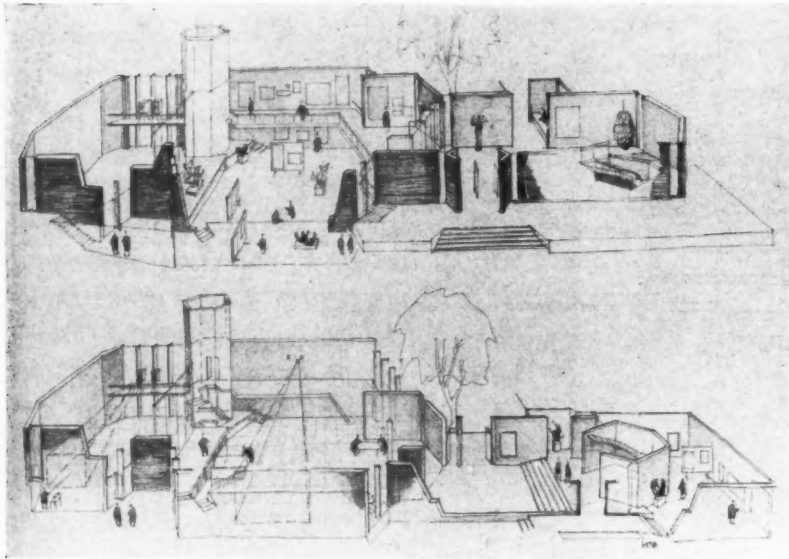


*Gulbenkian Hall will be the lecture-room library block, leading to a common room block which in turn will eventually be connected to the studio block by a first-floor bridge (see sketch below). The site further to the west, fronting on to Queen's Gate, will be available, when the leases expire in 1973, for the last stage of development: the provision of accommodation for the schools of Painting, Sculpture and Graphic Design. The main entrance for cars and pedestrians is on the east side, the open space round the Albert Hall providing an impressive background. The services and staff access will be from Jay Mews on the*

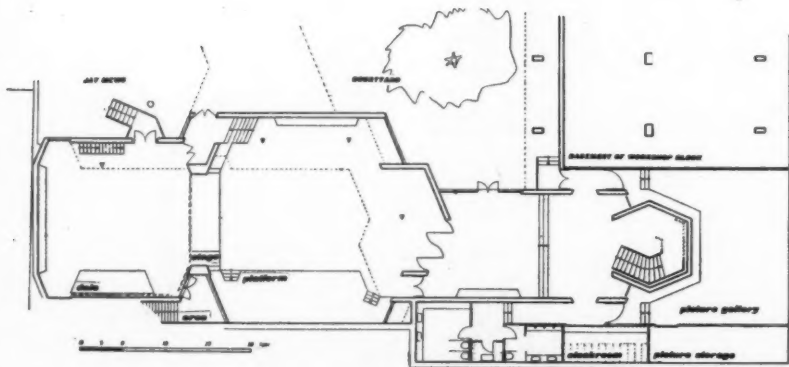


south and west boundaries. The educational policy of close inter-relation of workshop and studio had produced the design for the multi-storey block, in contrast to the usual subdivision of low workshop areas and a

# STUDIOS AND HALL FOR THE ROYAL COLLEGE OF ART continued

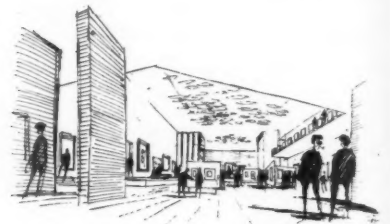


Ground floor plan, Gulbenkian wing



Basement plan, Gulbenkian wing

high teaching block. The plate floors are of hollow tile with integral beams, the thickness of the floor being 15 in., to carry a load of 150 lb. per sq. ft. Alternate floors are cranked in section to provide differing ceiling heights (see section, p. 368) of ten or twelve feet. The two vertical



circulation areas provide wind bracing and vertical service ducts, and horizontal ducts run centrally the length of the first to sixth floors. Construction: r.c. frame, brick, precast panels with exposed aggregates, metal windows. Interior: fair-faced brickwork, wood door frames and doors. The Gulbenkian Hall, as can be seen from the plans and sketches left and above, is multi-purpose. It is a gallery for the exhibition of pictures and sculpture (with separate public access where required); two lecture halls; and there are facilities for acting, film projection, dancing and general assembly.

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*Winning Design and Finalists of the Two-Stage :*

## IPSWICH CIVIC CENTRE COMPETITION

Has this competition provided a proper answer to Ipswich's problem of acquiring a Civic Centre? That is the question everyone should ask and attempt to answer, after studying the designs of the winner and the five other finalists shown on the following pages. In our opinion, bearing in mind the great importance of this competition, these designs are not good enough. Presumably, in selecting Rowland Pierce as the sole assessor, the promoters, besides obtaining an architect with considerable experience in town halls, showed their preference for an architect generally known to have classical leanings in design. After studying the winning design we feel it is our duty to criticize it as an inadequate example of town planning and architectural design. In detail planning and treatment of the elevations it does not match up to the high standards which a competition for a £1½ million scheme should

achieve. The design is not modern, nor is it traditional. It can best be described, and condemned, as neo-academic. Four of the other five finalists are also very poor.

Our advice to Ipswich Borough Council is to re-open the competition, strengthen the jury by including as assessors architects who are acknowledged leaders of the modern movement, and ask them to re-examine the entries to the first stage and select better finalists if they exist. If better finalists do not exist, the competition should be held again as a single stage competition. It should be realised that the inclusion of extra assessors known to belong to the modern movement would probably encourage a larger entry. Such a policy would mean that the Council had wasted £3,000 prize money, but in the long run they would gain much more by obtaining a better centre for Ipswich.

*Winning Design: Vine and Vine (R. Owen Vine, F.R.I.B.A., F.I.Arb., C. Malcolm Vine, F.R.I.B.A., F. A. M. Selley, A.R.I.B.A.) of Wood Green.*

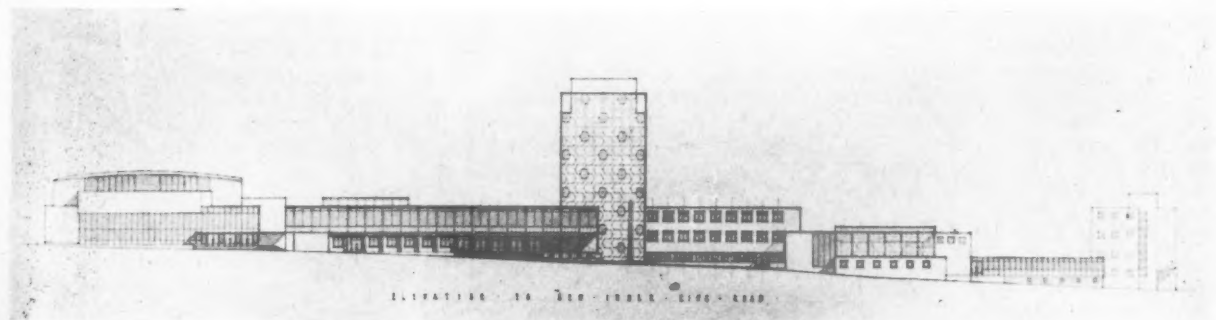
*Commended Design: Birkin Haward, A.R.I.B.A. (of Johns, Slater and Haward) of Ipswich.*

*Other Finalists: F. A. C. Maunder, R.S., F.R.I.B.A., A.M.T.P.I., of Great Missenden, Bucks;*

*J. P. Lomax, M.A., A.R.I.B.A., and Eduardo Dodds, A.R.I.B.A., of London;*

*Clifford Strange, L.R.I.B.A., of London; and Thomas Peatfield, A.R.I.B.A., of Blackheath*

*Elevation of the winning design.*



## Ipswich Civic Centre Competition

*The assessor's announcement of the award has been made as follows:*

*The Town Clerk, Town Hall, Ipswich*

SIR: Following the public announcement of the Competition in March, 1958, 568 architects or firms applied for the Conditions; of these 153 ultimately submitted schemes for the First Stage of the Competition.

The preliminary designs were hung in the Art Gallery and the School of Art and six were chosen for further development in accordance with the Conditions of Competition. The authors of these designs, on being notified by you, all agreed to proceed to the Final Stage of the Competition.

The schemes submitted in the Final Stage were hung for adjudication in the Wolsey

Gallery at Christchurch Mansion.

I now award as follows:

- (a) That the Design numbered 4 (four) in the Final Stage of the Competition be place First.
- (b) That the Design numbered 1 (one) in the Final Stage of the Competition be Commended.

I recommend therefore that the premiums be paid to the authors of these designs and to the authors of the other four designs (two, three, five and six) in accordance with the Conditions of Competition.

I have checked the accommodation provided by Design No. 4 and substantially the re-

quirements laid down by the Conditions of Competition have been met.

I have checked the cubic measurements and estimates of cost submitted in the Report accompanying Design No. 4; after making due allowances for certain errors and omissions and for the necessary adjustments, I am of the opinion that the probable cost of this scheme will not exceed the estimate of its author by 10 per cent at prices ruling at the date of issue of the Conditions of Competition.

S. ROWLAND PIERCE,  
F.R.I.B.A., DIST.T.P.

*The JOURNAL comments:*

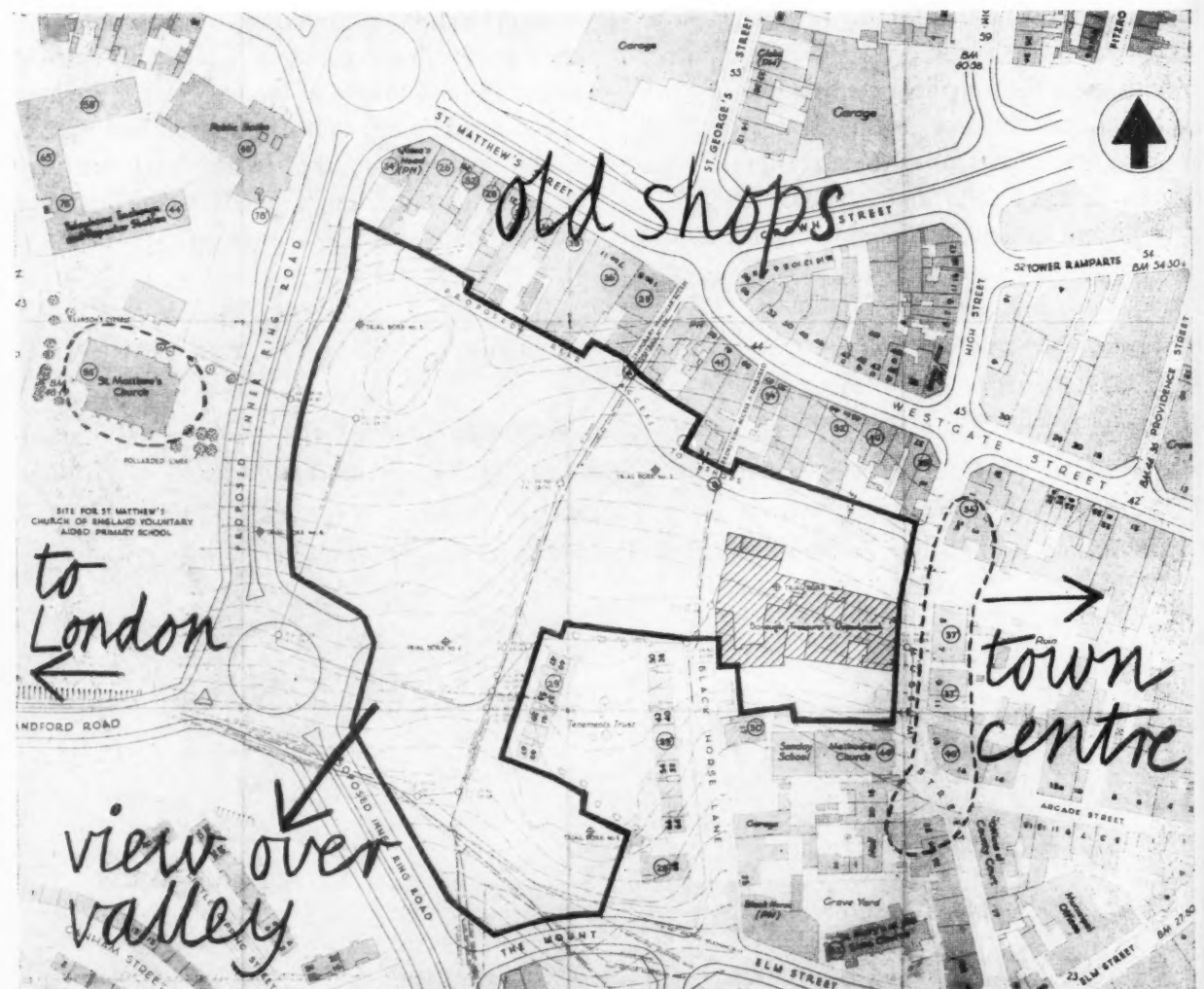
According to the conditions of the competition, the premium to be paid to the author of the "commended" design is the same as that for the other four, i.e., £300. The

author of the winning design receives £1,500 (to be merged, as is usual, with the later fees).

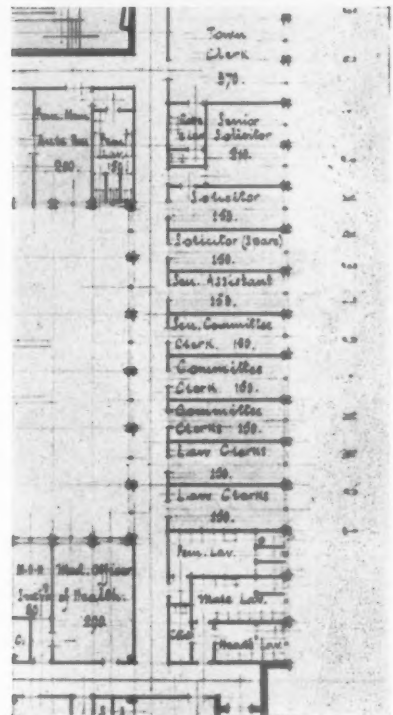
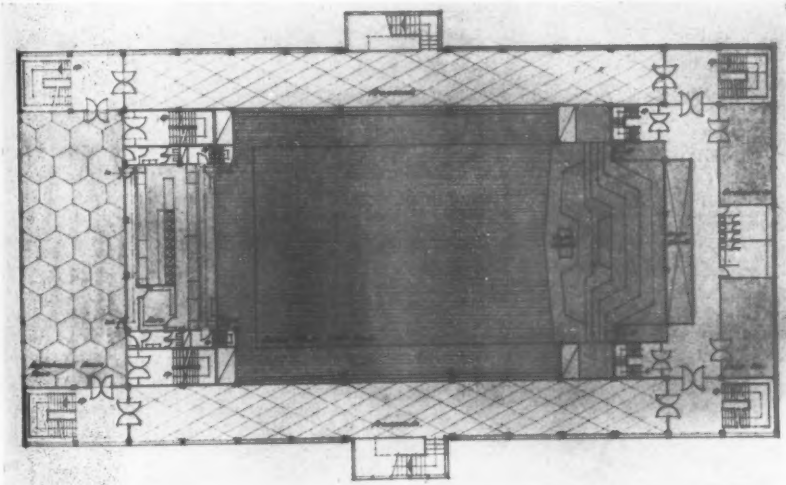
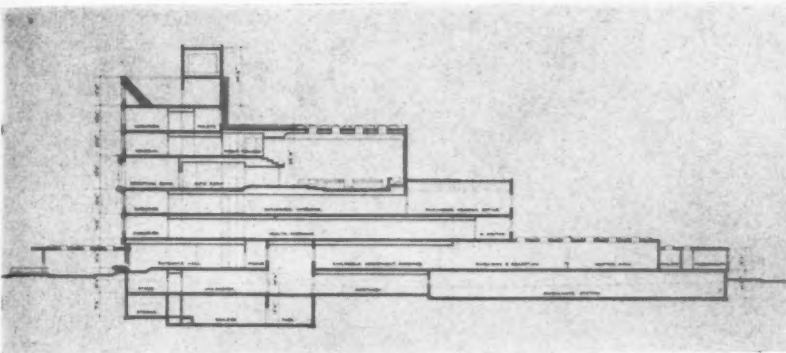
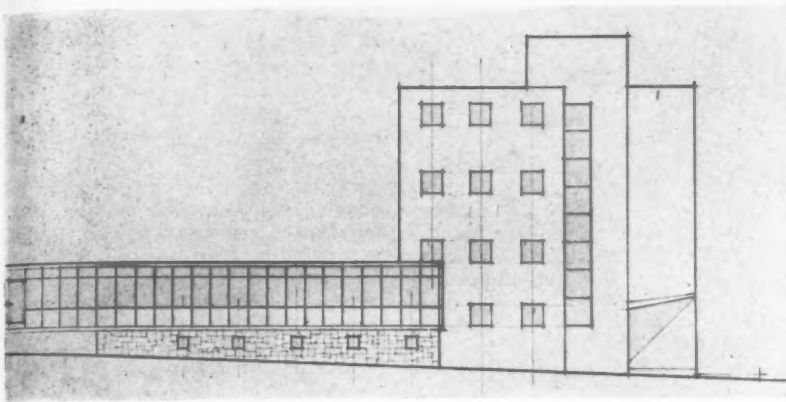
No further report is to be issued by the

assessor, nor are the 147 designs which failed to reach the final stage to be publicly exhibited. There are therefore to be no reasons given for the assessor's choice, neither are

*Plan of the site, which is 6½ acres in area. Existing buildings of character are ringed with a dotted line.*







Top left, part of an elevation from the winning design by Vine and Vine; above, part of the plan of the Town Clerk's department in the same scheme. Centre left, main east-west section through the design by Clifford Strange. Bottom left, plan at auditorium level of the Public Hall to seat 2,000 in the scheme by J. P. Lomax and Eduardo Dodds.

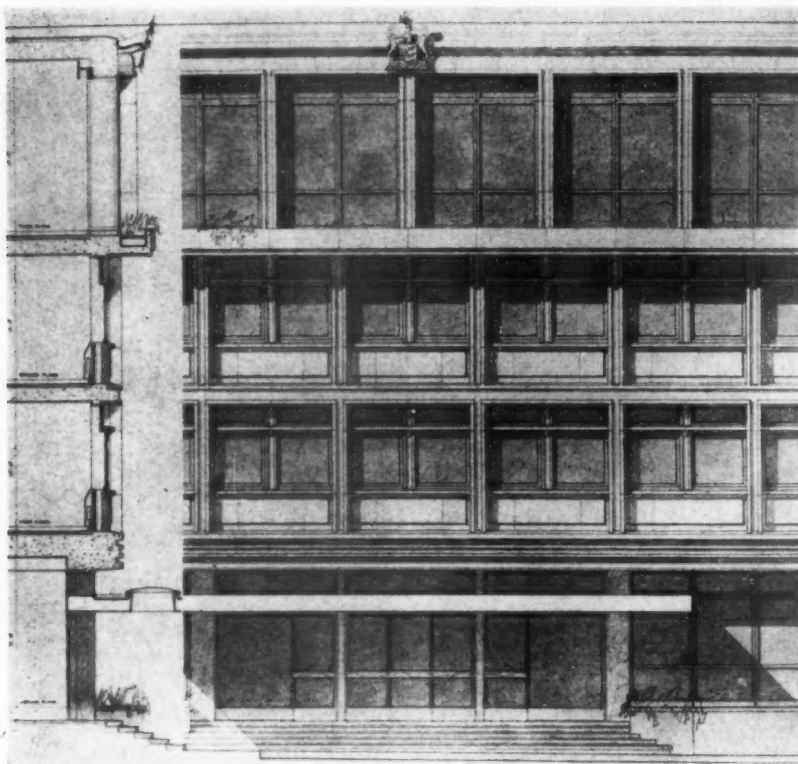
the competitors, the architectural profession, or the Ipswich ratepayers to be allowed to see what might have been. The amount of work represented by 147 architects or firms persisting to the end of an approximately 1½ million pound scheme is considerable, and, one might think, may well be worth more than a mere commitment to limbo. This is especially so in view of the poverty of thought and creative effort shown in most of the schemes which reached the final stage, including the winner.

The site, 6½ acres in area, is roughly U-shaped and situated a little to the west of the present centre of the town. At present covered with a maze of small streets

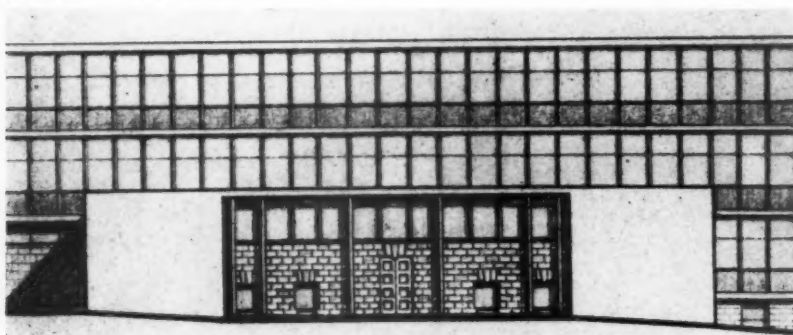
scheduled for demolition, the site will eventually be bounded to the south and west by a new inner ring road, to the north by the chaotic backs of the existing shops on St. Matthews and Westgate Streets, and on the east by Museum Street, a narrow street of considerable Georgian character. In the centre of the U are two blocks of two-storey between-war council tenements. The site slopes fairly steeply towards the south; to the south west is an extensive view over chimney-tops down into the Orwell valley. St. Matthews Church to the west is pleasant but dilapidated; its churchyard (later to contain a school) well wooded.

Ipswich itself has a mixed character.

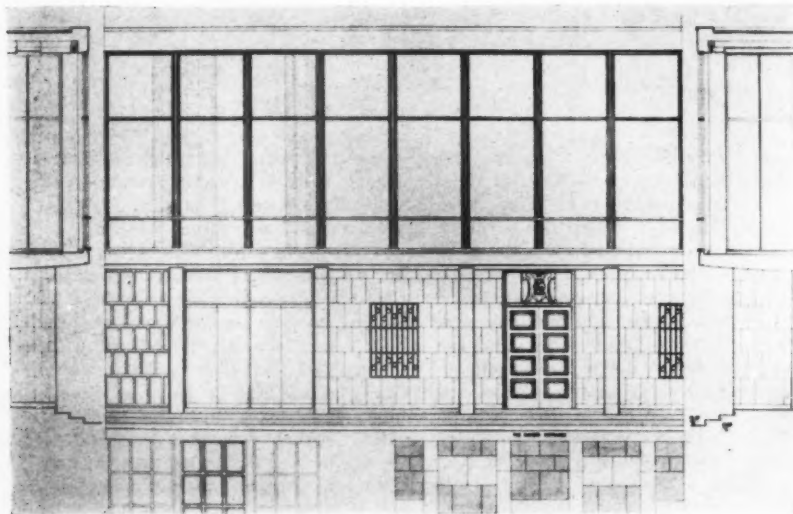
Narrow, old shopping streets are its chief delight; there is not one paved pedestrian space of any size nor any "square" which could be said to indicate the town centre other than the unsatisfactory Cornhill (in front of the present Town Hall), which has been turned into an extra large bus lay-by. In view of these considerations, one would hope to see Ipswich provided with a Civic Centre with the accent rather more on Centre than Civic; a group of buildings which seize upon the opportunities provided by the immediate surroundings of the site in order to integrate themselves with the town, which provide something in the nature of a piazza or town square, and



Above, detail elevation and section of main entrance and Municipal Offices, from the design by Clifford Strange.



Above, elevation of Law Courts, and below, detail elevation of "Civic Colonnade," from the design by F. A. C. Maunder.



possessing a slightly more introvert than extrovert character.

This should indeed be possible considering the number and variety of the buildings to be provided. These include a large Public Hall, complete Municipal Offices, Civic Suite, Law Courts, and a Police Station.

The programme is complicated by the necessity of being built in eight stages (occasionally two parts of the same department occur in different stages) and by the fact that the existing Borough Treasurer's department (hatched on the site plan) cannot be demolished until Stage 8.

There is no doubt that the exigencies of staging have had an unfortunate effect on most of the schemes illustrated here. But this is little excuse for the mediocrity of these schemes. Except for the "commended" design, and to some extent that by J. P. Lomax and Eduardo Dodds, there is little recognition of the more general town planning problems involved. Four of the schemes—and most conspicuously the winning design—are arranged only to be appreciated from the ring road. Five—and again most conspicuously the winner—have large areas of their sites sacrificed to motor cars. (This too may be ascribed partly to the competition conditions; the "maximum possible" car parking space was asked for. The maximum possible consistent with what?)

It is extremely difficult, in view of the fact that no comparison is allowed with the 147 remaining designs, to see why at least four of these schemes ever reached the final stage.

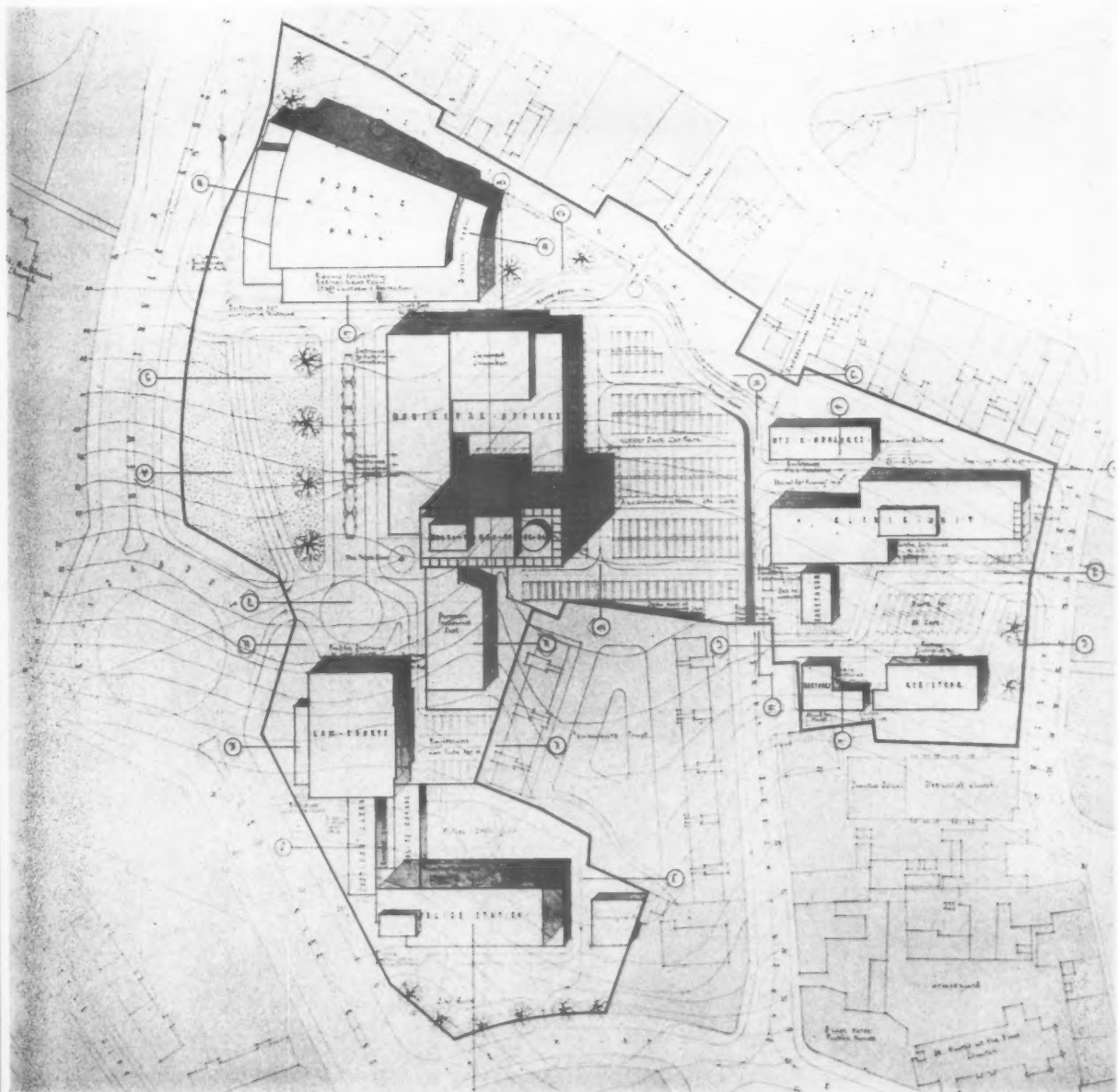
Consider the detail, page 371, from a main elevation of the winning design. Is this the kind of building one should expect as the result of a competition with 153 entries? Or the detail, also page 371, from the first floor plan of winning design. These offices are planned to grid dimensions of 7 ft. 6 in. by 20 ft. The section on page 371 is from perhaps the most perplexing scheme of the six. This scheme has A Front Elevation To The Ring Road; it tails off to the east in a Mary-Anne-Behind manner and ends in a car park. The plan of a Public Hall on page 371 was evolved in answer to a request in the conditions for a stage with "ample room at the sides and sufficient height to handle hung battens and rolled drapes and for simple box sets." Its section is no better, and the acoustics of the auditorium rely (heavily) on pivoted acoustic baffles in the ceiling, which are not shown. Finally, an interesting manifestation in this competition is the general detail character of the designs, compared with their overall character. All the schemes may be labelled "Contemporary," in the sense that they show the marks of superficial modernity. With most of them the relationship with modern architectural thought ends there: the approach is basically neo-classical. The same neo-classicism reveals itself in a particularly disturbing form in many details, such as those shown on this page. These three examples show all too clearly where the facile formulae which govern the design of so many buildings today are leading—straight back to the academics.

## Ipswich Civic Centre Competition

## WINNING DESIGN BY VINE AND VINE

The general spirit of the winning design can be seen clearly from the site plan. The enthusiasm with which turning-circles and flow lines are marked explains the surrender of every piece of open space to the insatiable greed of the motor-car. The fact that the contours shown are those of the site as existing (giving, apparently, a sudden 3-ft. drop across the pavement outside the main entry) betrays a fine disregard for the detailed character of the site itself. Existing buildings are played down—a grey wash is spread over both the buildings and their sites—and this is symptomatic of the general approach to site layout; the new buildings are placed in no

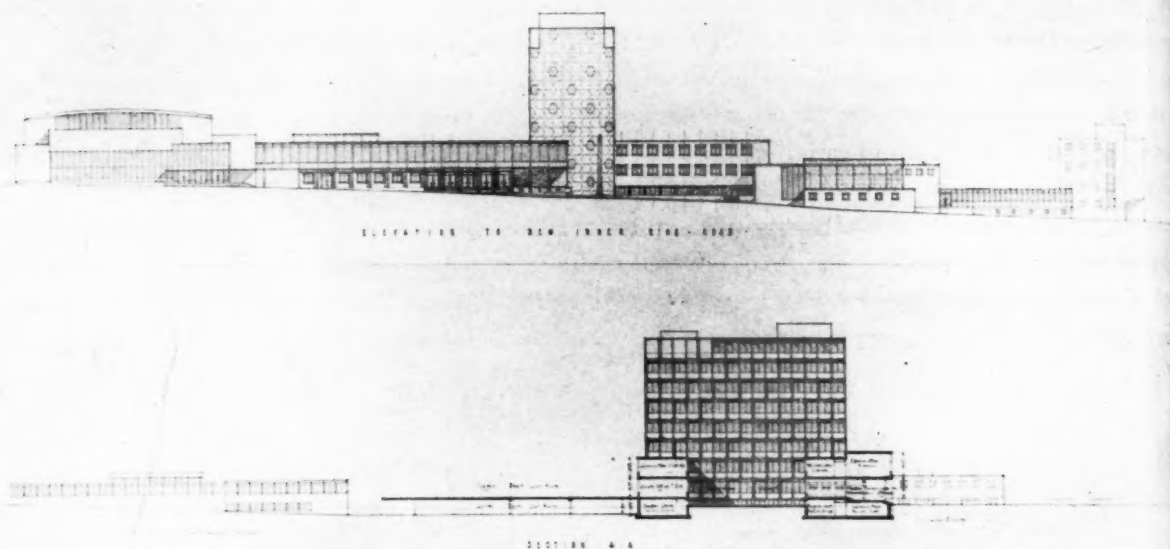
relation at all to those adjacent, and little to one another. Undoubtedly the main visual consideration has been the views from the ring road. The east end of the site is merely filled with odd bits of accommodation which could not, presumably, be fitted in elsewhere. The layout here is reminiscent of an army camp; Museum Street has been outraged. The spaces around the buildings are all indeterminate in character; no buildings, new or existing, are made to enclose external spaces. An exception is the internal "garden court," which has the high block on its south side. The one area of any size (other than the car park)—that in front of the main entrance—is



Site plan



# Ipswich Civic Centre Competition: WINNING DESIGN BY VINE

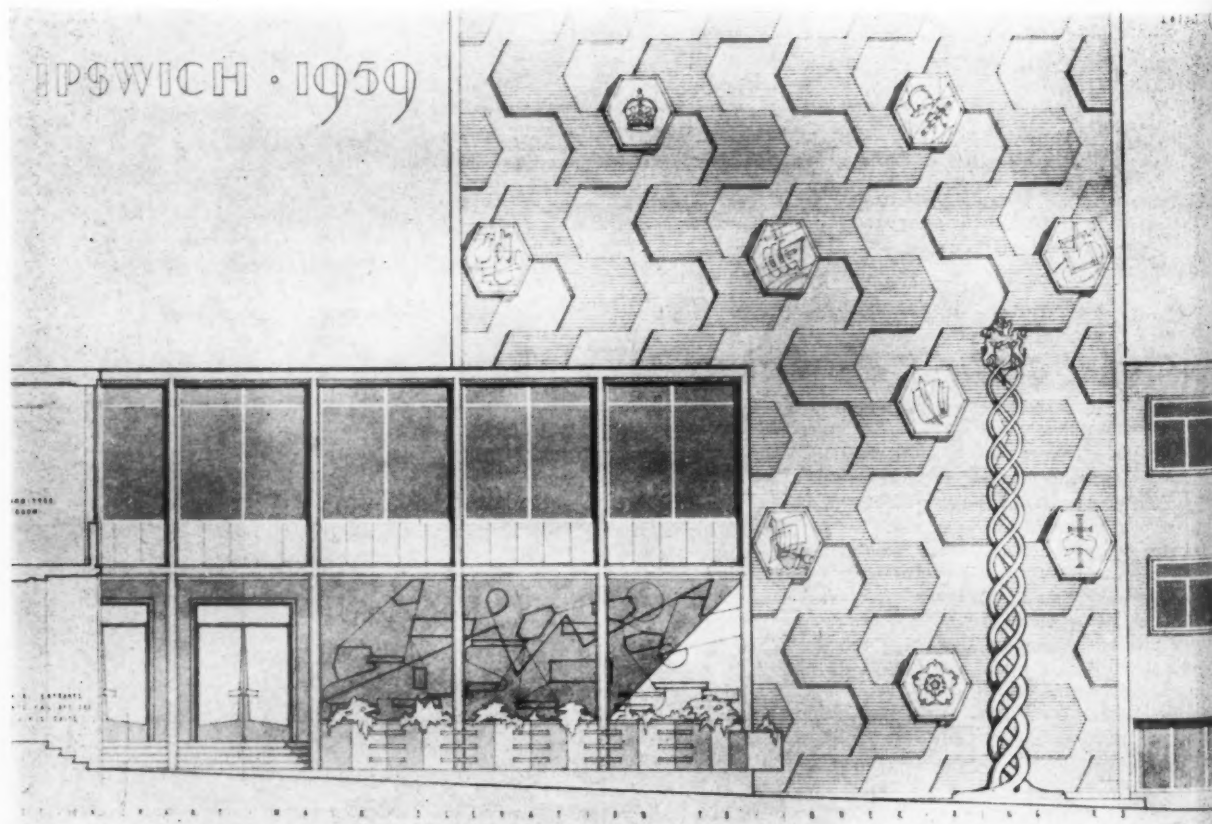


Elevation to inner ring road and east-west section

*grassed and then rendered unusable by a bisecting road whose purpose is obscure. The decorative panel shown under the colonnade in the detail elevation is a granite bas-relief on the theme of*

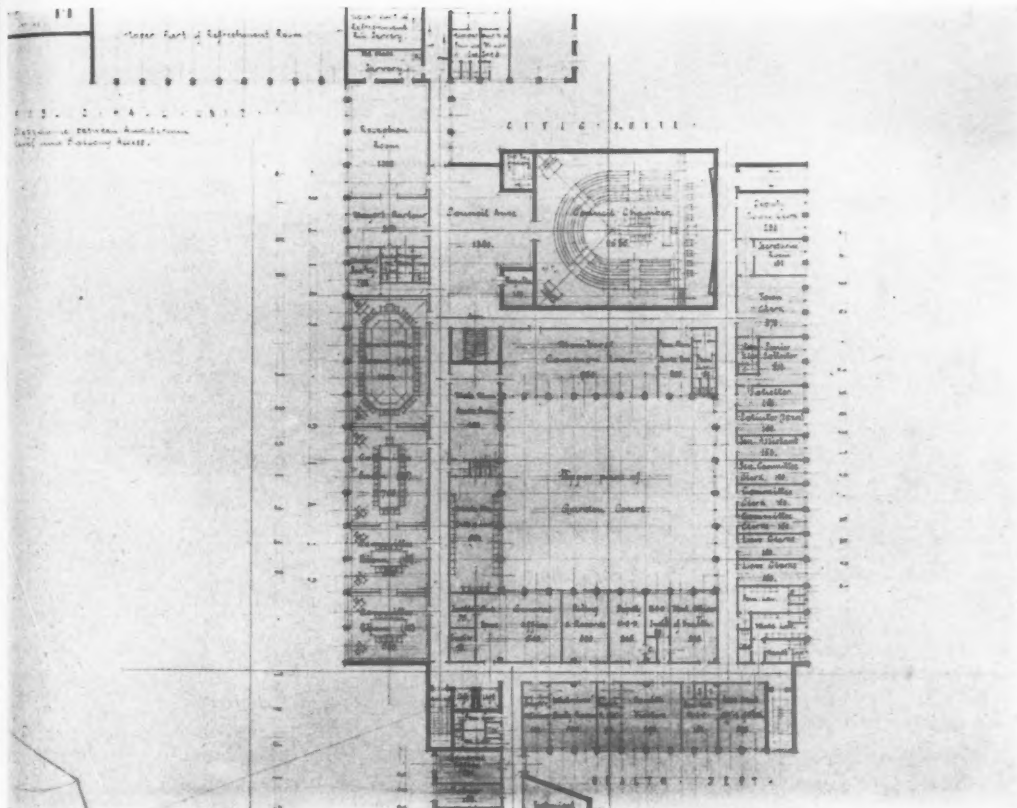
*Progress. The estimated cost of the buildings is £1,216,100, that of the external works £107,130; a total of £1,323,230. Of the cost of external works, only £6,510 is for "site layout and planting."*

Detail elevation at main entrance

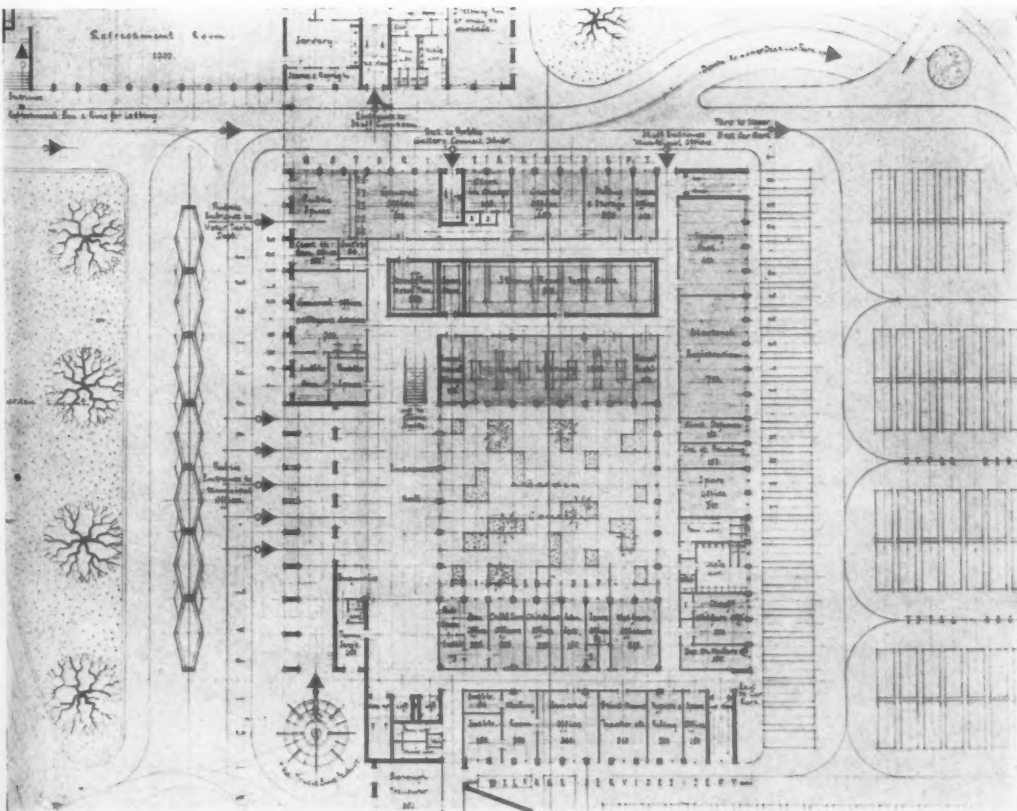




# INE AND VINE continued

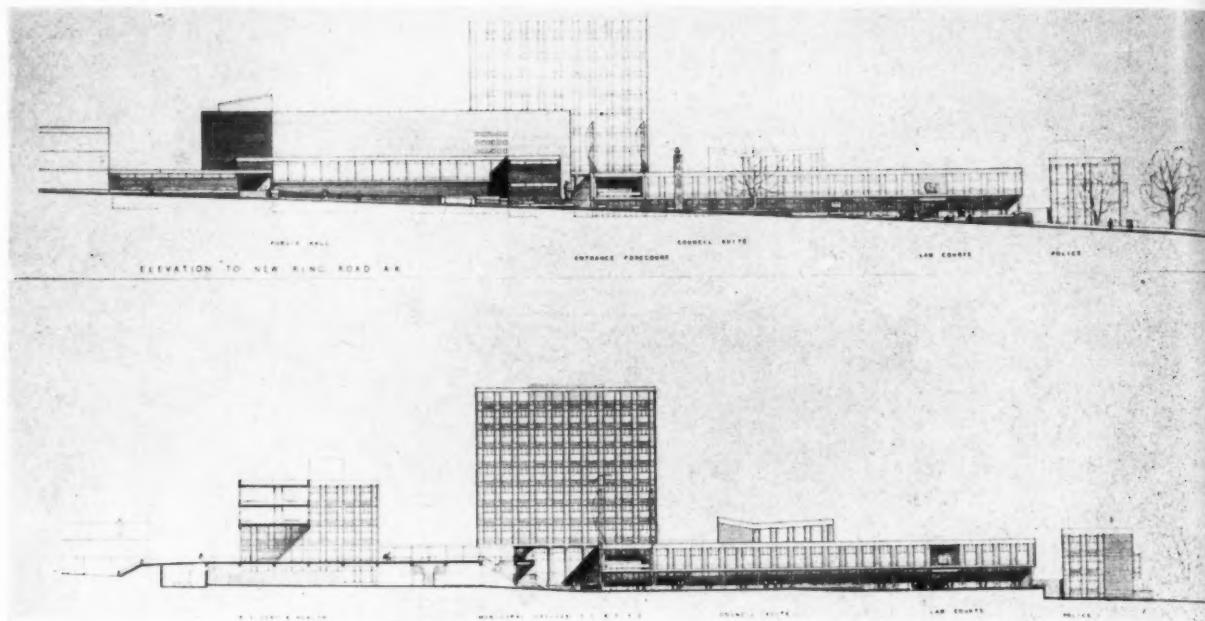


First floor plan, Municipal Offices

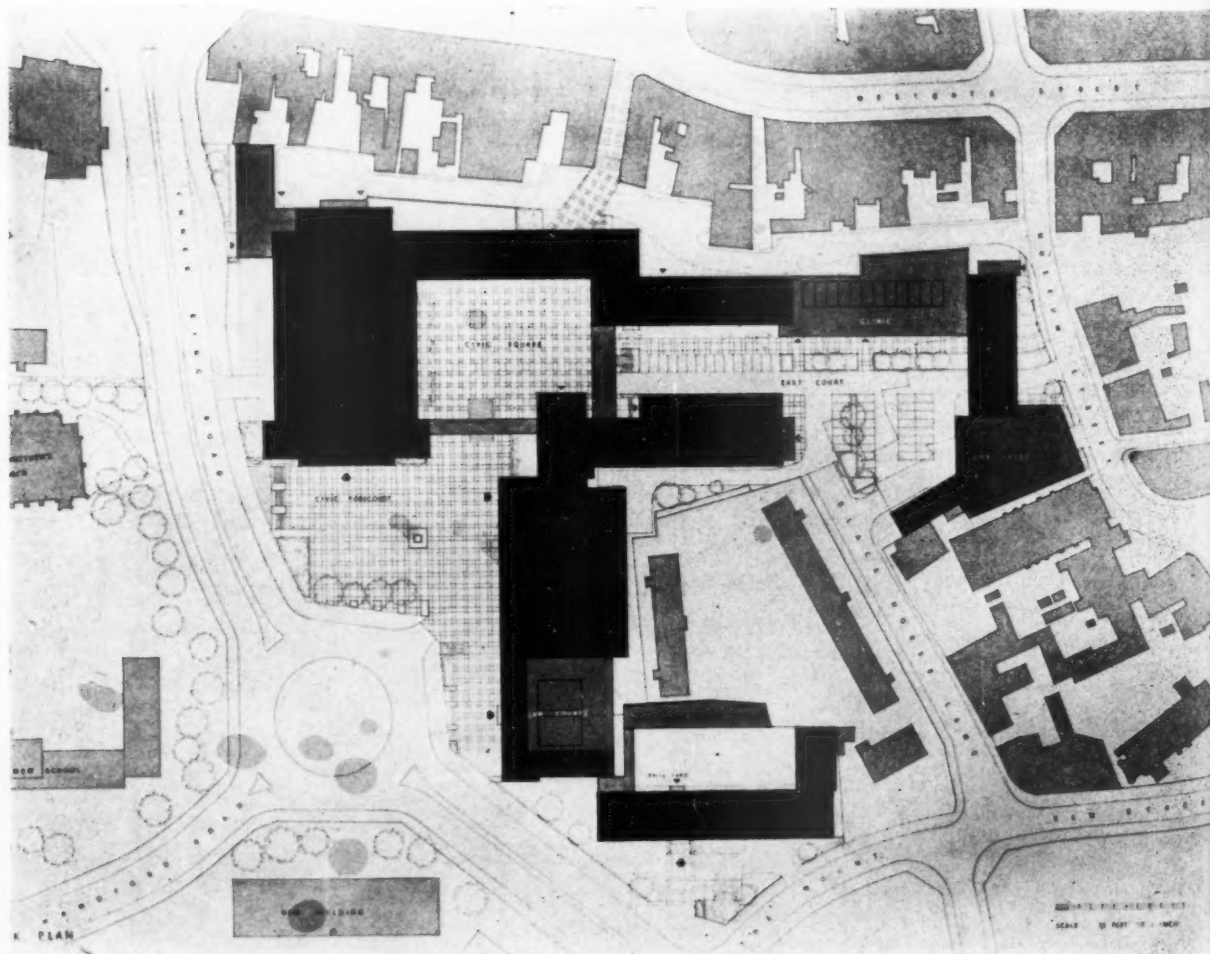


Ground floor plan, Municipal Offices

Ipswich Civic Centre Competition: COMMENDED DESIGN BY



Elevation to new ring road and section through Civic Square



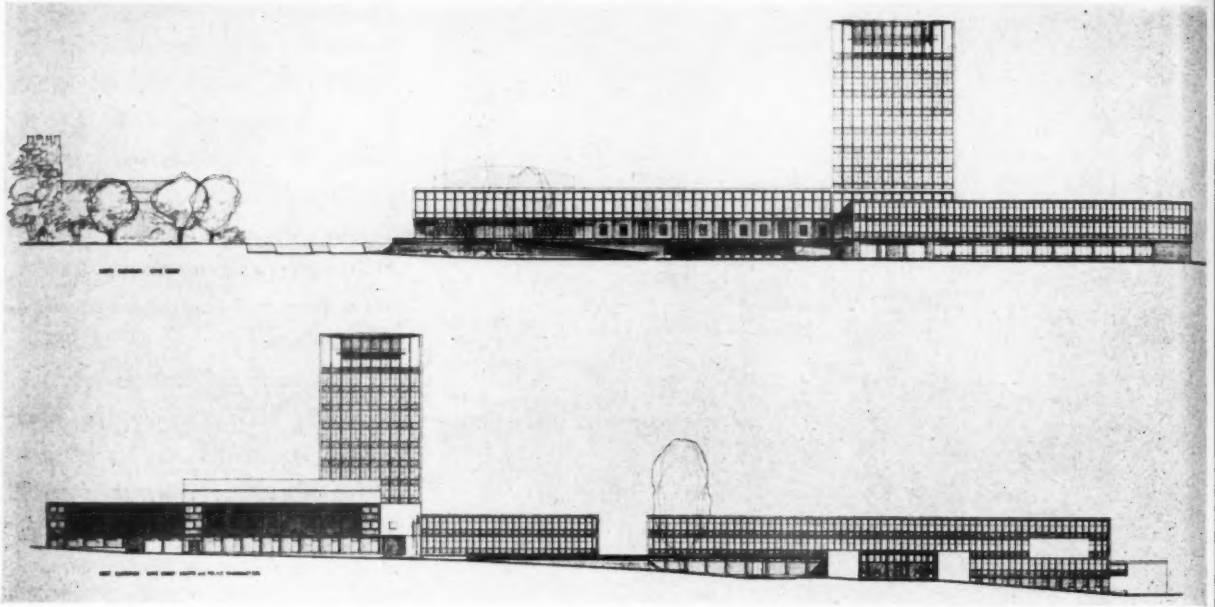
Site plan



*This is by far the most convincing of the six final designs. A conscious and largely successful attempt has been made to relate the new buildings to the existing buildings around the site, and to create within the site itself a sequence of spaces of some character. One area (the "Civic Square" has been given over entirely to pedestrians, and is linked by an existing alley to Westgate Street and by steps to the adjacent spaces to the east and south. The relation of the buildings to the surroundings has led the architect to suggest a ghost layout for the area on the south-west side of the ring road. It has also led him to suggest an extension of the Civic Centre on Museum Street in order to maintain its linear, enclosed character. Of the six schemes, this appears to be the only one which has recognized the existence of such problems and has gone to some length to solve them in spite of the difficulties of the programme. The detail from the plan of the upper ground floor level shows the Civic Square, with its various connections with adjacent external spaces, and the manner in which access to almost all parts of the Centre may be gained from it. A large car park is situated beneath the square. The elevational detail betrays a rather over-refined thinness and lack of vigour, but this is of secondary importance considering the other issues at stake. The estimated cost of the buildings is £1,451,523, that of external works, £180,000; a total of £1,631,523. The high cost of external works is significant; if you want a properly laid-out site, you have to pay for it.*

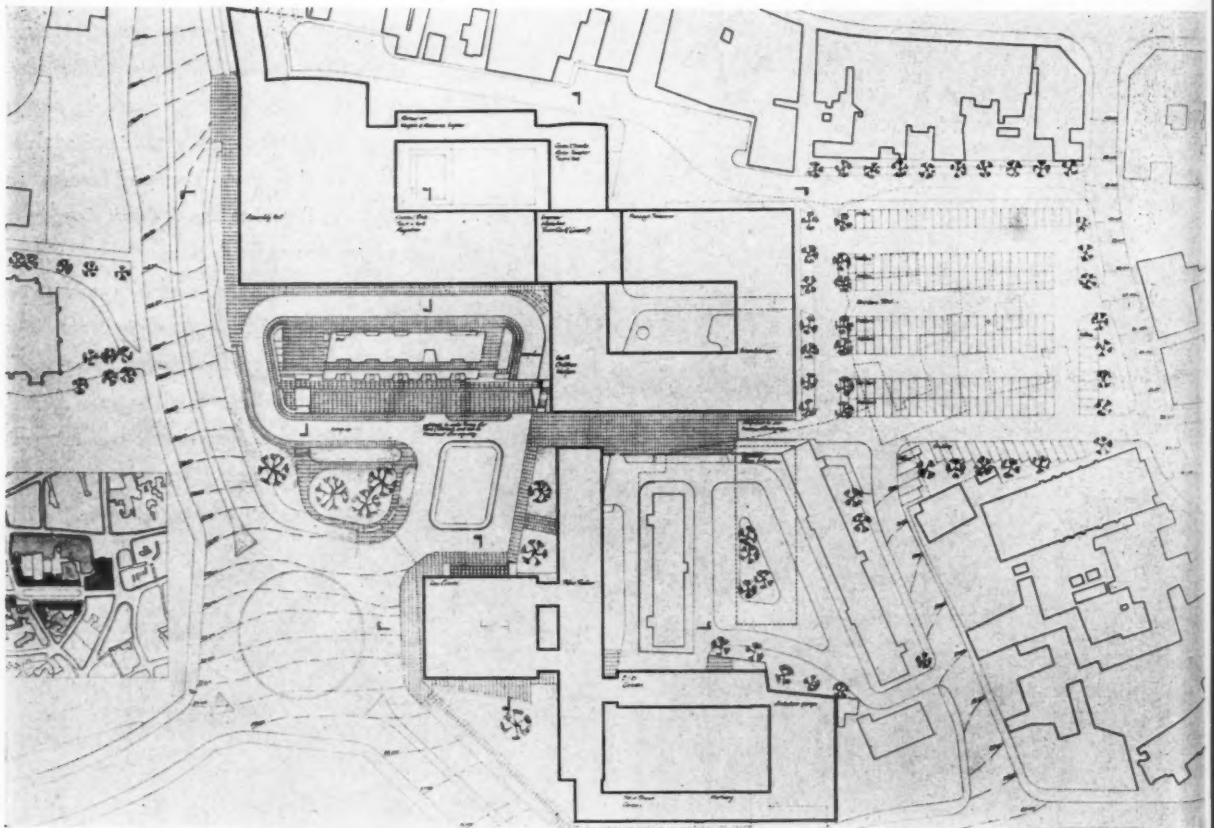


**Ipswich Civic Centre Competition: DESIGN BY F. A. C. MAUNDER**



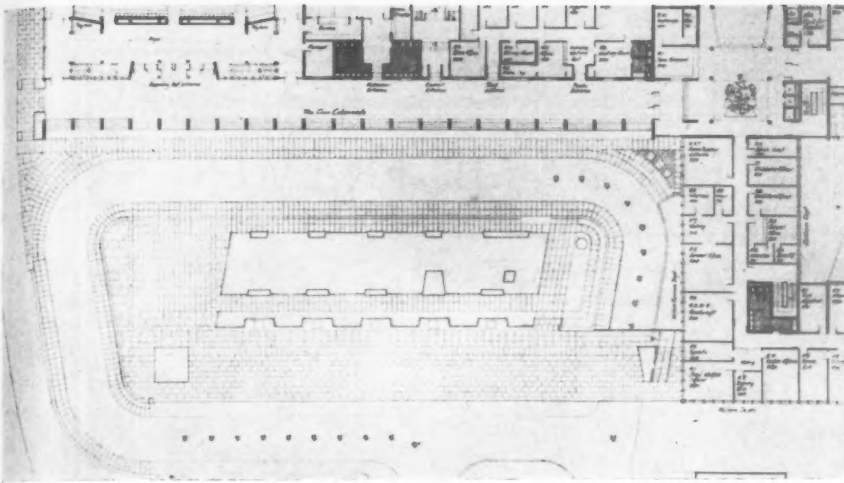
South and west elevations

*The site layout of this design is focused on a space adjacent to the ring road and roundabout. This space itself contains, in effect, two roundabouts, one of which consists of a ramped approach to the "Civic Colonnade" (a linear portico). It is very doubtful whether the areas in and around these roundabouts could ever be enjoyed. The east end of the site is given over to a car park. The architect shows, in an inset on the site plan, a proposal for ruining one of Ipswich's most delightful*



Site plan with inset in bottom left hand corner



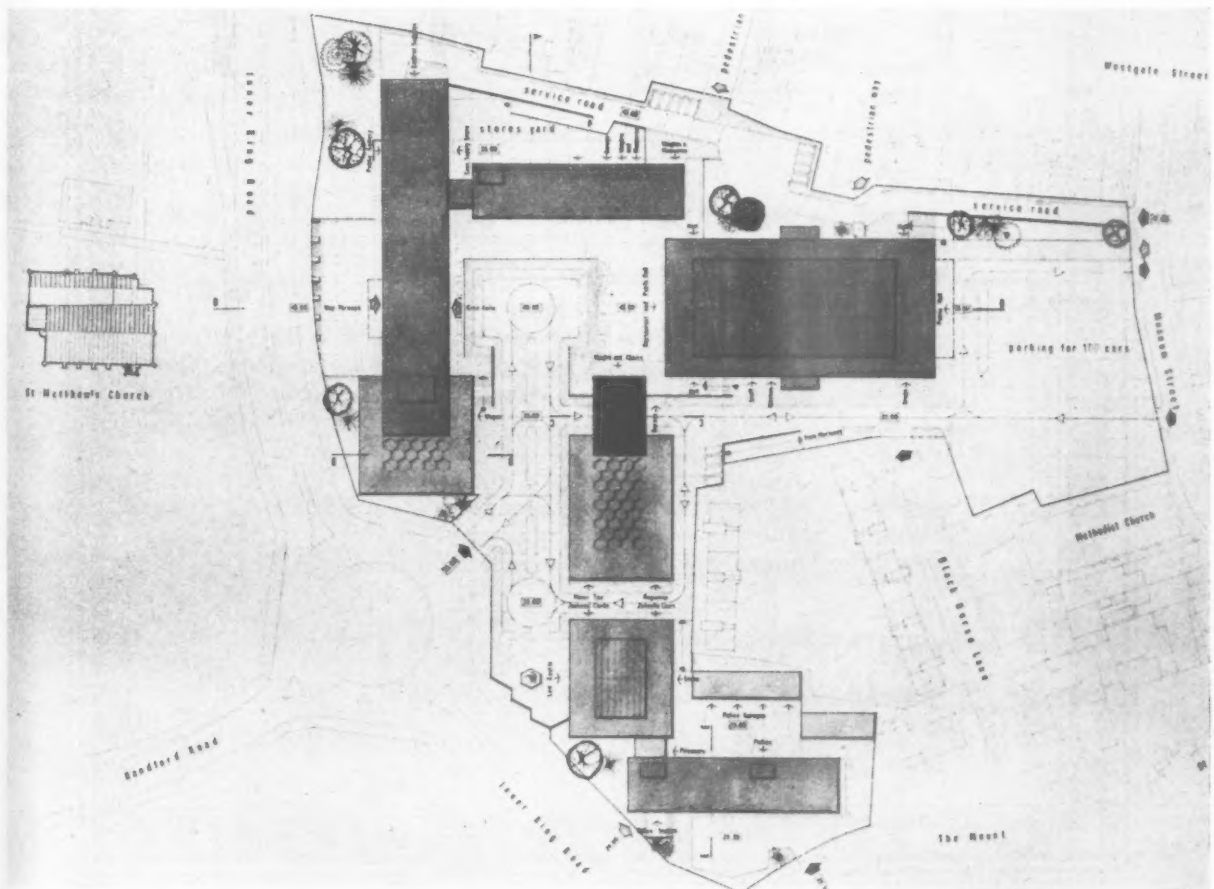


Detail; plan of approach ramp and "Civic Colonnade"

streets by linking the Centre's car park with the existing central area by a formal dual carriageway. The "Civic Colonnade" (see detail plan) contains entrances to the Public Hall, Restaurant, Civic Suite, staff entry to Registrar's department, and public entries. All these are given equal weight and (apparently, from the detail, p. 372) are un-named. The estimated cost of the buildings is £1,348,318, that of the external works is £54,500; a total of £1,402,818.

#### DESIGN BY J. P. LOMAX AND EDUARDO DODDS

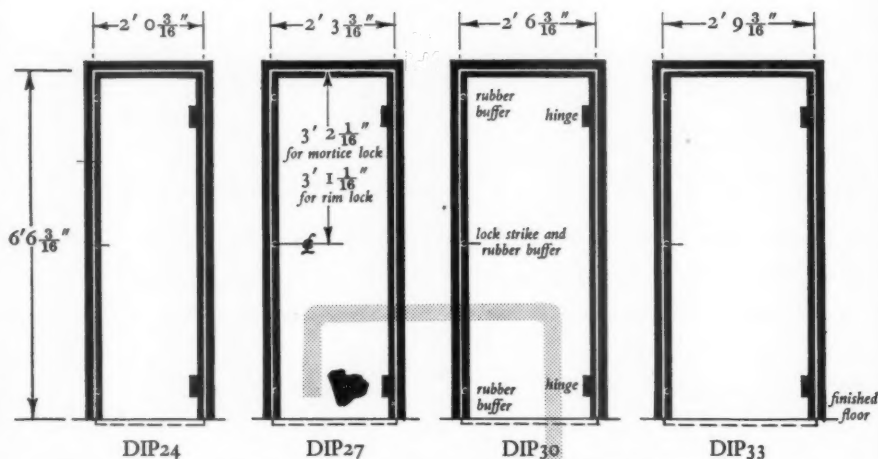
Like the commended design, this scheme introduces some paved areas given over entirely to pedestrian use, not only for purely circulatory purposes but also to introduce some life into the Centre. It also shows some regard for existing buildings surrounding the site. St. Matthew's Church, in particular, is brought in as a vital element in the composition of the paved upper square (the long Civic Suite block



Site plan

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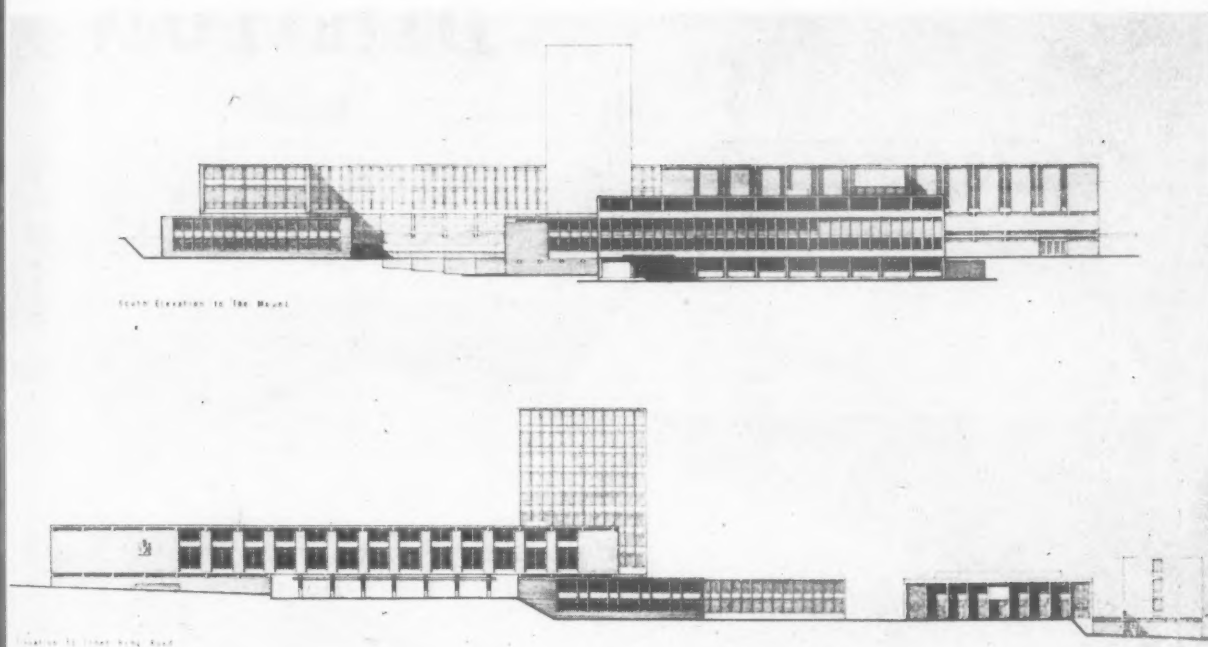
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## Ipswich Civic Centre Competition

DESIGN BY J. P. LOMAX AND EDUARDO DODDS continued

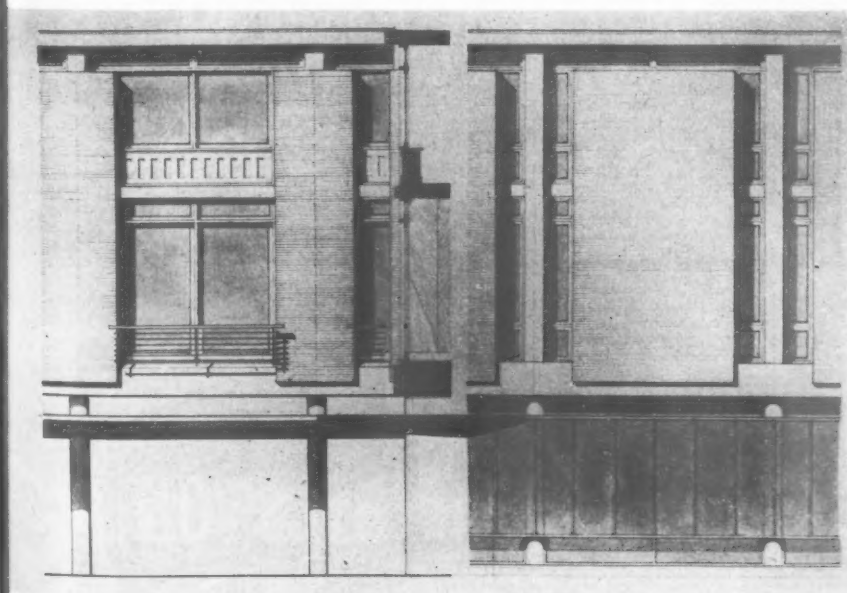


South elevation and elevation to ring road

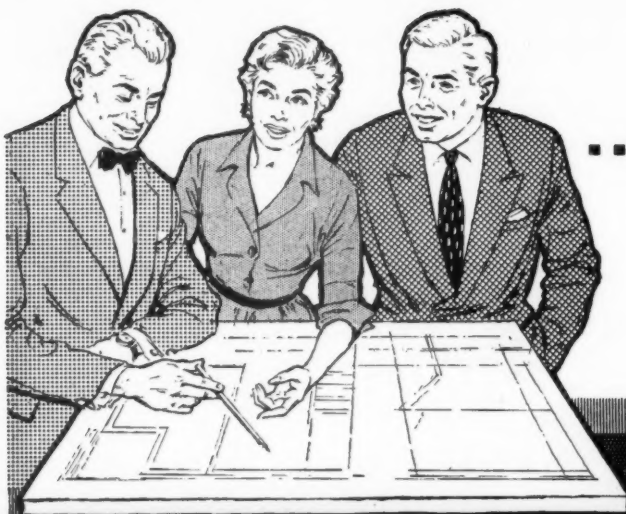
passes over this on stilts). The buildings are placed on the site in such a way as to form one really enclosed area of architectural character—the beginnings of a precinct. There is, however, a great deal of space wasted in odd bits and pieces left over round the perimeter. The Public Hall has been placed in the centre of the site, away from the noisy ring road. Its multi-level planning is

interesting but, as has been remarked already, its acoustics and stage planning are questionable. No attempt has been made to resolve the visual problems at the east (Museum Street) end of the site. A car park for a hundred cars forms the foreground to the east face and entrance of the Public Hall, to the south of which are some pieces of pavement of indeterminate shape and function,

the north end of the tenement buildings, and the back wall of the Methodist minister's house. At first sight the elevations appear to possess considerable vigour; the large-scale detail, however, shows a chunky neo-classicism peeping through the voids. The estimated cost of the buildings is £1,626,967, that of the external works, £121,297; a total of £1,748,264.



Details of elevation



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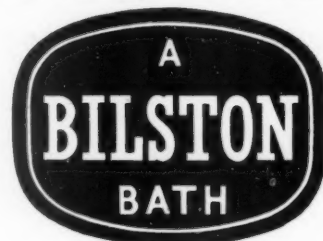
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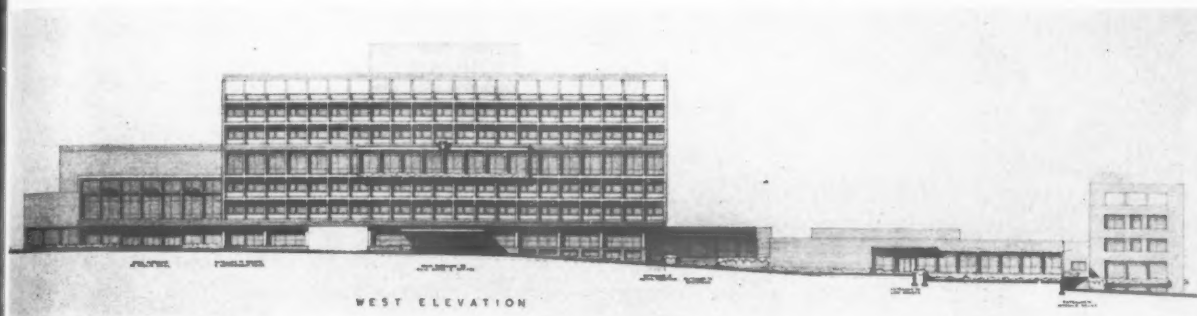


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# Ipswich Civic Centre Competition

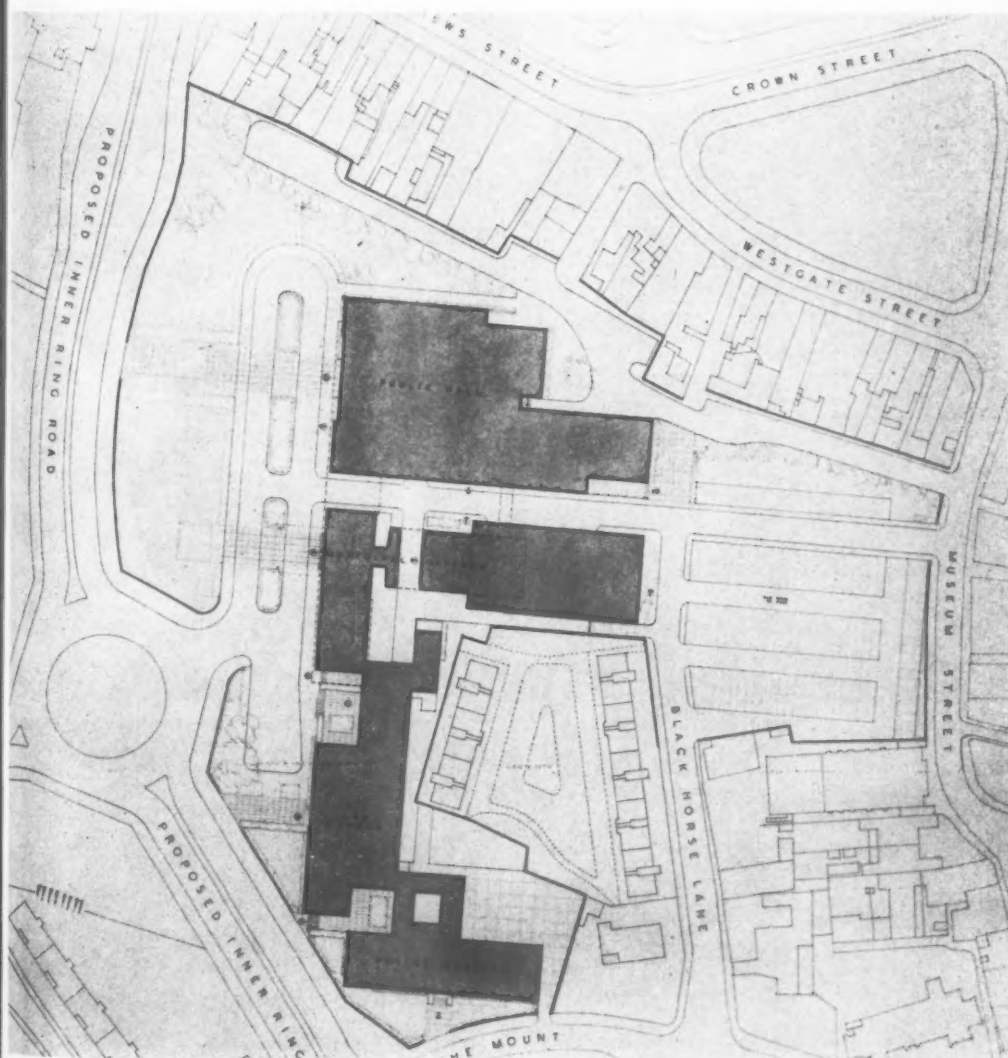
DESIGN BY CLIFFORD STRANGE



Elevation to ring road

The general layout of this design has been conceived almost entirely in the terms of the elevation facing the ring road. The component buildings of the Civic Centre are ranged up like racing competitors on the starting-line; from north to south, the Public Hall,

Municipal Offices and Civic Suite, Law Courts, and Police Station. They present facades of various character, abutting each other almost in the same plane. The top floor of the block containing the Municipal Offices is entirely unfilled. In front of the long main



Site plan



Architects: T. P. Bennett & Son. Contractors: Taylor Woodrow Construction Ltd.

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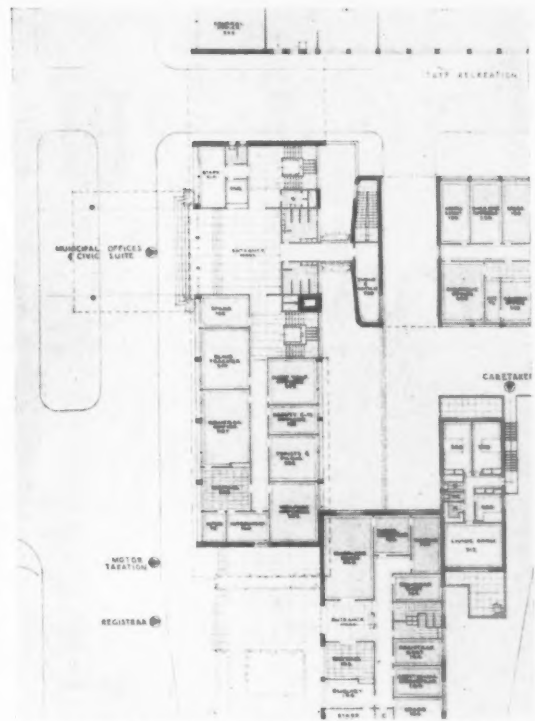


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## Ipswich Civic Centre Competition

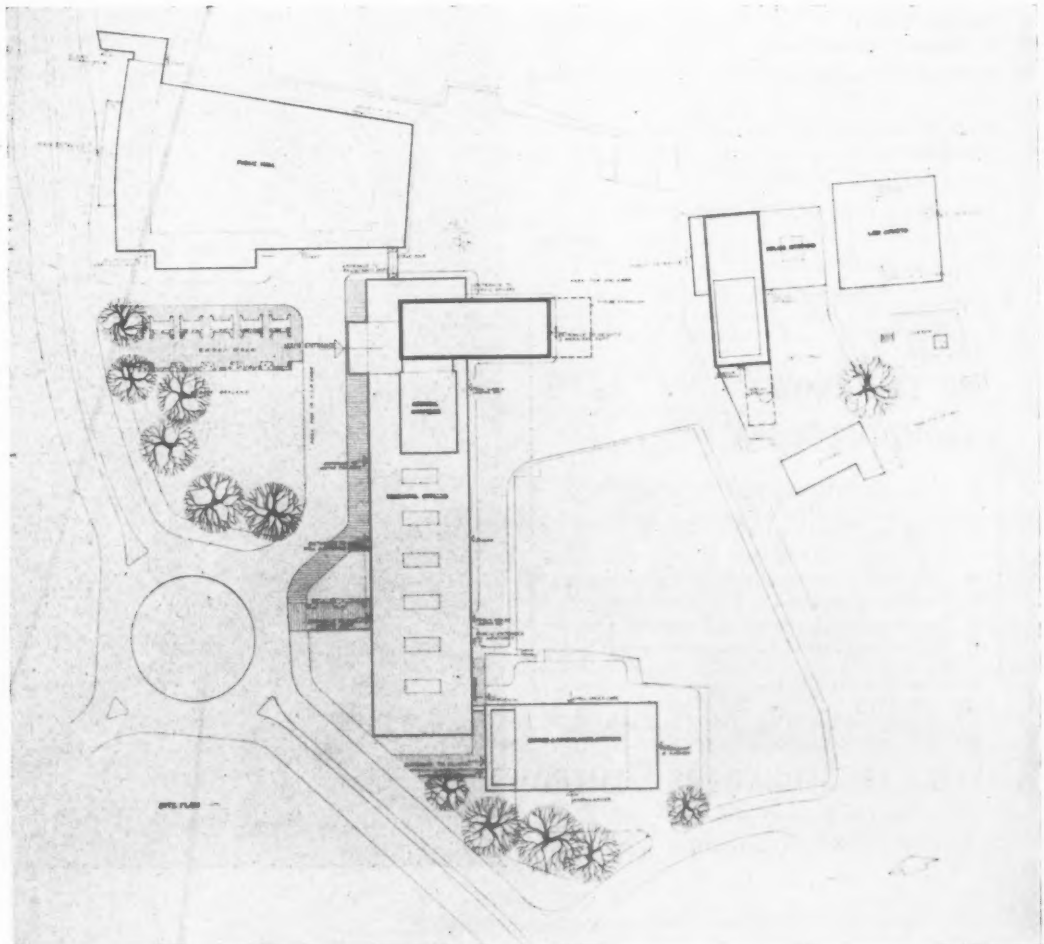
## DESIGN BY CLIFFORD STRANGE continued

facade, the dual carriageway of the proposed ring road is duplicated by a formal layout of access roads with central shrubberies. Between the two road systems is a strip of civic greensward, terminated to the north by the exposed backs of the shops on St. Matthews Street. At the rear (for there really is a front and a back to this design) the buildings tail off, as is shown in the section on page 371, in a series of odd shapes, the site at the Museum Street end being given over to a car park for 181 cars. Museum Street itself has, therefore, been ruined; its side has been cut open to expose a view of "backs"—both of the Westgate Street shops and of the new buildings—over the roofs of parked cars. The sample of detailed planning given here is the main entrance hall and surrounding areas on the ground floor. The short wide corridor on the axis of the entrance doors terminates, amid strong side lighting and flower boxes, in a small door to the telephone and switch room. The estimated cost of the buildings is £1,165,138, that of external works £54,000; a total of £1,219,138.



Part ground floor plan, Municipal Offices and Civic Suite

## DESIGN BY THOMAS PEATFIELD



Site plan

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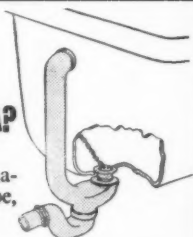
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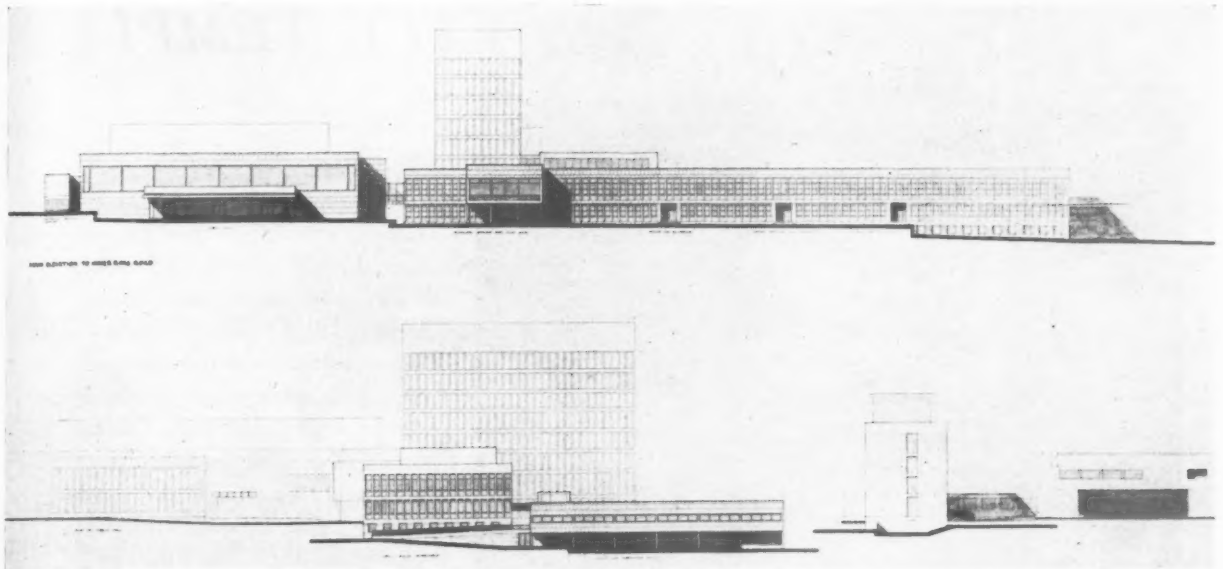
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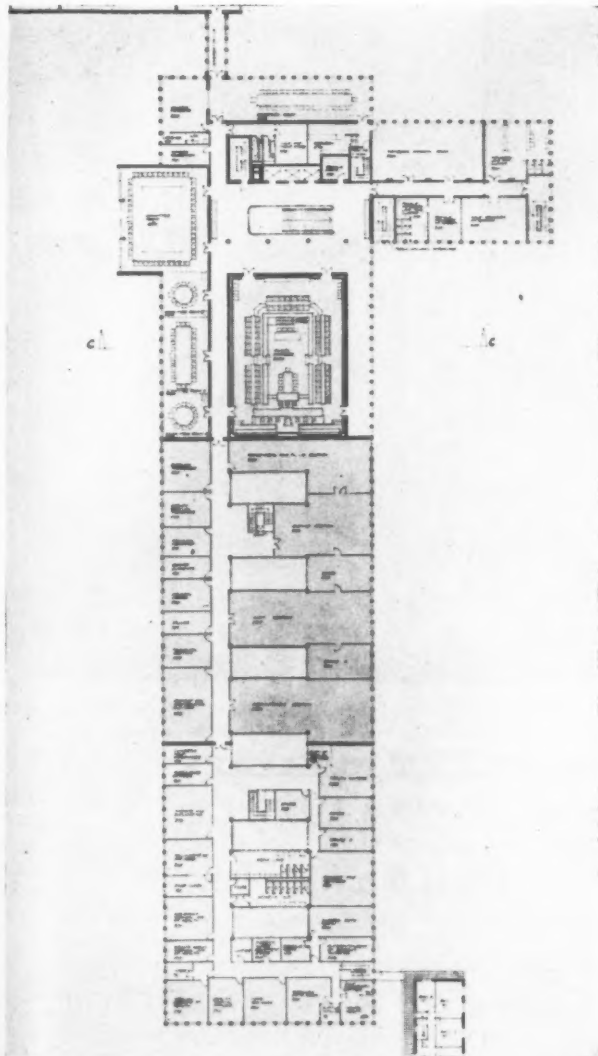


## Ipswich Civic Centre Competition

## DESIGN BY THOMAS PEATFIELD continued

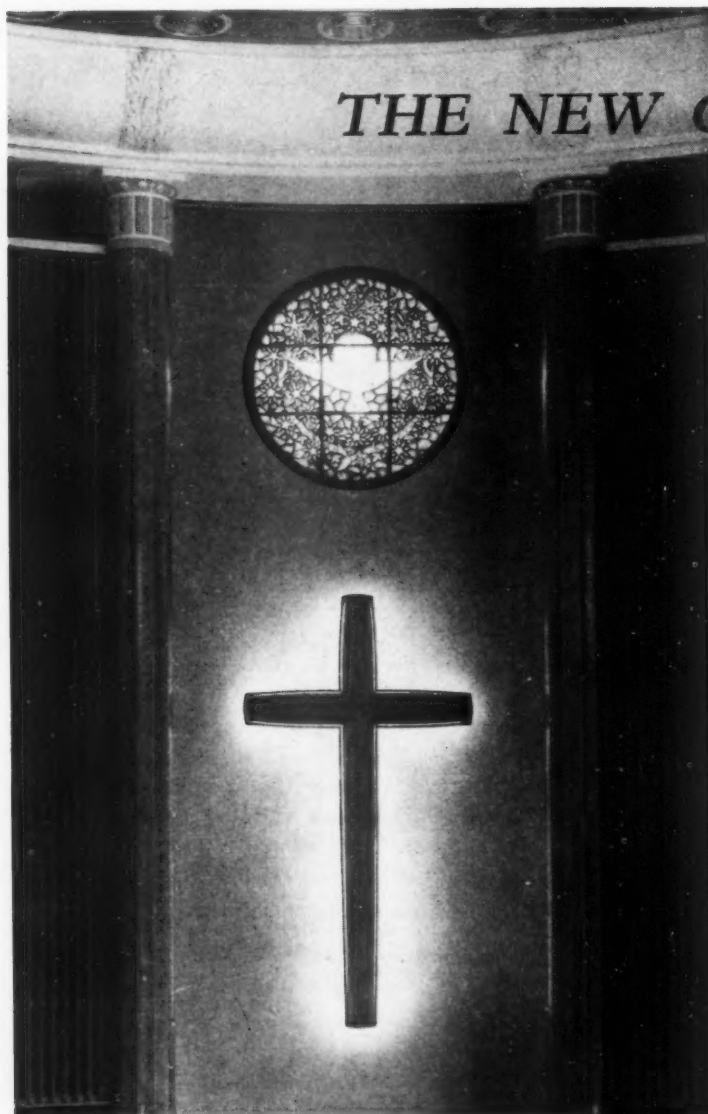


Main elevation to ring road and south elevation



The site plan for this design is a most significant drawing: existing buildings have been omitted altogether. Not only are they hardly worth considering, it seems, but not worth an acknowledgment on the plan. There is also no mention, in the competitor's report, of the principles, if any, followed in the general layout of the site. The scheme appears to have been designed from the east and west sides of the site separately; a fairly coherent main group to the west, facing the ring road, and the police station and law courts, oddly related to each other and to Museum Street, to the east. The vacuum between is labelled "park for 200 cars," but the arrangement of these is not shown. Of the two spaces referred to as "gardens," the larger (to the west) is surrounded by roads and is designed so as to render "keep off the grass" notices inevitable; the smaller, to the east, is a roundabout in the Law Court's car park. The only space manifestly for pedestrians is the short "Broad Walk" in front of the main entrance. The first floor plan of the Municipal Offices and Civic Suite is shown here as representative of the planning generally. The estimated cost of the buildings is £1,527,365; that of the external works is £54,000: a total of £1,581,865.

First floor plan, Council Chamber and Municipal Offices and Civic Suite

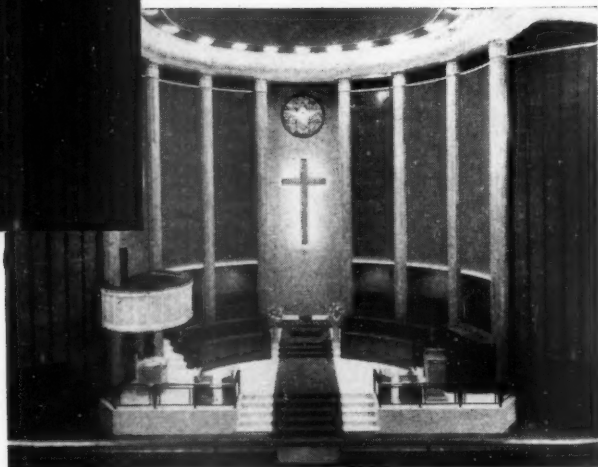


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## 10 DESIGN: BUILDING TYPES

## second RIBA symposium on laboratories: report of discussion

On February 19 and 20 the RIBA held their second symposium on Laboratories, entitled "Laboratories 2." Last week we published in full one of the papers: "Chemistry Teaching Laboratories in Universities," by Anthony Cox. Next week we publish in full another paper: "Laboratory Design for School Chemistry," by W. H. Lloyd. This week we report the discussion and summarize those articles which we are not publishing in full and which are susceptible to this treatment. For editorial comment on the symposium as a whole, see leader on page 357.

Introducing the symposium Peter Shephard, the Chairman, drew attention to the historical résumé in Richard Llewelyn Davies' paper which established that the Laboratory was in effect a new building type; and instanced a recent article in the *Spectator*, in which a laboratory client attacked architects, as evidence of the need for the kind of exchange and documentation which he hoped the symposium would provide.

**Planning bench type teaching laboratories**

Anthony Cox was the first speaker to present his paper. As he kept closely to his text, and as this was published in last week's JOURNAL, there is no need for us to summarize it here. The first speaker in the discussion was Geoffrey Robson, who began by pointing out that since some university laboratories have to cater for 100-130 people, they must be of the order of 4-6,000 sq. ft., a room size which you can hardly light and ventilate wholly by natural means. It is the attempt to do this which has led people to use 15-ft. ceiling heights with 2-ft. ceiling depths; and these have made laboratories so expensive. If lighting was difficult, ventilation was more so, owing chiefly to the fume cupboards. If these took their air from the room, then it was essential for the general ventilation in the room to be regulated by the opening and shutting

of the cupboards. A further problem was how to replace the warm air taken from the room: this he suggested, could be solved by local heating at the inlets, preferably in the form of circulated hot water.

Both of these points were taken up by later speakers. On the question of ceiling height, Professor Allen asked what was the correct height for a chemical teaching laboratory of from 2,000 to 3,000 sq. ft. Geoffrey Robson replied that 10 ft. was enough, provided that heating and lighting were satisfactorily dealt with. Several speakers spoke in favour of ventilating the fume cupboard independently of the laboratory with its own air inlet, the strongest argument being that students never remember to shut the cupboard when they have finished, so that extract continued at a high rate. Several speakers questioned Anthony Cox's contention that the laboratory with fixed benches had come to stay, but it transpired that these were talking of other disciplines. A University administrator said that flexibility was not wanted in an undergraduate laboratory but was of value for research.

**Laboratory design for school chemistry**

W. H. Lloyd, Head of the Science Department at Brighton College, was the next speaker to introduce his paper. As this, too, is to be published in the JOURNAL in due

course, there is no need to summarize it here. He had, however, three main points. First, the placing of the fume cupboard so that it backed into the preparation room, which thus became the core of the laboratory group. Second, the use of trolleys for demonstration purposes. These are prepared in the preparation room and when required are wheeled into a bay in the demonstration bench. Third, the use of micro methods for chemistry teaching. This is a practice in which Mr. Lloyd himself is a pioneer and one which influences the form of the benches and the shelving.

Mr. Lloyd showed a number of slides of the laboratory which he and his architect Kenneth Black have designed at Brighton; and these and a small exhibition of school laboratory equipment which they have developed, formed the basis of the subsequent discussion. Questioned on the height of the laboratory, Kenneth Black said that this was 9 ft. (less under beams) and was generally considered to be too low. The cost of the shell only was 60s. per ft. super, the total cost 85s. per ft. super. Peter Shephard remarked that most of the joinery at Brighton was smaller than standard joinery and the shelving, in particular, was less deep and the benches narrower, but it was not made clear why this was so. Another point noticed by several speakers was that the material for the benching was softwood and that there was none of the traditional teak to be seen. John Musgrove, commenting on this later in the symposium, said that he had just returned from a tour of laboratories in Germany and Scandinavia where the materials used are the same as at Brighton.

**Planning bench type research laboratories**

The third paper, by Richard Llewelyn Davies (who introduced it at the symposium), John Musgrove and R. G. Hopkinson, is an exceedingly important architectural document, being the outcome of several years of joint research by the architects of the Nuffield Foundation and BRS. Their paper is concerned mainly with three things: the size and shape of laboratory rooms, the lighting of laboratories, and the provision of services.

**Bench lengths:** The first survey was concerned to find out how much bench length was needed per scientist for a variety of different disciplines. Investigations showed that disciplines can be broken down into three requirement groups as follows:

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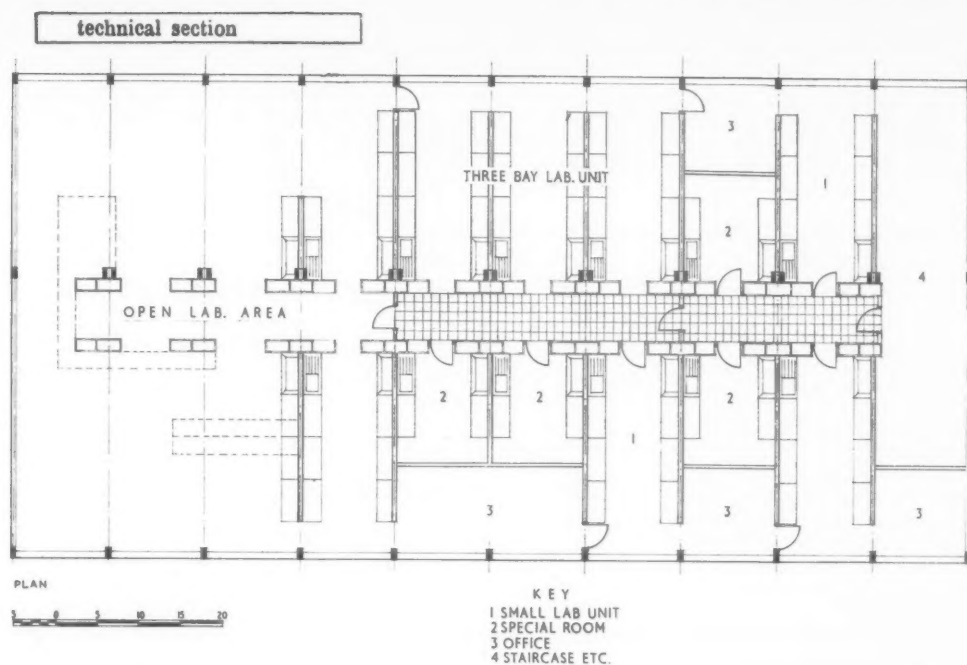
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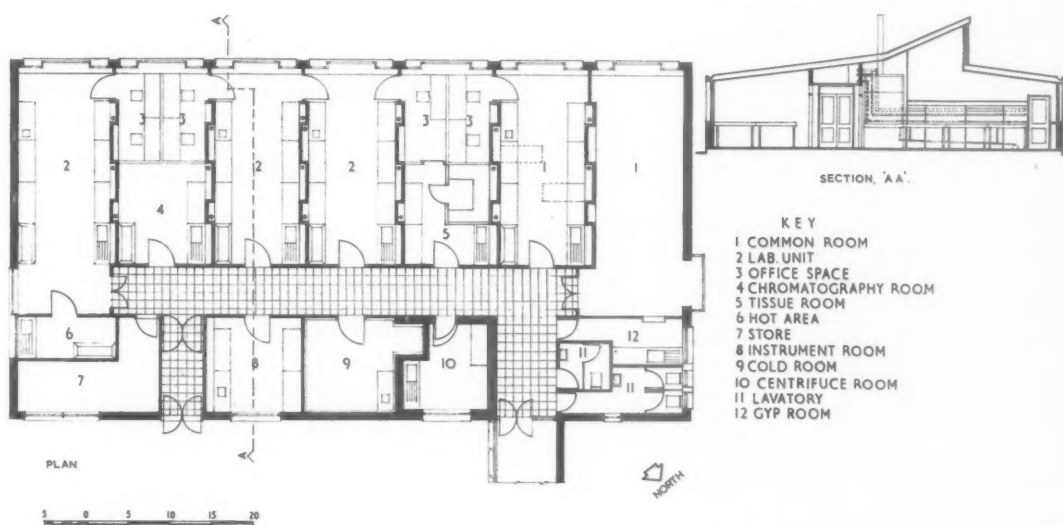
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Above, arrangement of laboratory units for a multi-storey building. (Note: the small enclosures adjoining the central passage space are trunking and vertical service ducts. The right-hand enclosure in each group of three is a cupboard). Below, plan and section of Animal

Research Laboratory, Cambridge. (Note: Gyp room is Cambridge slang for "pantry"). Both designs are by the Division for Architectural Studies of the Nuffield Foundation. Architect, Richard Llewellyn Davies.



**High requirements:** Biochemistry. **Medium requirements:** Chemistry, Physics, Biophysics, Microbiology, Entomology, Animal Physiology, Pathology. **Low requirements:**

Plant Physiology, Botany, Zoology, and that the needs of workers in each discipline could be summarized in tabular form as follows:

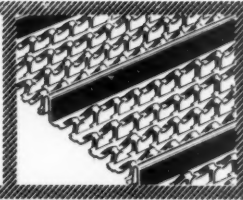
Bench-lengths in feet required for 90 per cent and 95 per cent satisfactions in groups of scientists and assistants (based on time during which bench was actually used)

| Number of scientists | Number of assistants | CLASS            |                  | Medium 90 per cent | Medium 95 per cent | Low 90 per cent | Low 95 per cent |
|----------------------|----------------------|------------------|------------------|--------------------|--------------------|-----------------|-----------------|
|                      |                      | High 90 per cent | High 95 per cent |                    |                    |                 |                 |
| 1                    | 0                    | 13.4             | 15.0             | 11.4               | 12.8               | 8.8             | 9.8             |
|                      | 1                    | 17.6             | 20.3             | 15.3               | 18.0               | 12.8            | 15.5            |
|                      | 2                    | 20.7             | 23.5             | 18.4               | 21.2               | 16.3            | 18.9            |
| 2                    | 0                    | 19.6             | 22.6             | 16.2               | 18.9               | 11.5            | 13.8            |
|                      | 1                    | 22.5             | 25.6             | 19.2               | 21.9               | 15.0            | 17.5            |
|                      | 2                    | 29.3             | 33.0             | 25.1               | 28.7               | 19.5            | 22.9            |
| 3                    | 0                    | 24.4             | 27.2             | 19.9               | 22.8               | 13.8            | 15.9            |

A common group of scientific workers comprises one scientist and one assistant. These, in the medium group, need no less than 20 ft. of bench run. As this is most economically provided in single runs and should run at right angles to the window wall, it calls for an average laboratory room depth of 20-30 ft. Such a depth at once raises the question of lighting.

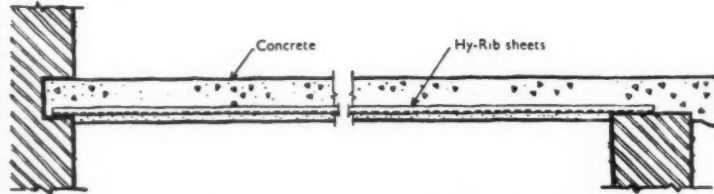
**Illumination levels:** Studies on laboratory lighting began by analysing the actual requirements of laboratory workers, dividing them up by task size ("minute," "small" and "ordinary") and by three degrees of contrast; and by then discovering the percentage of their total working time that workers are engaged on each task category.

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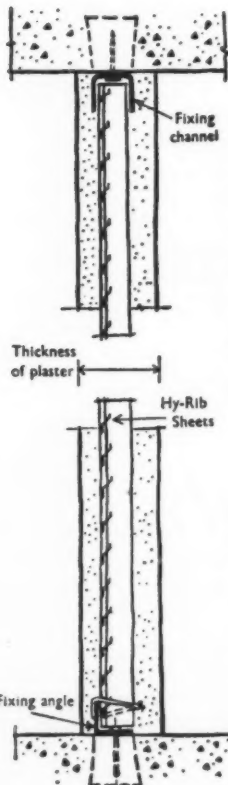
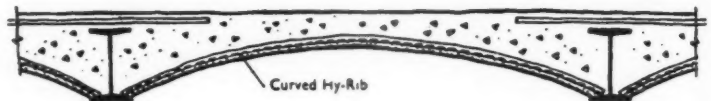


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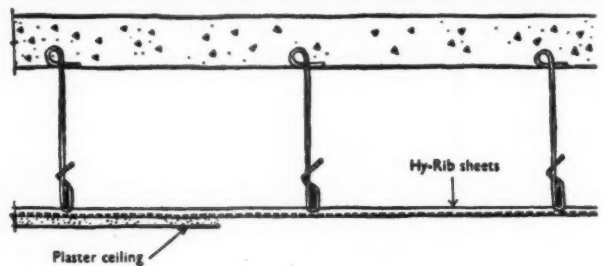
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# technical section

Laboratory lighting differs from school lighting in that tasks are to some extent mobile and that workers can move to better lit parts when they have something intricate to examine. A consideration of this led the team to conclude that with a side lit room a 3 per cent daylight factor is a reasonable criterion. In a top lit room, however, since the daylight level is more even, this should be raised to 6 per cent. The corresponding figure for artificial illumination is 30 lumens per sq. ft. With room depths of 20-30 ft. these levels of daylight illumination can be provided in single-storey buildings by using some form of top lighting towards the back of the room; but they cannot be provided in multi-storey buildings. Hopkinson and Longmore have shown that, on a 35-year amortization, it is cheaper to use supplementary artificial lighting in multi-storey buildings than to attempt to provide the required minimum level by raising the room height. Unfortunately this dual use of the two kinds of light source raises the problem of subjective or apparent brightness (*i.e.*, a quantitatively satisfactory level of artificial illumination will appear dull to the eye if a high level of daylight is to be seen at the same time). Experiments in the blending of lights are still going on, but it seems that a level of artificial illumination of 40-50 lumens at the back of a deep room will be high enough to dispel the effect of gloom.

**Provision of services:** Investigations into cost have shown that, in nine recent laboratories, services account for between 21 per cent and 47 per cent of the total. The last group of studies was, therefore, on the provision of services. Only the results of the electrical survey were given in the paper: a user survey for this type of supply showed that four or five points per worker is likely to be about right. Another investigation on electrical distribution systems showed that, for laboratory rooms built on both sides of a central corridor, the cheapest method is to run a horizontal sub-main in the corridor ceiling. The next cheapest is to run a vertical sub-main on the corridor walls, and this version is favoured for ease of maintenance. The most expensive was the traditional method of running horizontal sub-mains round the exterior walls. In their conclusions the authors make a number of general points. Laboratories should be designed on a services module "which is likely to be 9-ft. to 12-ft centres for most types of scientific work." The use of such a grid should give sufficient flexibility. Since a survey has shown that, though laboratory rooms are often subdivided, they are seldom opened up, there is no case for fully demountable partitions: semi-permanent walls are cheaper and better for sound and fire. Lastly the working scientist needs a minimum office space adjoining his laboratory. Richard Llewelyn Davies, who introduced the paper at the symposium, made some additional points. Two concerned costs: when comparing laboratory costs it is

essential to divide the space into Primary, that is, the highly serviced laboratory space proper, and Secondary, which approximates to normal building. Comparative costs for laboratories showed that the one factor which had a consistent effect on the cost per sq. ft. was room height. Lastly, he discussed the free floor area to be provided per man on the basis of a survey of the subjective response of laboratory workers. It seems that if you give them between 60 and 70 sq. ft. per man (*i.e.*, excluding bench space, fume cupboards, etc.), 30 per cent will think it on the lavish side, 52 per cent will think it about right, and the remaining 18 per cent will think it a bit tight. That is about the best response that you can evoke.

In the discussion which followed, a number of speakers questioned the use of top lights: Peter Shephard said that they cause overheating, and others pointed out that if they are designed to give enough light on a dull day the chances are that they will provide glare conditions on a bright day, and that in an industrial atmosphere it is difficult to keep them cleaned.

John Page, of the University of Liverpool, said that ceiling height is significant for a number of processes, and that ceilings should in any case be not less than 10 ft.

Dr. Hopkinson spoke of the importance of a systematic zoning of the laboratory space according to the visual difficulty of the tasks to be done and on the need to accept some permanent artificial lighting.

John Musgrove reported the total absence of floor ducts in the laboratories he had seen in northern Europe, an absence which he attributed to the difficulty of waterproofing them.

## Equipment and services in bench type lab.

W. H. Pritchard was unfortunately away ill and Stanley Meyrick read his paper, and showed his slides. Inevitably much of what he had to say was a repeat of his articles in the JOURNAL, but he had a number of new points to make.

**Service units:** First he called for the making of "local service units or cabinets which, with the incorporation of a few simple electrical and mechanical components, would produce a range of services from the basic utilities of single phase, mains water, drainage and town gas." In the absence of such a comprehensive product he discussed briefly each service in turn.

**Voltage stabilization:** Warning that some scientists ask for voltage stabilization when it is not really necessary, he said that it was usually only justified when applied locally to a specific piece of equipment, like an x-ray installation. Stabilized supplies for ordinary bench equipment is both expensive and not necessary.

Gas can often be replaced altogether by the use of electric Bunsen burners ("heating mantles") but for glass blowing it is

essential, and, as people are tending to use borosilicate glass, is often wanted in conjunction with oxygen. This will be obtained from cylinders, with a non return valve on the gas supply.

Water may be a problem in that many supply authorities will not let you connect direct to the mains. Since you will need a 60-ft. head of water, this means the provision of a booster pump in the line between the storage or "break tank" and the laboratory.

Nitrogen, in Mr. Pritchard's view, ought to be more used than it is. It presents no difficulties and should be provided at a pressure of 15 p.s.i. The same pressure is adequate for steam when it is wanted.

He then considered the corrosion of laboratory fittings, showing a scarifying slide of a tap after only five years use. He suggested that the answer was to use a plastic coating, remarking that there was one sprayed and stoved plastic based paint on the market which was resistant to a wide range of acid, alkali and solvent fumes.

He repeated his warning on the indiscriminate use of stainless steels; these are made in two kinds: martensitic (which are more accurately called "stainless irons") and austenitic. Of these the latter is usually the better choice, but there are so many alloys that it is prudent to consult the makers before specifying it.

**Fume cupboards:** Mr. Pritchard began by showing an American version with an unobstructed front which he considered from the scientist's point of view to be ideal. It cost \$10,000, a sum which in America is not thought out of the way. On the design of cupboards he kept faithfully to the types and standards described in the JOURNAL, envisaging always that the air would be taken from the laboratory. Fluctuations in air velocity across the face of the cupboard do not matter provided velocity does not fall behind the minimum for the class of work.

**Safety measures:** Two kinds of accident happen in laboratories: the explosion of a piece of apparatus, setting a man on fire, covering him with corrosive liquid or temporarily blinding him; and electric shock. For the first of these he advised a cold water shower, and for both an alarm push with a bell in the porter's lodge.

James Morison, an engineer, opening the discussion, reported that the kind of "service unit" described by Mr. Pritchard was already available for workshop type laboratories but not, as yet, for bench type laboratories. On fume cupboards, he remarked on the difficulty of providing a uniform flow over a large opening and the need to provide different flow rates. John Page, of Liverpool University, reported that his department was about to do some research on fume cupboards, a subject on which our knowledge is very defective. In particular we want to



### technical section

know more about the cost of running fume cupboards, which in his view was of much greater concern than their first cost, and about the flow of gases within the cupboard. He was of the opinion that the phrase "linear flow across the face" was meaningless, as secondary currents are set up within the cupboard and heavy gases tend to spill out on to the floor. This danger is increased when air is taken from another source and has a different temperature from that coming from the room. It is illusory to associate safety with high rates of flow if aerodynamic principles are not applied to design. The extracts for heavy gases may have to be downwards as there is difficulty in raising them. The same speaker pointed out the need to consider fume extracts as a whole: to insulate them against condensation (to which they are particularly prone) and to see that they discharge where they can do no harm. He also drew attention (as did other speakers) to the current lack of discipline in laboratories, to the habit of "fuming up" on benches instead of in cupboards, and to the difficulty of designing a ventilation system which will cope with this. An architect speaker (Mr. Simms) spoke of the difficulty of gathering taps over a small sink owing to a lack of compactness in their design, also of the failure of many models to give a sufficient jet. The corrosion of bronze taps could be prevented by frequent wiping with an oily rag, but this was not easy to ensure. The speaker suspected that Mr. Pritchard's plastic coating for taps was an epoxy resin stoved finish which he had tried but which chipped off. He had found that it was difficult to get a thick film of paint to stay put on exposed pipework: chlorinated rubber paint had proved bad in this respect but epoxy resin better. He also accused manufacturers of not having kept up with research and particularly deplored their continued use of chromium plate, which is useless in the laboratory. It was a great pity that Mr. Pritchard was not present to answer the many questions raised.

#### Adaptability in planning laboratories

E. D. Jefferiss Mathews began his paper by insisting that when we speak of flexibility we really mean "adaptability." In discussing this subject his main point throughout was the cardinal importance of making a thorough assessment at the beginning of a design of the actual need for adaptability and of never neglecting to find out the full economic implications of any design decision. At the end of his paper he gave a personal check list giving the sequence in which the factors should be considered. As this in effect summarizes the early part of his paper, we give it here:

- (a) establishment of purpose.
- (b) establishment of nature of use.
- (c) bench and equipment requirements.
- (d) establishment of probable changes and developments.
- (e) importance of disturbance during use.

- (f) local service requirements and design resulting from (e), (d) and (c).
- (g) consequent main service requirements, and design.
- (h) space heating, lighting and ventilation related to (f).
- (i) standard of finish and internal appearance.
- (j) structural form emanating from all above items.
- (k) capital cost check.
- (l) maintenance and alteration cost check.
- (m) economic assessment.
- (n) review of (e) to (j) inclusive to arrive at correct balance of (m) to (k) and (l).
- (o) development of internal design and design of services.
- (p) development of structural design.
- (q) control and aesthetic development of architectural composition resulting from (o) and (p).

Discussing the costs of adaptability, he reported that comparative comprehensive cost studies made on his own buildings had shown that the providing of a high degree of adaptability could vary the cost of the services by 50 per cent and add between 12 per cent and 15 per cent to the capital cost of the building."

He then discussed the principles of adaptability, illustrating them by four typical cross-sections and these basic varieties were illustrated by slides of his own buildings. Lastly, he considered in turn the components which are affected by adaptability: services, benching, fume cupboards, partitions, the ceiling, artificial lighting, and heating and ventilation. On benches he suggested that "the more fixed pattern of laboratory bench with integral under bench cupboards is on the way out," and is giving way to simple tables with trolley-type drawer and cupboard units which can be placed underneath at will. On partitions, he echoed Richard Llewelyn Davies' contention that enough sound insulation is not to be got from the simple demountable type of partition. On services in general, he advocated the use of carefully planned, unenclosed pipe runs, for visual effect, for cheapness, and for an insurance against concealed corrosion.

The discussion of this paper was long but failed to elicit many points of interest. Heating was debated (though this was formally excluded from the scope of the symposium) and Mr. Jefferiss Mathews pointed out that if coils are placed in the ceiling they tend to foul other services: in his view high velocity air heating was the most likely choice.

#### Planning workshop and larger scale laboratories

##### Equipment and services in workshop-type laboratories

The last two papers, by H. A. Snow and K. J. Jarvis, the one an architect and the other an engineer in the Ministry of Works, were complementary to one another, being

concerned mainly with the illustration of actual jobs on which both had been engaged. In fact their subject did not lend itself very readily to treatment in a symposium of this kind, owing to the extreme diversity of the equipment which a workshop laboratory may be called upon to house. The tendency for each laboratory to be a law unto itself was emphasized by both speakers' choice of such unique subjects for illustration as the ship tank at Feltham and the reactor at Dounreay. Interesting as these are, they shed little light on the more common problems which the designers of workshop-type laboratories have to solve.

We have, therefore, not summarized these papers, but mention only a few of the points which arose in the discussion. Stanley Meyrick, who led the discussion on Mr. Snow's paper, asked if we could not have a breakdown of the commonest types of workshop laboratory and of the differing service and functional provisions, so that we can apply realistic cost comparison to this class of job; and suggested that MOW was the authority in the best position to supply this. Mr. Snow in his paper called for the development of a good steel frame for industrial purposes. Cleeve Barr, speaking on this, pointed out that some satisfactory steel frames had been developed for the schools programme; that in order to undertake development of this kind you must have a sizeable, continuing programme of building; and that MOW has the largest programme of this kind. Why, he asked, could they not do some development work themselves?

In discussing the ship tank at Feltham, Mr. Snow remarked that Treasury restrictions forced the reduction of the length of the ship tank by 500 ft.; but that once this had been decided, the scientists concerned improved their instrumentation to make do with the reduced length. This prompted Michael Cooke-Yarborough to ask whether scientists could not make a better use of their own means to reduce building costs? Whether, in this particular case, they could not have started by examining the limits of their instrumentation before they asked for a ship tank of given length? And he instanced the savings which followed the adoption of micro methods in the bench-type laboratory.

Geoffrey Robson suggested that we are too ready to use elaborate overhead traversing gantries in laboratories when the equipment has to be moved so infrequently that it could be done more cheaply by using a hook in the ceiling with a block and tackle. Professor A. S. D. Thompson, leading the discussion on Mr. Jarvis' paper, raised a number of points of detail, among them the uselessness of viscous filters in heavily polluted atmospheres.

The symposium closed with a short general discussion and votes of thanks to Thomas Mitchell, the Chairman of the Science Committee, to the RIBA staff who had organized the symposium, and to Peter Shephard.



working detail

WALLS AND PARTITIONS: 76

ATTENDANT'S CUBICLE: STATION IN LONDON, E.C.2

Roger Walters, architect



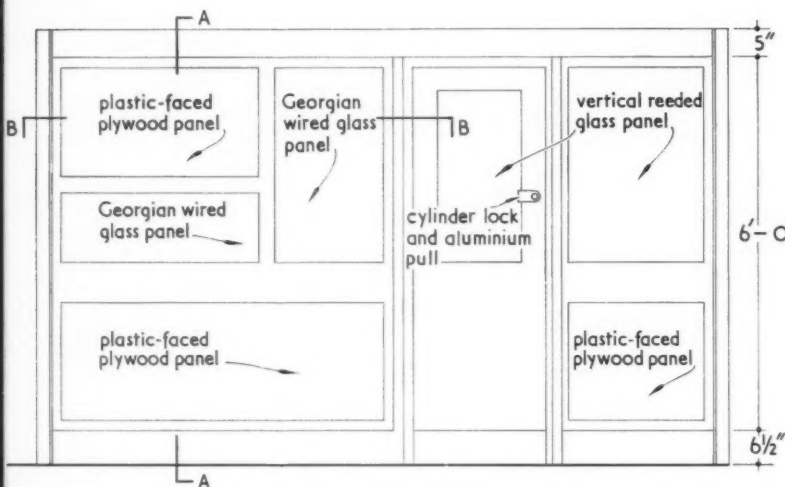
*This detail of a nursing and attendant's cubicle is a good example of the neatness which comes from using prefabrication techniques for joinery. Note the use of aluminium for the skirting and, though it cannot be seen in the photograph, of an aluminium angle to effect a junction at the corner. The hardwood used was African mahogany and the veneer to the doors is the same.*

working detail

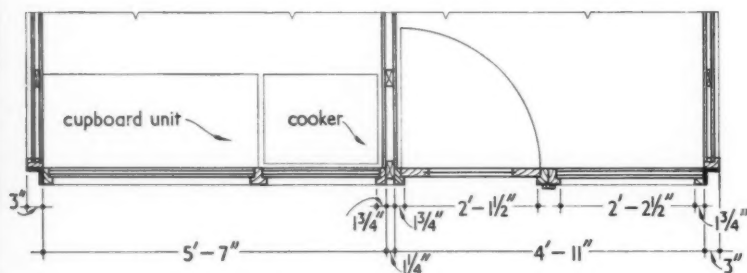
WALLS AND PARTITIONS: 76

ATTENDANT'S CUBICLE: STATION IN LONDON, E.C.2

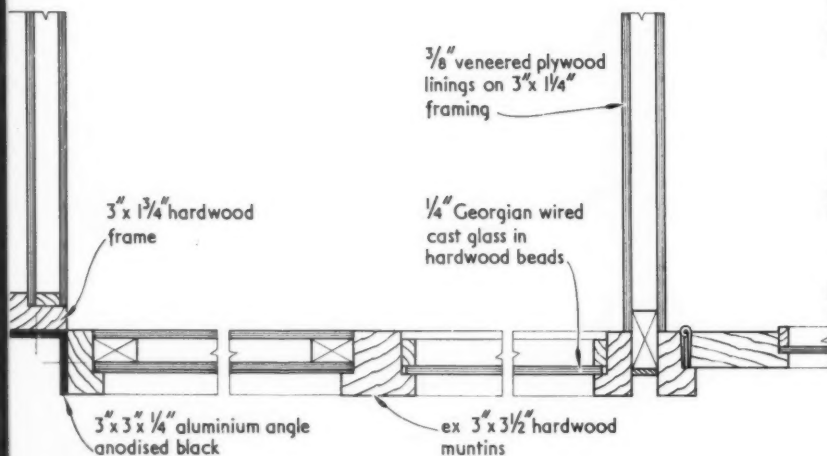
Roger Walters, architect



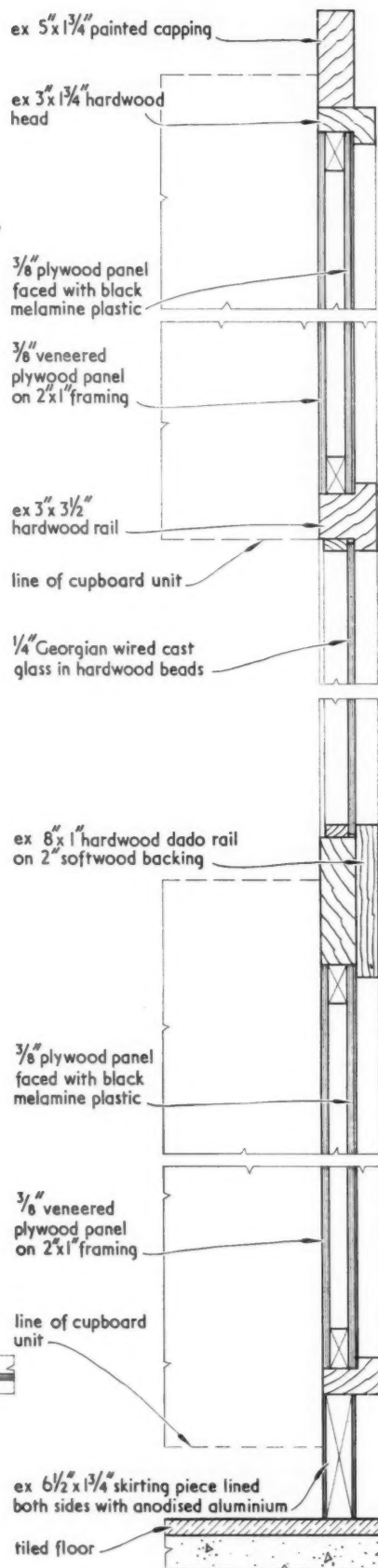
ELEVATION. scale  $\frac{3}{8}'' = 1' - 0''$



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



PLAN AT B - B. scale  $\frac{1}{8}$  full size



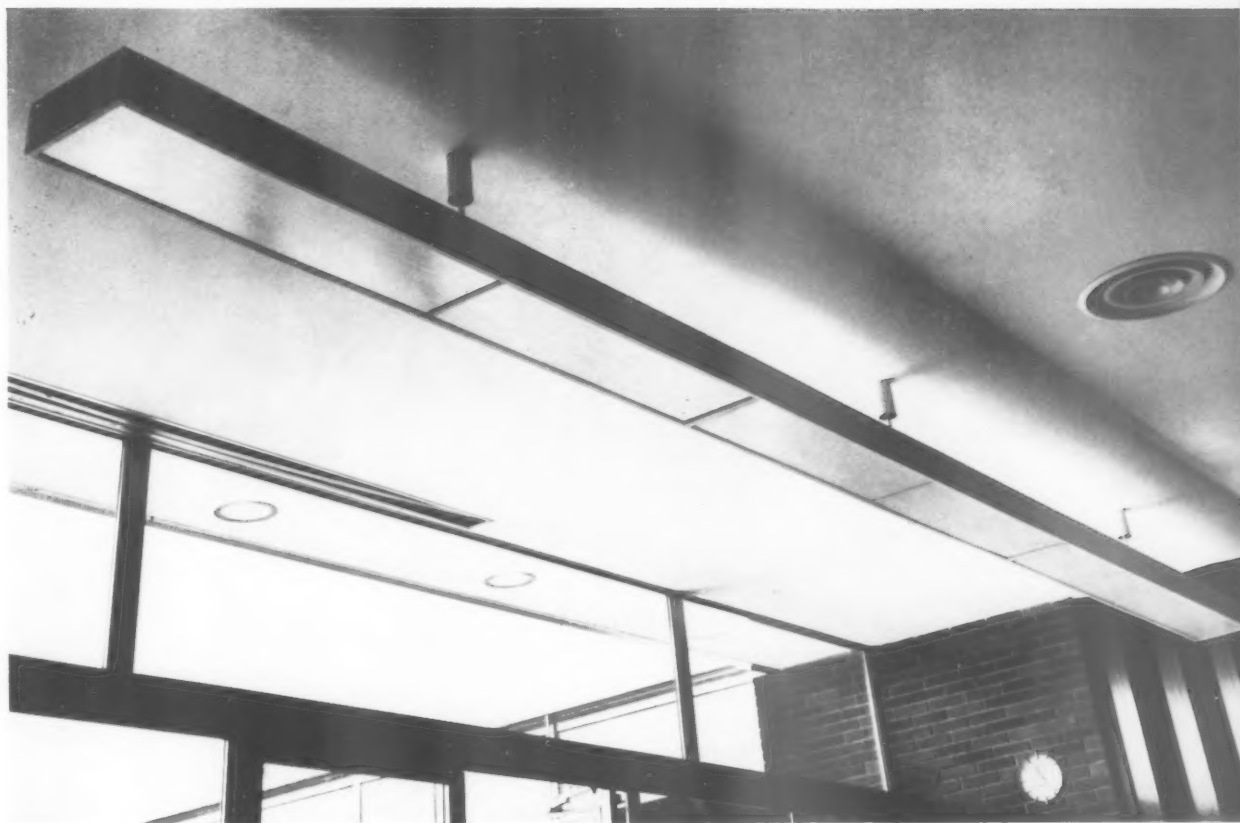
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working detail

LIGHTING: 16

LIGHTING FITTING: OFFICES IN GENEVA

George Addor, architect (material supplied by Dariush Borbor)

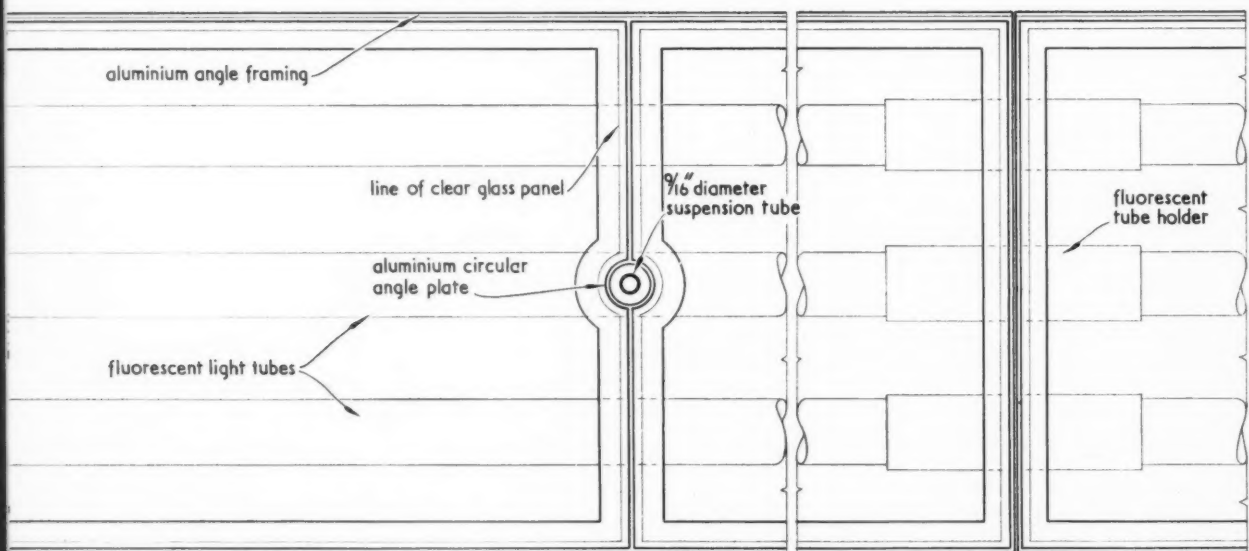
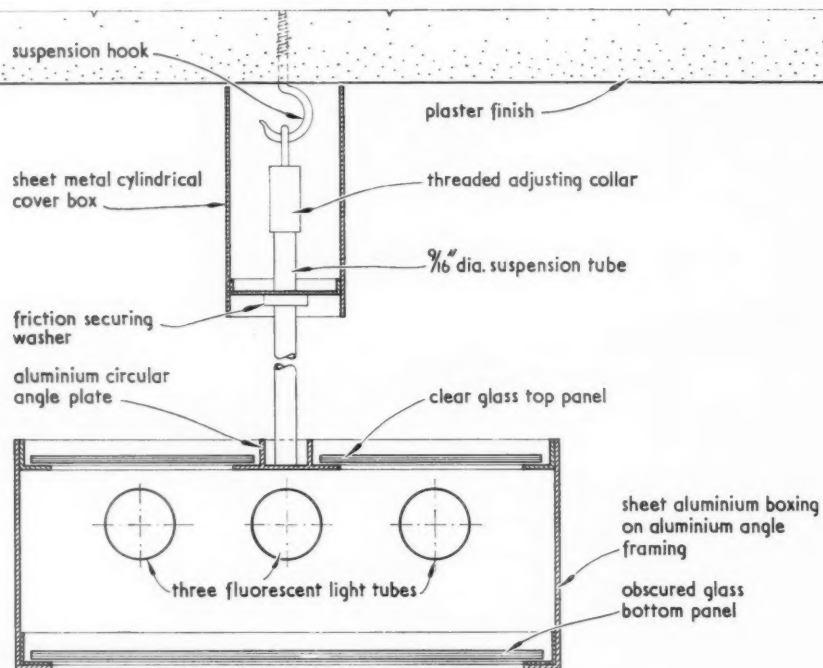
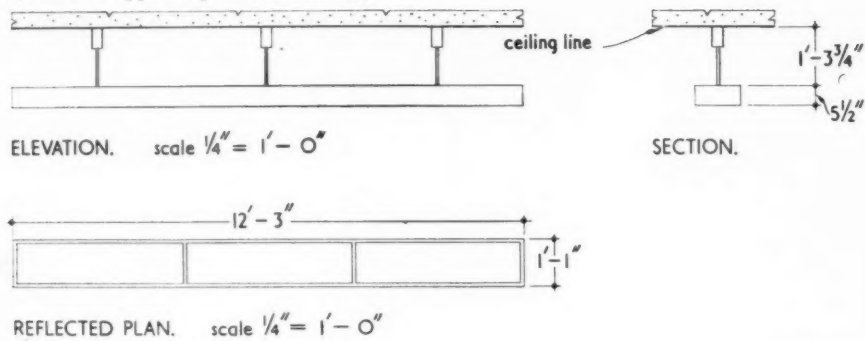


*Though not of great originality, this is a good example of one way in which fluorescent lights can be organised into a form which "reads" intelligibly. (It is to be noted that the drawing overleaf relates to a three-bay version, whereas that shown in the photograph has six bays.)*

## working detail

## LIGHTING FITTING: OFFICES IN GENEVA

George Addor, architect (material supplied by Dariush Borbor)



note: figured dimensions in feet and inches are approximate





T

Architect:

# THE BROOKWOOD MEMORIAL



*Architect: R. Hobday, A.R.I.B.A., Senior Architect to the Imperial War Graves Commission.*

## Broughton Moor Light Sea Green Slate

was chosen for its lasting beauty to preserve the names of 3,500 men and women of the Commonwealth who died on active service during the second world war, and who have no known graves. Their names are carved in the twenty-eight panels of Broughton Moor Light Sea Green slate set in the circular columns of the Brookwood Memorial, recently unveiled by the Queen. Chiselled deep into the glassy surface of the highly polished slate, the names are clear and legible. This beautiful green slate from the Lake District, rugged and hard, will defy the tooth of time to preserve the names for centuries to come.



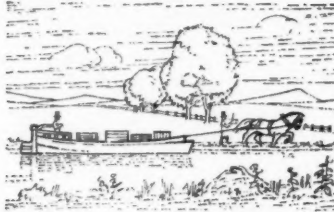
*A section of Broughton Moor Slate, showing the highly polished finish. Finely rubbed, naturally riven, sanded and frame sawn finishes are also supplied, and technical pamphlets showing typical methods of fixing are available, as follows: 1. Flooring. 2. Facings. 3. Coping. 4. Cills. 5. Riven Face Slabs.*

## The BROUGHTON MOOR Green Slate Quarries Ltd.

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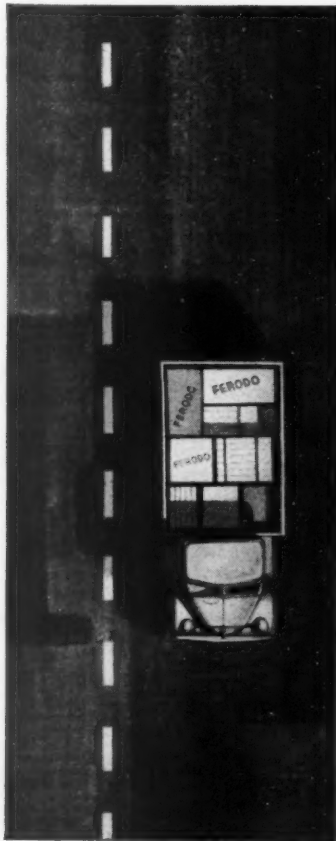
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## technical section

## THE INDUSTRY

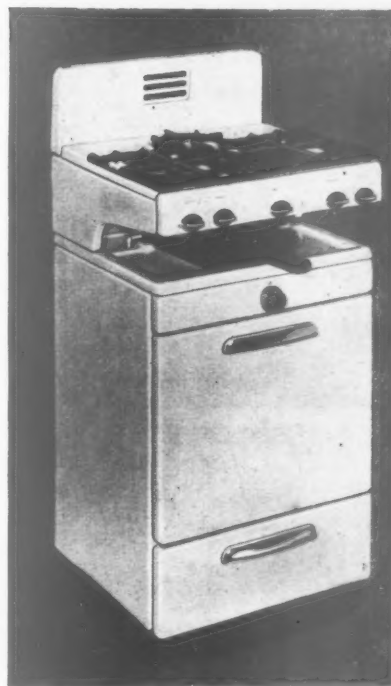
*Brian Grant describes a new way of making glass, a gas cooker and an electric cooker control unit, fixing name plates, a cabinet for filing drawings, and an electric convector heater.*

**A new manufacturing method for glass**  
Pilkington Bros., have recently announced Float Glass, which is produced by a patented process in which the glass emerges with a flat fire polished finish which eliminates the necessity for the grinding required by plate glass. The ordinary drawn sheet glass always suffers from a certain amount of distortion as it is drawn vertically from a pool of molten glass and its weight and viscosity cause ripples to form before it cools enough to become solid. The current method of producing plate glass is to roll out a flat ribbon which requires a great deal of polishing on both sides before it is free from distortion. Float glass is produced by running a ribbon of molten glass over a bath of molten metal so that it is fire polished on both sides and needs no further treatment other than annealing and cutting

to size. No information is given about the composition of the bath of molten metal, and it is obvious that the furnace atmosphere must be controlled to prevent the molten metal from oxidizing and spoiling the finish on the lower face of the glass. The result is a glass which has all the virtues of plate, but which is cheaper to produce, although for the moment supplies are limited and for the time being the price is the same as for plate. Since both the capital cost and the area required for the new process is very much less than for the usual polished plate it can be assumed that in due course the price will come down. At the present time it is being supplied mainly to the car industry, but production is being increased and it should soon be available for building. (*Pilkington Bros. Ltd., St. Helens, Lancs.*)

**New small gas cooker**

The illustration on the right shows the new Flavel Courier gas cooker, which is to be shown at the Ideal Home, and which is intended for use where space is limited. The hotplate has three burners and a grill, and the oven has a bottom hinged drop down door. Width is only 19 in. with an overall height of 41 in. Price is £25 15s. in white or cream, with a choice of colour for the taps, and the plate rack is 35s. extra. (*Flavel & Co., Ltd., Eagle Foundry, Leamington Spa.*)



*The Flavel Courier gas cooker.*

**Fixing name plates**

Evode have recently introduced a name plate fixing tape known as Twinstik. It



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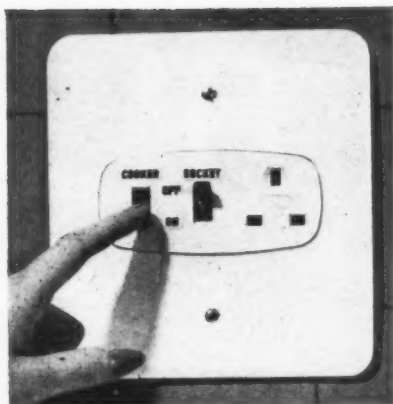


Set of 128E doors installed at S. Smith & Son (Eng.) Ltd., Witney  
Architects: T.P. Bennett & Son

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## technical section



consists of a double sided adhesive tape which is applied to the back of the name plate, and is protected by paper. When the paper is stripped off the name plate is applied merely with pressure, and the adhesive provides a permanent bond to metal, wood, plastic, plaster, brick or cement, as well as to cellulosed surfaces. (Evode Ltd., Stafford.)

**Cooker control units**

The illustration on the left shows the new Siemens Cambridge cooker control unit, which is made in flush or surface mounting units with 15 or 13 amp outlets, with or without pilot lights. Housings are in zinc coated steel finished in cream enamel and the front plates of the flush units are adjustable so that they can be accurately mounted. There is a cartridge fuse in the 15 amp unit, and the usual fuse in the 13 amp plug. Prices, inclusive of plugs, are 28s. and 31s. 8d. for the units with 13 and 15 amp plugs, and pilot lights are 10s. extra. (Siemens Edison Swan Ltd., 155, Charing Cross Road, London, W.C.2.)

**Filing drawings**

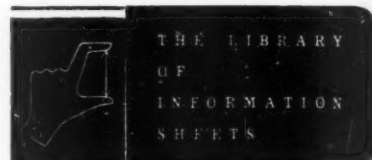
This is presumably a perennial problem for all architects, who may well be interested in the File-a-Plan cabinet, in which all drawings are held by a punched holder which is

*Above left, the Siemens Cambridge cooker control unit; left, the File-a-Plan cabinet.*

stuck to the top of the drawing and then hung on bars inside a cabinet. Price is 52½ guineas, and the cabinet will hold about 600 drawings. (Renown Metal Works Ltd, Sullivan Rd., London S.W.6.)

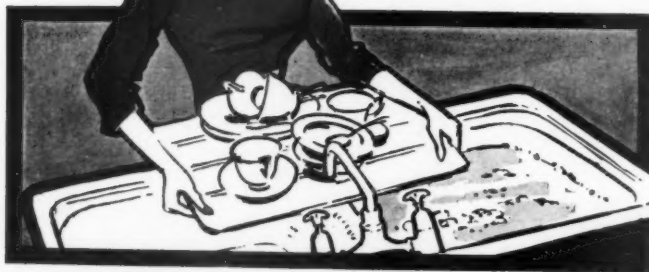
**Electric heating**

Ekco have just announced a new range of WM series wall mounting steel cased convectors to replace the previous MRL types. Two basic sizes are offered, each having a projection of only 5½ in. from the wall face with a height of 22½ in. Loadings are 1 or 2½ kW., with or without thermostats, and the smaller model is produced with loadings of 750 or 1,250 watts, or 1½ kW. for the larger model as alternatives. Closely spaced wire guards are concealed behind the inlet and outlet grilles, and the casings are quickly detachable for wiring. Prices, including purchase tax, vary from £10 12s. 0d. to £13 18s. 0d. (E. K. Cole Ltd., Southend-on-Sea, Essex.)

**26.M4. REFERENCE BACK**

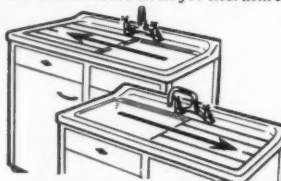
*Readers are asked to note that on the reverse of the Sheet, heading "Properties," sub-heading "Tensile strength," the figure given for "black" should be amended to "210."*

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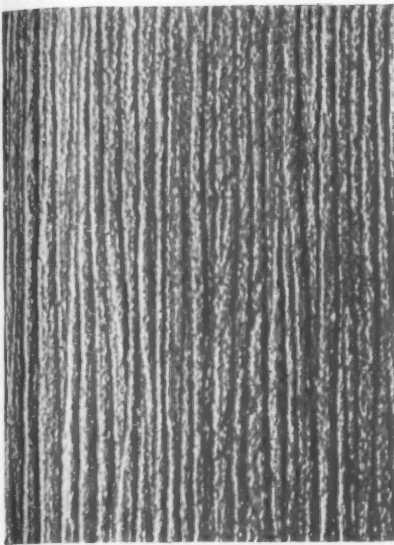
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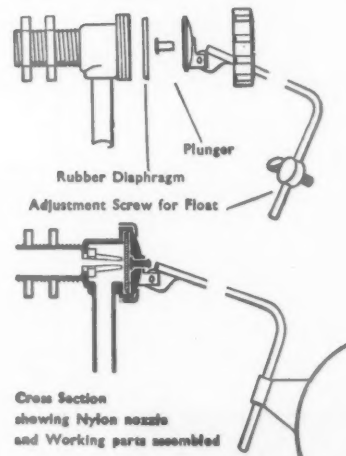
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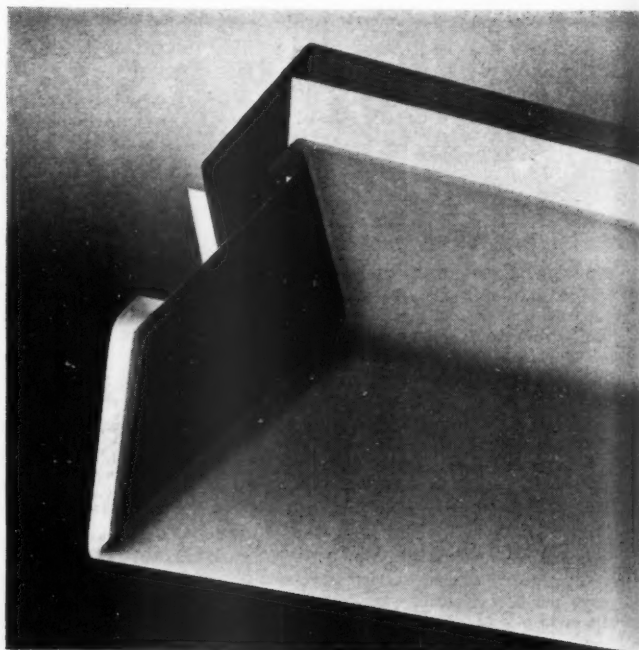
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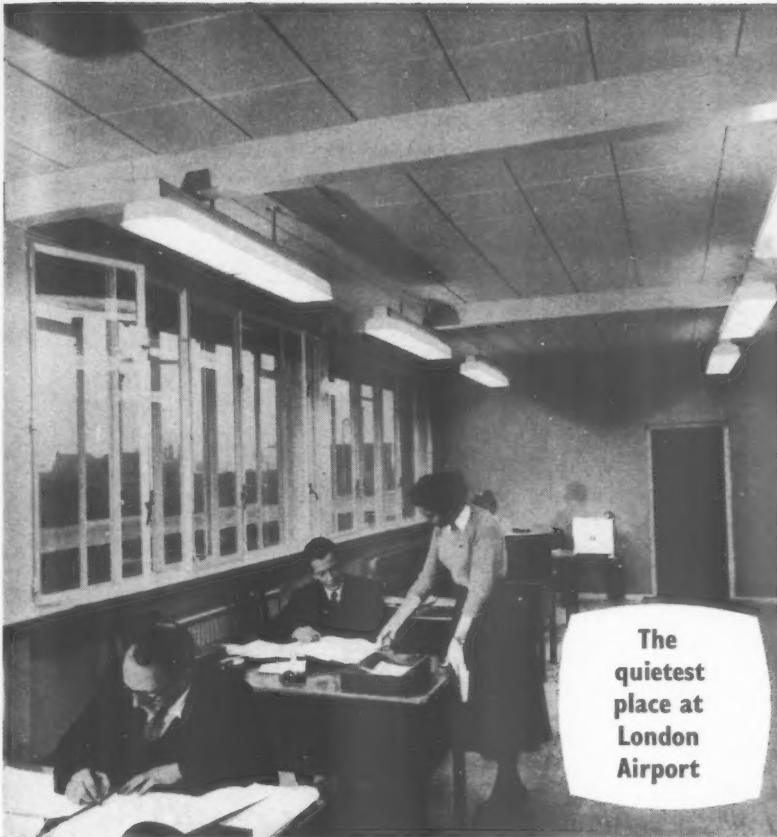
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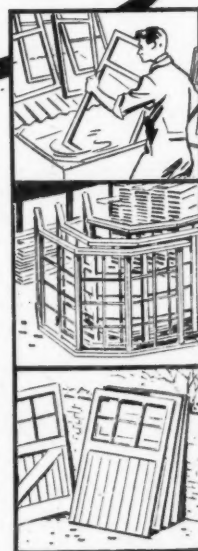
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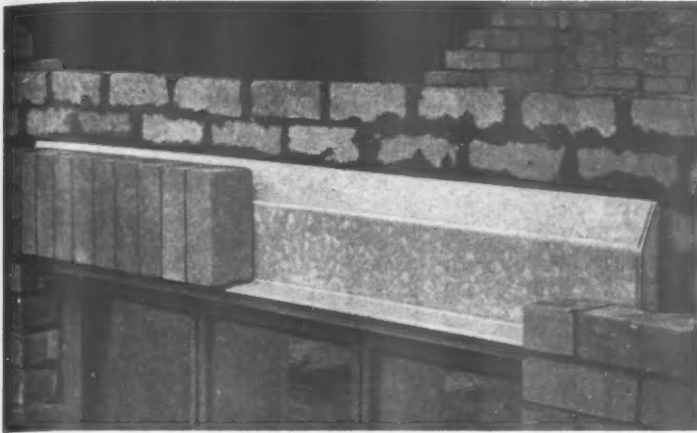
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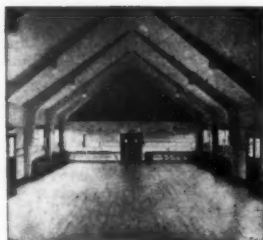
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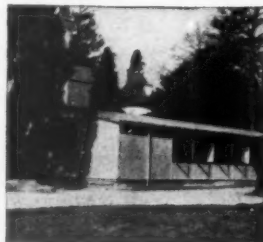
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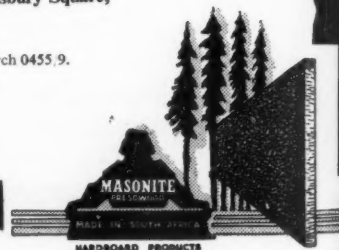
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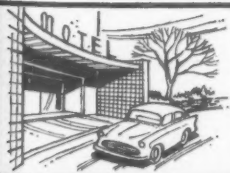
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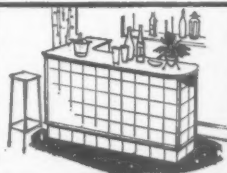
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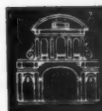
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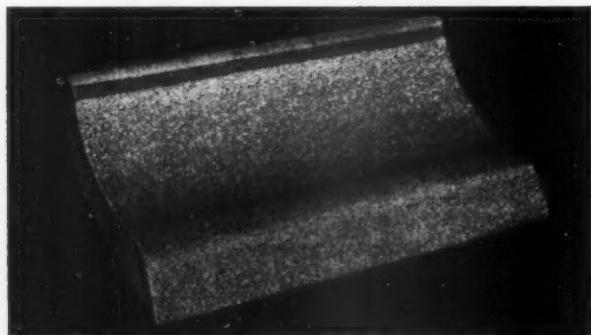
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L.R.I.B.A.



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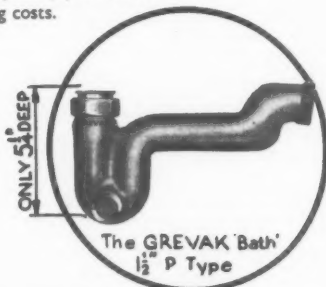
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## CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the *Advt. Manager, "The Architects' Journal,"* 5, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

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

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

## Public and Official Announcements

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## ARCHITECTURAL ASSISTANTS

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## MINISTRY OF WORKS

For employment in London and Provinces on design and drafting work on construction and maintenance of all types of public buildings.

Salary range £550 (age 21) to £870 p.a. London (slightly less elsewhere).

Five-day week. 35 weeks annual leave initially.

Starting pay according to age, qualifications and experience. Good prospects of promotion with salaries of £915 p.a. and above.

Opportunities for permanent posts leading to pensions (non contributory).

Interviews at Regional Offices where possible. Applicants should be of Intermediate R.I.B.A. standard. State age, training and experience to Chief Architect, Ministry of Works, Room 435, Abell House, John Islip Street, S.W.1. 2444

## LONDON COUNTY COUNCIL

## ARCHITECT'S DEPARTMENT

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). 3046

## LONDON COUNTY COUNCIL

## ARCHITECT'S DEPARTMENT

Vacancies for PLANNING ASSISTANTS. Duties include investigation of development proposals, surveys, report writing, preparation of data for Public Inquiries. Starting salaries up to £860 according to experience and qualifications. Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (Ref. AR/EK/11/59), County Hall, S.E.1. (186). 2917

## BOROUGH OF GILLINGHAM

## APPOINTMENT OF ARCHITECTURAL STAFF

## BOROUGH ENGINEER'S DEPARTMENT

Applications are invited for the under-mentioned appointments:—

TWO SENIOR ASSISTANT ARCHITECTS, Special Scale (£750—£1,030).

Commencing salaries of persons appointed according to qualifications and experience. Applicants to be A.R.I.B.A. and should have experience of housing and school work.

The posts are superannuable and the National Conditions of Service will apply.

Application forms may be obtained from the Borough Engineer, Municipal Buildings, Gillingham, Kent. The latest date for the receipt of completed applications is Monday, the 16th March, 1959.

FRANK HILL,

Town Clerk.

Municipal Buildings,

Gillingham,

Kent.

24th February, 1959. 3171

## DEPARTMENT OF ARCHITECTURE,

## SURVEYING AND BUILDING

The School of Architecture offers a five-year full-time course leading to the Final Examination of the Royal Institute of British Architects. Students successfully completing the first three years of the course obtain exemption from the Intermediate examination of the aforementioned Institute.

The portfolio of work completed during the final two years of the course is accepted by the Royal Institute of British Architects in lieu of the Testimonies of Study.

The College has established a list of approved students' lodgings in the County Borough of Southend-on-Sea. The arrangements for the placing of students in these lodgings are made by the Welfare Officer Supervisor of Student Lodgings.

Further details and forms of application for admission to the five-year full-time course may be obtained from J. M. Scott, B.Arch., F.R.I.B.A., Head of Department of Architecture, Surveying and Building, Municipal College, Victoria Circus, Southend-on-Sea.

D. B. BARTLETT, M.A.,

Chief Education Officer.

4th February, 1959. 3190

## CITY OF LEICESTER

## CITY ARCHITECT'S DEPARTMENT

QUALIFIED ARCHITECTS with enthusiasm for Education work are required for the following posts:—

(a) CHIEF ASSISTANT ARCHITECT, Grade "A", £1,190/£1,350, the commencing salary according to experience.

(b) ASSISTANT ARCHITECT, Grade A.P.T. IV, £1,025/£1,175.

(c) ASSISTANT ARCHITECTS, Special Grade, £750/£1,030.

Previous Local Government experience not essential.

Appointments will be subject to the National Scheme of Conditions of Service, passing a medical examination and one month's notice on either side.

Applications, stating post applied for, together with names of two referees, should reach the undersigned not later than Thursday, 12th March, 1959.

J. H. LLOYD OWEN,

City Architect.

10, Loseby Lane,

Leicester.

3163

## BOROUGH OF STRATFORD-UPON-AVON

## APPOINTMENT OF SENIOR ASSISTANT

## ARCHITECT

Applications are invited for the above appointment at a salary in accordance with A.P.T. Grade IV (£1,025—£1,175). Candidates must be Registered Architects, preferably with previous Local Government experience.

The appointment will be subject to the National Scheme of Conditions of Service of Local Government Officers, to the provisions of the Local Government Superannuation Acts, and to the successful candidate passing satisfactorily a medical examination. The appointment will be terminable by one month's notice on either side. The Council will, if necessary, be prepared to consider the provision of housing accommodation. Forms of application may be obtained from the undersigned to whom completed forms should be returned not later than Thursday, 12th March, 1959.

P. C. SMART, M.I.C.E.,

Borough Engineer & Surveyor.

Borough Engineer's Department,

Municipal Offices,

Stratford-upon-Avon.

18th February, 1959. 3168

## BOROUGH OF EALING

## ARCHITECTURAL ASSISTANT

required, salary within scale £780—£1,060 inclusive. Must hold recognised Architectural qualifications.

Full particulars and application form from Borough Engineer, Town Hall, Ealing, W.5. Closing date 16th March, 1959.

E. J. COPE-BROWN,

Town Clerk.

Town Hall,

Ealing, W.5.

3153

## CITY OF CARDIFF

## CITY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointment:—

ASSISTANT ARCHITECT, Special Grade, £750—£1,030 per annum.

Candidates should possess the minimum qualifications and experience prescribed by the National Joint Council for Local Authorities' A.P.T. and C. Services for posts in the above-mentioned grade.

General Conditions of Appointment may be obtained from the undersigned.

Applications accompanied by the names and addresses of two referees and endorsed "Assistant Architect—Special Grade," must be delivered to me not later than the 16th March, 1959.

S. TAPPER-JONES,

Town Clerk.

City Hall,

Cardiff.

February, 1959. 3173

## BOROUGH OF KING'S LYNN

## HOUSING ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of QUANTITY SURVEYOR, Salary Grade II A.P.T. (£725 rising to £845). The appointment is superannuable and subject to the National Scheme of Conditions of Service, and to Medical Examination. Form of Application and further particulars from G. Holmes, A.R.I.B.A., Housing Architect, Clifton House, Queen Street, King's Lynn, to whom applications should be submitted not later than Friday, 20th March, 1959.

E. W. GOCHER,

Town Clerk.

Town Hall,

King's Lynn,

Norfolk.

3278

## THE NATIONAL COAL BOARD

## SOUTH WESTERN DIVISION

Invite applications for the post of QUANTITY SURVEYOR, Grade 2, in their Architect's Branch, Divisional Production Department, Cambrian Buildings, Mount Stuart Square, Cardiff.

Applicants should hold the qualifications of A.R.I.C.S. (Quantities Division), and have had not less than one year's subsequent practical experience.

Salary Scale: £815 to £30—£1,125 per annum. Please quote Staff Vacancy No. 14/39.

Full particulars of age, qualifications, experience and positions held, together with details of present post and salary, should be sent to the Divisional Chief Staff Officer, National Coal Board, Cambrian Buildings, Mount Stuart Square, Cardiff, by 20th March, 1959. 3250

## BOURNEMOUTH EDUCATION COMMITTEE

## BOURNEMOUTH MUNICIPAL COLLEGE OF

## TECHNOLOGY AND COMMERCE

## DEPARTMENT OF BUILDING

Required for September, 1959: LECTURER for Building Construction and/or Building Science subjects in the Higher and Ordinary National Certificate and professional courses.

Applicants should have a university degree or a qualification such as A.R.I.B.A. or A.M.I.C.E., and wide professional experience. Teaching experience is desirable.

Salary according to the Barnham Technical Scale, 1956, viz: £1,260 to £3,180—£4,147 10s.

Further particulars and application forms obtainable from W. R. Smedley, Chief Education Officer, Town Hall, Bournemouth. 3246

## LANARK COUNTY COUNCIL

ARCHITECTURAL ASSISTANTS required for County Architect's Department, Motherwell. Must be A.R.I.B.A. with office experience. Salary scale A. & P. Grades VI (£880/£955), VII (£945/£1,020) and VIII (£1,005/£1,080). Placing on grades according to qualifications and experience.

In addition to large School Building Programme, work in Department embraces every aspect of building with exception of Housing. Appointments therefore provide excellent opportunity for extending experience on an interesting and varied programme.

Medical examination. Superannuation. No canvassing.

Applications, stating age, qualifications and experience, together with names of three referees, should be lodged with County Clerk, P.O. Box No. 1, Glasgow, within 14 days of date of advertisement. 3260

## CITY OF WAKEFIELD

## CITY ENGINEER'S DEPARTMENT

Applications are invited for the following superannuable appointments:—

(a) SENIOR ASSISTANT ARCHITECTS (Post Nos. 6, 7 & 9), Grade A.P.T. IV (£1,025 to £1,175).

Applicants must be A.R.I.B.A. and preference will be given to those having municipal experience.

(b) SENIOR ASSISTANT ENGINEERS (Post Nos. 17 & 18), Grade A.P.T. IV (£1,025 to £1,175).

Applicants must hold the Testamur of the Inst. Mun. E. and/or A.M.I.C.E. and must be experienced in the various branches of Municipal Engineering.

(c) ENGINEERING ASSISTANT (Post No. 22), Grade A.P.T. I (£575 to £30—£725).

Applicants must have completed a recognised period of training in a Municipal Engineer's Office.

(d) ASSISTANT HEATING ENGINEER (Post No. 24), Special Grade (£750 to £40—£1,030).

Applicants should have had experience in the design and supervision of the various Heating installations for schools and other public buildings and preference will be given to those holding the Higher National Certificate.

(e) SENIOR TOWN PLANNING ASSISTANT (Post No. 29a), Special Grade (£750 to £40—£1,030).

Applicants must be A.M.T.P.I. or hold an equivalent qualification and must be experienced in Development Plan procedure and Redevelopment schemes.

Housing accommodation will be provided in respect of appointments (a), (b), (d), and (e).

Applications, stating age, training, qualifications and experience, together with the names of two referees, should be sent to the City Engineer, Town Hall, Wakefield, by Monday, the 16th March, 1959. 3269

## CITY OF CANTERBURY

Applications are invited from persons who have passed the Final Examination of the R.I.B.A. for the temporary appointment of ASSISTANT ARCHITECT, Special Scale (£750—£1,030).

The successful candidate will be engaged on the design and construction of housing projects and the appointment offers considerable scope for initiative and experience in this field.

The commencing salary will be fixed within the scale, according to ability and experience.

The Council are prepared to assist the successful candidate to obtain housing accommodation, if necessary.

Applications, together with the names of two referees, must reach the City Architect & Planning Officer, Mr. J. L. Beribiers, F.R.I.B.A., A.M.T.P.I., not later than Saturday, 21st March, 1959.

Canvassing will disqualify.

J. BOYLE,

Town Clerk.

Municipal Buildings,

Canterbury.

3275

## GLOUCESTERSHIRE COUNTY COUNCIL

## ARCHITECTURAL ASSISTANT (QUALIFYING

CLASS)

A.P.T. Grade I (£575—£725), A.P.T. Grade II (£725—£845) and Special Grade (£750—£1,030). Applicants for Grades I and II must have passed Intermediate Examination R.I.B.A. and for Special Grade the Final Examination. N.J.C. Service Conditions, superannuation, medical examination.

Apply, giving age, present position, salary and date of appointment, details of previous appointments and names and addresses of two persons for reference, to County Architect, Shire Hall, Gloucester, by 14th March.

GUY H. DAVIS,

Clerk of the Council.



CITY OF SHEFFIELD EDUCATION  
COMMITTEE

Applications are invited for the following appointment in the Department of Building:—  
**LECTURER IN STRUCTURAL ENGINEERING** to teach Theory and Design of Structures in sandwich courses and Higher National Certificate courses. Industrial experience and membership of an appropriate professional body are desirable.

Salary scale for the post is £1,200 × £30—£1,350 (plus 5 per cent.) per annum.

Forms of application, obtainable from the undersigned (s.a.e.) at P.O. Box 67, Sheffield, 1, should be returned within 14 days of the appearance of this advertisement.

T. H. TUNN,

Director of Education. 3274

## COUNTY BOROUGH OF GATESHEAD

Applications invited for posts in the Borough Surveyor's Department to work under the Chief Architect upon an interesting programme of educational, housing and multi-storey flats and public buildings as follows:—

(a) ASSISTANT ARCHITECTS, Special Scale (£750—£1,030).

(b) JUNIOR ARCHITECTURAL ASSISTANTS, A.P.T. I (£575—£725).

Applicants must be for posts (a) Registered Architects and preferably members of R.I.B.A. Posts (b) of Intermediate R.I.B.A. standard preferably with some office experience.

Housing accommodation available for posts (a) in suitable cases.

Salaries within the above scales depending on qualifications and experience.

Posts pensionable, medical examination, and one month's notice.

Applications on forms obtainable from the Borough Surveyor, Swinburne Street, Gateshead, 3, must be returned to him within 14 days of this advertisement.

C. D. JACKSON,

Town Clerk. 3275

Town Hall,  
Gateshead, 8,  
February, 1959.

## COUNTY BOROUGH OF BOLTON

## BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the following vacancies:—

**PRINCIPAL ASSISTANT ARCHITECT** within Grade A.P.T. IV (£1,025—£1,175). Candidates should hold A.R.I.B.A. and have the ability to design and supervise major and minor building work.

**TECHNICAL ASSISTANT (Electrical)** within Grade A.P.T. II (£725—£845). Candidates should hold H.N.C. or equivalent and have the ability to prepare electrical schemes under supervision.

The posts are superannuable, subject to medical examination, and commencing salary will depend on experience. Previous Local Government experience not essential.

Applications, giving full details, including experience, present post and salary, and naming two referees, should be received by me not later than 16th March.

PHILIP S. RENNON,

Town Clerk. 3280

## MINISTRY OF HOUSING AND LOCAL

## GOVERNMENT: HOUSING AND PLANNING

**INSPECTORS.** Pensionable posts for men and women: (a) SENIOR INSPECTORS (b) INSPECTORS. Age at least 45 for (a) or 35 for (b) on 1.3.59. Candidates must be, or have been, Registered Architects or Corporate Members of an appropriate professional Institution. Practical experience in housing design and development or town and country planning an advantage. Duties include conducting public local inquiries under Housing and Town and Country Planning Acts; considerable travelling. Men's starting salary (£London): (a) £1,840; (b) £1,325 (age 35-37) to £1,480 (at 40 or over). Exceptionally higher starting salary may be recommended. Scale maxima: (a) £2,120; (b) £1,780. Promotion prospects. Write Civil Service Commission, 17 North Audley Street, London, W.1, for application form, quoting S4945/59. 3221

## MIDDLESBROUGH EDUCATION COMMITTEE

## ARCHITECTURAL STAFF

Applications are invited for the following vacancies in the Education Architect's Office of the Education Department. An excellent opportunity is offered for participation in the expanding Educational Building Programme.

Appointments will be made within the grades as indicated, subject to qualifications and experience.

(a) ASSISTANT ARCHITECTS, Special Grade £750 × £40—£1,030.

(b) ARCHITECTURAL ASSISTANT, A.P.T. I £575 × £30—£725.

(c) DRAUGHTSMAN OR DRAUGHTSWOMAN, Miscellaneous Grade III. £505 × £20—£565.

Candidates for posts (a) who should preferably be A.R.I.B.A., but must have passed final examination Parts I and II, will be eligible for automatic acceleration of £75 within the grade on obtaining Associate Membership of the R.I.B.A. Housing accommodation will be made available for successful applicants for posts (a) if required.

Application forms and particulars from the Director of Education, Education Offices, Woodlands Road, Middlesbrough, to whom completed forms should be returned not later than Friday, 20th March, 1959. 3281

CITY OF SALFORD  
CITY ENGINEER & SURVEYOR'S  
DEPARTMENT

Applications are invited for the appointment of TWO ASSISTANT ARCHITECTS at salaries within the Special Grade, £750—£1,030 per annum. Applicants should hold at least Parts I and II of the R.I.B.A. final examination or equivalent and have five years' experience.

The work of the Department affords experience in a wide variety of architectural projects carried out for all Committees of the Council.

Housing accommodation will be provided in approved cases.

The appointments will be subject to the provisions of the Local Government Superannuation Acts, the National Scheme of Conditions of Service and the passing of medical examinations.

Applications stating age, qualifications and details of experience, together with the names of two referees, should be sent to the City Engineer & Surveyor, Town Hall, Salford, 3, Lancs., to arrive not later than Monday, 16th March, 1959.

R. RIBBLESDALE THOENTON,

Town Clerk. 3218

BASILDON DEVELOPMENT CORPORATION  
DEPARTMENT OF ARCHITECTURE & PLANNING

Architects with flair and ability for advanced design invited to work in new groups on Town Centre, Factory and Housing projects including high blocks, for large building programme.

(a) ASSISTANT ARCHITECT—Grade APT VI, £934 to £1,146 per annum.

(b) ASSISTANT ARCHITECT—Grade APT V, £844 to £1,029 per annum.

(c) ASSISTANT ARCHITECT—Grade APT III, £679 to £811 per annum.

A.R.I.B.A. essential for (a) and (b).

House or flat available.

Applications on the special form (obtainable from the Chief Architect/Planner) to the General Manager, Basildon Development Corporation, Cliff House, Basildon, Essex, endorsed with the relevant appointment, by Friday, 20th March, 1959. 3277

## CITY OF ST. ALBANS

Applications are invited for the following:

Housing available for both posts.

Both posts superannuable.

Applications stating age, qualifications, experience and names of two referees to reach the undersigned by 16th March, 1959.

(a) ARCHITECTURAL ASSISTANT.

Intermediate R.I.B.A. examination, or equivalent. Salary within A.P.T. II (£725 × £30—£845) or A.P.T. I (£575 × £30—£725) according to experience and qualifications.

(b) SEWER and TRENCH INSPECTOR.

Established post. Miscellaneous Grade IV (£565 × £20—£625). Possibility of promotion in 1960 to Assistant Works Superintendent (£745 × £20—£805) on retirement of present holder.

Applicants should have experience in all classes of road construction, be capable of supervising men and of keeping accurate records.

W. N. MURGATROYD,

Town Clerk. 3255

38, St. Peter's Street,  
St. Albans.

## BOROUGH OF WOOD GREEN

## ARCHITECTURAL ASSISTANTS

The Council invite applications for the following posts on the staff of the Borough Engineer's Department:—

(a) ARCHITECTURAL ASSISTANT at a salary in accordance with the special scale for Architectural Assistants (£750—£1,030), and

(b) JUNIOR ARCHITECTURAL ASSISTANT at a salary in accordance with A.P.T. Grade I (£575—£725). The appropriate London weighting allowance will be paid in each case.

Applicants for (a) must be fully qualified architects and have had experience in the preparation of plans, drawings and other details associated with Local Authority work, including housing schemes.

Applicants for (b) should have passed the Intermediate R.I.B.A. Examination or equivalent and have had experience in an architect's office.

The appointments are subject to the Local Government Superannuation Acts and to medical examination.

Applications on forms obtainable from the undersigned must be returned by not later than 21st March, 1959.

A. BARNETT,

Town Clerk. 3257

Town Hall,  
Wood Green, N.22,  
26th February, 1959.

## KENT COUNTY COUNCIL

ARCHITECTS are required for 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. Candidates should be capable of accepting responsibility and displaying initiative, within a group system, in the design and control of building projects and possess experience and ability in current problems of design and control of costs. They should be Associates or should have passed Parts I and 2 of the Final Examination of the R.I.B.A.

Salaries within scale £750—£1,030. Commencing salary according to qualifications and experience. N.J.C. Conditions of Service. Further details and application forms from County Architect, Springfield, Maidstone. Closing date 16th March, 1959. 3287

## COUNTY BOROUGH OF SOUTHEAST-ON-SEA

## BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the following posts:—

**TECHNICAL ASSISTANT (Architectural)** £575 by annual increments of £30 to £725.

**ASSISTANT QUANTITY SURVEYOR** £750 by annual increments of £40 to £1,030.

Candidates must be suitably qualified and experienced.

The appointments will be subject to the provisions of the Local Government Superannuation Acts and the National Joint Council's Scheme of Conditions of Service so far as adopted by the Council. Medical examination.

Applications, stating age, qualifications and experience, with the names of two referees, should be submitted to the Borough Architect, 30, Alexandra Street, Southend-on-Sea, forthwith.

Canvassing will disqualify. Any candidate who is related to member or officer of the Council is required to disclose the fact.

ARCHIBALD GLEN,

Town Clerk. 3244

## SOUTH WEST METROPOLITAN REGIONAL

## HOSPITAL BOARD

Applications are invited for the following appointment on the permanent staff of the Board's Regional Architect generally in accordance with Whitley Council conditions of service.

**ASSISTANT ARCHITECT.**

Applicants must be Associate Members of the Royal Institute of British Architects and capable of preparing working and detailed drawings and specifications and supervising work on individual projects. Experience of hospital planning and construction an advantage. The commencing salary will be within the Scale £700 × £25(3) × £30(1) × £35(6)—£1,015 p.a., plus London weighting allowance of £20-£50 p.a.

Application forms may be obtained from the undersigned at 40, Eastbourne Terrace, W.2, and must be completed and returned by not later than 16th March.

E. G. BRAITHWAITE, Secretary. 3296

County Buildings,  
22 Union Terrace, Aberdeen.

February, 1959.

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**COUNTY BOROUGH OF MERTHYR TYDFIL**  
**APPOINTMENT OF BOROUGH ARCHITECT**  
Applications are invited from Associates of the R.I.B.A. with appropriate experience for the above post at a salary of £1,930 rising by one increment of £70 and three of £65 to £2,195.

Application forms, which also contain particulars and duties of the appointment, may be obtained from the undersigned and must be returned with copies of three recent testimonials by 19th March, 1959.

The appointment is subject to the provisions of the Local Government Superannuation Acts and to the passing of a medical examination and is terminable by three months' notice on either side.

Canvassing in any form will disqualify.

T. S. EVANS,  
Town Clerk.

Town Hall,  
Merthyr Tydfil.  
23rd February, 1959. 3288

**LONDON COUNTY COUNCIL**  
**ARCHITECT PLANNERS** reqd. Salary scales (a) £1,037 10s. to £1,305 (b) £815 to £1,090. Good design ability wanted for preparation of three-dimensional schemes for areas of redevelopment, including Stepney Poplar and South Bank, Elephant and Castle and other similar Central London redevelopment projects. Application form and particulars, returnable by 14 March, from Hubert Bennett, F.R.I.B.A., Architect to Council (AB/EK/24/59), County Hall, London, S.E.1. (422) 3241

**CITY OF BIRMINGHAM**  
**CITY ARCHITECT'S DEPARTMENT**  
**AMENDED ADVERTISEMENT**

Applications are invited for appointment as SENIOR ARCHITECT to control the Housing Design Section. This post offers great opportunities to a man with a lively interest in progressive design, new development techniques, and layouts. The architect appointed will be responsible for the design, planning and programming of the City's housing projects, which include new building in the redevelopment areas (being comprehensively redeveloped to high density) as well as development of suburban sites, to a total value of approximately £6,000,000 annually. In both types of areas there is scope for great variety in the design of mixed development, including multi-storey flats and maisonettes, shopping schemes, etc.

The salary for this post will be within the Joint Negotiating Committee for Chief Officers, Deputies and other Senior Officers Scale "G" (£1,990 to £2,280 per annum), at a commencing salary according to experience.

The post, which is permanent and superannuable, is subject to a medical examination and to three months' notice on either side.

Applications, endorsed with the heading of the post, stating age, present position and salary, qualifications and experience, together with the names of two persons to whom reference can be made, should reach the undersigned not later than 23rd March, 1959.

A. G. SHEPPARD FIDLER, City Architect,  
Civic Centre, Birmingham, 1. 3282

**COUNTY BOROUGH OF GREAT YARMOUTH**  
**SCHOOLS ARCHITECT'S DEPARTMENT**  
Applications are invited from Associate Members of the R.I.B.A. for a SENIOR ASSISTANT within Special Grade (£750-£1,030).

Candidates must have a thorough knowledge of school design and construction.

Housing accommodation will be made available to the successful candidate if married.

Full details of present and past appointments, age, qualifications and experience, together with the names of two referees, should reach the Schools Architect, 22, Euston Road, Great Yarmouth, by Friday, March 13th, 1959.

D. G. FARROW,  
Chief Education Officer.

22, Euston Road,  
Great Yarmouth. 3197

**MANCHESTER REGIONAL HOSPITAL BOARD**  
Applications are invited for the following posts:

(a) SENIOR ASSISTANT ARCHITECT.  
Salary £1,010-£1,195. Applicants must be Registered Architects.

(b) ASSISTANT SURVEYOR  
ASSISTANT QUANTITY SURVEYOR.  
Salary for both posts £700-£1,015. Professional qualifications required.

(c) SURVEYING ASSISTANT  
ARCHITECTURAL ASSISTANT.  
Salary for both posts £525-£730. Intermediate examination qualifications required.

(d) DRAUGHTSMAN.  
Salary £425-£635. Three years' drawing experience essential.

The salary scales are at present under review and all the posts are superannuable and subject to National Health Service conditions. Application forms and details of the posts obtainable from the Secretary, Manchester Regional Hospital Board, Cheetwood Road, Manchester, 8, to whom they should be returned no later than 21st March, 1959. 3205

**METROPOLITAN BOROUGH OF HAMPSTEAD**  
Require the following staff in the Housing Architect's Department:-

1. ARCHITECTURAL ASSISTANT (Temporary). Grades A.P.T. I/II-Intermediate R.I.B.A. (£575-£845); Special Grade, Final R.I.B.A. (£750-£1,030); plus London Area weighting.

2. JUNIOR ARCHITECTURAL ASSISTANT (Temporary). Grade General Division Q (£230-£700 plus London weighting). Commencing salary according to qualifications and experience.

Successful candidates will be required to work in one of two teams engaged in the conversion of property, area re-development, and the design and construction of new flats and houses.

Applications, giving age, training, experience, previous appointments and the names of three referees, to the Town Clerk (AJ), Town Hall, Haverstock Hill, N.W.3, by 11th March, 1959. No housing provided. 3203

**BOROUGH OF RUGBY**  
**ARCHITECTURAL ASSISTANT**

Applications are invited for the above vacancy in the Borough Engineer and Surveyor's Department. Salary within the Special Grade (£750-£1,030), depending on qualifications and experience. Housing accommodation will be considered.

The appointment is subject to satisfactory medical examination, the Local Government Superannuation Acts and determined by one month's notice. Further particulars and form of application may be obtained from the Borough Engineer and Surveyor, Burford House, Rugby, to whom completed applications must be sent not later than 13th March, 1959.

T. L. DUFFY,  
Town Clerk. 3199

**SOUTHAMPTON COUNTY BOROUGH**  
**COUNCIL**

requires under N.J.C. Conditions of Service  
ASSISTANT QUANTITY SURVEYOR-Salary within Special Grade (£750/£1,030 p.a.).

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

Apply on application form obtainable from the Borough Engineer and Surveyor, Civic Centre, Southampton, by not later than Monday, 23rd March, 1959. 3297

**ARCHITECTURAL ASSISTANT** required by HACKNEY BOROUGH COUNCIL. Salary grade A.P.T. I/II (£575-£845 p.a.). London weighting allowance £30 p.a. at age 26. Commencing salary according to training, qualifications and experience. Candidates should have passed the Intermediate examination of the R.I.B.A. or its equivalent. Apply Town Clerk, Town Hall, Hackney, E.8, for application form, returnable by 9 a.m., 18th March, 1959. 3272

**COUNTY COUNCIL OF ESSEX**  
**COUNTY PLANNING DEPARTMENT**  
Applications invited for post of ASSISTANT AREA PLANNING OFFICER, A.P.T. Grade IV (£1,025-£1,175) at Braintree. Applicants must be Corporate Members of the Town Planning Institute and the possession of an additional professional qualification in Architecture will be considered an advantage. Applicants must have had wide experience in development control and some experience in the preparation of development plans for county towns and large villages. They should also be able to assume control of an area office of 11 persons during the absence of the Area Officer.

Five-day week; medical examination; superannuation.  
Application forms from County Planning Adviser, Broomfield Place, Broomfield, Chelmsford, returnable by 16th March, 1959. 3193

**CITY OF LIVERPOOL**  
**ARCHITECTURAL AND HOUSING DEPARTMENT**

Applications are invited for the following appointments, viz.:-

(a) ASSISTANT ARCHITECTS.  
(b) ASSISTANT SURVEYORS.  
Salary in each case £750-£1,030 p.a. (N.J.C. Scale). Commencing salary will depend upon experience.

Applicants for:-  
(a) Should be Associates of the Royal Institute of British Architects or hold equivalent qualification. Vacancies exist in General, Housing and Redevelopment Architectural Sections, and preference for a particular type of work will be considered. The work involved is interesting and includes building for the education programme, other public buildings, the housing programme, including multi-storey blocks and slum clearance.

(b) Should possess the A.R.I.C.S., A.M.I.Mun.E. or equivalent qualification. Persons appointed will be employed in the section dealing with estate layouts, roads and sewers.

Application forms, obtainable from the City Architect and Director of Housing, Blackburn Chambers, Dale Street, Liverpool, 2, returnable to him by 31st March, 1959.

The appointments are superannuable and subject to the Standing Orders of the City Council. Canvassing disqualifies.

THOMAS ALKER,  
Town Clerk. 3202

**COUNTY BOROUGH OF SOUTHAMPTON**  
**BOROUGH ARCHITECT'S DEPARTMENT**  
Applications are invited for the following permanent positions:-

(a) ASSISTANT PLANNING OFFICER (DEVELOPMENT CONTROL), Special Grade (£750-£1,030), to assist with Development Control, examining applications, site inspections, interviews with applicants, preparation of reports. Applicants should be A.M.T.P.I.; architectural qualification or experience an advantage.

(b) ASSISTANT PLANNING OFFICER (RESEARCH), Special Grade (£750-£1,030). University degree in Economics or appropriate subject with special reference to Statistics.

(c) PLANNING ASSISTANT, Grade A.P.T. II (£725-£845), for Survey, Development Plan review, Redevelopment Areas and Compulsory Purchase Orders. Candidates should have passed the Intermediate Examination of the Town Planning Institute or other appropriate body.

(d) SENIOR ASSISTANT ARCHITECT, Grade IV (£1,025-£1,175). Should be A.R.I.B.A. preferably with experience in major local authority projects.

(e) ARCHITECTURAL ASSISTANT, Grade I (£575-£725).

Commencing salary according to experience; candidates should state their housing needs.

Application forms from the Borough Architect, Civic Centre, Southampton, returnable by 23rd March, 1959. 3194

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W. & M. NEGUS LTD.  
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**COUNTY BOROUGH OF WOLVERHAMPTON**  
**APPOINTMENT OF PLANNING ASSISTANT**  
 Planning Assistant Required in the Planning Section of the Borough Engineer's Department. Salary APT Grade I (£575-£725 per annum), commencing salary in accordance with qualifications and experience. Candidates should be good draughtsmen, preferably with experience in a Planning Office.

N.J.C. conditions of service. One month's notice. Medical examination. Superannuable post.  
 Applications stating age, training and experience, naming two referees, to the Borough Engineer, Town Hall, Wolverhampton, by 17th March. 3284

**SOMERSET COUNTY COUNCIL**  
**ARCHITECT'S DEPARTMENT**  
 Applications are invited for the following appointments:—

(a) ASSISTANT ARCHITECT, Special Grade (£750-£1,030).  
 (b) JUNIOR ARCHITECTURAL ASSISTANT, A.P.I. Grade I (£575-£725).

Applicants for (a) must be Associate Members of the R.I.B.A. or have passed Parts I and II of the R.I.B.A. final, or special examination, with a good standard of design ability, and may be required to take charge of work from sketch plan stage to completion on the ground working with a team consisting of four or five Architects; for (b) must have passed the Intermediate R.I.B.A. examination or its equivalent at one of the recognised schools of architecture.

The appointments are on the established staff of the Department and subject to the provision of the Local Government Superannuation Acts, the National Scheme of Conditions of Service, a satisfactory medical examination, and termination by one month's notice.

Applications, stating age, experience, qualifications and present appointment, with names and addresses of two referees, should be forwarded to reach me on or before Thursday, the 12th March, 1959.

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

Park Street, Taunton. 3195

**STEVENAGE NEW TOWN**  
 Stevenage Development Corporation invites applications for the appointment of SENIOR PLANNER in the Chief Architect and Planner's Department, to take charge of the Planning Group, at a salary in accordance with New Towns A.P.T. Grade IX (£1,226-£1,454 per annum).

A minimum qualification of A.M.T.P.I. is required with wide experience in planning. The planning group is engaged upon revision of Master Plan for the New Town, neighbourhood layouts, general planning and statutory planning applications.

Housing accommodation will be available in due course in an appropriate case.

Applications, giving full details and the names of two referees, to be sent to the Chief Administrative Officer, Aston House, nr. Stevenage, Herts, not later than Friday, 20th March, 1959. 3215

**DERBYSHIRE COUNTY COUNCIL**  
**COUNTY PLANNING DEPARTMENT**  
**APPOINTMENT OF ARCHITECT/PLANNER**

Applications are invited for this post on A.P.T. Grade V (subject to review), within salary range £1,175-£1,325.

Applicants should be members of the Town Planning Institute and hold an architectural qualification.

The post is one of three carrying responsibility for design control and plan respectively. Experience in the design and layout of residential, commercial and industrial building in areas of development and redevelopment is essential.

The commencing salary for the post will be determined on the basis of experience.

Applications, with one testimonial and the names of two referees, should reach the County Planning Officer, County Offices, Matlock, by 31st March, 1959. 3196

**METROPOLITAN POLICE** Receiver's Office, requires ARCHITECTURAL DRAUGHTSMEN/WOMEN. Scale: £550 (age 21)-£870. Starting pay according to age. Applicants to have Ordinary National Certificate or be of Intermediate R.I.B.A. Standard. Five-day, 42 hour week, paid leave, canteen facilities. Apply, giving qualifications, experience, age and nationality, to Room 578a, Receiver's Office, New Scotland Yard, S.W.1. 3220

**EAST SUFFOLK COUNTY COUNCIL**  
**PLANNING ASSISTANT** required, for work on Development Plans. Intermediate examination minimum qualification. A.P.T. II (£725-£845), and car allowance. Applications, giving full particulars, including names of two referees, to County Planning Officer, County Hall, Ipswich, by 13th March, 1959, from whom further information may be obtained. 3268

**Architectural Appointments Vacant**

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

**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, 44, Castlegate, Grantham. 2553

**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 2589.

**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. standard. Superannuation scheme. Apply to: Cotton, Ballard & Blow, 5, Baker Street, London, W.1. WBLbeck 3364. 2818

**ASSISTANT ARCHITECTS** for Co-operative Wholesale Society Ltd., Architect's Department, Cardiff. Salary scale £600-£870 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.1. 2743

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

**ASSISTANT** required in connection with expansion of extensive old established practice, about 40 miles London, in approx. £700 to £900 salary range, or according to experience and ability. Write particulars to Box 3189.

**ARCHITECT'S SENIOR ASSISTANT** required, about R.I.B.A. Final standard. State salary required, experience, etc. Box 3183.

**LOUIS DE SOISSONS, PEACOCK, HODGES & ROBERTSON** have immediate vacancies in their Welwyn Garden City office for Senior and Junior ASSISTANTS. Write stating age, experience and salary required to the above at Midland Bank Chambers, Welwyn Garden City, Herts. 3052

**A SENIOR ASSISTANT** with several years' experience able to assume responsibility and control of staff under the Branch Architect at Birmingham. The Office is engaged on a varied and interesting programme of commercial projects. A five-day week and Superannuation Scheme is in operation. Applications, giving full particulars and salary required to: G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society Limited, 1, Balloon Street, Manchester, 4. 3083

**ASSISTANTS** required for field surveys in various parts of the country. Telephone Portsmouth 25511 for appointment. 3092

**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 3608/9. 2611

**ADAMS, HOLDEN & PEARSON** require urgently both ARCHITECTURAL ASSISTANTS and ASSISTANT ARCHITECTS for permanent and progressive posts to work on large Hospital, Education and Commercial projects. Apply giving age, qualifications, experience and salary required to above at 38, Gordon Square, W.C.1. 3111

**ARCHITECTURAL** firm in Home Counties with varied practice, require ASSISTANTS. Intermediate, qualified, or at that standard. State experience and salary required to Box 3089.

**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 5201/5. 3130

**MORRIS DE METZ, F.R.I.B.A.**, requires experienced ASSISTANTS for large scale projects. West End Office. Salary up to £950. Telephone CITY 4086 or HUNTER 1051. 3133

**ARCHITECTURAL ASSISTANTS** required in West End Office. Large interesting contracts just commencing. Salaries around £900. Box 3134.

**ROBERT POTTER & RICHARD HARE, F.A.R.I.B.A.**, have the following vacancies:—

(a) Qualified ASSISTANT ARCHITECT to work on interesting University project. Experience of multi-storey buildings an advantage.

(b) ARCHITECTURAL ASSISTANT for the preparation of working drawings and surveys. Intermediate R.I.B.A. standard. Initial engagement for one year contract with possibility of renewal.

Write, stating qualifications, experience and salary required, to de Vaux House, Salisbury, Wilts. 3135

**ARCHITECTURAL ASSISTANTS**, with previous experience, required immediately for surveys and housing layouts. Head Office of firm: Southsea, Hants. Box 3136.

**COVENTRY**—Intermediate and Final Standard ASSISTANTS required with experience and interest in the preparation of accurate working drawings, schedules and specifications, for a wide variety of contracts. Salary will be reviewed annually and will relate direct to capability. Pension Scheme available. Five-day week. Travelling expenses to applicants selected for interview. W. S. Hattrell & Partners, 1, Queens Road, Coventry 60668. 3141

**ALL grades. ARCHITECTURAL ASSISTANTS** required. Ronald Ward & Partners, 29, Chesham Place, London, S.W.1. Belgravia 3361. 3146

**BRETT, BOYD & BOSANQUET** have vacancies for young qualified and unqualified ASSISTANTS at their Oxford Office. Applications, giving qualifications, experience and salary sought, should be sent to 60, St. John Street, Oxford. 3151

**INTERMEDIATE STANDARD ASSISTANT** required in small country practice on S. Devon Coast. Salary £350 to £500 according to ability, including, if required, unfurnished self-contained flat at nominal rent. Advancement directly proportionate to productivity, leading to responsible position with share of profits. Reliability and integrity essential. Write to Alec H. Joy, A.R.I.B.A., Victoria Place, Kingsbridge. 3152

**ASSISTANT** required by Chartered Architects practising in Brighton. Qualifications secondary to office experience (two years minimum). Pension Scheme, five-day week, salary up to £750 per annum. Apply Box 3161.

**ARCHITECTURAL ASSISTANT** (aged about 25) required in small private practice, Croydon district. Write or telephone: John King and White, 169, Brighton Road, Coulsdon, Surrey. Uplands 8889. 3164

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WHO IS A GOOD DESIGNER IN CONTEMPORARY IDIOM

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This is an important appointment offering opportunities for someone with ability, drive and top-level experience.

Write giving age, qualifications, experience and previous salaries to:—

Sidney L. Bernstein **GRANADA TV NETWORK LTD** Manchester 3

**ARCHITECTURAL ASSISTANT** required of between Intermediate and Final standard for work on commercial, office and housing contracts. Salary according to standard. George Watt, A.R.I.B.A., 146, Mostyn Road, Merton Park, S.W.19. Telephone: Liberty 8181. 3167

**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. 3176

**MAJOR OIL COMPANY** invites applications for the following positions in their Manchester Office:—

**ASSISTANT ARCHITECT.**  
**QUANTITY SURVEYOR.**  
**ARCHITECTURAL ASSISTANT.**—Applicants should be A.R.I.B.A., capable of administration, supervision of staff and controlling work. Must hold a current driving licence.

**QUANTITY SURVEYOR.**—Should be A.R.I.C.S. or A.I.Q.S.; able to act on own initiative; capable of preparing approximate estimates, specifications, Bills of Quantity, Interim and final certificates for contracts up to £15,000.

**ARCHITECTURAL ASSISTANT.**—Intermediate standard. Applicants should have experience of contemporary design, and be capable of working independently.

Pension and Life Assurance Scheme; General Sickness benefits; free luncheon vouchers; Social Club. Write giving full details of experience, age and salary required to Box 3225.

**JOHN LAING AND SON LIMITED**

**INVITE** applications for the following vacancies in their **ARCHITECTS' DEPARTMENT** (Chief Architect, Sydney Greenwood, A.R.I.B.A.) at their Head Office in N.W. London.

**ARCHITECTS AND ARCHITECTURAL ASSISTANTS** of Intermediate or Final R.I.B.A. standard with experience in one of the following: Office and Industrial Schemes; Multi-Storey Flats and Maisonettes; Private and Municipal Housing.

These positions offer opportunities for advancement and a wide variety of work in a busy office. Pension Scheme after two years' service. Five-day week.

Applications to Personnel Manager (Ref. AAA 1), John Laing and Son Limited, Building and Civil Engineering Contractors, Page Street, Mill Hill, London, N.W.7. 3192

**ARCHITECTURAL ASSISTANTS** (age 28-38) are invited to apply for a new position in our Drawing Office at York. The work is varied, interesting and of a substantial nature. A keen interest in building design and construction, initiative and the capacity for hard work are essential. This permanent, progressive position offers a good salary, non-contributory pension scheme, superior staff conditions and assistance with housing. Applications in confidence, stating age, training and experience, qualifications, availability and present scale of remuneration should be addressed to: D. W. Shepherd, M.I.O.B., Deputy Managing Director, F. Shepherd & Son Ltd., Building & Civil Engineering Contractors, Blue Bridge Lane, York. 3219

**ARCHITECTURAL ASSISTANT** required in good class West End practice, preferably with pre-war practical experience, capable of preparing details, specifications and supervising works. Salary up to £1,000 according to experience. Five-day week. Box 3240.

**CARDIFF** practice offers scope and variety to experienced **SENIOR ARCHITECTURAL ASSISTANT**, also **ARCHITECTURAL ASSISTANT**, Intermediate standard. Salary by agreement. Webb & Partners, 20, Dumbfries Place. 3239

**ONE** Senior and one Junior **ASSISTANT** required for interesting and contemporary work. Please write giving details of experience and salary required to Phillip Cranswick, A.R.I.B.A., A.M.T.P.I., 36, Sackville Street, London, W.1. 3238

**JUNIOR ARCHITECTURAL ASSISTANTS** up to Intermediate standard required to work on industrial projects in the Architects' Department of a group of Management Consultants. Commencing salary up to £550 per annum plus benefits. Apply: Combined Technical Services Ltd., Park House, Wick Road, Egham, Surrey. 3235

**ARCHITECTURAL ASSISTANTS** required immediately for progressive Architects' Department by leading company dealing with industrial projects of a varied and interesting nature. Qualifications required—R.I.B.A. Intermediate standard, aged 21-30, preferably with experience in industrial work, resident or prepared to reside in or near Tunbridge Wells, Kent, and must be keen and progressive. Write giving brief details in first instance to Box 3236.

**RALPH TUBBS** requires outstanding **ARCHITECT** to act as Team Leader and also **SENIOR ASSISTANT ARCHITECTS** for work on important new hospital. Experience in hospital design essential and applicants should be used to handling large contracts. Please apply by letter with brief particulars to 46, Queen Anne Street, W.1. 3234

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| Ferodo, Ltd.                               | 106    | 0229 |
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| Floor Treatments, Ltd.  | 70      | 0239 |
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| Gascoigne, George H.  | 73      | 1052 |
| Gay, R. & Co.   | 16      | 0252 |
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| Glamorock, Ltd.   | 20, 21  | 0915 |
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| Group Sales Ltd.  | 85      | 0834 |
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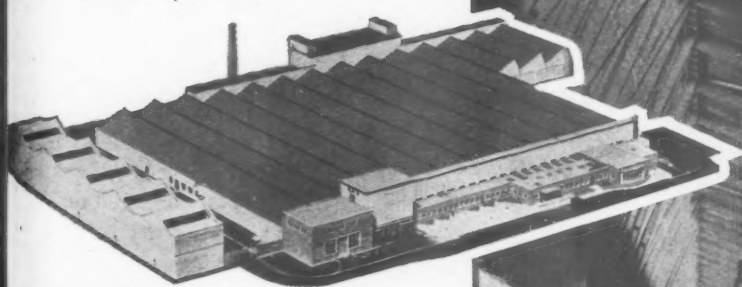


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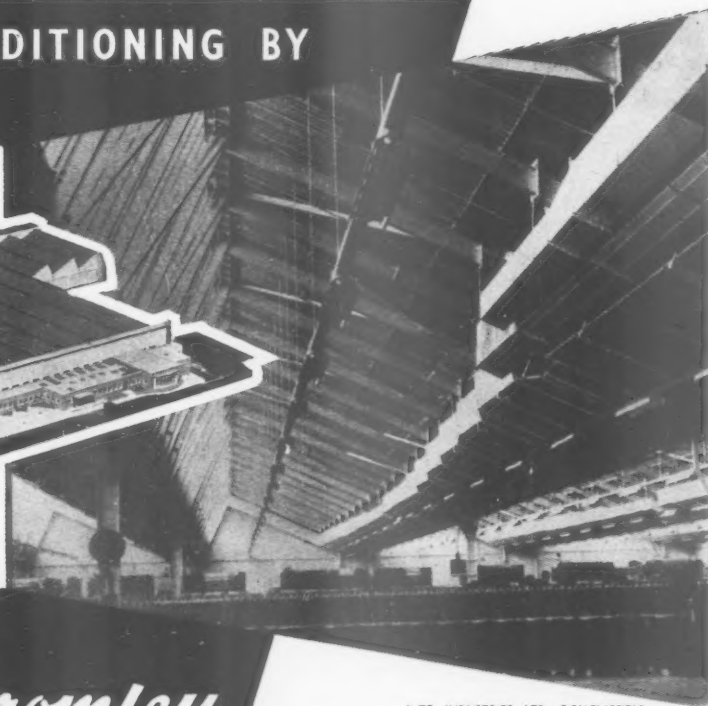
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