

# 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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Finishes and Costs

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Wanted and Vacant

No. 3404]

[Vol. 132

THE ARCHITECTURAL PRESS

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

S.W.1. 'Phone: Whitehall 0611

Price 1s. 0d.

Registered as a Newspaper.

★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), 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. Hyde Park 7070
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's 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 Asphalte Mine Owners and Manufacturers Council. 14, Howick Place, Victoria Street, S.W.1. Victoria 1600 & 6477
NAS	National Association of Shopfitters. 2, Caxton 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. 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 4459
NFHS	National Federation of Housing Societies. 12, Suffolk St., S.W.1. Whitehall 1631
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. 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
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. Wimbledon 5101
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 Arts 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
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. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen.
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1. Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2. Temple Bar 5006
TDA	Timber Development Association. 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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#### ***Incinerator***

weighs 28 lbs., 24 $\frac{1}{2}$ " high, 8 $\frac{1}{2}$ " diameter.  
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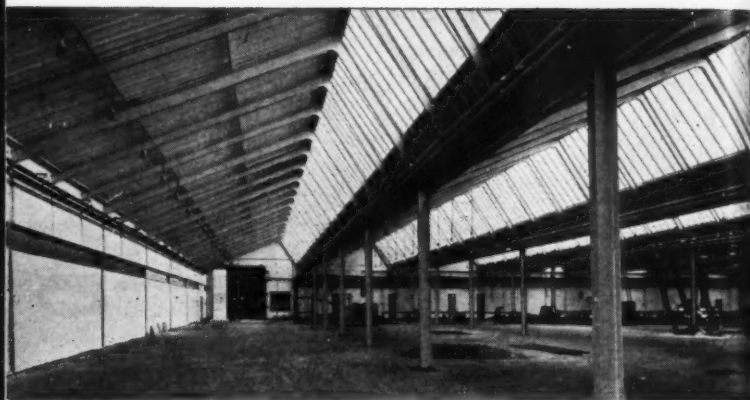
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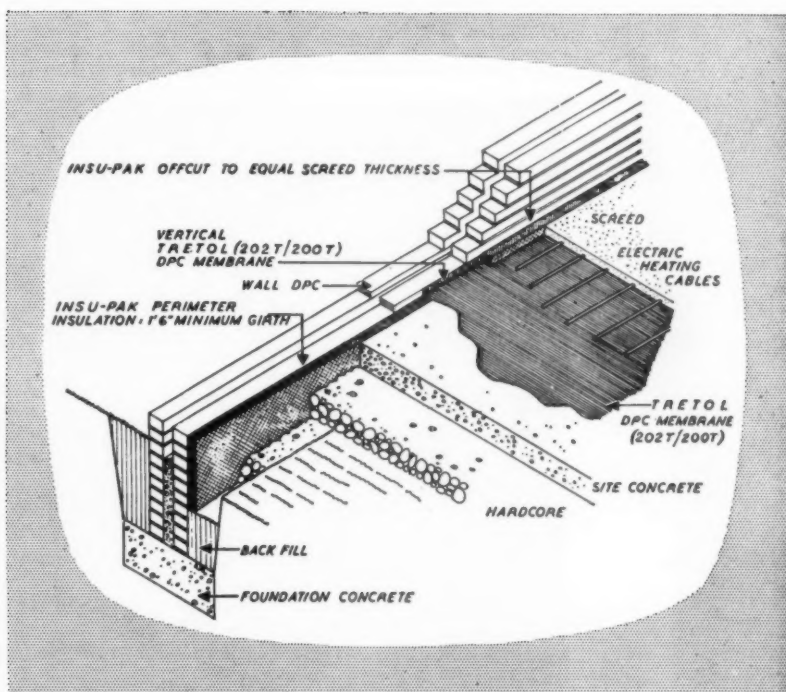
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The incorporation of continuous Bitumen Membranes in solid ground floor construction is essential to prevent the damaging effects of rising moisture vapour to floor coverings. The choice of the **correct** membrane is especially necessary when used with under floor heating systems where corrosion must be eliminated.

Tretol Cold-Applied Bitumen Membranes are manufactured from pure bitumen in solution form. They are entirely satisfactory for use with **any** type of heating element and will **not** stimulate corrosion.

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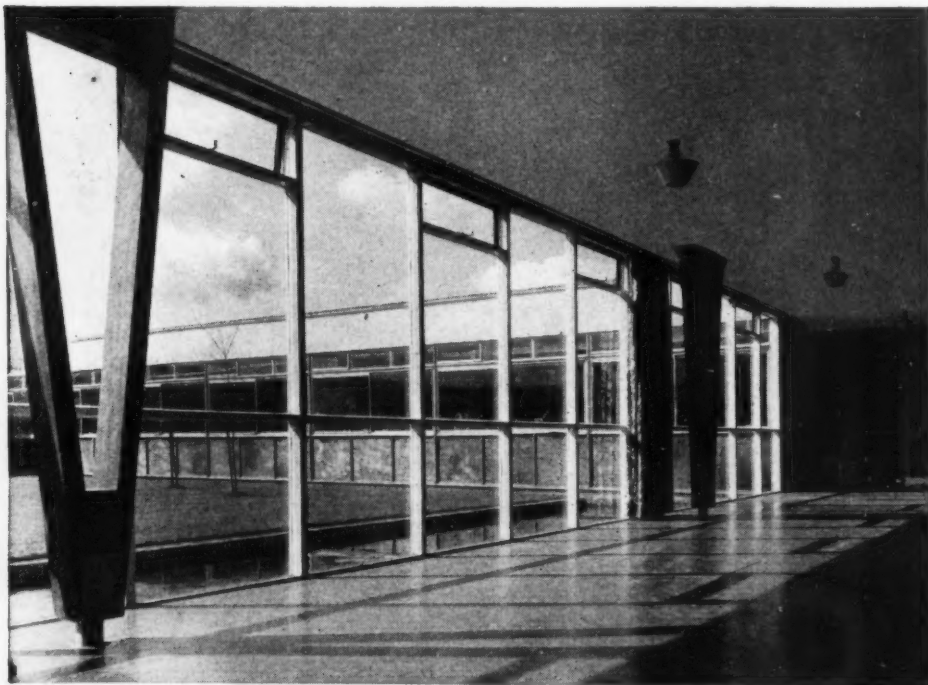
\* The diagram illustrates a typical use of standard Tretol Cold-Applied Bitumen Membrane combined with "INSU-PAK Perimeter Insulation". INSU-PAK is a product of Tretol-Servicised Ltd. and is designed to insulate ground floor slab and screed from vertical concrete and brickwork.

## TRETOL LTD

Head Office: Tretol House, The Hyde, London, N.W.9.

Telephone: Colindale 7223

*The aluminium individual windows supplied by QUICKTHO ENGINEERING LTD. for Burleigh School, Hatfield, were made entirely of extruded sections. The illustration shows them with Horizontal Sliding Windows and Top Hung Ventilators fitted into timber structure. Building designed by Architects Co-Partnership in collaboration with the County Architect, Hertfordshire.*

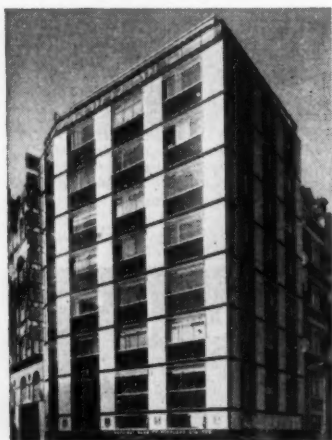


## TOMORROW'S WINDOWS

*—already taking shape with*

# ALCAN ALUMINIUM

The windows of today and tomorrow made of ALCAN aluminium will be better than ever before. In their natural clean finish, or colourfully anodised they will present no problems of rust or decay and lessen the cost of maintenance.



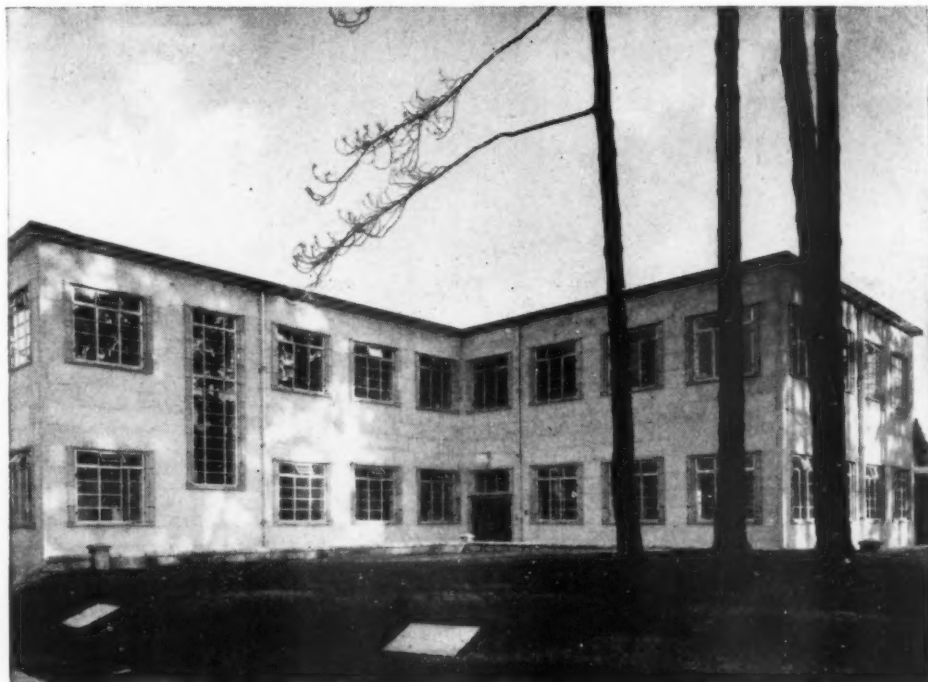
*The purpose-made aluminium window units supplied by QUICKTHO ENGINEERING LTD. for the extension to the Washington Hotel, London, comprise Horizontal Sliding Windows and Top Hung Ventilators designed to accommodate coloured Vitroslab infill panels by Plyglass Ltd.*  
Architects:  
Bronek Katz & R. Vaughan.

*In enclosing the Hackney Downs Signal Box, QUICKTHO ENGINEERING LTD. have made full use of aluminium extruded sections. Incorporated in the structure are Horizontal Sliding Windows and fixed glazing.*  
Architect: H. H. Powell, F.R.I.B.A., under the general direction of A. K. Terris, M.I.C.E., Chief Civil Engineer, British Railways, Eastern Region.





"Alwil" windows, manufactured by ALLAN H. WILLIAMS LTD., blend ideally with clean light rural surroundings in the new Research and Development Department of The Distillers Co. Ltd., at Epsom.



#### To the architect and designer

ALCAN aluminium means:

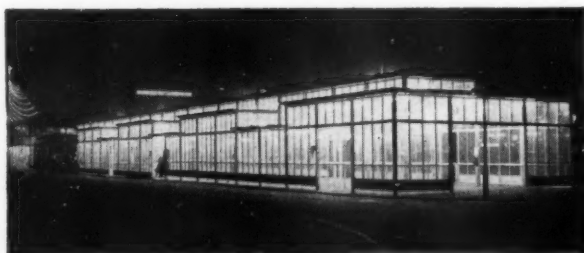
- Freedom to design outside the limitations of traditional raw materials
- One-piece hollow extruded sections made to intricately designed shapes never possible before
- Windows opening up new horizons in planning and design but right down-to-earth in sheer practicality

#### To the building owner or occupier

ALCAN aluminium means:

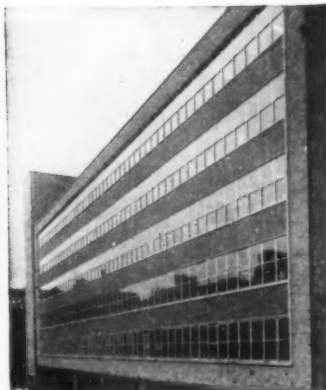
- No painting necessary ● No rusting
- Resistance to decay and corrosion ● No warping
- No needless weight—windows that are always easy to open
- Reduced maintenance cost throughout the life of the building

The advantages of aluminium are at their greatest with ALCAN aluminium. ALCAN, one of the world's largest producers, are specialists in the ingot field. To manufacturers, ALCAN specialisation means a constant, reliable source of aluminium in alloy forms exactly — consistently — suited to precise needs. To architects and designers ALCAN specialisation makes available a vast store of technical knowledge and experience ready to be applied to any project, backed up by years of fabricating technique. To the user of every aluminium product ALCAN specialisation means a certainty of quality and the best value that money can buy.



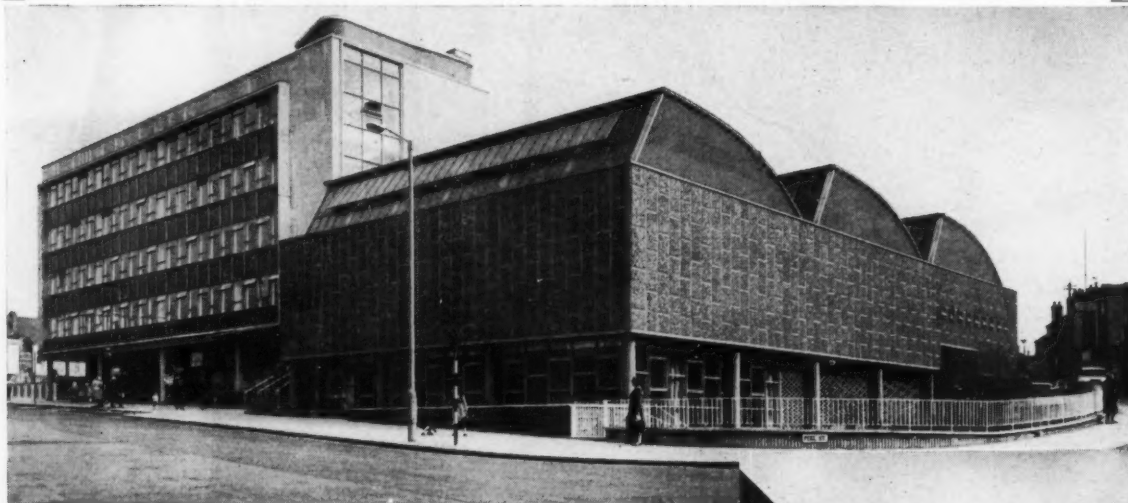
Piccadilly Bus Station, Manchester — a fine example of the use of aluminium windows, which were supplied by ALLAN H. WILLIAMS LTD., COVENTRY. Architect: Mr. Leonard C. Howitt, M. ARCH., Dip.T.P., D.P.A., F.R.I.B.A., M.T.P.I.

ALLAN H. WILLIAMS LTD., supplied more than 500 "Alwil" aluminium double-hung windows, with continuous extruded heads and sills, for Boots Pure Drug Co's new warehouse in Nottingham. Architects: Architects Department, Boots Pure Drug Co.



## DESIGNS IN CONCRETE

10



### WOLVERHAMPTON MARKET

Wolverhampton's new market reflects the prosperity of Britain in its careful attention to design with the housewife in mind. Extensive use of reinforced concrete allows wide floor spaces (without supporting pillars) and connecting bridges between multi-storey office blocks.

There are spacious halls, imaginative restaurants and shops, a sunken garden and an underground park for nearly 100 cars. North light barrel vault roofs shield the clean and unrestricted interior from direct sunlight.

Extensive use of 'Tentor' reinforcement (Regd.), supplied by G.K.N. Reinforcements Ltd., meant a saving of 15% compared with conventional reinforcements—an initial and accumulative economy reproducible in all modern building.



*The Wolverhampton Market Scheme was designed under the direction of the then Borough Engineer, Mr. W. M. Law, M.B.E., M.I.C.E., M.I.Mun.E., and the Architects responsible were:*

*Deputy Borough Architect:*

*A. G. E. CHAPMAN, A.R.I.B.A., A.M.T.P.I.*

*Chief Assistant Architect:*

*N. C. DOWELL, A.R.I.B.A.*

*Architect In Charge:*

*J. A. RICHARDS, Dip. Arch., A.R.I.B.A.*

*Reinforced Concrete Designers:*

*G.K.N. REINFORCEMENTS LTD.*

*Contractors: WILLIAM MOSS & SONS LTD. LOUGHBOROUGH.*

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LONDON: (Kensington 6311)

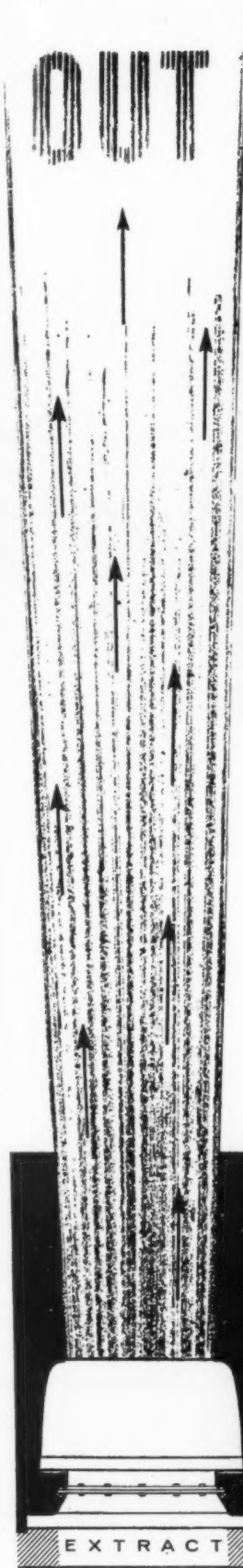
GLASGOW: (Bell 2444) MANCHESTER: (Ardwick 1691)



BRISTOL: (Bristol 21555) LEEDS: (Leeds 27311)

CARDIFF: (Cardiff 45220) LEICESTER: (Leicester 25114)

Works: SMETHWICK, WIGAN & GLASGOW



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- \* Brooks VERTICAL JET roof extract units can also be used with great advantage for ventilation of kitchens—foundries and other applications.

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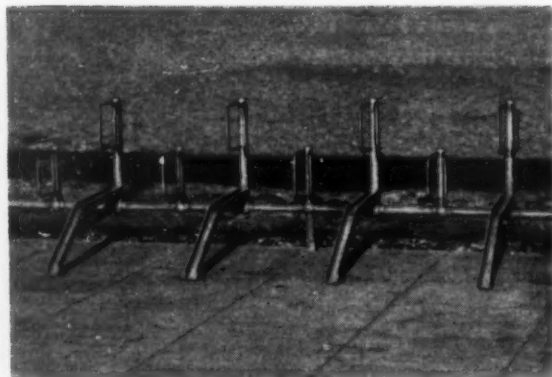
BROOKS VENTILATION UNITS LIMITED  
 100, NEWBURY ROAD, WIMBORNE, DORSET, ENGLAND  
 Tel. 01258 51111  
 Telex 950000  
 Cable: BROOKS VENTILATION UNITS LIMITED



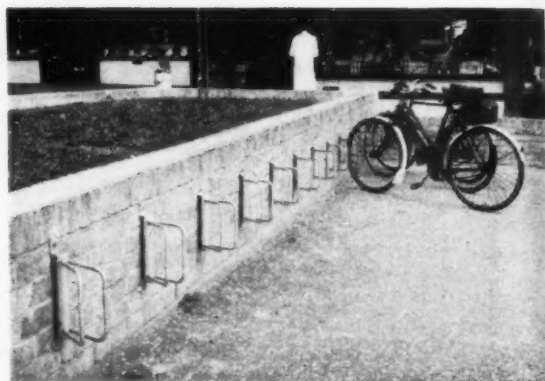
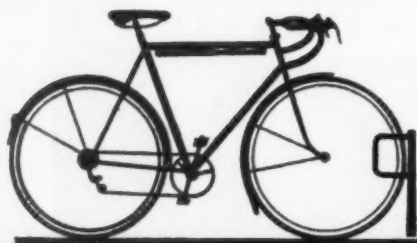
# VELOPA

## BICYCLE HOLDERS

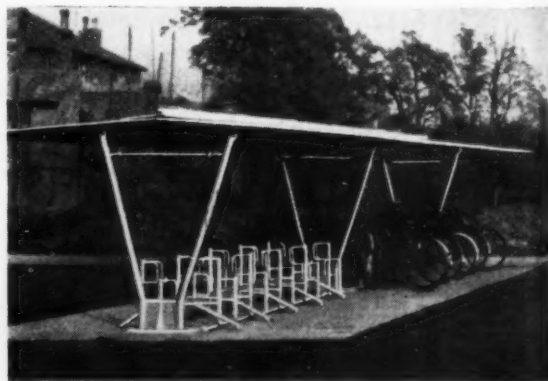
- heavily galvanised steel
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- grip tyre only
- easily installed



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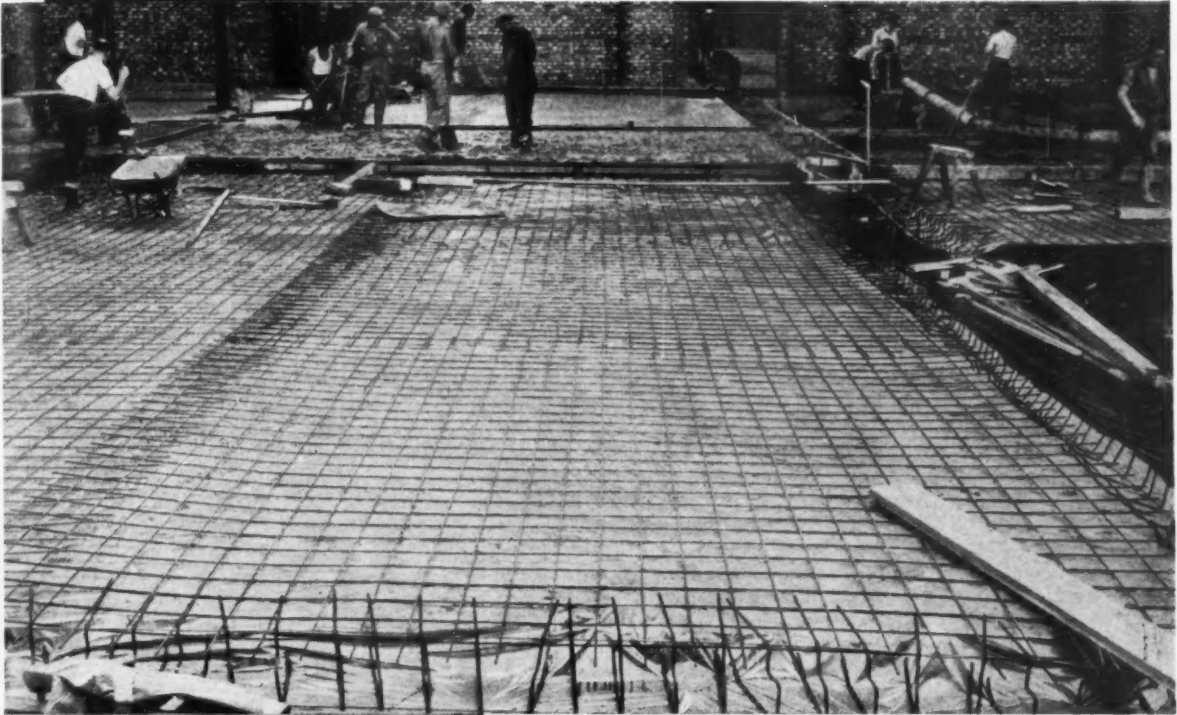
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## Over or under the slab, 'Visqueen' gives stronger concrete for less than $\frac{1}{2}$ ¢ per sq. ft.

### As an underlay, 'Visqueen' ensures:

*Uniform strength of concrete.* Because 'Visqueen' is tough and waterproof, it prevents seepage of fat and moisture into the sub-base during the curing period, thus maintaining exactly to specification a consistent mix ratio over the most extensive floor areas.

*A marked reduction in stress cracking.* As a separation membrane 'Visqueen' prevents the top slab from keying to the hardcore and allows it to move freely (Report No. 2284 by R. H. Harry Stanger available on request).

*Permanent protection of rafts and slabs.* Being chemically inert, 'Visqueen' gives complete protection to concrete from acidic sub-soils or aqueous salt solutions, and will last indefinitely.

### As a curing blanket 'Visqueen' ensures:

*Greater compressive strength and abrasion resistance.* 'Visqueen' laid over green concrete traps all the moisture—eliminates the need for constant watering, and ensures a proper cure. Tests by R. H. Harry Stanger show 'Visqueen' cured concrete has greatly increased strength and wear resistance. (Report available on request).

*Less risk of shrinkage cracking in grano finishes.* By retaining the moisture, 'Visqueen' slows down the curing rate of granolithic flooring—particularly in hot weather, thus avoiding excessive or too rapid shrinkage and reducing the risk of edge curling.

Whichever way you use it, 'Visqueen' saves time

'Visqueen' is easier to handle—reduces laying time—standard rolls are available in various widths up to 12 ft. (or wider to special order for specific bay sizes). And the lightweight grade costs less than a halfpenny a square foot.

## VISQUEEN Polythene Building Sheet

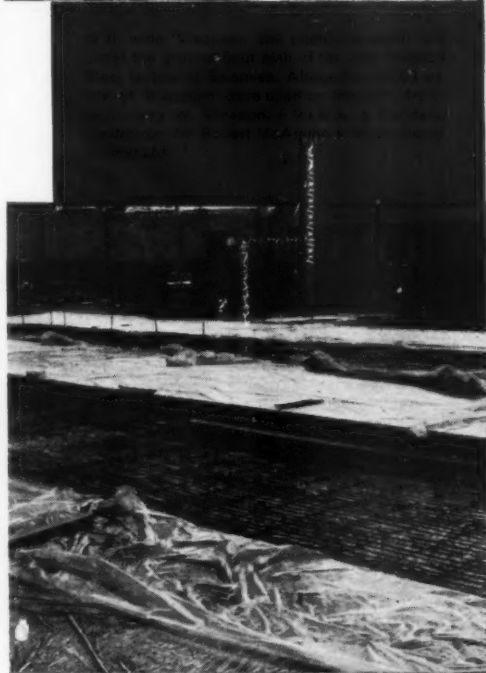
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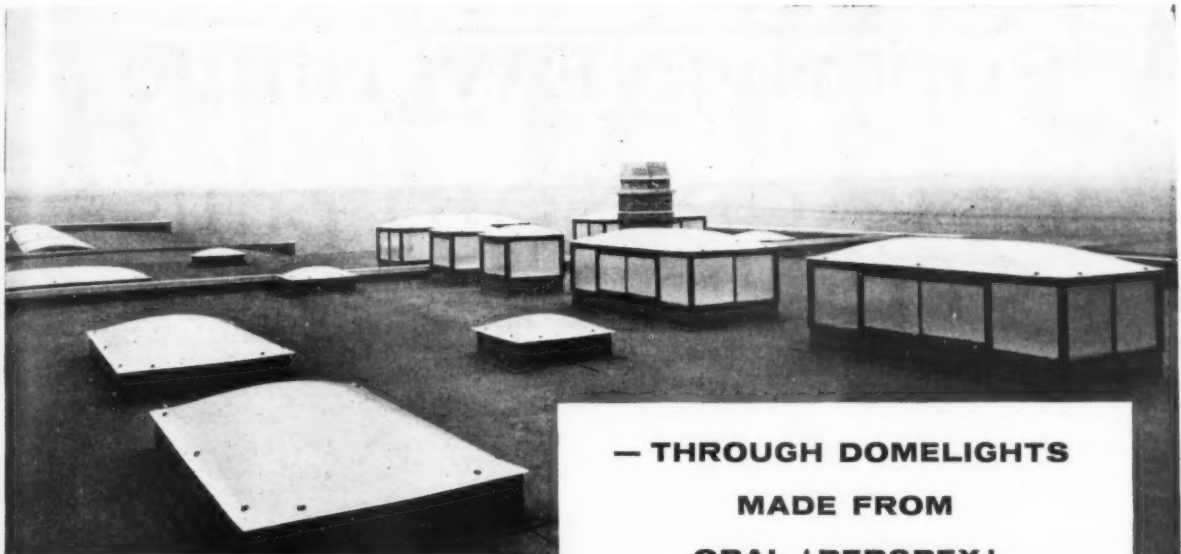
For variety  
of effect and  
freedom from  
maintenance —

**BUILD IN  
BRICK**

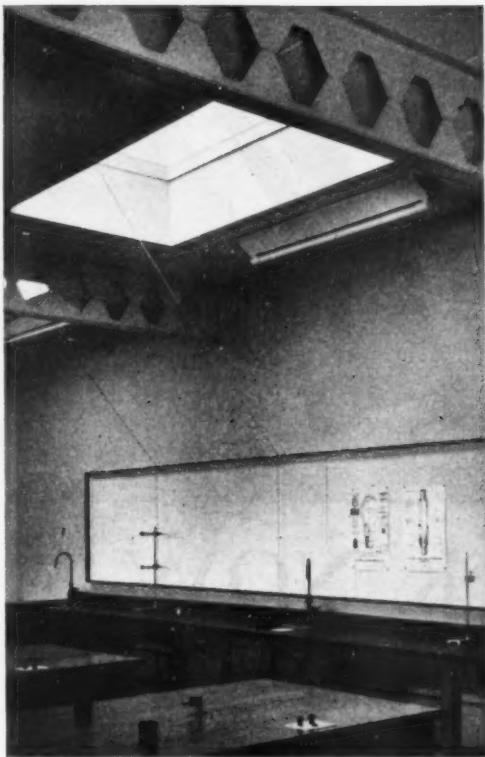
Netherfield Brow Flats, Liverpool.  
Architect: R. Bradbury, PH D FRIBA AMTP  
City Architect & Director of Housing.

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

**GOOD DAYLIGHT WORKING CONDITIONS FOR PUPILS AT THIS SCHOOL ...**



**— THROUGH DOMELIGHTS  
MADE FROM  
OPAL 'PERSPEX'**



Domelights made from Opal 'Perspex' by Henry Hope and Sons Ltd., Smethwick, on the roof of Hadrian County Secondary Modern School built for the Borough of Wallsend Education Committee.  
Architects: Messrs. Reavell & Cahill, F/R.I.B.A., Alnwick.  
Contractors: Messrs. Alex Anderson (Contractors) Ltd., Newcastle-upon-Tyne.

**G**OOD, NATURAL LIGHTING is essential in school classrooms. That is why the classrooms of Hadrian County Secondary Modern School at Wallsend have domelights made from Opal 'Perspex' acrylic sheet. Because Opal 'Perspex' is used, these domelights transmit an evenly diffused daylight, which benefits both pupils and staff.

'Perspex' is inexpensive to install and saves money on artificial lighting. It is light, tough, easy to handle. It is unaffected by the severest weather conditions and withstands the corrosive atmospheres of industrial and marine areas. Undoubtedly, Opal 'Perspex' is the ideal material to use where diffused daylight is needed to ensure good working conditions.

**· PERSPEX ·**

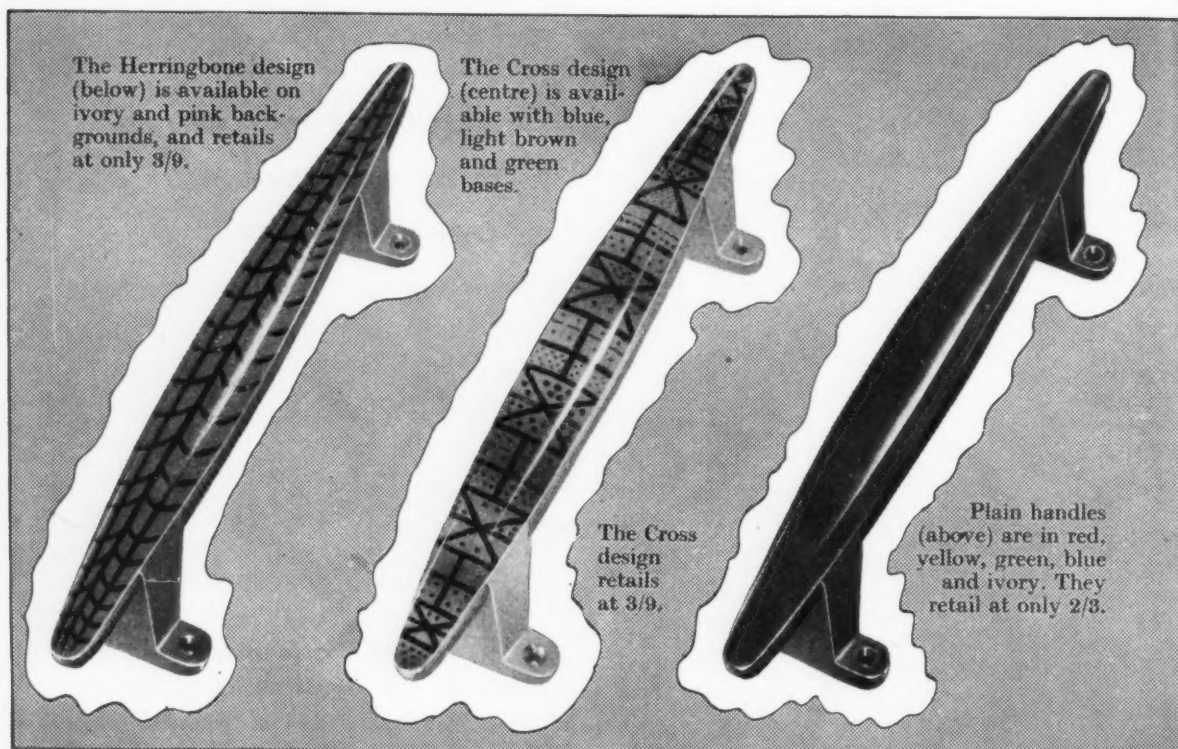
*'Perspex' is the registered trade mark  
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The Cross design (centre) is available with blue, light brown and green bases.

The Cross design retails at 3/9.

Plain handles (above) are in red, yellow, green, blue and ivory. They retail at only 2/3.

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Order your stocks of these beautifully-coloured plastics door-pulls—but do it *now*, so that you're ready for the demand that national advertising will create.

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TRADE MARK

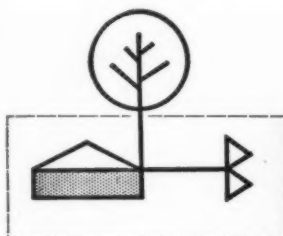
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As Flooring Manufacturers and as Floorlaying Contractors of long experience, we can advise the best wood for the traffic and the situation. Our vans, with their crews of craftsmen, operate throughout South-East England, for the laying and maintenance of Beves Block or Strip Floors in every type of building—from private house to public institution. Where floor tiles of Cork, Vinyl, Rubber or Lino are required, we can supply and lay them too. We welcome enquiries and will, on request, send an expert to inspect and quote.



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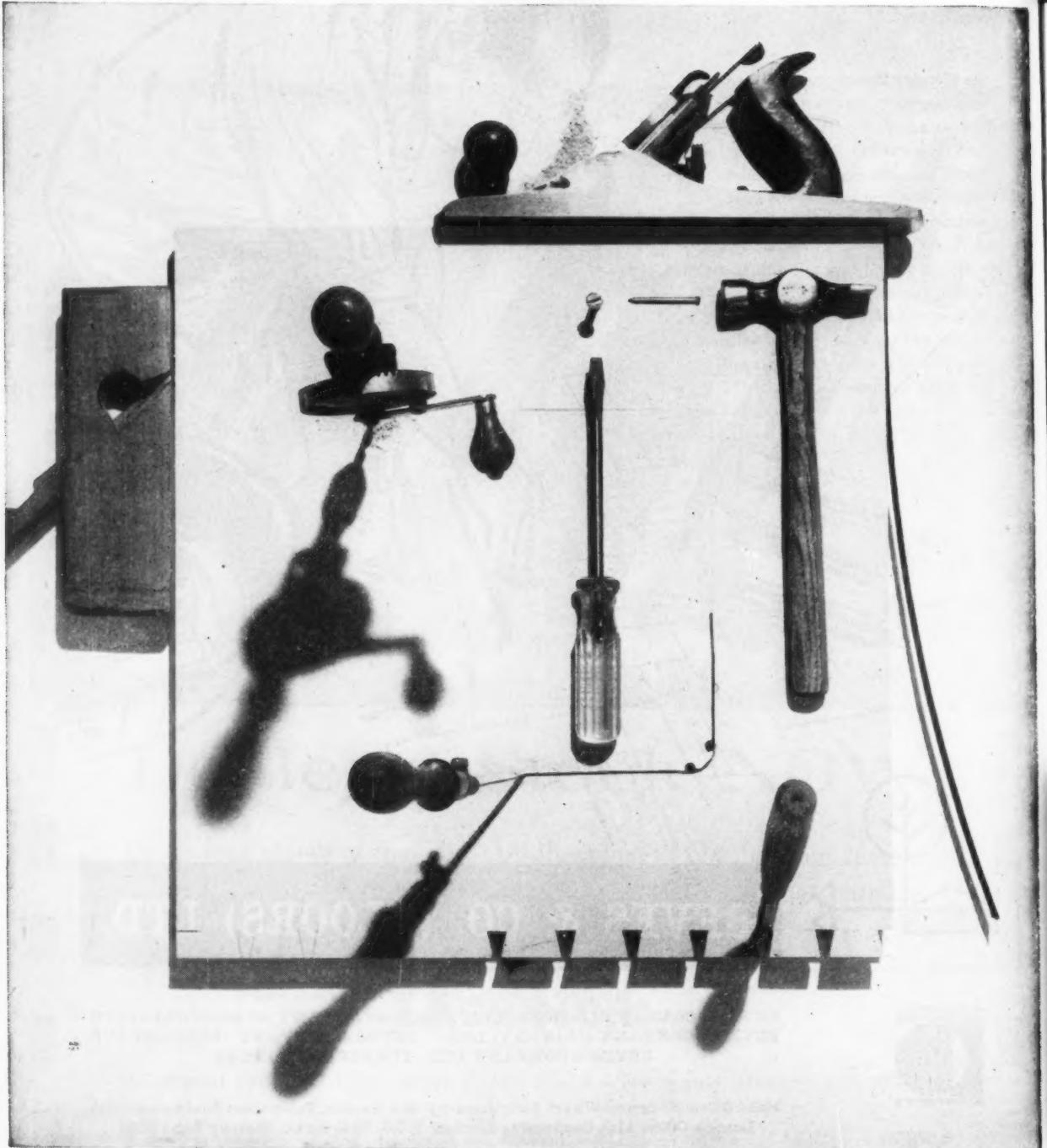
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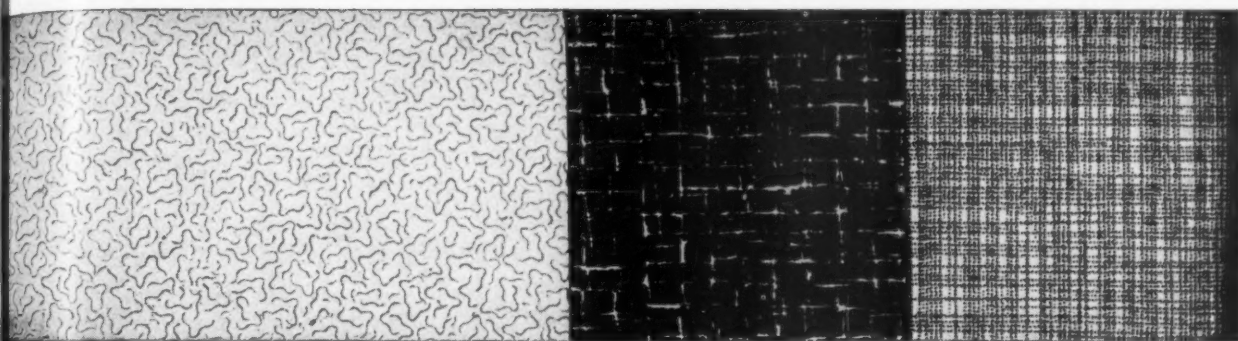
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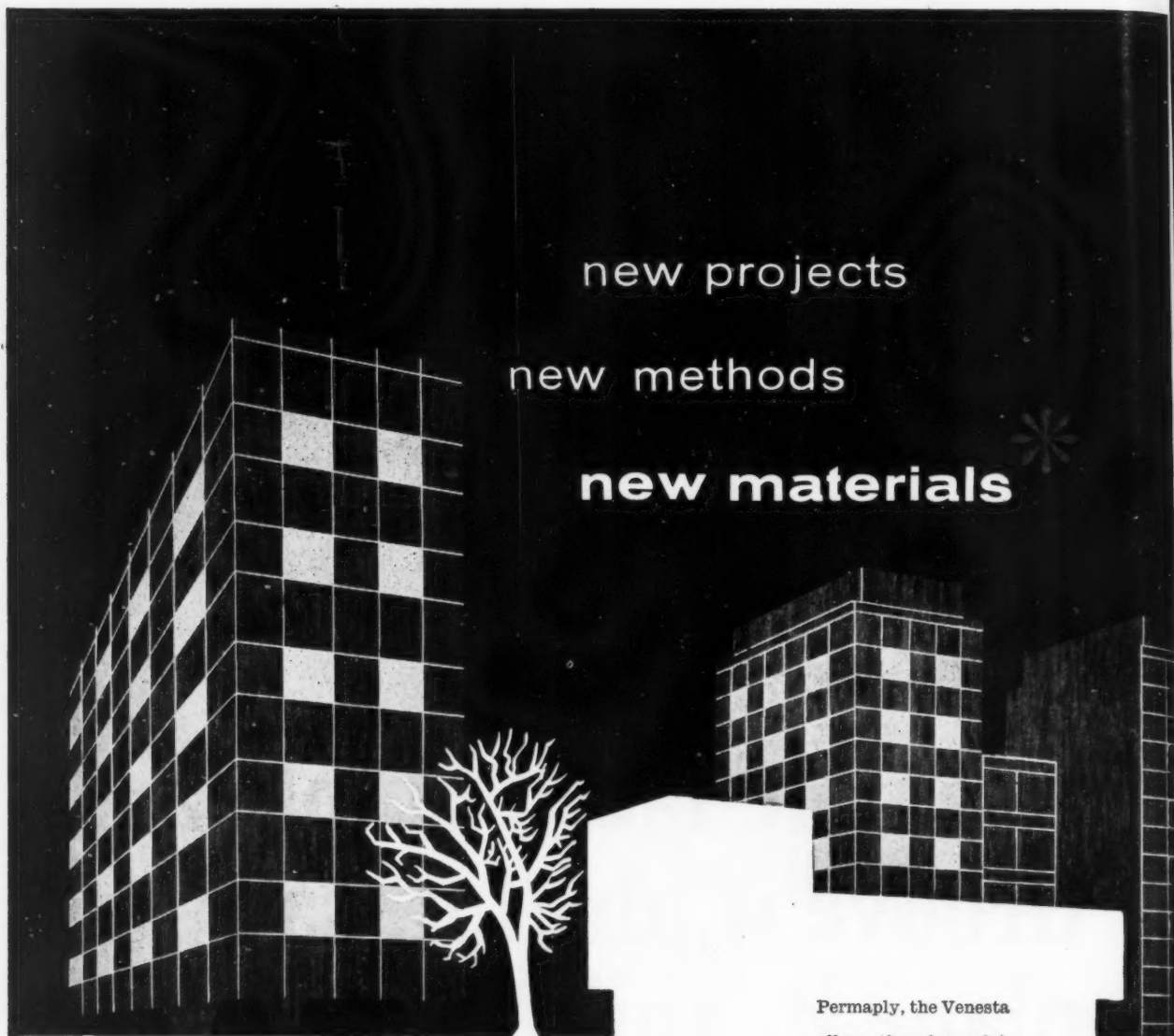
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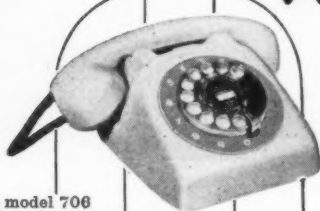
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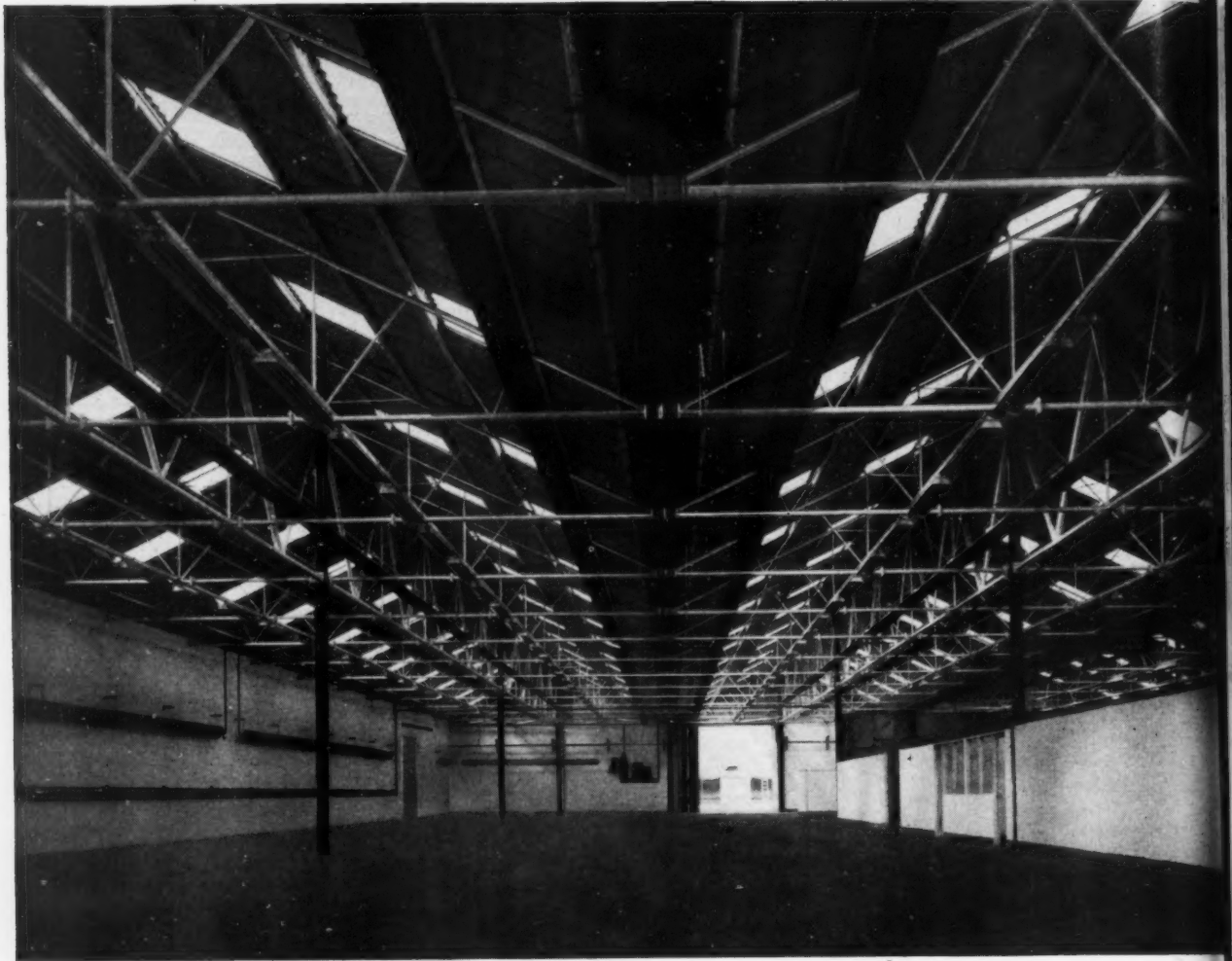
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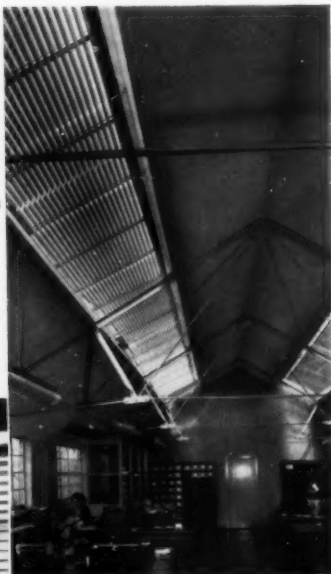
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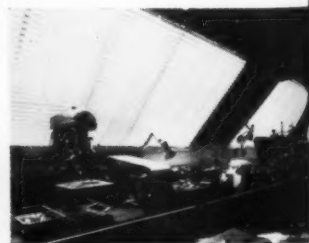
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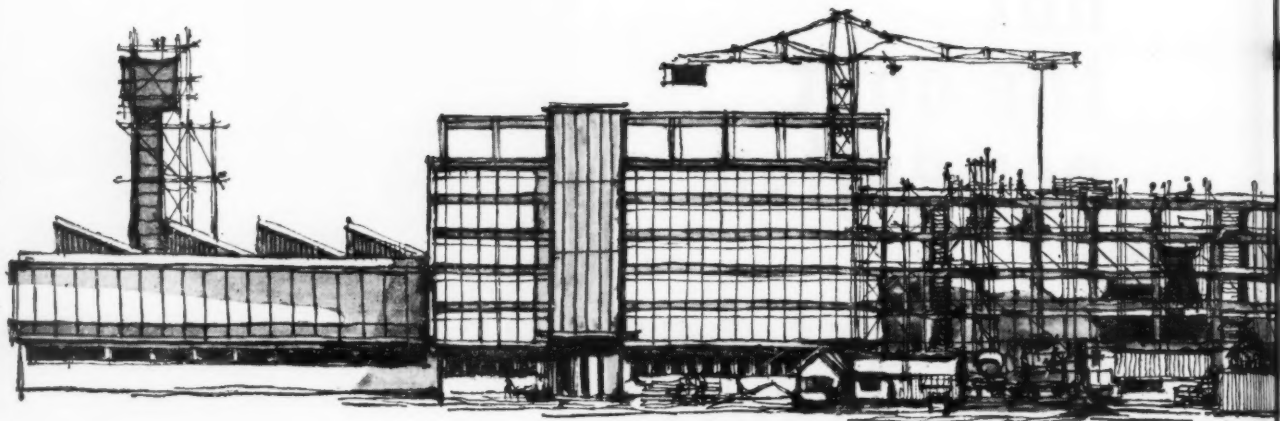
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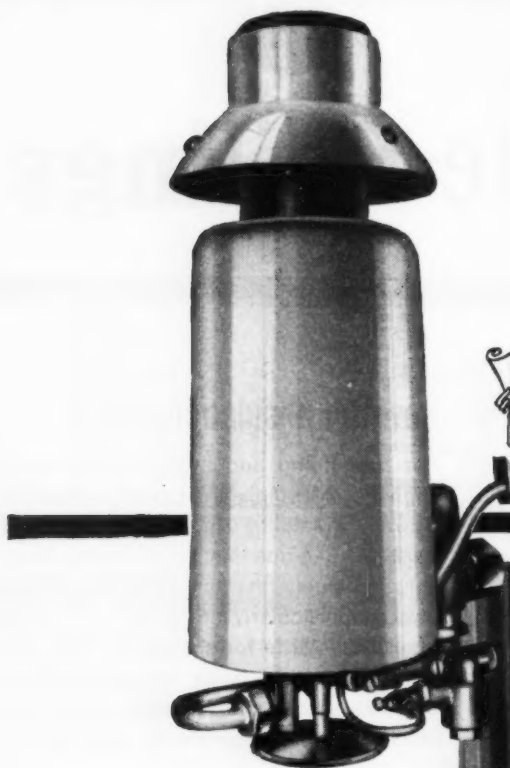
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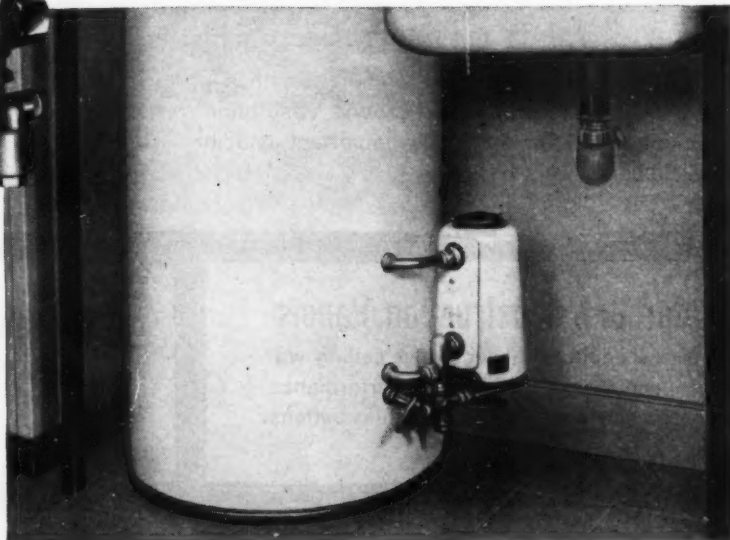
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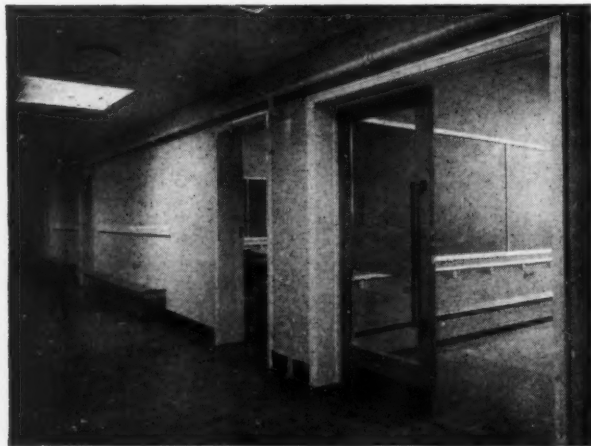


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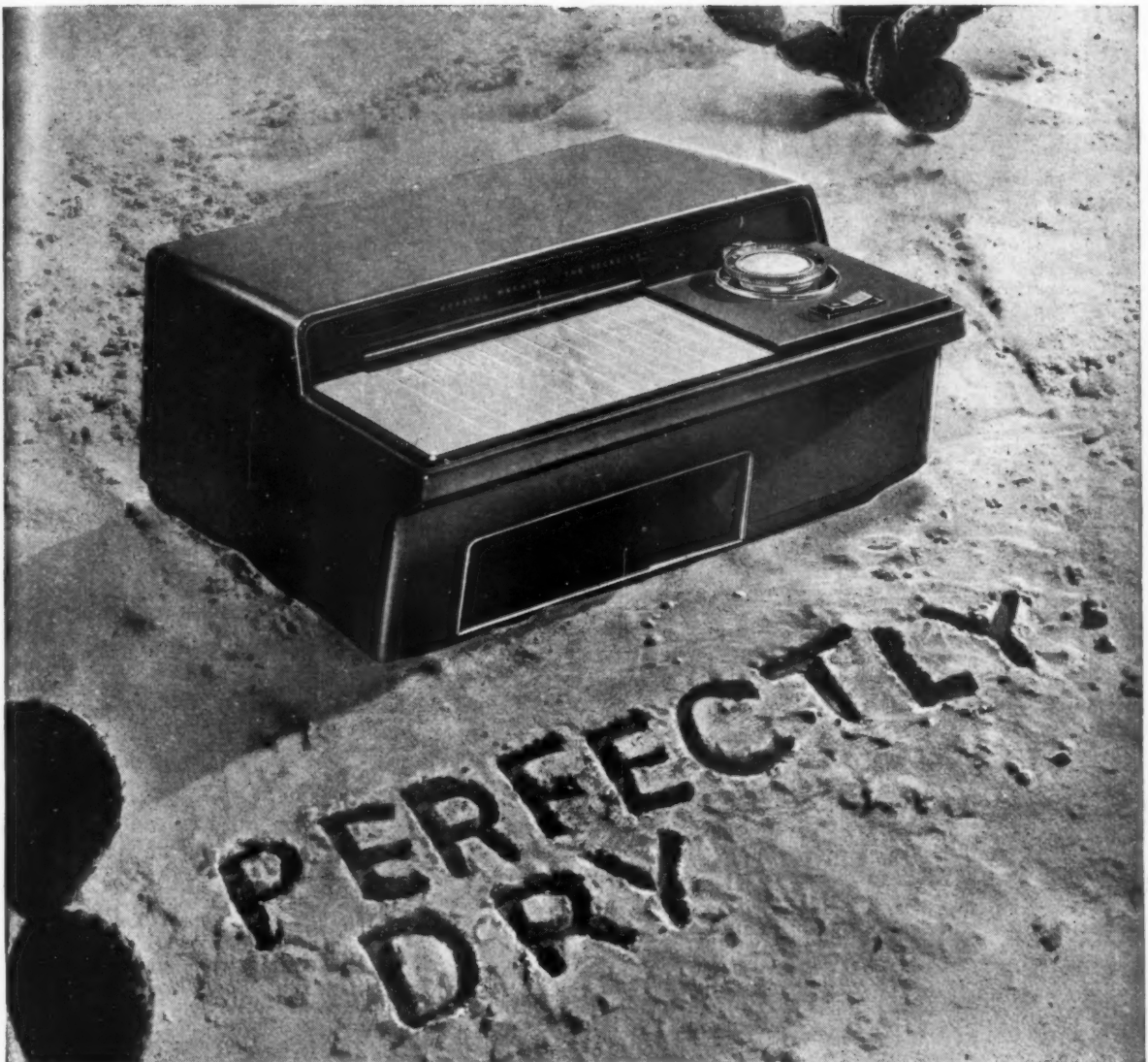
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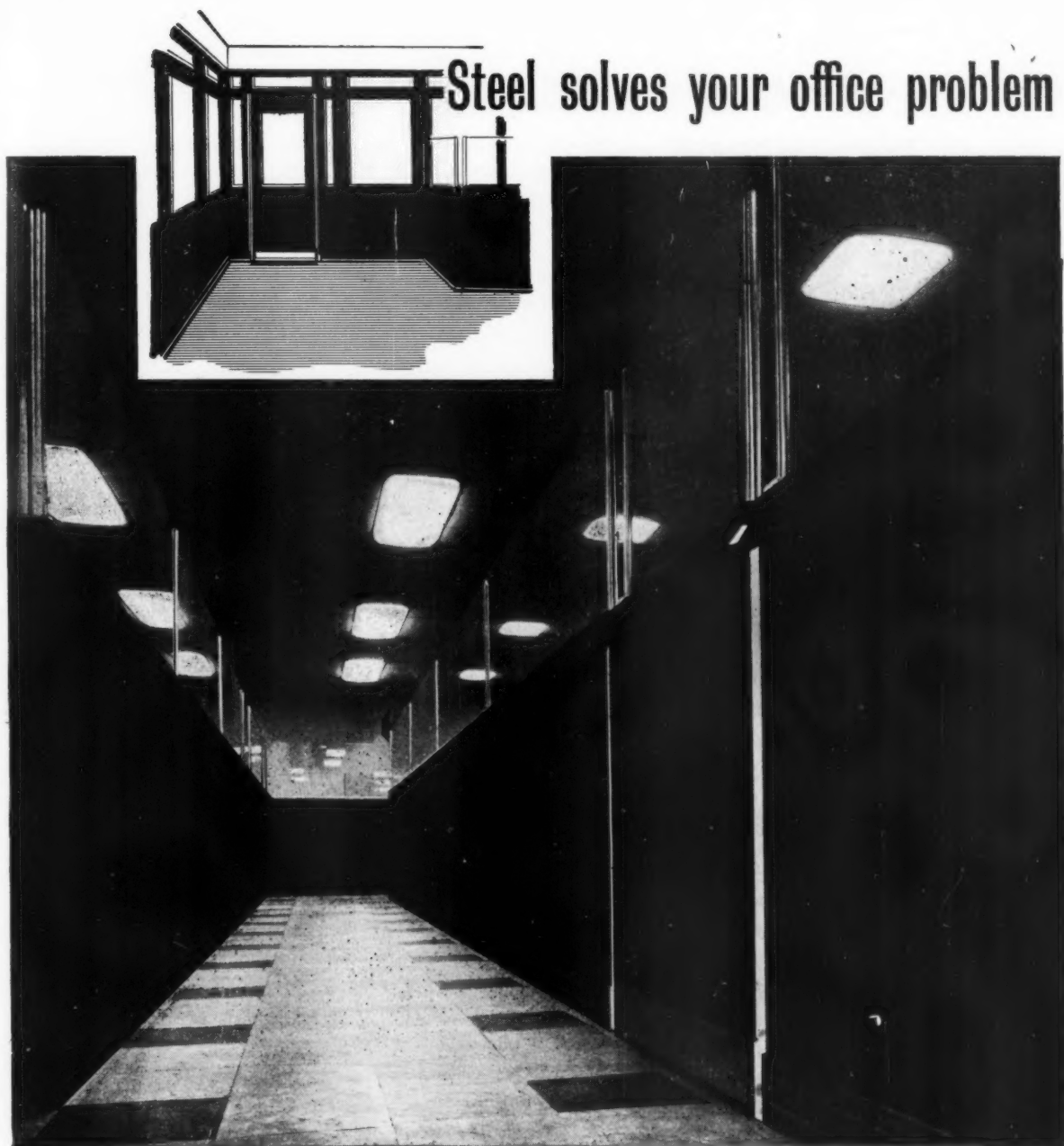
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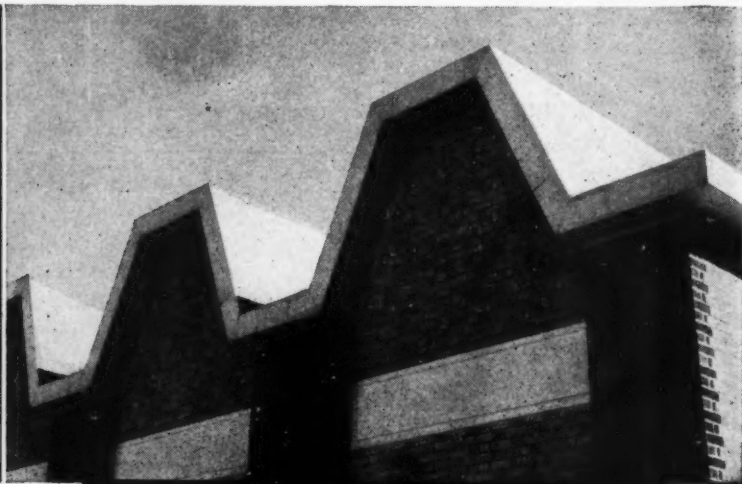
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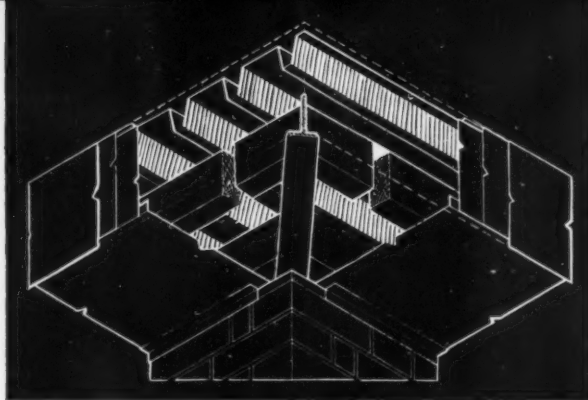
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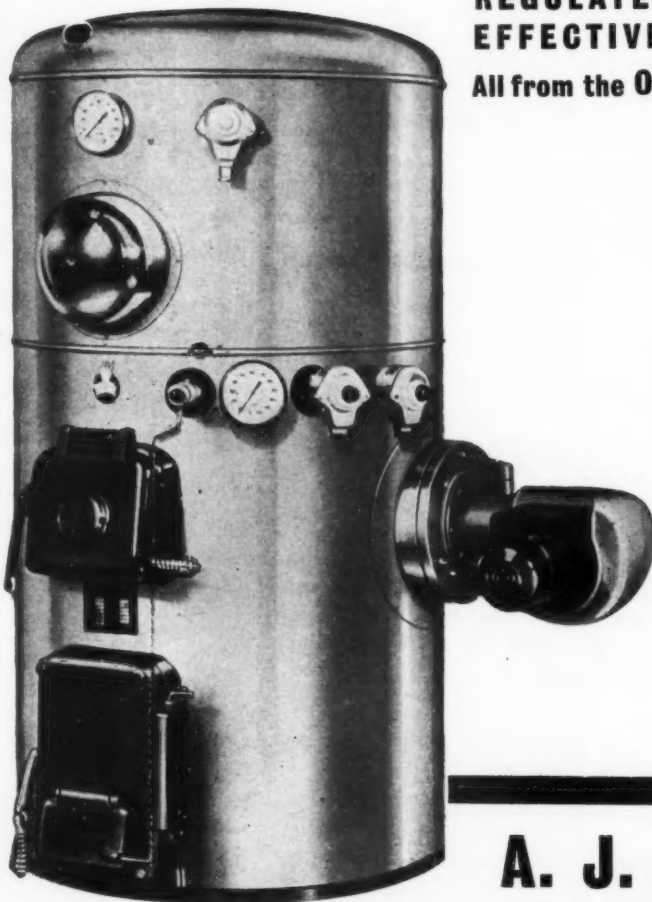


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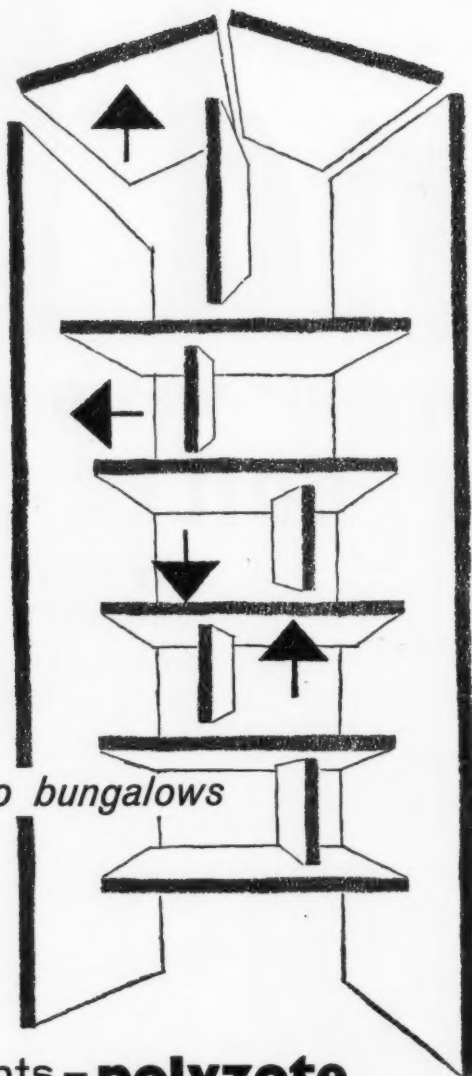
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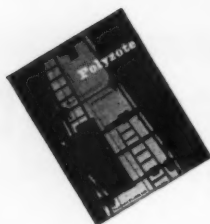
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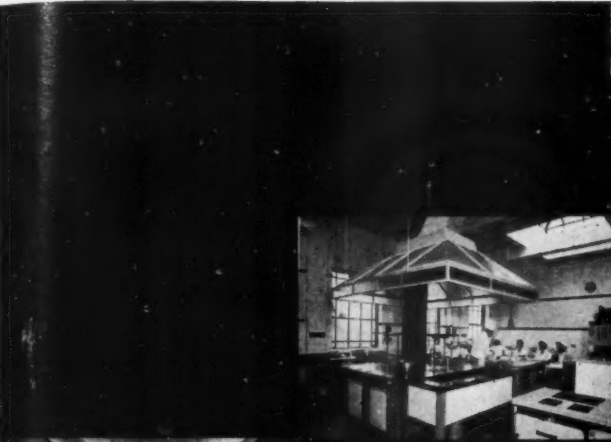
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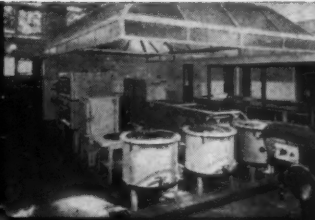
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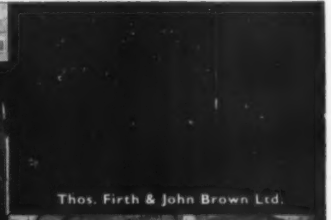
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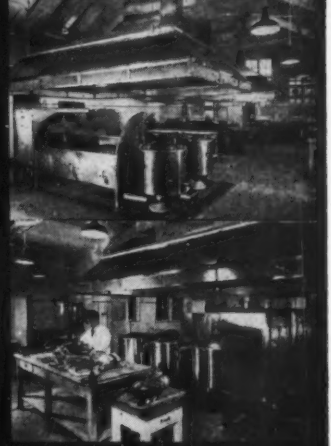
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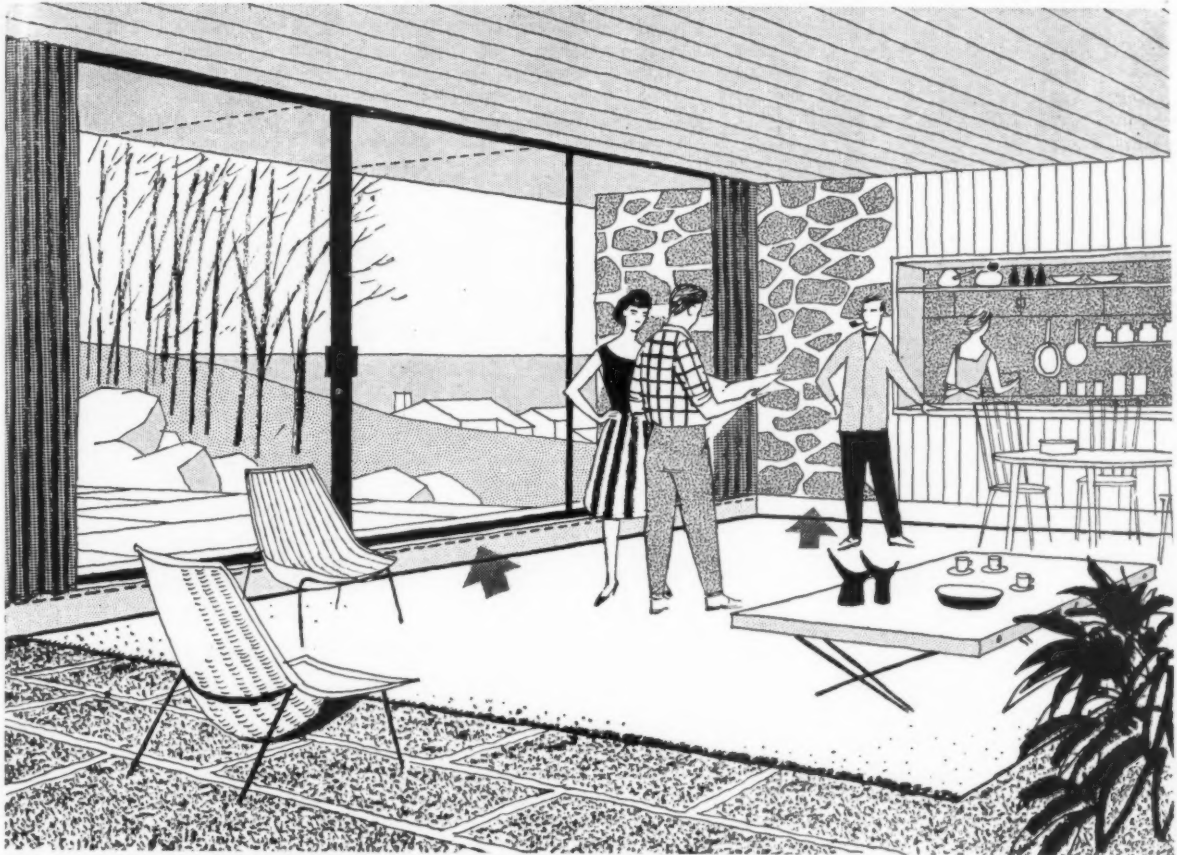
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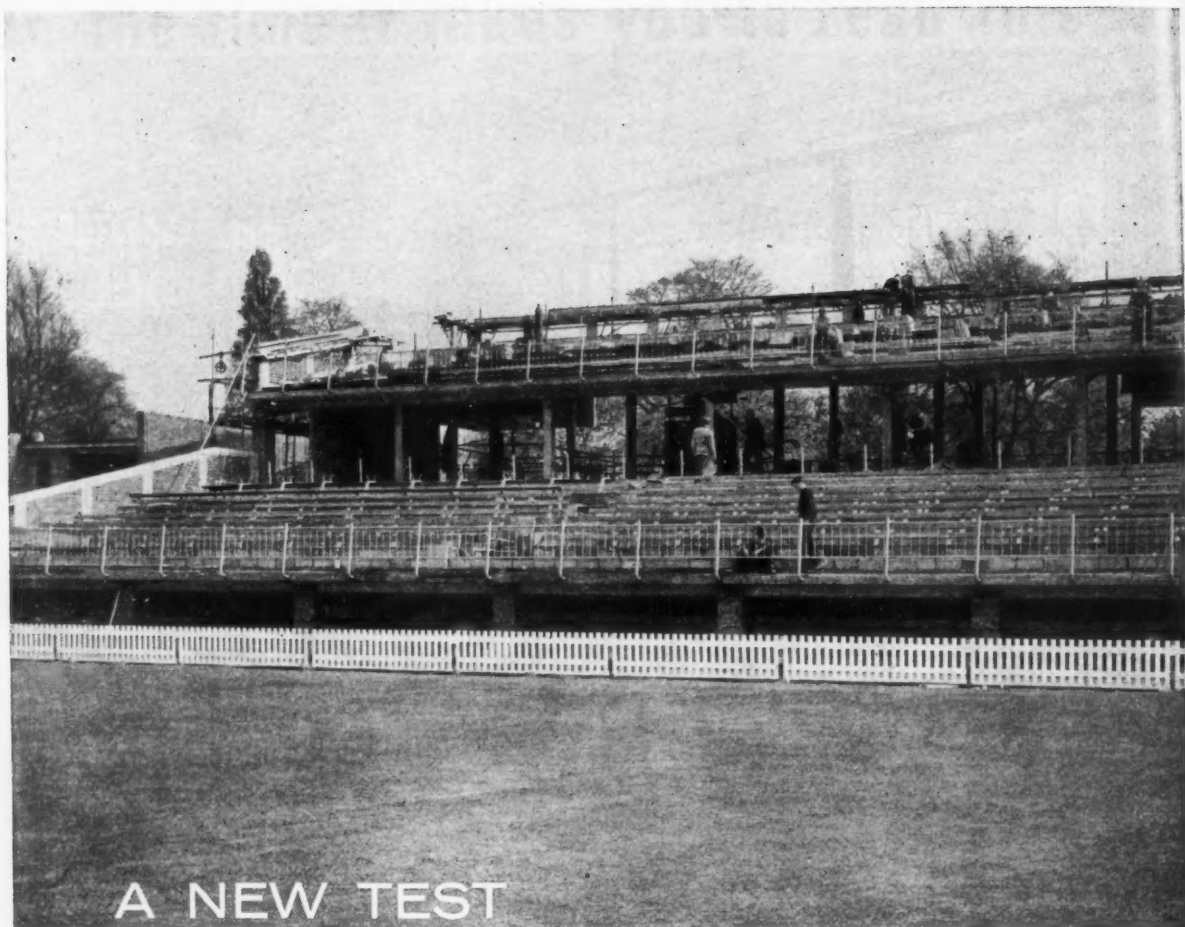
**E**VEN in the case of a private house, where normally the cubic space to be heated is in relatively small units, the existence of a large window area in any of these units will appreciably increase the amount of heat required to maintain a steady, equable temperature.

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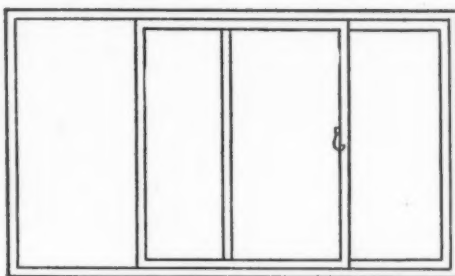
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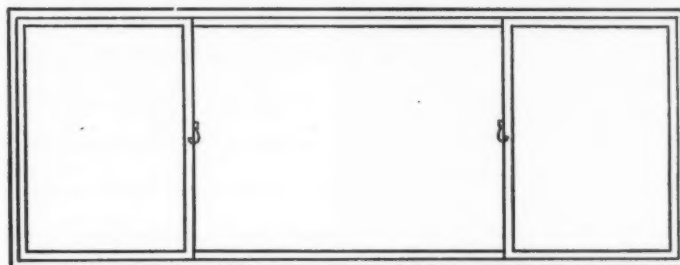
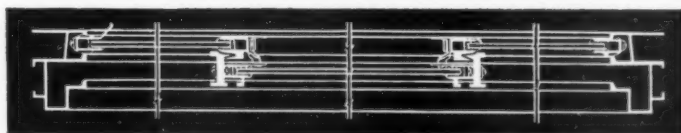
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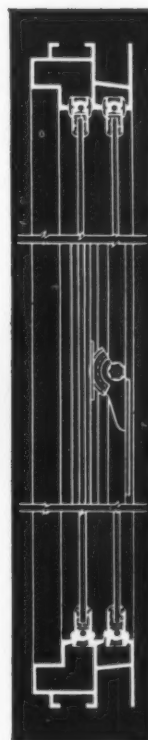
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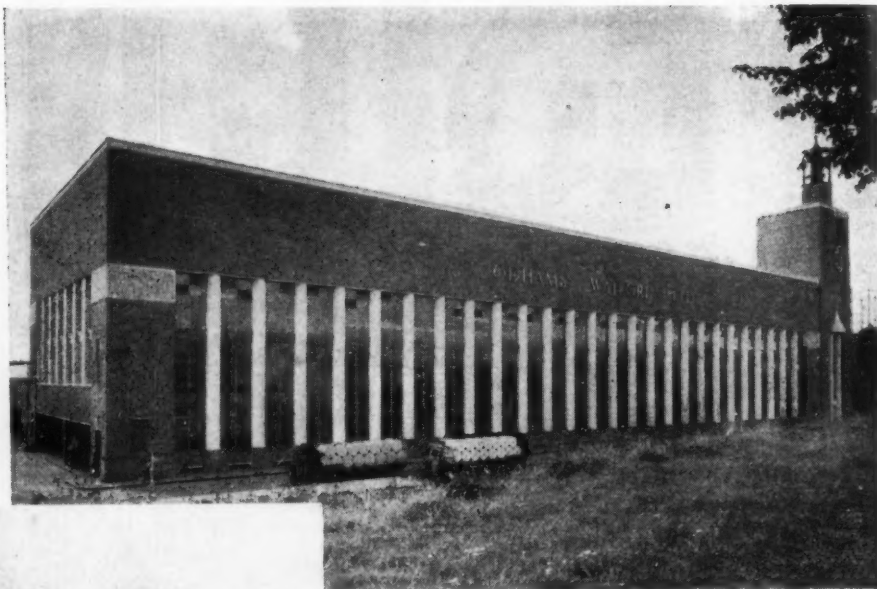
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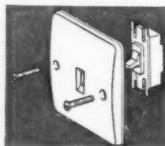
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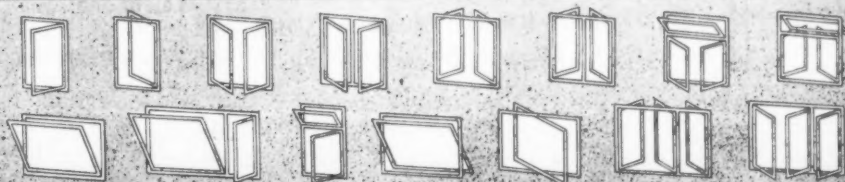
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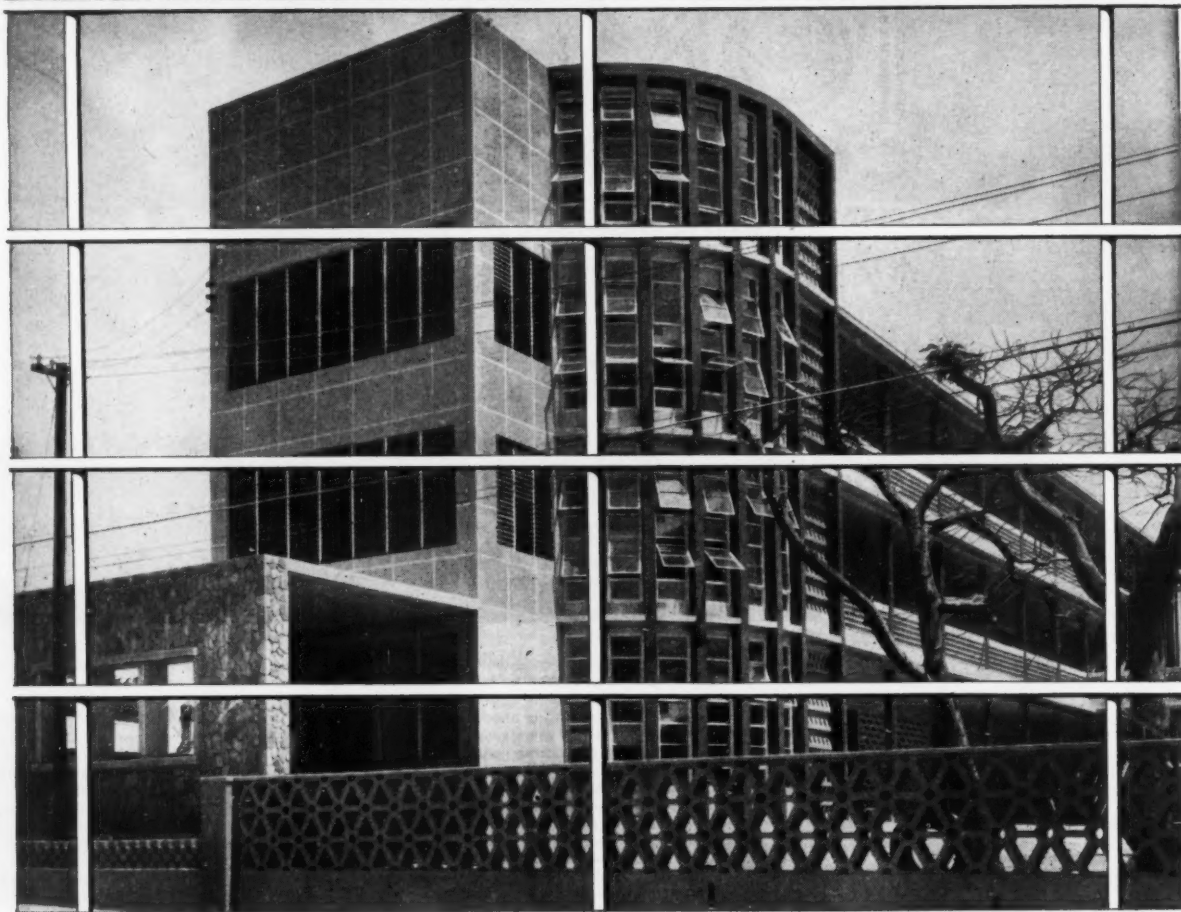
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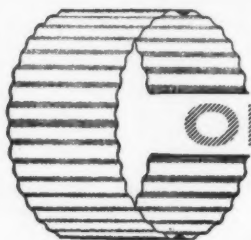
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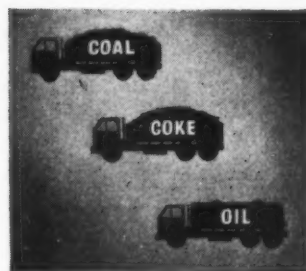
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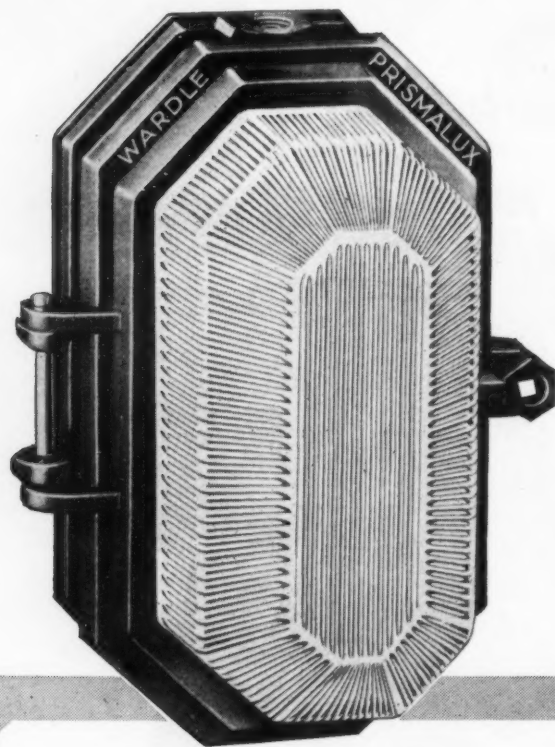
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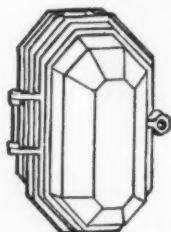
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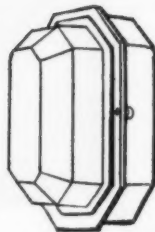
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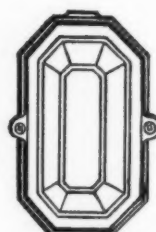
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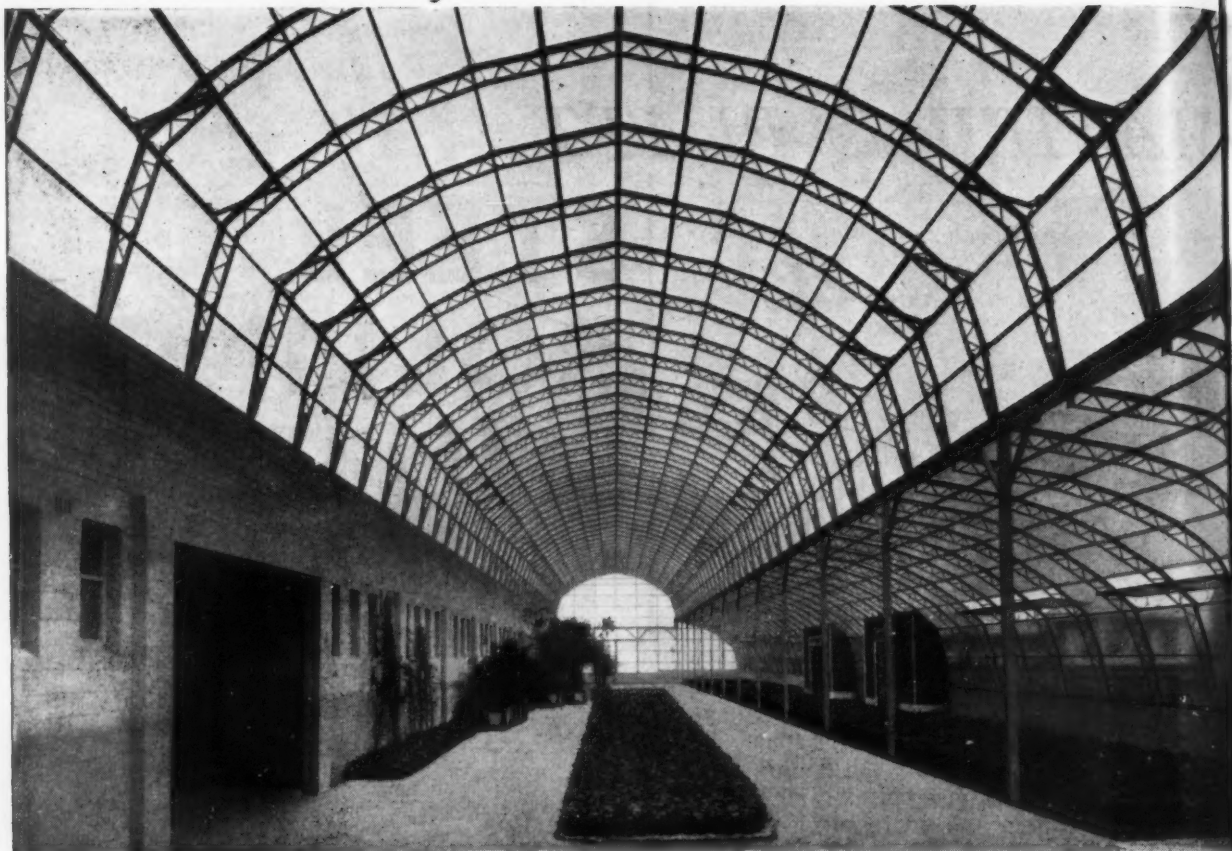
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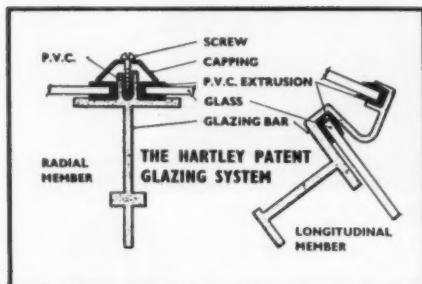
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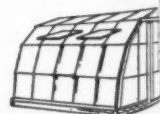


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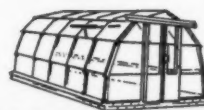
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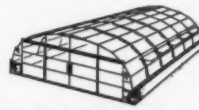
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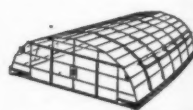
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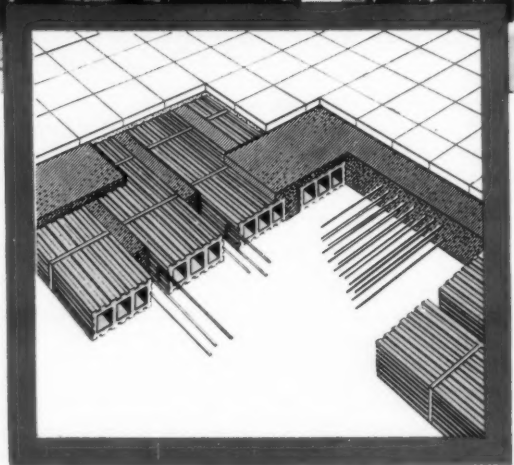
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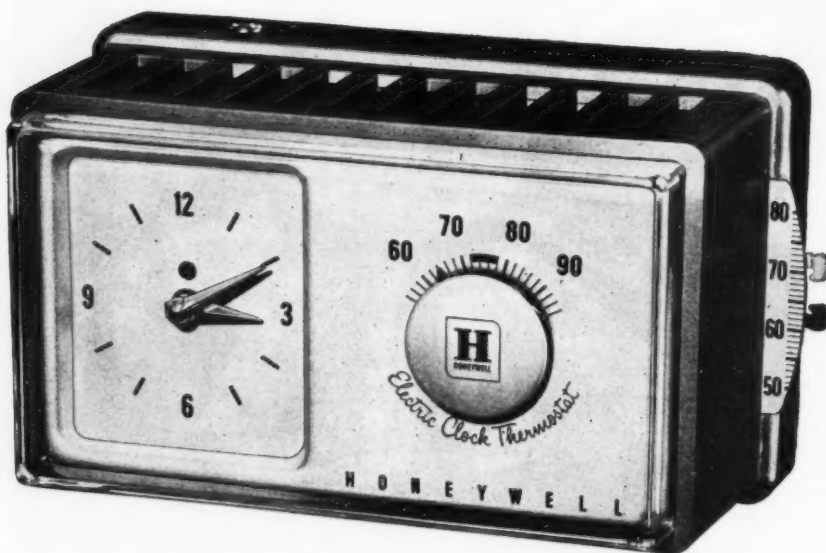
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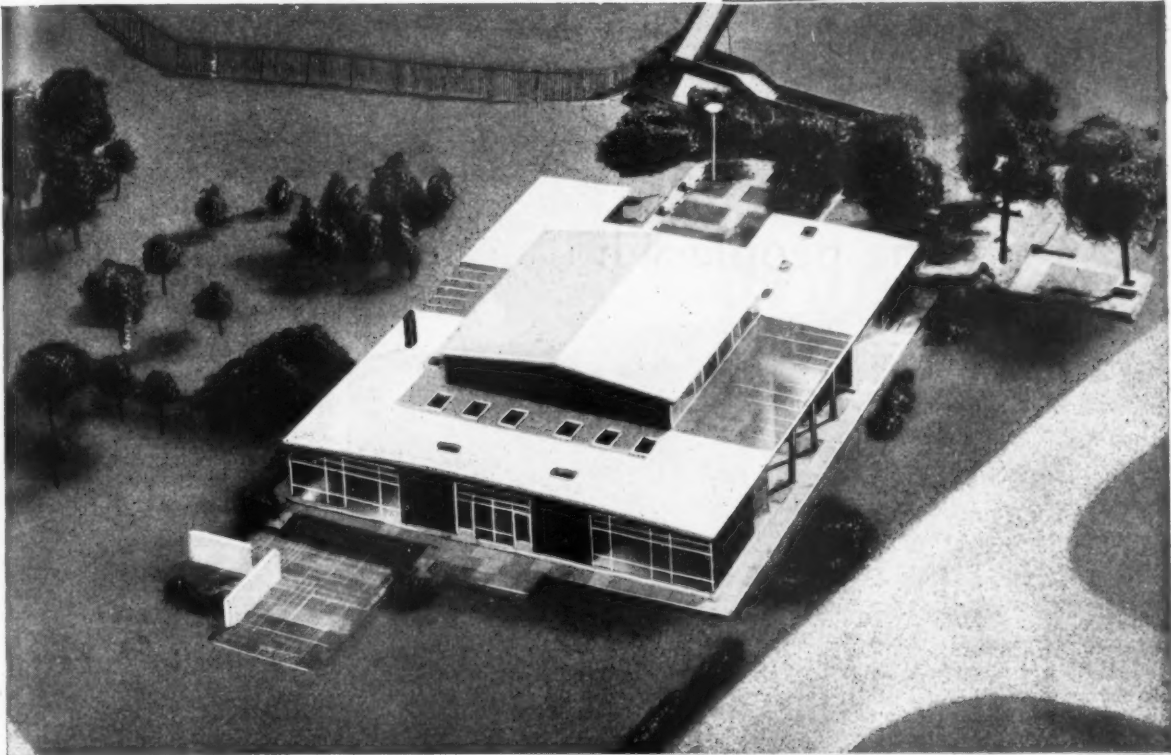


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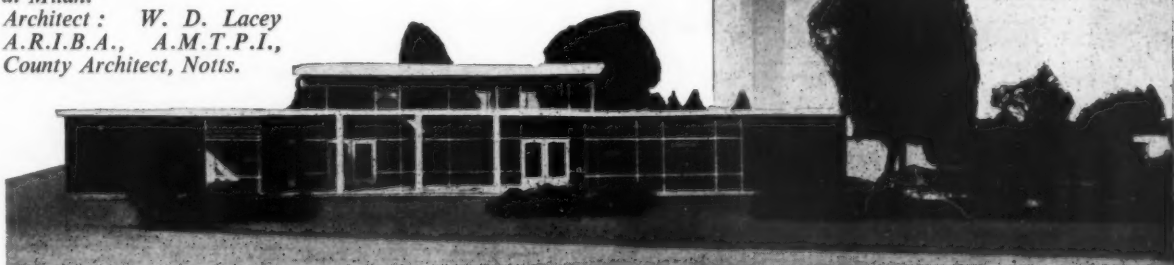
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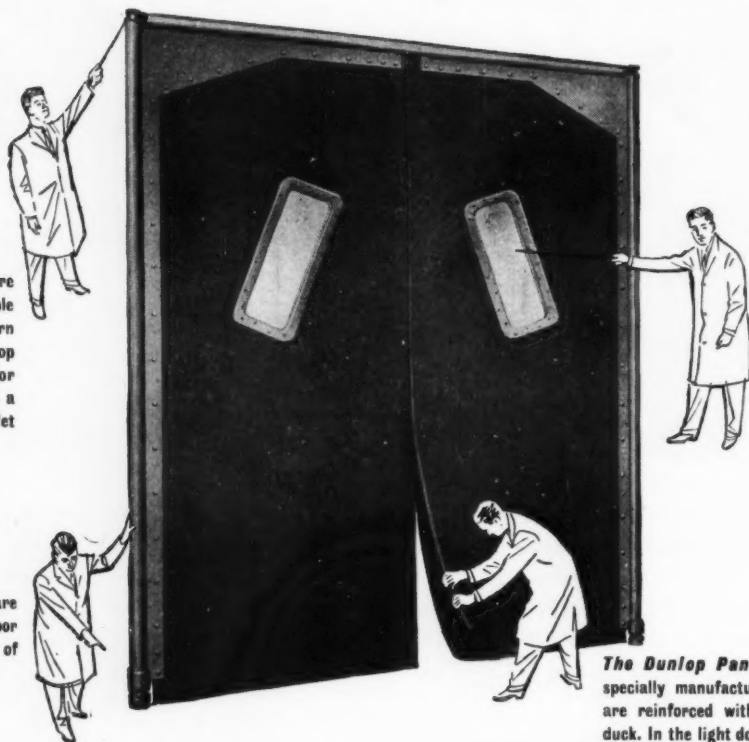
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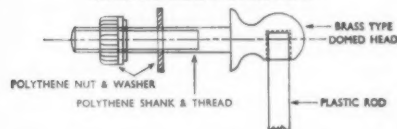
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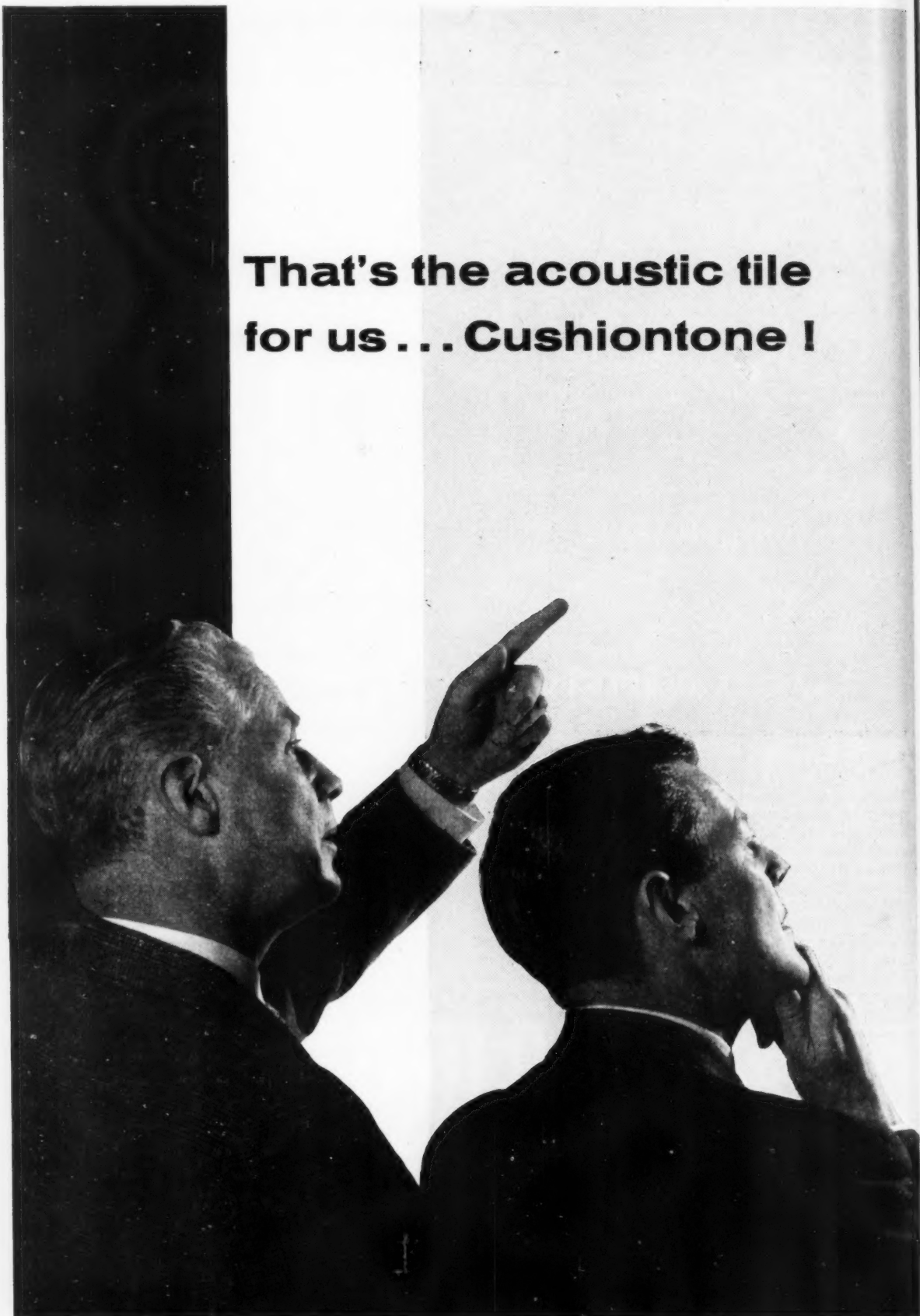
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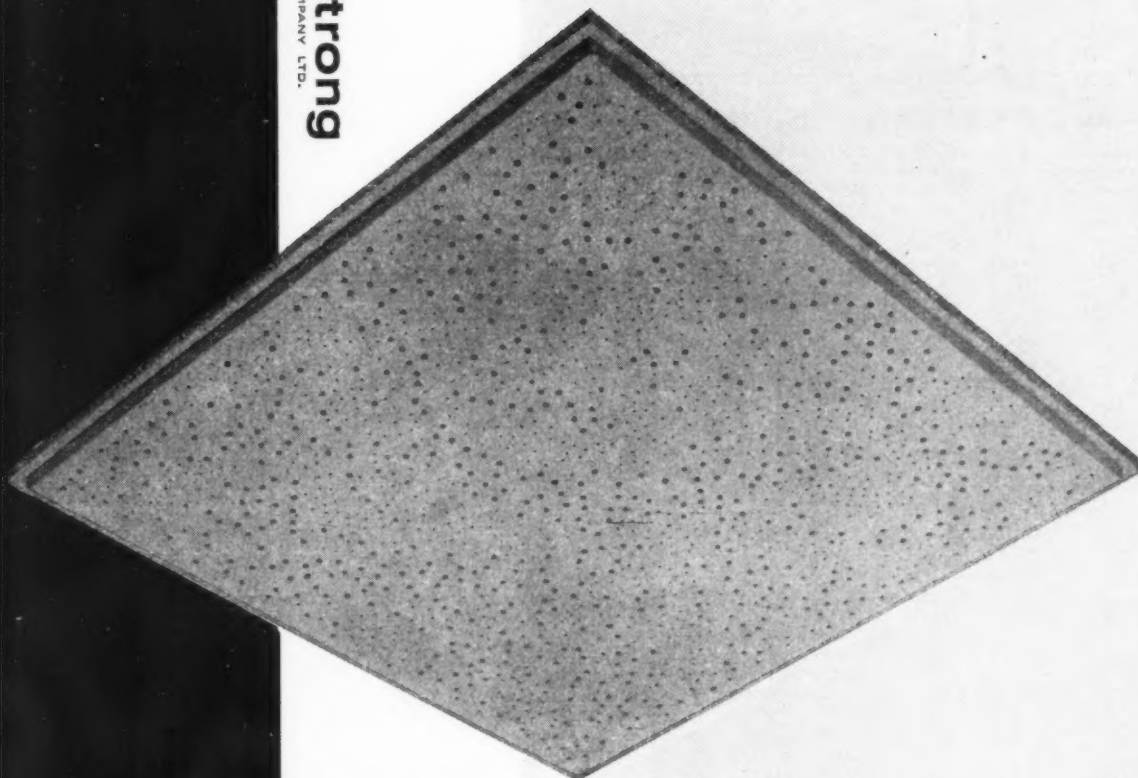


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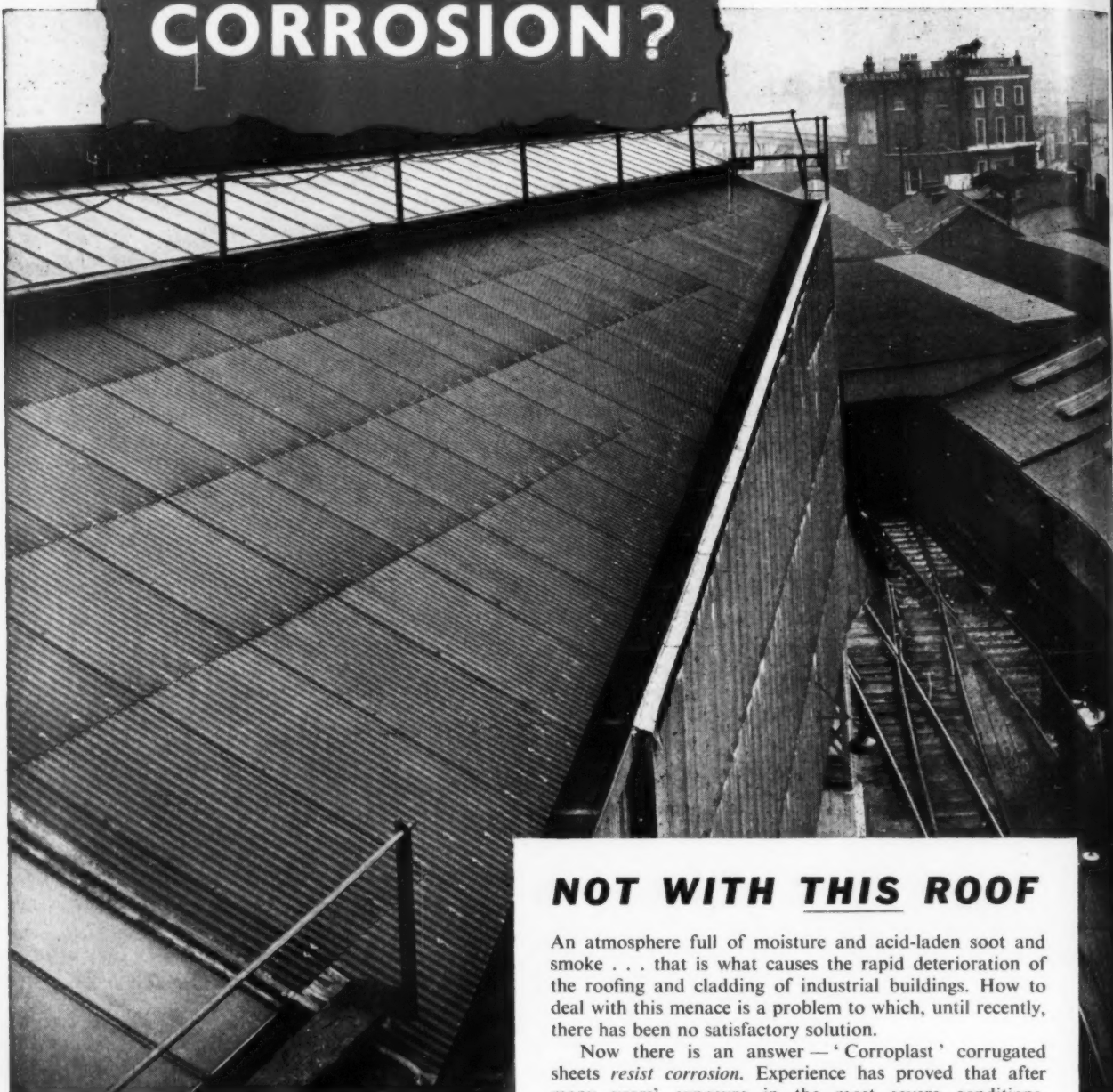
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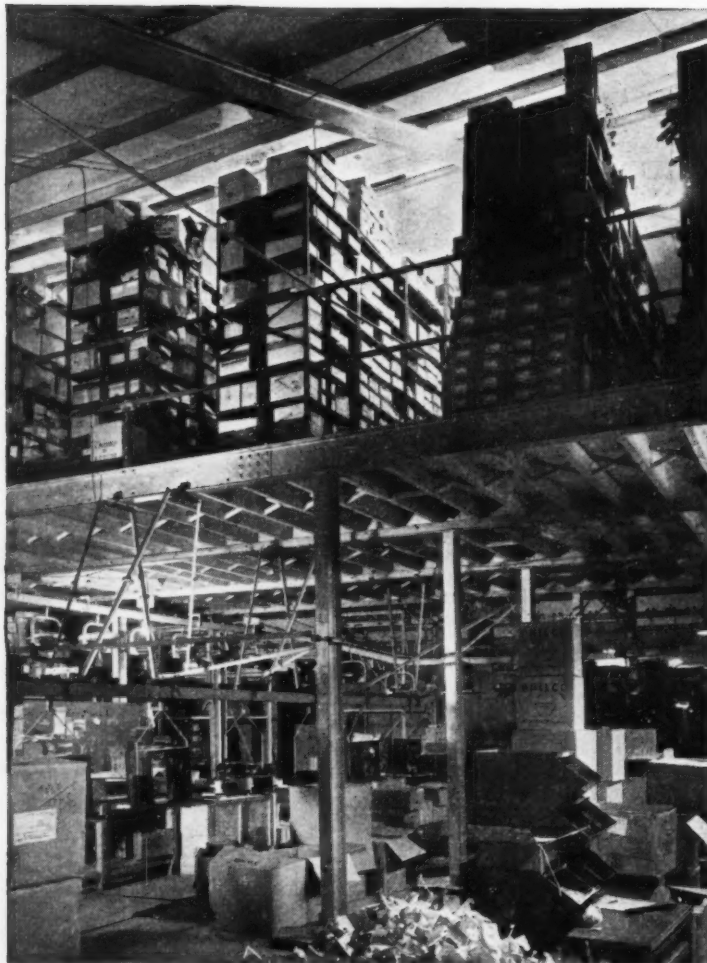
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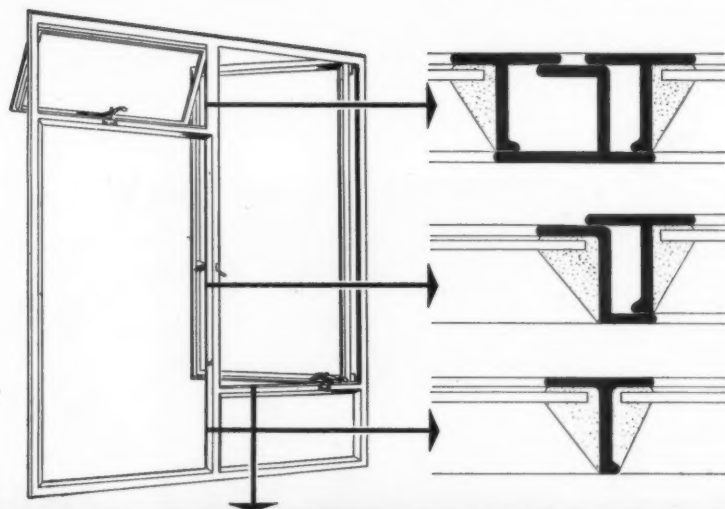


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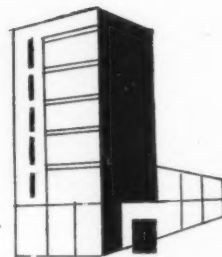
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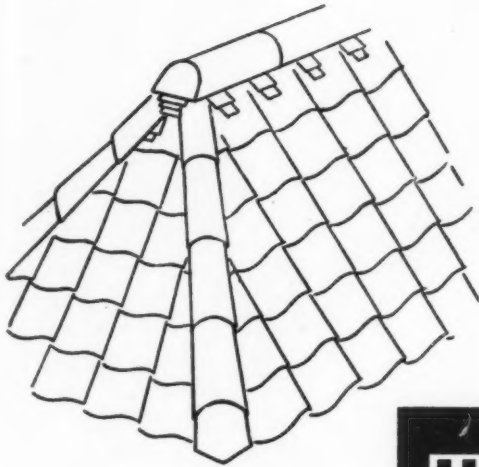
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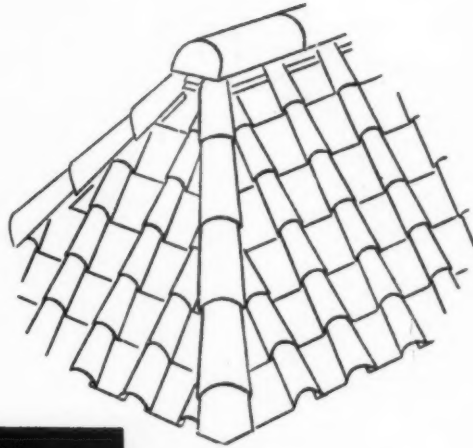
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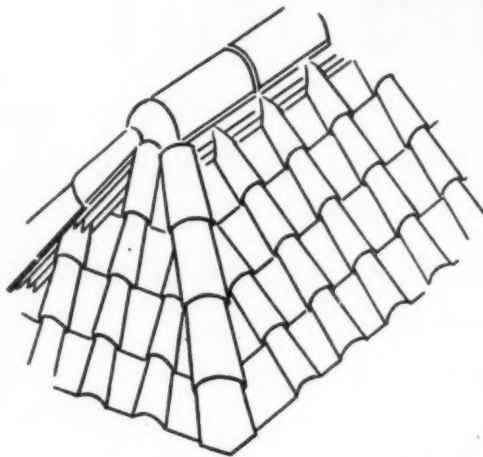
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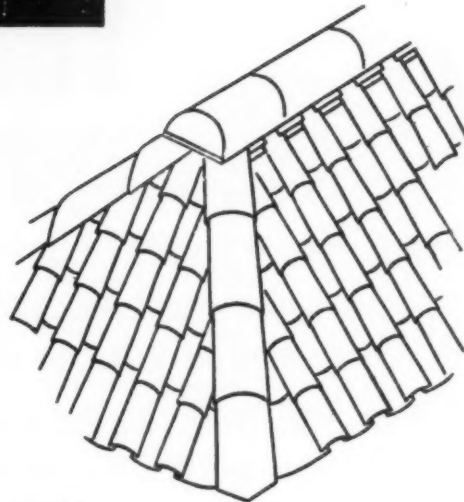
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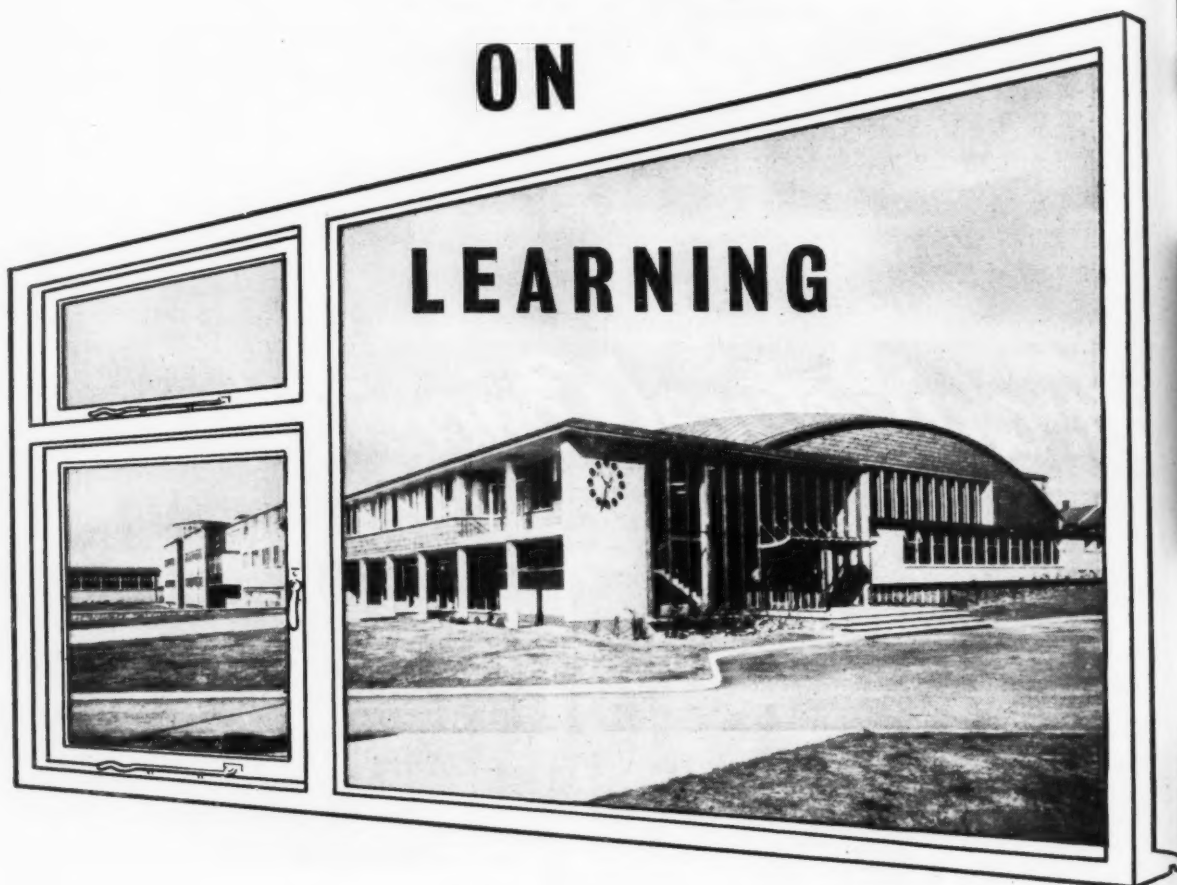


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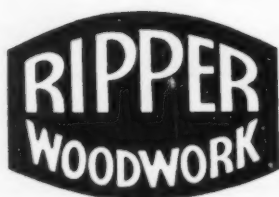
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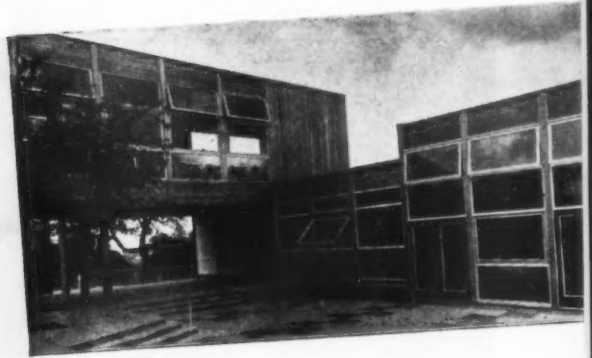
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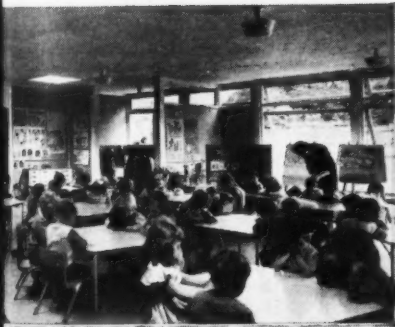
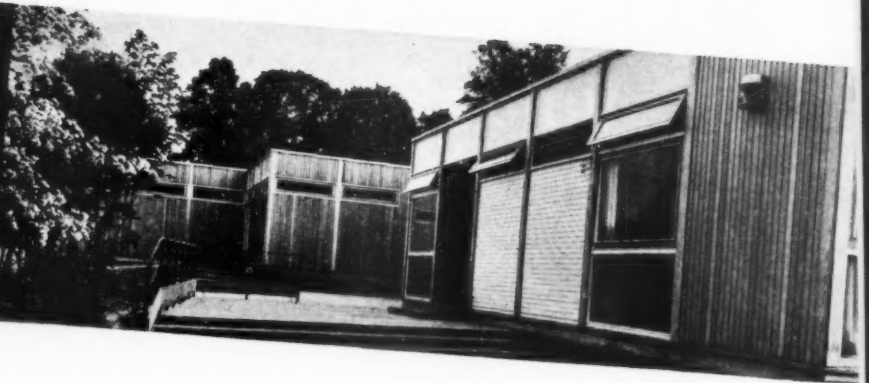
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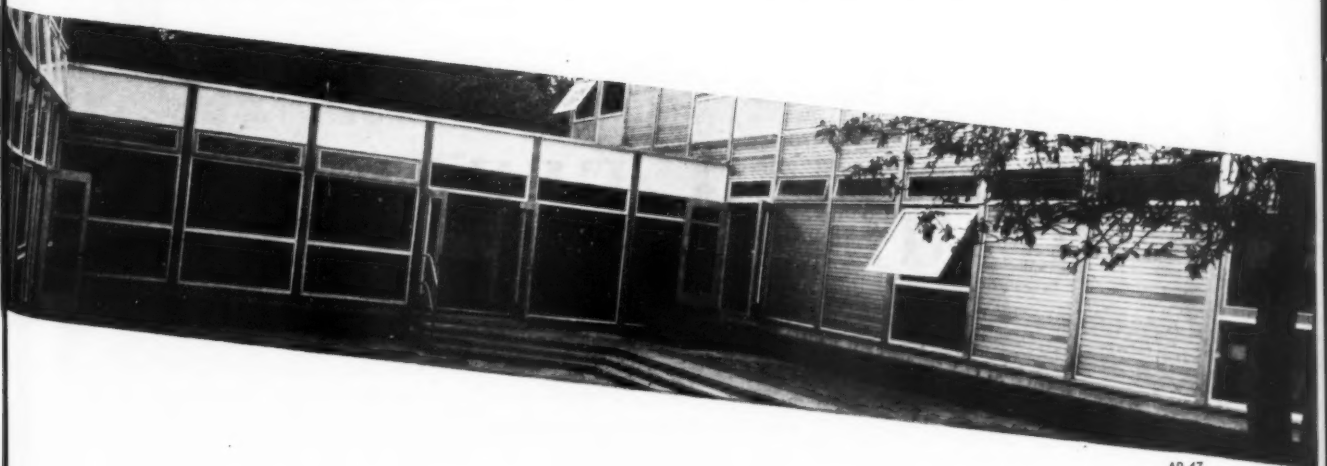
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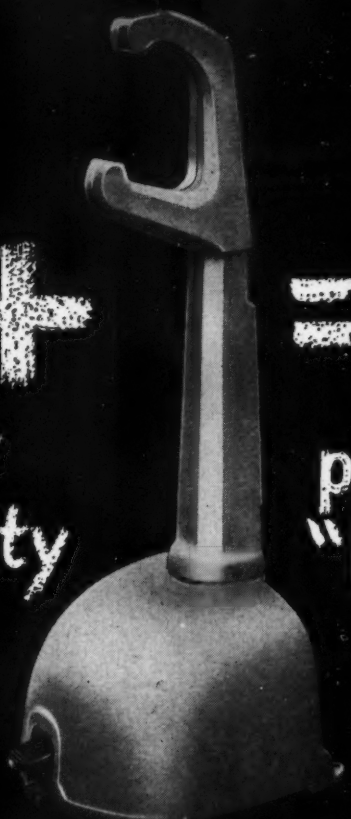


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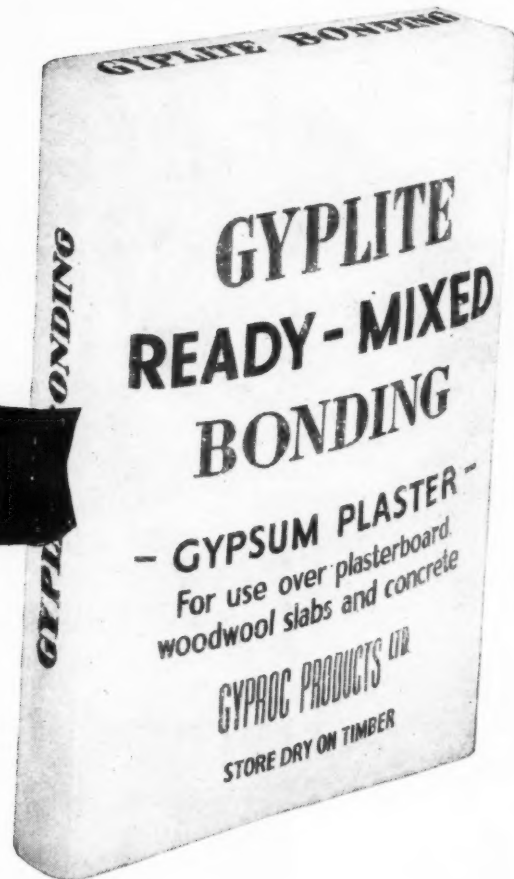
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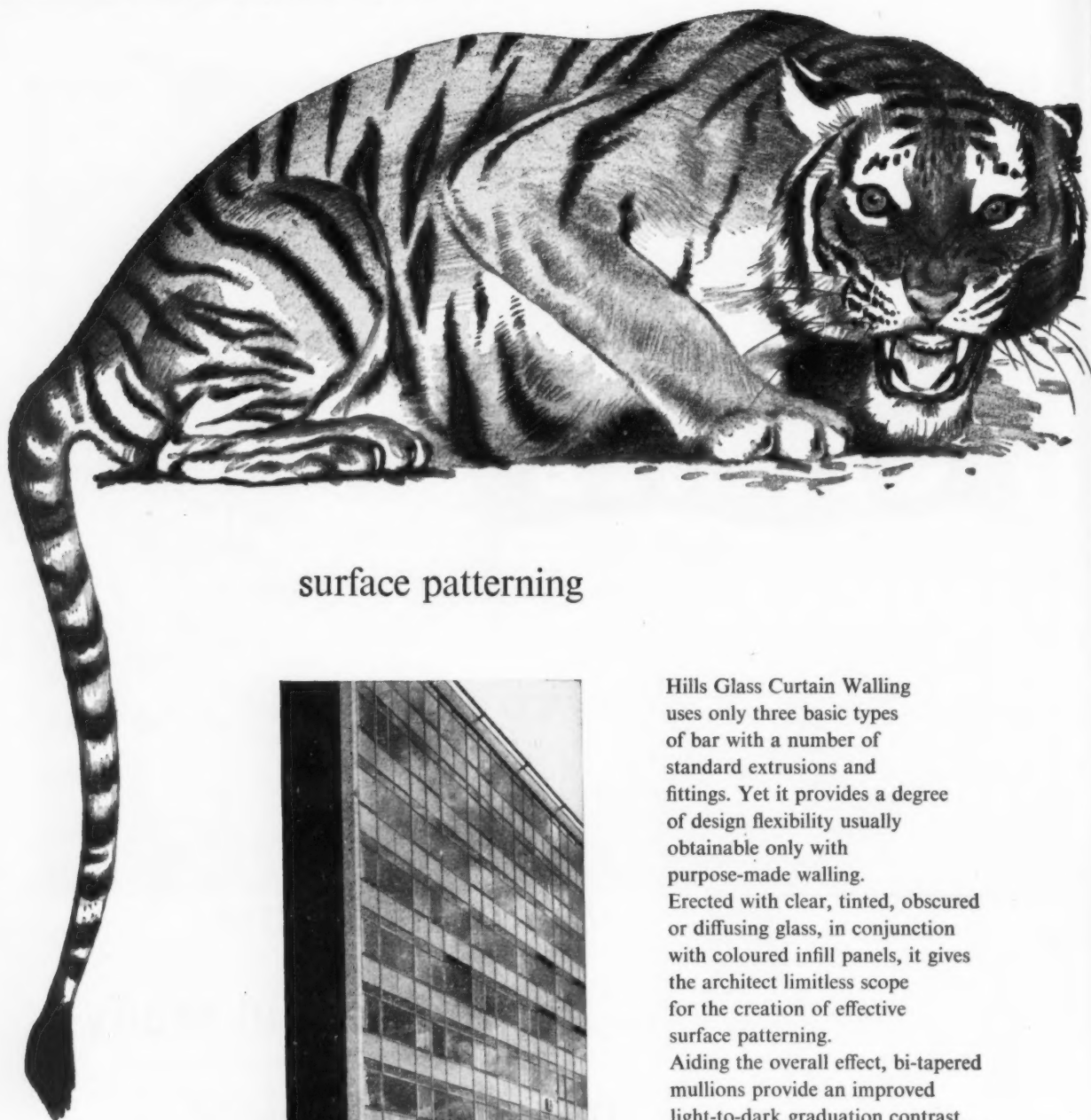
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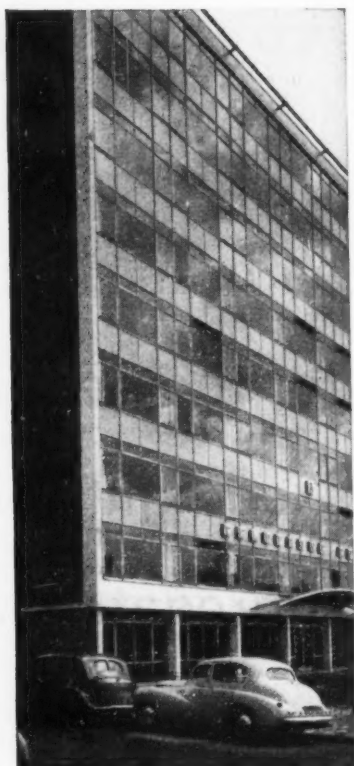
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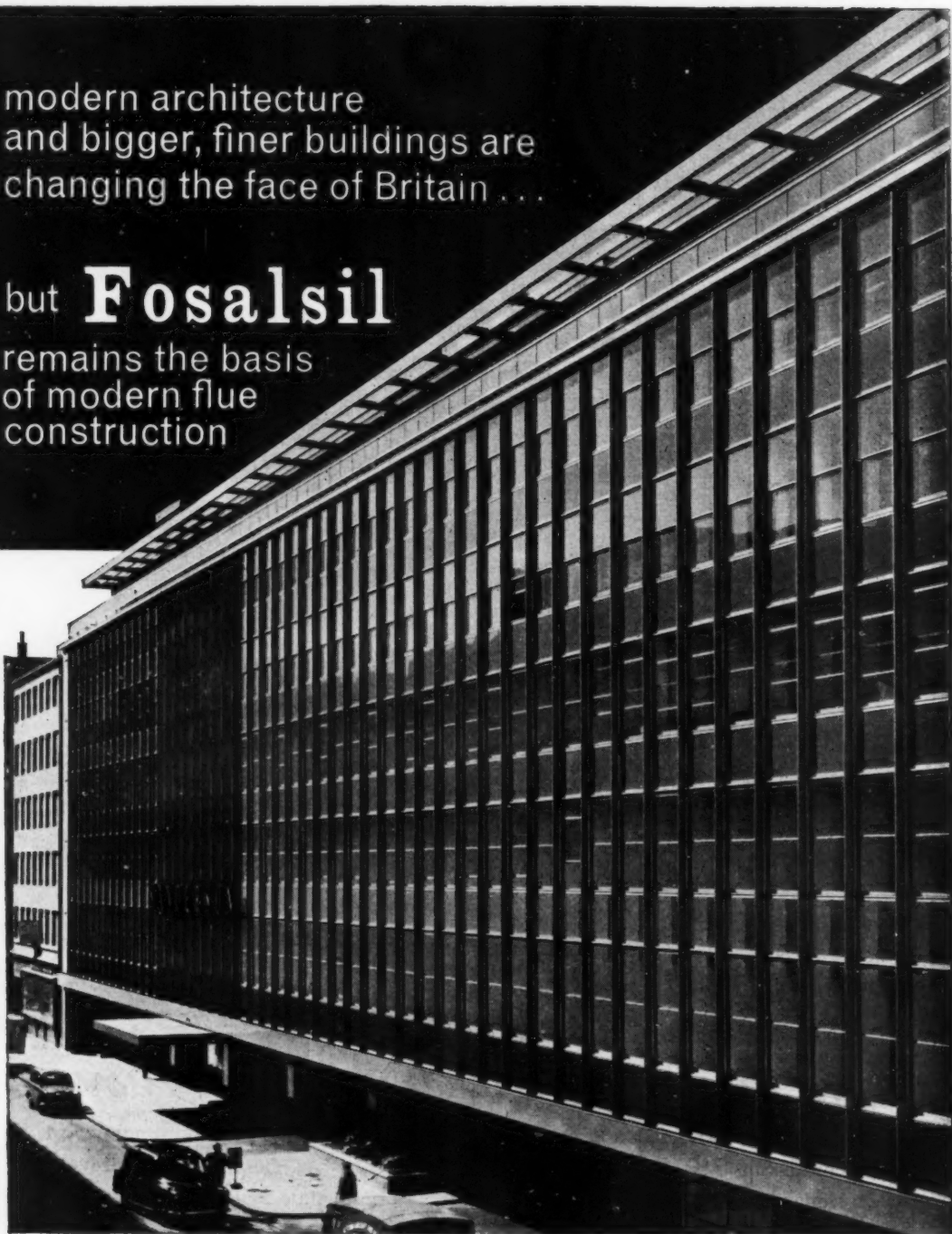


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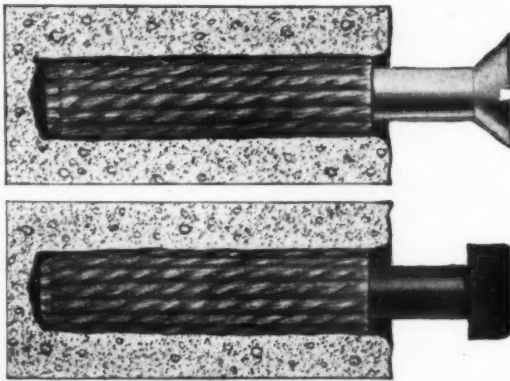
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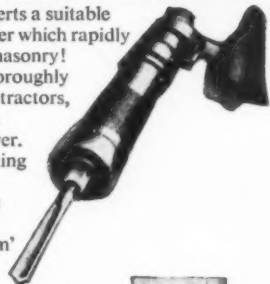


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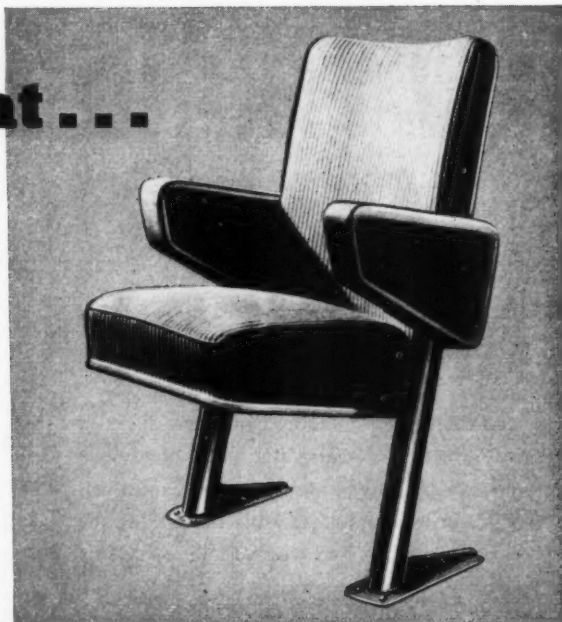
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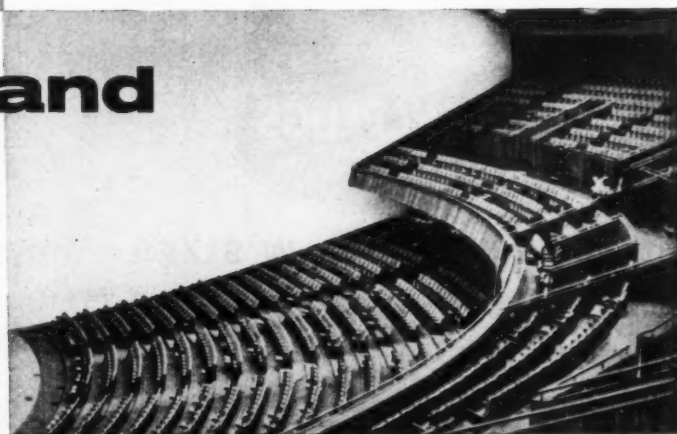
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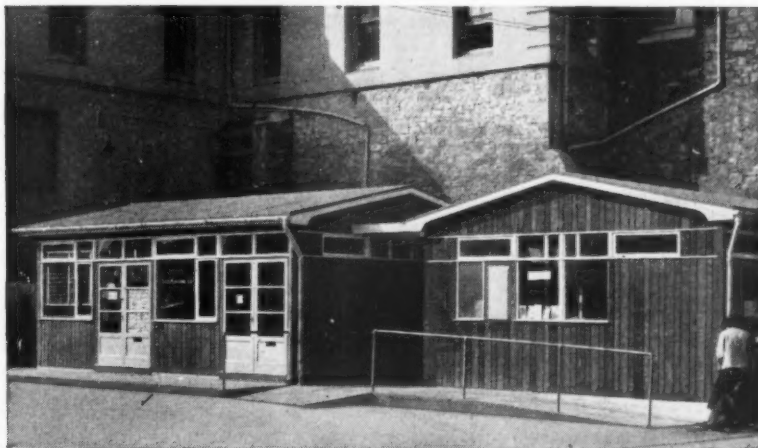
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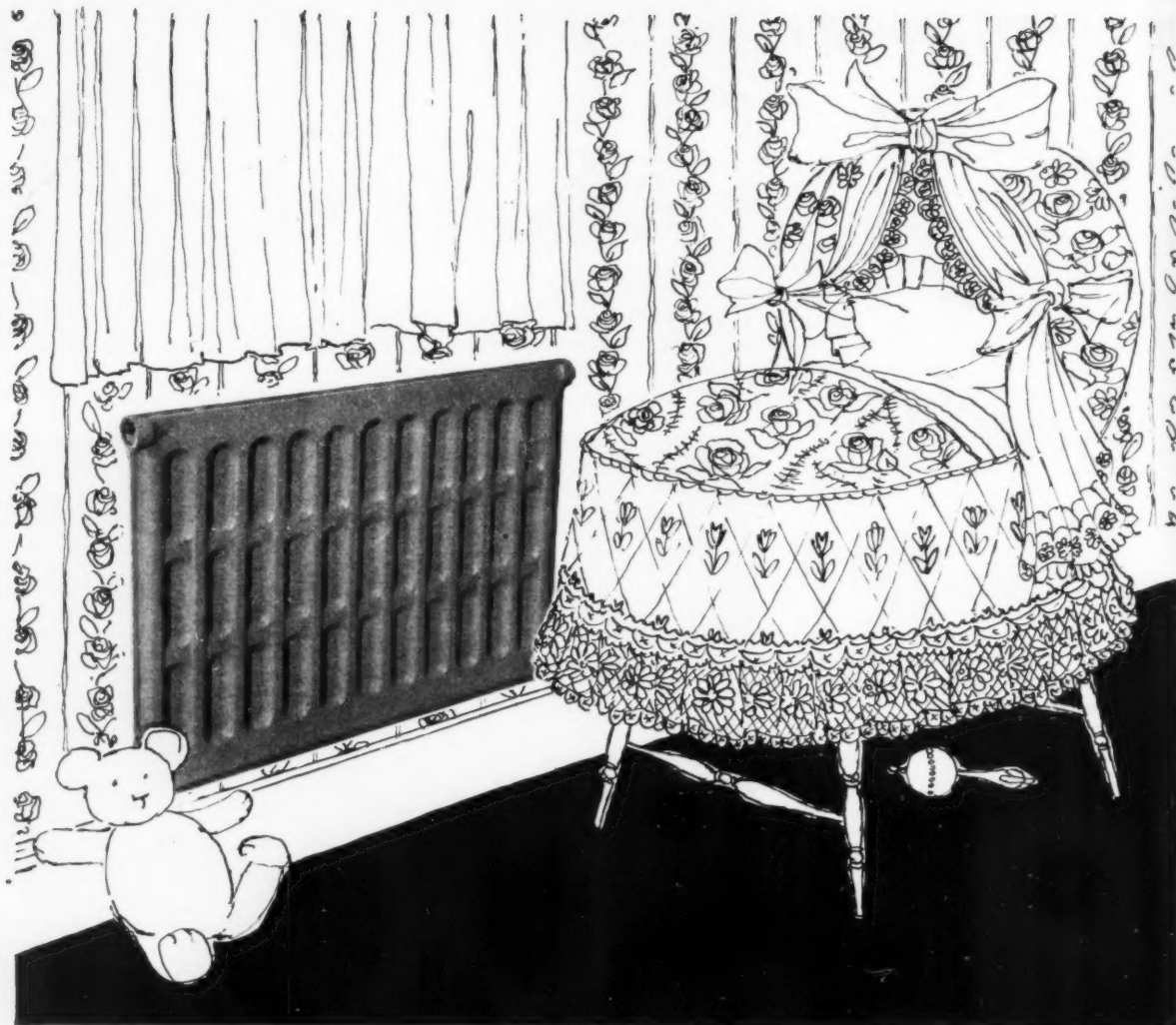
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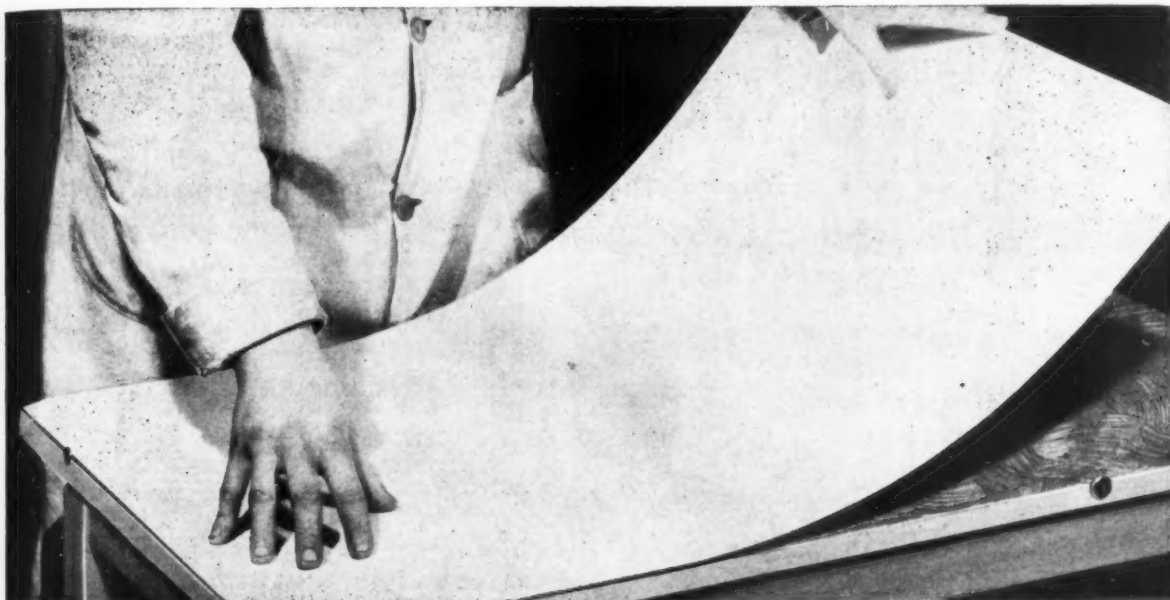
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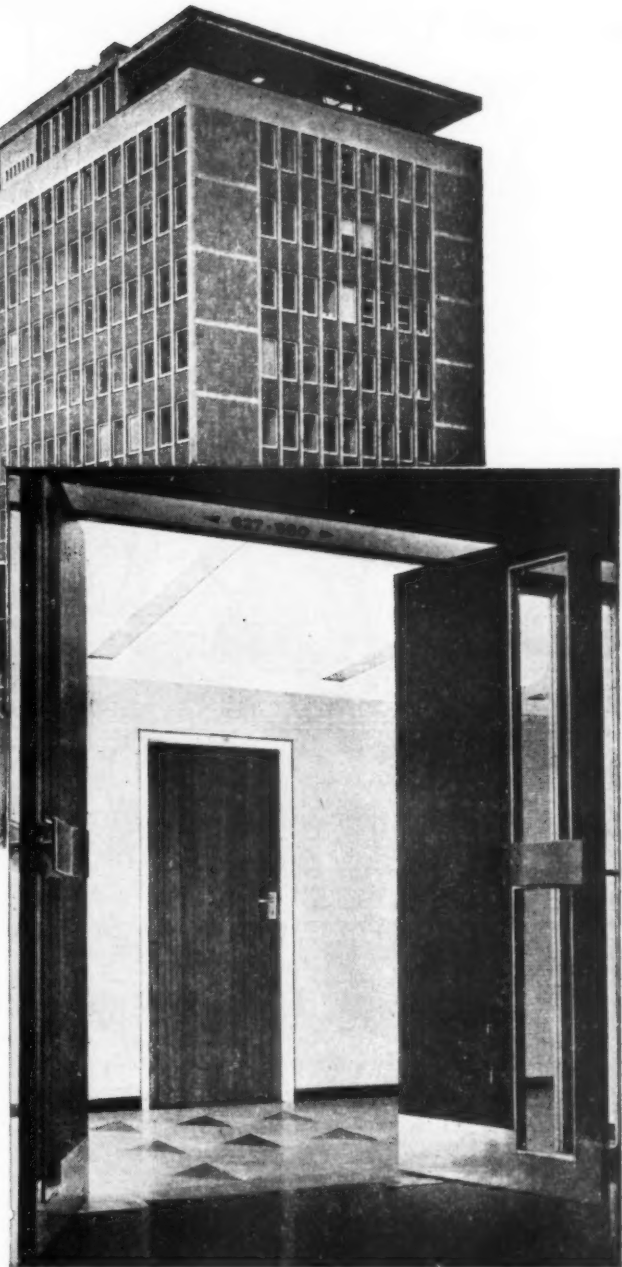
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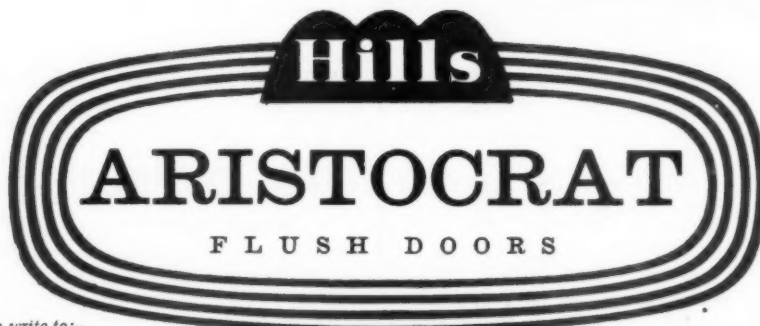
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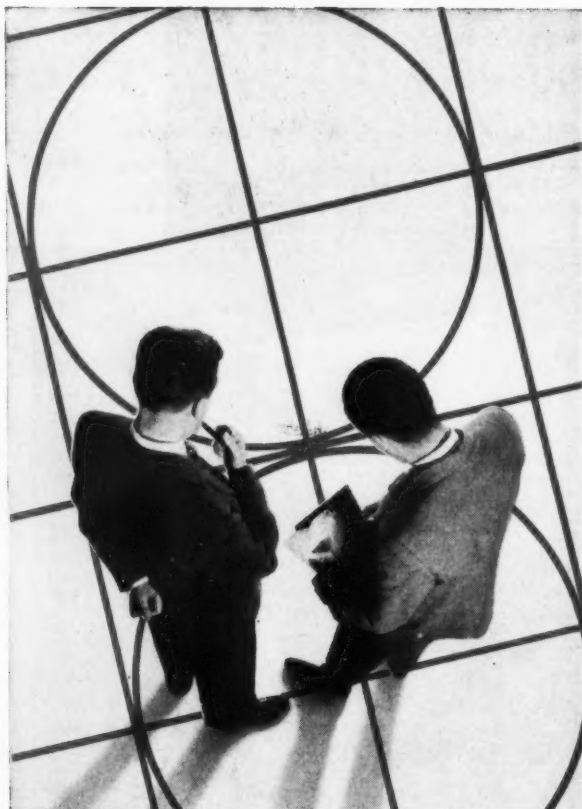


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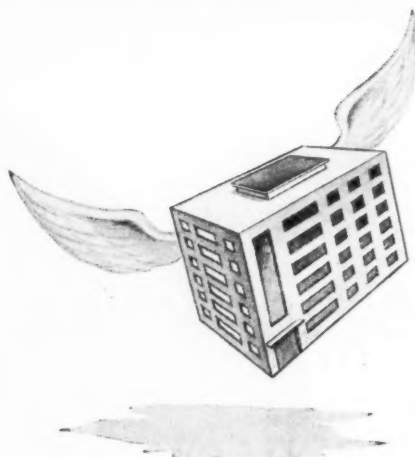
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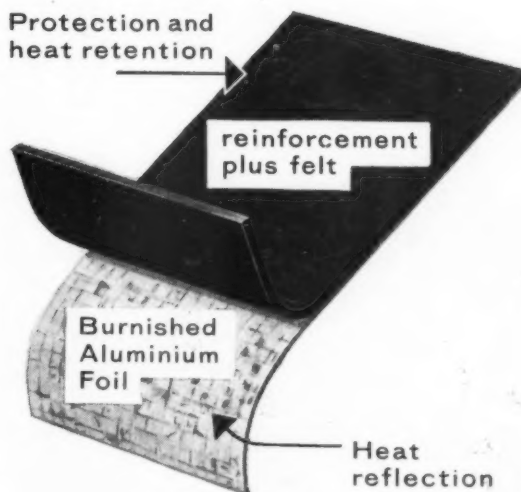
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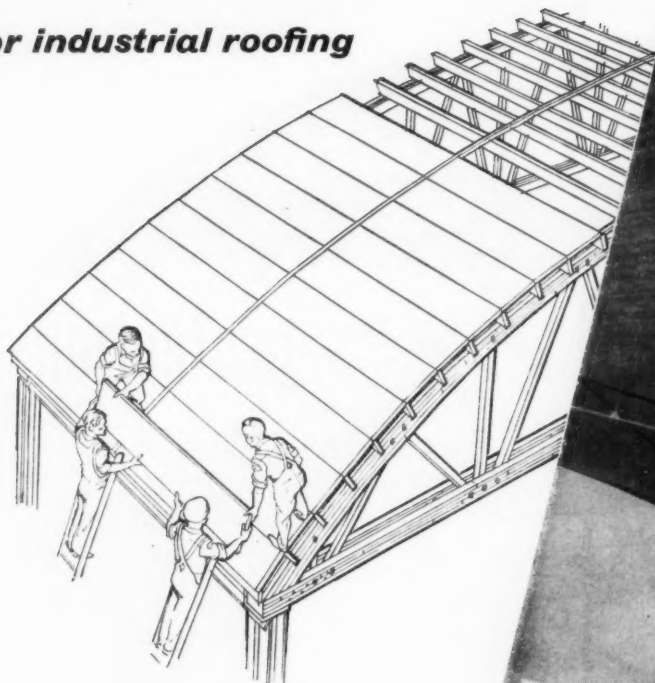
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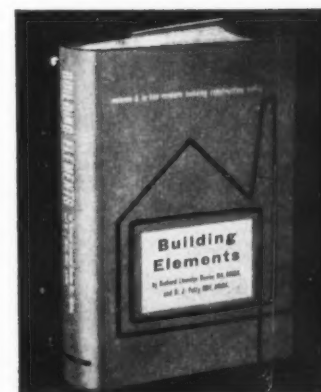


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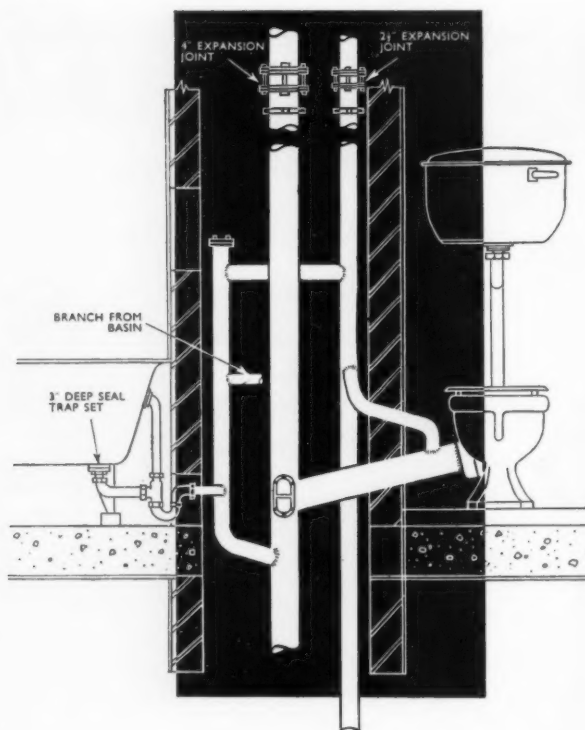
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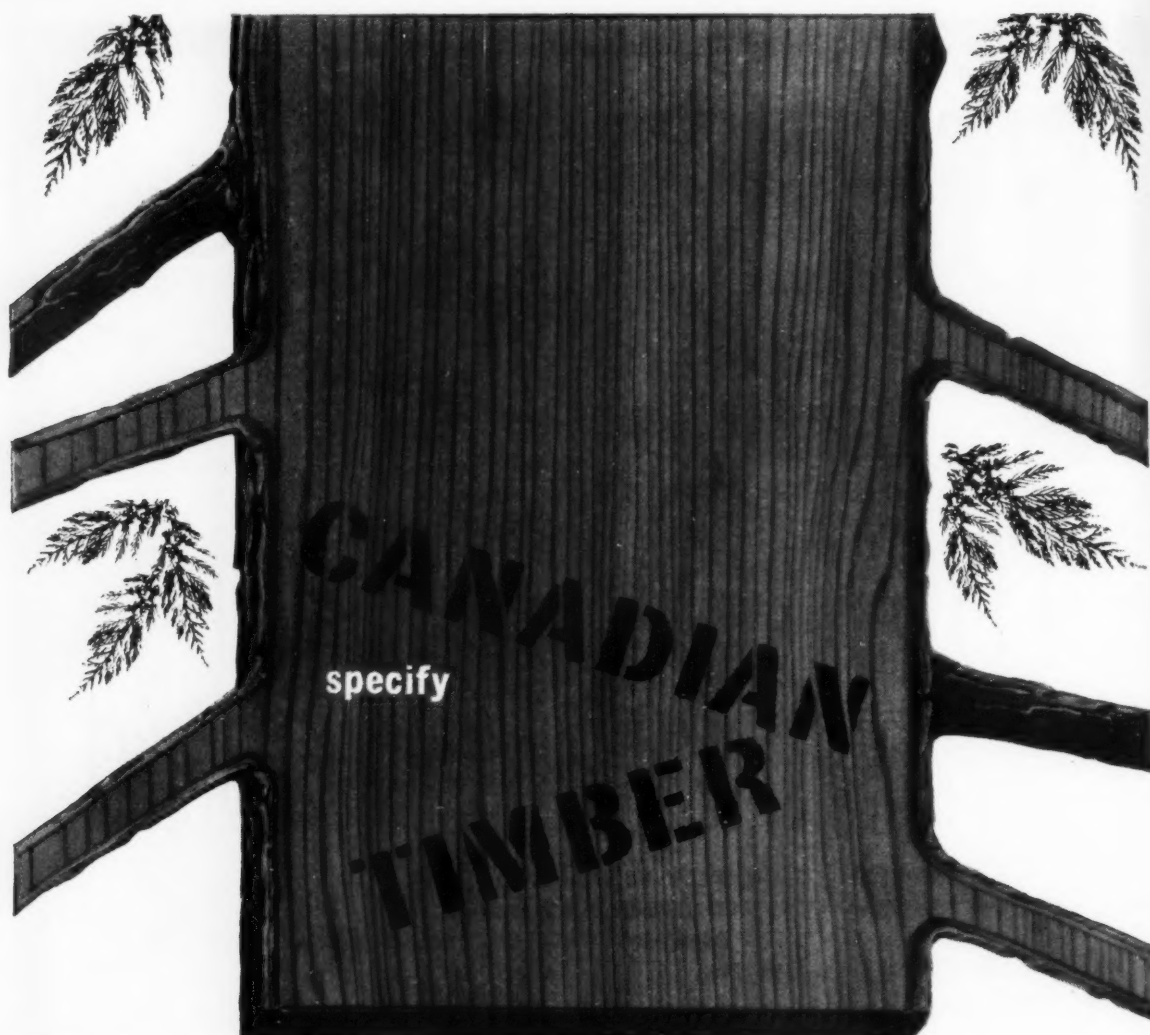
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The Architects' Journal

No. 3404. Vol. 132. July 14, 1960

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NOT QUITE ARCHITECTURE

## Non-Working Details

At about 9.30 a.m. with 240 miles on the clock the crankshaft broke. We clanked into Troyes only to discover that it was a national holiday, so we did an about turn and rattled slowly to Dunkirk.

Once the Grand Prix smell is in your nostrils though, you can't give up, so I committed financial suicide by tottering into Air France on the Haymarket and demanding a seat on an off peak flight to Nice. "When?" they said. Tonight! By 4 a.m. I was in bed in Monaco.

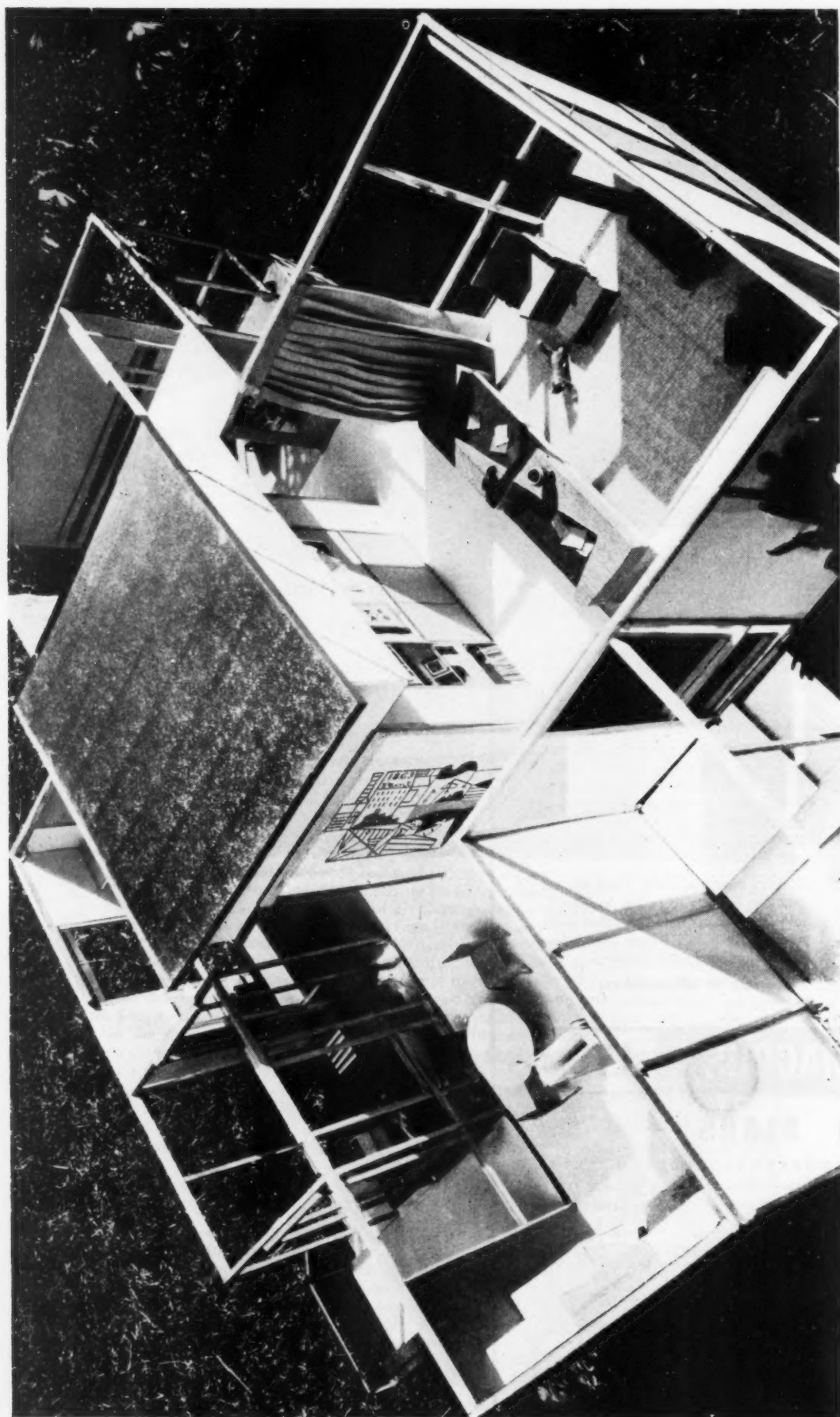
\*

In case the geography of the Principality has been bothering you may I report that it is about 4 miles long and consists of three distinct towns, Monaco the capital, seat of the Government and containing the Palace; La Condamine, the port and business area; and Monte Carlo up on the other hill to the east which is where the Casino and all the hotels flourish. At least it isn't the place you expect to trip over fellow architects, who are more likely to be hunting working details in the obscure parts of Finland or Yugoslavia.

\*

For four days the whole of Monaco is Grand Prix mad and although only part of the town is used for the race, life is completely dislocated. The result is stale news now but it was a great thrill to see Moss's luck turn. Our party on the terrace included the Vicar of Monte Carlo, a member of the BRDC, and two Swedish girls whose cheers for Joakim and the BRM were unavailing.





America's contribution to the Milan Triennale which opens on Saturday is an exhibition of Frank Lloyd Wright's work and a movable aluminum house by the Californian designer, John I. Matthias, which is described as combining "a pioneering structure exploring new concepts in the use of aluminum for residential structures" with a representation of American family life, and a showroom for the display of furnishings and equipment which are "claimed" to be "within the means and taste" of a typical American middle-class family—i.e. mother, father and 11-year-old son. The house contains less than 1,000 sq. ft., including a bathroom and services core at the centre. The work of 30 American designers is presented in the furnishings.

## *Flogging Aluminium*

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Next day the great clean-up began and there was an opportunity to look at the only piece of modern architecture of any moment in the town. Designed by Ginsberg and Massé of Paris with local architects Notari and Fissore in collaboration (the full list of architects came from the concierge. . . . Imagine the porter of an English block of flats knowing who the architect was?), it stands on the Boulevard Albert I and consists of two five-storey blocks and a 15-storey block behind. The flats vary in size and my friends have one of the smallest with living room, bedroom, kitchen, and bathroom. Apart from the wood strip floor (in approximately 1 ft. squares) the finishes are typically French and disappointing. Timber and ironmongery are of poor quality, and detailing of skirtings and architraves is heavy. Every time I unlocked the door on to the terrace I took the skin of my knuckles because the key was too close to the wall. I enjoyed the lift because it is so good on the Continent to be able to dispense with all those wretched gates. You open the door, walk in, shut the door, press the button and away. The wife of a certain shipping tycoon got the only maisonette in the building by pinching two floors and getting it organised at working drawing stage.

The rest of the time was spent falling in and out of the sea (so nice and clean that you can see your toes when you're in up to your neck) apart from a visit to Nice to see "La Dolce Vita." The French dub most foreign films excellently so that one finds it hard to believe that the characters were originally speaking Italian. Fellini's film (which won first prize at the recent Cannes Festival) is a long and sickening exposure of the various maladies of human behaviour, mostly among the upper crust of Roman society. Brilliantly directed and acted with no tricks it left me with a very nasty taste in the mouth.

We also had a Swedish party with liberal dollops of schnapps and smorgasbrod and on Whit-Sunday went across the border to Ventimiglia to see the Battle of the Flowers. Floats are decorated with the most intricate designs all carried out in carnations most of which are in the most sickening colours imaginable. It is rather tragic that so much work should go into something which is aesthetically so revolting.

Whit-Monday was spent on the Beach at Mala, and Tuesday evening in a somewhat alcoholic dinner with the Swedish friends who were celebrating one of their national days. At 2 o'clock on the Wednesday morning we were dancing by the sea pretending not to notice Onassis and Callas in the other corner (Hickey please copy). Silverstone will never seem quite the same again.

ROBIN BUTTERELL

## The Editors

### LAND HUNGRY

"A REALLY profound and scientific long-term investigation and assessment" to discover this country's needs for land is required, according to NFBTE president David Woodbine Parish. Recently the NFBTE director, Peter Trench, very pertinently and wisely asked the MOHLG to lead research into present and future land requirements and Woodbine Parish has elaborated on this theme, pointing out that the matter is outside the control of one Minister and should be treated as a Cabinet matter.

There is an alarming possibility with the present land boom that a Cabinet with no deep belief in planning, might come to a snap decision on how to reconcile the demands of agriculture, transport, defence, industry, commerce, housing, and education. Could any of the natural beauty of this island, which makes its demands in a very weak voice, survive such a reconciliation?

To enable any Cabinet to arrive at any useful decision would need large-scale research conducted severally and jointly by the various ministries. But so far as we know, all that exists at present of this kind is one new, small research unit at the MOHLG (according to rumour it could not be smaller, consisting of one man and a typist). The Ministry of Transport has promised to form one, and the man in charge is appointed but not yet announced. So what is there to enable any Cabinet to make up its mind on this fundamental question, other than the pressure groups of commerce?

At the Manchester Conference, Sir Keith Joseph, parliamentary secretary to the MOHLG, said that the green belts were not in danger. His Minister, Henry Brooke, in a written answer in Parliament last week confirmed this. Green belts, he said, should be inviolate, but in the same answer he subtly weakened the cause of green belts by adding that they should be established "only where there is clear need to contain the growth of a town . . . the belt should be carefully drawn so as not to include land which it is unnecessary to keep permanently open."

Even more disturbing, as RIBA President, Sir William Holford, has already commented, is Henry Brooke's recommendation that "proper provision must be made for development beyond the green belt." This is direct encouragement of satellite growths, of lengthy and expensive journeys to work, and of concentric rings of urban sprawl, which cause intense congestion at the centre because of the radial transport system on which they are almost inevitably based. As Holford commented, the present housing shortage and soaring land prices force people out to seek a site where they can live at a density of 60 to the acre, which they pay for with three hours' travelling a day at a density of 5,000 to the acre.

Mr. Brooke advises builders to redevelop the older areas within towns as one solution for the shortage of building land. Unfortunately in many cities this only creates an overspill

problem, because these are often areas of high population density. Meanwhile the price of such sites puts them out of bounds for any but the most profitable speculative building, while providing handsome capital gains. Having dismantled Uthwatt, this too is a responsibility of the Government, though of the Chancellor rather than the Minister of Housing. There is in fact no easy answer to the problem of urban growth and decay, of population and industrial movement. But an answer must be found before south-east England becomes an English Los Angeles.



#### DUNGEONS

I was lured to the Royal Show at Cambridge by talk of demonstration farm buildings. But I found, when I got there, it was not buildings, but floors, I was summoned to see. It seems there is an approaching crisis in the farm world due to a growing shortage of straw for litter. To get over this, a dodge is being borrowed from places like Iceland and Norway where they don't have any straw, but instead perch their animals at first floor level on a "slatted floor." The slats—in precast concrete or wood—vary in size and spacing according to the animal to be housed. You don't have to clean the slats—you merely sprinkle sawdust on them to keep them dry—and the dung collects quietly in the room below.

#### MODEST MINISTRY

I hear that the Ministry of Health

refused to allow the CCA's Hospital Exhibition to be visible in the RIBA building while the Minister was opening their own exhibition there. This, presumably, was on the grounds that the foreign examples shown to the CCA might shame our homely efforts. Although it is a pity to deprive the Ministry of their right to a bad conscience, in this matter their sense of shame was surely needless. First, because this country has a good reason for having little very special to show in the way of hospitals (she decided to put off her main rebuilding programme until now). Second, because it is by no means certain that foreign hospital building is particularly good. Most countries dashed into their hospital rebuilding without knowing much about the subject. Nowadays when foreign examples are mentioned by people who really know, they are nearly always mentioned for their mistakes (American mineworkers' hospitals excepted).

The truth is that we probably know as much as anyone about hospital design (though still not nearly enough) and we at least have the satisfaction of not having wasted our hospitals' cash on the wrong solution. But to judge by some of the largest and costliest projects in this show, it looks very much as though we are just about to do so.

#### ME AND THE MISSUS

I complained recently that *Nature* magazine seldom named the architects of the laboratory buildings it described. The latest is a new biology block at Aberystwyth University. I quote: "The architects were Sir Percy Thomas & Sons, Cardiff. . . . Botany has the north end . . . and Zoology the south. . . . The planning and design of the new Botany Department was carried out by Prof. Lily Newton, in

consultation with the architects and staff. The whole planning of the internal detail of the Zoology Department was done, in consultation with the architects and the staff, by Prof. and Mrs. T. A. Stephenson." While welcoming this evidence of architect/client collaboration, I can't decide whether the way it is put represents a slight improvement or only an improved slight.

The article is, incidentally, signed by T. A. Stephenson.

#### AFTER WHICH? WHERE?

Michael Young, sociologist and head of the Institute of Community Studies, who launched the Consumers' Association and its bulletin "Which?", has turned his attention to education and has set up ACE (short for the Advisory Centre for Education). It has a characteristically imposing list of vice-presidents, ranging from bishops and dons to a bevy of top politicians' wives added at the last minute to give the authentic non-party flavour.

The main purpose of the new organisation will be to answer parents' questions about education, which may range from prep and primary problems, through 11-Plus and handicapped children matters, to queries concerning universities and further education. Membership costs 10s. a year for which you will also receive the ACE quarterly "Where?" You can join by writing to ACE at 18, Victoria Park Square, E.2. But remember that ACE "will never attempt to assess the quality of any particular school," which means that if you want to know which is the best school of architecture they won't tell you. But, of course, you know the answer to that particular question already. Or do you?

#### GREENWICH OBSERVED

The cluster of nautical monuments at Greenwich has now become so large that it takes at least a day to do it (and a day well spent, at that). In addition to the Maritime Museum and the Cutty Sark, Flamsteed House, the oldest part of the observatory, has now been opened as a sort of museum of astronomy. It is a handsome building, with a very fine octagon room—Flamsteed's original observatory—at the top, very competently restored, but surely much too countrified and old fashioned to



Flamsteed house (see Greenwich Observed).

have been a work of Wren himself? The exhibits are marvellous, with their handsomely engraved brass dials and scales, and the quite fabulously inventive craftsmanship that went into instrument-making in its heroic ages.

Flamsteed himself makes an appearance also in another of the new sights of Greenwich—the restored and positively re-vitalised ceiling of the Painted Hall of Greenwich Hospital. Actually, the First Astronomer Royal is not so restored as some other figures in Sir James Thornhill's masterpiece, because the MOW cleaning team discovered that generations of previous restorers had all signed their names on successive layers of varnish in that corner, and it was felt that the names had themselves become part of the work by now. All this, and everything else about the ceiling, is explained in a very sophisticated and positively encyclopaedic little exhibition mounted by the MOW team at the upper end of the hall. See it while the exhibition is still on—before the end of September—because it establishes new standards in the presentation of complicated ancient monuments.

#### PICASSO, S.W.1.

It is quite beyond me to try to make any assessment of the Picasso show at the Tate, except to say that any adverse criticism is pure ingratitude on the part of disgruntled art-historians and critics. The effect is overwhelming, bewildering and absolutely compelling. The grand old man of modern art comes over with all the wallop of a television personality in spite of the fact that his own face hardly appears in the show at all. I take it I don't have to recommend you to see it. Nothing like it will happen again in our lifetime, and it's



Flamsteed by Thornhill.

only on until the middle of September.

#### DONATIONS, PLEASE

The William Morris Society are to organise a Memorial Fund for the late Peter Floud, in honour of the work he did in getting Victorian studies on to a respectable academic footing. The intention is to use the fund to award an annual essay-prize of some sort in his name. This seems a fit memorial, since it will stimulate what he would have liked to do himself—the further pursuit of Victorian studies. Inquiries and donations to Freeman Bass, treasurer of the William Morris Society, at 35, Hendon Avenue, London, N.3.

Do not forget, also, to contribute to ASTRAGAL'S fund for South African architects who have lost their livelihood for being anti-apartheid.

#### STILL NOT ENOUGH WORK

The Federation of Civil Engineering Contractors seems to be a bit happier about the general level of construction, which, after falling steadily for the past three years, has now taken a marked upward swing. But there is still a lot of surplus capacity—most notably in the road-making side, which is less than half employed. The trouble is that what the Government rather foxily calls “commitments” are taken to mean actual expenditure, but aren't by a long way, often not much more than half. When the industry has built up efficient road-building teams with the essential heavy machinery, it seems madness to let them fade away for lack of work.

#### ONLY SIXTEEN MONTHS TO GO

Even if you haven't yet got your 1961

diary, you may like to know that next year's Building Exhibition dates are November 15–29. Efforts are apparently being made, though far too slowly, I think, to group exhibits such as heavy machinery. It seems that a lot of people prefer a series of short visits to one long one, and this suggests an even greater need for stricter grouping, whether the exhibitors like it or not. One thing, however, is vital: the gangways must *not* be made any narrower: last year's were the absolute minimum.

#### GROPIUS IS ALL RIGHT, JACK

Mr. Jack Cotton, of Monico site fame, has announced that he is bringing Gropius over to look at Piccadilly (though not particularly the Monico site) for a couple of days and advise him about City Centre Properties' developments. While one may doubt how much even a top architect can achieve in two days, the announcement must give a good deal of pleasure to all objectors to the Monico scheme. The Cottons of this world could hand many more opportunities for large-scale planning over to first-rate architects than they do at present, and if public inquiries encourage them to do so, our cities will gain immeasurably.

#### THREE-TIER PROFESSION?

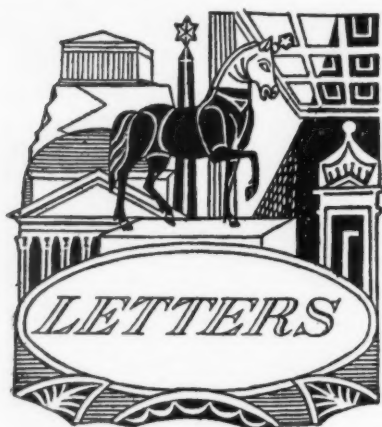
We plucked this encouraging advertisement from a recent copy of the *Evening News*:

“Architects Labourers. Harrods Ltd. have vacancies for Labourers in their Architect's Department. Permanent. Pensionable posts. Age up to 47. Apply in person. . . .”

Suitable for promising young architect approaching middle age?

ASTRAGAL





*D. P. Prosser*

*D. J. Brown, A.R.I.B.A.*

*Misha Black*

## Steel Cladding

SIR: I have followed with interest the series of articles by R. M. Rostron on Light Cladding in your journal and I would like to make one or two comments on the one on *Materials and Finishes: Metals*.

1. On page 724 Mr. Rostron states that mild steel cannot be extruded. This is incorrect and there are two firms in this country who are extruding steel shapes on a commercial basis. One concentrates mainly on tubes and hollow sections but the other extrudes a wide range of different shapes. Both firms extrude stainless and alloy products in the main but mild steel can be extruded with less difficulty. The main limitation on design of sections is imposed by the size of press which is installed. There are also some technical considerations which influence the design of the sections but they are not fearsome and consultation between the designer and the manufacturers can generally iron out these difficulties. The price of extruded steel sections at present is not competitive with sections which can be rolled, except perhaps in very small lots but the price differential is not massive and where sections cannot be rolled directly extrusion is often cheaper than two or more rolled sections which have to be welded or otherwise assembled to the final shape or a rolled section which has to be machined out to the final shape.

As regards the present limitation of the size of the extruded section this will undoubtedly disappear if the demand for larger extruded sections is sufficient to warrant the installation of larger extrusion presses. The present size of press of 1,000 to 2,000 tons is well under the size which it is possible to engineer successfully. Certainly presses of 5,000 to 6,000 tons are within the capacity of press makers to design and produce and an extrusion press as large as 20,000 tons has been designed and is in operation in the U.S.A. on experimental and special defence work.

2. With regard to Mr. Rostron's comment on corrosion and protection of mild steel, viz. "In rural and marine atmospheres a 2-oz. per sq. ft. zinc coating has a life of upwards of 25 years," I would point out that, while in general this statement is true, atmospheres can be very variable even within small areas and that the word "life" is capable of many interpretations in this context, e.g. for some applications the life would be governed by the onset of rust marks while for others complete covering of the cladding by rust marks and the total elimination of the zinc might be the criterion.

Therefore, it seems nearly always advisable to paint the zinc coating and for this purpose a priming coat of calcium plumbate followed by a painting system appropriate to the environment is a suitable treatment. It might be emphasized in this connection that the protection afforded by the paint is in direct proportion to the paint thickness and that once that thickness has been established maintenance painting should be directed at keeping that thickness in existence and it is important not to wait until the paint thickness has worn sufficiently thin to let corrosion of the underlying steel start. The practice of specifying so many coats of such and such a paint should be replaced by the specification of the thickness of the finished paint film as the thickness of individual coats can vary tremendously and three coats of paint each of 1 thou. thickness is much less use in preventing corrosion than two coats each 3 thou. thick.

One other point on the subject of protection of steel. It is important to realize that the metallic coating provided by the metallization process (which is invaluable in certain circumstances) is inherently porous, unlike a hot dip galvanized coating, and that it relies almost entirely for its effect on the sacrificial action of the coating. It is, therefore, again always desirable to protect the metallized coating with a painting system whenever extended life is required. One important point which is often overlooked too is that where prevention of corrosion is needed it is essential to arrange detailing to eliminate water "hanging up" in small crevices, etc. In contaminated industrial and urban areas the corrosive elements, e.g. sulphuric acid, can become quite concentrated due to cyclic evaporation of the water with disastrous results.

3. With regard to the use of stainless steels it should be borne in mind that there are hundreds of different types of "stainless" steel. Only a relative few are suitable for cladding work and any architect contemplating using stainless steel should consult the manufacturers to determine the best type of steel for his particular needs.

While stainless steel is undoubtedly relatively expensive in "first cost," the first cost is not the ultimate cost to a building owner. Where maintenance painting every two or three years is necessary the extra initial cost of stainless steel is recovered in a reasonable time, even allowing for the fact that a company can set off its maintenance painting against revenue and thus gain relief from

tax whereas the extra initial cost of the standard cladding is a "capital expenditure" and will not gain such relief.

D. P. PROSSER,

The United Steel Companies Limited.

## More Detailed Details

SIR: I agree that the devices of Messrs. Powell and Moya achieve elegance which is often missed by the "commonsense" detailer. The important point which arises out of Mr. Redfern's criticisms and your detailed replies is that there is more to these simple-looking details than meets the eye. To publish such details with full notes on the careful precautions taken to avoid traditional difficulties by non-traditional means can be of great value to both students and practising architects and encourages a radical approach; to publish them without this information could be a dangerous disservice to the profession.

D. J. BROWN

Liverpool

## Company Design

SIR: Dear ASTRAGAL must be very young to be able to write that the Orient Line "know and care very little about good design" (AJ, 9/6/60). Has he forgotten *Orion* and her sister ships which made us feel unashamed of Britain as a shipbuilding country?

It is fair enough to criticise the small exhibition which we arranged, but the faults of a minor affair for landlubbers are a curious basis for such massive condemnation.

MISHA BLACK

London

ASTRAGAL replies: It was the memory of the *Orion* that made that tatty little exhibition stick in my throat—a firm that knows and cares about good design sees to it that everything that bears its name is well designed. I fully realize that it is both brash and heretical to criticise firms who have "done good work," but having set a standard they must expect to be needed when they fail to keep it up.

## DIARY

*New Hospital Buildings Exhibition.* At the RIBA. UNTIL JULY 23

*Exhibition of Paintings by Picasso.* Organised by the Arts Council at the Tate Gallery. UNTIL SEPTEMBER

*Exhibition of AA Students' Work.* JULY 15 TO 28

*Milan Triennale.* JULY 16 TO NOVEMBER 4

*Redevelopment in the City.* Talk by H. A. Mealand to TCPA Planning Forum and tour of City. City Planning Offices, Guildhall, E.C.2. 6.30 p.m. JULY 18





## COMPETITIONS

### Harlow Housing

Harlow Development Corporation invites architects to submit designs for houses and flats to be erected on a site in Passmore Neighbourhood, Harlow, Essex. With the aim of stimulating new thinking about questions of layout and house design, an interesting, undulating site has been chosen, and among the general conditions of the competition the Corporation points out: It is sometimes said that architects are too restricted by rules and regulations that were framed a generation or more ago; that new ideas, new forms of construction, new conceptions of the use and furnishing of living space, are stifled because of the need for strict compliance with building bye-laws, street bye-laws, doctrines of the local planning authority, specifications of the Housing Manual, stipulations of the fire, police, sanitary and traffic authorities and many other requirements of the central and local government. All these regulations are directed to specific points that must be satisfactorily met, but if architects, while having full regard for the underlying objects of existing regulations were given a freer hand to solve these old problems in new ways, it might result in a pattern of living the better suited to the needs of modern urban society and might even mark an outstanding advance in architectural development.

"Where a winning entry does not conform to certain of the statutory and other requirements listed above but nevertheless provides a satisfactory pattern for living... the Corporation will be prepared to seek the necessary relaxations and approvals required from the responsible authorities concerned."

Assessors are H. T. Cadbury-Brown, A.A.Dip. (Hons.), F.R.I.B.A. and Victor Hamnett, B.Sc., A.R.I.B.A., Dip.T.P., A.R.I.C.S., A.M.P.T.I., (executive architect to the Development Corporation). First prize will be £1,000, second, £750; and 3rd prize, £500. Final date for questions to the General Manager, Harlow Development Corporation, Turlings, Harlow, Essex, September 1, 1960. Closing date for entries, March 6, 1961.

### Exhibition Stand

The National Federation of Clay Industries announces a competition open to architects, students RIBA, and students in the final year at a recognized school of architecture, in the design of an Exhibition Stand to be used at the Building Trades Exhibition, November, 1961.

The assessor is C. C. Handisyde, A.R.I.B.A., A.A.Dip., and awards offered are 1st prize, £150; 2nd, £50; 3rd, £25. Applications for conditions should be sent to the General Secretary, N.F.C.I., Drayton House, 30 Gordon Street, London, W.C.1, by July 30, 1960. Closing date for entries, October 22, 1960.

### Seattle Fountain

The City of Seattle, Washington, announces an international competition for the design of a fountain using "lifted and moving water, form and illumination" in unique and non-traditional ways, the winning design to become a permanent part of Seattle's Civic Centre, and to be completed in time for the Century 21 exhibition—described as "international space-age spectacular"—being organized in 1962.

The open, two-stage competition is being conducted through the Seattle Municipal Art Commission, and architects, designers and landscape architects are invited to register by September 16, 1960. Closing date for first stage, November 28, 1960. Five selected contestants will be awarded \$2,000 dollars each, and must then prepare working drawings and cost estimates, the winner being chosen by a three-man jury composed of an internationally known architect, a sculptor and a designer.

Information and registration application from: Professional Adviser, Seattle Civic Center Fountain Competition, Civic Auditorium, Third Avenue North and Mercer Street, Seattle 9, Washington, USA.

### Dumbarton



The winning team at Dumbarton: left to right, Walter Strebel, Stephen Garner, John Rae, Derek Preston. The three prizewinning schemes are illustrated on pages 60-74.

## RIBA

### Honorary Officers

The following have been elected for the 1960/61 session:

*Vice-presidents:*

Herbert Jackson

Sir Hugh Casson

Frederick Gibberd

Hugh Wilson (when formalities are com-

pleted for him to become a Fellow).

*Honorary secretary:* Donald Gibson.

*Honorary treasurer:* Hubert Bennett.

The following ordinary members of the RIBA Council have been elected: Lionel Brett, E. Maxwell Fry and Alfred George.

## MOHLG

### Hippodrome Appeal

The Minister of Housing and Local Government has disallowed the appeal of a development company against refusal of planning permission to build an office block on the site of the Golders Green Hippodrome. The Inspector for the MOHLG found no convincing evidence that the theatre could not be run except at a loss, and that the plan to build offices was too great a departure from the development plan, which allocated this site for "civic, cultural or special use as a theatre."

## ARCUK

### Grants

The closing date for applications for Architects' Registration Council grants for maintenance scholarships for special studies in architecture is September 1, 1960, and will be September 1 annually while the scheme is in operation.

ARCUK is to provide grants to Architecture students of British nationality who have yet, in order to complete their qualification for registration, to take their examination in Professional Practice and Practical Experience, having passed in all other sections of their final examination, and whose means appear to the Council insufficient to pursue special and approved studies in architecture. Grants will be available only for subjects definitely related to the syllabuses of the various final examinations qualifying for registration, and candidates must submit their programmes of study in detail. In the case of candidates at one of the Schools of Architecture, the programme must be countersigned by the head of the School. Candidates qualifying by means of Final or Special Final examinations of the RIBA must get their programme of studies countersigned by a registered architect. A grant may consist of up to £800 with approved fees in addition, and is normally for one year, but renewable for a second year on submission of a further application.

## AA

### Travelling Scholarships

The following travelling scholarships, available to students at the Architectural Association School of Architecture, have been awarded:

*Imperial Chemical Industries Travelling Scholarship* value £250 to Peter Stone to enable him to study architectural decoration in Switzerland.

*Building Centre Travelling Scholarship* value £100 to Peter Cook, to enable him to undertake research into the properties and architectural uses of building materials.

# COMPETITION: DUMBARTON

*As announced in last week's issue the results of this competition are : first premium (£1,200) is awarded to John Rae, Derek Preston, Stephen Garner and Walter Strebel (Switzerland), second premium (£900) to Law and Dunbar-Nasmith and third premium (£500) to Robert W. K. C. Rogerson. Despite the fact that, by English standards, Dumbarton is not a large town, this competition is of the utmost importance for it gives practical effect to the idea put forward by architects and planners, often in vain, that the principal object of redevelopment is not to achieve profitable investment but to create a better environment. By holding an architectural competition and appointing Professor Robert Matthew as assessor, the Town Council of Dumbarton have shown that they want the best possible solution in terms of townscape, architecture and amenity.*

*One effect of the small number of entries (12 in all) was that it gave the assessor no excuse for not commenting on all the schemes and, in his report (extracts from which appear opposite), Professor Matthew has in effect explained not only why the winners were successful, but also why the others failed.*

The Royal Burgh of Dumbarton is on the River Leven which flows into the Clyde fifteen miles west of Glasgow. Its population is approximately 27,000, having increased from just under 24,000 in 1951. Despite its proximity to Glasgow there is very little commuting by workers from Dumbarton into that city. It is the centre of a rural area and the county town of Dunbartonshire. Whilst commerce figures largely in present day activities its industries include a large whisky distillery on the banks of the Leven. Shipbuilding was and, to some extent, still is a major local industry. At one time virtually all British-owned cross-Channel steamers were built at Dumbarton.

Today, the centre of Dumbarton presents a slightly derelict picture. Large slabs of the area, which was the subject of the competition, are cleared of buildings and, to use a cliché, the whole of this area is ripe for redevelopment. The Council has acquired a good deal of land within the area, including a large piece in the north-west corner, the whole of the land for the proposed access road and some land in Church Street, the eastern boundary of the area. To the visitor it is immediately apparent how few shops there are to serve a town of this size. The principal shopping street, High Street, is a broad crescent, running parallel with the river. Apart from the rail bridge there is a road bridge crossing the Leven which is already inadequate for the traffic. This bridge carries traffic to the A roads which lead to Balloch and the Trossachs and to Helensburgh and the north-west. More shops and a new bridge are included amongst the conditions of the competition.

A development plan for the Burgh was prepared by a firm of engineers acting as consultants to the Town Council. This plan was approved by the Secretary of State for Scotland in 1955 and contained a proposal that the area north of the High Street extending

to the railway be redeveloped comprehensively. The Council's decision to sponsor a competition for the design of the central area redevelopment is a bold one, probably unique in Great Britain. It has been written into the conditions that the promoters intend to proceed with the work and that the author of the winning design will be "... appointed as architect for such buildings as the promoters intend to carry out themselves." This includes, in the first instance, housing and fifteen shops. In addition he will be appointed consultant architect for the whole of the rest of the development including the bridge and the new street and road works. This means, of course, that he will exercise control over the work of private developers within the central area.

Apart from their initiative in holding such a competition the Town Council is taking the enlightened view that it should be possible to encourage private developers to invest capital in the area more or less on the Council's terms. As well as the control exercised by the consulting architect on matters of building design and accommodation this presumably will include choice of sites. In other words it is not the intention of the Town Council to allow developers to pick their sites freely merely because they are investing money in the central area. It is to be hoped that every effort will be made to persuade developers to accept the winning scheme as it stands, for a good deal of the townscape quality hangs on the imaginative design of the buildings. At any rate the Council's attitude is highly commendable and should result in a coherent and balanced new town centre which will serve as a model for others to follow.

The terms of the competition involve laying out roads and open spaces and designing buildings within an area bounded by the railway to the north, Church Street to the east and the river south and west. Within this area certain buildings and features are to be retained. These include the Municipal

buildings and a number of churches as well as the town bowling greens. The existing street pattern need not be retained. Other mandatory conditions however include the provision of open space, suitably landscaped, between the existing High Street and the river and a new through road and bridge. There are only two permitted accesses to this road in the Central Area, as shown on the map accompanying the conditions. Until this is built, another access road is to be provided which will serve the new buildings and relieve the present traffic congestion.

Accommodation to be provided includes, as well as the above, a maximum of 300,000 sq. ft. of shopping space (including storage and service arrangements) which include both large and small shop units, a maximum of 400,000 sq. ft. of office space, of which 70,000 should be in one unit suitable for letting for Government use, parking space for at least 300 cars, a hotel with restaurant and 50 bedrooms and a community centre to replace the existing which contains approximately 7,000 sq. ft. of floor space. Competitors were called on to take account of the existing architectural character of the town. There is not a great deal which is of merit, but what does exist is good. This includes a Georgian church and a few two-storied Georgian houses and some small public buildings dating from the last century. Predominant finishing materials are grey and red sandstone. In fact competitors were not expected to consider the design of proposed new buildings in any detail, though several did so.

Natural foundation for building within the area is not good, due chiefly to a 16 ft. layer of running sand which occurs approximately at Ordnance datum. Solid rock is present, but some 250 ft. below ground level. Traditional footings for buildings are stone slabs 4 ft. long by 2 ft. wide by 18 in. deep laid side by side to give a bearing surface of 4 ft.

# CENTRAL AREA REDEVELOPMENT

## The assessor's report

The following extract from the assessor's report contains general comments on all the schemes:

"Competitors were quick to notice the possibilities of making more than one level of circulation, not only of wheeled traffic, as prompted by the height requirement at the bridge, but also of pedestrian traffic. Some, including the winner, went so far as to put the whole of the new through road on pillars at the level of the crown of the bridge, thus providing free use of the whole site at ground level for cross-town communication. One competitor thinking perhaps of Argyle Street where it passes under Glasgow's Central Station, ran a row of shops under this high-level road coming into the light of day at each end. The deep shadow under so wide an elevated road is, of course, the disadvantage of such an arrangement, and it is difficult to find any intensive use for the area so covered, unless it be simply car parking. It is perhaps curious that, with parking requirements well to the fore, so few of these competitors thought of putting the space below the roadway to this use, and generally seemed content with the standard of car parking expressed in the conditions as a minimum.

Most of the schemes cause shopping to take the general form of a precinct or precincts extending northwards from the High Street, but competitors differ in their handling of this piece of the plan. Some break the area into a series of small courts; others prefer one or two large courts. Some are content with what can be done at ground level; others, including the winner, develop shopping facilities at two levels.

Office space requirements drove almost all competitors into high buildings despite the difficult subsoil conditions. It might now be suggested that in carrying out that part of the redevelopment the promoters could reduce the office space requirement and thus lower the tallest buildings to a more reasonable height. An alternative, explored by two unplaced competitors, is to decrease the open space between buildings, but that would be apt to cause a new congestion of the ground, the very fault redevelopment ought to correct.

Although most schemes show intelligent use of landscape, the possibilities of treating the river front as a piece of connected design with alternating buildings and open space, the one to enhance the other, were not realised by everyone, but the placed schemes each treat this area with some feeling for what could be done.

The 'real estate' factor is of primary importance throughout the redevelopment area. It is now widely recognised that besides its obvious social value the traffic-free precinct whether for shops or offices is a good idea from the real estate point of view provided that vehicle access is adequate and that there is enough car-

parking. It is likewise agreed that such a feature as the Dumbarton river-front, if properly developed, confers value on properties enjoying it. Again, the idea that two-level traffic arrangements in the right place can increase the money-yielding potential is reaching acceptance. All the placed schemes show a sense of this factor, and bid fair to survive the scrutiny of the enlightened investor.

It is realised, of course, that the idea of a road on pillars raises the cost of the road and might thus result in its postponement. It is felt, however, that since in each case the raised road could be modified to fit into a normal road construction budget, no economic judgment need meanwhile be made for or against this road form."

## The entries

The low number of entries did not disappoint the assessor who felt that the exacting conditions and the status promised the winner, which would "... demand a certain specialisation not yet common among architects ..." may have discouraged many. Of the 12 entries he considers that eight are of considerable merit and the winner outstanding.

Estimates of cost average out amongst the competitors at around £4 m., though the winner's scheme is estimated at £4,415,000. These figures do not include the cost of the bridge and the new through road.

To guide him in the selection of the winning scheme Professor Matthew set down the following three points as principles of design: Firstly an architectural or "civic design" quality of the whole development and of its separate parts, actual and potential (a quality on which the conditions laid stress), secondly ease of working (a) for people living in the area (b) for those working there or coming to do business with them and (c) for wheeled and pedestrian traffic and thirdly the question whether the schemes as designed can be built, from the engineering point of view, having regard to the difficult subsoil conditions; from the economic point of view, having regard to the likely emergence of developers willing to undertake developments of the kind depicted.

## First prize scheme

With the above criteria in mind Professor Matthew states in his report that: "On all three counts the winning design is outstanding. Whether or not the high-level main road is found feasible, it is used here to the best effect; almost abolishing the division between the two parts of the site which a road at ground-level would separate. The placing of blocks north of this road and shopping south of it, logical in any case, is fully justified here since circulation between the two zones is unhindered. A possible criticism lies in the resulting pattern of new cross-town streets. They provide more cross-town links than are necessary between the shopping and office

zones and fail to provide the right access to the housing blocks which flank the main shopping unit. A further criticism is that the ends of housing and office blocks come too near the elevated road, but this is capable of adjustment. It could also be said that one junction with the elevated road would have been enough, either at the bridge or at Church Street, but what is shown on the plan fulfils the conditions.

This is the only scheme which provides adequate phasing for the short-term through road to be superseded by the long-term through road. The short-term road is interrupted in two places, when its usefulness has expired, and this helps to give the shopping unit better cross-town continuity than any other scheme submitted. It also creates two unbroken expanses of housing where otherwise competitors have been forced to break up their central area housing into too many small parts.

The main shopping unit, conceived as a two-storey street, the lower storey partly a covered arcade and both storeys so dimensioned that the shops have mezzanines for storage or extension of sales area, brings fresh ideas to bear on the shopping problem. Small open courts save the arcade from too much enclosure and the skilful arrangement of the community centre rightly associates this building with shopping. Again, the shopping arcade debouches on the High Street in such a way that existing High Street shopping is fully connected with the new shopping without having recourse to complexities found in other schemes. A further advantage here is that the new shopping unit can be begun with the minimum of High Street frontage clearance, and this is likely to commend itself to all concerned with the management of the redevelopment process.

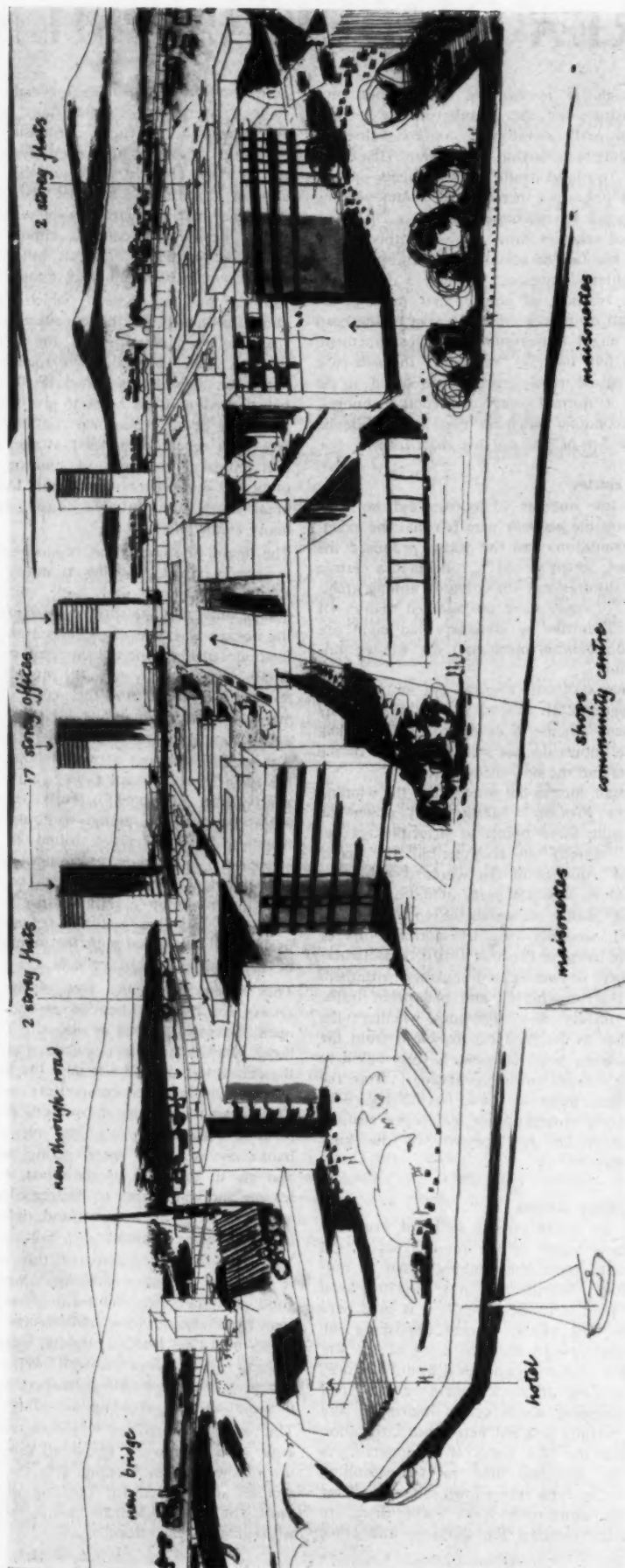
This scheme uses the river front as a setting for housing, besides its use as an open space, and also as the site for the hotel, in a much better position, surely, than the conventional hotel site near the Railway Station which other competitors adopted. This is exactly the sort of river side development to make the most of the river and its banks as an open space giving sunlight and air to this part of the town, without leaving the whole area to be treated purely as a park and likewise without destroying its open space character.

The Civic Design quality of this scheme is the best of those submitted indicating good unpretentious architecture, relatively free from stylisms and clichés. Its ingredients might be listed as clarity, simplicity, efficiency, and elegance with well scaled distances between buildings, leaving nothing in isolation and avoiding crowding.

The bridge, treated as a simple concrete arch with open-work above it supporting the roadway, is in keeping with the architectural idiom used for building and layout. The whole scheme hangs together without apparent effort."



## DUMBARTON COMPETITION: FIRST PRIZE SCHEME BY J. RAE, D. PRESTON, S. GARNER, AND W. STREBEL

*Perspective of the scheme.***From the competitor's report:**

"Within the central area land uses are zoned. Offices on the north, shops and community buildings in the centre, and residential around the perimeter. Each element of the design has its own scale and character: the offices are slab blocks and low courtyard buildings surrounded by open areas of lawns and car parks. A compact and intimate shopping precinct occupies the centre of the site and opens off the shopping area in High Street. It is planned as a two storey street, the lower storey being a partly covered arcade with gallery shopping above. It opens out into various squares and walkways where pedestrians are separated even from local traffic,

which must use different roads to deliver goods to shops. The Town Square separates this shopping precinct from a four storey multiple store with ground level bus station. A Community Centre with hall and various rooms opens off the Town Square at both ground and gallery levels. This should help to solve the isolation from which community centres so often suffer. Flats in two storeys give relatively low density development on either side of the shopping precinct. These are planned to give an urban street scene from the outside, and informal planted squares on the inside. The river front is developed as open space, and the quay, which will continue to

work, will help to define the character of this part of the town. Four tall maisonette blocks will be sited here, and will give a high density housing without stopping the public from using the river side. A three storey hotel, with 48 bedrooms and a terrace overlooking the Castle is also sited here. The design gives careful protection to existing buildings, in particular to the churches, and to the High Street, which give Dumbarton so much of its architectural character.

The new motor-road crosses the site at high level and forms a southern boundary to the office zone. The new bridge grows naturally from the road design. Built upon

pillars and at first floor level, it will give clearance to yachts passing underneath. It is a simple concrete arch with open work above it—supporting the road. Through traffic travelling at speed will be aware of the tall office blocks on one side and the low town centre backed by riverside blocks on the other. Service and local roads filter beneath the motorway in a grid pattern within the existing ring road formed by High Street and Station Road. This gives separation between through and local traffic. Pedestrian segregation is achieved by walkways unrelated to the road system, and by a series of galleries and squares between High Street and the Bus Station."



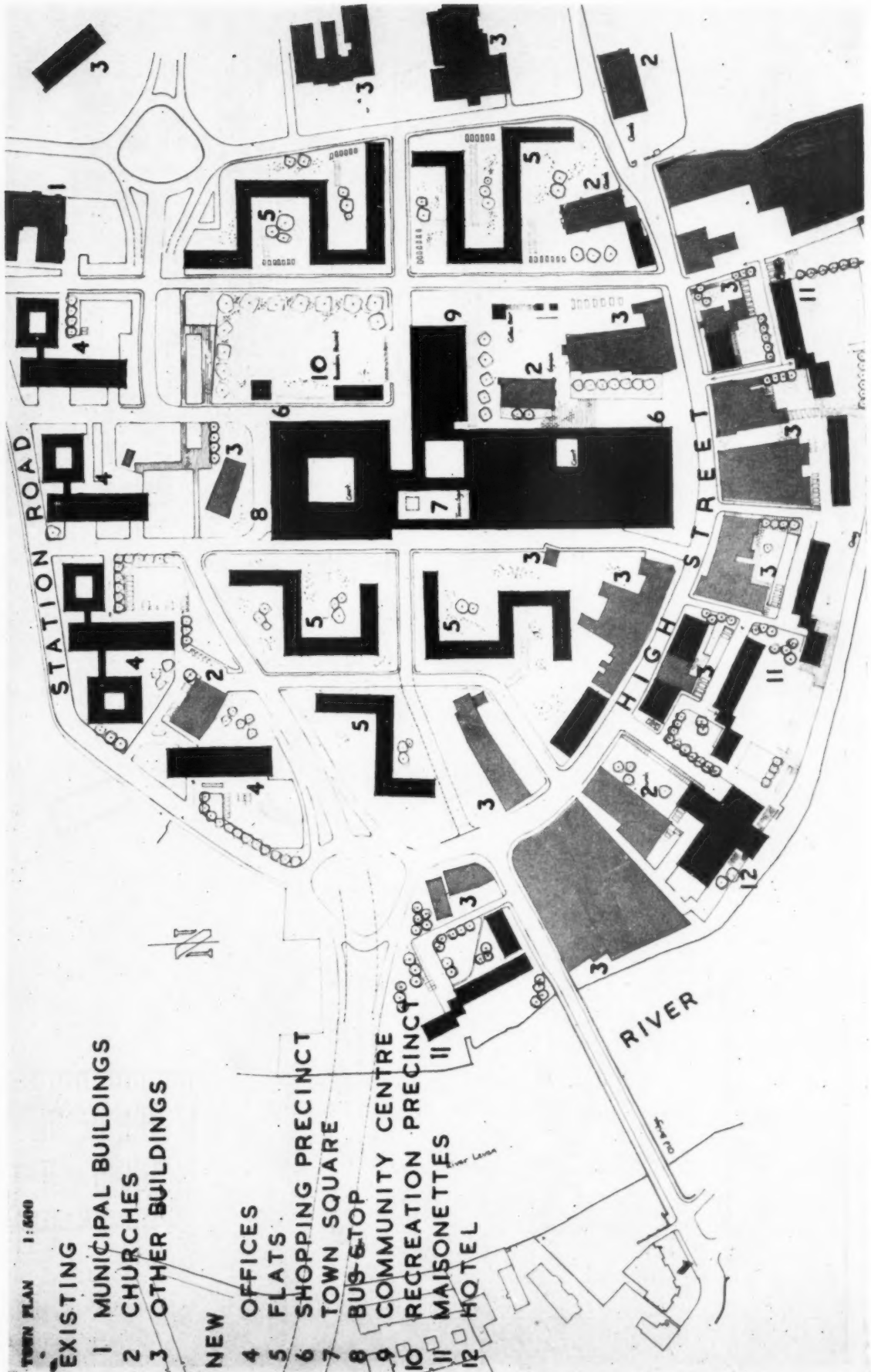
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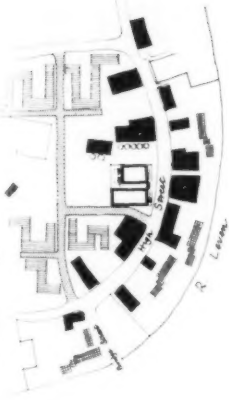


SHOPS

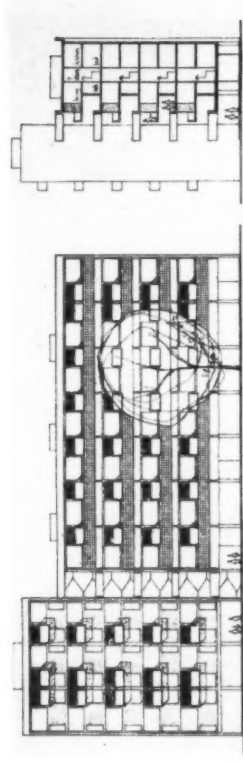
Scale 1:800

Legend:  
 1. First stage of redevelopment suggested by the competitors.  
 2. Second stage of redevelopment suggested by the competitors.  
 3. Third stage of redevelopment suggested by the competitors.  
 4. Fourth stage of redevelopment suggested by the competitors.  
 5. Fifth stage of redevelopment suggested by the competitors.

Right: first stage of redevelopment suggested by the competitors.

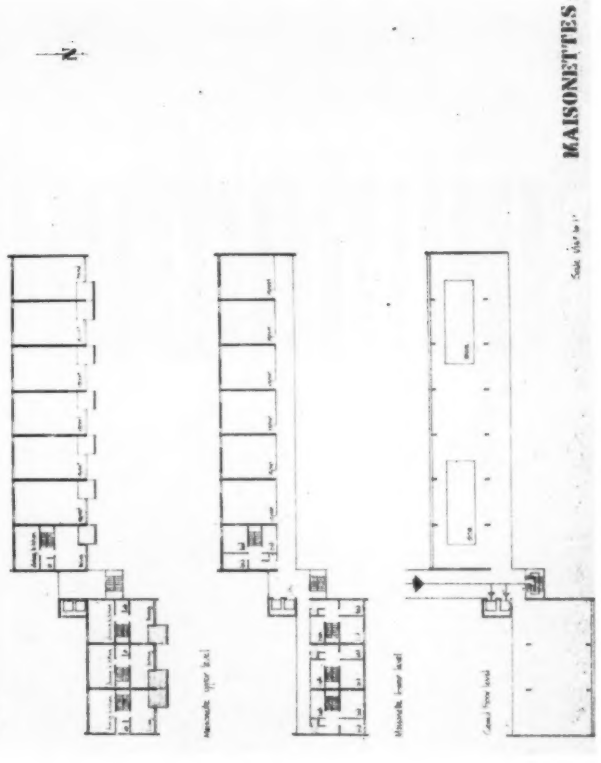


Typical block of maisonnettes (11 on site plan).



Section

Plan



MAISONNETTES

Scale 1/4" = 1'

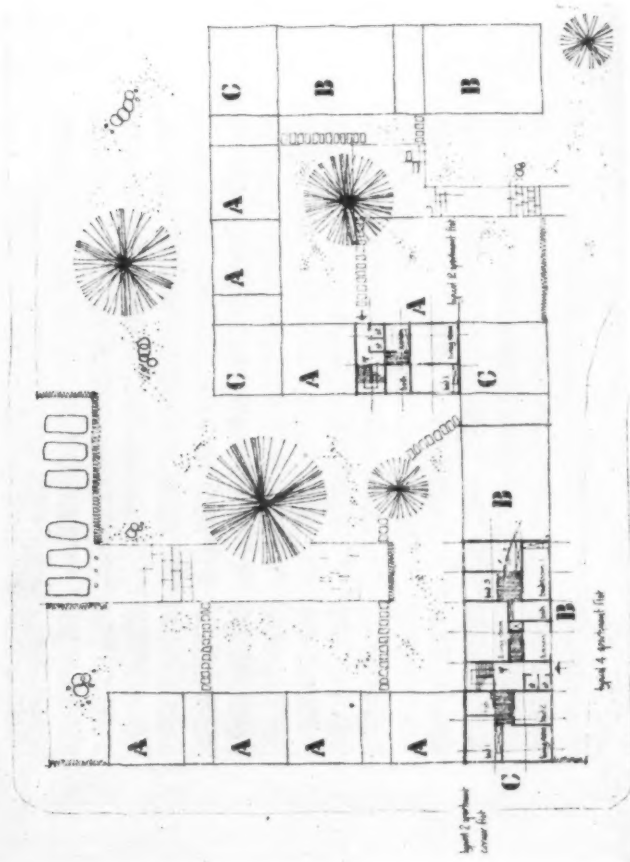
Ground Level

Above: shopping precinct and community centre (6, 7, 9 on site plan).

Typical block of two-storey flats (5 on site plan).

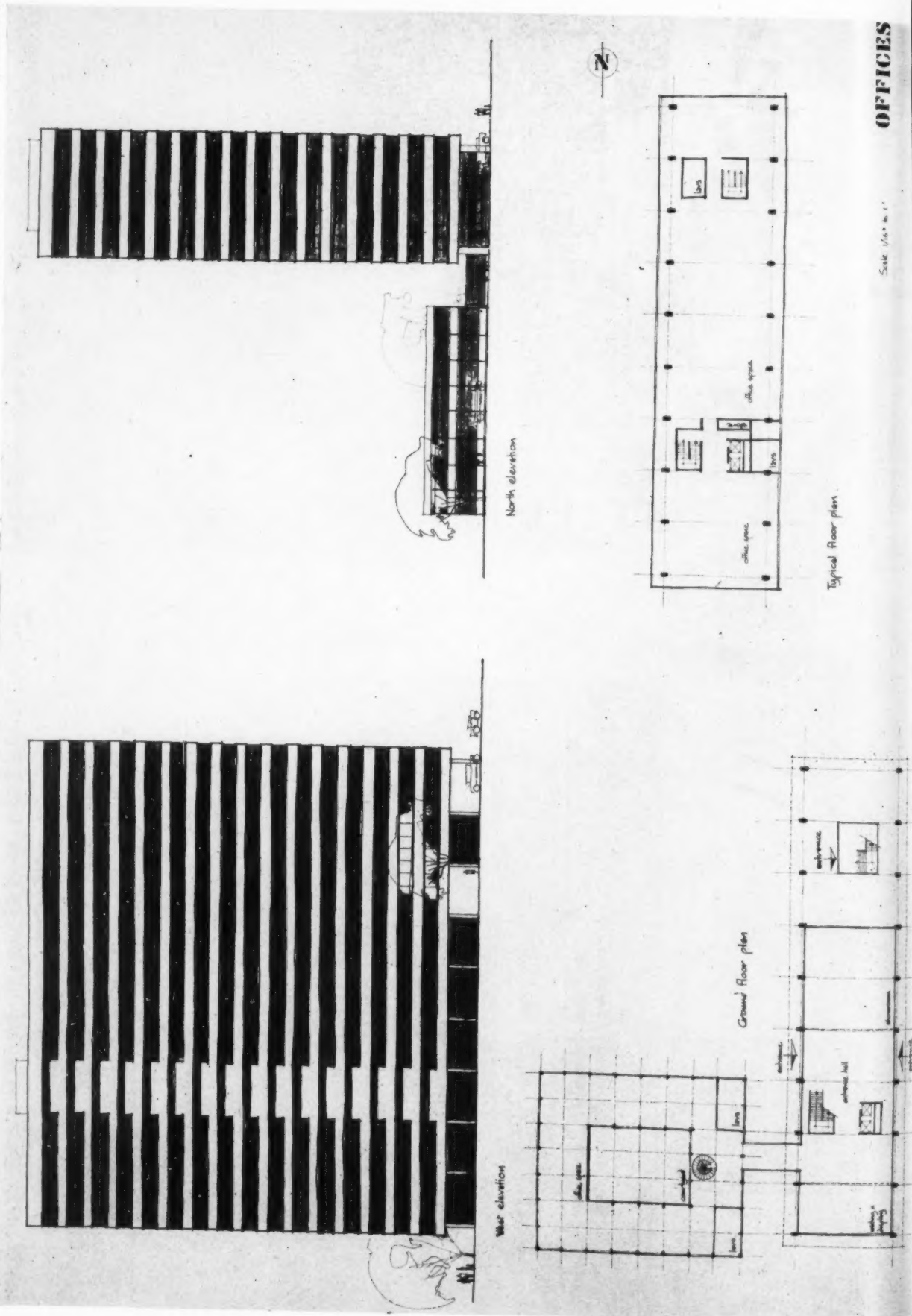


Sections



Scale 1/4" = 1'

DUMBARTON COMPETITION: FIRST PRIZE SCHEME BY J. RAE, D. PRESTON, S. GARNER, AND W. STREBEL (continued)



OFFICES

Scale 1/16" = 1'

## SECOND PRIZE SCHEME BY LAW AND DUNBAR- NASMITH

### The assessor's report:

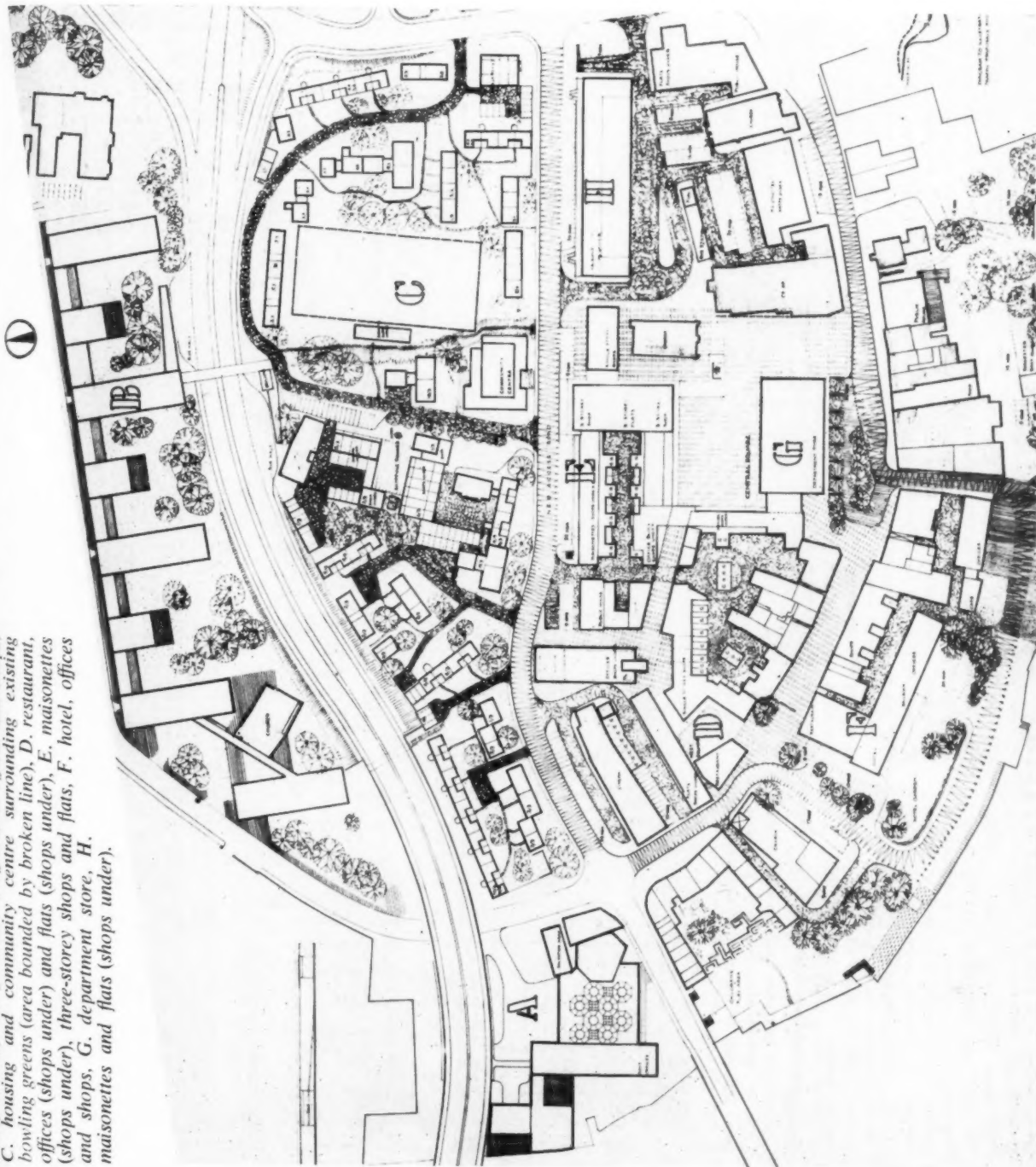
"The design placed second, one of the schemes which keeps the main road on the ground except where it rises to the bridge, is, by comparison with the winner, crowded and complex in its arrangements of buildings. These allow the short term road to remain a through access and create in effect three parallel strips of redevelopment each permanently separate. Logically enough, each of the three has a different prevailing use, in two cases combined with a subordinate use. That north of the long-term is offices (on a lavish scale and in its architectural idiom out of keeping with the shopping and housing in the other two zones). That between the two roads is devoted to housing with some shopping and that between the short-term road and the High Street, shopping with some housing. The three do not, however, hang so well together as do the different parts of the winning scheme, though there is an indication of good architecture in each. The housing designs are excellent. So are some of the small shopping courts, where the intimate scale retains the pleasant qualities of the present High Street with its Scottish burghal flavour. Phased development is possible, but it would be long before redevelopment gained the coherent form which the winning design promises at an early stage."

### From the competitor's report:

"Principal Factors influencing the Layout.

- (1) The site is already firmly bounded by the railway and the river. The new Trunk Road will divide it into two separate sections, the northern of which will be narrow, noisy and restricted in access.
- (2) The buildings which are to be retained indicate the maintenance of the existing shopping area, and impose their own pattern on the area south of the new Access Road.
- (3) The subsoil conditions require raft

Site plan. Key: A, government offices, B, offices and shops, C, housing and community centre surrounding existing bowling greens (area bounded by broken line), D, restaurant, offices (shops under) and flats (shops under), E, maisonettes (shops under), three-storey shops and flats, F, hotel, offices and shops, G, department store, H, maisonettes and flats (shops under).



# DUMBARTON COMPETITION: SECOND PRIZE SCHEME BY LAW AND DUNBAR-NASMITH (continued)

foundations for buildings above two storeys in height and extravagant rafts for building above seven storeys. This indicates a compact development of buildings of limited height. Similarly a continuously elevated Trunk Road, allowing communication beneath it between the northern and southern parts of the site would add some £400,000 to the normal road costs.

## Zoning

No attempt has been made to restrict one type of accommodation to any particular area but most of the office accommodation

has been located north of the Trunk Road (Area B) and most of the housing between the Trunk Road and the new Access Road in the area of the bowling green (Area C). The space between the Access Road and the river has a mixed development of shops, offices and houses with the Waterfront reserved for recreation (Areas D, E, F, G, H). The block of government offices is on the island site between the existing bridge and the new bridge (Area A).

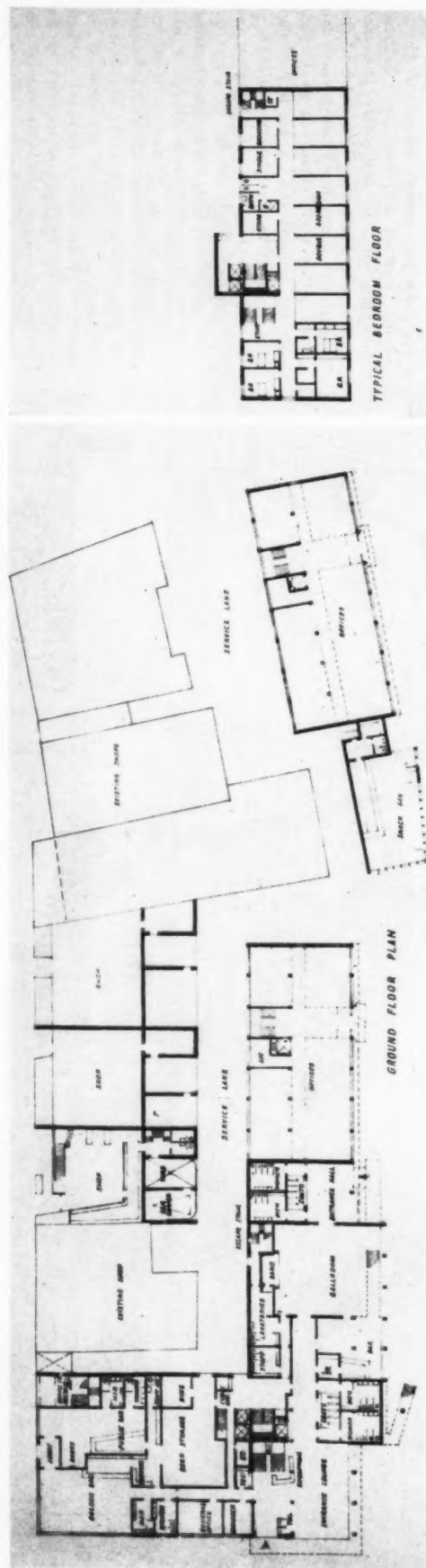
## Traffic Plan

It is assumed that the Trunk Road will join

the existing A.82 road at Glasgow Road, 400 yards to the east of the site and at Cardross Road, 300 yards to the west of the site and in view of this it is considered that only one access point is necessary. This has been located at Church Street and has been designed as a diamond flyover, carrying Church Street over the Trunk Road on the line of Strathleven Place and Bonhill Road, and providing the central area with a direct link to the north-east suburbs and Dumbuck Road. Church Street has been widened to correspond with the existing width of Station Road. In order to use existing roads

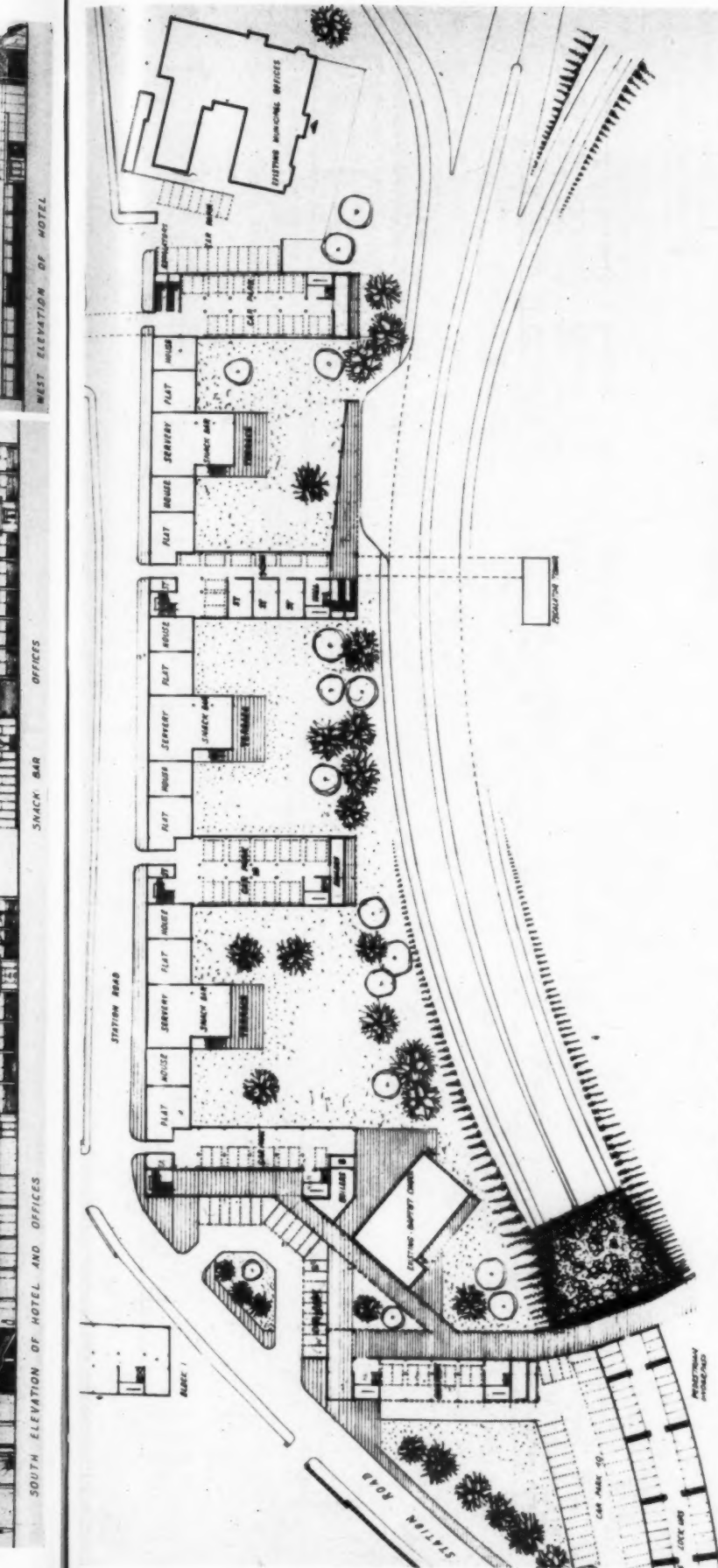
as slip roads as far as possible, a layout has been suggested which extends beyond the site boundaries.

The minimum height requirement for the new river bridge at the west end is such as to allow the Trunk Road to be continued on a viaduct across Station Road. From this point it descends to ground level at a gradient of 1 in 30. The space beneath the viaduct has been used for lock-up garages, some of which are on two floors. The Trunk Road is designed with two 24 ft. carriageways, an 8 ft. central reservation and 8 ft. hard shoulders. No pavements or

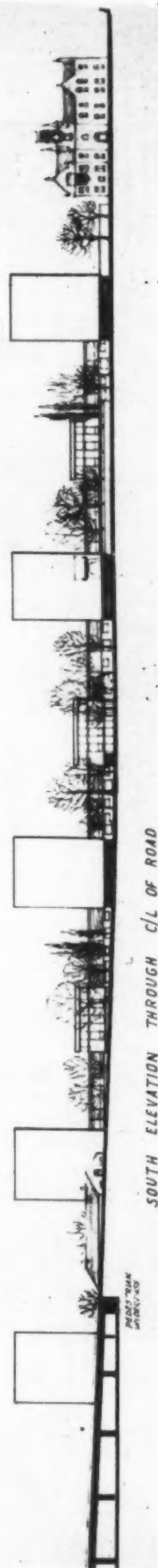


Hotel and offices (area F on site plan).





GROUND FLOOR PLAN AND SITE LAYOUT



SOUTH ELEVATION THROUGH C/L OF ROAD

*Offices and shops (area B on site plan).*

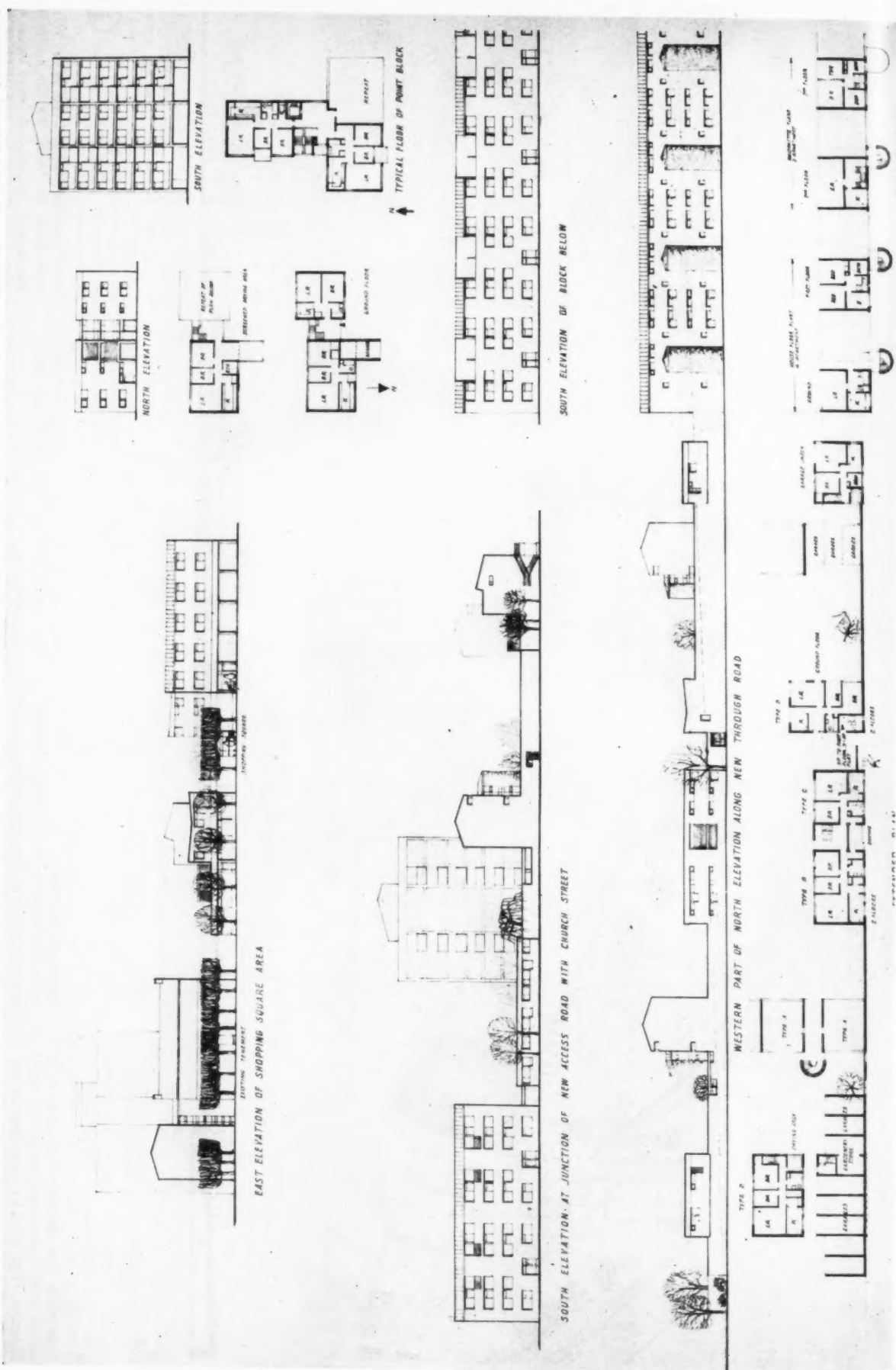
cycle tracks are provided but there is a further 6 ft. reservation outside the hard shoulders. The shoulders are discontinued and the central reservation is diminished at

Pedestrian circulation is provided at various levels by means of escalators, covered ways, pedestrian bridges and an underpass in the viaduct and bridge.

order to link the station platforms with the bus stances on the Trunk Road and with the central area. A large pedestrian shopping precinct ex-

tends from the Access Road to the Waterfront Road and from the Cinema to the Bus Station. Service lanes cross this at one point."

DUMBARTON COMPETITION: SECOND PRIZE SCHEME BY LAW AND DUNBAR-NASMITH (continued)



Housing (area C on site plan).

# THIRD PRIZE SCHEME BY ROBERT W. K. C. ROGERSON

## The assessor's report:

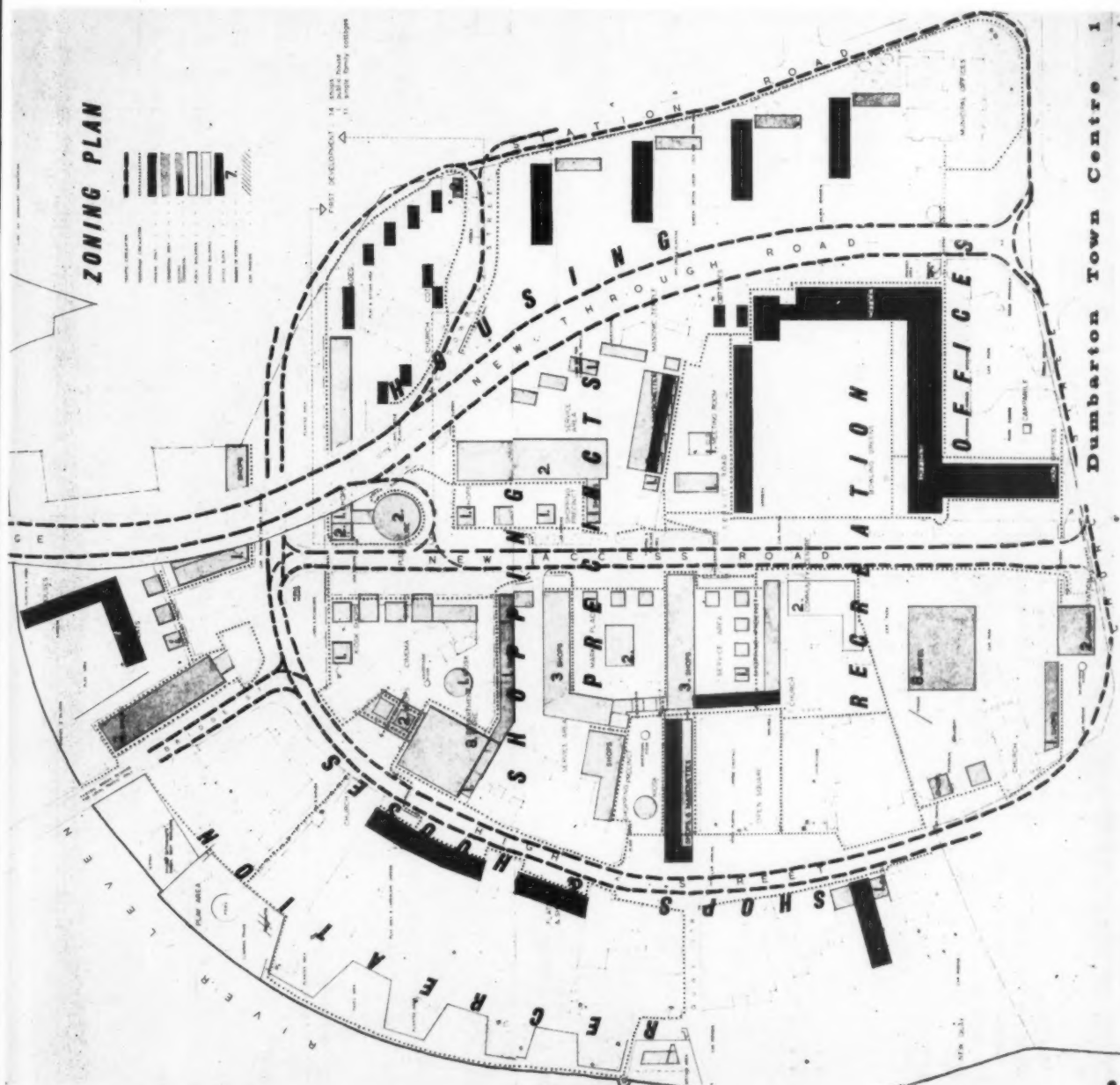
"The third placed scheme likewise elevates the main road only at its approach to the bridge, but uses this to full effect by taking shopping underneath in an arcade-like street to which reference has already been made. But it is doubtful whether this device succeeds in joining one part of the scheme with another and indeed the design suffers from disjointed arrangement both of roads and of building groups. In one case, a daring segregation of small houses within an enclave formed by elevated railway and semi-elevated roadway might have succeeded, for their low level could protect them from noise, but this is offset by strong flow of local traffic taken past the very doors.

This scheme devotes much skill to achieving homogeneous architectural character even between such diverse elements as a vast 20-storey office block and the small cottages just mentioned. But this is done with a big-city touch and has less feeling for the smaller town *milieu* than either the winning scheme or that placed second. The shopping precincts are well arranged. The bridge design is full of character, using pre-stressed concrete to make long straight members."

## From the competitor's report:

"The drawings submitted show that the gaps in the High Street created by the demolition of existing property have been filled on the south side with shops which have houses above them. There are also two tall blocks of eight storeys in height with houses and shops in them on this side of the street.

On the north side of High Street a large square in the Georgian manner has been created with distant views through to the Market Place and Community Centre beyond. The integration of the existing buildings on this side of the street, even



# DUMBARTON COMPETITION: THIRD PRIZE SCHEME BY ROBERT W. K. C. ROGERSON (continued)

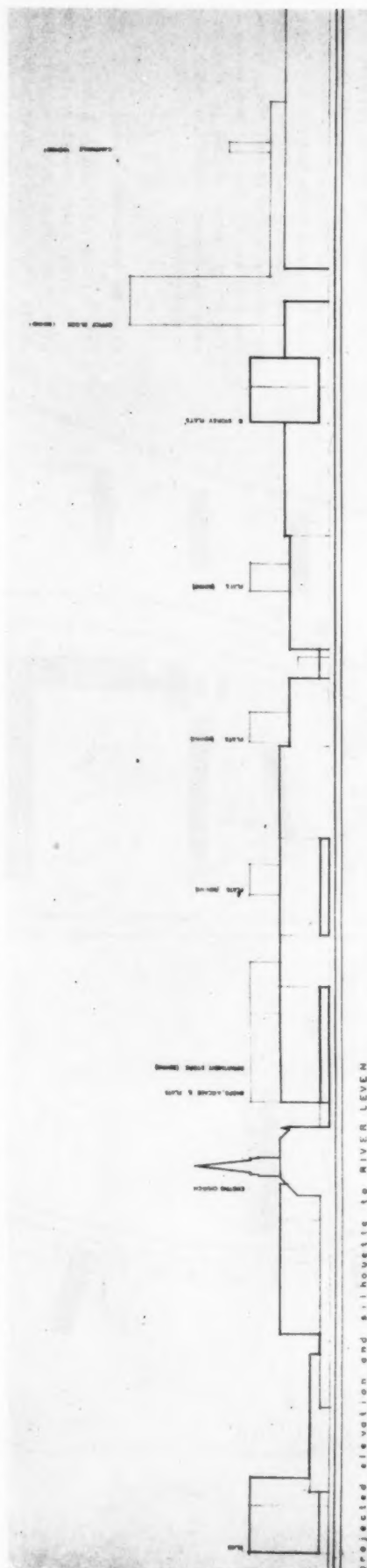
more diverse in architectural treatment, as they are, than those on the south, has been solved by filling the gaps with blocks of single storey shops with pergolas, to allow views of the hotel, etc

The existing pleasing Georgian County

Buildings with its Scottish Baronial Town Chambers as neighbour have been united by the creation of an office precinct. It is felt that since part of this office accommodation is earmarked for Government offices the hotel should be placed adjacent

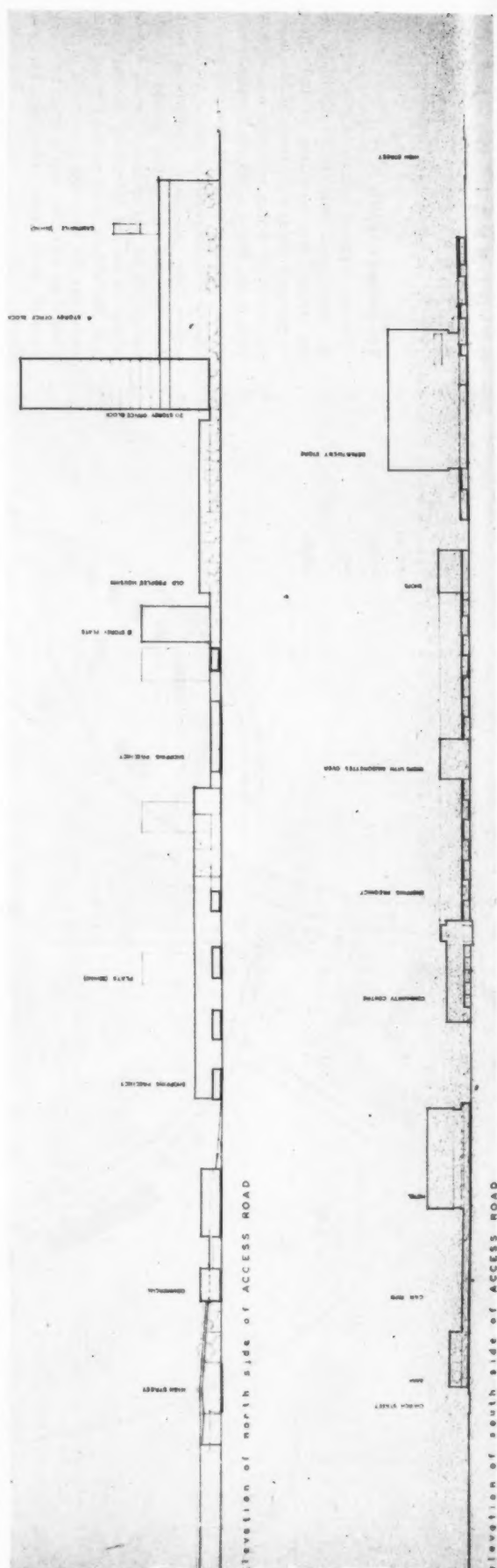
to this precinct. The market place has been planned to span across the new Access Road about midway from Church Street to the New Ring Road. This market place is provided with single and three-storey shops, also with kiosks or

stall-like booths. The access for stores, etc., is by service roads in the rear of certain of these blocks and by side entrances under the maisonettes in other cases."



Projected elevation and silhouette to river level

Three elevations of the scheme.





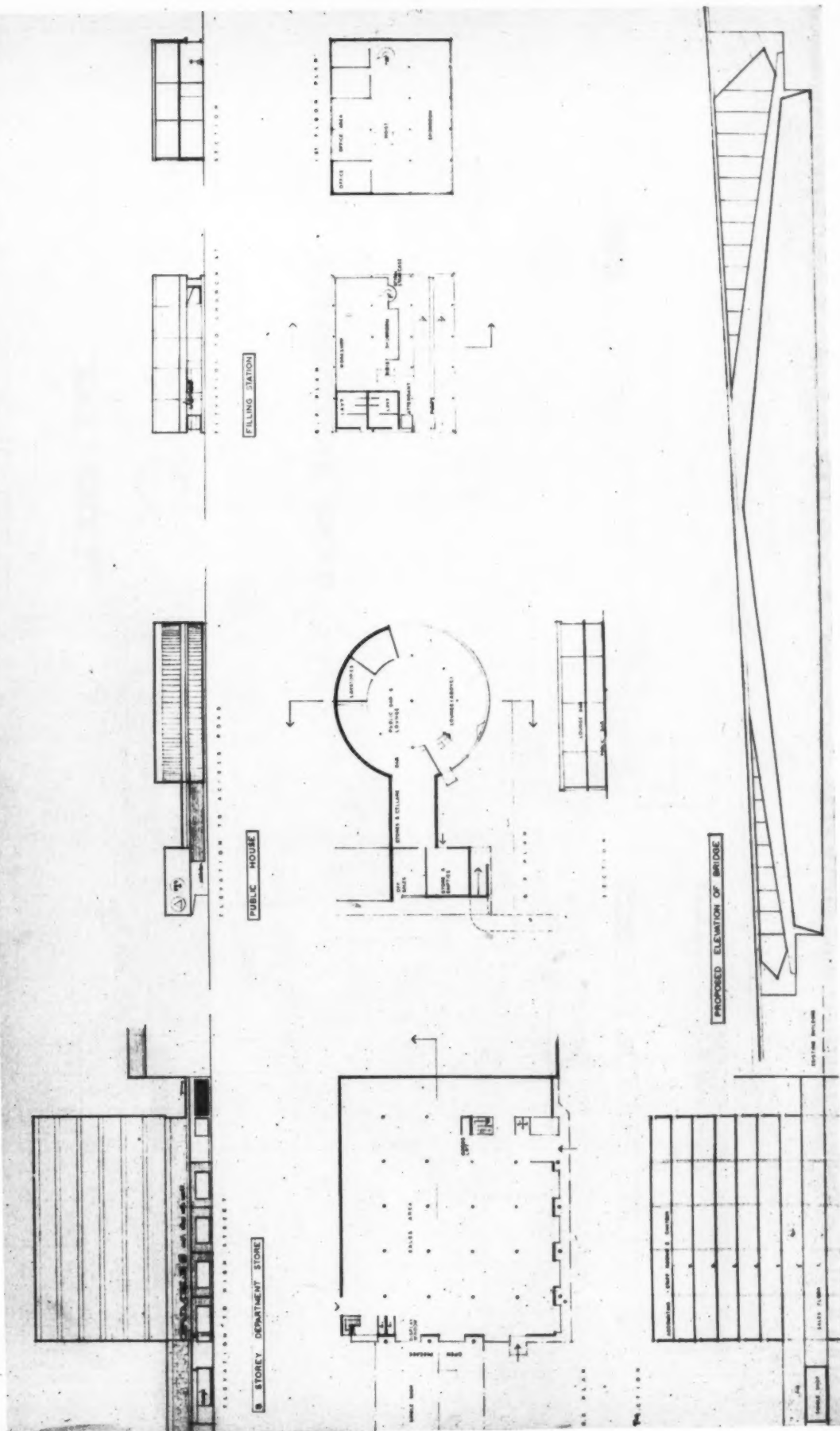
ELEVATION OF SOUTH SIDE OF ACCESS ROAD



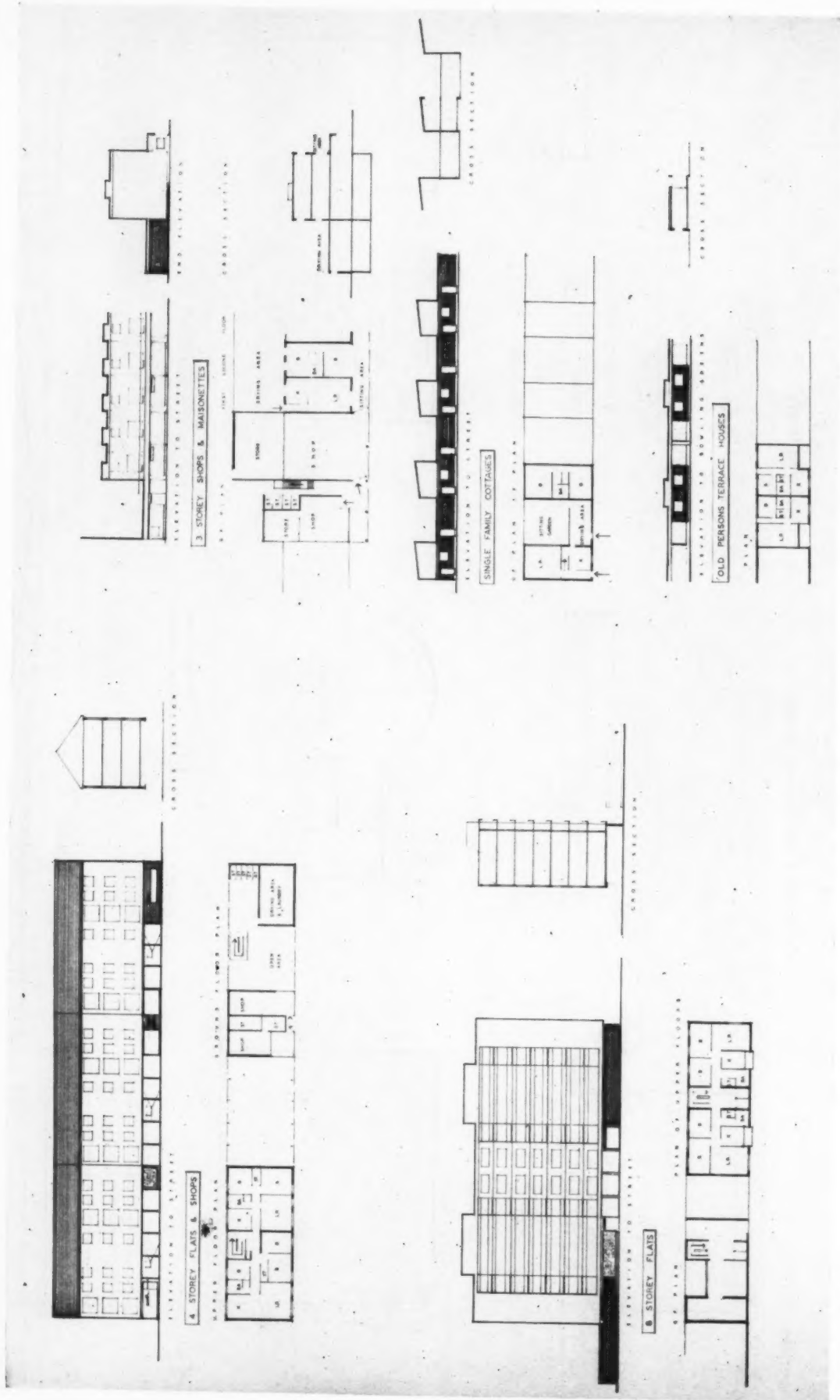
Department store.

Public house and new road bridge.

Filling station.



DUMBARTON COMPETITION: THIRD PRIZE SCHEME BY ROBERT W. K. C. ROGERSON (continued)

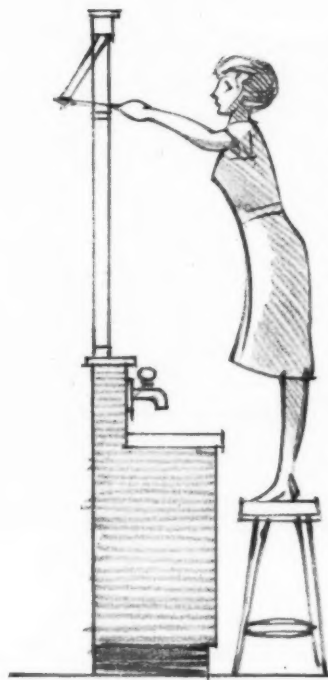


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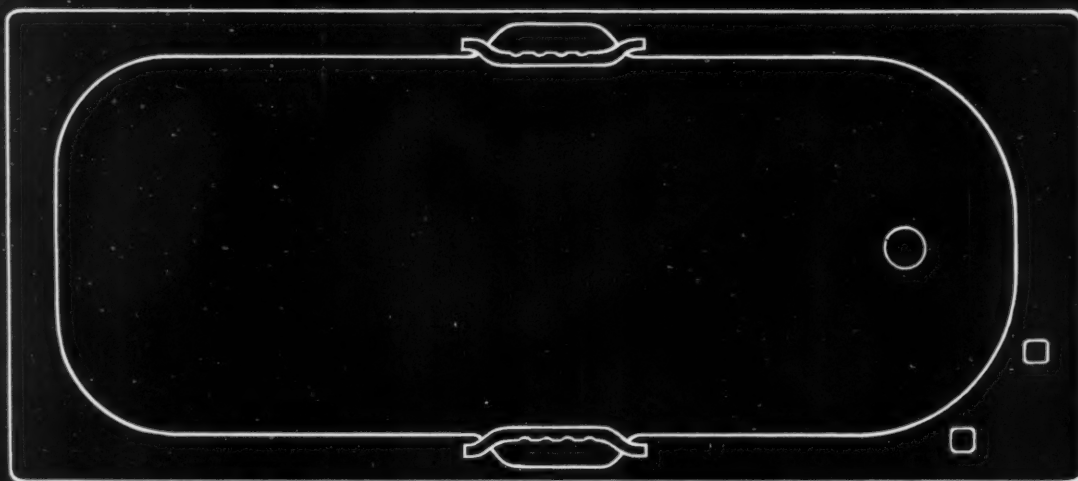
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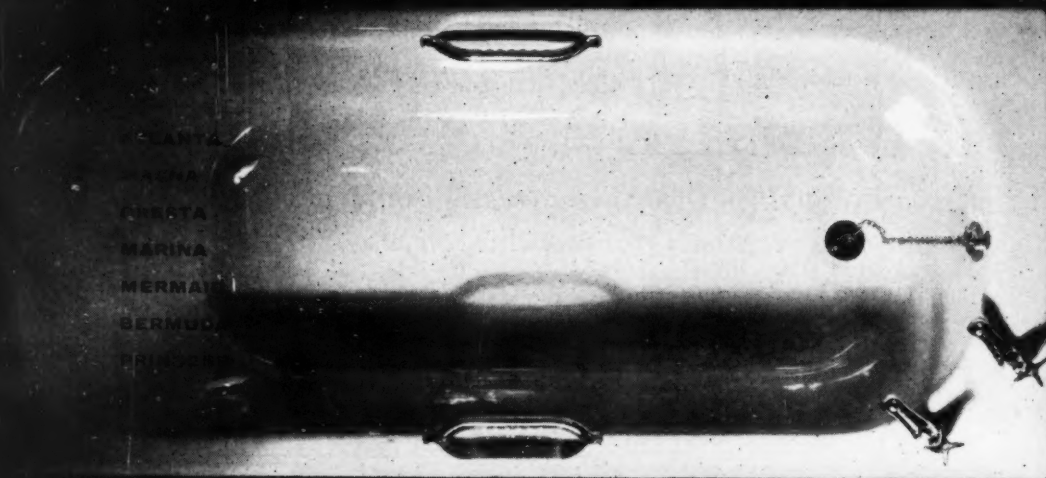
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## THE INDUSTRY

*Brian Grant describes this week insulated wall panels, a reconstructed marble, an adaptor socket, aluminium awnings, and an electric cooker.*

**Insulated Panelling**

Jablestoc insulated panels for curtain walling or partitioning are made with a core of Jablite expanded polystyrene faced on one or both sides with asbestos cement sheets. The core can be anything from  $\frac{1}{2}$ -in. to 12-in. thick, according to the degree of insulation required, but a 1 in. core with two faces of asbestos cement has a U value of 0.17. Alternative facings of hardboard, aluminium, plastics or plywood can be provided, the maximum panel size depending on the facing materials. (*Jablo Plastics Industries Ltd., Jablo Works, Waddon, Croydon, Surrey.*)

**Reconstructed Marble**

A new type of reconstructed marble known as Similpierre has been made in Italy and to a lesser extent in Germany for six or seven years, and is now being made under licence in this country by one of the Berger Group of Companies. The material is made from crushed and graded marble which is applied to a cement backing, the finished slabs having a total thickness of  $1\frac{1}{4}$  in. for floors or  $\frac{1}{2}$  in. for walls. The slabs can be cut and polished in the same way as ordinary marble, and fixing details are also the same, but the cost is very much lower, about £5 10s. per sq. yd. for floors and £6 5s. for walls, supplied and fixed. Quite a large range of colours is available, all at the same price. Tests at Milan Polytechnic show that the material has greater abrasion resistance and impact strength than natural marble as quarried. (*Similpierre Marble Products Ltd., Berger House, Berkeley Square, London, W.1.*)

**Adaptor Sockets**

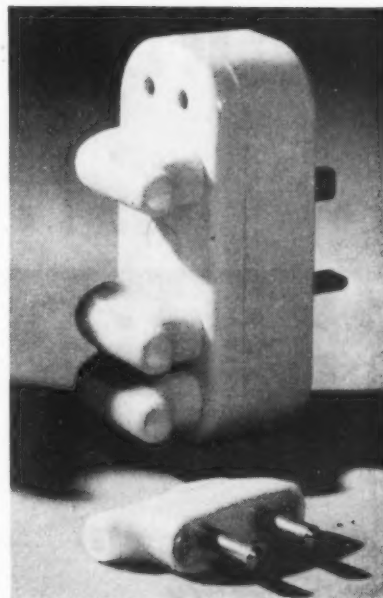
The photograph on the right shows a Nettle four way adaptor for the standard flat pin BS 1363 or the 15-amp. 3 pin socket with outlets to feed four two-core cable appliances having comparatively light loads such as electric blankets, clocks, radios or bedside lamps. The adaptor has a single cartridge fuse, and provides a very much neater fitting than the usual series of adaptors with flex emerging at all angles; it should prove a useful bedside fitting. Prices vary from 14s. 11d. to 18s. 11d. in brown or ivory, complete with four outlets; extra outlets are 1s. 3d. (*Nettle Accessories Ltd., Warren St., Stockport, Cheshire.*)

**Aluminium Canopies**

Luxaflex are now producing two types of aluminium awning, one a roll up type of interlocking slats on a spring loaded roll, the other a fixed awning with rolled edge panels which snap into place on the supports and can be run in lengths either parallel to the face of the building in long runs or at right angles. Prices vary from about £1 per square foot for the roller blinds to 13s. or so for canopies. (*Luxaflex Ltd., 33 Sloane St., London, S.W.1.*)

**New Creda Cooker**

The electric cooker manufacturers have now replied to the Parkinson spit roasting device, and the new Creda Mercury has an electrically driven spit in the oven. The necessary supports for the spit clip on to the oven pan, and the spit has adjustable tines to take the joint or bird. The end of the spit is squared and is turned by a motor in the back wall of the oven, both the spit motor and the grill element (at the top of the oven) being controlled by the automatic timer switch, or independently. A cast aluminium griddle which fits over the two front boiling rings is also provided, and the oven has a glass inner door and an automatic light. Price in white or cream is £57 15s. (*Simplex Electric Co. Ltd., Creda Works, Blythe Bridge, Staffs.*)



*The Nettle four-way adaptor.*

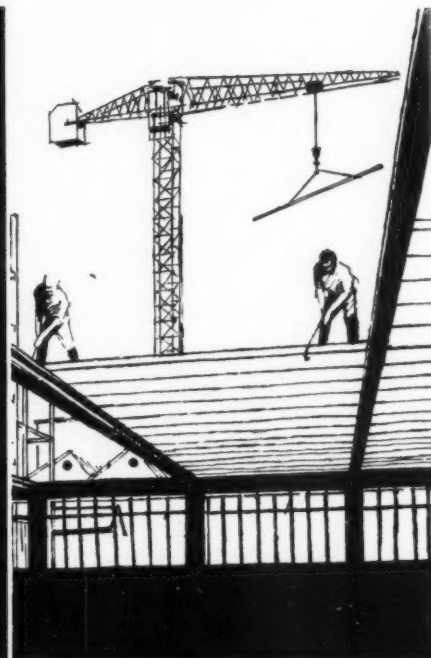


*The Creda Mercury, showing the electrically driven spit.*

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technical section

STB File No.

**B**

UDC No.

651

## 7 PRACTICE

### an essay in office management

In this article, N. Keith Scott, one of the Associates in Grenfell Baines and Hargreaves, describes a technique of assessing office output as applied to the design of the Scarborough Boys' High School.

*The completed school.*



On their appointment in 1955 as architects for the Scarborough High School for Boys, Grenfell Baines & Hargreaves decided that the time had come to reverse past experiences in which tenders had a disconcerting habit of being more than the client was willing to pay and considerable redrawing of working details had been necessary. It did not require much research to reveal that this redrawing was the main stumbling block in the office's aim to offer an average salary of £1,000 per year for the drawing office staff.

It had been established in the office for some time that on RIBA fees a man earning £1,000 per year must be responsible for building approximately £40,000 of work per year if he is to justify that salary and after some research into the best way of presenting this stark fact to the office staff it was decided to draw up

target graphs which were not calculated on costs in the office but on the amount of building work built per hour spent in the office. This method was chosen to bring home the fact that since the majority of the office fees were drawn as a percentage of certificates for work built, it seemed reasonable to present the information in a way directly related to the amount of actual building done.

Calculations showed that to average £1,000 a year, office overheads, plus a percentage profit for the firm, a man or a team of men must work at the rate of £24 of work built for every hour spent on a job. The calculation was done in the following way:

Hours/man/year	2,067*
----------------	--------

\*This figure is based on a working week of 5½ days (39½ hours) and does not take into account holidays, bank holidays or sickness. These are taken into account by the 80 per cent. efficiency figure.

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## technical section

Salary/man	£1,000
Overheads plus profit (assuming 80 per cent. efficiency)	£1,094

Total cost/man/year	£2,094
Average fee	5½%*

Let A represent required £ building work/man/hour

Let B represent required £ building work/man/year

Then  $A \times 2,067 \times 80\% = B$

but  $5\frac{1}{2}\% B = 2,094$

hence  $A \times 2,067 \times 80\% = 2,094 \times 5\frac{1}{2}\%$

$A = £24$

$= 5.7 \text{ man/day/£1,000}$

building work.

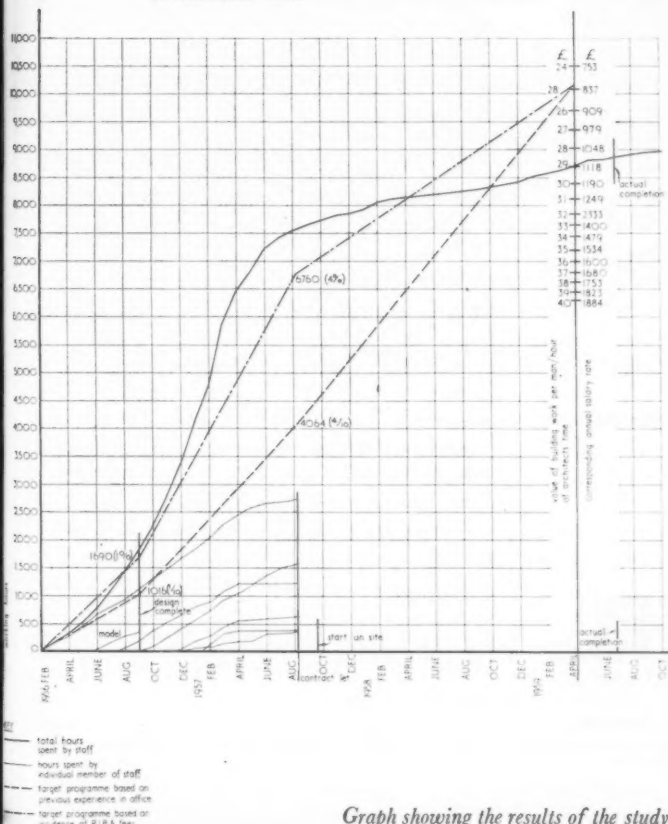
$= £39,696 \text{ building work/}$

man/year.

As a guide to progress, a line was drawn on the graph (presented as building work per hour over time in months) to represent average past experience in the office. This showed that, rather than working to the RIBA fees, of the total 6 per cent. fee 1/10th of the time was spent in design, 3/10ths of the time on working drawings and the remaining 6/10ths of the time were spent in post-contract work—completing working drawings, redrawing details, site supervision, etc. This appeared pessimistic, but it represented past experience (prior to 1955) and a check with other offices showed that their position was somewhat similar.

The architect-in-charge of the Scarborough job had

\*Reduced from 6 per cent. by taking lower fees on housing schemes and on consultants' work.



Graph showing the results of the study.

recently spent two years working in American offices and had been much impressed with the Americans' ability to complete all working drawings prior to the start of the contract and it was decided to experiment with this procedure. The implication of this method was that the graph should rise very steeply as the working drawing team worked for a concentrated period prior to contract date, but two dangers were immediately apparent:

(a) When the RIBA target of 4½ per cent. for completion of working drawings was reached, further drawing should be reduced to a minimum because there is little to spare in the remaining 2 per cent. for post-tender work.

(b) A cost analysis is presupposed because if at the completion of working drawings the tender comes in high, redetailing to cheaper forms of construction is usually the only solution. Redrawing a large body of the work would soon result in financial loss to the office for it is common knowledge that cost limits for schools are quite inflexible.

A study of the graph shows how the job proceeded. When the design stage was complete the previous limit of 1/10th (1,016 hours) was exceeded—as was the RIBA's 1 per cent. (1,690 hours). This was due mainly to inexperience, since this was the first large job on which cost planning techniques were used in the office and much initial work had to be done which is now in the office library of Cost Information. This total also includes a ½-in. scale model by the office model-maker (350 hours).

Working drawings were then commenced and the first two months were spent finalizing construction, during which the job architect spent most of his time doing dozens of free-hand sketches and perspectives. These were then given to a five-man working drawing team and the graph rose sharply, until as the quantities were being prepared the graph-line began to ease off. Throughout the working drawing period constant cost checks were made to ensure that the price was within the Ministry's limits and to justify the risk of letting the graph-line rise so much above previous experience. On receipt of tenders the contract was won with a price of £15,000 below the Ministry limit of £221,000 and it should be pointed out that this considerable error cannot be held as an argument against cost analysis techniques. In fact the quantity surveyor's price was just below the middle of the tenders, which is precisely where it should be, since the quantity surveyor cannot gamble on getting tenders from a contractor who is either ideally situated to do a job or who wants the work for some particular reason.

From the graph it can be seen that at contract stage office costs were nearly twice former experience of 4/10ths and well above the RIBA 4 per cent. The architects, however, were sure that no more major drawings were required, and in fact 135 working drawings were posted to the contractor on the day the tender documents were signed. Nevertheless, it was apparent that great care would have to be exercised through to the completion of the contract, if only



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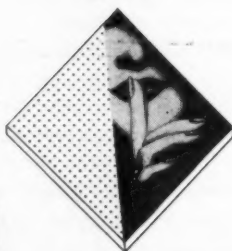
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## technical section

because the job was 125 miles away from Preston and excessive numbers of site visits were liable to consume many hours of wasted travelling time. The procedure for dealing with site supervisions was therefore streamlined and the contractor was put in entire control of the job. The general contractor was responsible for drawing up an agenda to the architects' approval for each site meeting; he took the chair at the meeting, minuted it to the architects' approval and distributed minutes of the meeting to all concerned. This had the great advantage that all sub-contractors (nominated and otherwise) looked to him for guidance and instruction—which is only proper, since they have signed a legal document with the general contractor and not with the client or his representatives. A rule was made that all correspondence from sub-contractors should pass through the general contractor, and this in effect meant that a very high percentage of all queries were cut off before they reached the architect. It also resulted in a complete avoidance of the common situation where the architect becomes a sub-contractor's chaser when he falls behind with deliveries. Site meetings were held once a month and on only one or two special occasions did the architect visit the job more frequently.

Since the formation of a technique for costing office work, the office has followed a policy of raising salaries as production rises and the current average salary has risen to £1,150 per annum, which means that efficiency has risen to £29 of building work per hour spent in the office. The current aim is to raise this standard to £1,400 per annum, which would involve a production of approximately £32.5 of building work per hour. This latter rate of production is dangerously high since it is most difficult to achieve with present known production methods. The office is therefore currently conducting detailed examinations into the two other constituent items in its make-up—profit and overheads. Profit margins are at the moment considered to be compatible with safety and attention has therefore been turned to streamlining overheads and present measures are aimed at reducing the target to approximately £30 of building work per hour to give an average salary of £1,400 per year to the technical staff. Calculations show that these figures seem to represent a practical limit at the moment and future salary improvements must obviously be geared to the following three items:

- (a) The cost of living, since rising costs mean higher fees.
- (b) A greater preponderance of more lucrative jobs in the office (large-scale commercial and industrial work).
- (c) A constant search for more efficient production of working drawings—the use of sketches, standard details, etc.

A word of warning should be given in respect of these graphs, for they must be correctly interpreted if they are not to give a false picture. Used unwisely they can do great harm to office morale for it is obviously not possible to produce £30 of building work per office hour on a small house costing £3,000 or on a tricky

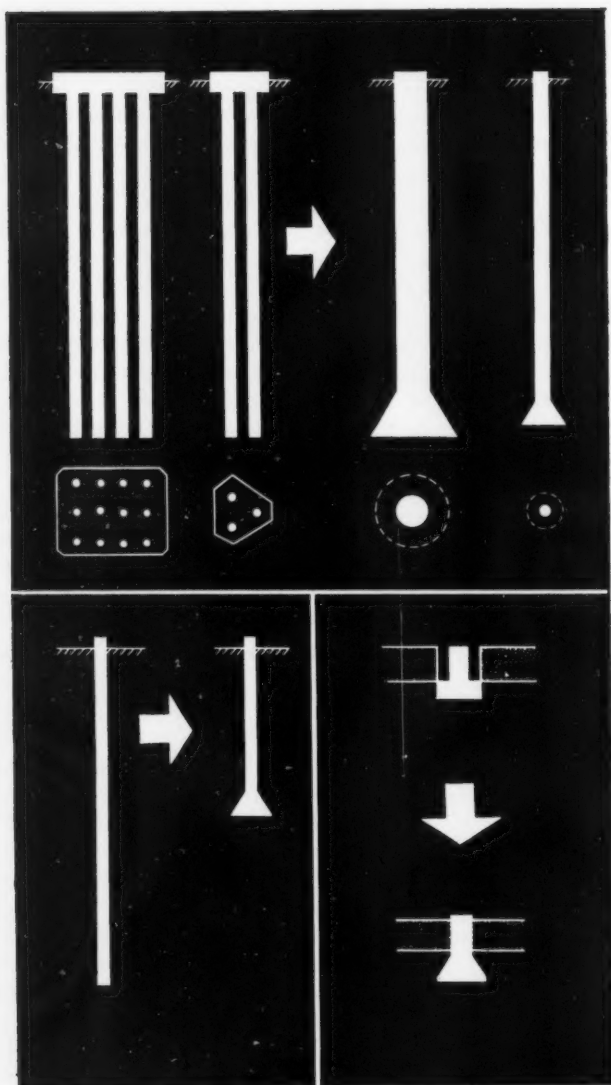
alteration job costing £8,000. On the other hand it is not likely that an office the size of Messrs. Grenfell Baines & Hargreaves would specialize in small jobs of this nature and the small offices which do deal with this class of work would certainly not have the high overheads of a large office. Furthermore the qualifications of the staff working on such jobs may well be lower, therefore the average salary is less and, together with a reduction of overheads, a satisfactory target may well be as low as £16 or £18 of building work per hour. On the other hand, targets in the region of £30 of building work per hour could easily give an inflated sense of importance to an architect working on large-scale repetitive industrial work, since on these jobs it is quite possible to achieve figures in excess of £45 of building work per hour.

The Scarborough High School has therefore been chosen as an example, not only because it was the first major exercise in the office, but also because a school of this nature is a fair average of the work likely to be tackled by a large office, and can therefore be taken as an "average" job.

The office is now working to a policy of arriving at a target figure for each job as it comes into the office, so that it can be given to the architect-in-charge at the outset. Some sort of sliding scale for arriving at targets for jobs is a very attractive thought and it may well be that something will eventually be worked out. The trouble with such an idea is that, since there is such a wide variety of complexity in both large and small jobs, a straightforward sliding scale is less empiric only in degree from the global target now in use. It is, for instance, quite possible to have a complex £300,000 job paying at only £22 of building work per hour at maximum office efficiency, while a straightforward £50,000 warehouse can comfortably attain £40 of building work per office hour. Thus until these anomalies are worked out it seems safer at the moment to hold a meeting on every job and treat each on its merits so that the architect-in-charge is both conversant with and sympathetic to the target he is set.

The office has also found that when used intelligently, rather than as a sort of whip, the graphs have the following interesting by-products:

1. They show the whole design team just where the job stands. Since the job is geared to building costs and through it to the industry, the younger members of the team are helped to feel part of that industry. It also corrects the tendency on the part of newly qualified designers to assume that their weekly or monthly salary comes from an unlimited reservoir or arrives mysteriously by act of God.
2. It shows the team precisely what extra effort is demanded to achieve targets and it also quite clearly demonstrates the extra efforts that must be made if increased salary claims are to be met. In other words, the decision as to whether a man gets a rise is not entirely dependent on the condition of the boss's liver but rather upon a rational examination of known facts to see whether increases are justified.



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## technical section

3. The architects' grasp of the financial implications of the job brings increased respect from the building industry. This has been one of the most gratifying by-products of the graph. It illustrates to the builder in terms that he can understand, how the architects' fortunes are geared to his own while the job is running, and the graph of the Scarborough Boys' High School, for instance, shows clearly the number of hours spent after the completion date due to prolongation of contract. These hours are readily computed and reduced to loss in fees, and the day is rapidly approaching in the office when claims will be made against builders who default in this way. The architects are considering the possibility of writing appropriate clauses in the contract to cover this eventuality, though obviously the architect must be sure that it is no fault of his that the contract has overrun before any such claims can be made.

4. During the working drawing period the graph was broken down to show the time spent by individual members of the working drawing team. By comparing this with the output of the various team members, some assessment by the Partners of the efficiency of each can be made and this again can be related back to any justification for an increase in salaries, or for the member's fitness to be entrusted with jobs of his own.

The most disturbing fact to Grenfell Baines & Hargreaves about the production of these graphs and the work that has been done on them is the body of opposition that there is in the profession when it has

been discussed at conferences or with members of other offices. The RIBA Conference on Office Efficiency last year was a particularly good example. There was considerable criticism of speakers who recommended such efficiency studies. This approach was charged with killing design spirit in the office; stultifying the imagination; dabbling in matters which are not the concern of the architect; trying to understand things that he is not by training or nature fitted to understand. It was interesting to note, however, that the majority of this opposition came from members whose offices run at an average salary of £800 to £900 per year. There seems, therefore, to be no point in objecting to these researches while complaining about the lowly paid status of the profession, unless an alternative approach can be put forward. It is obvious that the *status quo* simply will not yield salaries commensurate with other professions and Grenfell Baines & Hargreaves are convinced that architects are convinced that architects are really the only people who can help themselves, because the creative urge which is the driving force behind all true architecture is not readily conducive to orthodox statistical analyses such as those undertaken by Time and Motion experts. Grenfell Baines & Hargreaves do not presume to have found the answer to office productivity and to methods of portraying it statistically, but they submit the above procedure as a starting point and comments from other architects would be welcomed.

INFORMATION  
CENTRE

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

A

712

6.60 planning: public utilities  
LANDSCAPE DESIGN

*Studies in Landscape Design* by G. A. Jellicoe, Oxford University Press. 25s. This book consists of seven studies by this well known architect which have been based on lectures given to seven different audiences between 1952 and 1958. It is not a text book and does not attempt to set a pattern for the conscientious landscape architect to imitate. Rather is it a philosophical assessment of the place of landscape art at

various times and in various countries. A new book of this kind in the landscape field is all too rare.

The first two studies are historical, the remainder deal with problems of the present day always set against their historical background.

The many illustrations are well chosen but would be more useful interspersed with the text rather than grouped together at the end of the book.

(47)Ln

19.227 construction: details  
ROOFING

*Built up roofing in building construction.* Published by the Felt Roofing Contractors Advisory Board, Victoria House, Southampton Row, London, W.C.1. Free to architects. This booklet has been published by the trade to serve as an amplification to B.S. Code of Practice 144: 101, the last edition of which is dated 1952. It gives useful data on substructures, e.g. concrete screeds should be not richer than 1:4 and at least 1 in. thick. Asbestos cavity decking and sheeting should be covered by materials such as wood fibre insulation board, cork board, etc., as they are liable to give off gas or vapour when hot bitumen is poured on. Bitumen

felt and granule boards are not dense enough to serve as a base for built up roofing. Wood wool should be covered by a ½ in. sand cement screed. A warning is given against expanded and foamed plastics which may melt when the hot bitumen is poured on them. The booklet also gives drawings of expansion joints to cope with three different degrees of expansion. A useful office reference.

(54)

696-2

26.136 services and equipment: miscellaneous

## GAS INCINERATORS

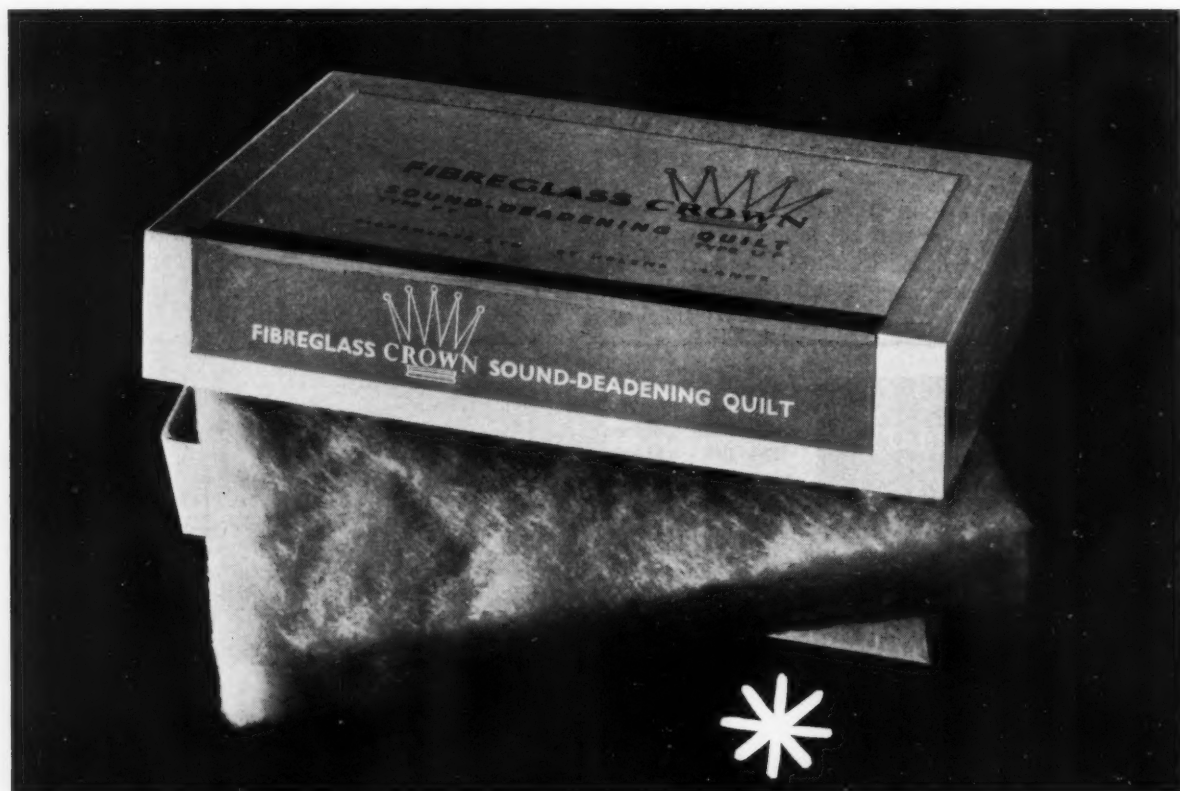
*The installation of small gas fired incinerators.* Published by the Gas Council. Free. This useful document is the outcome of joint research done by Watson House and the North Thames Gas Board. It gives full technical data on the flue-ing of gas incinerators. Those ventilated by natural draught must be flued individually; but, where mechanical extraction is used, up to 12 units may be combined in a single system. There are, of course, strong social reasons for placing one appliance in each toilet cubicle: mention is made of a double sided unit which is accessible from both sides and can, therefore, serve two adjacent cubicles.

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## OFFICE PRACTICE

During the summer many architectural students find work in offices. Indeed, many schools and universities insist that their students should spend a certain amount of time gaining practical experience in this way. Before the student is allowed to take his professional practice exams, and thereby ultimately qualify, the RIBA insist that he should have served twelve months as an assistant in an office. Office training has therefore been made an integral part of the student's training supplementing his formal education with practical experience. It seems to us then that the profession should undertake to provide suitable experience. To serve time as a draughtsman is of little value to the student and only of immediate very limited value to his employer, as a form of cheap labour.

For the student, office practice during his course and immediately afterwards must essentially be an introduction to reality. That is not to say that schools of architecture are necessarily ignorant of reality, nor that they turn their backs on it. However, with a few exceptions the student will throughout his school training design and detail for a Never Never Land in which proposals never become realities. Above all, then, office practice should be an opportunity for the student to test his theoretical knowledge against actual practice. He should be given the opportunity to take an interest in organisational problems, professional practice, quantities and site organisation, programming and estimating work. He should learn more about the connection between bills of quantities and working drawings and the relation of architect to quantity surveyor, contractor, engineer, etc.

In order to take advantage of these opportunities the student must be in a position of privilege. His part should be that of an observer. Mr. Kenneth Campbell of the LCC's Housing Department suggested at BASA's Bristol Conference that the student in an office should be given a roving commission rather than be attached to any one job. In this way he would be able to hold a watching brief. To provide this kind of facility the employer must accept a situation where he is expected to pay a student enough to live on while receiving only a meagre return in terms of work. This may seem hard on the employer. Nevertheless this remains the realistic attitude.

The profession cannot afford, if it is to raise its standards, to regard student labour as an immediate source of profit. Money spent on educating students is an investment. This is not a plea for philanthropy or charity but for good sense. The RIBA, on behalf of the profession, insists that students have office experience. The RIBA should also insist that the right kind of experience is available, and that the wrong kind is discouraged.

## STUDENT'S VIEW

### Boozing at the RIBA

Changes at the RIBA include a new clubroom and bar. Portland Palace has gone madly gay with the help of Alison Smithson and W. G. Howell. The colour scheme involves large areas of virginal white, imperial purple and torpid red which paradoxically have for me much the same effect as large quantities of alcohol making the sale of liquor unnecessary.

Hazards worth taking note of before entering include some visually insignificant changes in the level of the floor, designed I assume with the sadistic aim of providing light entertainment for those safely seated. You may not laugh as you trip over an unnoticed riser and grovel in a pool of your favourite drink, but think of the joy you may be giving to others!

The armchairs, squat and gross, are scattered with the gay confusion of a chronic parking problem. They offer only a superficial haven of safety and make no concessions to comfort that I noticed, having almost no arms or backs. In the same groove the tables are equally hefty. They look as though they were intended to support fire buckets or "Festival of Britain Flower Pots" rather than fragile glasses.

Of further interest amongst the fittings are the freestanding high level chromium-plated urinals which tastefully illuminate the walls. We wonder, however, what manner of man it is who is so proportioned that he is able to take advantage of this very public convenience.

Nevertheless, gratitude where it is due: alcohol is a useful addition to the amenities of Portland Palace.

*These RIBA chairs take a bit of getting used to . . .*



**Current Events**

Every now and then Presidents come and go at the RIBA. Mr. Spence has now retired from office after an active couple of years in which he has done much to inject new life into the profession and to focus the public's attention on architecture and some of its allied problems. Having returned from his transatlantic trip he had his final fling as President at the RIBA Conference at Manchester. (Down with those naughty land speculators.) Now Mr. Spence returns to active architectural practice taking his knighthood with him. Well, congratulations Sir Basil. Taking over the Presidency is Sir William Holford, town-planner and committee-man. Welcome, Sir William—don't forget the students, Sir.

**Oxford Conference**

You remember the Oxford conference on education? Three new catch phrases emerged from the RIBA's sleeve: Two "A" level minimum entrance qualifications, two-tier profession and post-graduate research. Very nice, but utterly meaningless without some sort of action.

**Grants**

Are we really going to have a national system of student grants at last? A standard payment to students irrespective of their parents' incomes is Utopian when compared with the present system. A national system would iron out the anomalies which result from some local authorities having more money than they know what to do with while others are poverty stricken. I look forward to the time when a student grant is awarded, as a matter of course, with every university place. This sort of system would benefit State, parents and students.

STUDENT

**THE SUMMER VACATION: Michael Sumpner**

Architectural students long to go abroad. In fourth year many spend several months in an office abroad; others, in the winter months, may have saved sufficient money to go ski-ing; and in the summer months an increasing majority cover phenomenal distances by hitch-hiking or other means. But ski-ing parties are generally limited to one or two weeks, whilst those who half kill themselves getting to Stockholm or Rome, are forced financially to live as tramps for considerable stretches of time. A question that may well arise is—"Why not get a job?"

The student will accept whatever he is offered, especially if he cannot speak the language; he may become odd-job man on a farm or building site. He may bury himself with some archaeologists, or he may even scrape a living by painting. But since one has to be prepared to work a long day for a number of weeks in one spot, with unfamiliar people, few, naturally, apply for this sort of job abroad, preferring rather to earn at home the money necessary to trek down to Germany or Italy.

Quixotically, the Student Work Camp offers the best of both worlds to those who want to go places but who also know that they cannot keep themselves for more than a week or two abroad, without getting a job at some point. Students abroad make the best of these camps but we tend to get rather an unwelcome picture of them—occasionally we read of some outlandish school which was allowed, by some careless government, to be razed to the ground by an earthquake, and which is now being rebuilt by students, who are getting sunstroke in the process, no doubt!

**Student Work Camps**

Today the number of organisations who run these in Europe and elsewhere is increasing continually. The camps vary in the amount and type of work available to volunteers, and in their duration, which may be week-ends, weeks, or months.

The advantages of a building work camp to an architectural student are:

1. *As building experience:* since the projects are usually small scale, one is

likely to be able to try one's hand at several jobs on one or more buildings in a short space of time. In the camps which help refugees build their own houses, for instance, one may be helping to concrete Mr. X's cesspit on Monday, hanging tiles with Mr. Y. on Tuesday, and rendering with Mr. Z. on Wednesday. Unlike being just another employee of a contractor, one may rapidly become a personal friend of Mr. X, who has no contractor, and be in a position to be able to discuss his building problem which, being divorced from traditional building practice, will encourage one to think empirically time and time again.

Work on a building site in this country may reward one with a considerable amount of money, but it is not likely to be as valuable an experience architecturally, nor socially.

2. *As a base for travelling:* The camp(s) can be chosen to act as base(s) for a particular itinerary envisaged in Europe, remembering too that short journeys can be made at week-ends from the camp. Reduced fares are available which do not have to coincide with one's stay at the camp. (The fact that the camp(s) may break up the itinerary is an advantage, as few people really enjoy being on the road for more than a few days at a time.)

3. *Camp life:* Have no fear, the camp is not made up of a host of over-socially-minded diehards, but an international, mixed collection of perhaps more "progressive" youngsters—to use a favourite adjective of young architects! Run entirely by students, the camp is a self-contained unit and at the same time is very much at home to the local inhabitants for whom it works. The work on the site finishes at about 4 p.m., the typical day would "begin" with, perhaps, a swim, followed by some magnificent meal prepared by, say, the Swedish girls one night, and the French the next . . .

**Addresses of Organisations**

1. International Voluntary Service, 72 Oakley Square, N.W.1.
2. UNA International Service, 25 Charles Street, London, W.1.



BALLIOL COLLEGE, OXFORD

**BACK-CLOTH TO THE CONFERENCE: Colin Taylor**

If much of the poetry involved in the "reasons for building" has disappeared almost completely from the twentieth century, it is as well to remind ourselves that the act of building is grotesquely stunted if simply confined to putting a roof, or several roofs, over our heads. Perhaps nowhere else are we confronted so directly with an indictment from the past as in our university towns. The "cathedral of the mind" is hardly a twentieth-century conception though it may well take new forms.

Balliol College's origins were an "outcome of a virtuous necessity." The founder, John Balliol, "unjustly vexed and enormously damnified" the churches of Tynemouth and Durham and laid hands on the Bishop of Durham. The Bishop's function, among other things, was the promotion of pious

works and he caused John Balliol to be scourged at the Cathedral door and added to that penance the obligation to hire a hostel in Oxford for sixteen poor scholars and to provide for their maintenance there. This is known to have taken place between 1260 and 1266.

Balliol's pre-eminence among Oxford colleges did not come until the nineteenth century when the introduction of entrance and degree examinations, together with a revival of the tutorial system, was made by the then Master of Balliol (1798-1819), Dr. Parsons. This was accompanied by a lifting of the severe restrictions on the qualifications for fellowships and scholarships in the statutes of the College. The position was consolidated by a series of remarkably able tutors, men like Jowett, Riddell, Nettleship, Strachan-Davidson and A. L. Smith,

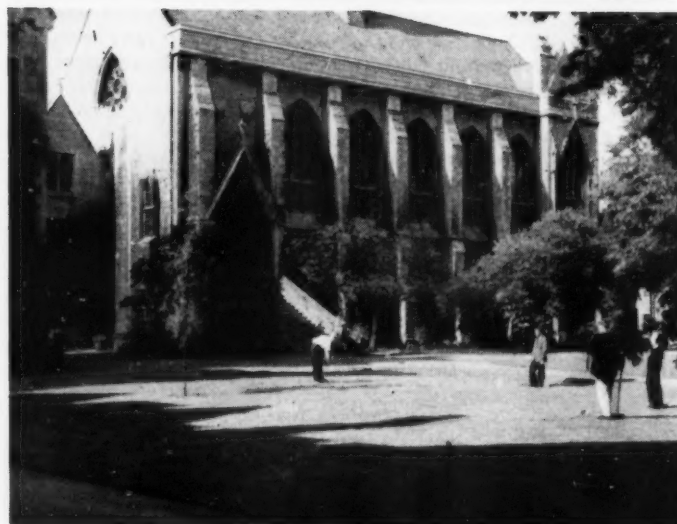
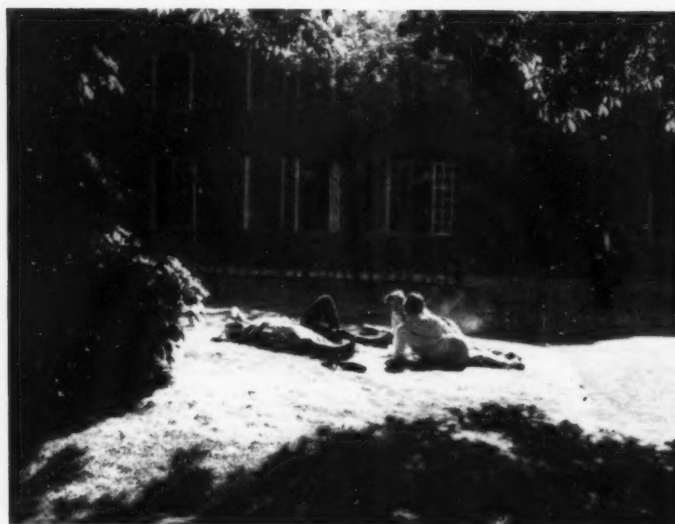
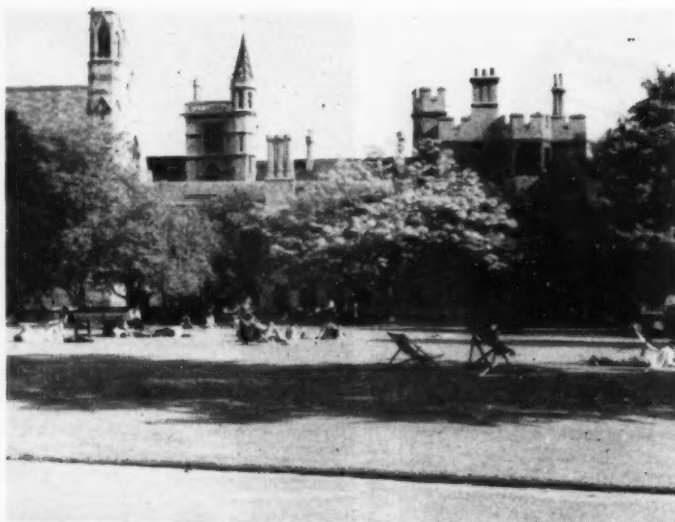
who devoted their lives to the College and its scholars. Such people and events made possible the basis of the high regard for Balliol which continues today.

The College buildings span five centuries of building, originally consisting of three tenements stretching back from Broad Street on what is now the western part of the front quadrangle and Fellows Garden. Nothing remains of the tenements, a sustained building programme in the fifteenth and early sixteenth centuries having replaced them with a quadrangle round which were grouped the Chapel, Library, hall and fellows' rooms. Since 1700 almost everything has changed. The only structural remains of buildings earlier than that date are the outside walls of the Upper Library, Lower Library (undergoing restoration) and

**SECOND BASA CONFERENCE ON ARCHITECTURAL  
EDUCATION to be held at BALLIOL COLLEGE, OXFORD**  
**5 p.m. September 19 - 5 p.m. September 21, 1960**

Would those interested complete the reverse side of this slip and send it to the Permanent Secretary, The Building Centre, Store Street, London, WC1

BASA monthly supplement



the Oriel window of the Master's Lodging. Everything else has been built or rebuilt, and some of it twice rebuilt, since 1700.

The active centre of the College has been shifted from "the" quadrangle (now the front quadrangle) to the garden round which are grouped the hall, common rooms, and chapel. While the garden quadrangle is of relatively recent origin, the earlier front quadrangle has been subject to repair, restoration or entire rebuilding. The chapel has twice been rebuilt. Of the first (c. 1309-28) nothing remains. The second (1522-9) was pulled down in 1856 but the stained glass and some of its seventeenth-century furnishings have been preserved in the third chapel which was built by William Butterfield in 1856-7 to accommodate the increased number of members of the College. The plan was expanded on the North Side and the roof raised above the height of the Upper Library roof. Butterfield also replanned the garden and designed the low-walled private terrace to the Fellows' quarters.

By 1853, increased numbers of students led to the Hall being enlarged by the architect Salvin. This involved the building of the present passage from the Front Quadrangle to the Garden Quadrangle round the north end of the Hall and the erection of "Salvin's Tower" at the north-west corner of the Front Quadrangle. This enlargement proved insufficient and in 1876 Waterhouse designed the new Hall at the north end of the garden, the old Hall becoming the Lower Library. Salvin's Tower now contains a set of Fellows' rooms.

At the turn of the century, then, the Front Quadrangle was composed of a "classical corner," the rest being Gothic. It was not until 1866 that Waterhouse began the complete re-design of the south and east ranges, being influenced, not too surprisingly, by Pugin's earlier design for the Broad Street front. These buildings have remained substantially unchanged to this day. The Junior Common Room, where the main issues of the Conference will be conducted, contains a number of paintings, drawings, etc., by Ceri Richards, Derrick Greaves, Michael Rothenstein, Elizabeth Frink, and others.

Name .....

School .....

Home Address .....



## THE FIRST JOB

*The author is a qualified architect now working in a London office.*

Qualified at last! The world at your feet, high ideals of service and art, a fine feeling after a considerable achievement. The prospects seem limitless; but here at once is something of a problem. Before, there has always been a known objective, within reach, but now there are many objectives, all far off, with many ways of attaining them. How does one set about it?

Some students, perhaps fortunate, have already formed some idea of which way they want to go and, knowing this, will go that way. Many others, not so sure how to use their talents and new skills, hesitate and wonder perhaps for the first time what it is they really want to do. Which way should they go? There is no body of information kept up to date, about work, programmes, attitudes and salaries in various types of office, to which students could refer. At the moment one can only find these things out by asking architects who have been in practice for a year or two, and in the Schools themselves these men are not always available to help. Therefore this is an attempt to survey briefly the kinds of jobs generally available to newly qualified men, and the opportunities each kind offers. It is based inevitably on rather personal impressions—and in fact any corrections will be very welcome as they will help to clarify the picture.

The opportunity or desire to set up in private practice immediately comes to very few. Most of us will work for some years for other architects, and the kind of office we choose will largely be determined by our temperament and what we consider to be the most valuable experience. It is unlikely that one office will provide at once all that we look for, so we must think out what we consider to be most important.

What might this be? Intellectual stimulation, technological skill, structural adventure, the personal pleasure of self-expression, the satisfaction of serving others, responsibility in administration, financial reward—all of these are available to a greater or lesser degree, even in the first job.

Two big questions come up at once: private practice or public service? Britain or abroad? And in either case there is a difference between personal ambition and creativeness, and the more vocational wish to be of service to the community—this is a problem which ultimately confronts all of us.

### 1. Government departments

These are principally the architect's departments of the Ministries of Hous-

ing, Education, and Works. There is a tendency in these offices to deal more with development work and research than with actual projects, requiring on the part of the staff considerable initiative and originality in drawing up programmes and working methods which will be used in practice by other architects. Some examples of the products of this work are the handbooks on Central Area Redevelopment, Road Design and Housing Layouts, the Housing Manuals, the Ministry of Education's Building Bulletins. Similar work, though more particularly concerned with building techniques and standards, is done by the D.S.I.R.'s Building Research Station at Garston. Experience in these departments may seem to some to be too academic and impractical, but its usefulness to the newly qualified man lies perhaps in the rationalising of one's approach to the solution of specific problems, and in the help these solutions will give to architects who have not the time or resources to do such work themselves.

Working regionally rather than centrally are the Ministries of Health and Transport, through the Regional Hospital Boards and the Regions of the British Transport Commission. The hospitals programme throughout the country has recently been very considerably increased, and there has been a consequent increase in the demand for architectural staff. This is something of a "vocational" work, as the projects and teams will be large, the work highly specialised, and comparatively inexperienced men can only be small cogs in big wheels. But salaries are quite high. The rather precarious position of the railway system has speeded up modernisation, and there have been several very interesting schemes produced for stations, offices and more specialised buildings. The road services have a more restricted scope.

### 2. Large local authorities

There are both dull and interesting projects, and good and bad groups. One may be fortunate immediately, being assigned to a lively section, or one may have to wait a little while until there is a change of staff. If one knows beforehand which are the better sections, one can of course ask to be put into one of them; but one cannot always be sure of this happening. However, the larger the department, the more likelihood there is for development work, and for learning from other jobs going on in the office. This is quite important—the diversity of schemes that a local authority will have in hand (housing, schools, community centres,

central area development, etc.) and the number of highly qualified men on the staff means that one can see, discuss and assess a lot of work at the same time as doing one's own job.

The Committee system always produces a certain amount of frustration and restriction in the offices. The client as a person does not exist; at every stage in the programme there may be aesthetic, structural and financial controls, and the whole attitude of a committee may change with the election of new councillors. Nevertheless, committee work, even report-writing, has its own value, requiring clear thinking, lucidity and conviction in the submission of any scheme for approval. Administrative work will eventually become quite a large part of any architect's job, and experience in the presentation of work to hard-headed laymen and knowledge of local government methods is one of the less obvious advantages of work in a public office.

### 3. Smaller local authorities

In the smaller offices, responsibility will probably come more quickly to the qualified man, possibly at once. There are fewer, less complex programmes, fewer architects, and the experience will obviously be wider in a short time. One may see a job through from design to completion quite quickly. Apart from a few local authorities and the New Towns Corporations which have a reputation for good design, one may well find that good constructional and administrative experience has to be balanced against the less satisfactory design experience resulting from reactionary committees and tight budgets. In all local government posts, salaries have improved considerably during the past three years, and one will often be better off, with the yearly increments, in the lower grades in public offices than with a private firm.

### 4. Private firms

Obviously this group is so various that one can do no more than indicate tendencies, and leave detailed investigations to the man looking for the job. However, the work of well-known architects will usually give some clue as to whether one would find oneself in sympathy with his approach. Frequently, though not always by any means, a big name will have big projects on hand, and a big staff. Combined with the fact that the designs will bear his name (as opposed to local authority work which is more or less anonymous—this often produces an hierarchica office organisation which can be rather depressing. The partners sit, figura-

tively, on the first floor doing the sketch designs and making all the connections with the clients, the seniors sit on the ground floor working up the design and supervising the construction, while the assistants sit in the basement constantly doing details on-working drawings. This has a variation in the more commercial firms, where there are design teams and working drawing teams, and where hard work brings in fairly high salaries. While it is undoubtedly a good thing to have such a good grounding in detailing, it is often very difficult to get to the floor above. Smaller offices with recognisable names may still have fairly strict control over design, but there is a much closer relationship between principals and assistants, and work of a high standard is produced, though perhaps not quite so much of it. Occasionally an expanding firm can retain this small scale character, allowing all assistants an opportunity to contribute at all stages of the design, and if there are sufficient jobs in the office, to handle a project. This office can give excellent experience, and the confidence of the principals in their architects is very encouraging. Work in less-well-known offices can be quite as rewarding in experience as work for a "big name," although it is possible that the clients will be less wealthy and less enlightened, and one's scope may thus be restricted architecturally. Unless the practice is so small that the principal can handle all the projects, one can generally say that the smaller the office, the greater will be the opportunities for assuming responsibilities, running one's own job, making contact with clients and consultants, and building up site experience.

Whereas in local authority work one can always be fairly sure of the kinds of projects one might be confronted with, in a private office a far wider range is obviously possible; and if one wishes to work on some specific and specialised type, one must do some research beforehand to find out which particular firms have this kind of job.

Although the proportion of school-trained men is fast increasing there is still among the older architects in private practice some reluctance to accept academic qualification as readily as practical experience. This is understandable, if rather disappointing to the man in his first job, and he may have to prove himself before being paid the salary his training should command. The range of salaries in private practice seems to be enormous, and frequently

all is shrouded in mystery. An Associate of the Institute may still be offered as little as £700 in a small office, and a man who has not even taken Finals as much as £900 in a commercial office. One more word about the commercial firms. These are either the architectural departments of manufacturing or selling organisations, or those attached to or working with property development companies. In the first case the work will be of a very much more restricted nature (nearly all industrial or nearly all shops and stores, for example) and may well be largely conversions. In the second case, adequate constructional knowledge and quick results seem often to be all that are required—one firm with a frightening amount of work in hand throughout the country still advertises for assistants who need be no more than Intermediate standard, and who may be architects or SURVEYORS! and in both cases, policy is directed by men to whom architecture means nothing. Even in this group there will be some firms who do care, though they will be rare, and Britain has not as yet produced an Olivetti. To hold his own here an architect must have a strong character and his work must be sound economically as well as structurally and aesthetically. But one has only to look at chainstores, housing estates and the City of London to see how much good architects are needed in this field.

##### 5. Work abroad.

Unless one speaks or is prepared to learn foreign languages, this means the Commonwealth countries and North America, or British firms with work in other countries, if one is to take a job with any responsibility.

In Canada and America private architects' offices seem to be rather vulnerable in slump and boom periods and there is the problem of securing either a job or a sponsor before one can go to the U.S.A., unless one emigrates. One can sometimes fix up a job most satisfactorily by seeing American architects when they are in England.

The tropics are rather different. Most of the work is in under-developed countries, where there is a conspicuous absence of many of the skills and techniques which we take very much for granted. Here one will undoubtedly gain considerable experience—in many ways, not only architecturally! But it may be tough going, resilience and initiative are essen-

tial qualities. The architect must be prepared to be designer, constructor clerk of works, and even sometimes tradesman too, to ensure correct interpretation of designs. For those who intend to practise in England, there may seem to be little point in spending a few valuable years building in a way that can have practically no application in our climate, but these conditions can give confidence and a directness of approach in solving basic problems cheaply and simply, and in administrative and site work. Office organisation again will vary tremendously—overseas branches of big British firms will probably be quite competent where small independent offices are rather precarious. Government departments are much more secure and have better resources, though these too, in newly independent nations, can be thrown into disorder.

Outside the adventure of one's work, there is always the interest of the country itself, presumably one of the reasons one would choose to work there, and this may have to compensate to some extent for the discomforts of climate and absence of friends. There is another aspect of life which is more distressing in some places than in others; graft and petty backbiting which often occur in a rapidly developing community where the effective power is in the hands of men on the make, and where there are "colonies" of people away from home. Many people going out to help in under-developed countries have been unprepared for this, and the less thick skinned find it rather uncomfortable.

Salaries in the tropics are usually quite high, at least when compared with similar jobs in this country; but it seems that unless one is determined to save, one can still spend it as easily without too much effort, and married couples who do much entertaining need most of what they earn.

Of work abroad, in any country, one perhaps need say only this: very rarely do you find anyone who in the long run regrets having spent a few years away from British practice.

##### Finale

It is hoped that this outline of the main kinds of office will be of some help to those who are now beginning to survey the field of play, and will bring in some comments from those who have been in the field for some time, the more the better.

## working detail

## STAIRCASE: SCHOOL IN SCARBOROUGH

*Grenfell Baines and Hargreaves, architects*

*The use of partial risers gives added stiffness while still avoiding an awkward junction for cleaning. The total cost of this stair was £46 5s. per foot rise, made up as follows:*

<i>Treads, landing and nosings</i>	<i>£15 15s. 0d.</i>
<i>Steel structure</i>	<i>£25 10s. 0d.</i>
<i>Hand rail</i>	<i>£2 10s. 0d.</i>
<i>Painting, polishing</i>	<i>£2 10s. 0d.</i>



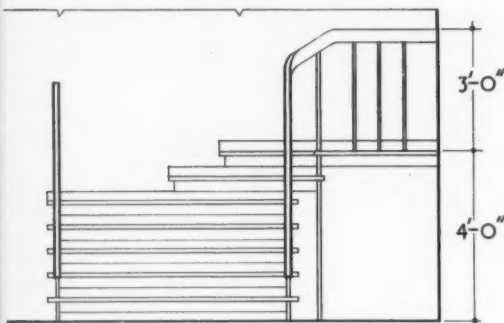
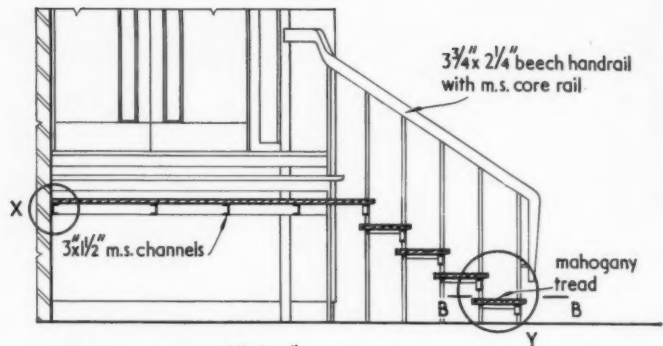
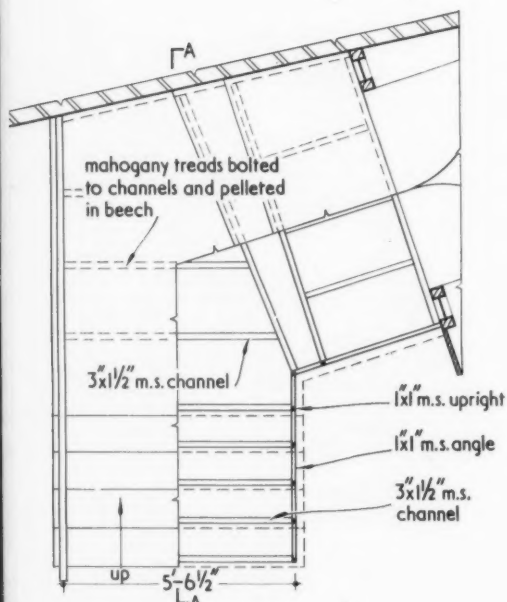
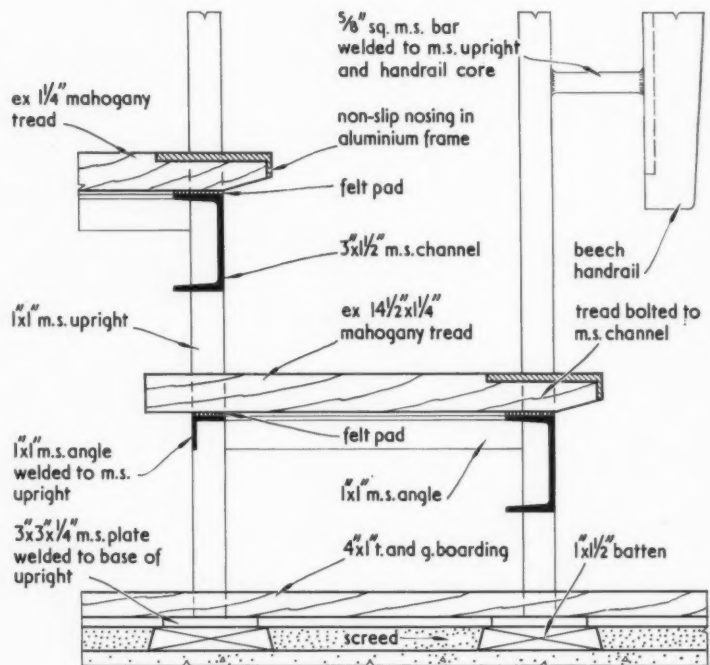
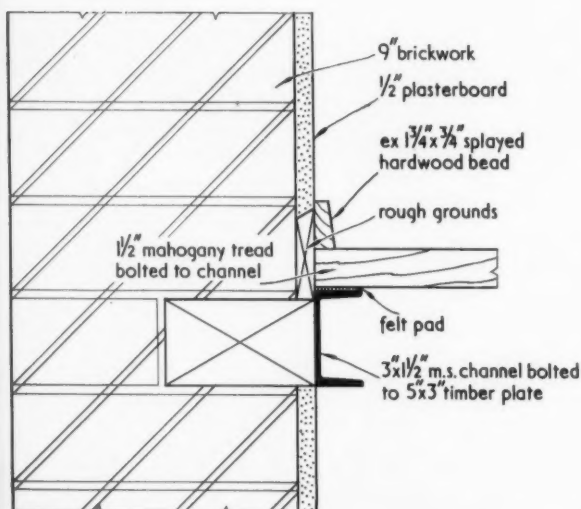
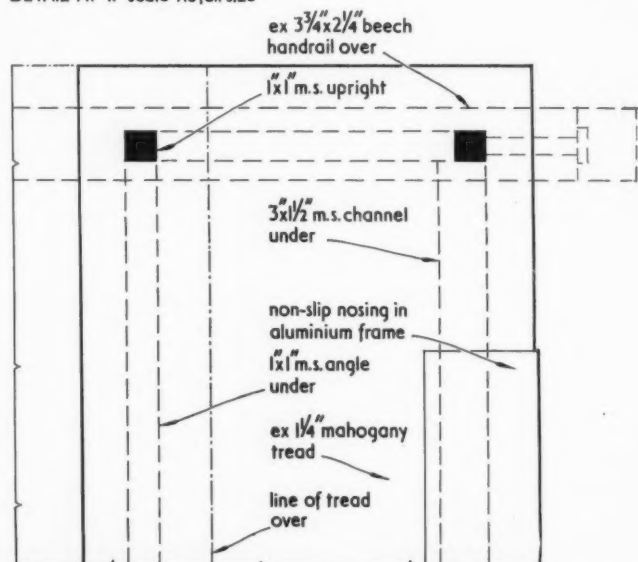
## working detail

STAIRCASE: SCHOOL IN SCARBOROUGH

Grenfell Baines and Hargreaves, architects

(24)

STAIRCASES: 57

ELEVATION. scale  $\frac{1}{4}''=1'-0''$ SECTION A-A. scale  $\frac{1}{4}''=1'-0''$ PLAN. scale  $\frac{1}{4}''=1'-0''$ DETAIL AT Y. scale  $\frac{3}{16}$  full sizeDETAIL AT X. scale  $\frac{3}{16}$  full sizePLAN B-B. scale  $\frac{3}{16}$  full size







working detail

FURNITURE AND FITTINGS: 99

CUPBOARD FOR PNEUMATIC TUBE GEAR: OFFICES IN LONDON, N.W.1

Gollins, Melvin, Ward and Partners, architects



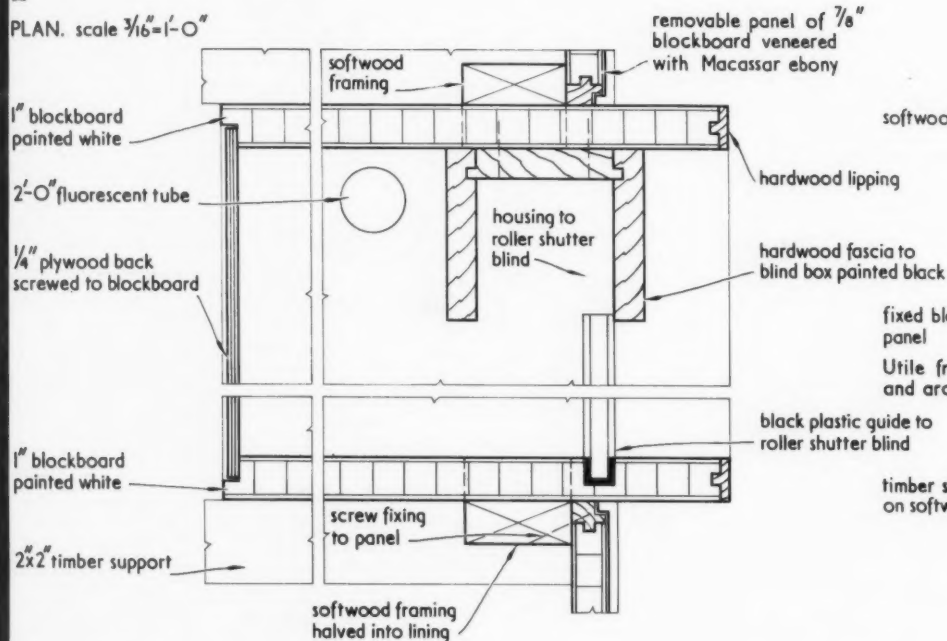
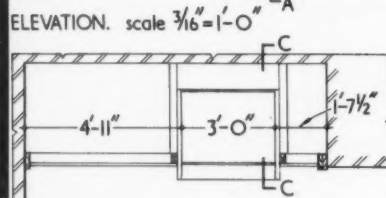
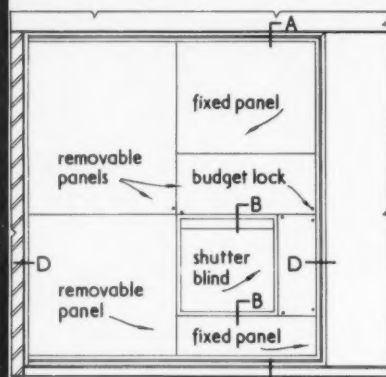
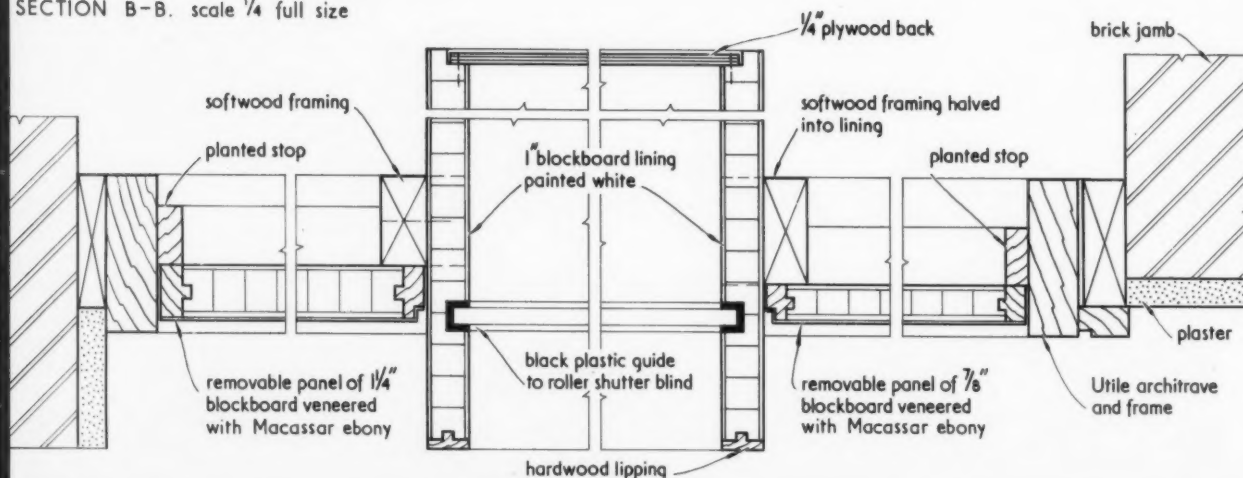
*The most surprising point to notice about this detail is the effect of the  $\frac{1}{4}$ -in.-wide white checking round the edges of the panels. The small white dots are budget locks which are here used not only to secure the panels against unauthorized opening but to hold them in place.*

## working detail

## FURNITURE AND FITTINGS: 99

CUPBOARD FOR PNEUMATIC TUBE GEAR: OFFICES IN LONDON, N.W.1

Gollins, Melvin, Ward and Partners, architects

SECTION B-B. scale  $\frac{1}{4}$  full sizePLAN AT D-D. scale  $\frac{1}{4}$  full size







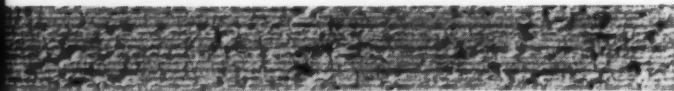
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**MARLEY** SEVENOAKS • KENT • Sevenoaks 55255 • London Showrooms • 251 Tottenham Court Road • W1

# DIVISION OF SPACE

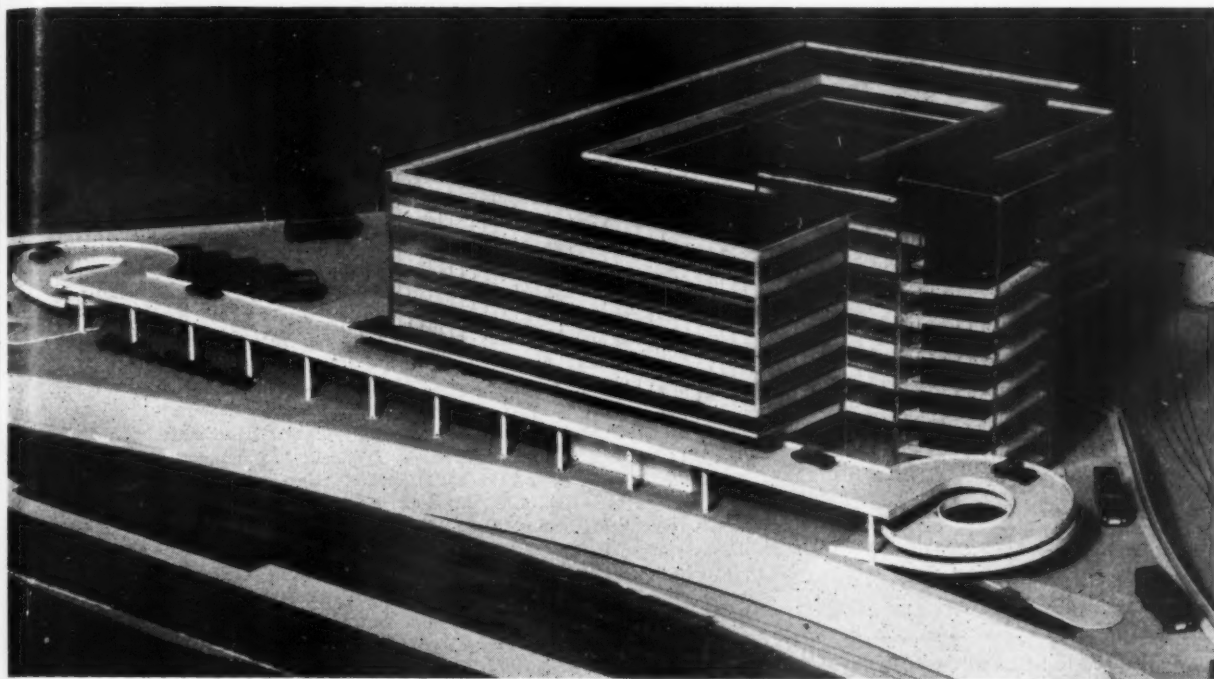
*The design achieves a pictorial effect of the molecular division of space. In the modern everyday world, the division of physical space in factory, office and home is most efficiently achieved by the use of PARAMOUNT DRY PARTITION. If you would like further details please write for literature to*

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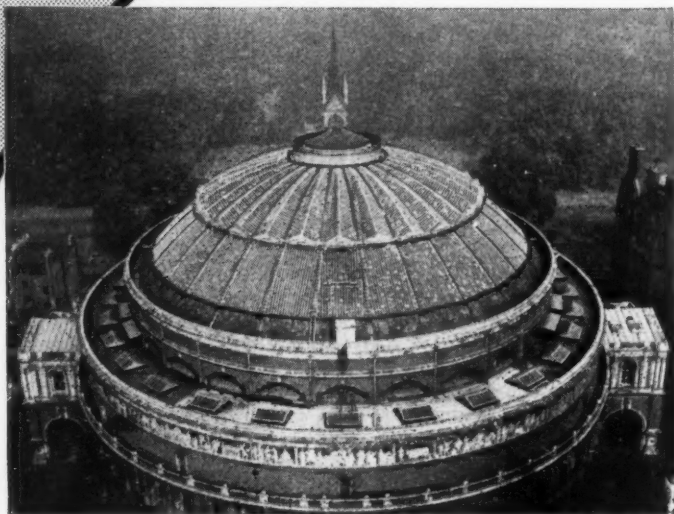


## BEA AIR TERMINAL: CROMWELL ROAD



Work on the new BEA Air Terminal in the Cromwell Curve, West London, designed by Sir John Burnet, Tait & Partners, started this month and is expected to be complete by 1963. The new building is being erected on a steel and concrete "raft" above the Underground railway tracks. A ramp road will lead from street level to the first floor departure hall and the basement of the new terminal will provide parking for 140 cars. The building will cost over £3,500,000, and will double the number of passengers BEA can handle. General contractors, Holland & Hannan and Cubitts.

## THE BATTLE OF THE DOME



Early last year, the condition of the roof of the Royal Albert Hall was creating several problems. The elements had taken their toll of the zincwork and slating on the 88-year-old building. Two men were employed, full time, to fight a battle against the effects of wind and rain. Eventually, Sylglas Weatherproof Tape was tested on the dome. The results were remarkable. Although continuous maintenance work still had to be carried out, costs were considerably reduced, operations far more successful. There can be no doubt that Sylglas Tape has contributed greatly towards the final victory of man over weather.

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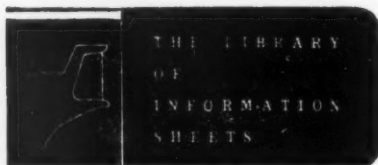
81 KNIGHT'S HILL, WEST NORWOOD, LONDON, S.E.27  
Tel: GIPay Hill 7511 (10 lines). Grams: Snowwhite, London, S.E.27

## Corrections

Alfred Goslett & Co. Ltd.'s advertisement on page 57 of the June 30 issue illustrated the Swanlyne Cygnet II basin and gave the dimensions of this basin as 18 in. x 15 in. This should have read 18 in. x 12 in.

The architects of the BBC TV Centre were given as Norman and Dawbarn on page 957 of the June 23 issue. This should have read Graham Dawbarn of Norman & Dawbarn.

The contractor for the reconstructed stone cross on the Blackley Crematorium was given as the Granolithic Concrete Co. Ltd. on page 940 of the June 16 issue. This should have read Stuarts Granolithic Co. Ltd.



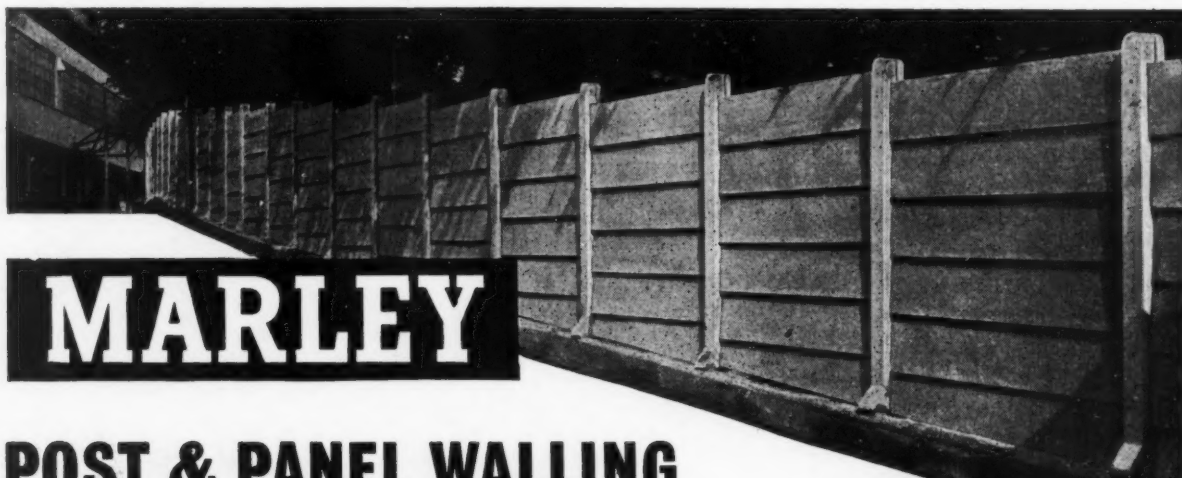
15.C11, 21.E2, 23.C1—3, 24.C1, 24.D1—4.

## Cancellation

Readers are asked to note that these Sheets are cancelled and should be withdrawn from the Library.

We are glad to publish the following list of contractors responsible for work at Altnagevin Hospital, Londonderry, whose names were omitted in error from the list published in AJ, May 26, 1960.

*Mechanical Services including heating, hot water, air conditioning, compressed air, medical gases and hydrotherapy pool:* G. N. Haden & Sons Ltd., Belfast. *Electrical:* B. French Ltd., Belfast. *Lifts:* Otis Elevators Ltd., London. *Metal Windows:* Williams and Williams Ltd., Chester. *Roofing:* Vulcanite Ltd., Belfast. *Precast conc. cladding:* Orlit (N.I.) Ltd. *Doors:* McCue Dick and Co. Ltd., Belfast. *Sanitary Fittings:* Stitsons Sanitary Fittings Ltd., London. *Railings, etc.:* Haywards Ltd., London. *Sterilizers:* Dent and Hellyer Ltd., London. *Washing machines:* Isaac Braithwaite and Co. Ltd., Kendal. *Terrazzo:* Toffolo Jackson and Co. Ltd., Belfast. *Tiling—Contract 3:* W. B. Simpson and Sons Ltd., Belfast; *Contract 4:* John McNeill Ltd., Belfast. *Asphalt—Contract 2:* John McGowan and Sons Ltd., Belfast; *Contract 4:* Neuchatel Asphalt Co. Ltd., Belfast. *Bricks:* Richard Parton Ltd., London. *Concrete bricks:* Dunbrik (N.I.) Ltd. *Laboratory fittings:* Baird and Tatlock Ltd., London. *Cold Rooms:* Frigidaire Ltd., London. *Blinds:* J. Avery and Co. Ltd., London. *Ironmongery:* N. F. Ramsay and Co., Ltd., London. *Weighbridge:* W. and T. Avery Ltd., Belfast. *Dark Room Equipment:* Kodak Ltd., London. *Hardwood Floors:* *Contract 3:* J. P. Corry and Co. Ltd., Belfast; *Contract 5:* Rowan and Bowden Ltd., Glasgow. *Linoleum—Contract 3:* Neuchatel Asphalt Co. Ltd., Londonderry; *Contract 5:* Rowan and Bowden Ltd., Glasgow. *Refrigerators:* J. N. Fulton Ltd., Belfast, and Central Merchants Ltd., Belfast. *Medical Gas Supplies:* British Oxygen Ltd. *Dental equipment:* Claudius Ash Sons and Co. Ltd., Belfast. *Gymnasium equipment:* H. Hunt and Sons Ltd., Liverpool. *Furniture:* Lees Hyman and Lees—by arrangement with Stafford Furniture Ltd., London. *X-ray cassette, hatches:* Newton Victor Ltd., London.



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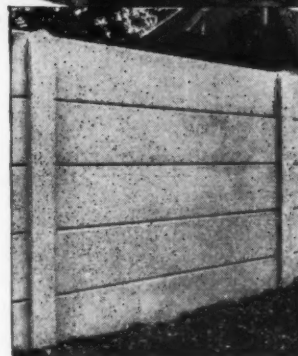
for industrial and domestic uses ...

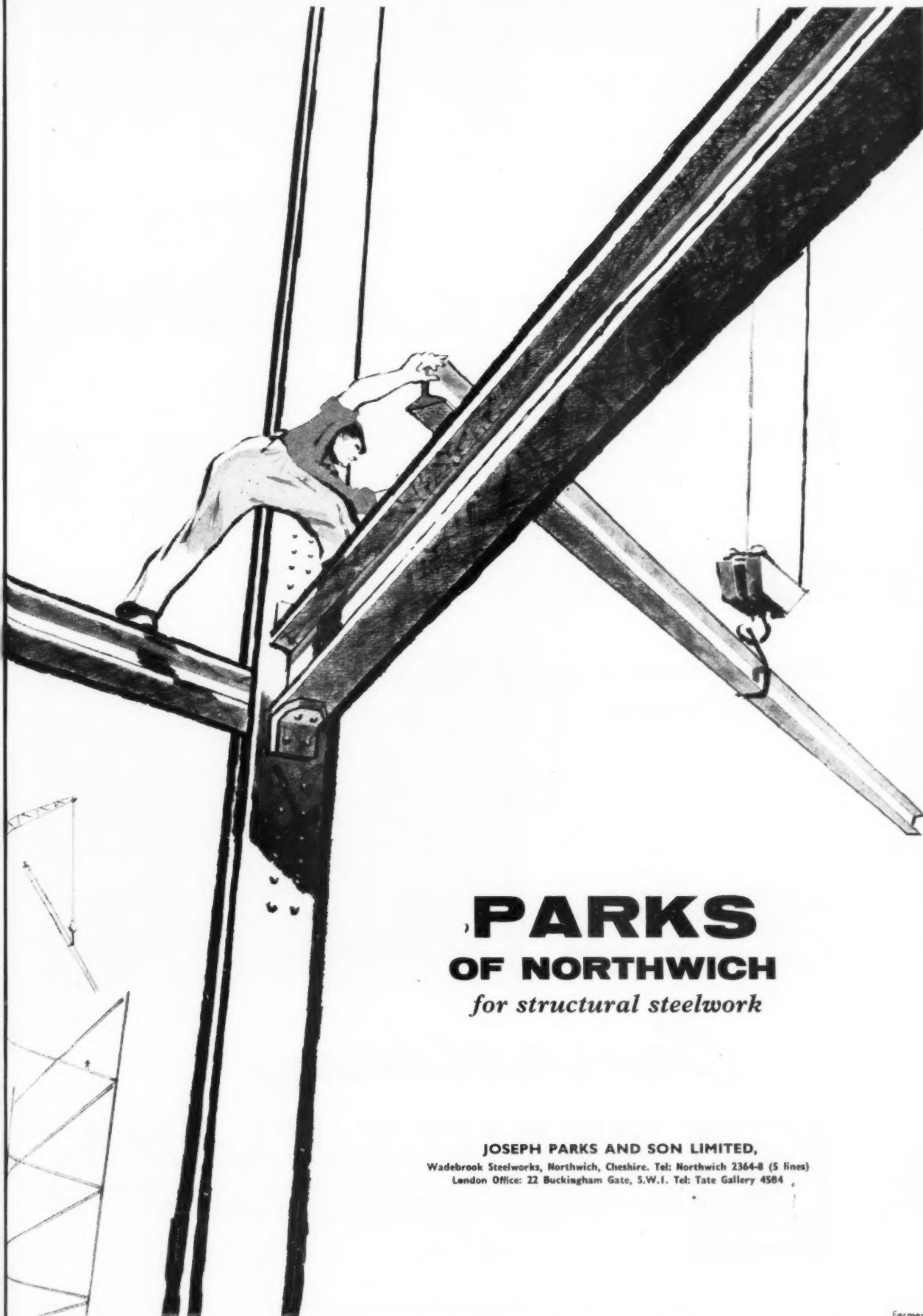
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London Showrooms: 251 Tottenham Court Road, W.1.





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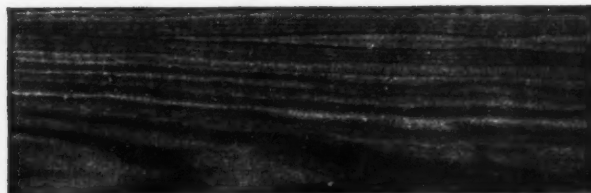
**JOSEPH PARKS AND SON LIMITED,**  
Wadebrook Steelworks, Northwich, Cheshire. Tel: Northwich 2364-8 (5 lines)  
London Office: 22 Buckingham Gate, S.W.1. Tel: Tate Gallery 4584

Farmer

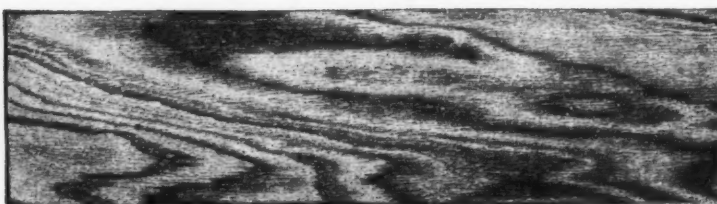
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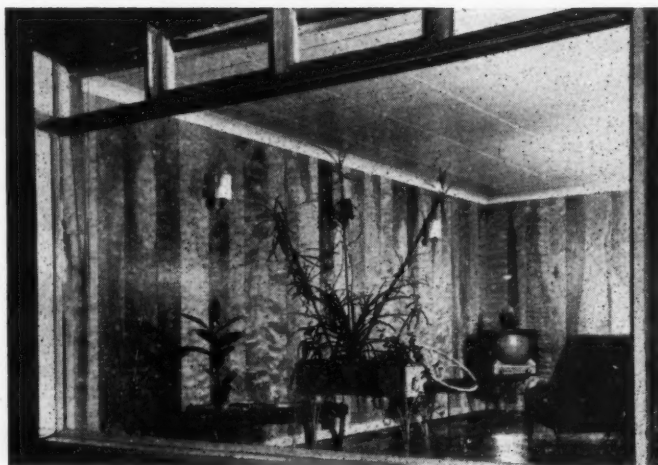
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**THE 3 MAIN FEATURES  
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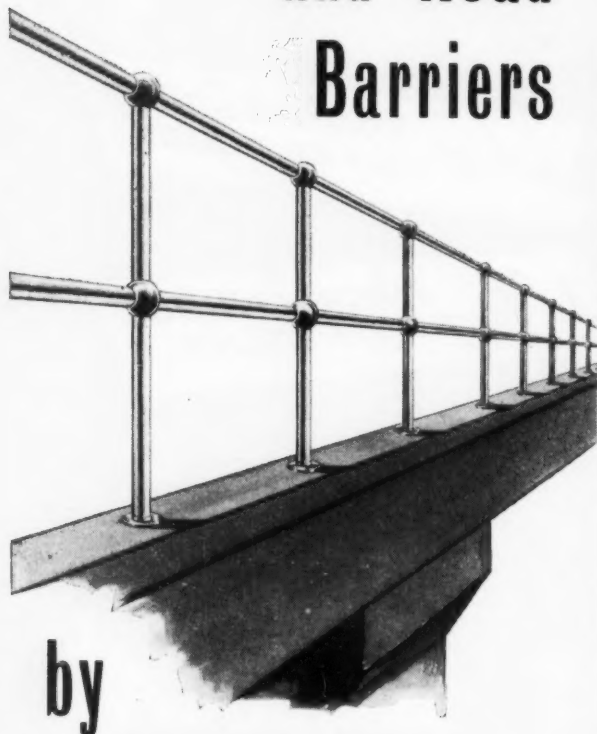
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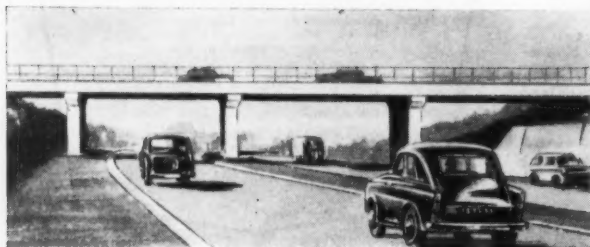
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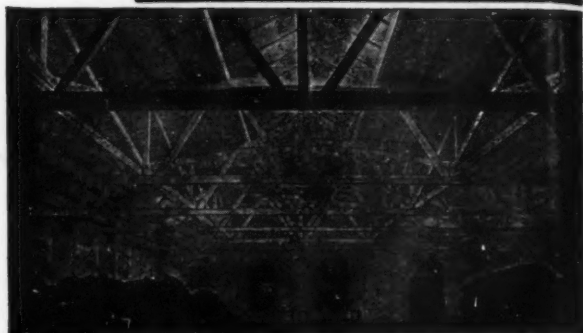


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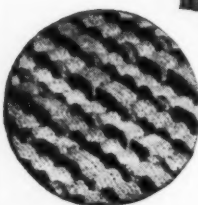
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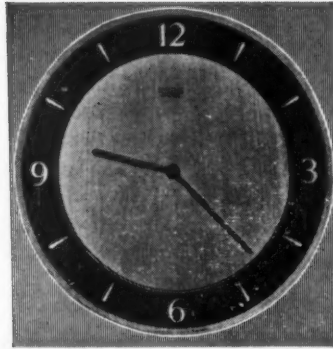
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Model ECS/W2

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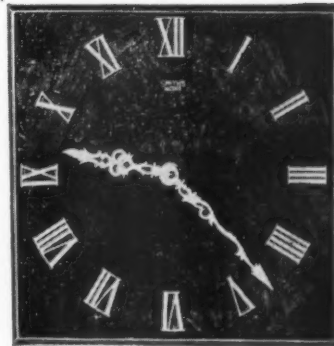


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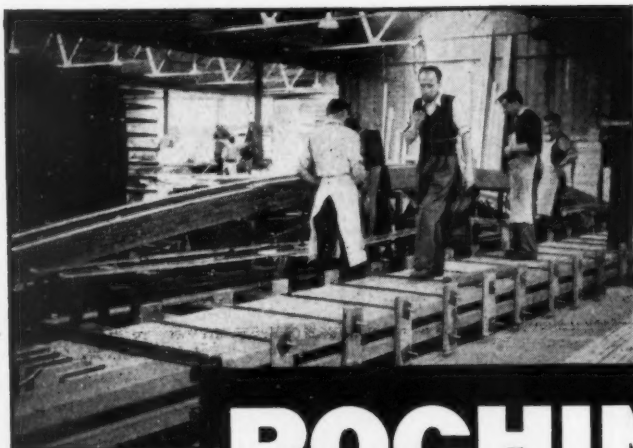
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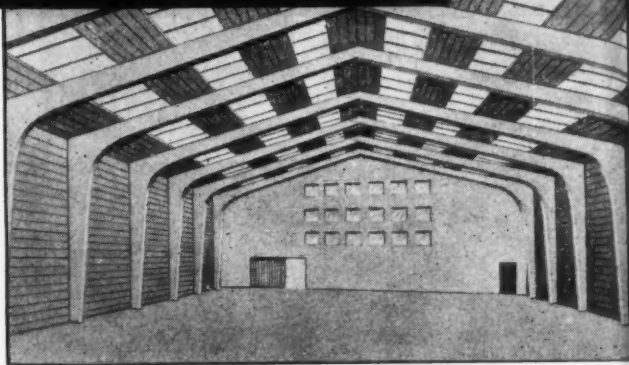


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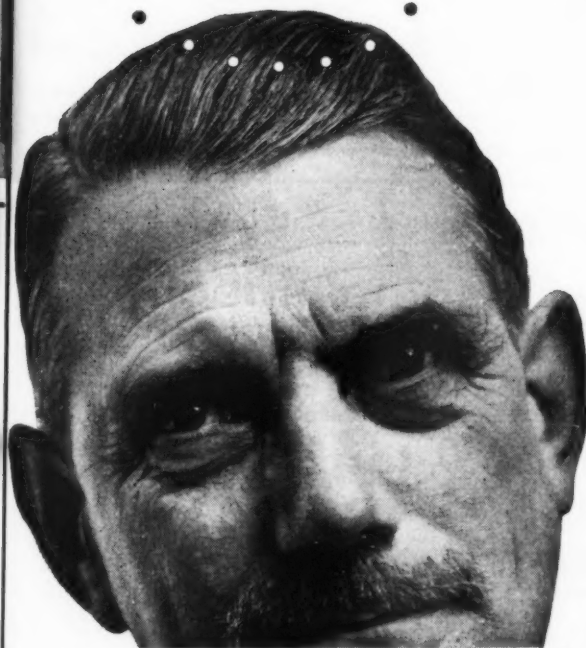
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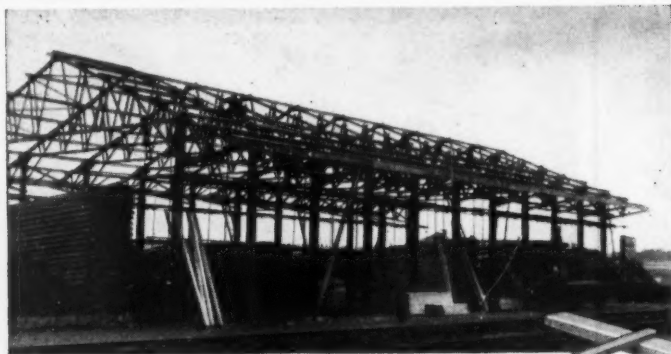
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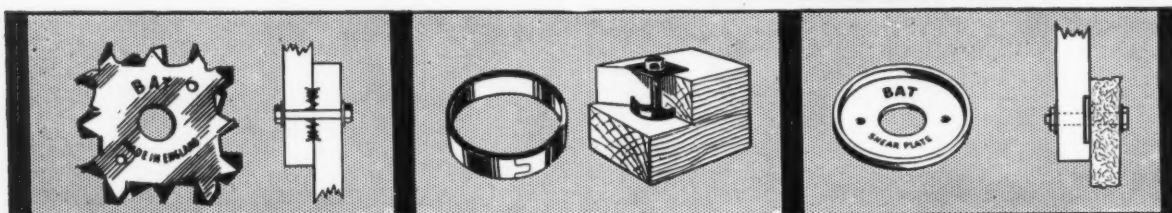


## TIMBER CONNECTORS



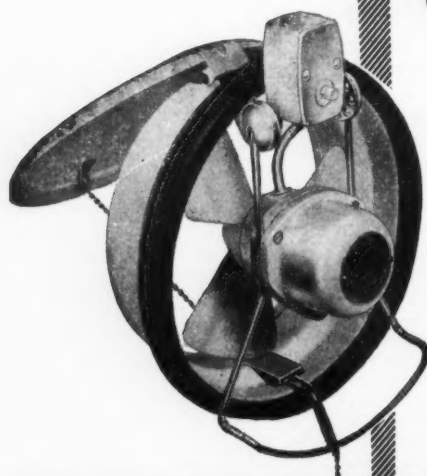
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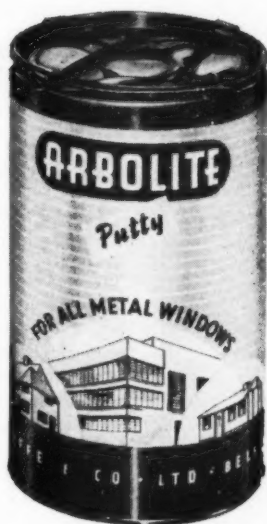


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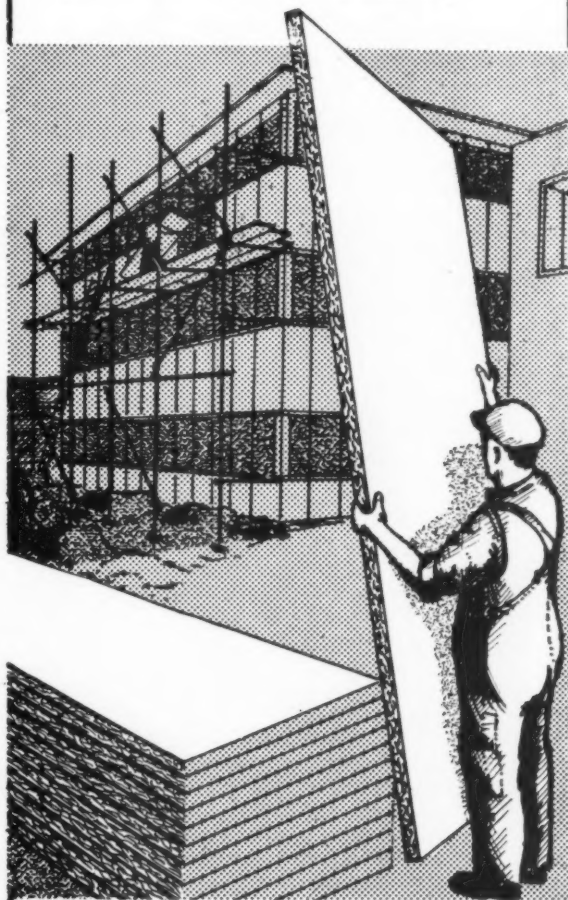
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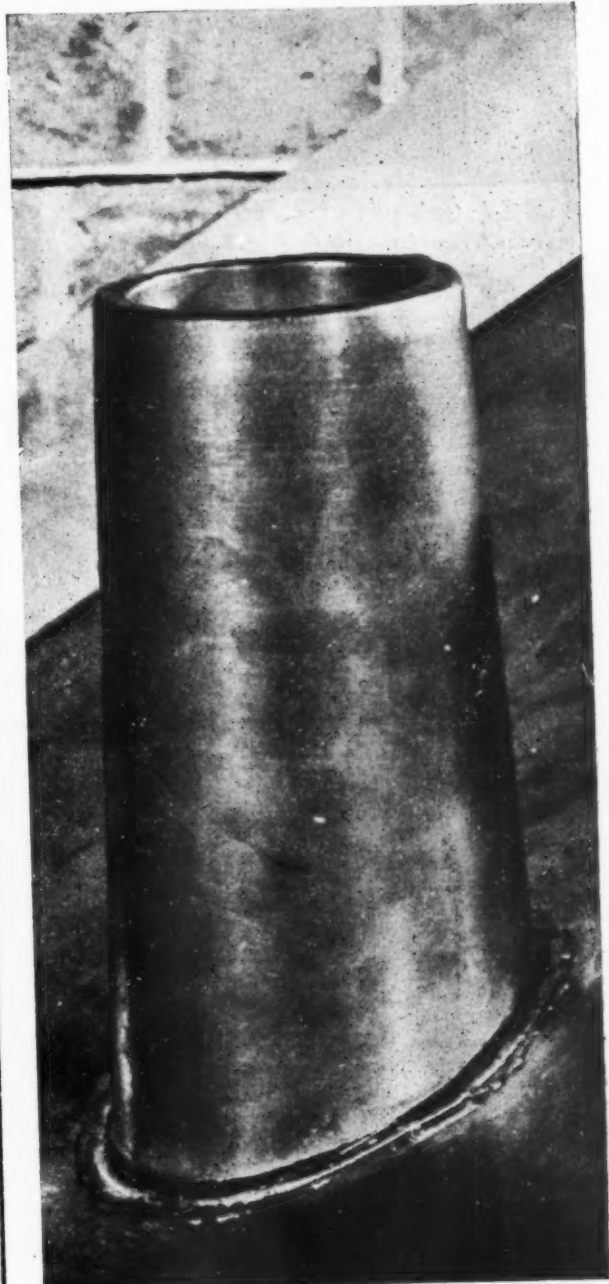
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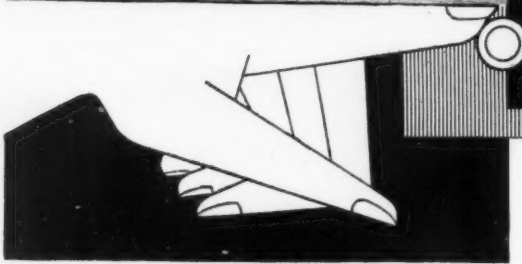
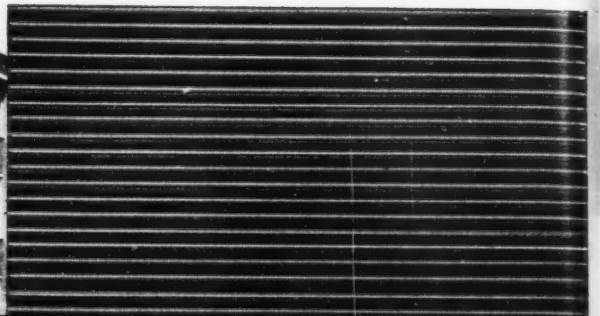
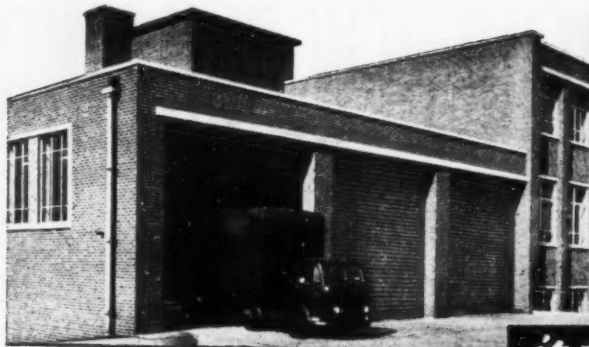
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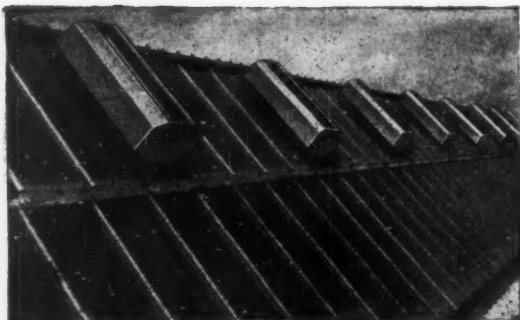
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Slack roof ventilators

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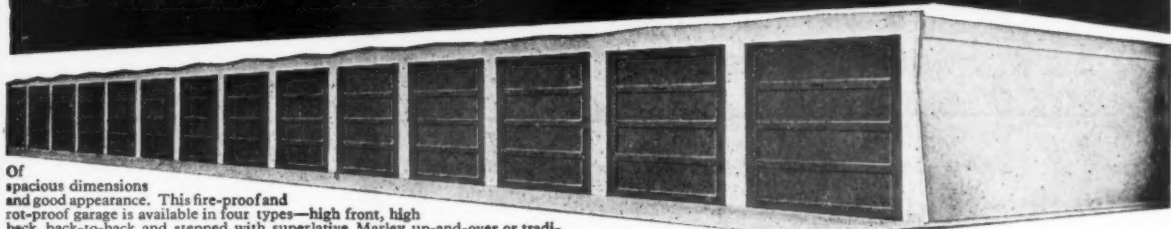
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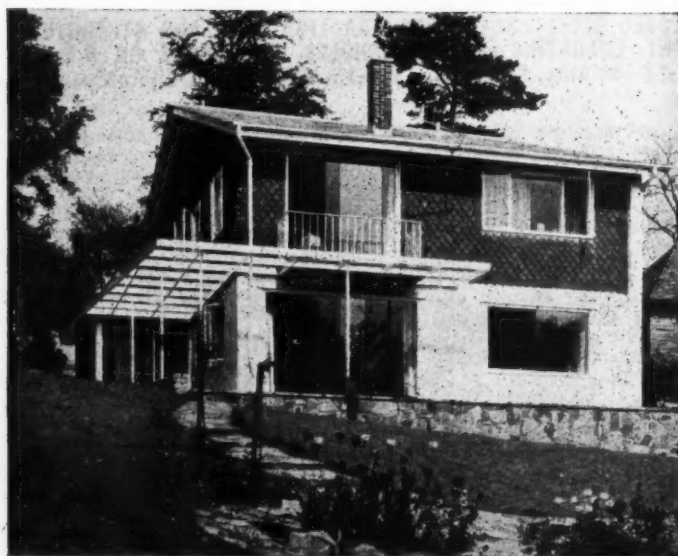
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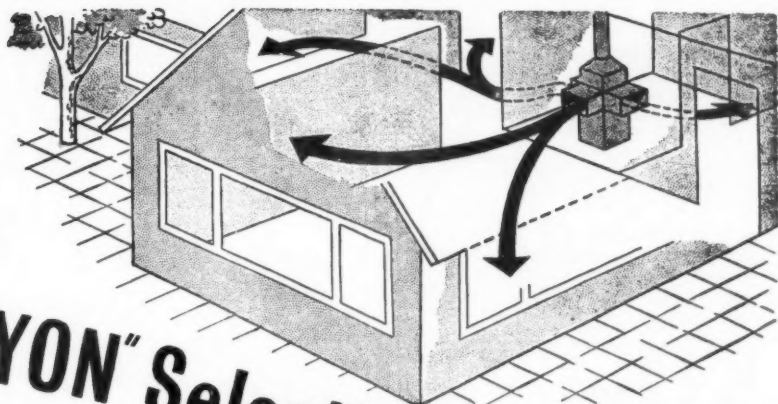


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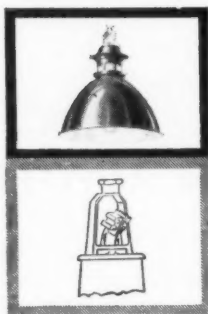
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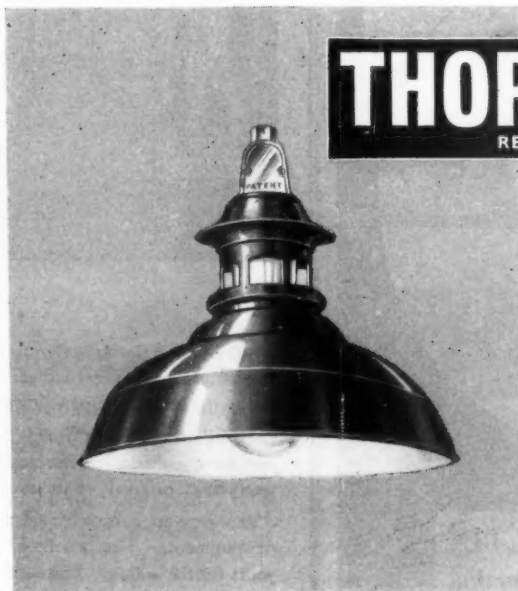
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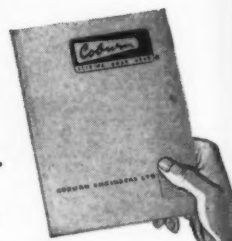
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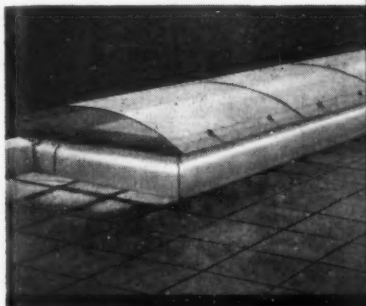
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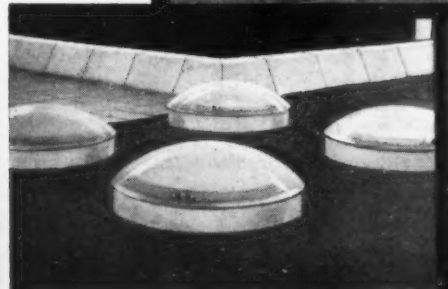
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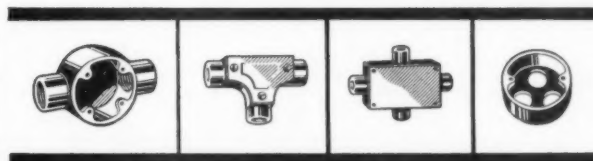
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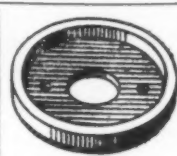
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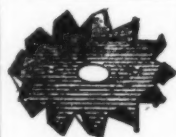
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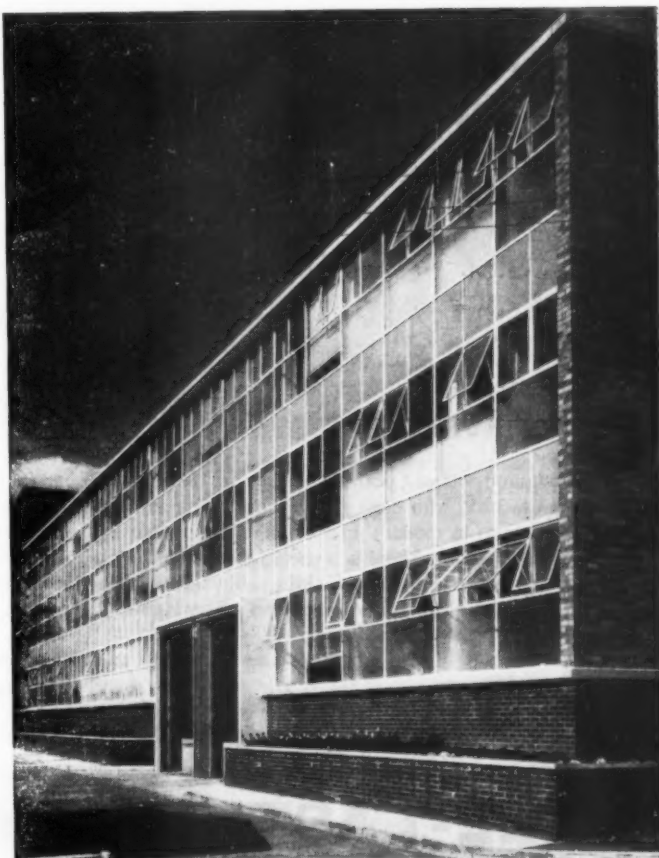
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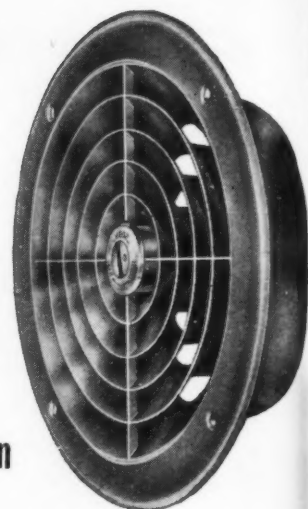
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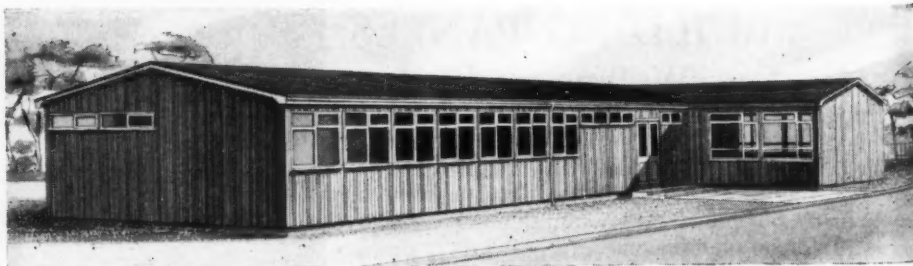
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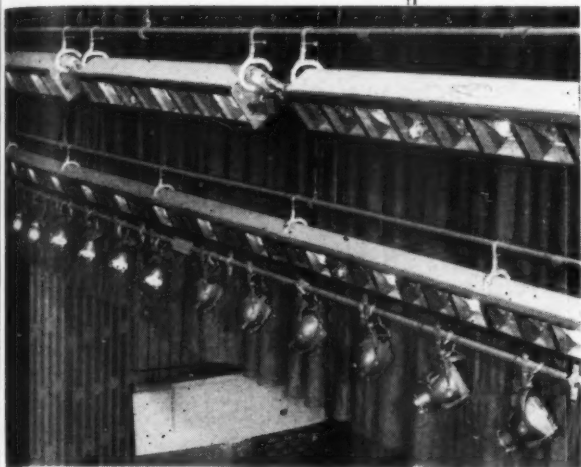
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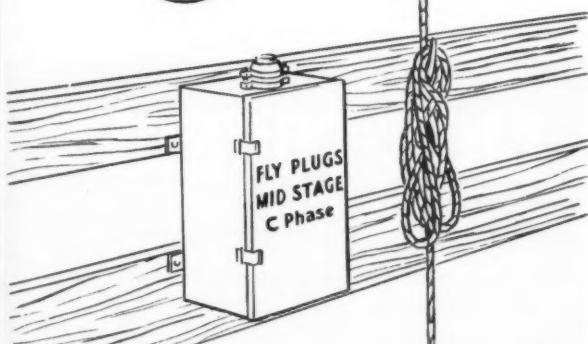
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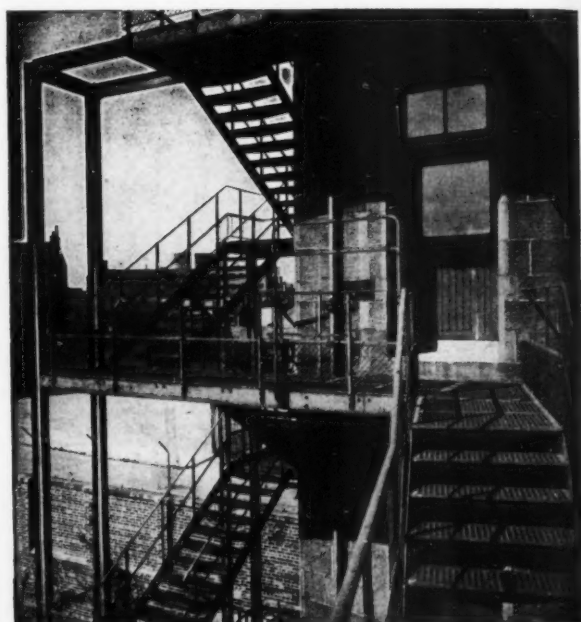


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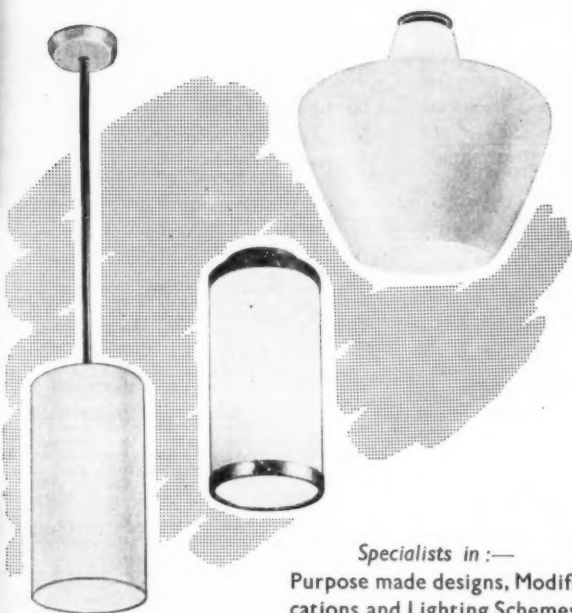
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### GLASGOW CORPORATION ASSISTANT ARCHITECTS TOWN PLANNING QUANTITY SURVEYORS

The Architectural and Planning Department of the Corporation of the City of Glasgow has vacancies for a number of qualified Assistants in the above professions.

The Department has in hand a large, varied and interesting programme of works including comprehensive redevelopment, multi-storey flats, schools and civic buildings. The work will provide scope for personal initiative in the preparation of designs and details of schemes upon which construction work will follow.

The salary scale for these Assistantships is up to £1,385 with placing according to experience.

Form of application may be obtained from the Principal Administrative Officer, 20, Trongate, Glasgow, C.1.

A. G. JURY,

City Architect and Planning Officer.

### NORTHERN POLYTECHNIC, HOLLOWAY, LONDON, N.7

The Governing Body invites immediate applications for appointment as ASSISTANT STUDIO INSTRUCTOR in the Department of Architecture as from September 1960. Applicants must be Associates of the Royal Institute of British Architects by examination and have had at least three years' professional experience after qualification; teaching experience in a Recognised School would be an advantage. Salary scale—£700 × £27.10.0. × £1,112.10.0. × £37.10.0. × £1,150, together with allowances in accordance with the Burnham Award. Commencing salary according to age, qualifications and experience.

Apply for form of application and further particulars.

R. H. CURRELL, F.C.A.  
Clerk.

### ELSTREE RURAL DISTRICT COUNCIL APPOINTMENT OF TEMPORARY ASSISTANT ARCHITECT

Applications are invited for the above temporary appointment in the Department of the Engineer & Surveyor, for a period of not less than two years, on work in connection with the design and erection of a proposed Public Hall, Covered Swimming Pool and other Civic Centre buildings.

Salary J.N.C. Scale "C," £1,385 to £1,620 per annum, commencing salary to be determined according to experience.

Candidates should have passed the Final Examination of the R.I.B.A. or equivalent.

The appointment will be subject to the National Scheme of Conditions of Service: the provisions of the Local Government Superannuation Acts, 1937-1953, and will be determinable by one month's notice, in writing, on either side. The successful candidate will be required to pass a medical examination.

Relationship to any member or Officer of the Council must be disclosed and canvassing directly or indirectly will disqualify.

Applications, stating age, qualifications and experience, together with the names and addresses of two referees, should be sent in an envelope endorsed "Temporary Assistant Architect" so as to reach the Engineer & Surveyor at these offices not later than Friday, 22nd July, 1960.

A. LANCASHIRE,

Clerk of the Council.

Council Offices,

Shenley Road,

Boreham Wood, Herts.

24th June, 1960.

### ARCHITECTS, LANDSCAPE ARCHITECTS, BUILDING SURVEYORS AND QUANTITY SURVEYORS

In the L.C.C. Parks department the professions work in association on the design, construction and improvement of parks and open spaces. Opportunities for specially interesting collaboration between architects and landscape architects, p.u. to £1,250 a year for qualified staff or to £950 for those in process of qualifying.

Apply to Chief Officer (A1/AJ/1813/7), L.C.C. Parks Dept., County Hall, S.E.1 (WATERLOO 5000, Ext. 8076).

### BOROUGH OF BASINGSTOKE

Applications are invited from Associates, R.I.B.A., for the post of SENIOR ASSISTANT in the Architect's Department of a town which is growing rapidly.

The work is varied and interesting, but applicants must have gained considerable housing experience. Salary range £785-£1,070 according to experience. N.J.C. Conditions. Post pensionable. Medical examination. Casual user car allowance. Housing available if required.

Details giving age, training, experience, etc., and names and addresses of three referees, to be sent to the Borough Architect, Eric Almond, Dipl. Arch., A.R.I.B.A., Municipal Buildings, Basingstoke, Hants., by 25th July, 1960.

L. WOMERSLEY,

Town Clerk.

### COUNTY BOROUGH OF BLACKBURN

#### ASSISTANT QUANTITY SURVEYOR

#### GRADE APT SPECIAL £785-£1,070.

Applications are invited for this appointment. Candidates should have passed the Final Examination of the R.I.C.S. (Q.S. section) or equivalent.

Housing accommodation will be available if required.

Applications stating age, qualifications and experience, with names of two referees to be sent to Borough Engineer, Town Hall, Blackburn, by 18th July.

FRANK SQUIRES,

Town Clerk.

### BOROUGH OF SCARBOROUGH

#### JUNIOR ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment (A.P.T. I, £610-£765 per annum).

The appointment will be subject to the provisions of the Local Government Superannuation Acts, 1937 and 1953, and to the passing of a medical examination, and will be terminable by one month's notice on either side.

In a suitable case the Council would be prepared to assist in the provision of housing accommodation and the payment of part removal expenses.

Applications, in envelopes endorsed "Junior Architectural Assistant," stating age, present and previous appointments, training, qualifications and experience, together with names of two referees, must be delivered to the undersigned not later than Wednesday, 20th July, 1960.

V. FORSHAW,

Borough and Water Engineer.

Town Hall,

Scarborough.

July, 1960.

2089

### HATFIELD RURAL DISTRICT COUNCIL

#### ARCHITECTURAL ASSISTANTS

Applications are invited for Architectural Assistants upon salary Grades A.P.T. I, II or III dependent upon qualifications and experience.

Housing accommodation will be considered if necessary.

Summary Form and applications to Engineer and Surveyor, 83, Great North Road, Hatfield, Herts, not later than 30th July, 1960.

S. F. JAGO,

Clerk of the Council.

HATFIELD,

Herts.

2252

### NORTHERN IRELAND HOUSING TRUST

#### SENIOR ASSISTANT ARCHITECT

The Trust invites applications for the post of Senior Assistant Architect, Grade II, on scale of £1,150-£1,300.

Candidates must be Associate Members of the Royal Institute of British Architects. Placing will be according to experience.

The person appointed will be required to contribute to a superannuation scheme which allows for the transfer of benefits in Local Government Schemes in suitable cases.

Housing accommodation may be arranged for married candidates.

Please apply not later than 5th August, 1960, giving full details of age, education, qualifications and experience, including present post and salary, to the General Manager, Northern Ireland Housing Trust, 12, Hope Street, Belfast, 12.

Please mark envelope 33/83.

2074

### CITY OF NEW SARUM

#### CITY ENGINEER'S DEPARTMENT

Applications are invited for the appointment of ASSISTANT QUANTITY SURVEYOR at a salary within the range of A.P.T.II £765-£880 to Special Scale (£785-£1,070) according to age, qualifications and experience.

Candidates should have passed at least the intermediate examination of the Royal Institution of Chartered Surveyors (Quantities) or its equivalent and have had at least five years' experience in a Quantity Surveyor's office.

The appointment is superannuable and will be subject to the provisions of the National Scheme of Conditions of Service and to the passing of a medical examination. Housing accommodation may be made available to the successful candidate if required.

Applications stating age, qualifications, present and previous appointments with salaries, details of experience together with names of two referees should be sent to the City Engineer, The Council House, Bourne Hill, Salisbury, not later than 19th July, 1960.

GEO. RICHARDSON,

Town Clerk.

2141

### DENBIGHSHIRE COUNTY COUNCIL

#### COUNTY PLANNING DEPARTMENT

Applications are invited from suitably qualified persons for the following appointments, viz.:

(a) SENIOR COUNTY PLANNING ASSISTANT, TANT, A.P.T. Grade IV. (Salary £1,065-£1,220 per annum.)

(b) ARCHITECT, Special Scale. (Salary £785-£1,070 per annum.)

(c) COUNTY PLANNING ASSISTANT, A.P.T. Grade I. (Salary £610-£765 per annum.)

Application forms and further particulars can be obtained from me. Completed applications giving the names of two referees, must be returned by 29th July, 1960.

W. E. BUFTON,

Clerk of the County Council

County Offices,

Ruthin,

Denbighshire.

208

### STATES OF GUERNSEY

#### PUBLIC WORKS DEPARTMENT

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

1. SENIOR ARCHITECTURAL ASSISTANT at a salary of £1,039/£1,191. Applicants must have passed the Final Examination of the R.I.B.A. and should have had considerable experience with a local authority.

2. ARCHITECTURAL ASSISTANTS at a salary of £735/£857, according to qualifications and experience. Applicants must have passed Parts I and II of the R.I.B.A. Final or special Final Examination, or their equivalent, at one of the recognized Schools of Architecture, and should have had experience with a local authority.

The appointments are subject to the States of Guernsey Conditions of Service and to the successful applicants passing a medical examination. The appointments will be permanent, subject to one month's notice on either side.

Particulars of pension and the transfer of pension rights under the Local Government Superannuation Acts obtainable on application. Casual user car allowances will be paid.

Applications, stating age, qualifications, experience and present and previous appointments, together with the names and addresses of two referees, to be delivered to the States Supervisor, States Office, Guernsey, C.I., not later than Monday, 25th July, 1960.

### BOROUGH OF EALING

TEMPORARY CLERK OF WORKS. £825 p.a. Miscellaneous Conditions of Service. To supervise external painting contracts and flat conversions.

Forms of application and full particulars from Borough Engineer, Town Hall, Ealing, W.5. Closing date 18th July, 1960.

E. J. COPE-BROWN,

Town Clerk.

2119

### LONDON COUNTY COUNCIL

#### ARCHITECT'S DEPARTMENT

Vacancies for ARCHITECT/PLANNERS. Tasks include three-dimensional planning in Comprehensive Development Areas and all other important areas of new development throughout London, including those associated with road improvements. Up to £1,250 according to experience and qualifications. Forms and particulars from Hubert Bennett, F.R.I.B.A., Architect to the Council (EK/AJ/1790/7A), County Hall, S.E.1.

2100

### CITY OF NEW SARUM

#### ARCHITECTURAL ASSISTANT

Applications are invited for the appointment on the established staff of the City Engineer of ARCHITECTURAL ASSISTANT (Grades A.P.T. II, III or Special).

The salary will be dependent upon age, experience and qualifications.

The post is pensionable and subject to National Joint Council conditions, medical examination and one month's notice on either side. Housing accommodation may be made available if required.

The appointment offers, *inter alia*, an interesting variety of design problems in connection with the Council's capital development programme.

Applications, stating age, qualifications, present and previous appointments with salary, together with the names of two referees, to the City Engineer, The Council House, Bourne Hill, Salisbury, by Tuesday, 19th July, 1960.

GEO. RICHARDSON,

Town Clerk.

2111

### THURROCK URBAN DISTRICT COUNCIL

#### ARCHITECTURAL ASSISTANT

#### A.P.T. I/II, £610-£880 p.a.

Applications are invited for the above appointment under the Architect to the Council, from candidates who should have passed the Intermediate Examination of the R.I.B.A. Good architectural experience is necessary, and applicants must be capable of preparing working drawings in all categories. The Council have interesting projects in hand, including an Indoor Swimming Bath. Appointment pensionable.

Applications, stating age, qualifications, experience, and quoting two referees, should reach the undersigned not later than 18th July, 1960. Canvassing disqualifies. Relationship with members or Senior Officers of the Council must be disclosed.

A. E. POOLE,

Clerk of the Council.

Council Offices,

Grays, Essex.

2110

## EAST RIDING OF YORKSHIRE COUNTY COUNCIL

Applications are invited for the appointment of ASSISTANT ARCHITECTS on the staff of the County Architect.

The salary will be in accordance with the N.C.C. Special Scale (£785 to £1,070 per annum). Applications giving particulars of qualifications, experience, age, past and present appointments with salaries, together with the names of three referees should be sent to the County Architect, County Hall, Beverley, not later than Saturday, 2nd July, 1960.

Assistance towards removal, lodging and travelling expenses may be granted.

THOMAS STEPHENSON,  
Clerk of the Council.

2199

## HAYES &amp; HARLINGTON U.D.C.

Applications are invited for: ARCHITECTURAL ASSISTANTS (Two). Salary within Grade A.P.T. II, i.e., £765-£880 p.a., plus London weighting, 21-25 years, £25 p.a., 26 years and over £40 p.a. Candidates should have passed the Intermediate examination of the R.I.B.A. and must have good general architectural experience. Five-day week. Housing accommodation if required will be made available for one of the appointments. Further particulars and conditions of service and form of application obtainable from the undersigned, which when completed must be returned by 8th August, 1960.

GEORGE HOOPER,  
Clerk & Solicitor.

2193

## BOROUGH OF SCUNTHORPE

(An expanding modern town of 61,000 population, 7,895 acres, R.V. £1,562,541).

## ENGINEERING AND ARCHITECTURAL APPOINTMENTS

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

SENIOR ASSISTANT ARCHITECT, A.P.T. III—£1,065-£1,220 p.a.).

ASSISTANT ARCHITECTS, A.P.T. II (£765-£880 p.a.).

ASSISTANT ENGINEERS, A.P.T. II (£765-£880 p.a.).

Commencing salaries will be fixed according to qualification and experience.

Housing accommodation available if required, approved removal expenses reimbursed in full, five-day working week.

Further information and application forms relating to the appointments may be obtained from the Borough Surveyor, Laneham Street, Scunthorpe.

Completed forms must be returned to the Town Clerk, 34, High Street, Scunthorpe, not later than Monday, 25th July, 1960.

2192

## CITY AND COUNTY OF NEWCASTLE UPON TYNE

## CITY PLANNING DEPARTMENT

A new planning department is to be created under the newly appointed City Planning Officer, Mr. Wilfred Burns, M.Eng., Dip. T.P., A.M.T.P.I., A.M.I.C.E.

A skeleton staff is to be appointed pending a review of the full requirements. Senior members of the staff will assist the City Planning Officer in formulating the programme of works and the staffing requirements.

THIS IS AN OPPORTUNITY TO SERVE IN A NEW, HIGHLY QUALIFIED AND ENTHUSIASTIC TEAM.

In addition to appropriate qualifications, candidates must be enthusiastic in the cause of planning and its importance in creating a modern worthwhile environment.

Applications are invited for the following posts:—

1. PLANNING POLICY OFFICER, Grade E (£1,655-£1,885).

2. DEVELOPMENT PLAN OFFICER (to serve under (1) above), Grade B (£1,255-£1,485).

3. RESEARCH OFFICER (to serve under (1) above), Grade B (£1,255-£1,485).

4. REDEVELOPMENT OFFICER (must have architectural qualification), Grade E (£1,655-£1,885).

5. CENTRAL AREA OFFICER (to serve under (4) above) (must have architectural qualification), Grade B (£1,255-£1,485).

6. DEVELOPMENT CONTROL OFFICER (must have architectural qualification), Grade E (£1,655-£1,885).

7. CHIEF ADMINISTRATIVE OFFICER, Grade A (£1,215-£1,390).

8. THREE ASSISTANTS ON Grade III-IV (£880-£1,220). State if only interested in one group.

9. SIX ASSISTANTS ON Grade I (£610-£765).

10. SECRETARY TO CITY PLANNING OFFICER, Senior Typists Scale "B" (£635-£710).

The appointments will be subject to the provisions of the Local Government Superannuation Act, the National Scheme of Conditions of Service, one month's notice on either side, and to the successful applicants passing a medical examination.

Applications stating age, qualifications and experience, and accompanied by the names of two persons to whom reference may be made, should be sent to me by not later than 15th August, 1960.

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

JOHN ATKINSON,  
Town Clerk.

2194

## Town Hall,

Newcastle upon Tyne.

29th June, 1960.

2194

## COUNTY COUNCIL OF NORTHUMBERLAND

COUNTY ARCHITECT'S DEPARTMENT  
ARCHITECTURAL ASSISTANTS. Vacancies exist on the permanent staff of this Department for ASSISTANT ARCHITECTS.

Applicants who have passed (a) the R.I.B.A. Final or (b) the Intermediate examination are required in connection with the County Council's Building Programme. The programme which is of considerable size and importance provides work of a varied and interesting nature in various parts of the County of Northumberland and gives scope in the field of modern design and building construction.

Salary according to qualifications and experience will be on either A.P.T. Special Grade, £785-£1,070 per annum for fully qualified Architects or on a scale not exceeding £880 per annum, with the prospect of promotion to higher grades within the Department on qualifying.

The appointments will be subject to the provisions of the Local Government Superannuation Acts and successful candidates will be required to pass a medical examination.

Forms of application can be obtained on request and should be submitted to the undersigned at the address stated below not later than ten days from the date of this advertisement.

C. C. BROWN,  
County Architect.

2195

30, 32, Great North Road,  
Newcastle upon Tyne, 2.

## COUNTY BOROUGH OF SWANSEA

BOROUGH ARCHITECT'S DEPARTMENT  
APPLICATIONS are invited for the post of ASSISTANT ARCHITECT—Salary Grade within the Special Class—£785 to £1,070 per annum.

Applicant must be an Associate of the R.I.B.A. and must have had considerable experience in the design and supervision of the erection of public buildings, in particular, Schools.

Candidates must be under 45 years of age unless in Local Government Service.

The appointment will be subject to the provision of the Local Government Superannuation Acts and may be terminated by one month's notice on either side. The successful candidate will be required to pass a medical examination.

Form of application may be obtained from The Borough Architect, The Guildhall, Swansea, to whom it must be returned not later than 5th AUGUST, 1960.

Canvassing disqualifies.

I. J. WATKINS,  
Town Clerk.

2273

The Guildhall,  
Swansea.

6th July, 1960.

## THE CITY OF COVENTRY offers

## TRAINING OPPORTUNITIES FOR CAREERS IN TOWN PLANNING

for up to TEN CANDIDATES eligible to sit for the Final Examination of the Town Planning Institute (and already exempt from the Intermediate Exam.).

## SALARIES—

ARIBA AMICE AMIMUNE ARICS  
£1,065-£1,220 APT.IV  
Degrees or other approved qualifications within the range of £610-£1,065 APT.I/III.

## PRACTICAL EXPERIENCE—

in various aspects of Town Planning will be arranged within the Planning Division

(City Architect and Planning Officer—

Arthur Ling, B.A., F.R.I.B.A., M.T.P.I.)

commencing in Autumn 1960 for a period of 3 years.

## STUDY—

2 days per week during academic sessions will be allowed for a course of study in preparation for the Final Examination of the Town Planning Institute.

## HOUSING ACCOMMODATION—

will be granted in approved circumstances—Removal Expenses Loan.

## APPLICATION FORMS—

from Department of Architecture and Planning, Council House, Coventry, to be returned by 16th August, 1960.

2274

## CITY OF BIRMINGHAM

Applications are invited for appointments as ASSISTANT ARCHITECTS in the City Architect's Department at commencing salaries, according to experience and capabilities, within the following grades:—

(a) A.P.T. IV, £1,065/£1,220 per annum (applicants should be fully qualified).

(b) Special Scale, £785-£1,070 per annum (applicants should have passed Parts I and II of the Final R.I.B.A. Examination or hold equivalent qualifications).

A large new Exhibition Hall with multi-storey car park and other public buildings, forming part of the new Civic Centre plan, are included in a building programme which also comprises Schools, Technical Colleges, Colleges of Further Education, and Schemes of Comprehensive Housing Development, including tall blocks of dwellings, Shopping Centres and ancillary buildings.

A great opportunity exists for enthusiastic and imaginative Architects who wish to assist in work of such architectural importance.

Pension Scheme. Five-day week. Medical Examination.

Applications stating appointment applied for, age, present position and salary, qualifications, experience and two referees to reach the undersigned by 29th July, 1960.

A. G. SHEPPARD FIDLER,  
City Architect.

2220

Civic Centre,  
Birmingham, 1.

## ARCHITECTS

required by LONDON TRANSPORT EXECUTIVE for the following posts:—

## ASSISTANT ARCHITECTS:

Salary range £1,070 p.a.—£1,245 p.a.

Applicants must be fully qualified and capable of supervising staff. (Reference 100/A/1).

## ARCHITECTURAL ASSISTANTS:

Salary ranges £855 p.a.—£951 p.a.; £989 p.a.—£1,028 p.a.

Applicants should be qualified to R.I.B.A. Intermediate standard with previous office experience (Reference 100/B/1).

FREE TRAVEL: 5 DAY WEEK! medical examination; contributory superannuation after probationary period. Applications quoting reference number of post applied for and giving age, qualifications and full details of previous experience sent to Staff and Welfare Officer, LONDON TRANSPORT EXECUTIVE, 55 Broadway, S.W.1.

2272

## BOROUGH OF CASTLEFORD

## APPOINTMENTS IN THE BOROUGH ENGINEER'S DEPARTMENT

Applications are invited for the following appointments:—

SENIOR ASSISTANT ENGINEER. Salary—Special Grade: commencing salary according to qualifications and experience but not less than £905 per annum, rising to £1,070 per annum.

Applicants must be Corporate Members of the Institution of Municipal and/or Civil Engineers, and have had experience in a Municipal Engineer's office.

SENIOR ASSISTANT ARCHITECT. Salary—Special Grade: commencing salary according to qualifications and experience but not less than £905 per annum, rising to £1,070 per annum.

Applicants must be Associate Members of the R.I.B.A. and/or Registered Architects, and have had some years' practical experience.

ASSISTANT ARCHITECTS (2 required). Salary—Grade A.P.T.II (£765-£880). Applicants should have passed the Intermediate Examination of the R.I.B.A. or its equivalent at one of the recognized Schools of Architecture.

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

If required housing accommodation will be provided for successful married applicants.

Applications, on forms obtainable from me, to be returned by the 30th July, 1960.

Canvassing disqualifies.

ERNEST HUTCHINSON,  
Town Clerk.

2254

Town Hall,  
Castleford,  
Yorkshire.

2254

## COUNTY BOROUGH OF DERBY

## BOROUGH ARCHITECT'S DEPARTMENT

(a) SENIOR ASSISTANT ARCHITECT, A.P.T. Grade IV (£1,065-£1,220 per annum). Qualifications: A.R.I.B.A.

(b) SENIOR ASSISTANT ARCHITECT, Special Grade (£785-£1,070 per annum). Qualifications: A.R.I.B.A.

(c) JUNIOR ARCHITECT, General Division (£210-£595 per annum). Qualifications: Probationer R.I.B.A.

OR ASSISTANT ARCHITECT, A.P.T. Grade I (£610-£765 per annum). Qualifications: Intermediate R.I.B.A.

(d) SENIOR QUANTITY SURVEYOR, A.P.T. Grade III/IV (£880-£1,220 per annum). Qualifications: A.R.I.C.S. (Quantities) or A.I.Q.S. or A.I.A.S. with appropriate experience.

(e) JUNIOR QUANTITY SURVEYOR, General Division (£210-£595 per annum). Qualifications: Student Member R.I.C.S. with previous experience in Quantity Surveyor's Office.

OR ASSISTANT QUANTITY SURVEYOR, A.P.T. Grade I (£610-£765 per annum). Qualifications: Intermediate R.I.C.S. with good experience in working up Bills of Quantities and Final Accounts, measuring on site and taking off for small works.

Commencing salary according to qualifications and experience. Permanent superannuable appointments, subject to one month's notice and to medical examination. National Conditions of Service.

Forms of application obtainable from and to be returned to the Borough Architect, The Council House, Corporation Street, Derby, not later than Wednesday, 3rd August, 1960.

N. S. FISHER,  
Acting Town Clerk.

2226

5th July, 1960.

2226

## THE NORTH WESTERN ELECTRICITY BOARD

## FOURTH ASSISTANT ENGINEER (BUILDING AND CIVIL) ENGINEERING DEPARTMENT

AREA BOARD HEADQUARTERS

CHEETWOOD ROAD, MANCHESTER, 8

Applicants should have passed the Intermediate Examination and be studying for the Final Examination of the Royal Institute of British Architects.

Experience should include design and working drawings for small buildings and detailing for larger buildings.

Salary scale: £735-£990 p.a., Grade BX II, N.J.C.B. Conditions.

Application forms to be obtained from the Secretary, The North Western Electricity Board, Cheetwood Road, Manchester, 8, and returned to him by the 30th July, 1960.

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**BIRMINGHAM REGIONAL HOSPITAL BOARD  
ARCHITECT'S DEPARTMENT**

- (a) ASSISTANT QUANTITY SURVEYOR (Arch. 9). Salary scale £905-£1,310 per annum. Corporate Membership RICS essential.
- (b) QUANTITY SURVEYING ASSISTANT (Arch. 10). Salary scale £625-£900 per annum. Intermediate RICS essential.
- (c) SURVEYING ASSISTANT (BUILDING) (Arch. II). Salary £625-£900 per annum. Intermediate RICS (Building Division) essential. To assist in survey of existing hospital buildings and preparation of record plans. Must be neat draughtsman with experience in measurement and plotting of surveys to all scales.

Previous hospital experience not essential. All posts superannuable. Five-day week. Applications quoting appropriate reference) stating qualifications, age, experience, present appointment and salary and names of two referees to Secretary, Birmingham Regional Hospital Board, 10 Augustus Road, Birmingham, 15, by 2nd August, 1960. 2222

**ADMINISTRATIVE COUNTY OF LEICESTER  
ARCHITECTS required to join special group,  
engaged on the design of NEW COUNTY  
OFFICES.**

- (a) SENIOR ASSISTANT ARCHITECT  
£1,220-£1,375.
- (b) ASSISTANT ARCHITECT £785-£1,070.
- Candidates for (a) must be A.R.I.B.A. and have had considerable office experience, preferably on large contracts and for (b) have passed parts one and two of the R.I.B.A. examination and be capable of executing working drawings. Further particulars and forms of application may be obtained from The County Architect, 123 London Road, Leicester, to whom they should be returned not later than 15th July, 1960.
- Removal expenses and lodging allowance may be paid to a married man. 2163

**SALISBURY CITY COUNCIL  
CIVIC HALL, SALISBURY**

CLERK OF WORKS required for eighteen months' contract starting in October, 1960. Applications are invited from suitably experienced and qualified men. Knowledge of piling, reinforced concrete construction and specialist joinery work an advantage. Applications stating age and qualifications with full details of past experience and salary required, together with the names of two referees, should be sent in writing to the Council's Architects, Messrs. Robert Potter & Richard Hare, F.A.R.I.B.A., De Vaux House, Salisbury, Wilts, by Tuesday, 2nd August, 1960. 2230

GEORGE RICHARDSON,  
Town Clerk.

**HORNCHURCH URBAN DISTRICT COUNCIL  
APPOINTMENT OF CLERK OF WORKS  
(BUILDING)**

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

The salary to be paid is within the range of the Miscellaneous Division, Grade VI, £715-£775 per annum, and in addition, an amount equivalent to London weighting will be paid.

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

Applications, on the forms provided by the undersigned, stating qualifications, experience and the names of two referees, must be returned not later than Wednesday, 27th July, 1960.

P. L. COX,  
Clerk of the Council.

Council Offices,  
Billet Lane,  
Hornchurch, Essex.  
5th July, 1960. 2218

**COUNTY COUNCIL OF ESSEX  
ARCHITECT'S DEPARTMENT**

SENIOR ARCHITECT, £1,065 to £1,220, for liaison work with private architects—mainly administrative duties—with ample opportunity for initiative and interesting work in consultations and discussions with leading private architects and officers of Ministries.

Application forms from H. Conolly, C.B.E., F.R.I.B.A., County Architect, County Hall, Chelmsford, to be returned with copies of three testimonials by 29th July, 1960. 2219

**METROPOLITAN BOROUGH OF  
BERMONDSEY**

**BOROUGH ENGINEER AND SURVEYOR'S  
DEPARTMENT**

ASSISTANT ARCHITECT  
Applications are invited for the permanent appointment of ASSISTANT ARCHITECT, Grade APT III-IV (salary range from £880-£1,220 p.a.) plus London Weighting, commencing salary according to experience and qualifications. Applicants must have passed Final R.I.B.A. Examination. Applications on forms from the undersigned to be returned by not later than 16th July, 1960.

J. S. LAMBERT,  
Town Clerk.

Municipal Offices,  
Spa Road,  
London, S.E.16. 1994

**BOROUGH OF TAMWORTH  
SENIOR ENGINEERING ASSISTANT**

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department. Salary within A.P.T. Grade II. Applicants should have a good general experience in a Municipal Engineer's office (housing experience would be an advantage). Preference will be given to applicants who have passed the Intermediate Examination of the Institution of Municipal Engineers or hold an equivalent qualification. House available. Applications stating age, qualifications and experience, together with the names of two referees should reach the undersigned not later than 18th July, 1960. Canvassing directly or indirectly, will disqualify.

H. B. LEAKE,  
Town Clerk.

Municipal Offices,  
Tamworth, Staffs.  
5th July, 1960. 2231

**COUNTY COUNCIL OF ESSEX  
COUNTY PLANNING DEPARTMENT**

Applications invited for post of ASSISTANT AREA PLANNING OFFICER in the South Essex Area Planning Office at Romford at a salary in accordance with A.P.T. Grade V (£1,220-£1,357).

Candidates for this post must be Corporate Members of the Town Planning Institute and should hold an additional appropriate professional qualification.

The successful candidate must possess a wide experience of all aspects of the work of a large and busy Area Office, and will be required particularly to assume control of the work of the Development Plan Section. They should be capable administrators and able to supervise and control staff.

Five-day week; medical examination; superannuation.

Applications with names of three referees to be sent to the County Planning Adviser, Broomfield Place, Broomfield, Chelmsford, Essex, by 4th August, 1960. 2221

**INDUSTRIAL ORTHOPAEDIC SOCIETY  
THE MANOR HOUSE HOSPITAL**

NORTH END ROAD,  
GOLDERS GREEN, N.W.11.

An experienced CLERK OF WORKS of proved ability required for extension project. Anticipated starting date middle July, 1960. Contract period about two years.

Write giving full details of experience, salary required, availability and references to W. F. Fendrell, General Secretary, The Manor House Hospital, Golders Green, N.W.11. 2240

ESTD. S.W. 1898

**IRON STAIRCASES**

**STEELWORK**

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**& SON LIMITED**

**FABRICATORS IN STEEL**

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STAIRWAY HOUSE, COURTHILL ROAD, LEWISHAM LONDON S.E.13. PHONE: LEE GREEN 4334-9.

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The skill of our craftsmen is being exploited by an increasing number of quality-conscious architects, for whose guidance we have prepared technical literature (to A4 size, of course) covering a number of applications - the latest being FIREPLACES

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Appleby Road Kendal  
Phone Kendal 1246



**CHESTERFIELD RURAL DISTRICT COUNCIL**

(a) ASSISTANT ARCHITECT, Grade A.P.T. IV (£1,065-£1,220).  
(b) ASSISTANT QUANTITY SURVEYOR, Grade A.P.T. IV (£1,065-£1,220).

Applications are invited for the above appointments in the Department of the Engineer and Surveyor, J. B. Wikeley, M.Eng., M.I.C.E., Barrister at Law.

For appointment (a) candidates must have passed the Final examination of the Royal Institute of British Architects or the equivalent at a recognised school of architecture.

For appointment (b) candidates must have passed the Final examination of either the Royal Institute of Chartered Surveyors or the Institute of Quantity Surveyors.

National conditions of service and alternate Saturday morning leave.

The Council is prepared to assist with housing accommodation and will reimburse household removal expenses.

Detailed application including the names and addresses of two referees to be received by the undersigned not later than the 21st July, 1960.

H. O. HAWKINS,  
Clerk of the Council.

Rural Council House,  
Saltergate,  
Chesterfield. 2208

**CHURCH COMMISSIONERS**

Applications are invited for the following appointments, based in London:—

(a) Two fully qualified Architects, aged 30-35, for the posts of ASSISTANT ARCHITECTS. Commencing salary during 12 months probation to be £1,250 per annum followed, if satisfactory, by appointment on an established pensionable basis on a scale of £1,325-£1,780 subject to medical examination. These posts cover advisory and executive duties concerning the erection and maintenance of domestic buildings.

(b) One temporary post of ARCHITECTURAL ASSISTANT for drawing office duties in connection with domestic buildings. Candidates for this post should be at Intermediate R.I.B.A. standard. Salary, according to experience, within the scale of £820-£1,070.

Apply in writing to the Establishment Officer, Church Commissioners, 1, Millbank, Westminster, S.W.1, not later than 29th July, 1960. 2217

**SURREY COUNTY COUNCIL**

COUNTY PLANNING DEPARTMENT

Applications are invited for the following appointment:—

At the North-West Area Office, Woking, a CHIEF PLANNING ASSISTANT, A.P.T. Grade III (£880 x £35/£40-£1,065). The post carries an essential user car allowance and is third in a staff of nine in an area with a wide variety of planning problems. Applicants should have reached at least the Intermediate standard of the qualifying examination for Associate Membership of the Town Planning Institute, Royal Institute of British Architects or Royal Institute of Chartered Surveyors or possess a good University Degree.

Applications endorsed "Confidential-Planning Assistant" stating age, qualifications, experience and present salary, with the names and addresses of two referees, must reach the County Planning Officer, "Elmhurst," Penrhyn Road, Kingston-upon-Thames, not later than 22nd July, 1960. 2229

**BOROUGH OF MALDEN AND COOMBE**

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited for the appointment of Senior Assistant Architect, Grade A.P.T. IV, £1,065-£1,220, plus London weighting, commencing salary according to experience and qualifications. Forms of application, which must be returned endorsed by not later than Monday, 29th August, 1960, to be obtained from John Apse, A.M.I.C.E., Borough Engineer.

HAROLD E. BARRETT,  
Town Clerk.

Municipal Offices,  
New Malden,  
Surrey. 2243

**BRACKNELL DEVELOPMENT CORPORATION**

Applications are invited for the post of ARCHITECT, salary range £1,163-£1,390. Applicants must be Corporate Members of the R.I.B.A. Superannuation schemes, medical examination. Housing available. Apply by 3rd August, 1960, giving age, education and qualifications, experience and appointments held (with dates and salaries), and names of two referees, to General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. 2228

**ARCHITECTURAL ASSISTANTS**

are required by the United Kingdom Atomic Energy Authority, Development and Engineering Group Headquarters, Risley, Warrington, Lancashire, to prepare working drawings and plans for a wide variety of industrial research laboratories and domestic buildings.

Applicants must have had several years' training and experience in an architect's office, and should preferably be of Intermediate R.I.B.A. standard.

Salary between £585 (at age 21) and £915. Contributory superannuation. Staff housing scheme.

Send postcard for application form, quoting reference 319/3.41, to Recruitment Officer, at above address.

Closing Date: 25th July, 1960. 2247

**DERBYSHIRE COUNTY COUNCIL**

COUNTY ARCHITECT'S DEPARTMENT

Vacancy exists for SENIOR ARCHITECT, Salary A.P.T. Grade V, £1,220 x £55 (1) and £50 (2) to £1,375 per annum. Applicants must be fully qualified. National Joint Council Conditions of Service. Scheme of allowances towards removal and lodging expenses in appropriate cases. Pensionable posts. Canvassing disqualifies. Application forms from The County Architect, County Offices, Matlock, to be returned as soon as possible. 2227

**COUNTY BOROUGH OF HALIFAX**

BOROUGH ENGINEER'S DEPARTMENT

Applications are invited for the appointment of SENIOR ASSISTANT ARCHITECT, Grade A.P.T. IV (two appointments), salary £1,065-£1,220, in the Education Section. Applications stating age, education and training, qualifications, present and past appointments (with dates and salaries) and experience along with the names and addresses of two persons to whom reference may be made, should be delivered to the undersigned not later than Saturday, 23rd July, 1960.

RICHARD de Z. HALL,  
Town Clerk.

Town Hall,  
Halifax 2223

**ALL-GAS HOUSE ARCHITECTURAL COMPETITION**

The Scottish Gas Board invite architects resident in the United Kingdom to submit designs for an All-Gas House which will exploit and demonstrate the possibilities of gas as a means of heating, cooking, water heating, refrigeration and home laundry.

Assessor: Professor Frank Fielden, M.A., F.R.I.B.A.

Premiums: £250 : £150 : £75.

Last day for submitting designs: 26th September, 1960.

Conditions may be obtained from: The Commercial Manager, The Scottish Gas Board, 1, Rathesay Terrace, Edinburgh, 3.

No deposit.

An applicant for the conditions must state his registration number. 1953

**AIR MINISTRY Works Design Branch requires**

in LONDON AND PROVINCES ARCHITECTURAL ASSISTANTS with adequate training and drawing office experience. O.N.C. (Building) an advantage. Work includes site layouts, sketch plans, working drawings and details for variety of technical and domestic buildings in permanent and semi-permanent construction. Financial assistance and time off given for recognised courses of study. Promotion and pension prospects. Five-day week with 18 days paid leave per year initially. Overseas tours for which special allowances granted. Salary: in LONDON ranges from £680 (age 25) to £900 p.a. for men; from £673 to £868 p.a. for women; somewhat lower in PROVINCES. Commencing salary dependent on age, quals, and exp. Applicants, who must be natural born British subjects, should write to AIR MINISTRY, W.G.D., Lacom House, Theobalds Road, London, W.C.1, or apply to any Employment Exchange quoting Kings Cross 891 giving age, details of training, quals., full particulars of former posts held and copies of any testimonials. Candidates selected will normally be interviewed in London and certain expenses reimbursed. 1988

**ARCHITECT — £945-£1,125**

A Senior Assistant Architect is required for a programme of traditional housing, redevelopment, and public buildings, in the office of the Burgh Architect, Dunfermline. Applicants should be fully qualified with a minimum of three years' experience since qualification. Placing will be according to age, qualifications, and experience. The post, which is superannuable, has been designated for priority housing. Detailed applications, with copies of recent testimonials, should be submitted to Leonard Howarth, A.R.I.B.A., A.M.T.P.I., Burgh Architect, 6, Abbot Street, Dunfermline, by 25th July, 1960.

City Chambers, J. DOUGLAS, Town Clerk. 2267

DUNFERMLINE. 4th July, 1960.

**GOVERNMENT OF SIERRA LEONE**

ARCHITECT, PUBLIC WORKS DEPARTMENT Required to prepare plans and specifications for Government buildings including houses, offices and hospitals. Contract appointment. Salary range £1,470-£2,145 a year. Gratuity 15% of salary. Free passages. Rental quarters. Children's allowances. Candidates preferably under 45 years must be A.R.I.B.A. Write Director of Recruitment, Colonial Office, London, S.W.1, giving full names, age, qualifications and experience quoting BCD 112/15/011/E2. 2265

**CITY OF PLYMOUTH**

APPOINTMENT OF PLANNING ASSISTANT

GRADE A.P.T. IV (£1,065-£1,220)

Excellent experience in urban renewal for keen professionally qualified man.

Appointment is superannuable and subject to medical examination; age limit 40 years, or 45 if serving with another local authority.

Consideration will be given to making housing accommodation available and the Council will contribute to removal expenses.

Applications, on forms obtainable from the undersigned, to be returned by 13th August, 1960.

J. ACKROYD,  
City Engineer and Surveyor.

The Guildhall,  
PLYMOUTH. 2248

**COVENTRY**

Enthusiastic imaginative ARCHITECT required in Central Area Division. Programme includes multi-storey commercial and residential development and swimming baths. Salary within A.P.T. V, £1,220-£1,375.

Housing accommodation in approved cases. Removal expenses loan available. Five-day working week. Canteen facilities. Application forms from Department of Architecture and Planning, Council House, Earl Street, returnable 14 days publication. 2149

**METROPOLITAN BOROUGH OF ISLINGTON**

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited from persons not more than 50 years of age for the following appointments on the permanent staff:—

(a) 2 SENIOR ARCHITECTURAL ASSISTANTS—Grade APT V (£1,220/£1,375 p.a.).

(b) 2 ARCHITECTURAL ASSISTANTS—Grade APT III—(£880/£1,065 p.a.).

All plus appropriate London Weighting.

Applicants for:—

(a) should be Associate Members of the R.I.B.A.

(b) should have passed the Intermediate examination of the R.I.B.A. and be suitably experienced.

Application forms, returnable by FIRST POST ON MONDAY THE 15TH AUGUST, 1960, obtainable from Mr. C. N. Cowney, Borough Engineer and Surveyor, Town Hall, Upper Street, N.1.

H. DIXON CLARK,  
Town Clerk. 2259

**NORTH WEST METROPOLITAN REGIONAL HOSPITAL BOARD**

ASSISTANT BUILDING SURVEYOR required for work in connection with hospital building programme.

Applicants should be Corporate Members of R.I.C.S. and capable of preparing working drawings and specifications for alteration works, site surveying and levelling, etc.

Salary scale, £945-£1,360. Commencing salary above minimum for candidate aged over 23 and with suitable experience. Whitley Council conditions. Superannuable.

APPLY, stating age, qualifications (with dates) and experience, together with the names of two referees, to: Secretary, North West Metropolitan Regional Hospital Board, 40 Eastbourne Terrace, W.2, by 25th July, quoting reference 838. 2257

**ARCHITECTURAL ASSISTANT**

Required by NYASLAND GOVERNMENT PUBLIC WORKS DEPARTMENT on contract for one tour of 24-36 months in first instance. Salary according to age and experience in scale £985 rising to £1,540 a year. Gratuity at rate of 10% of total salary drawn. Outfit allowance £30. Free passages. Liberal leave on full salary.

Candidates 25-35, should have passed Inter R.I.B.A., have had at least 5 years' experience in Architects Office, have a good standard of draughtsmanship and possess a sound knowledge of building construction, and be capable of carrying out site surveys including topographical work. Experience of tropical architecture an advantage.

Write to the Crown Agents, 4, Millbank, London, S.W.1. State age, name in block letters, qualifications and experience and quote M2B/51066/AG. 2864

**BUILDING SURVEYORS**

Architect's Department, I.C.C., has vacancies in Building Regulation Division and District Surveyors' Service for work in connection with applications under the London Building Acts and Byelaws. District Surveyors' offices are located in Metropolitan Boroughs and work involves negotiations with developers and supervision of works in progress.

Up to £1,250, commencing according to qualifications and experience. Form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/AJ/1637/7a), County Hall, S.E.1. 1944

2264

**Ar chitectural Competition**

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

**HARLOW DEVELOPMENT CORPORATION**

ARCHITECTURAL COMPETITION

HOUSES AND FLATS

AREA 71—PASSMORES NEIGHBOURHOOD

The Harlow Development Corporation invite Architects registered under the Architects (Registration) Acts to submit, in competition, designs for approximately 270 houses and flats proposed to be erected on a site in Passmores Neighbourhood, Harlow, Essex.

Assessors: H. T. Cadbury-Brown, A.A. Dip. (Hons.), F.R.I.B.A.; Victor Hammett, B.Sc., Dip. T.P., A.R.I.B.A., A.R.I.C.S., A.M.T.P.I. (Executive Architect to the Harlow Development Corporation).

Premiums: £1,000, £750, £500.

Last day for questions: 1st September, 1960.

Last day for submitting designs: 6th March, 1961.

Conditions may be obtained on application to: The General Manager,

Harlow Development Corporation, Terlings, Harlow, Essex.

Deposit: Two guineas. 2204

# Architectural Appointments Vacant

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

**EXPANDING** practice with varied work in different parts of the country, require keen and capable intermediate standard ASSISTANTS. Good salary and prospects for the right men. Holiday commitments honoured. Dalling and Partners, 14, Bloomsbury Square, W.C.1. CHANCERY 4725. 9469

**SENIOR ASSISTANTS** required immediately. Salary by arrangement. Theo. H. Birks, 38, Portland Place, London, W.1. LAN 7235. 1486

**EXPERIENCED ARCHITECTURAL ASSISTANT** wanted urgently, specialising in flat and housing work. Write, giving details of experience, to Kenneth Parker and Associates, 4, Liverpool Terrace, Worthing, Sussex. 2256

**ARCHITECTURAL ASSISTANTS** required for Architects' Department of large retail department store group, starting pay in the range £900 to £1,250 a year according to qualifications and experience. Interesting and varied work embracing design of modern supermarkets, department stores, factories and private houses. All workers are partners and share all profits, with good holidays, sick pay, shopping discount, subsidised meals and non-contributory pension scheme. Apply in writing, giving full details to Director of Personnel, John Lewis Partnership, Oxford Street, London, W.1. 2253

**ARCHITECTURAL ASSISTANT** required in North Wales Office. Office experience essential. Write giving full particulars to J. M. Porter & Co., The Estate Office, Colwyn Bay. 2251

**BBC** requires **ARCHITECTURAL STAFF** in London for work in connection with studios, office blocks, transmitting stations, etc. Candidates should have an interest in contemporary design and a sound knowledge of construction. (a) **ARCHITECTURAL ASSISTANT**, salary in scale £935-£1,185 p.a. Applicants should have Final R.I.B.A. with two years' office experience. (b) **ARCHITECTURAL ASSISTANT**, salary in scale £800-£1,025 p.a. Applicants should be students R.I.B.A. with two years' office experience. Requests for application forms to Engineering Recruitment Officer, Broadcasting House, London, W.1, quoting ref. EX.60.30 A.J. 2250

**BOOTH, LEDEBOER AND PINCKHEARD** require **ASSISTANTS** in the salary range £750-£1,000. Apply 17-20, Mason's Yard, Duke Street, St. James's, S.W.1. Tel. TRAFALGAR 1866. 2271

**ASSISTANT** urgently required, Intermediate to Final standard. Single man preferred willing to work in City or country office in Buckinghamshire. Interesting and varied work with opportunities for site supervision. Salary from £600 plus L.V. G. Gordon Stanham, Adamson, Gray & Partners, 9/10, Fenchurch Street, London, E.C.3. MANSION House 1010 and 5274. 2129

## BRITISH HOME STORES LTD.

require

### ARCHITECTURAL STAFF QUALIFIED AND UNQUALIFIED

at the London Head Office.

**WE HAVE A LARGE AND INTERESTING EXPANSION PROGRAMME OF NEW MULTIPLE STORES, AND ALSO EXTENSIONS AND MODERNISATIONS TO EXISTING PROPERTIES.**

- Salaries according to qualifications and experience.
- Five-day week. Subsidised Staff Restaurant.
- Good Pension and Life Assurance Scheme available to those under 45 years of age.
- Holiday arrangements respected.

Apply in writing, giving full details of age, qualifications, experience, salary, to:-

Personnel Controller,

British Home Stores Ltd.,

Marylebone House,

129/137, Marylebone Road, London, N.W.1. 2189

**ERNO GOLDFINGER** requires **ASSISTANTS** with sound knowledge of construction. Expanding programme of work includes office buildings, schools, shops, factories, local authority and private housing. Local Authority Rates. Telephone: HYDE Park 5657. 2188

**ARCHITECT'S** Office in Manchester requires **SENIOR ASSISTANTS**, qualified or up to Final Standard. Salary £1,100 to £1,250 according to experience and qualifications. Contributory pension scheme. Three weeks' holiday per year. Box 2190.

**ASSISTANT ARCHITECT** required for senior position in private office, London, W.1. Box 2270.

**MOBIL OIL COMPANY** requires qualified **ARCHITECT** to take charge of the Architect's Department of their Sheffield Division Office. Applicants must be A.R.I.B.A., capable of administration and control of staff and have experience in contemporary design. They will be responsible for projects throughout all stages of development. Applicants must hold a current driving licence; five-day week; three weeks' holiday after one year's service; free luncheon vouchers; pension scheme; sickness benefits. Write, giving details of age, experience and qualifications, to Employment Adviser, Caxton House, Westminster, S.W.1, quoting Ref. DAS. 2198

**"SENIOR AND ADVANCED" ASSISTANTS** with initiative required immediately to work on varied and interesting projects with the minimum supervision. Congenial working conditions. Excellent salaries offered for competent assistants. Write, stating age, experience and availability, etc., to Messrs. J. W. Hammond, Lloyds Bank Chambers, Main Road, Gidea Park, Romford, Essex. 2206

**LEWELLYN SMITH & WATERS** require **TWO ASSISTANTS** willing to specialise in Domestic work and Conversions. Applicants should be of Intermediate standard with two or three years' office experience. Salary in the range £700-£1,000 p.a. L.V.'s; Pension Scheme; holiday arrangements may be kept. A number of other vacancies still exist for staff of all grades. Write: 103, Old Brompton Road, S.W.7, or Tel. KEN. 4477. 2201

**ARCHITECT (A.R.I.B.A.)** for responsible post with capacity for administration and imaginative designing required in old established office of standing. Varied and extensive work and prospects. Pleasant working conditions and good pension scheme. Write, stating age, experience and salary required, to Forshaw, Greaves & Partners, 11, King Street, Newcastle-under-Lyme. 2202

## COUNTY OF CORNWALL

### APPOINTMENT OF

# SENIOR PLANNING ASSISTANTS

Applications are invited for the following three vacancies, salaries within the ranges of Special to A.P.T.IV (£785-£1,220):-

- (1) at Headquarters, Truro, on Development Plan work;
- (2) at the Western Area Office, Penzance, on development control work;
- (3) at the Central Area Office, Truro, on development control work.

Applicants must be Associate Members of the Town Planning Institute or hold an equivalent qualification.

Applications, stating commencing salary required, together with the names of three referees, should be sent to H. W. J. Heck, P.P.T.P.I., County Planning Officer, County Hall, Truro, not later than 28th July, 1960.

(No application forms are being issued.)

Clerk of the County Council.

# ARCHITECTS

**IND COOPE LIMITED**, National Brewers, require Senior and Intermediate Standard Assistant Architects in London, Watford (Herts) and Romford (Essex). Extensive programme in hand of a varied and interesting nature on Public Houses, Hotels, Industrial Buildings, etc. Opportunity for personal initiative and exploitation of new ideas, experience of interior design an advantage.

Senior Assistants, who must be Associates of R.I.B.A., will be expected to take charge of projects with minimum supervision.

Salary according to age and experience (London Increment £60 per annum).

The Company operates a Pension Scheme with substantial widows' benefits in the event of death before or after retirement. Five-day week. Enquiries (which will be treated in the strictest confidence) specifying the vacancy and giving details of experience and age, should be addressed to Group Architect, Ind Coope Ltd., Burton-on-Trent.



**ARCHITECTURAL ASSISTANTS** required in busy Bloomsbury office with varied practice. Good salary and prospects for suitable applicants. Five-day week. Write giving particulars of age, qualifications, experience, etc., to Box 910, c/o 7, Goptic Street, W.C.1. 8810

**RONALD WARD & PARTNERS** have immediate vacancy for ASSISTANT ARCHITECTS with initiative and some experience, for interesting, commercial, industrial and civic projects. Salaries commensurate with ability. Apply, 29, Chesham Place, S.W.1. BELGRAVIA 3561. 5638

**LEWIS SOLOMON, KAYE & PARTNERS**, rapidly expanding practice require ARCHITECTS and ASSISTANTS with initiative and competence to work on major design projects in the London area. These projects include Comprehensive Development Schemes, Hotels, Schools, Offices, and Luxury Flats. Good salaries according to ability and experience, luncheon vouchers, five-day week, and excellent working conditions. Write 6, Holborn Circus Thavies Inn House, E.C.1, or telephone CITY 8811, quoting SLB in both instances. 7700

**MONRO AND PARTNERS** require ARCHITECTURAL ASSISTANTS of Intermediate/Final R.I.B.A. standard in their London, Watford, and Glasgow Offices for work on interesting industrial and commercial projects. Salary range £800-£1,000 p.a. Non-contributory Pension Scheme. Five-day week. Apply in writing to 32, Clarendon Road, Watford. 8699

**ARCHITECTURAL ASSISTANT**, about Intermediate standard, required for general practice in North Devon Office. Pension scheme. Box 9744. 9458

**ARCHITECTURAL ASSISTANT** required, with at least two years' office experience. Apply in writing to Thomas Mitchell & Partners, 20, Bedford Square, London, W.C.1. 7282

**£1,000** experienced competent ARCHITECTS by a private practice in the City of London. The work will be primarily on the drawing board on new and interesting projects of magnitude. A high standard of design and detailing ability is required. Please apply in writing to Box 9360. 9458

**ARCHITECTURAL STAFF**, all grades, required for interesting work. Good salary, bonus, superannuation scheme. House Purchase Assistance Scheme. Excellent working conditions, five-day week. Please apply, giving details of qualifications, experience and salary required to: George Brown & Partners, A.I.A.R.I.B.A., F.I.A.S., and Eric Ross, F.R.I.B.A., Equity & Law Building, Baldwin Street, Bristol. 1. 9458

**ARCHITECTS and ASSISTANT ARCHITECTS** required for interesting commercial, industrial and civic projects. Responsibility and initiative encouraged. Five-day week, good salary commensurate with ability and experience. Ronald Ward & Partners, 29, Chesham Place, S.W.1. BELGRAVIA 3561. 9246

**BUSY City Firm** engaged in industrial and commercial work requires ASSISTANT of Final standard with several years' office experience. Five-day week. Luncheon vouchers. Salary by arrangement. Box 9227. 9246

**C. H. ELSOM & PARTNERS** require ASSISTANTS for work on theatres, laboratories, shops, stores and town centre redevelopment, etc. Apply 10, Lower Grosvenor Place, S.W.1. VIC. 4300. 9584

**ARCHITECTURAL ASSISTANTS** required in busy West End office. Varied work, excellent salary and prospects. Apply to Maurice Sanders, F.R.I.B.A., 24, Harley Street, W.1. 1441

**BASIL SPENCE & PARTNERS** require qualified and experienced ARCHITECTS to fill positions of responsibility on a major building programme. Write to 48, Queen Anne Street, W.1, stating experience and salary required. 9824

**EXPERIENCED SENIOR ASSISTANT ARCHITECT** required in Architect's Department of commercial firm in the West Riding of Yorkshire. Must be prepared to work on projects of varying size, also willing to travel throughout the country. Five-day week, Pension Scheme, canteen facilities. Salary by arrangement according to age and experience. Apply Box 1077. 1077

**DONALD ROWSWELL** urgently requires capable ASSISTANTS of various grades for Croydon office. Salary by agreement. Holiday arrangements honoured. Apply with full details to 5A, Friends Road, Croydon, or telephone CROydon 4080. 1045

**ASSISTANT** required by busy City office engaged mainly in industrial and commercial work. Five-day week; luncheon vouchers; salary by arrangement. Holiday arrangements will be honoured. Please apply: Eric Firmin & Partners, Thavies Inn House, 5, Holborn Circus, E.C.1. Tel.: CITY 8811. 1623

**SMALL CITY OFFICE**, with expanding practice, require experienced ASSISTANTS. Full sharing basis after trial period. All applications will be acknowledged. Porte & Partners, 16/17, Devonshire Square, E.C.2. (Bis. 8139). 2084

**JUNIOR and SENIOR ASSISTANTS** required. Five-day week. Excellent prospects. Bernard Gold & Partners, 4/6, Savile Row, W.1. Phone RBgent 7551. 1248

**ARCHITECT** required to take charge of old established West Riding practice, to be controlled by architects closely connected but some few miles away. Modern approach essential but need not be uncompromisingly brutalistic. Hope not, but may be necessary to nod at tradition occasionally. Salary and arrangements according to demonstrable ability. In confidence to Box 1626. 1733

**SENIOR ASSISTANT ARCHITECT** required by Devereux and Davies. Good salary to applicant with the requisite ability and experience. 3, Gower Street, Bedford Square, London, W.C.1. 1733

**WATKINS, GRAY & PARTNERS**, 57, Catherine Place, S.W.1, require SENIOR and JUNIOR ASSISTANTS for work on large hospital projects. Excellent opportunities for those seeking first hand experience in this most interesting and rapidly developing field. Luncheon Vouchers and pension scheme in operation. Write giving full particulars. 1524

**ARCHITECTS and ASSISTANTS** REQUIRED for work on interesting Industrial Project affording first class design and technical experience. Apply in writing to: Sir William Halcrow & Partners, (B.A. Architects' Section), 47, Park Lane, London, W.1. 1752

**INTERMEDIATE to Final ASSISTANTS** required immediately. Salary according to ability and experience. Theo. H. Birks, 38, Portland Place, London, W.1. LAN. 7236. 9739

**ARCHITECT'S ASSISTANT**, Intermediate and Final, for Solihull (Nr. Birmingham) Architects. The work is varied with experience in all phases of the job. Five-day week. Offices in very pleasant surroundings. Salary by arrangement. Apply in writing, giving age, experience to Box No. 1970. 1970

**GRINLING-Exceptional** qualified ASSISTANTS required at Hyde Park Corner office—salary £900-£1,100 per annum. Summer holiday by arrangement. Telephone for appointment: BELGRAVIA 6595. 1977

**CO-OPERATIVE WHOLESALE SOCIETY LTD.** ARCHITECT'S DEPARTMENT, MANCHESTER have vacancies for SENIOR and JUNIOR ARCHITECT'S ASSISTANTS

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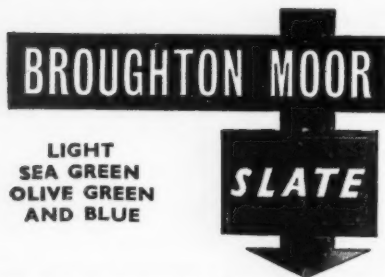
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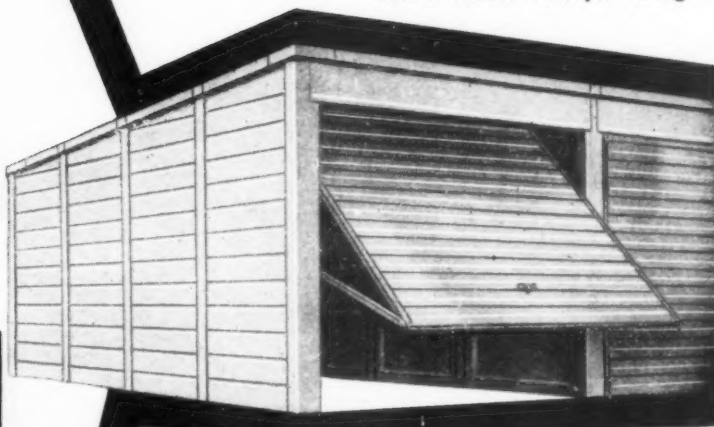


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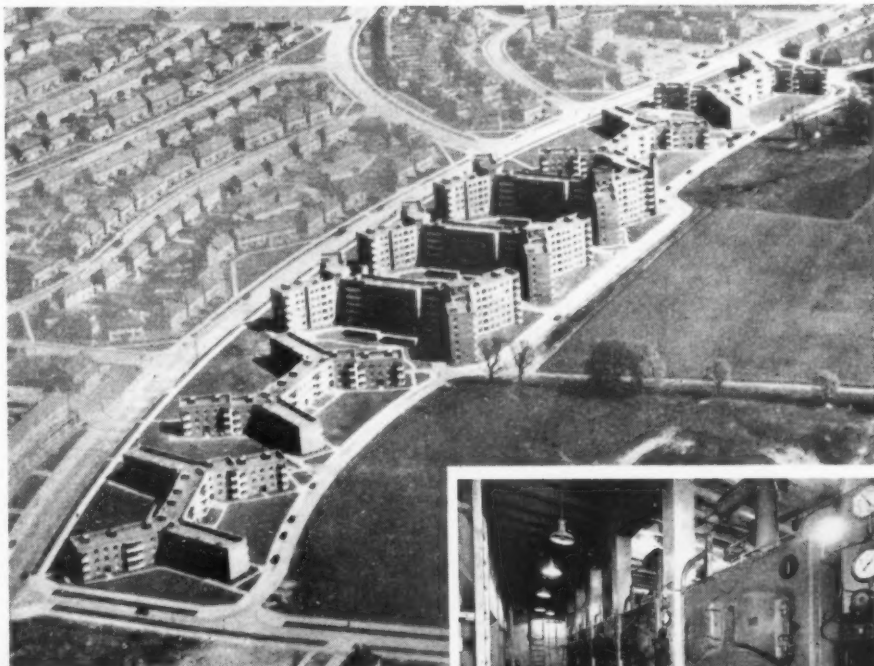
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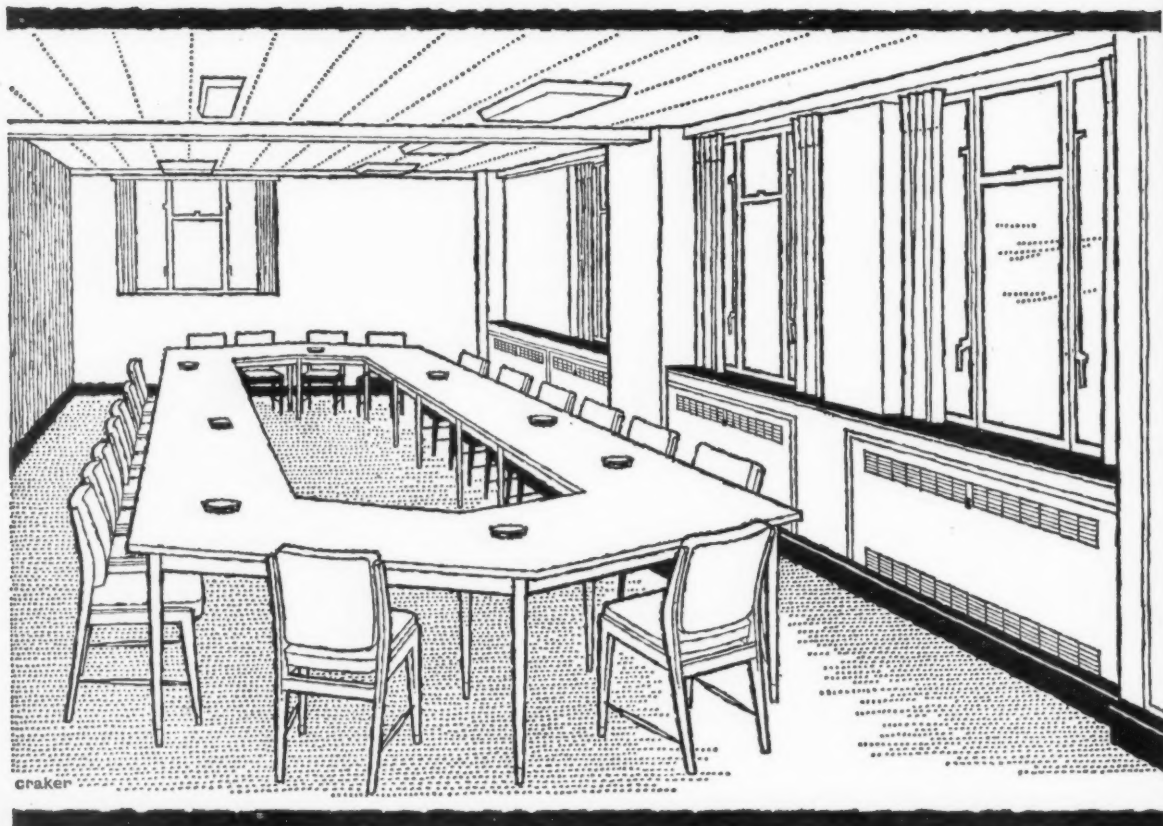


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