

THE ARCHITECTS' JOURNAL



standard contents

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

NEWS and COMMENT

Astragal's Notes and Topics

Letters

News

Diary

Criticism

TECHNICAL SECTION

Information Sheets

Information Centre

Current Technique

Working Details

Questions and Answers

Prices

The Industry

CURRENT BUILDING

Major Buildings described:

Details of Planning, Construction,

Finishes and Costs

Buildings in the News

Building Costs Analysed

Architectural Appointments

Wanted and Vacant

No. 3440]

[Vol. 133

THE ARCHITECTURAL PRESS

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

| | | |
|--------|--|----------------------|
| AA | Architectural Association, 34/6, Bedford Square, W.C.1. | Museum 0974 |
| AAI | Association of Art Institutions. Secy.: J. H. Holden, College of Art, Cavendish Street, Manchester 15 | |
| ABS | Architects' Benevolent Society. 66, Portland Place, W.1. | Langham 5533 |
| ABT | Association of Building Technicians. 156, Waterloo Road, S.E.1. | Waterloo 5427/8 |
| ACGB | Arts Council of Great Britain. 4, St. James's Square, S.W.1. | Whitehall 9737 |
| ADA | Aluminium Development Association. 33, Grosvenor Street, W.1. | Mayfair 7501/8 |
| ARCUK | Architects' Registration Council. 68, Portland Place, W.1. | Langham 5861 |
| BAE | Board of Architectural Education. 66, Portland Place, W.1. | Langham 5721 |
| BASA | British Architectural Students Association. Building Centre, 26 Store Street, W.C.1. | |
| BC | Building Centre, 26, Store Street, Tottenham Court Road, W.C.1. | Museum 5400 |
| BCC | British Colour Council. 13, Portland Square, W.1. | Welbeck 4185 |
| BCCF | British Cast Concrete Federation. 105, Uxbridge Road, Ealing, W.5. | Ealing 9621 |
| BCIRA | British Cast Iron Research Association. Alvechurch, Birmingham. | Redditch 716 |
| BDA | British Door Association. 10, The Boltons, S.W.10. | Fremantle 8494 |
| BE | Building Exhibition. 11, Manchester Square, W.1. | Hunter 1951 |
| BEDA | British Electrical Development Association, 2, Savoy Hill, W.C.2. | Temple Bar 9434 |
| BIA | British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2. | |
| BID | Building Industries Distributors. 52, High Holborn, W.C.1. | Glasgow Central 2891 |
| BINC | Building Industries National Council. 11, Weymouth Street, W.1. | Chancery 7772 |
| BOT | Board of Trade. Whitehall Gardens, Horseguards Avenue, S.W.1. | Langham 2785 |
| BRS | Building Research Station. Bucknalls Lane, Watford. | Trafalgar 8855 |
| BSA | Building Societies Association. 14, Park Street, W.1. | Garston 4040 |
| BSI | British Standards Institution. British Standards House, 2, Park St., W.1. | Mayfair 0515 |
| CABAS | City and Borough Architects Society. C/o S. A. G. Cook, A.R.I.B.A., Borough Architect and Director of Housing, Town Hall, High Holborn, W.C.1. | Mayfair 9000 |
| CAS | County Architects' Society. C/o J. Hurst, A.R.I.B.A., County Hall | Borough 3411 |
| CCA | Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1. | Holborn 3411 |
| CDA | Copper Development Association. 55, South Audley Street, W.1. | Dorchester. |
| COID | Council of Industrial Design. 28, Haymarket, S.W.1. | Belgravia 6661 |
| CPRE | Council for the Preservation of Rural England, 4, Hobart Place, S.W.1. | Grosvenor 8811 |
| CUC | Coal Utilization Council. 3, Upper Belgrave Street, S.W.1. | Trafalgar 8000 |
| DIA | Design and Industries Association. 13, Suffolk Street, S.W.1. | Sloane 4280 |
| EJMA | English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1. | Sloane 9116 |
| EPNS | English Place-Name Society. 7, Selwyn Gardens, Cambridge. | Whitehall 0540 |
| FAS | Faculty of Architects and Surveyors. 68, Gloucester Place, W.1. | |
| FASS | Federation of Associations of Specialists and Sub-Contractors, 14, Bryanston Street, W.1. | Regent 4448 |
| FBBDO | Fibre Building Board Development Organization Ltd. (Fidor), Stafford House, Norfolk Street, W.C.2. | Welbeck 1781 |
| FBI | Federation of British Industries. 21, Tothill Street, S.W.1. | Covent Garden 3008 |
| FC | Forestry Commission. 25, Savile Row, W.1. | Whitehall 6711 |
| FCMI | Federation of Coated Macadam Industries. 37, Chester Square, S.W.1. | Regent 0221 |
| FDMA | Flush Door Manufacturers Association Ltd. Trowell, Nottingham. | Sloane 1002 |
| FLD | Friends of the Lake District. Pennington House, nr. Ulverston, Lancs. | Ilkeston 623 |
| FMB | Federation of Master Builders. 33, John Street, W.C.1. Tel.: Chancery 7583 (6 lines) | Ulverston 201 |
| FPC | Federation of Painting Contractors, St. Stephen's House, S.W.1. | Whitehall 3902 |
| FRHB | Federation of Registered House Builders. 82, New Cavendish Street, W.1. | |
| GPDA | Gypsum Plasterboard Development Association. 11, Ironmonger Lane, E.C.2. | Langham 4341 |
| GC | Gas Council. 1, Grosvenor Place, S.W.1. | Monarch 8888 |
| GG | Georgian Group. 2, Chester Street, S.W.1. | Belgravia 4321 |
| HC | Housing Centre. 13, Suffolk Street, S.W.1. | Belgravia 3081 |
| IAAS | Incorporated Association of Architects and Surveyors. 29, Belgrave Square, S.W.1. | Whitehall 2881 |
| ICA | Institute of Contemporary Arts. 17-18, Dover Street, W.1. | Belgravia 3755 |
| ICE | Institution of Civil Engineers. 1, Great George Street, S.W.1. | Grosvenor 6186 |
| IEE | Institution of Electrical Engineers. Savoy Place, Victoria Embankment, W.C.2. | Whitehall 4577 |
| IES | Illuminating Engineering Society. 32, Victoria Street, S.W.1. | Temple Bar 7676 |
| IGE | Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1. | Abbey 5215 |
| IHVE | Institution of Heating and Ventilating Engineers. 49, Cadogan Square. | Sloane 8266 |
| IIBDID | Incorporated Institute of British Decorators and Interior Designers. 37, Soho Square, W.1. | Sloane 1601/3158 |
| | | Gerrard 5056 |



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WINDOW

ON

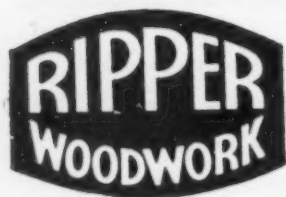
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345_{FT} TESTED

Extract from a report prepared by:
Mr. G. C. Wilson for R. H. Harry Stanger, Testing Consultants, The
Laboratories, Summerfield House, Barnet Lane, Elstree, Herts.
5th October 1960
Report of permeability test carried out with Febproof Integral Liquid
Waterproofing Compound in a Mortar Mix.

| Mix:— | Febproof Treated | Control Untreated |
|-----------------------------------|---------------------|----------------------|
| Sand, Parts by Volume | 3 | 3 |
| Portland Cement by Volume | 1 | 1 |
| "Febproof," Pints per cwt. Cement | 0.47 | 0.53 |
| Water/Cement Ratio | 1½" | 1½" |
| Slump Inches | | |

PERMEABILITY TEST RESULT ON MORTAR TREATED WITH FEBPROOF

| Water Pressure | | Water Pressure Held For | Amount of Water Percolation |
|----------------|------------------|----------------------------|--------------------------------|
| Feet Head | Lbs. per sq. in. | | |
| 46 | 20 | 1 HOUR | NIL |
| 69 | 30 | 1 " | NIL |
| 92 | 40 | 1 " | NIL |
| 115 | 50 | 1 " | NIL |
| 172 | 75 | 1 " | NIL |
| 230 | 100 | 1 " | NIL |
| 287 | 125 | 1 " | NIL |
| 345 | 150 | 1 " | NIL |

The thickness of the 1-3 cement, sand mortar slabs, was 2", and
age at date of test 28 days. Water percolated through all
untreated control specimens. **No** water percolated through
Febproof treated specimens. SEE TEST RESULT ABOVE.
Signed by G. C. Wilson for R. H. Harry Stanger.

With a sustained
water pressure of
150 lbs. p.s.i. equall-
ing 345 ft. head
of water, this
independent
Test Report
illustrates the re-
markable water-
proofing efficiency
of Febproof In-
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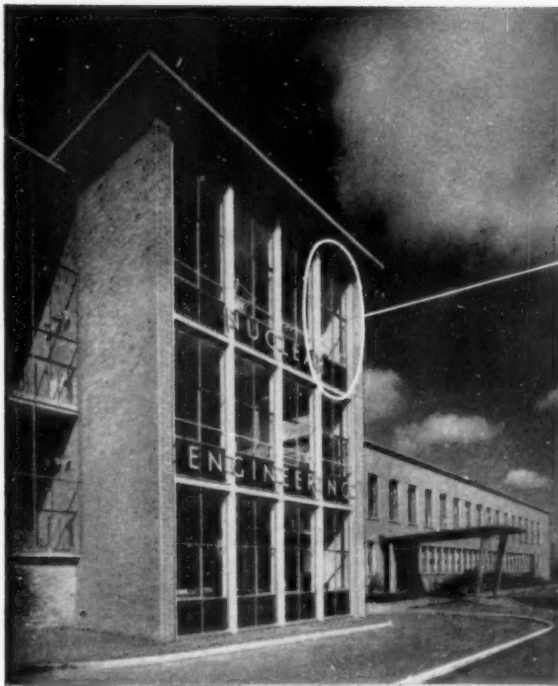
★ OSAL is the generic name for the products of A. A. Byrd & Co. Ltd.—“Florosal” for Surface Hardening and Protection of Concrete, Stone and Cement—“Neocosal” for Surface Waterproofing of Brick, Concrete, Stone, and “Tricosal.” Literature on each individual product is available from

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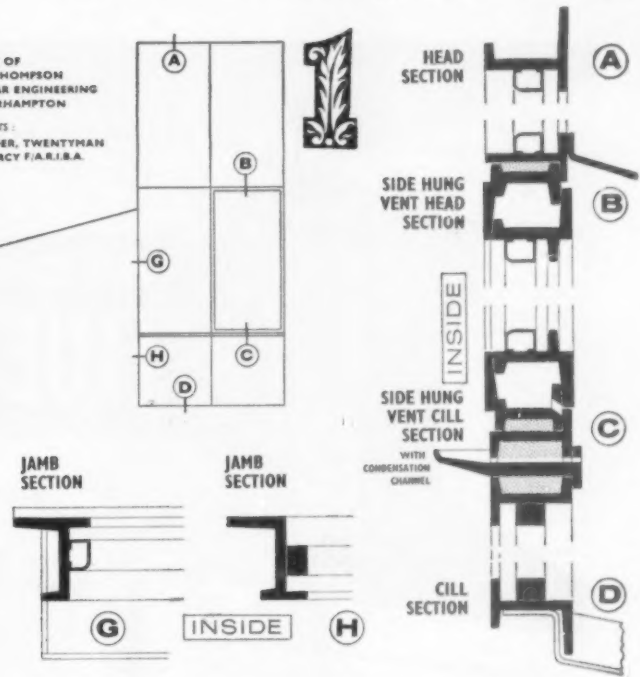
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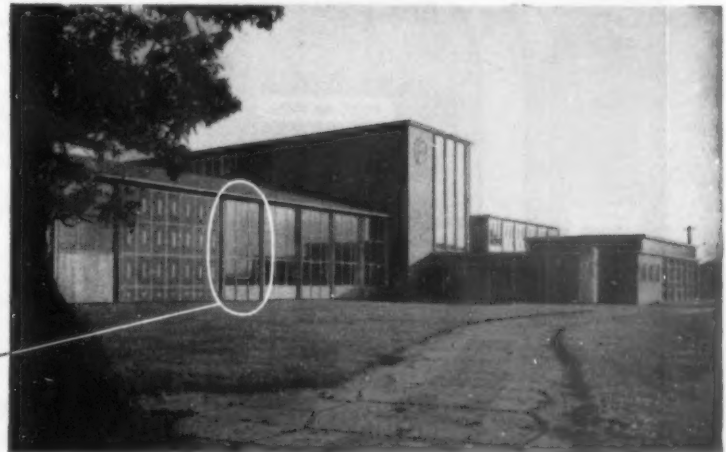
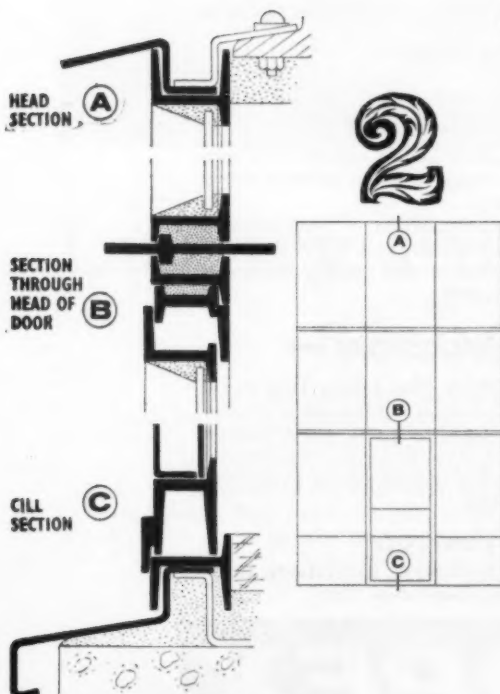
1

The Architect has achieved a bold elevational effect by setting Steel windows, between the verticals and horizontals of his concrete structure — the result has many of the advantages of curtain walling but avoids the usual flat effect.

2

The Architect has used a dark massing effect of brickwork to set-off the glass areas of the Assembly Hall of this school. These Steel windows are coupled horizontally and incorporate outward opening doors in case of emergency.

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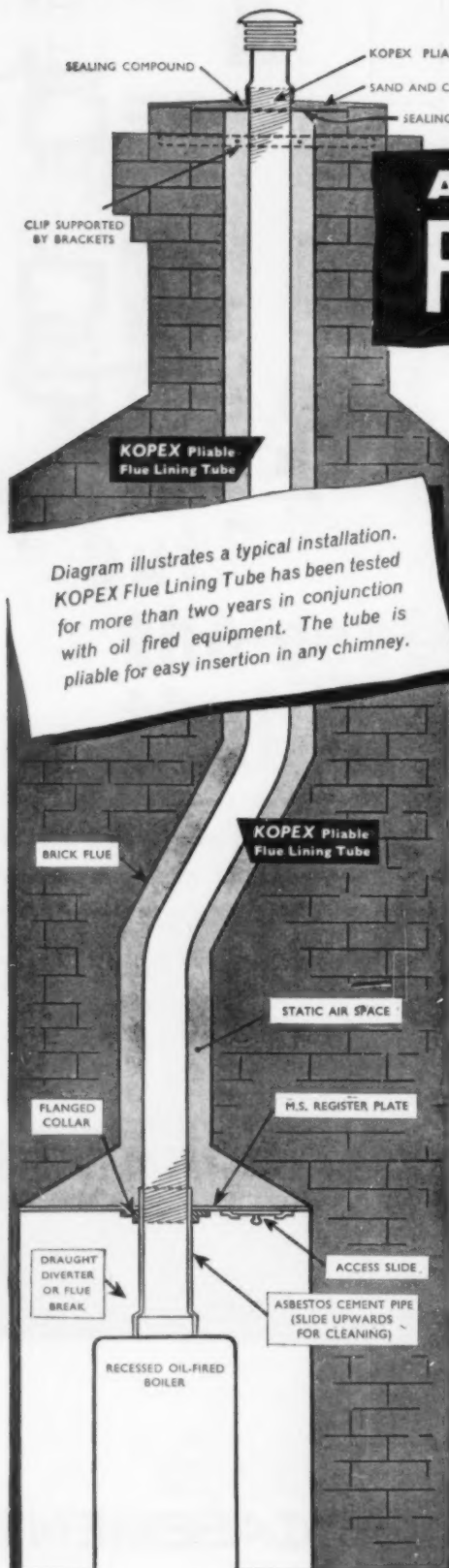


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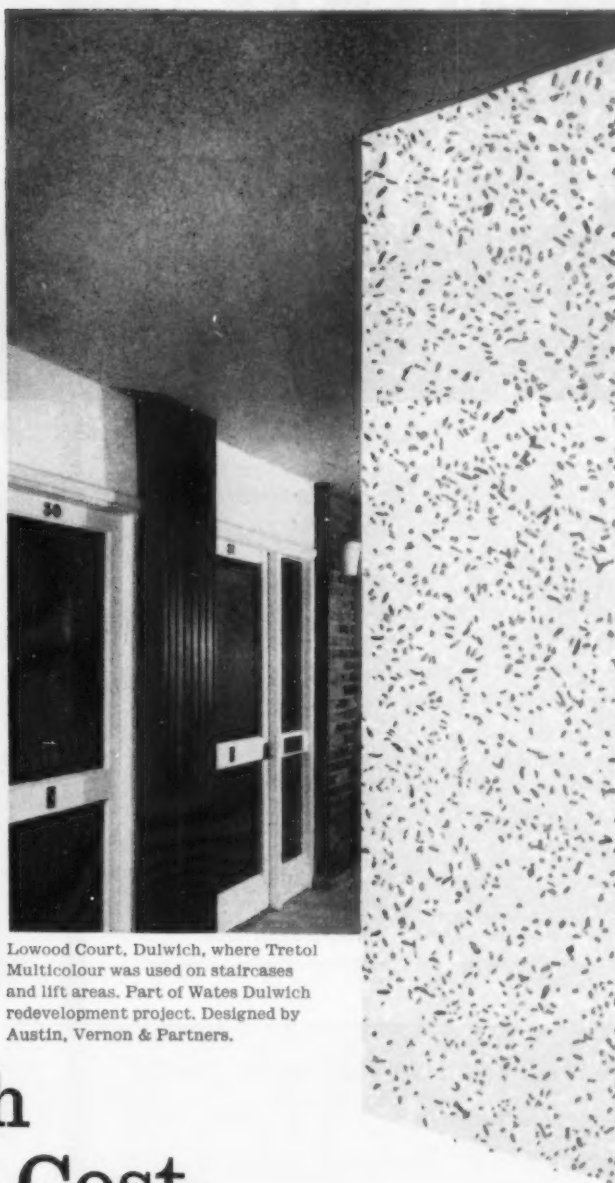
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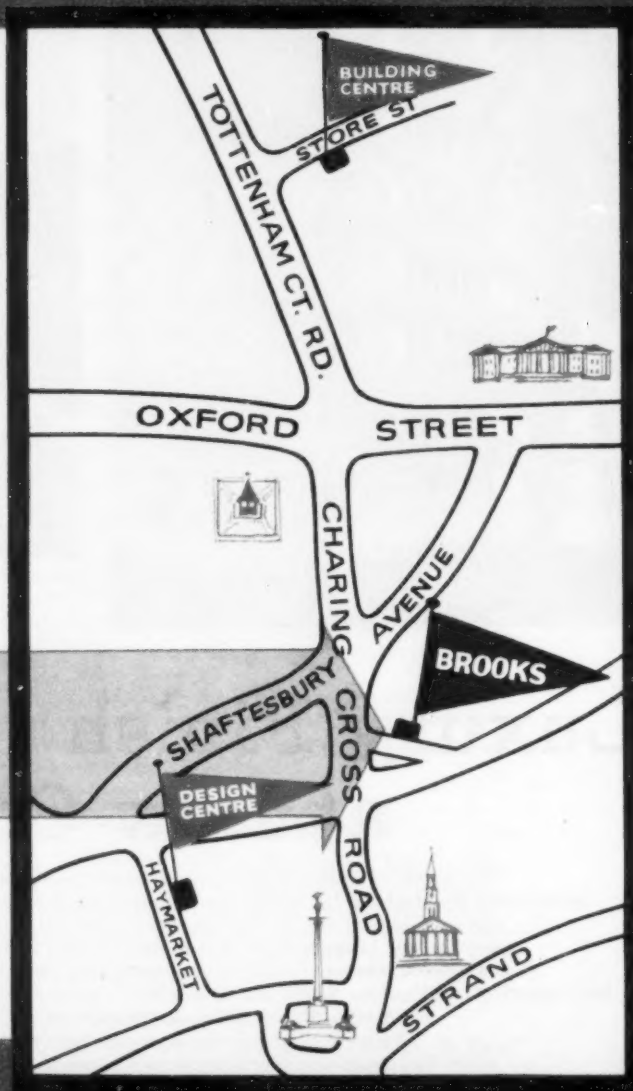
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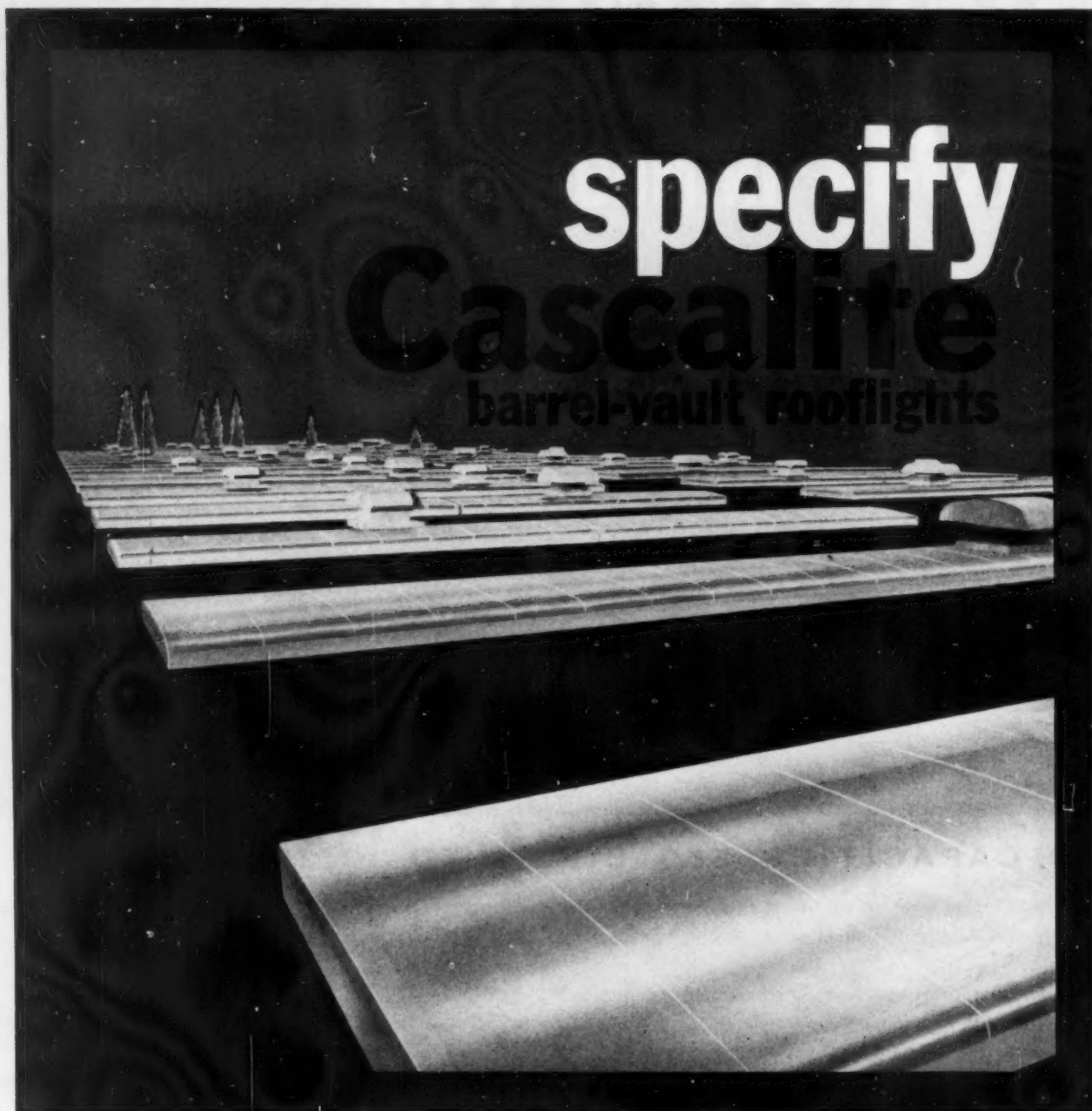
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OR FOR USE WITH
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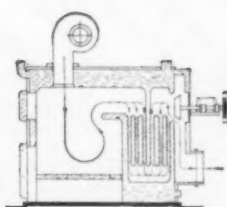
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induced draught

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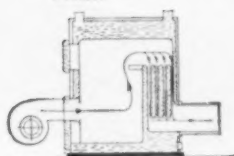
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with top mounted burner

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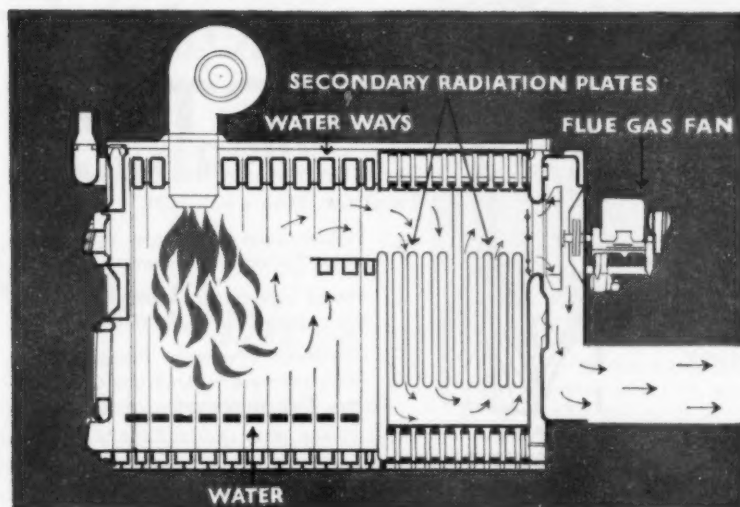


Top mounted burner
with induced draught
fan. High efficiency
boiler.



Front mounted burner;
standard convection
sections, normal
efficiency boiler.

HOW THE UEG WORKS

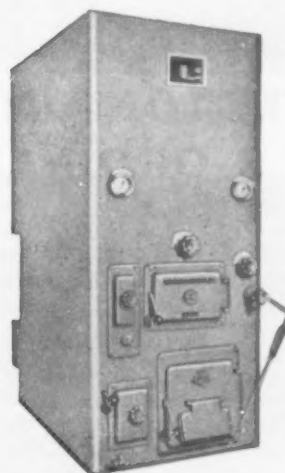


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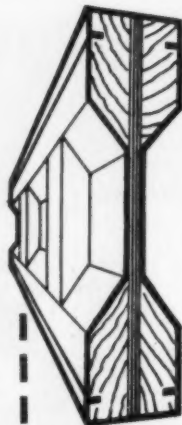
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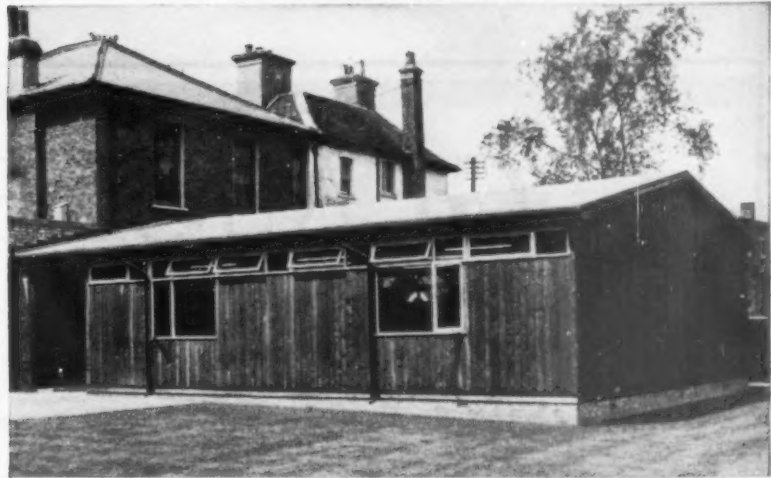
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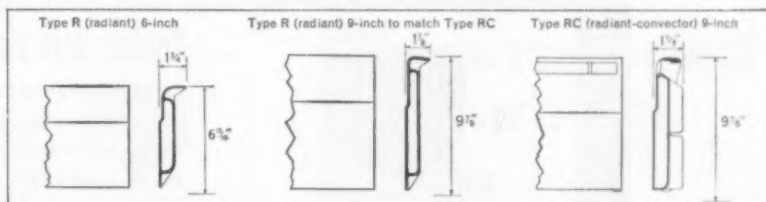
Where every foot of floor must be free

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3 types of Crane Skirting Heating

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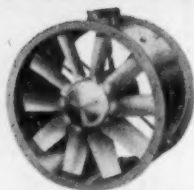


29.8

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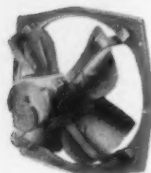
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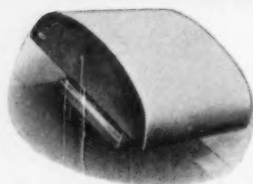
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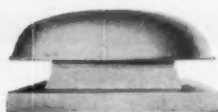
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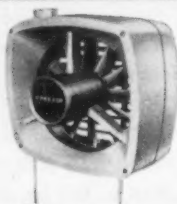
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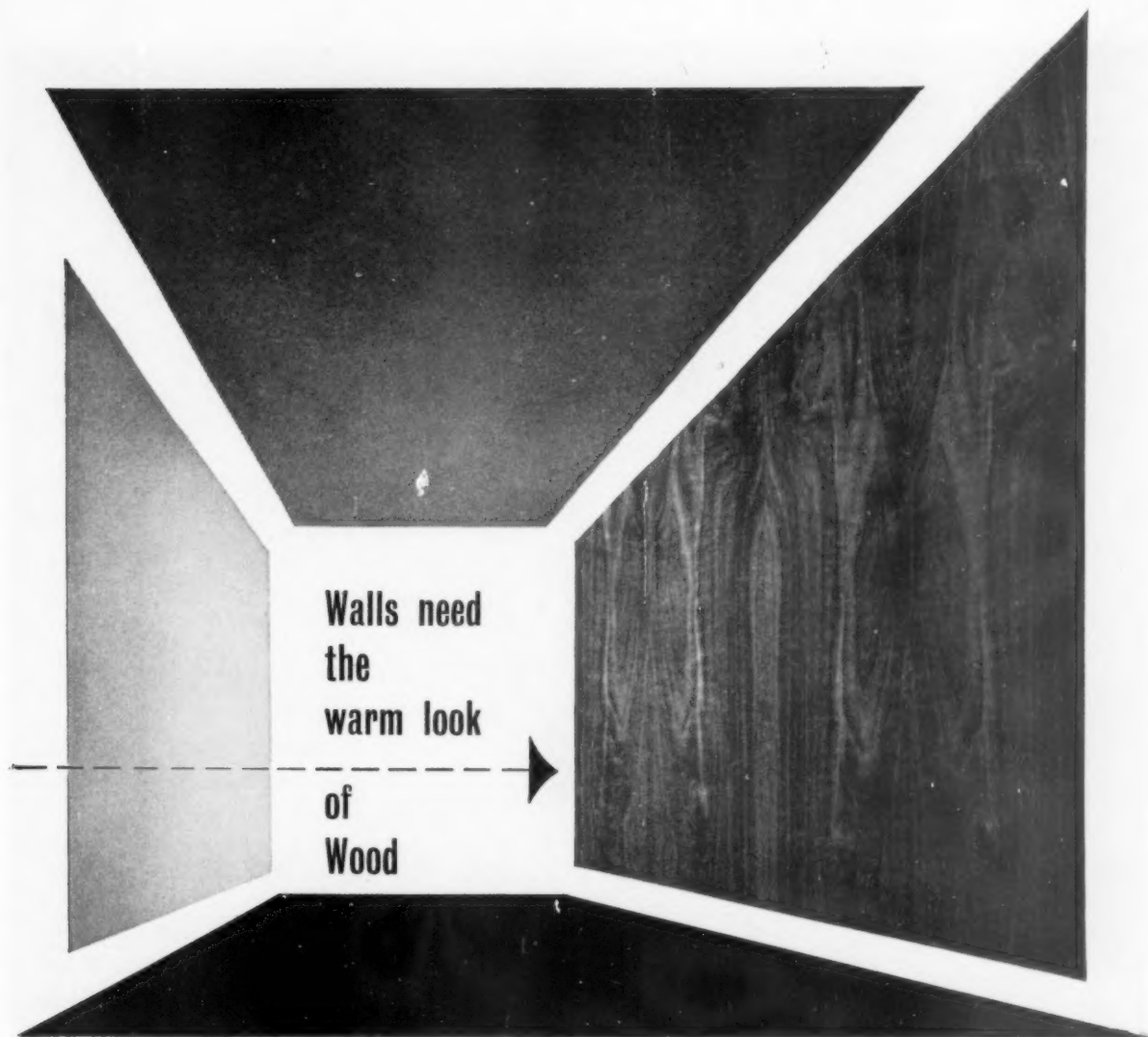
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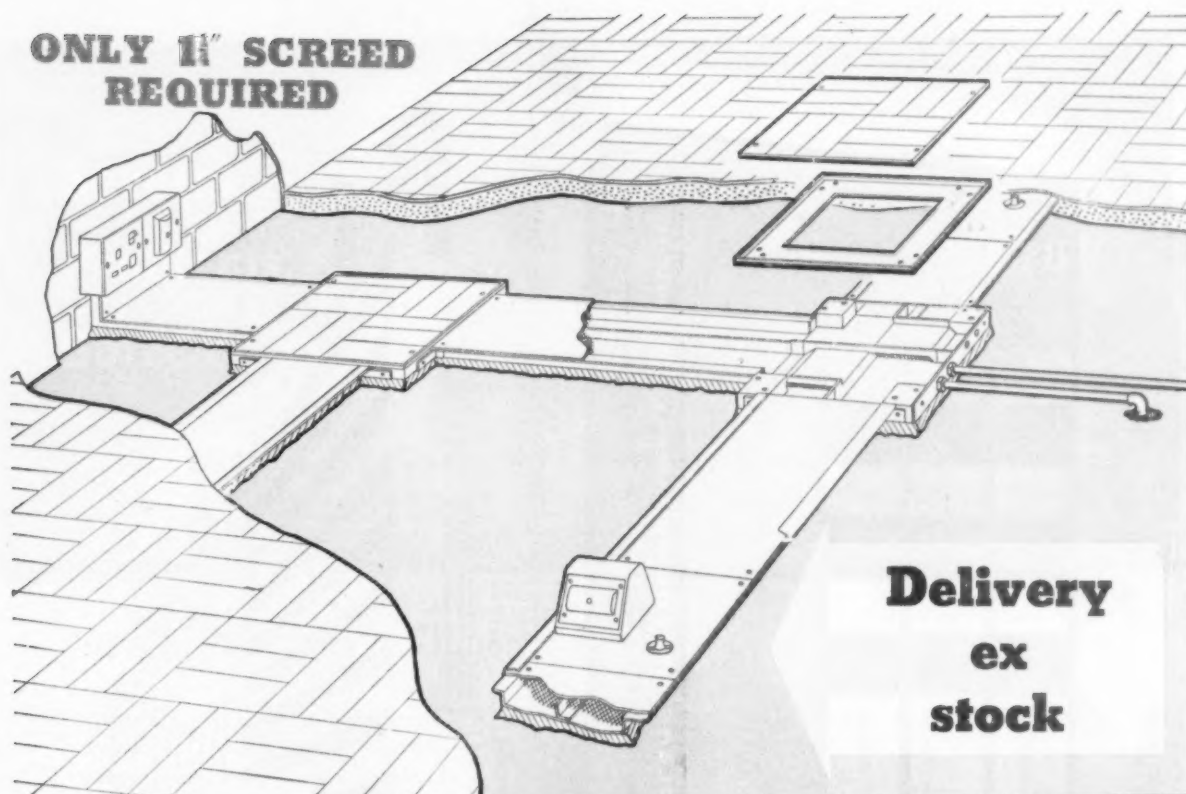
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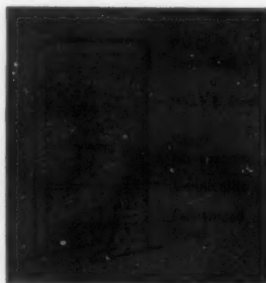
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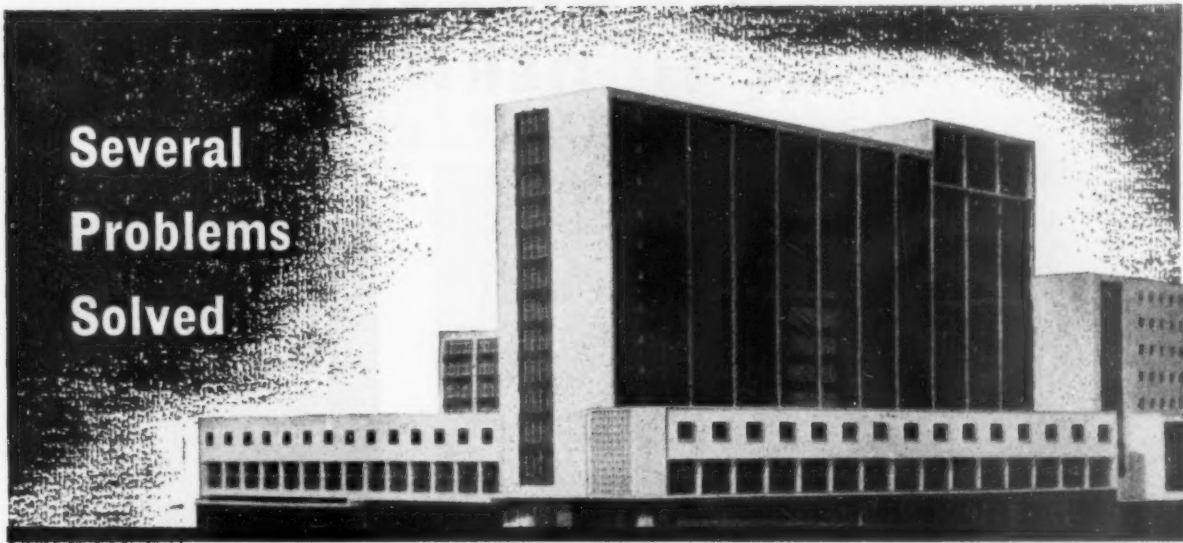
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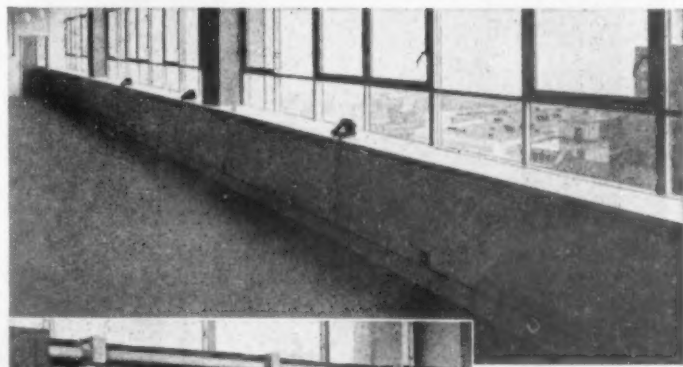
in Birmingham's Biggest Building

*The Big Top, New Street, Birmingham.
Architects: Messrs. Cotton, Ballard & Blow.
Heating Engineers: Couzens & Akers Ltd.*

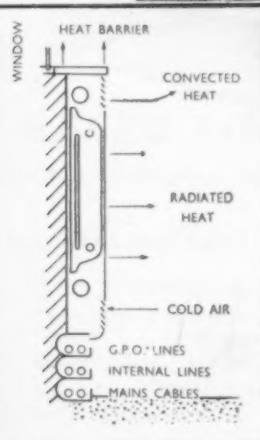
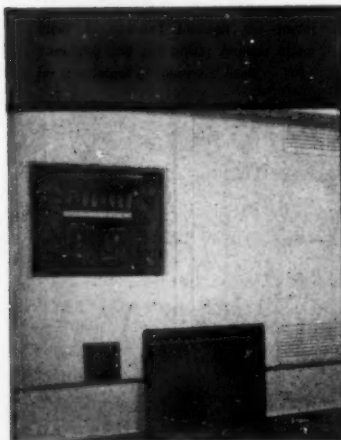
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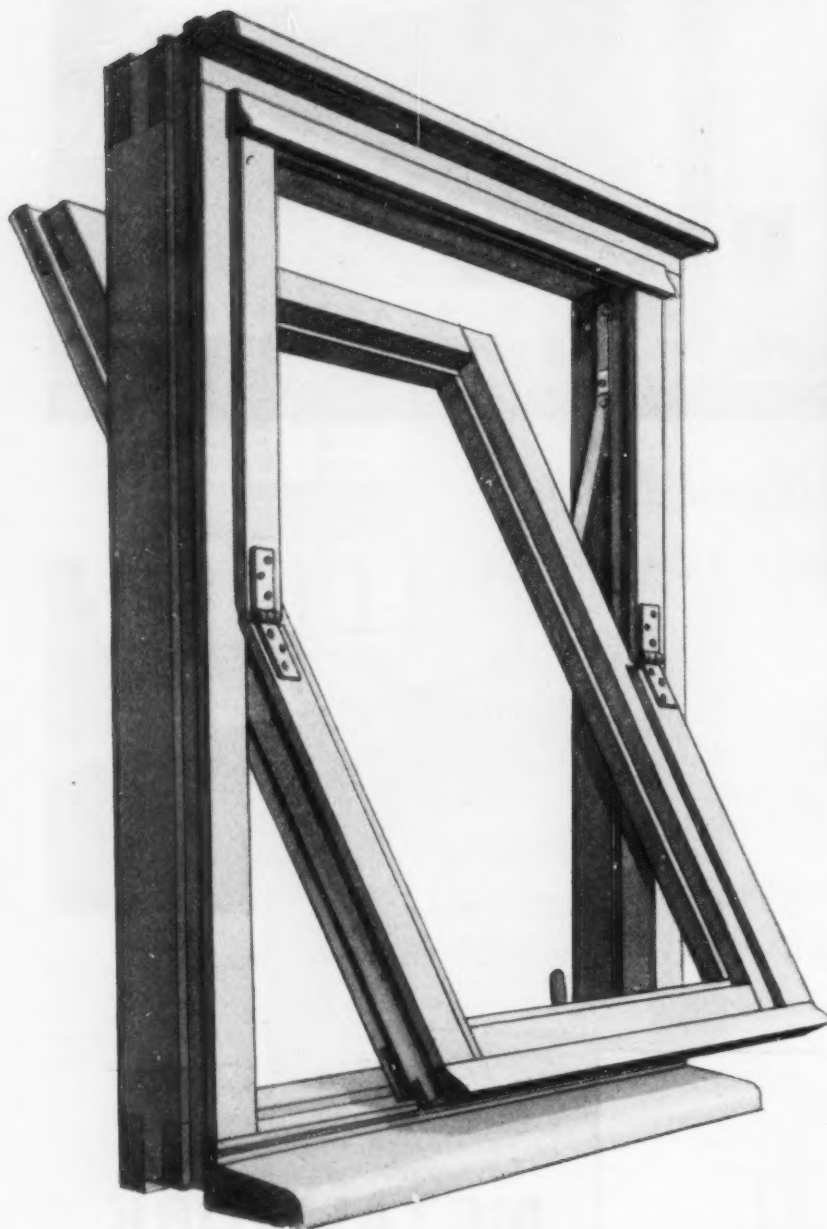


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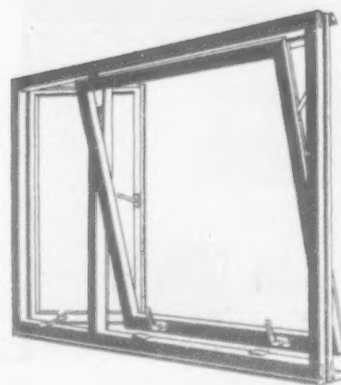
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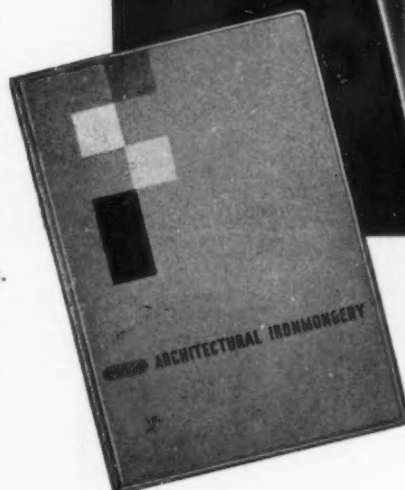
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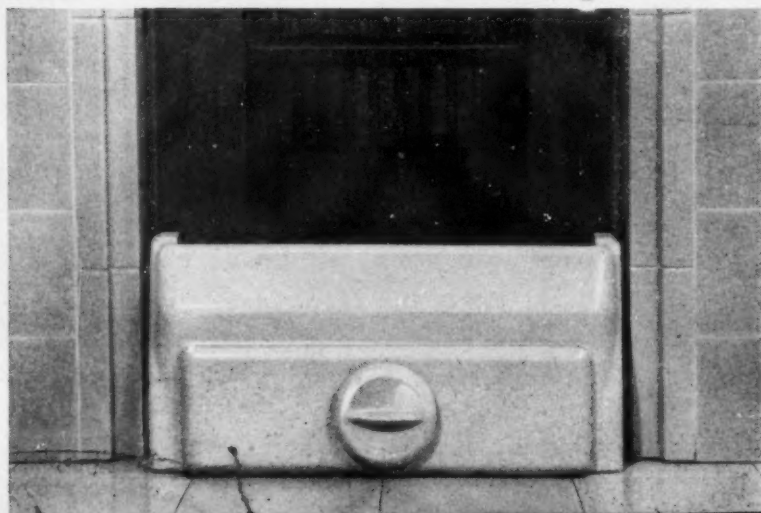
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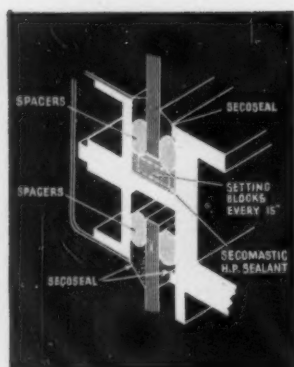
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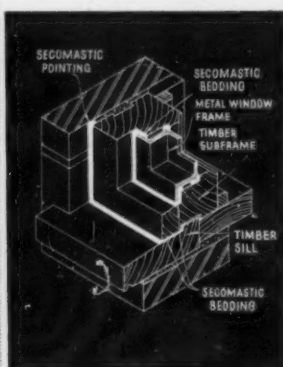
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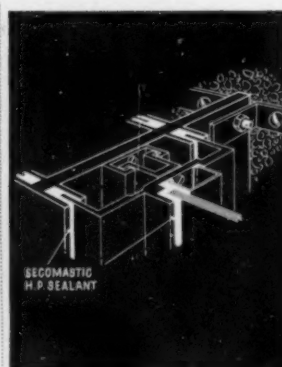
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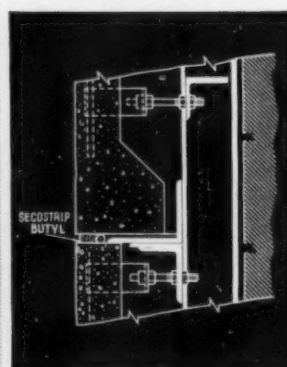
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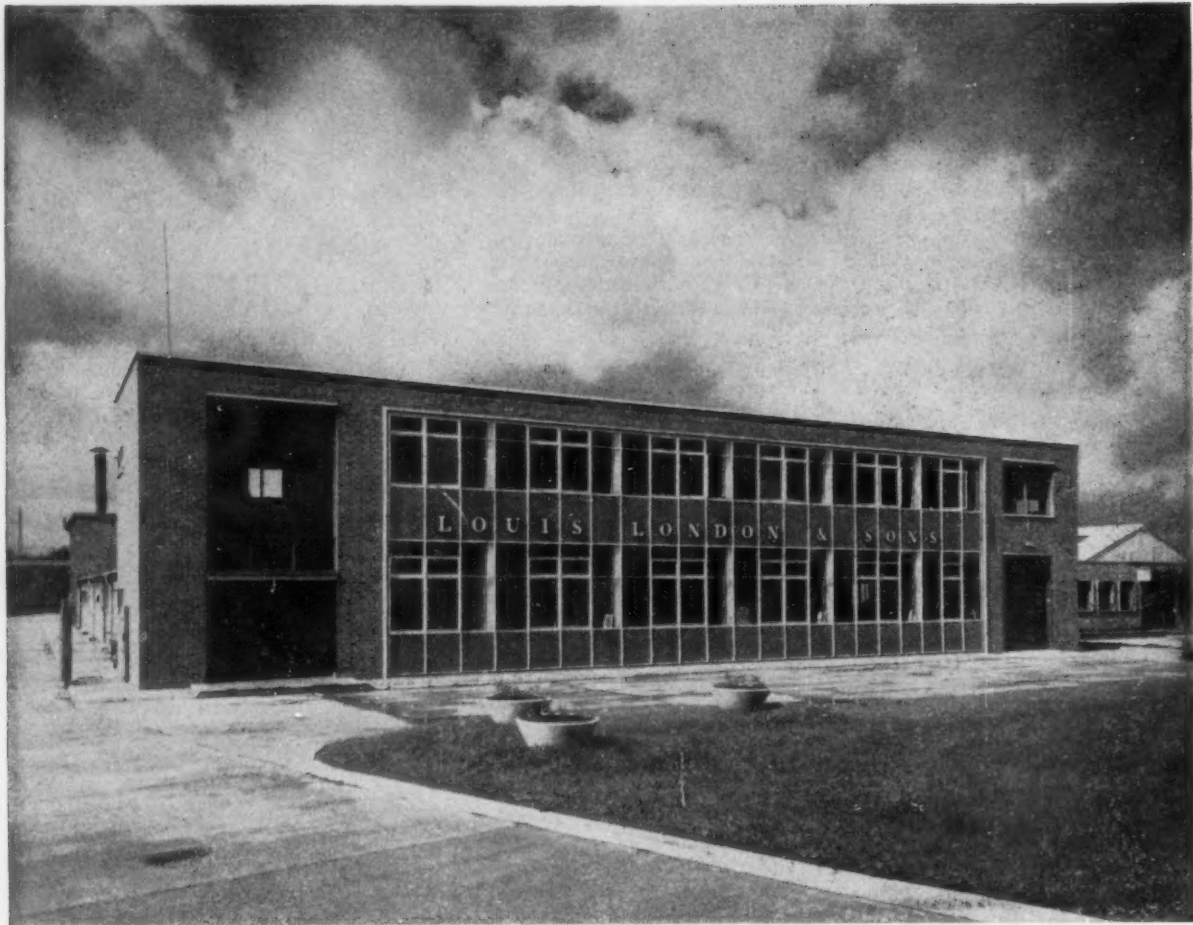
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The first layer of cork bark removed from this tree is, oddly enough, unsuitable for making corks, but ideal for making Britcork tiles. As subsequent layers grow, they become thicker and from these the bottle cork is produced. Britcork tiles have much to commend them. They are blissfully quiet to walk on and are very hardwearing. Britcork tiles are non-absorbent and after treatment with a plastic resin, or approved wax finish, are proofed against almost all forms of staining. Three standard tiles are made, each in three thicknesses. The B32 tile is made in three shades. Sample tiles and literature are readily available.



A Shell Photograph

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Matching or contrasting with tiles

QUADRANT Economic and practical alternative to skirtings

FEATURE STRIP

Adds character to a floor

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"Made to Measure"

WALL PANELLING Bevelled strips and tiles. Practical with an air of luxury

SPECIAL CORK TILES Non-standard sizes and shapes to individual requirements

INLAID MOTIFS Tiles incorporating any specified designs

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For wood-block floors

BRITCORK

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New Diplomat boilers* make life happier



for
him...



for
him...



for
her



THE DISTRIBUTOR. Here's a fully automatic boiler the distributor can sell with absolute confidence.

Elegant, clean-line appearance. Packaged unit makes for easy handling. Exclusive "glass" coated flue-way protects against corrosion and reduces maintenance. Certain to out-sell any other comparable boiler. And very competitively priced.

THE INSTALLER. With these new gas-fired boilers on the market, no installer need ever go grey before his time.

A new Diplomat is easy as ABC to install. Quick. Simple. Precise. The casing is rigid and fits flush at first go. The door has lift-off hinges and magnetic catches which take all the snags out of hanging and lining-up.

THE CUSTOMER. A new Diplomat's biggest feature for the customer is the five-way selector switch.

It provides heating and hot water automatically at times they're wanted, without the customer having to lift a finger. Installation time is reduced because all electrical connections are made by plug and socket. And wrong connections cannot be made.

**Model illustrated is the Diplomat 44 small-bore unit, typical of this new range of boilers.*

Potterton Boilers at the heart of efficient central heating—gas or oil

THOMAS POTTERTON LIMITED, 20-30 BUCKHOLD ROAD, LONDON SW18. A MEMBER OF THE DE LA RUE GROUP

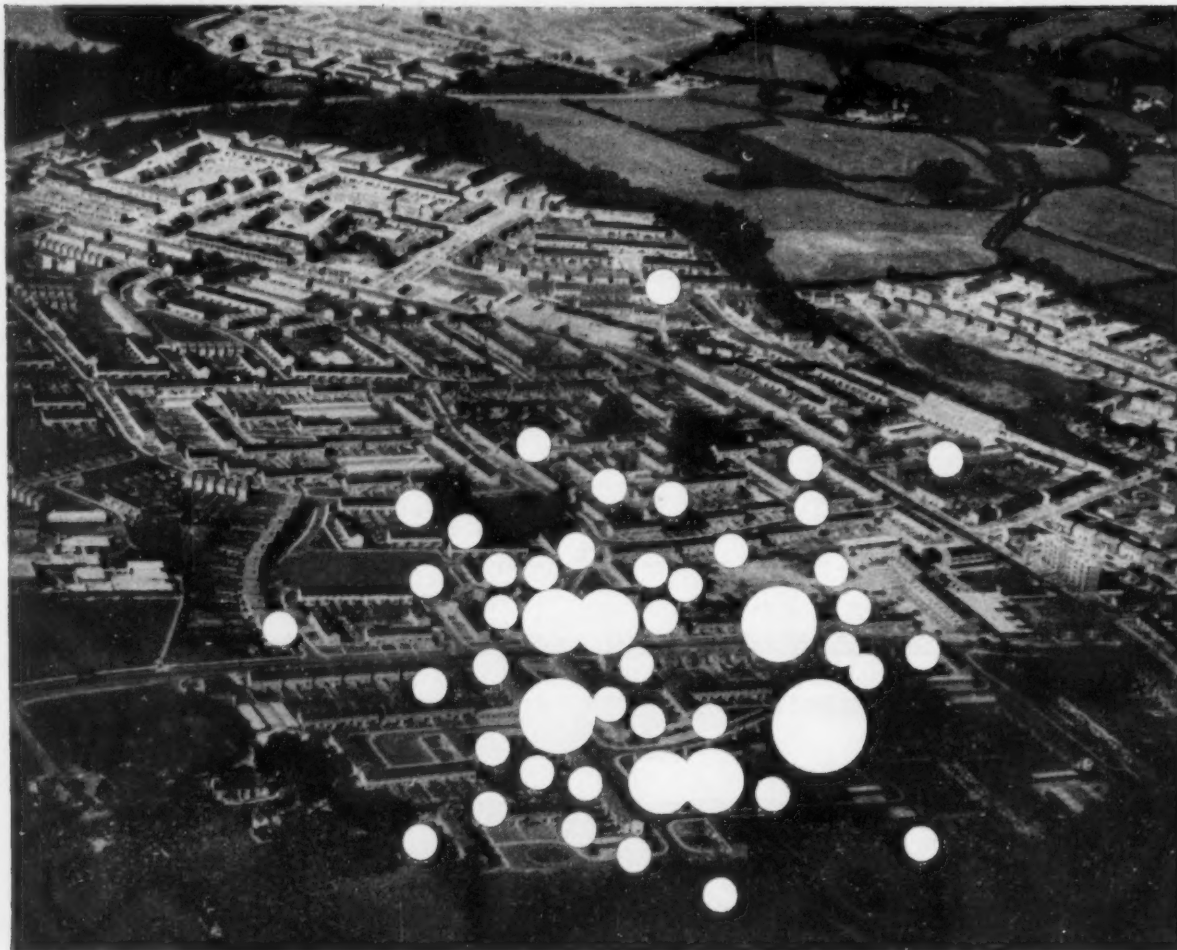


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property enemy No. 1

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But how can he be sure that the measures he suggests are suitable, the product chosen effective, and the treatment given adequate?

Fortunately structural timbers can now have the same lasting protection against woodworm that has proved so effective for many famous buildings and priceless antiques.

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Produced by the largest timber preservative research organisation in Europe, Xylamon has a three-way toxic action combining contact, stomach and fumigant insecticides. It drives deeply below the surface and becomes an integral part of the timber itself. Once applied it destroys any wood boring pest or fungus which attempts to attack the wood.

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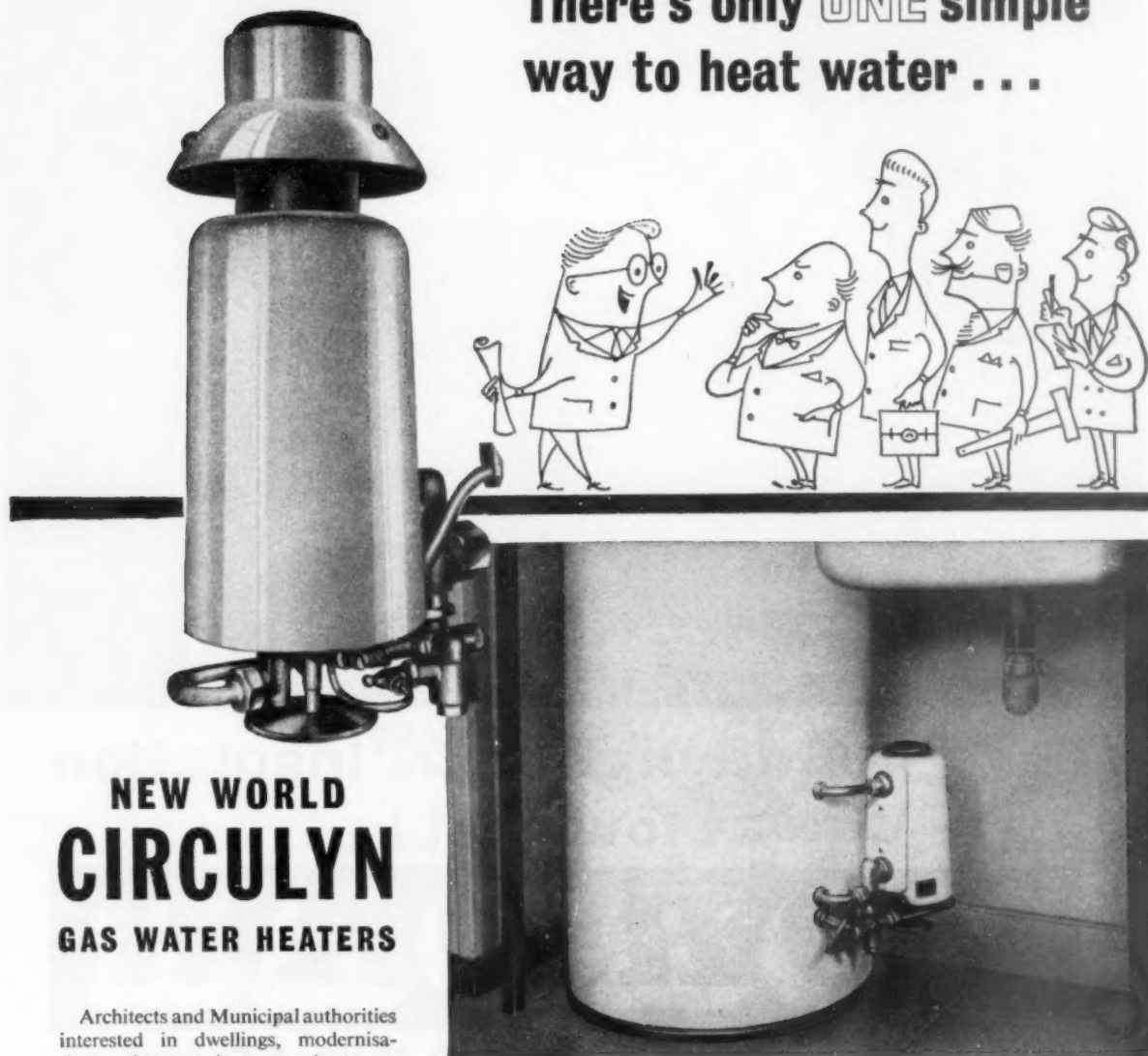
Staffed by experienced men, the service is designed to assist the architect in every way. It provides an authoritative diagnosis, gives skilled treatment by trained operatives, is backed by all the equipment and resources of Britain's largest servicing organisation for wood preservation, insures its user against an expensive recurrence of the pest in timbers treated by a full 20 year Guarantee.

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As an example the **NEW WORLD C.12LF** Circulator fitted to a 20 gallon cylinder, under the draining board or other convenient position, is normally adequate for an average household of up to four persons.

Other sized **NEW WORLD** Circulators are available when hot water requirements are in excess of that provided by the C.12LF. All are reasonably priced, economical in use and easily fitted.

In older properties existing gas and water services are

usually adequate and do not need replacement. Design is such that the minimum of maintenance is required over a long period of usage.

NEW WORLD Water Heaters also can be used as an auxiliary to a solid fuel system for intermittent use.

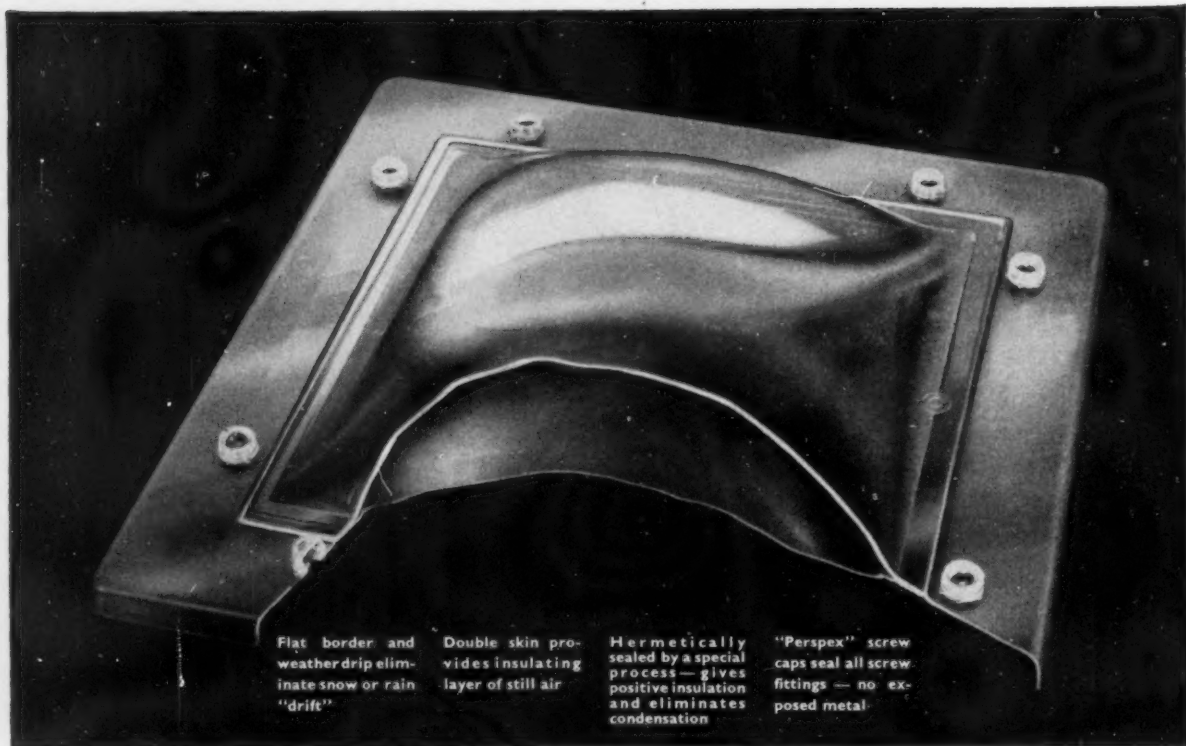
Some 35 County, Borough, Urban and Rural Councils are using the C.12LF/20 gallon cylinder Under Draining Board unit including: L.C.C., Willesden, Ilford, Camberwell, Battersea, Coventry, Lambeth, West Ham, Enfield, Edinburgh, Preston, Romsey, Liverpool.

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and forget your problems**

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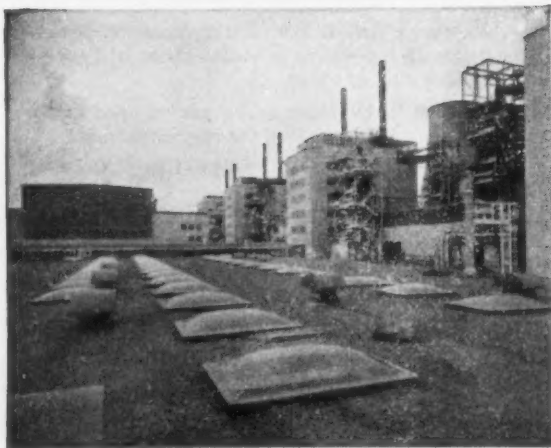
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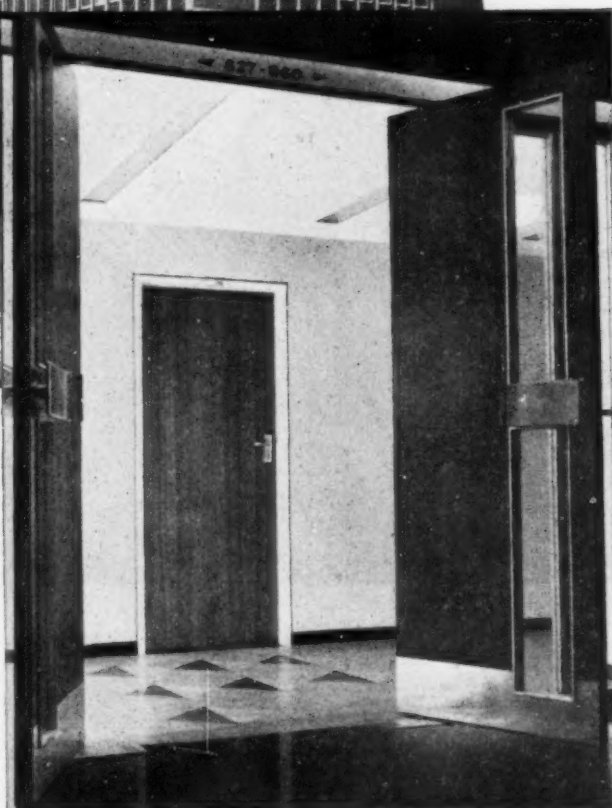
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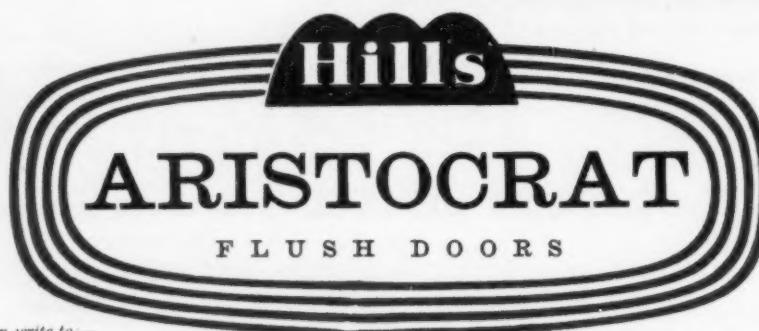
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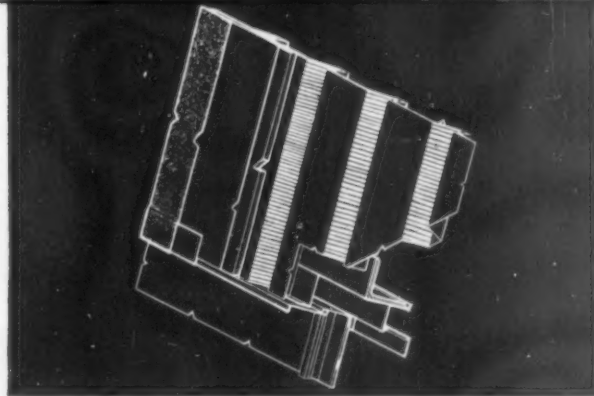
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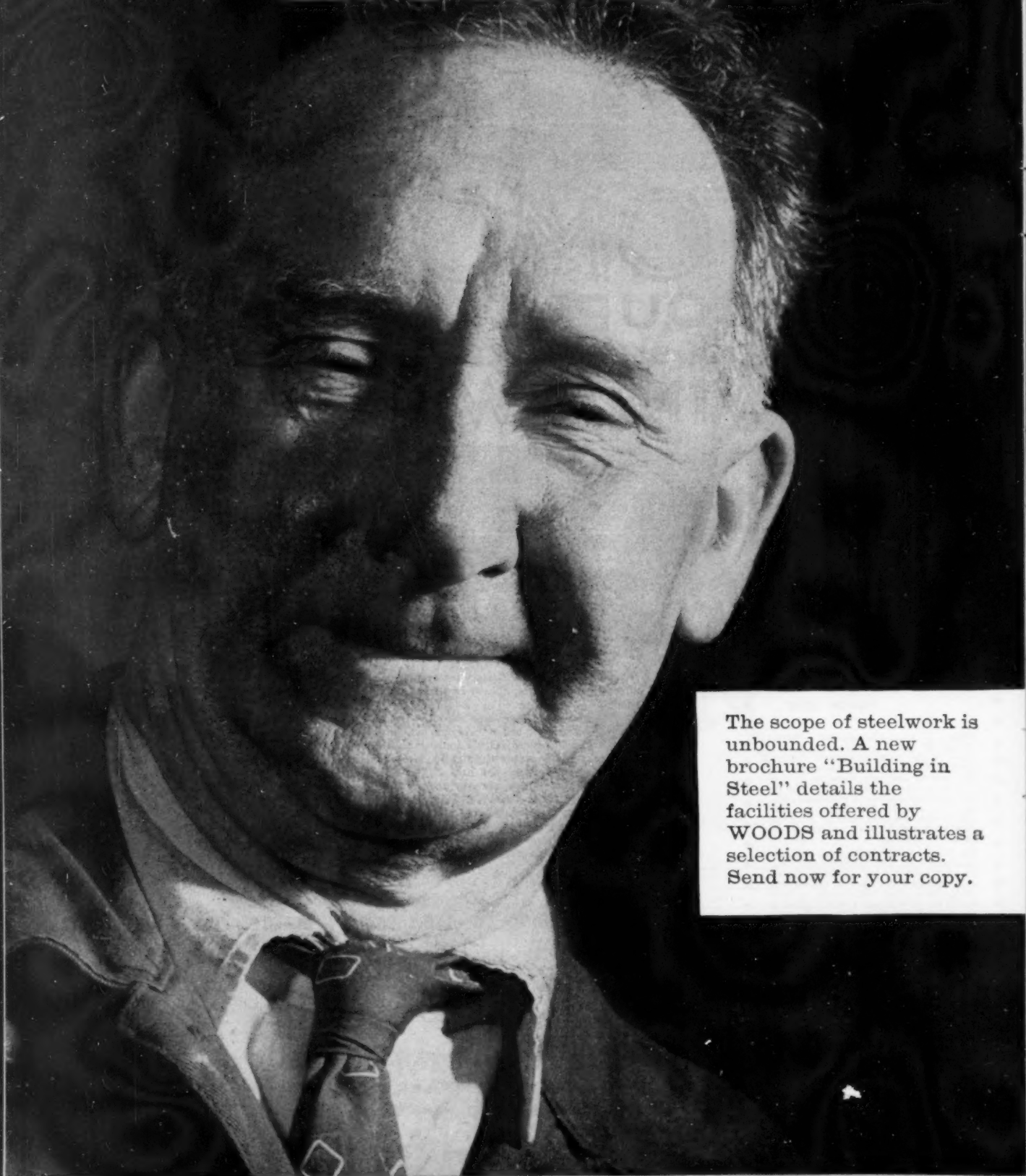
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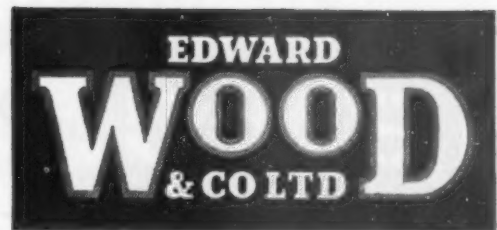


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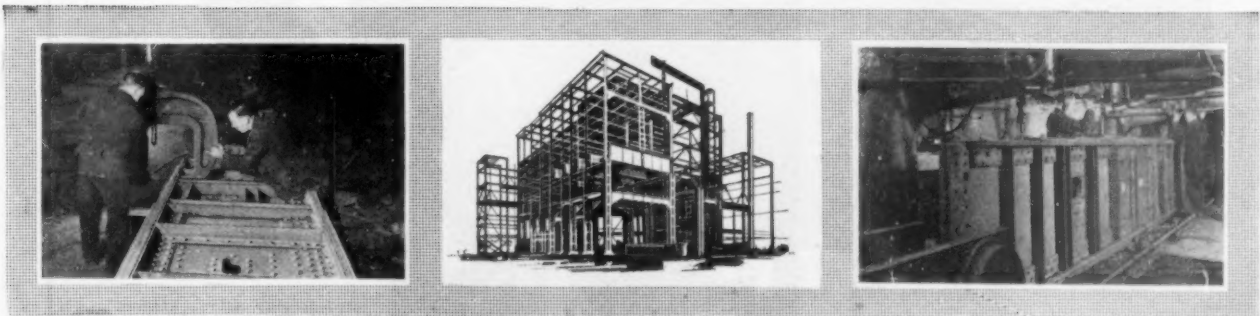
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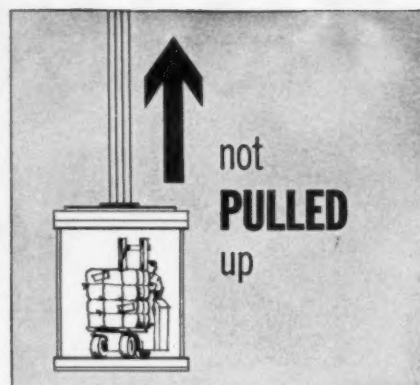
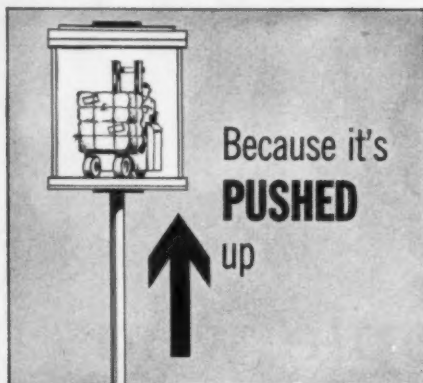
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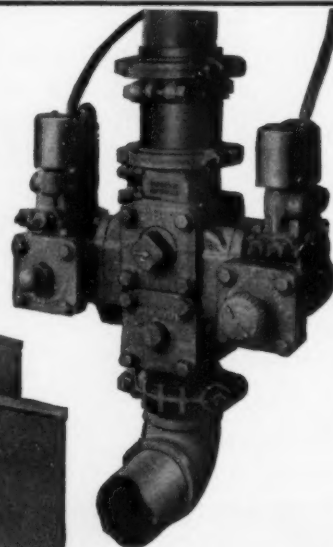
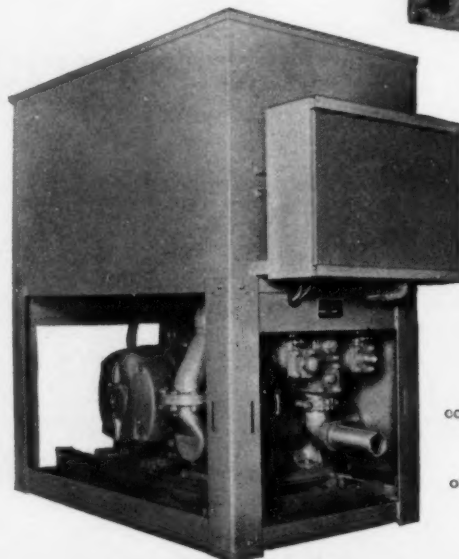
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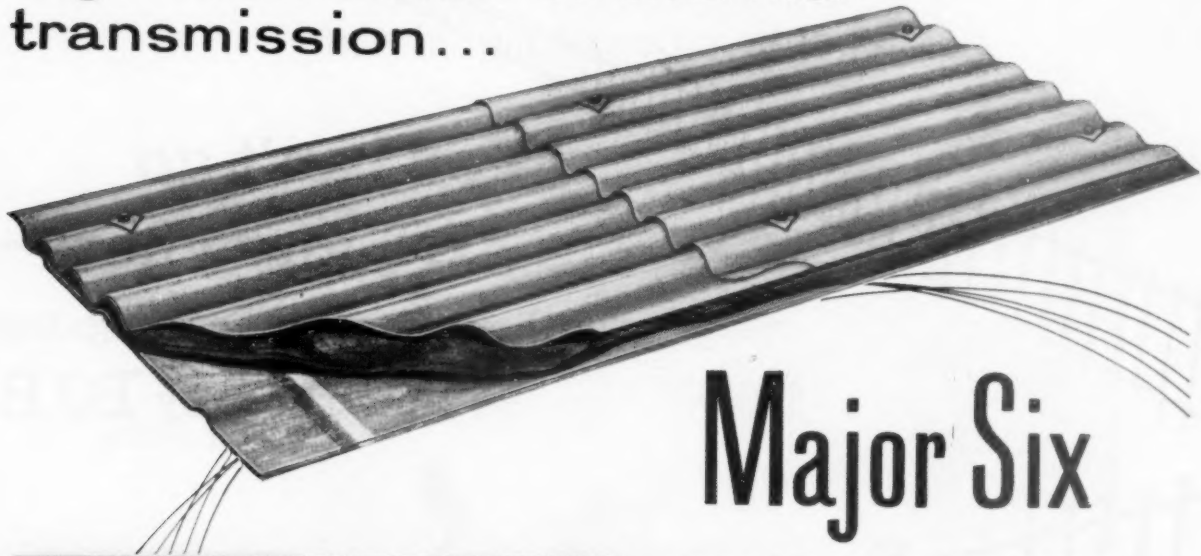


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Major Six

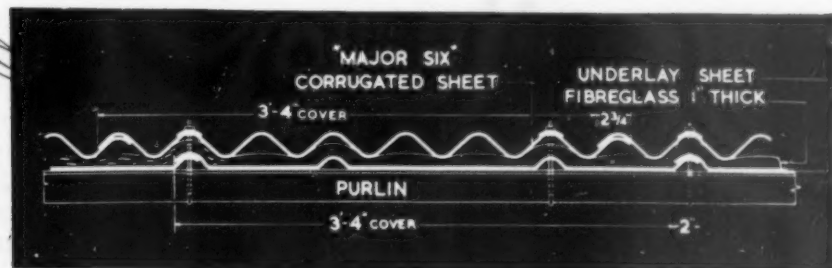
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Photograph above illustrates interior view of roof

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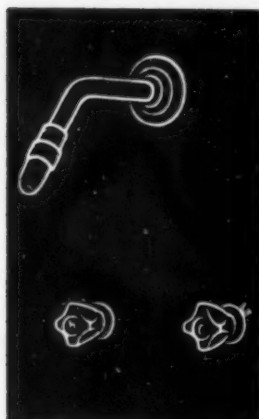
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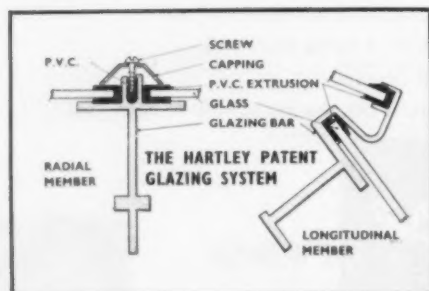
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The **HARTLEY** Glasshouse range covers all needs

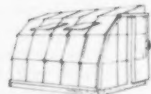
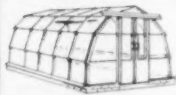
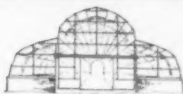

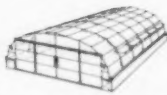
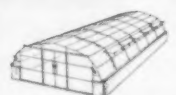
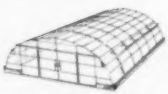
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*on the
right lines...*

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CHOOSE ANDERSON
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Roofing at the Longsight Electrification

Depot, completed recently for British

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— a strong galvanised steel deck insulated
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As a replacement or a new fitment, no other toilet seat in this price range has the advantages offered by Shires 'Continental'.

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Stylish, elegant, beautifully designed. Completely overlaps the seat for extra

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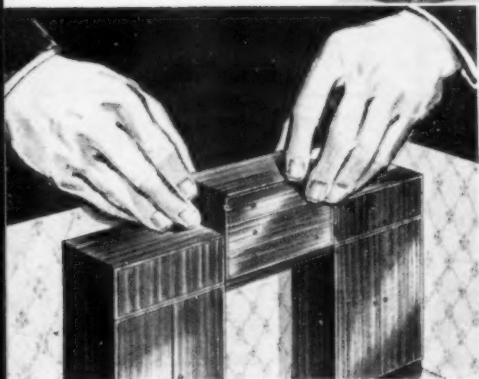
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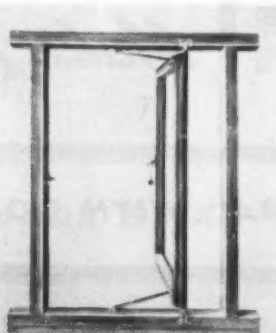
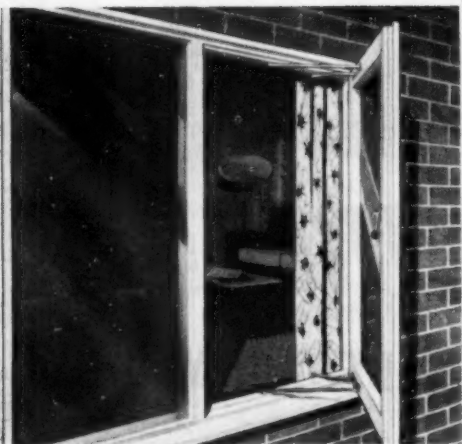
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BEDROOM UNITS AND WINDOWS FIT INTO ANY MODERN PLAN

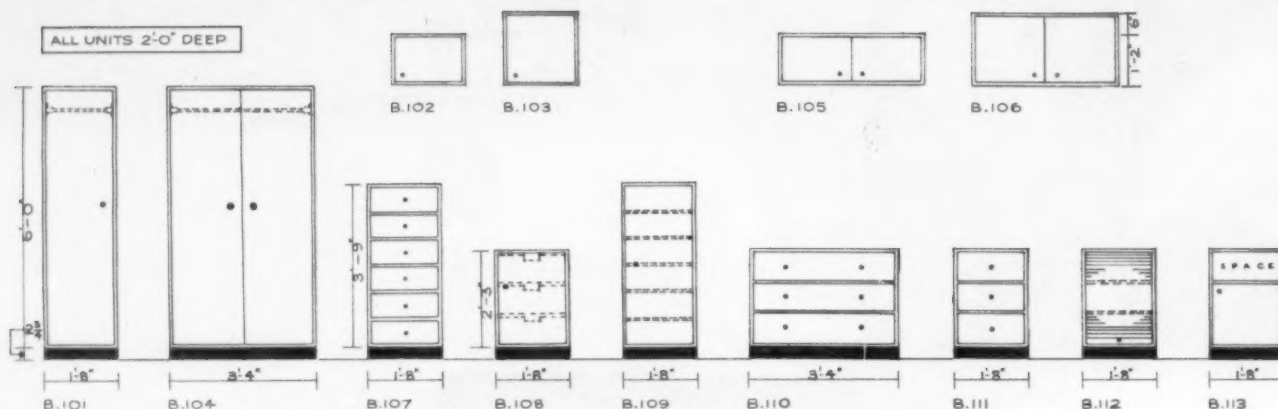
Attractive designs, flawless workmanship, the finest materials . . . when you specify "EJMA" built-in units and windows you can be sure of getting the very best—and at the most reasonable cost. All the items on the following pages have been designed and developed by the E.J.M.A. and registered under the Association's Certification Trade Mark—your guarantee of high quality. Specify "EJMA" with confidence and ensure that all goods are made by an "EJMA" licensed manufacturer.



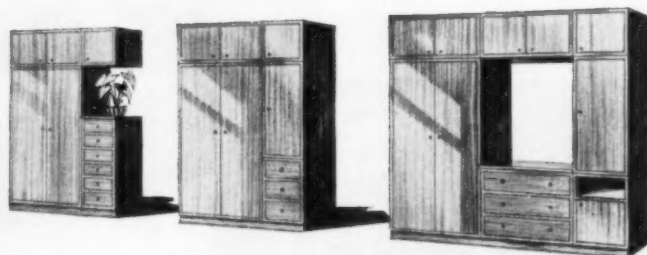


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"EJMA" Standard Bedroom Units are attractively made of Sapele and/or Utile or alternatively Beech with matching plywood. All external surfaces exposed to view, and the inside of doors and the fronts of trays are finished for polishing. A painted finish can be used if preferred. All doors are hung on non-rusting, bronze finish hinges and are supplied with bronze finish knobs and catches. Single units are 1' 8" or 2' 0" wide; double units, 3' 4" or 4' 0". Table tops are supplied to 2' 3" and 3' 9" high units when required. Almost any desired length can be obtained by using suitable combinations of units. They can be built up in height to suit 7' 6" or 8' 0" ceiling. For any modern bedroom plan — "EJMA" has the answer.



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STANDARD 'M' TYPE WINDOWS

* THE NEWEST DEVELOPMENT IN WINDOWS

| | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|
| 1ft 8in | 2ft 4in | 4ft 4in | 6ft 8in | 8ft 4in | 6ft 8in | 8ft 4in |
| M12B | M12B | M22B | M32B | | | |
| 3ft 4in | M134 | M134 | M234 | M334 | M334W | M434W |
| 4ft 0in | M140 | M140 | M240 | M340 | M340W | M440W |
| 4ft 4in | M144 | M144 | M244 | M344 | M344W | M444W |
| 5ft 0in | M150 | M250 | M350 | M450 | M350W | M450W |

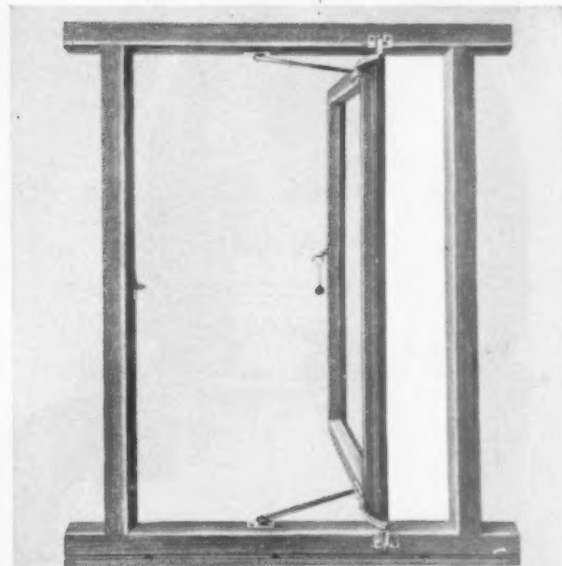
RANGE OF WINDOWS (opening lights side hung)

The "M" Type Windows are supplied complete with all necessary hinges and fittings which have been specially designed and developed in conjunction with, and are made exclusively for, the Association.

The plated friction hinges, of a completely new design, are fitted to the inside of the frame and casement and provide controlled ventilation and, when open at 90°, a space of 5 inches to allow for ease of maintenance and cleaning from the inside of the building. The design of the hinge has enabled the casement width to be increased to provide greater daylight areas in addition to an increase in the casement sections.

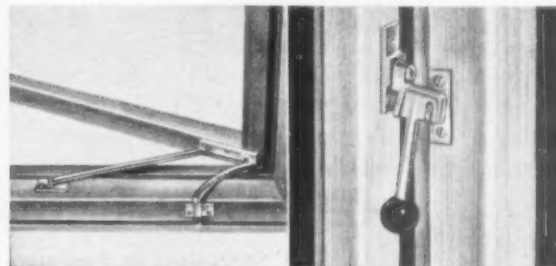
The fastener, attractive in design and finish, provides a ventilatory position in addition to the fully closed position. This has made it possible to omit ventlights from the standard range and thus provide elevations to meet the present demand for larger unobstructed glazing areas. The casements to windows 4 feet and more in height are also fitted with a closure pawl to ensure a tight closure on the hanging stile.

The overall sizes of these windows meet the requirements of those who wish to work to a 4 inch module both in width and height. The range of types and sizes is shown above. Bay windows can be built up from the standard units in many different combinations.



5" CLEARANCE FOR CLEANING

* **SUPPLIED COMPLETE** with specially designed, high quality hinges and fittings. These are factory fitted to all windows in the "M" range and are exclusive to "EJMA" licensed manufacturers.



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within the reach of
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The Leisure Shower Cubicle has been designed to stand anywhere without structural alterations of any kind. It is particularly useful in flatlets, where space is so precious. What does the Leisure Shower Cubicle offer? An attractive shower curtain seals off the gleaming white and black enamel interior from the outside room. The spotlight glass panel, set into the roof, provides plenty of light. A twist of the anti-scald mixer tap gives instant hot or cold showers. The chrome flexible pipe can be transferred to the washbasin, which together with the mirror and glass holder is an optional accessory. The Leisure Shower Cubicle is soundly constructed in pressed steel, and is easy to install. Prices have been kept to a minimum so that all can benefit from this unique piece of home equipment. Display the Shower Cubicle prominently in your showroom—and get set for brisk sales this summer!

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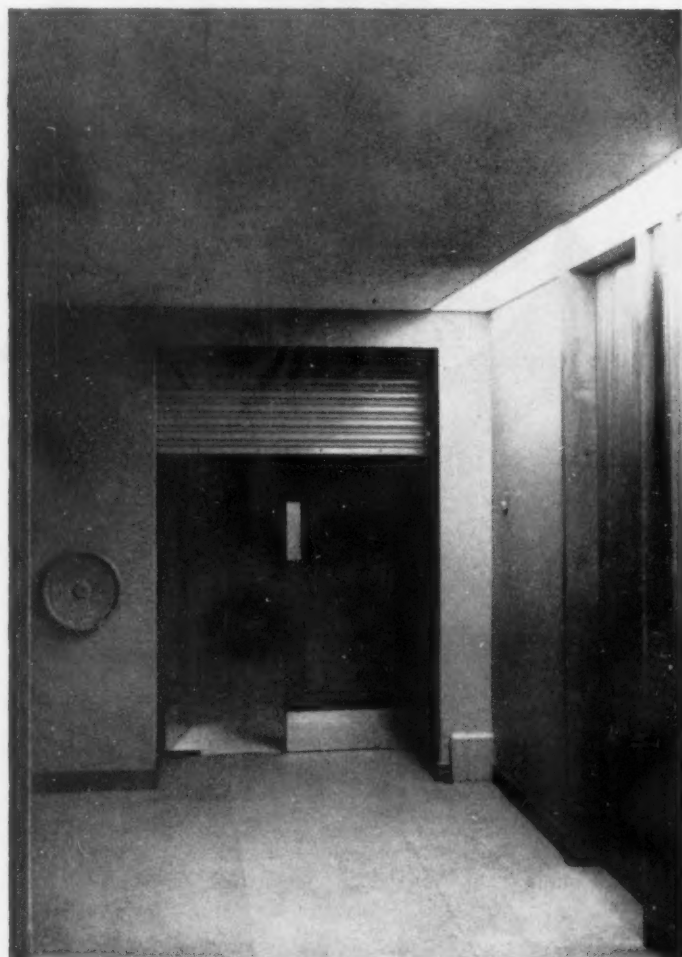


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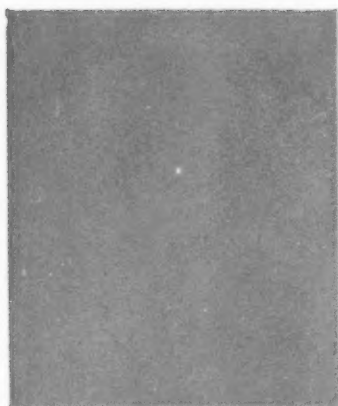
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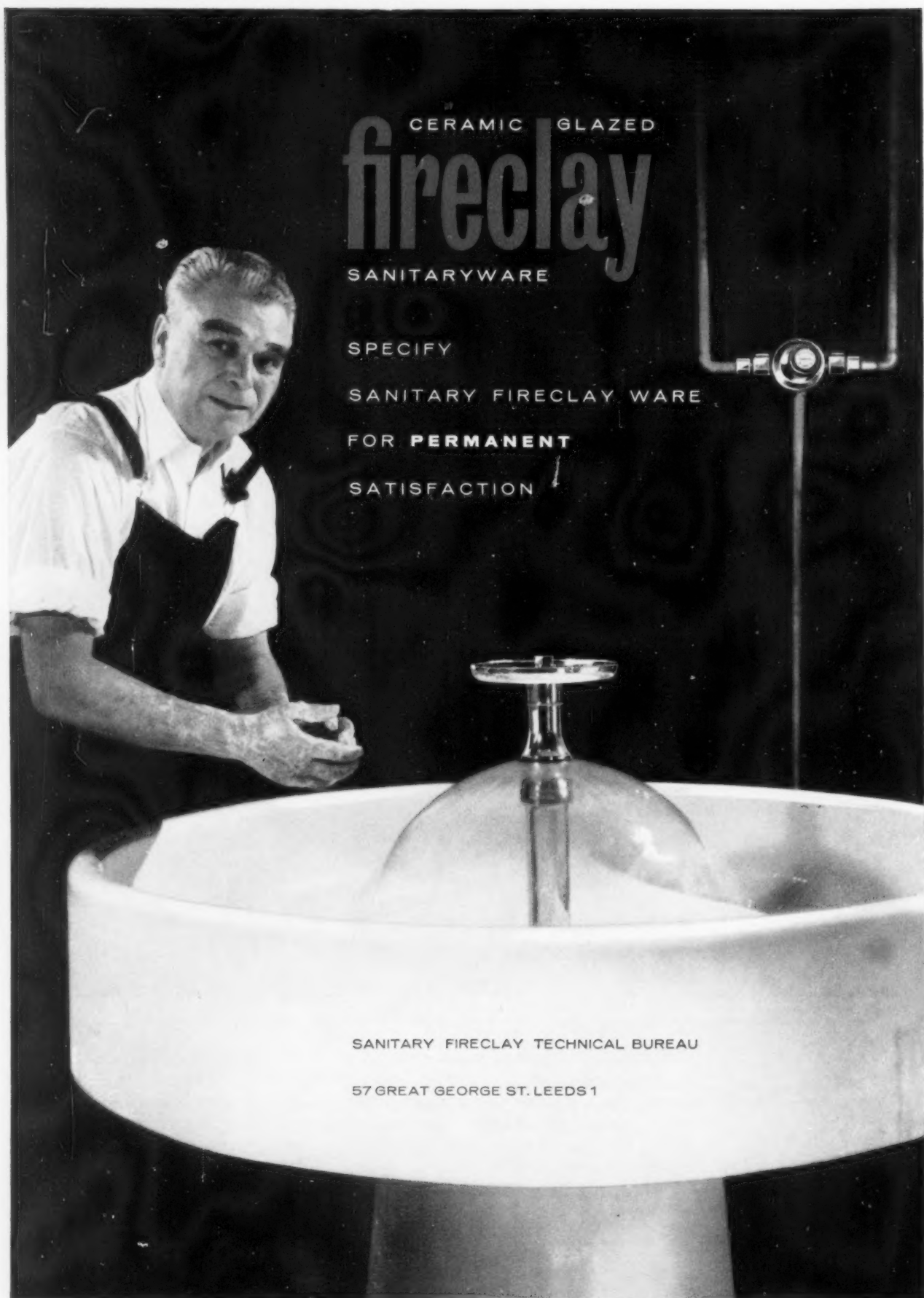
Policemen's feet may not be as heavy as tradition says, but this Accoflex floor has to stand more than the average amount of coming and going. Accoflex tiles offered just what was needed – excellent resistance to hard wear, dirt and grease of all kinds together with ease of maintenance. These qualities combined with a wide variety of colours to fit any decorative scheme make Accoflex the answer to flooring problems in public buildings. Please write for further details.

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WORKING WITH A WILL

"All clean and comfortable,
I sit down to write."

Letters of John Keats.

By A.F.B. Nall, A.M.I.San.E., A.M. Inst. W.

The link between cleanliness and comfort has been recognized for a considerable time; that between comfort and productivity for a much shorter period. Nevertheless, it is now well-established that workers produce more goods of better quality if their conditions are clean and congenial. There is not only the effect during their working hours to consider: good conditions mean less "time off" and good sanitation is the most important aspect of good conditions. Truly, if one is clean, then one is comfortable and can get down to work with a will.

Ceramic-Glazed Fireclay Sanitaryware accords well with modern concepts of industrial architecture. Just as the present-day factory is airy, spacious and well-lit, with a judicious use of colour in its decoration, so are modern designs of Fireclay Sanitaryware of simple and harmonious outline, free from complicated shapes which may create dust and germ traps, thus accentuating the gleaming, high-lustre glaze—as though inviting the user to challenge its sparkling cleanliness.

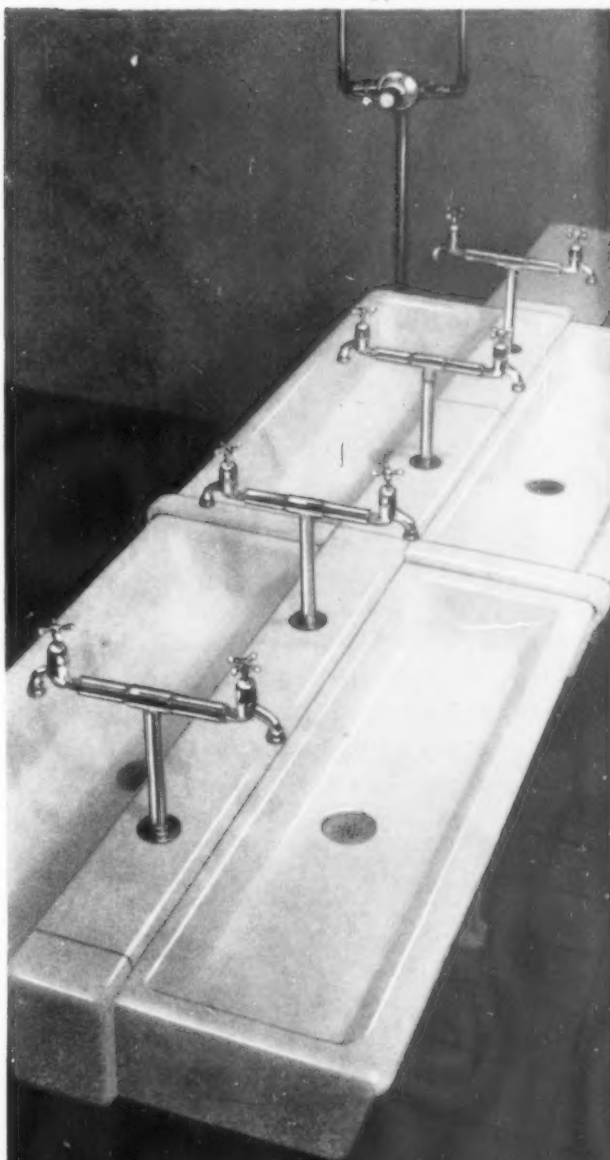
Fireclay Sanitaryware has a special contribution to make under the arduous conditions of factory installation, because it possesses unrivalled strength—the foundation of durability—and its hard, tough body is the ideal base for a vitrified glaze, the feature by which all sanitary ware is judged. This glaze is impervious to acids and alkalis and provides a smooth, glossy, china-like surface which regains its pristine sheen with a minimum of attention.

Ceramic-Glazed Fireclay covers a complete range of appliances for factory use, whether in canteen, wash-room, toilet or first-aid post. There are hand basins for individual or range mounting; island-type ablation troughs for coping with rush periods; water closets with corbel-type pans for easy floor cleaning; sinks with draining boards and work slabs for kitchens; hospital-type appliances backed by years of co-operation with Architects in the design of sanitary equipment for operating theatres and wards and therefore highly suitable for any kind of casualty and first-aid post. Many of these articles can be obtained in colour if desired.

In any factory in which the welfare of the employees is given due prominence (not only for their own sakes, but for its effect on industrial relations and productivity) a full range of good sanitary appliances is essential. The "dark, satanic mills" of the industrial revolution have been out-moded by the Factory Acts and the requirements of H. M. Inspectors but, apart from such considerations, it has been shown that there are tangible benefits to be derived from the generous provision of amenities. Such generosity is best expressed—in this context—by the installation of well-designed Ceramic Glazed Fireclay Sanitaryware, a real essential for the modern factory and equally so for schemes of modernisation.

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

See the exhibits at the Building Centres, London, Manchester, and Bristol.



CERAMIC GLAZED
fireclay
SANITARYWARE

SANITARY FIRECLAY TECHNICAL BUREAU

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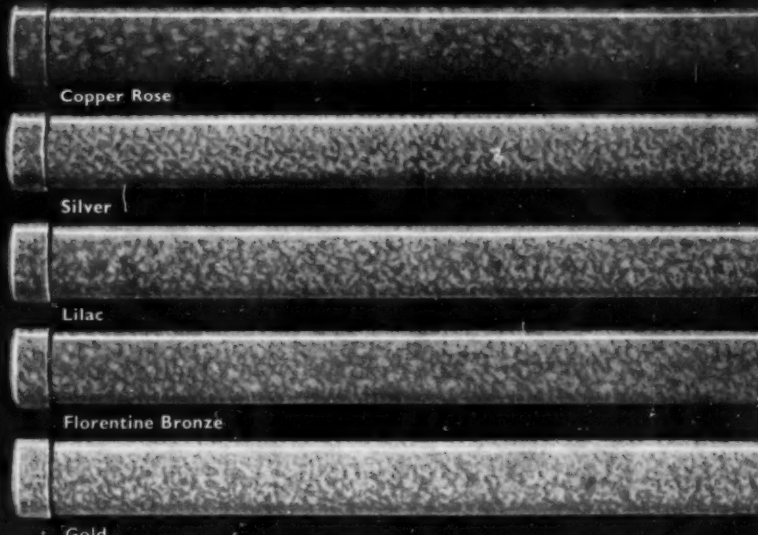

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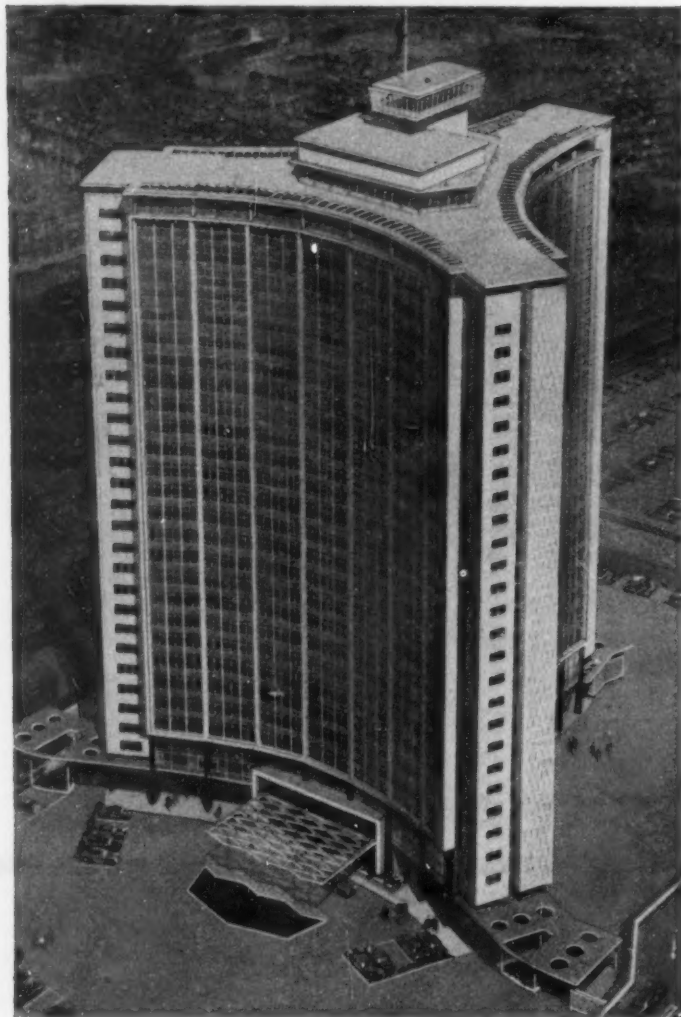
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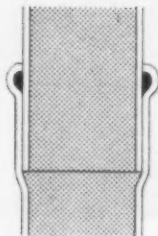
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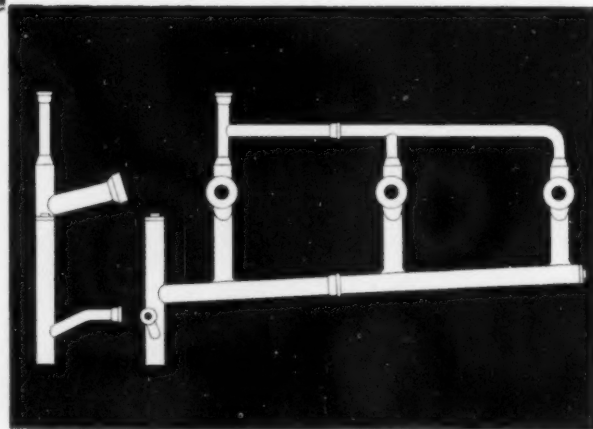


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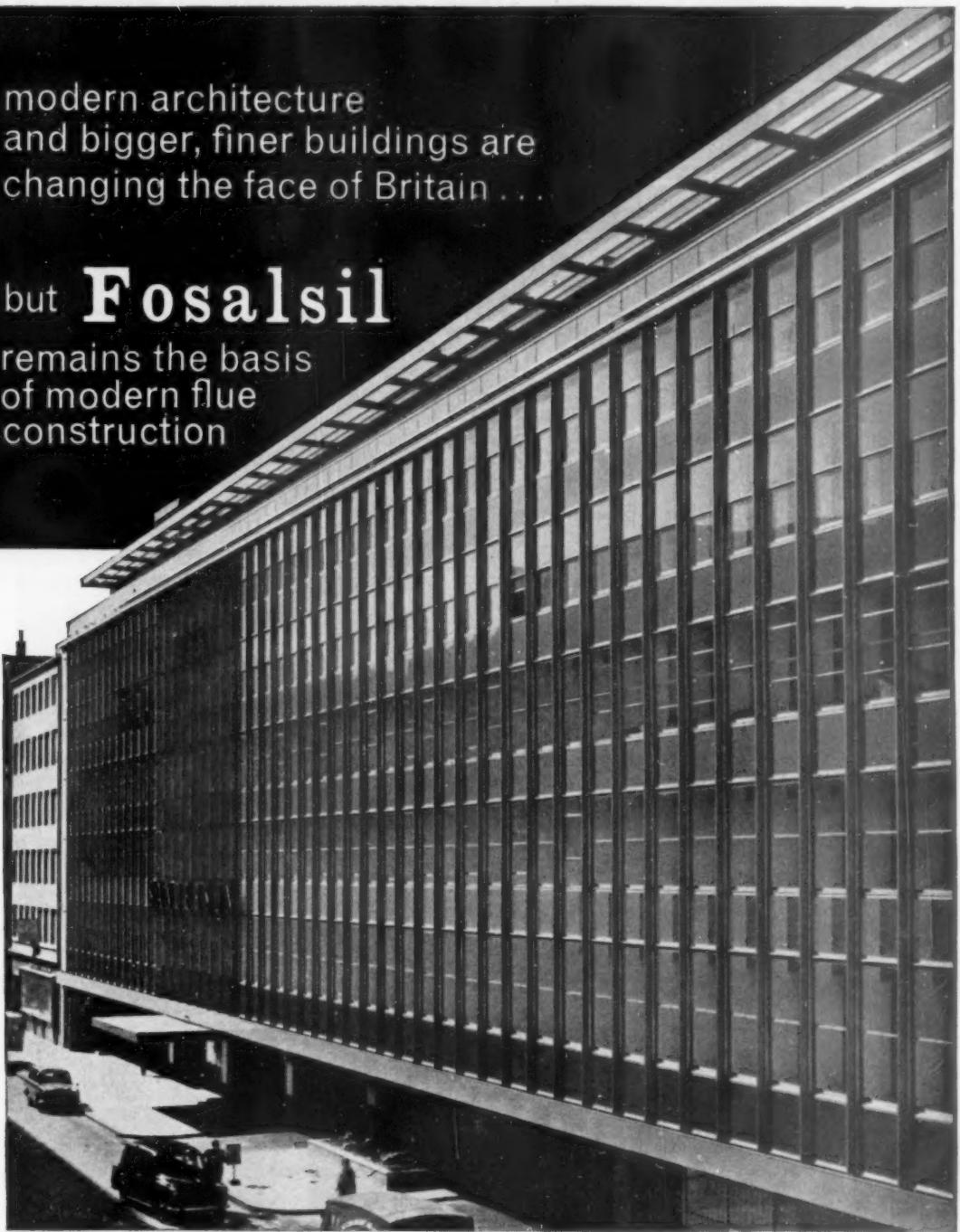
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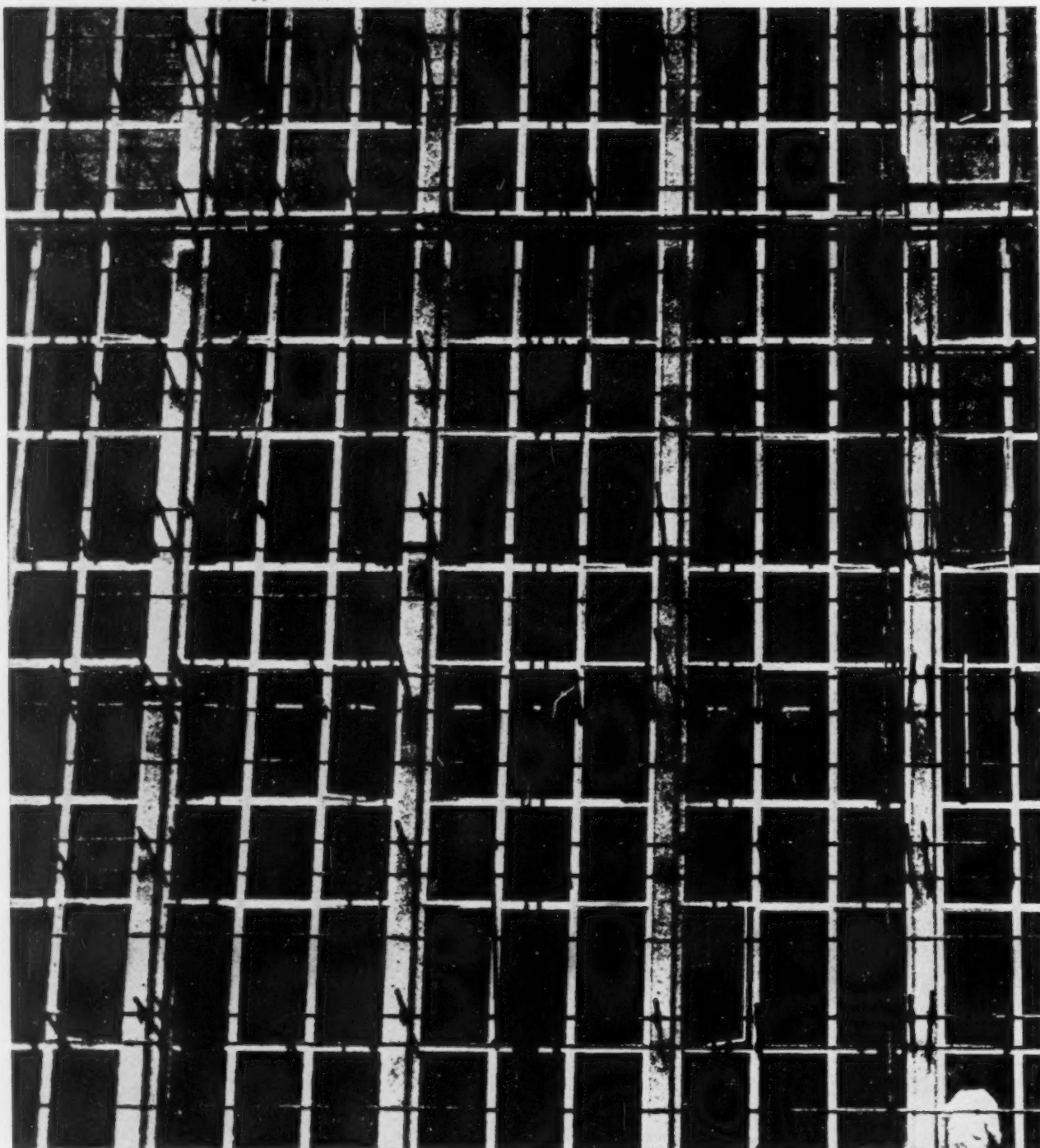
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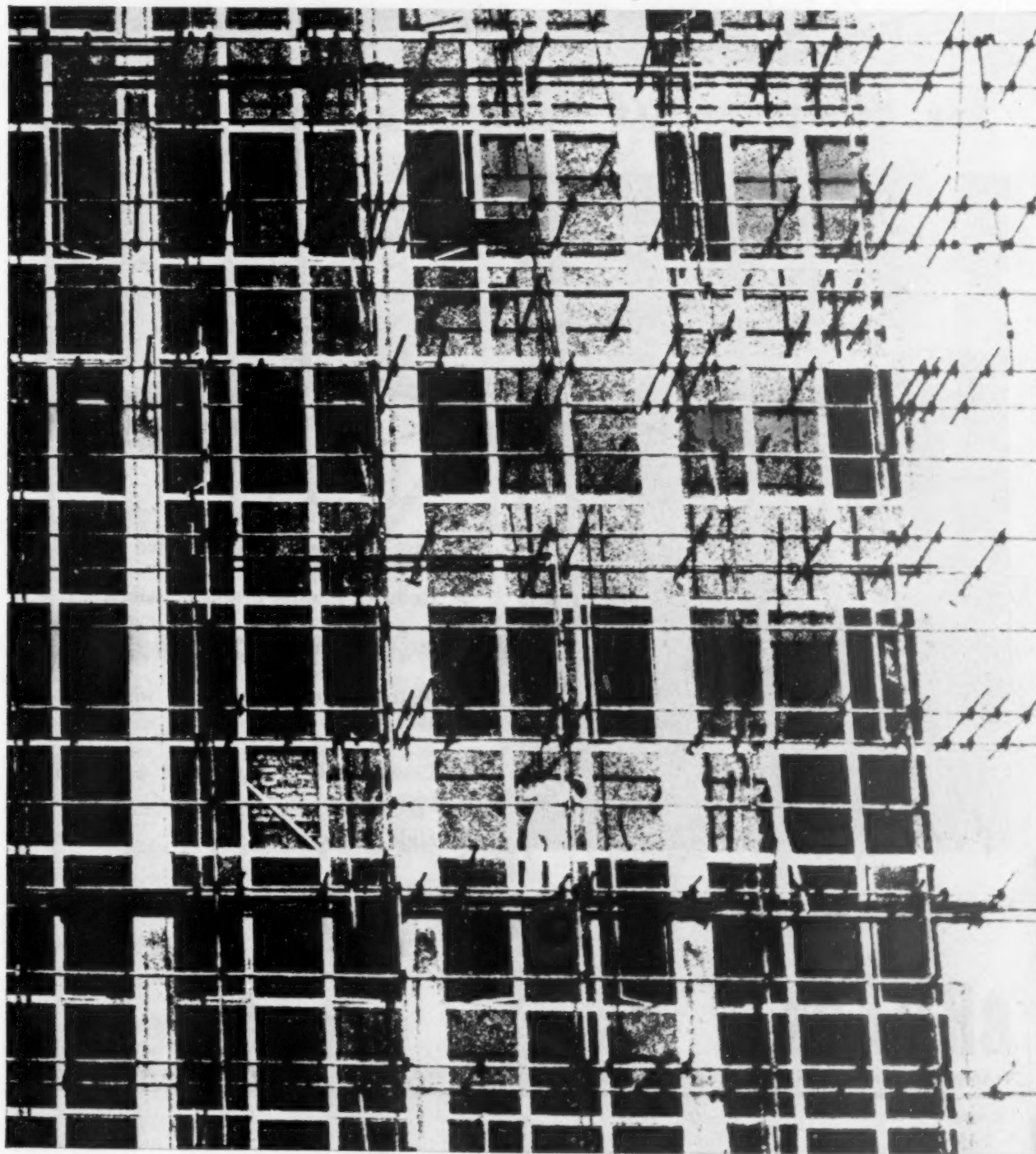
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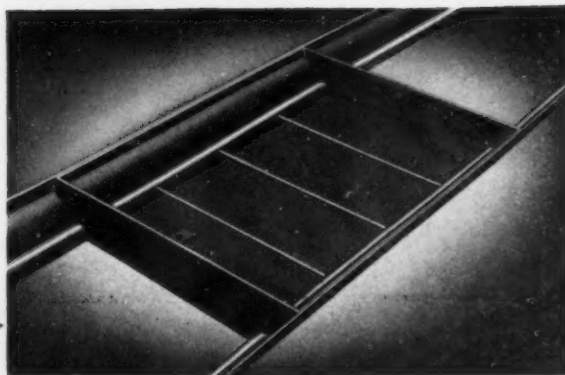
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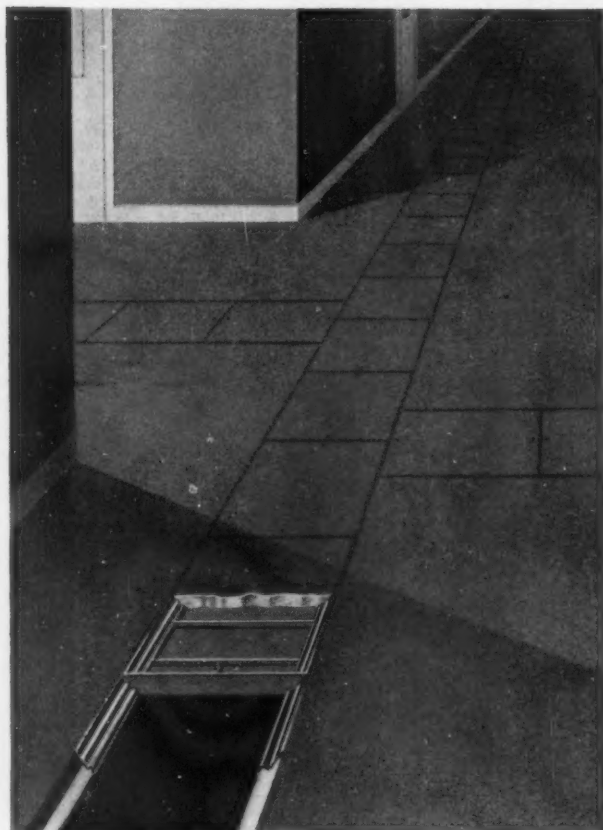
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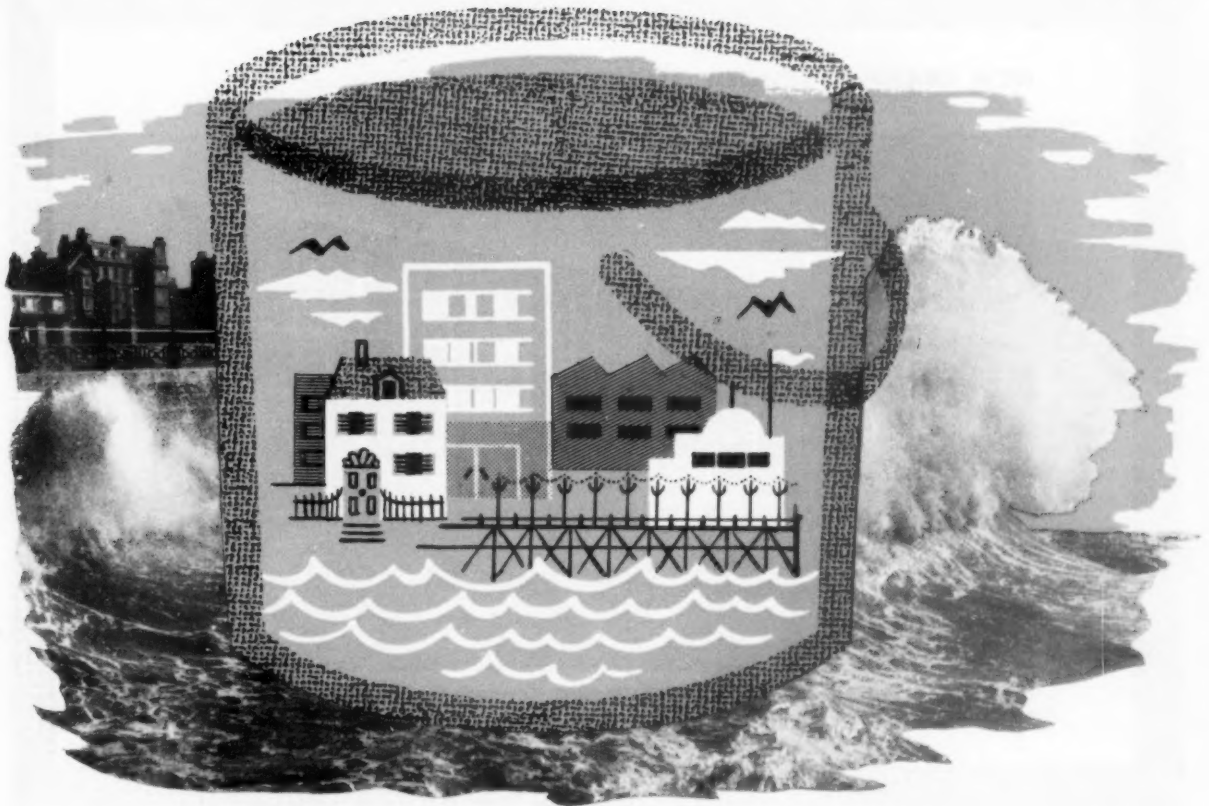
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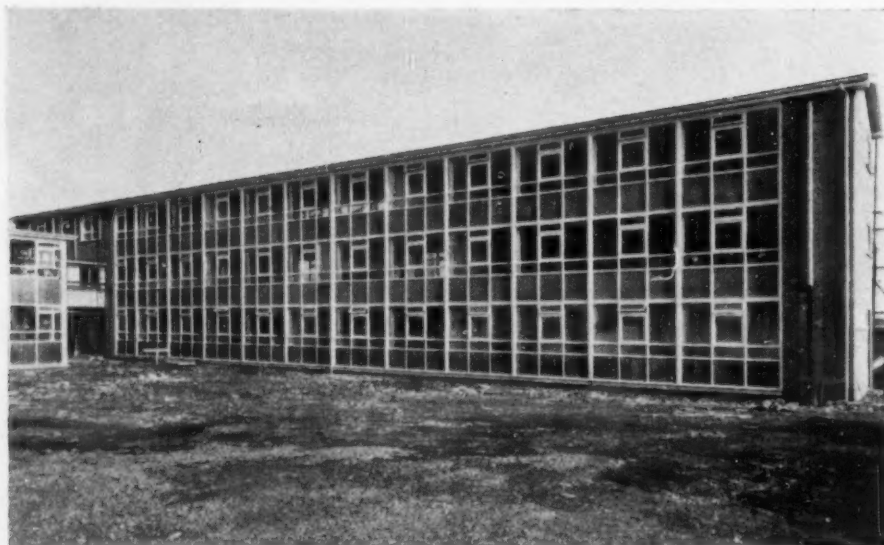
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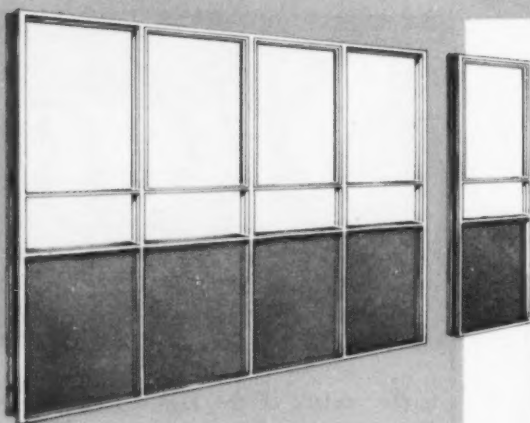
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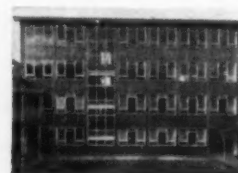


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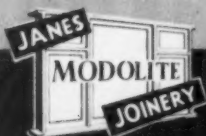
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SHOPPING'S A WALKOVER AT INTERNATIONAL STORES

SHOP: International Stores, Croydon.

PROBLEM: Streamlined routes result in concentrated traffic—and concentrated wear.

ANSWER: Nairn linoleum in Royal Red and Blondwood, contractor-cut to make this vivid directional chequerboard. International Stores use 4.5 mm Nairn linoleum in many of their shops, and find it very hardwearing, despite the stab of female footwear.

COMMENT: In value for money, you can't beat Nairn linoleum.

ARCHITECT: W. J. LEE, LRIBA, ARICS
FLOORING CONTRACTOR:
LEWIS BROS (KING'S CROSS) LTD

BROADMEAD'S 'OPERATION LIGHTNING SHOPFITTING'

SHOP: Broadmead Ltd, Edgware Road.

PROBLEM: How to install a tough new floor with a 'house-style'—at top speed.

ANSWER: Marbled white linoleum, laced with black feature strips, gives a terrazzo 'house-style' effect to the entrance arcade, so that the open shop appears to extend right to the pavement's edge. Even here, completely exposed, Nairn linoleum stands up to the weather very well.

COMMENT: A blend of imagination and common sense. Broadmead can—and do—lay a shop floor like this in 48 hours.

FLOORING CONTRACTOR: THE LINO TILE CO

SMITH'S PUT WELCOME ON THE FLOOR

SHOP: W. H. Smith, Ealing.

PROBLEM: To make part of an extremely large shop look friendly and pleasant.

ANSWER: Lay (contractor-cut) Nairn lino tiles from wall to wall, with red and yellow tiles scattered at random. The architect has used Nairn linoleum on this floor to give the record bar a relaxed, 'linger-awhile' feeling.

COMMENT: Nairn linoleum is for looking at as well as walking on.

ARCHITECT: H. F. BAILEY, RIBA
FLOORING CONTRACTOR:
THE LINO TILE CO

shop flooring—



WAITS—WHERE FOREGROUND IS BACKGROUND

SHOP: Waits, New Malden, Surrey. Wallpaper showroom.
PROBLEM: Floor must be attractive yet calm and quiet, act as foil to many different wallpaper patterns.
ANSWER: Lavender grey lino tiles by Nairn give unobtrusive background, help mood of reflection, blend with any and every design.
COMMENT: This floor contributes a lot without saying a word.
ARCHITECT: GEORGE WATT · FLOORING CONTRACTOR: LINO-INSTALLATIONS LTD

Four shops, four problems, four solutions— with Nairn linoleum

You see here four widely different shops: a fast-moving, hard-selling, electrical goods shop; a quiet and dignified wallpaper showroom; the browse-worthy record bar of a bookstore; and a streamlined supermarket. In each case, the floor poses a different problem—and in each case Nairn linoleum provides the solution.

A LONG LIFE—AND A CLEAN ONE

You'll see the detailed hows and wheres of these solutions beside each picture. The two big reasons why so many architects specify Nairn linoleum for shop floors are its long life and its ease of maintenance. Nairn linoleum is extraordinarily hardwearing; one store laid Nairn lino tiles at the head and foot of its escalators four years ago, and today—forty million hard-walking customers later—the floor is still in good condition. When it comes to maintenance costs, Nairn linoleum can save you up to one third as against thermoplastic floors.

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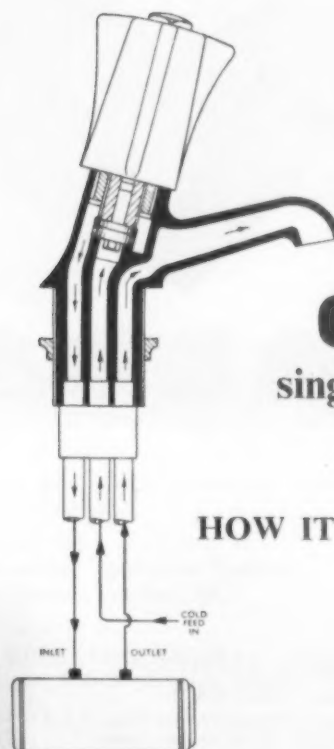
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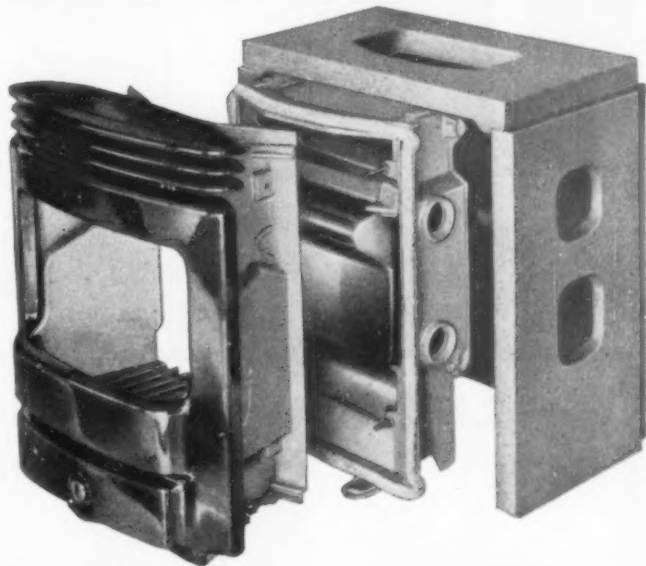
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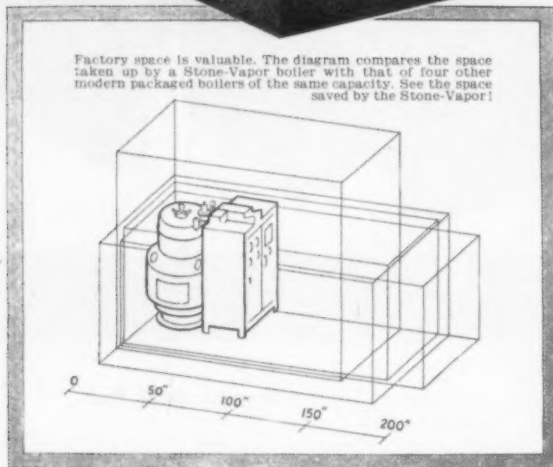
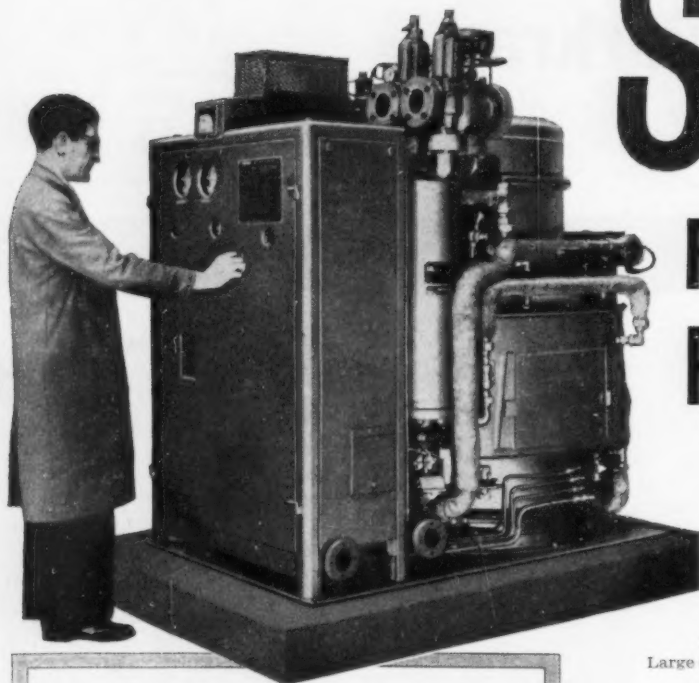
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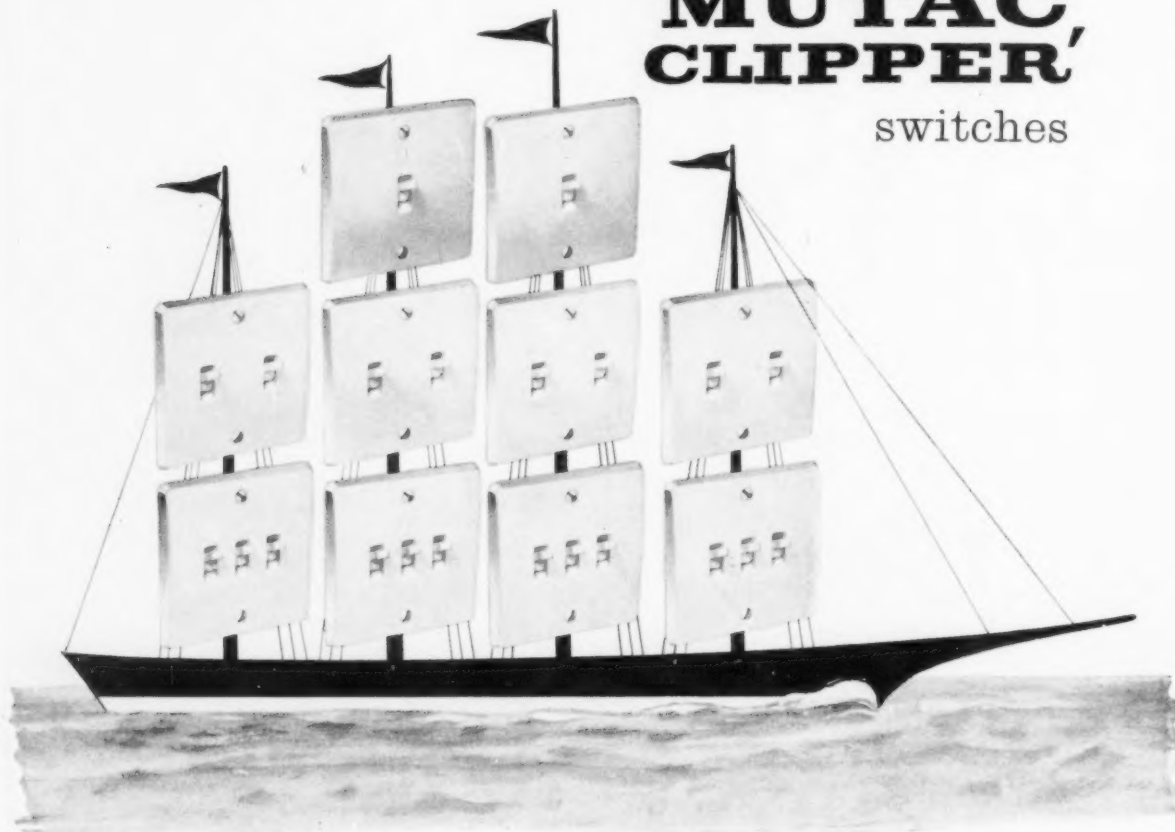
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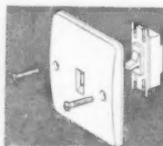
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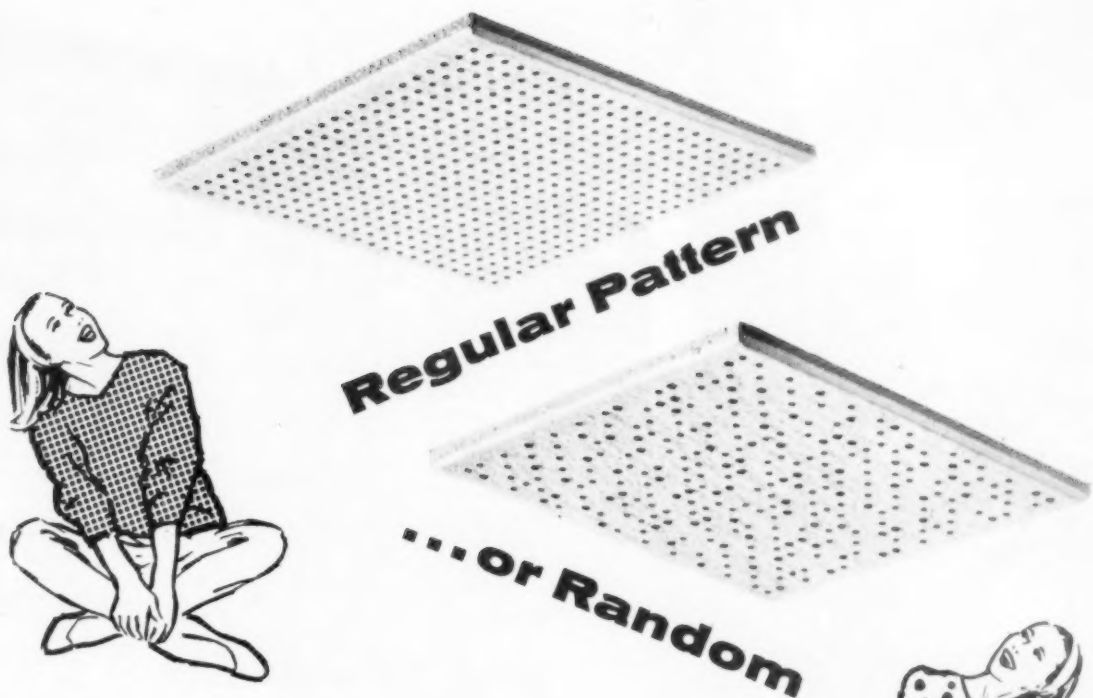
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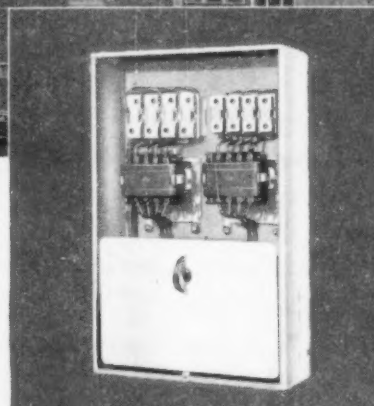
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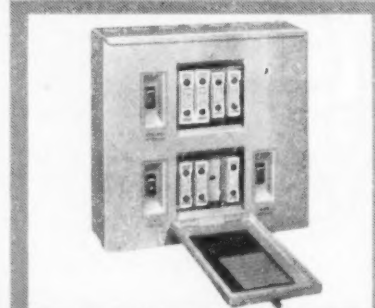


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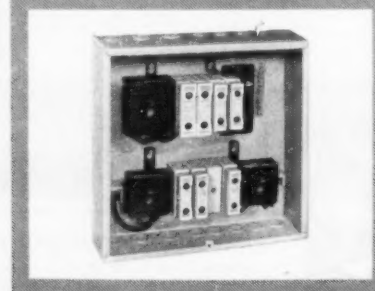
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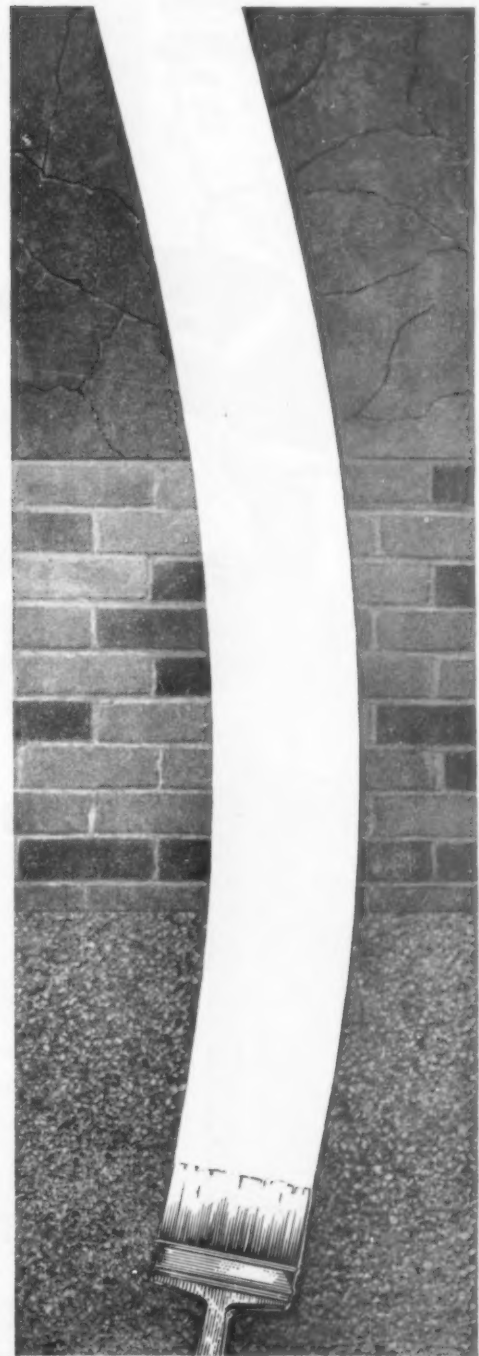
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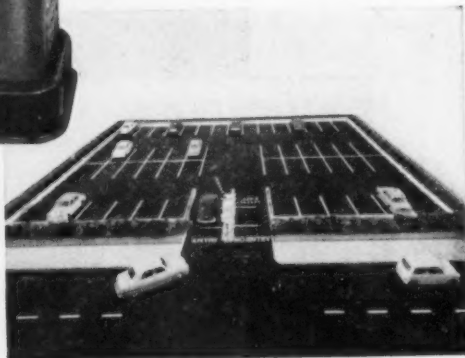
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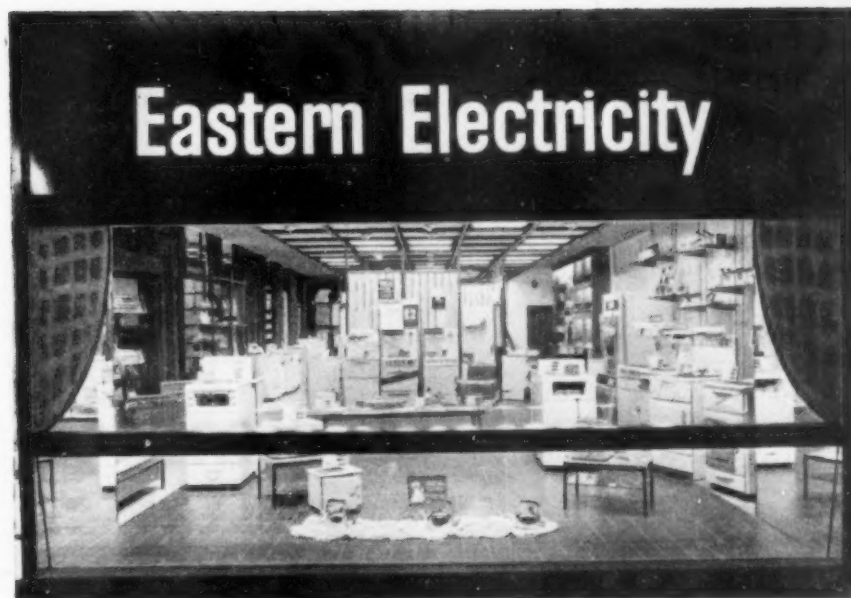
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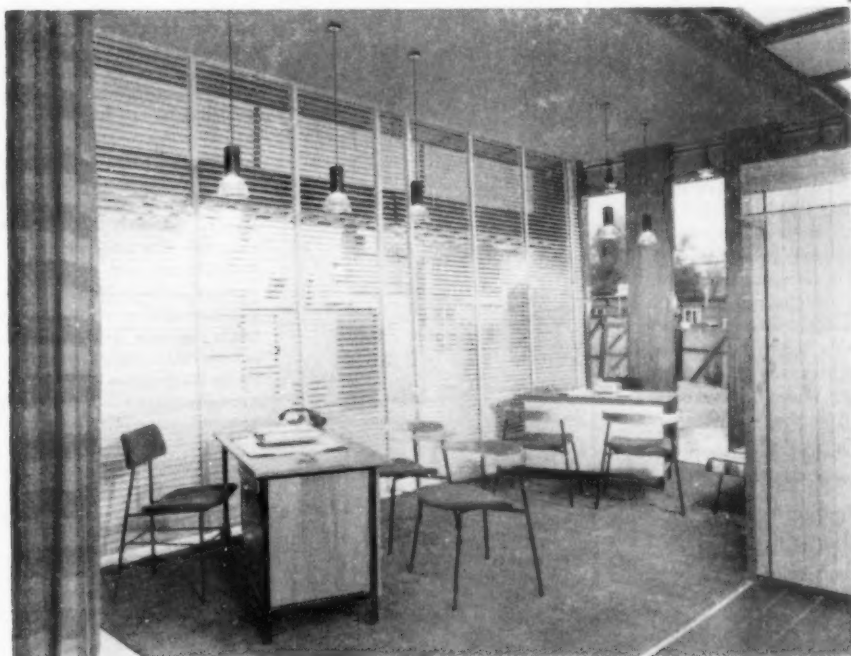


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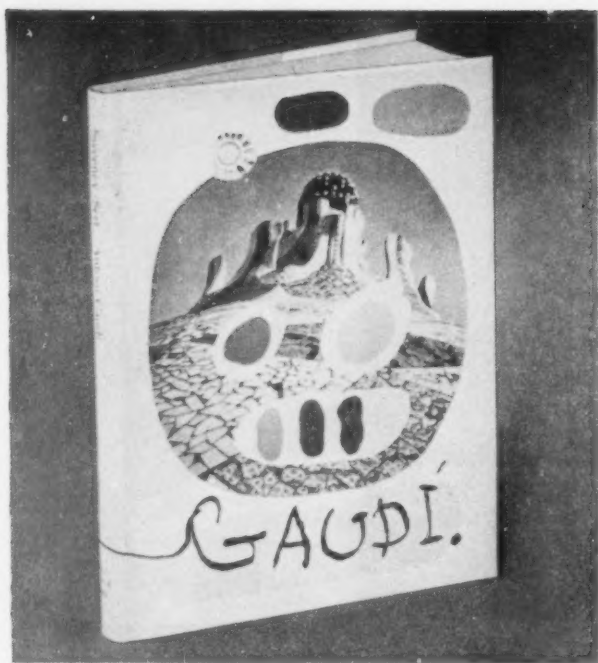
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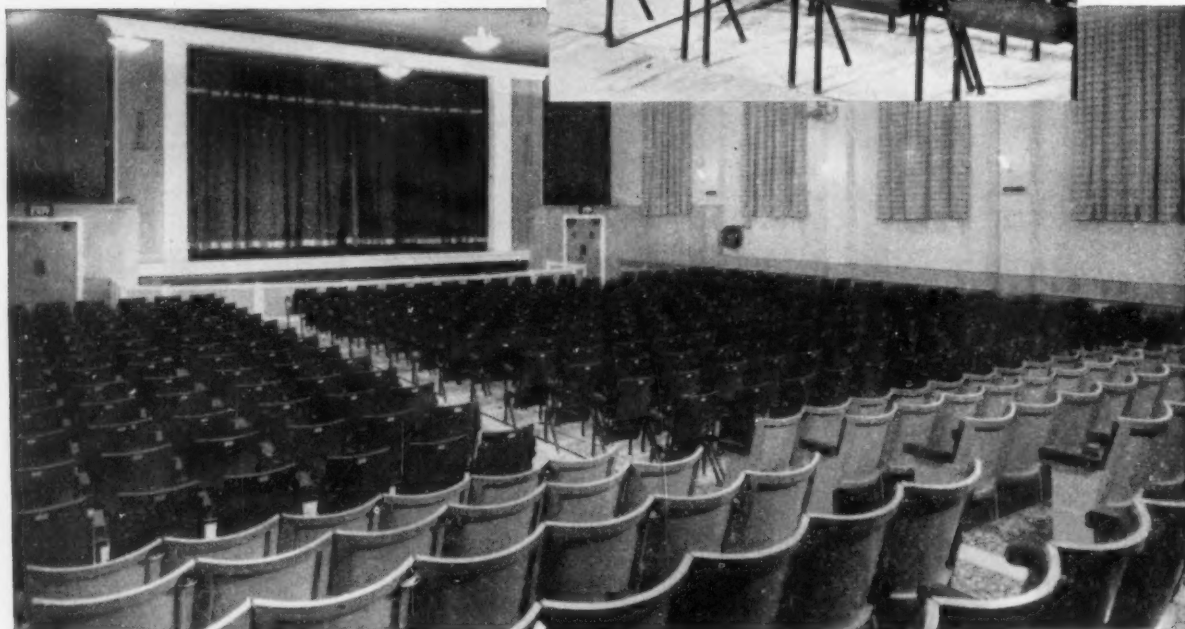
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THE ARCHITECTS' JOURNAL for March 23, 1961

INSU

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Fibreglass in the attic and between cavity walls stops heat escaping, and keeps it inside where it belongs. The cost is small—practically speaking negligible—in comparison with the cost of a house. But the difference it makes is far from negligible. It is one of the simplest and most certain contributions an architect can make to his clients' comfort. Not only in winter but in summer. Insulation works both ways, keeping heat out as well as in. In fact it is now recognised that insu-

lation is not a luxury but a necessity. We feel sure that you will agree that it should be standard practice and we hope that you agree that it should be Fibreglass. If you don't perhaps you will drop us a line and allow one of our technical people to put the facts before you.

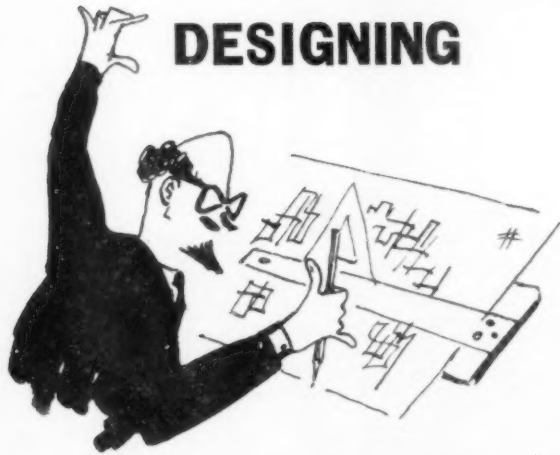
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NOT QUITE ARCHITECTURE

A Model Essay upon the Vanities of Anticipation as Exemplified in the Works of Fred Hoyle, Genius

Introductory anecdote, suitable for the beginning of a model essay.

I stuck, with one foot on the kerb and the other hovering over Whitehall, transfixed at the sight of the sun's dim early morning disc reflected in the side of a passing furniture van. With involuntary dread, I looked round to reassure myself that it really was the sun, and it was, standing at nine o'clock to the face of Big Ben. My foot hit the road surface and I walked on, delivered from the spell of what I had been reading on the bus, the Penguin re-issue of *The Black Cloud*, by Fred Hoyle.

Middle, or development, section as required in all essays to O level, GCE.

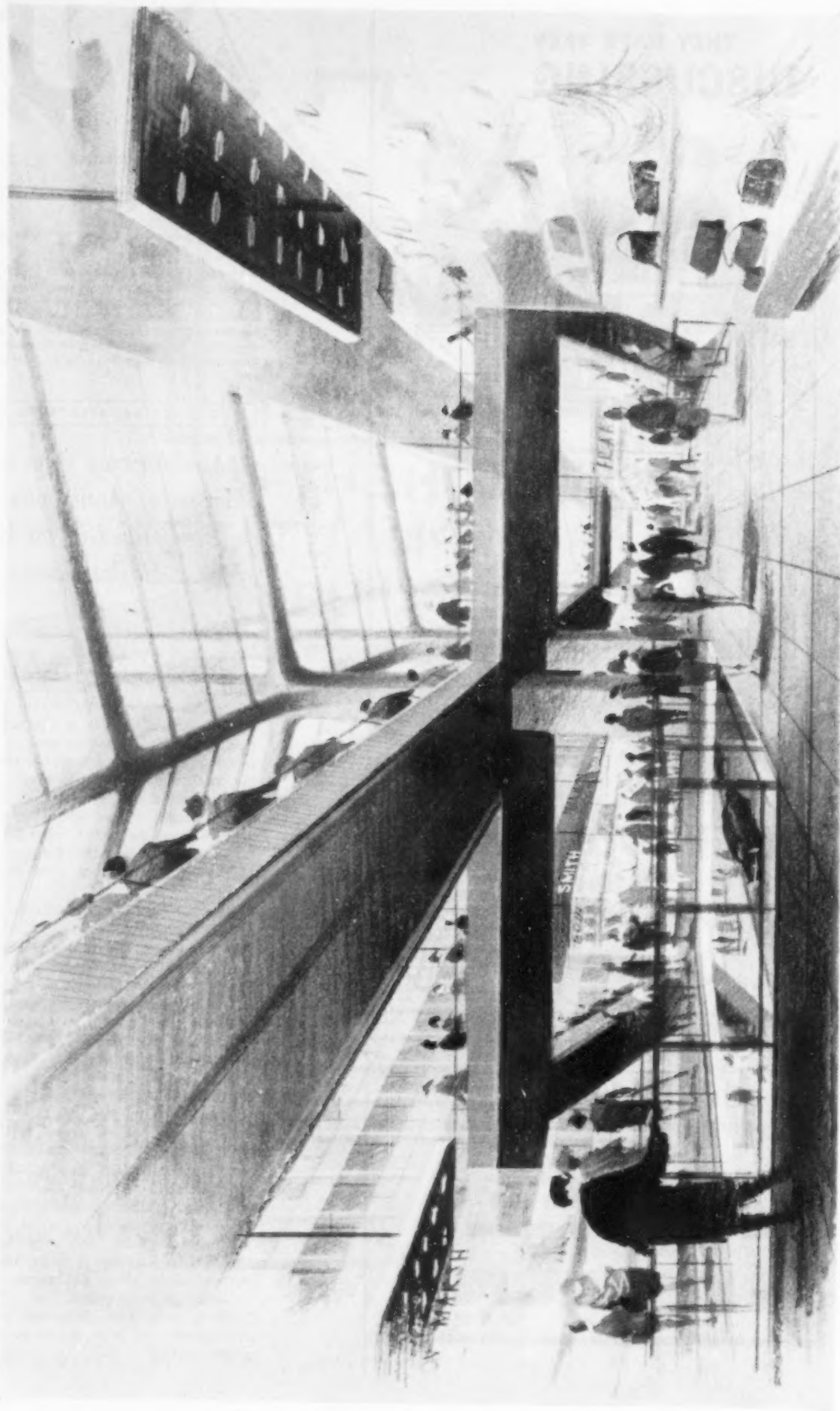
This is the same Hoyle that the Pop Press regards as the "loser" after Martin Ryle's claim to have established a unitary, explosive beginning for the Universe ("Book of Genesis is Right!"), as against Hoyle's Steady-State universe. *The Black Cloud* is no work of cosmology, but of science fiction, and does not bear directly on what the universe is doing, expansion-wise. It was published in 1957, which is not very long ago, and depicts events beginning in 1954, which is getting uncomfortably close. But in one passage it quite definitely poses the question "Did Hoyle know what Ryle was up to in 1956, and what Ryle hoped to prove?" Towards the end of the book, the British team of scientists under Christopher Kingsley is interrogating the sentient cloud about its origins, and the following exchange occurs:

"But it must have happened when the first member of your species arose," suggested McNeil.

High Oxford Street

Schemes for "doing something about Oxford Street" have been in the air before, but the boldest and most thought- and question-provoking solution, putting pedestrians on decks above the traffic, was presented this week at a meeting of the Society for the Promotion of Urban Renewal at the RIBA.

Planned and designed by Borys, Rigby Childs and Glover, it was explained to the meeting by R. Rigby Childs (whose paper is summarised on p. 419) and here Norah R. Glover sketches the pedestrian deck, which would span the road, connected with other levels by escalators.



"I would not agree that there ever was a 'first' member," said the Cloud. McNeil did not understand this remark, but Kingsley and Marlowe exchanged a glance as if to say "Oh-ho, there we go. That's one in the eye for the Exploding-Universe boys."

Pretty good, huh? Even though the preface to *The Black Cloud* warns the reader not to identify "opinions forcibly expressed by a character with the author's own . . . this association may be unwarranted," the planting of a reference to the Cosmological Controversy as far forward as 1965 is so stalky that one suspects this disclaimer to be more in the nature of a trailer for the plant, and feels confirmed in suspecting that the author identifies himself pretty strongly with one of the characters.

Counter-development, a refinement liable to cause an essay to be promoted to A level, GCE.

Even so, this neat anticipation is only craft going before a fall—terrible things can happen to an SF author who extrapolates only short futures. Some time after Kingsley's team have settled down to a marathon natter, day in day out, with the Cloud, they learn from their tame member of the Establishment (named Parkinson, by a stroke of anticipation that borders on genius) that the Russian and US Governments are about to do something absolutely unheard-of to the Cloud. Twenty lines later the reader unbates his breath with an audible *Pah!* when he discovers that this unheard-of thing is the launching of space-rockets with hydrogen war-heads—a technical development that apparently comes as a complete surprise to all the scientists in the Kingsley team.

Alas for anticipation. Any mass-rally of galactic dust that gets within range in any real 1965 will soon be so lousy with probes, luniks, sputniks, Explorers, Tiros, artificial planets, orbital observation posts, baffled apes, ageing astronauts and Russkie Huskies that it will have to swat the Earth *en passant* to stop the itching. At about the same time as Fred Hoyle was passing the page proofs of the book, some nervous Ivan must have been passing out Sputnik I for its journey to the launching pad, thus making nonsense of the whole argument, which rather depends on the Cloud being surprised to find intelligent (?) life in the Solar System—an unlikely situation if it had been pelted with chattering hardware from the moment it got this side of Mars.

Envoi, or ending, without which no essay will ever make the anthologies and be forgotten for ever.

It seems that the man who commits himself to extrapolate in public is more likely to be caught out by what happens next than what happens after that. In short (*phrase signalling an aphorism suitable for quotation by other authors*) Science Fiction may be described as history with the obvious improbabilities omitted.

REYNER BANHAM

The Editors

WANTED: A NEW RESPONSE

WHEN our system of local government was first established it was never expected to carry so great a burden of responsibility as is now the case. Certainly it was not envisaged that the authorities established under this system were to become the chief building owners in the country and, being this, were to become those with the greatest opportunity for bettering building design and construction. The miracle, therefore, is not that this system creaks under this unexpected load but that it bears up at all. A second and even greater miracle is that this local government system with its low salary scale, its ultimate dependence on spare time councillors with no particular attainments and its massive safeguards against imaginative spending, should have attracted enough gifted people among its officers to make possible the great technical revolution associated with the Hertfordshire County Council, the MOE, and CLASP. Some years ago the Royal Institute of Public Administration instituted an enquiry to find out how local authorities were managing their building programmes and whether their way of doing things could be improved. The Report of this enquiry which is out today* is not concerned with Government policy but with the technical problem of getting buildings designed and put up as well and as economically as possible. It is thus of particular interest to architects. It will also be most gratifying to the profession for it comes down unreservedly on the side of technical innovation. What is wanted, it says, is cost analysis and control, more development work by Ministries and by local government, programmes established two or three years ahead, bulk ordering in the manner of CLASP. It is for all who participate in central or local government to make these things possible and see that they are done. For only in this way can we respond as a profession and as a nation to our extraordinary opportunities.

RUNNING THE JOB

Undoubtedly the profession needs a shake up. That is why the RIBA, through its office survey, is looking into the way architects organise themselves and run their practices. It is also why some people, with a splendid show of misguided fervour, are pushing the idea of a two-tier profession. We are completely opposed to the two-tier idea, believing that the very survival of the profession depends on having the architect as an architect and not as either an impractical dreamer or an unimaginative technician, depending on which tier he is in. It is essential for the all-round capabilities of the architect to be developed. That is why we believe in the job architect system.† In line with this policy we commence publication in this issue (see page 442) of a serialised handbook

*See review on page 423. †See our leader, AJ, March 9, 1961.

on contract administration. It is a step-by-step guide to running a job, and every architect, in particular every job architect, should keep a copy by the drawing board or on a shelf by his desk. In this way we take an important practical step towards raising the status of the lower end of the profession, with every architect a potential practitioner.



HOUSES BY ANON.

None of you will be surprised by the contents of the "Guide to Better Homes" put out by *House Beautiful* as a follow-up to its search for the twenty-five best spec-built houses in the country. It is pretty clear by now, as Ian Nairn remarked in last month's *Architectural Review*, that only a handful of firms have done anything worth while. I'm told that an enormous number of spec builders were approached and that the 25 chosen were the only passable ones among 150 considered. "You will notice," says an editorial, "that in most cases the builder has either used the services of an architect or employs one on his own staff." If you plough through this collection of semi-free plans with random hearthstones and timber-plus-brick elevations you will probably hazard a guess at the professional designs. But why no architects' names? Has somebody got something to hide? Or does *House Beautiful* think that "architect-designed" is a sort of minimum guarantee of quality, like the BSS kite-mark?

SEARLEY CRITICS

It's good to see that Alasdair Milne, the new producer of *Tonight*, is following his predecessor, Donald Baverstock, by featuring architecture in the programme. In the last week or two there have been interviews with Henrique Mindlin ("Brasilia is costing a lot, but less than the war in Algeria is costing France"); Victor Pasmore—the saviour of Peterlee—looking and sounding rather like Spike Milligan imitating Victor Pasmore, and Peter Chamberlin—of ditto Powell and Bon, who was asked about his new school for girls at Southwark.

The last interview was splendid. Mr. Chamberlin argued with attractive modesty—and without making excuses—as some of the Searleiest building users criticised it and the camera moved mercilessly to points of criticism, such as an inch-high threshold that everyone trips over, an awkwardly-placed stanchion base and a first-floor window sill too low for safety. Once or twice he had to carry the can for the people who briefed him and it was a pity the LCC wasn't represented to take some of the blame. In spite of the criticisms made viewers will have realised that this is an exciting building. At least, I hope they will. I can't help thinking that interesting though it is to see a good architect in the pillory, the *Tonight* team could also make architecture viewable by dealing with it in a more positive way.

Incidentally, one of the positive features I like about the Southwark school is the careful placing of a courtyard pool. The architects have learned a lesson from another LCC school in Kensington where unintentional dips have been taken not by children, but by two headmistresses, a policeman and a gas inspector.

THE BRIGHTER RIBA

It's a pity there are 200 and however many days to Christmas because the

ideal present for the architect has just been published as a joint Tiranti/RIBA effort—50 or so reproductions from the RIBA collection. For five shillings you can have Burlington, Kent, Wren, Gibbs, Jones, Holland, Soane, Cockerell, Barry, Webb and Voysey—not to mention a Palladio, a Rubens, some megalomaniac vaults by Boulée and some sketches by Garnier for the Paris opera. And others, including only one dud—a coarse and nasty Halsey Ricardo.

This is another sign that the RIBA is doing an increasingly better job as a learned body. Recently we have also had the hospitals' handbook, which is the first product of Maurice Goldring's regime as Technical Information Officer. And again on the historical side, I hear that John Harris's catalogue of the Inigo Jones drawings is producing a response from the art-historical profession. Incidentally, doesn't such a labour of love and scholarship deserve something better than a mimeographed printing?

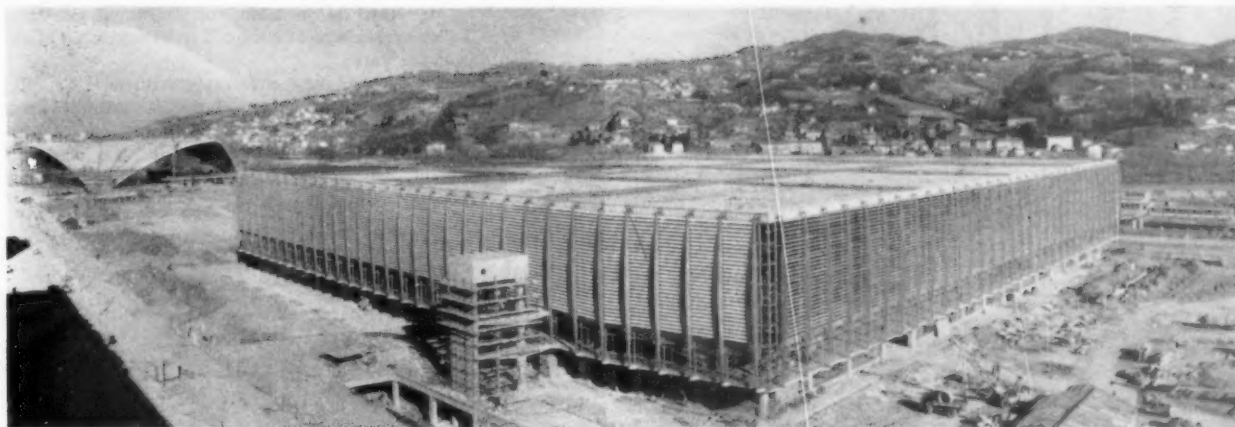
BETTER LITERATURE

Just in case you are taking the new appearance of RIBA literature too much for granted, you might like to look at a current exhibition in Portland Place which shows the new work (by the Public Relations Department, Bill Howell and Herbert Spencer) against the old style of off-white or sickly-pink documents.

All types of printed material have now been categorised and Herbert Spencer has devised rules of layout, type face and style which are producing unity, clarity and elegance. "A" sizes have been adopted throughout and for speedy reference a different colour is to be used each year. Members who are peevish about the "extravagance" of using "A" sizes ought to realise there is a certain advantage in reading material being readable.

THE CLIENT IS SOMETIMES WRONG

"The architect's primary duty is to satisfy his client!" That, of course, is a nonsensical statement, and Jack Pritchard had an easy time demolishing it the other evening when it was the motion before the Architecture Club. He did so with liberal quotes from Gropius to reinforce his argument that



the architect's primary duty is to society, in so far as it is compatible with the interests of his client.

*

David Woodbine-Parish supported the motion with a logical argument—in legal and commercial terms—in favour of satisfying the client on matters of capital investment, maintenance costs, time and so on. Also debating was Sir Owen Williams, a founder member of the Club, who returned after a 20-year absence to repeat a favourite theme—that a customer is given what he wants but a client gets what he *needs*.

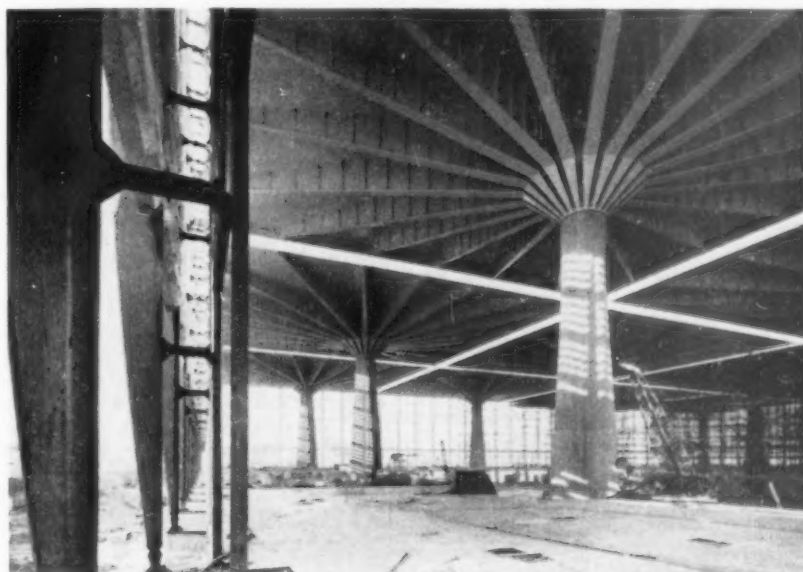
RECALLING THE HUNDRED DAYS

"International Labour" is the theme of Turin's summer exhibition to celebrate the centenary of Italy's unification—and just to show what *national* labour can do, the columns of Nervi's exhibition building (said to be the highest columns in the world, at 75 feet) were each constructed in eight days. Gio Ponti, the show's co-ordinator, told us this at the Café Royal last week. After brushing aside the official interpreter he described the building and said that until now the highest columns were those at Karnak—and no one knew how long it had taken to build them.

*

The COI will, I gather, be present with a British pavilion illustrating scientific achievements. Their hand-out material last week, however, included no indication that E. R. I. Allen was responsible for the design, nor any photographs—though we were told that these were available from an agency.

The Italia 61 exhibition hall by Nervi is nearing completion. Above: a general view. Below: the interior, showing the 16 concrete "trees" supporting the steel roof, which covers 260,000 square feet. See "Recalling the Hundred Days."



COSY VICTORIANS

If I don't say something quickly about John Gloag's latest book*, published today, there will be another new one on my desk by the same prolific author. The theme of the book—which shows the author's well-known facility for accumulating apposite facts and out-of-the-way pictures—is that the Victorians' love of comfort was responsible for most Victorian characteristics. Even if you feel that this love of comfort was more an effect than a cause, you will enjoy the drawings and engravings—familiar illustrations from *Punch* and unfamiliar ones from trade catalogues and women's serial stories. The readable text, divided into chapters like "Cosy Hearth," "Comfort in Travel" and "Comfort and Conscience," is too dis-

cursive and haphazard to make a useful reference book, but is full of fascinating information.

NO BIRKING AT BERKHAMSTED

Hats off to Berkhamsted, a small town which is taking a lively interest in new architecture as well as in preservation. The town has voted at a public meeting, organised by the local Citizens' Association, against the UDC's decision (reported here) to build an estate of 150 houses without the help of an architect. At this meeting, where the voting was 84 to 4, it was also decided that a committee should study means of avoiding the demolition of old cottages.

ASTRAGAL

* *Victorian Comfort: a social history of design from 1830-1900.* By John Gloag, Adam and Charles Black. 50s.

LETTERS

Malcolm MacEwen

ID

Roderick Enthoven, F.R.I.B.A., F.S.A.

G. Laurence

The Sussex & Dorking United Brick Cos., Ltd.,
Horsham, Sussex.

K. A. Ingersent

Department of Agricultural Economics, University
of Nottingham.

Sherban Cantacuzino, M.A.,
A.R.I.B.A.

Architecture on TV

SIR: One is entitled to expect that Reyner Banham, as a scholar and historian, checks his facts before retailing gossip or guesswork as fact. In his letter on the problems of presenting architecture on television he clearly implied that the Third Programme can find no articulate architects, and must, therefore rely on professional journalists.

He backed this view by asserting that, with the exception of Walter Segal, six architects named by Ramsay Short had been listened to and tested by Leonie Cohn or Prudence Smith for the Third Programme. And, he concluded, only one of these (evidently Peter Smithson) "found his way on to the air"—the implication being that the others had been rejected. In fact, none of them has either been "tested" or rejected.

The facts, as I have discovered by speaking to the people named, are as follows: Bill Howell has never been asked to broadcast, nor has he been "tested."

Andrew Derbyshire was once asked by the BBC to speak about an ILA conference in the North of England, but lost interest when he found that he was expected to pay his own expenses.

Peter Chamberlin has neither been asked to broadcast nor has he been "tested" but he has appeared on television.

Eric Lyons has never been "tested" by Leonie Cohn or Prudence Smith; he has, however, taken part in Building Matters and in television programmes with some success. Sound broadcasting and television are, in any case, entirely different media, and success or failure on one does not spell success or failure on the other. When the BBC decides to take the plunge on television, and applies the same amount of brains and money to the solution of the problems of presenting architecture and building as it now applies to science there will be no lack of material, ideas or even articulate architects.

MALCOLM MACEWEN

66, Portland Place,
London, W.1.

Human Sciences

SIR: I was delighted to hear—on the radio recently—that Mr. Reyner Banham is coming round to a point of view that, if it were

widely adopted, could "save" British architecture. He was talking about, "... using the human sciences," so he is not quite there yet—but perhaps one day he will take his courage in both hands and begin to think in terms of real people, instead of abstract conceptions.

The escape into the dream world of abstract conceptions is the ruin of our architecture—whether the dream is of a long-lost Georgian paradise, the "image" of the no-longer-new Brutalists, the intellectual pleasures of structure or the sensual fascinations of aesthetics. British architecture should start a big love-affair with real life. Where that has happened (early Herts Clasp) the results are enormously promising.

It would be a revolution in outlook and it would involve the reorientation of architectural training but it would be of immense benefit to society and it would earn for architects the respect they claim. If a person of such eminence as Mr. Banham exerts pressure and the students start moving fast, it could happen very quickly.

As I am a non-architect, who gets a living from architects, I shall have to sign myself.

I. D.

Brains in Bedford Square

SIR: In greeting the admirable new AA appointments for secretary, director, and head of the school, your editorial on March 2 hurls a number of darts at the AA and RIBA, one of them too poisoned to be ignored.

If broadly speaking the pattern of the AA has not shown radical change during the last ten years, it does not reflect, as is implied, any intransigent attitude on the part of Michael Patrick and H. J. W. Alexander. It is no small achievement during that period, for example, to have doubled the number of entry applicants, reinstated the student vote, attracted a teaching staff of the highest quality (three out of four of the Churchill College finalists were included in their number), built new studios, established a curriculum much of which has been used as a model by other schools; all this apart from significant contributions at the Oxford Conference and on the Board.

It would appear regrettable therefore publicly to hail their retirement with a sigh of relief instead of a deep pang of regret.

RODERICK ENTHOVEN

London.

Load Bearing Architect

SIR: The letter from Mr. Walter Segal in your issue of February 16, on the subject of loadbearing brickwork, raises some interesting points which have been causing bewilderment to many brick manufacturers for some time.

Is it too much to hope that the variation in design factors as between C.P.III and the 1952 By-laws can be ironed out in the current revisions now proceeding? If so then the brick makers, who go to the trouble of testing their material daily to ensure quality control, would welcome a solution which would allow bricks of continuous controlled performance to be so

used as to allow the maximum economic benefit to be obtained from calculated brickwork.

Under these circumstances there is no valid reason why some of the unreinforced brick structures which have been such an economic success on the Continent, need remain beyond the grasp of the designer in this country.

G. LAURENCE

Housing for Cows

SIR: My attention has been drawn to the digest of "New Housing of Dairy Cows in the East Midlands" on page 282 of your issue for February 23. On the whole I consider this to be a very fair summary of the report, but there is one point of detail in which it is misleading, where it is stated that "building costs could not be related systematically to the amount of work actually done, costs might vary by as much as 20 per cent depending on the interest or other commitments of the builder employed."

This is not an accurate statement of our findings. What we actually found was that amongst all the buildings surveyed, about 80 per cent of the overall valuation in cost per cow could be attributed to differences in design and specification (reflected by variations in standard cost). By inference the remaining 20 per cent of the overall variation in building costs was attributed to variation in builders' quotations for the same or similar work. This is not the same as saying that costs varied by as much as 20 per cent from some specified level which is what your statement implies.

The important point is that out of every £5 per cow difference in cost between two cowhouses we should expect £4 to be due to differences in the design of the two buildings and £1 to differences in the prices on which the builders based their quotations.

K. A. INGERSENT

Nottingham.

The reviewer replies: I am sorry that I appear to have misinterpreted the information on building costs but after rereading the relevant paragraphs and the editor's comments it still seems to me that 20 per cent (one pound in every five pounds) of the estimated cost of a farm building cannot be related to the actual value of the work carried out. On reflection, however, I think that I stated the findings of the authors the wrong way round and I am grateful for their correction.

Querry & Co.

SIR: Perhaps it is a good thing that ASTRAGAL is read mostly by the profession. Intelligent people outside the profession still regard architecture as an art above all else. No doubt Graham Green's Querry could have carried on with the "science and business" side of architecture and produced the rather less-than-average buildings most of us produce all our lives. Just art alone may not be enough, dear ASTRAGAL, but without art, true honesty is silence.

SHERBAN CANTACUZINO

London.

NEWS

SPUR

High Oxford Street?

A revolutionary scheme for the segregation of pedestrians from vehicles in Oxford Street, by the provision of a two-level pedestrian deck spanning the roadway and linked to the fronting buildings by bridges, was put forward at a special meeting of SPUR at the RIBA yesterday afternoon in a paper by D. Rigby Childs entitled "The Major Shopping Street: a review of opportunities and problems."

It is possible, Mr. Rigby Childs believes, to revolutionise conditions in Oxford Street and similar shopping thoroughfares, without waiting for large scale rebuilding, and he described how he began to explore the implications of the SPUR advocacy of multi-level circulation: how could theory be translated into practice?

"I chose Oxford Street, since if theory could be put into practice in this well-known street of such diverse character, surely it could be elsewhere? Alternatively what would be the prospect for Oxford Street, if modernising it had to be long drawn out?"

"I had in mind the need to find a way by which modernisation could spread through the street quickly and without causing disastrous upheaval; in an attempt to put forward a balanced interpretation I invited a number of colleagues, forming an inter-professional team, to join me in these explorations."

"Our purpose was to put forward constructive ideas, around which the many different views could be more adequately discussed than if considered only in the context of the present street."

As a starting point the team adopted the aims:

A new deal for shoppers and visitors in



The crowded Oxford Street of today with SPUR's scheme of a pedestrian platform linked to the shops at first floor level, with second level moving pavement, superimposed

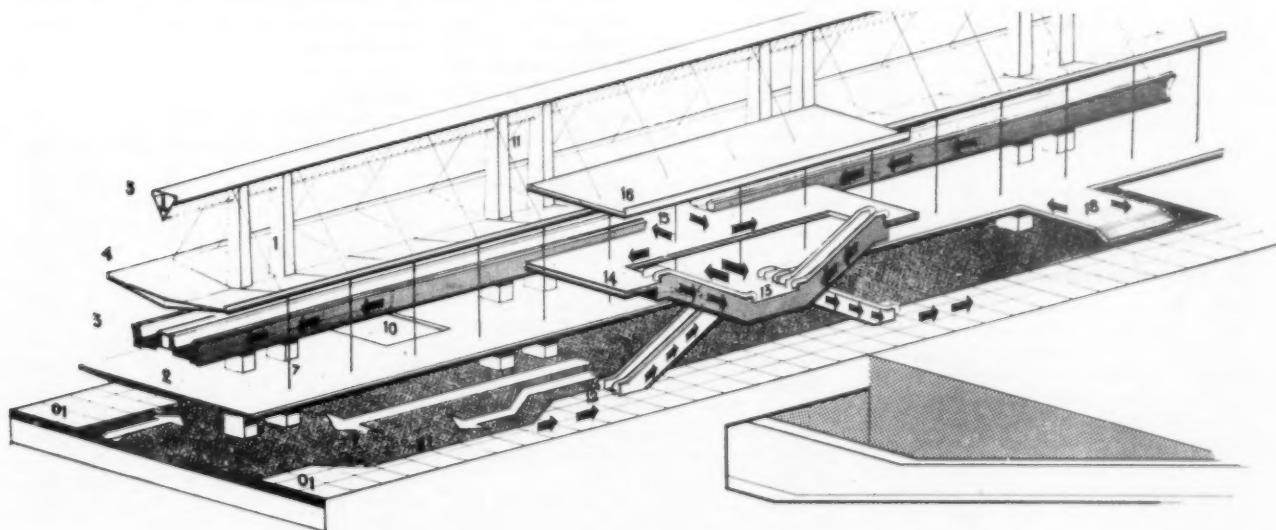
Oxford Street: the avoidance of compulsory alteration or redevelopment of existing buildings; the preservation of the present roadway as one of Central London's main East-West arteries; anti-interference with public transport, with, if possible, scope for improving facilities; planning for the motorist's convenience.

They propose the possibility of introducing a self-supporting and independent two-level pedestrian deck spanning the roadway and linked to the fronting buildings by bridges. It meets the conditions laid down; it could be built rapidly, without dislocating the life of the street; it would be the means of freeing the planning of new buildings and allowing the adaptation of existing buildings, so that in time the character of the

KEY

- 02 The present roadway
- 01 The present pavement
- 0 The present buildings
- 1 Freestanding columns in pairs
- 2 Shoppers' way deck (first pedestrian level)
- 3 Moving way (second pedestrian level)
- 4 Roofing over shoppers' way (glazed)
- 5 High beam (for lighting and servicing)
- 6 Suspension rods
- 7 Suspension columns
- 8 Display units
- 9 Side walk roofs
- 10 Deck openings in shoppers' way
- 11 Space within pairs of columns, ducting, etc.
- 12 Escalator or staircase pavement to shoppers' way
- 13 Escalator or staircase—shoppers' way to moving way level (travolator)
- 14 Head of escalator to travelling stepping-on point
- 15 Travolator stepping-on and interchange point
- 16 Roof over interchange point and escalators
- 17 Escalator—shoppers' way to underground station
- 18 Access bridges—shoppers' way to present buildings
- 19 Access bridges—shoppers' way to new buildings
- 20 New buildings
- 21 Bus and vehicle laybys
- 22 Traffic underpasses

Diagrammatic view of pedestrian and traffic circulatory systems



street would rival or surpass new shopping centres elsewhere. While the first cost would be high, it would be cheaper than any other form of major improvement.

The scheme, entitled High Oxford Street, comprises:

1. *A shoppers' way*, a mile-long upper deck for pedestrians only, an unbroken stretch of shop windows, show cases, small shops and kiosks, with access by bridges to the first floors of the adjoining shops and offices. Escalators and staircases would give access to the present pavement level and direct access to Underground stations.

2. *A moving way*, which at upper pedestrian level would provide for fast pedestrian movement by travolators in each direction, with interchange points at intervals. Such a system could be extended beyond Oxford Street to become part of a complete system for Central London—in which case the travolator might be replaced by a conveyor car system, it is suggested.

3. *Ground level*: here the pavement would be banned to pedestrians as a through walking way, and only used for access to vehicles, car parking being at ground level and in basements, with lay-byes for cars, vans and buses formed on pavements or under buildings: north-south underpasses would be sited between the Underground stations. Shop windows could be kept at this level for the benefit of passengers in vehicles passing through the street.

Construction: A high degree of prefabrication is suggested, combined with erection operations undertaken from special rolling gantries, and night delivery of materials to the site. The construction could be planned in four phases, each about a quarter-mile long, and would probably take about five years to complete, underpasses being constructed as part of the scheme.

Cost: A preliminary estimated cost for the new structure, including the travolators and escalators, is £12 million.

The shoppers' way structure and access up to building lines and to street level, and the basic cost of setting down and unloading

facilities for public service vehicles, should be met by the community.

Any exceptional hardships imposed should be covered by a street compensation fund, and facilities in the shoppers' way could be met by rent from traders.

The aim behind this exploration, said Rigby Childs, is to show how expansion in the use of Oxford Street can be directed—an expansion flowing from the increased demand for consumer goods in our affluent society. If Oxford Street does not attract this purchasing power, it will go elsewhere. It is for the community and the traders together to decide whether emphasis in the future will be placed on the metropolitan centre with full facilities, or will be dispersed over a series of smaller nuclei. If central shopping is favoured, development on the lines of this design is probably the simplest solution although there would be many problems to overcome.

(A report on the discussion that followed this paper will be published next week.)

IUA CONGRESS

Wanted: 20 Student Despatch Riders

The organising secretary of the IUA London Congress is appealing for "some twenty students with motor scooters to form a Congress communications section to operate in Central London," between July 2 and 7. Lunches, out-of-pocket expenses (but not hotel bills) will be met, a mileage allowance will be paid and special insurance cover arranged and, said the appeal, "participation in some of the Congress jollifications is assured." Applications to 66, Portland Place.

Splendid response is reported to the organisers' appeal for guides and interpreters: so many have been received that no further offers to interpret French or German can be accepted. More speakers of Russian or Spanish, however, would be very warmly received, either as interpreters or guides.

BASA, which is helping to round up students to help with the Congress, is appealing urgently for hospitality for visiting students or young architects coming to the Congress (including those with motor scooters who cannot run to hotel bills), and offers of hospitality should be sent to the Secretary of BASA at the Building Centre, Store Street, W.C.1, giving name, address and telephone number.

DSIR & LCC

Survey of Noise in London

Two-minute recordings of background noise in London are now being made in every hour of a 24-hr. period to begin the noise survey jointly undertaken by the Department of Scientific and Industrial Research and the London County Council.

Two vans and apparatus provided by the BRS are visiting sites over an area of about

36 square miles which contain a fair sample of all the various activities in the County of London.

Each of the two-minute noise recordings on magnetic tape, made with the help of an automatic timing mechanism inside the vans, will later be replayed for analysis in the BRS Laboratory. The percentage of the total time of the recording for which the noise falls into any one of the 15-decibel ranges will be determined by means of a high-speed level recorder and a system of relays designed at the station.

LCC staff are responsible for the positioning and the connecting-up of the vans and the working of the apparatus at each of the sites.

Noise levels at different heights inside and outside tall buildings and the effect of traffic noise on noise-sensitive buildings will be the subject of detailed surveys by the LCC's Scientific Adviser.

RIBA

1962 Conference Plans

Next year's British Architects' Conference is to be held in Coventry in July, and the theme will be "Building and Planning in the Motor Age."

More time is to be devoted to discussion than at previous conferences, and three half days have been allotted to this. It is intended to break down the main subject into three or four sections, each of which will be considered by a discussion group who will report back to the main conference.

The Council is considering the organisation of an exhibition to illustrate the theme of the conference.

LCC

Town Development Division

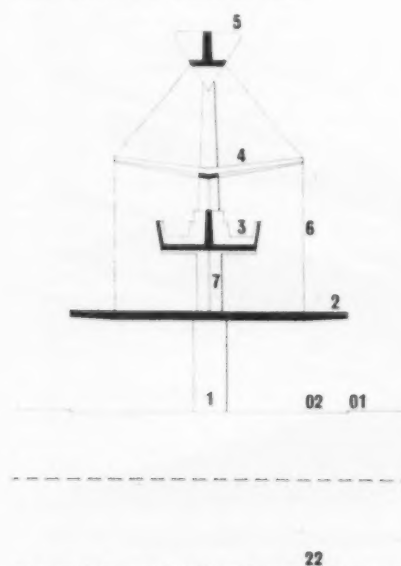
A town development division of the Architects Department at London County Council is being established, headed by J. C. Craig, A.R.I.C.S., A.M.T.P.I., as town development officer. At present Mr. Craig is group planning officer in charge of the new town section, which will form the nucleus of the new division.

MOH

Architect to Advise Rhodesia

A senior architect of the Ministry of Health's Hospital Research and Development Group, Mr. D. J. Petty, has gone to Southern Rhodesia to advise the Federal Department of Health and the Ministry of Works about their plans for a new multi-racial teaching hospital at Salisbury. Mr. Petty has gone at the invitation of the Rhodesian Medical School Planning Committee and with the support of the Nuffield Foundation (which has made a grant of £250,000 towards the cost of the new medical school), and of Birmingham University, which is sponsoring the medical school and will award its own degrees to successful students.

Cross section of pedestrian deck



Two Views of the Housing Bill

Below we present two views of the Housing Bill, shortly to be presented in Parliament: a Conservative view by Captain Corfield, MP for South Gloucestershire, and a Labour view from Frank Allaun, MP for Salford, and Harriet Slater, MP for Stoke-on-Trent. These are the personal views of the MPs concerned, and do not necessarily reflect the opinion of The Architects' Journal.

A Conservative View by Captain Corfield

In the history of post-war housing policy three broad phases are discernible: an initial period, from 1945 to 1951, of concentration upon subsidised local authority houses, followed by a period of increasing output, levelling off at somewhere around the target figure of 300,000 houses a year, the increase being almost wholly attributable to private enterprise building for owner-occupation. The third period, commencing about 1955-56, has been characterised by what, to Conservatives at any rate, must be the natural corollary of the second: the recognition of the housing functions of local authorities as complementary to, rather than as substitution for, private enterprise. The emphasis of local authority building has been deliberately switched to certain priority housing based upon the demand that private enterprise is least suited to meet.

That was the objective of the Housing Subsidies Act of 1956 which, by abolishing the general need subsidy in favour of the specific subsidy payable in respect of priority housing, made the first legislative inroad upon the socialist concept of housing as a universal service based upon housing need rather than a welfare service based upon financial need. The priorities were the rehousing of overspill and of slum dwellers and the provision of single bedroom houses for the old and of houses for key workers. This third period has also seen the reform of rent control which, with the continued expansion of private building, has tended towards a freer market in houses to let as well as to buy. At the same time the House Purchase and Housing Act of 1959 has both assisted home ownership and carried a stage further the somewhat hesitant provisions of the Housing Repairs and Rent Act of 1954 designed to encourage the modernisation of houses by private owners. Meanwhile, local authorities with relatively minor housing deficiencies have inevitably been able to make proportionately greater progress towards meeting their needs than have those with more formidable problems.

Moreover, it is an important prerequisite to the effective application of this basic Conservative principle (that public subsidy is justified only by financial need) that the housing policies of local authorities should broadly follow the same principle, for the extent to which they can, in fact, subsidise their tenants depends not only upon subsidies received from the Exchequer. Indeed, since the rental profit on a low cost pre-

war house may well exceed current rates of subsidy, the local authority with a substantial proportion of pre-war houses is better placed to keep down rents.

It is against this background that the White Paper must be read. Despite a continued high rate of building and a change of emphasis in policy, the priorities are found to remain very much the same, and the revolutionary part of the proposals is the inducements to local authorities to adopt some scheme of differential rents. These dictate the changes in meeting the priorities. Subject to certain exceptions, the present differential subsidies (in respect of overspill, £24, p.a.; of slum clearance, £22 1s. p.a.; of one-bedroom dwellings, £10) will again be replaced by a general needs subsidy. It is the Minister's responsibility to approve the need and he is not confined to the stated priorities.

The aim is that only those authorities operating some sort of differential rent scheme based primarily upon an economic rent (with rebate to those financially unable to meet it) will qualify for the full subsidy of £24: those who do not will be entitled only to £8 per house per annum whatever their housing needs. The test is to be whether or not the overall rent income reaches twice the 1955 gross value (i.e. based on 1939 values) of all the houses in the authority's ownership. Only if it does will the full £24 be payable.

This principle I believe to be sound, especially in view of the fact that apart from weighting the subsidies in favour of local authorities operating sensible rent schemes, it will also bring extra help to those areas with low rateable values which are frequently coincident with low incomes. Nevertheless, one is left with the feeling that the selection of an *ad hoc* test of this nature has been dictated less by practical considerations—and its success can only be measured in practice—than by reluctance to retract from the principle that local authorities should be left to decide these things for themselves. To my mind that is a principle that can be carried too far.

On the general need for continued slum clearance, relief of overcrowding, the need for overspill development and for more old people's dwellings few will cavil. But it seems to me that two questions remain to be posed.

First, the White Paper admits (para. 14) in connection with overspill, that "It is important that over the development of these sites there should be close co-operation between the exporting and the receiving authorities. . . . The London County Council have achieved good co-operation with a number of receiving authorities. This is less

true of the provinces, where town development schemes do not always seem to have been so persuasively and effectively pursued by the exporting local authorities."

Indeed, all too often town development schemes have been over-influenced by the exporting authority (frequently a county borough) being over-anxious to concentrate development in the immediately adjoining county areas, a policy which is no doubt influenced by the possibilities of future boundary revision and consequent recovery of rateable value. The result is precisely what town planning is supposed to prevent: sprawling urban development accepted by the neighbouring county districts for no better reason than the rateable value it brings. I do not believe such development can ever be satisfactorily planned until responsibility for large-scale planning of this nature is placed on a regional basis and divorced from authorities with a vested interest in rateable values.

Secondly, I question very much whether complete slum clearance can ever become more than an extremely expensive pipe dream until local authorities are armed with powers of prevention as well as exhortations to cure. The present position makes sense only on the basis of a relatively stable population, in which natural increase and the relatively gradual shifts that are dictated by economic expansion and adjustment can, over the short term at any rate, be reasonably accurately foreseen.

No local authority can possibly compete with the wholly unforeseeable influx that a policy of unrestricted Commonwealth immigration now entails. They cannot prevent these people taking up residence and can hardly be blamed for connivance in circumstances in which curative measures cannot conceivably keep pace with the influx, and can only be at the expense of their indigenous inhabitants.

Difficult as this problem is, it has got to be faced: either immigration will have to be controlled to a rate at which the requisite accommodation can be provided, or a rapidly increasing incidence of gross overcrowding will have to be accepted. If it is, I very much doubt whether the present proposals for enforcing a code of good management go far enough. The fact is that no amount of enforced repairs can indefinitely preserve a house that is consistently maltreated by its occupants. In short, the corollary of uncontrolled immigration coupled with a drive against overcrowding and consequent deterioration of valuable houses is a power to provide "second class" accommodation where overcrowding can at least be tolerated without serious damage to our national assets, and where people who ac-

cept these standards can await their turn in the housing queue.

Perhaps this is what the Minister has in mind in providing in the Bill for the reprieve of houses already condemned as unfit (clauses 21 and 22), but these are provisions which in their present form require careful consideration if they are not to be made an excuse for local authorities to acquire sound houses at "unfit" (i.e., site) values.

Finally, the White Paper contains important provisions aimed at increasing the number and quality of privately owned houses to let. These take two forms: further financial inducement to existing owners to modernise, and loans to non-profit-making private housing associations. These are to be welcomed, but here again there are reservations on both points.

In the first place, no doubt the present maximum chargeable rates of interest ("8 per cent subject to tax": para. 51) is inadequate, especially where the estimated life of the property is relatively short. But is this primarily a criticism of housing legislation rather than of the disincentive of high taxation? And is it a necessary corollary to add to the landlord's burden of repair by including items such as sanitary, heating and water installations (clause 29 of the Bill) the maintenance of much of which must inevitably depend upon the degree of care exercised by the occupant? Again, is it reasonable in amending the conditions in which standard grants in respect of hot water supplies are payable to retain a provision which disqualifies an applicant anxious to provide a hot water supply to his bath, simply because he has already installed an immersion heater for the supply to his sink?

In the second place, one cannot but wonder why many housing associations operated by charities are deliberately excluded from eligibility for loans if the objects of the charity are to provide housing for the old or disabled at less than economic rents. These measures, however, are admitted to be experimental, and can only be judged by results. The crux of the overall problem

Mrs. Harriet Slater



of the provision of private houses to let would seem to be the future role of private enterprise; that can only remain in doubt so long as the Labour Party continues to be the only foreseeable alternative Government, and continues to espouse the reposition of rent control and a policy of municipalisation.

In conclusion, I welcome the new measures as another step forward very much in the right direction, but I believe their full effectiveness will be conditioned as much by decisions in other spheres, such as local government, planning, immigration and taxation, as by their own intrinsic merits.

A Labour View by Frank Allaun and Harriet Slater

Far from ending Britain's tragic housing situation we believe the Government's recent White Paper and Housing Bill will do more harm than good.

They do absolutely nothing about the real cause of the trouble: the raising of interest rates on housing loans from 3 per cent in 1951 to 6½ per cent today. The fantastic effect of this is seldom realised. It means that a council flat costing £2,400 to build eventually costs £9,063 by the time interest has been paid at 6½ per cent for 60 years. For a £1,600 council house, the total cost is £6,042.

The result has been to cut council house building in Great Britain from 235,000 in 1954 to 129,000 last year. The total of all houses built annually has declined by more than 50,000 in this period. Very many councils have been forced either to confine housing purely to slum clearance tenants or else to end it altogether. Yet for the overwhelming majority of people, i.e. those earning under £14 10s. a week, it is quite impossible to buy their own houses. They are entirely dependent on council houses.

This is evaded by the Government's proposals. Interest rates will not be reduced, and the Exchequer subsidy will remain roughly what it is. "It is estimated," states the White Paper, "that, under the new proposals, the rate of growth of the total bill for Exchequer subsidies—about £3 million a year—will remain broadly unchanged." There will be merely a change of distribution. This will depend on the gross annual value of council houses on the one hand and expenditure on them on the other.

This new method will have some strange results. In the case of some cities which have made strenuous efforts to rehouse their people in the past it will mean a drastic reduction of subsidy from £24 to £8 per annum. In the case, however, of some authorities which have built few council houses in the past it will mean an increase in subsidy to £24 p.a.

For architects it means that the standard of design and planning of estates may well be seriously affected because—

1. Those local authorities which will only get £8 subsidy may cut down on design.
2. The possibility of subsidy being withdrawn may have the same effect; and



Frank Allaun

3. The quality and standard of fittings in houses, e.g. grates, baths, floors and windows, could also in the cause of economy be considerably lowered. This tendency exists even now. No lowering of design and quality standards ought to be tolerated.

One alarming feature appears in this section of the White Paper. The Government propose to take power to reduce the annual payments of subsidies authorised from now on "if after a period of years it appears, following consultation with the local authority associations, that so great a change has taken place in the financial position of council tenants generally that a continuance of payments on the original scale for the remainder of the 60-year period could no longer be justified."

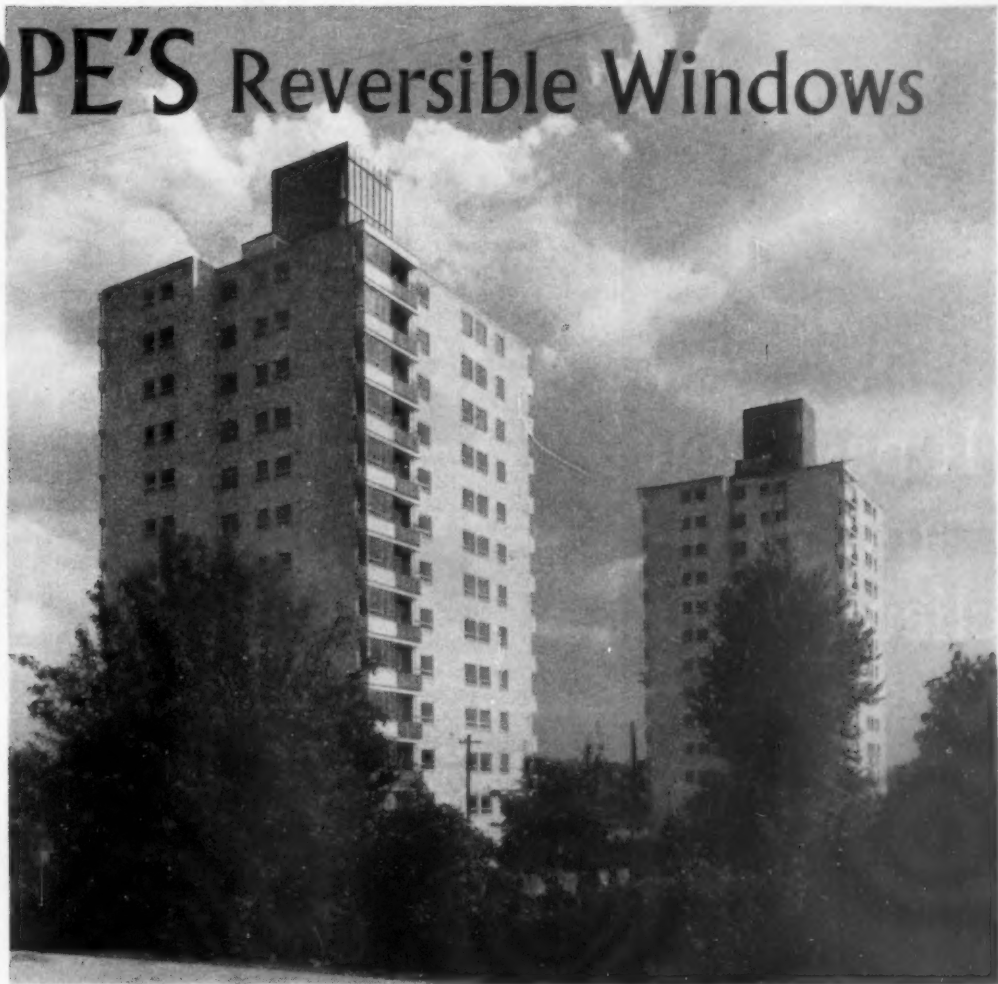
Uncertainty of continued subsidies will deter local authorities from long-term building and will also make the fixing of rents a most difficult matter.

We think it fair to conclude on this section of the proposals that a general rise in council house rents is not merely envisaged, but will be encouraged, by the Government. The average rent today is about 1.7 times the gross annual value. The average aimed at tomorrow is twice the gross annual value.

In the 1951 census there were 5,469,885 households in Great Britain entirely without a fixed bath, plus 1,087,147 households sharing a bath. Since then there has not been a very marked drop in these figures. So, in the year 1961, in the age of automation, atomic energy and space travel, one family in three in our country has no bath, and usually no inside lavatory or hot water system either.

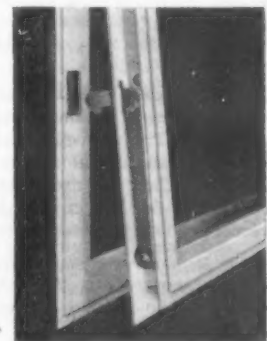
The Government grants have failed to encourage landlords (with a few honourable exceptions) to install these vital improvements, though owner-occupiers have made far greater use of them. Only 18,000 grants were obtained by private landlords in the first nine months of last year. Under the new Bill landlords who secure grants of


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N.C.B. Housewarming Plan—offers a personal loan to cover the cost of a central heating installation. Low interest—five years to pay—tax relief.

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|--|---|-------|--------|--|
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| SMALL ANTHRACITE <small>In gravity feed boiler</small> | 12/6d per cwt | — | 14/8d | |
| GAS | 1/4d therm plus, say, 2/8d a week standing charge | 16/1d | 23/6d | |
| ELECTRICITY | 1d unit (No standing charge included) | 18/2d | 29/10d | |
| OIL | 1/5½d gallon | *13/- | *23/- | |

* plus 2/- to 6/- a week maintenance cost.

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half the cost of the improvements will be able to raise their rents for 12 years by 12½ per cent of the landlord's share of the cost of the improvement instead of 8 per cent as at present.

We feel that most private landlords will still not bother to introduce these dearly-wanted baths, lavatories and hot water. Therefore the only solution is for the landlord to be forced to accept the grant and install the amenities where the tenant applies and the local authority certifies (as is required at present) that the house is suitable for such improvement. Though the Minister has been asked for some form of compulsion by the annual conference of the Association of Public Health Inspectors (with 2,000 in attendance) and also on several occasions by Members of Parliament, it is not included in the new proposals.

Finally, look at the reference in Mr. Brooke's Bill to housing associations. Loans up to a maximum of £25 million will be made available. "For a new house with an all-in cost of £3,000," states the White Paper, "the rent at current borrowing rates would be of the order of £4 a week exclusive of rates." That would mean about £7 or £8 a week in many areas. It would be for most families nothing other than a bad joke.

BOOK REVIEW

"Building by Local Authorities,"
by Elizabeth Layton, Allen &
Unwin, 40s.

Today sees the publication of a book which is certain to be of interest to all concerned with local authority building and deserves to be of influence. It is a report of an inquiry carried out, with Nuffield Foundation help, by the Royal Institute of Public Administration. This subject was chosen for study (as the preface explains) because of the major responsibility for building which has been placed on local authorities since the war: the object was to find out how authorities organise themselves to discharge this responsibility and whether there is room for improvement.

The conclusion in broad terms is that there is, indeed, room for improvement: the rising standard of living, the higher birth rate, the shift in population from north to south-east and, on the technical side, the fundamental changes which are taking place in the building industry, all demand a new response.

The report begins by considering the part played by central government, most particularly in the matter of control. The method of control used in department, the writer remarks shrewdly, reflects the degree and consistency of political support given by the Government to the service provided. Thus the Ministry of Education, which, of all central government departments has the most effective control, owes this in great part to the high priority which education has enjoyed with all governments. By contrast, MOHLG has suffered greatly by a radical change in housing policy, while the Home Office and the Ministry of Health

have up to now had no support for their building programmes.

In fact the chief finding of the Report is that the Ministry of Education's building policy has been successful and should be extended to other Ministries who have building programmes on their hands. Ministries who only allow authorities to plan one year at a time, who do not take the trouble to find out what the cost limits ought to be and who conceal their cost limits, are roundly condemned. Instead, authorities must be allowed to plan at least two years ahead, the Ministry itself must carry out development work to raise the standard of design and fix cost targets. And the targets themselves must be published.

The Report has a number of things to say about the control of building by council committees. Perhaps the most important are the need for some machinery for co-ordinating an authority's building programmes (a need which has been made more urgent by the block grant system) and the value of an architectural services committee to help the architect (or engineer) on policy matters and protect him from the exorbitant demands of client committees.

On the question of the division of function among local authority officers the Report remarks that though the chief architect is now firmly established in the county councils, it is comparatively rare for a non county borough to have a chief architect, the more usual arrangement being to place the architect under the engineer. This concept of a combined department may simplify co-ordination, but may adversely affect architectural quality. If an authority is large enough, it is best to separate the two departments for then the authority will attract better architectural staff. The Report does not suggest that an architect should be a Director of Housing, as architects are not the best people to deal with tenants. It considers it important, however, that the Director of Housing or Housing Manager should be able to contribute effectively to discussions on design and he, like the architect, should be protected by having a committee of his own.

The Report comes out in favour of the use by local authorities of private architects. It is admitted that there is a widespread feeling in local authority circles against their use and that many have proved unbusinesslike, but this is sometimes due to the manner in which they have been treated by their local authority clients who have given them too little time and an inadequate brief. The report finds that private architects can be a stimulus to local authority building and recommends that large authorities should employ them regularly. But they must be allowed direct access to committees to explain their plans.

As might be expected the Report is insistent on the value of cost analysis and cost planning. Local authorities are apprehensive of the higher cost which this entails at the beginning of the design process, but evidence shows that it pays off handsomely in the end. It is evident that, to the writer of the report, the chief value of the quantity

surveyor lies, not in his traditional function as the preparer of the bills of quantities, but in his assistance in the control of cost. Maintenance is a subject which grows in importance as local authorities' capital investment in buildings increases. Unfortunately it is usually left to officers who are not equipped to see the long term issues. No clear cut solution is found to the problem of who ought to look after maintenance, but attention is drawn to the need for more work study and operational research on methods of management, for regular inspections of property as a first step in drawing up programmes of structural repairs and periodic maintenance, and a build-up of reserve funds so that jobs can be done quickly when needed. Direct labour used on maintenance is not cheaper in first cost but usually results in a higher standard of work and for this reason is probably cheaper in the long run. On Contracts for new work the Report accepts the view that competitive tendering must be the general rule, but says that the time has come for wider use of negotiated contracts both for development work and for modest single projects.

The report ends with an unequivocal call for more development work, as the Government's best hope for getting better design and better value for money. MOHLG is warned that strong support must be given by the department if this Ministry's current venture is to succeed, and the one remaining non-starter in this field—the Home Office—is urged to do something about it. In particular, development work is needed on building types of which each local authority only builds one or two in a generation. One difficulty at present experienced by central government in this work is that the departments themselves have no experience in running the services for which they must design: this is something which the local authorities must find means of conveying to them.

CLASP is cited as the shining example of development work by local authorities and as marking as great a step forward as that made by MOE; and other groups of local authorities are urged to take up the idea. This report states soberly and with no suspicion of special pleading all the things that the JOURNAL has been saying, more fervently, for many years!

DIARY

Architects' Christian Union—Reception at the RIBA, 66, Portland Place, W.1, at 7 p.m. Buffet 6.30 p.m. Speaker: F. H. Wintmore, Esq., of London City Mission.

MARCH 23

Brickwork, External Rendering, Plastering: study course arranged by the Chalk Lime and Allied Industries Research Association, at Welwyn. Details from C.L.A.I.R.A. Laboratories, Church Street, Welwyn, Herts.

APRIL 11 to 13

Two courses at the Institute of Advanced Architectural Studies, Micklegate, York: *Urban Renewal, the Inner Ring*

MAY 5 to 9



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THE INDUSTRY

This week Brian Grant describes heating system accelerators, fire protection tables, building blocks, waterproofing composition and a circular ventilator.

Accelerators for Small Bore Heating

A new range of accelerators for industrial and domestic heating systems has been introduced under the name of Flo-Mel. The domestic accelerators are of the glandless type and incorporate a motor with special windings to withstand high temperatures, and all bearings are water lubricated. The industrial accelerators have plastics bearings which do not need lubrication, and the motors can be removed without draining the water system. Pumps are made up to 4-in. bore with outputs from 1 to 140 gallons per minute at heads up to 20 ft. (Mel Engineering Co., Dean Road, Handforth, Wilmslow, Cheshire.)

Fire Protection

New tables showing revised thicknesses of vermiculite-gypsum plaster for fire protection of structural steelwork have been calculated by the Fire Research Station following a fresh series of tests on stanchions and beams carried out in accordance with BS.476 at the request of the Expanded Metal Co. Ltd. and Mandoval Ltd.

For 4-hour protection 1½-in. thickness is now required, whereas previously it was 2¼-in., and for 2-hour protection ¾-in. instead of 1-in. In the 3- and 4-hour ratings for column encasement the metal lath was spaced 1-in. from the face of the flange by means of a light metal channel. The thicknesses of 1½ in. and 1¼ in., therefore, are valid only for this form of construction.

In making the computations the Fire Research Station assumed that ¾-in. is the practical minimum thickness and did not, therefore, calculate figures giving a lesser thickness.

In all cases the mixes used were 1½ volume coarse vermiculite plaster aggregate to 1 volume retarded hemihydrate plaster for the rendering and floating coats and ½ volume fine vermiculite plaster aggregate to 1 volume retarded hemihydrate plaster for the finishing coat. It is expected that the results will be included in forthcoming revisions of the Scottish, LCC and Model Bye-Laws.

Building Blocks

Thermalite Ytong are now producing reinforced wall, roof and partition units which give greater load bearing capacity but are at the same time light in weight with good fire resistance and heat insulation. The units are made with cement, sand and pulverised fuel ash and are reinforced with steel mats dipped in bituminous material to prevent corrosion.

Roof and wall units are made in lengths up to 20 ft., and in standard thicknesses from 4 to 9½ in. and with dry densities of 30 and 40 lb. cu. ft. Partition units are 3 and 4 in. thick and 18 or 20 in. wide, and made in lengths up to 10 ft., or to special requirements. All units are cut to shape by a special wire cutting process and have smooth surfaces which can be rendered or painted direct. Workability of the standard blocks is retained and the units can be nailed, screwed or chased without difficulty. (Thermalite Ytong Ltd., 4, Regent Street, London, W.1.)

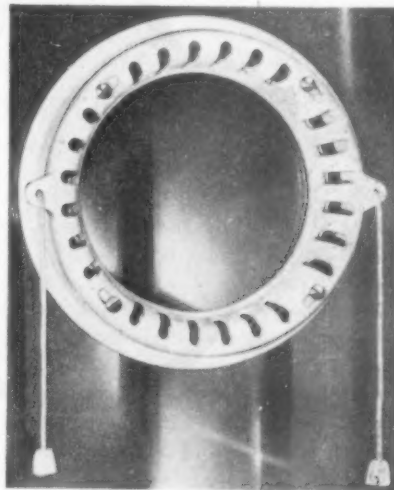
Waterproofing Compositions

Freemans have been working for some time to make their Cementone No. 9 waterproofing easier to apply. Whereas it used to be necessary to stipple the second coat in order to get a fine even texture on the finished work, the new material will now dry with an even textured film, the aggregate being evenly distributed throughout, thus giving a virtually self-stippling finish. It is further claimed that the dried film has greater flexibility, while retaining the hard-

ness and long wearing qualities of the original material. (Joseph Freeman Sons & Co. Ltd., Cementone Works, Wandsworth, London, S.W.18.)

Circular Ventilator

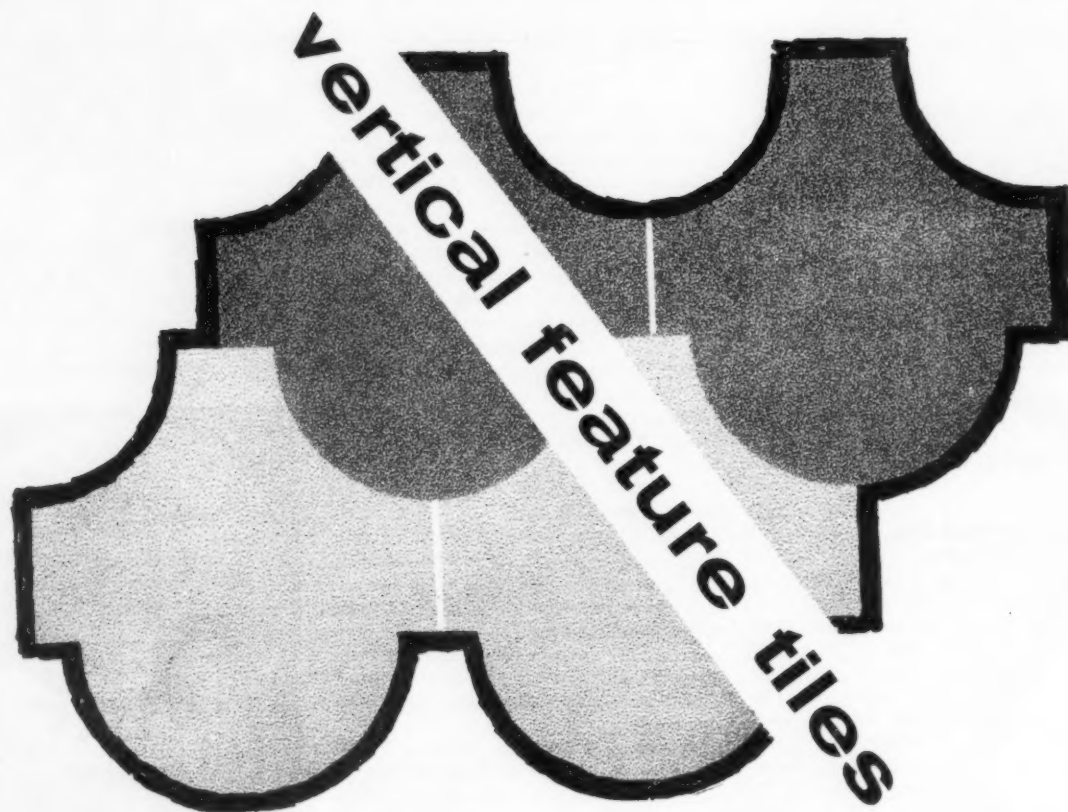
The Circulataire ventilator is made in cream plastics and fits into a 6½ in. diameter hole. Its overall diameter is 7½ in. and there is a 4½ in. diameter centre glass. Price is 22s. 6d. (Evered & Co. Ltd., Surrey Works, Smethwick, Birmingham 40.)



The Circulataire ventilator

The Flo-Mel accelerator





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technical section

SIB File No. (52)

UDC No. 696.12

25. WATER SUPPLY AND SANITATION

experiment on ventilation of single stack plumbing

At present, if you use single stack plumbing, you must continue the stack, to a diameter of not less than 3 in., or not less than that of the largest fitting, up through the roof to serve as ventilation and you must ensure a drop of at least 3 ft. between the point of entry of the lowest fitting and the invert level of the drain. Peter Burberry in this article describes an experimental installation set up at Southend School of Architecture which has demonstrated that the diameter of the vent pipe can be safely reduced to 1½ in. and that the distance between the lowest fitting and the drain invert level need be only 1 ft. 6 in.

The principles of the one pipe system of plumbing were originally formulated on the assumption that movement of waste and soil discharges in pipe work will inevitably result in air pressure fluctuation and consequently in trap unsealing. The Building Research Station have demonstrated in their investigation into single stack plumbing that this is not always the case, and that under certain conditions many fittings may discharge into one stack without destruction of the trap seals. The single stack system of plumbing resulting from these investigations is cheaper and neater in appearance than the one pipe system. Its use is, however, limited to situations which conform with the limitations that have been proved by experiment to be suitable. It is certain that other special conditions exist, not as yet the subject of experiment, within the limits of which venting could be dispensed with or simplified. The impetus for the single stack investigations was efficiency and economy in the plumbing installation. From the architectural point of view there are wider implications. Construction and appearance are prime considerations and it is easy to visualise the situation when a more expensive plumbing installation might result in a cheaper building if it simplified planning or

reduced the structural support or pipe casings which might otherwise be required.

It was with these points in mind, and after consultation with the Building Research Station, that an experimental plumbing installation was constructed at the Southend School of Architecture. The Building Research Station, the Borough Architect, Southend-on-Sea, and a number of manufacturers assisted with advice at this stage, and gave or loaned materials and apparatus. The installation was intended to serve two main purposes: to provide a working demonstration of a single stack plumbing installation for the benefit of students who took part in both building and testing; and to carry out an investigation of some special cases which might result in simplified plumbing. The cases chosen for first investigation are a result of architectural as well as cost considerations.

A typical domestic two-storey arrangement of sanitary fittings was chosen. The arrangement, which is shown in the diagram (Fig. 2), fitted the space available, and was suited to both the demonstration and investigation purposes.

Two problems have been investigated:—

1. Possible reduction in the diameter of the part of soil pipe carried up as vent.
2. Reduction in the length between the junction of the lowest fitting and the drain bend.

1. Reduction in vent diameter

Consideration of a soil and vent stack leads to the supposition that a vent pipe section of the stack of smaller diameter than the soil section would still be likely to allow the ingress of sufficient air to prevent trap unsealing. It seems particularly likely that this reduction would be satisfactory in a two-storey domestic installation since the full soil pipe diameter vent is capable of dealing with buildings of many floors.

Experiments were therefore carried out to attempt to establish the smallest diameter pipe which would function satisfactorily in the installation shown in Diagram 2.

The result of reducing the vent diameter is not simply to reduce the cost of the installation. (If copper tube were used for the reduced vent the saving would be nominal.) The most important effect would be to improve the appearance of the pipe work and make it easier and perhaps cheaper to accommodate the vent pipe inside the building and to make it simpler to take the pipe through the roof and to flash.

It must be remembered that many soil and vent pipes also vent the drain and that in this case the pipe could not be reduced to less than 3 in. in dia. if it is to comply with the byelaws. This is a situation which might also repay investigation. It does not seem likely that the flow of water in a drain would require a

technical section

greater rate of air ingress than the vertical stack to avoid pressure fluctuations and it might well be that a smaller pipe would provide a sufficient general rate of air circulation for small installations.

2. Reduced length of bottom section of stack

This dimension was originally fixed at 3 ft. by the Building Research Station and subsequently reduced to 2 ft. 6 in. These dimensions apply to buildings up to five storeys in height and it seems probable in a two-storey building a reduced dimension could be satisfactory. The minimum possible length would be approximately 1 ft. 6 in., which could be achieved by a direct connection between a B.S. W.C. connector and a B.S. long radius bend. If this arrangement proved satisfactory there would be a number of cases when 1 ft. of depth might be saved along the whole length of a building drain.

To establish the extent of the reductions, if any, which could be made in the parts of the installation described above the most critical discharge conditions were established and the installation operated under these conditions with various vent diameters and bottom dimensions. The following tests of performance were applied:—

1. Traps observed for loss of seal.
2. Pressures in the stack were measured. This was done at 1 ft. intervals by means of rubber tube suspended in the stack. In each case the worst of five consistent readings was taken as the result.

The critical discharge conditions considered are:—
(a) Various combinations of fittings were tried (including all fittings flushing together). The combination causing the greatest suction in the stack was the simultaneous discharge of all the first floor fittings. (W.C., lavatory basin, and bath.)

(b) Six pieces of newspaper 6 in. by 4 in. were placed in the upper W.C., and the results of flushing observed. The suction was less severe than in case (a) above.

(c) It has sometimes been suggested that a heavily loaded drain might affect the performance of a soil

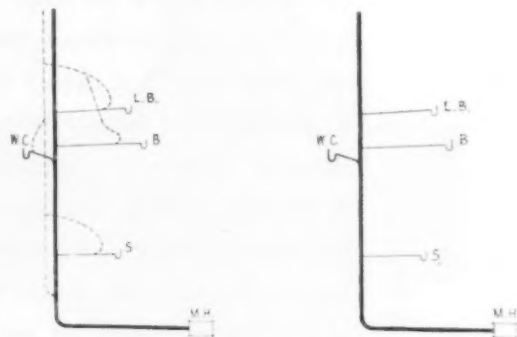
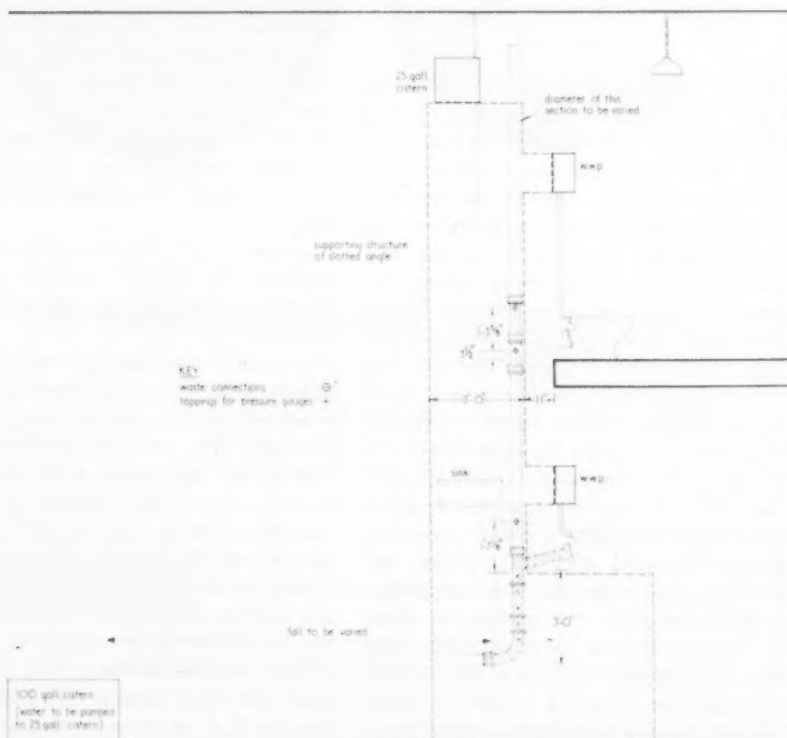


Fig. 1. Left, one pipe system with separate vent pipes. Right, single stack system

Fig. 2. Diagram of experimental installation. Note 1 ft. and 6 in. lengths of pipe between bend and lowest fitting to permit variations of the lowest fitting to invert dimension

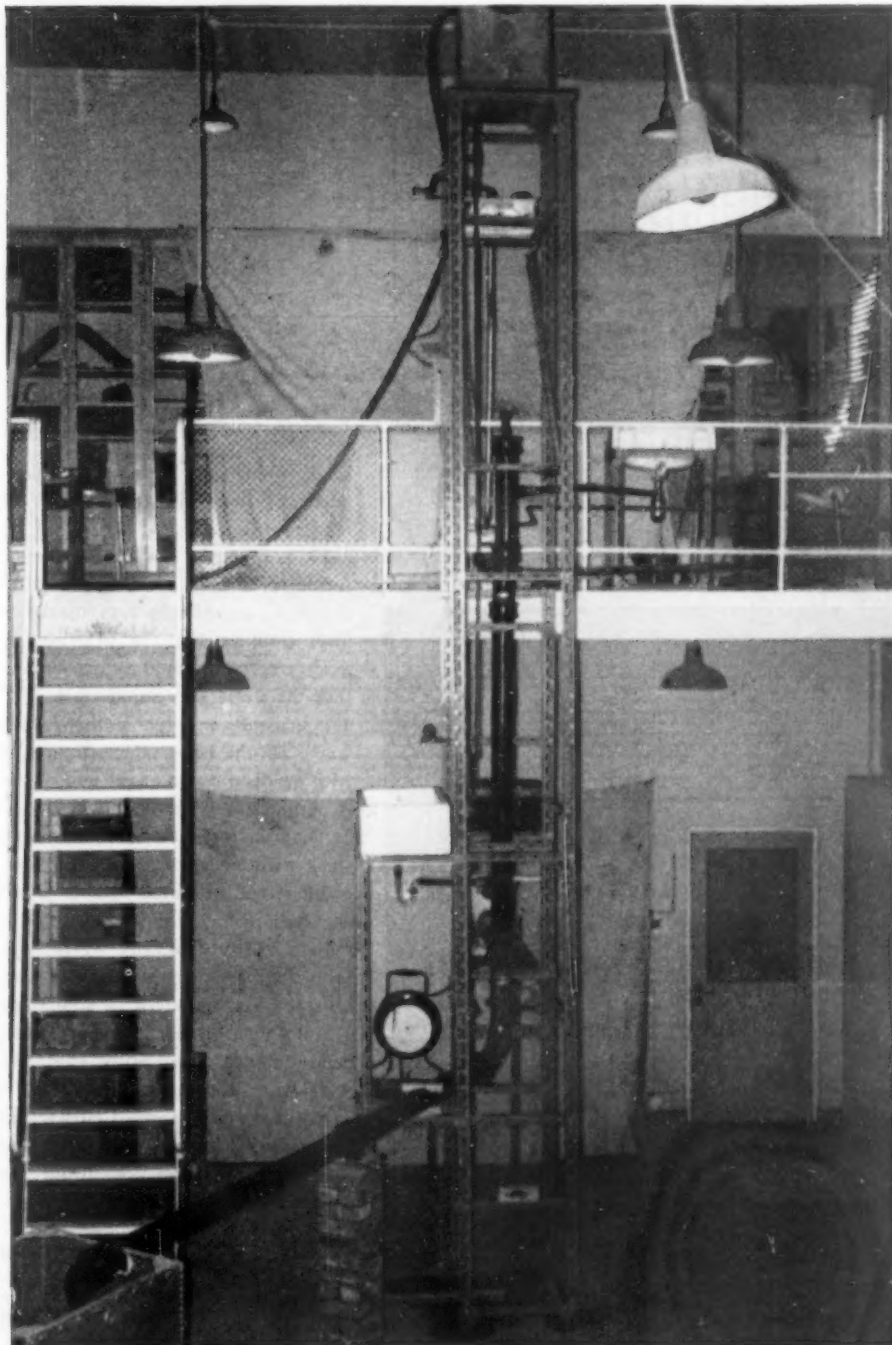


stack connected to it. In order to allow for this contingency a bend was applied to the outgo of the horizontal section at the foot of the stack so that the outgo was just submerged, thereby simulating the conditions which might result from a heavily surcharged drain submerging the entry of the branch bend into the manhole. Actually this arrangement improved the performance of the stack from the point

of view of suction on the trap seals. It may be conjectured that this improvement is due to the reduced discharge of air from the bottom of the stack resulting from the submerged outgo.

(d) The possibility of detergent foam backing up the stack and appearing through the lower traps was investigated by discharging bath water well mixed with a tablespoonful of detergent per gallon down the

Fig. 3. Photograph of the experimental installation



technical section

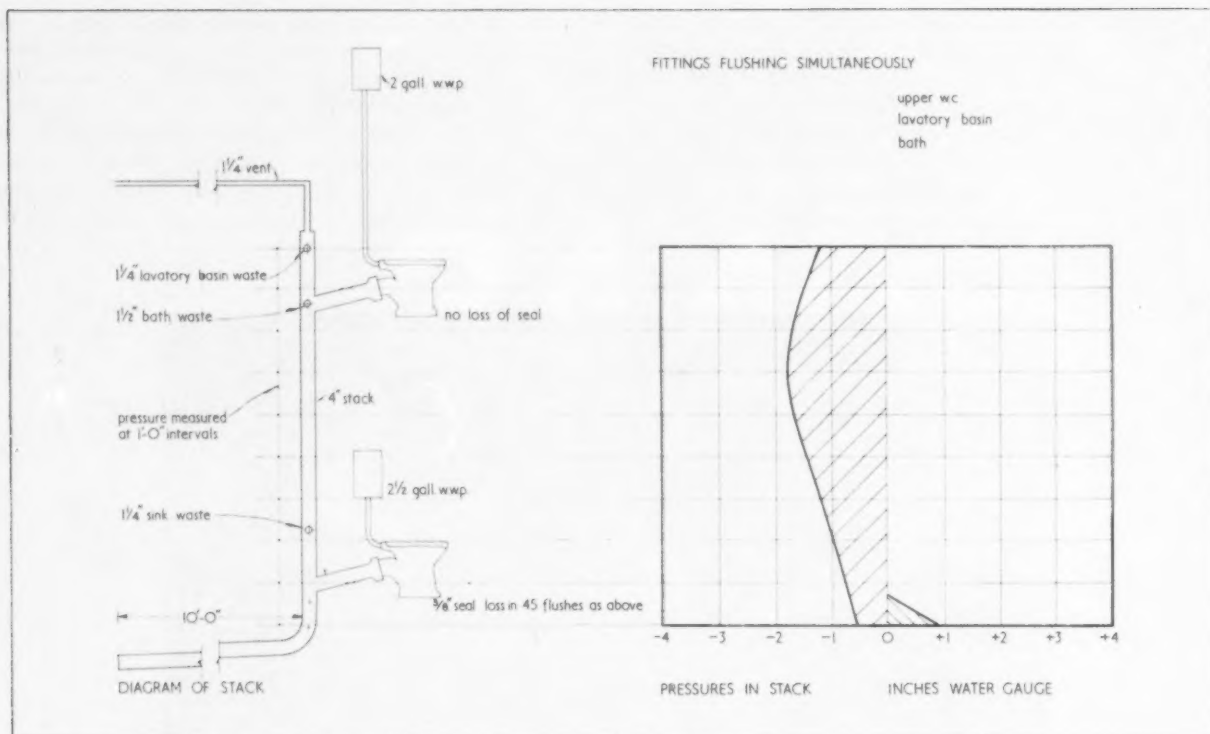
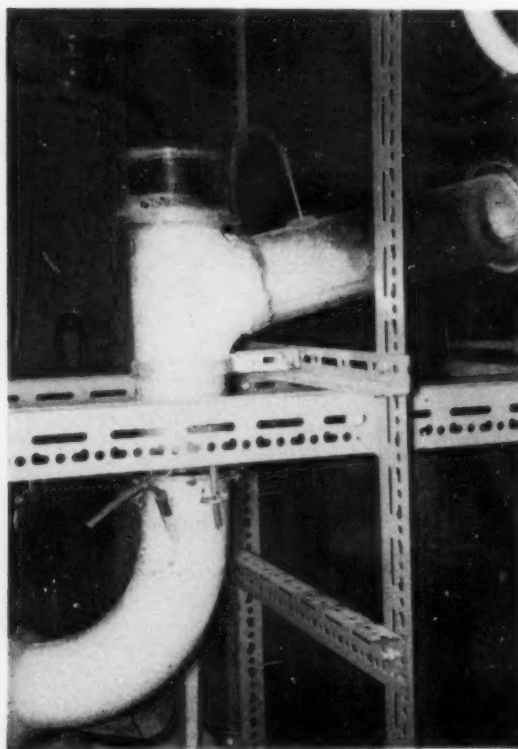


Fig. 4. Diagram of acceptable minimum installation with graph showing maximum pressures in pipe

Fig. 5. Foam in bend with submerged outlet



stack. When the outgo was open no build up of detergent foam occurred. When the outgo was submerged the detergent foam did back up the stack (see photograph) but no foam reached the traps of the lower fittings even with only 1 ft. 6 in. between the W.C. connection and the drain bend. It seems most unlikely that, in practice, large quantities of detergent foam would be discharged at the same time that the drain was surcharged.

The critical condition in this installation is therefore when all the upper floor fittings discharge together with an open outgo at the end of the manhole branch. A number of vent diameters were tried. The graph in Diagram, 4, shows the conditions resulting in the stack with 11 ft. of 1 1/4 in. vent with one right angled bend. It will be noted that no significant loss of seal occurred in any trap and that the greatest suction in the stack barely exceeds -1 in. WG. It seems, therefore, that a vent pipe of these dimensions could be satisfactorily employed in similar cases.

The distance between the lowest fitting and the drain bend did not significantly affect the pressure in the stack with or without the reduced vent and the 1 ft. 6 in. minimum performed satisfactorily with detergent. It appears, therefore, that this dimension would give satisfactory performance in an installation of this type with 1 1/4 in. diam. vent.

Acknowledgments

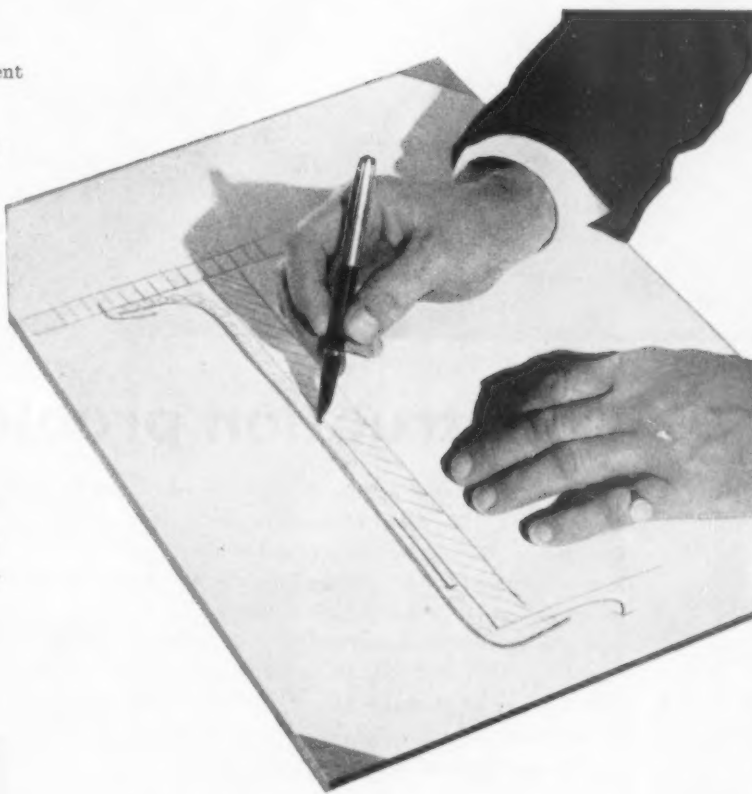
The students and members of the staff of the Southend School of Architecture who undertook the work are indebted to the following for assistance with the project—

| | |
|---|---------------------------|
| Borough Architect, Southend-on-Sea | Econa Modern Products |
| Building Research Station | Finch's, Barking |
| Institute of Plumbing | Yorkshire Imperial Metals |
| Public Health Department, Southend-on-Sea | |



That's a good question: I'm glad you asked

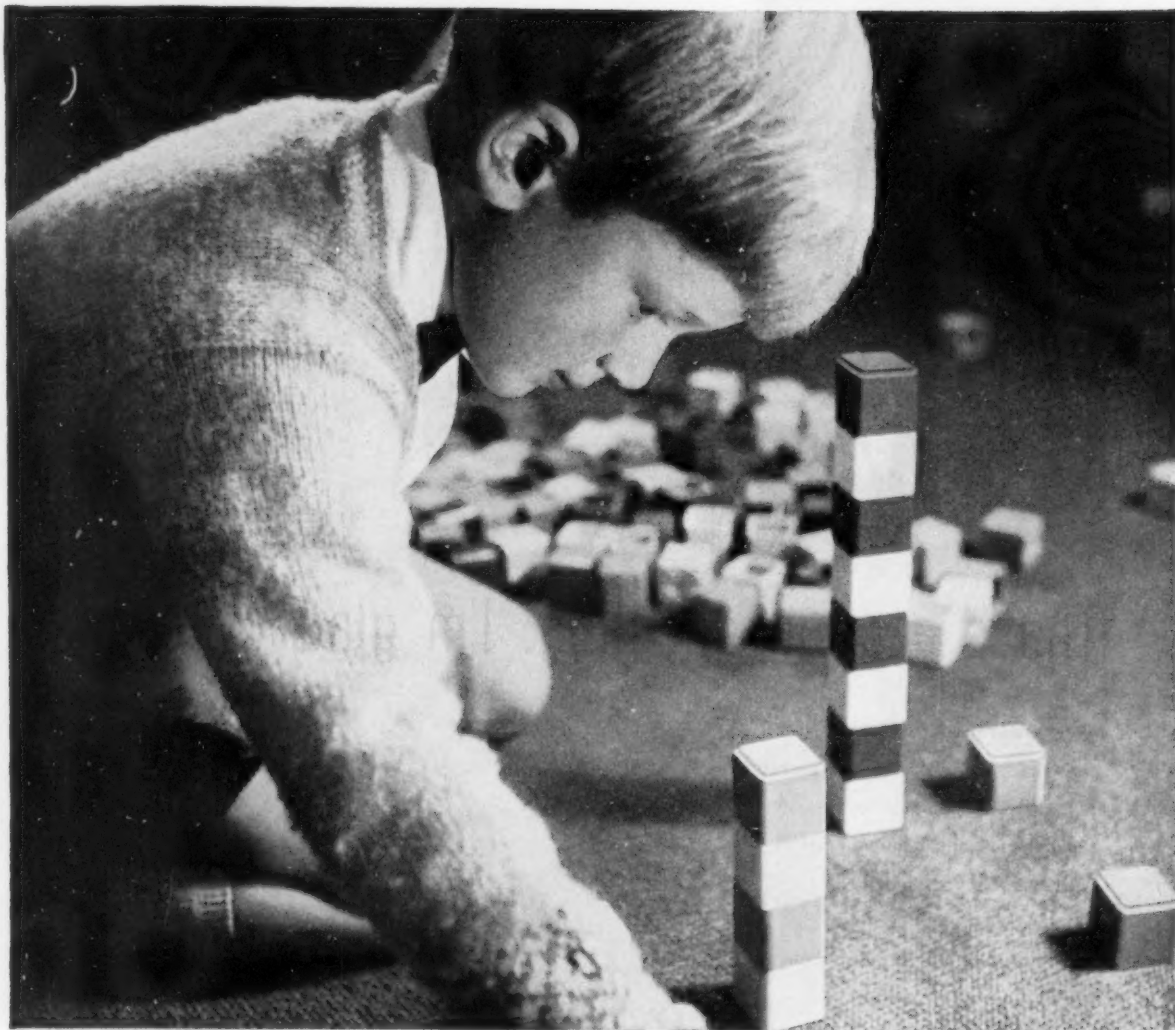
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Construction problem

It isn't just a matter of putting them one on top of another. There's more to it—the lie of the carpet and the selection of colours and a very steady hand. Maybe his urge to build will stay with him, and when he grows up the chances are he will specify the same plastic from which his blocks are made today—Shell's 'Carinex' polystyrene—in all its grades and all its colours. 'Carinex' is easy to mould, of good appearance, rigid and of high purity. Its grades are tailor made to meet the needs of your specific application or fabrication technique.



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P.S.I.

High Flats

at New Southgate

SJB No. (98)

UDC No. 728.4

The point block is now a well-established building type in the housing field. This scheme has, however, achieved a high standard of design which distinguishes it as a model example.

for SOUTHGATE BOROUGH COUNCIL
architect DAVID du R. ABERDEEN & PARTNERS
partner in charge J. S. HEATHCOTE
quantity surveyors YOUNG & BROWN
in association with
borough engineer J. T. W. PEAT
and surveyor
consultants:
engineers OVE ARUP & PARTNERS
mechanical ventilation J. ROGER PRESTON & PARTNERS

The blocks sit directly on the ground, without the introduction piloti, an expensive cliché



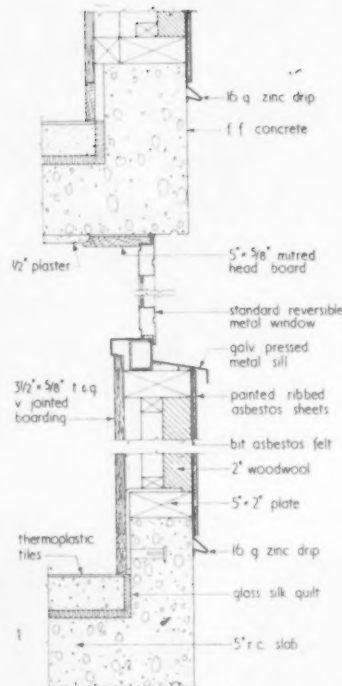
APPRAISAL

The architects for this scheme are at present planning a further scheme of low development for a site nearby, and it would appear that the local authority is adopting the progressive policy of attempting to maintain a continuity of thought within the area. The past lesson of comprehensive development areas is that results are disappointing where a variety of architects are engaged in the same area with schemes carried out over an extended period of time. In this case the architects' intentions for the area are to create pockets of open space and landscaped areas as a break from the endless street pattern of semi-detached bijou. Typical of this approach is the layout for the second phase of this site with the low blocks stepped back from Palmers Road to give an effect of small islands of grass and trees, an environment which is pleasant to live in and attractive to pass through.

It seems inevitable that every high density scheme should have at least one tall point block, regardless of whether this is the ideal form of development for that site or not. With a subsidy structure related to height there would appear to be little alternative open to the housing architect, for low development at high densities would be expensive and there would be no compensating increase in subsidy, as there is with increase in building height. On this particular site, however, there are a number of other reasons to justify fully the use of tall point blocks. One such reason is the electric railway which runs in an arc around three sides of the narrow strip of site, for this would cause a noise nuisance to tenants in low development. Town Planning requirements that gable walls should be fifty feet, and flank walls one hundred feet from boundaries of railways, coupled with the shape of the site and the density requirements, would also make any other alternative difficult to envisage. Adopting point blocks, the majority of the tenants are removed by height from the noise of the railway, and since the surrounding development is almost entirely two-storey, a high proportion have the advantage of extensive views. Seen from above, the trees become prominent and make suburbia more pleasant to look upon than at ground level.

In the four-flat-per-floor type of point block used here, the dwellings, with living rooms on the north-east and the north-west, are less well orientated than those at the south end. This disadvantage has, however, been reduced by projecting the main living room windows and by raking the windows to the private balconies to increase the angle of entry of the sun. The private balconies are small, but are mainly intended to enable a portion of the living room windows to be opened to floor level. This could admittedly be achieved at less cost with inward opening casement doors and guard rails, but balconies have been used to give a greater sense of security at these heights. They are apparently just big enough to put the baby out, and are adequate for sitting out in an upright type of chair (which the tenants are more likely to use than deckchairs which they would find difficult to store). To balcony or not to balcony is one of the controversial questions of the moment, but these balconies cater for the more worthwhile needs at a minimum cost.

Housing blocks depend to quite a large extent upon balconies for their architectural character. In these blocks, together with the living room windows and the recessions of plane, they give a strong vertical emphasis. This is not to imply that all this is done for the sheer trickery of architectural effect; for almost everything in the building has a functional reason for its form and expression. For example, the lift-motor room superstructure is given vertical emphasis by the standing seams to the cladding, but the use of copper here is part of the architects' insistence that roof finishes should be of such a high standard that they can be forgotten about for



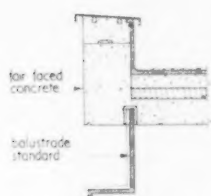
Vertical section through living room window [Scale: 1" = 1' 0"]

Block plan [Scale: 7,500 : 1]

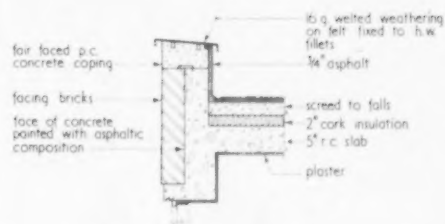




The blocks from the south-east, rising above the surrounding Victorian development

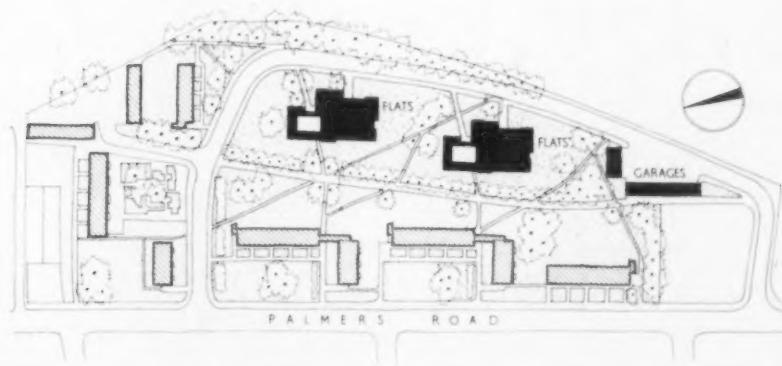


Section through top balcony head [Scale $\frac{1}{32}$ FS]



Section through typical window head and parapet

Site plan showing flats and garages in relation to terrace housing yet to be carried out



building study—2nd series

ever afterwards. The viewing platform up on the roof, although it helps to make the motor room look an integral part of the block, is rather purposeless (the door to it is kept locked, presumably to prevent it being used as a suicides' leap).

The intention of the entrance pergola is that plants should be grown up it forming a "leafy arbour" to soften the approach to the building. This is an extremely romantic and personal expression of the need to improve the main entrance to public authority housing blocks, which are usually miserable, ill-lit holes without any sense of warmth and human dignity.

The standards of workmanship of finishing trades in housing is habitually low and the plastering here is often at fault. This is particularly noticeable on the wall to the common entrance halls opposite the lifts, where the undulations are emphasised by the strong side lighting from the louvered windows which provide cross ventilation to these halls. It is also unfortunate that amidst all the care and thought which have gone into the design of these blocks the dry riser outlets should appear as ugly protrusions, although admittedly into an area of little importance.

Externally colour is restricted to the buff-white of the brick-work, silver grey window frames, grey below the white panels to projecting windows, and white-painted faces of balcony

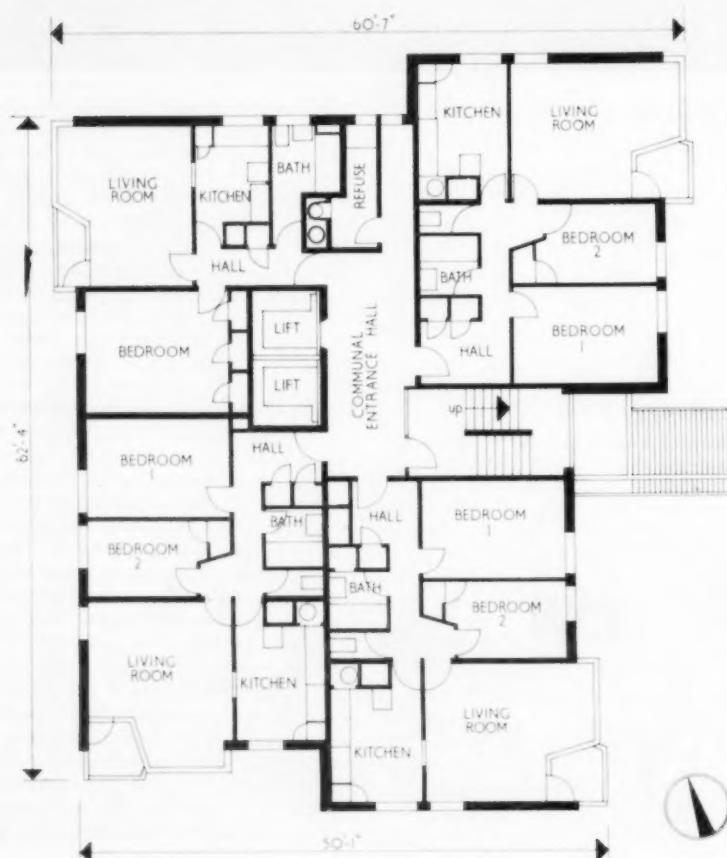
slabs. There is very little reliance on paint as an external finish. In consequence the blocks should weather well and maintenance costs should be low.

The client wanted a system of space heating which would permit the input of background heat outside the tenants' control in order to avoid the sort of condensation problems that raise scandals in evening newspapers. Two alternatives were proposed, gas warm air, and electric floor heating, of which the latter was chosen as being more able to fulfil this requirement. The floor heating is designed to provide a temperature of 65° F. in the living room and a background temperature in the remainder of the dwelling. The blocks are in the area of the Eastern Electricity Board where the off peak tariff rate is 0.8d. per unit with energy available between the hours of 7 p.m. and 7 a.m. Definite input of heat outside the tenants' control is ensured by adopting a minimum setting for the thermostats of 50° F. No electric radiant fire has been provided, but every room is equipped with a 13-amp. power point for tenants' own fittings.

These blocks make no startling innovations in plan form, constructional techniques or in the use of materials, and are similar to many which are being erected throughout the country. The overall impression, however, is that they are very much better designed and thought out than the very great majority.

Typical upper floor plan. The ground floor is similar except for the entrance lobby under the stairs [Scale: $\frac{1}{16}" = 1' 0"$]

Housing blocks depend to quite a large extent upon balconies for their architectural character, opposite

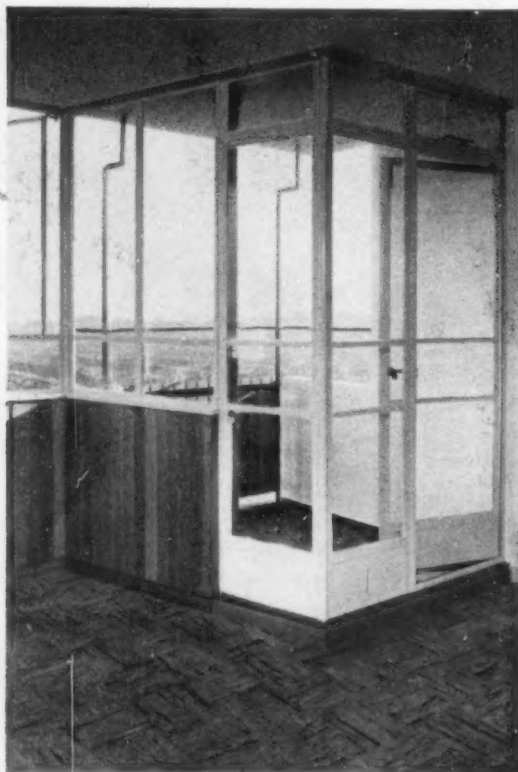




building study—2nd series

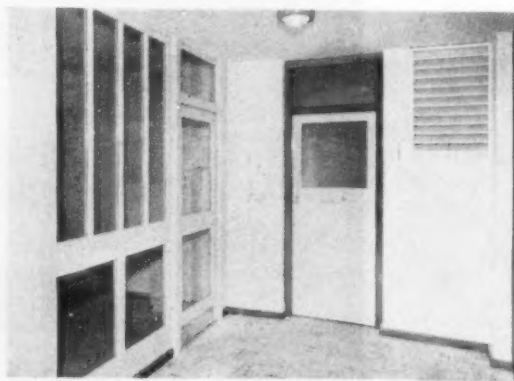


The courtyard surrounded by tenants' stores, above. This layout is one of the successful features of the scheme



The private balconies are small, but are mainly intended to enable a portion of the living room windows to be opened to floor level

Typical upper landing, with glazed screen to stairs on the left



CLIENT'S REQUIREMENTS

As many dwellings as possible on this part of the site which was immediately available. (The density agreed with M.O.H.L.G. was 114 persons per acre.) Garage accommodation, one to every three dwellings: tenant stores, one to every two dwellings.

SITE

The area of the entire site is 4.8 acres; the part developed by the point blocks is 2.6 acres. These 2.6 acres were purchased from the London Transport Executive and were one of the few remaining areas of undeveloped land in the Borough.

The remaining 2.2 acres are occupied by old three-storey terrace houses which are being acquired individually as the leases expire; the land is expected to be available for development in seven to ten years' time. The surrounding neighbourhood is fairly typical suburban sprawl.

PLANNING

Tall point blocks have been used to achieve a relatively high initial density while retaining as much open space as possible. The single staircase means of escape in case of fire has been adopted; this principle allows for a short dash to safety from the flats' entrance doors across an internal lobby, which must have permanent ventilation to the external air to reduce smoke hazard. In this plan ventilation is provided by glass louvered windows at the end of the corridors beyond the refuse rooms and by a natural extract system of branched ducts at the other end of the lobby.

The plan form of individual dwellings follows normal practice with four-flat-per-floor point blocks in having living-rooms placed at the extreme corners of the block and accommodation which does not require natural light in the centre. Internal bathrooms and w.c.s with mechanical extract ventilation produce a more compact plan and reduce external wall area and the mass of the block. Overall areas and individual room areas conforming with the requirements of M.O.H.L.G. were considered too small to permit a more open plan form. It was required that two-bedroom dwellings should have separate w.c.s and that kitchens should be planned to allow dining space for occasional meals.

So that the tenant stores could be reached under cover, they are linked to the north face, and can be reached directly from the ground floor entrance lobby. They are arranged in a court and serve as a screen to the refuse chamber and plant-room access doors. A public lavatory is included in this group.

SCHEDULE OF ACCOMMODATION

| | |
|-------------------|----|
| Two bedroom flats | 78 |
| One bedroom flats | 24 |

SUMMARY

Gross ground floor area: 6,626 sq. ft.
Gross total floor area: 87,256 sq. ft.
Net dwelling floor area: 70,308 sq. ft.
Type of contract: RIBA with quantities (fixed price).
Tender date: November 1958.
Work began: March 1959.
Work finished: August 1960.
Tender price of foundation, superstructure, installation and finishes, including drainage to collecting manhole:
£265,267 4s. 5d.

Tender price of external works and ancillary buildings, including drainage beyond collecting manhole:

£13,866 3s. 7d.

Total: £279,133 8s. 0d.

COST ANALYSIS

Based on tender, and net dwelling area.

(AJ revised elemental breakdown in use from November 10, 1960.)

| | Cost per sq. ft. |
|---|---------------------|
| Preliminaries and insurances | 5 2½ |
| 6.6 per cent of remainder of contract. (Includes £200 special insurance.) | |
| Contingencies | 8½ |
| Work below lowest floor finish | 3 11½ |
| 115 reinforced concrete piles, average 32 ft. long bound together at reduced ground levels with concrete pile caps. | |

STRUCTURAL ELEMENTS

| | |
|---|--------------|
| Frame | 1 2 |
| Mainly reinforced concrete floor and roof beams | |
| Upper floors | 4 11½ |
| 5-in. reinforced concrete in-situ slab; 3,996 sq. yds., 11s. 8d. per sq. yd. Precast balconies, 362 sq. yds., 10s. 4d. per sq. yd. | |
| Roof | 1 9 |
| 5-in. reinforced concrete in-situ slabs, 2-in. cork insulation; natural rock asphalt on screed. Aluminium external rainwater pipes, 12-in. sq. asbestos tiles to viewing platform; 556 sq. yds., 87s. 0d. per sq. yd. | |
| Staircases | 10½ |
| Reinforced concrete precast flights with granolithic finish. Reinforced concrete in-situ landings. Balustrading, and iroko handrail on mild steel core rail. One 115 ft. 9 in. high × 3 ft. 10 in. wide. | |
| External walls | 4 6½ |
| 4½-in. brick: 62 sq. yds., 15s. 7d. per sq. yd. 4-in. block inner lining: 906 sq. yds., 11s. 9d. per sq. yd. Patent glazing to tank room: 256 sq. yds., 94s. 0d. per sq. yd. Copper cladding to tank room: 156 sq. yds., 90s. 0d. per sq. yd. Asbestos faced under window panels to living-room including bituminous felt and paint: 442 sq. yds., 28s. 6d. per sq. yd. | |
| Windows | 3 9½ |
| Galvanised steel including casement doors to balconies: 10,365 sq. ft., 25s. 10d. per sq. ft. | |
| External doors | 1 |
| 4 pairs 2½-in. softwood framed, ledged and braced: 168 sq. ft., 5s. 10d. per sq. ft. 1 pair 2-in. two panel iroko glazed: 68 sq. ft., 18s. 0d. per sq. ft. 2 pairs 2½-in. one panel iroko glazed with glazed screens: 65 sq. ft. 16s. 8d. per sq. ft. | |

building study—2nd series

Internal structural walls

4-in. reinforced concrete crosswalls: 17 sq. yds.,
56s. od. per sq. yd.
4½-in. reinforced concrete crosswalls: 31 sq. yds.,
56s. od. per sq. yd.
5-in. reinforced concrete crosswalls: 748 sq. yds.,
56s. od. per sq. yd.
6-in. reinforced concrete crosswalls: 1,954 sq. yds.,
56s. od. per sq. yd.
7-in. reinforced concrete crosswalls: 1,113 sq. yds.,
56s. od. per sq. yd.
9-in. reinforced concrete crosswalls: 8 sq. yds.,
56s. od. per sq. yd.

Partitions

3-in. clinker block: 1,788 sq. yds., 9s. 10d.
per sq. yd.
2½-in. clinker block: 986 sq. yds., 9s. 10d. per
sq. yd.
2-in. clinker block: 467 sq. yds., 9s. 10d. per sq. yd.

Internal doors

1,312 1½-in. ply-faced flush: 8,454 sq. ft.,
3s. 3d. per sq. ft.
4 1½-in. softwood: 72 sq. ft., 7s. 5d. per sq. ft.
26 pairs 2½-in. iroko panel: 822 sq. ft., 16s. 7d.
per sq. ft.
Includes doors and fronts to cupboards formed in
partitions and metal internal door frames.

Ironmongery

Silver anodised aluminium lever handled latch sets
to internal doors.
Lock and latch sets to bathrooms and w.c.s.

Total of structural elements: 27s 11½d

FINISHES AND FITTINGS

Wall finishes

Three coats plaster: 8,328 sq. yds., 6s. 9d. per
sq. yd.
Two coats plaster: 11,294 sq. yds., 6s. od. per
sq. yd.
⅝-in. glazed tiling to bathrooms and kitchens:
2,750 sq. yds., 45s. 3d. per sq. yd.

Floor finishes

½-in. asphalt (BS 1418): 86 sq. yds., 17s. od. per
sq. yd.
2-in. granolithic: 106 sq. yds., 15s. 2d. per sq. yd.
2½-in. granolithic: 118 sq. yds., 17s. 10½d. per
sq. yd.
3-in. granolithic: 54 sq. yds., 19s. 5½d. per sq. yd.
1½-in. York stone paving: 32 sq. yds., 100s. od.
per sq. yd.
Thermoplastic floor tiles on screed and glass wool
quilts: 7,560 sq. yds., 11s. 7½d. per sq. yd.
½-in. asbestos tile paving: 52 sq. yds., 26s. 3d.
per sq. yd.
½-in. asphalt (BS 1410): 272 sq. yds., 19s. 8d. per
sq. yd.

Ceiling finishes

2 coats plaster on concrete soffits: 7,708 sq. yds.,
4s. 10d. per sq. yd.

s d
6 2½

Decorations

Kitchens, bathrooms and w.c.s, oil paint.
Other plastered surfaces, 2 coats washable
distemper.
Woodwork and metalwork priming, undercoat and
2 finishing coats.
Exposed external concrete surfaces, 4 coats.

Fittings

| | | |
|--|-----|------|
| Worktops with 11 sq. ft. of shelving | 102 | 1½d. |
| Flower boxes | 4 | 0½d. |
| Serving hatches | 102 | 2½d. |
| Kitchen cupboards | 102 | 7½d. |
| Kitchen wall cupboards | 204 | 2½d. |
| Pergolas to entrance | 2 | 1½d. |
| Cat ladders | 8 | 0½d. |
| Clothes rails, 1-in. dia- meter aluminium rail, average length 3 ft. 3 in. | 228 | 4½d. |

11

3 0½

Total of finishes and fittings: 12s 6½d

SERVICES

Sanitary fittings

| Type of fitting | No. of each type |
|---|------------------|
| Kitchen sinks and drainer units (vitreous enamelled steel) | 104 |
| Lavatory basins | 102 |
| Close coupled w.c. suites | 102 |
| Baths and panels | 102 |

7½

Waste, soil and overflow pipes

4-in. cast iron stack pipes.
2-in. vent modified single stack w.c.s only.
Vented copper branch wastes, anti-siphonage and
traps.
This item includes cast iron drains under block.

3 11½

Cold water services

Two 4,08c gallon two-compartment sectional steel
tanks.
Two booster pumps for each block.
Galvanised piping.
No. of draw-off points: 3 per dwelling.
Includes builder's work, 2½d.

3 3

Hot water services

Galvanised steel hot water storage tanks, 27 gallons
actual capacity in kitchen, with one 1-kW. electric
immersion heater at the top and one 2-kW. at the
bottom.
No. of draw-off points: 3 per dwelling.
Includes builder's work, ½d.

6½

Heating services

Electric under-floor heating. Embedded system
with pyrotenax cables. Combined circuit to hall and
kitchen controlled by thermostat in hall. Living
room circuit separate thermostat.
Extra costs of additional screed thickness and under
screed insulation not included.
No electric radiant fires provided.
Includes builder's work, 1½d.

s d
2 10

1 11

1 3½

1 8½

3 8½

9½

3 11½

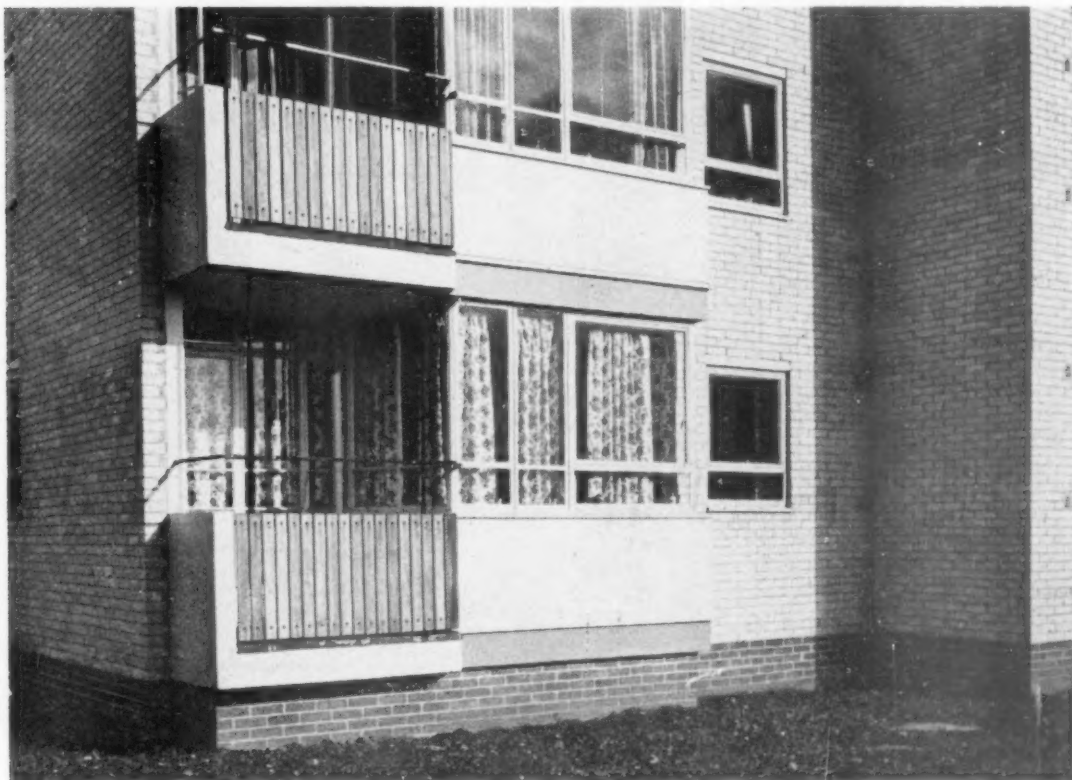


The scheme from the west end of the site

The 3 ft. wide extension from the entrance hall to the outside wall, which therefore allows it to be a naturally ventilated space. In the foreground, the dry riser



Much of the success of the scheme in its external visual appearance results from modest but immaculately thought out detailing



building study—2nd series



There is very little reliance upon paint as an external finish



Viewed from above, the trees become prominent, making suburbia more pleasant to look upon than at ground level

Plants should be grown up the pergola forming a leafy arbour to soften the approach to the building



building study—2nd series

Ventilation services

Mechanical extract system to internal bathrooms and w.c.s.
2 louvered grilles to each dwelling.
Mechanical extract ventilation to drying cabinets in each dwelling.
Builder's work including precast concrete branched flue ducts and main ducts on roof, 10d.

Gas services

Normal subsidised domestic installation.
No. of outlets: 308
Includes builder's work, ½d.

Electrical services

Tungsten lighting; conduits chased into walls.
Meter and switch gear.
Lighting fittings to lobbies and stairs.
Service to lift.
Television aerial and amplifier on roof.
Lighting points 982
Power points 566
Cooker control units 102
Drying cupboard points 102
Floor warming control points 102
Television coaxial socket outlets 102
Includes builder's work, ½d.

Special services

Two encased stoneware chutes per block with one hopper entry on each floor: 4½d.
Two electric lifts per block serving alternate floors.
Lift speed: 150 ft. per minute; total stops: 14: 4s. 11½d.
Two lightning conductors per block, one copper, one tinned copper (external) connecting to copper cladding to superstructure, TV aerial and to parapet flashing: 1½d.
Dry riser installation: 3d.
Includes builder's work, 1d.

Drainage

Mainly 4-in. diameter stoneware separate system, including main-holes, gullies, etc.
Separate soil and rainwater systems.

Total of services: 25s 5d

External works

(calculated on net dwelling area)
44 tenant stores; concrete raft, timber flat roofs, paved court, entrance gates and screen: 8½d.
3 blocks of 31 garages; brick concrete foundation with timber and woodwool flat roof: 9½d.
Landscaping; roads, paths and service connections: 1s. 9d.

Net cost per sq. ft. of floor area :

£265,267 (net cost, excluding external works)

70,308 sq. ft. (net dwelling area)

Gross cost per sq. ft. of floor area :

£265,267 (net cost, excluding external works)

87,256 sq. ft. (measured inside external walls)

s d COST COMMENT

1 4½

As has been said in the appraisal, the point block is now a well-established building type. If comparison is made with previous examples in this series, it is interesting to note that some main groups of elements appear to be relatively consistent while others vary fairly considerably. This is shown in the accompanying table:—

| | Roehampton 12-storey | Wandsworth 11-storey | Southgate 13-storey |
|--|-------------------------|-------------------------|------------------------|
| 2½ Block | | | |
| Tender date | Nov. 1954 | Aug. 1953 | Nov. 1958 |
| Date published | Nov. 5, 1959 | Nov. 29, 1956 | — |
| 5 11 Preliminaries, insurances and contingencies | 3s. 0½d. | 4s. 8½d. | 5s. 10½d. |
| Work below ground and structural elements | 33s. 11½d. | 31s. 11½d. | 31s. 10½d. |
| Finishes and fittings | 14s. 10½d. | 11s. 9½d. | 12s. 6½d. |
| Services | 18s. 11½d. | 20s. 11½d. | 25s. 2d. |
| Total | 70s. 10½d. | 69s. 4½d. | 75s. 5½d. |

5 9

In making comparison between these figures, some account must, of course, be made of the fact that the Southgate blocks went out to tender much more recently, and in view of this the overall figure would seem perfectly reasonable. It is particularly interesting to note, however, that the cost of structural elements and foundations has remained relatively uniform in the face of rising costs. Part of this story must undoubtedly be due to the fact that these point blocks are the only ones that did not have ground floor piloti. It is clear to see that the same discipline has been applied to finishes and fittings.

However, it is the service element which accounts for the rise in cost, the very sector over which the architect has no direct control. It may perhaps be dangerous to generalise from these three examples, but it would seem that in order to hold down the cost of this type of housing development (the most important established method whereby high density can be achieved with open communal space) the profession must now concentrate upon economising the services. This would seem to apply particularly to the electrics.

4½

3 3½

CONTRACTORS

General contractors: Wates Ltd. Sub-contractors—Plumbing: Richard J. Audrey Ltd. Dry risers: The Automatic Sprinkler Co. Ltd. Television aerial distribution system: Belling & Lee Ltd. Refuse disposal chutes: Broads Manufacturing Co. Ltd. Metal balustrades, balcony fronts, etc.: Clark, Hunt & Co. Ltd. Mechanical ventilation extract plant: Richard Crittall & Co. Ltd. Lifts: The Express Lift Co. Ltd. Facing bricks: Fisons Ltd. Foundation piling: The Franki Compressed Pile Co. Ltd. Lightning conductor installation: W. J. Furse & Co. Ltd. Electrical installation including underfloor heating: Holliday, Hall & Stinson Ltd. Copper cladding to penthouses and metal copings: Holloway Metal Roofs Ltd. Metal windows: Henry Hope & Sons Ltd. Sanitary fittings: Stitsons Sanitary Fittings Ltd. Precast duct units for ventilation system: True Flue Ltd. Ironmongery and door furniture: Yannedis & Co. Ltd. Thermoplastic tile flooring: Armstrong Cork Co. Ltd. Kitchen fittings: Jayanbee Joinery Ltd.

= 75 5½

= 60 9½

Broughton Moor - The Green Slate for Greenwoods



Architects: Samuel Jackson & Son

The external appearance of Shops and Department Stores may profoundly influence the kind of customer they attract. That is why the natural and uncontroversial beauty of Broughton Moor Green Slate was chosen for the new Greenwood Department Store in Liverpool. The distinctive pastel greens of this naturally riven, frame-sawn or fine-rubbed slate appeal to all sections of the community and lift the character of a building above the severely functional. Broughton Moor Green Slate weathers beautifully in all climates and corrosive atmospheres. As external and internal facings, floorings, copings and cills it adds permanent beauty to Shops, Residences and Skyscrapers the world over.

Broughton Moor

GREEN SLATE QUARRIES LTD

CONISTON · THE LAKE DISTRICT · LANCASHIRE · TELEPHONE CONISTON 225/6

Running a Job

This week we commence publication of a handbook on contract administration written for the AJ by Ronald Green, an architect in private practice. The handbook has been prepared as a sequence of operations (62 in all) in the order which the author has found from experience tends to arise in the running of a job. Needless to say, not every operation occurs in every job. The steps are numbered (see list opposite) and each one will be presented on one page with occasionally a check list in support overleaf. Readers should collect the pages as they appear in the Journal and at the end of the series they will have a handbook on contract administration—a working tool for everyday use. Because it is intended as a reference book, its value depends on its being up to date and constantly abreast of normal practice. For this reason the Editors welcome comments and ideas.

At the foot of each page is a line diagram summarising the text. This means that by a quick reference to the diagrams the user can either trace the sequence of operations or alternatively pinpoint the stage of a job at any given time.

There is a pressing need in even the smallest office to improve efficiency in the running of jobs. Contract administration cannot be regarded as one of the profession's strong points, and this weakness seriously erodes the architect's position as leader of the building team. There is little need to add that the architect owes a duty to his client to run a job efficiently and to himself to spend no more time on it than is needed to ensure that it is done properly and well.

A client commissions an architect to produce a well-balanced building in terms of appearance, planning, construction, initial and maintenance costs. He expects an efficiently run contract and an amicable settlement of final account. In many cases the client is an extremely efficient business organisation and expects the contract to be run in a similar manner. In order to achieve this, an architect is faced not only with organising his own office, but also relying on the support of his fifty competitive sub-contractors, half a dozen main contractors, the quantity surveyor, the engineer and any specialists who are involved. Up to now this has generally resulted in his becoming one of two things. He comes to regard himself either as a designer who hopes that it will be accepted that he is not very good at administration, or as an administrator and, as a result, does very little designing. At best he pushes on hoping that the details will sort themselves out on the site. The fact is that the "designer" should not be hopeless at administration any more than the "administrator" should be obsessed with this phase of the work. Designing and administration are each an integral

part of the job and demand a proportion of time to be spent on them which, with some exceptions, should not vary enormously from job to job. I am hoping to justify my excursion into the organisation of administrative work by showing that the average contract follows a known sequence of events. If these events can be put down in their true order, referred to at the appropriate time, dealt with and forgotten, the pattern of contract administration falls into place. The time demanded of even the most "design-inclined" architect is no more than is necessary to run the contract efficiently.

A system for administering contracts must not inflict an unwieldy form-filling discipline on an office, taking more time than it saves on a contract. It can only be a framework within which a practice can operate according to its own personality or "bent." A thoroughly-well-organised office will probably fill out the framework of this series with its own check lists and supplementary information—offices may only regard it as a way of eliminating interminable internal memos beginning, "Don't forget

SEQUENCE OF OPERATIONS IN THE ADMINISTRATION OF A CONTRACT

(The serialised handbook will follow these stages in subsequent issues of the *AJ*)

- | | |
|----------------------------------|---------------------------------------|
| 1. Preliminary enquiries | 32. Alternative contracts |
| 2. Office programme | 33. Insurances |
| 3. Architect's appointment | 34. Liquidated damages assessments |
| 4. Site inspection | 35. Clerk of works |
| 5. Survey | 36. Clerk of works appointment |
| 6. Site analysis | 37. Selection of main contractor |
| 7. Consultant recommendation | 38. Completed quantities |
| 8. Engineer appointment | 39. Form of tender |
| 9. Quantity surveyor appointment | 40. Pre-tender documents |
| 10. Services consultant | 41. Receipt of tenders |
| 11. Murals or sculpture | 42. Preparation of contract documents |
| 12. Statutory consents | 43. Placing the contract |
| 13. Design drawings | 44. Contract interpretation |
| 14. Design report | 45. Contract stage fees |
| 15. Design fees | 46. Contractor's programme |
| 16. Other consents | 47. Site reports |
| 17. Adjoining owners | 48. Site meetings |
| 18. Party structure notices | 49. Contract instructions |
| 19. Party structure settlement | 50. Client's modifications |
| 20. Drawings programme | 51. Variations and extensions |
| 21. Construction drawings | 52. Site progress photographs |
| 22. Public services | 53. Site supervision |
| 23. General services | 54. Sub-contract deliveries |
| 24. Collection of data | 55. Certificate procedure |
| 25. Schedules | 56. Practical completion |
| 26. Technical representatives | 57. Maintenance information |
| 27. Sub-contract tenders | 58. Defects liability |
| 28. Sub-contractor nomination | 59. Records |
| 29. Cost analysis information | 60. Final certificates |
| 30. Contract drawings | 61. Final fees |
| 31. Quantity surveyor brief | 62. Recommendations |

Contract administration

preliminary enquiries

1

Do not assume that because you are approached by a client it necessarily means that you will be commissioned to carry out the work or, indeed, that you want it. Because architecture is such a personal thing the immediate reaction is to be flattered that anyone has come at all but one cannot afford to be led astray by this. If you have never met him before, it may be blatantly obvious at the first meeting that you are not his man, or alternatively that he is not yours. If the client has come on recommendation he may not have seen your work, and even if he has seen it he may not realise until the interview the costs involved, including fees for yourself and for consultants.

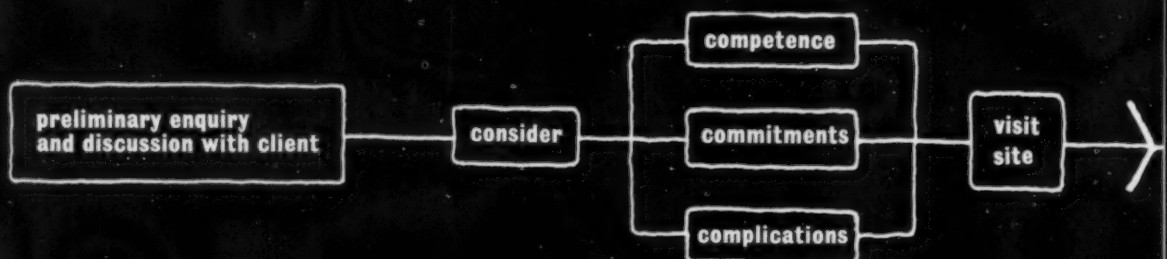
It is essential to discuss terms of

appointment, programme of work and costs with your client at the outset so that you both understand all the implications. A good result may depend largely upon this. Your client must be given the opportunity to reconsider proposals after this discussion. Similarly, if you do not feel entirely sympathetic with his views at this stage, you must make it perfectly clear and offer to recommend another architect. This is the time to be absolutely honest with yourself and your client and consider the following points carefully: Competence: Can you deal with the type of work required by your client, or should you recommend people who are better suited to it?

Commitments: Can you carry it

financially? Will your other commitments permit you to devote adequate staff and time to the work? There is no point in telling a client that you can do a job knowing jolly well that you cannot start it for three months. You must tell him this. He may be prepared to wait.

Complications: Is there anything slightly dubious about the whole affair? It is surprising how often a client will approach an architect with a sly nudge. Do not be tempted to ignore the Scale of Professional Charges, such as agreeing to undertake work for a developer on the basis of being paid a fee only if his speculative proposals go ahead.



Contract administration

office programme

2

Unless staff will be taken on specifically to deal with a job, programming for it should take account of other work running concurrently and of the demands on all staff, including principals and secretaries.

Now is the time to check the office current insurance cover. While planning for the inevitable contingencies (illness, holidays, local authority hitches), remember that delays are cheaper for the client before the quantity surveyor stage rather than after work has commenced on the site.

The programme should be drawn up in the following phases and before issue checked by your client and by everyone in the office who will be concerned with the job:

- | | | |
|-------|----|---------------------|
| phase | 1 | survey |
| | 2 | analysis of problem |
| | 3 | design |
| | 4 | consents |
| | 5 | contract drawings |
| | 6 | quantities |
| | 7 | tenders |
| | 8 | supervision |
| | 9 | defects liability |
| | 10 | final settlement |

It is at this stage that you should consider which, if any, of the following consultants should be employed, and their part in the programme.

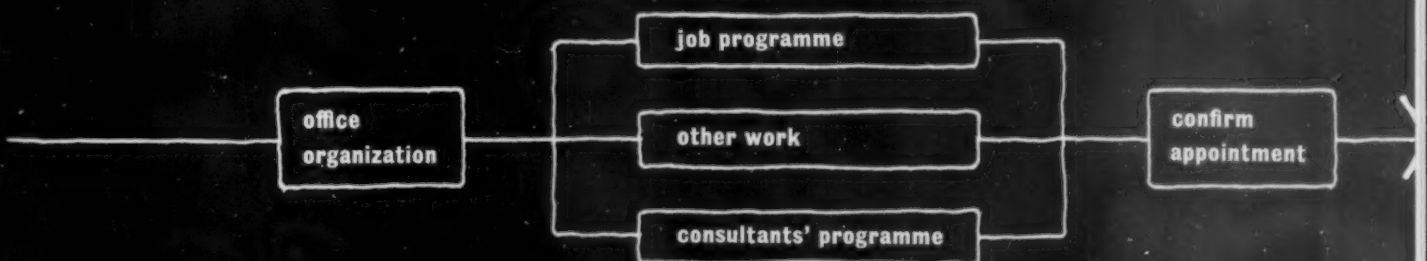
Surveyor: When accurate site information is not to hand or when converting existing building where no survey exists.

Quantity Surveyor: If the cost of the works is likely to exceed the figure agreed from time to time between the N.F.B.T.E., and the R.I.B.A. A bill of quantities for the job ensures that all tenders when submitted are directly comparable. It also enables a cost plan to be prepared at the outset ensuring accurate cost control throughout.

Consultant engineer: If the structure is complex or advice on comparative structural systems is required.

Mechanical Services Consultant: Where complex heating, air-conditioning or other services are involved.

"Specialists" of any kind: For decorative, interior, sculptural, typographical or other similar works are proposed.



Contract administration

architect's appointment

3

Following the preliminary discussion, a letter of confirmation should be sent to your client setting out the agreed terms of appointment. It should be borne in mind that this letter and/or a letter from your client, in the absence of any other form of agreement, may be the only document which could remotely be called a contract. Being a potential legal document, it must anticipate all the snags which could arise from loosely-drawn terms of appointment. For example it should cover your degree of responsibility for authorising variations.

The letter should:

1. check that no other architect has been instructed or is working on the same contract
2. state clearly the brief as you under-

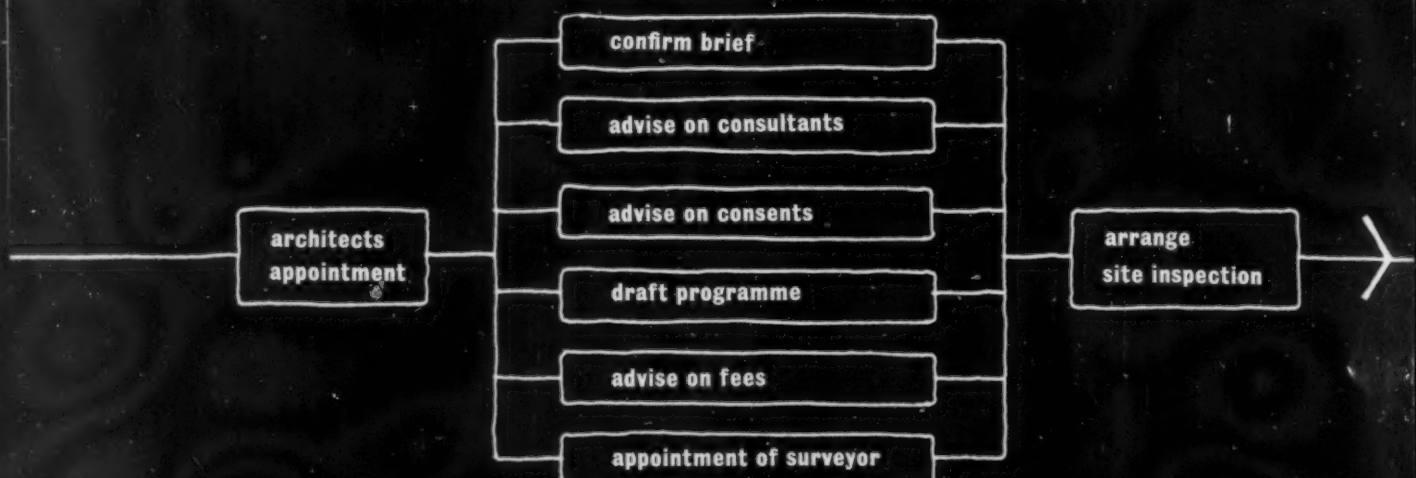
stand it, noting any special design, constructional, financial or personal considerations which are to be incorporated

3. inform your client of other professional services or consultants required and of how they are appointed and paid
4. recommend such specialists for decorative, sculptural, typographical or other similar work as you consider necessary
5. check if there is a survey available and, if not, arrange with your client the immediate appointment of a surveyor
6. advise him that he will need a clerk of works if he wants constant supervision of the work on the site
7. advise him of his obligations to comply with all statutory regulations and where necessary obtain consents
8. check that he agrees with the draft

programme for the work

9. advise him of any negotiations which may be necessary with the adjoining owners and of the financial implications
10. be accompanied by the RIBA *Conditions of Engagement and Scale of Professional Charges* or otherwise advise him about fees and expenses and time of payment so that he is able to assess all his commitments at the outset
11. arrange for a liaison man: with authority to take day to day decisions if your client is a committee.

Your client should be made aware of all these points at this stage so that he can plan his own programme in terms of leasehold or other arrangements on present properties and anything else which is likely to affect his moving into a new building.



APPLIED TREATMENTS | TIMBER, BRICKWORK, MASONRY

40.Z1

The Architects' Journal Library of Information Sheets 811. Editor: Cotterell Butler, A.R.I.B.A.

WYKAMOL TREATMENTS FOR TIMBER, BRICKWORK AND MASONRY

| Problem and Location | Preliminary Work | Chemical Treatment | Notes |
|---|--|---|---|
| Common furniture beetle (<i>Anobium punctatum</i>) In roof timbers | Seriously weakened members to be replaced and badly riddled sapwood edges of hardwood timbers trimmed away. Loose dirt, bore dust and debris to be removed by brushing and vacuum cleaning. | All surfaces of all timbers should be sprayed with Wykamol, the solution being flooded into open joints, shakes, cracks and crevices. Any concealed timbers such as wall plates and rafter feet should be reached by extending the spray lance or by opening up. | Ground floor boarding or timbers in any situation tending to be damp should be treated with Wykamol Plus. Thorough preliminary cleaning and normal care when spraying will avoid disoloration of ceiling linings or decorations. |
| In flooring timbers | Where joists support ceiling linings or cannot be reached from beneath, one floor board in every four or five to be removed to gain access to joists. | Joists and both sides of floor boards should be sprayed with Wykamol, manipulating spray nozzle to secure an even deposit of fluid on concealed surfaces. | Severely infested plywood seldom responds wholly to treatment. It is best removed and replaced with new, treated wood. |
| In panelling and joinery | Unless infestation appears very slight, woodwork to be removed to expose uncoated surfaces and/or paint to be stripped. | Uncoated surfaces should be sprayed generously with Wykamol and studding timbers also treated. Fluid should be injected into flight holes in coated surfaces. | For extensive replacements Tanalised timber should be used (see Sheet 40.A2). |
| Death Watch Beetle (<i>Xestobium rufovillosum</i>) In roof timbers, lintels, built-in bonding timbers and studding | The strength of timbers to be tested with an auger bit driven into heartwood, particularly in areas subject to dampness. To be replaced as necessary. Riddled sapwood to be trimmed away with an adze. Roof spaces to be cleaned thoroughly by brushing and vacuum cleaning. | Wykamol Plus should be injected into selected flight holes at a pressure of 50 lb./sq. in. All surfaces of all timbers should be sprayed with Wykamol Plus. The solution should be flooded into open joints, shakes, cracks and crevices. | Injections of large sectioned timbers should be supplemented through 1/4-in. holes drilled into heartwood at 12-in. intervals. Access to wall plates and rafter feet must be obtained to ensure thorough treatment. Built-in timbers may be treated by drilling right through and flooding under pressure. |
| In flooring timbers | Ends of beams and joists to be exposed and tested for soundness. To be replaced as necessary. To be cleaned between joists, and riddled sapwood trimmed away. | As above. | Faulty roof drainage or other causes of damp penetration must be rectified. |
| In panelling and joinery | Woodwork to be removed to expose uncoated surfaces. | Uncoated surfaces should be sprayed generously with Wykamol Plus and studding timbers also treated. Flight holes should be injected. | |
| House Longhorn Beetle (<i>Hylotrupes bajulus</i>) In all locations | Galleries to be found by probing and riddled wood trimmed away until sound timber is revealed. Seriously weakened members to be replaced as necessary. Area to be cleaned thoroughly with vacuum machine. | All surfaces of timber should be sprayed thoroughly with Wykamol. The solution should be flooded into open joints, cracks and crevices. All replacement timbers should be pre-treated. | Cases of infestation by house longhorn beetle should be recorded with the T.D.A. Laboratories at Tyler's Green. |
| Lyctus Beetle (<i>Lyctus brunneus</i>) In block or strip hardwood flooring | Locate all sapwood of affected hardwoods. | Accessible surfaces of timber should be sprayed thoroughly with Wykamol. | Where floor blocks are set in a pitch-mastic base, they should not be sprayed over-generously. |
| In panelling and joinery | Where possible woodwork to be removed to expose uncoated surfaces. | Uncoated surfaces should be sprayed with Wykamol. Fluid should be injected into flight holes in coated surfaces. | Hardwood-faced plywood will respond to treatment if stripped of paint or other finish and thoroughly sprayed. |
| Dry Rot (<i>Merulius lacrymans</i>) In all locations | Full extent of fungal growth to be disclosed by thoroughly opening up the affected area. Plaster to be stripped for at least 2 ft. beyond visible hyphal strands. Badly decayed timber and all timber set into or against infected masonry and brickwork to be removed and burned. Ends of joists and rafters bearing on an infected wall to be cut away. Contaminated site soil below badly affected ground floors to be dug out and removed well away from building. Affected brickwork and masonry to be drilled into at an angle of 45° at 9-in. centres. Walls to be wire-brushed to remove all traces of fungus. | Brickwork and masonry should be sprayed with Murosol. Drill holes should be repeatedly filled with the fluid until thickness of wall is saturated. Murosol should be sprayed over new surface of site soil or concrete sub-floor. All remaining timber should be sprayed with Wykamol Plus for at least 6 ft. beyond the limits of the outbreak. All sawn ends of joists and rafters should be treated very generously. | Tanalised timber should be used for extensive replacements. All replacement timbers, after cutting to length must have the sawn ends dipped in preservative. New joists and rafters should be insulated from contact with brickwork by inserting strips of roofing felt. They must not be cemented into the wall. Walls treated with Murosol will produce efflorescence for some weeks after treatment. The white deposit can be brushed off at intervals: not until it ceases to appear should plastering and re-decoration proceed. |
| (continued on reverse of Sheet) | | | |

40.Z1 · WYKAMOL · TREATMENTS FOR TIMBER, BRICKWORK AND MASONRY

| Problem and Location | Preliminary Work | Chemical Treatment | Notes |
|---|---|--|--|
| Dry Rot (continued) In all locations | Structural work to be carried out to alleviate dampness and promote effective ventilation. | | |
| Wet Rot (<i>Coniophora cerebella</i> , etc.) In all locations | Badly decayed timber to be removed. Structural work to be carried out to alleviate dampness and promote effective ventilation. | Replacement timber should be thoroughly treated with Wykamol Plus with particular attention to sawn ends. Timber immediately adjacent to affected area should be sprayed. | |
| Wet Rot and Damp Penetration In exterior timbers In roof shingles | — Roof lining and badly decayed shingles to be removed. | During a spell of dry weather timber should be sprayed with Ceetox. During a spell of dry weather Ceetox should be sprayed on to shingles from above and Wykamol Plus from beneath. Replacement shingles should be dipped in Ceetox before fixing. | Dipping is the most effective means of treating new exterior timbers or shingles. Ceetox may delay slightly the weathering of new red cedar shingles to silver grey. |
| Dampness In porous solid walls, chimneys, parapets, etc. In limestone or other masonry having high carbonate content or in persistently damp situations Rising damp in solid walls through absence or defectiveness of d.p.c. | Brickwork to be wire-brushed to remove loose particles, repointed if necessary and the surface generally brought into good condition. As above. A row of $\frac{1}{8}$ -in. holes to be drilled into brickwork at 9-in. centres downwards at 45°, penetrating just beyond halfway through thickness. Walls of 14 in. or greater thickness require drilling from both sides. | During a spell of dry weather, the exterior wall surface should be sprayed with Wykamit Silicone. The wall should be sprayed with Wykamit Primer. As soon as masonry is reasonably dry, a second spray treatment with Wykamit Silicone should be applied. Wykamit D.P.C. should be filtrated into drill holes in sufficient quantity to ensure impregnation face-to-face of the brickwork or masonry. Later surface spray treatment with Wykamit Silicone should be applied to prevent moisture penetrating horizontally and building up over the Wykamit D.P.C. | The drier the wall at the time of treatment, the longer will water repellency persist. In persistently damp situations, the object of applying Wykamit Primer is to reduce the moisture content of the brickwork to a point at which Wykamit Silicone can penetrate and give long-term protection. Where rising damp is not obviously present but is merely suspected, an initial surface spray treatment with Wykamit Silicone may reduce dampness effectively and render the more expensive d.p.c. process unnecessary. |
| Algae, Moss, Lichens On damp walls and roof tiles | — | Algon should be sprayed in sufficient quantity to saturate the growth. When the growth is completely dead, it should be scraped away. A second application of Algon will prevent recurrence. | Care should be exercised in scraping dead moss from porous roof tiles; wooden tile pegs may be weakened by decay. |

This Sheet describes the Wykamol range of products for the treatment of all kinds of decay due to insect attack or damp conditions.

Materials

Wykamol: An organic solvent insecticide with chloronaphthalenes and gamma BHC as the main constituents. It is toxic to all wood-boring insects, including marine borers and termites. The solution is colourless and non-staining: treated timber can be painted.

Wykamol Plus: A solution of Wykamol supplemented by powerful fungicidal chemicals to produce a general-purpose preservative toxic to both wood-destroying fungi and insects.

Murosol: A water-borne solution designed to produce a fixed deposit of fungicidal chemicals within brickwork and masonry so as to eradicate wood-destroying fungi and inhibit their reappearance.

Ceetox: An organic solvent, water-repellent preservative, containing silicone resins in addition to preservative chemicals.
Wykamit Primer: A water-borne siliconate solution for application to highly-carbonated or persistently damp masonry, producing temporary water-repellency and bringing the fabric into a condition suitable for effective treatment with Wykamit Silicone.

Wykamit Silicone: A high-strength solution of silicone resins in organic solvents, designed to make brickwork and masonry lastingly water-repellent.

Wykamit D.P.C.: A water-borne siliconate solution for the creation of damp-proof barriers in solid walls.

Algon: A water-borne algicide and herbicide.

Wykester: A silicone ester preparation for preserving friable stonework.

Coverage and Application

The coverage of timber fluids varies with the absorptive capacity of the timber and is usually between 120 and 180 sq. ft. to the gallon. Murosol should be applied to ensure an even diffusion of one gallon (diluted) through every 15 cubic feet of brickwork or masonry. Water-repellent surface treatment requires the application of at least one gallon to every 200 sq. ft., depending on the porosity of the wall.

The fluids are most effectively applied by pneumatic compression-type sprayer producing a moderately coarse spray. Suitable equipment may be purchased or hired from the manufacturer.

Further Information

The manufacturer maintains a staff of specialist surveyors experienced in the investigation of problems of timber decay and dampness. Treatment can also be carried out by the manufacturer, who has skilled labour and equipment available for undertaking control measures on any scale.

Compiled from information supplied by:

Richardson and Starling Limited

Head Office: 21, Hyde Street, Winchester, Hampshire,
Telephone: Winchester 5001.

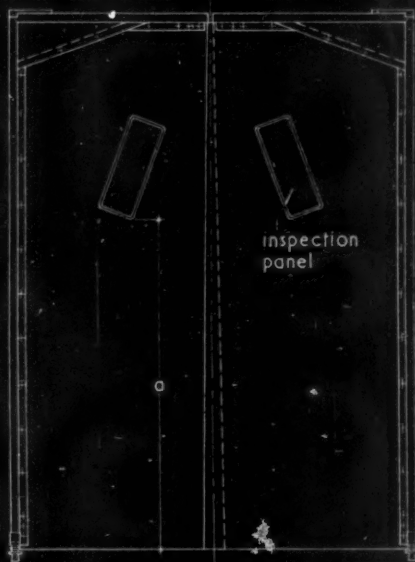
London Office: 21, Wormwood Street, Bishopsgate,
London, E.C.2.

Telephone: Avenue 6685.

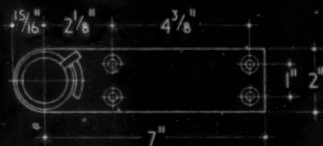
Branch Offices: Cardiff, Edinburgh, Glasgow, Leeds.

DOORS | FLEXIBLE

The Architects' Journal Library of Information Sheets 812. Editor: Cotterell Butler, A.R.L.B.A.



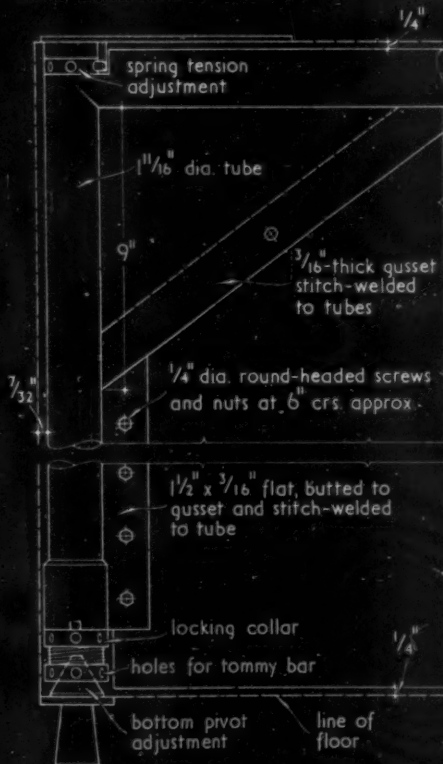
TYPICAL ELEVATION OF PAIR OF DOORS



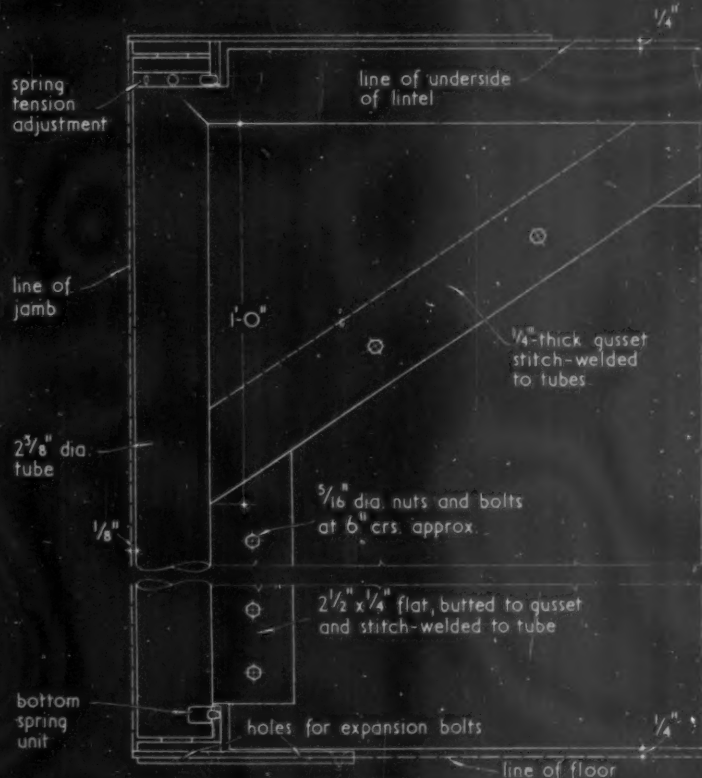
view of underside of top plate



view of underside of top plate



DETAIL OF LIGHT DOORS



DETAIL OF HEAVY DOORS

| type | rubber | | | plastic |
|----------------------------|--------|--------|-------------|---------|
| | light | heavy | extra heavy | |
| maximum height | 8'-6" | 11'-0" | 12'-0" | 8'-0" |
| max. width of single doors | 3'-0" | 5'-0" | 6'-0" | 3'-0" |
| max width of pair of doors | 6'-0" | 10'-0" | 12'-0" | 6'-0" |
| dimension 'a' | 4'-0"* | 4'-3" | 4'-3" | - |

* for doors under 6'-6" high dimension 'a' varies according to the height of the doors

TABLE OF DIMENSIONS

23.22 FLEXIBLE DOORS

(Patent Nos. 719189/54, 719190/54, 0022/60 and 726071/55)

This Sheet describes flexible doors for use in commercial and industrial buildings. They are of the swing type and are available singly or in pairs.

General

The doors consist of flexible panels held at the top and sides by tubular metal frames pivoted at lintel and floor. They can be arranged to swing either way or both ways if required. Their use makes it possible to have the advantages of a door to separate departments and exclude draughts, while at the same time permitting trucks, trolleys or persons to pass quickly through without noise or damage.

Construction

There are four types of door, light, plastic, heavy and extra heavy, and all types may be used singly or in pairs.

Main frame: This is of tubular steel either $1\frac{11}{16}$ in. or $2\frac{3}{8}$ in. dia.

Panels: The panels are specially manufactured, $\frac{5}{16}$ in. thick for light doors or $\frac{1}{2}$ in. for heavy and extra heavy doors. The canvas reinforcement of rubber doors is of heavy duck with a $\frac{1}{16}$ -in. tough, hard-wearing skin of rubber on either side. Plastic panels are $\frac{1}{4}$ in. thick. Where there is a pair of doors, the panels overlap $1\frac{1}{2}$ in. at the top and 4 in. at the bottom.

Panel framing: The top and side edges of the panels are held between steel flats either $1\frac{1}{2}$ in. by $\frac{3}{16}$ in. held together by screws and nuts, or $2\frac{1}{2}$ in. by $\frac{1}{4}$ in. held by bolts and nuts. A gusset plate is inserted in the upper corner of the panel on one face only, butt-jointed to the flat, the whole assembly being stitch-welded to the main tubular frame. The flat on the other face is free of the main frame.

Inspection panels: These are of transparent plastic in aluminium frames held by patent rivets for easy removal. They are 1 ft. 6 in. by 6 in. on all doors, but may be increased to 2 ft. 0 in. by 9 in. on heavy type doors where size permits. They are set in the panels at an angle so that their rigidity will not distort the panel when the door is opened.

Pivot assemblies: The doors are pivoted top and bottom and fixings to the structure of the opening provided. Details are shown in the drawings on the face of the Sheet.

Return spring and tension adjustments: The patented return spring is totally enclosed in the top of the vertical tubular framing with tension adjustments as shown in the drawings on the face. All heavy doors have the bottom pivot adjustment replaced by a spring unit similar to that at the top.

Sizes

The sizes are as given in the table on the face of the Sheet.

Fixing

The top plate is supplied for letting-in and screwing to a timber head. The bottom cone-type bearing on the light and plastic doors is for building into concrete and the bottom plate of the heavy type is for fixing in concrete with expansion bolts.

Ordering

When ordering doors the following information should be supplied:

- (1) Size of opening from floor to underside of lintel and between jambs at lintel and floor.
- (2) Whether doors are for internal or external use.
- (3) Type of traffic anticipated.
- (4) Composition of floor and lintel.

Applications

Flexible doors are suitable for factories, stores and warehouses, hospitals, hotels and restaurants. In addition, the doors may be fitted in sliding doors to reduce the opening to that required for small traffic; hung horizontally to form flaps to chute openings; used to seal openings between departments using a continuous conveyor belt; fitted horizontally above a pair of rubber doors of maximum height where exceptionally high loads occasionally have to pass through.

Finish

All metal parts are primed one coat of red oxide: the panels are black. Frames for plastic doors are stove-enamelled polychromatic green.

Maintenance

The panels may be kept clean by regular washing down with detergent. 10 per cent glycerine in methylated spirits, regularly applied, will keep the rubber panels in good condition. No fats or grease should be allowed to come into contact with the rubber; brine has no effect on it but chlorine will harden the rubber and rot the core. Neoprene and plastic are not affected by any of these substances.

Fire Resistance

The rubber will not burn until melting point is reached. Plastic panels are classed as self-extinguishing. Neoprene has good fire-resisting properties.

Further Information

The manufacturer will advise on any problems connected with the installation of flexible doors.

Compiled from information supplied by:

William Newman & Sons Limited.

Address: Hospital Street, Birmingham.

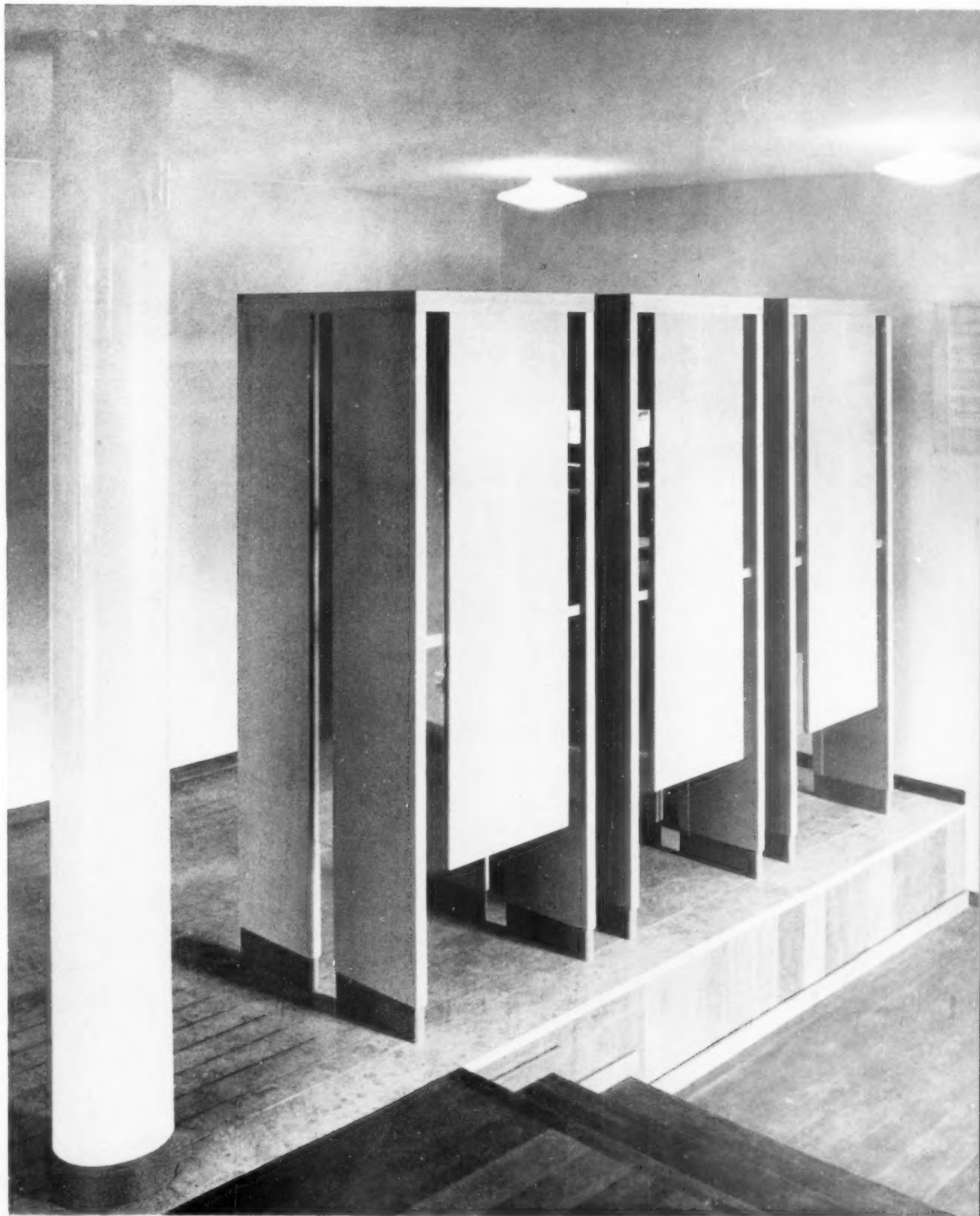
Telephone: Aston Cross 3221.

working detail

FURNITURE AND FITTINGS: 106

TELEPHONE BOXES: RESTAURANT IN LIDINGO, SWEDEN

Anders Tengbom and Sven Kai-Larsen, architects (material supplied by A. J. Sherwin)



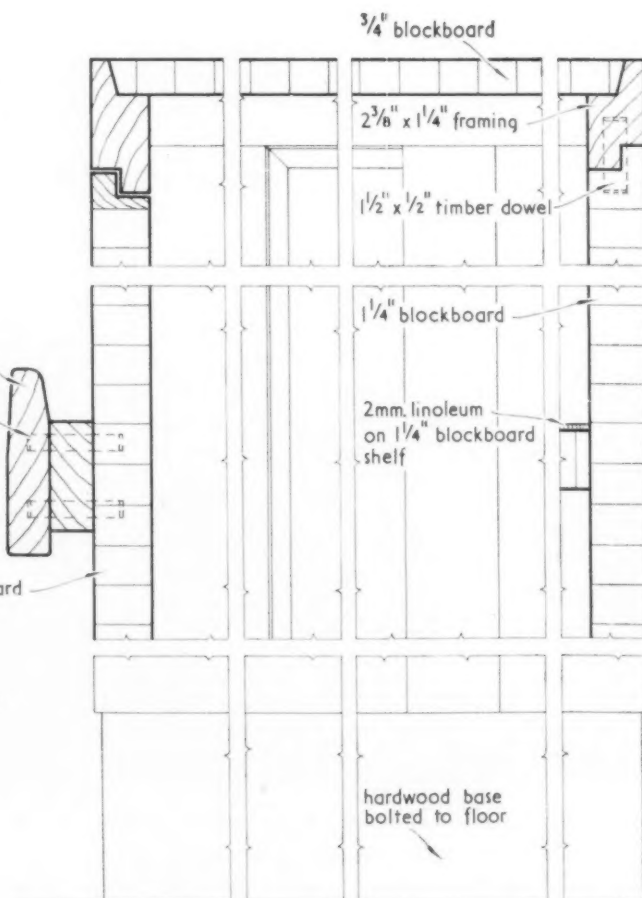
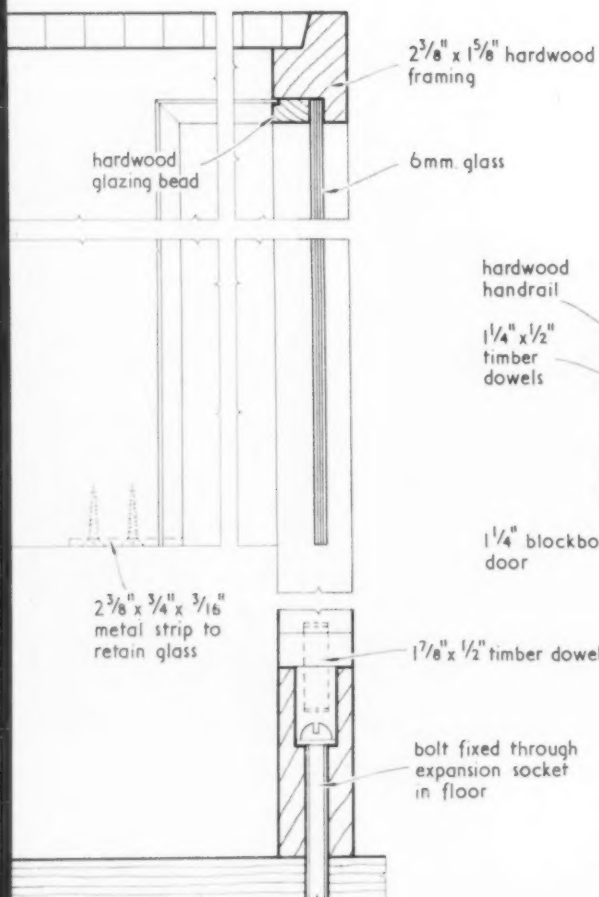
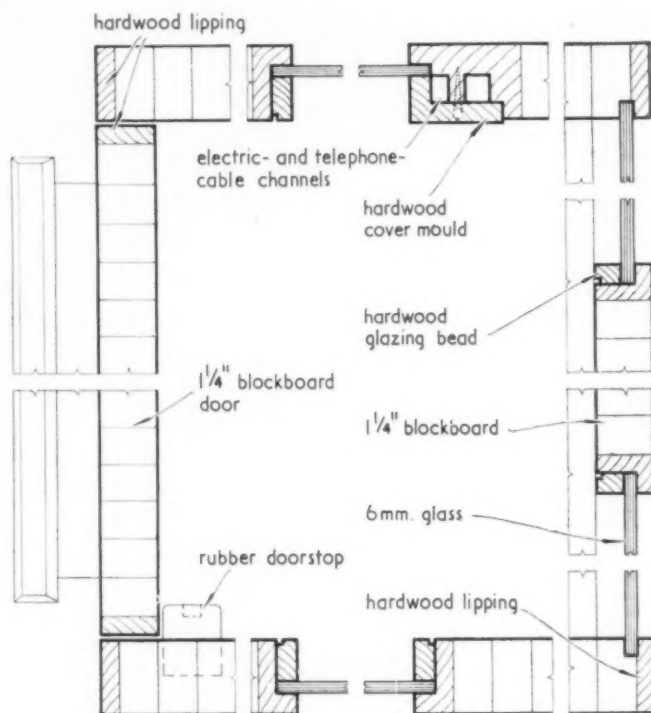
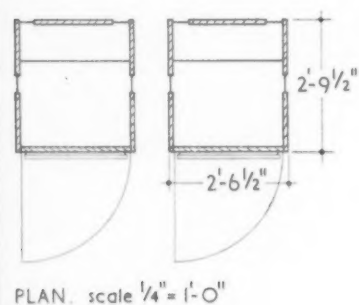
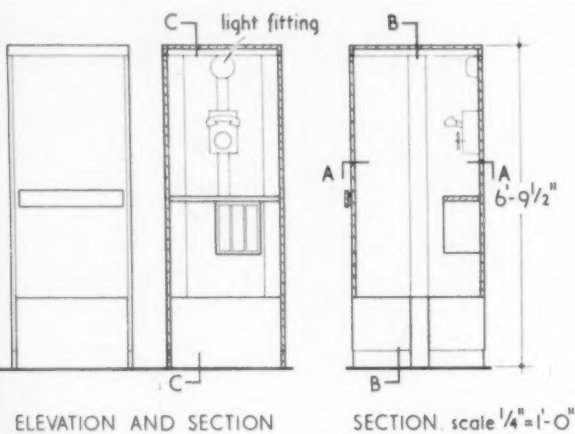
The most interesting aspect of this detail is the neat use of hardwood trim. Note (on the drawing) the concealed floor fixing passing through the skirting, the concealment of the telephone cable behind an extended glazing bead and the consistent use of timber dowels.

working detail

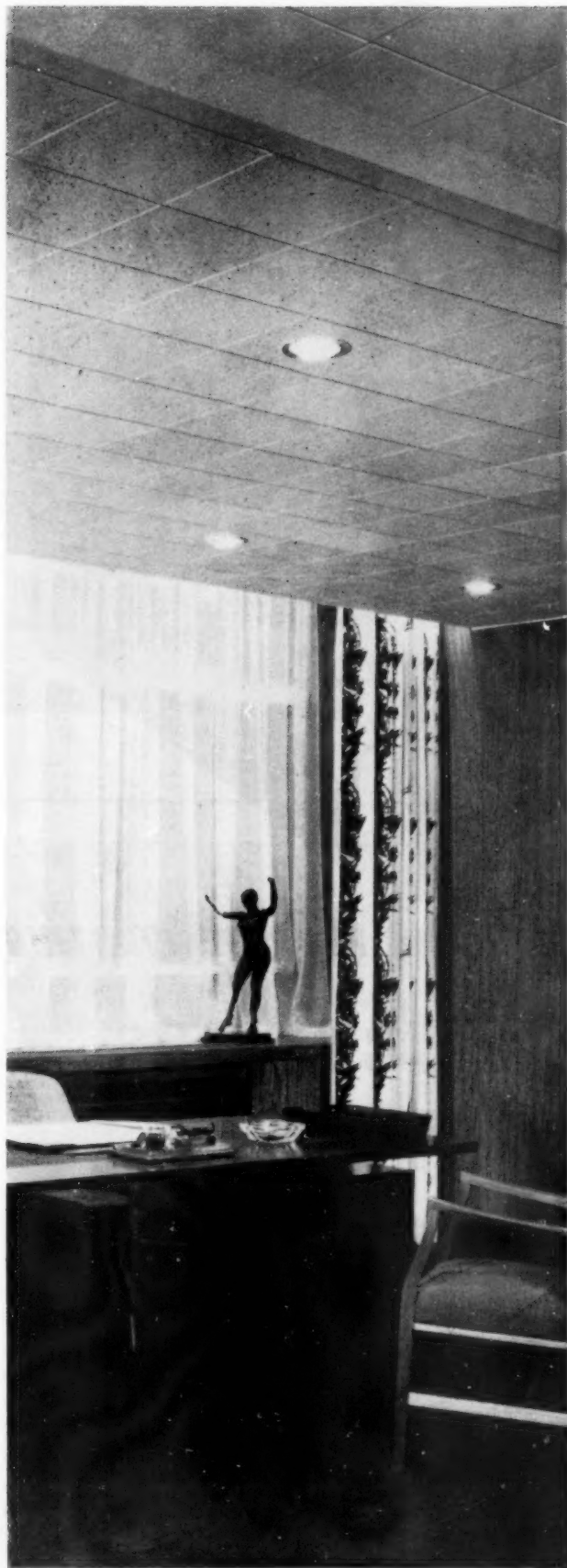
FURNITURE AND FITTINGS: 106

TELEPHONE BOXES: RESTAURANT IN LIDINGO, SWEDEN

Anders Tengbom and Sven Kai-Larsen, architects (material supplied by A. J. Sherwin)

SECTION C-C. scale $\frac{1}{4}$ full sizeSECTION B-B. scale $\frac{1}{4}$ full size

note: figured dimensions in feet and inches are approximate



he dividends of silence...

A successful compromise between a conservative exterior and an adventurous and modern interior has been made at the Ionian Bank's building in Coleman Street, London E.C.2. Five of the Bank's directors share a large first-floor office. The elimination of excessive noise was considered essential and has been achieved by the use of Armstrong Travertone tiles. The superb decorative effect of these fire-resistant mineral wool tiles has enhanced the appearance of the room, where the individual tastes of the five directors have been effectively blended.

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◀ The directors' office in the Ionian Bank.

Architects: Guise, Davies & Upfold

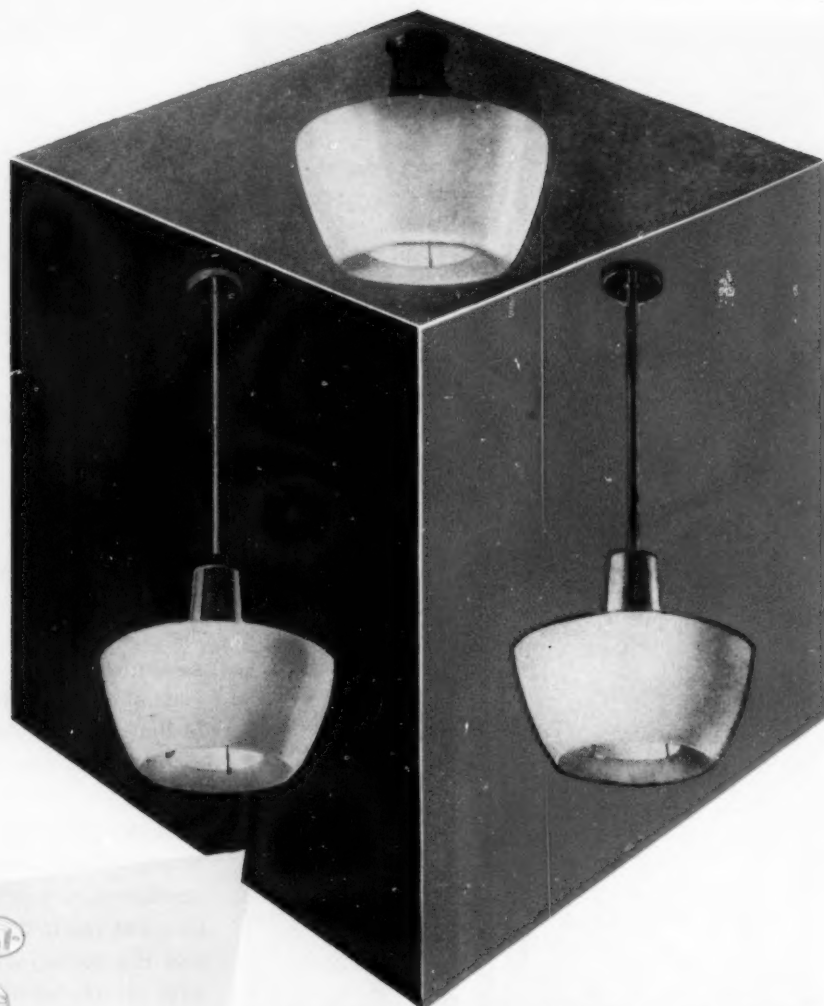
Acoustic contractors: Horace W. Cullum & Co. Ltd.



The next
advertisement
in this series
will feature the
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at Bath

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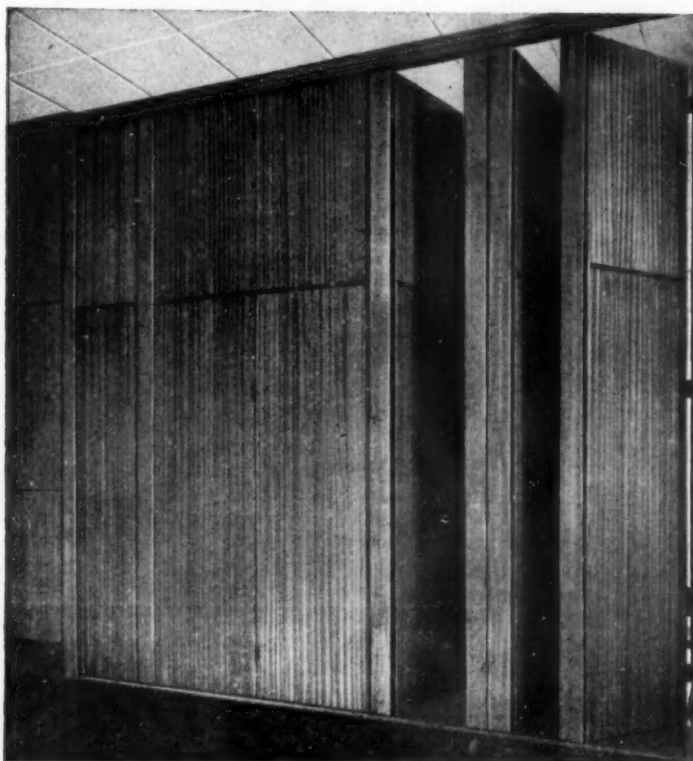
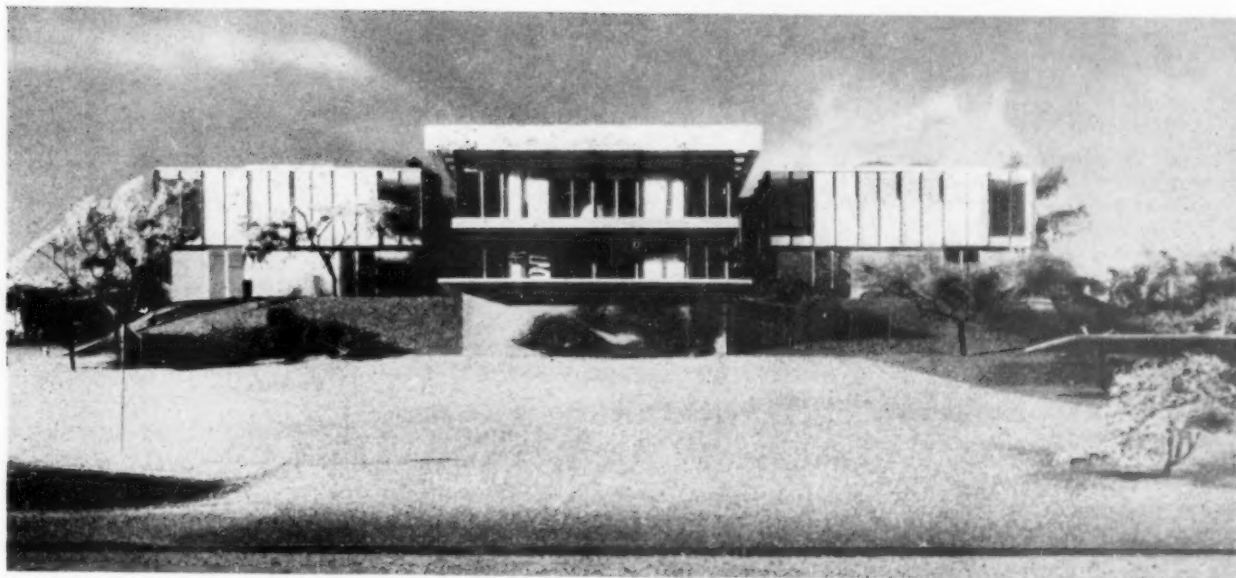
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Aluminium House in Detroit

Aluminium structural members, which can be put together with a hand wrench, screwdriver, bolts and screws, compose the house, of which this is a model, designed by Greimel and Morris, for a Detroit industrialist, who produces aluminium building products. Presumably it is a shop window in the same way as Lady Docker's gold-plated car: it will cost when finished about \$250,000. However, it is claimed that the use of aluminium can greatly increase the flexibility of prefabrication, enabling a house to be expanded with the size of family, and achieving flexibility of design along with economical production and assembly.



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Architect: Fitzroy Robinson & Partners.
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New Infirmary for Royal Hospital, Chelsea

The new infirmary for 400 Chelsea Pensioners, designed by the Chief Architect's Division of the Ministry of Works for the War Department, to replace Sir John Soane's original building destroyed by bombing in 1941, was officially opened recently. The accompanying picture shows the main entrance to the new building, in Chelsea Bridge Road. The Ministry of Health, the LCC, the Nuffield Trust and the RFAC have all been brought into consultation on the design of this rather dull building, which aims to "preserve a continuity and harmony between old and new" without imitating the main Royal Hospital building, and is of course incomparably more comfortable, convenient and well appointed than the old infirmary.



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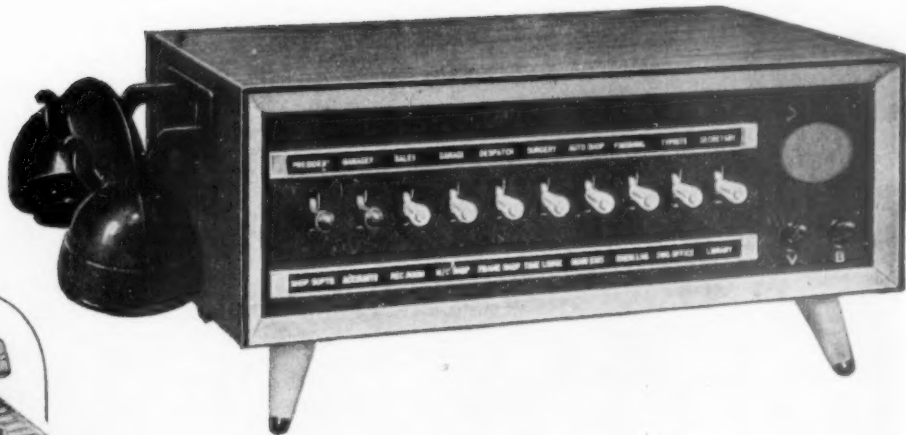
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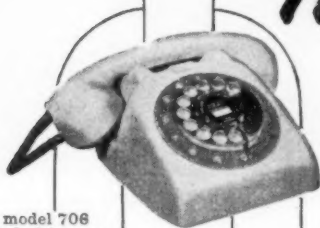


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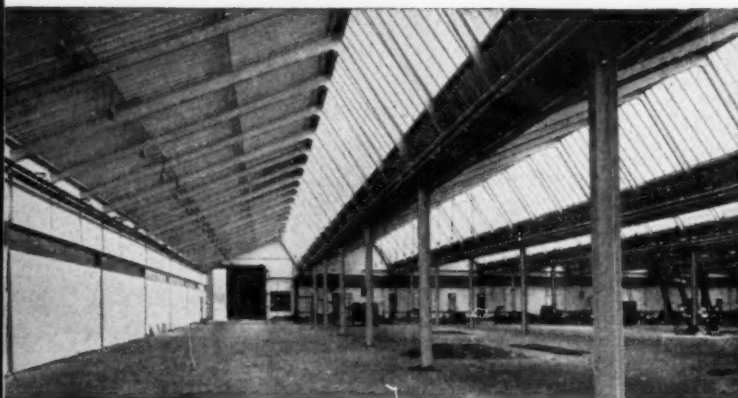
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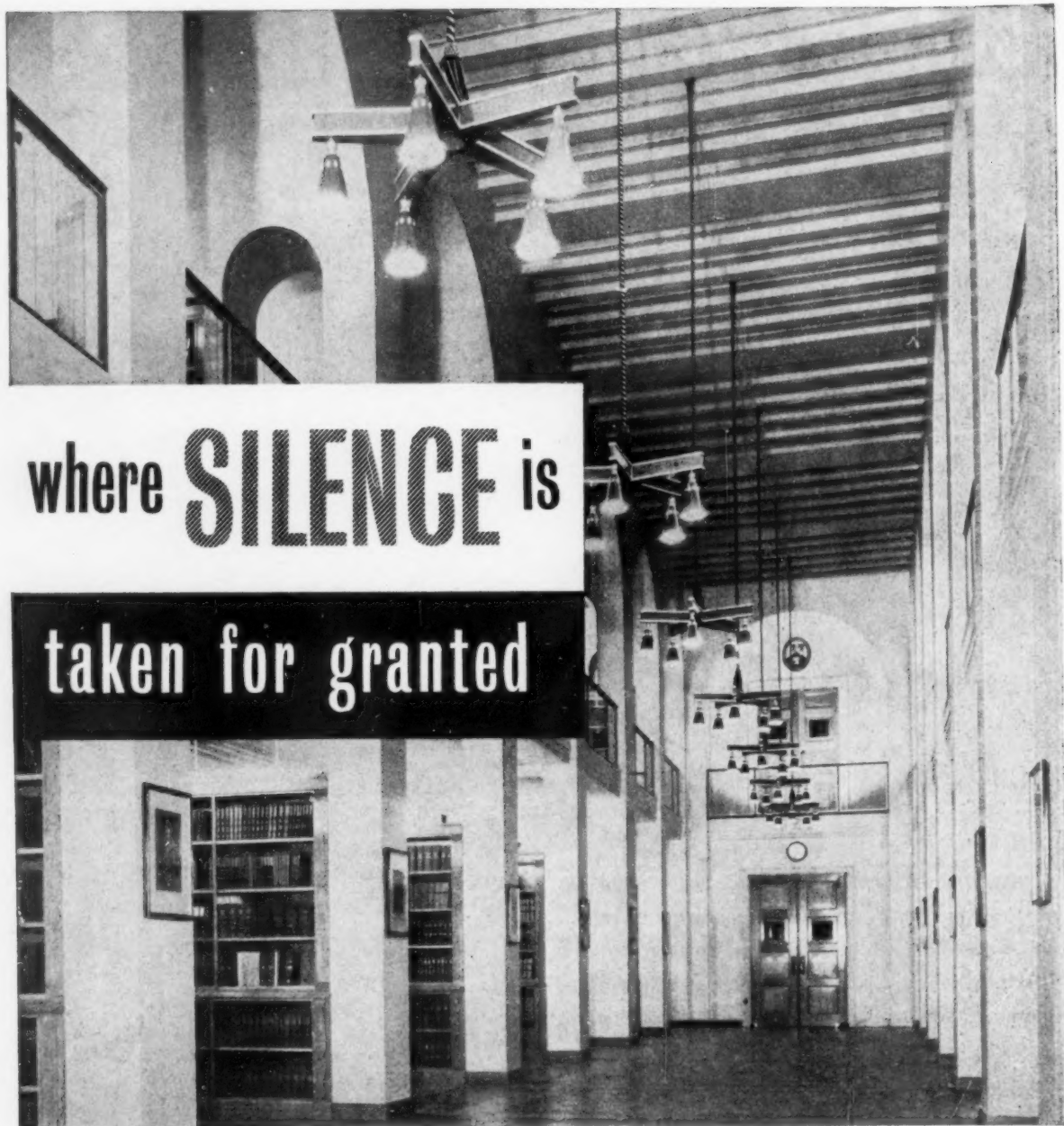
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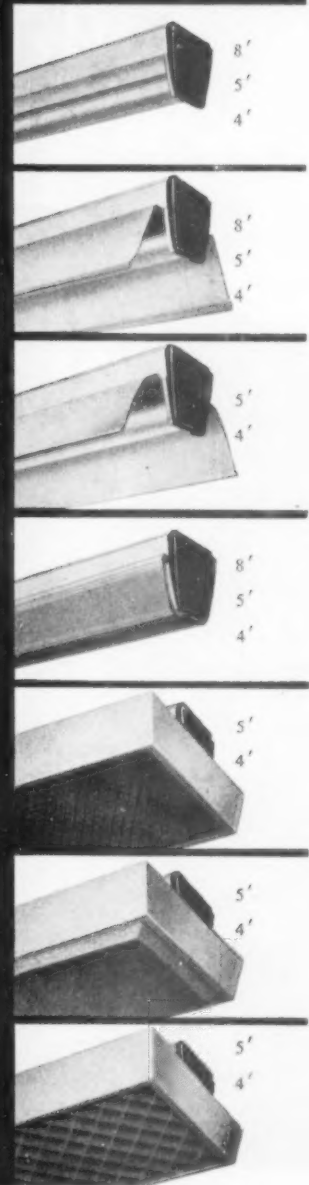
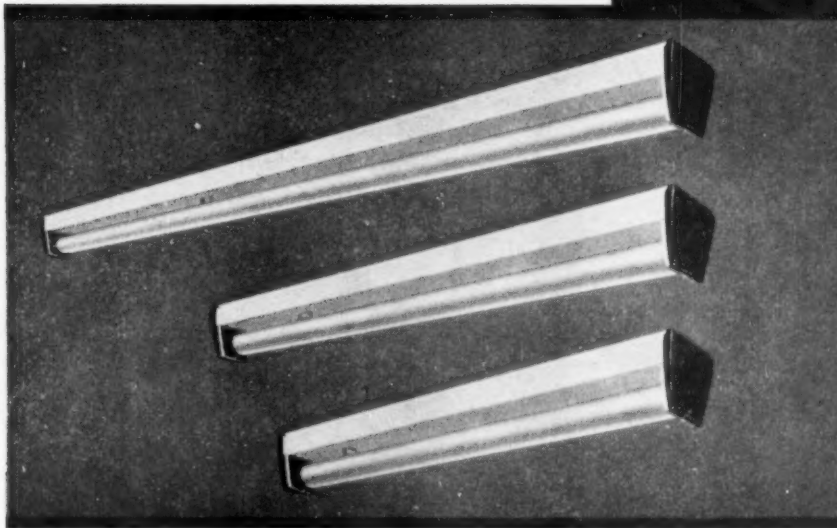
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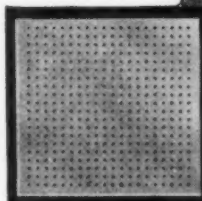
Ankarboard Acoustics are available as boards or tiles $\frac{1}{2}$ " or $\frac{3}{4}$ " thick in regular or random perforations. Regular perforations are 4 m/m at 15 m/m centres and random perforations are 4 m/m and 7 m/m holes. Holes are of the necessary depth to provide maximum acoustic correction.

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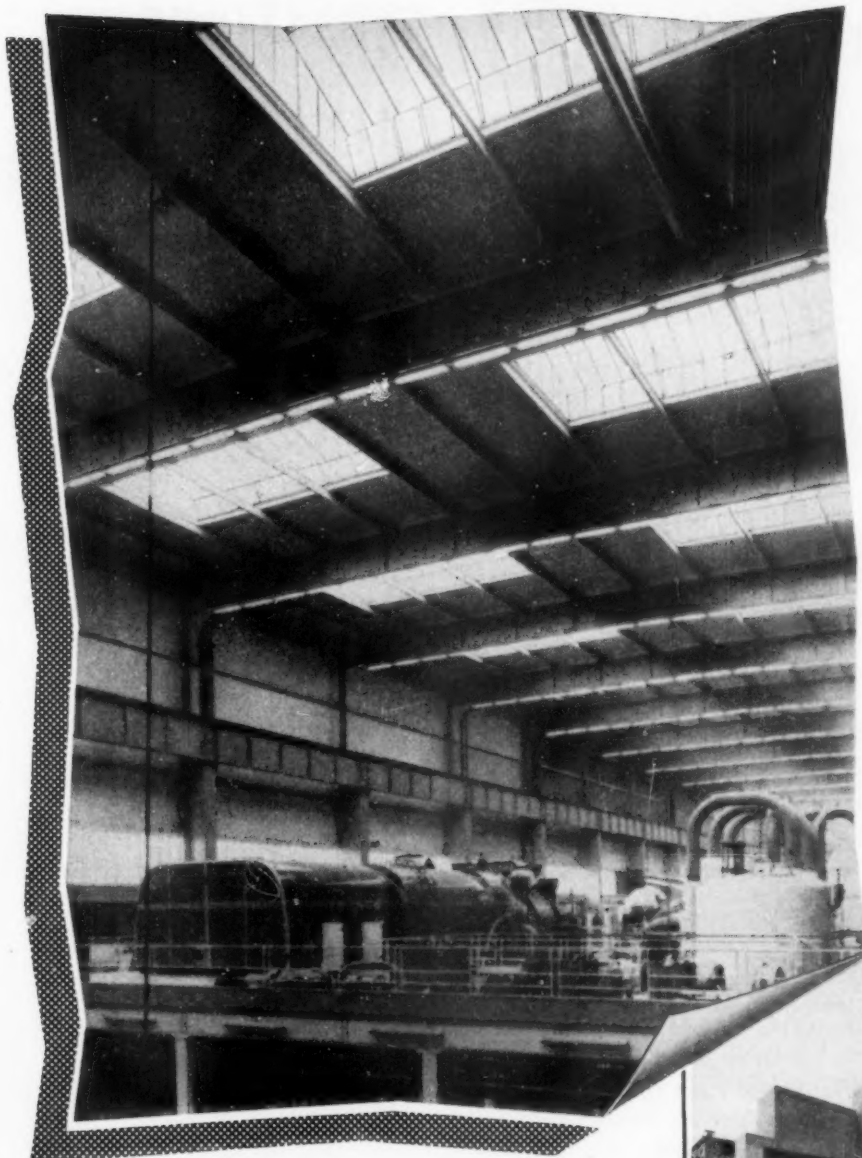
Entrance Hall, Yorkshire Electricity Board, No. 6 Sub Area, Hull
Architect: J. Houghton A.R.I.B.A., Hull
Main Contractors:
Geo. Houlton & Sons, Ltd, Hull
Ceilings by:
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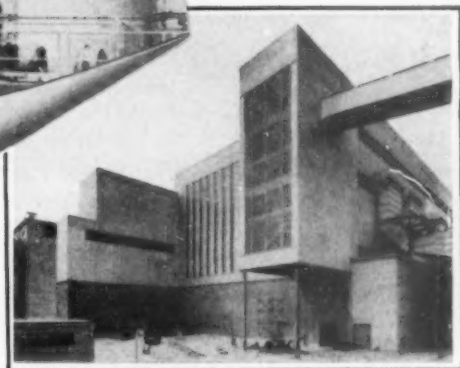
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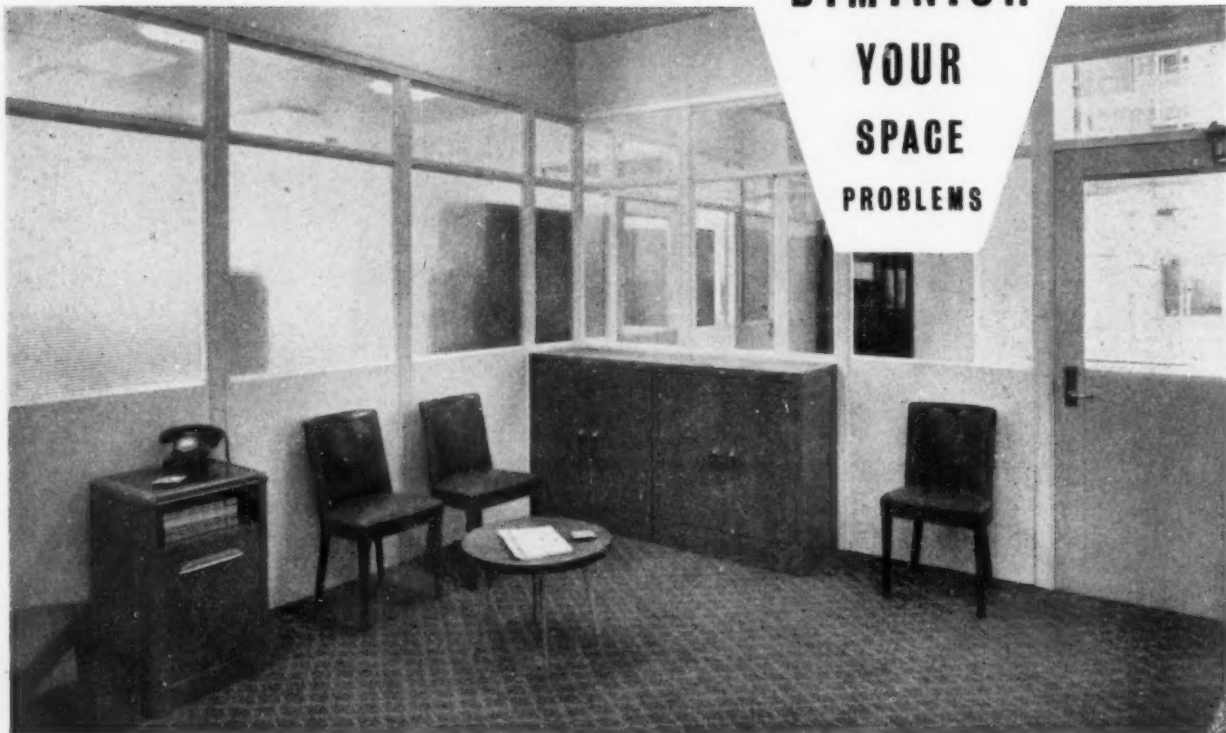
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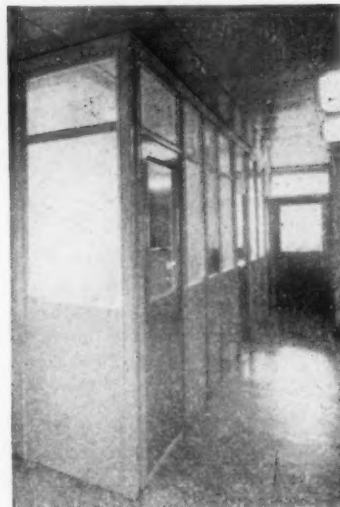
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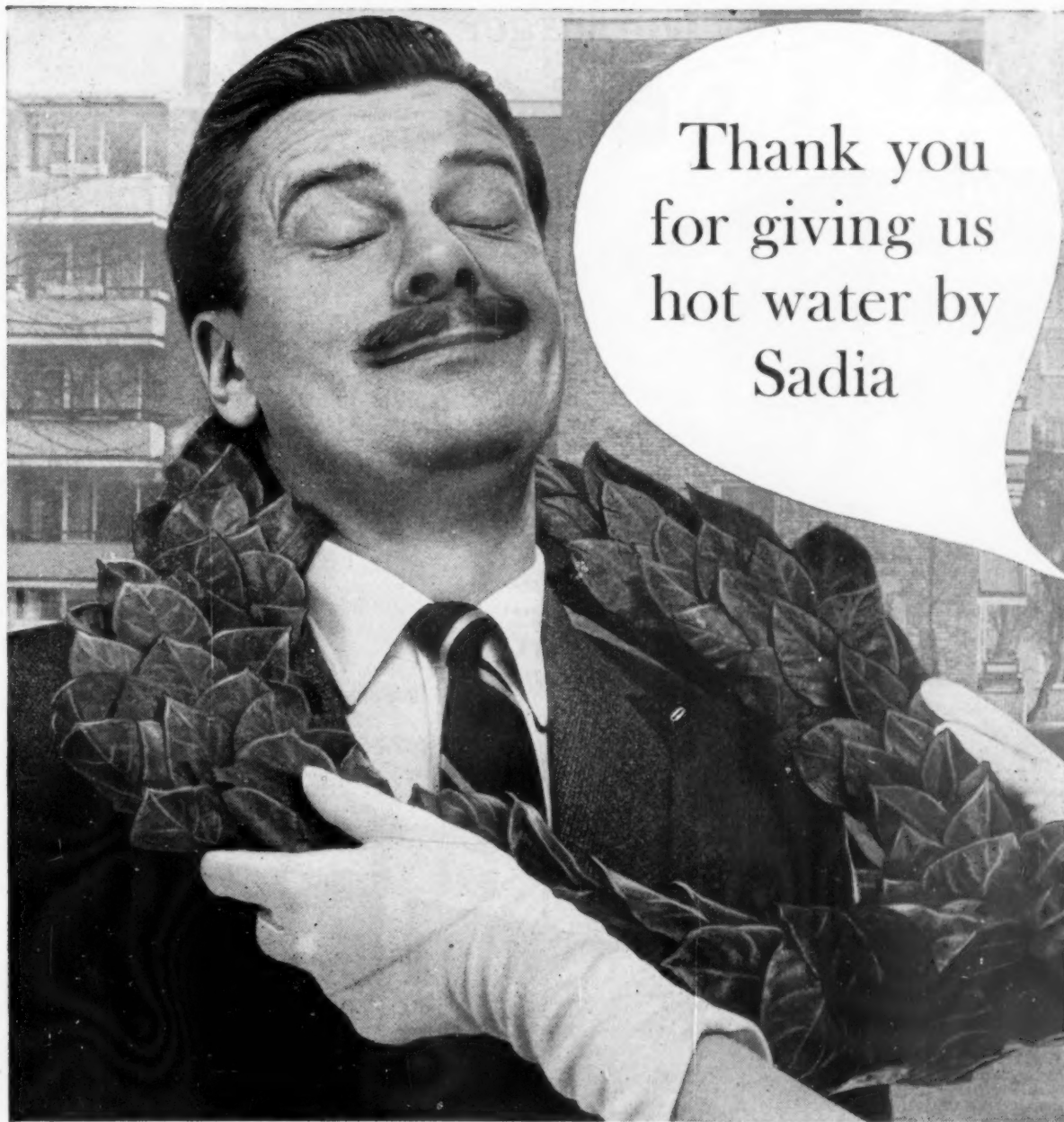
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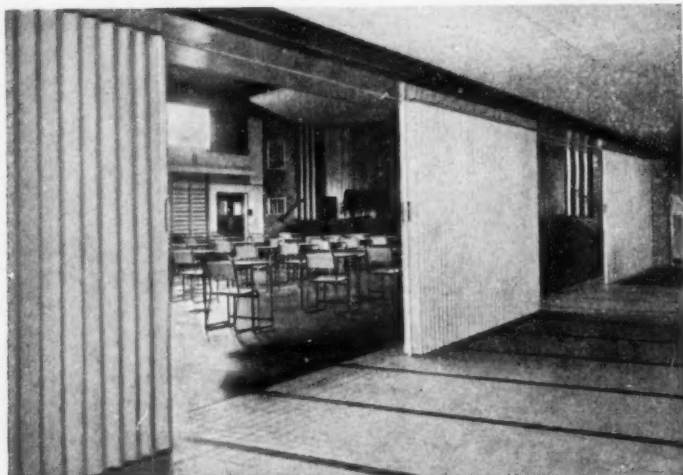
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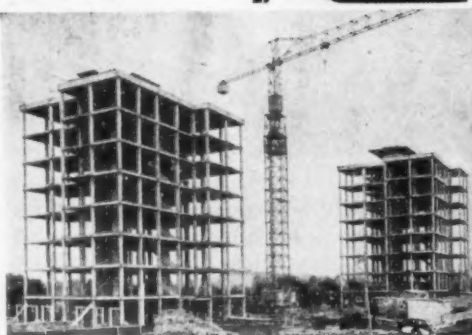
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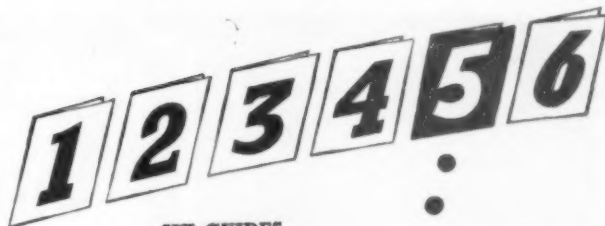
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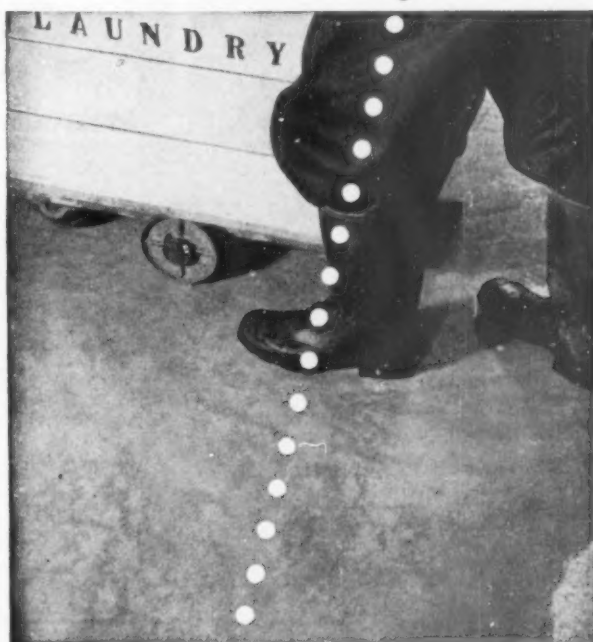
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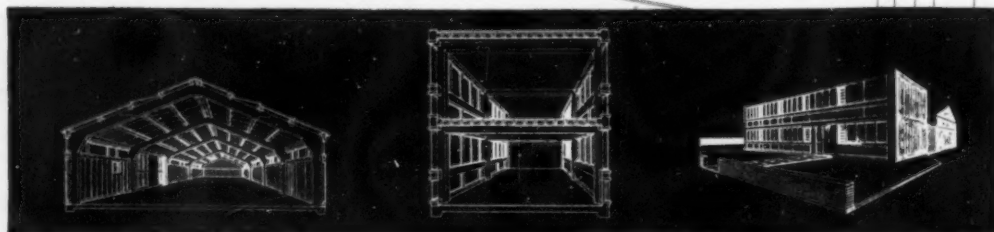
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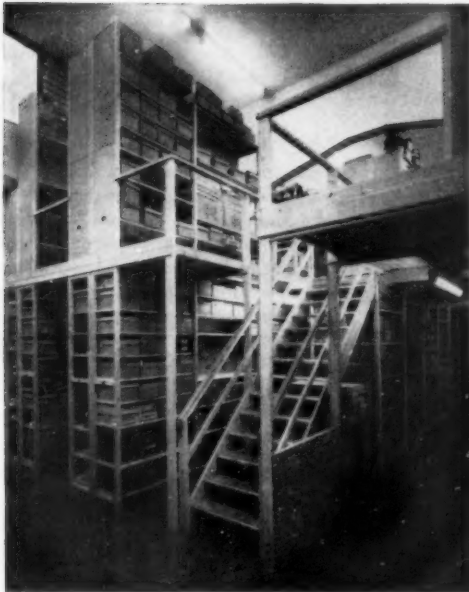
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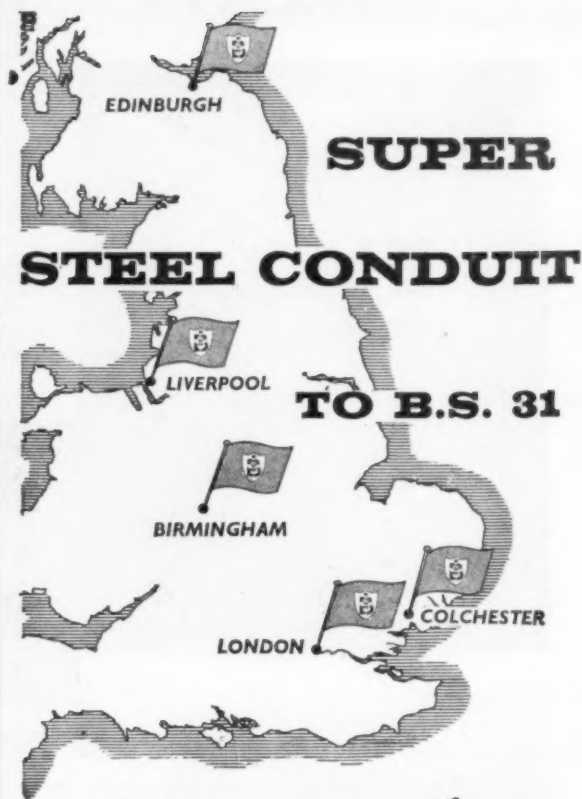
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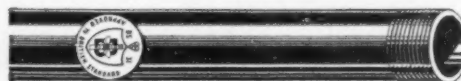
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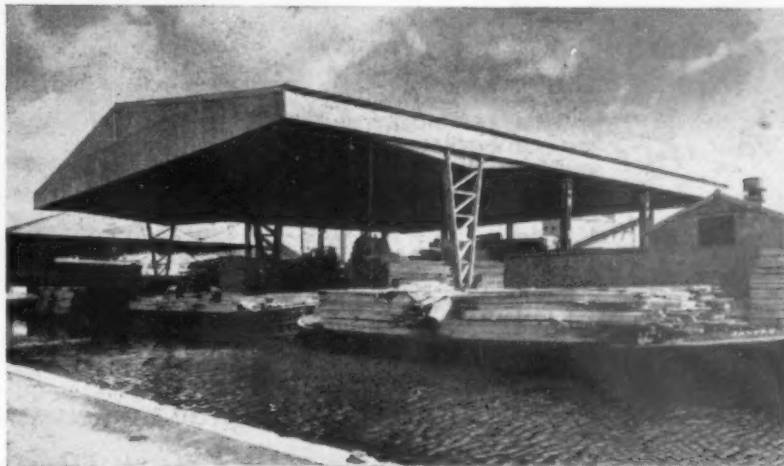
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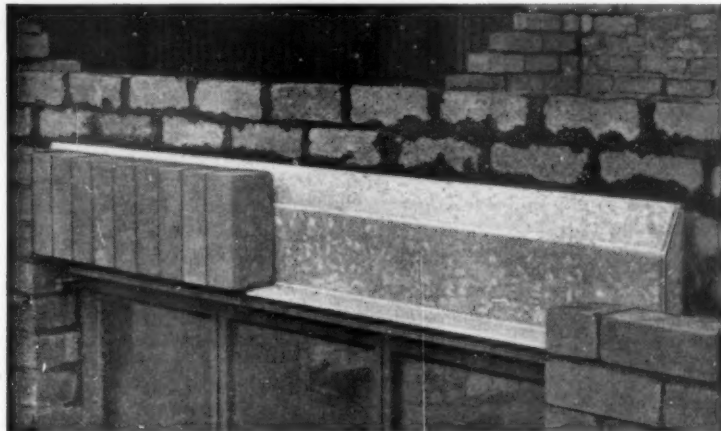
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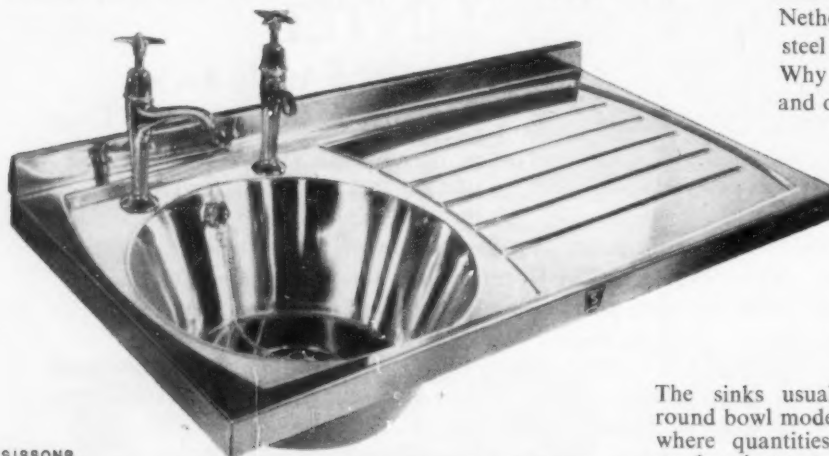
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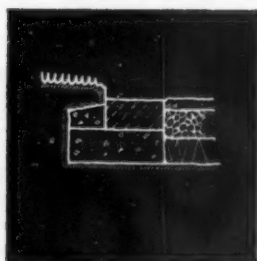
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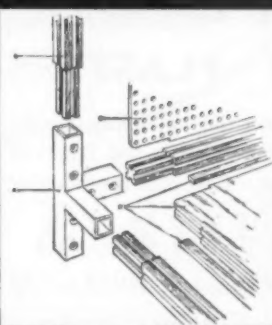
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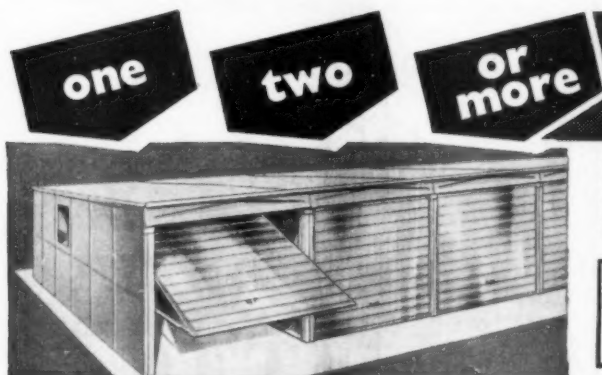
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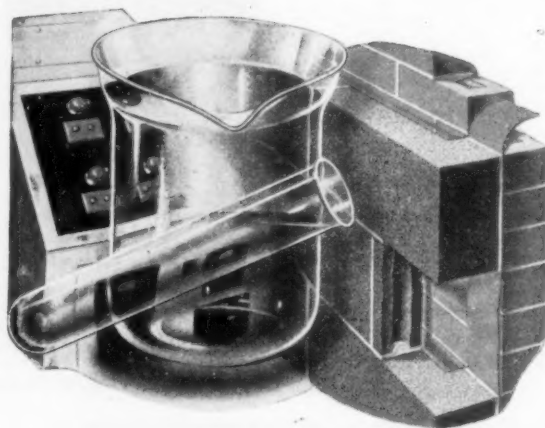
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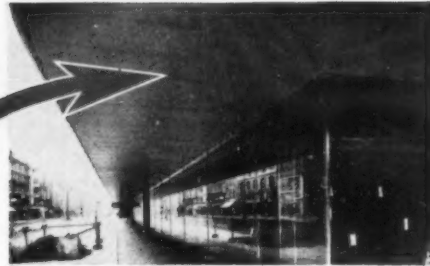
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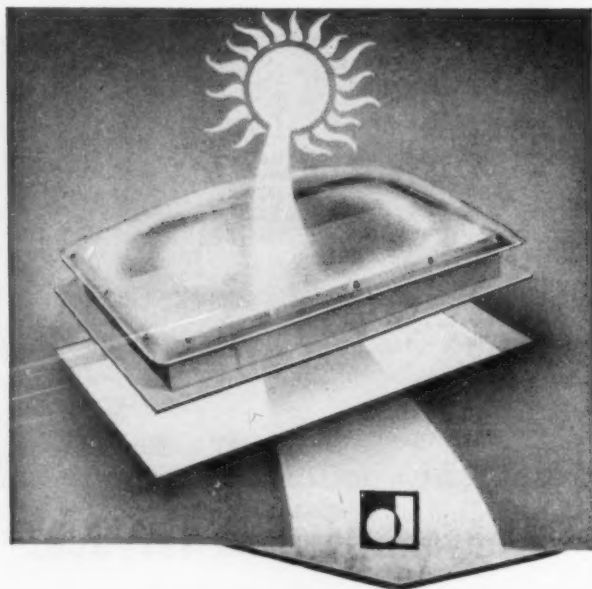
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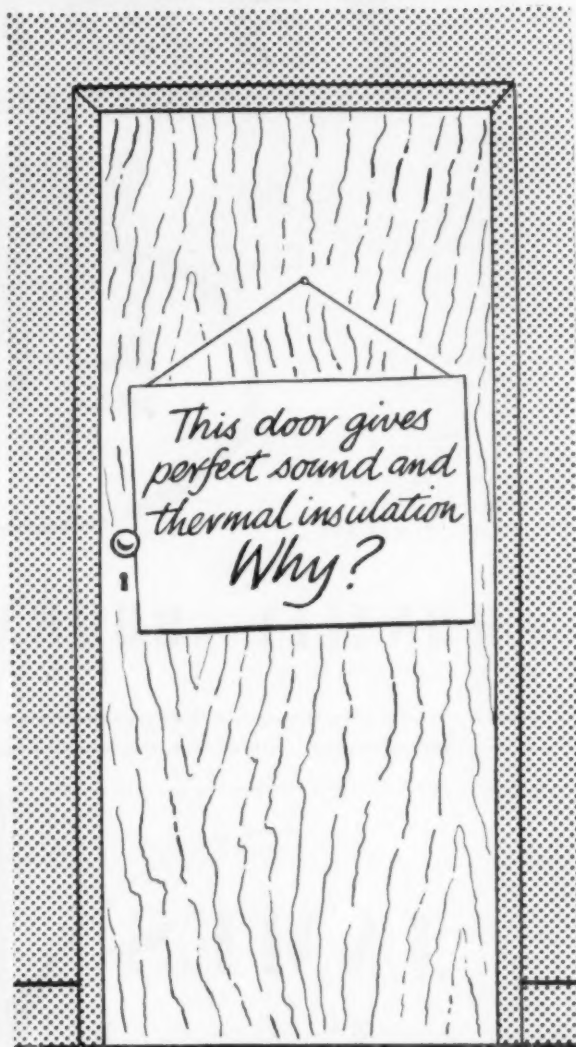
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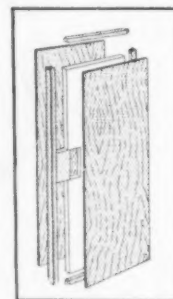
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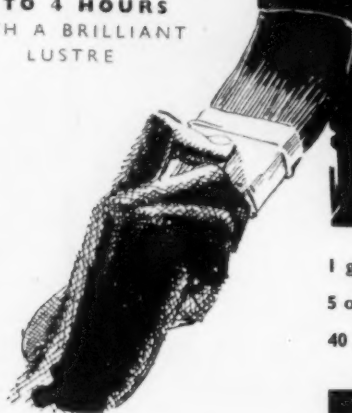
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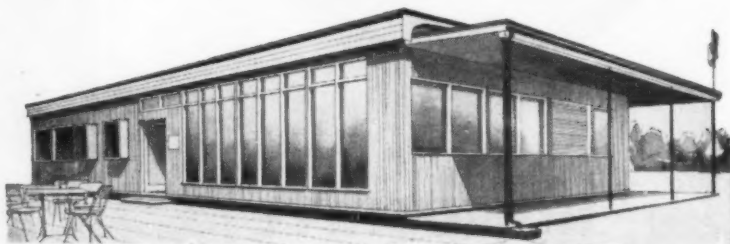
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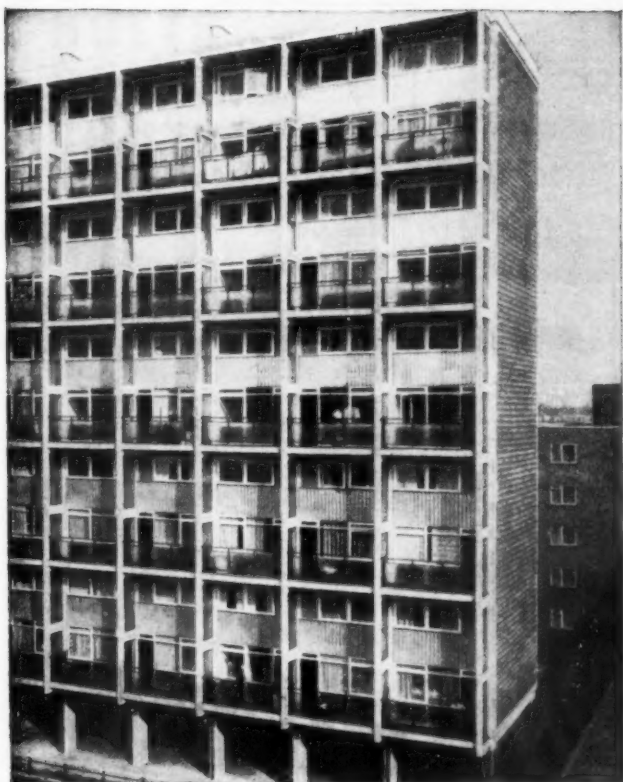
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 SUFFOLK HOUSE, 5 LAURENCE POUNTNEY HILL, E.C.4
 TEL: MINCING LANE 1531-3. TELEX: 25272

LEEDS OFFICE:
 11 KING STREET, LEEDS, 1
 TEL: LEEDS 30384-5. TELEX: 55156

THE DUNDEE
LINOLEUM
COMPANY
LIMITED

OFFERS ARCHITECTS

2

NEW SERVICES

1

TECHNICAL
ADVISORY
SERVICE

On call for architects is a team of specialists trained by Dundee who are always

ready to help you if you have any problems about flooring, the laying of linoleum under varying conditions, the quality of linoleum that would suit your needs best, or any other queries you may have in relation to the use of linoleum. Just contact Dundee whenever a problem arises, and one of these men will be on their way to see you.

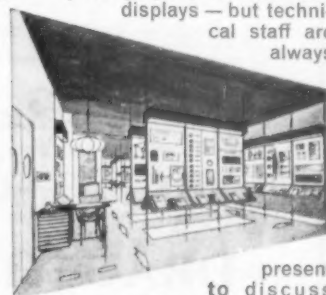
2

THE LINOLEUM
CENTRE



At the new Linoleum Centre in Little Britain E.C.1, you will find ideas for the use of Linoleum, recommended methods of installation, general information about the service and maintenance of linoleum. The Centre has been opened in co-operation with the leading manufacturers of sub-

floorings and all materials used in conjunction with Linoleum. The information is presented visually through photographs, models and displays — but technical staff are always



present to discuss particular problems. Why not call in at the Centre yourself—you're bound to find it interesting.

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NEW RANGE OF
LINOLEUM COLOURS
DESIGNED
SPECIALLY FOR
ARCHITECTS

Dundee have launched a new Contract quality range of heavy duty inlaid and plain linoleum in colours specially designed for the architect and designer to use in both modern and traditional schemes. Colours were specially selected by Michael Inchbald, M.S.I.A., F.R.S.A., M.B.A.D.A., noted Colourist and Interior Designer.

The

DUNDEE

Linoleum Company Limited,

Dundee House, 39/44, Little Britain, London, E.C.1. Tel: MONarch 0477

CWMBRAN NEW TOWN MONMOUTHSHIRE

Applications are invited from suitably qualified

ARCHITECTS

who wish to take part in an interesting and varied programme of work including all types of residential development, Town Centre Development and Neighbourhood Shopping Centres.

- (a) Principal Assistant Architect Grade APT. VIII £1,565-£1,825.

(The successful candidate will be responsible for the Housing Section of the Department.)

- (b) Senior Assistant Architect Grade APT. VII. £1,415-£1,670.

- (c) Two Senior Assistant Architects Grade APT. V. £1,310-£1,480.

- (d) Architectural Assistant Grade APT. III. £960-£1,140.

Conditions of service, including superannuation, are similar to those in Local Government. Housing accommodation will be available to rent or purchase, if required.

Applications, giving details of age, training, qualifications, present and previous appointments and experience, together with the names of two persons to whom reference may be made, must reach the undersigned on or before Monday, 10th April, 1961.

J. C. P. West, A.R.I.B.A., M.T.P.I.,
Chief Architect Cwmbran Development Corporation
Victoria Street, Cwmbran. Mon.

LAING

John Laing Construction Limited

Sydney Greenwood, A.R.I.B.A.,

Chief Architect,

requires

ARCHITECTS AND ARCHITECTURAL ASSISTANTS

Architects should be qualified and although experience is valuable vacancies exist for newly qualified Architects.

Architectural Assistants should have passed the Intermediate Examination of the R.I.B.A. or have reasonable equivalent experience.

Salaries will be commensurate with qualifications and experience.

Work in hand includes major commercial projects and industrial, domestic and school projects.

The office offers full opportunity for close collaboration with all branches of the industry and there is ample opportunity for advancement.

Pension facilities are available and applications should be made to:

The Group Personnel Manager (RSA 9),
JOHN LAING AND SON LIMITED
Page Street, Mill Hill, N.W.7

or arrangements for interviews can be made by telephone (Mill Hill 3636).

TAYLOR WOODROW (ARCON) LIMITED

SENIOR

ARCHITECTURAL DRAUGHTSMAN

Applications are invited from those having several years' first class practical detailing experience, and who are capable of taking responsibility.

The work is varied and interesting, and generally concerned with prefabrication.

Please reply giving full details of age, experience and salary to

The Office Manager,
41, Welbeck Street, W.1

For further information telephone HUNter 6666.

MICHELIN TYRE CO. LTD., STOKE-ON-TRENT

requires

(1) AN ARCHITECTURAL ASSISTANT

age 25-40, commencing salary at least £1,000 per annum. Applicants should have a minimum qualification of Inter. R.I.B.A., H.N.C. Building or equivalent and several years' experience in industrial building work.

(2) A JUNIOR ARCHITECTURAL ASSISTANT

age 21-23, having a minimum of 12 months' experience in a professional office. Commencing salary not less than £615 per annum at 21.

These architectural appointments are to complete a team engaged on interesting new building projects, at home and overseas.

These appointments are permanent and pensionable. Housing assistance given in appropriate cases. Removal expenses paid. Five-day week. Three weeks' holiday.

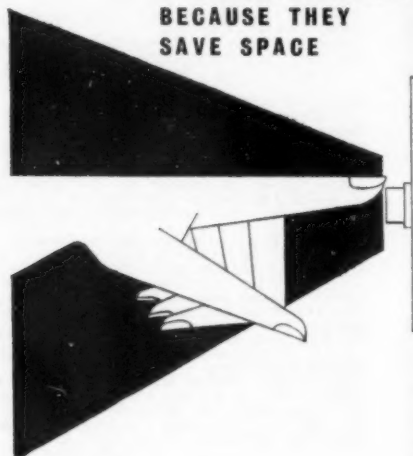
Please write in confidence, giving full details of qualifications and experience, quoting present salary to:

Mr. B. G. Tierney, Technical Personnel Officer,
at the above address

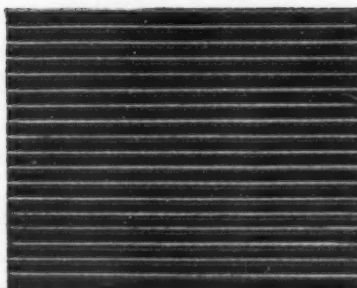
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HOLTS ROLLING SHUTTERS...

THEY SAVE MONEY
BECAUSE THEY
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HOLTS SHUTTERS LIMITED
Department (A.J.)
CAVALIER STREET, BRADFORD 3
Tel. No. 21305

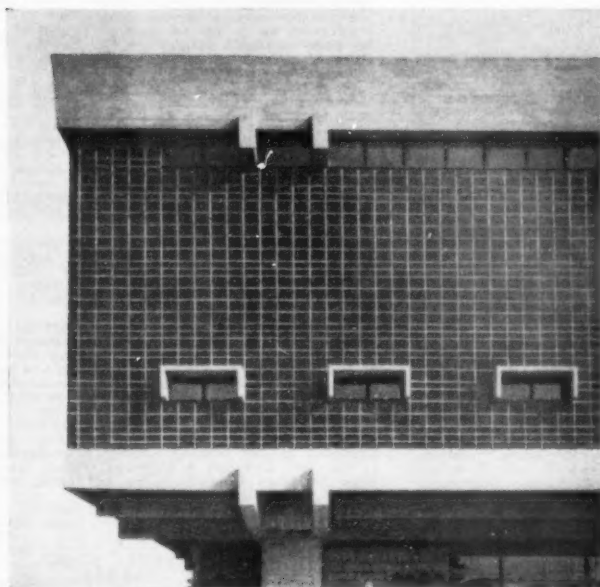


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- Electrically operated shutters in wood, steel or aluminium laths for industrial use.
- Polished hardwood shutters for hotel bars, cafe and canteen service hatches.
- Grille shutters for shop windows, bars and arcades.
- WRITE FOR DETAILED BROCHURE

HOLTS



New Japanese Architecture

by Udo Kultermann

The Architectural Press
9-13 Queen Anne's Gate, London, S.W.1.

Western opinion has an ideal image of modern Japanese architecture: spare, elegant, informal. While the work of Junzo Sakakura seemed to support this, there is an increasing awareness that in Kenzo Tange Japan possesses an architect who probably ranks with the world's top ten, but practises an entirely different kind of architecture.

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Size 11½ × 8½ ins. 212 pages. 180 half-tone illustrations.
63s. net. Postage 2s.

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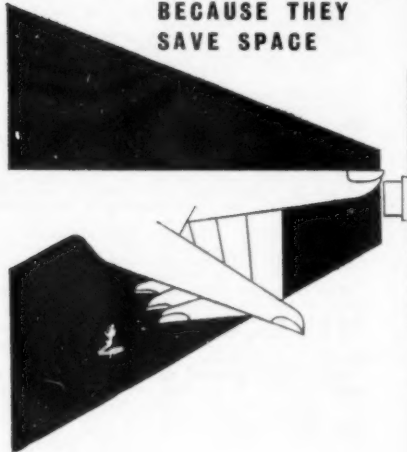
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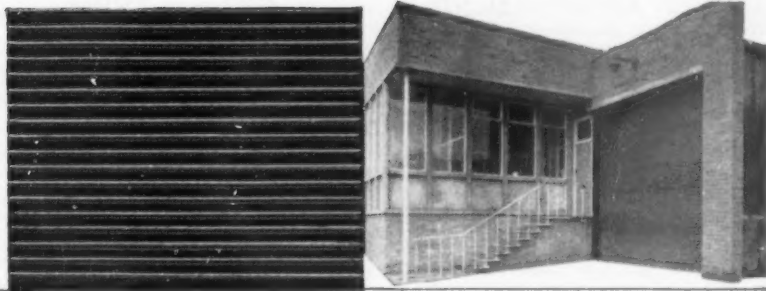
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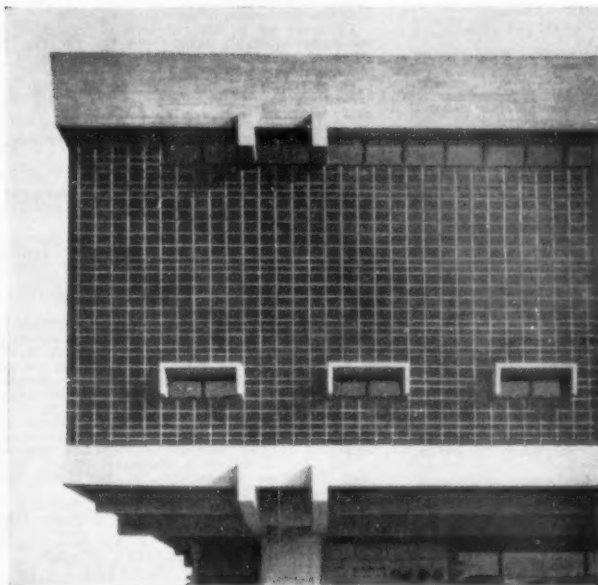


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Size 11¼ × 8¾ ins. 212 pages. 180 half-tone illustrations.
63s. net. Postage 2s.

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11, and 13, Queen Anne's Gate, Westminster, S.W.1. Normal printing arrangements have been altered to allow for the Easter holiday. The latest dates for receiving advertisements are as follows:—
 March 30 issue—Thursday, March 23.
 April 6 issue—Tuesday, March 28.
 April 13 issue—Friday, April 7.
 Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

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

Public and Official Announcements

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

METROPOLITAN BOROUGH OF BERMONDSEY

SENIOR ASSISTANT ARCHITECT (TEMPORARY)
 Applications are invited from persons under 51 years of age, qualified by examination as Associates of the R.I.B.A. for a temporary appointment of about two years to design a Public Baths and later to lead a small group in the preparation of working drawings and specifications.

Salary up to £1,565 per annum according to qualifications and experience.

Applications should be addressed to the Borough Engineer and Surveyor, Municipal Offices, Spa Road, S.E.16. 6428

CITY AND COUNTY OF NEWCASTLE UPON TYNE

CITY ARCHITECT'S DEPARTMENT

A unique opportunity exists in this office for competent Architects to take part in one of the most ambitious programmes of varied building works in the country, and vacancies in the establishment occur for ARCHITECTS who will be considered on their ability in design, experience, and architectural outlook, in the following grades:—

J.N.C. "C": £1,560—£1,825 per annum.

J.N.C. "B": £1,410—£1,670 per annum.

A.P.T. V: £1,310—£1,480 per annum.

A.P.T. IV: £1,140—£1,310 per annum.

A.P.T. III: £960—£1,140 per annum.

A.P.T. II: £815—£960 per annum.

A.P.T. I: £645—£815 per annum.

The Department is engaged upon a wide and varied programme of major redevelopment schemes embracing multi-storey flats, shopping precincts and associated community buildings, one of which schemes is the Scotswood Road Redevelopment Area to rehouse approximately 5,000 people, and which is expected to cost in the region of £12 million.

Planning work has now commenced on the new Education Precinct in the central area, comprising Colleges of Further Education, Art and Industrial Design, Drama, Commerce and Multi-storey Hostels, which will be the largest development of its kind in the country.

Further projects include: Airport Terminal; Abattoir and Pabstok Market; Vegetable Markets; Central Library; and Divisional Police Headquarters, etc., and a varied programme of normal housing development of a stimulating character.

The department is also engaged on the New Town Hall, where an exceptional opportunity is presented for working on a building of some £4 million in value, and being executed in materials of the highest quality.

Architects wishing to take part in one of Britain's most stimulating programmes should apply immediately for further details and forms of application to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 13, Cloth Market, Newcastle upon Tyne, 1, indicating the grade for which they wish to apply.

JOHN ATKINSON,
 Town Clerk.

Town Hall,
 Newcastle upon Tyne, 1.
 20th February, 1961. 6084

HUNTINGDONSHIRE

COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT Grade A.P.T. IV (£1,140—£1,310).

Candidates should have passed the final examination of the Royal Institute of British Architects.

Application forms and further particulars may be obtained from the County Architect, County Buildings, Huntingdon, and completed forms should be returned to the undersigned by the 4th April, 1961.

A. C. AYLRARD,
 Clerk of the County Council.

County Buildings,
 Huntingdon. 6453

BOROUGH OF ENFIELD
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

(Non-County Borough in the County of Middlesex
 —Population 109,700; Area—12,400 acres)

SENIOR ASSISTANT ARCHITECT, APT IV.
 Applications are invited, from suitably qualified persons, for the following permanent appointment:—

SENIOR ASSISTANT ARCHITECT—APT IV—
 £1,140—£1,310 plus London Weighting.

The commencing salary will be fixed at a point within the Scale commensurate with qualifications and experience.

The successful applicant will be engaged, inter alia, on the preparation of three-dimensional schemes for the redevelopment of the Town Centre as a pedestrian shopping precinct, the design of multi-storey point blocks of flats, and the redevelopment of Clearance Areas.

HOUSING ACCOMMODATION may be made available in appropriate cases. The Council is also prepared to consider 100% advance to the successful applicant for house purchase within the Borough.

Saturday mornings are normally free from duty. Application forms, obtainable from H. D. Peake, M.Sc. (Eng.), Borough Engineer & Surveyor, 7 Little Park Gardens, Enfield, Middx., must be delivered to the undersigned not later than Monday, 10th April, 1961, in the official endorsed envelope.

CYRIL E. C. R. PLATTEN,
 Town Clerk.

Public Offices,
 Enfield, Middx. 6450

BOROUGH OF DARTFORD

Applications are invited for the appointment of:—

(a) **SENIOR ASSISTANT ARCHITECT—**

Grade APT IV (£1,140—£1,310, plus £46).

(b) **ARCHITECTURAL ASSISTANT—**

Grade APT II or III (£815—£1,140 plus

£25—£45 according to age and grade).

Applications are invited from suitably qualified and experienced persons for the above appointments in accordance with the N.J.C. service conditions for work on an interesting building programme.

The commencing salaries will be in accordance with qualifications and experience.

HOUSING ACCOMMODATION will be available.

Applications stating age, qualifications and experience, together with the names of two referees, should be received by the Borough Engineer & Surveyor, Bridge House, Dartford, not later than Monday, 10th April, 1961.

THOMAS ARMSTRONG,
 Town Clerk.

Council Offices,
 Dartford,
 Kent.
 8th March, 1961. 6452

BOROUGH OF CASTLEFORD
APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for this appointment in the Borough Architect's Department. Salary—Grade A.P.T. II (£815—£960). Applicants should have passed the Intermediate Examination of the R.I.B.A. or its equivalent at one of the recognised Schools of Architecture.

N.J.C. Service conditions; superannuable—successful applicant will be required to pass satisfactorily a medical examination; terminable on one month's notice on either side; housing accommodation, if required, for successful married applicant.

Applications, on forms obtainable from me, to be returned not later than 9 a.m. on Thursday, the 30th March, 1961.

Canvassing disqualifies.

ERNEST HUTCHINSON,
 Town Clerk.

Town Hall,
 Castleford. 6350

ZETLAND COUNTY COUNCIL

Applications are invited for the appointment of ASSISTANT ARCHITECT in the County Architect's Department. Salary according to scale for Professional Assistants (£850—£1,150) with placing according to age, qualifications and experience. Candidates must be Registered Architects and should have had wide experience in the preparation of sketch plans, working drawings and details. Preference will be given to candidates who have had Local Government experience in the planning and supervision of school projects and who are conversant with the Scottish Education Department's regulations for school planning. The appointment is superannuable. Housing accommodation may be available.

Applications, stating age, experience and qualifications, and accompanied by copies of two recent testimonials must be lodged with the undersigned by 31st March, 1961.

JOHN N. SINCLAIR,
 County Clerk.

County Buildings,
 Lerwick, Shetland,
 4th March, 1961. 6313

LONDON COUNTY COUNCIL

ARCHITECTURAL DRAUGHTSMEN

Skilled and experienced Draughtsmen required in Housing Division, Architect's Department, to produce working drawings under supervision. Up to £1,250 according to experience and quality. Form from Hubert Bennett, F.R.I.B.A., Architect to the Council (EK/A/666/3A), County Hall, S.E.1. 6373

BOROUGH OF WREXHAM
ENGINEER & SURVEYOR'S DEPARTMENT
ASSISTANT ARCHITECT

Applications are invited for the following appointment:—

ASSISTANT ARCHITECT—Salary in the range of A.P.T. Grade III (£960—£1,140 per annum).

Applicants should have passed Parts I and II of the R.I.B.A. Final Examination or equivalent. Casual car allowance will be paid on the instructions of the Borough Surveyor and the Council will consider the payment of removal expenses. Housing accommodation is available if required.

Further particulars and form of application from the Borough Engineer and Surveyor, 31, Chester Street, Wrexham.

Applications to be returned to the undersigned not later than 12 noon, 27th March, 1961.

PHILIP J. WALTERS,
 Town Clerk.

Guildhall,
 Wrexham,
 March, 1961. 6444

GLOUCESTERSHIRE COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of ARCHITECTURAL ASSISTANTS (QUALIFYING CLASS), vacancies existing in the following Grades:—

A.P.T. I Salary £845—£815 p.a.

A.P.T. II Salary £815—£960 p.a.

A.P.T. III Salary £960—£1,140 p.a.

A.P.T. I Salary £645—£815 p.a.

Applicants for posts in Grades I and II should have passed the Intermediate Examination of the R.I.B.A. and for Grades III and IV the full R.I.B.A. Final Examination.

N.J.C. Conditions of Service, Superannuation. Medical examination.

Applications, stating age, present position and salary, details of previous appointments, together with the names and addresses of two persons for reference, must reach the County Architect, Shire Hall, Gloucester, by 3rd April, 1961.

GUY H. DAVIS,
 Clerk of the County Council. 6446

CITY OF GLASGOW

ASSISTANT ARCHITECTS

The Architectural and Planning Department has a number of vacancies for qualified Assistant Architects.

The Department has in hand a large, varied and interesting programme of work, 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 £1,560 with placing according to experience.

A five-day week is in operation.

Advances up to 100 per cent of valuation will be made available, where needed, for the purchase of suitable houses in or near Glasgow, by successful applicants.

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

A. G. JURY,
 City Architect and Director of Planning. 6318

CITY OF CANTERBURY

APPOINTMENT OF PLANNING RESEARCH ASSISTANT (TEMPORARY), A.P.T. II (£815—£960)

Applications are invited for the temporary appointment of a Planning Research Assistant in the City Architect & Planning Officer's Department. Appointment will commence in June or July and last from 18 months to two years.

The successful candidate will be engaged on research, survey analysis and general statistical work in connection with the forthcoming Review of the Development Plan, which is due for submission to the Ministry in 1963. The appointment offers considerable scope and experience in this particular field of Town Planning.

Applications, stating age, qualifications and experience, together with the names and addresses of two referees, should be submitted to the City Architect & Planning Officer, Municipal Buildings, Canterbury, by April 29th, 1961. Canvassing will disqualify.

JOHN BOYLE,
 Town Clerk. 6352

EASTERN ELECTRICITY BOARD
NORTHMET SUB-AREA

ARCHITECTURAL DRAUGHTSMAN, CIVIL, ENGINEERING AND BUILDING SECTION, SUB-AREA ENGINEER'S DEPARTMENT. (Ref. 1034)

Candidates should be neat draughtsmen with a sound knowledge of building construction and preferably have received training in an architect's office. The work includes the preparation of sketch plans and detailed drawings in connection with the construction and modification to offices, showrooms, workshops and substations.

Salary: N.J.B. Class N. Grade 18 (£815—£920) inclusive of London Allowance. Apply by letter to the Manager, Eastern Electricity Board, Northmet Sub-Area, Northmet House, Southgate, London, N.14, by 31st March, 1961. 6492

BOROUGH OF LEYTON
(in the County of Essex)
COMMITTEE FOR EDUCATION
APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the permanent appointment of Architectural Assistant, Grade A.P.T. III, £960-£1,140 per annum, plus London weighting. The successful applicant will be employed by the Essex County Council and will work in the School Architect's Section of the Borough Engineer and Surveyor's Department, Town Hall, Leyton, E.10. Five-day week is operated.

Details and forms of application from the Borough Education Officer, Education Offices, Kirkdale Road, Leytonstone, E.11, to whom they should be returned within 14 days from the appearance of the advertisement. 6386

LINDSEY (LINCOLNSHIRE) COUNTY COUNCIL

ARCHITECT'S DEPARTMENT
AREA CLERK OF WORKS, Grade A.P.T. II, £815-£960, required to take charge of an area of the County covering a radius of approximately 10 miles to the west of Lincoln round to the north to 20 miles to the east of Lincoln. The person appointed will be required to live in this area and he will be responsible for major schemes and alteration work. The post carries an essential user's car allowance up to 10 h.p. Commencing salary within the grade dependent upon experience, N.J.C. Conditions of Service. Canvassing will disqualify, and candidates must disclose in writing whether to their knowledge they are related to any member or Senior Officer of the Council.

Applications, giving age, qualifications and experience, present post and salary, and the names of two persons to whom reference can be made, to be sent to the County Architect, County Offices, Lincoln, not later than 28th March, 1961. 6431

HAMPSHIRE COUNTY COUNCIL

ARCHITECTURAL ASSISTANTS, A.P.T. II/III (£815-£1,140) for pensionable posts in County Architect's Department. Candidates should have passed the Intermediate Examination of the R.I.B.A. The commencing salary will be determined by qualification and experience. Separation allowance and assistance with removal expenses in approved cases. Five-day week.

Application forms, returnable by 31st March, from the Clerk of the County Council, The Castle, Winchester. 6467

URBAN DISTRICT OF EBBW VALE

ARCHITECT'S DEPARTMENT
APPOINTMENT OF ARCHITECTURAL ASSISTANT (NON-DESIGNATED POST)
Applications are invited for this appointment in the Architect's Department within Grade A.P.T. III (£960-£1,140) from persons with at least Intermediate R.I.B.A. examination. Commencing salary in accordance with qualifications and experience.

The Department is engaged on an interesting programme of work including new Civic Centre Buildings which involves the construction of an Indoor Swimming Pool (just commencing), Municipal Offices, Council Chamber and Public Hall. In addition there are redevelopment and general housing schemes in course of preparation. Alternate Saturday mornings free. Canteen facilities. Local Government Superannuation Acts apply.

Applications with usual information and names of two referees to be received by the undersigned not later than noon, 1st April, 1961.

HOWARD J. WILLIAMS,

Clerk of the Council.

District Council Offices,
The Walk,

Ebbw Vale, Mon. 6383

CITY ENGINEER'S DEPARTMENT,

NOTTINGHAM

ASSISTANT PLANNING OFFICERS

(a) Grade B (£1,565-£1,670 per annum).
(b) Grade APT 5 (£1,310-£1,480 per annum).
Applications are invited for the above positions in the Planning Section of the City Engineer's Department.

Post (a). The person appointed will be next in seniority to the Chief Assistant Planning Officer to whom he will act as deputy, and will also be in immediate charge of the Planning drawing office.

Post (b). There are two vacancies in this Grade which is next in seniority to post (a).

Applicants for these positions should preferably be Associate Members of the Town Planning Institute and an additional qualification in a kindred profession will be an advantage. It is intended that one of these three posts should be filled by a person with an architectural qualification. There is a large volume of creative Planning work on hand in the Department with a strong emphasis on central area redevelopment, with scope for original and imaginative ideas. Commencing salary will depend in each case on experience and qualifications, and will be within the following ranges:-

(a) Grade B, £1,565-£1,670 per annum.
(b) Grade APT 5, £1,310-£1,365-£1,420-£1,480 per annum.

HOUSING ACCOMMODATION MAY BE AVAILABLE FOR ONE OF THE PERSONS APPOINTED.

Applications on forms to be obtained from F. M. Little, Esq., B.Sc. (Tech.), A.M.I.C.E., A.M.I.Struct.E., City Engineer and Surveyor, Guildhall, Nottingham, are to be returned to him by 5th April, 1961. 6493

MINISTRY OF WORKS

NORTH WESTERN REGION

require in Manchester, Liverpool and Preston, for work of widely varying and interesting nature
LEADING ARCHITECTURAL ASSISTANTS
Applicants must have achieved inter-R.I.B.A. standard, have good design ability and knowledge of modern building construction, and be capable of exercising leadership and supervision coupled with high quality individual work.

Salary range: £993-£1,160 p.a.

LEADING GRADE HEATING AND VENTILATING DRAUGHTSMEN

Applicants should be widely experienced in the design of Steam and Low Pressure H.W. Heating and D.H.W. installations. Minimum technical qualifications: O.N.C. (Mech.) or Grad. I.H.V.E. Salary range: £993-£1,160 p.a.

ARCHITECTURAL ASSISTANTS

of inter-R.I.B.A. standard with keen, modern outlook.

Salary range: £603-£993 p.a.
BASIC GRADE HEATING AND VENTILATING DRAUGHTSMEN

With experience as above and similar standard of technical education.

Salary range: £603-£993 p.a.

General: Equal pay; 5 day week; promotion and permanency; 3½ weeks leave per annum; prospects of Non-contributory pension scheme.

Applications, stating age, training and experience to Mr. H. J. Muir, A.R.I.B.A., A.R.I.A.S., Assistant Regional Director (Works), Ministry of Works, Warwick Road South, Old Trafford, Manchester 16. 6488

NORTH RIDING COUNTY COUNCIL

Applications are invited for the post of **BUILDING INSPECTOR** for Architect's Maintenance Area based on Richmond and covering the North West Area of the Riding. Grade A.P.T. I Salary £845-£815 p.a. according to age, qualifications and experience.

Conditions of Service and application form from R. Allport-Williams, M.B.E., B.Arch., F.R.I.B.A., County Architect, County Hall, Northallerton, Yorkshire, and applications to be returned to The Clerk of the County Council at the same address by 28th March, 1961. 6310

BERMONDSEY BOROUGH COUNCIL

ASSISTANT IN ARCHITECT'S SECTION

TEMPORARY ASSISTANT required for Architect's Section. Applicants must be under 51 years of age and have passed intermediate examination of R.I.B.A. or R.I.C.S., and should have experience in surveying old housing properties and preparing conversion and improvement schemes. Commencing salary at a point in APT. III (£960-£1,140) or IV (£1,140-£1,310) plus London Weighting, according to experience. Apply giving details of experience, etc., to Borough Engineer, Municipal Offices, Spa Road, S.E.16. 6478

ARCHITECTURAL DRAUGHTSMAN required by British Road Services Ltd. to work from Manchester in department administering operational premises throughout the North Western counties including maintenance, improvements and alterations, and new work.

Applicants should have thorough knowledge of building construction, industrial building surveys, and be capable of preparing site plans and ½ inch scale drawings.

The commencing salary will be £705 per annum in the range £705-£840 per annum.

Applications should be addressed to Divisional Manager, British Road Services Limited, North Western Division, 47 Corporation Street, Manchester 4, and should state age, qualifications and experience, and give names of two referees. 6475

COUNTY COUNCIL OF NORTHUMBERLAND

COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the undermentioned posts of **ASSISTANT ARCHITECTS** on the permanent staff of this Department:-

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 on A.P.T. Scales according to qualifications and experience with the prospect of promotion within the Department.

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.

Application forms which can be obtained from the undersigned should be submitted not later than fourteen days from the date of this advertisement.

C. C. BROWN,

County Architect.

30/32, Great North Road,

Newcastle upon Tyne, 2. 6476

UNIVERSITY OF LIVERPOOL

DEPARTMENT OF BUILDING SCIENCE

DIPLOMA IN BUILDING SCIENCE

A full time course consisting of lectures, laboratory and drawing office work, leading to the Diploma in Building Science will be offered by the University in Session 1961-62. The course will extend over three terms commencing in October, 1961. Applications for admission are invited from persons of graduate status in Civil Engineering, Architecture or Building. Further particulars may be obtained from the Registrar, The University, Liverpool, 3, quoting reference CVIAJ. 6485

FERMANAGH COUNTY EDUCATION

COMMITTEE

NORTHERN IRELAND

ARCHITECTS' DEPARTMENT

ASSISTANT ARCHITECT, salary scale £805 to £1,260 (under review).

Qualifications—Registered Architect: A.R.I.B.A. and/or University Degree or Diploma in Architecture.

Post subject to the provisions of the Local Government (Superannuation) Act (Northern Ireland) 1950. Commencing salary determined within Scale by age, experience and qualifications.

Form of application and conditions of appointment may be obtained from the undersigned, with whom completed applications must be lodged not later than Tuesday, 11th April, 1961.

Other things being equal, preference will be given to ex-Service candidates possessing the required qualifications.

J. MALONE,

Chief Education Officer.

Education Office,

County Buildings,

Enniskillen,

Northern Ireland.

13th March, 1961. 6504

LONDON ELECTRICITY BOARD

ARCHITECTURAL DRAUGHTSMAN

Applications are invited for the above position under the supervision of an Architect in the Chief Engineer's Department in Central London (Waterloo).

The post is graded under Schedule B of the National Joint Board Agreement, as Grade 13, Class BX, and the commencing salary will be in the range of £780 to £1,065 per annum, inclusive of London Allowance.

Application form obtainable from the Construction Engineer, Lesco House, Stamford Street, London, S.E.1. Please quote ref.: PER/V/3230/A. 6480

MIDLOTHIAN COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT

Applications are invited from qualified architects for vacancies in the County Architect's Department, 32, Palmerston Place, Edinburgh, 12, as follows:-

(a) **SENIOR ASSISTANT ARCHITECTS**—Scale £1,345-£1,595.

(b) **ASSISTANT ARCHITECTS**—Scale £1,136-£1,345.

Applications giving full details of experience and qualifications, together with names of two referees, should be submitted to the County Clerk, County Buildings, George IV Bridge, Edinburgh, 1, by Monday, 27th March, 1961. 6482

NORTHUMBERLAND COUNTY COUNCIL

COUNTY PLANNING DEPARTMENT

Applications are invited for the appointment of **AREA PLANNING OFFICER—J.N.C. Scale A (£1,380-£1,565)**. The development control work in the County is carried out in three areas with headquarters at Newcastle upon Tyne. The successful applicant will be in charge of the North-West Area which is predominantly rural in character and contains the main market towns. The area is of high landscape value and includes the Northumberland National Park and Area of Outstanding Natural Beauty. It is preferable that applicants be Corporate Members of the Town Planning Institute and have good appreciation of design problems encountered in rural areas.

The County Council operate a five-day week. The salary for the post will be fixed in accordance with previous experience and ability. Application forms are obtainable from the County Planning Officer, County Hall, Newcastle upon Tyne, and must be returned not later than 8th April, 1961.

J. B. ROSS,

County Planning Officer.

6491

STAFFORDSHIRE COUNTY COUNCIL

COUNTY PLANNING AND DEVELOPMENT DEPARTMENT

Applications are invited for the post of **ASSISTANT in the Design Section (Landscape)** on A.P.T. Grade III (£960-£1,140 per annum) or A.P.T. Grade IV (£1,140-£1,310 per annum) the commencing salary will be at any point commensurate with the qualification and experience of the applicant.

The duties will be concerned with the preparation of tree planting schemes for housing, industrial and other projects, tree preservation orders, and large scale proposals for the reclamation of derelict land. Applicants should be qualified in landscape design and/or forestry. An additional qualification in horticulture with special regard to arboriculture, and experience in nursery work would be an advantage.

The Council are prepared to grant lodging allowances of 35s. per week for a period of six months and second class railway travel home every two months during the initial six months to married applicants maintaining a home outside the geographical county. Consideration will also be given to the granting of financial assistance in appropriate cases towards removal expenses.

Applications giving details of age, education, qualifications, present and previous appointments, experience and the names of two persons to whom reference may be made should be sent to D. W. Riley, County Planning and Development Officer, 41a, Eastgate Street, Stafford, not later than 5th April, 1961.

Relationship to any member or senior officer of the County Council will not be disclosed. Canvassing will disqualify.

T. H. EVANS,

Clerk of the County Council.

6499

SHEPHERD of YORK

A RCHITECTS

Required for our Architects' Department

The appointments offer:

Interesting and varied work with scope for self expression.

The full support and resources of a well organised and expanding building concern.

Permanent position with a good progressive salary, car allowance and non-contributory pension.

Assistance with removal and housing.

Applications stating age, details of education and experience to:

Donald W. Shepherd—Technical Director,

F. SHEPHERD AND SON LIMITED,
BLUE BRIDGE LANE, YORK

CIVIL ENGINEER

(DESIGN)

required by

UNITED KINGDOM ATOMIC ENERGY AUTHORITY

to work at Aldermaston, Berks. Duties include design of structures in reinforced concrete and structural steel together with a wide range of work of a general civil engineering nature. Previous design experience is essential. Applicants are expected to have served an articulated pupilage and be Corporate Members of the Institution of Civil Engineers, although Graduate membership will be considered for younger applicants.

**SALARY:—£1,005 (aged 25)—£1,350
(age 34 or Over)—£1,535.**

Superannuation scheme. A house or substantial assistance with house purchase will become available for married officers living beyond daily travelling distance.

Please write for application form to the Senior Recruitment Officer, A.W.R.E., ALDERMASTON, BERKS., quoting ref. 2943/119.

Architects Architectural assistants

We have vacancies in the Architects' Department in LONDON and EPSOM for qualified men and those who have passed the Intermediate R.I.B.A. Examination.

These are permanent positions: luncheon vouchers, five day week, pension scheme

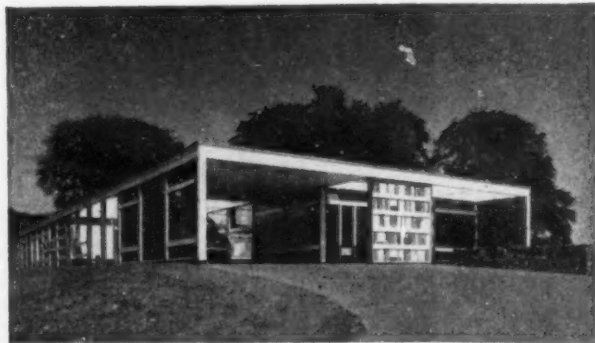
Please write fully in confidence to:

**THE PERSONNEL MANAGER,
W. S. ATKINS & PARTNERS,
158 VICTORIA STREET,
LONDON, S.W.1.**

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third edition

edited by FELIX WALTER F.R.I.B.A.



House at High Sunderland by Peter Womersley: one of the new houses illustrated

ILLUSTRATES and describes fully a selection of examples of the most successful and interesting recently-built single-storey houses, showing the latest developments in small house planning and design. In his introduction and descriptive notes, the editor, a practising architect with considerable experience of small house design, pays special attention to new heating methods and to the latest ideas in planning, kitchen arrangements and so on which these facilitate. This edition has been thoroughly revised and brought up to date, and 15 new houses added. Costs are stated.

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THE ARCHITECTURAL PRESS 9 QUEEN ANNE'S GATE S.W.1

PEAK PARK PLANNING BOARD

The Board offer the following appointments, providing varied and interesting work in the office of the Peak District National Park at Bakewell.

1. **SENIOR DEVELOPMENT CONTROL ASSISTANT, A.P.T. Grade V** (£1,310-£1,480). Responsibilities will include urban areas outside Park for which Board provide area planning office services to Derbyshire County Council; essential car user allowance.

2. **PLANNING ASSISTANT, A.P.T. Grade III** (£960-£1,140)—a new post for work on development and restoration schemes, access to open country and other recreational projects.

3. **JUNIOR PLANNING ASSISTANT, A.P.T. Grade I** (£645-£815) for development plan and national park projects.

All posts subject to N.J.C. scheme of conditions of service. Superannuation scheme. Application forms, conditions of appointment and further information from the Planning Officer, Aldern House, Bakewell. Applications must be received by 6th April, 1961.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

OFFICE OF THE COUNTY ARCHITECT
Applications are invited for the following appointments in the Doncaster Divisional Office at Adwick-le-Street.

ARCHITECTURAL ASSISTANT, A.P.T. III, salary range £960-£1,140.

ARCHITECTURAL ASSISTANT or BUILDING SURVEYOR, A.P.T. II, salary range £815-£960.

Applicants should possess a sound knowledge of building construction and be capable of dealing with maintenance works and adaptations to buildings of various types. Five-day week operated.

Applications to be submitted by the 5th April, 1961, on forms to be obtained from and returned to the undersigned.

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

Bishopgarth,
Westfield Road,
Wakefield. 6509

COUNTY BOROUGH OF WEST BROMWICH

BOROUGH SURVEYOR'S DEPARTMENT
Applications are invited for the following appointment:

SENIOR ASSISTANT ARCHITECT, Salary grade A.P.T. IV (£1,140 to £1,310 per annum). N.J.C. Conditions of Service, and a five-day week.

Applications, naming two referees, to the undersigned by 5th April, 1961.

W. H. GREENWOOD,
Borough Surveyor.

Town Hall,
West Bromwich. 6512

**CITY OF ST. ALBANS
CITY ENGINEER AND SURVEYOR'S DEPARTMENT**

APPOINTMENT OF TOWN PLANNING ASSISTANT

(Grade A.P.T. IV/V (£1,140-£1,480))

Applications are invited for the above permanent superannuable post. Candidates must be corporate members of the Town Planning Institute. Considerable experience of development control is essential—experience in preparing Town Maps will be an advantage. Housing accommodation available. Essential user car allowance. Applications, with the names of two referees, should be submitted to me by not later than 4th April, 1961.

B. V. ENTWISTLE,
Town Clerk.

38 St. Peter's Street,
St. Albans. 5518

SOUTH WEST METROPOLITAN REGIONAL**HOSPITAL BOARD**

**REGIONAL ARCHITECT'S DEPARTMENT
APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR**

Applications are invited from Quantity Surveyors holding Corporate Membership of the Royal Institution of Chartered Surveyors (Quantities Division) for the above-mentioned post. The salary is on the scale £935 p.a. rising to £1,360, and the starting point will depend on the successful applicant's previous practical experience. Applications giving full details of age, experience, previous and present positions, together with the names and addresses of two referees, should be sent to the undersigned by not later than 5th April.

E. G. BRAITHWAITE, Secretary. 6567

**STAFFORDSHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
ASSISTANT INSPECTOR OF BUILDINGS**

Grade A.P.T. I £645-£815

Applications are invited for the post of ASSISTANT INSPECTOR OF BUILDINGS in the South West Divisional Area, based at Dudley, from persons having practical experience in the building trade, the preparation of specifications and estimates, and who are car owners. Commencing salary will depend upon age, experience and qualifications.

Forms of application, which must be returned within 10 days from the date of this advertisement, may be obtained from:—

P. Woodcock, F.R.I.B.A.,
County Architect,
Green Hall,
Lichfield Road,
Stafford.

T. H. EVANS,
Clerk of the County Council.
6468

**BOROUGH OF HESTON AND ISLEWORTH
APPOINTMENT OF
SENIOR ARCHITECTURAL ASSISTANT**

Applications are invited for the permanent appointment of a Senior Architectural Assistant in the Borough Engineer and Surveyor's Department. Salary in accordance with A.P.T. Grade III (£960-£1,140, plus London weighting).

Applicants must have had good experience in architectural design and building work under construction, and, other things being equal, preference will be given to applicants who have passed the examination for Associate R.I.B.A. or hold a University Degree or Diploma in architecture accepted by that Institute.

The Council is unable to assist the successful candidate with housing accommodation.

Applications are to be submitted by 10th April, 1961 on forms to be obtained from and returned to the Borough Engineer and Surveyor, 88 Lampton Road, Hounslow.

D. MATHIESON,
Town Clerk.

Town Hall,
Hounslow, Middlesex. 6505

CITY OF WINCHESTER

Applications are invited for the post of BUILDING ASSISTANT in the City Engineer's office. The position involves the supervision of the Works Department, and maintenance of Corporation property, the supervision of new building work by contract and direct labour, but not the erection or maintenance of Council houses.

Applicants should have a good knowledge of the building trade. Experience in dealing with old buildings will be an advantage. Salary: within Grade A.P.T. II (£815-£960 per annum). The appointment is a permanent one terminable by one month's notice. Applications stating age, present position, salary, previous appointments and experience, together with the names of two referees, should be addressed to the City Engineer, and reach him not later than Friday, 7th April, 1961.

R. H. McCALL,
Town Clerk.

Guildhall,
Winchester.
14th March, 1961. 6503

STEPNEY M.B.C.

require **SENIOR ARCHITECTURAL ASSISTANT**, £1,185-£1,355 p.a. Permanent post. Must be registered architect and possess suitable architectural qualifications, and have had considerable experience in design, construction and the administration of large building contracts, preferably with a local authority. Five-day week. Forms of application and other particulars from Town Clerk, 227 Commercial Road, E.1. Closing date: 8th April, 1961. 6522

**BOROUGH OF WALTHAMSTOW
COMMITTEE FOR EDUCATION**

Applications are invited for the appointment of **ARCHITECTURAL ASSISTANT** (Grade A.P.T. I) in the Office of the Education Architect, Mr. T. L. Rampton, A.R.I.B.A., A.R.I.C.S.

The commencing salary will be fixed within the range of £645-£815 per annum according to qualifications and experience. In addition London Weighting of £25 per annum (age 21-25) or £40 per annum (26 years of age or over) is payable.

The post is superannuable and subject to medical examination.

Form of application to be obtained from and returned to the Borough Education Officer, Town Hall, Forest Road, E.17, within two weeks of the appearance of this notice. 6531

SOUTHAMPTON

BOROUGH ARCHITECT'S DEPARTMENT
Applications are invited for the following permanent posts:—

(a) **SENIOR ASSISTANT PLANNING OFFICER** (Landscape), Scale "A" (£1,380-£1,565).

Applicants should be members of T.P.I. and hold a qualification in Landscape Architecture, to be in charge of small landscape group, with considerable opportunity for preparing and carrying through schemes of urban landscaping.

(b) **ASSISTANT PLANNING OFFICER**, Grade A.P.T. V (£1,310-£1,480).

Applicants should be members of the T.P.I. and preferably R.I.B.A., experienced in the re-development of central urban areas.

Commencing salary within grades according to experience and qualifications.

Housing accommodation available in approved cases, and approved removal expenses reimbursed up to a maximum of £50.

Application forms from the Borough Architect, Civic Centre, Southampton, returnable as soon as possible. 6619

BOROUGH OF ERITH

BOROUGH ENGINEER'S DEPARTMENT
Applications are invited for the following appointments:—

(1) **ENGINEERING ASSISTANT, A.P.T. Grade III**.

(2) **ARCHITECTURAL ASSISTANTS, A.P.T. Grade II**.

(3) **ARCHITECTURAL ASSISTANTS, A.P.T. Grade I**.

Plus appropriate London weighting.

Applicants for appointment (1) should have a good general experience in Municipal Engineering and possess the appropriate qualifications.

Five-day week.

Applications stating age, qualifications, experience and the names of two referees to be received by the Borough Engineer and Surveyor, Town Hall, Erith, Kent, by Monday, 10th April, 1961.

J. A. CROMPTON,
Town Clerk.

Town Hall,
Erith,
Kent. 6517

BOROUGH OF ELLESMERE PORT**APPOINTMENT OF****BOROUGH ARCHITECT HOUSING DIRECTOR**

Applications for this appointment are invited from fully-qualified Architects. Salary, in accordance with the recommendations of the Joint Negotiating Committee for Chief Officers, £1,940 × C75 (4)—£2,240. The Borough's present population of 42,000 is expected to rise eventually to 80,000.

The appointment is new. The successful applicant will be the Chief Officer responsible for (i) all architectural work, (ii) housing management and (iii) repair and maintenance of Corporation dwellings, principally by direct labour.

Further details, terms and conditions of appointment and list of duties obtainable from me. Closing date for applications 14th April, 1961.

R. J. BERNIE,
Town Clerk.

Municipal Offices,
Ellesmere Port,
Cheshire. 6523

BOROUGH OF EDMONTON**BOROUGH ARCHITECT'S DEPARTMENT**

Applications are invited for the appointment of **SENIOR ASSISTANT ARCHITECT** in the Borough Architect's Department of a progressive Borough (94,000 population) offering a unique experience in the relationship of design and construction of buildings by direct labour under the control of the Architect. The programme of work includes multi-storey flats, Town Centre redevelopment, industrial buildings and offices. The Council are prepared to grant loans up to 100 per cent. of valuation to facilitate house purchase.

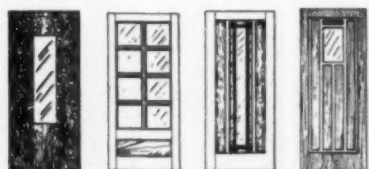
Salary Grade A.P.T. V £1,310-£1,480 plus £45 London Weighting.

Applications on forms from the Town Clerk, Town Hall, Edmonton, N.9, must be delivered by the 31st March, 1961.

H. BACKHOUSE,
Town Clerk. 6470

RENFREW COUNTY COUNCIL

The Council have vacancies for young **ARCHITECTURAL ASSISTANTS**, recently qualified, with practical experience in domestic and general architecture. £850-£1,150 p.a. Superannuable appointments. Applications stating age, qualifications, etc., and naming two referees, to County Clerk, P.O. Box 12, Paisley, immediately. 6568



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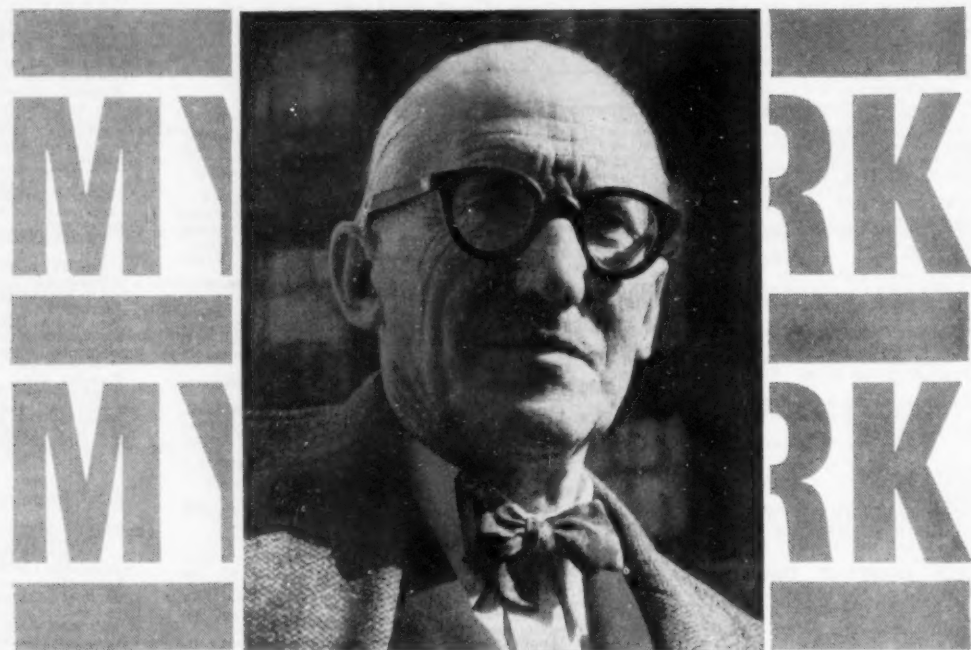
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BIRMINGHAM REGIONAL HOSPITAL BOARD
APPOINTMENT OF ARCHITECTURAL STAFF
 (a) SENIOR ASSISTANT ARCHITECTS, salary scale £1,300 to £1,600 (Arch. 12).
 (b) ASSISTANT ARCHITECTS, salary scale £905 to £1,310 (Arch. 13).

Qualifications for (a) and (b): Registered architect by examination.
 These posts are not necessarily restricted to those with previous hospital experience. They offer opportunities for gaining knowledge and experience of the whole field of hospital architecture ranging from adaptation schemes to comprehensive new hospital projects. Superannuable. Five day week. Applications (quoting appropriate reference) stating qualifications, age, experience, present position and salary and naming two referees to Secretary, 10 Augustus Road, Birmingham 15, by 7th April, 1961. 6418

BOROUGH OF SOLIHULL
APPOINTMENT OF SENIOR ASSISTANT ARCHITECTS AND ASSISTANT ARCHITECTS
 Applications are invited from Architects with suitable qualifications and experience for the under-mentioned appointments:

- (a) SENIOR ASSISTANT ARCHITECTS, A.P.T. Grade V (£1,310-£1,480).
 (b) ASSISTANT ARCHITECT, A.P.T. Grade III-IV (£960-£1,310 p.a.). Commencing salary according to experience.
 (c) ASSISTANT ARCHITECT, A.P.T. Grade I-II (£645-£960 p.a.). Commencing salary according to experience.

The Borough which has a population of approximately 90,000 and which is still expanding rapidly, is an Excepted District for education and in April, 1961, is assuming delegated powers for health and welfare services. It has also been recommended for County Borough status by the Local Government Commission for England. There is a considerable programme of varied capital work on hand and to be undertaken in the future.

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

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

Applications, giving full particulars as to age, qualifications and past and present experience, together with the names and addresses of three referees, should be submitted to the Borough Surveyor, 90, Station Road, Solihull, not later than Friday, 7th April.

W. MAURICE MELL,
 Town Clerk.

The Council House,
 Solihull,
 15th March, 1961. 6554

COUNTY BOROUGH OF IPSWICH
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT
 (1) ARCHITECTURAL ASSISTANT—Grades A.P.T. III-IV (£960-£1,310).
 (2) JUNIOR ARCHITECTURAL ASSISTANT—Grades A.P.T. I-II (£645-£960).

Applications are invited for the above posts at commencing salaries to be fixed in accordance with qualifications and experience.

Applicants for both posts should preferably have had Local Government experience and for (1) should be registered architect and for (2) should be of intermediate standard.

Applications stating age, experience, etc., together with names of two referees, must be received by the Borough Engineer, 19 Tower Street, Ipswich, by 10th April, 1961. Canvassing disqualifies.

J. C. NELSON,
 Town Clerk.

Town Hall,
 Ipswich. 6552

COUNTY BOROUGH OF NORTHAMPTON
NEW MUNICIPAL OFFICES

TWO SENIOR ASSISTANT ARCHITECTS are required for a period of about three years to work upon the design and supervise the contract for this major project comprising offices and shops estimated to cost about £300,000 on a site adjoining the Guildhall.

Salary up to £1,600 according to qualifications and experience.

Further details and application forms, returnable by 8th April, from Borough Architect, Guildhall, Northampton. 6550

CITY OF MANCHESTER
 Applications invited for the following permanent appointments in the office of the City Architect.

- (a) SENIOR ASSISTANT ARCHITECTS. Salary APT V. £1,310 to £1,480 per annum.
 (b) ASSISTANT ARCHITECTS. Salary APT III-IV. £960 to £1,310 per annum.
 (c) ARCHITECTURAL ASSISTANTS. Salary APT I/II. £645 to £960 per annum.

- (d) ASSISTANT STRUCTURAL ENGINEERS. Salary APT IV. £1,140 to £1,310 per annum.
 (e) ASSISTANT HEATING AND VENTILATING ENGINEER. Salary APT III/IV. £960 to £1,310 per annum.
 (f) HEATING AND VENTILATING ENGINEERING ASSISTANT. Salary APT III. £660 to £1,140 per annum.

Commencing salary for each appointment according to qualifications and experience.

Five day week. Removal expenses allowed. Housing accommodation for a limited period may be provided (position C excepted).

The department has an extensive programme of Municipal building work ahead comprising new abattoirs, libraries, schools, technical colleges, aged persons' homes, etc., interesting and varied work with excellent opportunities for promotion on merit.

Forms of application from the City Architect, Town Hall, Manchester 2. Returnable by 5th April. 6569

BOROUGH OF ROWLEY REGIS
BUILDING DEPARTMENT

Applications are invited for: ARCHITECTURAL ASSISTANT A.P.T. II (£815-£960). Applicants should be experienced in housing and other architectural works normally undertaken by a Local Authority. Applications, stating age, qualifications and experience, together with two recent testimonials, should be sent to the undersigned not later than Wednesday, the 5th April, 1961.

G. C. COOKSON,
 Town Clerk.

Municipal Buildings, Old Hill,
 Staffs.
 March, 1961. 6535

MINISTRY OF EDUCATION (Architects and Building Branch) requires ARCHITECTS for Territorial Architects' posts with experience in design of school buildings. Duties include design consultation with Education Authorities, advisory work within Ministry, and collaboration with Development Group. Minimum age 35. Posts established, but possibilities of permanency. Appointment as Architect normally at minimum of London salary scale of £1,516-£2,015. Conditioned hours 42. 5-day week. Annual leave 25 working days rising to 30 days. Forms from Ministry of Labour, Technical and Scientific Register (K). 26, King Street, London, S.W.1. Quoting J.116/1A/CB, closing date 6th April, 1961. 6532

CENTRAL OFFICE OF INFORMATION requires a SENIOR DRAUGHTSMAN to work in collaboration with exhibition designers and to supervise and control a Drawing Office. Applicants must be experienced in the preparation, for exhibitions and displays of detailed plans and working drawings (including metric system) from sketch designs. Good knowledge of up-to-date exhibition techniques, materials and methods of construction essential. The post is graded SENIOR INFORMATION OFFICER (unestablished). Salary £1,575-£1,937. Write, giving age, full details of experience and qualifications to Manager (P.E.853), Ministry of Labour, Professional & Executive Register, Atlantic House, Farringdon Street, London, E.C.4. 6533

HOLLAND COUNTY COUNCIL invite applications for the following appointments:—

- (a) SENIOR ASSISTANT ARCHITECT Grade A.P.T. IV £1,140 to £1,310 per annum.
 (b) ARCHITECTURAL ASSISTANT Grade A.P.T. III £960 to £1,140 per annum.
 (c) SENIOR ASSISTANT QUANTITY SURVEYOR Grade A.P.T. IV £1,140 to £1,310 per annum.

- (d) JUNIOR QUANTITY SURVEYING ASSISTANT Grade A.P.T. I £645 to £815 per annum.
 The provisions of the Local Government Superannuation Acts, the N.J.C. Scheme of Conditions of Service and a medical examination will apply.

The County Council would be prepared to make a contribution towards the cost of removals.

Forms, obtainable from the County Architect, should be returned to the Clerk of the County Council, County Hall, Boston, Lines., by 10th April, 1961. 6527

BOROUGH OF SOLIHULL
APPOINTMENT OF ASSISTANT QUANTITY SURVEYORS

Applications are invited from Quantity Surveyors with suitable qualifications and experience for appointment as Assistant Quantity Surveyors in the Architect's Section of the Borough Surveyor's Department at a salary in accordance with A.P.T. Grade IV (£1,140-£1,310 per annum) commencing according to experience.

The Borough which has a population of approximately 90,000 and which is still expanding rapidly, is an Excepted District for education and in April, 1961, is assuming delegated powers for health and welfare services. It has also been recommended for County Borough status by the Local Government Commission for England. There is a considerable programme of varied capital work on hand and to be undertaken in the future.

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

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

Applications, giving full particulars as to age, qualifications, and past and present experience, together with the names and addresses of three referees, should be submitted to the Borough Surveyor, 90, Station Road, Solihull, not later than Friday, 7th April.

W. MAURICE MELL,
 Town Clerk.

The Council House,
 Solihull,
 15th March, 1961. 6551

METROPOLITAN BOROUGH OF
SENIOR WANDSWORTH

Grade A.P.T. V (£1,355 rising to £1,525). Applicants must be A.R.I.B.A. with experience in design and planning of multi-storey blocks of flats and supervision of their erection. Forms from Borough Engineer returnable to me by 5th April. J. NOEL MARTIN,
 Town Clerk. 6575

THE ROYAL BOROUGH OF KENSINGTON
ARCHITECTURAL ASSISTANTS Salary £1,065-£1,355 per annum. Borough Engineer & Surveyor's Department Applications stating age, qualifications, etc., with names of two referees, to reach Town Clerk, Town Hall, Kensington, W.8, by 4th April, 1961. 6576

BOROUGH OF SUTTON AND CHEAM
BOROUGH ENGINEER & SURVEYOR'S DEPARTMENT

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

- A. ARCHITECT Grade APT 5 (£1,310 to £1,480 per annum) plus London "Weighting" of £45 per annum. Applicants must be qualified members of the Royal Institute of British Architects.

The post ranks No. 3 in order in the Section and the person appointed will be expected to take a measure of responsibility under the Chief Architect, Mr. P. H. Masters, F.R.I.B.A.

- B. ASSISTANT ARCHITECT APT.5/4 (£960 to £1,310 per annum) plus London "Weighting" of £25 or £40 per annum. Commencing salary according to ability and experience, entry into Grade 4 being conditional upon obtaining appropriate examination qualifications.

Work is of a varied and interesting nature comprising public and industrial buildings and comprehensive redevelopment including multi-storey flats, and experience in all or any of these types of buildings would be an advantage.

The Council may consider the provision of housing accommodation where appropriate.

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

Form of application from Mr. C. Needham, M.I.C.E., M.I.Mun.E., A.M.I.Struct.E., Borough Engineer and Surveyor, to be returned with two recent testimonials, by not later than 10th April, 1961, endorsed "(A) Architect Grade APT.5" or "(B) Assistant Architect APT.5/4" whichever is appropriate.

Canvassing in any form will disqualify.

A. PRIESTLEY,
 Town Clerk.

Municipal Offices,
 Sutton, Surrey.
 March, 1961. 6553

cladding

cills

copings

flooring

paving

fireplaces

surrounds

skirtings

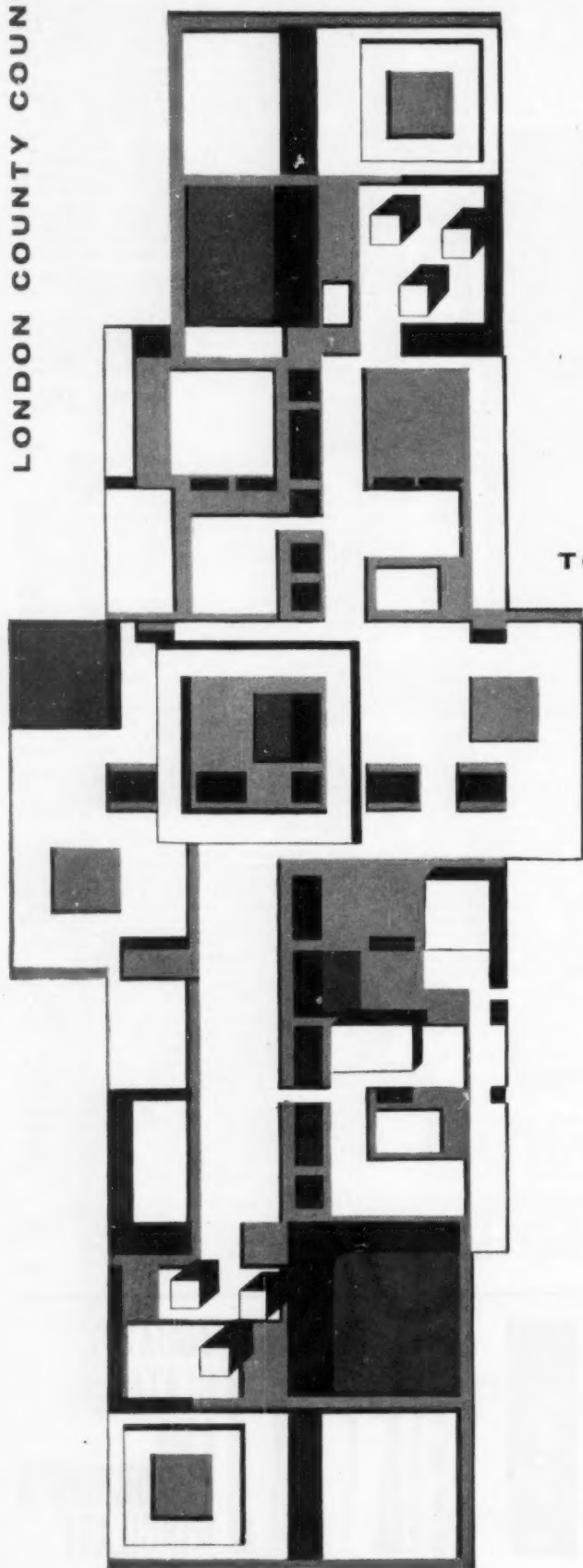
stairtreads

shelves

THE BOW SLATE & ENAMEL CO LTD
 THE TOWN HALL BOW ROAD E.3
 QUARRIES ABERLEFERN NORTH WALES

TODAY'S
 SLATE
 AND
 TOMORROW'S
 WINGILATE

LONDON COUNTY COUNCIL



TOWN DEVELOPMENT DIVISION

A new composite Division for the development of expanding towns to take London's overspill.

The work covers planning and a wide range of buildings: housing of all types including development work on materials, standards and costs; town centre planning and the design and construction of shopping centres, offices and amenity buildings; factories of all types.

There are immediate vacancies for:

| | architects | architect/ planners. |
|---------------------------|--------------|-------------------------|
| Grade I (£1500 to £1700) | 1 position | 1 position |
| Grade II (£1250 to £1500) | 2 positions | 2 positions |
| Grade III (£750 to £1250) | 19 positions | 5 positions |

Application forms and further particulars from :
Hubert Bennett, F.R.I.B.A., Architect to the Council,
County Hall, S.E.1, quoting reference EK/565/3

BELFAST EDUCATION COMMITTEE **COLLEGE OF TECHNOLOGY** Principal: D. H. ALEXANDER, O.B.E., F.C.G.I., M.Sc., Wh. Sch., M.I.Mech.E.

COLLEGE OF ART
Applications are invited for the position of
SENIOR LECTURER, Grade 1, ARCHITECTURE in the College of Art, College of Technology, Belfast 1.

The salary attached to the position will be on the scale of £1,370 + £35 to £1,550 per annum, with allowance for previous experience in a position of similar responsibility.

Applicants should hold appropriate professional qualifications, and it is desirable that they should also have had industrial, professional or teaching experience.

Further particulars and forms of application may be obtained from the Principal, College of Technology, Belfast 1, with whom completed applications should be lodged not later than Monday, 10th April, 1961.

Canvassing is strictly forbidden and will disqualify.

J. STUART HAWNT,
Director of Education.

COUNTY BOROUGH OF CROYDON **ARCHITECTURAL STAFF**

APPLICATIONS are invited for appointments to assist in the Corporation's housing and general architectural work, which includes a considerable variety of large and interesting projects.

(a) **ARCHITECTURAL ASSISTANTS, APT I/II/III/IV** (£560 to £1,355 p.a. including "London Weighting"). Commencing salary according to qualifications and experience. Essential user car allowance payable when graded in APT IV with R.I.B.A. Final.

(b) **ARCHITECTURAL DRAUGHTSMAN, APT II** (£840 to £1,000 p.a. including "London Weighting"). Commencing salary according to experience.

Pensionable posts. Five-day week (38 hours). HOUSING—Assistance with rented housing accommodation will be considered. Advances up to 100% of Borough Valuer's valuation will be made available in approved cases where needed for the purchase of suitable houses in Croydon.

Further particulars and application forms obtainable from the Borough Engineer, Town Hall, Croydon. Closing date 10th April, 1961.

DENBIGHSHIRE COUNTY COUNCIL **APPOINTMENT OF DEPUTY COUNTY ARCHITECT**

Applications are invited for the appointment of Deputy County Architect at a salary of £2,053 6s. 8d. per annum, rising by three annual increments of £83 6s. 8d. to a maximum of £2,303 6s. 8d. per annum.

Candidates must be Associate Members of the Royal Institute of British Architects and must have had wide administrative experience in a County or County Borough. A knowledge of Welsh will be an added qualification.

The appointment is subject to three months' notice; to medical examination and to the Local Government Superannuation Acts.

Application forms, together with terms and conditions of appointment, obtainable from me. Completed application forms should reach me by the 11th April, 1961.

W. E. BUFTON,
Clerk of the County Council.

County Offices,
Ruthin,
Denbighshire.

LANCASHIRE COUNTY COUNCIL **PLANNING ASSISTANTS required at ST. ANNES, WIGAN and MANCHESTER.**

Commencing and maximum salary according to qualifications and experience within range £645—£1,310 per annum. (Weighting)

Applicants should have an appropriate University degree and/or be studying for or possess a recognised qualification in architecture, surveying, engineering or town planning.

Applications giving age, qualifications, present appointment (if any), experience, etc., and two referees to the County Planning Officer (S), East Cliff County Offices, Preston, by the 5th April, 1961.

COUNTY BOROUGH OF EAST HAM **SENIOR ASSISTANT PLANNING OFFICER** **GRADE APT II—£915 to £960 (plus London**

Vacancy in Borough Engineer's Department. Salary above minimum payable according to qualifications and experience.

A subsistence allowance may also be paid over a reasonable period to the person appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application form (returnable within 10 days) from the Town Clerk, Town Hall, East Ham, E.6.

CENTRAL OFFICE OF INFORMATION requires an **EXHIBITION TYPOGRAPHER** to work in and supervise a Typography Section and to collaborate with designers in the production of exhibitions and displays. Applicants must have creative ability and be experienced in all forms of graphic design and presentation for exhibitions. The post is graded **SENIOR INFORMATION OFFICER** (unestablished). Salary £1,573—£1,937. Write, giving age, full details of experience and qualifications to Manager (P.E.892), Ministry of Labour, Professional & Executive Register, Atlantic House, Farringdon Street, London, E.C.4

BURGH OF HAMILTON **ARCHITECT'S DEPARTMENT**

Vacancies exist for Associates of the Royal Institute of British Architects (or equivalent qualification) with experience in post-war housing and civic building design, etc., in this Department dealing now with varied and interesting programme including Police H.Q., Public Baths, Branch Library, etc., and central re-development schemes, for—

(a) **CHIEF ARCHITECTURAL ASSISTANT—**
Salary £1,250 per annum.

(b) **ASSISTANT ARCHITECT** (new post)—
Salary £850—£1,150 with placing.

Superannuation Medical Examination—J.I.C. Conditions, House to let if required.

Applications, containing full particulars of age, qualifications and experience, with names of three referees, to Burgh Architect, 56 Brandon Street, Hamilton, by 10th April, 1961.

Canvassing, directly or indirectly, disqualifies.

COUNTY BOROUGH OF DEWSBURY **BOROUGH ARCHITECT AND BUILDINGS SURVEYOR'S DEPARTMENT**

Applications are invited for the following appointments within the scope of the grades stated—

(a) **DRAUGHTSMAN, A.P.T. Grade I** (£645—£815 p.a.)

(b) **ARCHITECTURAL ASSISTANT** (Education Section), A.P.T. Grade I (£645—£815 p.a.)

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

Applications stating age, education, qualifications, full particulars of training and experience together with copies of two recent testimonials, should be sent to the undersigned not later than Wednesday, 5th April, 1961, in envelopes endorsed "Appointment of . . ."

A. NORMAN JAMES,
Town Clerk.

Town Hall, Dewsbury.
13th March, 1961.

AIR MINISTRY Works Designs 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 £836 (age 25)—£1,020 p.a., somewhat lower in Provinces. Commencing salary dependent on age, qualifications and experience. Applicants, who must be natural born British subjects, should write (quoting Kings Cross O.N. 897) to Air Ministry, W.G.4. Lacon House, Theobalds Road, London, W.C.1, or to any Employment Exchange giving age, details of training, qualifications, full particulars of former posts held and copies of any testimonials. Candidates selected will normally be interviewed in London and certain expenses reimbursed.

LANCASHIRE COUNTY COUNCIL **COUNTY ARCHITECT'S DEPARTMENT** **SENIOR ASSISTANT ARCHITECTS** (N.J.C. Scale "B." £1,506—£1,670)

Applications are invited from experienced Architects for posts on the permanent staff. The County Council have a large and extremely varied Building Programme, and posts will be filled by men of initiative, imagination and a flair for sensitive design.

Applicants are expected to be Registered Architects, as well as Associates of the Royal Institute of British Architects, and, if appointed, will be able to claim a disturbance allowance up to a maximum of £125, a facility offered by the County Council to cover the expenses of removal and other associated costs.

Application forms and conditions of appointment are obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by the 7th April, 1961.

Architectural Appointments Vacant

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

£950-£1,500. ARCHITECTURAL ASSISTANTS with imagination and designing ability required to assist with large and important new developments in the central London Area. Telephone or write: Trehearne & Norman, Preston & Partners, 83, Kingsway, W.C.2. HOLBORN 4071.

OPPORTUNITY FOR FRUSTRATED INTER-MEDIATE ASSISTANT WITH INITIATIVE AND IMAGINATION, UNABLE TO FIND POST OFFERING FREEDOM IN DESIGN OR CHANCE TO TAKE CHARGE IN PROJECTS. WRITE OR PHONE: NICHOLSON AND RUSHTON, 2 NEW SQUARE, LINCOLN'S INN, W.C.2. HOLBORN 2095.

ARCHITECTURAL ASSISTANT, with experience, required in Luton Office. Interesting and varied work, excellent prospects and working conditions. Pension scheme. Ring or write: CONNELLS,

Architectural and Survey Department,
5, Upper George Street, Luton.
Tel.: Luton 5910-4.

RONALD WARD AND PARTNERS invite applications from ARCHITECTS, Senior and Junior. Long-term prospects. Scope for initiative and responsibility in interesting commercial, industrial and civic projects in British Isles, West Africa and Australia. Salaries commensurate with ability. Non-contributory Pension and Life Insurance schemes. Five-day week. Pleasant offices. Apply 29, Chesham Place, Belgrave Square, London, S.W.1. Tel.: BELGRAVIA 3361.

EXPERIENCED and confident ARCHITECTS required to fill positions of responsibility in a growing and varied practice with industrial and commercial work throughout the southern half of the country. Applicants must have initiative as well as architectural ability to carry through contracts up to £100,000, working directly with Principals but with minimum supervision. Apply in writing to Thomas Mitchell & Partners, 20, Bedford Square, London, W.C.1 5418

£850-£1,600. ARCHITECTURAL ASSISTANTS required. Long term prospects. Non-contributory pension and life assurance schemes. Five-day week. Telephone or write: Ronald Ward & Partners, 29, Chesham Place, Belgrave Square, S.W.1, Belgravia 3361.

WOLVERHAMPTON. Norman & Dawbarn require an ASSISTANT in their Midlands Office. This position could afford useful experience of small and medium size jobs in a young but expanding office, with possibility of later transfer to London Office or overseas if desired. Minimum of two years' office experience required if qualified, four years if Intermediate. Excellent working conditions, five-day week, three weeks' annual leave, lunch vouchers. Write or telephone 7, Portland Place, London, W.1 (L.A.N.G.H.A.M. 8011), or Heanton House, Salop Street, Wolverhampton (Wolverhampton 27387).

PLAYNE & LACEY require experienced and enthusiastic SENIOR ARCHITECTURAL ASSISTANT for work on University project. Salary range £1,200 to £1,500. Write 19, Queen Anne's Gate, Westminster, S.W.1, or ring WHI 2552 for interview.

ARCHITECTURAL ASSISTANTS required with practical experience. Varied practice including contemporary work. Salary £700—£1,100 (plus L.V.A.), according to qualifications and experience. Please write, giving full particulars, to Sir Giles Scott, Son & Partner, 9, Gray's Inn Square, W.C.1.

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 918, c/o 7, Coptic Street, W.C.1.

OPPORTUNITY for Intermediate or newly-qualified ASSISTANT with initiative and all-round ability, to join youthful expanding practice in Croydon. Apply to Donald Rowsell & Partners, 11/11a, George Street, Croydon, or telephone CROYDON 4080.

TWO SENIOR ASSISTANTS required. Salary in accordance with experience. Please apply to F. G. Frizzell, A.R.I.B.A., 80, Portland Place, W.1. LANGHAM 1732.

SENIOR ASSISTANTS required for work on large Hospital programme, excellent opportunities for the right men, salary £1,000—£1,400. Luncheon Vouchers and five-day week. Write giving full particulars to W. H. Watkins, Gray and Partners, 57, Catherine Place, S.W.1.

ASSISTANT ARCHITECTS required immediately in expanding private practice, preferably car driven. Pleasant office and working conditions. Five-day week. Scope for initiative and responsibility on varied and interesting works including domestic, commercial, industrial and ecclesiastical, over wide area of the country. Commencing salary according to experience and ability up to £1,000. Please apply giving fullest details to A. R. Laing, Deacon & Laing, 65, Goldington Road, Bedford.

VACANCIES exist in large provincial practice with offices in Peterborough and Spalding for the following:

- (1) **ARCHITECTURAL ASSISTANT**, Male or Female, qualified, with few years' office experience. Able to work on own initiative and take responsibility. Salary up to £1,150 to suitable applicant.
- (2) **ARCHITECTURAL ASSISTANT**, Male or Female, qualified, having recently left college, office experience not essential. Salary up to £900.
- (3) **JUNIOR ASSISTANTS**, Intermediate/Final standard with 2/3 years' office experience. Salary up to £800.

The work is of a varied and interesting nature, pension scheme in operation. Assistance will be given with accommodation in appropriate cases. Apply in writing with full details to:—
Ruddle & Wilkinson, F/L/A.R.I.B.A.,
Long Causeway Chambers,
Peterborough.

ARCHITECTURAL ASSISTANTS, to Intermediate standard or above, required in Wimbledon office for interesting work U.K. and overseas. Five-day week; no travelling to Town. Apply: J. E. K. Harrison, F.R.I.B.A., Eagle House, Wimbledon, S.W.19, or phone WIM. 4244.

CROYDON—SENIOR and INTERMEDIATE ARCHITECTURAL ASSISTANTS required for various large projects. Salary according to ability. Box 6196.

ARCHITECTS IN LONDON require ARCHITECTURAL ASSISTANTS of Intermediate standard for interesting and varied projects. Good salaries paid. Five-day week. Luncheon vouchers. Box 5989.

ARCHITECT required in Oxford Office to work on hospital programme. Five-day week. Write giving full particulars to W. H. Watkins, Gray & Partners, c/o Churchill Hospital, Headington, Oxford. 5964

ARCHITECTURAL ASSISTANTS required for interesting work, including schools and hospitals, in Croydon office. Commencing salaries offered: £900-£1,150 for Associates, £600-£850 for students, according to age and experience. Five-day week and annual bonus. Write to George Lowe & Partner, 79, George Street, Croydon. 5197

WILLIAM H. ROBBINS, A.R.I.B.A., requires JUNIOR and SENIOR ARCHITECTURAL ASSISTANTS of Final and Intermediate standard for interesting work in expanding office.

Applicants should be experienced in design and construction, quick and able to take responsibility.

Excellent opportunity for advancement, salary range Junior Assistants £750 to £900, and Senior Assistants £1,000 to £1,400 per annum, according to experience.

Five-day week. Apply: 77, Wigmore Street, London, W.1. Telephone: WELbeck 0274/5. 5908

ARCHITECTURAL ASSISTANTS of all grades, particularly Intermediate standard, required on varied and interesting projects. High salaries will be paid in accordance with skill or experience of applicant. Lewis Solomon, Kaye & Partners. City 8811. 5970

YORKE, ROSENBERG AND MARDALL have some vacancies for experienced STAFF, starting salary according to qualifications and experience, in the range £950-£1,200. Ring AMBassador 4521 for appointment. 6200

SOUTHAMPTON—ASSISTANT of Intermediate standard required for interesting contracts in the Southern Counties. Apply with details of any previous office experience and required salary to E. M. Galloway & Partners, F.A.R.I.B.A., 10, Portland Street, Southampton. 4865

ERNO GOLDFINGER requires several qualified field ASSISTANTS with at least 2 years' experience to take part in a growing programme of interesting work which includes large office buildings, central developments, Local Authority housing, schools and private houses. Good salaries and scope for men with sound knowledge of construction. Phone HYDe Park 5657. 5084

LEICESTER—SENIOR ARCHITECTS AND ASSISTANTS required for general practice. Appropriate salary paid. Apply by telephone or in writing for an interview to Herbert, Son & Sawday, 18, Friar Lane, Leicester. Tel. 56476. 5307

SIR JOHN BURNET, TAIT & PARTNERS have vacancies for ARCHITECTURAL ASSISTANTS of all grades. Salaries from £1,200 p.a. Luncheon vouchers, superannuation and medical schemes, non-contributory. Apply 10 Bedford Square, W.C.1. 6126

IMMEDIATE vacancies in leading Bristol office for all grades of ARCHITECTS and ARCHITECTURAL ASSISTANTS. Modern approach to design essential and considerable freedom of expression allowed. Top salaries paid according to ability and experience. Outstandingly good working conditions; 5-day week; annual bonus; contributory pension scheme available; existing holiday commitments honoured. Apply giving particulars of age and experience to W. H. Watkins, Gray & Partners, 8 Colston Avenue, Bristol. Telephone Bristol 292333, reverse charge calls accepted. 6132

ASSISTANTS, all grades, urgently required for busy general practice. Salaries according to experience. Ring VICTORIA 7088 for appointment. 6239

ARCHITECTURAL ASSISTANTS, Intermediate to Final standard, required by firm of Exeter Architects. Salary range £600-£850. Apply giving full particulars of age and experience to Box 6225.

ARCHITECTS with some experience required by expanding City practice. Salaries to £1,400 for right men. Every opportunity for initiative and responsibility. Box 6054.

OPPORTUNITIES for trained ASSISTANTS to gain experience in all aspects of architectural project management in connection with a wide variety of work, including a major urban development. Salary range up to £1,200. Modern office, five-day week, non-contributory pension scheme, bonuses, luncheon vouchers. Elder and Lester, 2, Town Square, Billingham-on-Tees, Co. Durham. 5836

WILLIAM HOLFORD & PARTNERS (City Office) require ARCHITECTURAL ASSISTANT of Intermediate/Final standard, office experience an advantage. Varied programme of work including university buildings. Five-day week, luncheon vouchers and pension scheme in operation. Salary £750 to £1,000 according to ability. Write giving full details to Adelaide House, London Bridge, E.C.4 (tel. MINcing Lane 7387). 6796

ARCHITECTS' ASSISTANTS required, both Intermediate R.I.B.A. and Finalist standard, with experience in this country. Good salary offered. Bernard Gold & Partners, 4/6 Saville Row, W.1. Regent 7551. 6170

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

OSCAR GARRY AND PARTNERS require three experienced ASSISTANTS to work on large projects at present at design stage. Salaries not less than £1,150. Luncheon vouchers. Apply 66 Gloucester Place, London, W.1. or 'phone WELbeck 2509. 6171

PLAYNE & LACEY require experienced and enthusiastic ARCHITECTURAL ASSISTANTS. Salary range £900-£1,050. Write 19, Queen Anne's Gate, Westminster, S.W.1. or ring WHI 2552 for interview. 6260

PATRICK GWYNNE requires SENIOR ASSISTANT to work on important private houses and interiors. The Homewood, Esher, Surrey. Esher 3310. 6270

LEWELLYN SMITH & WATERS require ASSISTANTS in the following categories: DESIGNERS to prepare and develop sketch designs for every type of work. Imaginative outlook and good sense of detail essential. £1,000-£1,250.

JOB ORGANISERS to take charge of jobs; able to control drawing office and site work and deal with Consultants and Specialists. £1,000-£1,250.

ASSISTANTS interested in working on a wide range of projects. Good opportunities for young men of ability. £700-£1,000.

Salaries listed are commencing salaries and there is scope for advancement.

Vacancies in both London and Worcester offices.

Write: 103, Old Brompton Road, S.W.7. (KEN 4477.) 6206

ARCHITECTURAL ASSISTANT required. Intermediate to Final standard with office experience, for small busy practice. No Saturdays. L.V. Shaw & Lloyd, F.R.I.B.A., 74, Gt. Russell Street, W.C.1. MUSEum 9693. 6216

HOWARD V. LOBB & PARTNERS require ASSISTANT ARCHITECTS. Salaries would be between £750 and £1,250 per year. Please write to 20, Gower Street, London, W.C.1. 3640

AN experienced ARCHITECTURAL ASSISTANT, Intermediate to Final standard, required immediately to work on large projects in the City and West End of London. Salary range up to £1,200 plus L.Vs. Pension scheme and other staff amenities. Small office with opportunity for advancement. Write to W. H. Rogers, A.R.I.B.A., 16, Mark Lane, E.C.3. or telephone MINcing Lane 3123. 6208

WORTHING—SENIOR and JUNIOR ARCHITECTURAL ASSISTANTS urgently required in busy South Coast office. Excellent conditions, generous salaries, car provided, five-day week, offered to competent applicants. Goldsmith & Pennells, Chartered Architects, 13 Liverpool Gardens, Worthing. 6308

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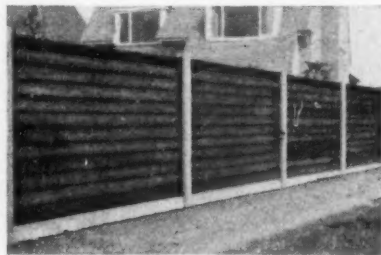
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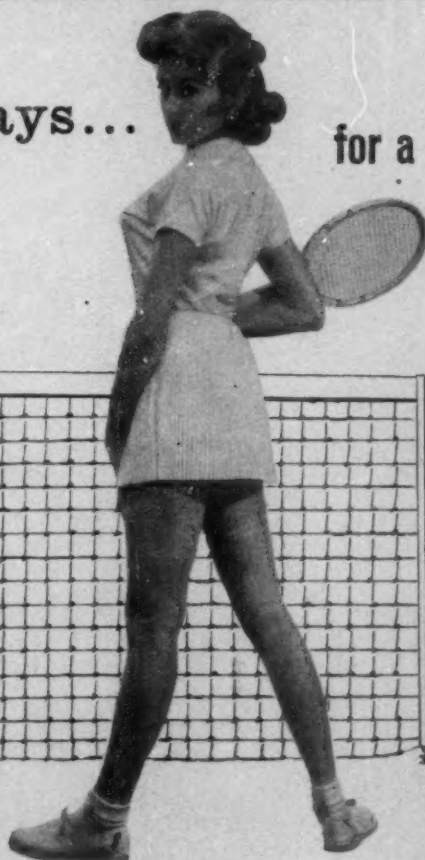
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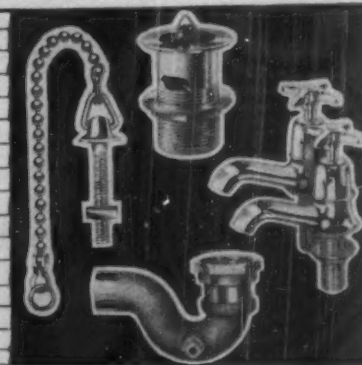
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|--|--------------|------|---|------------|------|--|----------|------|
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| Armstrong Cork Co., Ltd. | 115 | 0928 | General Electric Co., Ltd. | 87 | 1248 | Protim, Ltd. | 100 | 0897 |
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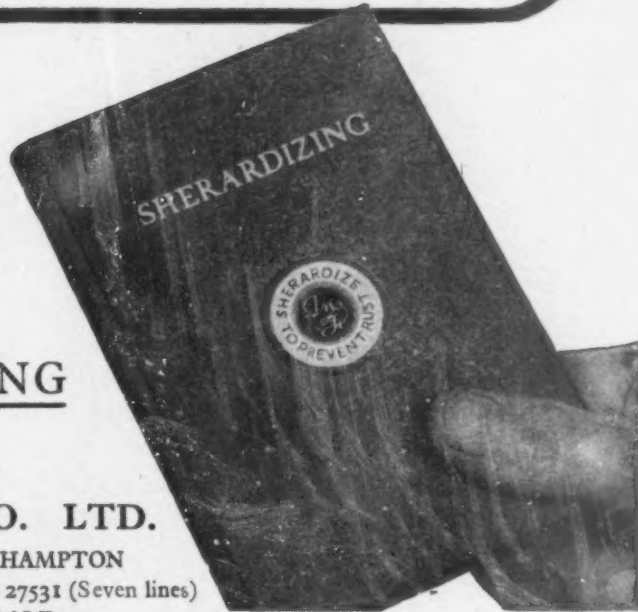
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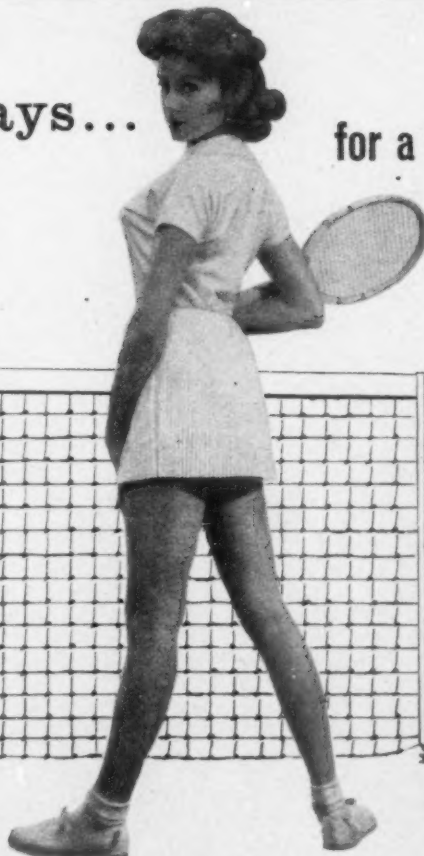
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