

THE ARCHITECTS' JOURNAL



standard contents

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

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Wanted and Vacant

No. 3432]

[Vol. 133

THE ARCHITECTURAL PRESS

9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1. 'Phone: Whitehall 0611

Price 1s. 0d.

Registered as a Newspaper.

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

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: 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 9757
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.	Museum 5400
BC	Building Centre, 26, Store Street, Tottenham Court Road, W.C.1.	Welbeck 4185
BCC	British Colour Council. 13, Portland Square, W.1.	Ealing 9621
BCCF	British Cast Concrete Federation. 105, Uxbridge Road, Ealing, W.5.	Redditch 716
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Fremantle 8494
BDA	British Door Association. 10, The Boltons, S.W.10.	Hunter 1951
BE	Building Exhibition. 11, Manchester Square, W.1.	Temple Bar 9434
BEDA	British Electrical Development Association, 2, Savoy Hill, W.C.2.	
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Whitehall Gardens, Horseguards Avenue, S.W.1.	Trafalgar 8855
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 4040
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. British Standards House, 2, Park St., W.1.	Mayfair 9000
CABAS	City and Borough Architects Society. C/o S. A. G. Cook, A.R.I.B.A., Borough Architect and Director of Housing, Town Hall, High Holborn, W.C.1.	Holborn 3411
CAS	County Architects' Society. C/o J. Hurst, A.R.I.B.A., County Hall, Dorchester.	
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Belgravia 6661
CDA	Copper Development Association. 55, South Audley Street, W.1.	Grosvenor 8811
COID	Council of Industrial Design. 28, Haymarket, S.W.1.	Trafalgar 8000
CPRE	Council for the Preservation of Rural England, 4, Hobart Place, S.W.1.	Sloane 4280
CUC	Coal Utilization Council. 3, Upper Belgrave Street, S.W.1.	Sloane 9116
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 68, Gloucester Place, W.1.	Welbeck 9966
FASS	Federation of Associations of Specialists and Sub-Contractors, 14, Bryanston Street, W.1.	Welbeck 1781
FBBDO	Fibre Building Board Development Organization Ltd. (Fidor), Stafford House, Norfolk Street, W.C.2.	Covent Garden 3008
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	Regent 0221
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 33, John Street, W.C.1. Tel.: Chancery 7583 (6 lines)	
FPC	Federation of Painting Contractors, St. Stephen's House, S.W.1.	Whitehall 3902
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4341
GPDA	Gypsum Plasterboard Development Association. 11, Ironmonger Lane, E.C.2.	Monarch 8888
GC	Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
GG	Georgian Group. 2, Chester Street, S.W.1.	Belgravia 3081
HC	Housing Centre. 13, Suffolk Street, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 29, Belgrave Square, S.W.1.	Belgravia 3755
ICA	Institute of Contemporary Arts. 17-18, Dover Street, W.1.	Grosvenor 6186
ICE	Institution of Civil Engineers. 1, Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, Victoria Embankment, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 49, Cadogan Square.	Sloane 1601/3158
IIBDID	Incorporated Institute of British Decorators and Interior Designers. 100, Park Street, Grosvenor Square, W.1.	Mayfair 7086

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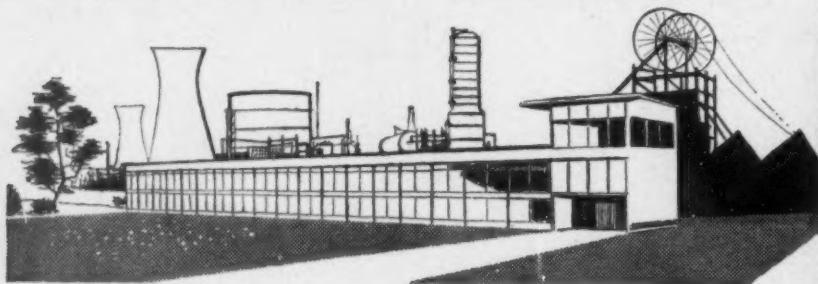
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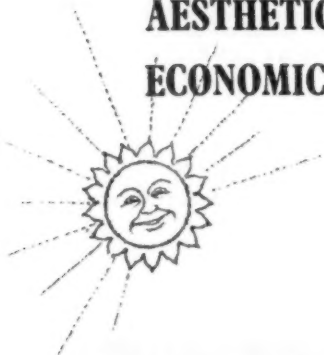
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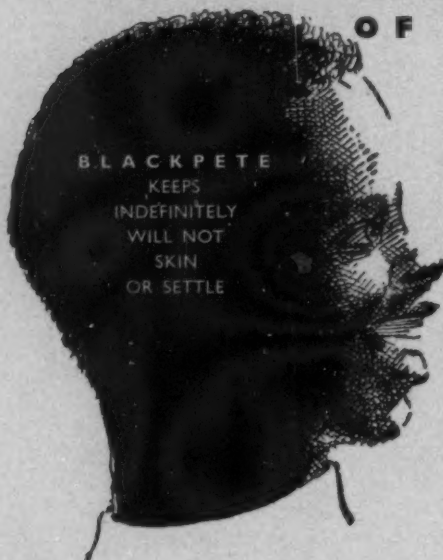
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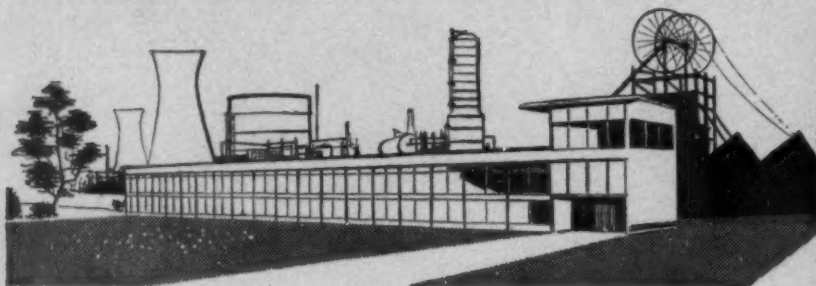
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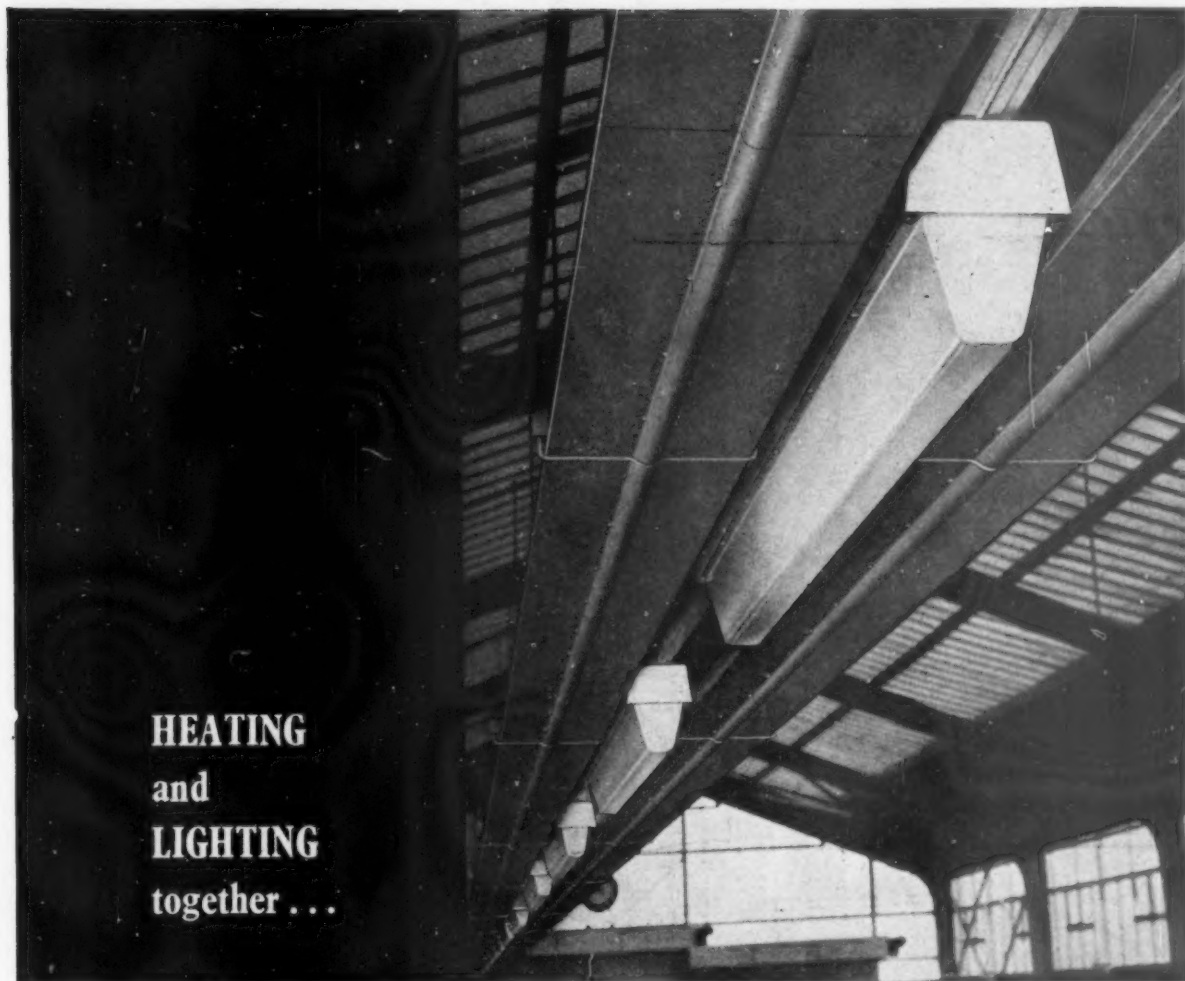
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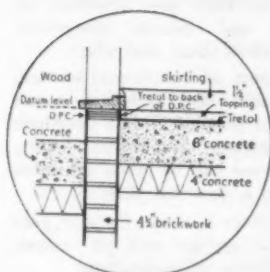
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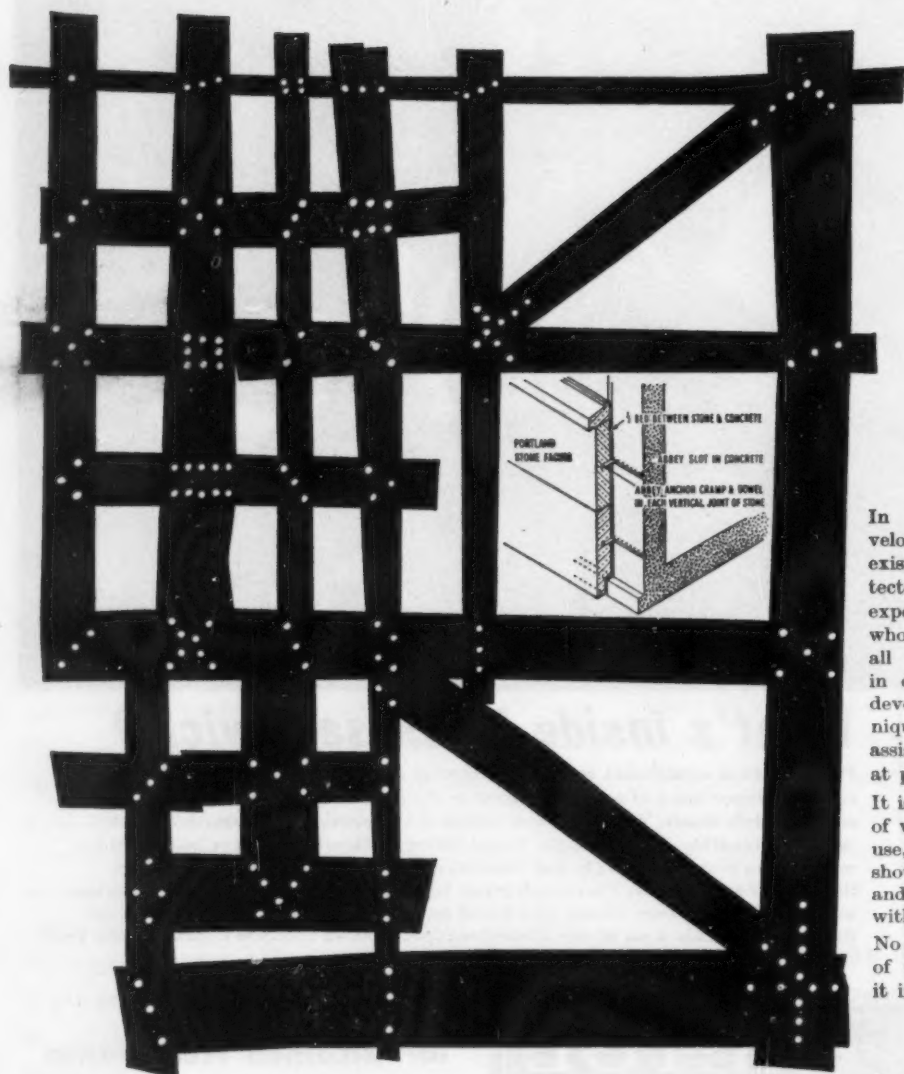
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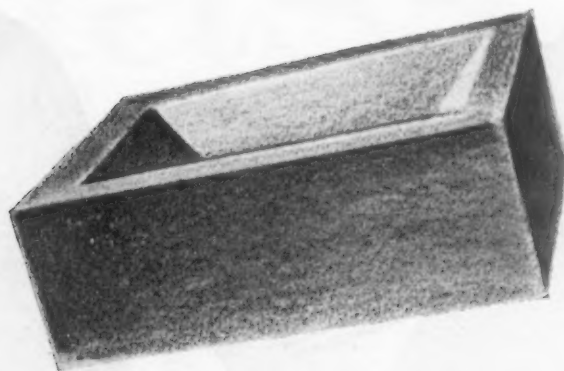
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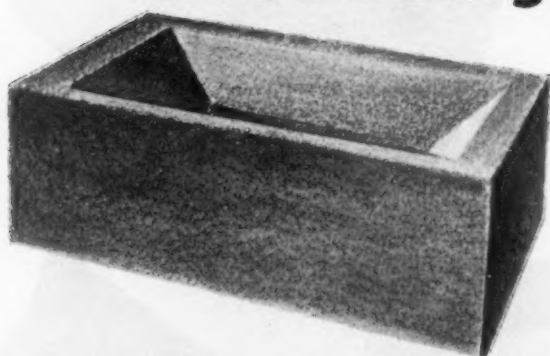
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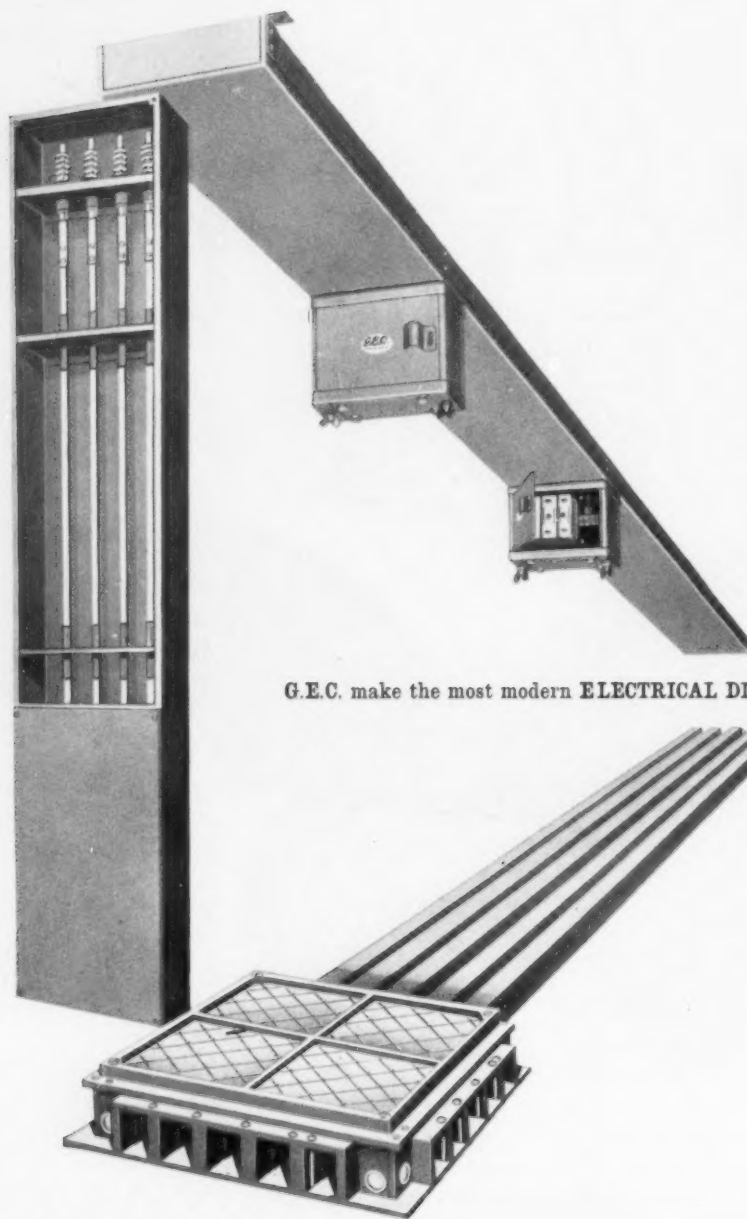
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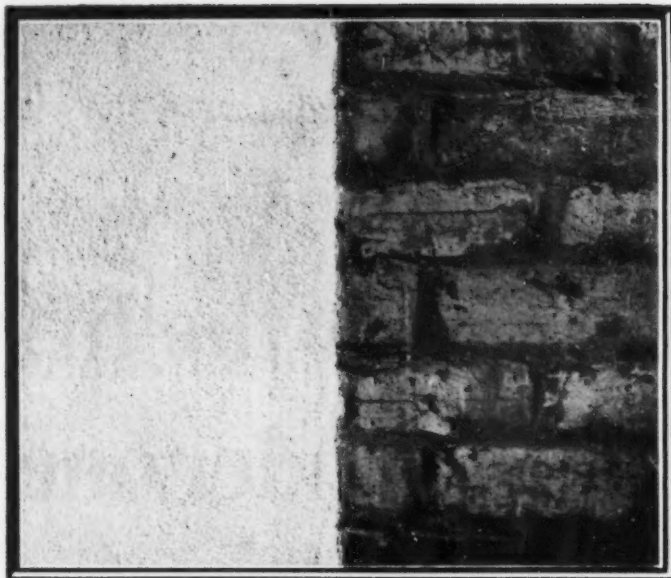
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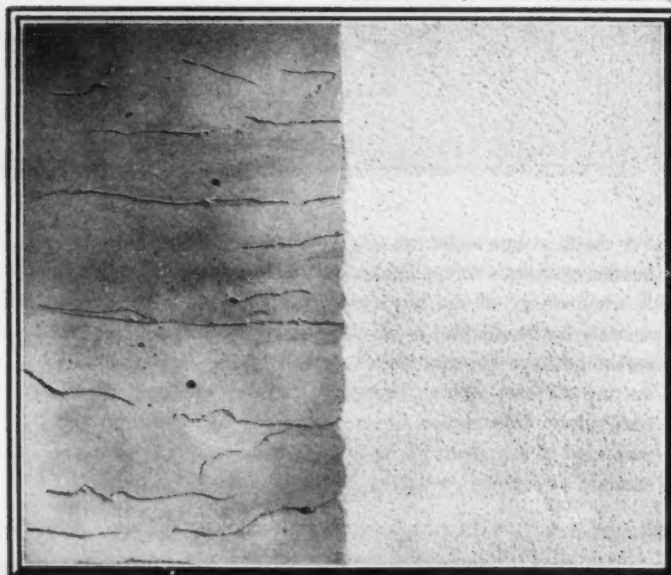
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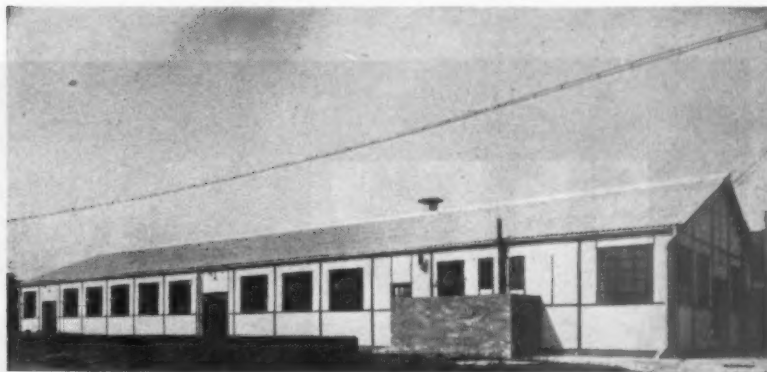
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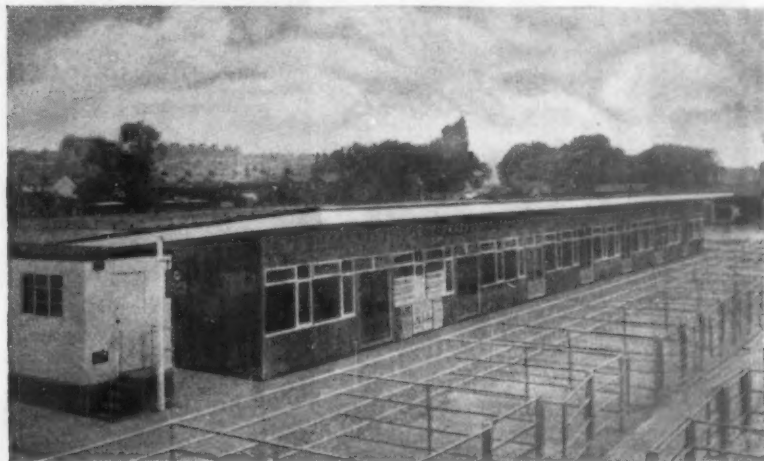
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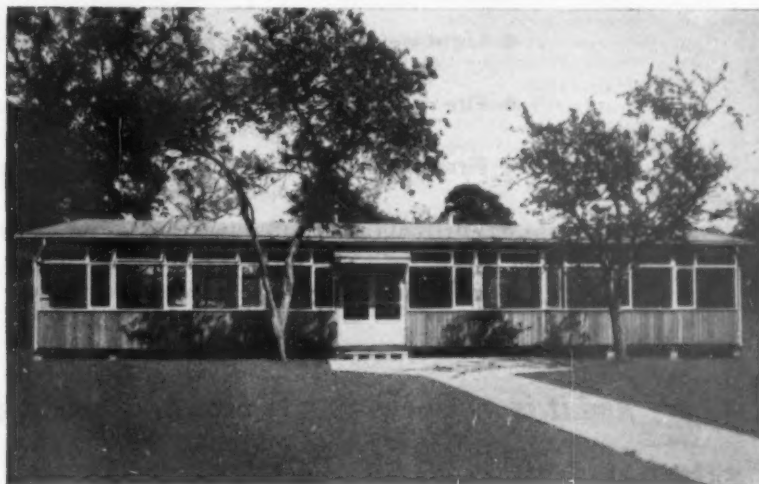
Timber framed Factory Canteen.

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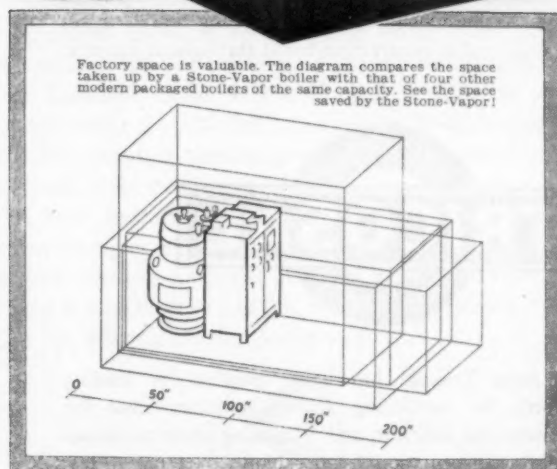
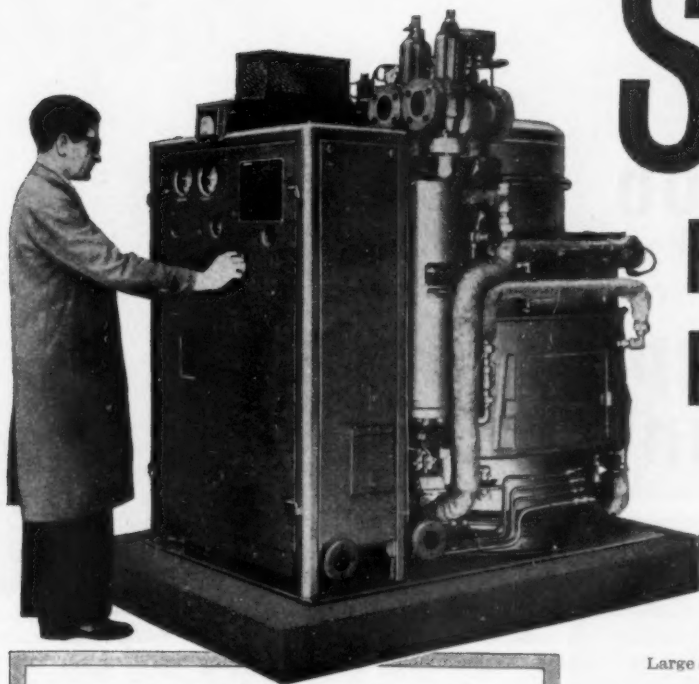


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- * Laboratory and high pressure test work.
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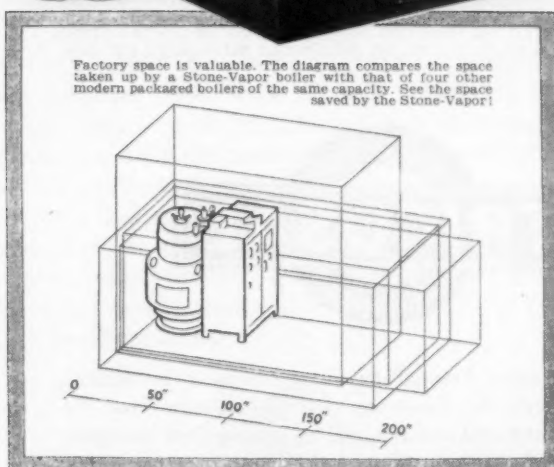
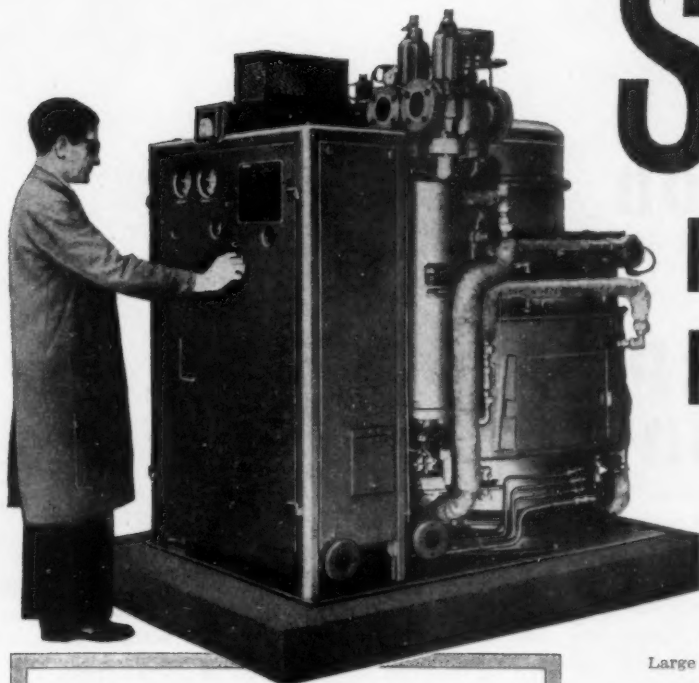


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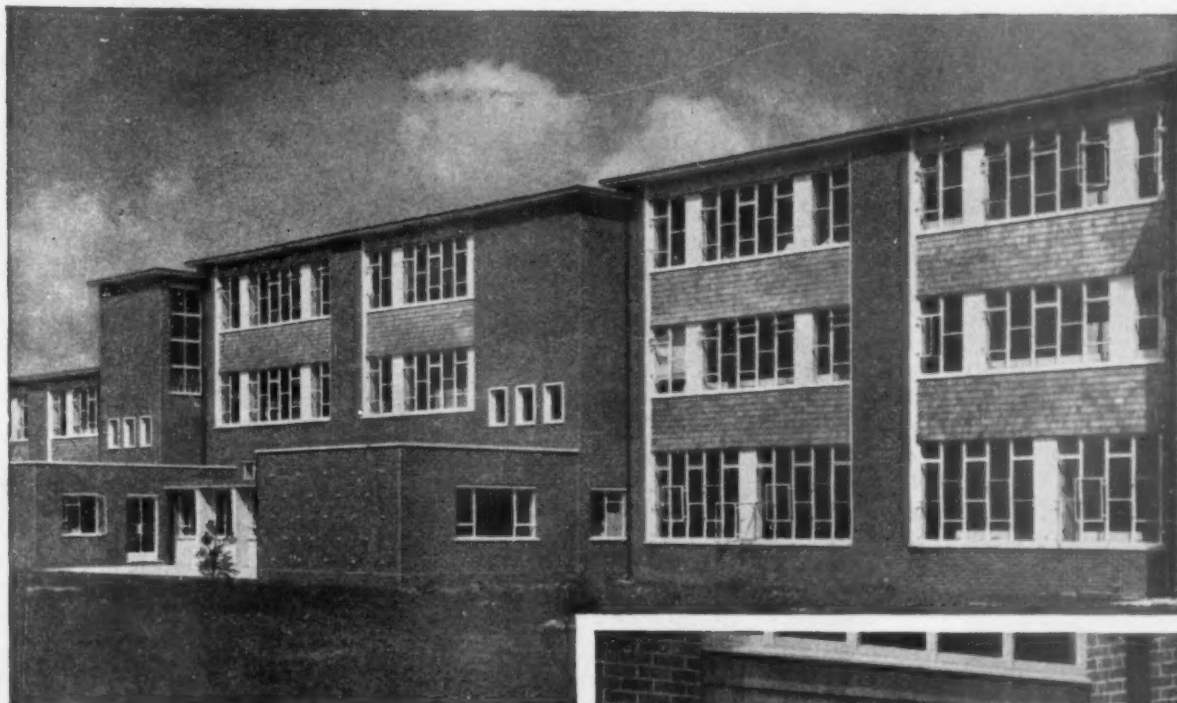
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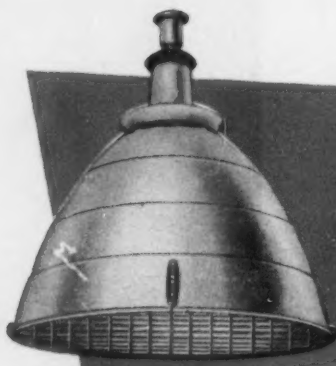
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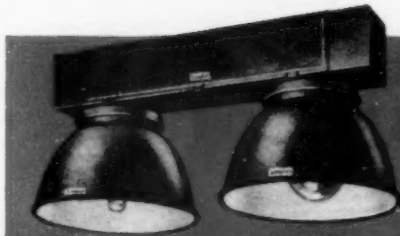
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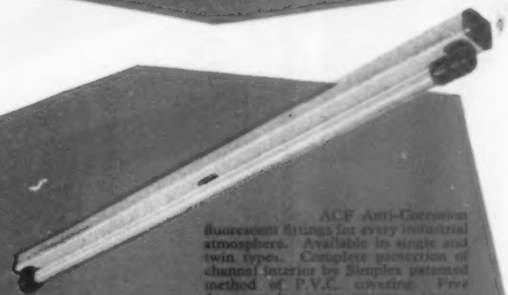
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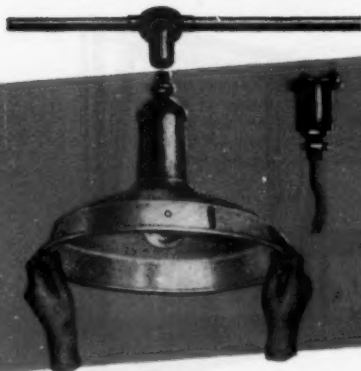
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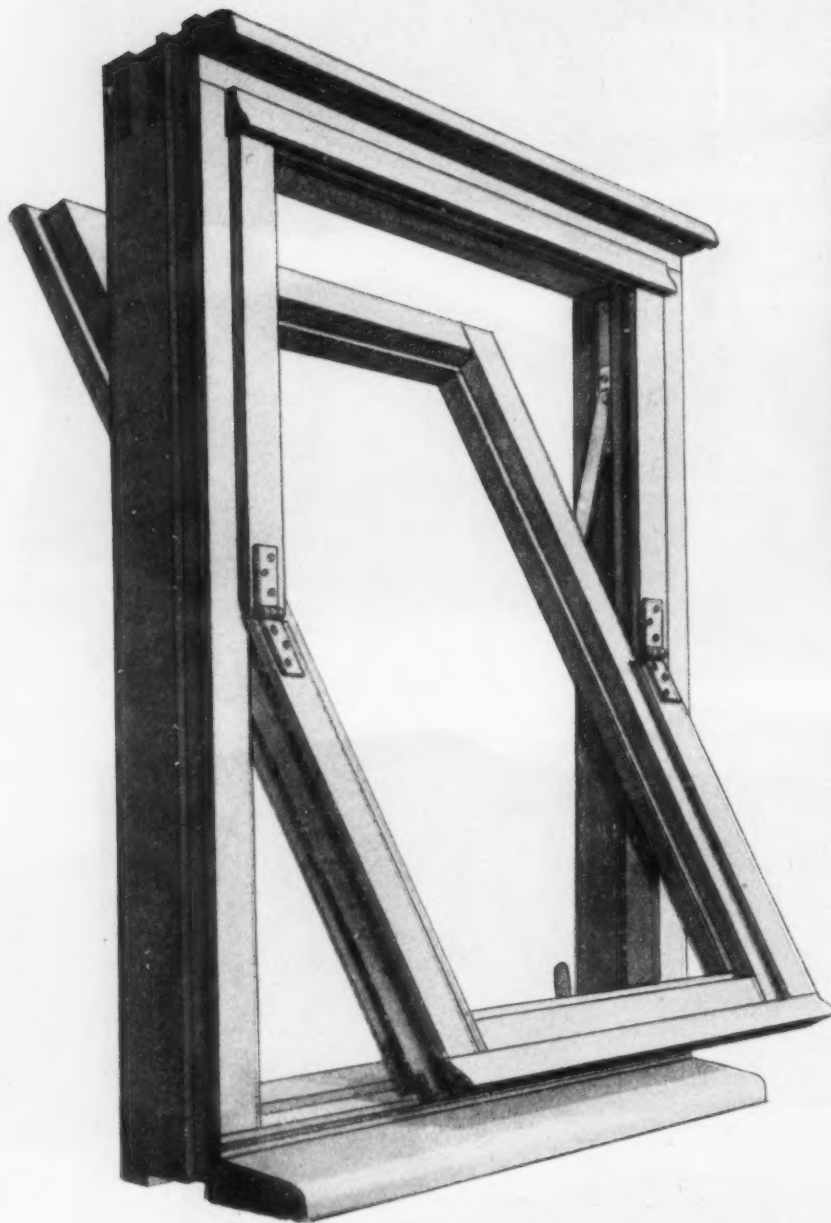
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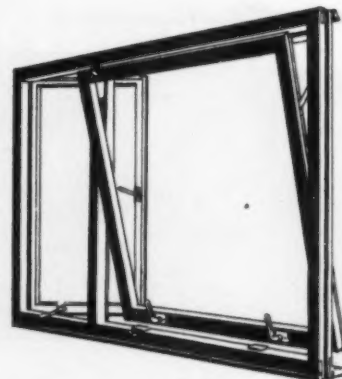
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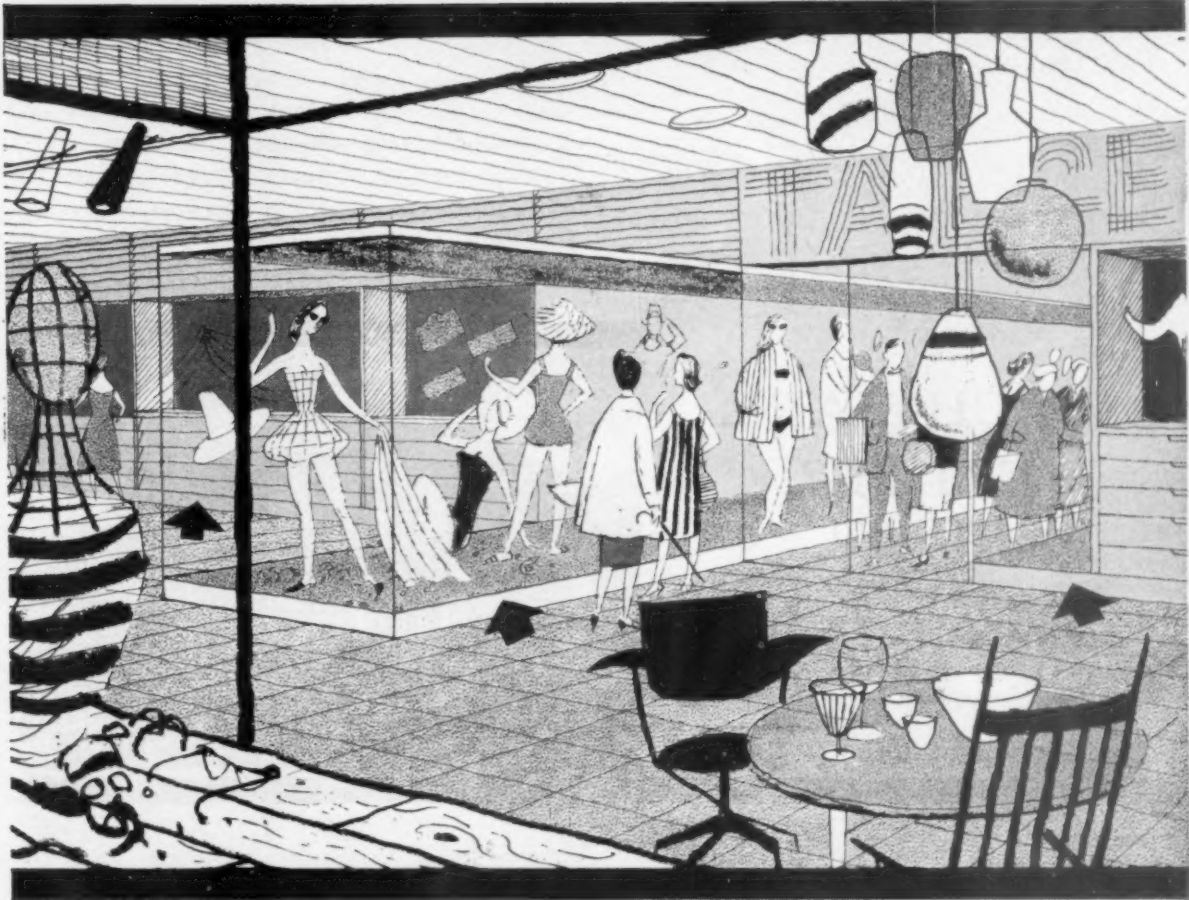
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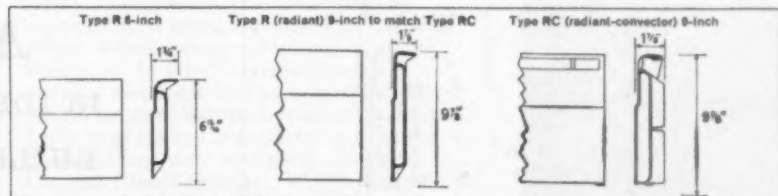
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3 types of Crane Skirting Heating

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27.8

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ASCOT AND THE PRIVATE BUILDER: 1



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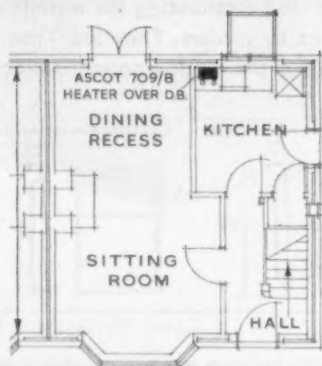
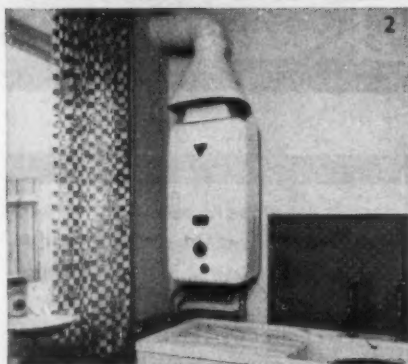
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Floor Plan showing installation of Ascot 709B multipoint water heater in the kitchen to supply hot water to sink, bath and bathroom basin.

1. One pair of semi-detached houses on the Birch Farm Estate.
2. An Ascot 709B instantaneous multipoint installed in a kitchen.
3. General view of the Estate.

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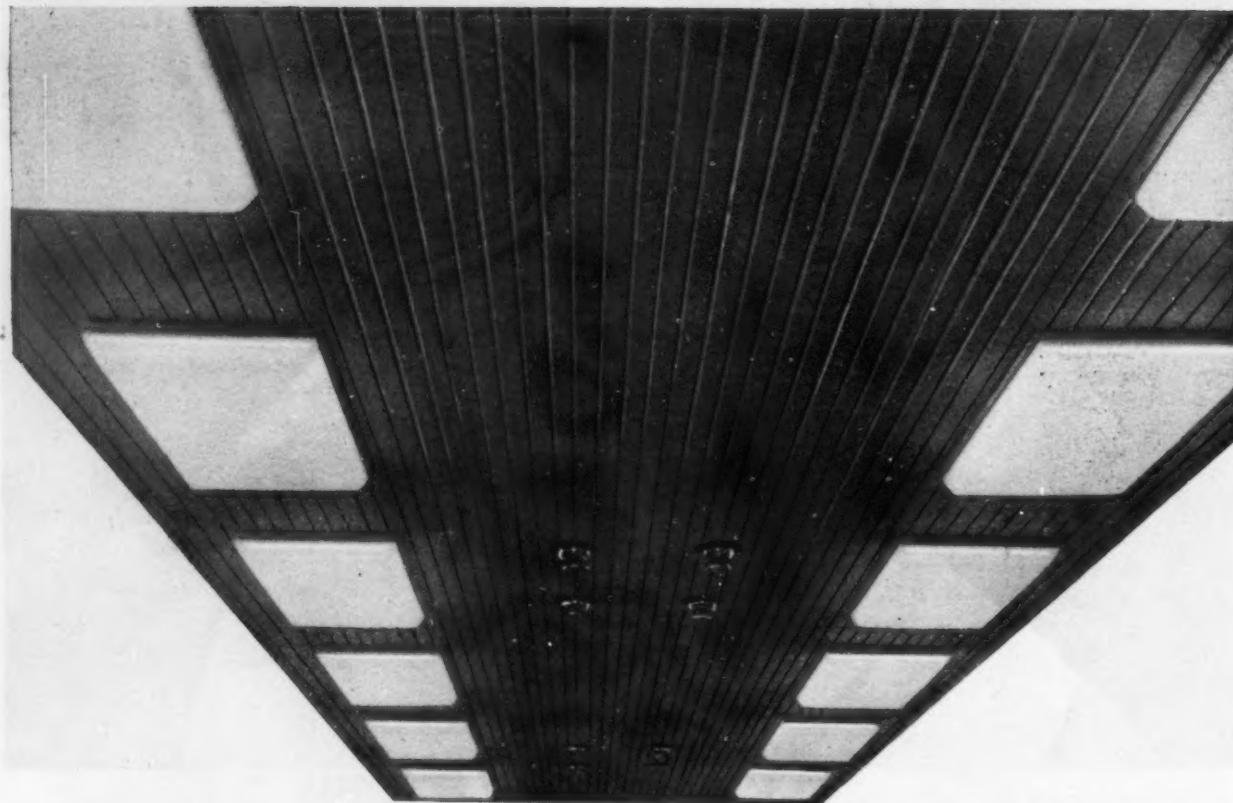
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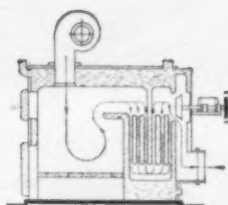
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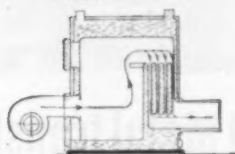
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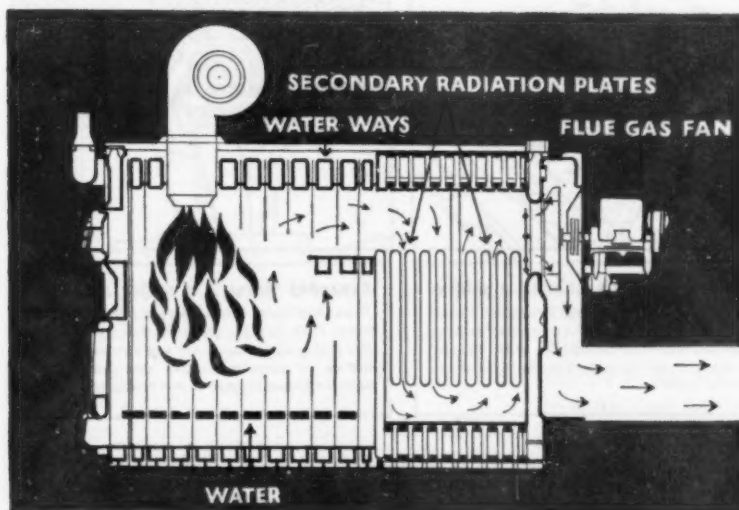


Top mounted burner
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Front mounted burner;
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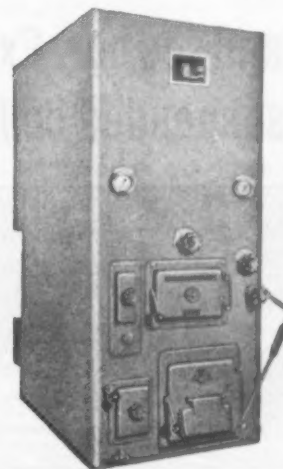


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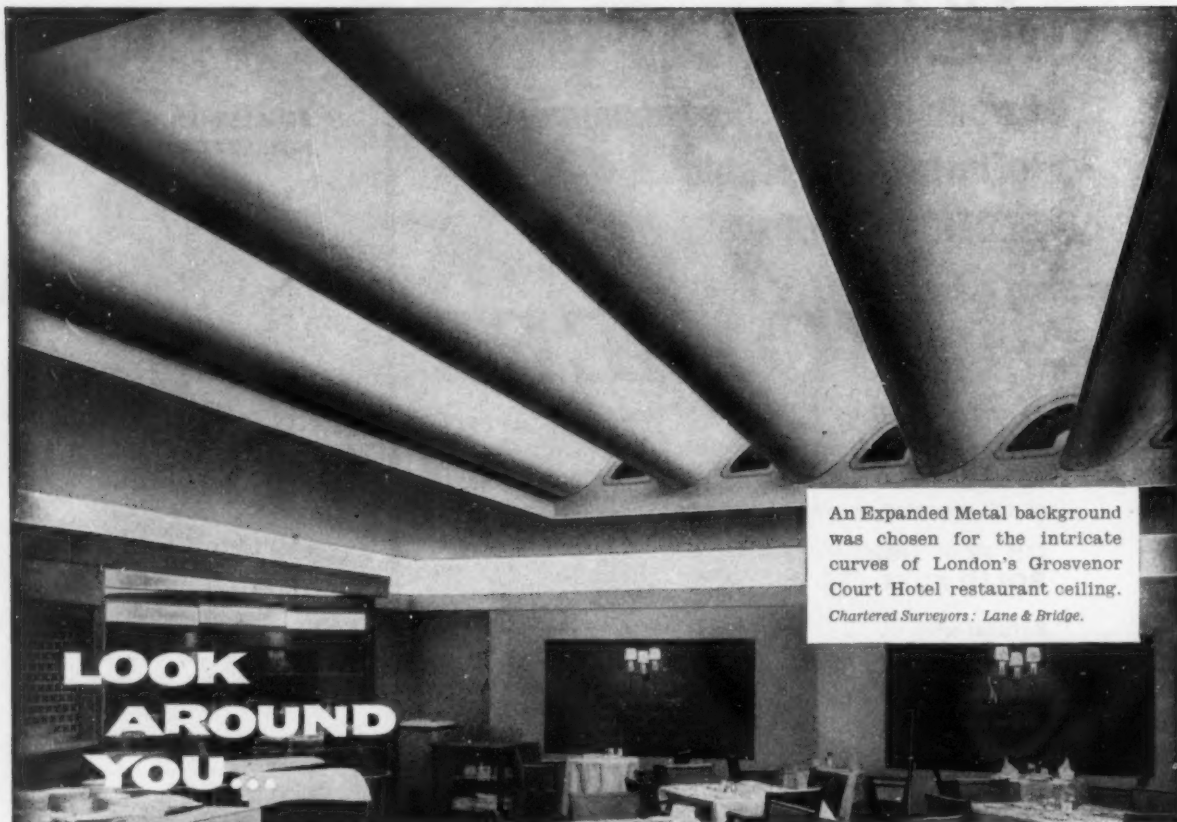


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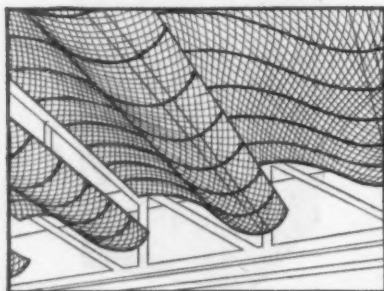


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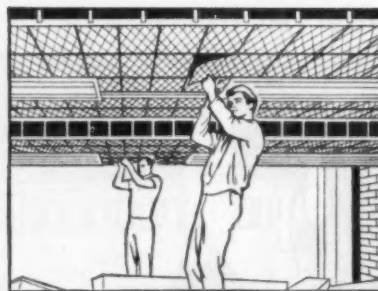
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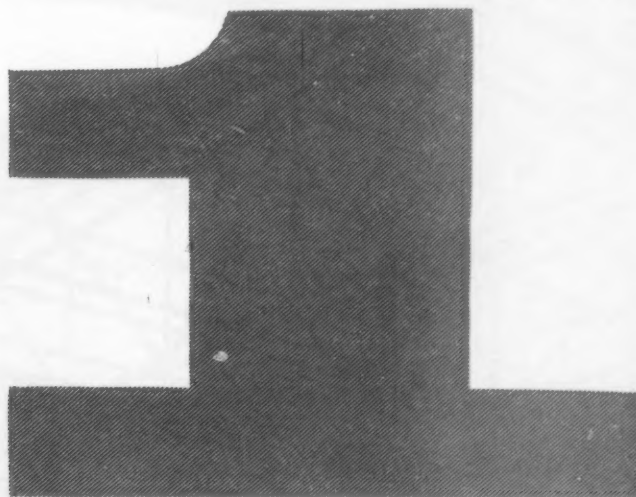
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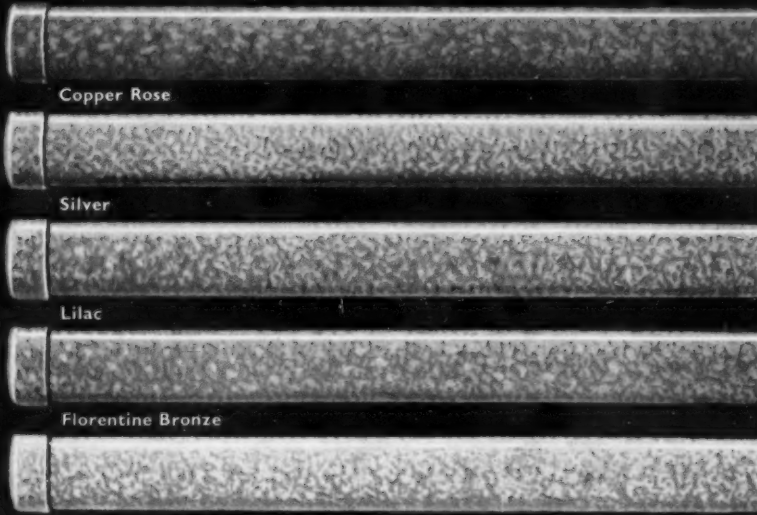

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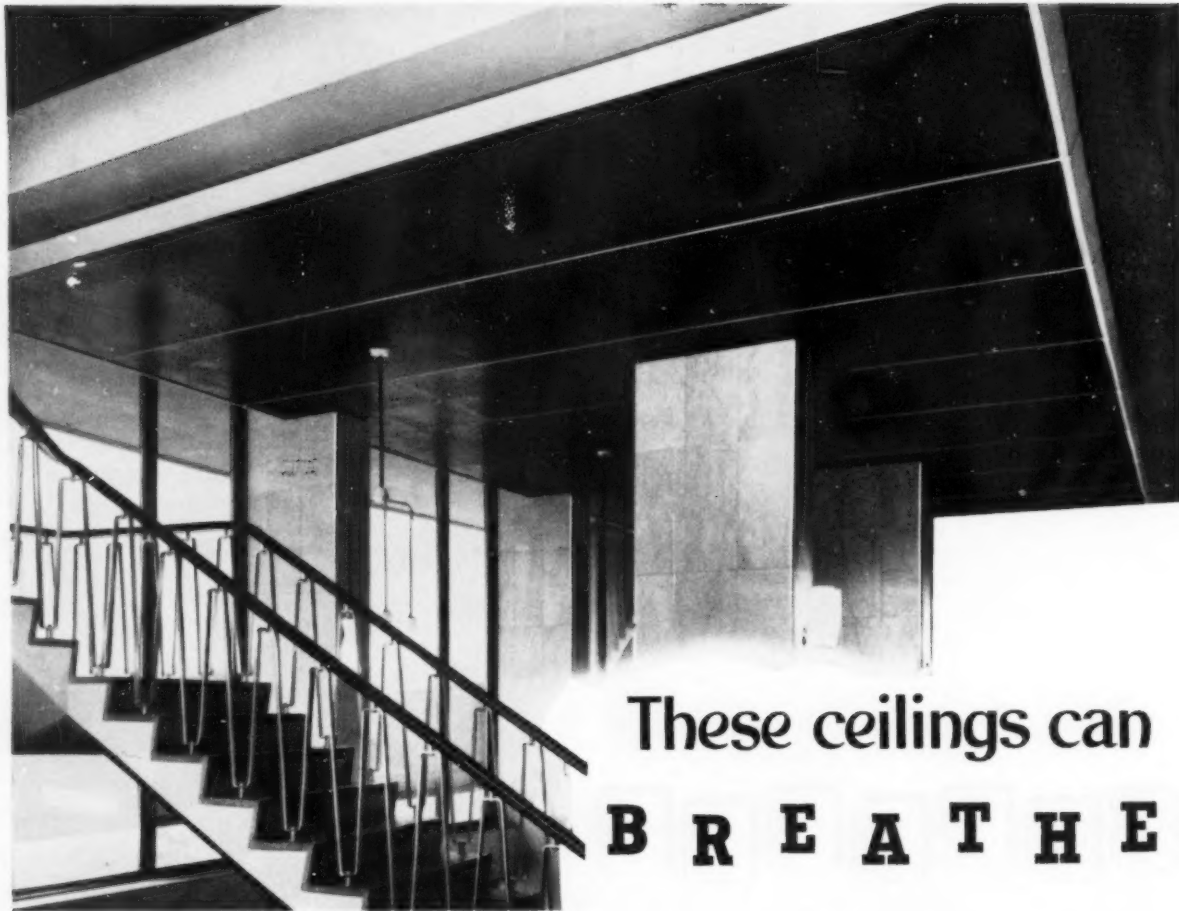
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For details of these new Formica patterns, please write to:

Formica Limited, De La Rue House, 84-86 Regent Street, London W.1. REGent 8020





These ceilings can **B R E A T H E**

Overhead services are completely obscured, yet there is adequate circulation of warm air *through* the panels to maintain efficient heating.

For panelling suspended ceilings, perforated metal also offers other distinct advantages. It is incombustible; maintenance is negligible; for access to services, panels may be removed and replaced without difficulty or damage; panel size and perforation pattern can be varied to suit individual requirements. Perforated metal is very versatile, and Harveys will help you to make the best possible use of it. Enquiries are invited.



Liverpool Corn Exchange

Architects: Harold E. Davies & Son, A.R.I.B.A.

Contractors: Tysons (Contractors) Ltd.



PERFORATED METAL

G. A. HARVEY & CO (LONDON) LTD., Woolwich Road, London, S.E.7. Telephone: GREenwich 3232 (22 lines)

Other Harvey Products: DECORATIVE SCREENING IN PATENT METALACE AND RIBBON WIREWORK • COMPLETE INSTALLATIONS OF STEEL OFFICE FURNITURE AND PARTITIONING • STEEL CLOTHES LOCKERS AND CUPBOARDS • VENTILATORS AND DUCTING • ZINC AND COPPER ROOFING

P10

an unbeatable guarantee for an unbeatable product



If any CELMAC moulded plastic seat should prove defective under normal usage—it will be replaced without question.

This is a development which we have been seeking for many years. Now that we have absolute confidence in our new raw materials we are proud to offer this warranty.

CELMAC moulded plastic toilet seats have been leaders in their field for many years. This latest development puts them further ahead.



No. 170A

Double lightweight four buffer full size seat and domed cover, made from guaranteed material. The best value for money on the market. Available with full range of fittings.



No. 23A

Double medium weight seat and cover for competitive work. Solid underbase, four buffers, manufactured from B.S.S. guaranteed material. Available with full range of fittings.



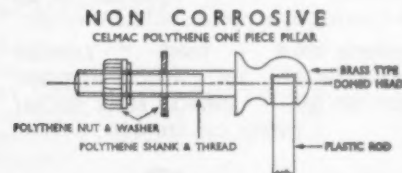
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Double seat and cover, badged-B.S.S., four buffers manufactured from B.S.S. guaranteed materials. This seat is unbeatable for value and quality.

A RANGE OF FORTY COLOURS TO CHOOSE FROM

CELMAC—ALL POLYTHENE FITTINGS

This ALL-Polythene one-piece pillar is the latest development in the trade. Absolutely corrosion free, no metal at all—and cheaper than any other fitting. The flexibility of this fitting is an added safeguard against accidental breakage. All CELMAC seats are available with this fitting, or with moulded pillars, chromium pillars, all with various rods and spacers.



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DENTON

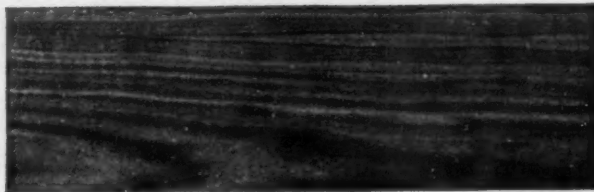
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BEAUTY
IN
BEAUTY PLANK**



Tiara



American Black Walnut



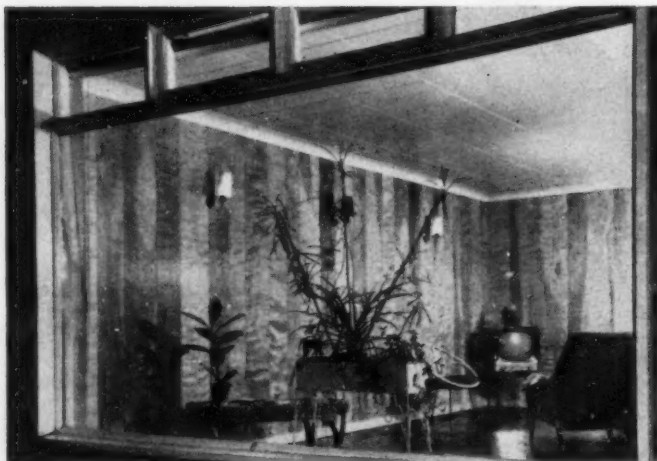
Rotary Cut Red Oak

*Rich colour —
fine grain*

To Board Room, Showroom, or Exhibition Stand, this prefinished plywood planking adds beauty and distinction. The incorporated tongued and grooved fixing technique eliminates all face nailing and simplifies application.

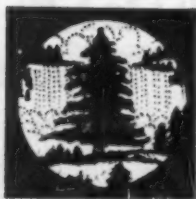
The panelling, 8' long, $\frac{1}{4}$ " thick and of random widths, is available in the following eight prefinished hardwoods:-

NATURAL BIRCH • TIARA • AMERICAN
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RIFT RED OAK • AMERICAN BLACK WALNUT
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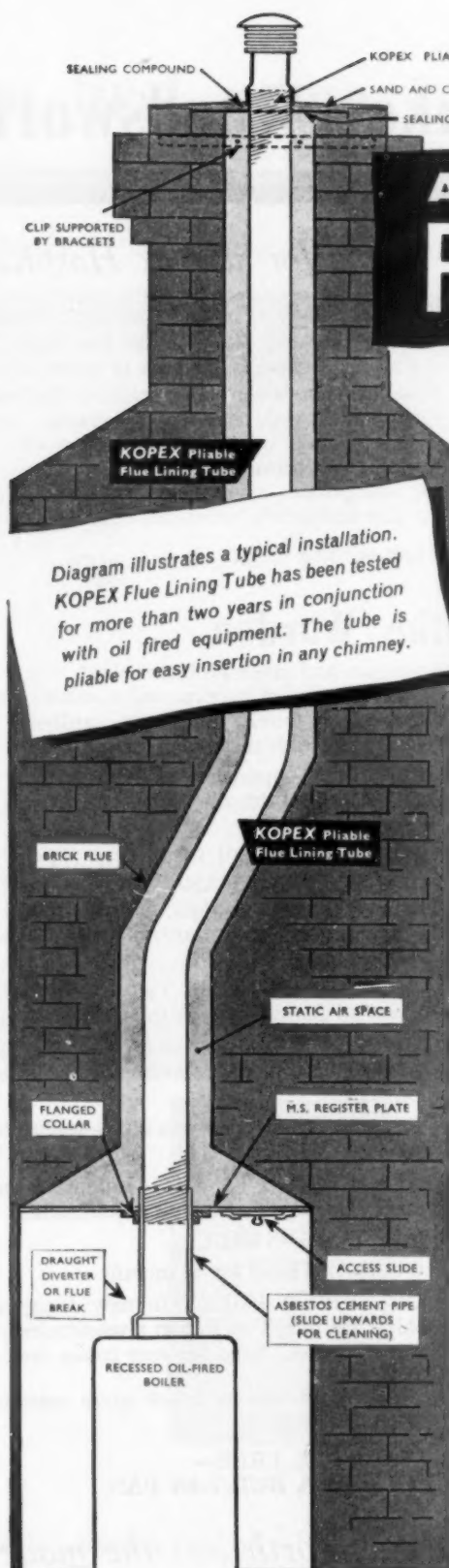
Canadian

BEAUTY PLANK



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AVOID THE EFFECTS OF FLUE CONDENSATION

**FIT A KOPEX PLIABLE
FLUE LINING TUBE
WHEN INSTALLING OIL, GAS
OR SOLID FUEL BOILERS**

Kopex Flue Lining Tube eliminates the risk of interior and external wall staining, improves draught, checks brickwork corrosion and reduces degree of condensation.

The Problem -

Most modern domestic boilers operate at a relatively low flue gas temperature in order to obtain maximum efficiency.

Condensation of the products of combustion is consequently unavoidable and may result in serious staining on inside and outside walls, also other attendant troubles.

The Solution -

By fitting the KOPEX Flue Lining Tube in the chimney flue condensation troubles are overcome. **APPROVED BY LEADING OIL COMPANIES** SUITABLE FOR NEW AND EXISTING INSTALLATIONS. Technical information is available on application to the manufacturers.

UNI-TUBES LIMITED
197 Knightsbridge, London, S.W.7
Telephone: KNightsbridge 7811

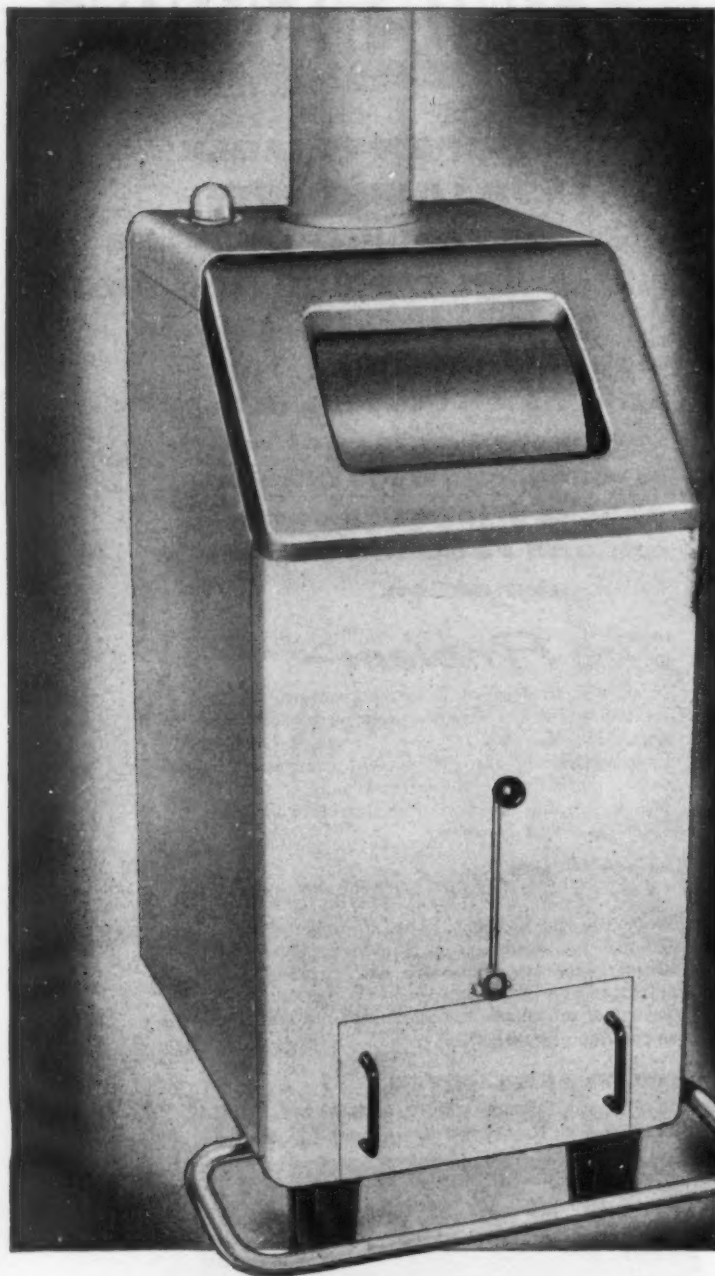
KOPEX

PLIABLE FLUE LINING TUBE

Made under British patent Nos. 718403 and 605340 and corresponding foreign patents

It's the *fan** that makes Wandsworth

for use in Hospitals,



The changeover to modern heating systems in post-war building development has highlighted the need for effective methods of waste disposal. Wise planners, however, are realising the benefits that Wandsworth electric incinerators offer—disposal without odour or unsightliness—the safe hygienic way, because each Wandsworth incinerator incorporates an exclusive built-in extractor fan that completely eliminates all noxious fumes.

Three of these models are shown here.

the Warden

An urgent and major problem solved at last—the BULK disposal of surgical and maternity dressings, sanitary towels, documents, cardboard and other combustible materials.

HOSPITALS—appreciate that on-the-spot disposal of surgical dressings minimises the risk of cross infection.

NURSES HOMES, PUBLIC TOILETS, FACTORIES, OFFICES AND RESTAURANTS. The Warden fulfils the long-felt need for a large electrical incinerator for central disposal—cleanly, hygienically.

- FUME FREE—patent Fan Extractor Unit removes all fumes—even with access door open.
- EASY TO USE—place matter for disposal in Warden—burning cycle commences and ends automatically.
- FOOT BAR—opens access door—leaving both hands free.
- ADJUSTABLE TIMING—automatic burning cycle can be varied to suit requirements.
- EASY TO INSTALL
- GUARANTEED for 12 months.
- DESCRIBED FULLY in new Incinerator Booklet. Burning Test Report gives detailed performance figures. Send for your copies now.

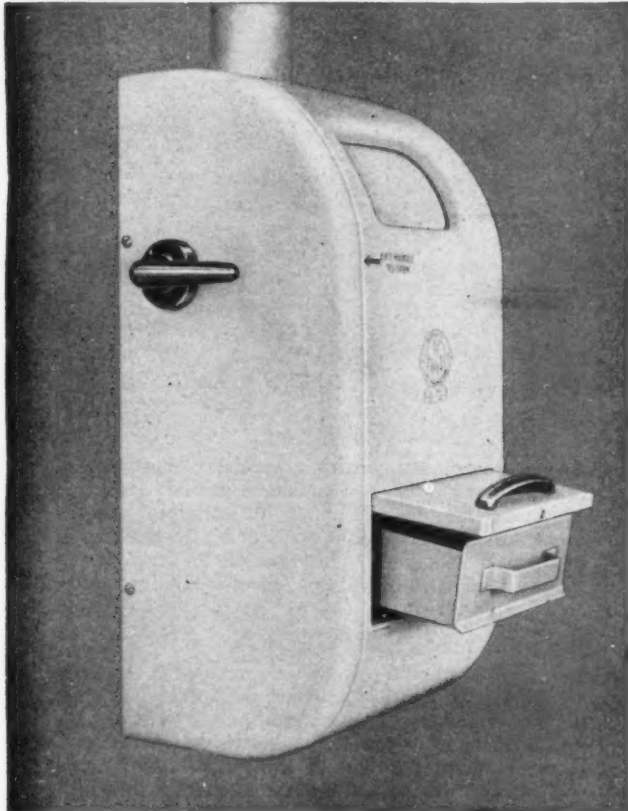
The only incinerator which easily copes with Bulk Disposal

**TROUBLE FREE—
IT HAS A BUILT-IN FAN**

* If it hasn't a Fan . . . it isn't a Wandsworth . . . the modern

the first name in incinerators

Schools, Factories, Municipal Buildings, Offices, Hotels, etc.



above: Standard surface-mounted Bunnie



right: Flush-mounted Bunnie

the Bunnie

Exclusive Wandsworth built-in extractor fan on the 'Bunnie' incinerators entirely eliminates unpleasant odours due to smoke or fumes. By means of a simple relay system several machines may use a common flue without risk of feedback—even when access doors are open.

- Completely hygienic • Automatic operation
- Big capacity—100-150 staff • Surface or flush wall mounting (Pedestal model also available—details on request) • Residual ash deposited in ash drawer for later disposal • Easy installation
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- Outer case always remains cool • Consumption 800 watts • Available for A.C. or D.C.
- 12 months' guarantee

All British made by Wandsworth, one of the most famous and experienced names in the electrical industry.

Technical advisory service available—please write or phone for new Incinerator Booklet.

Wandsworth

electric incinerator

THE WANDSWORTH ELECTRICAL MANUFACTURING CO. LTD.
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six sided argument



Any organisation professing a specialist knowledge of timber preservation must provide a genuine service in which the diagnosis, the method of treatment and the preservative used can all be accepted by the architect or the client in good faith. The argument for the Xylamon service is six sided — and guarantees a cure for at least 20 years.

THREE WAY TOXIC.

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 timber.

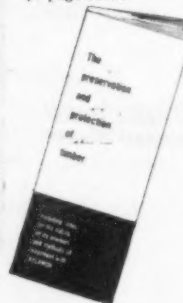
THREE WAY SERVICE.

The Xylamon service divides itself naturally into three parts: the initial survey and diagnosis which is authoritatively reliable — and for which no charge is made.

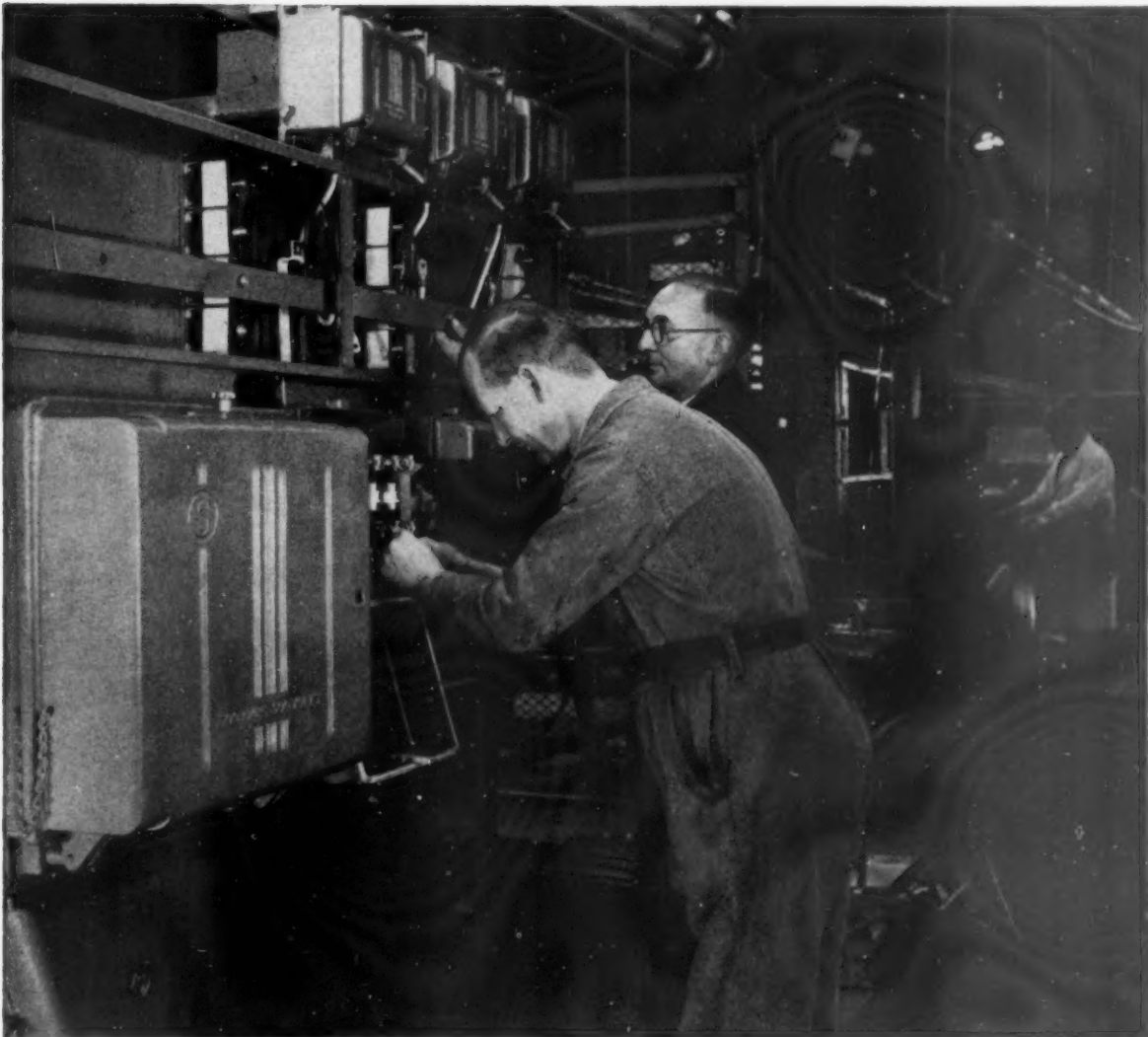
The actual treatment — which is given by trained operatives of the largest preservation service organisation in the U.K.

The after-treatment service in which the user is protected against any possible further expense that might be incurred by another outbreak — by a written 20 year Guarantee covering the timbers treated.

Advice, survey and estimates are given without charge or obligation. Write for the fifth edition of this free 40-page book.



WOOD PRESERVATION LTD. 142 Sloane St. London, S.W.1. Tel: SLOane 9984/5



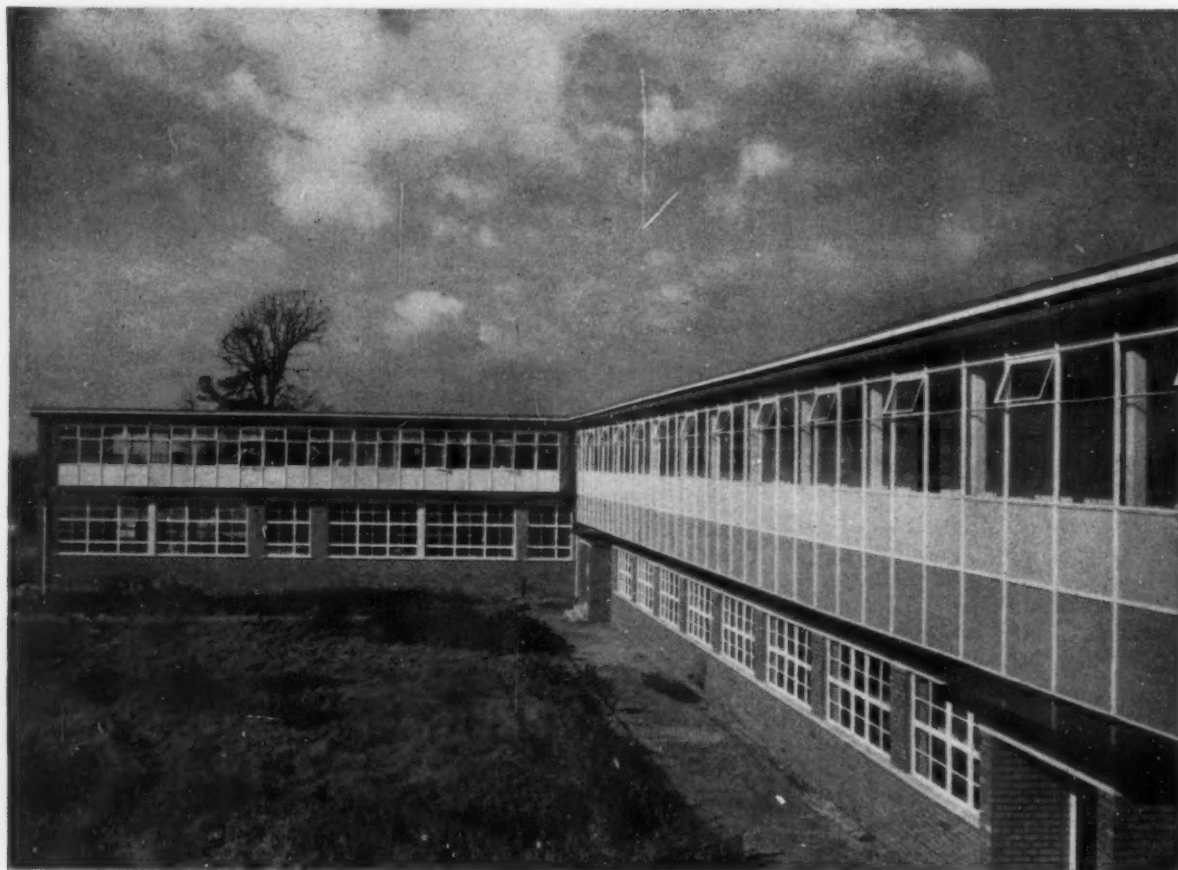
Whichever way you look at it

Whichever way you look at it, SANDACLAD Switchgear is 'just the job'. Perfect as can be in conception, design and manufacture it bears the unmistakable stamp of quality. From our point of view, SANDACLAD Switchgear—indeed, every Sanders product—embodies the best of modern techniques both in design and fabrication. For the electrician SANDACLAD Switchgear offers the simplicity of speedy, easy wiring and the elimination of time-wasting frustrating re-adjustments. And the user can have complete confidence in the capability of SANDACLAD Switchgear to perform its allotted task and to carry its designated loading. Dependable, reliable and as pleasing in appearance as such equipment can be, SANDACLAD Switchgear provides safe, immediate and lasting control of electrical power.

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"TRICO" Infilling Panels: The Rustless Iron Co., Ltd.
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224 Panels. Backed with $\frac{3}{8}$ " Asbestolux.

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COMPOSITION: Mild Steel Sheets with or without flanges, covered all over with weatherproof vitreous (glass) enamel. May then have a backing material such as asbestos, cork, insulating board, glass or mineral wool, etc.

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MAINTENANCE: Washing down only.

COLOURS: Available in an almost unlimited choice.

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PREFABRICATION: Complete at factory. Can be moved entire from one site to another.

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*on the
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— a strong galvanised steel deck insulated
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Contractors: Charles R. Price
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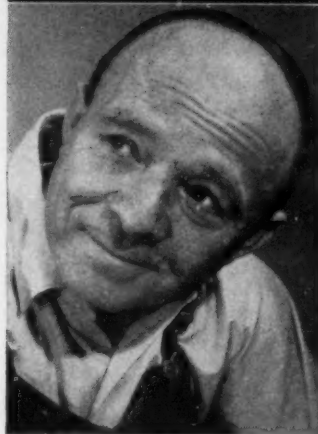
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**THOSE WHO
SPECIFY IT...**



THE ARCHITECT with an eye for efficiency also sees in the Lynx's clean-cut lines contemporary styling at its very best.

**THOSE WHO
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THE PLUMBER finds it easiest of all to fit; the concealed fixing is neat and simple.

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THE CUSTOMER is delighted to discover that such a handsome cistern also has the most discreetly quiet and dependable mechanism she's ever encountered.

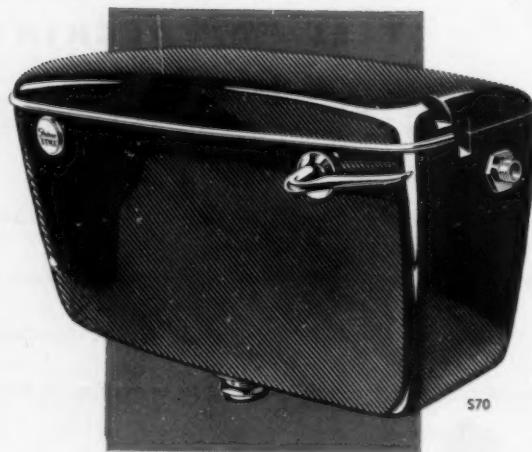
**...ALL
ACCLAIM**

THE LYNX

Shires Lynx is today's most popular cistern, for replacements or new installations. Lynx high and low level cisterns are made of black Duranite—tough and durable, non-crazing, non-corrosive. The Kingfisher syphon mechanism gives a powerful flush: made of polythene—non-corrosive, non-ageing and unbreakable—it can be used in hard or soft water areas. It conforms to BSS 1125 and Water Works specifications. Capacities: 2, 2½ and 3 gallons.

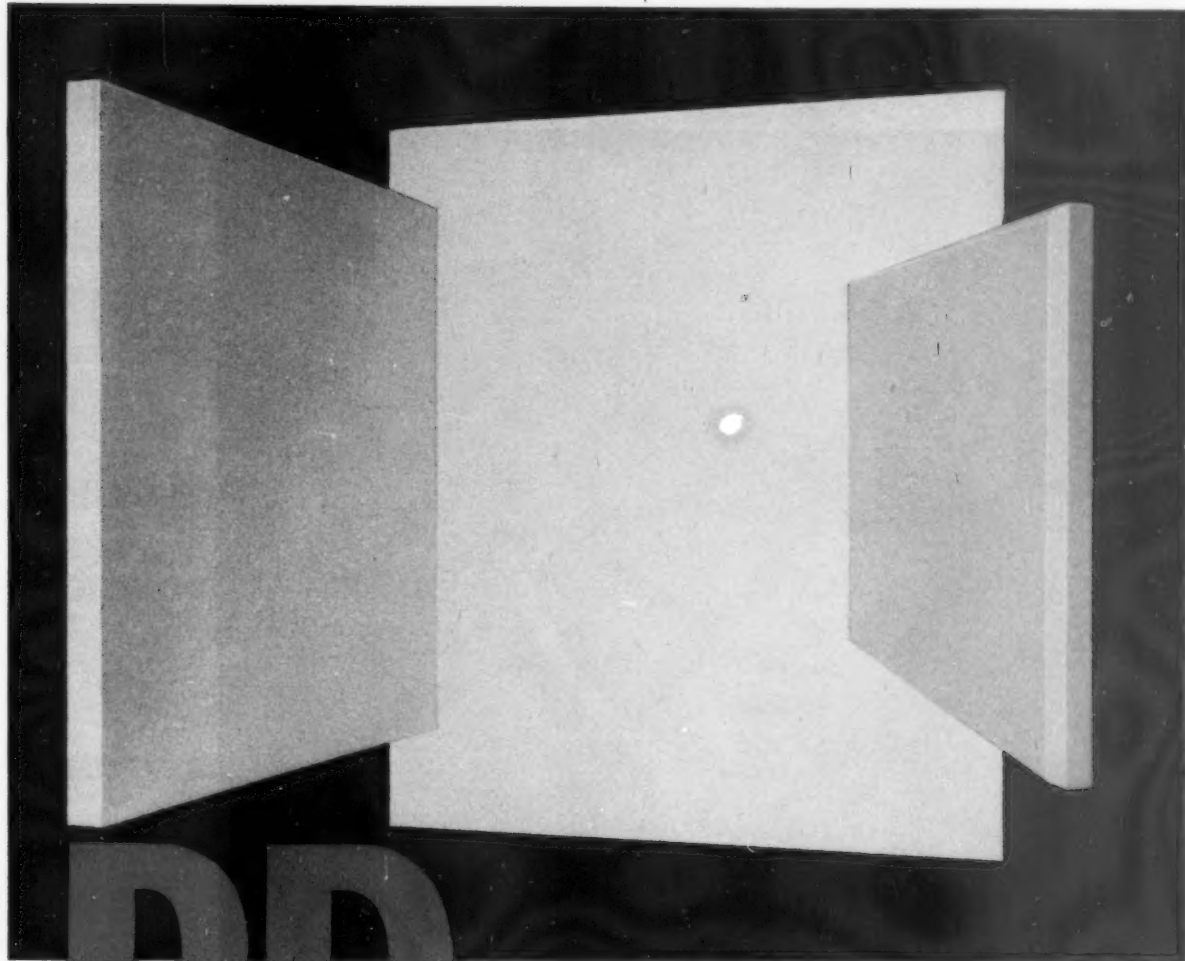
**EVERY GENUINE LYNX HAS THE NAME
ENGRAVED ON THE CISTERN**

Shires are the largest manufacturers of flushing cisterns in the world. They also make W.C. pans and seats, pipes, wash-basins and complete W.C. suites.



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GREENBOTTOM WORKS, GUISELEY, YORKS
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made by
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PD **WHITEFACE**

* Light to handle, easy to work and fix — **CUTS** basic construction costs.

* Special two-coat paint, hot-rolled into the surface of the board during manufacture, gives smooth, permanent white quality finish — **CUTS** decorating costs.

* High insulating characteristic, as for PD natural board — **CUTS** heating costs.

THE WHITE INSULATION BOARD THAT CUTS COST IN EVERY WAY

PD WHITEFACE is made to the highest standard from uniform wood fibres in Britain's latest fibre board mill. It is the ideal material for roof and wall linings, ceilings and partitions in industrial, office and public buildings. It provides a ready-made and permanent light-reflecting surface which may be matched to a planned colour scheme, if required, with a single further coat of paint. It has excellent insulating characteristics and can also be used to improve acoustic conditions. It counteracts condensation and is resistant to fungal and mould growths.

PD WHITEFACE IS AVAILABLE IN THE FOLLOWING STANDARD SIZES:

	Thickness	Length	Width
Insulation Board	$\frac{1}{2}$ "	4' 0" to 12' 0"	2, 3 and 4 ft
	$\frac{3}{4}$ ", $\frac{1}{2}$ " and 1"	4' 0" to 12' 0"	2 and 4 ft
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Bevelled panels 1' 0" x 1' 0", 2' 0" x 2' 0", 2' 0" x 4' 0", 4' 0" x 4' 0".

Special sizes cut on application. Kraft paper wrapped in bundles.



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at Peterborough

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* **David Cluer,**
Pit Manager, 41 years
with the Company

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STEEL ROLLING SHUTTERS

**the super shutter
protects
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Architects: H. A. HALPERN & ASSOCIATES



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A new transistorised loudspeaking master station of unique design by Reliance for use by the busy executive.



The Reliance push button intercommunication set suitable for 3 to 21 stations.

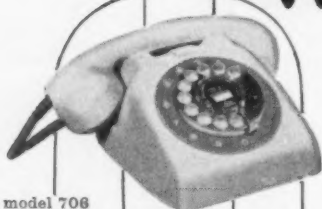


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Intercommunication

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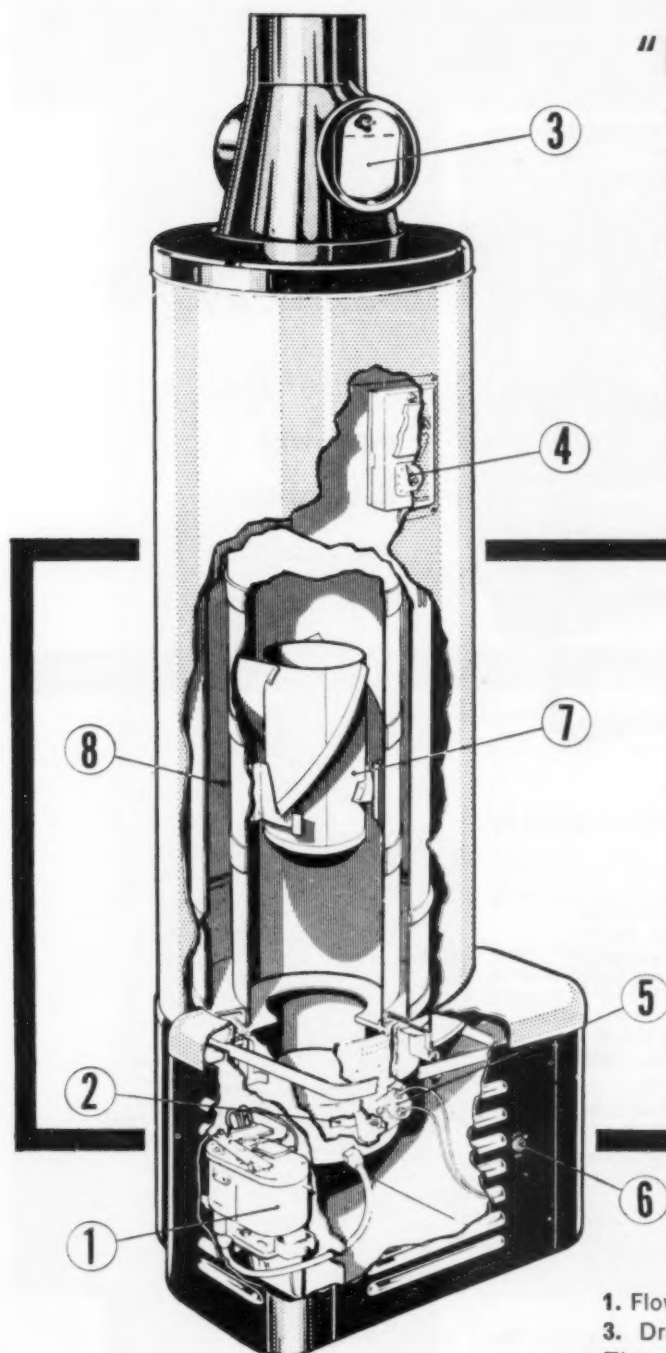
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boiler for the smaller house*

SMITHS

"MODEL 30"

This excellently designed boiler (at the very moderate retail price of £75) brings fully automatic background heating and domestic hot water within reach of the small-home owner. It has a high thermal efficiency, is economical to run, needs servicing only once a year, and (where it will aid economy) can be controlled by a time-switch.

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SUMMARY OF TECHNICAL DATA

The natural-draught vaporizing burner is fitted with electric ignition, and operates high-fire and off. 200-250 volts AC only.

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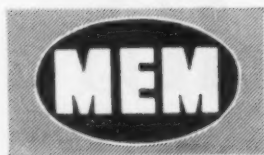
Weight: 93 lbs.

Flue draught required: .06 w.g.

Fuel: regular grade kerosene.

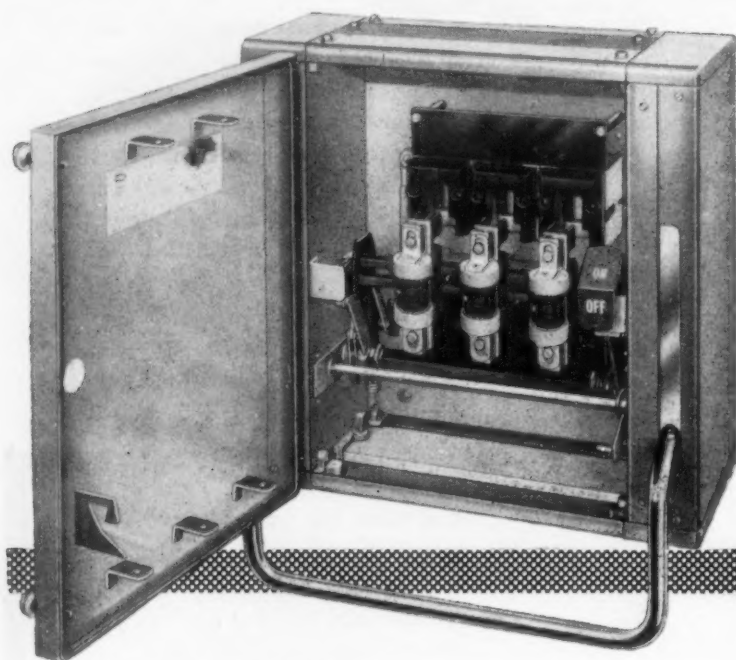
1. Flow Control Valve
2. Vaporizing Pot Burner
3. Draught Stabilizer
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5. Igniter
6. On/Off Switch
7. Baffle
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100-200-300 Amps

440 Volts A.C.

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Installations**

Comply with B.S.861 and B.S.2510 (so far as relevant)

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M.E.M.-H.R.C. cartridge fuse-links have been A.S.T.A. tested and certified for Category of Duty 440 A.C.5 (46,000 amps), equivalent to a three-phase rupturing capacity of 35 M.V.A. at 440 volts.



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Polyurethane Lacquer
ON ALL FLOORS

Upstairs and downstairs and everywhere there are people, Luxol Polyurethane Lacquer is the supreme floor coating that takes the hardest of wear yet keeps a continually cheerful lustre. Luxol Polyurethane Lacquer gives a beautiful glossy build that coats and protects at the same time. Feet never touch the actual floor surface because Luxol Polyurethane Lacquer shields it from wear and dirt. Instead, you get an aristocratic finish that stays lustrous for months without polishing. And its non-slip surface (ideal for dining room or dance floor) makes it safe for young and old alike; will not chip, mark or flake. Luxol Polyurethane Lacquer is a practical luxury for all suitable floor surfaces.

AND FOR CLADDING

Luxol Polyurethane Lacquer gives a handsome protective finish to exterior cladding that withstands the severest of outdoor conditions.

Luxol Polyurethane Lacquer is a two pack product that is easily applied on site. Whether brushed or sprayed on it can be overcoated in 4 - 6 hours and dries to a rich deep build that neither cracks, chips nor flakes. Has exceptionally low flame spread.

For full details of Luxol Polyurethane Lacquer write for Technical Information Leaflet 11/28.



BRITISH PAINTS LIMITED

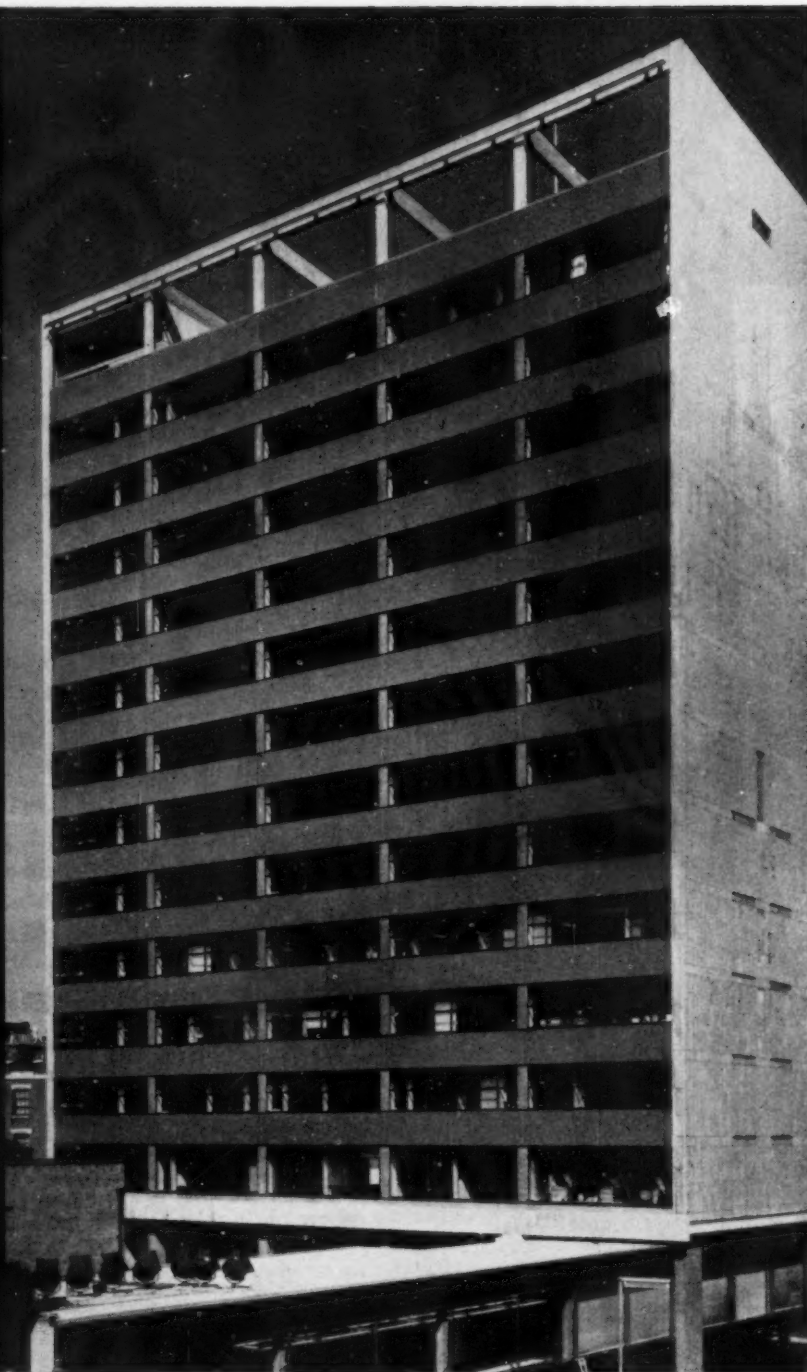
PORTLAND ROAD, NEWCASTLE UPON TYNE, 2.



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architecture
and bigger,
finer
buildings
are changing
the face
of Britain . . .

but
Fosalsil
remains
the basis of
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construction



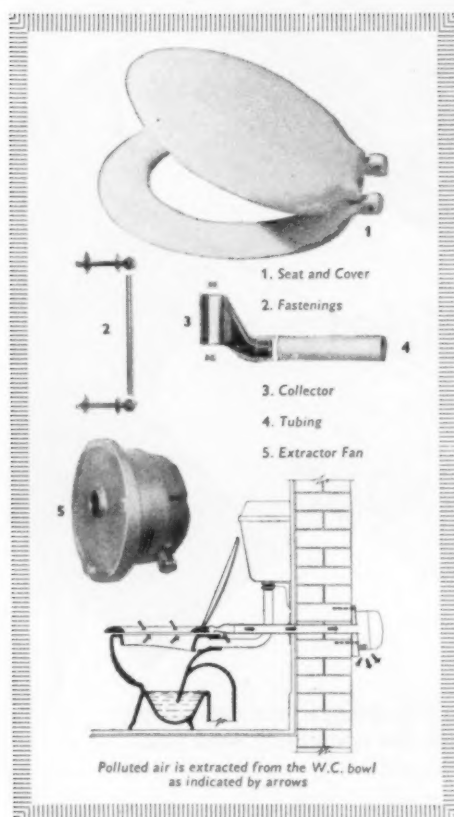
THORN HOUSE, Upper St. Martin's Lane, London, W.C.2.
Architects: Messrs. Basil Spence & Partners.
Heating Consultants: Messrs. A. F. Myers & Partners.
Contractors: Messrs. Bovis Ltd.

FOALSIL flue bricks
were used throughout

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Made only by MOLER PRODUCTS LIMITED,
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Reduce dangerous airborne infection and eliminate offensive odours at source with **Silavent** REGD



Bacteria are invariably present in air polluted by the use and flushing of a w.c., and the danger is strikingly explained in an article published in *The Lancet* recently, which states:

'... the flushing of the water closet generates particles of sizes capable of penetrating to the lower respiratory tract, as well as of deposition in the nose, mouth and eyes, and upon surfaces touched by the hands ...'

It was to remove this health hazard and the aesthetically objectionable problem of odour in use that the 'Silavent' system was invented. It extracts polluted air from the w.c. bowl before it can escape into the surrounding air, the extracted air being harmlessly dispersed outside the building.

A British invention, the 'Silavent' system comprises a toilet seat which is fixed to the w.c. in the usual way. A collector fits to the hinge of the seat and connects by tubing with a special extractor fan mounted on an outside wall.

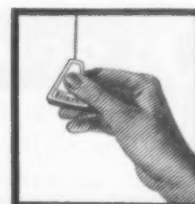
Low in cost and universal in application, 'Silavent' can be installed in any type of toilet in homes, hospitals, hotels, factories, schools or public buildings, in units or ducted multiples.

Write for a booklet giving full details of the 'Silavent' System—an invention as simple and fundamental as that of the water-closet itself.

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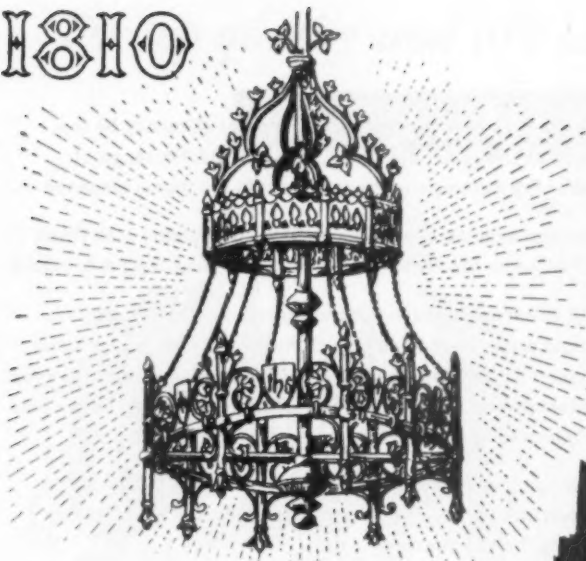
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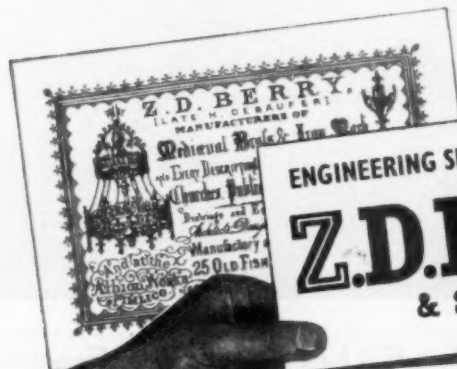
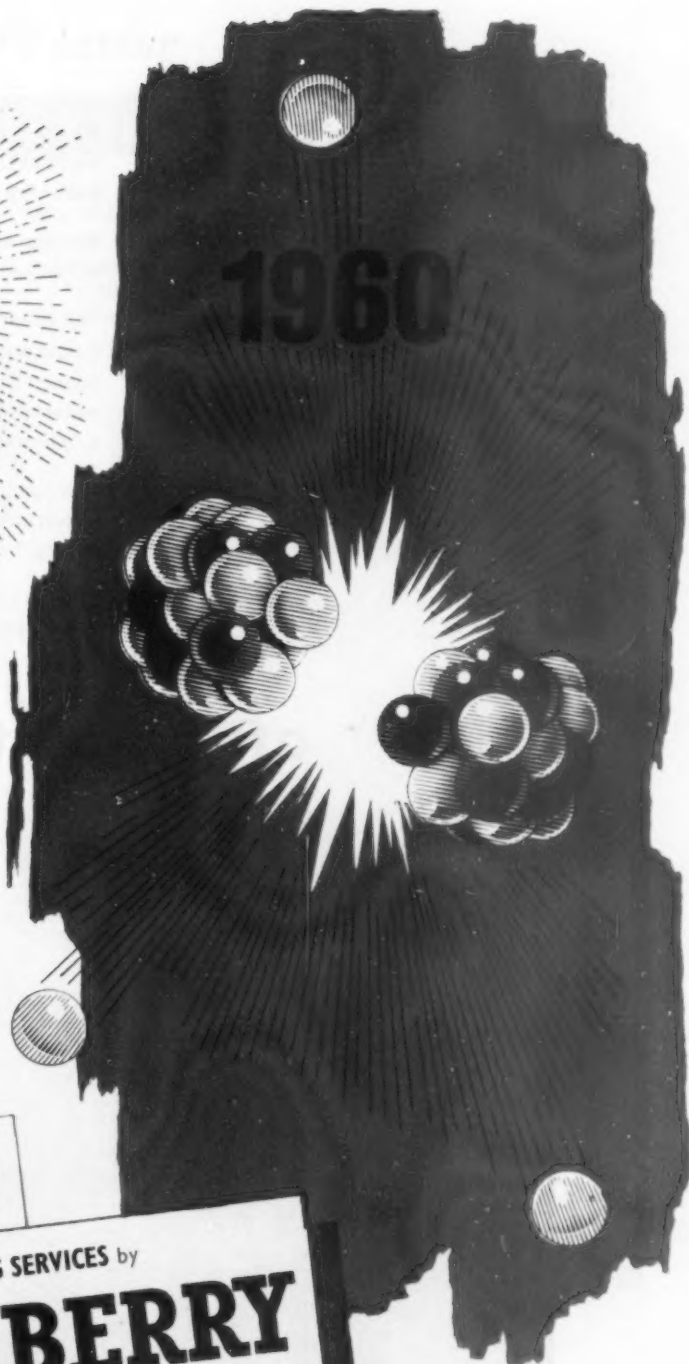
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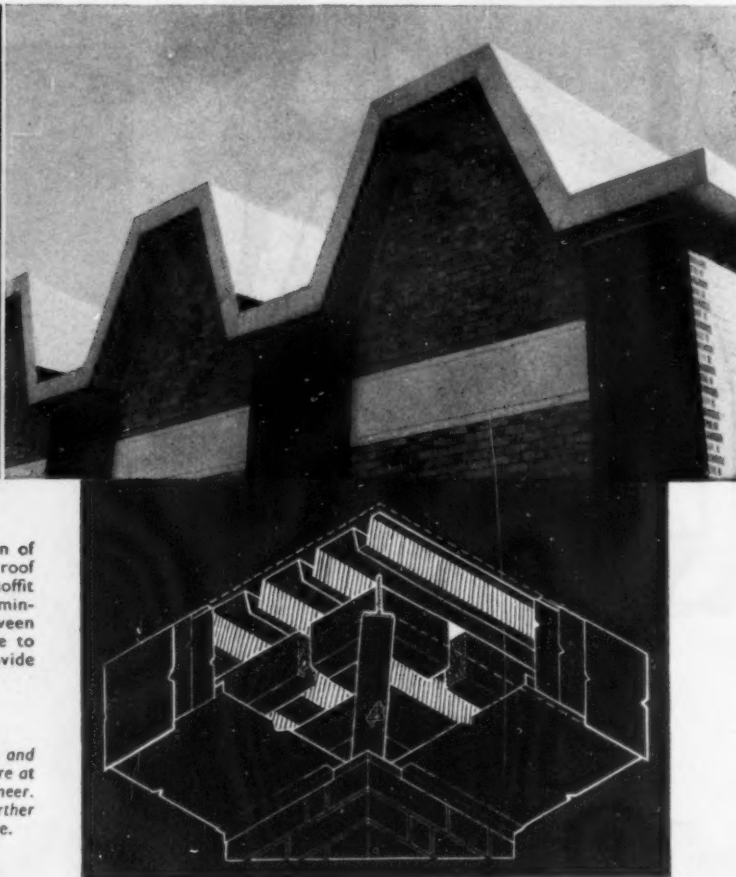
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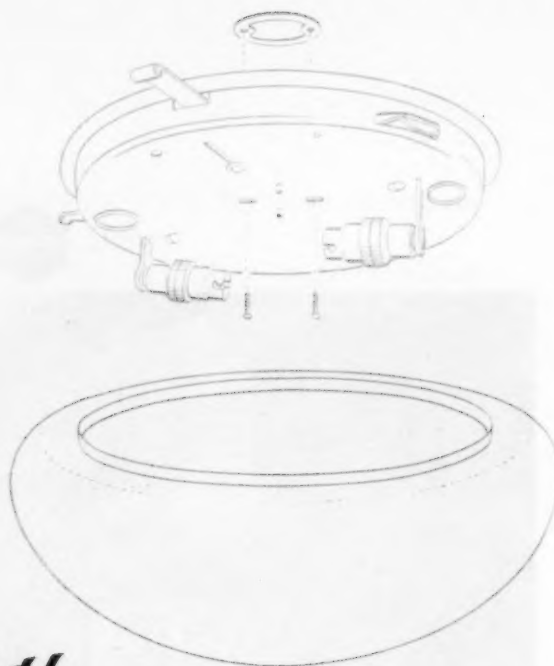
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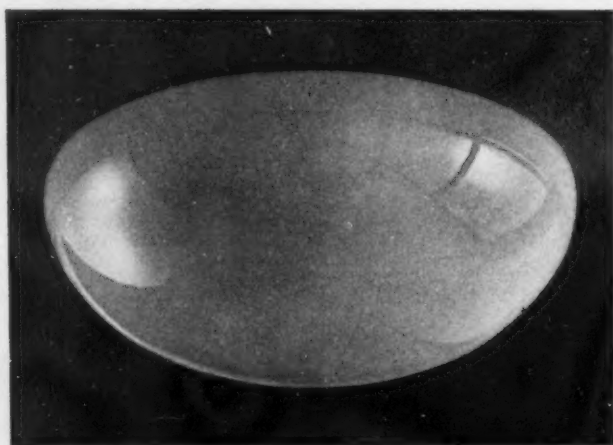
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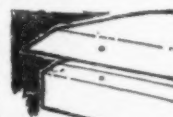
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The Architects' Journal

No. 3432. Vol. 133. January 26, 1961

9-13 Queen Anne's Gate, London, S.W.1. Whitehall 0611

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NOT QUITE ARCHITECTURE

Taste Makers Look Forward

The news of the resignation of one of Britain's leading lady film-critics will doubtless be received with satisfaction in many quarters. Satisfaction will, however, be tempered with regret that the *Observer* did not take the opportunity to fire the rest of its "cultural staff" with the exception of Sir Harold Nicolson, who should have been shot out of hand, *honoris causa* and *pour encourager les autres*.

Other proposals whose implementation this year is regarded with the keenest anticipation include:

Seven-a-side floodlit cricket at Lords for the AR-TV Trophy; the teams to be sponsored by leading manufacturers of branded goods.

Clore-Cotton to buy out Prunier's and use the name for a nationwide chain of help-yourself fish-bars featuring Mornayburgers and Oysterolos.

Flogging to be introduced as a deterrent to the use of the word "pukey" by people who don't use the mass-media anyhow.

The Alamein re-union replaced by a monster rally of foundation members of the British Branch of the Frank Sinatra Fan Club in Women's-Services uniforms of the period. The boy himself to be flown over by USIS to lead the singing of the grand old songs that made Britain great,



Patio Houses in Scandinavia

1	2
3	4
	5

These four patio houses, from Stockholm, Gothenburg, Elsinore, and Copenhagen were among the illustrations to Cleeve Barr's talk on patio housing at the Housing Centre, reported on p. 133.

1. Some of the best family houses at Vallingby, built round four sides of a sloping green. Each house with a front patio with breast-high fence.

2. L-shaped, single-storey patio housing at Kortedala, Gothenburg, from just inside the front gate, and 3 viewed from the street.

4. Housing by Jorn Utzon at Elsinore. Again, the houses turn their back on the street.

5. Terrace houses around a common green in a Copenhagen suburb, where families have created their own patios with planting and bamboo frames.



such as *She's Funny That Way* and *Nancy with the Laughing Face*

The Royal Gold Medal for Architecture to be awarded on the only basis that the entire profession can understand and approve, viz., total turnover in the previous financial year.

Adam Faith as Isaac Newton in *Royal Society!*

The National Trust to introduce a Top Twenty Hit Parade for stately homes open to the public, based on attendance figures at week-ends; at the end of the season, the award of a golden "Bedford" (a nude statuette holding a TV-camera) to the pile achieving the highest net one-day sale of Tizer.

Royal Ascot reduced to a shambles by the crack "Beaulieu" brigade of South London Loutniks, as a protest against their inability to gain admission to the Enclosures.

The Memoirs of Sir Winston's gag-writers.

A lengthy court-case, with a procession of expert witnesses, ending in an injunction restraining any publisher except Penguins from labelling their product "Pornography."

A Siamese musical entitled *My Husband and I*, with a filmed prologue by Prince Chula explaining why he thinks Yul Brynner is well cast as the Duke.

The ICA to stop flogging the Banham/Alloway line all over again and do something contemporary.

Sir Kenneth Clark to do the next Reith Lectures: subject *The Nude in Art, Life and Soho*.

Lego to be denounced in the Security Council as Danish cultural imperialism.

Design Centre Awards to be decided on the basis of a Motivation Research study of teenage widows' preferences; the Ten-o'clock-Testing panel to be brought out of retirement as a court of appeal in case of ties.

PRIBA's portrait to be sculpted in polychrome polystyrene by Annigoni.

CEGB list of beauty-spots due for development as abandoned atomic-energy sites leaked to Press by Civic Trust to distract attention from their own "approved" list of applications by slum landlords to have their property scheduled for face-lifting, which will be leaked to the Press by the RFAC to distract attention from their "hands off" list of key sites due for development by relatives of members of the Commission.

Instant Haggis.

PETER PRYS
BILL PEIRSON

The Editors

THE GREAT TEMPTATION

DURING the coming year the architectural profession is going to make a fundamental decision which is comparable in its gravity with the registration of the profession in the 'thirties. The issue is one to which we have already referred and our correspondence columns this week, and in the issue of January 5, contain strongly expressed arguments against us. The subject, of course, is the need, or otherwise, for a second tier to the architectural profession. The prospect of a second tier obviously appeals greatly to the frailer side of the architect's nature; to quote Mr. Rosenthal on January 5, the building technician on the Continent "relieves the architect of the seamier side of detailing such as plumbing layouts . . . he can survey sites, supervise all routine work . . . in short, he relieves the architect of all chores and so gives him time to devote himself to the job for which he is qualified, namely to plan and design." And this week Mr. Beecher makes a similar point: "a . . . man trained, to . . . Intermediate level can prepare an excellent survey. . . . The 'semi-qualified' can successfully design a complicated drainage layout with all the falls, manholes and inverts. A fully-qualified architect's work 'stops' where his staff can satisfactorily take over."

The prospect is so tempting: a host of capable, reliable men, extremely competent technically, but just needing a Master's hand to guide them, and direct their multifarious technical activities so that a great work of Architecture emerges. This is an ivory-tower world, an escapist dream which for a few deluded, but often wealthy (indeed necessarily so) architects, really exists. It is the world where the 6b pencil and the brilliant sensitive sketch still reigns. It is fun and excitement at the start and quarrels and anguish at the end when target dates and prices are missed, and plans don't work, and details fail and roofs leak. It is the world of the big professional confidence trick.

Some of the 6b kings might argue that the cause of the odd building failure was that they were largely compelled to employ frustrated architects (would-be 6b-men) instead of contented technicians to carry out their designs. There is some truth in this. But the real answer depends on what is meant by "modern architecture." Is it, thanks to new techniques and materials, a new style? A new freedom to experiment in visual effects, a new eclecticism? Is it a man-scaled sculpture which also, rather irritatingly, has to perform

certain functions? If it is this, then the doodling maestro with second-tier technicians who know their place will be an adequate solution.

But "modern architecture," to many, means much more than this. It is based not merely on new techniques, but on the development of the sciences, of scientific method, of self-consciousness and of a social purpose. The modern architect is that rarity in a world of specialisation: the man who has to synthesize over the whole wide range of mankind's activities. To do this he must have help: from the client, from specialist consultants, and finally from the builder. But in the process of synthesis he must not delegate details to technicians. If he does he will cut himself off from the scientific and technical sources on which his mastery of modern design depends. There is no worth, and never has been, in the "pure" designer.

It is said at Portland Place that the majority of the profession see the need for a second tier. The Oxford Conference suggested training technicians and technologists in virtually every subject except design and the history of architecture. And both members of the RIBA Council and principals in public and private practice have asked for some qualification to be given to the unqualified assistants they employ. Some of the arguments for such assistants are given by the Bristol and Somerset Society of Architects' memorandum (which has been approved by the Allied Society's Conference) printed on pages 135-136 of this issue. Briefly, the argument is as follows: The RIBA's rather thoughtless decision to introduce two "A" level GCE passes as a minimum standard for entry to the profession will discourage young people from coming into offices as assistants and may result in a serious lack of junior staff. A certificate of qualification as technical assistants should therefore be issued to encourage the recruitment of assistants. These assistants would have to have, on entry, passes in three "O" level GCE subjects and be trained to a "modified" RIBA intermediate examination level. The unqualified assistants already exist, they are economically essential to the small private practice, therefore they should be given some status.

This argument we believe to be fallacious. Official recognition of a professional failing does not excuse or mitigate it. If the practice of architecture is a professional matter no part of it can be delegated to non-professionals. If such a practice exists it should rest heavily on the conscience of the architect indulging in it: he can be accused of cheating his client.

It is significant that the most active opponents of this proposal for a second tier are amongst those architects who have designed this country's school-building programmes: the most important architectural development in the world at the present time. There is little force in advocating the technicians of continental practice as an example of progress when the world-leading progress in this country is achieved by those who eschew technicians.



JACK COTTONS ON

Mr. Jack Cotton is a smart man. While waiting to hear how much the LCC's comprehensive plan will alter the shape and size of his Monico site building, he has commissioned Dr. Gropius and partners Professor Richard Llewellyn Davies and John Weeks, to work together on the revised building when the time comes. And to show that his heart is in the right place, he has already got them going on a mixed development scheme in Park Lane. It will be rather a neat end to the Monico fuss if the building finally put up on the site outshines everything else around it. And it may well do so; after all, however good a plan Sir William Holford produces by the end of his consultations with the LCC, the two ministries concerned and the developers, we can't be sure that good architecture will be put up within the plan.

LANDSCAPE FIT FOR EROS

I wonder, incidentally, how many laymen were baffled this week by the differing perspectives of Piccadilly that appeared in the Sunday Press—and the nicely off-beam sketching done for BBC Television. There must have been a lot of confusion in the public mind. The truth is that the national Press didn't make it clear enough that Sir William's work is concerned entirely with planning and that the final

shape of the buildings is anybody's guess.

*

There was a curious statement in Robert Harling's aggrieved article about Piccadilly in the *Sunday Times*. "The real trouble," wrote Mr. Harling, "is that Sir William is really serving too many masters." But that, surely, is the whole point of the operation, the whole essence of comprehensive development. If Sir William is told this week by the LCC that he can go ahead and talk to developers about his plans for a long-term scheme in which they will share financial responsibility with the Government (if only through an MoT grant) and the LCC (backed by revenue-earning facilities in the Circus)—then planning in this country will have made its biggest move forward since the war.

Before I leave this subject, here are two quotes of the week:

Sir William Holford: "This is the stage at which we have to see if the rabbit can be produced from the hat. If we can't do it in Piccadilly, then we won't be able to do it in the Midlands, the North or anywhere else."

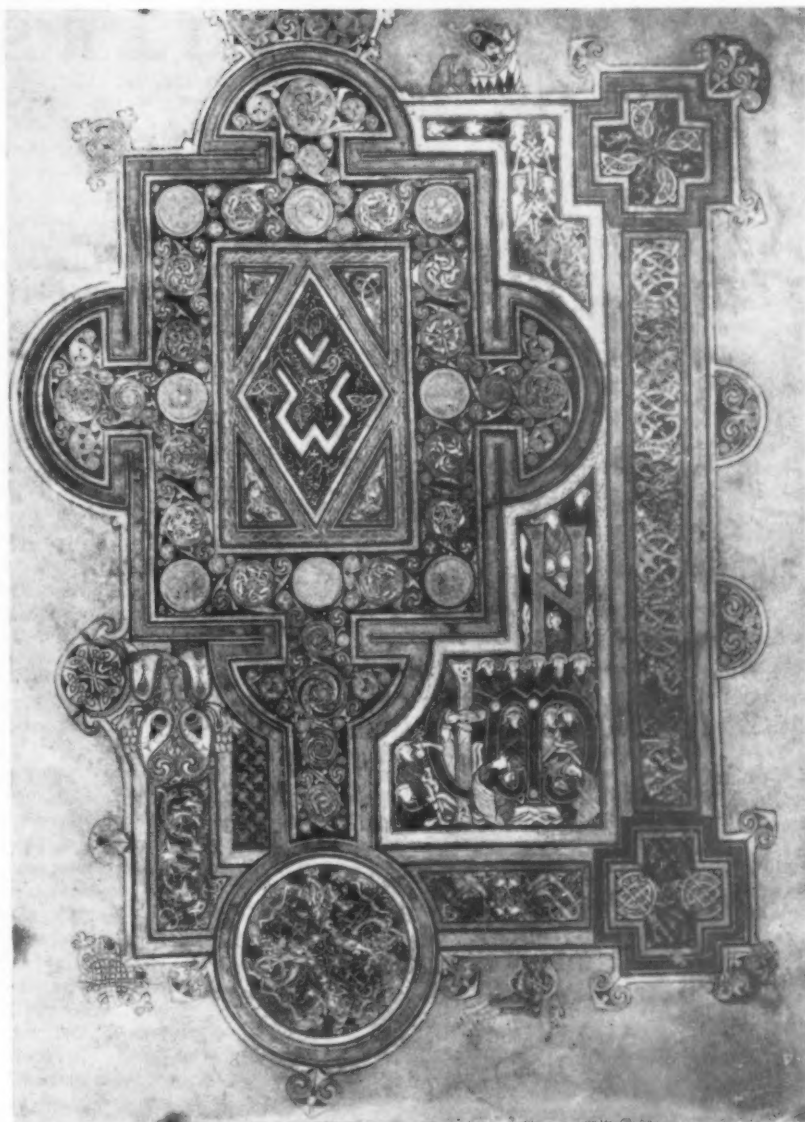
Jack Cotton: "When Regent Street was built it had a flat skyline: the new Notting Hill has an interesting, jagged one. Every age brings a different kind of development: you can't plan for 30 years ahead, when thinking will have changed."

ILLUMINATED APSSES

At the Academy there is an exhibition well worth seeing of Trinity Library, which is appealing for funds to extend (and presumably to secure prize-money for the competition that practically every London architect has entered for). The exhibition shows library treasures, busts, documents, the harp of Brian Boru, and not one but five ancient manuscripts—including the book of Kells. The designer has slightly overdone the room where the books are displayed but the manuscripts themselves are strong enough to stand up to the competition from enormous Flaherty-type peasant-scapes.

*

Kells itself gets its peculiar power from the monumental sense of scale in its best pages. The one illustrated here suggests that the Dark Age Irish kept alive not only ancient learning, but also Roman planning concepts. Just look at those apses.



From the book of Kells. See Astragal's comment below.

NEW HISTORIC REVIVAL

Nikolaus Pevsner's recent paper at the RIBA titled "Modern Architect and the Historian, or, the return of Historicism" was very timely, but also slightly disappointing. It is high time that someone of Pevsner's eminence should recognise and deplore the emergence of historicism, the return to imitating, or being inspired by, styles which had never previously been revived. He instanced neo-liberty, neo-Art Nouveau, neo-Gaudi, neo-de Stijl and so forth.

Pevsner rightly described these aberrations as a turning away from rationalism, but it was William Allen, in the discussion which followed, who suggested one of the causes: the inability of the schools to train architects to be

aware of "the deep-seated human requirements of sensitivity . . . to light, space, shape and colour; to acoustic environment" and other refinements. The modern movement, in fact, has broken down because of the lack of fundamental research. As functional requirements have widened and the architect's scope enlarged he has found himself without the knowledge to develop on functional lines. The exception to this is the school building where an intelligent client and a development programme has allowed true architectural progress, as is so well demonstrated by CLASP (a point which Robert Matthew made). Failing a broadly based programme of research and development, which is virtually impossible to achieve in private practice anyway, it is

not surprising that imaginative architects flounder and seek a merely stylistic lead.

MUMFORD'S MEDAL

It is good to see the RIBA maintaining its determination to break the bad old habit of awarding the Royal Gold Medal to a British architect every other year. The new policy has given the medal greater significance. And the award to Lewis Mumford is timely—or about timely—because the last theorist to receive the medal was Auguste Choisy, in 1904.

The influence of Mumford's ideas is probably at its greatest now—even if people who hold his views don't know where they got them from. Some sociologists now look slightly askance at the ideas expressed in *Technics and Civilization* or *The Culture of Cities* (Mumford among them, if rumours of revisions are correct), but these were books that taught two generations of architects to look at cities and formed their opinions of what a city should be.

NOT-SO-CIVIL ENGINEERS

Stanley Gordon Wardley, city engineer and surveyor for Bradford, thinks municipal engineers are fitter than architects to lead the town planning team. He said so last week in his ICE paper—a brief account of his plan for Wakefield, where he was once city engineer, surveyor and architect, and a longer account of his plan for Bradford (see AJ 29.1.59). He was brilliantly challenged in the subsequent discussion by Colin Buchanan who said it was undignified to argue about leadership and then pointed out that the leader must have the broad qualification of planning and be backed by the contributory professions.

By sub-titling his paper *The Engineer as Leader of the Planning Team*, Mr. Wardley was asking for the brickbats he got—even from members of his own Institution. But he got bouquets as well—for conceiving a city plan and putting it into effect. As Colin Buchanan remarked, to have drawn up a plan in 1946 and to be steadily proceeding with it 15 years later is a remarkable achievement, particularly in view of the re-thinking of planning principles which has taken place since then.

ASTRAGAL

LETTERS

G. P. W. Taylor, A.R.I.B.A.

Kenneth Nealon, F.R.I.B.A.

President, Bristol and Somerset Society of Architects

David Beecher, F.R.I.B.A., M.A.

President, Berks, Bucks and Oxon Architectural Association.

D. C. Taylor

John Reid

Education Supplement

SIR: The response to my letter in your December 1 issue suggesting a journal for teachers of architecture has been most heartening. This, seen in the light of our acknowledged professional literary disabilities, confirms the wide-spread concern with the deficiencies of current systems of architectural education and the need many teachers feel for some effective liaison. I should therefore be very pleased to take up your offer of a monthly educational supplement.

It would not, of course, be reasonable to expect the AJ to publish such a feature in perpetuity, and I would still hope eventually to see this venture on a more permanent basis. In case it should not occur to anybody else to do so, I would like to thank you now for providing us with such an excellent opportunity to get something going.

I shall be writing again to all those who have expressed interest and volunteered help to propose a meeting so that the possibilities of the idea can be discussed and some preliminary policy formulated. In the meantime, I shall be delighted to receive axe grinding work at the address below.

G. P. W. TAYLOR

Little Heath Cottage,
Sheethanger Lane,
Felden,
Herts

Semi-Architects Wanted

SIR: The accusation of selfish motive by the advocates of the technical assistant class, contained in your leading editorial of December 22, will be widely resented.

The Bristol and Somerset Society of Architects prepared a memorandum on "The Need for Technical Assistants" and circulated it in August last to Allied Societies and Chapters. The considerable support received from all over the country resulted in its approval by the Allied Societies Conference at the November meeting. It was then placed before the RIBA Council.

I am not alone among Allied Societies' Presidents in regarding your editorial comment as unjustified and most misleading. I consider that you should in fairness publish the approved memorandum in full so that your readers may form their own

judgments on it.

A copy of the memorandum is enclosed.

KENNETH NEALON

Bristol

The Memorandum, as passed by the Allied Societies, is on page 135.

SIR: Your leader of December 22, "Semi-Architects Wanted For The Dull Work", calls for comment. Appreciation must be expressed of the way in which you have misunderstood—or simply missed—the point so completely.

One would expect that, of all people, architects and those interested in architecture would appreciate the importance of building on sound foundations, in this case the educations required for members of the profession in relation to the end product, namely, the best possible architecture.

Expressions such as "to adulterate the architectural profession," "poor relations," "a two-tier profession" and "the creation of half-baked architects," as used in your article make no constructive contribution to the problem but are fit only to be classed with political catch-phrases designed to get the votes of those who either cannot think clearly, or are unwilling to do so, or just are not interested. Not content with this, you ask questions, complain that they have not been answered, but make no attempt to answer them.

Perhaps, of course, you are not able to answer them; but if you should imagine that they are unanswerable you are making a big and elementary mistake. A few illustrations will suffice—for those who can think. A man trained to, or even training for, intermediate level can prepare an excellent survey of an existing building or of a site, including levels. The "semi-qualified" can successfully design a complicated drainage layout with all the falls, manholes and inverts. A full-qualified architect's work "stops" where his staff (I am not including the lone practitioner) can satisfactorily take over. Do you, Sir, not only write your own leaders but also personally set up the type and actually print the JOURNAL in which they appear?

Building has changed, as must any living thing, and continues to change in purpose, in form, in construction, in equipment and with growing complexity. If architectural practice is to retain its rightful place it must develop and grow in sympathy. The profession, if it is to live, must grow up continually and face facts, particularly new facts as they arise or come to light.

One fact is that architectural practice today involves skills of many kinds providing scope for people with varying qualifications and capabilities. Moreover, there is not only scope but need for such people for no man, be he however brilliant, can be master of every aspect and detail of current architectural design and building construction. So the architect, if he is to be a leader of the building industry, capable of producing good architecture, must have staff properly qualified and capable of supplementing and supporting his work, leaving him free to concentrate on his primary function of—for want of a better phrase—overall design.

Such staff can all be qualified architects but there is no need for this. A man unable to qualify as an architect may make as great a contribution to good architecture as his qualified colleagues. Nurses are invaluable to the medical profession but are not doctors, and doctors, freed from nursing their patients, can concentrate on their proper jobs to the advantage of medical practice. The same principle applies to architectural practice, but there is an important difference. Nurses have, in the main, to work under doctors; their qualifications are no use to them if they wish to become telephonists or dress designers. Those who are competent to be architects' assistants have qualifications, whether formally recognised or not, which give them openings to many other occupations, with builders, with engineers and so on.

That is why it is so important that architects should appreciate not only the fact of the assistant and the need for him, but also the necessity of appropriate training and then the necessity of keeping him in the profession.

How is this to be done if the RIBA does not direct and control his training and then give him an appropriate qualification so that he feels that he is a recognised and valuable member of the profession, and wishes to remain in it? People can only give of their best if they know that they have a position which they know is recognised as valuable. If those who, unable to qualify as architects, nevertheless are able and wanting to be in architectural practice can get no recognition they will, increasingly as general educational standards rise, turn to other occupations where they can get it.

So I suggest, Sir, that you should think, carefully, systematically, and having thus thought, should withdraw your reactionary and half-baked views and, I hope, offer something constructive instead.

DAVID BEECHER

Oxford.

South American Tour

SIR: Some misunderstanding may have arisen from the use of the phrase "under the auspices of the R.I.B.A.," which we have used to describe the tour to Latin America that is being offered by Ashton & Mitchell Travel Ltd. to members of the R.I.B.A. and associated professions. The phrase is not intended to mean that the R.I.B.A. is responsible for the tour, or that it will be accompanied by a R.I.B.A. representative.

The phrase does mean, however, that we have discussed the tour with the travel agents and are satisfied that they are capable of organising it satisfactorily. We are grateful to them for their initiative, and have asked the architectural institutes in Latin America to co-operate with them. We hope that the tour will be a success, and that R.I.B.A. members will take advantage of the very reasonable terms offered.

D. C. TAYLOR

U.K. Committee of the I.U.A.
R.I.B.A.

Kings Cross Market

SIR: Your columnist ASTRAGAL is perfectly within his rights to criticise my Group adversely on its choice of Architects and Consultants and on its architectural judgment. (He is, in so doing, commenting much more sharply against Central Airports Ltd., for whom the Kings Cross scheme was designed nearly 30 years ago, and who still retain C. W. Glover & Partners as their Consultants!)

By the same token, might I claim a little of your space to counter his criticisms, for his comments amount to a personal insult to a man who is widely acknowledged to be one of the outstanding engineers in the country, my dear friend and wise mentor, Charles Glover.

It is not in engineering alone that Mr. Glover has made his mark. Since setting up in business as a practising architect 35 years ago, he has been responsible for the architectural design of many notable churches, schools and public buildings in addition to innumerable factories and offices, and his war-time "Glover Construction," which, by minimising bomb damage in industry, contributed much to our war effort during the Nazi bombing, was a brilliant architectural achievement. His appointment as President of the Incorporated Association of Architects and Surveyors (only one of the many Presidential Chairs he has held) is adequate testimony from other architects to his outstanding ability.

ASTRAGAL missed the point of the Press Conference if his remarks about Mr. Glover's chances of success are sincere. I would assure him that I have it on the best possible authority that the chances of amendment to the Covent Garden Bill to permit the new Authority to consider Charles Glover's Kings Cross Marketing Centre are excellent. It is a wonderful solution to a widely recognised problem of long standing, to which no one has succeeded in providing an answer for much longer than the 28 years in which Mr. Glover's scheme has been conceived, modified to meet changing conditions and repeatedly urged upon the authorities.

The Glover Scheme was not the policy of the LCC Planning Committee many years ago. Their plan concerned the "Kings Cross Area" and not the sidings, which choice of site eliminates the vast problem of compulsory purchase and demolition of existing properties as well as the enormous initial cost necessarily involved in the LCC plan. Neither, for the record, did the Runciman Committee examine Mr. Glover's proposals, nor, to their shame, did they call any Consultants or Architects to appear before them!

As to the models, your columnist has again missed the point. These models were made by Mr. Glover himself in his "free time" over the Christmas period to illustrate the potential for redevelopment in the 38 acres known as the Covent Garden area, after the Market had been removed to Kings Cross. They were not architectural studies (on which the obvious absence of detail would have been quite inexcusable) but three-dimensional schemes intended for those

people vitally interested but incapable of assessing the proposals from professional plans and drawings.

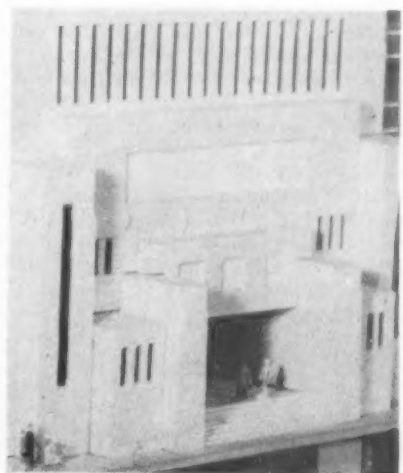
Apart from preserving such valuable architectural pieces as St. Paul's Church and the Opera House in an attractive setting, the object was to demonstrate that the remaining 1,000,000 sq. ft. of office space could be reconstructed and still leave room for flats for 12,500 people, with accommodation for 5,000 motor-cars in underground parks beneath open green spaces which would form an attractive centre for our great capital city. This accommodation exceeds the LCC allowable intensity of population per acre—a fact stated not in ignorance of the regulations, but intended to show that these could be handsomely exceeded without overcrowding the site. The responsibility for the detailed plan—and for the architecture—lies, of course, with the LCC Planning Committee.

I am aware that ASTRAGAL's column comprises personal notes and comments more akin to the gossip column of a newspaper than your other features. However, I submit that your readers would have been better served by two or three lines devoted to the vital and valuable statistics of the scheme than by a paragraph suggestive of personal animosity terminating in an adverse criticism of the architecture with not a single word of reason or qualification to back it up. This hardly seems in keeping with the high standards of a fine professional journal.

JOHN REID

London, W.1

ASTRAGAL replies: "The key point of Mr. Glover's scheme, the removal of the market to above Kings Cross station, was favourably commented on in Nigel Seymer's article discussing the Covent Garden Bill (AJ, December 15). As regards the amount of detail shown, the photograph below of part of the model for the Kings Cross site shows enough to substantiate my point that the design is crude, and a close inspection of the model of a rebuilt Covent Garden area showed an unacceptable density by present-day standards."—THE EDITORS.



NEWS

PICCADILLY CIRCUS

Private Meeting Makes a Splash

Sir William Holford had "an informal and confidential discussion" with members of the L.C.C. last Wednesday which must have been the best-publicised confidential discussion ever organised at County Hall. The fact that it was to take place was splashed in *The Daily Telegraph* and featured in *The Times* that morning, so naturally the Press turned up, only to learn that there was "no Press conference," but nevertheless to meet Sir William after the meeting and hear an account of the "extremely tentative" scheme he had put to councillors for consideration. Later the L.C.C. issued a very full memorandum "for the correction of various unauthorised statements" which had appeared. But no drawings were released because of course it was all so tentative and confidential.

Sir William expressed himself as being "enormously excited by the possibilities of comprehensive development," and outlined a provisional scheme to be carried through in two main stages, the first affecting the Monico site, the Trocadero site, the London Pavilion and the central island; the second involving the widening of Jermyn Street, redevelopment of most of the Criterion block, and the linking of this block with the central island.

The first stage is envisaged as bridging the foot of Shaftesbury Avenue and Great Windmill Street and providing a deck for a new structure, replacing the London Pavilion at the north-east corner of the Circus, which would internally provide a covered gallery and externally provide a background for "a kaleidoscope of lights." Of the Monico site, Sir William said he had suggested that the building should be horizontal rather than vertical in character, with Denman Street realigned to provide a more rectangular site, on which building could begin over 32,000 sq. ft., up to the line of the proposed arcade. He had not produced any actual design for this building, he said, as Mr. Jack Cotton had two architects working at it for him already.

A new underground foyer at the same level as the present underground concourse would be constructed on the site of the London Pavilion, and above this an intermediate level for services and vehicles would be established (which would later be linked to Jermyn Street through the basement of the Criterion blocks. This would be done by building up the level of the central island by 5½ to 8 ft., from north to south, and the part of the platform which now supports the steps, fountain and figure of Eros would be raised 2 ft. higher, to allow headroom for an octagonal flower shop with its entrance at pavement level. Holford visualises the flower display overflowing onto the steps and carrying on the

traditional association of Eros and the flower sellers. Round the west side of the octagon would be a ramped approach to the piazza level, with a parapet or railing right round the northern half of the central island, so that pedestrians could only cross north of the traffic lights. From the central island a covered bridge would be built over the carriageway to the Monico site. Here a series of escalators and covered stairs would link deck and piazza and the underground concourse and subways.

The next stage would be the development of the corner of Great Windmill Street and Shaftesbury Avenue, providing an abutment for a bridge across to Lyons' Trocadero building, which would carry the north wing of a 12-storey hotel. The south wing is proposed on the same line as the north wing, forming a high wall to the east (about 155 ft. above Shaftesbury Avenue's pavement), on the top floor of which is suggested a "Starlight restaurant." Complete redevelopment of the Trocadero block depends on satisfactory arrangements being arrived at between a consortium of developers on this site: then it would be possible to extend the deck from the Monico building and the piazza to the west front of the Lyons building on the other side. The completed deck would measure 210 ft. from west to east by 150 ft. from north to south.

The centre of the new London Pavilion would be a public concourse "in the sense of the Galleria in Milan or the Burlington Arcade," said Sir William, "with commercial premises on either side." During shopping hours this would take the stream of shoppers passing from the north of Regent Street and the pavement in front of the Monico building to Coventry Street and Leicester Square and lift them to deck level over the three streams of traffic which flow under it, by means of escalators. In the evening the new Pavilion would "come into its own as an entertainment centre," with coffee bars, restaurants and a place for dancing and music.

Sir William put an end to Mr. Cotton's fears—expressed the day before—that "something like Parliament Square" was being contemplated, when Mr. Cotton called for plenty of lights and jollity to surround "the little god of love." Holford made clear that plenty of lights and jollity are certainly the idea. He promised floodlighting and illuminations on the building and roof outlines of the new Pavilion which would add "a brilliant finishing touch to crown the pyrotechnic display," and for the Monico building itself suggested "slightly more and more interesting" signs, including new, three-dimensional forms of electrical advertising.

BUILDING WAGES AND HOURS

NFBTE President's Statement

The National Joint Council for the Building Industry has announced that an increase in wage rates of ½d. an hour will come

into effect on February 6, under the industry's sliding scale agreement. The Joint Council has also approved the recommendations of its committee on working hours and wage rates.

Under this settlement the working hours of building trades operatives will be reduced from 44 to 42 from October 2, 1961, and the Grade A standard rate for craftsmen will be advanced to 5s. 6d. At the same time, said the statement, there would be "a modification in the matter of overtime control and of the present regulations on meal breaks."

Outlining the agreement at the A.G.M. of the Eastern Federation of Building Trades Employers at Cambridge on January 11, the president of the NFBTE, Mr. D. E. Woodbine Parish, said that the cost of these wage increases should be to some extent set off by the rise in building productivity which had taken place in the last year or two.

"Surely we cannot claim, although doubtless many of us would like to be able to do so, that our building organisations are already so efficient that there is no room for improved performance by which we may absorb some of the effect of the increase in our wages costs, which after all does not come into effect until October 1," he said.

Mr. Woodbine Parish went on to claim that the NFBTE representatives had got a concession from the operatives "regarding the strict control of refreshment breaks, including those for tea in the mornings and afternoons. If we, as employers, apply and operate this new arrangement in the right way, it is reasonable to calculate that a large part of the wage increase would be absorbed, as the saving of unproductive time previously paid for could be considerable."

National Federation of Building Trades Operatives' Denial

The General Secretary of the National Federation of Building Trades Operatives, Sir Richard Coppock, issued a denial to the Press that the question of tea breaks had been mentioned in the settlement, immediately on the publication of Mr. Woodbine Parish's statement. "The settlement made by the National Joint Council at its statutory meeting dealt with an increase of wages rates and a shorter week," he said. "The question of tea breaks receives no mention in the settlement."

Sir Richard went on to protest that the "invariable custom" of the NJCBI "has been broken by the issue of this 'unauthorised statement' by the NFBTE. Which leaves one to suppose that the question of tea breaks was in fact discussed at the meeting of the Joint Council, and with undiminished surprise at the thought that building workers should be ready to forgo drinking tea in their employers' time when the majority of mankind, from directors to office boys, certainly do so.

TCPA

Bow Group Reports

The Planning Forum of the TPCA were quick on the mark when they organised a discussion evening on Monday, January 9, on the Bow Group's latest pamphlet "Let Our Cities Live." Timothy Knight, Brian Falk and Rex Harbour were there to outline their proposals, supported by William Deedes, Conservative MP for Ashford, and opposed by Lewis Keeble, senior lecturer in Town Planning, University of London, with Wyndham Thomas, TPCA Director, in the chair.

The policies put forward by the Bow Group have already been outlined in the AJ (January 5) and commented upon in the leader and compared with those of SPUR. Like SPUR, "Let Our Cities Live" starts from the premise that our conurbations are here to stay and must be revitalised, that land is a precious commodity and must not be wasted on low-density sprawl, that there should be internal decentralisation within the conurbations of the main centres of employment and that "twilight" areas must be rehabilitated and renewed; public transport must be improved and a road system planned to accommodate all vehicles which are essential to the economy of the city while the indiscriminate use of private cars cannot be met without destroying our cities, and pedestrians should be separated from vehicular traffic wherever possible.

However, unlike SPUR, the Bow Group pamphlet goes on to put forward definite and far-reaching proposals over a vast field of urban and regional planning while SPUR concentrates on urban renewal and advocates more research before jumping to conclusions. One of the most controversial ideas of the Bow Group is to allow existing conurbations to spread still further into the Green Belt. True, a controlled, high density growth along defined lines is advocated with Green Fingers between them instead of the "Green Noose" of the Green Belt as at present. The authors contend, and many will agree, that the existing New Towns are too close to their sources of employment and population and too small; they therefore advocate larger cities well out of the orbit of the existing conurbations, i.e., two New Towns of 300,000 to 400,000, one in Lincolnshire and one in the West Country. This is a bold statement which will have to be backed up by a good deal of research, though the idea of a New Town for 300,000 has already been worked out tentatively by town planning students of the UCL under Bruno Schaffenberg (see *Architecture & Building*, June 1960).

The Bow Group's proposals for reforms of the planning machinery are equally sweeping: Area Councils to be set up to co-ordinate the planning work of several County Councils while development control is delegated to small towns of 20,000. These suggestions are indeed a logical follow-up of the proposals put forward by the Royal Commission on Local Government in Greater London. Finally, with regard to central area redevelopment, the Bow Group place their faith in a land pooling system.

to achieve the necessary unification of land, under private auspices rather than by municipalisation.

These ideas were presented by Messrs. Knight, Falk and Harbour in a confident and engaging manner. Mr. Deedes, in supporting their proposals, underlined the necessity to keep vehicular traffic out of city centres (e.g., Oxford) and felt the Group should have been more outspoken about this. The Area Councils were a good idea but would require an exceptional calibre of councillors, both part-time and full-time, who should be paid. Mr. Deedes thought there should also be a Cabinet Subcommittee composed of the Ministers of Housing and Local Government, Labour, Power, Education and Health, and the Board of Trade.

Lewis Keeble assured the audience that he was not speaking as a young Tory and thought the Bow Group pamphlet, except for minor aspects, could have been written by the wildest of left-wing architectural critics. He took the three young men to task on a number of errors and inaccuracies which he proceeded to correct. (It must be admitted that these and other slips by the authors tend to detract from the seriousness of their proposals.) The Green Fingers he thought were "a dead duck" when closely examined, because the lateral communications wouldn't work. The proposals for Area Councils were good but the delegation to small towns had not been fully worked out and was impracticable as envisaged; development control was a highly skilled job and cannot be done without fully qualified staff which cannot be afforded at local level. "You cannot get good development control by promoting a lot of sanitary inspectors." With regard to raising residential densities, Lewis Keeble was of course against it and tried to prove, not very convincingly, that this was quite unnecessary.

The discussion which followed was lively and at times hilarious. Most speakers, while welcoming the Bow Group pamphlet as thought-provoking, found faults with some of the detailed proposals. It appeared that the proposal to delegate development control to towns of 20,000 was thought to be the most doubtful one. Others criticised the proposed incursions into the Green Belt by allowing further growth of the conurbations and thought that the Green Finger policy, though possibly good in theory, came too late to apply effectively. The location and size of the two New Towns were also queried and the authors were told that they had underestimated the difficulties of moving industry and population to these. An architect/planner criticised the lack of consideration given to three-dimensional planning.

The authors were also accused of political bias which prompted them to dismiss municipalisation of land in central areas in favour of a land pooling system by private owners, though the only worthwhile comprehensive redevelopment in city centres have been achieved in this country by local authorities, who alone are willing to provide for uneconomic but socially essential uses in central areas like housing, public

buildings, public walkways, open spaces, etc.

Timothy Knight, who replied on behalf of the Group with disarming charm, stood his ground well, conceded little beyond Mr. Keeble's corrections and admitted readily that the Group's dislike of municipalisation was due to political prejudice—after all they were young Tories. He said *The Times* though they had gone too far, while the *Herald* was disappointed that they had not gone far enough.

Wyndham Thomas summed up by welcoming new thinking in planning (though it was made clear in the discussions that many of the new ideas had been freely borrowed by the authors from other sources, particularly from SPUR) and by wondering whether the Bow Group has not been attempting a take-over bid of SPUR.

W. G. B.

HOUSING CENTRE

*Cleeve Barr on
"Introspective Housing"*

An excellent illustrated talk on "Introspective Housing" was given by Cleeve Barr at the Housing Centre on January 17. His talk was chiefly built round a collection of slides. These were mainly of patio and courtyard houses, but included examples which, though neither of these, showed considerable outdoor privacy in a small space. A number of points came out in the course of the evening. Patio houses cost between 10 per cent and 15 per cent more to build than traditional houses, but since their great value from the point of view of economy is the land they save, they are more aptly compared with flats which cost from 50 per cent to 100 per cent more.

Patio houses come into conflict with the by-laws, both in the matter of "space round buildings" and in the current prohibition (Housing Act of 1957) of back-to-back dwellings. Cleeve Barr pointed out that there were provisions for relaxing these requirements, but a speaker from Sheffield said that the Town Clerk of that city had ruled that the infringement by the patio plan of the back-to-back condition was incontestable and that a council who built patio houses ran the risk of having them pulled down.

Speaking on design, Cleeve Barr remarked on the current practice of orientating the houses so that the sun penetrates the rooms most of the day. This means that the walls facing these windows will be habitually in shade, a fact which limits their use for planting. He suggested that it might be more logical to put the house the other way about so that the walls would get most sun and to arrange for the rooms to receive sun through clearstorey lighting.

Two sociological points came up for much discussion. The first was whether those who live in patio houses need to look outwards. It was generally agreed that they do. Both for severely practical reasons (e.g., to catch the milkman on his rounds) and because there was a real danger that the housewife may feel shut off from the community. The

second point was whether the kind of privacy the patio gives is not a middle class taste and whether the habitual neatness necessary to make the patio house a success is not a characteristic middle class accomplishment.

The last matter to be discussed was densities. Though the patio house has been put forward as a high density solution, it was remarked by more than one speaker that the most successful schemes have been those of relatively low density, round about 10-15 houses per acre. The reason for this is the need to associate the very small private open space with fairly generous public open space to give a measure of outlook. The LCC, in order to get densities of 30-50 dwellings per acre, associates patio houses with a tall block. A method of ensuring an outlook is to limit the size of patio sites. Cleeve Barr thought that patio houses were likely to be helpful at densities from 15 to 30 dwellings per acre.

The visual effect of such a site, when seen in plan or from above, is that of a Khirgiz carpet; but, as Kenneth Campbell put it, it is best to have very small carpets, or, rather, rugs.

Miss Judith Ledebor was in the chair.

COMPETITIONS

Design of Technical Literature

Barbour Index Ltd. which operates a trade literature service for architects has announced a competition for the design of technical literature. The diversity of size and the general level of unhelpfulness of much manufacturers' technical literature is a common complaint of architects. Now architects, who, after all, are the people who use technical literature of this sort, are invited to express their ideas on the form which catalogues and leaflets should take.

The competition is open to architects and assistants working or registered in the U.K. Competitors must do three things: (a) describe briefly (750 words) the factors and principles to be considered in producing technical literature; (b) select any one existing building product and analyse the problems involved in producing for it a piece of technical literature, and (c) illustrate the analysis with no fewer than four sample pages of a catalogue or leaflet. Entries must be accompanied by an entry form (see trade announcement, p. 94) and closing date is Friday, April 28. First prize will be 250 guineas, second 100 guineas, third 50 guineas and four additional prizes of 25 guineas each.

Judges for the competition will be three architects and two manufacturers: D. E. E. Gibson, F.R.I.B.A., Howard V. Iobb, F.R.I.B.A., Dargan Bullivant, A.R.I.B.A., P. Talbot-Smith, a director of the U.A.M. Group of Companies, and R. N. Smith, a director of William Newman & Sons Ltd. Results will be announced in June. An exhibition of entries will be held after the judging. One outcome of the competition will be that Barbour Index will publish

a handbook on the production of trade literature. This will be available free of charge to subscribers to the Index and at a nominal charge to other manufacturers.

County Offices, Reading

The Royal County of Berkshire has decided to promote an architectural competition for new county offices on a site in Reading bounded by Abbot's Walk, Abbey Street and the Abbey ruins, at a cost not exceeding £700,000. Further particulars to be announced shortly.

The assessor is Frederick Gibberd, C.B.E., F.R.I.B.A., M.T.P.I., F.I.L.A.

Carpet Design

Carpet Trades Ltd., of Kidderminster, to mark the occasion of the opening of their new £350,000 administration block, have announced an international competition in carpet design, with prizes totalling £1,650. The prize money will be allocated between three classes: for a Wilton design, a Spool Axminster design and a "Design for Modern Living": in each case there will be a first prize of £400, a second prize of £100, and a third prize of £50. Entries will be judged by the following panel of six experts: Lord Bosson, LL.D., F.R.I.B.A., J.P., Sir Ernest Goodale, C.B.E., M.C., Mr. Paul Reilly, Director, C.O.I.D., Mrs. Marian Russell, A.R.I.B.A., F.S.I.A., Mr. Neville Ward, B.Arch., A.R.I.B.A., F.S.I.A., and Miss Anna Zinkeisen, R.O.I., R.D.I. Entry forms and details now available from Carpet Trades Ltd., Mill Street, Kidderminster. The closing date for the competition is September 30, 1961.

PETER FLOUD MEMORIAL

Study of William Morris

The Peter Floud Memorial Fund, which was established in his memory in January 1960, is to be used to encourage critical study of the life, work and influence of William Morris, and the William Morris Society, which manages the fund, has announced a prize of £50 for an essay on some subject concerning William Morris. Judges of the entries will be Mr. John Brandon-Jones, Professor Nikolaus Pevsner, Mr. Stanley Morison and Mr. E. P. Thomson. Closing date for entries is June 30, 1961, and details of conditions are available from the Honorary Secretary of the William Morris Society, 260, Sandycroft Road, Kew, Surrey, not later than April 30.

Cover Design for T.P.I.

The Town Planning Institute is holding a competition for a new cover design for the institute's journal, which goes out to over 5,000 members all over the world.

The first prize will be 50 guineas, second prize 25 guineas, third prize 10 guineas, and closing date for submission of designs is February 28, 1961.

The judges' panel consists of: Prof. J. S. Allen, F.R.I.B.A., P.P.T.P.I., Walter Bor, A.R.I.B.A., A.M.T.P.I., L. B. Keeble, F.R.I.C.S., M.T.P.I., and W. L. Waide, A.M.P.T.I. Application for entry forms and conditions should be made without delay to the Secretary, The T.P.I., 18, Ashley Place, London, S.W.1.

Talk on Contract Organisation

"Co-ordination on the Building Site" was the title of a talk given by W. J. Nicholls of Tersons Ltd., to the Architectural Association, London, on January 11. The title was misleading in that the speaker did not confine himself to site organisation but spoke about the whole range of problems confronting a contractor in organising a job from the moment the contract is awarded. Mr. Nicholls is obviously experienced in this work and, if a good deal of his talk was devoted to berating architects for their bad habits, the criticism was well justified. For example, insufficient time for tendering and the habit of some architects not to send drawings to tenderers but to expect them to inspect a set of drawings in their offices were two criticisms.

The speaker pointed out that the emphasis today is on fast building. Clients, particularly developers, are demanding that buildings go up quickly and often put considerable pressure on their architects to rush a contract through. He warned that architects must take a firm line with their clients to ensure that the time allowed for completion was a realistic figure. If buildings are to be erected quickly then they should be designed with this in mind. For example, greater standardisation of column and beam sizes reduces sitework in making up formwork. Generally speaking traditional construction does not lend itself to speedy erection. Apart from designing for speed architects should give some thought to (1) ensuring that fully detailed drawings are always supplied to the contractor on time. (Tersons send a copy of their job programme to the architect before work starts and on this are entered the dates when drawings will be required), and (2) anticipating the long waiting times for delivery of materials. The brick supply position was taken as a case in point. A manufacturer will not take much interest until he has a definite order on his books. Mr. Nicholls suggested that architects should try to get their clients to allow them to place a firm order for bricks even before the job goes out for tender. Similarly delays in the supply of reinforcing steel should be anticipated by having the consultant provide bending schedules the day the contract is awarded.

Two other points were brought out by the speaker. Firstly the party wall award usually takes a long time to settle and it is unwise to start work on the site until the award has been made. The second point

was that architects often expect a finer tolerance in *in situ* concrete than is practicable. He mentioned a contract in which a 300 ft. length of wall was permitted to have $\frac{1}{4}$ in. tolerance \pm in its total length. It was disappointing to see such a small audience and a notable absence of young members. Has the AA considered inviting Mr. Nicholls to deliver, say, one lecture a year to senior students?

OBITUARY

F. R. Hiorns

Frederick Robert Hiorns, architect to London County Council from 1939 to 1941, has died at Sandown, Isle of Wight, aged 84. A senior member of the L.C.C. architectural staff for many years, he was Deputy Chief Architect for four years before his promotion. His work included the South East London Technical Institute, the Weights and Measures Office in Euston Road, and he was connected with the extension to London County Hall.

A Devon man, Mr. Hiorns became an Associate of the RIBA in 1899 and a Fellow in 1921. He was a medallist for design, and a Godwin Bursar and Travelling Student. He served on RIBA committees and for many years was on the executive committee of the Society for the Protection of Ancient Buildings.

He was a Royal Academy exhibitor, a member of the Roman Society, a Fellow of the Society of Antiquaries, a Life Fellow of the Royal Society of Arts and a member of the Art Workers Guild.

AA

Entrance Scholarships

The following scholarships, for applicants of British nationality, are tenable for one year but may be renewed from year to year for the remainder of the course.

For entrants to the first year:

Leverhulme Scholarship, value £2,500 over five years.

Bowater's Scholarship, value £112 10s. p.a.

Gleeson's Scholarship, value £112 10s. p.a.

Haden's Scholarship, value £112 10s. p.a.

Metal Window Scholarship, value £75 p.a.

Natural Asphalte Council Scholarship, value £50 p.a.

Patent Glazing Scholarship, value £50 p.a.

Senior Entrance Scholarship.

Metal Window Senior Scholarship, value £50 p.a.

Particulars and application forms from the Principal, AA, Bedford Square, London, W.C.1.

RIBA

Prizes and Studentships

1960-1

The following major awards were announced on January 10:

The Alfred Bosson Research Fellowships:

£250 for post-graduate research, to Peter David Cowan, DIPL. ARCH (NORTHERN POLYTECHNIC), A.R.I.B.A., and to Raymond Osborne Moss, DIPL. ARCH. (SHEFFIELD), A.R.I.B.A.

The RIBA Rose Shipman Studentship: a certificate and £600 for the study of architecture to John Cecil Turnbull Warren, B.A.R.C.H. (DUNELM), A.R.I.B.A.

The Henry Saxon Snell Prize and Theakston Bequest: a certificate and £150 to David William Hubert, DIP. T.P. (THE POLYTECHNIC), A.R.I.B.A.

The Rome Scholarship in Architecture for 1960 was not awarded.

LIVERPOOL UNIVERSITY

Leverhulme Postgraduate Fellowships

Applications are invited for two post-graduate fellowships, one in the School of Architecture or the Department of Civic Design, and one in any Department of the Faculty of Arts. Each will be tenable for one year at a value of £600 but may be renewed for a second year. Applications (three copies), giving age, qualifications and experience, proposed field of research, names of two referees and—in the case of the Fellowship in architecture or civic design—enclosing copies or photographs of work, should be received not later than March 1, by the Registrar, from whom further particulars may be obtained.

DIARY

British Furniture Show, 1961, Earls Court, 10 a.m. to 9 p.m.

FEBRUARY 1 TO 11

Cylindrical Shell Roof Design by J. D. Bennett, B.ENG., course of 12 weekly lectures at the Brixton School of Building, Ferndale Road, S.W.4, at 6 p.m. Fee for course, £1 10s. Series began JANUARY 11

Space Structures: Modern Trends and Recent Developments: course of 11 post-graduate lectures for architects and builders by Z. S. Makowski, PH.D., DIP. ING., D.I.C., A.M.I.C.E. (Imperial College of Science and Technology). Fyvie Hall, The Polytechnic, Regent Street, London, W.1. Fridays, 6.30 to 8.30. Series began JANUARY 13

Woodworm and Dry Rot, free lectures and film shows organised by Woodworm and Dry Rot Control Ltd., of the Rentokil Group, Birmingham, White Horse Restaurant, 7 p.m.

JANUARY 31

Chichester, Dolphin & Anchor, 11 a.m.

Colwyn Bay Hotel, 11 a.m.

FEBRUARY 1

Stirling, Station Hotel, 7 p.m.

FEBRUARY 2

Salisbury, Red Lion, 7 p.m.

FEBRUARY 3

Travel in Asia Minor and Istanbul, informal illustrated talk by Olga Ford, at the AA, 6.15.

FEBRUARY 1

The New Stockholm at the Building Centre. Photographs, models and drawings of new building and town planning developments in Stockholm.

FEBRUARY 2 TO 22

The Need for Technical Assistants in the Profession

We publish below in full the controversial memorandum on the two-tier profession approved by the Allied Societies Conference, which is the subject of this week's leading article and is referred to in Letters on page 130

INTRODUCTION

The Society's Council has considered this problem at some length and our views are set out below. There appears to be a considerable divergence of opinion in the profession as a whole on the subject, due probably to a wide difference of requirements between large "national" offices and smaller provincial ones. In our view the needs for architects in the provinces could be met by the scheme outlined. We consider it important that the general requirement of provincial practices should be established and made known.

1. EXISTING USE OF UNQUALIFIED ASSISTANTS

In provincial offices considerable use is made of unqualified assistants, many of whom have valuable experience as draughtsmen and in routine work of offices. They are essential members of the provincial architect's office team. Many started straight from school and have learned by experience to do much of the work of an office adequately and economically. Many of them do not wish to accept the responsibility of decision and control which normally goes with qualification as an architect.

2. ECONOMICS OF PROVINCIAL PRACTICES

The work of most provincial architects' practices whatever the size appears to include a large number of small jobs. Many practices are based on domestic work and in these commissions of £25,000 value or over are exceptional.

To employ none but qualified architects would for many tasks be quite uneconomical and also a sheer waste of trained ability, frustrating to the men concerned.

It is sound economics for an appropriate relation of the assistants pay to the task

to be maintained and especially important when the generally low level of architects remuneration in relation to other professions is considered.

In industry there has been criticism of waste of university science graduates on work which does not make use of their capacity to the full. The architectural profession must avoid similar wastage.

3. TRAINING OF ASSISTANTS

We have no doubt that unqualified men will continue to be employed. We consider that office training is suitable on an apprentice or learner basis and that it would be an advantage if "one day release" classes and evening classes could be available for them.

4. STANDARD FOR TRAINING AND QUALIFICATION

There appears to be no general demand in the provinces for a class of highly qualified technicians or technologists approaching university graduate standard. There might be a limited use for them in large local government offices and the largest of private offices.

The architect himself is a skilled technician and there are consultants available for specialist problems.

In local and central government it would be necessary for technologists and technicians to be recognised as new categories in the system of staff grading qualifications and status now in operation and this might well present a difficult and long drawn out administrative problem.

In our view there would be an encouragement to recruits to the assistant class if some qualification such as a modified RIBA intermediate examination could be available to provide an objective to work for. This we feel is the standard most generally required in offices.

We consider that the general education standard required for this qualification should be passes in three G.C.E. "O" level subjects including English and Mathe-

matics. With the improving standards of secondary modern schools and their acceptance of G.C.E. examinations for the brighter pupils, a new field of recruitment might be secured.

5. CONTROL OF QUALIFICATION

We consider that control of the issue of certificates of qualification as technical assistant should be carried out by the RIBA. While co-operation with other bodies concerned with building would be valuable and may well be developed, we feel that control by the profession is an important factor. We accept that this policy may need modification if, in the future, satisfactory arrangements for co-operative education for the whole range of building are achieved.

6. RECOGNITION FOR ESTABLISHED ASSISTANTS

If an assistant qualification is established, some recognition should be given to those men already employed as such, based on their experience and employers' recommendation.

7. ASSISTANTS WISHING TO QUALIFY AS ARCHITECTS

We consider it essential that the exceptionally gifted man who obtains his assistant qualification and satisfies the RIBA of his talents and experience should have the opportunity to take the RIBA examinations to qualify for Associateship. We do not consider that, in these exceptional cases, it should be necessary for him to obtain the G.C.E. "A" level passes required for normal entry.

If a man were required to obtain these "A" level passes he would almost certainly have to "cram" for these at evening classes, a process of doubtful value.

We feel that the door to architectural qualification should be left open, even if narrowly, for an exceptional man who by reason of financial means or late development of his abilities failed to take the normal training course.

Young men generally have great and understandable difficulty in deciding their careers and we would deprecate the exclusion of those who possibly through no fault of their own do not take the right steps before or on leaving school.

There should be some modest degree of flexibility of entry into a profession in which natural talent has an important place alongside technical competence.

8. TIME FACTOR

As from September 1960 entrants to the profession will require two "A" level G.C.E. passes and from this time onwards young people who have not reached this standard will be discouraged from coming into offices as assistants as there will be no status or qualification generally recognised by the RIBA open to them. This could easily result in a serious lack of junior staff in many offices within two or three years.

A solution to the problem appears, therefore, to be urgently required.

9. SUMMARY

(a) We consider that an assistant class exists; that it is necessary to the profession; that it should be fostered by the provision of training facilities and recognised by issue of a certificate or diploma.

(b) A definite educational standard of entry should be determined.

(c) The level of qualification should approximate to that of the RIBA Intermediate examination.

(d) Control of entry should be by the RIBA.

(e) In exceptional cases and subject to suitable safeguards an avenue for qualification by associateship should be possible.

(f) There is some urgency on this matter.

We recognise that much detail remains to be considered but that as a first step the principles set out should be accepted.

This is the Bristol Society's resolution as amended by the meeting of the Allied Societies Conference.

Previous articles (published AJ October 27 and December 22) have described the organisation of the Works Directorate as a whole, and an eight-man team of architects at work: this week's describes how the other professions fit into the Works Directorate.

Group Working at the War Office 3

The last article showed how responsibility is delegated in such a way as to stimulate the interest and enthusiasm of the job architects, the men directly responsible for the projects. However, these enthusiasms cannot be completely fruitful unless the architects' colleagues in other professions

have similar enthusiasm. It is therefore important for all professions to be organised so that initiative, responsibility, and enthusiasm for good building are cultivated.

The other professional services in the Works Directorate consist of Quantity Surveying, Civil and Structural Engineering and Mechanical and Electrical Engineering (including heating and ventilating engineering). This article explains how they are formed up under three professional heads, namely:—James Nisbet, Morris Shaw and C. L. Champion, respectively.

Quantity Surveying

Of all the specialist branches, the quantity surveyors must take pride of place, for they are usually actively engaged with a job for as long as, if not longer than, the architects; and, of all the members of the design team they are the ones with whom the architects are the most acquainted and with whom they work most intimately.

The size of the Q.S. Branch creates problems besides presenting opportunities. Paramount is the problem of the individual's place in the organisation and how best his



Too often in a QS office it is a case of the work running you instead of you running the work. To avoid this happening when a large staff are handling an extensive and complex programme, control of work progress is of vital importance. In this photograph J. E. COOKE and PETER GUEST (left) are seen discussing a Team Manpower Budget in which the work is planned and manpower deployed to maximum advantage.

identity can be maintained and a sense of purpose brought to his work. As with the architect it is a question of trying to give the professional QS the fullest control of his jobs so that he can work and act with a sense of "completeness," instead of merely being a cog.

The intention is to give each man the responsibility that he should have as a chartered quantity surveyor, in the belief that this will give greater satisfaction than is normally enjoyed by a salaried employee. It is also expected that further satisfaction will come from being a vital member of a team where making contributions to the joint effort of building becomes exciting and stimulating in itself.

The Deputy QS, J. E. Cooke, who is responsible for QS development matters, was until recently in private practice and his experience of architects leads him to a very strong view that the need for enthusiasm works both ways. A specialist has no scope for his own creative instincts unless he is lucky enough to work with an enthusiastic architect. Creative instinct is not usually associated with quantity surveyors, but provided the architect accepts that he must be concerned with cost, the quantity surveyor is able to

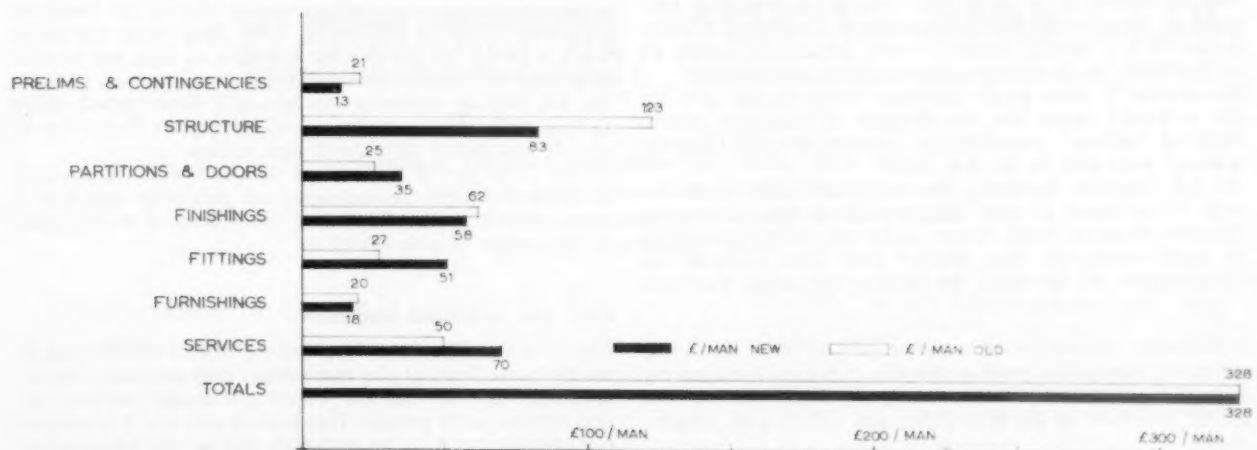
make a positive and constructive contribution. Except for the actual preparation and production of a bill of quantities the quantity surveyor's effort is somewhat negative; he seldom sets the pace for all the advice he gives. However, when it comes to cost investigation and analysis, leading to the positive contribution of setting the cost pattern of a job, the creative instinct of the QS can be satisfied. Planning a sound cost structure for a building gives an extraordinary sense of achievement, the same sort of thing perhaps that the Chancellor of the Exchequer feels when he produces a sound budget; or that the housewife feels who has well satisfied her family's appetites on a slender allowance.

"Private Practice" in Government Service

How can all this be achieved? The present staff is around 60 on the professional side, supported by about 10 clerical and comptometer staff, and this complement is to be roughly doubled in the near future. The professional side is organised into a number of six- to eight-man teams, each well balanced, and a completely self-contained unit. In fact, each team operates as a small (or perhaps not so small) private practice office and the team leader is given all the responsibilities of a partner in private practice. Within the teams each job is allocated to a job QS and by this means the responsibilities are delegated as far as possible. There is no specialisation in the sense that one team does the cost planning, another prepares the BQ and another deals with the final account. The job QS sees the process through all its aspects from inception to settlement of the final account.

There may appear to be good economic reasons for specialisation and against the diversification that is practised, but there is a very sound counter argument. While continual specialisation in particular fields may increase efficiency in the short run, in time it leads to stagnation, loss of interest and loss of efficiency. It is again a question of the individual's reaction to the work he is doing. Diversification is more satisfying and stimulating and more likely to bring fresh thought and to create the right environment for development. And here it must be stressed that "develop-

This diagram compares the distribution of expenditure per man between a barrack block designed some years ago, and one recently designed. For the new design the QS produced a cost analysis of the old and together with the architect by means of cost planning effected a redistribution of expenditure, that gave improved standards of amenity. The increase in the cost of fittings and services (made possible by savings in structure) reflects this improvement.



ment" is important both in the man himself and in the work he is doing. Ultimately both mean increased efficiency.

Research and Development

Development has an established and recognisable place in the QS branch. The group is loosely formed of two teams, one dealing more with research and investigation and the other with production and development of work techniques. Each team has a small nucleus of permanent staff but otherwise the complement is fluid to allow for the movement of the ordinary QS staff through the development field. By this means it is hoped to encourage all members of the staff to make their contribution and be an essential part themselves of all that comes out of this development work. Subjects on which the Development Group are at present working include a joint exercise with the Architects' Development Group to establish provisional cost limits for all types of buildings that the Army requires; an investigation of post-contract procedures; the compilation of comparative cost information from all overseas and home theatres of operation; and the study of automatic data processing for application to QS work. In this last respect the team has just completed a small exercise in which a Bill was successfully produced by conventional punch card machinery.* This was done in close collaboration with the War Office's own punch card machine installation under Mr. S. R. Belton.

Training

The responsibility which the practising chartered quantity surveyor has towards the young student, under the present training methods of the profession, is given tangible form in the branch. A specific training programme for student quantity surveyors has been drawn up and forms the basis of the student's activities from the time he enters until the time comes to sit for his final examinations. Closely linked to the RICS examinations, it details the work and responsibilities which the young surveyor should be experiencing at any stage in his training and by this means it is hoped that his theoretical studies will be supplemented by well-balanced practical work.

The programme is equally applicable to articled pupils or trainees and the point of entry is determined solely by the man's experience when joining the Directorate.

The Individual

There is usually a gap between theory and practice and the individual does not always react as it is hoped he will, but a short account of the sort of work a particular quantity surveyor is carrying out may help to illustrate the effect of the policy that has been described. A typical new member of the QS staff is Peter Guest, 34 years old and qualified in 1950. Before joining the Directorate in January, 1960, he was with a firm in private practice and latterly worked on Messrs. Heinz' (57 Varieties) Kitts Green project. Among the reasons he had for joining the Directorate were the attractions of a large-scale continuing building programme, good promotion prospects and a belief that, under James Nisbet, the QS branch of the Directorate would be in the forefront of modern quantity surveying practice. He is now a main grade quantity surveyor and job QS for a transit camp for the Brigade of Gurkhas and a Married Soldiers' experimental Air-conditioned Quarters scheme, both jobs in the Far East.

As Job Quantity Surveyor, the initiative for the work lies with Peter Guest. It soon became evident that before any detailed planning could be got under way more knowledge of local conditions was needed than was available at Chessington. As he would be dealing with other Far East

jobs in the future it was decided that, together with an architect, Richard Mayne, he should visit Singapore and Malaya. He flew there and back, and was away for four weeks.

The visit provided a good example of the "positive" approach for here the architect and quantity surveyor had to find things out for themselves in order to take full advantage of any particular local conditions that might lead to good and economical building, and to be forewarned, not only of things which in the Far East might be very expensive, but of conditions which might exist at tendering time and which could affect the result. Such conditions range, for example, from the cheapness of Japanese glass mosaic tiling at about 22s. 6d. per yard super to reluctance on the part of industry and developers in Singapore to invest capital in building projects until the effects of the new left wing Government policies become better known, which would mean of course, that competition among local builders would be keen and prices low.

The economic success of these projects is now largely on the shoulders of Peter Guest. Cost planning in the Far East is at present far less reliable than in Britain, so far as ensuring that the cost comes exactly as expected, but so far as ensuring a proper distribution of expenditure it is still of vital importance. Peter Guest will therefore prepare cost plans, he will use all the cost information he has got to carry out cost checks and he will prepare Bills and carry the contract through to completion.

These responsibilities are heavy, but few competent quantity surveyors would wish to have anyone else controlling their jobs or taking decisions for them.

Mechanical and Electrical Engineering

There is an essential difference in the set-up between mechanical and electrical engineers and architects. The engineers already have a "two tier" profession with design drawing offices staffed by specially trained draughtsmen. Responsibility for a job is delegated to "project engineers," who are the opposite numbers of job architects, and who discuss the job and advise the architect from the earliest stage and carry the full professional responsibility. Later the work is taken over by one of the drawing office staff for design in detail under the supervision of a design engineer who collaborates closely with the project engineer. All those concerned, with architects and QS, are regarded as part of the design team for a particular job, and all have a joint responsibility for producing a good building. The particular organisation for engineering work has been adopted because the field covered by mechanical and electrical engineering is so vast that it would be impossible for every project engineer to keep himself up to date in all its branches. The engineering draughtsmen are specialists in their particular fields and the design engineers specialise while holding these posts (although they may have worked as project engineers at one time) and this enables them to keep in the forefront of developments in their field rather than being limited to conventional approaches. The benefits of this are already beginning to show in a more imaginative approach to lighting and heating problems. An M and E development group (which will shortly have a well-equipped laboratory) is closely associated with the design section.

A very large part of the work of the chief M and E engineer is concerned with maintenance, and particular attention is being paid to the application of the lessons of maintenance to the design of new works.

Civil and Structural Engineers

The civil and Structural Engineering Branch works broadly on the same lines as the mechanical and electrical branch, with the exception that the project and design engineers are one and the same person. This branch also has a laboratory for carrying out tests on materials and in site investigation.

*This work was based on a system devised by J. E. Cooke whilst he was still in private practice. Similar investigations have since been carried out jointly by D. G. Braine and D. G. Pritchard of the War Office and I.B.M. Ltd., respectively.

BAGHDAD—New Houses of Parliament

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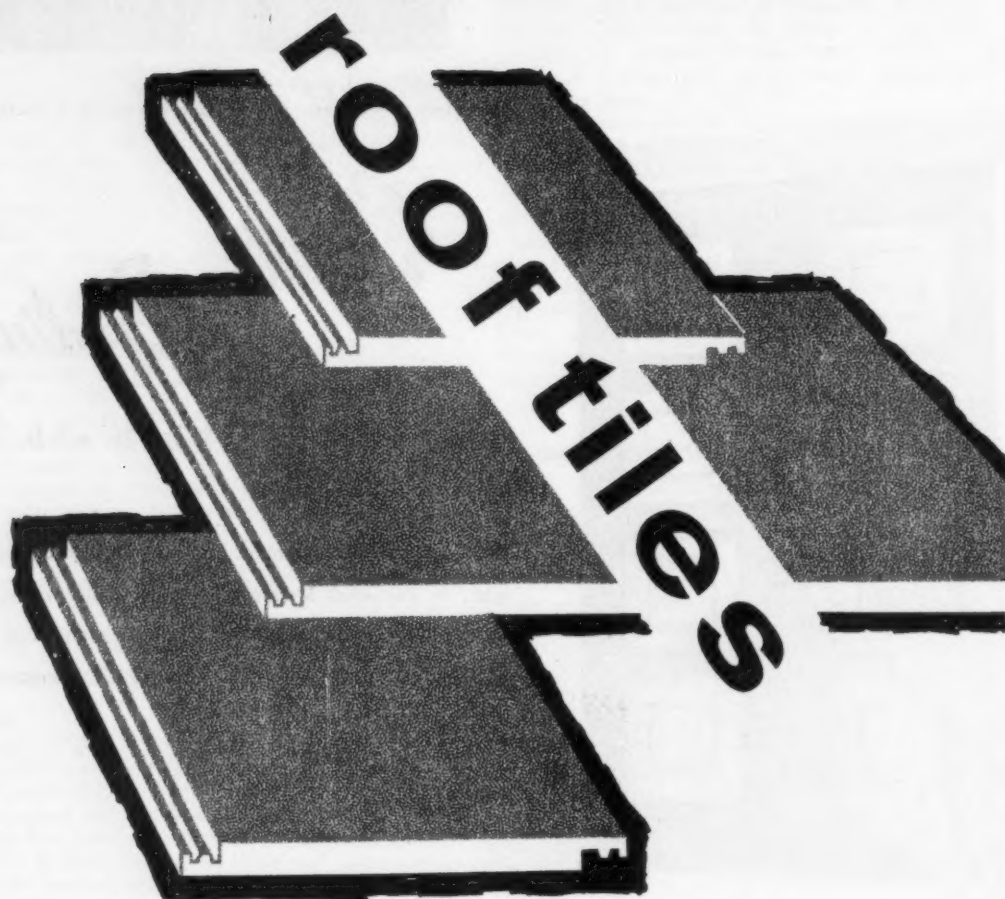
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THE INDUSTRY

This week Brian Grant describes a combined cooker and refrigerator, dehumidifying equipment for drying out new buildings, a method for forming ducts in poured concrete, a fan and cooker canopy, electric heating panels, continuous barrel rooflights and two new refrigerators.

Kitchen Equipment

The illustration on the top right shows a new combined cooker and refrigerator unit produced jointly by Electrolux and Cannon and known as the CannonLux. The GEC, I remember, produced the same sort of thing for the Mount Royal flats in the mid-thirties, but it was, of course, electric, and I do not think that any particular effort was made to sell it as a standard line. The refrigerator of the CannonLux has a capacity of 1½ cubic feet, above which is a four burner hotplate. The illustration shows a combined grill and oven at the top, but various other versions are available. The oven can be mounted separately on the wall, and the cooker used either with a high-level folding grill or with only a splash back above the hotplate. The oven seems a little on the small side, but is big enough for a 4 or 5 lb. joint. Price is £75 12s. for the unit as shown, including the purchase tax on the refrigerator, and standard colours are white or cream. (Cannon (GA) Ltd., Deepfields, Bilston, Staffs and Electrolux Ltd., 419, Oxford Street, London, W.1.)

Drying Out New Buildings

Although the drying out of new buildings is probably more the concern of the builder



CannonLux combined cooker and refrigerator



Greenwood's Mechavent fan and canopy

than the architect, it is interesting to note that there are alternatives to the usual method of turning on the heating system at the earliest reasonable stage in construction, for this method often leads to plaster cracks. The use of excessive gas or other heat produces even worse results. The new Hygro-Robot electric dehumidifiers which are based on an advanced system of air compression and condensation seem to have brought an answer to a safe and quick drying out of large volumes, irrespective of outside atmospheric conditions. The units are portable, fully automatic and require no installation. Running cost is negligible. The largest unit can extract up to 17 gallons of water from walls and floors in 24 hours. They can be used in ambient temperatures from 14° F. to 104° F. without supervision and can keep the humidity down to between 30 and 40 per cent R.H. (The British Sarozal Ltd., 22, Berners Street, London, W.1.)

Ducts in Poured Concrete

A new technique has recently been developed for producing holes or ducting of virtually any section in poured concrete structures. The method is to form expanded polystyrene into the shape of the hole required and then to fix it in the required position inside the shuttering before the concrete is poured. When the concrete has set and the shuttering is struck the plastic is burnt out with a blowlamp, leaving the shape of the plastic. Quite large and complicated shapes can be produced, and the process can also be used for producing surface patterns, which can be undercut if necessary. The material is being marketed under the name of Warmafoam. (Wola Products Ltd., Grange Yard, The Grange, Bermondsey, London, S.E.1.)


Kitchen Ventilation

Greenwoods have just introduced a Mark II Mechavent fan which can be used with a glass fibre/resin canopy. The fan unit is arranged in a 9½-in. square casing for building into the wall and has a rating of only 35 watts, though it is claimed to shift 1,400 cubic feet of air a minute. Price is £12 17s. 6d. The canopy is made in white, cream or red, and costs £8. (Greenwood's & Airvac Ventilating Co., Ltd., Beacon House, Kingsway, London, W.C.2.)

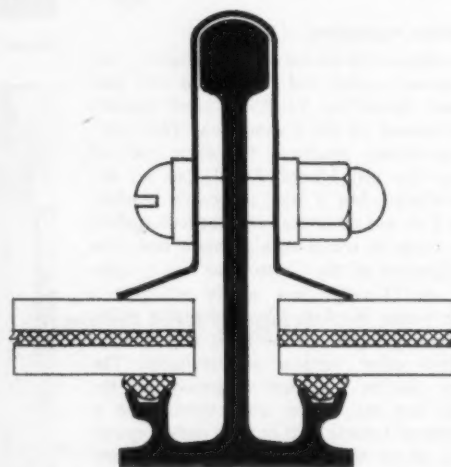
HOPE'S aluminium patent glazing



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Boswell, Mitchell & Johnston, Chartered Architects : Glasgow

HOPE'S vertical patent glazing with galvanized steel fascia and cill has been installed on three elevations, using our B-capped bar throughout. The top tier is glazed with decorative Plyglass in a flat sculptural design, $\frac{7}{16}$ in. thick, as shown in section. 

We also supplied the cast aluminium initial letters IBM which are 4 ft. high and set in a vitreous enamelled aluminium dished panel. Windows are hot-dip galvanized steel.



Section through Hope's Patent Glazing Bar
FULL SIZE

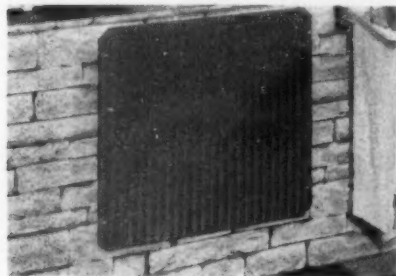
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Electrical Heating

Mhoglas electrical heating panels, originally developed by Hunting for aircraft de-icing, are now being marketed for domestic heating. The heating element is a flexible fibre glass fabric coated with colloidal graphite and a thermo hardening resin. This element is then sandwiched between layers of ribbed masonite, the heat output of the panel being distributed uniformly over the surface, at a temperature of 120° F. There is no danger of electric shock, and the panels can be wiped clean with a damp sponge; 3 ft. by 2 ft. panels are rated at 500 watts and cost £10 10s., while there are other sizes (larger to order) and a small 20 in. by 8 in. model rated at 50 watts and costing 45s. being intended for airing cupboards. Heating panels are also produced for food trolleys, hot plates, skirting heating and shop window de-mister units. The illustration shows a 2 ft. square 300 watt version (£8 8s.); the less said about the stone wallpaper the better. (Morheat Ltd., Church Path, Fareham, Hants.)



Mhoglas electrical heating panel

Lighting Fittings

Some new fittings, known as Lighting Bricks, for external use in walls or canopies have recently been introduced by Churchouse. They are made of satin etched opal glass with a small amount of surface pattern, and in simple geometric forms, circles, squares, rectangles and hexagons. All types are arranged for flush mounting in cast light alloy fixtures, and are waterproof. Lamp sizes are 60 and 100 watt, in b.c. or Edison screw lampholders, and relamping is easy. Two of the rectangular models, approximately brick size, can be supplied with letters or numbers fired on the glass. (C. M. Churchouse Ltd., Clarendon Works, Clarendon Cross, London, W.11.)

Advice about Timber

Richardson & Starling Ltd., who have been concerned for the past 25 years with wood destroying fungi and insect pests, have just opened an advice bureau at the peculiarly appropriate address of 21 Wormwood Street, Bishopsgate, London, E.C.2. Advice will be freely available on all methods of treating decayed timber, and also on the vacuum/pressure impregnation of new timber.

Heating with Coke

The British Coking Industry Association has just issued a number of data sheets covering the use of hard coke for small bore domestic heating systems, in large sectional boilers, and for various other purposes such as the heating of hotels and glasshouses. Each sheet lists suitable boilers with their outputs and prices. "Hard" coke as produced by the Association members is carefully graded to size and is claimed to have high calorific value, as it is a primary product intended mainly for steel industry furnaces, as opposed to gas coke, which is of course a by-product of the gas producing industry. (The British Coking Industry Association, 14 Grosvenor Street, London, W.1.)

Translucent Roof Lights

For some time U.A.M. Plastics have been producing standard Unilux dome lights in reinforced plastics sheeting, and have now standardised two barrel light designs, both of which are made in a variety of colours and in standard or fire retardant material. The insulated decking light is made in a standard size to fit a 10 ft. by 2 ft. 8 in. opening, this width having been chosen to replace two universal decking units, though the lights can be used with almost any normal flat roof construction. When produced in a double skin version the lights have a U factor of 0.510. The continuous barrel light is made in both single skin and insulated versions, in two widths and in single lengths up to 15 ft. Open ended units with a 5 in. corrugated lap joint are made for long continuous runs. (U.A.M. Plastics Ltd., Tolpits, Watford, Herts.)



Unilux continuous barrel lights

New Refrigerators

Electrolux have just announced two new and one revised model. The L.40 has a capacity of 4 cu. ft. and a low temperature compartment which will keep up to 7 lb. of frozen food for as long as three weeks. Price is £61 19s. including purchase tax. The new model 16 (1½ cu. ft.), costs £32 11s. and can be stood on a table top or hung on the wall. Alternatively four legs cost 42s. The revised model is a luxury version of the L.26 and costs £49 7s. (Electrolux Ltd., 153 Regent Street, London, W.1.)

INFORMATION CENTRE

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

(B)

69-001-3

8.65 surveying and specification**SPECIFICATION***Specification 1961*

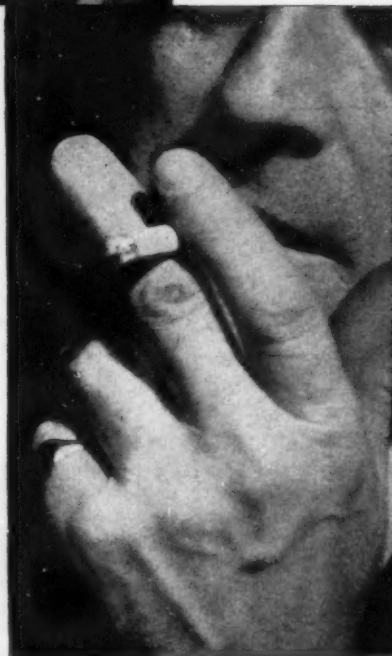
Editor: F. R. S. Yorke; Assistant Editor: Penelope Whiting. Published by The Architectural Press, 35s.

This year's volume contains an excellent rewriting of *Electrical Engineer* by Peter Jay. This includes much of the material used in the author's series in the AJ on "Small Electrical Installations," but includes large installations as well and gives a most illuminating account of electrical equipment. Roads and Footpaths has been rewritten. This section uses the "specification note" form with explanatory notes in italics as distinct from the "technical article" form which has become more usual of recent years. Useful as the latter are, the specification form is surely more suitable in a publication of this kind. There is a new section on plastics which treats plastics under the different trades in which they are used. The information given is terse and to the point, but it might have been more useful if it had been transferred to the respective trade headings in the book instead of being treated in a separate heading entitled "Plastics." The last section to be completely rewritten is *Thermal Insulation*. This is well done, the only criticisms being that less than justice has been done to the value of an enclosure of high thermal capacity in evening out the peaks in a building which is in continuous use and that there is no discussion of the burning question of the circumstances in which double glazing is worth while. There are other minor additions and changes which all go to make "Specification" a first rate living reference for the architect.



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10.202 design: building types

FACTORY DESIGN

Industrial Architecture by James F. Munce. Distributed in UK by Interscience Publishers Ltd., 88-90, Chancery Lane, W.C.2. Price £5 11s.

This is a useful book worthy of the notice of all who have to do with factory planning. It commences with an abbreviated history of factory development from the early 18th century to the van Nelle factory in 1927. The history of factory construction is closely linked with the development of structures from load bearing brickwork to cast iron, wrought iron and concrete frames and this development is traced in outline from Britain, France, Germany and the U.S.A. Because our predecessors in the last century thought that factories were not quite architecture, Mr. Munce considers that only today are architects appreciative of the opportunities offered by industrial architecture although he mentions some notable exceptions.

The small industrialist is threatened with extinction by the efficiency of large combines and the products of under-developed countries where labour is cheap. He can only survive by a greater degree of efficiency achieved by automation. Progressively since the Industrial Revolution automation has been introduced into all the processes of industry. Development is so rapid that a complete change over of machinery is more likely today than the piecemeal introduction of machinery and processes. In designing the production line vertical and horizontal flexibility is required both within and without the enclosing envelope. Mr. Munce considers that the architect is concerned with three vital problems:—

1. The increased technical complexity of the manufactured product.
2. The integration of the machines in the production line with the flow of raw materials.
3. The relationship between the capital value of the equipment used and the cost of labour actually employed in producing finished goods.

To take advantage of the opportunities offered the architect must have a fundamental enthusiasm for the industrial processes involved. At the same time the industrialist must think big and the point is made that the British industrialist does not always make use of the master plan which will enable him to think of tomorrow while building for today.

Three chapters are devoted to factories in Britain, U.S.A. and Germany, giving comparisons of design, construction and some indication of relative costs. The conclusions at the end of each chapter are interesting. In Britain the over-all industrial pattern lacks cohesion owing to a preponderance of the buildings being designed by non-architects, the packaged deal being the greatest horror and the enemy of true

architecture. In U.S.A. factories have followed a definite thesis—functionalism, with the American industrialist demanding a functional approach even when it is to the detriment of labour amenities and welfare. West German industrial architecture is given the laurels and is described as perhaps the most stimulating and vigorous in the world, a ranking which is not so clearly shown in either the text or the illustrations. The factors attributable to this high standard is firstly that the Germans had a clean slate to start with, secondly they had a struggle for survival which engendered a great depth of feeling and brought out the Teutonic flair for technology and mechanisation, and lastly the need for the economical use and exploitation of available materials.

Industrial estates which are peculiar to Britain are compared with American company towns and industrial parks. To get the best both economically and functionally out of an industrial complex, it is essential that it should be both cohesive and flexible. This could mean large scale combined units in which pride of ownership and individual distinction are subordinated to greater efficiency. In this way the complex can more easily share main services and transport systems and maximum automation can be introduced; which is perhaps just as well as the environment created may not be suitable for human beings.

The fabric of factories is described at length with comparisons between different types of frames and recommendations for desirable physical conditions and finishes.

Services, including heating, lighting, ventilation and air-conditioners are dealt with separately and in some detail with accents on co-ordination, flexibility and appearance. A chapter at this point on the economics of flexibility would have been useful.

Fire protection is deservedly given a complete chapter. The overall planning especially for the storage of raw and finished materials must ensure adequate escape routes as well as minimising machine friction and dust and ensure a complete control of flues and elevators together with the prevention of spontaneous combustion.

This is an important book which has been well presented with good photographs and ample detailed sketches to make the text clear. A good index and bibliography are appended.

CLASSIFICATION FOR TECHNICAL ARTICLES AND INFORMATION CENTRE

1. Sociology.
2. Planning: General.
3. Planning: Regional & National.
4. Planning: Urban & Rural.
5. Planning: Public Utilities.
6. Planning: Social & Recreational.
7. Practice.
8. Surveying & Specification.
9. Design: General.
10. Design: Building Types.
11. Materials: General.
12. Materials: Metal.
13. Materials: Timber.
14. Materials: Concrete.
15. Materials: Applied Finishes & Treatments.
16. Materials: Miscellaneous.
17. Construction: General.
18. Construction: Theory.
19. Construction: Details.
20. Construction: Complete Structures.
21. Construction: Miscellaneous.
22. Sound Insulation & Acoustics.
23. Heating & Ventilation.
24. Lighting.
25. Water Supply & Sanitation.
26. Services & Equipment: Miscellaneous.
27. Furniture & Fittings.
28. Miscellaneous.

A

389-6

7.80 practice

PAPER SIZES

"A" Series of International Paper Sizes
RIBA Industry Note. Available from RIBA. Free.

This single sheet—to the A4 size—sets out what the architect ought to know about this U subject. It is admirably clear in the main, but confusing in one particular. "A" sizes, it says, "are trimmed sizes and, therefore, exact." But a few lines further down it says "printers actually buy their paper in "A" or "C" sizes and this allows for trim." It is not clear how, if "A" formats are "exact," they can be subject to tolerance; and how, if printers buy their papers in "A" sizes, the papers can remain such after they have been trimmed. Fortunately this is not an architect's worry. But what is meant by all this is that the paper supplied to printers is sufficiently over the A size to allow for trimming after printing and folding to the exact A dimensions without undue wastage. The RIBA have wisely plumped for A4 for architects' literature; but ought they not also to countenance (as BSI does) A5 for catalogues and small brochures? This sheet should be pinned up in all offices. It gives envelope sizes too.

(56)

697-32

26.138 services and equipment

CALORIFIERS

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(6)

621-3

26.139 services and equipment

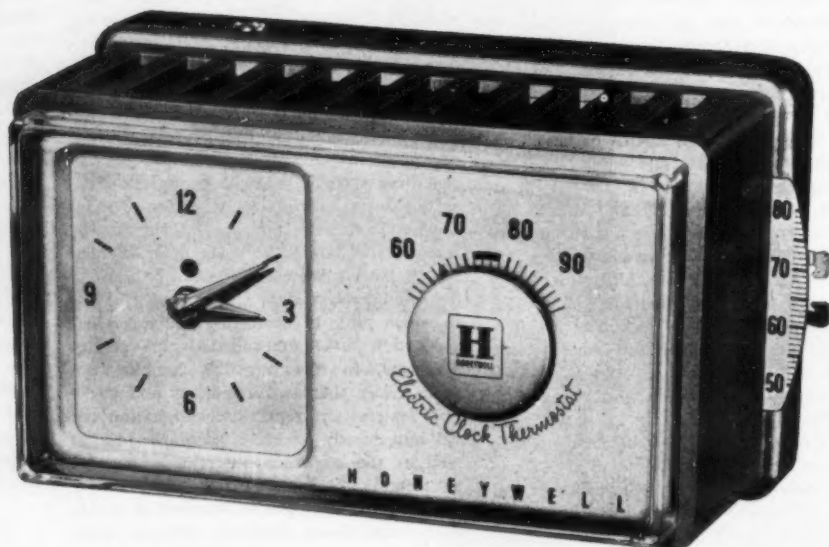
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6. PLANNING: SOCIAL AND RECREATIONAL

radburn planning: a reassessment, 6 design principles, 2

In the last article of this series*, Paul Ritter considered Radburn design principles as they affect the town as a whole, the superblock and the footpath. This week he turns to the cul-de-sac, house plans and street numbering.

Culs-de-sac

Under the influence of Radburn ideas and, more particularly, as a result of the steady increase in the percentage garage provision, the traditional cul-de-sac (street, pavements, turning circle) is being converted into a garage court.

Where the garage provision is less than about 30 per cent, the garages should be grouped and the remainder of the cul-de-sac treated as a road. Some local authorities insist on a pavement, but this conflicts with the logic of the Radburn idea, is not necessary and is visually less satisfactory. Where there are proportionately few garages, the gardens cannot be screened except by high fences or walls and these are expensive.

With a garage provision above 30 per cent, the garages themselves will take up most of the frontage and the cul-de-sac can be treated as a garage court. It will normally be much wider (garages facing one another must be at least 35 feet apart) and as the garage aprons will be nearly continuous there is no question of a path and the floor can be uninterrupted, while the back gardens will be screened by the garages. Courts need not be regular in shape. When the area is large, it is wise (as at both the Willenhall sites and at Carbrain) to use a complex plan so that the long lines of garage doors are broken up.

There is an evident advantage in placing each garage next to the house it belongs to, for it is then easier for the garage to be used as extra storage. When each garage is so placed, the garage number should correspond to the house number, as confusion is caused when the garage number is different. Every garden must have a back gate.

Relieved of paths the floor of the garage court should be punctuated only by bollards and rails protecting the corners of garage blocks and by indications of parking and traffic areas. Hydrants should be provided. Trees, if used, should not be associated with grass so that there should be no confusion with the path side and at night the difference might well be enforced by the use of different coloured lighting.

As already mentioned in the last article, paths linking the cul-de-sac with the path side must not be on opposite sides of the latter for, if they are, they will be used as short cuts. The only possible exception to this rule is where a passage is to be run at the end of a garage court or cul-de-sac. There is no objection to this provided the path is railed off from the cars and access gates provided.

The plans which follow represent a documentation of cul-de-sac and garage court planning over the last ten years. They are divided into four groups: pioneer projects of early Fifties; mid Fifties; New Town schemes of late Fifties and projects under construction. In all drawings the houses are shown in dark outline and the garages are shaded. Arrows represent paths connecting with the path side. The table below gives statistical and dimensional data of all plans.

* Previous articles in this series were as follows: The classic objections; November 10; Footpath or road access?—a social enquiry, 1, November 17; Footpath or road access?—a social enquiry, 2, November 24; Comparative costs, December 8, 1960; Design principles, 1, January 12, 1961.

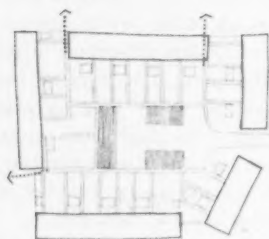
technical section

STATISTICAL DATA OF ESTATES

	Density: dwellings per acre of whole scheme	Percentage garages	Area at back (minimum width in brackets) (ft.)	Average depth of gardep (back)(ft.)	Width of road in cul-de-sac (ft.)	Max- imum	Depth of cul-de-sac (ft.), example shown	Width of entry (ft.)	Width of ring road (ft.)
Wrexham	21.5	10	200 × 150 (70)	40	13	600	200	13	16
Stourport	20.3	14	90 × 150 (80)	40	Hardly enters	350	120	13	18
Northampton	18.1	10	110 × 180 (80)	35	13	320	225	13	22
Sheffield Greenhill	20.0	11	100 × 200 (80)	35	13	400	300	13	16
Kirkcaldy	Low	10	170 × 300 (155)	55	40	300	300	13	18
Coventry, Willenhall I	20.0	50-80	150 × 400 (125)	35-50	35	600	480	13	22
Coventry, Willenhall II	High	66	—	35	35	500	300	13	22
Cumbernauld Park	Low	100	100 × 250 150 × 200	30	20-50	250	250	13	18
Basildon, Lee Chapel North	17.0	35	170 × 300 (170)	40	40	300	300	13	18
Stevenage, Elm Green	12.7	73	175 × 250 (150)	50	40	350	300	13	18
Harlow, Radburn Close	15.0	50	50 × 350 100 × 250	45	40	300	250	13	22
Cumbernauld, Carbrain	23.0	100	—	20	18-35	1,050	350	18	18
Beeston Fishpond	15.6	24	Footpath access	35	16-30	300	300	16	18
Huntingdon LCC	14.8	70	—	50	18-25	850	640	18	25

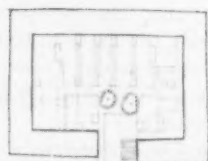
Pioneer projects of early Fifties

Wrexham



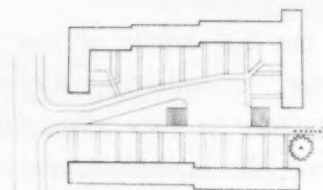
This shows a very small garage court. For reasons explained in article 2, this scheme is a social failure as the garage court is used for games in preference to the path. It is also a visual failure as the post and wire fence are an insufficient screen.

Stourport, Welsh's Farm



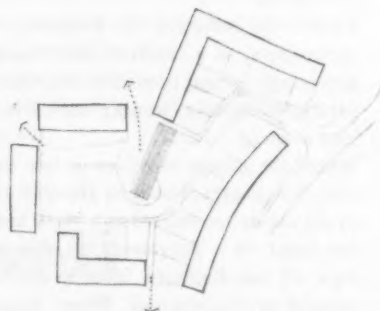
A minimum cul-de-sac. The small area enclosed by the houses (90 ft. by 150 ft.) makes for noise. A footpath enters the cul-de-sac to give access to garden gates. Fruit trees may reduce noise and give more privacy.

Northampton, Eastfield



Grass patch tends to attract children on to the wrong side. Backs insufficiently screened.

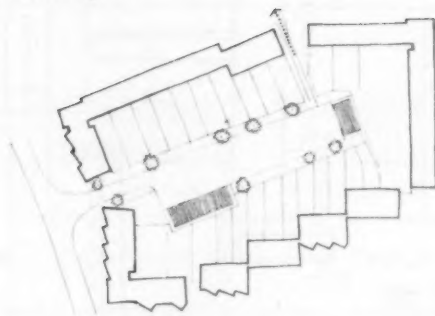
Sheffield, Greenhill



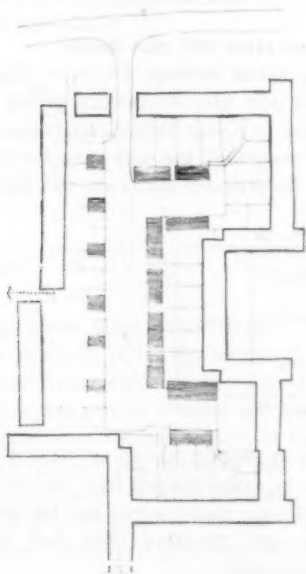
A very free plan, but paths on both sides of roadway make this example more akin to the cul-de-sac type than to the garage court. Post and wire fences give no privacy.

technical section

Mid Fifties

Kirkcaldy

This is a very spacious layout (average dimensions between houses 170 ft. by 300 ft.), but garage court character is diluted by the use of the wide flanking paths.

Coventry, Willenhall I

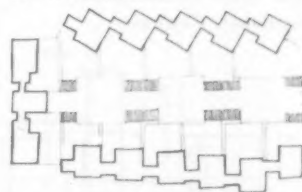
With a higher garage provision, the garages are mostly linked with the houses and screen both the backs and parts of the court. Uniform treatment of floor. Long stretches of garage doors give dull effect. Some fences kept low for cheapness.

Coventry, Willenhall II

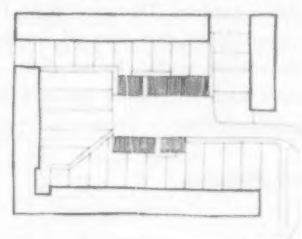
High fences and garages between them give complete privacy. Garages grouped to break up area and avoid monotony. Gable facing on to road entrance improves the sky line and the architectural detailing is generally of a high standard.



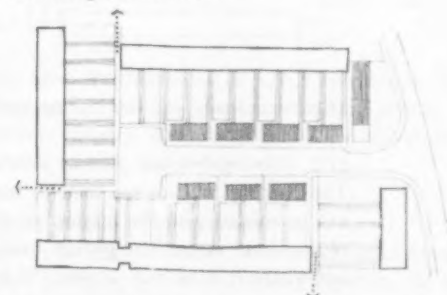
New Town Schemes of late Fifties

Cumbernauld Park

Quite the best backs in the country, with complete screening. Note lay bays for service deliveries between garage groups. Uniform floor.

Basildon, Lee Chapel North

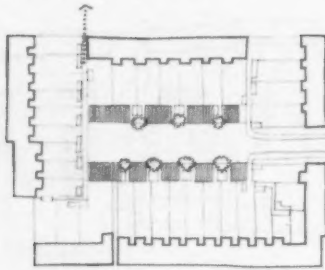
A tight plan with some screening of backs by garages. Uniform floor.

Stevenage, Elm Green

A spacious plan with good screening by garages. Generous turning space.

technical section

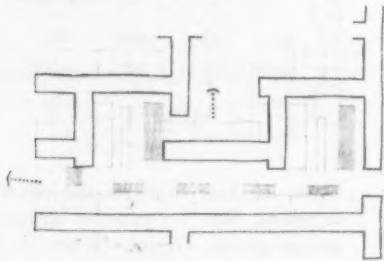
Harlow, Radburn Close



Almost complete screening of backs by garages with trees between to soften harshness of lines.

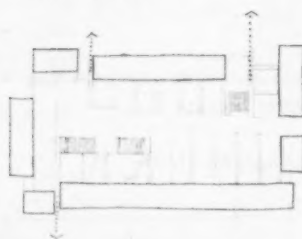
Projects under construction

Cumbernauld, Carbrain



A complex garage court used in conjunction with very small gardens. Distance of 50 ft. between houses made possible by fact that all windows face one way (see discussion under house plans, page 146). Wide frontages with individual garages sited parallel with the garden fronts.

Beeston Fishpond

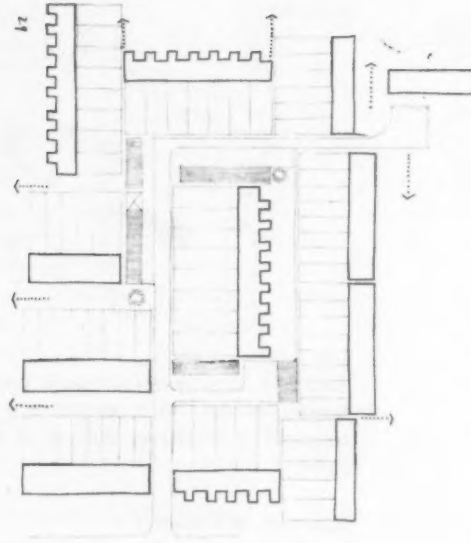


Minimum space and low garage provision.

LCC Huntingdon (see plan in next column)

The complex culs-de-sac lead to batteries of garages not associated with the houses, an arrangement which is common where the garage provision is low, but not where it is as high as this (70 per cent). Some of the houses (e.g., those in the centre, top) do not have direct access to the cul-de-sac, but are reached along footpaths.

LCC, Huntingdon



House plans and plot shapes

Discussions between Professor Stephenson, Clarence Stein and Mr. Womersley during the early experiments in Great Britain established that the kitchen must overlook the path side, for the mother will put her children out where she can watch them.

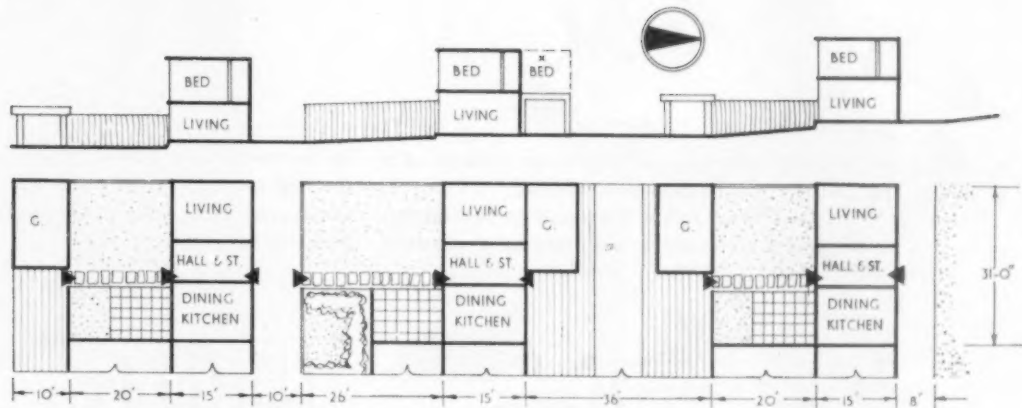


This necessarily raises a problem, for the kitchen must also be easily reached from the service road side. The traditional plan (above) has the kitchen on the road side and, therefore, does not meet the Radburn requirement.

One solution adopted at Sheffield uses a through living room with a french window on the road side. The kitchen is placed on the path side with a hall dividing it from living room and delivery from the road is through a large storeroom.



technical section



Plans and sections of Cumbarnauld, Carbrain, houses

Another solution used at Coventry shows a through living room and a through dining kitchen. These through rooms solve the orientation problem and the division into one work-play-eating space and one sitting-entertaining space is rational, given the restricted area of public housing. A pilot survey carried out at Coventry showed that a significant majority of householders liked this plan and variations are now being tried. One of these includes a porch for the pram on the path side.

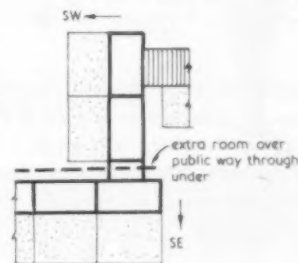


The house plans which we have been considering so far imply a relatively narrow frontage. With traditional housing layouts, where the house faces on to the street, the narrow frontage has been considered inevitable if building costs were to be kept low and densities high. In Radburn planning this logic does not apply and at Cumbarnauld, Carbrain, a house is to be used with a frontage of 30 ft. and a depth of 15 ft. (See below.) A general advantage of a wide front is that it

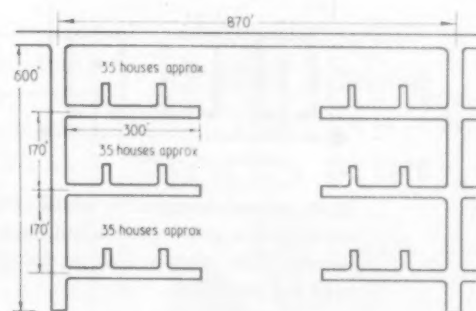


gives more privacy in the garden. A special advantage for Radburn planning is that the through room in the centre is a more manageable shape. The placing of all windows (except for one high level window in the bathroom) on one front enables the terraces to be sited only 35 ft. apart; and a further advantage of this plan

is that it lends itself to corner siting and thus avoids the need to put corner flats in this position. (See below.) Garages, with this plan, are placed either



against the house on the north side or along the southern end of the garden. The layout at Cumbarnauld gives the surprising density of 23 dwellings to



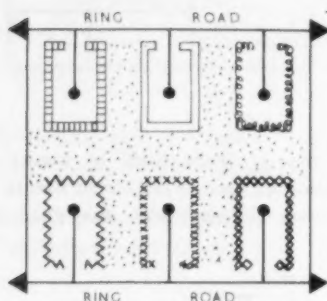
the acre, three-quarters of which are houses. Though the plan chosen owes its form, to some extent, to the steeply sloping site, the principles it brings to light are of general application.

Street names and numbers

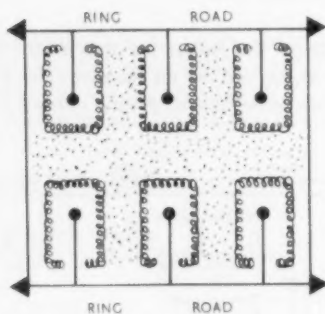
One minor incidental problem which arises from Radburn planning is that of choosing a method for naming the streets and paths and numbering the houses. This is an important detail because naming and numbering, if well conceived, can help reinforce the Radburn idea

technical section

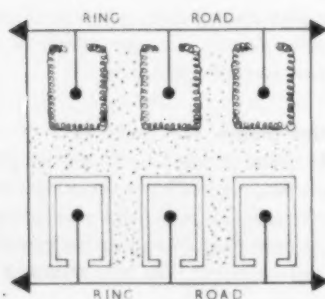
and, if badly conceived, can both make nonsense of it and lead to much practical inconvenience. The diagrams which follow illustrate four possibilities. Each pattern represents a unit bearing a common name.



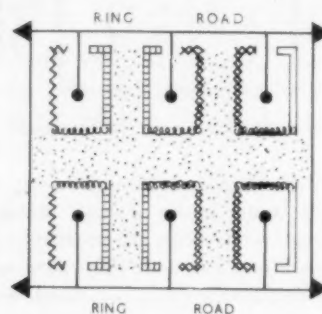
In the first, each cul-de-sac is named and numbered individually. This system is used at Coventry, Willenhall, and at Wrexham. It leads to a lack of identity: path areas carry different names on opposite sides and the pedestrian side of a square will show four different names.



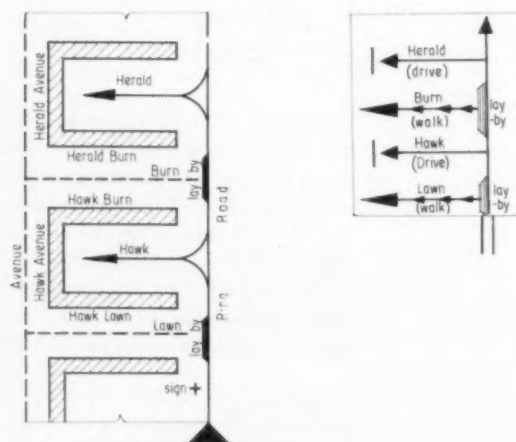
In the second example, the whole of the path area of a superblock is given a name and the numbering is continuous. This gives a lack of identification on both road and path side.



In the third example (used at Stevenage, Elm Green) the ring roads carry the name and the numbering is continuous. This results in the opposite sides of path areas having different names.



In the fourth example the footpath areas are named individually and numbering follows as in the traditional grid-iron road pattern. This makes deliveries difficult in culs-de-sac where names are different and numbers non-continuous.



A possible solution to the difficulty has been put forward by Mark Robertson. This involves the use of two sets of names. One set will apply to the footpath areas and will comprise names associated with walking (in the example "avenue," "burn," "lawn") and the other will apply to the cul-de-sac. House names will be double-barrelled and will show on which walk and on which cul-de-sac they are sited.

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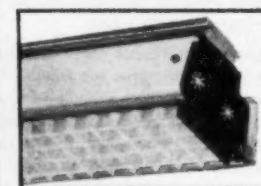
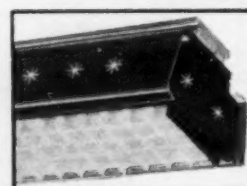
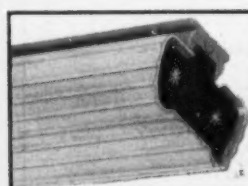
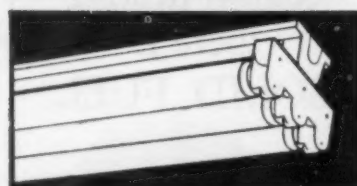
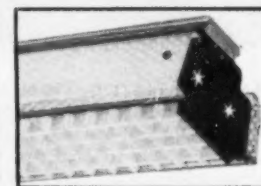
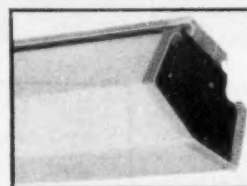
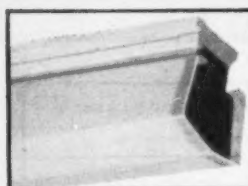
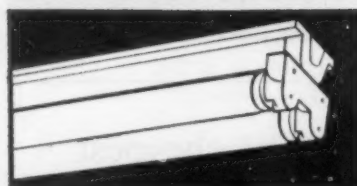
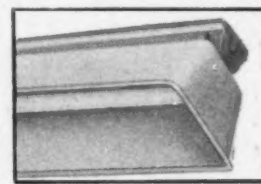
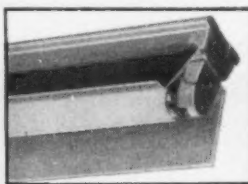
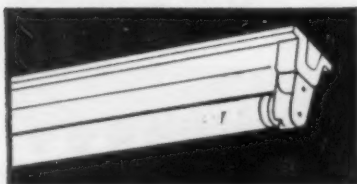
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NAME

ADDRESS

SA16

PHILIPS LEAD THE WORLD IN LIGHTING

(LD3284)

Branch Library

at Westcliff,
Southend-on-Sea

This building displays some of the current trends in library design. These include not only the more obvious characteristics of open planning and the use of associated outdoor spaces but also an attempt to make the library self-evident and inviting from the pavement to encourage the casual borrower, and to achieve a friendly, almost domestic, scale of interior.

designed by
P. F. BURRIDGE
Borough Architect

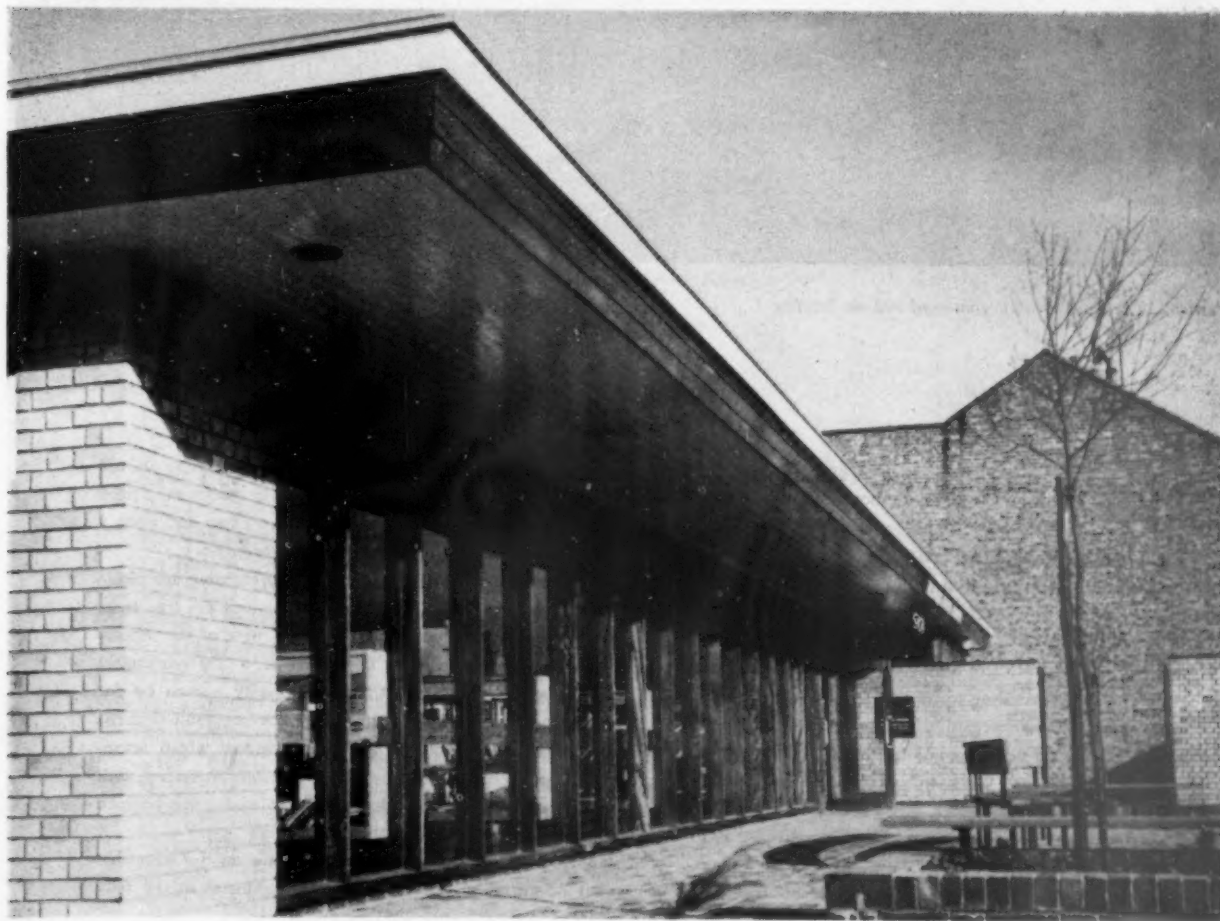
staff:
W. F. BALL
Deputy Borough Architect

chief assistant
P. G. LOUTSIS

assistants
R. F. G. WARDILL
D. R. SNELL

quantity surveyor
REEKES & MANN

The south front. At the far end are the main entrance and gateway to cycle park





West side. The garden wall is continued into the building

APPRAISAL: This branch library has been built to serve a densely populated area and is situated about one mile west of the centre of the town. It does not attempt to duplicate the comprehensive facilities available at the central library and apart from a small nucleus of reference books the whole library is given over to separate lending departments serving adults and children.

The site is on the north side of a busy main road and is large enough to enable the building to be set back from the road, still leaving room for courtyard gardens at the rear. The landscaping has a good urban quality achieved by restricting the areas of planting and grass to small raised beds, the remainder being paved with bricks. The public garden to the north is slightly less formal and is regarded as an open air extension to the adult library.

The forecourt and garden are both easily visible from inside,

as most of the external walls are glazed from floor to ceiling. This gives an excellent sense of light and space; the raised roof over the central portion adds to this effect and gives a good even level of natural illumination throughout.

The construction and appearance of the building are pleasantly simple and with one or two exceptions are free from tricks. The wall separating the public part of the library from the staff areas was conceived as a "psychological invitation to enter," but the wall is badly broken by the entrance to the cycle park. Its low height has resulted in the introduction of an internal clerestory window which serves no real purpose and has led to some difficulty in dealing with the structure supporting the tank room which can be seen behind the clerestory (see photograph page 155).

The penetrating brick wall is used again on the west side (but no entry is allowed here) and terminates in the only

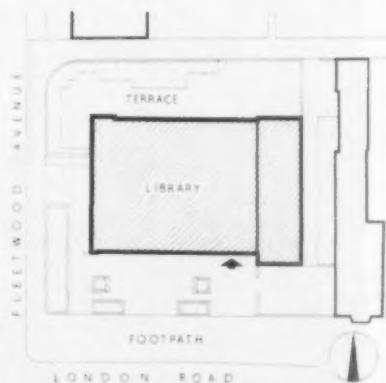


The inner end of the wall shown opposite divides the lending library from the reference section

curve in the structure. The effect is somewhat incongruous although the wall certainly achieves its object of defining and enclosing the small reference area.

Despite the proximity of the main road the level of noise is remarkably low; this was achieved by having no opening windows on the south side. Double glazing was used on the north side to reduce heat losses. Ventilation is dealt with by opening lights in the west end of the clerestory and two extract fans in the east end, but it seems doubtful if this will be adequate in hot weather.

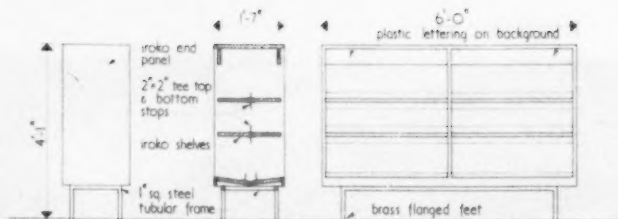
Most of the furniture and fittings were designed by the architect and, excepting the rather lumpy issue desk, it all has a simple, direct appearance. The issue desk contains all the controls for the library and was designed for the reception of both adults and children. It was intended that from this



Site plan [Scale: 1/4" = 1' 0"]

building study—2nd series

Shelves for children's library
[Scale: $\frac{1}{4}" = 1' 0"$]



position the staff could supervise all parts of the library; but the introduction of the panelled wall to the entrance lobby (see photograph page 158) has meant that part of the children's section is hidden from view.

The staff accommodation is well planned and attractive; in particular, the common-room with its cooking facilities and private garden is a very pleasant amenity.

CLIENT'S REQUIREMENTS

Adult and junior libraries, entrance hall, work-room, staff rest-room and ancillary accommodation. Shelving accommodation in the adult library for 9,500 books, in the junior library for 3,500 books.

SITE

The site has a frontage to both London Road and Fleetwood Avenue. A footway on the north side gives access to the rear of the building for unloading goods. The

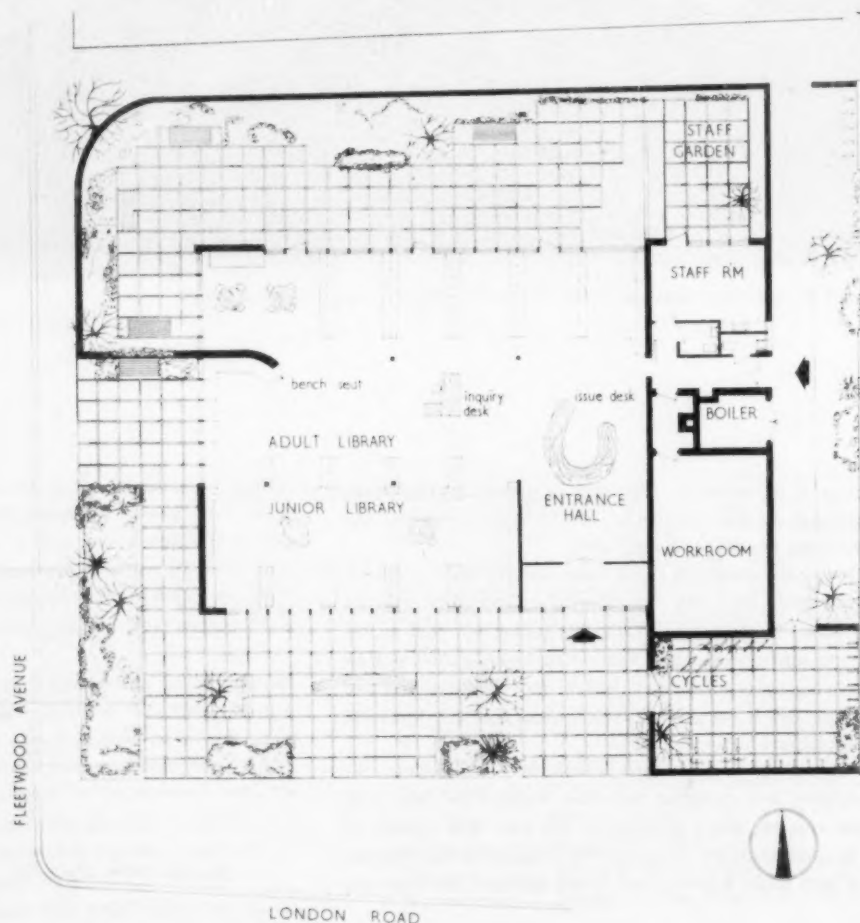
main entrance is from London Road and the building is set back to allow for a paved forecourt facing the main street and Fleetwood Avenue. There is also a public cycle park enclosed by a screen wall.

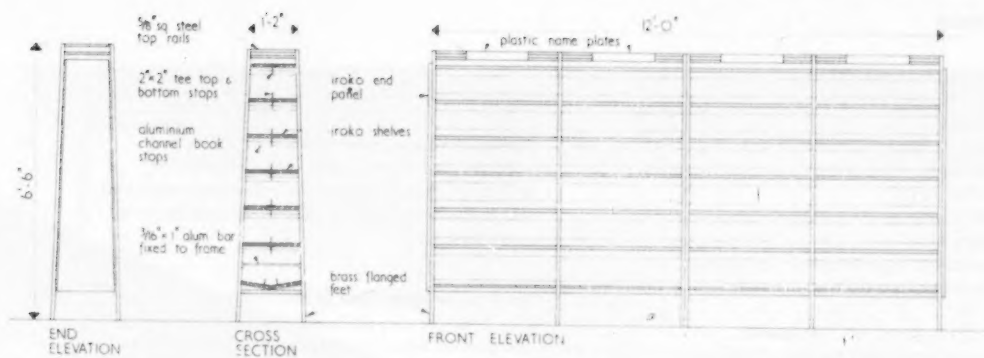
PLANNING

The building has been planned with a view to economy in staffing, while at the same time keeping the adult and junior libraries entirely separate. The main issue desk, therefore, serves both sections. Lighting, heating and ventilation are all controlled from this desk. Glazing from floor to ceiling increases the sense of spaciousness within the building, and visually links the external reading area provided by the public garden, which is treated as an open air extension of the library.

On the south front facing London Road the same treatment, together with deliberate continuation of the screen wall into the entrance hall, offers a psychological invitation to enter. Risk of glare on the south side is removed by the overhang of the flat roof, which also protects a queuing area. Noise is successfully minimised by using cork fl or tiles and acoustic ceiling tiles, and by having no opening lights facing the London Road.

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





Shelves for adult library [Scale: 1/4" = 1' 0"]



building study—2nd series

SUMMARY

Ground floor area: 4,224 sq. ft.
 Total floor area: 4,365 sq. ft.
 Type of contract: RIBA.
 Tender date: November 1958.
 Work began: January 1959.
 Work finished: January 1960.
 Tender price of foundation, superstructure, installation and finishes, including drainage to collecting manhole: £16,523 14s. 9d.
 Final contract price: £16,182 os. od. (estimated).
 Tender price of external works and ancillary buildings including drainage beyond collecting manhole: £3,276 3s. 2d.
 Final contract price: £3,114 os. od. (estimated).

COST ANALYSIS

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

Preliminaries and Insurances

Includes cost of local rates and telephone for architect's agent. Cost of general preliminaries and insurances is included in measured work under all other elements.

Work below lowest floor finish

6-in. concrete slab on hardcore with concrete edge and ground beams. Central adult library area has isolated bases for stanchions. Floor area finished with two coats damp-proof membrane.

Cost per
sq. ft.
s d
2 1/2

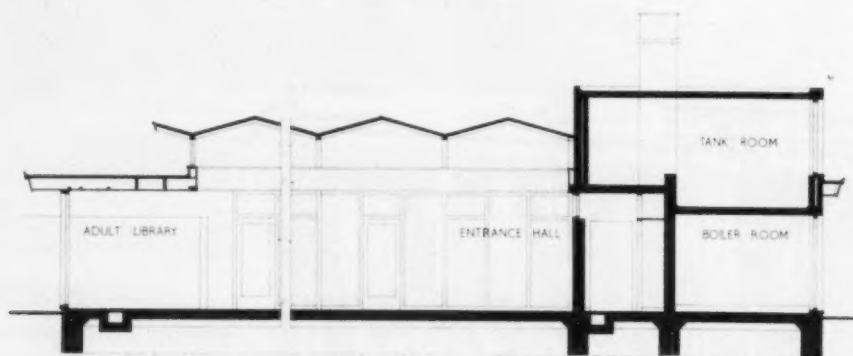
6 1

STRUCTURAL ELEMENTS

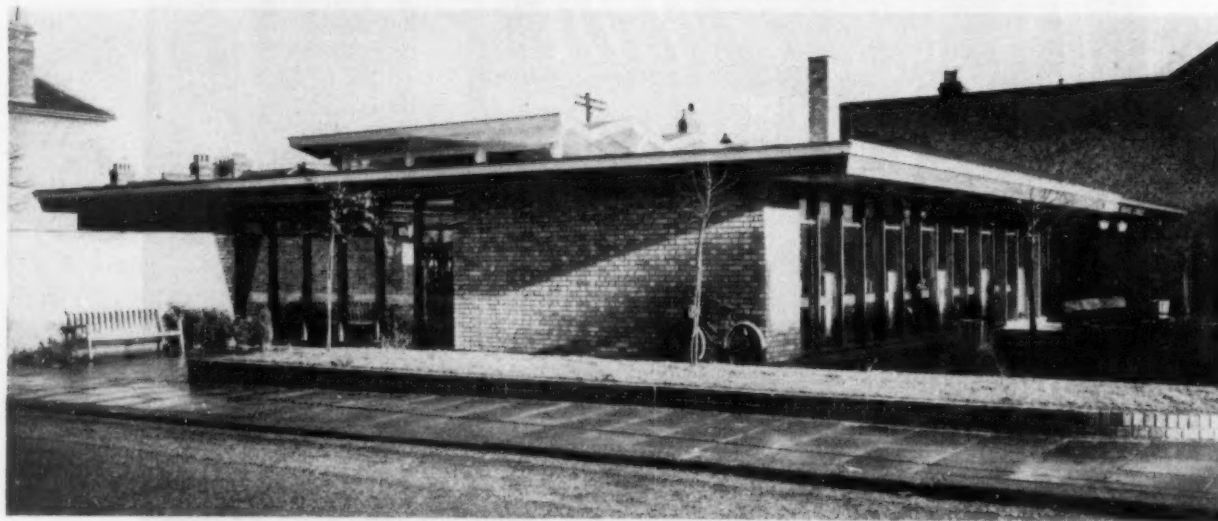
Frame

Central adult library area has a steel framework

2 2 1/2



West-east section
[Scale: 1/8" = 1' 0"]



View from south-west, showing clerestory over adult library



South-north section
[Scale: 1/8" = 1' 0"]



The adult library, looking towards the issue desk

composed of box stanchions (not encased in concrete). Rolled steel joists and lattice girders.

Upper floors

6-in. reinforced concrete suspended floor to tank room: 16 sq. yds., 42s. 6d. per sq. yd.

Roof

Central adult library area: pitched roof of 4 in. × 2 in. rafters with 2-in. compressed straw slab covered with 3-ply roofing felt: 153 sq. yds., 58s. 6d. per sq. yd.

General library area: 10 in. × 3 in. and 10 in. × 2 in. combined flat roof and ceiling joists with 2-in. compressed straw slab covered with two coats asphalt: 432 sq. yds., 72s. 9d. per sq. yd.

Tank room: 4-in. reinforced concrete suspended flat roof covered with 1-in. cement and sand screed and two coats asphalt: 15 sq. yds., 70s. 1½d. per sq. yd.

Rooflights

¼-in. opal plastic rectangular domelights with aluminium hit and miss ventilating kerb: three 46 in. × 46 in., one 46 in. × 34 in., £16 7s. 3d. per sq. yd.

Staircase

None: access to tank room by ordinary wood ladder.

External walls

Staff and workroom: 11-in. hollow wall of two brick skins, outer skin faced with Leicestershire buff rustic facing bricks.

General library: mainly mullioned walling composed of iroko head and sill with mullions at 3-ft. centres. Mullioned walling filled in with clear cavity ply glass composed of 24-oz. and 32-oz. glass as necessary. Cost includes 4 single and 1 pair double doors.

Type of wall	Area in sq. yd.	Cost per sq. yd.
11-in. hollow wall	128	80s. 3d.
Mullioned walling	140	162s. 0d.

Windows

Cost includes metal windows in wood sub-frames to workroom, also metal clerestory windows.

Area of openings 88 sq. ft., cost 66s. 4d. per sq. ft.

External doors

(Doors in mullioned wall included under External Walls).

2 pairs double doors to tank room and boiler room: 2-in. wrought softwood, framed, ledged and braced: 70 sq. ft., 14s. 10d. per sq. ft.

Single door to staff entrance: 2-in. wrought softwood with glass panel: 18 sq. ft., 13s. 4d. per sq. ft.

building study—2nd series



View from the reference library towards the children's section

Children's library on the south side of the building (right)



Partitions

2 6½

9-in. brick faced one side: 105 sq. yds.,
55s. 3d. per sq. yd.
4½-in. brick: 30 sq. yds., 23s. 4d. per sq. yd.
Borrowed lights, iroko framing with glass: 81 sq. ft.,
9s. 7d. per sq. ft.
Part-glazed screens: 350 sq. ft., 8s. 10½d. per sq. ft.

Internal doors

3½

13 single doors.
1½-in. plywood faced both sides, frames, linings,
etc., to BS 459: 172 sq. ft., 16s. 1d. per sq. ft.

Ironmongery

1 4½

Satin nickel bronze finish.

Total of structural elements: 26s 4d

FINISHES AND FITTINGS

Wall finishes

5½

Render and set on walls: 234 sq. yds., 8s. 2½d.
per sq. yd. (Note: The low cost of this element is
caused by use of mullioned walling and internal
facings in main library.)
Plaster in staff quarters.

Floor finishes

4 3½

Vinyl-asbestos tiling with screed: 85 sq. yds., 40s.
per sq. yd.
Cork tile with screed: 337 sq. yds., 44s. 0½d. per
sq. yd.
Granolithic: 8 sq. yds., 25s. 0d. per sq. yd.
Cement and sand paving: 12 sq. yds., 6s. 8d. per
sq. yd.
(Cost of all items but last includes skirtings.)

Ceiling finishes

1 9½

½-in. plaster-board soffit in staff quarters:
89 sq. yds., 8s. 1d. per sq. yd.

$\frac{3}{4}$ -in. acoustic tiles to flat roof portion: 249 sq. yds.,
22s. 6d. per sq. yd.
 $\frac{1}{2}$ -in. wrought softwood tongued and grooved.
V-jointed boarding to pitched roof area: 106 sq. yds.,
13s. 2 $\frac{1}{2}$ d. per sq. yd.

Decorations

Ceilings and wall, two-coat eggshell emulsion paint.
Woodwork and metalwork generally, three-coat oil paint.
Iroko framing to mullioned walling and screens,
one coat wood preserver and two coats thermo-
plastic paint internally, one coat wood preserver and
four coats thermo-plastic externally.

Fittings

33 tiers book shelving and two index desks, £2,800.
Wrought shelving for workroom: 74 ft., 14s. 7d.
per ft. run.
Plastic letters and numerals.
Large U-shaped issue desk.
Enquiry desk.
Work desks.

Total of finishes and fittings: 22s 5d

SERVICES**Sanitary fittings**

Type of fitting	No. of each type
White china lavatory basins	2
White china low-level w.c. suites	2
Stainless steel combined sink and single d.ainer	1
White enamelled w.c. fittings	2

Waste, soil and overflow pipes

Copper waste and overflow pipes.
Cast iron ventilating pipe to w.c.

Cold water services

40-gallon nominal capacity galvanised mild steel storage cistern to BS 417 No. C6 grade A; coated internally with non-toxic bituminous paint. Insulated with compressed straw slab.
Copper rising main and services.
Builder's work.
5 draw-off points.

Hot water services

60-gallon mild steel cold feed and expansion tank, grade A, coated internally with non-toxic bituminous paint.
(Cost of tank and immersion heater included in Heating and Electrical services.)
3 draw-off points.

Heating

Pumped low pressure hot water forced warm air radiators, oil-fired boiler.
Builder's work includes tank and boilerhouse bases, heater cabinets.
Heat load: 271,700 B.t.u.s per hour.

Ventilation

(Fans, etc. included with Electrical services, other work with Heating.)

Electrical services

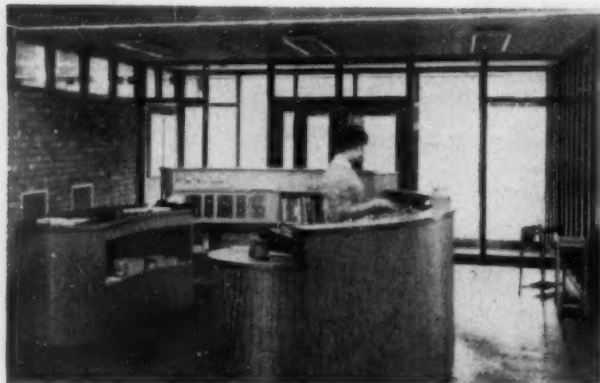
Cost includes service main and immersion heater.

Type of point	No. of each type
Lighting	38
Fan	2
Buzzer	1
Clock	3
Fluorescent light	52
Flush light	12
Power	18
Cooker	1



The shelf-lined workroom has clerestory windows

building study—2nd series



Main entrance, and issue desk from which heating, lighting and ventilation are controlled

Total load: 22 k.w.

Builder's work 8½

Special services 2½

Builder's work

Fire-fighting equipment (e.g. run through continuous hose reel).

Work in connection with telephone installation.

Drainage 2 3

Separate soil and surface water drainage

Total of services: 19s. 1½d.

External works 14 3½

Blue brindle brick paving laid basket pattern on 3-in. bed of concrete.

Flower beds.

Cycle racks.

Screen walls.

Gates.

Forecourt seating.

Drainage connections to sewer.

Total per sq. ft. of floor area:

£16,330 (net cost excluding external works)
4,365 sq. ft. (measured inside external walls) = 74 1½

COST COMMENT

This analysis makes an interesting cost comparison with the library at Beaconsfield (*AY*, July 25, 1957). Both are compact branch libraries consisting mainly of lending departments, and each has a small reference section.

Element group	Beaconsfield Area: 3,024 sq. ft. Tender date: Oct. 1955	Westcliff Area: 4,365 sq. ft. Tender date: Nov. 1958
Preliminaries	1s. 1½d.	0s. 2½d.
Contingencies	3s. 4d.	—
Foundations	5s. 0½d.	6s. 1d.
Structure	33s. 2½d.	26s. 4d.
Finishes and fittings	22s. 4½d.	22s. 5d.
Services	12s. 9½d.	19s. 1½d.
Total net cost per sq. ft.	77s. 10½d.	74s. 1½d.

To make a sharper overall comparison account must be taken of a rise of about 4 per cent in building costs between

tender dates. However, contingencies at Beaconsfield may or may not have been used and as this sum approximately equals the rise in building costs for the purpose of this comparison, the costs per sq. ft. can stand at 77s. 10½d. and 74s. 1½d.

The main differences lie in the structural group of elements and the services.

Within the structural group there is a difference of 6s. 0d. per sq. ft. floor area in the external walling cost. The ratio of external walling area to floor area can be gleaned from each analysis and is shown in the table below.

Library	Walling area in sq. ft.	Floor area in sq. ft.	Ratio	Cost per sq. ft. floor area	Average unit cost per sq. ft.
Beaconsfield	—*	3,024	1.05	16s. 11d.	16s. 11d.
Westcliff	2,588	4,365	0.6	10s. 11d.	18s. 2½d.

* Not specifically given in the analysis, but with a ratio of 1.05 it would be approximately 3,175 sq. ft.

The first reaction is to assume a more complex plan-shape at Beaconsfield, but actually both buildings are rectangular with a small projection for a work-room. The difference in ratio lies in the respective wall heights, a factor often overlooked when concentrating on overall costs per sq. ft. Beaconsfield has a 14 ft. 2 in. internal wall height with end gable walls: Westcliff is 8 ft. 6 in. at low level with clerestory over central adult library only and no gable walls. From the table above it can be seen that although the cost per sq. ft. floor area was 6s. 0d. lower at Westcliff, the average unit cost of the external walls was in fact 1s. 3d. per sq. ft. more expensive.

The difference in the services is due mainly to different approaches to the heating problem. Beaconsfield has electrical floor heating (4s. 0½d. per sq. ft. of floor area), Westcliff has low pressure hot water, radiators and warm air cabinets, oil-fired boiler and flue (8s. 1d. per sq. ft. of floor area). (It would be useful to study these two schemes in relation to capital cost, running costs, efficiency, user comments, etc.)

Unfortunately, the level of lighting to achieve Westcliff's 7s. 9½d. per sq. ft. of floor area is not given. Beaconsfield's 6s. 3½d. per sq. ft. of floor area seemed a high standard but their list of fittings (at 1 per 74 sq. ft.) appears meagre against Westcliff's (1 per 42 sq. ft.). And what does one do with 18 power points in a library?

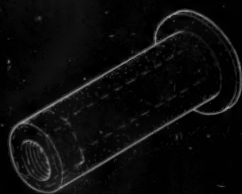
Having commented on the differences in these two analyses, it is pertinent to draw attention to the close similarity in the Finishes and Fittings section; the Fittings especially are almost identical at 13s. 10½d. and 13s. 10d. per sq. ft. of floor area. Coincidence or a recognisable trend?

CONTRACTORS

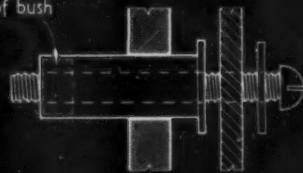
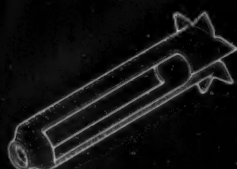
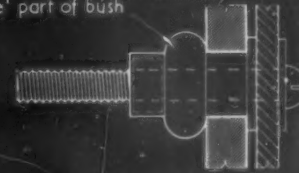
General: Hosking & Son (Essex) Ltd. Sub-contractors and suppliers—Cork tile flooring: Philip Flooring Co. Ltd. Bituminous felt roofing: Webbs Asphalte Roofing & Flooring Co. Ltd. Furniture: George E. Hammer & Co. Ltd. Lettering and letter-box backing: Falconcraft Ltd. Steelwork: Hotchkiss Ltd. Metal windows: James Gibbons Ltd. Fire-fighting equipment: George Angus & Co. Ltd. Heating and ventilation: The Watkin Heating Co. Ltd. Electrical installation: Rayford Electric Co. Ltd. Wrought iron gates: Hill & Smith. Ironmongery: Standard Range & Foundry Co. Ltd.

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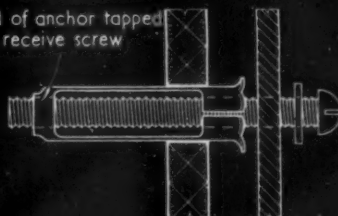
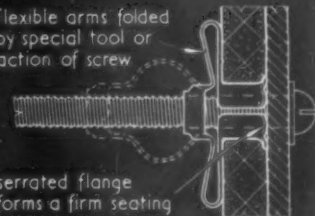
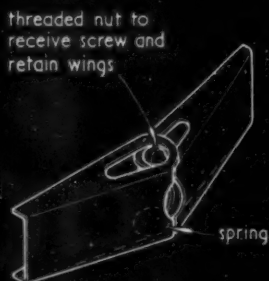
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RAWLNUT.

threaded nut moulded
into end of bushaction of screw compresses
'free' part of bush

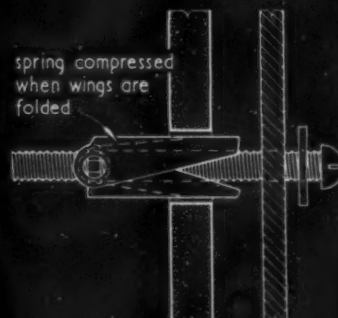
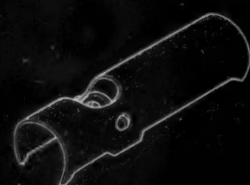
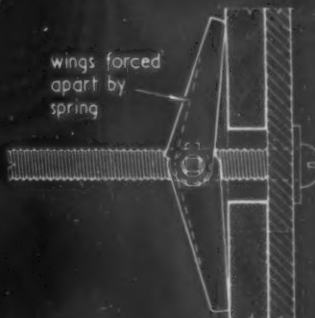
RAWLANCHOR.

end of anchor tapped
to receive screwflexible arms folded
by special tool or
action of screwserrated flange
forms a firm seating

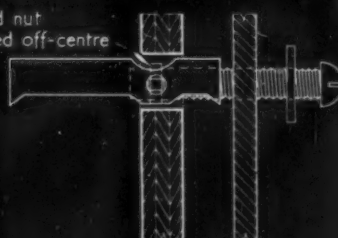
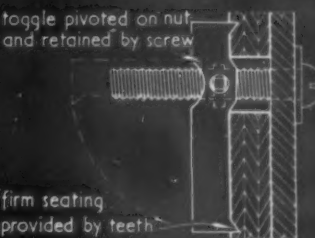
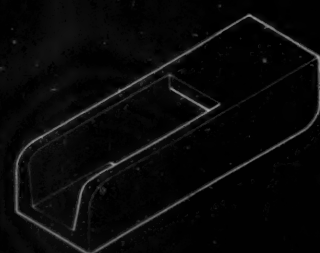
SPRING TOGGLE.

threaded nut to
receive screw and
retain wings

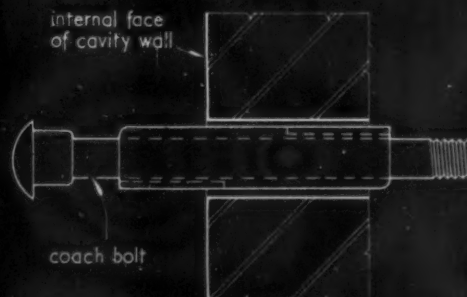
spring

spring compressed
when wings are
foldedwings forced
apart by
spring

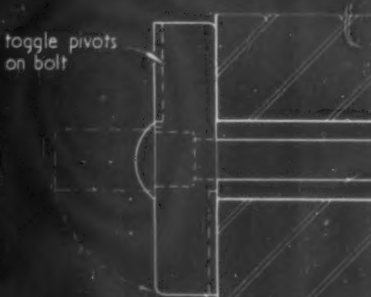
GRAVITY TOGGLE.

threaded nut
positioned off-centretoggle pivoted on nut
and retained by screwfirm seating
provided by teeth

HEAVY-DUTY GRAVITY TOGGLE.

internal face
of cavity wall

coach bolt

toggle pivots
on bolt

26.J1 ·RAWLPLUG· CAVITY FIXING DEVICES

This Sheet describes cavity fixing devices for varying applications. The drawings on the face show the appearance of the fixing component in isometric projection without the screw or bolt and the sections illustrate the fixing process in each case.

Rawlnut

A Rawlnut consists of a tough rubber bush of special composition with a flange at one end and a brass nut bonded into the other. When the Rawlnut has been inserted through a hole in the thickness of the material, the action of tightening the screw causes the rubber to be drawn against the reverse face of the material forming a thickened head as shown: where the material is thicker than the length of the Rawlnut, the effect is to make the rubber grip the sides of the hole. A sealed-end type is available in which the screw is completely enclosed to protect it from corrosion.

The Rawlnut is usually supplied in high-durability natural rubber composition, but oil-resisting Neoprene or non-silver-staining rubber (NS) can be specified.

Sizes: Rawlnuts are available in sizes to take screws from 4 BA to $\frac{1}{2}$ in. In addition to the standard threads supplied, special threads can be obtained: the manufacturer should be consulted for details.

Applications: Rawlnuts provide a stable fixing that is airtight, waterproof, sound-resisting, and electrically insulates the screw from the material into which it is fixed. They can be used on any thin or hollow material irrespective of surface contour, e.g. tubes, curved framing, etc. When fixing to hollow building blocks, should the drill strike one of the webs of the block, the rubber bush of the Rawlnut will adjust itself to the shape of the hole, the fixing being unimpaired.

Rawlanchor

A Rawlanchor is of metal as shown with a thread at one end and a serrated flange at the other. The two connecting strips of metal collapse when the screw is tightened to form two wings on the reverse of the material. A special tool is available from the manufacturer for collapsing the Rawlanchors where a large number are to be fitted. The tool inserts and collapses the Rawlanchors and the screws can be subsequently inserted: it can accommodate all sizes of Rawlanchor by means of an interchangeable attachment.

Sizes: Rawlanchors are available in sizes to suit $\frac{1}{8}$ in., $\frac{3}{16}$ in. and $\frac{1}{4}$ in. screws.

Applications: Rawlanchors are particularly suitable for fixing to soft wallboards as the serrated flange embeds itself in the material and grips it firmly.

Spring Toggle

This device is made of metal and the wings are held apart by a wire spring. They are pressed together for passing through the fixing hole and spring apart on the other side. The article to be fixed should be placed on the screw before the toggle is inserted in the fixing hole.

Sizes: The toggles are available in three sizes to take $\frac{1}{8}$ in., $\frac{3}{16}$ in. and $\frac{1}{4}$ in. screws: they can be supplied with or without screws.

Applications: Spring toggles are suitable for fixing to any type of material, but are particularly effective when used with materials of low structural strength, such as plasterboard or lath and plaster, as the span of the wings spreads the load over a wide area. In the case of lath and plaster the wings of the toggle should rest on the laths.

Gravity Toggle

The metal toggle is pivoted on a nut off-centre, as shown. It is inserted horizontally through the fixing hole and when it is clear of the hole the long end drops against the reverse side of the material. When the screw is tightened, a firm hold is provided: the article to be fixed should be placed on the screw and the toggle threaded about two turns onto the screw before the toggle is inserted in the fixing hole.

Sizes: The toggles are available in three sizes to take $\frac{1}{8}$ in., $\frac{3}{16}$ in. and $\frac{1}{4}$ in. screws.

Applications: Gravity toggles are especially suitable for fixing to woodwool slabs, fibreboard, plasterboard and other materials where it is desirable to spread the load.

Heavy Duty Gravity Toggle

This device works on a similar principle to the gravity toggle previously described except that it is of heavier construction and is used with a coach bolt, as shown.

Sizes: The toggles are available in six sizes to take coach bolts $\frac{1}{4}$ in., $\frac{5}{16}$ in., $\frac{3}{8}$ in., $\frac{1}{2}$ in., $\frac{5}{8}$ in. and $\frac{3}{4}$ in. in diameter.

Applications: These devices are appropriate for fixing to $4\frac{1}{2}$ in. brickwork in cavity wall constructions where heavy loads, like cable racks, are to be carried.

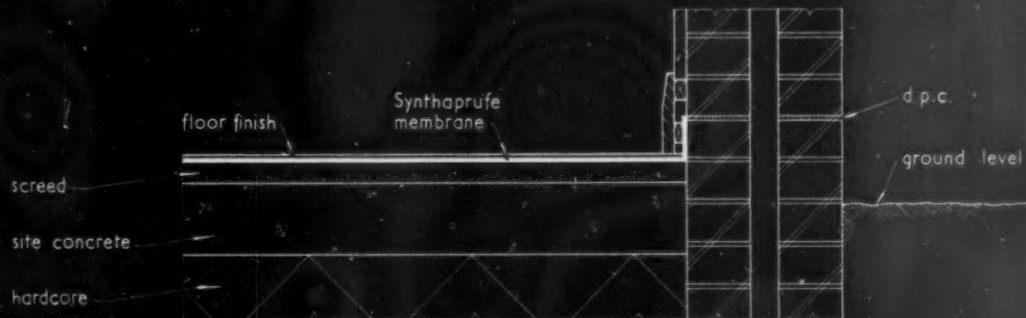
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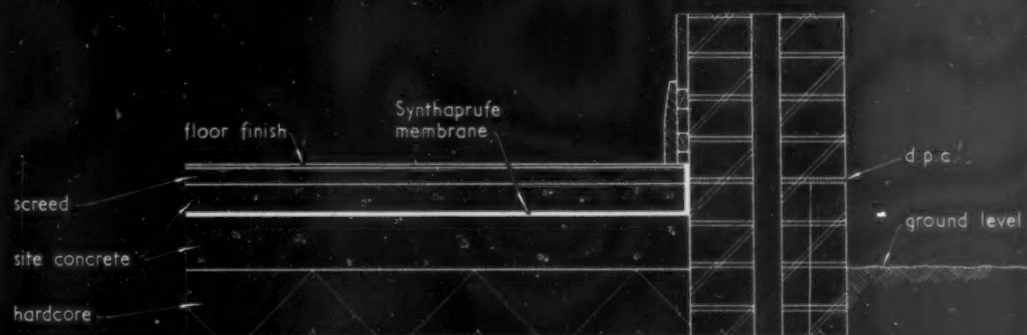
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ANTI-WATER-PENETRATION TREATMENTS | BITUMINOUS EMULSION 40.C3

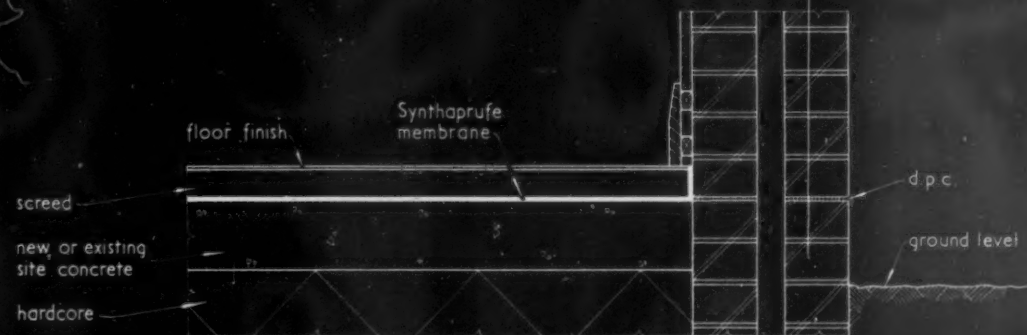
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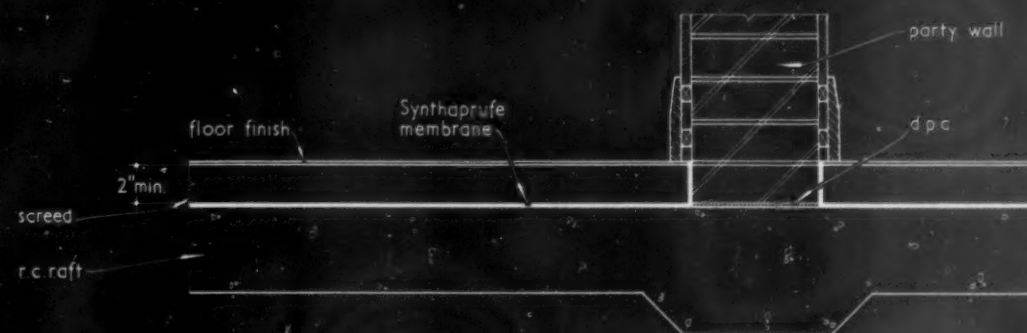
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SANDWICH MEMBRANE SCREED NOT LESS THAN 2" THICK.



SANDWICH MEMBRANE R.C. RAFT CONSTRUCTION.

SYNTHAPRUF: BITUMINOUS RUBBER EMULSION DAMP-PROOFING OF FLOORS.
 Manufacturer: National Coal Board (South Western Division)

40.C3 ·SYNTHAPRUF· BITUMINOUS RUBBER EMULSION: DAMP-PROOFING OF FLOORS

This Sheet describes Synthaprufe bituminous compound with particular application to the waterproofing of floors.

Material

Synthaprufe is a bituminous emulsion made from the by-products of coal and contains a high percentage of rubber. Applied to any smooth surface, it sets rapidly and forms a tough, black, elastic film which is impervious to moisture. The film can be stretched to double its length and will return to its original size. It has excellent adhesive properties and can be used to bond many different materials to various surfaces.

It should not normally be exposed to temperatures above 165° F.: when used as a sandwich membrane in concrete sub-floors for domestic loading, 130° F. should not be exceeded and for industrial floors supporting heavier loads, 110° F. is the safe maximum. Dry Synthaprufe is unaffected by frost but it will damage a coat that is not completely dry. At room temperature Synthaprufe is resistant to common dilute organic acids (up to 10 per cent strength), dilute alkalis and many inorganic salts. It should not be allowed to come in contact with oils.

Application

Synthaprufe is applied cold: on a warm, dry day three coats can often be laid in four hours: on colder, more humid days, several hours' drying time may be needed between coats. It turns black as it becomes tacky.

Although it may be diluted for use as a priming coat it must on no account be diluted when used for waterproofing or as an adhesive.

For waterproofing floors, the first coat of Synthaprufe should be applied at 6 sq. yd. per gallon and the second coat at 8 sq. yd. per gallon.

Waterproofing Existing Floors

There are two methods of waterproofing existing floors, depending on the construction of the floor and the degree of dampness to be counteracted. The first, surface treatment, is only possible where there is good hardcore beneath and the site is fairly dry. The second, that of providing a sandwich membrane, is necessary where conditions are less favourable.

Surface treatment: The floor should be very thoroughly cleaned by lightly damping and carefully brushing to remove all dirt. A priming coat, consisting of one part Synthaprufe to six parts water should then be applied. When this is dry, two coats of Synthaprufe should be applied, allowing ample time for each coat to dry before applying the next. Linoleum or wood blocks may be laid over the dried film, with Synthaprufe, in the usual way.

Sandwich membrane: The floor should be cleaned as before, but a priming coat is not necessary. Two coats of Synthaprufe should be spread evenly over the surface, each coat being allowed to dry before applying the next. The final coat should be blinded with sharp sand when tacky. A concrete screed 2 in.

thick should then be laid over this and levelled to take the floor finish.

Waterproofing New Floors

With new floors that are to be waterproofed during construction, the base concrete should be brought to a reasonably smooth finish and when it has set, the Synthaprufe applied as for existing floors. When the Synthaprufe is dry, the finishing screed should be applied, to a minimum depth of 2 in. Alternatively, the base concrete can be laid to half its ultimate thickness and finished smooth; when it has set, two coats of Synthaprufe should be spread evenly over the surface, the first coat being allowed to dry thoroughly before the second is applied. While the final coat is still tacky, it should be blinded with clean, sharp sand to give a key for the final layer of concrete which should be at least 2 in. thick and completes the full thickness of the floor slab. The Synthaprufe should be taken 2 in. up the walls or joined to the existing d.p.c.

Laying Floor Finishes

Synthaprufe can be used for bonding floor finishes. New concrete should be given ample time to dry before the floor finish is applied. When rising damp in existing floors is suspected, treatment as previously recommended should be carried out.

Linoleum: The linoleum should be laid out and given time to stretch if necessary before fixing. Before the Synthaprufe is applied, the floor surface should be lightly damped and well brushed to remove dirt: the damping facilitates sweeping. A priming coat of six parts water to one part Synthaprufe should next be applied. The linoleum, which is spread in position, should then be rolled back half way and Synthaprufe poured onto the floor (1 gallon to 8 sq. yd.). It should then be spread evenly over the surface with a brush and left until tacky. The linoleum should then be pressed down into place and the other half rolled back and the process repeated. The linoleum should then be pressed down all over with a hand roller ensuring that there are no air pockets. Any Synthaprufe spilt on the linoleum should be wiped off immediately with a clean damp cloth. Good ventilation should be provided while the work is being carried out.

Wood blocks: The surface to take the blocks should be perfectly level. After cleaning, a priming coat of six parts water to one part Synthaprufe should be applied. Each block should then be separately dipped in a shallow receptacle of Synthaprufe and placed directly on the priming coat. Alternatively, Synthaprufe can be spread on the floor (1 gallon to 5 sq. yd.) and the blocks placed in position.

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National Coal Board (South Western Division)

Marketing Department (By-products)

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working detail

FURNITURE AND FITTINGS: 103

STORAGE FITTING: OFFICES IN LONDON, E.C.3

Brian Drury, architect

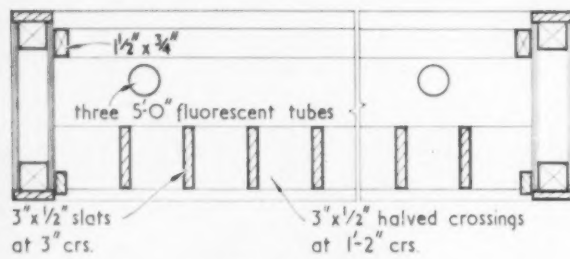


This is a simple example of new joinery work in an existing office. With the exception of the cupboards and surrounds at lower level all exposed timber is polished sapele mahogany and guboon-faced plywood also polished. The painted cupboard doors are finished white and battle-ship grey alternately.

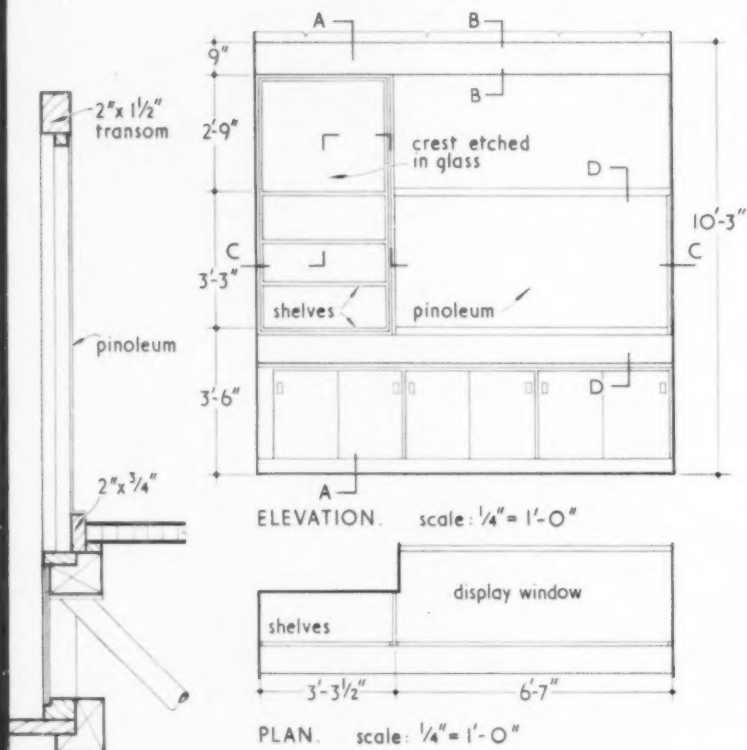
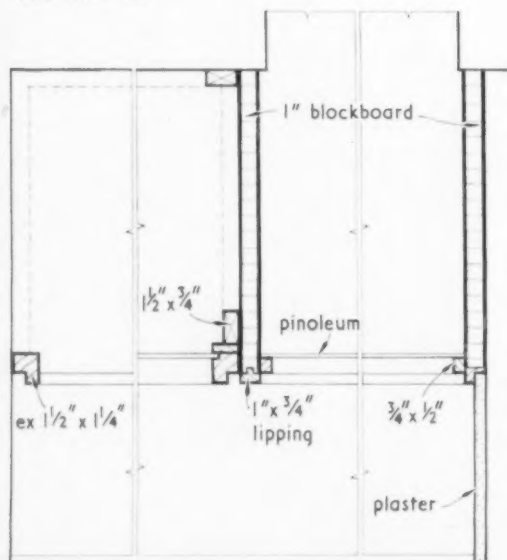
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STORAGE FITTING: OFFICES IN LONDON, E.C.3

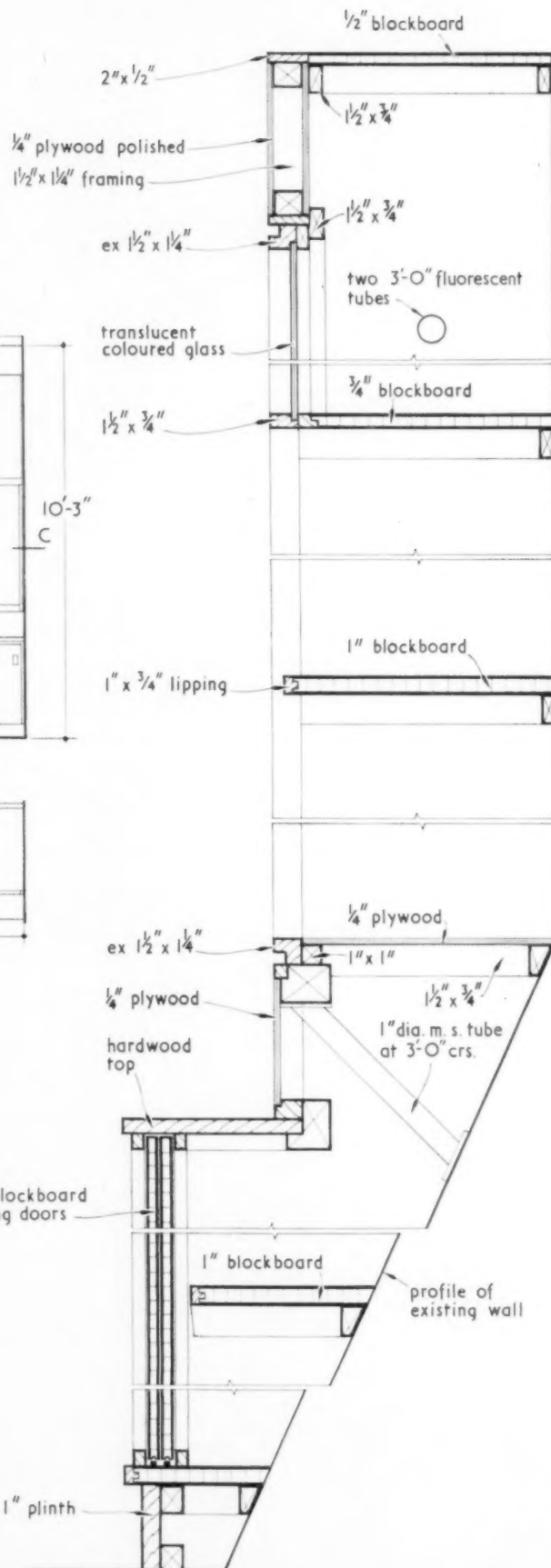
Brian Drury, architect



SECTION B-B scale 1/8 full size

SECTION D-D.
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PLAN AT C-C. scale 1/8 full size



SECTION A-A. scale 1/8 full size

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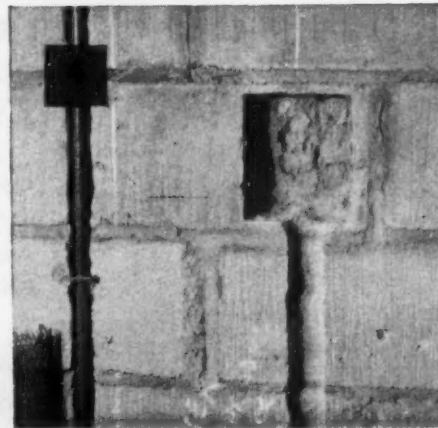
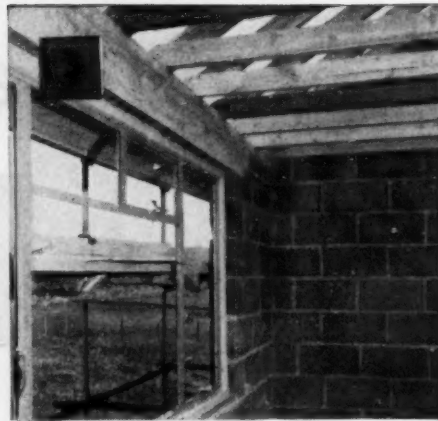
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Load Bearing: Inner Leaf.

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Load Bearing: Eaves Level.

This internal view shows the 6" Thermalite solid wall carrying lintel, roof plate and roofing members.

Load Bearing: Front Face.

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Announcements

PROFESSIONAL

A study tour to Germany is being arranged for British architects and townplanners from April 23 to 29, 1961.

The Department of Extra-mural Studies of the University of Birmingham is conducting a study tour of churches in Germany, Switzerland and France from April 27 to May 10, 1961. Apply to the Department of Extra-mural Studies, the University, Edgbaston, Birmingham 15

Harry Finlay, A.R.I.C.S., chartered quantity surveyor, has moved his office to Fenwick House, 289 293, High Holborn, London, W.C.1. (Telephone: CHAncery 4888, unaltered.)

Walter G. Palmer, D.F.C., A.R.I.B.A., has now commenced practice under the title of Walter G. Palmer & Associates at 1, Spring Crescent, Portwood, Southampton. J. F. Goulty, A.R.I.B.A., Dip.Arch., J. B. Holt, A.R.I.B.A., and P. Kilby, Dip.Arch., A.R.I.B.A., have been taken into the practice.

Clifford Tee & Gale, chartered architects have moved to 5, Eccleston Street, London, S.W.1. (Telephone: SLOane 9633.)

Peter Milne, A.R.I.B.A., Dip.Arch., has changed his address to Old Kennel Cottage, Lingfield Road, Felcourt, near East Grinstead, Sussex (telephone Dormans Park 446).

Wood & Kendrick & Williams, F.R.I.B.A., announce that W. B. R. Ellender, A.R.I.B.A., Dip. Arch., and C. Horsley, B.A., A.R.I.B.A., have become associates of the firm which will continue to practise under the same name, at the present address of 57, Colmore Row, Birmingham, 3. A branch office has been opened at Norwich Union Building, 38, Park Row, Leeds, under the control of E. Gell, A.R.I.B.A., Dip.Arch.

The Borough of Colchester have set up an independent architectural department under the direction of the Borough Architect, Vinton Hall, A.R.I.B.A., A.M.T.P.I., at 64, West Stockwell Street, Colchester, to which address all future correspondence and trade literature should be sent.

Sir John Burnet, Tait, Wilson & Partners have opened offices in Sydney and Melbourne, Australia, under the control of Sidney E. Smith, B.Arch., A.R.A.I.A., and Walter Gherardin, A.R.A.I.A., A.R.I.B.A., respectively. Addresses: A.M.P. Building, 50, Miller Street, N. Sydney, N.S.W. and 409, St. Kilda Road, Melbourne, S.E.2., Victoria.

Covell, Matthews & Partners, F.R.I.B.A., A.M.T.P.I., have opened a branch office in Karachi, P.O. Box No. 4985.

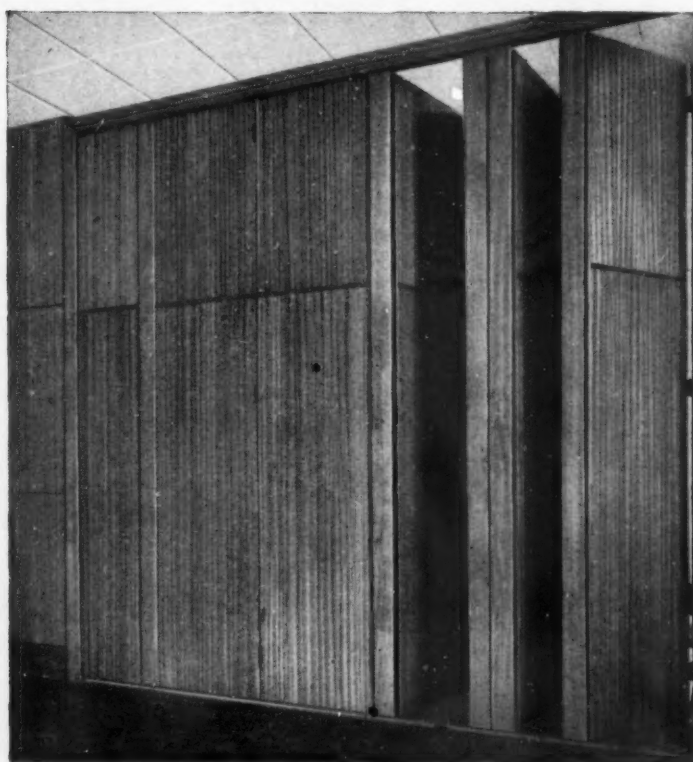
F. B. Swainston, Dip.Arch., A.R.I.B.A., has commenced private practice at Martins Bank Chambers, 28-32, Albert Road, Middlesbrough, where he will receive trade literature.

Locke, Son & Newcombe have appointed Arthur H. W. Mold, A.R.I.B.A., area architect in charge of their Dartmouth office at 7, Hauley Road, Dartmouth. (Telephone: Dartmouth 383.)

The City office of William Holford & Partners has moved to Adelaide House, London Bridge, E.C.4. (Telephone: MINcing Lane 7387-7388.)

Freeman & Lockyer, Old Bank Chambers, High Street, Bracknell, have opened a branch office at 6, Market Place, Reading, in charge of Mr. Lockyer.

Kenneth Nealon, F.R.I.B.A., F.R.I.C.S., and Ivor J. Tenner, D.F.C., A.R.I.B.A., have taken into partnership J. W. W. Leask, A.A.Dipl., A.R.I.B.A., and C. Marsden-Smedley, B.A. (Arch.), A.R.I.B.A. The partnership will be known as Kenneth Nealon, Tanner & Partners.



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Announcements continued

Baker & Wilkins, chartered quantity surveyors, have removed from 143, Cannon Street, E.C.4, to 141-142, Fenchurch Street, E.C.3. Telephone number remains MANSion House 5500.

John F. Phillips, dip.arch.(Birm.), A.R.I.B.A., has moved his head office to 36, New Street, West Bromwich (telephone 2315-6). He has taken Derek Cutler, A.R.I.B.A., into associate partnership and the firm will now be known as John F. Phillips & Associates. The Walsall office will remain as before, 324A, Birmingham Road, Walsall (telephone 28329).

Malcolm Peck, Roberts & Associates, chartered architects, have taken into associate partnership K. M. Smith, A.R.I.B.A., and V. J. Thurgood, A.R.I.B.A. Mr. Thurgood will be in charge of the Woking office at 47, Goldsworth Road.

Ronald Stanley, A.R.I.B.A., has been appointed a partner in the firm of Ruddell & Wilkinson, chartered architects, of Peterborough. He will remain in charge of the branch at Spalding.

Wakeman, Trower & Partners, quantity surveyors, of St. Paul's House, St. Paul's Street, Leeds 1, announce that D. J. Shepherd, A.R.I.C.S., has left the partnership.

The Committee of the Architects' Benevolent Society wish to thank all those who supported the 1960 ball, particularly Scaffolding (Great Britain) Ltd., who provided and erected the side shows divisions; Marley Tile Co. Ltd., for their gifts for the bottle tombola and Vitrextex Ltd., for providing the paint for the splendid décor by the students of the schools of architecture.

Sydney Shine, A.R.I.C.S., chartered quantity surveyor, has started in private practice at 2, Southampton Place, London, W.C.1. (Telephone: HOLborn 5052/3.)

Wakeman, Trower & Partners, quantity surveyors, of 47, Bloomsbury Square, London, W.C.1, announce that W. E. Bottomley, F.R.I.C.S., has left the partnership.

Howard, Fairbairn & Partners, have moved their offices to Mercury House, 195, Knightsbridge, London, S.W.1 (telephone Knightsbridge 3731).

TRADE

THM Partners is now to be called Tandy, Halford & Mills Ltd.

The sales department of G. A. Harvey & Co. (London) Ltd., is operating from Villiers House, Strand, W.C.2 (telephone: WHitehall 9931/7), but correspondence relating to advertising should be sent to Woolwich Road, London, S.E.7.

Matthew Hall & Co. Ltd., have moved their London offices to Matthew Hall House, 101-108, Tottenham Court Road, W.1. (Telephone: MUSEum 3676.)

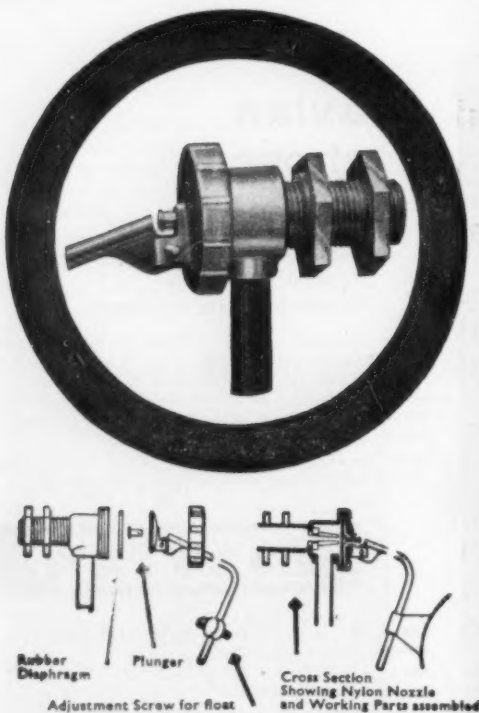
A. B. Read, R.D.I., has rejoined Troughton & Young (Lighting) Ltd. as design consultant. He will also continue his association with Carter & Co. Ltd. in a consulting capacity.

The London Ferro-Concrete Co. Ltd., have opened an office at 49A, Warwick Street, Leamington Spa.

Robert Mack has taken up the post of senior representative of Concrete (Northern) Ltd., in Manchester.

Blaw Knox have moved their head office to Thorn House, Upper St. Martin's Lane, London, W.C.2. (TEMPle Bar 0381/6). Their administrative offices are at Short's Way, Rochester, Kent. (Telephone: CHatham 41041); and service and spares department is at Bushey Mill Lane, Watford, Herts. (Telephone: WATford 29291.)

The British Xylonite Group have moved to new offices and showrooms at 27, Blandford Street, London, W.1 (telephone WELbeck 9211).



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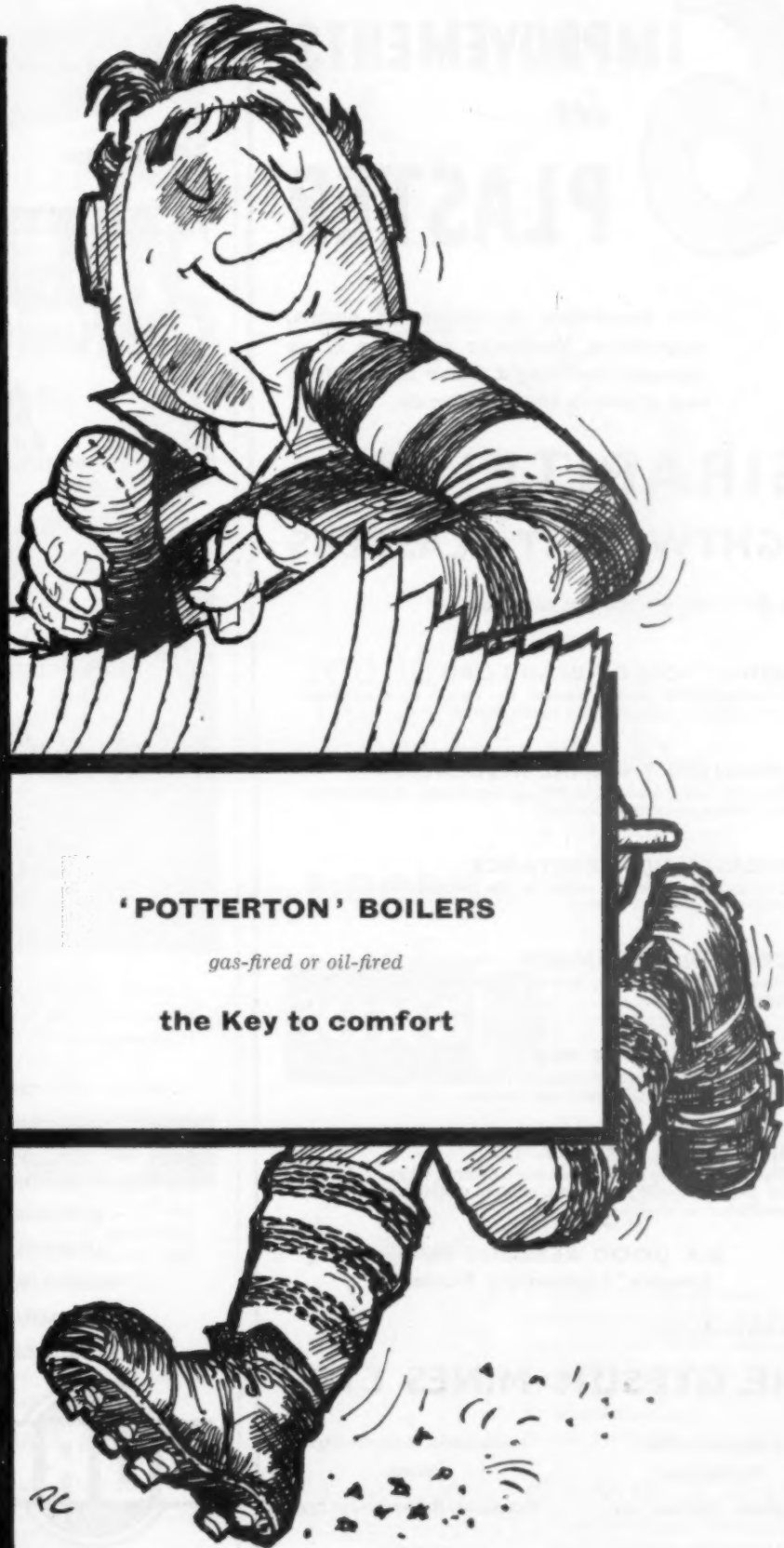
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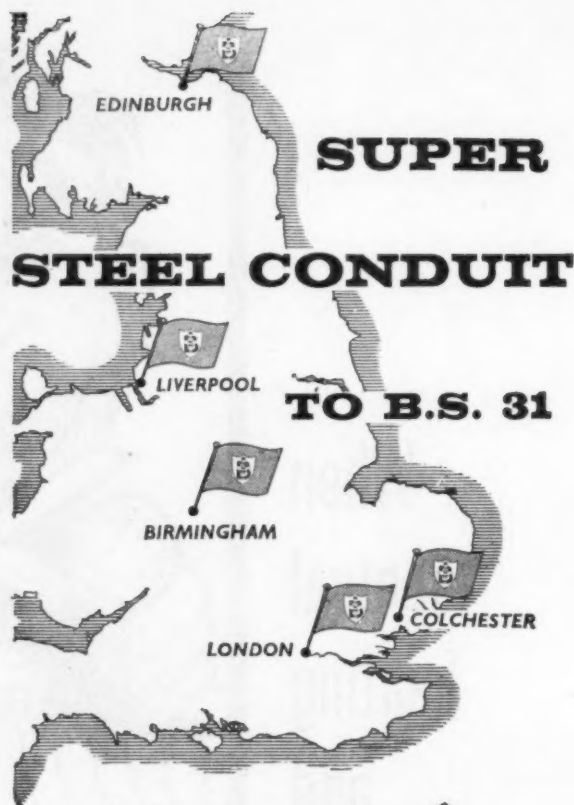
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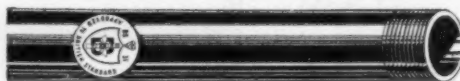
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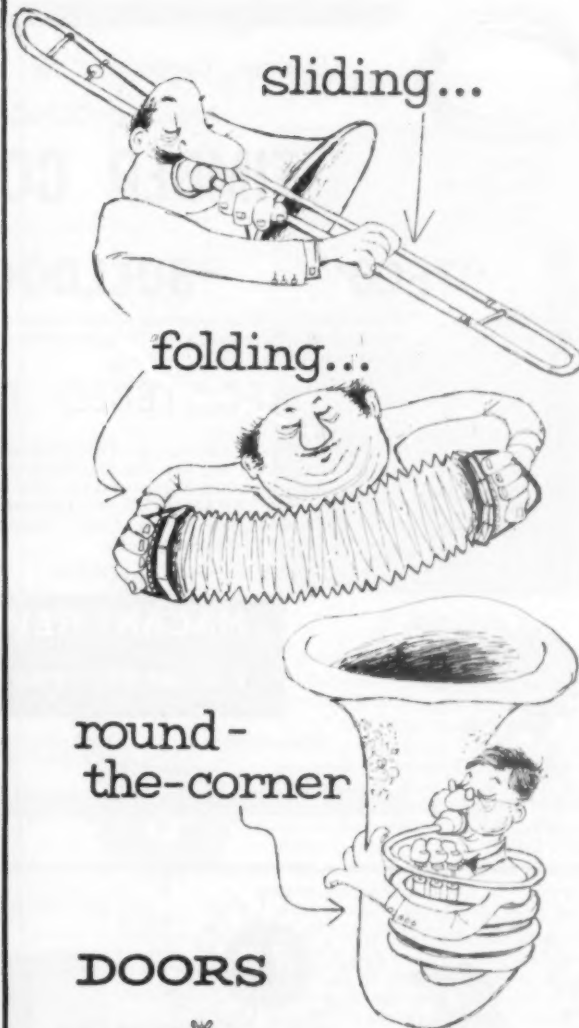


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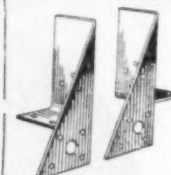
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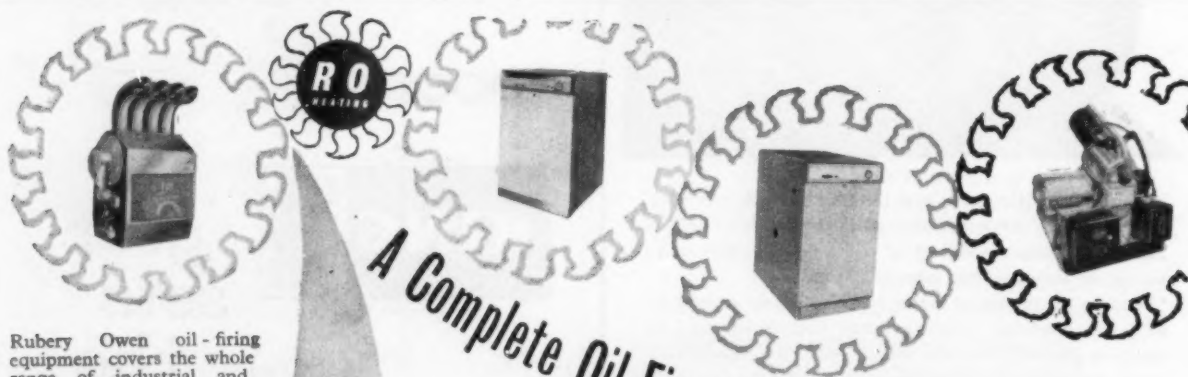
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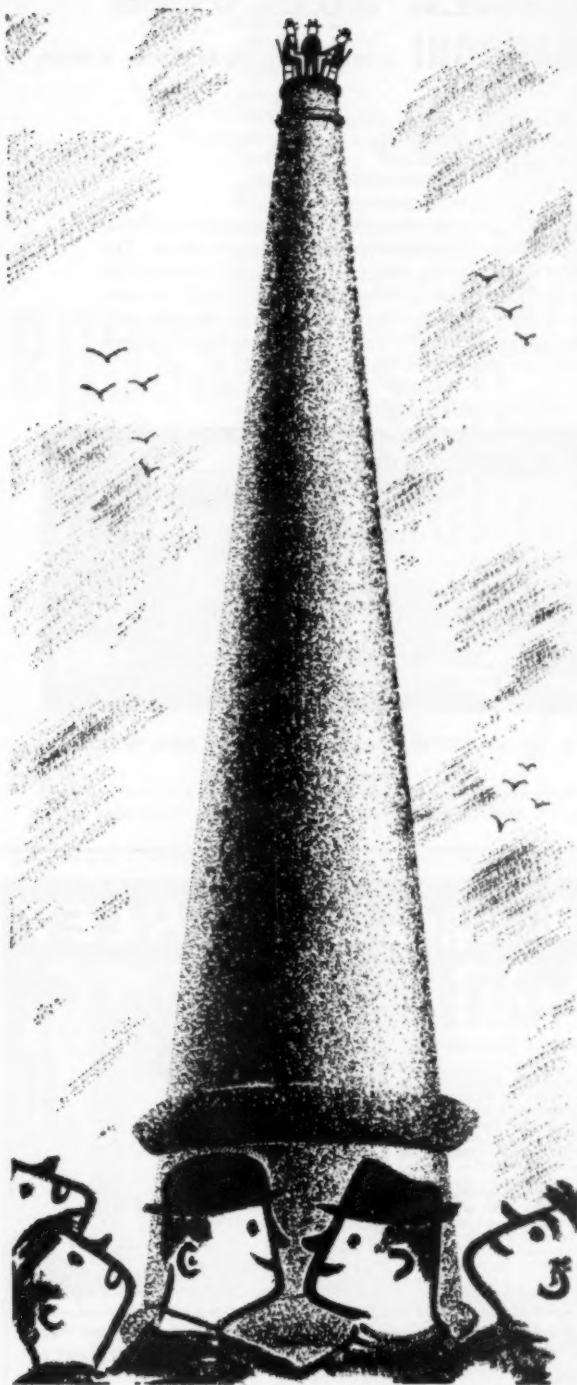
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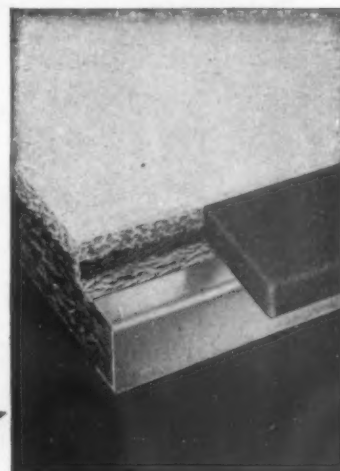
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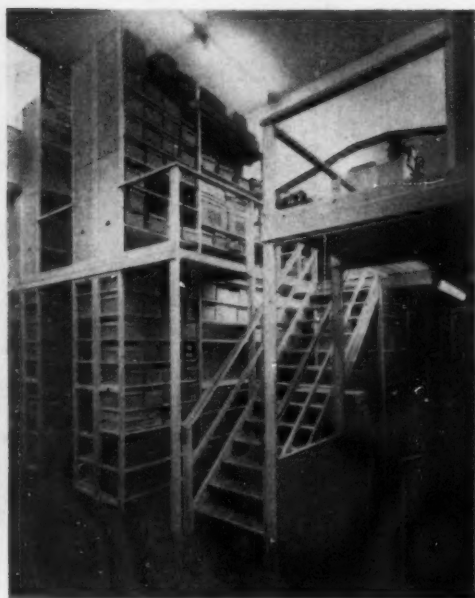
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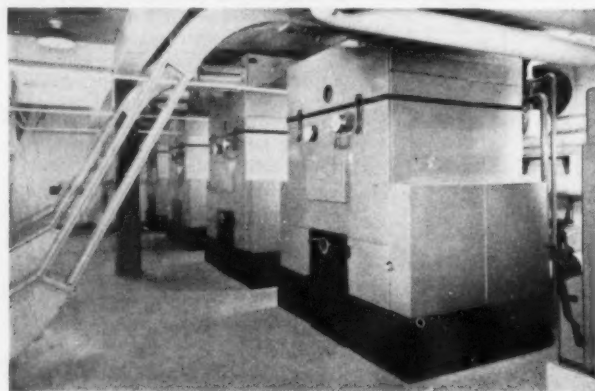
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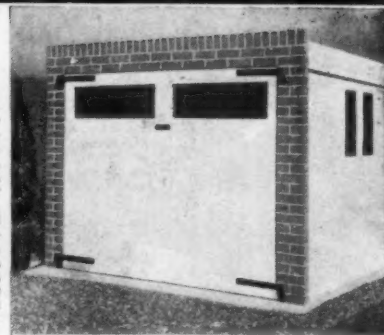
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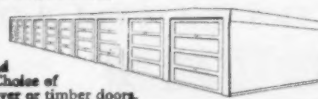


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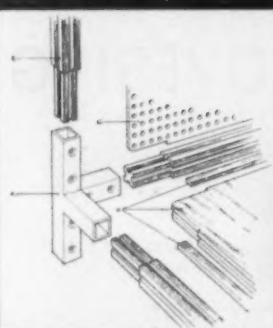
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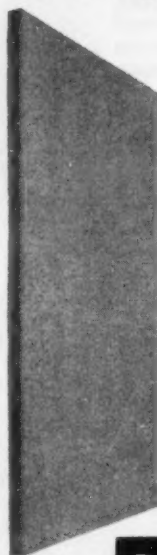


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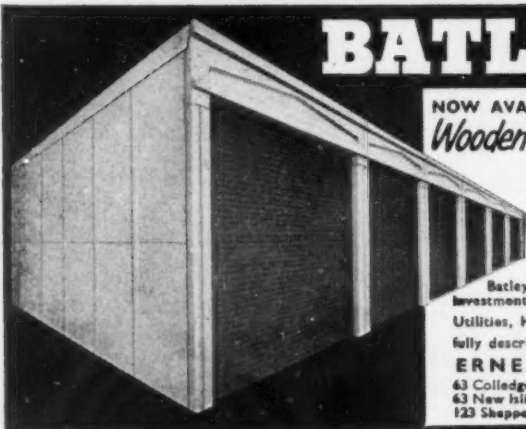


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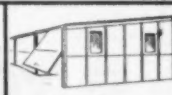
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Applicants for posts (c) and (d) to have had good general experience.

All appointments are permanent and subject to Local Government Superannuation Acts on passing medical examination and to N.J.C. Conditions of Service.

Applications in writing in appropriately endorsed envelope stating age, qualifications and experience together with names and addresses of two referees to the Borough Architect, P.O. Box 17, Town Hall, Reading, not later than 11th February, 1961. 5314

MIDLOTHIAN COUNTY COUNCIL invite applications for the post of SENIOR QUANTITY SURVEYOR on the Scale £1,065—£1,200. Applicants must be Associate Members of the R.I.C.S. and be prepared to take charge of a small section of Surveyors. Applications, giving details of previous experience and naming two referees, to The County Clerk, County Buildings, George IV Bridge, Edinburgh, 1, as soon as possible, quoting reference RC/4/1961. 5271

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C. E. BROWN, A.M.I.Mun.E.,

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5357

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Applications, giving age, details of training, present employment, and salary, qualifications and other information, together with the names of two referees, to reach me by Wednesday, 1st February, 1961.

P. D. WADSWORTH,

Town Clerk.

The Council House,

Dudley,

Worcs.

7th January, 1961.

5266

LONDON COUNTY COUNCIL

ARCHITECT'S DEPARTMENT

ARCHITECTURAL ASSISTANTS (Salary up to £1,250) required in Voluntary Schools Section to prepare schemes for development of primary and secondary Church Schools and to examine Governors proposals for development of aided Grammar Schools, Polytechnics and Technical Colleges. Experience in sketch-planning and in preparation of working drawings, specifications and reports essential.

Form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council, (EK/A/67/1), County Hall, S.E.1. 5338

CUMBERLAND COUNTY COUNCIL

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Applicants must be A.R.I.B.A. preferably with Schools experience, and handling of large contracts.

Application forms and further particulars obtainable from D. W. Dickenson, F.R.I.B.A., County Architect, 15, Portland Square, Carlisle, to whom completed applications should be returned not later than Monday, 13th February, 1961.

G. N. C. SWIFT,

Clerk of the County Council.

5330

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DEPARTMENT

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BERTRAM WEBSTER,

Town Clerk.

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5306



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W. FOWLER HOWITT, A.R.I.B.A.,
Architect to the Board of Governors.
45 Lambeth Palace Road,
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Applicants who must be natural born British subjects should write stating age, quals, and exp. to Manager (PE2), Ministry of Labour, Professional & Executive Register, Atlantic House, Farringdon St., London, E.C.4. Candidates selected will be interviewed in Air Ministry, London, and certain expenses reimbursed. Only applicants selected for interview will be advised. 5349

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(Population 45,000)

SENIOR ARCHITECTURAL ASSISTANTS
ARCHITECT'S DEPARTMENT

Applications are invited for two Senior Architectural Assistants at a commencing salary within Grade A.P.T. IV (£1,140—£1,310) or V (£1,310—£1,480). The successful applicants will be engaged on major capital schemes.

HOUSING ACCOMMODATION AVAILABLE.

If married. Further particulars may be obtained from the undersigned to whom applications should be submitted by 13th February, 1961.

The area of the Authority is not adversely affected by proposals of the Local Government Commission.

H. C. ALLEN,
Clerk of the Council.

Council House,
The Green,
Cannock,
Staffs.
January, 1961. 5454

CITY OF CANTERBURY
SENIOR ASSISTANT ARCHITECTS
A.P.T. III/IV (£960—£1,310)

Applications are invited for the above appointments in the Department of the City Architect and Planning Officer. Commencing salary according to ability and experience.

The successful candidates will be engaged on one of the following:—

- Housing
- General Works
- Public Buildings
- Education

Housing accommodation will be made available if required.

Applications, with names of two referees, to the City Architect and Planning Officer J. L. Beribiers, F.R.I.B.A., A.M.T.P.I., by Saturday, 4th February, 1961.

Canvassing will disqualify.

J. BOYLE,
Town Clerk.
Municipal Buildings,
Canterbury. 5383

NEWCASTLE REGIONAL HOSPITAL BOARD
EXPANSION OF ARCHITECTURAL
DEPARTMENT

P. H. KNIGHTON, M.B.E., A.R.I.B.A., REGIONAL
ARCHITECT

ARCHITECTURAL STAFF

As the Board is in the process of increasing its Architectural Department in Newcastle to deal with a programme at present totalling about £12m., applications are invited for the following (superannuable) posts which offer either a career of varied, interesting and rewarding work of a high standard, or an excellent stepping-off point for further advancement.

1. SENIOR ASSISTANT ARCHITECT (£1,300 × £50 (5)—£1,600).

Open to registered architects with experience in the design and construction of major public buildings. Experience of hospital work desirable but not essential. Assistance with removal expenses if appointee at present in a lower-graded Health Service post.

2. ASSISTANT ARCHITECTS (£905 × £35 (1) × £45 (6) × £50 (2)—£1,310).

Applicants must have passed the R.I.B.A. Final Examination. For registered architects increments can be given above the bottom of the grade in accordance with relevant practical experience.

3. ARCHITECTURAL ASSISTANTS (£625 × £30 (8) × £35 (1)—£900).

Intermediate R.I.B.A. and preferably some practical experience.

4. ARCHITECTURAL DRAUGHTSMEN (£475 × £25 (6) × £30 (2)—£685).

Three years' previous experience in an architect's drawing office and good draughtsmanship required.

Evening study facilities available at King's College of Durham University in Newcastle. **SURVEYING ASSISTANT (Lands and Buildings)** (£625 × £30 (8) × £35 (1)—£900).

Intermediate Examination of the Royal Institution of Chartered Surveyors, or an examination recognised by the Institution as equivalent together with experience in surveying sites and buildings. Commencing salary within grade dependent upon applicant's age and practical experience.

Details of training, qualifications, experience, present salary, etc., with the names of three architectural referees, should reach the Secretary to the Board, Bonfield Road, Newcastle upon Tyne, 6, by 3rd February, 1961. Canvassing will disqualify. 5286

COUNTY BOROUGH OF WOLVERHAMPTON
Applications are invited for the following appointments:

(a) PRINCIPAL ASSISTANT ARCHITECT—
salary Grade APT V (£1,310—£1,480).

(b) SENIOR ASSISTANT ARCHITECTS—
Grade APT IV (£1,140—£1,310).

(c) ASSISTANT ARCHITECTS—salary within grades APT III/IV (£960—£1,310).

(d) ARCHITECTURAL ASSISTANTS—salary within Grades APT I to III (£645—£1,140).

(e) ARCHITECTURAL DRAUGHTSMEN—salary Grade Miscellaneous Scale IV (£625—£685).

Commencing salaries according to qualifications and experience.

Housing accommodation and car allowances may be made available in respect of posts (a) and (b). Applications, stating age, qualifications, training and experience, and naming two referees, to the Borough Engineer, Town Hall, Wolverhampton, by Monday, 6th February, 1961. 5453

BOROUGH OF ILKESTON
Applications are invited for the following appointments:—

ARCHITECTURAL ASSISTANT—
Grades APT II-IV (£815—£1,310).

ARCHITECTURAL ASSISTANT—Grades—
General Division to APT II (£260—£960).

Commencing salary for each appointment to be fixed according to qualifications and experience. **HOUSING ACCOMMODATION AVAILABLE.** Canvassing disqualifies.

Application forms and conditions of appointment obtainable from A. O. Marshall, Borough Surveyor & Water Engineer, Town Hall, Ilkeston, to whom they are to be returned by Monday, 6th February, 1961.

J. YATES,
Town Clerk.
5420

COUNTY BOROUGH OF DERBY
BOROUGH ARCHITECT'S DEPARTMENT

(a) SENIOR ASSISTANT ARCHITECT, A.P.T.
Grade IV (£1,140—£1,310 per annum). Qualifications: A.R.I.B.A.

(b) ASSISTANT ARCHITECT, A.P.T. Grade II
(£815—£960 per annum). Qualifications: Intermediate R.I.B.A.

(c) ASSISTANT QUANTITY SURVEYOR, A.P.T.
Grade II (£815—£960 per annum).

Qualifications: Intermediate R.I.C.S. with good experience in working up Bills of Quantities and Final Accounts, measuring on site and taking-off for small works.

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

National Conditions of Service.

Forms of application obtainable from and to be returned to the Borough Architect, The Council House, Corporation Street, Derby, not later than Tuesday, 14th February, 1961.

N. S. FISHER,
Town Clerk.
17th January, 1961. 5467

CITY AND COUNTY OF BRISTOL
APPOINTMENT OF CHIEF PLANNING
ASSISTANT, SENIOR PLANNING ASSISTANTS
AND PLANNING ASSISTANTS

Applications are invited for the following appointments in the Planning Section of the City Engineer and Planning Officer's Department. The appointments are required mainly to deal with the Development Plan, the Replanning of the Central and other large redevelopment Areas and the Control of Development.

1. CHIEF PLANNING ASSISTANT.

J.N.C. Scale "C", £1,560—£1,825 p.a. This Officer will be directly responsible to the City Engineer and Planning Officer and the Deputy City Planning Officer, and for the whole of the Planning Work of the Department.

Candidates must be Members or Associate Members of the Town Planning Institute, and should hold an additional professional qualification, preferably in Architecture. They must have had extensive general planning experience, particularly with regard to large Urban Redevelopment Schemes.

2. SENIOR PLANNING ASSISTANT.

J.N.C. Scale "A", £1,360—£1,565 p.a.

Candidates for this post should be Members or Associate Members of the Town Planning or other appropriate Institute and have had considerable general planning experience, and in particular the Control of Development, and be competent to supervise qualified staff.

3. PLANNING ASSISTANTS.

A.P.T. V, £1,310—£1,480 p.a. (2 appointments).

Candidates must be Members or Associate Members of the Town Planning Institute or other appropriate Institute and have had considerable experience in the office of a large Urban Planning Authority.

4. PLANNING ASSISTANTS.

A.P.T. IV, £1,140—£1,310 p.a. and A.P.T. III/IV, £935—£1,310 p.a.

Candidates for these posts should be fully qualified and have had experience in the preparation of a Development Plan, the Control of Development or Reconstruction and Redevelopment of Central Areas.

Recently qualified candidates would be considered for A.P.T. III/IV appointments.

All the appointments are permanent and pensionable, are subject to the passing of a medical examination and, except in the case of an officer transferred from the service of another Local Authority, to a probationary period of six months.

A five-day week is worked and staff restaurant facilities are available.

The housing needs of the successful candidates and the question of a contribution towards removal expenses will receive favourable consideration.

Applications should be arranged in the following order: Age, nationality and whether married or single; education; training; professional qualifications; present position with salary and date of appointment; previous positions with salaries and dates of appointment; detailed particulars of experience; any further remarks in support of the application; notice required to terminate present appointment; whether related to a member or senior officer of the Council; names of two referees.

Canvassing disqualifies.

Applications clearly indicating the post concerned should be delivered to the City Engineer and Planning Officer, Cabot House, Deanery Road, Bristol, 1, by 6th February. 5294

BOROUGH OF SCUNTHORPE
APPOINTMENT OF CLERK OF WORKS—
14 STOREY FLATS, SCUNTHORPE

Applications are invited for the temporary appointment of Clerk of Works for the above scheme. It is expected that the building operations will commence in March, 1961, with an anticipated contract period of 18 months.

Applicants must have appropriate experience including reinforced concrete frame construction. The salary will be at the rate of £20/- per week, including travelling and subsistence allowance.

Applications with full details of qualifications, past experience and age, together with the names and addresses of two referees must reach the Town Clerk, Municipal Offices, 34, High Street, Scunthorpe, not later than Monday, 6th February, 1961. 5478

CITY OF BIRMINGHAM

Applications are invited from enthusiastic and imaginative fully-qualified ARCHITECTS for a number of new appointments on the SENIOR OFFICERS' SCALE "C"—£1,560 + £70 (3) + £55 (1)—£1,825 per annum—to take part in a large programme of work being carried out by the CITY ARCHITECT'S DEPARTMENT.

The architectural work on hand includes a Major Exhibition Hall, multi-storey office blocks, new Central Library, and other buildings forming part of the Civic Centre Development Scheme, in addition to Colleges of Further Education, Schools, and schemes of Comprehensive Housing Development involving multi-storey flats and associated buildings.

Commencing salaries within the scale will be according to capabilities and experience. Pension Scheme. Five-day week. Medical Examination.

Applications stating age, present position and salary, qualifications, experience and names of two referees, to reach the undersigned by 17th February, 1961.

A. G. SHEPPARD FIDLER,
City Architect.
Civic Centre,
Birmingham, 1. 5493

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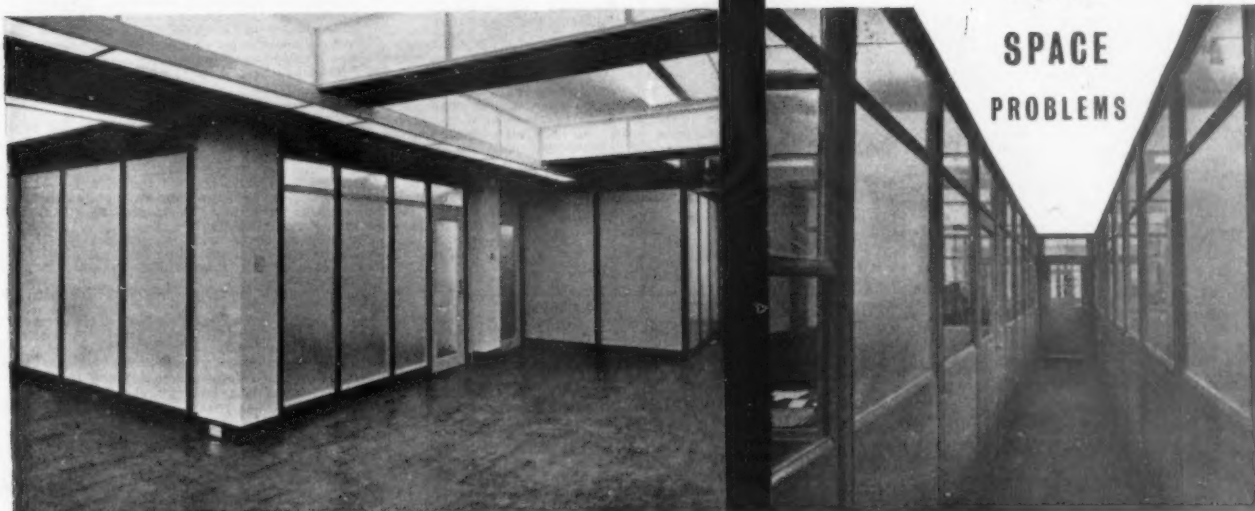
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ART METAL, 199/203, Buckingham Palace Road, London, S.W.1.
Telephone: SLOane 5201.

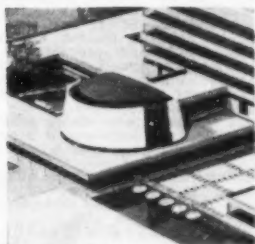
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ARCHITECTS

FOR

SHROPSHIRE

Architects are required to work on projects ranging from the design of the New Shirehall (£1,000,000) to new schools, welfare and other buildings. In addition to this programme, a group will shortly be formed to develop, in association with industry a prefabricated system for school buildings. Salary grade A.P.T.IV (up to £1,310 p.a.).

Qualified staff who feel they can make a contribution to one or more of these aspects of the department's work are invited to apply for necessary forms to Ralph Crowe, A.A.Dipl., A.R.I.B.A., A.M.T.P.I., County Architect, Column House, London Road, Shrewsbury. Closing date 9th February, 1961



BIRDS EYE FOODS LIMITED

ARCHITECTURAL ASSISTANTS

required to help carry out full architectural services for industrial buildings, and in particular, process areas, canteens, and office accommodation, necessary for the further development of this rapidly expanding Company. Applicants, qualified by examination and/or experience, should show themselves capable of handling building projects from sketch design to completion, and will be offered the opportunity of undertaking responsibility, reporting directly to the Company Architect.

A four-figure salary will be offered together with a full range of employee benefits, including Superannuation Scheme. Full details of age, qualifications and experience should be sent to:

**Personnel Officer,
BIRDS EYE FOODS LIMITED,
HESKETH HOUSE, PORTMAN SQUARE,
LONDON, W.1.**

JAMAICA NATIONAL TRUST COMMISSION

Require a **TECHNICAL OFFICER** to act as Adviser on the restoration and preservation of historic monuments and buildings. Engagement is for three years, annual salary £2,000 plus housing subsidy £300. Gratuity at rate of 20% of salary for each period of three months' satisfactory service. Free passages, liberal leave on full pay.

Candidates must be qualified architects and have knowledge and experience of the repair and conservation of old buildings.

Apply to **CROWN AGENTS**, 4, Millbank, London, S.W.1, for application form and further particulars, stating age, name, brief details of qualifications and experience and quoting reference M2B/51229/AG. 5485

BOROUGH OF BEXLEY

ARCHITECTURAL DRAUGHTSMAN

Applications are invited for the above appointment. Salary within Grade APT.II (£215-£260 per annum) plus London Weighting. Candidates should be good draughtsmen and have a general knowledge of building construction and specification work.

Form of application and conditions of appointment are obtainable from the Borough Engineer, West Lodge, Broadway, Bexleyheath, Kent, to whom completed applications must be returned by the 20th February, 1961. Canvassing will disqualify.

ARTHUR GOLDFINCH,
Town Clerk. 5482

BOROUGH OF CHATHAM

(a) ASSISTANT ARCHITECT

(b) ARCHITECTURAL DRAUGHTSMAN

Applications are invited for the above appointments from professionally qualified and suitably experienced persons.

Salary: (a) Assistant Architect, within A.P.T. IV (£1,140-£1,310).
(b) Architectural Draughtsman, A.P.T. I (£245-£215).

Applications, with the names and addresses of two referees, should be delivered to the Borough Engineer and Surveyor, Town Hall, Chatham, not later than Friday, 3rd February, 1961.

Housing accommodation will be available in an appropriate case.

The appointment will be (a) in accordance with the National Scheme of Conditions of Service, (b) terminable by one month's notice on either side and (c) superannuable, subject to satisfactory medical report.

In accordance with their usual practice the Council will require the successful candidate to give an undertaking to remain in the Council's service for two years.

ROWLAND NEWNES,
Town Clerk. 5332

CITY OF MANCHESTER

Applications invited for the following Permanent appointment in the office of the City Architect.

ASSISTANT ARCHITECT

The salary is A.P.T. Grade III/IV £960 to £1,310 per annum, the commencing salary will be according to qualifications and experience.

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.

Five-day week. Housing accommodation may be provided for a limited period. Removal expenses allowed.

Forms of application from the City Architect, P.O. Box 488, Town Hall, Returnable by 7th February. 5475

BOROUGH OF MAIDENHEAD
BOROUGH ENGINEER AND SURVEYOR'S

DEPARTMENT

ARCHITECTURAL ASSISTANT

Applications are invited for the appointment of an Architectural Assistant on Grade A.P.T. III of the National Scales (£960-£1,140) commencing salary according to qualifications and experience. Preference will be given to Associates of the Royal Institute of British Architects.

Housing accommodation is provided and contribution made towards removal expenses in approved cases. The Council is operating a five-day week.

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

Applications, stating age, qualifications, experience, and accompanied by the names of two referees, must be sent to C. T. Read, M.B.E., M.I.C.E., F.R.I.C.S., M.I.Mun.E., 14, Cranford Rise, Maidenhead, as soon as possible but not later than Monday, 13th February, 1961.

Canvassing will be a disqualification and candidates must disclose whether to their knowledge they are related to any member or senior official of the Council.

STANLEY PIATT,
Town Clerk. 5421

Guildhall,
Maidenhead,
January, 1961.

CITY OF NOTTINGHAM

ESTATES AND HOUSING COMMITTEE

Applications are invited for the following appointments in the Chief Architect's Section of the Estates Department:—

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

(b) **ASSISTANT ARCHITECTS**, A.P.T. Grade III, £960-£1,140.

(c) **ARCHITECTURAL ASSISTANT**, A.P.T. Grade II, £815-£960.

(d) **ARCHITECTURAL ASSISTANT**, A.P.T. Grade I, £645-£815.

Applicants for (a) should preferably be Associates of the Royal Institute of British Architects, or if not so qualified, have had appropriate professional experience, and for (b) should preferably have passed parts I and 2 of the R.I.B.A. Final examination. Applicants for (c) and (d) should have passed the Intermediate examination of the R.I.B.A.

Commencing salary in each case will be in accordance with qualifications and experience.

There is a large and interesting programme of comprehensive estate development and redevelopment schemes, including multi-storey dwellings, shopping centres, and all ancillary buildings.

The architects and assistants appointed will work in small self-contained teams under the general direction of a Group Leader and will be responsible for the design, construction and management of projects.

The appointments will be subject to the National Joint Council's Scheme of Conditions of Service.

Applications stating age, qualifications, experience, present appointment and salary, and naming two referees, should be sent to the Estates Surveyor & Valuer, The Guildhall, Nottingham, by Tuesday, 7th February, 1961.

T. J. OWEN,
Town Clerk.

The Guildhall,
Nottingham. 5375

CITY OF NOTTINGHAM

ESTATES & HOUSING COMMITTEE

APPOINTMENT OF SENIOR ASSISTANT ARCHITECT, A.P.T. Grade V, £1,310-£1,480.

Applications are invited from qualified architects of experience for the post of Senior Assistant Architect at a salary of £1,310-£1,480 in A.P.T. Grade V, to take charge of a small group dealing with the development of housing estates under the direction of the Chief Architect.

There is also an interesting programme of comprehensive redevelopment schemes including multi-storey dwellings, part of which may be undertaken by this group.

The appointment will be subject to the National Joint Council's Scheme of Conditions of Service.

Applications stating age, qualifications, experience, present appointment and salary, and naming two referees, should be sent to the Estates Surveyor & Valuer, The Guildhall, Nottingham, by Thursday, 9th February, 1961.

T. J. OWEN,
Town Clerk.

The Guildhall,
Nottingham. 5429

SHEFFIELD REGIONAL HOSPITAL BOARD

Appointment of

ASSISTANT REGIONAL ARCHITECT

Salary Scale: £1,825-£2,175 per annum

Applications are invited from Registered Architects who are Corporate Members of the R.I.B.A. for the above appointment on the Board's Headquarters staff.

Duties include the control of one or more of the Board's design teams responsible for major projects, i.e. value £250,000 to £4,000,000. Special aptitude for design with administrative and organising ability and experience desirable. Hospital experience not essential.

Application forms and further details obtainable from the Secretary, Sheffield Regional Hospital Board, Fulwood House, Old Fulwood Road, Sheffield, 10. Closing date for receipt of completed applications, 3rd February, 1961. 5424

CITY AND COUNTY OF THE CITY OF

CHESTER

CITY ENGINEER & SURVEYOR'S

DEPARTMENT

DEPUTY CITY ARCHITECT

Applications are invited for the above appointment on Grade C. of the National Scales, i.e. £1,560-£1,825 per annum. Candidates must hold the qualification of A.R.I.B.A. and have wide experience in design (particularly in relation to housing and schools) and property maintenance. The successful candidate will be required to provide a car for his own use, for which he will be allowed National Joint Council Scale for a 10 h.p. car.

Applications giving full details of qualifications and experience and the names of two persons to whom reference may be made, should be addressed to the City Engineer, 49, Northgate Street, Chester, by 10th February, 1961. 5427

UNITED KINGDOM TECHNICAL ASSISTANCE

Applications are invited for the post of Expert in Housing at the School of Planning and Architecture, NEW DELHI, India. Applicant should be a suitably qualified Architect or Town Planner with experience in training at post graduate level and of research into housing problems generally. Age 35 to 50 years. Duration two years initially. Salary £2,600-£3,600 per annum according to qualifications and experience, plus generous tax free allowances. For further information and application form, write to Ministry of Labour (E.9), 26-28, King Street, London, S.W.1, quoting E.9/TCS/IND/895. 5440

BOROUGH OF EDMONTON

BOROUGH ARCHITECTS' DEPARTMENT

Applications are invited for the following appointments. Appointments 1 and 2 are in connection with the Council's Capital Building Programme, including multi-storey housing and public buildings, maintenance and improvement works.

1. **ASSISTANT QUANTITY SURVEYOR**. Salary within Grade A.P.T. II, £815-£960 plus London weighting.

2. **ASSISTANT ARCHITECT**. Salary within Grade A.P.T. I, £645-£815 plus London weighting.

3. **TOWN PLANNING ASSISTANT**. Salary Grade A.P.T. III, £960-£1,140 plus London weighting, commencing salary will be on the appropriate position of the Grade according to experience/qualifications.

Applications on forms obtainable from the Town Clerk, Town Hall, Edmonton, N.9, must be delivered by the 11th February, 1961. 5435

COUNTY BOROUGH OF ST. HELENS

BOROUGH ENGINEER & SURVEYOR'S

DEPARTMENT

Applications are invited for the following posts in the Architectural Section:—

(a) **PRINCIPAL ASSISTANT ARCHITECT**, A.P.T. Grade V (£1,310-£1,480).

(b) **ASSISTANT ARCHITECTS** within A.P.T. Grade III/IV (£960-£1,140).

Applicants for appointment (a) should be qualified architects with considerable experience in general Municipal Development.

Applicants for appointment (b) should have passed Parts I and II of the R.I.B.A. Final examination or hold an equivalent qualification and should have had at least five years' experience (including training).

The appointments will be subject to N.J.C. Conditions of Service, the provisions of the Local Government Superannuation Acts and a medical examination.

Housing accommodation will be provided if required.

The Council operate a five-day working week. Applications indicating the post applied for, stating age, qualifications, details of appointments held and experience, together with names and addresses of two referees should reach the undersigned not later than Tuesday, 7th February, 1961.

Applicants must reveal relationship to any member or Senior Officer of the Council.

Canvassing will disqualify.

M. WAHD,
M.I.Mun.E., M.T.P.I., A.M.I.Struct.E.,
Borough Engineer & Surveyor. 5448

BOROUGH OF OLDBURY

ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment on the staff of the Borough Surveyor's Department at a salary in accordance with Grade A.P.T. III of the National Salary Scales.

Candidates should be well trained and experienced in the design and preparation of schemes and supervising contracts in connection with general housing including multi-storey flats, public buildings, school buildings, and minor improvements and maintenance works.

The appointment will be superannuable, subject to the National Scheme of Conditions of Service and to the selected candidate passing a medical examination.

Applications giving particulars of age, qualifications, experience, and the names of two referees, should be delivered to the undersigned not later than the 9th February, 1961.

KENNETH PEARCE,
Town Clerk

Municipal Buildings,
Oldbury.
January, 1961. 5431

CITY AND COUNTY OF

NEWCASTLE UPON TYNE

CITY ARCHITECT'S DEPARTMENT

APPOINTMENT OF CHIEF ASSISTANT ARCHITECT (NEW TOWN HALL)

Applications are invited for the above post at a salary in accordance with the J.N.C. Scale "D" (£1,710 per annum, rising by annual increments to a maximum of £1,975 per annum).

Applicants must have appropriate professional qualifications, and the person appointed will be in charge, under the direction of the City Architect, of the section engaged solely on the New Town Hall, a project of some £4,000,000 in value. Work on the superstructure of the first stage has already commenced and an exceptional opportunity is presented for working on a building carried out in materials of the highest quality.

Further details and form of application may be obtained on application in writing to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, Newcastle upon Tyne, 1.

JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle upon Tyne, 1.
13th January, 1961. 5399

ARCHITECTS required by the National Coal Board in Edinburgh. Salary within the scale £900 to £1,250 per annum. Applicants must be Associate Members of the R.I.B.A. (or, if not yet qualified, may be appointed in the first place as Architectural Assistants in a salary scale £655 to £935, or if exceptionally experienced to £1,100). Applications, stating age, education, qualifications, experience, present post and salary, to Staff Department, National Coal Board, 3, Eglinton Crescent, Edinburgh 12. 5414

NEWCASTLE REGIONAL HOSPITAL BOARD

EXPANSION OF ARCHITECTURAL DEPARTMENT

P. H. KNIGHTON, M.B.E., A.R.I.B.A.,
REGIONAL ARCHITECT

ARCHITECTURAL RESEARCH FELLOWSHIP

In connection with the considerable expansion of the hospital building programme now in process, a RESEARCH FELLOWSHIP is to be created to further investigation into the DESIGN and EQUIPPING OF HOSPITALS. The investigation is being promoted by the Regional Hospital Board in association with the Board of Governors of the United Newcastle upon Tyne Hospitals and the appointment will be for a period of three years.

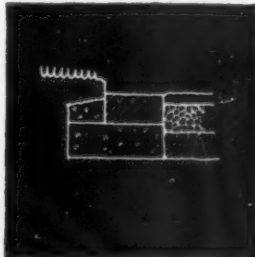
The commencing salary will be within the scale of £1,665 x £50(1) x £75(2) x £85(2)—£2,035 and the post will be superannuable in accordance with the National Health Service regulations. Assistance with removal-expenses if appointee at present in a lower-graded Health Service post. The architect appointed will be attached to the staff of the Regional Architect and be responsible, through him, to a Steering Committee representing the two Boards.

Initially the research will be directed towards means of achieving easily-cleaned finishes and equipment in operating suites, and to establishing a small permanent exhibition of models, samples, photographs and drawings to illustrate approved types. The investigation is intended subsequently to deal with the design and equipping of other hospital departments.

Applicants should preferably be not more than 36 years of age, be registered architects and Associate Members of the R.I.B.A., and should possess enthusiasm and a marked ability for architectural research and the presentation of its results. The man appointed will be given opportunities for travel both in the British Isles and on the Continent to see modern hospital buildings.

To a keen and able architect this post offers an exceptional opportunity for becoming well versed in the techniques of designing and equipping modern hospitals, and to prepare himself for further advancement.

Details of training, qualifications, experience, present salary, etc., with the names of three architectural referees, should reach the Secretary to the Board, Benfield Road, Newcastle upon Tyne, 6, by the 3rd February, 1961. Canvassing will disqualify.



basic

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Sir Hugh Casson in the *Observer*

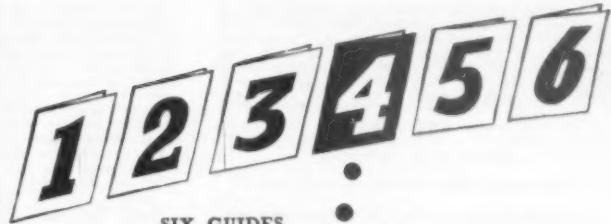
An invaluable handbook has just been published by the Architectural Press. It covers, among many other subjects

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It is aesthetic but entirely practical, fully illustrated, thoroughly indexed, and gives ample additional references.

Price 42s. It is called

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Diamond Betonac metallic aggregate produces a hard, dense surface topping.

It is best laid on a good concrete base whilst still "green".

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HAMMERSMITH BOROUGH COUNCIL.
ARCHITECTURAL ASSISTANTS—A.P.T. III—
£960—£1,140 plus London weighting. A general knowledge of the design of public buildings and housing will be an advantage. Application form, returnable by 13th February, 1961, from Town Clerk, Town Hall, W.6. 5315

THE WEST INDIES

TECHNICAL OFFICER

BUILDING AND TOWN PLANNING

Applications are invited for appointment in the Federal Public Service to a post of Technical Officer (Building and Town Planning) which it is proposed to create in the Ministry of Communications & Works, at a salary of \$12,480 (£2,600) per annum (fixed). The appointment will be on contract for three years in the first instance.

Duties

The duties of the post will be:

- to advise the Federal Government (and where required, the Territorial Governments) on all building, architectural and town planning matters;
- to maintain contact with research in building and town planning development within and outside The West Indies;
- to tour the region at intervals when required and maintain contact with officers of Territorial Governments concerned with building, town planning and associated matters;
- to advise the Federal Government on any building scheme which it may wish to initiate or develop and generally to represent the Federal Government as its competent technical officer in all matters connected with building, architecture and town planning with which it is concerned.

Qualifications

The qualifications required for the post are the Associateship of the Royal Institute of British Architects and the Associate Membership of the Town Planning Institute or equivalent qualifications, with at least eight years' post-graduate experience.

General Conditions of Service

A statement of the other terms and conditions of service applicable to the post will be made available on application to The West Indies Commissioner, 6-8, Bruton Street, London, S.W.1. Applicants should furnish evidence of their age, qualifications, a recent testimonial and give the names of two referees. Marital Status should also be mentioned. Applications should be sent to the Federal Personnel Officer, Federal House, Port of Spain, Trinidad, W.I., to reach him not later than the 11th February, 1961. Duplicates should be sent along with original documents to facilitate the return of originals. 5408

SOUTH EASTERN ELECTRICITY BOARD.
ARCHITECTURAL ASSISTANTS, Surveyor's section, Headquarters.

Salary £890 x £30—£1,010 under N.J.C. Grade 4. Applications are invited for two vacancies for architectural assistants with experience in the preparation of working and detail drawings for offices, stores, workshops, garages, showrooms and electricity substations. Applicants should be at intermediate level of an appropriate professional body. Post is superannuable. Applications quoting A.J. and naming two referees to the Surveyor, Seaboard, 10, Queen's Gardens, Hove 3, Sussex, by 8th February, 1961. 5386

GEORGE WRAY,
Secretary.

COUNTY BOROUGH OF
BARROW-IN-FURNESS
BOROUGH ENGINEER AND SURVEYOR'S

DEPARTMENT

TECHNICAL STAFF

Applications are invited for the following appointments:

- (a) SENIOR ARCHITECT (2 vacancies), Grade IV, £1,140—£1,310.
- (b) ARCHITECTURAL ASSISTANT, Grade II, £815—£1,140.
- (c) PLANNING ASSISTANT (Redevelopment), Grade IV-V, £1,140—£1,480.

In each case the commencing salary will be fixed within the limits indicated.

Qualifications required: (a) A.R.I.B.A., (b) Intermediate, (c) A.M.T.P.I.

Housing accommodation available, alternatively a subsistence allowance will be paid. Removal expenses reimbursed. Car purchase scheme in operation. The Department works a five-day week and has an interesting and varied programme of schemes. Full details of the post, conditions of appointment and application forms may be obtained from the Borough Engineer and Surveyor to whom completed forms must be returned not later than Friday, 10th February, 1961.

LAWRENCE ALLEN,
Town Clerk.

Town Hall,
Barrow-in-Furness. 5381

KENT COUNTY COUNCIL

Applications are invited for the appointment of ASSISTANT ARCHITECTS in the office of the County Architect. Salaries within scales £1,310—£1,480, £1,140—£1,310 and £960—£1,140 according to qualifications and experience.

The Council's expanding building programmes contain many large and interesting projects including schools, colleges, residential homes and other public buildings.

Further details and application forms from County Architect, Springfield, Maidstone. Closing date 13th February, 1961. 5488

BOROUGH OF MALDEN AND COOMBE
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT

SENIOR ASSISTANT ARCHITECT

Applications are invited from Chartered Architects for the appointment of senior Assistant Architect, Grade A.P.T. IV, £1,140—£1,310, plus London "Weighting" and car allowance of £75 per annum, commencing salary according to experience and qualifications. The Council will, if required, endeavour to provide housing accommodation for a temporary period and also advance money for the acquisition of property. Forms of application, which must be returned endorsed by not later than Monday, 27th February, 1961, to be obtained from John Apse, A.M.I.C.E., Borough Engineer and Surveyor.

HAROLD E. BARRETT,
Town Clerk.

Municipal Offices,
New Malden, Surrey. 5487

WORCESTERSHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

ARCHITECTURAL ASSISTANT required on Grade A.P.T. II (£815—£915). The County Council may be able to assist with housing accommodation.

Forms of application should be obtained from L. C. Lomas, F.R.I.B.A., County Architect, 14, Castle Street, Worcester, not later than 3rd February, 1961. (1.75). 5339

MIDLOTHIAN COUNTY COUNCIL invite applications for the post of ASSISTANT ARCHITECT (QUALIFIED) on the Scale £850—£1,150. Applicants should hold A.R.I.B.A. Applications, giving details of previous experience and naming two referees, to The County Clerk, County Buildings, George IV Bridge, Edinburgh 1, as soon as possible, quoting reference BC/3/1961. 5273

MIDLOTHIAN COUNTY COUNCIL invite applications for the posts of ARCHITECTURAL ASSISTANTS (UNQUALIFIED) on the Scale £915—£1,055. Applications, giving details of previous experience and naming two referees, to The County Clerk, County Buildings, George IV Bridge, Edinburgh 1, as soon as possible, quoting reference BC/2/1961. 5272

LONDON COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

Experienced ARCHITECT/PLANNERS, Grade II (up to £1,500), with drive, initiative and appropriate qualifications required as leaders of civic design teams.

Form and particulars, returnable by 6th February, from Hubert Bennett, F.R.I.B.A., Architect to the Council (EK/A/147/1), County Hall, S.E.1. 5407

Architectural Appointments Vacant

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

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

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. 2960

ASSISTANT ARCHITECTS required for staff in a new office opening in Southampton for work on interesting projects including University, War Department and Ecclesiastical programmes. Juniors also required. Apply stating age, qualifications, experience and salary required to Robert Pottle, F.R.I.B.A., Richard Hare, B.Arch., A.R.I.B.A., De Vaux House, Salisbury. 3167

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. 5209

ARCHITECTURAL ASSISTANT wanted for appointment in Exeter. Experience of conversion and modernisation of property an advantage. Starting salary within range £900 to £1,100. Apply Box 5337.

BASIL SPENCE & PARTNERS require qualified and experienced ARCHITECTS to fill positions of responsibility on a major building programme. Write to L. Fitzroy Square, W.1, stating experience and salary required. 9824

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

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

SIR JOHN BURNET, TAIT & PARTNERS have vacancies for ARCHITECTURAL ASSISTANTS of all grades. Salaries ranging from £1,000 to £1,500 per annum. Luncheon vouchers. Pension and Medical schemes (non-contributory). Telephone LAngham 25 for appointment. 2113

SENIOR ASSISTANTS required immediately. Salary by arrangement. Theo. H. Birks, 38, Portland Place, London, W.1. LAN. 7236. 1496

BOOTH, LEDEBOER AND PINCKHEARD require ASSISTANTS in the salary range £750—£1,250. Apply 17-20, Mason's Yard, Duke Street, St. James's, S.W.1. Tel.: TRAFALGAR 1866. 3119

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

EXPERIENCED ARCHITECTURAL ASSISTANT required for busy West End office. General practice but mainly office and commercial projects. Bernard Gold & Partners, 4/6, Savile Row, W.1. REGENT 7551. 3742

C. H. ELSOM & PARTNERS need experienced ARCHITECTS for a wide range of public and commercial projects. VICTORIA 4304. 10, Lower Grosvenor Place, W.1. 4271

SENIOR ASSISTANT ARCHITECTS required immediately for a wide variety of interesting work. Applicants should be experienced in all aspects of modern building design and construction. Attractive remuneration to right men capable of working on own initiative under ideal conditions for self expression. Preference given to men over 45 years of age although all applications will be considered on merit irrespective of age. Applications should be made in writing to Kenneth F. Masson, Esq., A.R.I.B.A., Chief Architect, S.C.W.S. Ltd., Architectural Division, 75, Morrison Street, Glasgow, C.5. 4152

URGENTLY required: SENIOR ASSISTANT capable of supervising contracts and also preparing sketch plans and first class presentation drawings. Please write, giving particulars and salary required, to Box 5457, or telephone MAYfair 312 to arrange interview.

EXPERIENCED ASSISTANTS required by Architects for responsible positions in West End office. Salaries: £1,000 to £1,500. Apply Box 5461.

ARCHITECTURAL ASSISTANT required for medium sized office engaged on Churches, Industrial Buildings, Housing, etc. Good prospects and salary according to ability. Opportunity for further studies. McKewan & McKewan, 318, Hamstead Road, Handsworth, Birmingham, 20. Northern 8281. 5458

ARCHITECTURAL ASSISTANT required in West End Consulting practice. Work is of varied nature. Supervision and administrative experience an advantage but not essential. Starting salary £500—£900 according to experience. Luncheon vouchers. Write Mark Jennings, Son & Partners, 21, Conduit Street, London, W.1. 5459

ARCHITECT'S JUNIOR ASSISTANT required, a good draughtsman, detailer, Intermediate standard. Please write stating age, experience and salary to: F. W. BEECH & E. CURNOW COOKE, Chartered Architects, 15, DIX'S FIELD, EXETER. 5455

£850—£1,200. ASSISTANTS and ASSISTANT ARCHITECTS required within this salary range for work on schools and universities. Qualification in landscape architecture an advantage which would affect salary. Large progressive office offering outstanding opportunities for people of ability, both at home and overseas. Excellent working conditions, five-day week, three weeks' annual leave, lunch vouchers, bonus scheme and generous sick pay provision. Write or telephone Norman & Dawbarn, Architects & Consulting Engineers, 7, Portland Place, London, W.1. LANGham 8011. 5345

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

BRYAN & NORMAN WESTWOOD & PARTNERS require ARCHITECTS and ASSISTANTS. Salaries up to £1,200. Apply to 21, Suffolk Street, S.W.1, Trafalgar 1106, or 5, Balfour Road, Weybridge, Surrey. 6088. 5281

DESIGN GROUP NIGERIA require a qualified **ASSISTANT ARCHITECT** for design work in Ibadan and to supervise building in various parts of Nigeria. Salary £1,400-£2,000 p.a. according to age and experience; tours each of 18 months with three months paid leave; free medical attention; car provided; free accommodation suitable for unmarried applicants only. The appointment is to be taken up as soon as possible. Write to 269, King Street, London, W.6. 5441

GLOUCESTERSHIRE—Intermediate standard office trained **ASSISTANT** required for small expanding office. Varied programme of industrial, commercial and domestic work. Five-day week. Examination studies encouraged. Full particulars to Ronald Edwards, A.R.I.B.A., Hollis House, Dursley, Glos. 5432

YOUNG Architects interested in rebuilding and modernising licensed premises are invited to apply to fill a vacancy for a **SENIOR ASSISTANT** in the Architect's Department of a London Brewery Company. The applicant would be required to design, produce working drawings and specifications, supervise works through all stages to completion, carry out surveys of existing buildings, check builders' accounts, etc. Superannuation. Write stating age, qualifications, if any; experience; and salary required. Box 5433.

REQUIRED—A.R.I.B.A., not less than five years' office experience, and **GENERAL ASSISTANTS**—Intermediate standard. Good opportunity in expanding office, interesting variety of work. Evening interviews if required. Write or phone George E. Clay & Partners, A.R.I.B.A., 198, Parrock Street, Gravesend, Kent. (Gravesend 1401/2.) 5435

JOHN STAMMERS has vacancies in his Reigate Office for qualified **ASSISTANT** and **INTERMEDIATE** with some experience. School, office, church and domestic work. Write giving particulars and salary required to Alders Road, Reigate. 5422

ARCHITECTURAL ASSISTANTS required for the Architects Office of a large industrial organisation specialising in food production. Intermediate standard with minimum of five years' experience in industrial work. Knowledge of London Building Acts essential. Commencing salary in the region of £1,000 to £1,200 per annum. Five-day week. Pension Scheme. Meal facilities; Sports Club. Apply in writing to Box 5423.

ASSISTANT ARCHITECTS and **ARCHITECTURAL ASSISTANTS** required immediately to work in small London office on Tropical Hospital projects. Apply in writing, stating experience and salary required. Box 5425.

BRISTOL Architects require **TWO ASSISTANTS** of post intermediate to final standard to work with them in a Practice (non pyramid) offering scope for Assistants to take direct responsibility for buildings and where initiative counts more than experience. Please write giving details and salary required to Whicheol & Macfarlane, 14, Great George Street, Bristol, 1. 5426

ARCHITECT required by Development Company to take charge of a number of large scale housing developments in North Wales. Preference will be given to applicants who have had experience of this type of work. The Company operate a non-contributory pension scheme and a car will be provided. Assistance will be given to providing accommodation, if required. Please write stating age, salary required, to Chief Architect, Bunting Estates Ltd., 73 Acre Lane, London, S.W.2. 5369

VACANCY occurs in the West End Branch of a large provincial Architectural Practice, for an **ASSISTANT** at Intermediate standard. The post offers considerable scope on varied projects. Five-day week. Luncheon Vouchers. Write giving particulars of age, experience and salary required to Box 4135.

QUALIFIED ARCHITECTURAL ASSISTANT required immediately in Home Counties office. Successful applicant will have the opportunity of working on widely varying industrial, commercial and housing schemes. Five-day week. Write full particulars to Box 4136.

INTERMEDIATE to FINAL STANDARD. Expanding practice engaged large scale commercial projects requires **ARCHITECTURAL ASSISTANTS** with design and supervision initiative. Good salaries according to capabilities. Five-day week. L.V.s. Raymond Spratley & Partners, 9, Hertford Street, Park Lane, W.1. GRO 1532. 4306

WATKINS, GRAY & PARTNERS, 57, Catherine Place, S.W.1 require **ASSISTANTS** of Intermediate and Final standards for work on large hospital projects. Excellent opportunities for those seeking first hand experience in this most interesting and rapidly developing field. Luncheon vouchers and pension scheme in operation. Write giving full particulars. 4233

TWO first class **ARCHITECTURAL ASSISTANTS** required. Salary range £1,250-£1,750 p.a. depending upon experience. Write with fullest details of experience. Box 4227.

ASSISTANT required Intermediate to Final Standard, five day week. Write with full particulars to Reginald H. Gallanough & Partners, 54 Queen Anne Street, London, W.1. 5096

STOP THAT COMMUTING! To **ARCHITECTS** in West Sussex we offer work on a wide variety of West African projects, prospects of service abroad, and £1,000 per annum. Apply in writing to Technic, Architects and Town Planners, 38 Sudley Road, Bognor Regis. 4698

ARCHITECTURAL ASSISTANTS required for busy London practice with interesting and varied work such as Power Stations, Schools, Offices, Churches, etc. Salary from £700-£1,100, depending on qualifications and experience, plus luncheon vouchers. Please write, giving full details, to Box 4864.

EDWARD D. MILLS & PARTNERS require additional staff at varying levels for a variety of new work including housing, schools, industrial and churches. Enthusiasm and initiative important. Five day week. Write giving full details to 9-11 Richmond Buildings, Dean Street, London, W.1. 5107

CROYDON. Varied and interesting experience offered in progressive and growing practice to experienced **ASSISTANT** and **JUNIOR**. Five-day week. Please write or telephone: L. A. Macintosh & Haines, A.R.I.B.A., 33-35 High Street, Croydon. CRO 5780/9992. 4884

PATRICK GWYNNE requires **SENIOR ASSISTANT** to work on important private houses and interiors. The Homewood, Esher, Surrey. Esher 3310. 5039

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. 4859

ASSISTANT required to carry out medium size projects under supervision but with scope for initiative. Preferably used to commercial or school work. Excellent prospects. Box 4376.

£850-£1,400. **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. 4934

£1,250 P.A. MIN. to suitable **ARCHITECTURAL ASSISTANT** with not less than five years' experience, to assist in general practice administration and to run jobs on own initiative. Required immediately. Raymond Spratley & Partners, 9, Hertford Street, Park Lane, W.1. GRO 1532. 4936

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. 4943

£800-£1,500 **MALE or FEMALE ASSISTANTS** required by Architect's Department of rapidly expanding Development Company with new offices at Walton-on-Thames with all the advantages of freedom in design and detailing of economical buildings of all types. Please phone G. W. Mills, A.R.I.B.A., Walton-on-Thames 26311. 4941

NORTH LONDON—**ASSISTANTS** required about R.I.B.A. Intermediate standard. Wide variety of interesting work. Five-day week. Facilities for part-time day study. Apply C. E. Owen Ward, L.R.I.B.A., Midland Bank Chambers, Palmers Green, London, N.13. PAL 1186/7. 4948

SENIOR ARCHITECTURAL ASSISTANT required in busy West End office. Good salary and prospects for keen and energetic young man. Apply in writing to Maurice Sanders Associates, 24, Harley Street, W.1. 4959

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. 4866

ERNO GOLDFINGER requires several qualified **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 5667. 5094

EXPERIENCED ASSISTANTS required for work on major schemes, able to take initiative and responsibility. Bonus, pension and life assurance schemes. Salary according to experience and ability. Full particulars to Hadfield Cawkwell & Davidson, 17, Broomgrove Road, Sheffield, 10. 5048

ARCHITECTURAL ASSISTANT, about Intermediate standard, required for general practice in North Devon Office. Would have full charge of branch office. Box 5019.

ARCHITECTS with extensive general practice (Churches, Hospitals, Schools, Flats, Commercial and Industrial) require experienced **ASSISTANTS**, post-Intermediate level or recently qualified. Ivor Day & O'Brien, 9, Clare Street, Bristol, 1. 5231

BLACKPOOL Pleasure Beach: **ARCHITECTURAL ASSISTANT** required to work at Blackpool under general direction of Howard V. Lobb & Partners, London. Minimum two years' office experience. Salary about £800 depending on experience. Interesting design and practical experience, with long-term appointment. 5199

SENIOR ARCHITECTURAL ASSISTANTS required in London Office of expanding group of companies, for work on interesting industrial projects and shop modernisation. Permanent appointments, attractive pension scheme, canteen facilities. Salaries commensurate with experience. Apply in confidence, Box 5020.

FARMER AND DARK require ASSISTANT ARCHITECTS

with some office experience, initiative and ability. Varied work. Apply Romney House, Tafton Street, S.W.1. Tel.: ABBEY 6311. 5204

RICHARD SHEPPARD, ROBSON & PARTNERS require **ASSISTANTS** of Intermediate and Final standard. Initial salary range £750-£1,000 according to ability. 5, Southampton Place, W.C.1. CHANCERY 4261. 5181

SENIOR ASSISTANT required by City Architects. Varied and interesting work. Generous salary and bonus. Five-day week. Vigers & Co., 4, Frederick's Place, Old Jewry, E.C.2. 5188

ASSISTANT required in City Office. Intermediate standard. Good salary and bonus. Five-day week. Vigers & Co., 4, Frederick's Place, Old Jewry, E.C.2. 5189

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

QUALIFIED ARCHITECTS looking for some really interesting new work should apply in writing to George, Frew and Dunn at their new offices, 50, Eastbourne Terrace, W.2. 5205

ARCHITECTS in Watford and London require **capable ASSISTANTS** with at least three years' office experience for work on interesting commercial and industrial projects. Salary range £800-£1,300 per annum. Non-contributory pension scheme. Apply Box 5148.

£850-£1,600 Experienced **ARCHITECTS** and **ASSISTANTS** able to keep on top of Church and School projects up to £200,000 at all stages required for **NEW OFFICE** opening shortly in HARBOUR/YORK area. 5 day week, pension and bonus schemes. Box 5214.

EXPERIENCED ARCHITECTURAL ASSISTANTS required for our offices in Manchester, Sheffield and Warrington. Wide range of interesting projects, including University buildings, large Departmental Stores, Factories, Hospitals, Hotels, etc. The positions are permanent and progressive, with 3 weeks' annual holiday and 5 day week. Pension and Life Assurance Scheme, and annual bonus. Commencing salary £1,000 p.a. Write or telephone for an appointment to: J. W. Beaumont & Sons, 51, Mosley Street, Manchester, 2. Telephone No. Manchester Central 0992/4. 5244

THERE is more to it than drawing, you know! Are you kept pinned to the Drawing Board day in, day out? If so, we can offer you much greater scope in gaining all-round experience and carrying through the varied duties of an **ARCHITECTURAL ASSISTANT**. Responsibility positively encouraged. Write telling us your experience with the usual particulars: it may well be to our mutual advantage (Box 5168), or telephone MAYfair 9564.

ASSISTANT ARCHITECTS required by Kenneth Lindy & Partners. Good salaries, varied practice. Every opportunity for initiative and responsibility. 24, St. Mary Axe, E.C.3. or telephone Avenue 6153. 5144

INTERMEDIATE STANDARD ASSISTANTS required to work with qualified seniors on a number of interesting jobs in and out of London. Good draughtsmanship, sensitive detailing and some experience are sought and will be paid for. Write, stating age and experience, to David Stern & Partners, 24, Gloucester Place, London, W.1. 5151

£1,150-£1,400 **SALARIES** in this range paid to capable and experienced **SENIOR ASSISTANTS**.

£800-£1,100 **FOR** Intermediate grade **ASSISTANTS**. Interesting commercial and industrial projects. Luncheon vouchers. Pension scheme. Five-day week. Apply to Elliott, Cox & Partners, 172, Buckingham Palace Road, London, S.W.1. 5135

ARCHITECTURAL ASSISTANT required, with good general experience for varied work mainly industrial and commercial. Write, giving experience and salary required, to Howell, Freeman & Batten, Chartered Architects, Reading. 5134

BARBOUR INDEX 500 GUINEA COMPETITION ON TECHNICAL LITERATURE

ARCHITECTS frequently comment on the need for improved technical literature. The object of this Competition is to give architects an opportunity to consider and express their ideas on the aim, content and use of manufacturers' catalogues and leaflets, and so to help manufacturers produce improved technical information.

RULES AND CONDITIONS

1. ELIGIBILITY

The Competition is open to all Architects and Architectural Assistants working or registered in the United Kingdom.

2. AWARDS

A total of 500 guineas in Prize Money will be awarded as follows:-

- 1st Prize — 250 guineas
- 2nd Prize — 100 guineas
- 3rd Prize — 50 guineas
- 4 Prizes of 25 guineas

3. SUBJECT

Competitors are invited to:-

a) Describe briefly (approximately 750 words) the factors and principles to be considered in the production of manufacturers' technical literature, taking into account its content, design and use by Architects, Consultants, Quantity Surveyors, Contractors and Merchants. In so doing, consider the technical information required by each at various stages, and its presentation for easy reference without excessive cost or complication.

b) i) Select any one existing building product. Analyse the problems involved in producing for it an item of manufacturers' literature, conforming with all the factors and principles previously described.

ii) Illustrate this analysis with no less than four sample pages of a catalogue or leaflet for the product, in sufficient detail to demonstrate all the factors involved.

4. NOTES ON REQUIREMENTS

a) Entries will be judged on the aptness and practicability of the factors and principles listed, and on the skill of the entrant in applying them to the selected subject.

b) The sample pages of the leaflet or catalogue will be assessed:-

i) From the point of view of their convenience and usefulness to architects and other users;

ii) From the point of view of their practicability to manufacturers, including suitability for printing.

c) The technique of presentation is at the discretion of the competitor.

BARBOUR INDEX LIMITED

81 Charlotte Street, London, W.1.

GERrard 5436

It should be emphasised that the subject chosen must be such as to demonstrate adequately all the factors and principles involved. Note also that certain products require more information than others—e.g. those with many possible applications—and this may raise additional problems of content and presentation.

d) The sample pages must be on one side only of International A4 size paper (11.7 x 8.3in.).

e) Written and illustrative information on the sample pages should be carefully related. As it is intended to exhibit winning and other entries of merit, a reasonable standard of draughtsmanship is called for in any drawings, but highly-finished art-work is not required. The use of colour, tones, symbols, referencing, etc. is at the discretion of the competitor.

f) Written matter other than on sample pages must be typed on one side only of plain white paper, and should be kept as brief as is compatible with an adequate explanation of the subject.

5. JUDGES

The Competition will be judged by the following:-

Mr. D. E. E. Gibson, C.B.E., D.C.L.,
F.R.I.B.A. Director General
of Works, War Office.

Mr. Howard V. Lobb, C.B.E.,
F.R.I.B.A., A.M.I. Struct. E.

Mr. Dargan Bullivant, A.R.I.B.A.,
Architects' Journal Research
Fellow on Information.

Mr. P. Talbot-Smith, Director, The
U.A.M. Group of Companies.

Mr. R. N. Smith, Director, William
Newman & Sons Ltd.

6. EXHIBITION

An Exhibition will be held after the completion of the Competition. Entries cannot therefore be returned and Barbour Index Ltd. shall have the right to publish and exhibit any designs or other entry material as it sees fit. All other rights in the entries shall be reserved to their authors.

7. HOW TO ENTER

Entries, together with a completed entry form, should be sent unfolded and suitably protected to:-

"Competition",

Barbour Index Ltd.,
81 Charlotte Street,
London, W.1.

All written matter, designs, and drawings must be submitted without name, pseudonym, or distinguishing mark of any kind. The entry form shall be signed, sealed in a plain envelope, and securely attached to the entry. On receipt of the entry a number will be placed on each item and on the envelope. The envelope will not be opened until after the judging has been completed. Additional entry forms may be obtained from the above address. There is no entry fee.

8. CLOSING DATE

Closing date for receipt of entries is Friday, April 28th 1961.

9. RESULTS

All prize winners will be notified by post, and a full list of awards will be published in the architectural press in June 1961. A Presentation of Awards will take place, details of which will be announced.

10. The decisions of the Judges shall be final and legally binding. No correspondence or communication will be entered into. No responsibility will be accepted for entries lost, delayed, undelivered, or mislaid in the post. Barbour Index Ltd. shall be at liberty to withhold any or all of the awards if, in the opinion of the Judges, the entries submitted do not show sufficient merit or do not comply with the conditions.

ENTRY FORM

See Rule 7
"How to enter"

NAME _____

ADDRESS _____

Please use Block Letters

Name of office, practice etc. _____

Date _____

Signature _____

BARBOUR INDEX COMPETITION ON TECHNICAL LITERATURE

ASSISTANT required, at least Intermediate standard, to start early summer. L. H. Bond & R. W. Read, 44, Castlegate, Grantham, Lincs. 5130

GOTCH, SAUNDERS AND SURRIDGE of Kettering and Corby require **ARCHITECTURAL ASSISTANTS** of Intermediate standard for interesting projects, requiring initiative. Write to: Bank Chambers, Kettering. 5309

BRISTOL Intermediate standard **ASSISTANT** with some experience needed urgently by small busy office with varied practice. Salary up to £850 for right person. Alexander Beckingsale & Partners, 36 Whiteladies Road, Bristol. 5305

ARCHITECTURAL ASSISTANTS of all grades urgently required. Salaries by arrangement. Bonus, Pension Schemes in operation. Schools, industrial, commercial, hospital and domestic work. Write to Firth, Son & Blackburn, A.A.R.I.B.A., Broadway House, Crickendge Lane, Dewsbury. 5279

BIRMINGHAM. We need a young **ARCHITECT**, either qualified or in training, with a good sense for clean and straightforward design. There is plenty of scope for the right man. Top salary according to experience. Apply: J. Alfred Harper & Son, 63 Temple Row, Birmingham. 5280

£800-£2,000 **COMPETENT** **ARCHITECT** or **SENIOR ASSISTANT** able to take charge of large variety of contracts in young progressive office. Present-day design outlook is essential coupled with sound constructional experience. Limitless opportunity for right man. Box 5352.

CROYDON Architects need Intermediate and qualified **ASSISTANTS**. Please write for appointment giving details of experience. Graham Crump & Denis Crump, F.A.R.I.B.A., 43, George Street, Croydon. 5366

SENIOR OR JUNIOR ARCHITECTURAL ASSISTANT, male or female, required by national group of Building and Civil Engineering Contractors at Head Office situated in Westminster. Interesting and varied work. Staff position with Pension and Life Insurance benefits. Write giving particulars of age, qualifications, experience, etc., to Box 5363.

CHIEF ARCHITECT of Expanding Architects Department of established Building and Development Company requires **SENIOR ARCHITECTURAL ASSISTANTS** at new headquarters building in Ealing, for work on industrial and commercial projects. Keenness and experience essential. Good salaries paid. Five-day week. Luncheon vouchers. Pension scheme available. Please state age, experience and salary required to Box 5361.

ARCHITECTURAL ASSISTANT required for Country Practice engaged on new and restoration work to houses, churches, schools, offices and industrial buildings, etc. Salary range £600 to £1,000. G. Forsyth Lawson & Partners, 30, Horse Fair, Banbury, Oxon. 5368

EXPERIENCED ASSISTANT ARCHITECT required for newly opened Bournemouth office. Must be competent designer and administrator. Interesting varied work, five-day week, luncheon vouchers £900-£1,200 p.a. according to experience and ability. Write: Gotch & Partners, 29, Richmond Hill, Bournemouth. Phone: Bournemouth 20337/8. 5355

SENIOR ARCHITECTURAL ASSISTANT required for responsible and varied work on large scale development schemes and high buildings in London. Write or telephone Colclutt & Hamp, 86, Prince Albert Road, Regents Park, N.W.3. FRImrose 5157. 5356

POWELL AND MOYA need several enthusiastic **ASSISTANTS** to work on new major general hospitals. These large schemes offer many interesting opportunities. For assistants of Intermediate standard, good general experience can be gained of buildings requiring a high standard of detailing and finish. For qualified assistants and those of Final standard, there is the challenge of resolving complex and developing requirements into a humane architectural solution. If you are interested please write to 36 Great Smith Street, London, S.W.1, or telephone Abbey 3156. 5342

EXPERIENCED ASSISTANT ARCHITECTS required. City Office. Salaries to £1,450 per annum. Varied interesting practice. Every opportunity for responsibility and initiative. Box 5340.

COMPETENT ASSISTANT or DESIGNER required for specialist work in shoofitting and interior design contracts including fittings and furniture in addition to general architectural practice. Victor Bloom & Partners, 12 Gloucester Place, London, W.1. HUNTER 2069. 5350

OPPORTUNITY for young **ARCHITECTS** (Intermediate or qualified) to participate in designing and building large projects of great variety, in Central or East London offices of large practice. Sound knowledge of modern design and real ability in draughtsmanship essential. Generous salaries for suitable men. Box 5351.

ARCHITECTURAL ASSISTANTS urgently required for a small but growing London practice. Church Office and Domestic work. Please write or phone to Ernest W. Banfield & Son, F.R.I.B.A., 28 Mortimer Street, W.1. MUSE 0175. 5284

QUALIFIED ASSISTANT required by London firm to work in their Nigerian office. Varied and interesting projects, good salary, pleasant location and conditions. Apply: J. E. K. Harrison, F.R.I.B.A., Eagle House, High Street, Wimbledon, S.W.19. Tel. WIM 4244. 5298

CHIPPINDALE AND EDMONDSON CHARTERED ARCHITECTS

1. **QUALIFIED ASSISTANT ARCHITECTS** are urgently required to take part in rapidly expanding programme of widely varied work. There are at present vacancies in both the Bradford and Darlington offices.

2. **QUANTITY SURVEYORS** required to work with Chartered Quantity Surveyor in Q.S. section of the Bradford office. A.R.I.C.S. or this year's finalists preferred able to take charge of projects from taking off to Final accounts.

3. **JUNIOR ASSISTANT** in Quantity Surveyor's Section of the Bradford office. Minimum qualifications: five subjects G.C.E. at "O" level including English language and mathematics.

Superannuation scheme. Five-day week. Luncheon Vouchers. Good salaries and excellent working conditions. Apply to Chippindale & Edmondson, Chartered Architects, Empire House, Piccadilly, Bradford giving full particulars and endorsing the envelope "Private-Staff." 5320

EXETER. **ASSISTANT**, Intermediate standard or above, required for growing and progressive practice. John Radford, A.R.I.B.A., 14, Southernhay West, Exeter. Telephone: 59237/8. 5311

WOLVERHAMPTON Architects require immediately:—
Qualified and experienced **ARCHITECT** to fill position of responsibility. Salary £1,000-£1,250, and
ASSISTANTS of Intermediate to Final standard. Salary according to experience.
John Weiler & Silvester, 15 King Street, Wolverhampton. 5335

FRY, DREW & PARTNERS have vacancies for qualified and experienced **ASSISTANTS** on very interesting new work including residential development and industrial headquarters in U.K. and development in the Mediterranean. Salaries from £1,000 upward for suitable applicants. Apply 63, Gloucester Place, W.1 (WEL 3318). 5486

LEICESTER Architect requires an energetic **ASSISTANT** to be engaged upon a variety of work. Apply giving Qualifications, experience and Salary required to Douglas H. Smith, 61, Regent Road, Leicester. 5484

WALTON-ON-THAMES Architect with varied practice requires **ASSISTANT** (Intermediate or qualified), experience on flats an advantage. Part-time (3 days/week min.) considered. Apply Box 5483.

ARCHITECTURAL ASSISTANTS required immediately by large development company. Good salaries, pension and bonus schemes. Apply in writing to Prowling Ltd., Bury Street, Ruislip, Middx. 5481

ARCHITECTURAL ASSISTANT of Intermediate Standard required to assist in small office on an interesting variety of work. Salary around £500 p.a. according to experience. Please reply in writing, stating age, to John Pantlin, 14 East Street, Wimborne, Dorset. 5480

ARCHITECTURAL ASSISTANT required in small office carrying out varied and interesting work. Any reasonable salary will be considered. Own transport desirable but not essential. Good bonuses paid. Apply to—D. R. Harper, Esq., A.F.C., D.F.C., A.R.I.B.A., Messrs. F. W. B. Yorke, Harper & Harvey, 191, Corporation Street, Birmingham 4. 5479

ASSISTANTS of Intermediate Standard required in busy provincial office. Contemporary outlook welcomed. Opportunity given to handle contracts from inception to completion. Facilities given for study at London Schools one day per week, if required—fare and fees paid. Salary £750-£900 according to ability—Hare & Pert, A.R.I.B.A., 29, Elm Street, Ipswich. 5477

SENIOR ASSISTANT of final standard required for interesting work on Departmental Stores. Office experience and the capability of handling large contracts without supervision essential. Write stating experience and salary required—George Baines & Syborn, A.R.I.B.A., 121, Victoria Street, Westminster, S.W.1. 5472

ASSISTANT of Intermediate Standard required for varied and interesting work with considerable opportunity to gain experience. Apply stating age, experience and salary required—George Baines & Syborn, A.R.I.B.A., 121, Victoria Street, Westminster, S.W.1. 5471

EXPERIENCED ASSISTANT ARCHITECT required for small practice in Gray's Inn, London, to take charge of important housing project and other work. Possibility of partnership after trial period. Full details and salary required to Box 5470.

CROYDON. **ASSISTANT** willing to take responsibility required by Powell & Alport. Apply giving details and salary required to Box 5468.

ARCHITECTS in South-East London with varied and interesting practice require experienced **ASSISTANT ARCHITECT** capable of initiating and handling complete projects. Also a capable **ASSISTANT** of Intermediate standard interested in varied work, and good experience. Salary by arrangement. Write or phone particulars to H. G. Payne, L.R.I.B.A., 35, East St., Bromley, Kent. RAY 4067. 5469

MUNBY SMITH & HAMPTON require **ASSISTANTS** in all grades up to Final. Telephone Kensington 6221. 5466

EXPANDING Office, Westminster Area, requires three first-class **ASSISTANTS** to work on first-class imaginative development schemes throughout the country involving three dimensional planning and design right through to completion. Salaries around £1,000 p.a. according to experience and ability. Write or telephone H. Owen Luder, A.R.I.B.A., 79 Regency Street, S.W.1. VIC. 2171. 5465

NORTH & PARTNERS, Chartered Architects, Maidenhead, seek Two New **ASSISTANTS**:—

- (1) Partner's Personal Assistant for general Architectural and administrative duties.
- (2) Experienced Architectural Assistant/Architectural Draughtsman for main Drawing Office.

Five-day week, Pension Scheme, etc.
State age, experience and salary required. 5492

ROBERT MATTHEW & JOHNSON-MARSHALL have vacancies in their London office for Architects at all levels of experience for a variety of interesting jobs. Apply to Robert Matthew & Johnson-Marshall, 24 Park Square East, N.W.1. 5491

ARCHITECTS' ASSISTANTS required. Experienced in running commercial contracts. Interesting work including new shopping centres in Provincial Towns. 5 day week and Superannuation fund. Good salary according to experience. Apply **ERIC H. DAVIE**, F.R.I.B.A., A.M.T.P.I., 77 Grosvenor Street, W.1 (Mayfair 7666). 5489

ASSISTANT ARCHITECT. Are you young, reasonably competent and fed up with large offices? I want someone educated, capable and flexible to take responsibility for various jobs in young, growing Practice. Branch shortly opening in Basingstoke needing caretaker. Write to me at 50 Baker Street, W.1, about yourself. Salary approaching the four figure mark, but this might be increased after a probationary period. 5460

ASSISTANT required in Architects Department of Development Company working on houses and estate layout around London. Write stating age, experience and salary required to Chief Architect, Bunting Estates Ltd., 71/73, Acre Lane, London, S.W.2. 5494

A GOOD OPPORTUNITY EXISTS for a sound, experienced **SENIOR ASSISTANT ARCHITECT** in Dartford Practice. Must be qualified and be capable of carrying projects through to completion. Multi-storey flats, housing, commercial and industrial work. Non-contributory pension scheme, car allowance, etc. Write giving details and salary required to Box 5474 or phone Dartford 24350 for appointment.

OAKLEY & SANVILLE, Architects, require **ASSISTANT** for general practice, interest in landscape work an advantage. Good salary and prospects for right man. Apply 60, King Street, Manchester, 2. Tel.: BLACKfriars 5385

COOK, CULLING & ILLINGWORTH require experienced **ASSISTANT ARCHITECT** for busy industrial practice. Pleasant conditions. House available. Apply: Meeting Lane, Gold Street, Kettering. 5384

A LARGE Industrial Organisation require the services of a **JUNIOR ARCHITECTURAL ASSISTANT** in their Surveyor's Dept. Salary range £600-£800 according to qualifications. Permanent position after probationary period. Staff restaurant, free lunches, five-day week, Pension Scheme. Apply in writing to: Chief Surveyor, Wiggins, Teape & Co. Ltd., Gateway House, 1, Watling Street, London, E.C.4. 5387

ARCHITECTURAL ASSISTANT required. Must be capable of working on own initiative and of carrying out a good deal of survey work. Interesting residential and shopping developments in various parts of the country. Salary £800-£1,200 according to qualifications and experience. Apply in writing to Lapworth Developments Limited, 2a, High Street, Stourport-on-Severn, Worcestershire. 5388

ST. AUBYN HUBBARD, JOHN TURNER & PARTNERS, require **ASSISTANTS** of Intermediate and Final standard. The practice is centred on one of the finest parts of Sussex, and consists of a wide variety of work. Salary by arrangement. Apply in writing please, to 44, South Street, Chichester, or Rumbolds Hill, Midhurst. Interviews for applicants from London or further North could be arranged at our Ealing office. 5391

DEVON—**SENIOR ARCHITECTURAL ASSISTANT** required for varied and progressive practice. Write to Antony Lamb, A.R.I.B.A., A.M.T.P.I., Ottery St. Mary, Devon, 1. 5393

ARTHUR GUINNESS SON & CO. (DUBLIN) LTD. require an ASSISTANT ARCHITECT immediately. A.R.I.B.A. or equivalent. Five years' experience Industrial Architecture. Good knowledge modern structural methods and materials. Age 25 to 30. Starting salary in range £800 to £1,200 with prospects. Non-contributory pension scheme. Expenses paid if interviewed in Dublin.

Give full chronological particulars of education, training, posts held and present salary to: The Chief Engineer, St. James's Gate Brewery, Dublin, 8. 5394

SENIOR ARCHITECT required for executive position to take charge of architectural department of expanding building company in Bristol area. Work consists mainly of new factories, flats and housing projects. Must be fully qualified and have high standard of design. Good salary and prospects. Box 5395.

HALLIDAY & AGATE, Manchester, require a number of ASSISTANT ARCHITECTS for a varied and extensive programme. Experience and ability to develop schemes with a minimum of supervision are important. Apply in writing, giving full details of previous experience to 4, Fountain Street, Manchester, 2. 5396

HALLIDAY & AGATE, Manchester, require a SENIOR ASSISTANT ARCHITECT, who should have ability and experience in the design of large buildings and the administration of contracts. Apply in writing, giving full details of previous experience to 4, Fountain Street, Manchester, 2. 5397

TOWN PLANNING ASSISTANT
SENIOR TOWN PLANNING ASSISTANT is required, possessing considerable experience with a New Town Development Corporation or similar organisation. Commencing salary will be not less than £1,800 per annum. Apply in writing to Downes & Meehan, Architects, 37, Leeson Park, Dublin, Ireland. 5398

ARCHITECTURAL ASSISTANT required. Salary £500-£750. Apply in writing to Norman Jones, Sons & Rigby, 271, Lord Street, Southport. 5401

ARCHITECTS AND ARCHITECTURAL ASSISTANTS are invited to apply for posts in the Architects Department at Ericsson Telephones Limited, Beeston, Nottingham. Starting salary will be according to ability, qualifications and previous experience.

Only applicants with an enthusiastic approach to new ideas and progressive design, and willing to accept responsibility will be considered.

The Department at present works a five-day week. Good canteen facilities are available. Participation in superannuation fund after qualifying period.

Please write, stating age and giving full details of training and experience, to the Personnel Manager. 5405

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. 5406

PRIVATE Office in W.C.1 area requires recently qualified ASSISTANT with limited experience to assist Senior on interesting housing project in London. Salary £900-£1,100. Box 5445.

PRIVATE Office in W.C.1 area requires Intermediate standard ASSISTANT with experience to join team working on University project. Salary £800-£1,000. Box 5446.

LANDSCAPE ARCHITECT in North West England, required to work on commission basis. Apply:

Moff and Bateman, F/A.R.I.B.A., Chartered Architects, Trustee Savings Bank Chambers, Town Hall Square, Rochdale. 5403

LANCHESTER & LODGE urgently require **ARCHITECTURAL ASSISTANTS** of all grades. Work includes Hospitals, Laboratories, Universities, Offices, Housing, etc. Write full particulars or ring for interview, 10, Woburn Square, W.C.1. MUSEUM 0845. 5447

MEDWAY BUILDINGS & SUPPLIES LTD. have a vacancy for an **ARCHITECTURAL ASSISTANT** of Intermediate standard. Applicants must be competent draughtsmen with a sound knowledge of timber construction and detailing. The work covers the planning and design of single and two-storey prefabricated timber buildings both for home and overseas, for schools, office blocks, pavilions, etc. Salary according to experience and qualifications. Good canteen facilities. Pension scheme. Write stating age, qualifications and salary required to Office Manager, Medway Buildings & Supplies Ltd., Phoenix Wharf, Rochester, Kent. 5436

W. S. HATTRELL & PARTNERS require **ASSISTANT ARCHITECTS** (Senior) commencing £1,000 to £1,250. Write telephone to 21, Cleveland Place, LONDON, S.W.1 (Whitehall 4076); 1, Queen's Road, COVENTRY (Coventry 26446); 15, Piccadilly, MANCHESTER (Deansgate 8288). 5437

CAPABLE ASSISTANT ARCHITECTS required immediately for handling complete projects within small congenial contemporary practice, away from the smoke! Apply, stating experience and salary required, to:

Robert J. Wood & Partners, 29, Widmore Road, Bromley, Kent. 5443

MOBIL OIL COMPANY invites applications for the post of **ASSISTANT ARCHITECT** in their BIRMINGHAM Office. Applicants must be A.R.I.B.A., have experience in contemporary design and be capable of working independently. They will be responsible for handling jobs through all stages of development. Must hold a current driving licence. Five-day week, three weeks holiday after one year's service, free luncheon vouchers, sickness benefits. Write giving full details of experience, age and salary required to Employment Adviser, Mobil Oil Co. Ltd., Caxton House, Westminster, S.W.1. 5450

SLOUGH ESTATES LTD. require an **ARCHITECTURAL ASSISTANT** with about five years' experience, chiefly for industrial work. Five-day week, good working conditions, luncheon vouchers, pension scheme, etc. Please apply stating age, experience and salary to The Chief Architect, Slough Estates Ltd., Bedford Avenue, Trading Estate, Slough, Bucks. 5376

EXPANDING practice urgently requires **SENIOR ASSISTANT** capable of handling complete contracts. Salary according to ability. Dalling and Partners, Chartered Architects, 14, Bloomsbury Square, London, W.C.1. CHANCERY 4725. 5378

SMALL Architect's Office requires **ASSISTANT** of Intermediate standard with some office experience for work on buildings, some of 10-30 storeys. Immaculate detailing essential, interest in curtain wall techniques an advantage. Salary according to age and experience but applicants earning less than £850 p.a. are unlikely to be considered. Pension scheme, L.V.s and other staff benefits. Apply W. H. Rogers, A.R.I.B.A., 16, Mark Lane, E.C.3. 5377

LEADING OIL COMPANY requires **TWO** **ARCHITECTURAL ASSISTANTS**, one Final and one Intermediate standard, at their Head Office, for work on service station design and general building works. Post permanent and pensionable. Good salary and working conditions. Box 5379.

ARCHITECTURAL ASSISTANT required in varied and interesting Practice, minimum Intermediate stage, with office experience. Write with full details of education and experience to: J. M. Porter & Co., The Estate Office, Colwyn Bay. 5380

ARCHITECTURAL ASSISTANT required. Post Intermediate standard with good office experience. Scope for initiative and responsibility. One day off a week for study. Please write giving full details to:- D. Plaskett Marshall & Partners, 89, Gordon Square, W.C.1. 5382

ARCHITECTS AND BUILDING DRAUGHTSMEN

London Consultants in Reading Area engaged on Nuclear Power work.

ARCHITECTS: Three years' post-qualification experience. £1,100-£1,400.

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Vacancies for **ARCHITECTURAL ASSISTANTS** also exist in our London Office.

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Apply in writing to:
JAMES T. GORNALL & ASSOCIATES,
3, Hobart Place, S.W.1. 5410

E. R. COLLISTER & ASSOCIATES require:

ARCHITECTURAL ASSISTANTS of Intermediate to Final standard. Applicants will be required initially to work in our Chelmsford office but they should be prepared to work in our London or overseas offices when required. Applications should be addressed to: 41, Buckingham Palace Road, London, S.W.1, giving details of experience and salary required. 5419

ASSISTANT ARCHITECTS required in the new Chelmsford Branch Office of a progressive, established firm of London Architects. Scope for initiative and responsibility on varied and interesting projects. Assistants should be capable of carrying through schemes from sketch stage to final construction. Salary range £800-£1,200, five-day week, plus luncheon vouchers. Apply giving full details to:-

Guntton & Guntton,
Chartered Architects,
87, High Street,
Chelmsford, Essex. 5409

EXPANDING and progressive development organisation requires the services of an **INTERMEDIATE ASSISTANT** for work in connection with housing and flat development schemes. Experience in layout, planning and design and the preparation of working drawings. Salary according to experience and ability. Pension and luncheon voucher schemes. Apply in writing or telephone for appointment: Chief Building Surveyor, Percy Bilton Ltd., 54/58, Uxbridge Road, Ealing, W.5. Telephone number: EALING 7777. 5411

ARCHITECTS
SENIOR QUALIFIED ARCHITECTS required by West End Architects with Provincial and Overseas practices. Responsible positions leading to Associate Partnerships. Salary £1,500 to £2,000 p.a. according to ability and experience. Write Box 5412.

SENIOR ARCHITECTS required to take charge of sections of Drawing Office of busy London Architects. Applicants must have had previous similar experience and only those confidently capable of designing and carrying out projects from sketch plans to completion of contracts need apply. Special consideration will be given to those applicants who have had experience in civic design and comprehensive developments. There are excellent prospects for the right persons as Junior Partnerships would be considered after a satisfactory probationary period. Applications (which will be treated in strictest confidence) should be in writing, stating age, experience, qualifications and salary required to:-

W. Russell Orme & Partners,
55, Manchester Street,
London, W.1. 5413

ASSISTANT ARCHITECT with experience and/or interest in schools and multi-storey flats. Write ERIC LYONS, MILL HOUSE, BRIDGE ROAD, HAMPTON COURT, MIDD. 3562

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SCHERRER AND HICKS, 19, Cavendish Square, W.1. require **ARCHITECTURAL ASSISTANTS** of intermediate standard with some office experience. Interesting work on school projects. Five-day week. L.Vs. 5416

SCHERRER AND HICKS, 19, Cavendish Square, W.1. require recently qualified **ARCHITECT** with some office experience. Interesting work on school projects. Five-day week. L.Vs. 5417

ARCHITECTURAL ASSISTANT required of intermediate standard with or without previous experience, for interesting varied work. Apply Victor Bloom & Partners, 12, Gloucester Place, London, W.1. HUN. 2669. 5213

SENIOR ARCHITECTURAL ASSISTANT EXPANDING and progressive Company requires the services of a Senior Architectural Assistant in their Housing Division. Experienced in design and the preparation of working detailed drawings in connection with multi-storey flat developments. Salary according to experience and qualifications. Luncheon Voucher and Superannuation Schemes in operation. Phone or write Chief Building Surveyor, Housing Division, Percy Bilton Ltd., 54/58, Uxbridge Road, Ealing. Telephone EALing 7777. 5463

ARCHITECTURAL ASSISTANTS, Intermediate or Finals standard. Required in Chief Architect's office. Interesting and varied work. Five-day week, bonus, etc. Appointments permanent and superannuable. Write (in confidence) stating age, experience and salary required, to Personnel Manager, Wates Limited, London Road, Norbury, S.W.16. 4704

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Write or phone: The Architect, Production-Engineering Ltd., Park House, Wick Road, Egham, Surrey. Egham 4411. 5490

ARCHITECTS AND ARCHITECTURAL ASSISTANTS are invited to apply for posts in the Architects Department at Ericsson Telephones Limited, Beeston, Nottingham. Starting salary will be according to ability, qualifications and previous experience.

Only applicants with an enthusiastic approach to new ideas and progressive design, and willing to accept responsibility will be considered. The Department at present works a five day week. Good canteen facilities are available. Participation in superannuation fund after qualifying period.

Please write stating age and giving full details of training and experience to the Personnel Manager. 5476

£1,000 P.A. ASSISTANT, qualified or near required for post, responsibility, country office, 45 miles London. Wide variety of work. Office car available. Supervision. Box 5317.

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LLEWELLYN 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.

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Vacancies in both London and Worcester offices.

Write: 103 Old Brompton Road, S.W.7. (KEN 4477). 5268

Architectural Appointments Wanted

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SCHOOL-TRAINED ARCHITECT, 33, with wide general experience at home and abroad requires position of responsibility, London area. Available mid-1961. Salary £1,500 or less if prospects of partnership good. Box 5347.

ARCHITECT IN CHARGE, wide experience covering design, site, and negotiations with clients and local authorities, seeks position in London area. Box 5439.

RETIRED Regular Officer (Major, graduate of Army Staff College, Camberley), A.R.I.B.A., A.A.Dip., with two years' experience in busy provincial office would like appointment with prospects in public department or private firm, Southern England or overseas. Write Box 5444.

ASSOCIATE, 35, Univ. trained, 11 years' varied 1st class experience in London, incl. full control of projects—seeks position where keen interest and efficiency would be rewarded with some prospects for the future. Car owner. Salary, about £1,400 p.a. Box 5473.

ARCHITECTURAL ASSISTANT, 11 years' experience (domestic and industrial) would like to work in busy Maidstone (Kent) office. Box 5456.

Other Appointments Vacant

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

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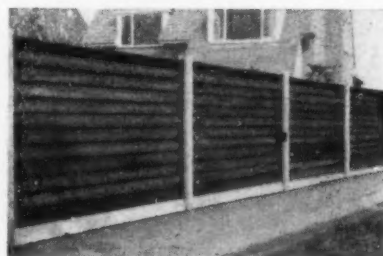
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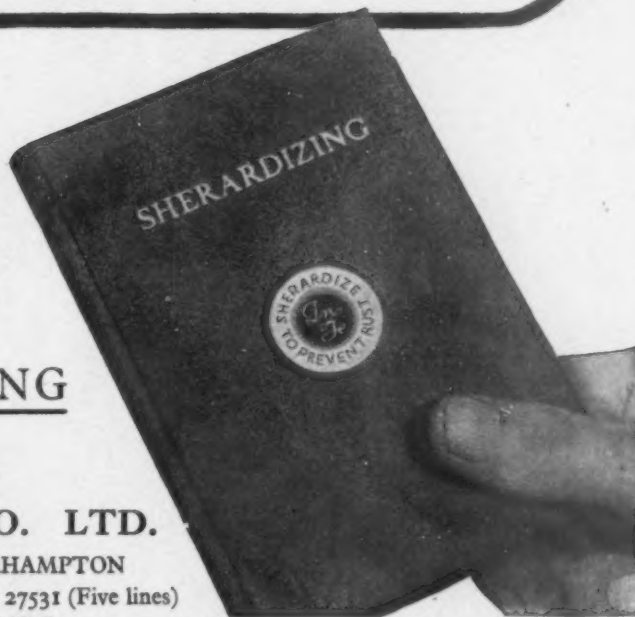
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* Sorry about that hat but, well—you know how difficult it is
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